



# TOWN OF ESTES PARK

***The Mission of the Town of Estes Park is to provide high-quality, reliable services for the benefit of our citizens, guests, and employees, while being good stewards of public resources and our natural setting.***

*The Town of Estes Park will make reasonable accommodations for access to Town services, programs, and activities and special communication arrangements for persons with disabilities. Please call (970) 577-4777. TDD available.*

## BOARD OF TRUSTEES - TOWN OF ESTES PARK

Tuesday, April 25, 2023

7:00 p.m.

### ADVANCED PUBLIC COMMENT

By Public Comment Form: Members of the public may provide written public comment on a specific agenda item by completing the Public Comment form found at <https://dms.estes.org/forms/TownBoardPublicComment>. The form must be submitted by 12:00 p.m., the day of the meeting in order to be provided to the Town Board prior to the meeting. All comments will be provided to the Board for consideration during the agenda item and added to the final packet.

### PLEDGE OF ALLEGIANCE.

(Any person desiring to participate, please join the Board in the Pledge of Allegiance).

**GRADUATION CEREMONY: 2023 COMMUNITY INFORMATION ACADEMY (CIA) PARTICIPANTS.** Mayor Koenig, Public Information Officer Miller and Town Administrator Machalek present Participation Certificates.

### AGENDA APPROVAL.

PUBLIC COMMENT. (Please state your name and address).

### TOWN BOARD COMMENTS / LIAISON REPORTS.

### TOWN ADMINISTRATOR REPORT.

### CONSENT AGENDA:

1. [Bills.](#)
2. Town Board Minutes dated April 11, 2023, Town Board Study Session Minutes dated April 11, 2023, and Town Board Strategic Planning Study Session Minutes dated April 5, 2023.
3. Family Advisory Board Minutes dated March 2, 2023 and Special Family Advisory Board Minutes dated February 24, 2023 (acknowledgment only).
4. Estes Park Board of Adjustment Minutes dated January 3, 2023 (acknowledgment only).
5. Estes Park Planning Commission Minutes dated January 17, 2023, and Estes Park Planning Commission Study Session Minutes dated January 17, February 21, and March 21, 2023 (acknowledgment only).
6. 2023 Art in Public Places (AIPP) Yarn Bombing Application.
7. Resolution 42-23 Setting a Public Hearing for a Change of Location for a Tavern Liquor License held by Montego Bay Enterprises Inc. dba The Wapiti Colorado Pub from 247 W. Elkhorn Avenue to 1350 Fall River Road, Estes Park, CO 80517 for May 9, 2023.

- 8. Resolution 43-23 Setting the Public Hearing for a New Hotel and Restaurant Liquor License Application for Montego Bay Enterprises Inc. dba The Downtown Eatery, 247 W. Elkhorn Avenue, Estes Park, Colorado, for May 9, 2023.
- 9. Resolution 44-23 Setting the Public Hearing for a New Hotel and Restaurant Liquor License Application for Ole International Kitchen LLC dba Ole International Kitchen, 145 E. Elkhorn Avenue, Units 300-304, Estes Park, Colorado, for May 9, 2023.
- 10. Correcting the Appointment of Richard Dowling to the Estes Park Board of Appeals for a term expiring May 1, 2025.

**REPORTS AND DISCUSSION ITEMS:** (Outside Entities).

- 1. **NEW INITIATIVES FOR FUTURE SUCCESS: ESTES PARK MUSEUM FRIENDS & FOUNDATION.** Eric Adams, Estes Park Museum Friends & Foundation, Inc. President.  
  
Present on the new mission, the transition Board of Directors and purpose, efforts completed, and future initiatives.

**ACTION ITEMS:**

- 1. **RESOLUTION 45-23 OPPOSING COLORADO SENATE BILL 23-213.** Town Attorney Kramer.  
  
To take a formal position of opposition to this bill before the Colorado General Assembly.
- 2. **SETTING THE PUBLIC HEARING FOR ORDINANCE 04-23 AMENDING CHAPTER 14.12 OF THE ESTES PARK MUNICIPAL CODE TO ADOPT THE 2021 EDITIONS OF INTERNATIONAL CODES, INCLUDING THE INTERNATIONAL BUILDING, RESIDENTIAL, EXISTING BUILDING, FUEL GAS, MECHANICAL, PLUMBING, PROPERTY MAINTENANCE, ENERGY CONSERVATION, AND SWIMMING POOL AND SPA CODES, WITH AMENDMENTS.** Director Garner.  
  
Set the public hearing to consider Ordinance 04-23 for the 2021 International Building Codes with Local Amendments

**REPORTS AND DISCUSSION ITEMS:**

- 1. **ESTES PARK BOARD OF TRUSTEES VACANCY LETTERS OF INTEREST.** Town Clerk Williamson.  
  
Review submitted Letters of Interest and discuss next steps.
- 2. **ESTES TRANSIT BRANDING PROCESS & RECOMMENDATIONS.** Manager Solesbee.  
  
Provide an update on the drafted Brand Discovery Report, proposed new transit name, and design concepts for vehicle wraps.

**ADJOURN.**

NOTE: The Town Board reserves the right to consider other appropriate items not available at the time the agenda was prepared.

*Town of Estes Park, Larimer County, Colorado, April 11, 2023*

Minutes of a Regular meeting of the Board of Trustees of the Town of Estes Park, Larimer County, Colorado. Meeting held in the Town Hall in said Town of Estes Park on the 11<sup>th</sup> day of April, 2023.

Present: Wendy Koenig, Mayor  
Trustees Marie Cenac  
Kirby Hazelton  
Barbara MacAlpine  
Patrick Martchink  
Cindy Younglund  
Vacancy

Also Present: Travis Machalek, Town Administrator  
Jason Damweber, Deputy Town Administrator  
Dan Kramer, Town Attorney  
Jackie Williamson, Town Clerk  
Bunny Victoria Beers, Deputy Town Clerk

Absent: None

Mayor Koenig called the meeting to order at 7:00 p.m. and all desiring to do so, recited the Pledge of Allegiance.

**RESOLUTION OF RESPECT FOR MAYOR PRO TEM WEBERMEIER.**

Mayor Koenig and Trustees read a resolution of respect honoring the service of the late Mayor Pro Tem Scott Webermeier.

**PROCLAMATION – VOLUNTEER APPRECIATION MONTH.**

Mayor Koenig read a proclamation recognizing April as Volunteer appreciation month.

**AGENDA APPROVAL.**

It was **moved and seconded** (Younglund/Hazelton) **to approve the Agenda**, and it passed unanimously.

**PUBLIC COMMENTS.**

Jed Aeide/Town citizen voiced concern related to SB23-213 Land Use, stating the legislation would impact many cities and towns in Colorado. He questioned relinquishing local control stating the best individuals to make local decisions are locals. He stated if passed the Town would relinquish power to the State. He added the five (5) foot set back would not be sufficient to reduce the spreading of fire. He urged the Town Board to strongly oppose SB23-213.

Steven and Kaylyn Kruger/Town citizens and managers of Solitude Cabins & Lodge highlighted the partnership with Restoration Ranch Colorado's Valor Vacations Program. The program provides lodging and short-term rentals at no charge to first responders and their families. A proclamation would be read on April 19, 2023 to recognize Estes Park as a destination within the initiative "Colorado Puts First Responders First".

Kristine Poppitz/County citizen stated Preserve Estes Park (PEP) would hold a meeting at the American Legion with guest speaker Deborah Price, retired environmental educator, to speak regarding dark skies lighting. She added PEP continues to circulate and acquire petition signatures against an upcoming project.

**TRUSTEE COMMENTS.**

Trustee comments were heard and have been summarized: The Estes Valley Investment in Childhood Success (EVICS) held a parade around the library to honor the Month of the Young Child; the Board of Adjustment re-elected officers Jeff Moreau to serve as Chair and Wayne Newsom as Vice-Chair; the Family Advisory Board would continue to work on recommendations for the Town Board and determining how they would proceed as a

community formed board; the Economic Development Corporation (EDC) would hold graduation for their spring Business Accelerator Services of Estes (BASE) program participants; Adam Shake, EDC CEO tenured his resignation and would help secure his replacement; the Board extended gratitude to staff who responded to the Valley wide power outage on March 30, 2023; the Behavioral Health Committee has begun reviewing funding distributions and the facility on Taft would open as scheduled; the Regional Air Quality Committee discussed how to retire gas equipment with electric replacement, and the Board encouraged patience and care through the heavy construction timeframe.

**TOWN ADMINISTRATOR REPORT.**

Town Administrator Machalek presented his policy governance report for policies 3.3 and 3.7 and reported compliance in all areas. Staff would review the emergency management function and ways to be more responsive, resilient, and planning oriented in the future.

The American Public Power Association congratulated the Town on exceptional electric reliability in 2022 and staff were commended on their efforts and data management.

The Water Division received approval from the Colorado Department of Health and Environment for a Seasonal Compliance Point for concentration contact time for the Glacier Water Treatment Plant. Staff efforts on the compliance points were commended, which helped avoid \$15 million in repair costs.

**CONSENT AGENDA:**

1. Bills.
2. Town Board Minutes dated March 28, 2023, Town Board Study Session Minutes dated March 28, 2023, and Joint Town Board Study Session Minutes dated March 22, 2023.
3. Transportation Advisory Board Minutes dated February 15, 2023 (acknowledgment only).
4. Resolution 36-23 Construction Contract for the Remodel of the Community Development Department with Darling Enterprise, Inc., for \$180,000, Budgeted.
5. Acceptance of Town Administrator Policy Governance Monitoring Report.

It was **moved and seconded** (Hazelton/Cenac) **to approve the Consent Agenda**, and it passed unanimously.

**REPORTS AND DISCUSSION ITEMS:** (Outside Entities)

**1. 8<sup>TH</sup> JUDICIAL DISTRICT DATA TRANSPARANCY PROJECT UPDATE.**

Attorney McLaughlin provided an update on the 8<sup>th</sup> Judicial District's Data Transparency Project. The 8<sup>th</sup> Judicial District includes both Larimer and Jackson counties with an estimated population of 370,000. He reviewed the mission and vision, a case roadmap including summons, arrests, trial, or hearings, and stated the District Attorney's (DA) office reviews 12,000 cases annually. He reviewed the programs and projects including: Adult diversion; hiring a Complex Case Prosecutor who handles fentanyl distribution and gun crimes; Competency Court Docket; Northern Colorado Economic Crime Task Force; Critical Incident Response Team Protocol Update; and Victim Services. He highlighted the use of a court room facility dog who provides comfort and support to victims. He stated the DA's office and seven other districts in Colorado partnered to form the Prosecutor Performance Indicator metrics which provides the public with insights on their work. He reviewed the Estes Park Police Department case filings highlighting a significant reduction in misdemeanor cases since COVID which was not isolated to the area. He reviewed the types of crimes filed by year and the type of charge for minor crimes. He reviewed violent crimes filed by quarter and motor vehicle theft comparisons for the State of Colorado which reflected lower average numbers in Larimer compared to the Denver Metro area. He would be working alongside other DA's to draft an auto theft bill which would make auto thefts more

prosecutable. A first ever annual report would be published to the DA's website in April of 2023.

**2. ESTES PARK HEALTH (EPH) UPDATE.**

Chairman Batey provided a review of the upcoming Park Hospital District Election to be held on May 2, 2023 for Ballot Issue 8A which, if approved, would authorize Estes Park Health to enter into multi-fiscal year obligations. He reviewed challenges to accomplish the overall healthcare services goals including: reimbursement changes which are dependent upon membership in a payor network; increases in capital investments to be current with evolving medical technology; and rural hospitals experiencing significant financial challenges. He stated 30% of rural hospitals are facing closure due to financial hardships. Affiliation with an integrated healthcare services organization would help address the challenges to accomplish overall healthcare service goals. He reviewed EPH Ballot Issue 8A language and arguments "For" and "Against" the issue. Board questions have been summarized: Questioned the benefit to a non-profit organization to partner with EPH; future role of the district Board if the ballot issue passed; whether there would be a need for the district Board if 8A passed; whether there would be increased opportunity for financial assistance for the non-insured; and whether the passing of 8A would allow the Hospital Board to sell in the future without going to a vote of the district.

**3. ESTES PARK SCHOOL DISTRICT R-3 UPDATE.**

Superintendent Bode presented the school district's history and plans stating the district covers 44 acres and includes seven buildings serving Larimer County and a small portion of Boulder County residents. Local taxes are the primary funding source for the district with minimal state funding. She reviewed staff numbers comprised of: 262 district members, 41 coaches, 40 substitute teachers and 81 classified staff. Approximately 25% of members commute from outside of the district. She reviewed the district's Mission to engage all learners in authentic learning for global application. The district held 23 Neighborhood Learning Conversations in the community which engaged 294 people and was hosted by 31 people from the community. Feedback from the community engagement helped form the global outcomes. She reviewed the Respect Ownership Awareness and Responsible (ROAR) Program and the Restorative Practice. She reviewed the accreditation performance rating for the district overall and within each school. New curriculum has been developed to improve district ratings. The five 2022-2023 Areas of Focus included: high impact instruction; communication and stakeholder engagement; attendance and student engagement; positive culture and climate, and gifted identification and programming. She stated the Career and Technical education programs were expanded. She stated the inability to have volunteers due to COVID severely impacted connections with the community and as volunteers are welcomed back, the district was hopeful to increase engagement with community members. She stated the district would be making efforts to improve the climate and culture of the school and would hold a district wide field day. She stated the district has been developing a new five-year strategic plan developed by a steering committee which would be finalized in 2023.

**LIQUOR ITEMS:**

- 1. RESOLUTION 37-23 NEW HOTEL AND RESTAURANT WITH OPTIONAL PREMISE LIQUOR LICENSE APPLICATION FOR ESTES VALLEY RECREATION & PARK DISTRICT; LAURA EMMER DBA MOTHER'S CAFÉ AT THE HANGAR RESTAURANT, 1480 GOLF COURSE ROAD, UNITS A-E, ESTES PARK, COLORADO.** Mayor Koenig opened the public hearing and Town Clerk Williamson presented Resolution 37-23. She provided history on the current licenses at the location stating they would be surrendered with the approval of the new application. She reviewed the application for the new Hotel and Restaurant with Optional Premise Liquor License, stating all paperwork and fees have been submitted and the application has undergone concurrent review. The applicant filed as "other" since they are operating as a special district. The applicant was aware of the Training for Intervention Procedures (TIPS) requirement and was

available for questions and stated the restaurant would be opening May 1, 2023. Mayor Koenig closed the public hearing and it was **moved and seconded** (Hazelton/Younglund) **to approve Resolution 37-23**, and it passed unanimously.

2. **RESOLUTION 38-23 NEW HOTEL AND RESTAURANT LIQUOR LICENSE APPLICATION FOR MOUNTAIN HOME CAFE INC., DBA MOUNTAIN HOME CAFÉ, 457 E. WONDERVIEW AVENUE, SUITE C-1, ESTES PARK, COLORADO.** Mayor Koenig opened the public hearing and Town Clerk Williamson presented Resolution 38-23. She stated the location currently holds a Beer and Wine liquor license which would be surrendered with the approval of a Hotel and Restaurant license. She reviewed the application for the new Hotel and Restaurant Liquor License, stating all paperwork and fees have been submitted and the application has undergone concurrent review. The applicant was aware of the TIPS requirement. The applicant was available for questions and stated an expanded liquor license would meet the needs of their patrons. Mayor Koenig closed the public hearing and it was **moved and seconded** (Younglund/Cenac) **to approve Resolution 38-23**, and it passed unanimously.
3. **RESOLUTION 39-23 TRANSFER OF A HOTEL AND RESTAURANT LIQUOR LICENSE FROM DELLA TERRA LLC DBA DELLA TERRA MOUNTAIN CHATEAU TO BLACK CANYON CATERING, INC., DBA DELLA TERRA MOUNTAIN CHATEAU, 3501 FALL RIVER DRIVE, ESTES PARK, COLORADO.** Mayor Koenig opened the public hearing and Town Clerk Williamson presented Resolution 39-23. The location had two new licenses issued in 2022 due to State licensing changes. She reviewed the transfer application for the Hotel and Restaurant Liquor License, stating all paperwork and fees have been submitted and the application has undergone concurrent review. The applicant was aware of the TIPS requirement and stated staff received annual in-house training. The applicant was available for questions and provided background on the business. Trustee Younglund requested clarification on catering moving in-house and impacts to alcohol serving. Town Clerk Williamson clarified the distinction between the two licenses on the property. Mayor Koenig closed the public hearing and it was **moved and seconded** (Younglund/MacAlpine) **to approve Resolution 39-23**, and it passed unanimously.
4. **RESOLUTION 40-23 TRANSFER OF A LODGING AND ENTERTAINMENT LIQUOR LICENSE FROM DELLA TERRA LLC DBA DELLA TERRA EVENTS TO BLACK CANYON CATERING, INC., DBA DELLA TERRA EVENTS, 3501 FALL RIVER DRIVE, ESTES PARK, COLORADO.** Mayor Koenig opened the public hearing and Town Clerk Williamson presented Resolution 40-23. She reviewed the transfer application for the Lodging and Entertainment Liquor License, stating all paperwork and fees have been submitted and the application has undergone concurrent review. The applicant was available for questions. Mayor Koenig closed the public hearing and it was **moved and seconded** (Hazelton/Cenac) **to approve Resolution 40-23**, and it passed unanimously.

#### **ACTION ITEMS:**

1. **RESOLUTION 41-23 SUPPLEMENTAL BUDGET APPROPRIATIONS #3 TO THE 2023 BUDGET.** Director Hudson presented Resolution 41-23 to approve budget appropriations to appropriate Parking Services allocation, the Event Center public wireless system, the new Workforce Housing and Childcare fund, new grants for the US36/Community Drive Roundabout, and \$5.3 million dollar budget dedicated to workforce housing and childcare. It was **moved and seconded** (Cenac/MacAlpine) **to approve Resolution 41-23**, and it passed unanimously.

#### **REPORTS AND DISCUSSION ITEMS:**

1. **VACANCY ON THE ESTES PARK BOARD OF TRUSTEES AND THE PROCESS TO FILL THE VACANCY.** Town Clerk Williamson requested Board direction on the process to fill the vacancy on the Board of Trustees with the recent passing of Mayor Pro Tem Scott Webermeier. Mayor Pro Tem Webermeier was

## Board of Trustees – April 11, 2023 – Page 5

elected at the April 5, 2022 election for a four (4) year Trustee Term. As a statutory community, the Town would be required to follow the guidelines outlined in Colorado Revised Statutes (CRS) 31-4-303 Trustee to Fill Vacancy. The Board must either appoint or set an election within 60 days from the date of the vacancy to fill the term of the Trustee, i.e. May 26, 2023. If the Board does not take action within 60 days, an election must be held to fill the vacancy. She reviewed options to consider filling the vacancy until the next election on April 2, 2024, including directing staff to begin the appointment process and how or set an election to fill the vacancy at a cost of approximately \$30,000. Staff recommended an appointment process with individuals submitting a letter of interest and requested direction on the preferred interview process and timing of the appointment. Board consensus was to direct staff to elicit letters of interest for the vacancy. The Board would determine the review process after the deadline to submit letters and requested staff highlight the time commitment and regular attendance at scheduled meetings and previous experience in government in the advertisement. The Board would review letters at the April 25, 2023 meeting.

Whereupon Mayor Koenig adjourned the meeting at 9:30 p.m.

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Wendy Koenig, Mayor

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Bunny Victoria Beers, Deputy Town Clerk

## RECORD OF PROCEEDINGS

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*Town of Estes Park, Larimer County, Colorado April 11, 2023*

Minutes of a Study Session meeting of the **TOWN BOARD** of the Town of Estes Park, Larimer County, Colorado. Meeting held at Town Hall in the Board Room and Virtually in said Town of Estes Park on the 11<sup>th</sup> day of April, 2023.

Board: Mayor Koenig, Trustees Cenac, Hazelton, MacAlpine, Martchink, and Younglund, and Vacancy

Attending: Mayor Koenig, Trustees Cenac, Hazelton, MacAlpine, Martchink, and Younglund

Also Attending: Town Administrator Machalek, Assistant Town Administrator Damweber, Town Attorney Kramer, Town Clerk Williamson, and Recording Secretary Disney

Absent: None.

Mayor Koenig called the meeting to order at 5:30 p.m.

### **BUSINESS/SHORT-TERM RENTAL LICENSE RENEWAL ANNUAL REPORT.**

Town Clerk Williamson provided an annual report of the business and short-term rental license renewals. She highlighted the number of issued licenses for 2022, business license penalty fee for late renewals, the vacation home residential cap and waitlist, the number of vacation home license which transferred or went inactive, the Workforce Housing Regulatory Linkage Fee impact, increased interests in bed and breakfast licenses, clarification of the bed and breakfast definition and requirements, the state's definition of bed and breakfasts, and how property taxes were assessed for bed and breakfast licenses.

The Board discussed the 2023 delinquent business licenses, the residential cap and reason for creating the cap, the process of assessing commercial rates for bed and breakfast licenses as a mixed-used property classification, and the number of vacation home licenses that don't actively operate. The Board directed staff to maintain the cap and waitlist and requested a future study session to discuss the bed and breakfast regulations, minimum usage of vacation homes, the role of an on-site manager, and adjusting terminology from vacation home to short-term rentals.

### **SB23-213 LAND USE.**

Town Attorney Kramer presented an overview of SB23-213 Land Use, currently before the state legislature, which would limit the local control on land use. He provided background on the classifications of municipalities, the impacts of the proposed legislation, outlined specific impacts applicable to the Town such as: Accessory Dwelling Unit regulations, occupancy limits, and water loss audits, and how these impacts compare to current Town codes and practices. The Board discussed concerns with the bill, a resolution for the Town to take a formal position, the timeline of providing a resolution, and potential changes to the bill already being discussed.

### **TRUSTEE & ADMINISTRATOR COMMENTS & QUESTIONS.**

None.

### **FUTURE STUDY SESSION AGENDA ITEMS.**

Town Administrator Machalek stated the Joint Study Session with the Estes Park Housing Authority to discuss Issue 6E funds was scheduled for April 25, 2023, a discussion on the Planning Fee Schedule was scheduled for May 9, 2023, and it was requested and determined to schedule a discussion on seasonal RV housing for May

**Town Board Study Session – April 11, 2023 – Page 2**

23, 2023 and add a discussion on Bed & Breakfast regulations to Items Approved Unscheduled.

There being no further business, Mayor Koenig adjourned the meeting at 6:38 p.m.

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Kimberly Disney, Recording Secretary

DRAFT

## RECORD OF PROCEEDINGS

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*Town of Estes Park, Larimer County, Colorado April 5, 2023*

Minutes of a Study Session meeting of the **ESTES PARK TOWN BOARD** of the Town of Estes Park, Larimer County, Colorado. Meeting held at Town Hall Rooms 202/203 in said Town of Estes Park on the 5<sup>th</sup> day of April 2023.

Board: Mayor Koenig, Trustees Cenac, Hazelton, MacAlpine, Martchink, Younglund and a Vacancy

Also Attending: Town Administrator Machalek, Deputy Town Administrator Damweber, Town Attorney Kramer, Directors Bergsten, Garner, Hinkle, Hudson, and Muhonen, Chief Hayes, Management Analyst Simpson, Managers Garcia, Schumaker, and Solesbee, Public Information Officer Rusch Supervisor Berg, Town Clerk Williamson and Deputy Town Clerk Beers

Absent: None.

Meeting was called to order at 1:00 p.m. by Mayor Koenig.

### **REVIEW OF OBJECTIVES AND GOALS.**

Town Administrator Machalek reviewed changes or additions from the departments and the Board to the Strategic Policy Statements, Objectives, and Goals for each Key Outcome Area. Revisions and additions have been listed below:

#### **Exceptional Guest Services**

No Board comments on the Strategic Policy Statements.

Revised Goal 6.B: Visitor Services will work with Visit Estes Park on developing and implementing ways to help educate and entertain guests at the Visitor Center.

New Goal 6.C: Continue to implement a Guest Services (Service Elevated) annual training for volunteers in the Visitor Center.

New Objective 2.A.1: Produce a new event in January of 2024 (First People's Festival).

New Objective 4.1: Implement a new user friendly and robust ticketing system for events.

New Objective 4.A.1: Design a new user friendly Events Department website using a different website platform.

New Objective 4.A.2: Develop and Implement a more robust social media program.

New Objective 4.A.3: The Visitor Center will implement a plan to cross promote Town signature events.

New Trustee recommended Objective 5.A.1: Continue to work the Fine Arts Guild to evaluate the feasibility of a performing arts center in Stanley Park.

New Objective 6.B.1: Enhance the visitor experience in the Visitor Center through Estes Park imagery and artifacts.

#### **Governmental Services and Internal Support**

No Board comments on the Strategic Policy Statements.

**Town Board Study Session Meeting – April 5, 2023 – Page 2**

Revised Goal 2.A: Complete a review of the Town employee benefit package to ensure the Town remains competitive and aligned with other municipalities.

Revise Goal 7.C: Digitize Town records within Laserfiche.

New Objective 1.A.1: Implement supervisor training for all Town employees with direct reports.

New Objective 1.A.2: Complete 2024 Organizational Culture Survey and develop an action plan based on the findings. The Board requested a report of the completed Organizational Culture Survey before engaging the 2024 survey.

New Trustee recommended Objective 1.A.3: Refresh the Human Resources Strategic Plan and share next steps with the Town Board.

New Objective 2.A.1: Complete a benchmark study of employee benefit packages.

New Objective 7.A.1: Create a public-facing dashboard to share performance measurement data.

**Infrastructure**

No Board comments on the Strategic Policy Statements.

Revised Goal 1.C: Develop a plan to replace one (1) mile of pipe per year (federal financing will influence the 5-year outlook on how we replace one mile of pipe per year.

Revised Goal 3.B: Establish planning and policy guidance to direct Town investment in zero emission fleet vehicles, equipment, and infrastructure.

Revised Goal 4.A: Evaluate the service condition, safety, functionality, accessibility and land use restrictions of our 32 public buildings using a data-driven approach and document the outcomes in our LUCITY asset management system.

Revised Goal 4.B: Upgrade the quality, function and safety of the Town's public restrooms.

Revised Goal 4.D: Establish a timeline and funding strategy to implement the Facilities Master Plan recommendations.

Revised Goal 5.C: Implement a Stormwater Utility for the Estes Valley that funds the administration, operation, maintenance, and capital expansion of stormwater infrastructure over a 30 year or greater time period.

New Objective 1.A.1: Complete a draft Big-Thompson raw water supply line route analysis.

New Objective 1.B.1: Establish a baseline water loss record using out new Water Audits and Loss Control Program.

New Objective 1.C.1: Submit funding application(s) for the federal Infrastructure Investment and Jobs Act program and determine if in-house labor will be an eligible expense.

New Objective 3.A.1: Explore joint funding options for storage and intermittent renewables with PRPA.

New Objective 3.B.1: Complete a Zero-Emission Fleet Transition Plan.

**Town Board Study Session Meeting – April 5, 2023 – Page 3**

New Objective 4.D.1: Hire consultants to assist in land acquisition and design to relocate the Police Department out of Town Hall.

New Objective 5.A.1: Pursue grant funding for private and/or public flood mitigation and stormwater projects.

New Objective 5.A.2: Complete at least one stormwater CIP project from the list included in the Stormwater Drainage System Maintenance Policy.

New Objective 6.A.1: Conduct a feasibility study and take-rate report on a Trailblazer Broadband program to help provide access at a reduced or free rate to economically challenged families within the Estes Park School District.

New Trustee recommended Objective 6.A.1: Implement a Trailblazer Broadband program to help provide services at a reduced or free rate to economically challenged families within the Estes Park School District.

**Outstanding Community Services**

New Statement 9: We preserve and make accessible the history of Estes Park to understand how the community became what it is today and to make informed decisions about its future.

Revised Goal 1.A: Plan for and utilize 6E funds to achieve Workforce and Attainable Housing goals in partnership with the Estes Park Housing Authority.

Revised Goal 1.C: Incentivize development, conversion, and/or preservation of workforce and attainable housing, including downtown.

Revised Goal 4.A: Plan for and utilize 6E funds to address childcare issues consistent with the Childcare Needs Assessment and Strategic Plan.

Revise Goal 5.A to include a chapter on water-conscious landscaping.

Revised Goal 5.B: Overhaul outdated and aging landscaping in Children's Park, Riverwalk, and Wiest Park by 2026.

Discussion ensued regarding removal of Goal 5.C: Specify the additional equipment, personnel and space needed to deliver and maintain high quality landscaping in accordance with National Fire Protection Association Firewise USA criteria as required by new capital projects. Staff recommend adding the goal in the future during police facility considerations relative to environmental impacts and construction.

New Trustee recommended Goal 5.D: Implement xeriscaping or zero-water-waste landscaping in public parks.

New Objective 5.A.1: Establish a timeline and funding strategy for a Parks & Open Space Master Plan.

New Objective 7.1 Establish a timeline and funding strategy to implement the recommendations identified in the ADA Transition Plan.

**Public Safety, Health, and Environment**

No Board comments on the Strategic Policy Statements.

New Trustee recommended Goal 1.D: Support beneficial electrification of buildings by encouraging the replacement of fossil-fuel appliances with cleaner electric alternatives.

Move Goal 1.F Strongly consider funding to hire a full-time Environmental Sustainability Manager at the administrative level to an Objective 1.A.

**Town Board Study Session Meeting – April 5, 2023 – Page 4**

New Trustee recommended Goal 1.H: Establish Estes Park as a leader in mountain environmental stewardship and sustainable practices.

New Goal 1.I: Continue work with Larimer County on Climate Smart Future Ready initiative.

New Goal 7.A: Work collaboratively with the Estes Valley Fire Protection District to build an Emergency Management function that is focused on resilience planning for emergencies, responding to emergencies, and recovering from emergencies.

New Trustee recommended Objective 1.H.1: Develop an Estes-Park specific Climate Action Plan. After further discussion, the Board suggested moving the objective to a goal.

**Robust Economy**

No Board comments on the Strategic Policy Statements.

New Objective 4.A.1: Work with the Estes Chamber of Commerce and Downtown businesses to evaluate implementation options for the Downtown Plan.

New/Revised 5.A: Conduct corridor studies for the corridors called out in the Comprehensive Plan.

**Town Financial Health**

No Board comments on the Strategic Policy Statements.

Revised Goal 1.A: Replace the current accounting system with a modern Enterprise Resource Planning (ERP) system by 2025.

Revised Objective 1.A.1: Implement new ERP system. (Multi-Year Objective)

**Transportation**

No Board comments on the Strategic Policy Statements.

Revised Goal 1.A: Street rehabilitation efforts will result in an average Pavement Condition Index of 80 or greater for the Town street network by 2034.

Revised Goal 1.B: Fund the upgrade and maintenance of our public trail network to comply with adopted safety and disability standards through 2034.

Revised Goal 2.C: Explore the potential for year-round local and regional transit-service.

Revised Goal 2.D: Implement the Multimodal Transportation Plan.

Revised Goal 4.A: Implement the Downtown Parking Management Plan in a manner that delivers parking and transit services as a self-sustaining enterprise-funded program by 2030.

New Objective 1.A.1: Complete the construction of the Cleave Street Improvements.

New Objective 1.A.2: Complete the street rehabilitation of 1<sup>st</sup> Street, 2<sup>nd</sup> Street, 3<sup>rd</sup> Street, North Court, and South Court and provide ADA compliant pedestrian facilities following the water main and service installation project.

New Objective 1.A.3: Complete rehabilitation of West Elkhorn Avenue from Moraine Avenue to Far View Drive.

New Objective 2.A.1: Deliver technical support and public communication assistance for construction of the Downtown Estes Loop by FHWA. (Multi-Year Objective).

**Town Board Study Session Meeting – April 5, 2023 – Page 5**

New Objective 2.H.1: Select specific recommendations from the Multimodal Transportation Plan for budgeting and implementation in 2025.

New Objective 2.D.1: Seek funding and create an implementation timeline for the year-one recommendations from the Transit Development Plan.

New Objective 4.A.1: Evaluate implementation of paid parking in all downtown public lots and the associated timing and funding impacts for a new downtown parking structure.

New Objective 4.A.2: Construct a single-deck parking structure above the Big Horn parking lot.

New Objective 5.1: Seek funding to complete the construction phase of the SB267 Mobility Hub project.

New Objective 5.2: Actively participate in the US34 Coalition and Transportation Management Organization planning and project implementation.

New Objective 7.A.1: If funded, complete the design and construction of the multi-use path on the west side of Community Drive between Manford Avenue and US36. (2023 Carryover)

New Objective 7.A.2: Pursue CDOT Safe Routes to School grant funding for the design of the segment of the Community Drive Multi-Use Trail between Brodie Ave and Graves Ave.

New Objective 7.B.1: If funded by the 2023 TAP grant, complete the design of the Fall River Trail.

Town Administrator Machalek would compile input from the meeting, collect public input, and develop a provisional 2024 Strategic Plan in May 2023. A final draft 2024 Strategic Plan would be prepared for the Board's consideration before adoption at a regular meeting in the fall.

There being no further business, Mayor Koenig adjourned the meeting at 3:54 p.m.

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Bunny Victoria Beers, Deputy Town Clerk

*Town of Estes Park, Larimer County, Colorado, March 2, 2023*

Minutes of a meeting of the **FAMILY ADVISORY BOARD** of the Town of Estes Park, Larimer County, Colorado. Meeting held in Rooms 203 of the Estes Park Town Hall in said Town of Estes Park on the 2<sup>nd</sup> day of March, 2023.

Board: Chair Nancy Almond, Vice Chair Deanna Ferrell, Members Aleta Kazadi, Rut Miller, Jessica Moffett, Nicole White, and Sue Yowell

Also Attending: Town Board Liaison Younglund, Deputy Town Administrator Damweber, and Deputy Town Clerk Beers

Absent: None.

Chair Almond called the meeting to order at 3:35 p.m.

**PUBLIC COMMENT.**

Chair Almond recommended amending the agenda to add a Chair Report after the Police Department Co-Responder Program, a follow up discussion regarding the recommendations to the Town Board from the February 24, 2023 Special FAB Meeting, and a discussion regarding the Town Boards decision to sunset the FAB, and the FAB was in agreement.

**PUBLIC COMMENT.**

Bell Morris/Town citizen stated concern regarding the Town Boards decision to sunset the FAB and recommended members consider meeting with other advisory boards to discuss their evolution based on community needs. She stated the importance of new employees overseeing the 6E fund spending working directly with local organizations and advocacy groups.

Laurie Dale Marshall/Estes Valley Investment in Childhood Success Director stated housing and childcare needs are important and there are more opportunities now than in the past.

**MINUTES DATED FEBRUARY 2, 2023.**

It was **moved and seconded** (Yowell/Miller) **to approve the meeting minutes dated March 2, 2023**, and it passed unanimously.

**STAFF LIAISON UPDATE.**

Deputy Town Administrator Damweber stated the Town Board approved the Workforce and Childcare Funding Plan which would be presented to the Larimer County Board of County Commissioners for consideration. He stated the Town would consider contributions toward the YMCA of the Rockies to assist with filling childcare positions which remain vacant. He stated a childcare needs assessment would be completed in 2023. He stated the Board have mentioned the need for a task force to inform the Board on the childcare needs and other issues. The Town Board would be identifying a spending plan for 6E funds during the 2024 Strategic Planning process.

Chair Almond stated FAB had received criticism in the past for lack of recommendations to the Town Board and requested clarification on the process of informing the Town Board of advisory board recommendations. She questioned how providers are informed on funding options available through the Town. Discussion ensued regarding home-care service providers and how they would be informed of funding options available through the Town. He stated infant and toddler care continues to be a service gap in the community and clarified the 2023 budget allocates \$100,000 toward childcare. Discussion ensued regarding the Estes Valley Recreation and Park District Community Center which could be renovated and used for infant and childcare and would be considered as an option.

**POLICE DEPARTMENT CO-RESPONDER PROGRAM.**

Kristi Capo, SummitStone Co-Responder with SummitStone and clinical mental health provider reviewed services provided and the typical calls which they respond to. She stated calls range from family disputes, general mental health related de-escalation, or contact connection for resources and referrals. Services encompass all of Larimer County and she acknowledged the difficulties individuals face in crisis who need services which are only provided outside of the Estes Valley. She stated SummitStone received additional funding to allow for a second co-responder in Estes Park to increase the resource availability 7 days a week. FAB questions have been summarized: whether SummitStone provides referrals to outside agencies including those outside of the Estes Valley; how SummitStone coordinates services with the Estes Valley Crisis Advocates; and if SummitStone responds to mental health related issues at the school. The FAB stated the importance of responders being informed on available resources within the community and they encouraged opportunities to connect with community organizations and ways to support the Spanish speaking members.

**TOWN BOARD DECISION TO SUNSET FAB - MEMBERSHIP COMMENTS.**

Chair Almond provided highlights of the February 28, 2023 Town Board Study Session FAB discussion and the discussion to sunset FAB. It was mentioned the FAB could request the Town Board to maintain FAB or members could create a community advocacy group and continue similar work outside of Town Board appointment.

Cindy Younglund arrived at 4:42 p.m.

FAB comments have been summarized: Concern was stated for lack of support from the Town Board and clarity on directives for FAB; support was stated in advocacy for families in a different way; a community group would be an opportunity to build relationships; interest was heard to form a community group with more flexibility; new members appointed in 2022 stated frustration in the state of the FAB not being identified during interviews; disappointment was stated in the Town Boards decision and interest was stated in advocating for maintaining the FAB.

Members of FAB stated the importance of fighting and supporting families, providing resources, engaging with the Hispanic community, and focusing efforts to be most effective.

Deputy Town Administrator Damweber stated FAB has elevated the needs of families in the community since formation. At the time FAB was established the Town also formed the Community Initiative Funding program which has been instrumental in forming relationships with outside partners and identifying the needs of the community. He encouraged FAB to consider how they can be most effective in advocating for change and influencing policy decisions on behalf of families.

Member White left at 5:05 p.m.

Trustee Younglund commended FAB for bringing awareness to family needs and stated opportunity exists for the high energy of members to continue serve the community in a different setting or group.

Discussion ensued regarding FAB member interest in advocating against the sunset decision by the Town Board or forming a community group to advocate for families. Consensus was to continue to advocate for the needs of families in the community while maintaining effectiveness. It was **moved and seconded** (Yowell/Almond) **to recommend the Town Board not sunset FAB**, and it passed unanimously.

There being no further business Chair Almond adjourned the meeting at 5:36 p.m.

/s/Bunny Victoria Beers, Deputy Town Clerk

Minutes of a Special meeting of the **FAMILY ADVISORY BOARD** of the Town of Estes Park, Larimer County, Colorado. Meeting held in the Estes Valley Investment in Childhood Success Family Resource Center, Unit A, 1182 Graves Avenue in said Town of Estes Park on the 24<sup>th</sup> day of February, 2023.

Board: Members Nancy Almond, Vice-Chair Deanna Ferrell, Aleta Kazadi, Rut Miller, Jessica Moffett, Nicole White, and Sue Yowell

Also Attending: Deputy Town Administrator Damweber

Absent: Vice Chair Deanna Ferrell, member Aleta Kazadi, and Town Board Liaison Younglund

Chair Almond called the meeting to order at 2:02 p.m.

**PUBLIC COMMENT.**

Laurie Dale Marshall, Estes Valley Investment in Childhood Success (EVICS) Director shared information on opportunities for building and expanding Early Childhood Education capacity in the Estes Valley.

**REVIEW THE WORKFORCE AND CHILDCARE FUNDING PLAN FOR LODGING TAX (6E) FUNDS.** Deputy Town Administrator Damweber provided an overview of the proposed 6E funding plan.

**IDENTIFY FUNDING PLAN RECOMMENDATIONS FOR TOWN BOARD CONSIDERATION.** After discussion, it was moved and seconded (White/Yowell) to recommend the Operating Plan reflect a partnership with EVICS for the execution of specific activities within the plan that align with EVICS expertise and scope of work and designate pass-through funds for those purposes, and it passed with Member Miller abstaining.

Member Yowell left the meeting at approximately 3:00 p.m.

It was moved and seconded (White/Miller) to recommend the Town Board designate 6E funds to update the 2018 Childcare Needs Assessment and create a Community Childcare Strategic Plan, including short and long-term goals and projected allocations of funds for meeting the community’s childcare needs; and the 2024 Town Strategic Plan specifically reference the administration of 6E Lodging Tax Funds, and appropriate strategies and outcomes to ensure accountability and success, and it passed unanimously.

It was moved and seconded (White/Moffett) to recommend the Town Board direct staff to create a Stakeholders Advisory Team comprised of key partners currently executing programs and services related to housing and childcare, to meet prior to the development of the annual funding plan and as needed based on opportunities or needs as they arise, and it passed unanimously.

There being no further business Chair Almond adjourned the meeting at 3:42 p.m.

/s/Jason Damweber, Deputy Town Administrator

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Minutes of a Regular meeting of the **ESTES PARK BOARD OF ADJUSTMENT** of the Town of Estes Park, Larimer County, Colorado. The meeting was held in said Town of Estes Park on January 3, 2023.

Board: Chair Jeff Moreau, Vice-Chair Wayne Newsom, Board Member Joe Holtzman

Attending: Chair Moreau, Board Member Holtzman, Community Development Director Jessica Garner, Senior Planner Woeber, Planner I Kara Washburn, Town Board Liaison Barbara McAlpine, Recording Secretary Karin Swanlund

Absent: Newsom

Chair Moreau called the meeting to order at 9:00 a.m. There were nine people in attendance.

**APPROVAL OF AGENDA**

It was moved and seconded (Holtzman/Moreau) to approve the agenda. The motion passed 2-0.

**APPROVAL OF CONSENT AGENDA**

It was moved and seconded (Holtzman/Moreau) to approve the Consent Agenda. The motion passed 2-0.

Public Comment: none

**VARIANCE REQUEST                      TBD Raven Avenue                      Senior Planner Woeber**

The Applicant seeks a 10-foot variance to the minimum lot width standard for the RM Zone District in accordance with *Estes Park Development Code* (EPDC) Section 3.6.C. If approved, the property will be subdivided into five lots, each 50 feet wide.

Discussion: David Emerson, director of St. Vrain Habitat for Humanity, relayed plans for providing affordable housing in Estes Park at a 60% AMI or lower. He thanked the Board for hearing the variance.

**It was moved and seconded** (Moreau/Holtzman) to **approve** the variance request for a 10-foot setback to the minimum lot width in accordance with the findings as presented. **The motion passed 2-0.**

**VARIANCE REQUEST                      160 First Street                      Planner I Washburn**

The Applicant requests approval of a variance to allow a reduced front setback of eight and three-tenths feet (8.3') and a reduced arterial road setback of twenty-two feet six inches (22'-6") in lieu of the fifteen feet (15') and twenty-five feet (25') respective setbacks required in the CO (Commercial Outlying) Zoning District under Section 4.4.C.4. of the *Estes Park Development Code* (EPDC). The Applicant proposes eliminating three parking spaces in the subject area to construct a deck for outdoor seating at the El Mex-Kal Family Restaurant.

Discussion: Member Holtzman requested removing the fourth parking space and including a bollard. Backing out of those parking spaces is a hazard. Mark Rismiller, the property owner, explained the reason for not using the 4th parking space for the decking was due to Estes Park Sanitation concerns with accessing the clean-out sewer lines. He will check with EPSD on the placement of the bollard.

**It was moved and seconded** (Moreau/Holtzman) to **approve** the variance request for reduced front setback and reduced arterial road setback for the subject property addressed as 160 1st Street in the Town of Estes Park, with findings as outlined in the staff report with the addition of installing a bollard to keep people from parking in the fourth parking spot. **The motion passed 2-0.**

**Board of Adjustment, January 3, 2023 – Page 2**

**REPORTS**

The comprehensive plan passed in December. The next project will be updating the Development Code. A restructuring of the fee schedule will also be done in 2023. The Community Development offices will be remodeled, hopefully starting in the Spring.

There being no further business, Chair Moreau adjourned the meeting at 9:23 a.m.

/s/Jeff Moreau, Chair

/s/Karin Swanlund, Recording Secretary

Minutes of a Regular meeting of the **ESTES PARK PLANNING COMMISSION** of the Town of Estes Park, Larimer County, Colorado. Meeting held in said Town of Estes Park on the 17 day of January 2023.

Committee: Chair Matt Comstock, Vice-Chair Matthew Heiser, Commissioners Joe Elkins, Howard Hanson, Chris Pawson.

Attending: Chair Comstock, Vice-Chair Heiser, Commissioner Elkins, Commissioner Hanson, Commissioner Pawson, Director Jessica Garner, Senior Planner Jeff Woeber, Planner I Kara Washam, Recording Secretary Karin Swanlund, Attorney Dan Kramer, Town Board Liaison Barbara MacAlpine

Absent: Elkins

Chair Comstock called the meeting to order at 1:33 p.m. There were 12 people from the public in attendance.

Chris Pawson, the new Commissioner, was introduced. The Town Board of Trustees appointed him in December. New Planner I, Kara Washam, was also introduced.

**AGENDA APPROVAL**

**It was moved and seconded (Hanson/Heiser) to approve the agenda. The motion passed 4-0.**

**PUBLIC COMMENT** none

**CONSENT AGENDA APPROVAL**

**It was moved and seconded (Hanson/Heiser) to approve the consent agenda. The motion passed 3-0, with Pawson abstaining.**

**ACTION ITEMS**

**Stanley Home Museum**

**Amendment to S2 Special Review**

Senior Planner Woeber reviewed the staff report. The original Special Review for the Cultural Institution (Stanley Home Museum and Education Center) was approved by the Town Board on August 28, 2018. Woeber described the amendments proposed to five of the thirteen previous Conditions of Approval. The original conditions will remain unchanged.

Condition **No. 1:** The applicant proposes allowing two tour groups of up to 12 people (the maximum currently allowed) to be on the property at the same time, but with more overlap than what is currently allowed. Currently, only “brief and incidental overlap” is permitted. The applicant notes 99% of tours have six or fewer people.

Condition **No. 2:** Sunday hours are 12:30 p.m. to 4:45 p.m. The applicant proposes amending the Sunday hours to 9:45 a.m. to 4:45 p.m. Mondays are closed under current Condition #2 unless it is a holiday. The applicant proposes expanding this to Mondays, which are a holiday or if a Special Event is scheduled.

Condition **No. 3:** Special Events are a key component of the Stanley Home operation. Currently, there is a limit of two Special Events per month. The applicant proposes expanding this to four per month, with eight allowed during December. Outdoor Special Events are also proposed, up to one per month with a limit of four during a calendar year.

Condition **No. 10:** Currently, tour attendees must use a shuttle to visit the Stanley Home from May 1 to October 31. The applicant proposes allowing attendees to park on-site year-round. There are eleven existing parking spaces, with five additional spaces proposed. Shuttle service would continue to be used for Special Events.

**Planning Commission – January 17, 2023 – Page 2**

Condition **No. 11**: The eleven existing parking spaces are designated for employee parking, in addition to one ADA Handicap space, from May 1 to October 31. The applicant proposes allowing these and the five proposed spaces to be used by tour attendees year-round.

**DISCUSSION:**

David Batey, the Historic Stanley Home Foundation Chair, was available for questions. Regarding the Conservation Easement requirement, there was a requirement to initiate this, but it was determined it was not feasible. Vice-Chair Heiser suggested removing this item from the conditions. The increased number of tours and parking was reviewed and deemed appropriate. Tour times will not overlap. Outdoor special events are still required to conclude by 8:00 p.m.

Public Comment: none

**It was moved and seconded (Heiser/Hanson) to forward a recommendation of approval to the Town Board of Trustees of the Special Review Amendment with the findings and condition of approval recommended by Staff, suggesting that Staff look at all conditions of approval which are still relevant. The motion passed 4-0.**

**REPORTS:**

The Comprehensive Plan is complete and accepted by all bodies. Hard copies are available if wanted.

There being no further business, Chair Comstock adjourned the meeting at 2:07 p.m.

/s/Matt Comstock, Chair

/s/Karin Swanlund, Recording Secretary

*Town of Estes Park, Larimer County, Colorado January 17, 2023*

Minutes of a Study Session of the **PLANNING COMMISSION** of Estes Park, Larimer County, Colorado. The meeting was held in the Town Board Room, 170 MacGregor Avenue in said town of Estes Park on the 17<sup>th</sup> day of January, 2023

Commission: Chair Matt Comstock, Vice-Chair Matthew Heiser, Commissioners Joe Elkins, Howard Hanson. Chris Pawson

Attending: Comstock, Hanson, Heiser, Pawson

Also Attending: Director Jessica Garner, Senior Planner Jeff Woeber, Planner I Kara Washam, Town Attorney Dan Kramer, Town Board Liaison Barbara MacAlpine, Recording Secretary Karin Swanlund

Absent: Elkins

Chair Comstock called the meeting to order at 12:30 p.m.

New planner Kara Washam and new Commissioner Chris Pawson were introduced.

Consultants Mike Scholl and Matt Ashby from Ayres gave a report on medium-density housing, or “The Missing Middle.” This has been an ongoing discussion, beginning in August of 2021. It has been delayed due to the Comprehensive Plan rewrite and the new Housing Needs Assessment (HNA). The new HNA suggests 2,700+ housing units are needed in the Estes Valley. Medium density is the blending of single-family housing and large, high-density apartment complexes. This is in contrast to the traditional lots or units-per-acre practice. The community decides the definition of “middle” and establishes the rules.

**Benefits of medium-density housing options:**

Workforce  
Different stages of life  
Support for transit options  
Walkability  
Improved neighborhood character  
Opportunity for more attainable housing  
Diverse price points

**Multi-step process:**

New zone district  
Rezone applications  
platting/site planning  
Permitting

**Planning Commission Study Session January 17, 2023**

**– Page 2**

There are at least two options on how to integrate current neighborhoods into higher density:

- Missing Middle Open-higher scale, walkable/transit, more urban design,
- Missing Middle Limited-less dense, lower scale, natural focal point, sensitive to existing development

The process is about customization, rules you must follow, guidelines for consideration and adding details of how to make it work.

- Determine where zoning designation is appropriate in the geographic component
- Do areas correlate to all or a portion of the missing middle?
- What checks and balances are necessary for each category?
- Important to connect this process to the Comprehensive Plan

Director Garner stated that diversity is needed at all levels: housing, income, and age. The accessible, easy places to build are no longer available, so we have to look deeper and get creative.

This topic will be continued at the February 21 Study Session.

Chair Comstock adjourned the Study Session at 1:30 p.m.

/s/Karin Swanlund, Recording Secretary

*Town of Estes Park, Larimer County, Colorado February 21, 2023*

Minutes of a Joint Study Session of the **PLANNING COMMISSION** of Estes Park, Larimer County, Colorado. The meeting was held in the Town Board Room, 170 MacGregor Avenue in said Town of Estes Park on the 21<sup>st</sup> day of February, 2023

Commission: Chair Matt Comstock, Vice-Chair Matthew Heiser, Commissioners Joe Elkins, Howard Hanson, Chris Pawson

Attending: Comstock, Hanson, Heiser, Pawson, Elkins

Also Attending: Director Jessica Garner, Town Attorney Dan Kramer, Town Board Liaison Barbara MacAlpine, Recording Secretary Karin Swanlund

Absent: None

Chair Comstock called the meeting to order at 12:00 p.m. There were four members of the community present.

Housing Authority Executive Director Scott Moulton gave a presentation on the recently completed Housing Needs Assessment, focusing on some of the highlights. See the meeting recoding for detailed conversation. PowerPoint presentation attached.

1. Key Findings: age profile, job projections, housing stock (occasional use approximately 40%), price increases.
2. Data Analysis: The above findings lead to the “housing gap analysis,” with an acute need at the lower income levels. Right now, the total existing unit need is 1,220. The housing authority has over 1,000 people on a waiting list.
3. Strategic Plan Overview: preserve current housing stock and alter its use, not necessarily build hundreds of new units. This can be done through property acquisition, deed restriction buy-down, renovation and rehab, among many other options. Development Code updates to increase density and Development Project requirements to house employees are also needed. Using the estimated \$5 million 6E funds will open up many opportunities.

Discussion: Housing Authority must use these implementation plans to make housing available. What should be allowed as a “use by right” needs to be included in the Development Plan rewrite. The Planning Commission can focus on gauging projects that come across their path by keeping the future Code in mind. Some 6E funding could be used for the Code rewrite. Defining workforce, attainable, and affordable housing would be helpful.

The Missing Middle discussion will be brought back to the Commission at a later date.

## **RECORD OF PROCEEDINGS**

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**Planning Commission Study Session February 21, 2023**

**– Page 2**

There being no further business, Chair Comstock adjourned the meeting at 1:40 p.m.

/s/Karin Swanlund, Recording Secretary

*Town of Estes Park, Larimer County, Colorado, March 21, 2023*

Minutes of a Study Session of the **ESTES PARK PLANNING COMMISSION** of the Town of Estes Park, Larimer County, Colorado. Meeting held in said Town of Estes Park on the 21 day of March 2023.

Commission: Commission: Chair Matt Comstock, Vice-Chair Matthew Heiser, Commissioners Joe Elkins, Howard Hanson, Chris Pawson

Attending: Comstock, Hanson, Heiser, Elkins, Pawson

Also Attending: Director Jessica Garner, Planner Kara Washam, Town Attorney Dan Kramer, Town Board Liaison Barbara MacAlpine, Recording Secretary Karin Swanlund

Absent: none

Chair Comstock started the meeting at 10:30 a.m. There were five members of the community present.

Planner I Washam gave an update to the Commission on Community Planning for Wildfires (CPAW). The CPAW program was paused due to staff changes and the completion of the Comprehensive Plan. The Memorandum of Understanding has been renewed until December 31, 2023. CPAW recommendations are intended to complement the other wildfire studies that have been done. Most of the changes can be integrated into the Development Code update, with a high priority on landscaping standards and plant suggestions. Chair Comstock noted that enforcement would be necessary for the implementation.

Heiser asked that staff inform developers of this endeavor. There is guidance in the code that states that if you are accomplishing the same goals, you don't have to meet the exact standards, leaving some flexibility in the Landscape Code and balancing development standards.

Ayres Associate Mike Scholl reviewed the most current findings regarding the Missing Middle code amendment. Per the Housing Needs Assessment and Strategic Plan, creating desirable and compatible neighborhoods is vital to the Missing Middle goal. The approach is to amend Chapter 9, Planned Unit Developments (PUDs) and establish two new zoning districts: Mixed Neighborhood Residential and Neighborhood Village. Due to its uniqueness, the standard code paradigm won't work in Estes Park.

Purpose: to provide a compatible range of housing types within neighborhoods and projects based on plans that promote well-designed communities and integrate with surrounding development.

## RECORD OF PROCEEDINGS

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### Planning Commission Study Session March 21, 2023

– Page 2

Per Attorney Kramer, creating standards to help say Yes or No to a project is needed, with defined criteria and a multi-step process.

Considerable discussion on PUDs and time frames was had. (see recording <https://www.youtube.com/watch?v=l3ewUxmVlxU>).

Questions to consider for the subsequent discussion were given:

Lot size minimums?

Open Space types?

Internal Circulation regarding street standards?

Home sites related to open spaces?

This topic will be continued at the April 16 Study Session.

There being no further business, Chair Comstock adjourned the meeting at 12:10 p.m.

/s/Karin Swandlund, Recording Secretary



# Memo

**To:** Honorable Mayor Koenig  
Board of Trustees

**Through:** Town Administrator Machalek

**From:** Brian Berg, Parks Supervisor  
Greg Muhonen, Public Works Director

**Date:** April 25, 2023

**RE:** 2023 Art in Public Places (AIPP) Yarn Bombing Application

(Mark all that apply)

☐ PUBLIC HEARING ☐ ORDINANCE ☐ LAND USE  
☐ CONTRACT/AGREEMENT ☐ RESOLUTION ☒ OTHER \_\_\_\_\_

QUASI-JUDICIAL ☐ YES ☒ NO

## **Objective:**

Public Works staff request that the Town Board approve the placement of knit yarn wraps on the street trees along Elkhorn Avenue during the Wool Market.

## **Present Situation:**

It has become an annual tradition for this group to decorate the downtown street trees to help promote the annual Wool Market, which will be held at the Estes Park Events Complex, June 10-11, 2023.

## **Proposal:**

This is a self-funded event organized by volunteers. All yarn, installation, upkeep, and removal are provided by these volunteers.

## **Advantages:**

- This artwork is a fun addition to the downtown area and always receives positive feedback from our guests and residents.

## **Disadvantages:**

- If there is poor weather such as heavy rain, it can negatively affect the yarn wrapping until the volunteer group can arrive and fix the wraps.

## **Action Recommended:**

Staff recommends approval of the 2023 Yarn Bombing application for display June 7-18, 2023.

**Finance/Resource Impact:**

This event produces no financial impact to the Town budget and no resource impact to the Parks Division.

**Level of Public Interest**

Low to medium, depending upon previous knowledge of this recurring annual event.

**Sample Motion:**

I move for the **approval** of the 2023 AIPP Artwork Donation Form for Yarn Bombing on the trees along Elkhorn Avenue.

**Attachments:**

1. 2023 AIPP Yarn Bombing Application



**TOWN OF ESTES PARK**  
**TOWN OF ESTES PARK**  
**ARTWORK DONATION FORM**

Thank you for your interest in donating a work of art to the Town of Estes Park. Art in Public Places is a vital component to the beauty and quality of life in our community. Please complete the information below to facilitate a thorough review of the proposed donation.

In order to ensure the highest standards, aesthetic consistency, and proper maintenance, the decision to accept the donation rests with the Public Works Department. Public Works staff reserve the right to move or remove the piece from the permanent collection, if that becomes necessary, in the future.

Please submit with this form:

1. Photographs or detailed drawings of the artwork
2. Documentation authenticating the purchase price or appraised value

### General Information

Donor name (Individual/Organization/Business):

Contact person (if different from above):

*Kathryn Snijders*

Mailing Address:

*301 Utte Lane*

Phone Number & Email Address:

*970-227-5751      kathy.snijders@airbits.com*

### Information About the Artwork

Title of the Artwork:

*Farm Bombing*

Name of the Artist:

*multiple*

Mailing Address of Artist:

Description of media or materials used or to be used in artwork:

Fiber

Proposed Location of Artwork:

Elkhorn Ave

Special Instructions (if any):

June 7

When is the artwork available for installation?

June 7 down on 18<sup>th</sup>

Year Completed: \_\_\_\_\_

Purchase Price: \_\_\_\_\_

Current Value: \_\_\_\_\_

Dimensions: \_\_\_\_\_

Weight: \_\_\_\_\_

Long-term maintenance required:

garage committee will maintain

Does donation include the cost of site preparation, installation costs, concrete pad or pedestal (if necessary), or does it include money for these costs? YES NO NA

If yes, please provide proposed budget amount: none

The undersigned is the owner of the artwork, free of all liens and encumbrances, and has the right to make this agreement. The undersigned hereby agrees to donate the above described art work, with the following additional conditions (if any):

Kathryn Snyders

Donor Signature & Date (Please print name after signature)

Return this form and supporting documents to:

Town of Estes Park  
Public Works Department  
170 MacGregor Ave  
PO Box 1200  
Estes Park, CO 80517  
[publicworks@estes.org](mailto:publicworks@estes.org)

**RESOLUTION 42-23**

SETTING THE PUBLIC HEARING FOR A CHANGE IN LOCATION OF A TAVERN  
LIQUOR LICENSE APPLICATION FOR MONTEGO BAY ENTERPRISES INC. DBA  
THE WAPITI COLORADO PUB

BE IT RESOLVED BY THE BOARD OF TRUSTEES OF THE TOWN OF ESTES  
PARK, COLORADO:

That the filing date of the application for a Change of Location for a Tavern Liquor  
License, filed by MONTEGO BAY ENTERPRISES INC. DBA THE WAPITI COLORADO  
PUB, from 247 W. Elkhorn Avenue, Estes Park, Colorado, to 1350 Fall River Road, Estes  
Park, Colorado, is April 6, 2023.

It is hereby ordered that a public hearing on said application shall be held in the  
Board Room of the Municipal Building, 170 MacGregor Avenue, on Tuesday, May 9, 2023,  
at 7:00 P.M., and that the neighborhood boundaries for the purpose of said application and  
hearing shall be the area included within a radius of 3.55 miles, as measured from the  
center of the applicant's property.

DATED this \_\_\_\_\_ day of \_\_\_\_\_, 2023

TOWN OF ESTES PARK

\_\_\_\_\_  
Mayor

ATTEST:

\_\_\_\_\_  
Town Clerk

APPROVED AS TO FORM:



\_\_\_\_\_  
Town Attorney

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**RESOLUTION 43-23**

**SETTING THE PUBLIC HEARING FOR A NEW HOTEL & RESTAURANT LIQUOR  
LICENSE APPLICATION FOR MONTEGO BAY ENTERPRISE INC. DBA THE  
DOWNTOWN EATERY**

BE IT RESOLVED BY THE BOARD OF TRUSTEES OF THE TOWN OF ESTES  
PARK, COLORADO:

That the filing date of the application for a New HOTEL & RESTAURANT Liquor  
License, filed by MONTEGO BAY ENTERPRISE INC. DBA THE DOWNTOWN  
EATERY, 247 W. Elkhorn Avenue, Estes Park, Colorado, is April 6, 2023.

It is hereby ordered that a public hearing on said application shall be held in the  
Board Room of the Municipal Building, 170 MacGregor Avenue, on Tuesday, May 9, 2023,  
at 7:00 P.M., and that the neighborhood boundaries for the purpose of said application and  
hearing shall be the area included within a radius of 3.25 miles, as measured from the  
center of the applicant's property.

DATED this \_\_\_\_\_ day of \_\_\_\_\_, 2023

TOWN OF ESTES PARK

\_\_\_\_\_  
Mayor

ATTEST:

\_\_\_\_\_  
Town Clerk

APPROVED AS TO FORM:



\_\_\_\_\_  
Town Attorney

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**RESOLUTION 44-23**

**SETTING THE PUBLIC HEARING FOR A NEW HOTEL & RESTAURANT LIQUOR  
LICENSE APPLICATION FOR OLE INTERNATIONAL KITCHEN LLC DBA OLE  
INTERNATIONAL KITCHEN**

BE IT RESOLVED BY THE BOARD OF TRUSTEES OF THE TOWN OF ESTES  
PARK, COLORADO:

That the filing date of the application for a New HOTEL & RESTAURANT Liquor  
License, filed by OLE INTERNATIONAL KITCHEN LLC DBA OLE INTERNATIONAL  
KITCHEN, 145 E. Elkhorn Avenue, Units 300-304, Estes Park, Colorado, is April 7, 2023.

It is hereby ordered that a public hearing on said application shall be held in the  
Board Room of the Municipal Building, 170 MacGregor Avenue, on Tuesday, May 9, 2023,  
at 7:00 P.M., and that the neighborhood boundaries for the purpose of said application and  
hearing shall be the area included within a radius of 3.25 miles, as measured from the  
center of the applicant's property.

DATED this \_\_\_\_\_ day of \_\_\_\_\_, 2023

TOWN OF ESTES PARK

\_\_\_\_\_  
Mayor

ATTEST:

\_\_\_\_\_  
Town Clerk

APPROVED AS TO FORM:



\_\_\_\_\_  
Town Attorney

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# Memo

**To:** Honorable Mayor Koenig  
Board of Trustees

**Through:** Town Administrator Machalek

**From:** Jackie Williamson, Town Clerk

**Date:** April 25, 2023

**RE:** *Correcting the Appointment of Richard Dowling to the Estes Park Board of Appeals for a term expiring May 1, 2025.*

---

(Mark all that apply)

☐ PUBLIC HEARING ☐ ORDINANCE ☐ LAND USE  
☐ CONTRACT/AGREEMENT ☐ RESOLUTION ☒ OTHER Appointment

QUASI-JUDICIAL ☐ YES ☒ NO

---

**Objective:**

To consider a correction to the Appointment of Richard Dowling to the Estes Park Board of Appeals

**Present Situation:**

The term of Richard Dowling is set to expire May 1, 2023. As the Clerk's Office prepared for interviews to fill this appointment and an additional vacancy, it was determined that Richard's original appointment was for a partial term expiring May 1, 2023, when it should have been for a full five-year term expiring May 1, 2025.

**Proposal:**

After consulting with the interview committee of Trustees Hazelton and Younglund, and confirming Richard Dowling's continued interest in serving, the correction to the appointment is being submitted to the Board for consideration.

**Advantages:**

Provides continuity on the Estes Park Board of Appeals and would bring the appointment in-line with the bylaws.

**Disadvantages:**

If the correction is not made, the position would become vacant until interviews could be conducted.

**Action Recommended:**

Correct the appointment of Richard Dowling to a five-year term expiring May 1, 2025.

**Finance/Resource Impact:**

None.

**Level of Public Interest**

Low.

**Sample Motion:**

I move to **approve/deny** the correction to the appointment of Richard Dowling to a term expiring May 1, 2025.

**Attachments:**

None.

# **TOWN BOARD MEETING**

**April 25, 2023**

## **Report & Discussion Item 1**

**New Initiatives for Future Success: Estes Park  
Museum Friends & Foundation.**

**No packet material will be provided for  
this item.**

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# Memo

**To:** Honorable Mayor Koenig  
Board of Trustees

**From:** Dan Kramer, Town Attorney

**Date:** April 25, 2023

**RE:** Resolution 45-23 Opposing Colorado Senate Bill 23-213

(Mark all that apply)

☐ PUBLIC HEARING ☐ ORDINANCE ☐ LAND USE  
☐ CONTRACT/AGREEMENT ☒ RESOLUTION ☐ OTHER \_\_\_\_\_

QUASI-JUDICIAL ☐ YES ☒ NO

## **Objective:**

Formalize a position of the Town on Colorado Senate Bill 23-213, regarding Land Use.

## **Present Situation:**

A bill has been introduced in the Colorado Senate that would dramatically change the relationship between the State and local governments on matters of land use and zoning. The bill was passed out of the Senate Local Government & Housing Committee on April 19. The committee also approved a number of amendments to the bill for consideration by the whole Senate, although no amendment has yet passed which would significantly alter the effect of the bill on Estes Park.

Staff have begun to advocate against the bill before the members of the General Assembly, as directed by the Board at its April 11, 2023 study session. This work has been in concert with the ongoing efforts of the Colorado Municipal League, the Colorado Association of Ski Towns, and municipalities across the state.

## **Proposal:**

At the April 11 study session, the Board directed staff to bring back a resolution to formalize the Town's opposition to the bill. Such a resolution is included for the Board's consideration.

## **Advantages:**

State legislators would be further apprised of the Board's continued opposition to the bill, and the formal resolution of the Board may have a greater impact than staff's advocacy alone.

## **Disadvantages:**

None identified. The bill would not provide any additional local authority on land use matters. Opposition to a bill is a Board policy decision.

**Action Recommended:**

If the Board wishes to oppose the bill, I recommend the Board pass the resolution.

**Finance/Resource Impact:**

*Minimal to none. Staff is already advocating on the bill.*

**Level of Public Interest**

Interest in the bill is high.

**Sample Motion:**

I move for the **approval/denial** of Resolution 45-23.

**Attachments:**

1. Resolution 45-23.
2. [Presentation slides](#) (beginning p. 13) on SB 23-213 from April 11, 2023 Study Session.

RESOLUTION 45-23

A RESOLUTION OPPOSING SENATE BILL 23-213

**WHEREAS**, Senate Bill 23-213 on Land Use has been introduced at the Colorado General Assembly; and

**WHEREAS**, the bill would supersede many provisions of the Estes Park Development Code regarding accessory dwelling units and occupancy limitations, which provisions were carefully considered and underwent substantial public involvement; and

**WHEREAS**, the bill would require the Town to allow development of accessory dwelling units in ways that do not fit the character of the neighborhoods of Estes Park, and would not allow the Town to condition these approvals on the units being reserved for workforce or attainable housing; and

**WHEREAS**, land use and zoning are matters of local concern, and on these matters the State should continue the longstanding tradition of allowing local democratic processes to reach the best outcomes for local communities.

**NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF TRUSTEES OF THE TOWN OF ESTES PARK, COLORADO:**

The Town of Estes Park opposes the adoption of Senate Bill 23-213 and urges the members of the General Assembly to reject it.

DATED this \_\_\_\_\_ day of \_\_\_\_\_, 2023.

TOWN OF ESTES PARK

\_\_\_\_\_  
Mayor

ATTEST:

\_\_\_\_\_  
Town Clerk

APPROVED AS TO FORM:

  
\_\_\_\_\_  
Town Attorney

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# Memo

**To:** Honorable Mayor Koenig  
Board of Trustees

**Through:** Town Administrator Machalek

**From:** Jessica Garner, Community Development Director

**Date:** April 25, 2023

**RE:** Setting the Public Hearing For Ordinance 04-23 Amending Chapter 14.12 Of The Estes Park Municipal Code To Adopt The 2021 Editions Of International Codes, Including The International Building, Residential, Existing Building, Fuel Gas, Mechanical, Plumbing, Property Maintenance, Energy Conservation, And Swimming Pool And Spa Codes, With Amendments

---

☐ PUBLIC HEARING      ☒ ORDINANCE      ☐ LAND USE  
☐ CONTRACT/AGREEMENT      ☐ RESOLUTION      ☐ OTHER \_\_\_\_\_

QUASI-JUDICIAL    ☐ YES    ☒ NO

---

**Objective:**

Set the public hearing to consider Ordinance 04-23 for the 2021 International Building Codes with local amendments.

**Present Situation:**

Staff from Community Development has been working with the Building Advisory Committee (BAC) since 2021 to review the 2021 series of International Codes in order to clarify questions about the codes, the costs of implementing the most recent code cycle, and to determine which code cycle to recommend to the Board for adoption.

**Proposal:**

Staff recommends adoption of the 2021 International Building Codes with amendments, with the with the Ordinance effective 30 days after publication and the codes coming into effect January 1, 2024. As amended, the 2021 International Building Code includes, by reference, the following codes in their entirety:

- International Existing Building Code
- International Fuel Gas Code
- International Mechanical Code
- International Plumbing Code

- International Property Maintenance Code
- International Energy Conservation Code

The International Pool and Spa Code and the International Residential Code are adopted separately and not as a part of the IBC.

Currently, the draft IRC would require all new single-family homes, two-family homes, duplexes, and townhomes to have sprinklers installed throughout the residence. Should the Board decide to revise this requirement, staff can make the amendment prior to the public hearing on May 23rd.

Additionally, the Board has the option to adopt either the following optional appendices in conjunction with the International Energy Conservation Code, or the Colorado Model Electric Ready and Solar Ready Code (attached for the Board's review), currently in final draft form:

- **Appendix RB:** Solar-Ready Provisions- Detached One- and Two-Family Dwellings and Townhouses *(Although Appendix RB does not require solar systems to be installed for a building, it does require the space(s) for installing such systems, providing pathways for connections and requiring adequate structural capacity of roof systems to support the systems)*
- **Appendix CB:** Solar-Ready Zone- Commercial *(Intended to encourage the installation of renewable energy systems by preparing buildings for the future installation of solar energy equipment, piping and wiring)*
- **Appendix RC:** Zero Energy Residential Building Provisions *(Provides requirements for residential buildings intended to result in net zero energy consumption over the course of a year)*
- **Appendix CC:** Zero Energy Commercial Building Provisions *(Intended to supplement the International Energy Conservation Code and require renewable energy systems of adequate capacity to achieve net zero carbon)*

Staff recommends the Board adopt either Appendices RB and CB, or the Colorado Model Electric Ready and Solar Ready Code, due to significant overlap of regulations. Staff does not recommend adopting, and has not included in the draft ordinance for adoption, Appendices RC and CC, as we understand only one Colorado municipality has adopted either of the two, for various reasons. Should the Board adopt the 2021 IECC, staff recommends further review and discussion of Appendices RC and CC, which can be adopted later with no detrimental impact on the cumulative 2021 IECC elements so long as the Town also adopts the Colorado model electric ready and solar ready code at this time.

For consideration to amend and adopt the 2021 International Building Codes, staff presents the following options to the Board of Trustees and the Town of Estes Park.

Each set of Codes listed above would be adopted by reference, and require additional public notice before the public hearing on May 23. Copies of each of the Codes are

available in the Town Clerk's office from 8:00 am-5:00 pm, Monday through Friday until May 23.

**Advantages:**

Adoption of the 2021 International Building Codes keeps the Town up to date on industry standards, new technologies and materials, recent studies, and other jurisdictions, including Larimer County.

The 2021 Codes also provide safeguards and establish minimum safety standards for all aspects of building construction (structural, plumbing, electrical, gas, mechanical, and energy).

**Disadvantages:**

While the Town has typically adopted new building codes on a six-year cycle, there is an expected learning curve as contractors and designers in the industry acclimate to new and/or revised requirements.

**Action Recommended: The Board cannot approve the adoption of any of the five options below on April 25<sup>th</sup>, but can direct staff to revise the Ordinance with any of the following options for final adoption in May.**

**Option One:** Approve adoption of the 2021 IBC and related codes with amendments presented at the Town Board meeting on May 23, 2023, including optional Energy Code Appendices CB and RB.

**Option Two:** Approve adoption of the 2021 IBC and related codes with amendments presented at the Town Board meeting on May 23, 2023, excluding optional Energy Code Appendices CB and RB.

**Option Three:** Approve adoption of the 2021 IBC and related codes with amendments presented at the Town Board meeting on May 23, 2023, including the Colorado Model Electric Ready and Solar Ready Code, and schedule a study session to discuss the possibility of adding Appendices RC and CC, as well as electric-preferred provisions presented by SWEEP at a later date.

**Option Four: Possible Alternative as the Legislative Authority**

The Board of Trustees may postpone adoption of the 2021 International Codes or direct staff to revise any portions of the codes.

The Community Development Department recommends Option Three if the Board wishes to regulate above and beyond what is required at this time. Since its development, we understand that the state model code has largely supplanted the 2021 Energy Code appendices as a method of exceeding the 2021 codes.

**Finance/Resource Impact:**

Low.

**Level of Public Interest**

General Local Amendments: Low

Significant changes: Medium

Sprinklers: Medium

**Sample Motions:**

I move to set the public hearing for Ordinance 04-23 for May 23, 2023.

**Attachments:**

1. Ordinance 04-23 with local amendments
2. Exhibit A 2021 IBC amendment package
3. Exhibit B 2021 IRC amendment package
4. Exhibit C Vacation Home amendments
5. Exhibit D 2021 IECC amendments
6. Exhibit E Colorado Model Electric Ready and Solar ready Code Final Draft
7. Flow Chart for Estes Park options for Estes Park
8. Fact Sheets from Department of Local Affairs (DOLA)
9. Energy Amendment Summary

ORDINANCE NO. 04-23

AN ORDINANCE AMENDING CHAPTER 14.12 OF THE ESTES PARK MUNICIPAL CODE TO ADOPT THE 2021 EDITIONS OF INTERNATIONAL CODES, INCLUDING THE INTERNATIONAL BUILDING, RESIDENTIAL, EXISTING BUILDING, FUEL GAS, MECHANICAL, PLUMBING, PROPERTY MAINTENANCE, ENERGY CONSERVATION, AND SWIMMING POOL AND SPA CODES, WITH AMENDMENTS

**WHEREAS**, on the 25th day of April, 2023, this Ordinance was introduced to the Board of Trustees of the Town of Estes Park; and

**WHEREAS**, notice of said hearing was published as provided in section 31-16-203, C.R.S.; and

**WHEREAS**, as stated in the published notice, certified copies of the International Building, Residential, and Swimming Pool and Spa Codes, 2021 Editions, and certified copies of all secondary codes referenced in the International Codes, have been on file in the office of the Town Clerk and available for public inspection; and

**WHEREAS**, the subject matter of these codes is a set of comprehensive provisions and standards regulating the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal, and demolition of buildings and structures for the purpose of safeguarding the public health, safety, and general welfare.

**NOW, THEREFORE, BE IT ORDAINED BY THE BOARD OF TRUSTEES OF THE TOWN OF ESTES PARK, COLORADO AS FOLLOWS:**

Section 1: Ellipses in this ordinance and its exhibits indicate material not reproduced as the Board intends to leave that material in effect as it now reads.

Section 2: Chapter 14.12 of the Estes Park Municipal Code is repealed and replaced with the following language, effective January 1, 2024:

14.12.010 - International Building Code, 2021—Adopted.

The International Building Code, 2021 Edition, issued by the International Code Council, 4051 W. Flossmoor Rd., Country Club Hills, IL 60478-5795, referred to in this title as the International Building Code, is enacted and adopted by reference. This code includes all secondary codes listed in its section 101.4, except that subsection 101.4.5 is hereby stricken, as the fire code is adopted through a separate process of the Estes Valley Fire Protection District. This code and its secondary codes are amended as described in section 14.12.060, originally adopted as Exhibit A to Ordinance XX-23.

14.12.020 – International Residential Code, 2021—Adopted.

The International Residential Code, 2021 Edition, issued by the International Code Council, 4051 W. Flossmoor Rd., Country Club Hills, IL 60478-5795, referred to in this title as the International Residential Code, is enacted and adopted by reference. This code is amended as described in sections 14.12.070 and 14.12.080, originally adopted as Exhibits B and C to Ordinance XX-23.

14.12.030 - International Property Maintenance Code Amended.

The entirety of the International Property Maintenance Code, adopted via section 101.4.4 of the International Building Code, is stricken with the exception of Chapters 1 and 2 which shall remain. Section 101.2 is amended as follows, with

strikethroughs indicating deleted material and underlined material indicating additions:

The provisions of this code shall apply to all existing ~~residential~~ and nonresidential structures and all existing nonresidential premises . . . .

#### 14.12.040 - International Energy Conservation Code Amended.

The International Energy Conservation Code, adopted via section 101.4.6 of the International Building Code, is amended as described in section 14.12.090, originally adopted as Exhibit D to Ordinance XX-23. The adoption of the International Energy Conservation Code includes its appendices CB and RB. The Colorado Model Electric Ready and Solar Ready Code is hereby adopted, as presented in Exhibit E attached to Ordinance XX-23, as an amendment to the International Energy Conservation Code.

#### 14.12.050 – International Swimming Pool and Spa Code Adopted.

The International Swimming Pool and Spa Code, 2021 Edition, issued by the International Code Council, 4051 W. Flossmoor Rd., Country Club Hills, IL 60478-5795, is enacted and adopted by reference. This code is amended as described in section 14.12.060, originally adopted as Exhibit A to Ordinance XX-23.

Section 3: Section 14.12.060, entitled Local Code Amendments, is added to the Municipal Code effective January 1, 2024, and shall contain all the material contained in Exhibit A hereto. References to the Estes Park Land Use Code shall be interpreted as references to the entirety of the Estes Park Municipal and Development Codes.

Section 4: Section 14.12.070, entitled Local Code Amendments—Residential, is hereby added to the Municipal Code effective January 1, 2024, and shall contain all the material contained in Exhibit B hereto. References to the Estes Park Land Use Code shall be interpreted as references to the entirety of the Estes Park Municipal and Development Codes.

Section 5: Section 14.12.080, entitled Local Code Amendments—Residential—Vacation Homes, is hereby added to the Municipal Code effective January 1, 2024, and shall contain all the material contained in Exhibit C hereto.

Section 6: Section 14.12.090, entitled Local Code Amendments—International Energy Conservation Code, is hereby added to the Municipal Code effective January 1, 2024, and shall contain all the material contained in Exhibit D hereto.

Section 7: Section 14.04.040 of the Municipal Code is hereby amended by the addition of underlined material and the deletion of stricken material, to read as follows, effective January 1, 2024:

#### 14.04.040 - Violation.

- (a) It is unlawful for any person to violate any of the provisions of a code adopted under Chapter 14.12.
- (b) Every person convicted of a violation of any provision of a code adopted under Chapter 14.12 shall be punished as set forth in Section 1.20.020 of this Code.
- (c) The Town shall have the option of instituting an appropriate action in any court having jurisdiction to prevent, enjoin, abate or remove a violation of any code adopted under Chapter 14.12 to prevent any illegal act or use in or on such premises as a result of any violation of such code.

Section 8: Exhibits A, B, C, D, and E attached hereto are incorporated as local amendments to their respective codes as described above, effective January 1, 2024.

Section 9: The codes and amendments adopted in this Ordinance shall supersede and replace their counterparts of earlier editions upon the effective dates listed above.

Section 10: This Ordinance shall take effect and be enforced thirty (30) days after its adoption and publication by title.

**PASSED AND ADOPTED** by the Board of Trustees of the Town of Estes Park, Colorado this \_\_\_\_ day of \_\_\_\_\_, 2023.

TOWN OF ESTES PARK, COLORADO

By: \_\_\_\_\_  
Mayor

ATTEST:

\_\_\_\_\_  
Town Clerk

I hereby certify that the above Ordinance was introduced at a regular meeting of the Board of Trustees on the \_\_\_\_ day of \_\_\_\_\_, 2023 and published by title in a newspaper of general circulation in the Town of Estes Park, Colorado, on the \_\_\_\_ day of \_\_\_\_\_, 2023, all as required by the Statutes of the State of Colorado.

\_\_\_\_\_  
Town Clerk

APPROVED AS TO FORM:

  
\_\_\_\_\_  
Town Attorney

EXHIBIT A

**TOWN OF ESTES PARK, COLORADO**  
AMENDMENTS TO THE  
**2021**  
INTERNATIONAL BUILDING CODE  
INTERNATIONAL EXISTING BUILDING CODE  
INTERNATIONAL FUEL GAS CODE  
INTERNATIONAL MECHANICAL CODE  
INTERNATIONAL PLUMBING CODE  
INTERNATIONAL SWIMMING POOL AND SPA CODE

*Amendments to the 2021 International Building Code,  
2021 International Existing Building Code,  
2021 International Fuel Gas Code,  
2021 International Mechanical Code,  
2021 International Plumbing Code,  
2021 International Swimming Pool and Spa Code*

# 2021 INTERNATIONAL BUILDING CODE (IBC)

## Chapter 1 Administration

***The following section is hereby amended to read as follows:***

**101.1 Title.** These regulations shall be known as the *Building Code* of **Town of Estes Park**, hereinafter referred as “this code.”

***The following section is hereby amended to read as follows:***

**101.2 Scope.** The provisions of this code shall apply to the construction, alteration, relocation, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures.

**Exception:**

Detached one- and two-family dwellings and townhouses not more than three stories above grade plane in height with a separate means of egress, *short-term (Vacation Home) rentals*, and their accessory structures not more than three stories above grade plane in height, shall comply with this code or the *International Residential Code*.

***The following section is hereby amended to read as follows:***

**101.4 Referenced Codes.** The other codes specified in Sections 101.4.1 through 101.4.8 as adopted and amended by **Town of Estes Park** and referenced elsewhere in this code shall be considered to be part of the requirements of this code to the prescribed extent of each such reference.

***The following section is hereby amended to read as follows:***

**101.4.3 Plumbing.** The provisions of the *International Plumbing Code* shall apply to the installation, alteration, repair and replacement of plumbing systems, including equipment, appliances, fixtures, fittings and appurtenances, and where connected to a water or sewage system and all aspects of a medical gas system. The provisions of the most recent edition of the **Town of Estes Park** On-site Wastewater Treatment System Regulations enforced by the Larimer County Department of Health and Environment shall apply to private sewage disposal systems.

***The following section is hereby amended to read as follows:***

**103.1 Creation of enforcement agency.** The Building Division is hereby created and the official in charge shall be known as the building official. The function of the agency shall be the implementation, administration, and enforcement of the provisions of this code.

***The following section is hereby amended to read as follows:***

**103.2 Appointment.** The building official shall be appointed by the Town of Estes Park Board of Trustees.

***The following section is hereby amended to read as follows:***

**104.2.1 Determination of substantially improved or substantially damaged existing buildings and structures in flood hazard areas.** For applications for reconstruction, rehabilitation, repair, alteration, addition or other improvement of existing buildings or structures located in flood hazard areas, the Town Engineer or their designee shall determine if the proposed work constitutes substantial improvement or repair of substantial damage.

***The following section is hereby amended to read as follows:***

**104.10.1 Flood hazard areas.**

The Town shall not grant modifications to any provision required in flood hazard areas as established by the **Town of Estes Park** Land Use Code without the granting of a variance to such provisions if allowed and as described under the Code.

***The following section is hereby amended in its entirety to read as follows:***

**105. 1.1 Smoke alarms.** When work requiring a permit occurs within Group I-1 and R occupancies, smoke alarms shall be installed in accordance with Section 902.2.11.

**Exception:** Work involving the exterior surfaces of such buildings, such as the replacement of roofing or siding, the addition or replacement of windows or doors, or the addition of a porch or deck

***The following section is hereby amended in its entirety to read as follows:***

**105.1.2 Carbon monoxide detection.** When work requiring a permit occurs within Group I-1, I-2, I-4, and R occupancies, and within classrooms of Group E occupancies, carbon monoxide detection shall be provided in accordance with Section 915.

**Exception:** Work involving the exterior surfaces of such buildings, such as the replacement of roofing or siding, the addition or replacement of windows or doors, or the addition of a porch or deck

***The following section is hereby amended to read as follows:***

**105.2 Work exempt from permit.** Exemptions from permit requirements of this code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of this jurisdiction. Permits shall not be required for the following:

**Building:**

1. One-story detached accessory structures used as tool and storage sheds, playhouses, and similar uses, provided that the floor area is not greater than 120 square feet (11 m<sup>2</sup>) and there are no utilities installed.
2. Fences not over 7 feet (2134 mm) high.
3. Oil derricks.
4. Retaining walls that are not over 4 feet (1219 mm) in height measured from a point eight feet horizontally downslope from the low side finish grade to the high side finish grade behind the wall, provided that the horizontal distance to the next uphill retaining wall is at least equal to twice the height of the upper wall unless supporting a surcharge or impounding Class I, II or IIIA liquids. [See Figure 105.2.4]
5. Water tanks supported directly on grade if the capacity is not greater than 5,000 gallons (18,925 L) and the ratio of height to diameter or width is not greater than 2:1.
6. Sidewalks and driveways not more than 30 inches (762 mm) above adjacent grade, not over any basement or story below and not part of an accessible route.
7. Painting, papering, tiling, carpeting, cabinets, counter tops, and similar finish work.
8. Temporary motion picture, television and theater stage sets and scenery.
9. Prefabricated swimming pools accessory to a Group R-3 occupancy that are less than 24 inches (610 mm) deep, are not greater than 5,000 gallons (18,925 L) and are installed entirely above ground.
10. Shade cloth and maximum 6 mil single layer poly-roofed structures constructed for nursery or agricultural purposes, with no entry by the general public, not including service systems.
11. Swings and other playground equipment accessory to detached one- and two-family dwellings, including one elevated playhouse per lot, designed, and used exclusively for play, not exceeding 64 square feet (5.9 m<sup>2</sup>) of floor area nor 8 feet (2.44 m) in height as measured from the floor to the highest point of such structure.
12. Window awnings supported by an exterior wall that do not project more than 54 inches (1372 mm) from the exterior wall and do not require additional support, storm windows, storm doors, and rain gutter installation.
13. Nonfixed and movable fixtures, cases, racks, counters, and partitions not over 5 feet 9 inches (1753 mm) in height.
14. Roofing repair or replacement work not exceeding one square (100 square feet (9.29 m<sup>2</sup>)) of covering per building.
15. Decorative fountains and pools which cannot contain water more than twenty-four (24) inches (610 mm) deep.

**Gas:**

1. Portable heating appliance.
2. Replacement of any minor part that does not alter approval of equipment or make such equipment unsafe.

**Mechanical:**

1. Portable heating appliance.
2. Portable ventilation equipment.
3. Portable cooling unit.
4. Steam, hot or chilled water piping within any heating or cooling equipment regulated by this code.
5. Replacement of any part that does not alter its approval or make it unsafe.
6. Portable evaporative cooler.
7. Self-contained refrigeration system containing 10 pounds (4.54 kg) or less of refrigerant and actuated by motors of 1 horsepower (0.75 kW) or less.
8. Portable fuel cell appliances that are not connected to a fixed piping system and are not interconnected to a power grid.

**Plumbing:**

1. The stopping of leaks in drains, water, soil, waste or vent pipe, provided, however, that if any concealed trap, drainpipe, water, soil, waste or vent pipe becomes defective and it becomes necessary to remove and replace the same

with new material, such work shall be considered as new work and a permit shall be obtained and inspection made as provided in this code.

2. The clearing of stoppages or the repairing of leaks in pipes, valves or fixtures and the removal and reinstallation of plumbing fixtures, provided that such repairs do not involve or require the replacement or rearrangement of valves, pipes or fixtures.

#### FIGURE 105.2.4 RETAINING WALL PERMIT EXEMPTIONS

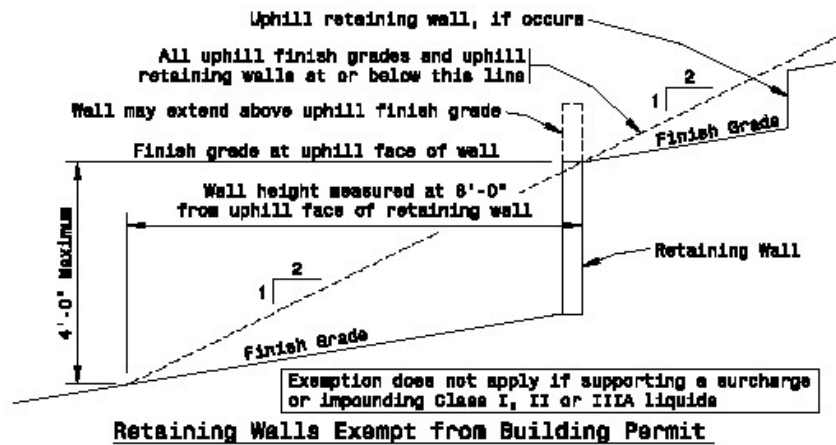


Figure 105.2.4

**The following section is hereby amended to read as follows:**

**105.3.2 Time limitation of application.** An application for a permit for any proposed work shall be deemed to have been abandoned 180 days after the date of filing, unless such application has been pursued in good faith or a permit has been issued. The building official is authorized to grant one or more extensions of time for additional periods not exceeding 180 days each. The extension shall be requested in writing and justifiable cause demonstrated.

**The following section is hereby amended to read as follows:**

**107.3.1 Approval of construction documents.** When the building official issues a permit, the construction documents shall be approved, in writing, electronically or by stamp, indicating the approved permit number. One set of construction documents so reviewed shall be retained by the building official. The other set shall be returned to the applicant, shall be kept at the site of work and shall be open to inspection by the building official or a duly authorized representative.

**The following section is hereby added to read as follows:**

**109.7 Re-inspections.** A re-inspection fee may be assessed for each inspection or re-inspection when access to the work is not provided on the date for which inspection is requested, a readily visible address is not posted, the inspection record card is not posted or otherwise available on site, the approved plans are not readily available in a visible location for the inspector, such portion of work for which inspection is called for is not complete, corrections called for are not made, work deviates from plans approved by the building official, or for other good and sufficient cause as determined by the building official. To obtain a re-inspection, the applicant shall pay the re-inspection fee in accordance with the adopted Town of Estes Park fee schedule. When re-inspection fees have been assessed, no additional inspection of the work will be performed until the required fees have been paid.

**The following section is hereby added to read as follows:**

**110.3.2.1 Underground inspection.** Underground inspections shall be made after trenches or ditches are excavated and bedded, piping, tubing, ducts, and electrical wiring is installed, and before backfill is put in place. Where excavated soil contains rocks, broken concrete, frozen chunks, and other rubble that would damage or break the piping or cause corrosive action, clean backfill shall be on the job site.

***The following section is hereby amended to read as follows:***

**110.3.4 Frame inspection.** Framing inspections shall be made after the roof deck or sheathing, all framing, fireblocking, and bracing are in place and pipes, chimneys, vents rough electrical, plumbing, heating, pipes and ducts to be concealed are complete.

***The following section is hereby added to read as follows:***

**110.3.4.1 Rough-in inspections.** Rough-in inspections shall be made after the roof, framing, fireblocking, firestopping, draftstopping and bracing is in place, chimneys, vents, electrical, plumbing, heating, pipes, and ducts, are roughed-in, and prior to the installation of insulation, wall, or ceiling membranes.

***The following section is hereby amended to read as follows:***

**110.3.9 Energy efficiency inspections.** Inspections shall be made to determine compliance with Chapter 13 and shall include, but not be limited to, inspections for footing, foundation, slab and thermal envelope insulation *R*- and *U*values, fenestration U-value, duct system R-value, HVAC and water-heating equipment efficiency, air sealing, plumbing protection, lighting system controls, components and meters, installation and proper operation of all required building controls, and documentation verifying activities associated with required building commissioning in accordance with Section C408.

***The following section is added to read as follows:***

**110.7 Testing.** Plumbing, fuel gas, mechanical, and systems shall be tested as required in applicable codes and in accordance with Sections 110.7.1 through 110.7.3. Tests shall be made by the permit holder and observed by the code official.

***The following section is added to read as follows:***

**110.7.1.1 New, altered, extended, or repaired systems.** New plumbing, fuel gas, mechanical, and parts of existing systems that have been altered, extended, renovated, or repaired shall be tested as prescribed herein to disclose leaks and defects, except that testing is not required in the following cases:

***The following section is added to read as follows:***

**110.7.2 Equipment, material, and labor for system tests.** Equipment, material, and labor required for testing a plumbing, fuel gas, and mechanical systems or part thereof shall be furnished by the permit holder.

***The following section is added to read as follows:***

**110.7.3 Reinspection and testing.** Where any work or installation does not pass any initial test or inspection, the necessary corrections shall be made to comply with this code. The work or installation shall then be resubmitted to the code official for inspection and testing.

***The following section is hereby amended to read as follows:***

**111.1 Change of occupancy.** A building or structure shall not be used or occupied in whole or in part, and a change of occupancy of a building or structure or portion thereof shall not be made, until the building official has issued a certificate of occupancy therefor as provided herein. Issuance of a certificate of occupancy shall not be construed as an approval of a violation of the provisions of this code or of other ordinances of the jurisdiction. Certificates presuming to give authority to violate or cancel the provisions of this code or other ordinances of the jurisdiction shall not be valid.

**Exceptions:**

1. Certificates of occupancy are not required for work exempt from permits in accordance with Section 105.2.
2. Shell, agricultural and accessory buildings and miscellaneous permits shall not receive certificates of occupancy; a letter of completion will be issued upon request.

***The following section is hereby amended to read as follows:***

**111.2 Certificate issued.** After the building official inspects the building or structure and does not find violations of the provisions of this code or other laws that are enforced by the department, the building official shall issue a certificate of occupancy that may contain the following:

1. The permit number.

2. The address of the structure.
3. The name and address of the owner or the owner's authorized agent.
4. A description of that portion of the structure for which the certificate is issued.
5. A statement that the described portion of the structure has been inspected for compliance with the requirements of this code.
6. The name of the building official.
7. The edition of the code under which the permit was issued.
8. The use and occupancy, in accordance with the provisions of Chapter 3.
9. The type of construction as defined in Chapter 6.
10. The design occupant load.
11. Where an automatic sprinkler system is provided, whether the sprinkler system is required.
12. Any special stipulations and conditions of the building permit.

***The following section is hereby amended to read as follows:***

**111.3 Temporary occupancy.** The building official is authorized to issue a temporary certificate of occupancy before the completion of the entire work covered by the permit, provided that such portion or portions shall be occupied safely. A Temporary Certificate of Occupancy (TCO) shall be valid for ~~180~~ 90 days and may be extended by the Building Official. The fee for each TCO shall be in accordance with the fee schedule as established by Town of Estes Park.

***The following section is hereby amended to read as follows:***

**113.4 Administration.** To appeal a written determination of the *building official* to the Board of Appeals, a written appeal must be received by the *building official* within thirty (30) days of the date of the determination being appealed. The appellant shall, at the time of making such appeal, pay to the Town of Estes Park Building Division an appeal fee as specified in the Town of Estes Park fee schedule. The *building official* shall send written notice of hearing to all parties concerned at least fourteen (14) days prior to the hearing by mailing the same to such parties' last known address by regular mail. All meetings or hearings shall be open to the public. The Board of Appeals shall, from time to time, adopt such additional rules and regulations as it deems necessary and advisable for the conduct of its hearings and for carrying out the provisions hereof. The *building official* shall take immediate action in accordance with the decision of the Board of Appeals.

## Chapter 2 Definitions

***The following section is hereby amended by adding definitions to read as follows:***

### 202 DEFINITIONS

**FACTORY-BUILT FIREPLACE.** A listed assembly of a fire chamber, its chimney and related factory-made parts designed for unit assembly without requiring field construction. Factory-built fireplaces are not dependent on mortarfilled joints for continued safe use.

**FIREPLACE INSERT.** A wood burning device designed to be installed in an existing fireplace.

**INTERNATIONAL FIRE CODE.** The International Fire Code as adopted, amended, and administered by and within a fire district.

**LARGE SHORT-TERM (VACATION HOME) RENTAL.** A dwelling constructed in compliance with the International Residential Code, where transient accommodations are provided for a single group of more than 10 occupants and where rooms may not be individually rented to guests who are not part of the group.

**RESORT LODGE COTTAGE(S)** - A building or group of buildings, under single management and ownership, containing rooms and/or dwelling units available for temporary rental to guests where the primary attraction is generally recreational features or activities.

**SHORT-TERM (VACATION HOME) RENTAL.** A dwelling constructed in compliance with the International Residential Code, where transient accommodations are provided for a single group of ten or fewer occupants and where rooms may not be individually rented to guests who are not part of the group.

**SOLIDLY SHEATHED DECK.** A roof deck with gaps between planks or sheathing not exceeding 1/8 inch (3.18 mm).

**WOOD STOVE:** An appliance designed for or capable of burning wood and capable of and intended for domestic space heating or domestic water heating.

## Chapter 3 Use and Occupancy Classification

*The following section is hereby amended to read as follows:*

**305.2.3 Children in a dwelling unit.** A facility such as the above within a *dwelling unit* having children receiving such day care shall be classified as a Group R-3 occupancy or shall comply with the International Residential Code.

*The following section is hereby amended to read as follows:*

**310.2 Residential Group R-1.** Residential Group R-1 occupancies containing sleeping units where the occupants are primarily transient in nature, including:

Boarding houses (transient) with more than 10 occupants

Congregate living facilities (transient) with more than 10 occupants

Hotels (transient)

Motels (transient)

*Large Short-term (Vacation Home) Rentals*

*Resort Lodge Cottages* with more than 10 occupants.

**Exceptions:**

1. *Short-term (Vacation Home) rentals* shall comply with this code or the International Residential Code.
2. *Resort lodge cottages* not exceeding 10 occupants shall comply with this code or the International Residential Code.

*The following section is hereby amended to read as follows:*

**310.3 Residential Group R-2.** Residential Group R-2 occupancies containing sleeping units or more than two dwelling units where the occupants are primarily permanent in nature, including:

Apartment houses

Congregate living facilities (nontransient) with more than 16 occupants

Boarding houses (nontransient)

Convents

Dormitories

Fraternities and sororities

Monasteries

Hotels (nontransient) Live/work units

Motels (nontransient) Vacation

timeshare properties

**Exceptions:**

1. *Short-term (Vacation Home) rentals* shall comply with this code or the International Residential Code.
2. *Resort lodge cottages* not exceeding 10 occupants shall comply with this code or the International Residential Code.

*The following section is hereby amended to read as follows:*

**310.4.1 Care facilities within a dwelling.** Care facilities for five or fewer persons receiving care that are within a single-family dwelling are permitted to comply with the *International Residential Code* provided an *automatic sprinkler system* is installed in accordance with Section 903.3.1.3. Day care facilities for children within a *dwelling unit* shall be classified as a Group R-3 occupancy or shall comply with the International Residential Code.

**310.4.2 Lodging houses.** Owner-occupied lodging houses with five or fewer guest rooms and 10 or fewer total occupants shall be permitted to be constructed in accordance with the International Residential Code.

*The following section is hereby amended to read as follows:*

**311.1.1 Accessory storage spaces.** A room or space used for storage purposes that is accessory to another occupancy and not more than 25% of the square footage of that occupancy shall be classified as part of that occupancy.

## Chapter 5 General Building Heights and Areas

*The following section is hereby added to read as follows:*

**502.2 Premises Identification During Construction.** The approved permit number and street address number shall be displayed and be plainly visible and legible from the public street or road fronting the property on which any building is being constructed or remodeled.

*The following section is hereby amended to read as follows:*

**508.5 Live/work units.** A live/work unit shall comply with Sections 508.5 through 508.5.11.

**Exception:** Dwelling or sleeping units that include an office that is less than 20 percent of the area of the dwelling unit are permitted to be classified as dwelling units with accessory occupancies in accordance with Section 508.2.

## Chapter 9 Fire Protection Systems

*The following section is hereby amended to read as follows:*

**902.1 Pump and riser room size.** Where provided, fire pump rooms and automatic sprinkler system riser rooms shall be designed with adequate space for all equipment necessary for the installation, as defined by the manufacturer, with sufficient working room around the stationary equipment. Clearances around equipment to elements of permanent construction, including other installed equipment and appliances, shall be sufficient to allow inspection, service, repair, or replacement without removing such elements of permanent construction or disabling the function of a required fire-resistance-rated assembly. Fire pump and automatic sprinkler system riser rooms shall be provided with doors and unobstructed passageways large enough to allow removal of the largest piece of equipment and no less than 32" (813 mm) net clear width.

*This section is hereby amended to read as follows:*

**903.2.1.1 Group A-1.** An automatic sprinkler system shall be provided throughout stories containing Group A-1 occupancies and throughout all stories from the Group A-1 occupancy to and including the levels of exit discharge serving that occupancy where one of the following conditions exists:

1. The fire area exceeds 5,000 square feet (464.5 m<sup>2</sup>).
2. The fire area has an occupant load of 300 or more.
3. The fire area is located on a floor other than a level of exit discharge serving such occupancies.
4. The fire area contains a multitheater complex.

*This section is hereby amended to read as follows:*

**903.2.1.3 Group A-3.** An automatic sprinkler system shall be provided throughout stories containing Group A-3 occupancies and throughout all stories from the Group A-3 occupancy to and including the levels of exit discharge serving that occupancy where one of the following conditions exists:

1. The fire area exceeds 5,000 square feet (464.5 m<sup>2</sup>).
2. The fire area has an occupant load of 300 or more.
3. The fire area is located on a floor other than a level of exit discharge serving such occupancies.

*This section is hereby amended to read as follows:*

**903.2.1.4 Group A-4.** An automatic sprinkler system shall be provided throughout stories containing Group A-4 occupancies and throughout all stories from the Group A-4 occupancy to and including the levels of exit discharge serving that occupancy where one of the following conditions exists:

1. The fire area exceeds 5,000 square feet (464.5 m<sup>2</sup>).

2. The *fire area* has an *occupant load* of 300 or more.
3. The *fire area* is located on a floor other than a *level of exit discharge* serving such occupancies.

**The following section is hereby added to read as follows:**

**903.2.2.1 Group B.** An automatic sprinkler system shall be provided for fire areas containing Group B occupancies when the *fire area* exceeds 5,000 square feet (464.5 m<sup>2</sup>).

**The following section is hereby amended to read as follows:**

**903.2.2.2 Ambulatory care facilities.**

An *automatic sprinkler system* shall be installed throughout the entire floor containing an *ambulatory care facility* where either of the following conditions exist at any time: 1. Four or more care recipients are *incapable of self-preservation*.

2. One or more care recipients that are *incapable of self-preservation* are located at other than the *level of exit discharge* serving such a facility.

In buildings where ambulatory care is provided on levels other than the level of exit discharge, an automatic sprinkler system shall be installed throughout the entire floor as well as all floors below where such care is provided, and all floors between the level of ambulatory care and the nearest *level of exit discharge*, **the level of exit discharge**, and all floors below the *level of exit discharge*.

**Exception:** Floors classified as an *open parking garage* are not required to be sprinklered.

**The following section is hereby amended to read as follows:**

**903.2.3 Group E.** An *automatic sprinkler system* shall be provided for Group E occupancies as follows:

1. Throughout all Group E *fire areas* greater than 5,000 square feet (464.5 m<sup>2</sup>) in area.
2. The Group E *fire area* is located on a floor other than a *level of exit discharge* serving such occupancies. **Exception:** In buildings where every classroom has not fewer than one exterior exit door at ground level, an *automatic sprinkler system* is not required in any area below the lowest *level of exit discharge* serving that area.
3. The Group E *fire area* has an occupant load of 300 or more.

**This section is hereby amended to read as follows:**

**903.2.4 Group F-1.** An *automatic sprinkler system* shall be provided throughout all buildings containing a Group F-1 occupancy where one of the following conditions exist:

1. A Group F-1 *fire area* exceeds 5,000 square feet (464.5 m<sup>2</sup>).
2. A Group F-1 *fire area* is located more than three stories above *grade plane*.
3. The combined area of all Group F-1 *fire areas* on all floors, including any mezzanines, exceeds 24,000 square feet (2230 m<sup>2</sup>).

**A new section is hereby added to read as follows:**

**903.2.4.2 Group F-2.** An *automatic sprinkler system* shall be provided throughout all buildings containing a Group F2 occupancy where one of the following conditions exist:

1. A Group F-2 *fire area* exceeds 5,000 square feet (464.5 m<sup>2</sup>).
2. A Group F-2 *fire area* is located more than three stories above *grade plane*.

**The following section is hereby amended to read as follows:**

**903.2.6 Group I.** An *automatic sprinkler system* shall be provided throughout buildings with a Group I *fire area*.

**Exceptions:**

1. An *automatic sprinkler system* is not required where Group I-4 day care facilities are at the *level of exit discharge* and where every room where care is provided has not fewer than one exterior exit door and the fire area does not exceed 5,000 square feet (464.5 m<sup>2</sup>).
2. In buildings where Group I-4 day care is provided on levels other than the *level of exit discharge*, an *automatic sprinkler system* in accordance with Section 903.3.1.1 shall be installed on the entire floor where care is provided, all floors between the level of care and the level of *exit discharge*, and all floors below the *level of exit discharge* other than areas classified as an open parking garage.

**The following section is hereby amended to read as follows:**

**903.2.7 Group M.** An *automatic sprinkler system* shall be provided throughout buildings containing a Group M occupancy where one of the following conditions exists:

1. A Group M *fire area* exceeds 5,000 square feet (464.5 m<sup>2</sup>).
2. A Group M *fire area* is located more than three stories above *grade plane*.
3. The combined area of all Group M *fire areas* on all floors, including any mezzanines, exceeds 24,000 square feet (2230 m<sup>2</sup>).

***The following section is hereby amended to read as follows:***

**903.2.9 Group S-1.** An *automatic sprinkler system* shall be provided throughout all buildings containing a Group S-1 occupancy where one of the following conditions exists:

1. A Group S-1 *fire area* exceeds 5,000 square feet (464.5 m<sup>2</sup>)
2. A Group S-1 *fire area* is located more than three stories above *grade plane*.
3. The combined area of all Group S-1 *fire areas* on all floors, including any mezzanines, exceeds 24,000 square feet (2230 m<sup>2</sup>).
4. A Group S-1 *fire area* used for the storage of commercial motor vehicles where the *fire area* exceeds 5,000 square feet (464.5 m<sup>2</sup>).

***The following section is hereby amended to read as follows:***

**903.2.9.1 Repair garages.**

An *automatic sprinkler system* shall be provided throughout all buildings used as repair garages in accordance with Section 406, as shown:

1. Buildings having two or more *stories above grade plane*, including basements, with a *fire area* containing a repair garage exceeding 5,000 square feet (464.5 m<sup>2</sup>).
2. Buildings not more than one *story above grade plane*, with a *fire area* containing a repair garage exceeding 5,000 square feet (464.5 m<sup>2</sup>).
3. Buildings with repair garages servicing vehicles parked in basements.
4. A Group S-1 *fire area* used for the repair of commercial motor vehicles where the *fire area* exceeds 5,000 square feet (464.5 m<sup>2</sup>).

***The following section is hereby amended to read as follows:***

**903.2.10 Group S-2.** An automatic sprinkler system shall be provided throughout buildings containing a Group S-2 occupancy where any of the following conditions exists:

1. Where the Group S-2 *fire area* exceeds 5,000 square feet (464.5 m<sup>2</sup>).
2. Where an enclosed parking garage in accordance with Section 406.6 is located beneath other groups.  
**Exception:** Enclosed parking garages located beneath Group R-3 occupancies.
3. Where the fire area of an open parking garage in accordance with Section 406.5 exceeds 48,000 square feet (4460 m<sup>2</sup>).
4. Where a Group S-2 *fire area* is located more than three stories above *grade plane*.

***The following section is hereby amended to read as follows:***

**903.2.11.1.3 Basements.** Where any portion of a *basement* is located more than 75 feet (22,860 mm) from openings required by Section 903.2.11.1, the *basement* shall be equipped throughout with an *approved automatic sprinkler system*.

***The following section is hereby amended by adding item #5 to read as follows:***

**903.3.1.2.3 Attics.**

5. In buildings of other than R-3 occupancy containing dwelling or sleeping units.

**Exceptions:**

1. Where the building contains not more than 6 individual dwelling units or sleeping units, which are separated from each other by minimum 1-hour fire barriers.
2. Where the building contains not more than 12 individual dwelling units or sleeping units, which are separated into fire areas containing no more than 6 individual dwellings units (complying with number 1 above) by a minimum 2-hour fire wall.

***The following section is hereby amended to read as follows:***

**907.2.11 Single- and multiple-stations smoke alarms.** Listed single and multiple station smoke alarms complying with UL 217 shall be installed in accordance with sections 907.2.11.1 through 907.2.11.7 and NFPA 72. Where one or more sleeping rooms are added or created in existing Group R Occupancies, the entire building shall be provided with smoke detectors located and installed as required for new Group R Occupancies described herein.

## Chapter 10 Means of Egress

***The following section is hereby amended and exceptions 7 and 8 are added to read as follows:***

**1010.1.4 Floor elevation.** There shall be a floor or landing on each side of a door. Such floor or landing shall be at the same elevation on each side of the door. Landings shall be level except for exterior landings, which are permitted to have a slope not to exceed 0.25 unit vertical in 12 units horizontal (2-percent slope). All exterior steps, slabs, walks, decks, and patios serving as exterior door landings or exterior stairs shall be adequately and permanently secured in place by approved methods to prevent such landings or stairs from being undermined or subject to significant displacement due to improper placement of supporting backfill or due to inadequate anchoring methods.

**EXCEPTIONS:**

7. Exterior doors serving individual dwelling units, other than the main entrance door to a dwelling unit, may open at one intervening exterior step that is equally spaced between the interior floor level above and exterior landing below, provided that the step has a minimum tread depth of 12 inches (305 mm), a maximum riser height of 7 ¾ inches (196.8mm), a minimum width equal to the door width, and further provided that the door does not swing over the step.

***The following section is hereby amended to read as follows (the exceptions are unchanged):***

**1011.11 Handrails.** Flights of stairways of more than 1 riser shall have handrails on each side and shall comply with Section 1014. Where glass is used to provide the handrail, the handrail shall also comply with Section 2407.

***The following section is hereby amended to read as follows:***

**1015.8 Window openings.** Windows in Group R-2 and R-3 buildings including dwelling units, where the top of the sill of an operable window opening is located less than 24 inches (610 mm) above the finished

floor and more than 72 inches (1829 mm) above the finished grade or other surface below on the exterior of the building, shall comply with one of the following:

***The following section is hereby added to read as follows:***

**1015.9 Below grade openings.** All area wells, stair wells and light wells attached to any building that are located less than thirty-six (36) inches (914.4 mm) from the nearest intended walking surface and deeper than thirty (30) inches (762 mm) below the surrounding ground level, creating an opening greater than twenty-four (24) inches (610 mm) measured perpendicular from the building and with side walls of such well having a slope steeper than two horizontal to one vertical, shall be provided with guards complying with section around the entire opening, or be provided with an equivalent barrier. An intended walking surface is a sidewalk, pathway, patio slab, deck or similar element.

**EXCEPTIONS:**

1. Guards are not required on the access side of stairways.
2. Area wells provided for emergency escape and rescue openings may be protected with grilles or covers complying with Section 1031.6 of this code.
3. Grilles or covers may be placed over stairways and other openings used exclusively for service access.

***The following section is hereby amended to read as follows:***

**1031.2 Where required.** In addition to the means of egress required by this chapter, emergency escape and rescue openings shall be provided in the following occupancies:

1. Group R-2 occupancies located in stories with only one exit or access to only one exit as permitted by Tables 1006.3.4(1) and 1006.3.4(2).
2. Group R-3 and R-4 occupancies.

Basements, sleeping rooms, habitable lofts, and mezzanines below the fourth story above grade plane shall have not fewer than one emergency escape and rescue opening in accordance with this section. Where basements contain one or more sleeping rooms, an emergency escape and rescue opening shall be required in each sleeping room but shall not be required in adjoining areas of the basement. Such openings shall open directly into a public way or to a yard or court that opens to a public way.

**Exceptions:**

1. Basements with a ceiling height of less than 80 inches (2032 mm) shall not be required to have emergency escape and rescue openings.
2. Emergency escape and rescue openings are not required from basements or sleeping rooms that have an exit door or exit access door that opens directly into a public way or to a yard, court or exterior egress balcony that opens to a public way.
3. Basements without habitable spaces and having not more than 200 square feet (18.6 m<sup>2</sup>) in floor area shall not be required to have emergency escape and rescue openings.
4. Storm shelters are not required to comply with this section where the shelter is constructed in accordance with ICC 500.

***The following section is hereby amended to read as follows:***

**1031.3.2 Minimum dimensions.** The minimum net clear opening height dimension shall be 24 inches (610 mm). The minimum net clear opening width dimension shall be 20 inches (508 mm). The net clear opening dimensions shall be the result of normal operation of the opening, with casement windows measured when open perpendicular to the exterior wall.

***The following section is hereby amended by adding Exception #2 to read as follow:***

**1031.5.3 Drainage.** Area wells shall be designed for proper drainage by connecting to the building's foundation drainage system required by Section 1805.

**Exception:**

1. A drainage system for area wells is not required where the foundation is on well-drained soil or sand-gravel mixture soils in accordance with the United Soil Classification System, Group I Soils, in accordance with Section 1803.5.1.
2. A drainage system is not required for new window wells on additions to existing dwellings where no foundation drainage system exists.

## **Chapter 11 Accessibility**

***The following section is hereby amended to read as follows:***

**1108.6 Group R.** Accessible units, Type A units and Type B units shall be provided in Group R occupancies in accordance with Sections 1108.6.1 through 1108.6.4. Group R occupancies shall be provided with accessible dwelling units, guest rooms and other elements as specified in the 2003 Colorado Revised Statutes Title 9 Article 5 Section 105 or as subsequently amended by statute.

## Chapter 14 Exterior Walls

**The following section is hereby amended to read as follows:**

**1402.6 Flood resistance.** For buildings in flood hazard areas as established in Section 1612.3, building construction shall comply with the requirements of the Town of Estes Park Land Use Code.

**The following section is hereby added to read as follows:**

**1403.9.1 Vinyl siding on new buildings.** Vinyl sidings on new buildings shall be installed over one-hour fire-rated assemblies listed for exterior fire exposure, in both the vertical and horizontal plane.

**The following section is hereby added to read as follows:**

**1403.12.3 Polypropylene siding on new buildings.** Polypropylene on new buildings shall be installed over onehour fire-rated assemblies listed for exterior fire exposure, in both the vertical and horizontal plane.

## Chapter 15 Roof Assemblies and Rooftop Structures

**The following section is hereby amended to read as follows:**

**1502.1 General.** All buildings shall have a controlled method of water disposal from roofs that will collect and discharge roof drainage to the ground surface at least 5 feet (1524 mm) from foundation walls or to an *approved* drainage system. Design and installation of roof drainage systems shall comply with this section, Section 1611 of this code and Chapter 11 of the International Plumbing Code.

**The following section is hereby added to read as follows:**

**1504.8.1 Impact resistance of asphalt shingles.** Asphalt shingles shall be Class 4 impact resistant, tested in accordance with UL 2218 and installed in accordance with the manufacturer's installation instructions.

### Exceptions

1. When an owner wishes to replace existing asphalt shingles that are less than class 4 impact resistant with tiles of a similar color or tile, and there are no class 4 impact resistance shingles available of similar color or style, the building official may approve alternate materials that are less than class 4 impact resistant, so long as the replacement shingles are the highest class of impact resistance available that match the color or style of the existing shingles. If no impact resistant materials are available, the building official may approve non-impact resistant shingles that meet all other applicable requirements of this code.
2. For repairs or additions to existing asphalt singles that are less than class 4 impact resistant, the owner may use the same or similar materials regardless of impact resistance of the new shingles.

**The following section is hereby amended to read as follows:**

**1505.1 General.** Roof assemblies shall be divided into the classes defined in this section. Class A, B and C roof assemblies and roof coverings required to be listed by this section shall be tested in accordance with ASTM E108 or UL 790. In addition, fire-retardant-treated wood roof coverings shall be tested in accordance with ASTM D2898. Except as otherwise allowed, roofs shall be covered with materials listed as Class A.

### Exceptions:

1. Skylights and sloped glazing that comply with Chapter 24 or Section 2610.
2. Noncombustible *roof coverings* as defined in Section 1507.3, 1507.4, and 1507.5 may be applied in accordance with the manufacturer's specifications in place of a fire-retardant roofing assembly.
3. Any Class B or Class C *roof covering* may be installed on any new construction that is added to an existing building classified as a Group R, Division 3 or Group U Occupancy containing Class B or Class C roof covering, provided the roof extremities of such existing building and new construction are located a minimum distance of 5 feet from the nearest adjacent property line and a minimum distance of 10 feet (3048 mm) from any other building. Any roof covering shall have a minimum rating of Class B for buildings located in the *Wildfire Hazard Area* and a minimum rating of Class C outside the *Wildfire Hazard Area*.

**Table 1505.1 “Minimum Roof Covering Classifications for Types of Construction” is hereby deleted.**

**The following section is hereby amended to read as follows:**

**1505.9 Rooftop mounted photovoltaic (PV) panel systems.** Rooftop mounted photovoltaic (PV) panel systems shall be tested, listed, and identified with a fire classification in accordance with UL 2703. Listed systems shall be installed in accordance with the manufacturer's installation instructions and their listing. The fire classification shall comply with Section 1505.1 based on the type of construction of the building.

**The following section is hereby amended to read as follows:**

**1507.1.2 Ice barriers** An ice barrier shall be installed for asphalt shingles, metal roof shingles, mineral-surfaced roll roofing, slate and slate-type shingles, wood shingles, and wood shakes. The ice barrier shall consist of not less than two layers of underlayment cemented together, or a self-adhering polymer modified bitumen sheet shall be used in place of normal underlayment and extend from the lowest edges of all roof surfaces to a point not less than 24 inches (610 mm) inside the exterior wall line of the building.

**Exception:** Detached accessory structures that do not contain conditioned floor area.

**The following section is hereby amended to read as follows:**

**1511.2.3 Weather protection.** Provisions such as louvers, louver blades or flashing shall be made to protect the mechanical and electrical equipment and the building interior from the elements. Mechanical units, ducts, piping, or structures installed or replaced on roofs shall be being properly supported by curbs, pads, bases, or piers which shall be flashed to the roofing in a watertight manner. All unsupported sections of mechanical equipment shall be a minimum of twelve (12) inches (304.8 mm) above the plane of the roof so that they will not obstruct the re-roofing process. Mechanical units shall properly connect to heating, air handling, refrigeration, and ventilation equipment, including fans, blowers, and similar types of equipment. Units shall be so located that proper drainage from the roof will not be blocked or impeded. Roof openings surrounded by curbs shall be sheathed over solidly and covered with a minimum of twenty-six (26) gauge metal approved for the use, or of equal material. All seams and mitered corners shall be constructed in a watertight manner. Such curbs shall be a minimum of nine (9) inches (228.6 mm) in height.

**The following section is hereby amended to read as follows:**

**1512.1 General.** Materials and methods of application used for recovering or replacing an existing roof covering shall comply with the requirements of Chapter 15 and Section 1202.2. No portion of an existing nonrated *roof covering* may be permanently replaced or covered with more than one square of nonrated *roof covering*. Any existing *roof covering* system may be replaced with a *roof covering* of the same materials and classification, provided the replacement *roof covering* has a minimum rating of Class B for buildings located in the *Wildfire Hazard Area* and a minimum rating of Class C outside the *Wildfire Hazard Area*.

## Chapter 16 Structural Design

**The following section is hereby amended to read as follows:**

**1602.1 Notations.** The following notations are used in this chapter:

- D = Dead load.
- $D_i$  = Weight of ice in accordance with Chapter 10 of ASCE 7.
- E = Combined effect of horizontal and vertical earthquake induced forces as defined in Section 12.4 of ASCE 7.
- F = Load due to fluids with well-defined pressures and maximum heights.
- $F_a$  = Flood load in accordance with Chapter 5 of ASCE 7.
- H = Load due to lateral earth pressures, ground water pressure or pressure of bulk materials. L = Live load.
- $L_r$  = Roof live load.
- R = Rain load.

- S = Snow load.  
T = Cumulative effects of self-straining load forces and effects.  
 $V_{asd}$  = Allowable stress design wind speed, miles per hour (mph) (km/hr) where applicable.  
V = Basic design wind speeds, miles per hour (mph) (km/hr) determined in accordance with Section 1609.3.  
W = Load due to wind pressure.  
 $W_i$  = Wind-on-ice in accordance with Chapter 10 of ASCE 7.

**The following section is hereby amended by amending Exception #7 to read as follows:**

#### **1603.1 General Construction**

**Exception:** Construction documents for buildings constructed in accordance with the conventional light-frame construction provisions of Section 2308 shall indicate the following structural design information:

1. Floor and roof dead and live loads.
2. Ground snow load,  $P_g$ .
3. Basic design wind speed, V, miles per hour (mph) (km/hr) and allowable stress design wind speed,  $V_{asd}$ , as determined in accordance with Section 1609.3.1 and wind exposure.
4. Seismic design category and site class.
5. Flood design data, if located in flood hazard areas established in Section 1612.3.
6. Design load-bearing values of soils.
7. Risk category.

**The following section is hereby amended by amending Exception #7 to read as follows:**

**1603.1.3 Roof snow load data.** The ground snow load,  $P_g$ , shall be indicated. The following additional information shall also be provided, regardless of whether snow loads govern the design of the roof:

1. Flat-roof snow load,  $P_f$ .
2. Snow exposure factor,  $C_e$ .
3. Snow load importance factor,  $I_s$ .
4. Thermal factor,  $C_t$ .
5. Slope factor(s),  $C_s$ .
6. Drift surcharge load(s),  $P_d$ , where the sum of  $P_d$  and  $P_f$  exceeds 20 psf (0.96 kN/m<sup>2</sup>).
7. Width of snow drift(s),  $W$ .

**The following entry in Table 1604.5 is hereby amended to read as follows (remainder of table unchanged):**

**TABLE 1604.5 RISK CATEGORY OF BUILDINGS AND OTHER STRUCTURES**

<b>RISK CATEGORY</b>	<b>NATURE OF OCCUPANCY</b>
III	Power-generating stations, communications towers and facilities, water treatment facilities for potable water, wastewater treatment facilities and other public utility facilities not included in Risk Category IV.

**The following section is amended to read as follows:**

#### **1608.2 Ground Snow Loads.**

The design ground snow load shall comply with the Colorado Design Snow Loads Report and Map, published by the Structural Engineers Association of Colorado (dated May 6, 2015) or the table below. The design roof snow load values shall be determined from Section 1608 of the IBC, including all applicable factors, and loading and drifting considerations of ASCE 7, Chapter 7, but in no case shall the final design roof snow load be less than a uniformly distributed load of 30 psf.

**EXCEPTION:** Greenhouses may take the full load reductions allowed per ASCE 7.

<b>Ground Elevation does not exceed (feet)</b>	<b>Ground Snow Load <math>P_g</math> (psf)</b>	<b>Ground Snow Load Table Notes:</b>
5,000	35	Ground snow load ( $P_g$ ) may be linearly interpolated between tabulated values.
6,000	45	
6,500	50	For ground elevations above 10,000 feet, the ground snow load ( $P_g$ ) shall be determined from the Colorado Design Snow Loads Report and Map published by the Structural Engineers Association of Colorado (dated May 6, 2015).
7,000	60	
8,000	70	
9,000	100	
10,000	140	

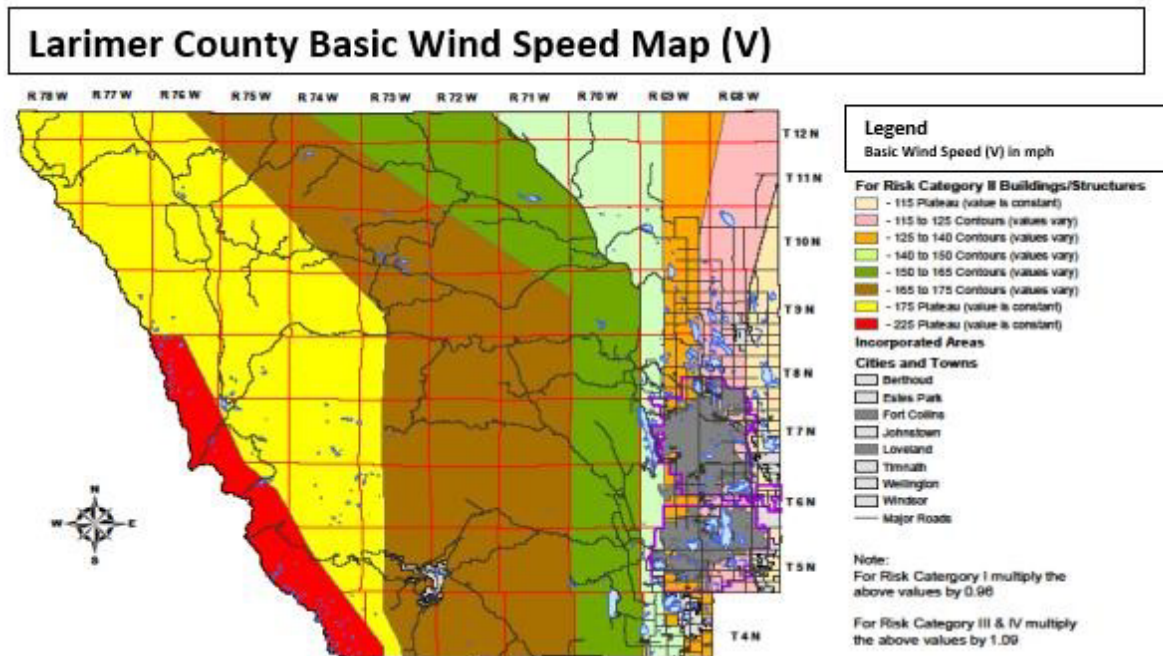
*The following section is hereby amended to read as follows:*

**1609.3 Basic Design Wind Speed.**

The basic design wind speed, V, in mph, for the determination of site wind loads shall comply with the Colorado

Front Range Gust Map – ASCE 7-10 Compatible, published by the Structural Engineers Association of Colorado

(dated November 18, 2013) or the Larimer County Basic Design Wind Speed Map



*The following section is hereby amended to read as follows:*

**1609.4 Exposure category.** For each wind direction considered, an exposure category that adequately reflects the characteristics of ground surface irregularities shall be determined for the site at which the building or structure is to be constructed. Account shall be taken of variations in ground surface roughness that arise from natural topography and vegetation as well as from constructed features. Wind exposure category shall be Exposure C unless designated otherwise by the design professional based on site-specific conditions and approved by the building official.

*The following section is hereby amended to read as follows:*

**1612.1 General.** Within flood hazard areas as established by the **Town of Estes Park** Land Use Code, all new construction of buildings, structures and portions of buildings and structures, including substantial improvement and repair of substantial damage to buildings and structures, shall be designed, and constructed to resist the effects of flood hazards and flood loads. For buildings that are located in more than one flood hazard area, the provisions associated with the most restrictive flood hazard area shall apply. Building construction within the flood hazard area shall comply with the requirements of the **Town of Estes Park** Land Use Code.

*The following sections are hereby deleted in their entirety:*

**1612.2 Design and construction.**

**1612.3 Establishment of flood hazard areas.**

**1612.4 Flood hazard documentation.**

*The following section is amended to read as follows:*

**1613.2 Seismic ground motion values.** Except as noted below, seismic ground motion values shall be determined in accordance with this section. Site-specific seismic design values shall be determined from the USGS website <https://earthquake.usgs.gov/hazards/designmaps/>  
For Risk Categories I & II, the following values may be used for design:

0.2 second spectral response acceleration  $S_s = 0.229g$ , Site Class D, Seismic Design Category B

1.0 second spectral response acceleration  $S_1 = 0.068g$ , Site Class D, Seismic Design Category B

**The following section is hereby amended to read as follows:**

**1614.1 General.** Ice-sensitive structures shall be designed for ½ inch (12.7 mm) atmospheric ice loads ( $D_i$ ) in accordance with Chapter 10 of ASCE 7.

## **Chapter 18**

### **Soils and Foundations**

**The following section is hereby amended to read as follows:**

**1809.5 Frost protection.** Except where otherwise protected from frost, foundations and other permanent supports of buildings and structures shall be protected from frost by one or more of the following methods:

1. Extending a minimum of 30 inches (762 mm) below grade.
2. Constructing in accordance with ASCE 32.
3. Erecting on solid rock.

**Exception:** Free-standing buildings meeting all of the following conditions shall not be required to be protected:

1. Assigned to Risk Category I.
2. Area of 600 square feet (56 m<sup>2</sup>) or less for light-frame construction or 400 square feet (37 m<sup>2</sup>) or less for other than light-frame construction.
3. Eave height of 10 feet (3048 mm) or less.

Shallow foundations shall not bear on frozen soil unless such frozen condition is of a permanent character.

**The following section is hereby added to read as follows:**

**1811 Radon-resistant construction.** Newly constructed buildings with I-1, I-2 nursing homes, R-2, R-3, and R-4 occupancies shall provide radon reduction systems complying with the adopted International Residential Code, Appendix AF, as amended by Town of Estes Park.

## **Chapter 21 Masonry**

**The following section is hereby added to read as follows:**

### **2111.15 Fireplace Installation.**

- A. All fireplaces installed in the Restricted Area as defined herein and shown in Figure 2111.15 (Larimer County Fireplace Area Map) shall be one of the following:
  - (i). A gas fireplace or fireplace with a gas log installed and functioning at time of final inspection.
  - (ii). An electric device; or
  - (iii). A fireplace that meets the most current emissions standards for wood stoves established by the Colorado Air Quality Control Commission or any other clean-burning device that is approved by the commission.
- B. All fireplaces installed prior to January 1, 2002, in the Restricted Area shall be allowed to remain in use until such time as the owner voluntarily replaces it. Upon replacement, such fireplace shall be one of the types specified in Subsection (A) (i), (ii), or (iii).
- C. Within the Non-restricted Area, fireplaces including but not limited to masonry and factory-built fireplaces shall be allowed without being required to meet the standards in Subsection (A).

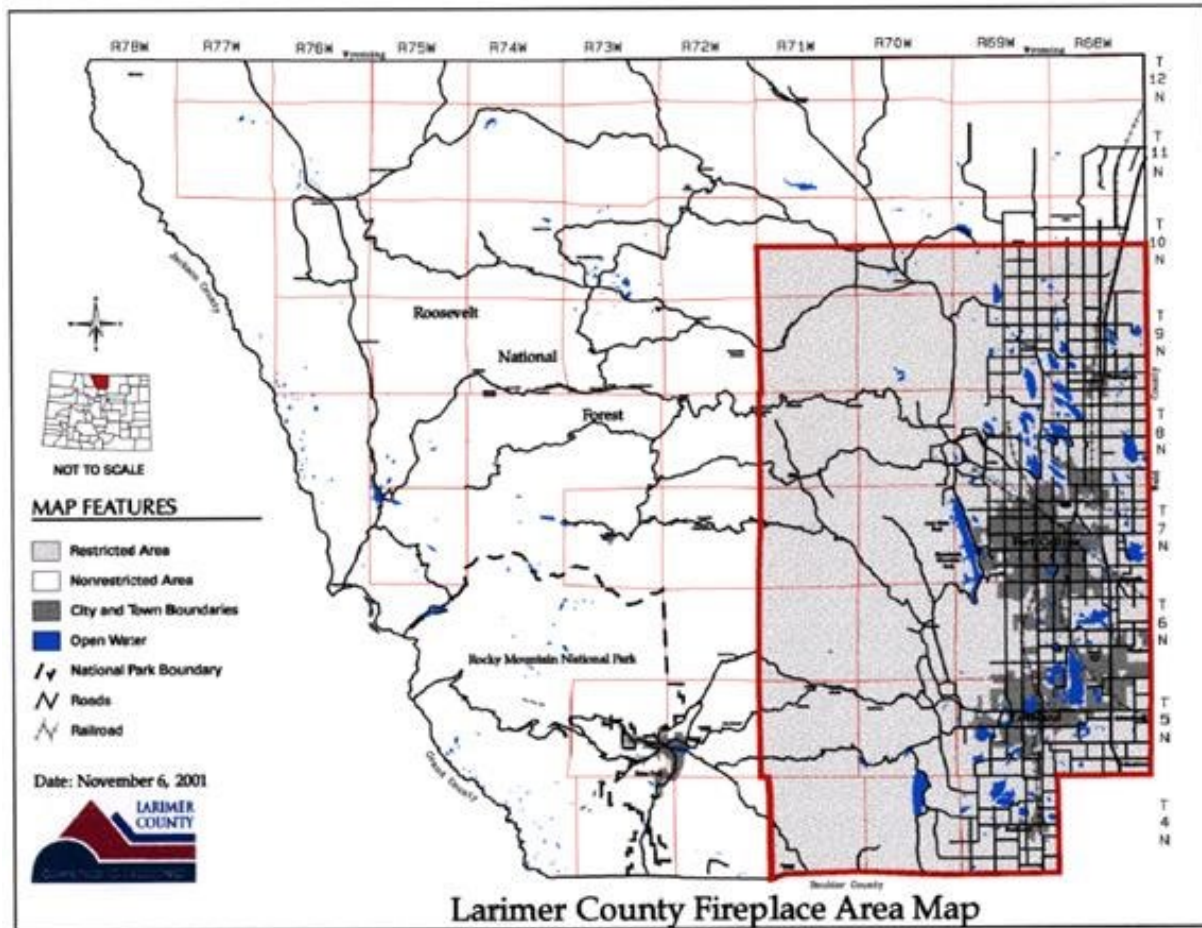


FIGURE 2111.15 Larimer County Fireplace Area Map

## Chapter 24 Glass and Glazing

*The following section is hereby amended to read as follows:*

**2406.4.7 Glazing adjacent to stairway landings.** Glazing adjacent to the stair landings where the glazing is less than 36 inches (914 mm) above the landing and within a 60-inch (1524 mm) horizontal arc that is less than 180 degrees (3.14 rad) from the bottom tread nosing shall be considered to be a hazardous location.

**Exception:** Glazing that is protected by a guard complying with Sections 1015 and 1607.9 where the plane of the glass is greater than 18 inches (457 mm) from the guard.

## Chapter 29 Plumbing Systems

*The following section is hereby amended to read as follows:*

**Table P2902.1 footnote "e" is revised to read as follows (no other changes to table)**

e. For business and mercantile classifications with an occupant load of 15 or fewer and storage classifications without plumbing fixtures, a service sink shall not be required.

**The following section is hereby amended to read as follows:**

**2902.2 Separate facilities.** Where plumbing fixtures are required, separate facilities shall be provided for each sex.

**Exceptions:**

1. Separate facilities shall not be required for *dwelling units* and *sleeping units*.
2. Separate facilities shall not be required in structures or tenant spaces with a total *occupant load*, including both employees and customers, of 25 or fewer.
3. Separate facilities shall not be required in mercantile occupancies in which the maximum occupant load is 100 or fewer.
4. Separate facilities shall not be required to be designated by sex where single-user toilets rooms are provided in accordance with Section 2902.1.2.
5. Separate facilities shall not be required where rooms having both water closets and lavatory fixtures are designed for use by both sexes and privacy for water closets are installed in accordance with Section 405.3.4 of the

International Plumbing Code. Urinals shall be located in an area visually separated from the remainder of the facility or each urinal that is provided shall be located in a stall.

**The following section is hereby amended to read as follows:**

**2902.6 Small occupancies.** Drinking fountains shall not be required for an occupant load of 25 or fewer.

**The following chapter is hereby added to read as follows:**

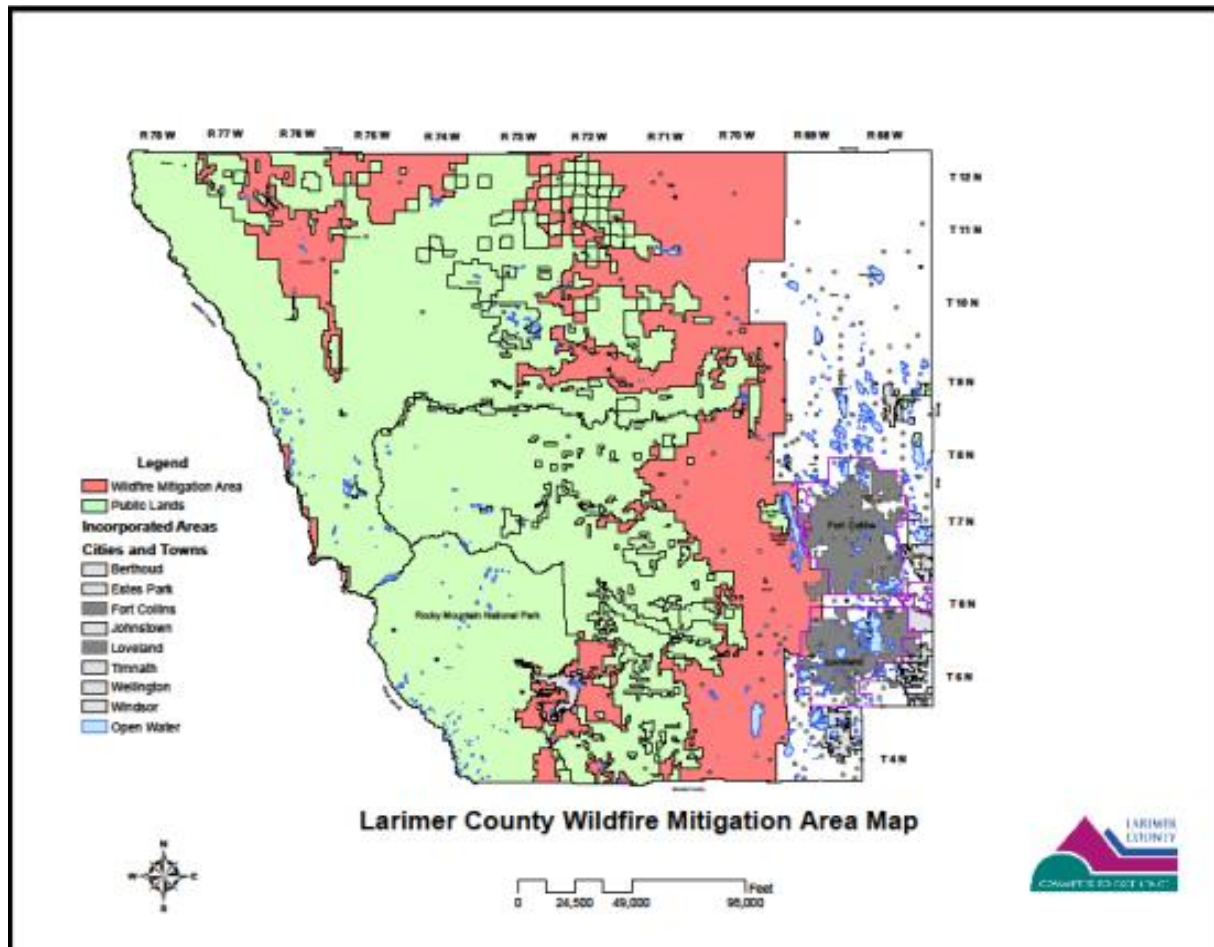
## **Chapter 36 Wildfire Hazard Mitigation Requirements**

**3601 General Purpose.** The purpose of this chapter is to establish minimum standards for design and construction of new buildings or portions thereof for the protection of life and property from wildfire hazards.

**3601.1 Scope.** Within the *wildfire hazard area* as defined herein and shown in Figure 3601, all new building construction including additions shall comply with the provisions of this chapter.

**EXCEPTIONS:**

1. Sheds, greenhouses, and similar detached accessory structures not exceeding 600 sq. ft. (55.7 m<sup>2</sup>) in area.
2. Loafing sheds and similar unenclosed agricultural structures of any size



**FIGURE 3601 LARIMER COUNTY WILDFIRE HAZARD AREA MAP**

**3601.2 Alternate Materials and Methods of Compliance.** The provisions of this chapter are not intended to prevent the use of any material or method of compliance not specifically prescribed by this chapter, provided any alternate has been *approved* and its use authorized by the building official in accordance with Section 104.11.

**3602 Definitions.** For the purpose of this chapter, certain terms are defined as follows:

**COMBUSTIBLE** - a material that fails to meet the acceptance criteria of Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750°C (ASTM E136).

**COMBUSTIBLE CONSTRUCTION** - a type of construction that does not meet the requirement for noncombustible construction.

**DEFENSIBLE SPACE** - a natural or man-made area, where woody vegetation capable of allowing a fire to spread unchecked has been treated or modified to slow the spread and reduce the intensity of an advancing wildfire, and to create an area for fire suppression operations to occur.

**FIRE-RESISTIVE CONSTRUCTION** - construction designed to resist the spread of fire.

**FIRE-RESISTIVE RATING** - the time that the material or construction will withstand the standard fire exposure as determined by a fire test made in conformity with the standard methods of fire tests of buildings construction and materials.

**FLAME-SPREAD INDEX (FSI)** - a relative index describing the surface-burning characteristics of building materials. The test used to establish FSI evaluates the flame spread over the building material surface when exposed to a test fire. The rate at which flame spreads across the specimen is compared on a scale of 0 for inorganic reinforced cement board, to 100 for red oak." The following table identifies the flame-spread index and Flame Spread

Classification:

Flame Spread Classification	Flame Spread Index
Class A	0 to 25
Class B	26 to 75
Class C	76 to 200

**FUEL** - combustible material.

**NONCOMBUSTIBLE** – a material that meets the acceptance criteria of Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750°C (ASTM E136).

**NONCOMBUSTIBLE CONSTRUCTION** - a type of construction in which a degree of fire safety is attained by the use of noncombustible materials for structural members and other building, assemblies.

**ONE-HOUR FIRE-RESISTIVE CONSTRUCTION** – construction that **will** "withstand the standard fire exposure" for one hour "as determined by a fire test made in conformity with the standard methods of fire tests of building construction and materials".

**WILDFIRE HAZARD** - the relative threat that a wildland fire may cause the destruction of life and improved property.

**WILDFIRE HAZARD AREA** - The area west of a line starting at the intersection of the Wyoming border line and range 69 west, then South nine miles to S.W. corner of section 31, Township 11, Range 69, then West three miles to N.W. corner of Section 3, Township 10, Range 70, then South five miles to S.W. corner of Section 27, Township 10, Range 70, then East three miles to S.W. corner of Section 30, Township 10, Range 69, then South nine miles to S.W. corner of Section 7, Township 8, Range 69, then West one mile to N.W. corner of Section 13, Township 8, Range 70, then South four miles to S.W. corner of Section 36, Township 8, Range 70, then East two miles to N.W. corner of Section 6, Township 7, Range 69, then South three miles to S.W. corner of Section 17, Township 7, Range 69, then East one mile to S.E. corner of Section 17, Township 7, Range 69, then South four miles to S.W. corner of Section 4, Township 6, Range 69, then East one mile to S.E. corner of Section 4, Township 6, range 69, then South four miles to S.W. corner of Section 27, Township 6, Range 69, then West one mile to S.W. corner of Section 28, Township 6, Range 69, then South three miles to intersection of U.S. Highway 34, then West following U.S. Highway 34 two miles to intersection with Range 69 West, then South seven and three quarter miles to S.W. corner of Section 18, Township 4, Range 69, then West one mile to S.W. corner of Section 13, Township 4, Range 70, then South three miles to where the S.W. corner of Section 36, Township 9, Range 70 meets the Boulder County Line.

**WILDFIRE MITIGATION** - action taken to eliminate or reduce the wildfire hazard.

**3603 Fire-Resistive Construction.** Fire-resistive construction on all new structures shall be one of the following types:

1. One-hour fire-resistive shell providing not less than one-hour fire-resistive construction at all exterior walls, excluding openings and decks.
2. Exterior siding materials with a flame-spread classification of Class C or better. Exterior siding shall be composed entirely of non-combustible materials for a minimum of 4 feet above finished grade.

**EXCEPTION:**

Non-combustible siding for the lowest 4 feet is not required if 5 feet or more of non-combustible landscaping material or natural ground cover is provided in accordance with Section 331.6.

3. Log structures using solid logs with a minimum tip diameter of 6 inches (152.4 mm) for exterior wall construction and 8 inches (203.2 mm) for roof beams, purlins and supporting columns.

**3604 Defensible Space.** Defensible space in compliance with current Colorado State Forest Service guidelines shall be required on all new construction in the Wildfire Hazard Area. Any landscaping materials or natural ground cover within 5 feet of the exterior walls of the building shall be non-combustible. For additions equal to or greater than 50% of the total square footage of the original structure, or changes in the occupancy or use of existing buildings that would place the building under the scope of Section 3601.1, defensible space shall be provided around the entire building.

**EXCEPTION:** Five feet of non-combustible landscaping material or natural ground cover is not required if the lowest 4 feet of siding is non-combustible in accordance with Section 3603.

**3604.1 Evaluation.** Evaluation of the defensible space will be based upon: 1. Current Colorado State Forest Service standards and guidelines, and

2. Site specific vegetation and topographical characteristics.

The building official may allow alternatives to the Colorado State Forest Service Standards and Guidelines based on specific site conditions.

**3604.2 Completion.** The defensible space must be approved prior to issuing a certificate of occupancy.

**3605 Liquid Propane Gas.** Liquid propane gas facilities installed in the Wildfire Hazard Area shall comply with current county requirements, the International Fire Code and NFPA 58, for installation of such facilities. Liquid propane gas containers and tanks shall be located within the defensible space.

**3606 Spark Arresters.** Chimneys serving fireplaces, woodstoves, barbecues, incinerators, or decorative heating appliances in which solid fuel or liquid fuel is used, shall be provided with a spark arrestor. Spark arrestors shall be constructed of woven or welded wire screening of 12 USA standard gage wire (0.1046 inch) (2.66 mm) having openings not exceeding ½ inch. The net free area of the spark arrestor shall not be less than four times the net free area of the outlet of the chimney.

**3607 Fees.** Fees shall be assessed in accordance with the adopted Larimer County wildfire assessment and inspection fee schedule.

**3608 Appeals.** Appeals of interpretations made by the building official relative to the application of this chapter shall be made to the Board of Appeals in accordance with Section 113.

**3609 Maintenance.** Defensible space areas created as required by this code or other **Town of Estes Park** ordinances shall be maintained by the property owner. No re-planting or new planting of trees, shrubs or other vegetation that would violate the defensible space requirements of this section shall be permitted.

## Appendices

*The following appendix chapters are hereby adopted as part of the 2021 International Building Code:*

**Appendix C.** Group U - Agricultural Buildings

**Appendix E.** Supplementary Accessibility Requirements

**Appendix I.** Patio Covers

## 2021 INTERNATIONAL EXISTING BUILDING CODE (IEBC)

### Chapter 1 Administration

***The following section is hereby amended to read as follows:***

**101.1 Title.** These regulations shall be known as the Existing Building Code of Town of Estes Park, hereinafter referred to as "this code."

***The following section is hereby amended to read as follow:***

**101.2 Scope.** The provisions of this code shall apply to the repair, alteration, change of occupancy, addition to and relocation of existing buildings.

**Exception:** Detached one- and two-family dwellings and townhouses not more than three stories above grade plane in height with a separate means of egress, *short-term (Vacation Home) rentals*, and their accessory structures not more than three stories above grade plane in height, shall comply with this code or the International Residential Code.

***The following section is hereby amended to read as follows:***

**102.4 Referenced codes and standards.** The codes as adopted and amended by Town of Estes Park and standards referenced in this code shall be considered part of the requirements of this code to the prescribed extent of each such reference and as further regulated in Sections 102.4.1 and 102.4.2.

**Exception:** Where enforcement of a code provision would violate the conditions of the listing of the equipment or appliance, the conditions of the listing shall govern.

***The following section is hereby amended to read in its entirety as follows:***

**SECTION 103 CODE COMPLIANCE AGENCY.** All items related to Code Compliance Agency shall be as set forth in Section 103 ("Code Compliance Agency") of the adopted International Building Code (IBC).

***The following section is hereby amended to read in its entirety as follows:***

**SECTION 104 DUTIES AND POWERS OF CODE OFFICIAL.** All items related to Duties and Powers of Code Official shall be as set forth in Section 104 ("Duties and Powers of Code Official") of the adopted IBC.

***The following section is hereby amended to read in its entirety as follows:***

**SECTION 105 PERMITS.** All items related to Permits shall be as set forth in Section 105 ("Permits") of the adopted IBC.

***The following section is hereby amended to read in its entirety as follows:***

**SECTION 106 CONSTRUCTION DOCUMENTS.** All items related to Construction Documents shall be as set forth in Section 107 ("Construction Documents") of the adopted IBC.

***The following section is hereby amended to read in its entirety as follows:***

**SECTION 107 TEMPORARY STRUCTURES AND USES.** All items related to Temporary Structures and Uses shall be as set forth in Section 108 ("Temporary Structures And Uses") of the adopted IBC.

***The following section is hereby amended to read in its entirety as follows:***

**SECTION 108 FEES.** All items related to Fees shall be as set forth in Section 109 ("Fees") of the adopted IBC.

***The following section is hereby amended to read in its entirety as follows:***

**SECTION 109 INSPECTIONS.** All items related to Inspections shall be as set forth in Section 110 ("Inspections") of the adopted IBC.

***The following section is hereby amended to read in its entirety as follows:***

**SECTION 110 CERTIFICATE OF OCCUPANCY.** All items related to Certificate of Occupancy shall be as set forth in Section 111 ("Certificate of Occupancy") of the adopted IBC.

***The following section is hereby amended to read in its entirety as follows:***

**SECTION 111 SERVICE UTILITIES.** All items related to Service Utilities shall be as set forth in Section 112 ("Service Utilities") of the adopted IBC.

***The following section is hereby amended to read in its entirety as follows:***

**SECTION 112 MEANS OF APPEAL.** All items related to Means of Appeal shall be as set forth in Section 113 ("Means of Appeal") of the adopted IBC.

*The following section is hereby amended to read in its entirety as follows:*

**SECTION 113 VIOLATIONS.** All items related to Violations shall be as set forth in Section 114 ("Violations") of the adopted IBC.

*The following section is hereby amended to read in its entirety as follows:*

**SECTION 114 STOP WORK ORDER.** All items related to Stop Work Orders shall be as set forth in Section 115 ("Stop Work Order") of the adopted IBC.

*The following section is hereby amended by adding definitions to read as follows:*

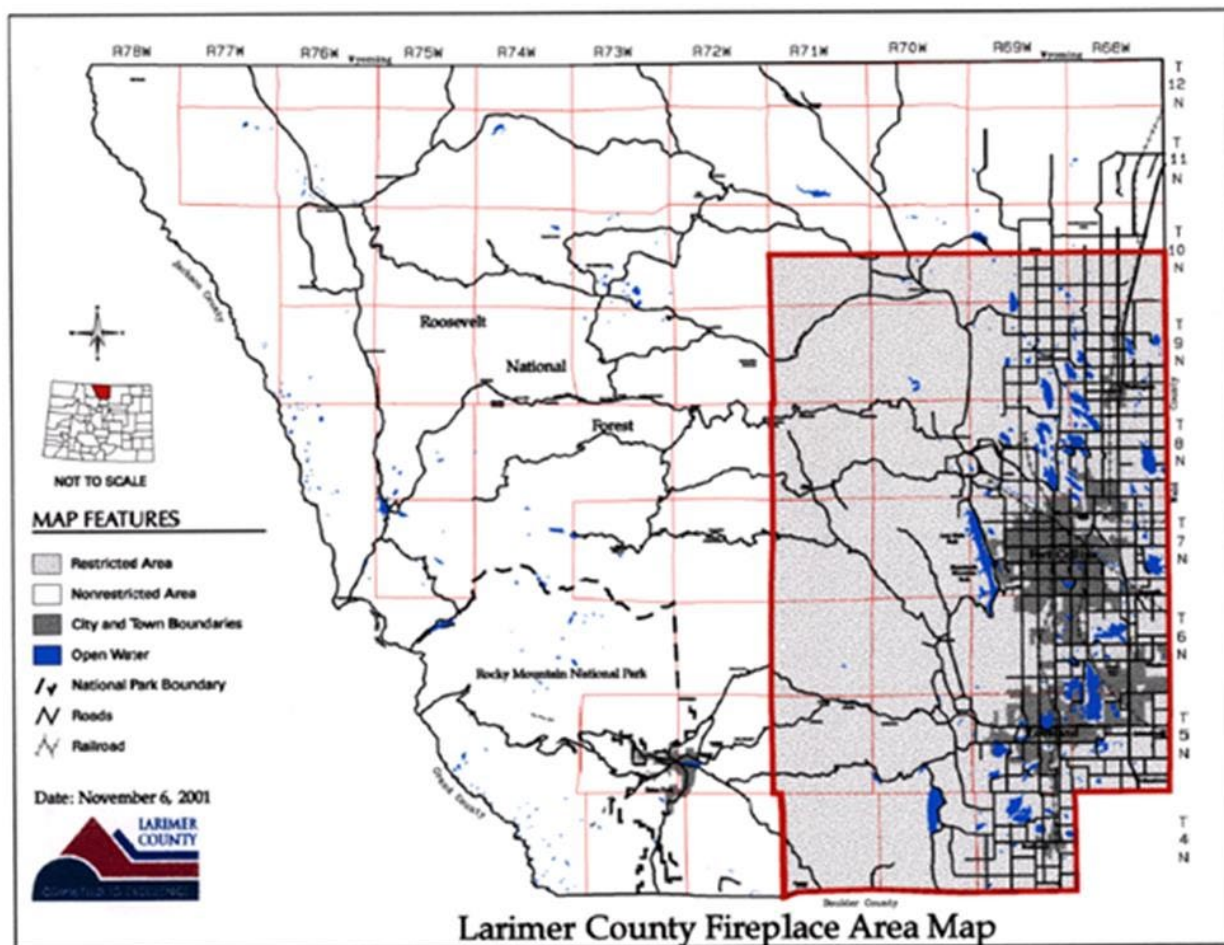
**SECTION 202 GENERAL DEFINITIONS**

**INTERNATIONAL FIRE CODE.** The International Fire Code as adopted, amended, and administered by and within a fire district.

**NON-RESTRICTED AREA.** That part of unincorporated Larimer County located west of Range 71 or north of the north half of Township 10, and east of Range 72 as shown on the Larimer County Fireplace Area Map.

**FIREPLACE RESTRICTED AREA.** That part of unincorporated Larimer County located outside the Non-restricted Area as shown on the Larimer County Fireplace Area Map.

**WILDFIRE HAZARD AREA -** The area west of a line starting at the intersection of the Wyoming border line and range 69 west, then South nine miles to S.W. corner of section 31, Township 11, Range 69, then West three miles to N.W. corner of Section 3, Township 10, Range 70, then South five miles to S.W. corner of Section 27, Township 10, Range 70, then East three miles to S.W. corner of Section 30, Township 10, Range 69, then South nine miles to S.W. corner of Section 7, Township 8, Range 69, then West one mile to N.W. corner of Section 13, Township 8, Range 70, then South four miles to S.W. corner of Section 36, Township 8, Range 70, then East two miles to N.W. corner of Section 6, Township 7, Range 69, then South three miles to S.W. corner of Section 17, Township 7, Range 69, then East one mile to S.E. corner of Section 17, Township 7, Range 69, then South four miles to S.W. corner of Section 4, Township 6, Range 69, then East one mile to S.E. corner of Section 4, Township 6, range 69, then South four miles to S.W. corner of Section 27, Township 6, Range 69, then West one mile to S.W. corner of Section 28, Township 6, Range 69, then South three miles to intersection of U.S. Highway 34, then West following U.S. Highway 34 two miles to intersection with Range 69 West, then South seven and three quarter miles to S.W. corner of Section 18, Township 4, Range 69, then West one mile to S.W. corner of Section 13, Township 4, Range 70, then South three miles to where the S.W. corner of Section 36, Township 9, Range 70 meets the Boulder County Line.



Larimer County Fireplace Area Map

*The following section is hereby amended to read as follows:*

**301.3 Alteration, addition or change of occupancy.** The alteration, addition or change of occupancy of all existing buildings shall comply with Section 301.3.2.

*The following section is hereby deleted in its entirety:*

**301.3.1 Prescriptive compliance method.**

*The following section is hereby deleted in its entirety:*

**301.3.3 Performance compliance method.**

*The following section is hereby amended to read as follows:*

**307.1 Smoke alarms.** Where an alteration, addition, change of occupancy or relocation of a building is made to an existing building or structure of a Group R and I-1 occupancy, the existing building shall be provided with smoke alarms in accordance with the International Fire Code or Section R314 of the International Residential Code. **Exception:** Work classified as Level 1 Alterations in accordance with Chapter 7, other than installation, alteration, or repairs of plumbing or mechanical systems.

*The following section is hereby amended to read as follows:*

**308.1 Carbon monoxide detection.** Where an addition, alteration, change of occupancy or relocation of a building is made to Group I-1, I-2, I-4 and R occupancies and classrooms of Group E occupancies, the existing building shall be provided with carbon monoxide detection in accordance with the International Fire Code or Section R315 of the International Residential Code.

**Exceptions:**

1. Work involving the exterior surfaces of buildings, such as the replacement of roofing or siding, the addition or replacement of windows or doors, or the addition of porches or decks.
2. Work classified as Level 1 Alterations in accordance with Chapter 7, other than installation, alteration, or repairs of plumbing or mechanical systems.

*The following section is hereby deleted in its entirety:*

**CHAPTER 5 PRESCRIPTIVE COMPLIANCE METHOD**

*The following section is hereby amended to read as follows:*

**1011.5.6 Existing emergency escape and rescue openings.** Where a change of occupancy would require an emergency escape and rescue opening in accordance with Section 1031 of the International Building Code, operable windows serving as the emergency escape and rescue opening shall comply with the following:

1. An existing operable window shall provide a minimum net clear opening of 5 square feet ( .47 m<sup>2</sup>) with a minimum net clear opening height of 22 inches (559 mm) and a minimum net clear opening width of 20 inches (508 mm).
2. A replacement window where such window complies with both of the following:
  - 2.1. The replacement window meets the size requirements in Item 1.
  - 2.2. The replacement window is the manufacturer's largest standard size window that will fit within the existing frame or existing rough opening. The replacement window shall be permitted to be of the same operating style as the existing window or a style that provides for an equal or greater window opening area than the existing window.

*The following section is hereby deleted in its entirety:*

**CHAPTER 13 PERFORMANCE COMPLIANCE METHODS**

*The following section is hereby added to read as follows (existing section 1402.7 is renumbered as 1402.10):* **1402.7 Wildfire hazard area.** If relocated or moved into a *wildfire hazard area*, structures shall comply with Chapter 36 of the International Building Code, or Section R331 of the International Residential Code, as applicable.

*The following section is hereby added to read as follows:*

**1402.8 Fireplace restricted area.** If relocated or moved into a *Fireplace Restricted Area*, structures shall comply with Section 2111.15 of the International Building Code, or Section R1001.1.1 of the International Residential Code, as applicable.

*The following section is hereby added to read as follows:*

**1402.9 Moved manufactured or mobile homes.** Where manufactured or mobile homes are to be located at or above 6,000 feet (1829 m) elevation, or in areas where ultimate design wind speeds equal or exceed 140 mph (225 km/h), the permit holder shall install or take snow and wind mitigation measures pre-approved by the Town of Estes Park Building Division. Such measures may include independent, engineered structural roof systems capable of resisting the site design snow load, approved snow removal plans, engineered wind fences, or other engineered site-specific designs considering prevailing winds, exposure, topography, trees and other relevant natural features.

*The following section is hereby amended to read as follows:*

**1402.10 Required inspection and repairs.** The code official shall be authorized to inspect, or to require approved professionals to inspect at the expense of the owner, the various structural parts of a relocated building to verify that structural components and connections have not sustained structural damage. Any repairs required by the code official as a result of such inspection shall be made prior to the final approval.

## **2021 INTERNATIONAL FUEL GAS CODE (IFGC) Chapter 1 Administration**

*The following section is hereby amended to read as follows:*

**101.1 Title.** These regulations shall be known as the Fuel Gas Code of Town of Estes Park, hereinafter referred to as “this code.”

***The following section is hereby amended to read as follows:***

**101.2 Scope.** This code shall apply to the installation of fuel-gas piping systems, fuel gas appliances, gaseous hydrogen systems and related accessories in accordance with Sections 101.2.1 through 101.2.5.

**Exception:** Detached one- and two-family dwellings and townhouses not more than three stories above grade plane in height with a separate means of egress, *short-term (Vacation Home) rentals*, and their accessory structures not more than three stories above grade plane in height, shall comply with this code or the International Residential Code.

***The following section is hereby amended to read as follows:***

**102.8 Referenced codes and standards.** The codes and standards referenced in this code shall be those that are listed in Chapter 8 and such codes as adopted and amended by Town of Estes Park and standards shall be considered to be part of the requirements of this code to the prescribed extent of each such reference and as further regulated in Sections 102.8.1 and 102.8.2.

**Exception:** Where enforcement of a code provision would violate the conditions of the listing of the equipment or appliance, the conditions of the listing and the manufacturer’s installation instructions shall apply.

***The following section is hereby amended to read in its entirety as follows:***

**SECTION 103 CODE COMPLIANCE AGENCY.** All items related to Code Compliance Agency shall be as set forth in Section 103 (“Code Compliance Agency”) of the adopted International Building Code (IBC).

***The following section is hereby amended to read in its entirety as follows:***

**SECTION 104 DUTIES AND POWERS OF CODE OFFICIAL.** All items related to Duties and Powers of Code Official shall be as set forth in Section 104 (“Duties and Powers of Code Official”) of the adopted IBC.

***The following section is hereby amended to read in its entirety as follows:***

**SECTION 105 APPROVAL.** All items related to Approval shall be as set forth in Sections 104.10 through 104.11.2 (“Modifications” through “Tests”) of the adopted IBC.

***The following section is hereby amended to read in its entirety as follows:***

**SECTION 106 PERMITS.** All items related to Permits shall be as set forth in Section 105 (“Permits”) of the adopted IBC.

***The following section is hereby amended to read in its entirety as follows:***

**SECTION 107 CONSTRUCTION DOCUMENTS.** All items related to Construction Documents shall be as set forth in Section 107 (“Construction Documents”) of the adopted IBC.

***The following section is hereby amended to read in its entirety as follows:***

**SECTION 109 FEES.** All items related to Fees shall be as set forth in Section 109 (“Fees”) of the adopted IBC.

***The following section is hereby amended to read in its entirety as follows:***

**SECTION 110 SERVICE UTILITIES.** All items related to Service Utilities shall be as set forth in Section 112 (“Service Utilities”) of the adopted IBC.

***The following section is hereby amended to read in its entirety as follows:***

**SECTION 111 TEMPORARY STRUCTURES AND USES.** All items related to Temporary Structures and Uses shall be as set forth in Section 108 (“Temporary Structures and Uses”) of the adopted IBC.

***The following section is hereby amended to read in its entirety as follows:***

**SECTION 112 INSPECTIONS AND TESTING.** All items related to Inspections and Testing shall be as set forth in Section 110 (“Inspections”) of the adopted IBC.

***The following section is hereby amended to read in its entirety as follows:***

**SECTION 113 MEANS OF APPEAL.** All items related to Means of Appeal shall be as set forth in Section 113 ("Means of Appeal") of the adopted IBC.

*The following section is hereby amended to read in its entirety as follows:*

**SECTION 114 BOARD OF APPEALS.** All items related to Board of Appeals shall be as set forth in Section 113 ("Means of Appeal") of the adopted IBC.

*The following section is hereby amended to read in its entirety as follows:*

**SECTION 115 VIOLATIONS.** All items related to Violations shall be as set forth in Sections 114 ("Violations"), 112.3 ("Authority to disconnect utility services") and 116 ("Unsafe Structures and Equipment") of the adopted IBC.

*The following section is hereby amended to read in its entirety as follows:*

**SECTION 116 STOP WORK ORDER.** All items related to Stop Work Orders shall be as set forth in Section 115 ("Stop Work Order") of the adopted IBC.

*The following section is hereby amended by adding a definition to read as follows:*

**SECTION C202 GENERAL DEFINITIONS**

**INTERNATIONAL FIRE CODE.** The International Fire Code as adopted, amended, and administered by and within a fire district.

## **Chapter 3 General Regulations**

*The following section is hereby amended to read as follow:*

**303.3 Prohibited locations.** Appliances shall not be located in sleeping rooms, bathrooms, toilet rooms, storage closets or surgical rooms, or in a space that opens only into such rooms or spaces, except where the installation complies with one of the following:

1. The appliance is a direct-vent appliance installed in accordance with the conditions of the listing and the manufacturer's instructions.
2. Vented room heaters, wall furnaces, vented decorative appliances, vented gas fireplaces, vented gas fireplace heaters and decorative appliances for installation in vented solid fuel-burning fireplaces are installed in rooms that meet the required volume criteria of Section 304.5.
3. The appliance is installed in a room or space that opens only into a bedroom or bathroom, and such room or space is used for no other purpose and is provided with a solid weather-stripped door equipped with an approved selfclosing device. Combustion air shall be taken directly from the outdoors in accordance with Section 304.6.
4. A clothes dryer is installed in a residential bathroom or toilet room having a permanent opening with an area of not less than 100 square inches (.06 m<sup>2</sup>) that communicates with a space outside of a sleeping room, bathroom, toilet room or storage closet.

## **Chapter 4 Gas Piping Installation**

*The following section is hereby amended to read as follows:*

**404.12 Minimum burial depth.** Underground *piping* systems shall be installed a minimum of 48–24 inches (457 mm) below grade, except as provided in Section 404.12.1.

*The following section is hereby amended to read as follows:*

**404.12.1 Individual outside appliances.** Individual lines to outside lights, grills, or other *appliances* shall be installed not less than 18 inches (457 mm) below finished grade.

**Exception:** Approved materials installed a minimum of 6 inches (152 mm) below finished grade when covered with a minimum 4-inch-thick (101.6 mm) concrete slab.

*The following section is hereby amended to read as follows:*

**406.4.1 Test pressure.** The test pressure to be used shall be 10 psi for non-welded pipe for natural gas, 30 psi for liquid propane gas.

**Exception:** One-piece tubing without joints other than at regulators are not required to be tested during inspection.

*The following section is hereby amended to read as follows:*

**409.5.1 Located within same room.** The shutoff valve shall be located in the same room as the appliance. The shutoff valve shall be within 6 feet (1829 mm) of the appliance, and shall be installed upstream of the union, connector or quick disconnect device it serves. Such shutoff valves shall be provided with access. Shutoff valves serving movable appliances, such as cooking appliances and clothes dryers, shall be considered to be provided with access where installed behind such appliances. Appliance shutoff valves located in the firebox of a fireplace shall be installed in accordance with the appliance manufacturer's instructions and shall have a secondary shutoff outside the firebox.

*The following section is hereby amended to read as follows:*

**410.3 Venting of regulators.** Pressure regulators that require a vent shall have an independent vent to the outside of the building. The vent shall terminate at least 3 feet (914 mm) from any openings into the building. The vent shall be designed to prevent the entry of insects, water, or foreign objects.

## Chapter 5 Chimneys and Vents

*The following section is hereby amended to read as follows:*

**501.8 Appliances not required to be vented.** The following appliances shall not be required to be vented:

1. Electric ranges.
2. Electric built-in domestic cooking units listed and marked for optional venting.
3. Hot plates and laundry stoves.
4. Type 1 clothes dryers (Type 1 clothes dryers shall be exhausted in accordance with the requirements of Section 614).
5. A single booster-type automatic instantaneous water heater, where designed and used solely for the sanitizing rinse requirements of a dishwashing machine, provided that the heater is installed in a commercial kitchen having a mechanical exhaust system. Where installed in this manner, the draft hood, if required, shall be in place and unaltered and the draft hood outlet shall be not less than 36 inches (914 mm) vertically and 6 inches (152 mm) horizontally from any surface other than the heater.
6. Refrigerators.
7. Counter appliances.
8. Direct-fired makeup air heaters.
9. Specialized appliances of limited input such as laboratory burners and gas lights.

Where the appliances listed in Items 5 through 11 are installed so that the aggregate input rating exceeds 20 British thermal units (Btu) per hour per cubic foot (207 watts per m<sup>3</sup>) of volume of the room or space in which such appliances are installed, one or more shall be provided with venting systems or other approved means for conveying the vent gases to the outdoor atmosphere so that the aggregate input rating of the remaining unvented appliances does not exceed 20 Btu per hour per cubic foot (207 watts per m<sup>3</sup>). Where the room or space in which the appliance is installed is directly connected to another room or space by a doorway, archway or other opening of comparable size that cannot be closed, the volume of such adjacent room or space shall be permitted to be included in the calculations.

*The following section is hereby amended to read as follows:*

**503.1 General.** The venting of appliances shall be in accordance with Sections 503.2 through 503.16. Vents shall terminate 12" (305 mm) minimum above anticipated snow level and a minimum of 22 inches (559 mm) above the surface or grade directly below.

*The following section is hereby amended to read as follows:*

**503.4.1 Plastic piping.** Where plastic piping is used to vent an appliance, the appliance shall be listed for use with such venting materials and the appliance manufacturer's installation instructions shall identify the specific plastic piping material. The plastic pipe venting materials shall be labeled in accordance with the product standards specified by the appliance manufacturer or shall be listed and labeled in accordance with UL 1738. Where installed as an exhaust vent for a gas-fired water heater, the new plastic pipe shall be tested with 5 psi maximum air pressure by the installer prior to being connected to the water heater.

## Chapter 6 Specific Appliances

*The following section is hereby amended to read as follows:*

**614.4.1 Terminal location.** Exhaust duct terminations shall be in accordance with the dryer manufacturer's installation instructions and not less than 3 feet (914 mm) in any direction from openings into buildings, including openings in ventilated soffits.

*The following section is hereby amended to read as follows:*

**614.9.2 Duct installation.** Exhaust ducts shall be supported at 4-foot (1219 mm) intervals and secured in place. The insert end of the duct shall extend into the adjoining duct or fitting in the direction of airflow. Ducts shall not be joined with screws or similar fasteners. Where dryer exhaust ducts are enclosed in wall or ceiling cavities, such cavities shall allow the installation of the duct without deformation.

*The following section is hereby amended to read as follows:*

**614.9.4 Duct length.** The maximum allowable exhaust duct length shall be determined by one of the methods specified in Section 614.9.4.1 through 614.9.4.2.

*The following section is hereby deleted in its entirety:*

**614.9.4.2 Manufacturer's instructions.**

*The following section is hereby amended to read as follows:*

**614.9.4.2 Dryer exhaust duct power ventilator length.** The maximum length of the exhaust duct shall be determined by the dryer exhaust duct power ventilator manufacturer's installation instructions.

*The following section is deleted in its entirety as follows:*

**621 UNVENTED ROOM HEATERS**

*The following section is hereby added to read as follows:*

**623.3.1 Kitchens with gas cooking appliances.** In new construction, kitchens with gas cooking appliances shall be supplied with an exhaust system vented to the outside in accordance with Chapter 5. Ducts serving kitchen exhaust systems shall not terminate in an attic, crawl space or areas inside the building and shall not induce or create a negative pressure in excess of negative 3 Pa or adversely affect gravity-vented appliances.

*The following section is hereby amended to read as follows:*

**630.3 Combustion and ventilation air.** Unvented infrared heaters shall not be installed.

## 2021 INTERNATIONAL MECHANICAL CODE AMENDMENTS (IMC) Chapter 1 Administration

*The following section is hereby amended to read as follows:*

**101.1 Title.** These regulations shall be known as the Mechanical Code of Town of Estes Park, hereinafter referred to as  
“this code.”

*The following section is hereby amended to read as follows:*

**102.8 Referenced codes and standards.** The codes and standards referenced herein shall be those that are listed in Chapter 15 and such codes as adopted and amended by Town of Estes Park and standards shall be considered as part of the requirements of this code to the prescribed extent of each such reference and as further regulated in Sections 102.8.1 and 102.8.2.

**Exception:** Where enforcement of a code provision would violate the conditions of the listing of the equipment or appliance, the conditions of the listing and the manufacturer's installation instructions shall apply.

*The following section is hereby amended to read in its entirety as follows:*

**SECTION 103 CODE COMPLIANCE AGENCY.** All items related to Code Compliance Agency shall be as set forth in Section 103 (“Code Compliance Agency”) of the adopted International Building Code (IBC).

*The following section is hereby amended to read in its entirety as follows:*

**SECTION 104 DUTIES AND POWERS OF CODE OFFICIAL.** All items related to Duties and Powers of Code Official shall be as set forth in Section 104 (“Duties and Powers of Code Official”) of the adopted IBC.

*The following section is hereby amended to read in its entirety as follows:*

**SECTION 105 APPROVAL.** All items related to Approval shall be as set forth in Sections 104.10 through 104.11.2 (“Modifications” through “Tests”) of the adopted IBC.

*The following section is hereby amended to read in its entirety as follows:*

**SECTION 106 PERMITS.** All items related to Permits shall be as set forth in Section 105 (“Permits”) of the adopted IBC.

*The following section is hereby amended to read in its entirety as follows:*

**SECTION 107 TEMPORARY STRUCTURES AND USES.** All items related to Temporary Structures and Uses shall be as set forth in Section 108 (“Temporary Structures and Uses”) of the adopted IBC.

*The following section is hereby amended to read in its entirety as follows:*

**SECTION 108 INSPECTIONS AND TESTING.** All items related to Inspections and Testing shall be as set forth in Section 110 (“Inspections”) of the adopted IBC.

*The following section is hereby amended to read in its entirety as follows:*

**SECTION 109 FEES.** All items related to Fees shall be as set forth in Section 109 (“Fees”) of the adopted IBC.

*The following section is hereby amended to read in its entirety as follows:*

**SECTION 110 CONSTRUCTION DOCUMENTS.** All items related to Construction Documents shall be as set forth in Section 107 (“Construction Documents”) of the adopted IBC.

*The following section is hereby amended to read in its entirety as follows:*

**SECTION 112 SERVICE UTILITIES.** All items related to Service Utilities shall be as set forth in Section 112 (“Service Utilities”) of the adopted IBC.

*The following section is hereby amended to read in its entirety as follows:*

**SECTION 113 STOP WORK ORDER.** All items related to Stop Work Orders shall be as set forth in Section 115 (“Stop Work Order”) of the adopted IBC.

***The following section is hereby amended to read in its entirety as follows:***

**SECTION 114 MEANS OF APPEAL.** All items related to Means of Appeal shall be as set forth in Section 113 ("Means of Appeal") of the adopted IBC.

***The following section is hereby amended to read in its entirety as follows:***

**SECTION 115 VIOLATIONS.** All items related to Violations shall be as set forth in Sections 114 ("Violations"), 112.3 ("Authority to disconnect utility services") and 116 ("Unsafe Structures and Equipment") of the adopted IBC.

## **Chapter 2 Definitions**

***The following section is hereby amended by adding definitions to read as follows:***

### **SECTION 202 GENERAL DEFINITIONS**

**FIREPLACE INSERT:** A wood burning device designed to be installed in an existing fireplace.

**INTERNATIONAL FIRE CODE.** The International Fire Code as adopted, amended, and administered by and within a fire district.

**WOOD STOVE:** An appliance designed for or capable of burning wood and capable of and intended for domestic space heating or domestic water heating.

## **Chapter 5 Exhaust Systems**

***The following section is hereby amended to read as follows:***

**504.4.1 Termination location.** Exhaust duct terminations shall be in accordance with the dryer manufacturer's installation instructions and not less than 3 feet (914 mm) in any direction from openings into buildings, including openings in ventilated soffits.

***The following section is hereby amended to read as follows:***

**504.9.4 Duct length.** The maximum allowable exhaust duct length shall be determined by one of the methods specified in Sections 504.9.4.1 through 504.9.4.2.

***The following section is hereby deleted in its entirety:***

**504.9.4.2 Manufacturer's instructions.**

***The following section is hereby amended to read as follows:***

**504.9.4.2. Dryer exhaust duct power ventilator length.** The maximum length of the exhaust duct shall be determined by the dryer exhaust duct power ventilator manufacturer's installation instructions.

## **Chapter 6 Duct Systems**

***The following section is hereby amended by adding one sentence at the beginning to read as follows:*** **601.5 Return air openings.** A return air path shall be provided in all habitable rooms by means of ducts or transfer grills Return air openings for heating, ventilation and air-conditioning systems shall comply with all of the following: ***[Items 1 through 8 and the Exceptions are unchanged.]***

***The following section is hereby amended in its entirety to read as follows:***

**602.3 Stud cavity and joist space plenums.** Stud wall cavities and the spaces between solid floor joists shall not be utilized as air plenums.

**The following section is hereby amended by adding this conversion chart below to read as follows: Table 603.4 DUCT CONSTRUCTION MINIMUM SHEET METAL THICKNESS FOR SINGLE DWELLING UNITS<sup>a</sup>**

Thickness (inches)	.013	.016	.018	.019	.023	.024	.027	.034
Galvanized Steel (gauge)	32	30	28	28	25	25	24	21
Aluminum (gauge)	28	26	25	24	23	22	21	19

For SI: 1 inch = 25.4 mm, 1-inch water gauge = 249 Pa.

- a. Ductwork that exceeds 20 inches by dimension or exceeds a pressure of 1-inch water gauge shall be constructed in accordance with SMACNA HVAC Duct Construction Standards—Metal and Flexible.

## Chapter 8 Chimneys and Vents

**The following section is hereby added to read as follows:**

**802.6.1 Minimum vent height above snow level.** Vents shall terminate 12" (305 mm) minimum above anticipated snow level and a minimum of 22 inches (559 mm) above the surface or grade directly below.

## Chapter 9 Specific Appliances, Fireplaces, and Solid Fuel-Burning Equipment

**The following section is hereby added to read as follows:**

### 901.5 Installation

- A. All fireplaces installed in the Restricted Area (Figure 901.5 Larimer County Fireplace Area Map) shall be one of the following:
  - (i). A gas fireplace or fireplace with a gas log installed and functioning at time of final inspection.
  - (ii). An electric device; or
  - (iii). A fireplace that meets the most current emissions standards for wood stoves established by the Colorado Air Quality Control Commission, or any other clean-burning device that is approved by the commission.
- B. All fireplaces installed prior to January 1, 2002, in the Restricted Area shall be allowed to remain in use until such time as the owner voluntarily replaces it. Upon replacement, such fireplace shall be one of the types specified in Subsection (A) (i), (ii), or (iii).
- C. Within the Non-restricted Area, fireplaces including but not limited to masonry and factory-built fireplaces shall be allowed without being required to meet the standards in Subsection (A).

**The following section is hereby amended to read as follows:**

**903.1 General.** Factory-built fireplaces shall be listed and labeled and shall be installed in accordance with the conditions of the listing. Factory-built fireplaces shall be tested in accordance with UL 127. Factory-built fireplaces shall comply with Section 901.5.

**The following section is hereby amended to read as follows:**

**905.1 General.** Fireplace stoves and solid-fuel-type room heaters shall be listed and labeled and shall be installed in accordance with the conditions of the listing. Fireplace stoves shall be tested in accordance with UL 737. Solid-fueltype room heaters shall be tested in accordance with UL 1482. Fireplace inserts intended for installation in fireplaces shall be listed and labeled in accordance with the requirements of UL 1482 and shall be installed in accordance with the manufacturer's instructions. New wood-burning residential hydronic heaters shall be EPA certified. Wood-burning appliances shall meet the latest emission standards as established by the State of Colorado and Federal Regulation 40 CFR Part 60, Subpart AAA.

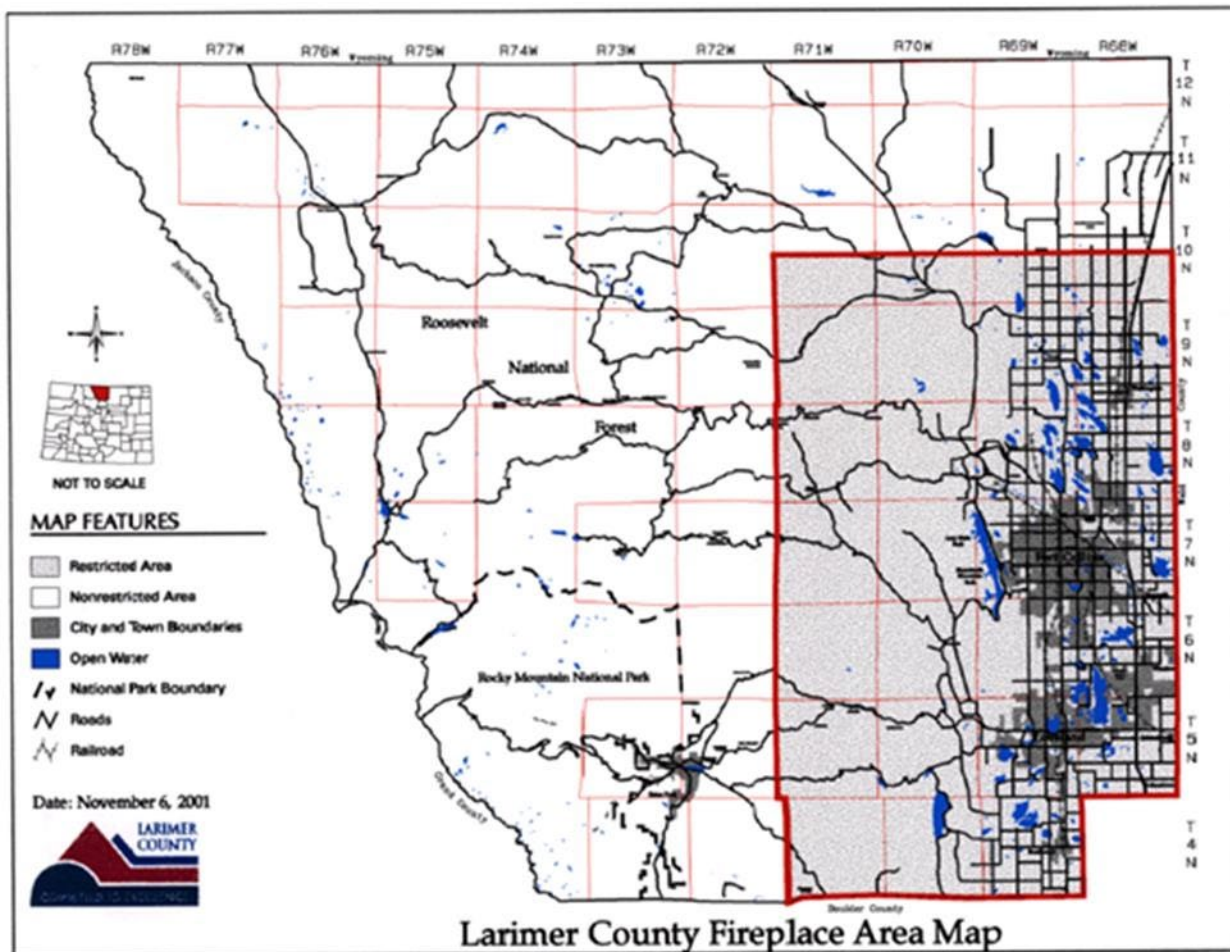


FIGURE 901.5 Larimer County Fireplace Area Map

## 2021 INTERNATIONAL PLUMBING CODE (IPC)

### Chapter 1 Administration

*The following section is hereby amended to read as follows:*

**101.1 Title.** These regulations shall be known as the International Plumbing Code of Town of Estes Park hereinafter referred to as "this code."

*The following section is hereby amended to read as follows:*

**102.8 Referenced codes and standards.** The codes and standards referenced in this code shall be those that are listed in Chapter 15 and such codes as adopted and amended by Town of Estes Park and standards shall be considered as part of the requirements of this code to the prescribed extent of each such reference and as further regulated in Sections 102.8.1 and 102.8.2.

*The following section is hereby amended to read in its entirety as follows:*

**SECTION 103 CODE COMPLIANCE AGENCY.** All items related to Code Compliance Agency shall be as set forth in Section 103 ("Code Compliance Agency") of the adopted International Building Code (IBC).

*The following section is hereby amended to read in its entirety as follows:*

**SECTION 104 DUTIES AND POWERS OF CODE OFFICIAL.** All items related to Duties and Powers of Code Official shall be as set forth in Section 104 ("Duties and Powers of Code Official") of the adopted IBC.

*The following section is hereby amended to read in its entirety as follows:*

**SECTION 105 APPROVAL.** All items related to Approval shall be as set forth in Sections 104.10 through 104.11.2 ("Modifications" through "Tests") of the adopted IBC.

*The following section is hereby amended to read in its entirety as follows:*

**SECTION 106 PERMITS.** All items related to Permits shall be as set forth in Section 105 ("Permits") of the adopted IBC.

*The following section is hereby amended to read in its entirety as follows:*

**SECTION 107 TEMPORARY STRUCTURES AND USES.** All items related to Temporary Structures and Uses shall be as set forth in Section 108 ("Temporary Structures and Uses") of the adopted IBC.

*The following section is hereby amended to read in its entirety as follows:*

**SECTION 108 INSPECTIONS AND TESTING.** All items related to Inspections and Testing shall be as set forth in Section 110 ("Inspections") of the adopted IBC.

*The following section is hereby amended to read in its entirety as follows:*

**SECTION 109 FEES.** All items related to Fees shall be as set forth in Section 109 ("Fees") of the adopted IBC.

*The following section is hereby amended to read in its entirety as follows:*

**SECTION 110 CONSTRUCTION DOCUMENTS.** All items related to Construction Documents shall be as set forth in Section 107 ("Construction Documents") of the adopted IBC.

*The following section is hereby amended to read in its entirety as follows:*

**SECTION 112 SERVICE UTILITIES.** All items related to Service Utilities shall be as set forth in Section 112 ("Service Utilities") of the adopted IBC.

*The following section is hereby amended to read in its entirety as follows:*

**SECTION 113 STOP WORK ORDER.** All items related to Stop Work Orders shall be as set forth in Section 115 ("Stop Work Order") of the adopted IBC.

*The following section is hereby amended to read in its entirety as follows:*

**SECTION 114 MEANS OF APPEAL.** All items related to Means of Appeal shall be as set forth in Section 113 ("Means of Appeal") of the adopted IBC.

*The following section is hereby amended to read in its entirety as follows:*

**SECTION 115 VIOLATIONS.** All items related to Violations shall be as set forth in Sections 114 ("Violations"), 112.3 ("Authority to disconnect utility services") and 116 ("Unsafe Structures and Equipment") of the adopted IBC.

## **Chapter 2 Definitions**

*The following section is hereby amended by adding a definition to read as follows:*

### **SECTION 202 GENERAL DEFINITIONS**

**INTERNATIONAL FIRE CODE.** The International Fire Code as adopted, amended, and administered by and within a fire district.

## **Chapter 3 General Regulations**

*The following section is hereby amended to read as follows:*

**305.4.1 Sewer depth.** Building sewers that connect to private sewage disposal systems shall be not less than 12" below finished grade and comply with State of Colorado and Larimer County Department of Health and Environment Regulations.

*The following section is hereby amended to read as follows:*

**312.1 Required tests.** The permit holder shall make the applicable tests prescribed in Sections 312.2 through 312.10 to determine compliance with the provisions of this code. The permit holder shall give reasonable advance notice to the code official when the plumbing work is ready for tests. The equipment, material, power and labor necessary for the inspection and test shall be furnished by the permit holder and he or she shall be responsible for determining that the work will withstand the test pressure prescribed in the following tests. Plumbing system piping shall be tested with either water or by air. After the plumbing fixtures have been set and their traps filled with water, the entire drainage system shall be submitted to final tests. The code official shall require the removal of any cleanouts if necessary to ascertain whether the pressure has reached all parts of the system.

*The following section is hereby amended by deleting the first sentence to read as follows:*

**312.3 Drainage and vent air test.** An air test shall be made by forcing air into the system until there is a uniform gauge pressure of 5 psi (34.5 kPa) or sufficient to balance a 10-inch (254 mm) column of mercury. This pressure shall be held for a test period of not less than 15 minutes. Any adjustments to the test pressure required because of changes in ambient temperatures or the seating of gaskets shall be made prior to the beginning of the test period.

## Chapter 4 Fixtures, Faucets and Fixture Fittings

*The following section is hereby amended by changing footnote e to read as follows:*

### **TABLE 403.1 MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES**

e. For business and mercantile classifications with an occupant load of 15 or fewer and storage classifications without plumbing fixtures, a service sink shall not be required.

*The following section is hereby amended to read as follows:*

**403.2 Separate facilities.** Where plumbing fixtures are required, separate facilities shall be provided for each sex.

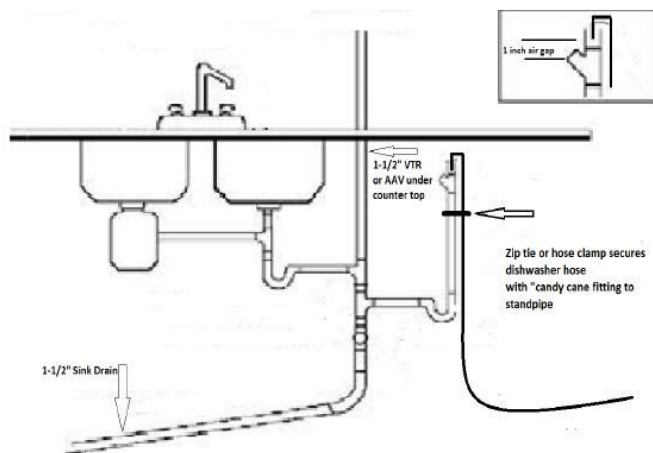
#### **Exceptions:**

1. Separate facilities shall not be required for *dwelling units* and *sleeping units*.
2. Separate facilities shall not be required in structures or tenant spaces with a total *occupant load*, including both employees and customers, of 25 or fewer.
3. Separate facilities shall not be required in mercantile occupancies in which the maximum occupant load is 100 or fewer.
4. Separate facilities shall not be required to be designated by sex where single-user toilets rooms are provided in accordance with Section 403.1.2.
5. Separate facilities shall not be required where rooms having both water closets and lavatory fixtures are designed for use by both sexes and privacy for water closets are installed in accordance with Section 405.3.4. Urinals shall be located in an area visually separated from the remainder of the facility or each urinal that is provided shall be located in a stall.

*The following section is hereby amended to read as follows:*

**409.4 Residential dishwasher waste connection.** The waste connection of a residential dishwasher shall connect directly to a wye branch fitting on the tailpiece of the kitchen sink, directly to the dishwasher connection of a food waste disposer, or through an air break to a standpipe. The waste line of a residential dishwasher shall rise and be securely fastened to the underside of the sink rim or countertop. Residential dishwashers may be connected to a separately trapped standpipe provided with an air break as shown in Figure 409.

**FIGURE 409**



*The following section is hereby amended to read as follows:*

**410.2 Small occupancies.** Drinking fountains shall not be required for an occupant load of 25 or fewer.

*The following section is hereby amended to read as follows:*

**421.4.1 Floor and wall area.** Bathtub floors, shower floors, wall areas above built-in tubs that have installed shower heads and walls in shower compartments shall be constructed of smooth, corrosion-resistant, and nonabsorbent waterproof materials. Wall materials shall extend to a height of not less than 6 feet (1829 mm) above the room floor level, and not less than 72 inches (1828 mm) above the drain of the tub or shower. Such walls shall form a watertight joint with each other and with either the tub or shower floor.

*The following section is hereby added to read as follows:*

**421.7 Shower head location.** Showerheads shall be located on the sidewall of shower compartments or be arranged so the shower head does not discharge directly at the entrance to the compartment and the bather can adjust the valve prior to stepping into the shower spray.

**Exception:** Roll-in showers installed in accordance with ICC A117.1-17 standards.

*The following section is hereby added to read as follows:*

**421.8 Shower valve location.** A shower or tub/shower control valve shall be installed only where the spout and/or shower head discharges into an approved tub or shower compartment. **Exception:** Emergency showers.

## Chapter 6 Water Supply and Distribution

*The following section is hereby amended by deleting the exception in its entirety to read as follows:*

**605.15.2 Solvent cementing.**

Joint surfaces shall be clean and free from moisture, and an approved primer shall be applied. Solvent cement, orange in color and conforming to ASTM F493, shall be applied to joint surfaces. The joint shall be

made while the cement is wet, and in accordance with ASTM D2846 or ASTM F493. Solvent cement joints shall be permitted above or below ground.

## Chapter 7 Sanitary Drainage

*The following section is hereby amended to read as follows:*

**701.2 Connection to sewer required.** Sanitary drainage piping from plumbing fixtures in buildings and sanitary drainage piping systems from premises shall be connected to a public sewer. Where a public sewer is not available, the sanitary drainage piping and systems shall be connected to a private sewage disposal system in compliance with state or local requirements.

**Exception:** Graywater systems shall comply with Larimer County Department of Health and Environment regulations.

*The following section is hereby amended by deleting the exception in its entirety to read as follows:*

**705.10.2 Solvent cementing.** Joint surfaces shall be clean and free from moisture. A purple primer that conforms to

ASTM F656 shall be applied. Solvent cement not purple in color and conforming to ASTM D2564, CSA B137.3, CSA B181.2 or CSA B182.1 shall be applied to all joint surfaces. The joint shall be made while the cement is wet and shall be in accordance with ASTM D2855. Solvent-cement joints shall be permitted above or below ground.

*The following section is hereby amended to read as follows:*

**708.3 Building drain and building sewer junction.** The junction of the building drain and the building sewer shall be served by a cleanout that is located at the junction or within 10 feet (3048 mm) of the developed length of piping upstream of the junction. For the requirements of this section, the removal of the water closet shall not be required to provide cleanout access. When the cleanout is installed at the junction of the building drain and building sewer, it shall be an approved two-way fitting with a single riser not to exceed 4 feet (1219 mm) in depth, or a two-riser cleanout using back-to-back combination fittings or equal of schedule 40 material.

## Chapter 9 Vents

*The following section is hereby amended to read as follows:*

**903.1.1 Roof extension unprotected.** Open vent pipes that extend through a roof shall be terminated not less than 6 inches (152 mm) above the roof.

## Chapter 13 Non-potable Water Systems

*The following section is hereby amended to read as follows:*

**1301.1 General.** Larimer County Department of Health and Environment regulations shall govern the materials, design, construction and installation of systems for the collection, storage, treatment and distribution of nonpotable water.

*The following section is hereby amended to read in its entirety as follows:*

**SECTION 103 CODE COMPLIANCE AGENCY.** All items related to Code Compliance Agency shall be as set forth in Section 103 ("Code Compliance Agency") of the adopted International Building Code (IBC).

*The following section is hereby amended to read in its entirety as follows:*

**SECTION 104 FEES.** All items related to Fees shall be as set forth in Section 109 ("Fees") of the adopted IBC.

*The following section is hereby amended to read in its entirety as follows:*

**SECTION 105 DUTIES AND POWERS OF CODE OFFICIAL.** All items related to Duties and Powers of Code Official shall be as set forth in Section 104 ("Duties and Powers of Code Official") of the adopted IBC.

**The following section is hereby amended to read in its entirety as follows:**

**SECTION 106 APPROVAL.** All items related to Approval shall be as set forth in Sections 104.10 through 104.11.2 ("Modifications" through "Tests") of the adopted IBC.

**The following section is hereby amended to read in its entirety as follows:**

**SECTION 107 MEANS OF APPEAL.** All items related to Means of Appeal shall be as set forth in Section 113 ("Means of Appeal") of the adopted IBC.

**The following section is hereby amended to read in its entirety as follows:**

**SECTION 108 BOARD OF APPEALS.** All items related to Board of Appeals shall be as set forth in Section 113 ("Means of Appeal") of the adopted IBC.

**The following section is hereby amended to read in its entirety as follows:**

**SECTION 110 STOP WORK ORDER.** All items related to Stop Work Orders shall be as set forth in Section 115 ("Stop Work Order") of the adopted IBC.

**The following section is hereby amended to read as follows:**

**111.1.3 Structure unfit for human occupancy.** A *structure* is unfit for human *occupancy* whenever the *code official* or *Health Official* finds that such structure is unsafe, unlawful or, because of the degree to which the structure is in disrepair, lacks maintenance, is insanitary, is vermin or rat infested, contains filth and contamination, lacks sanitary facilities or other essential equipment required by this code, or because the location of the structure constitutes a hazard to the occupants of the structure or to the public.

**The following section is hereby amended to read as follows:**

**111.1.4 Unlawful structure.** An unlawful *structure* is one found in whole or in part that was erected, altered or occupied contrary to law.

**The following section is hereby amended to read as follows:**

**111.1.5 Dangerous structure.** For the purpose of this code, any *structure* that has any or all of the conditions or defects described as follows shall be considered dangerous:

1. Any door, aisle, passageway, stairway, exit or other means of egress that does not conform to the approved building or fire code of the jurisdiction as related to the requirements for existing buildings.
2. The walking surface of any aisle, passageway, stairway, exit or other means of egress is so warped, worn loose, torn or otherwise unsafe as to not provide safe and adequate means of egress.
3. Any portion of a building, structure or appurtenance that has been damaged by fire, earthquake, wind, flood, deterioration, neglect, abandonment, vandalism or by any other cause to such an extent that it is likely to partially or completely collapse, or to become detached or dislodged.
4. Any portion of a building, or any member, appurtenance, or ornamentation on the exterior therefor that is not of sufficient strength or stability, or is not so anchored, attached or fastened in place so as to be capable of resisting natural or artificial loads of one and one-half the original designed value.
5. The building or structure, or part of the building or structure, because of dilapidation, deterioration, decay, faulty construction, the removal, or movement of some portion of the ground necessary for the support, or for any other reasons, is likely to partially or completely collapse or some portion of the foundation or underpinning of the building or structure is likely to fail or give way.
6. The building or structure, or any portion thereof, is clearly unsafe for its use and occupancy.
7. The building or structure is *neglected* damaged, dilapidated, unsecured or abandoned so as to become an attractive nuisance to children who might play in the building or structure to their danger, becomes a harbor for vagrants, criminals, or immoral persons, or enables persons to resort to the building or structure for committing a nuisance or an unlawful act.
8. Any building or structure has been constructed or exists or is maintained in violation of any specific requirement or prohibition applicable to such building or structure provided by the approved building or fire code of the jurisdiction, or of any law or ordinance to such an extent as to present either a substantial risk of fire, building collapse or any other threat to life and safety.
9. Any building or structure, used or intended to be used for dwelling purposes, because of inadequate maintenance, dilapidation, decay, damage, faulty construction or arrangement, or otherwise, is determined by the *code official* or *Health Official* to be insanitary, unfit for human habitation or in such a condition that is likely to cause sickness or disease.

10. Any building or structure, because of a lack of sufficient or proper fire-resistance-rated construction, fire protection systems, electrical system, fuel connections, mechanical system, plumbing system or other cause, is determined by the *code official* to be a threat to life or health.
11. Any portion of a building remains on a site after the demolition or destruction of the building or structure or whenever any building or structure is abandoned so as to constitute such building or portion thereof as an attractive nuisance or hazard to the public.

***The following section is hereby amended to read as follows:***

**111.2 Closing of vacant structures.** If the *structure* is vacant and unfit for human habitation and *occupancy*, and is not in danger of structure collapse, the *code official* is authorized to post a placard of condemnation on the premises and order the structure closed up so as not be an attractive nuisance. Upon failure of the owner or owner's authorized agent to close up the *premises* within in the time specified in the order, the *code official* shall cause the *premises* to be closed and secured through any available public agency or by contract or arrangement by private persons and the cost thereof shall be charged against the real estate upon which the *structure* is located and shall be a lien upon such real estate or may be made a personal obligation of the person causing the violation, whichever the legislative body of this jurisdiction shall determine is appropriate, and shall be collected by any other legal resource.

***The following section is hereby amended to read as follows:***

**113.3 Failure to comply.** If the owner of a premises or owner's authorized agent fails to comply with a demolition order within the time prescribed, the code official shall cause the structure to be demolished and removed, either through an available public agency or by contract or arrangement with private persons, and the cost of such demolition and removal shall be charged against the real estate upon which the structure is located and shall be a lien upon such real estate, or the cost may be made a personal obligation of the person causing the violation, whichever the legislative body of this jurisdiction shall determine is appropriate based on the specific situation at the time.

## **Chapter 2 Definitions**

***The following section is hereby amending by adding or amending definitions to read as follows:***

### **SECTION 202 GENERAL DEFINITIONS**

**CODE OFFICIAL.** The *building official* who is charged with the administration and enforcement of this code, or any duly authorized representative.

**HEALTH OFFICIAL.** Employee of the Larimer County Department of Health and Environment, state or federal official duly authorized to enforce environmental or public health regulations.

**INTERNATIONAL FIRE CODE.** The International Fire Code as adopted, amended, and administered by and within a fire district.

***CHAPTER 3 is hereby deleted in its entirety.***

### **GENERAL REQUIREMENTS**

***CHAPTER 4 is hereby deleted in its***

***entirety.*** LIGHT, VENTILATION AND

### **OCCUPANCY LIMITATIONS**

***CHAPTER 5 is hereby deleted in its entirety.***

### **PLUMBING FACILITIES AND FIXTURE REQUIREMENTS**

***CHAPTER 6 is hereby deleted in its entirety.***

### **MECHANICAL AND ELECTRICAL REQUIREMENTS**

**CHAPTER 7 is hereby deleted in its entirety.**  
**FIRE SAFETY REQUIREMENTS**

**CHAPTER 8 is hereby amended in its entirety to read as follows:**  
**REFERENCED STANDARDS**

**ICC International Code Council, 500 New Jersey Avenue, NW, 6th Floor, Washington, DC 20001**

**IBC-21: International Building Code**, pages 102.3, 201.3

**IEBC-21: International Existing Building Code**, pages 102.3, 201.3

**IFGC-21: International Fuel Gas Code**, pages 102.3, 201.3

**IMC-21: International Mechanical Code**, pages 102.3, 201.3

**IPC-21: International Plumbing Code**, pages 102.3, 201.3

**IRC-21: International Residential Code**, pages 102.3, 201.3

## **2021 INTERNATIONAL SWIMMING POOL AND SPA CODE (ISPSC) Chapter 1 Administration**

**The following section is hereby amended to read as follows:**

**101.1 Title.** These regulations shall be known as the Swimming Pool and Spa Code of Town of Estes Park, hereinafter referred to as "this code."

**The following section is hereby amended to read as follows:**

**101.2 Scope.** The provisions of this code shall apply to the construction, alteration, movement, renovation, replacement, repair and maintenance of aquatic recreation facilities, pools, and spas. The pools and spas covered by this code are either permanent or temporary and shall be only those that are designed and manufactured to be connected to a circulation system and that are intended for swimming, bathing, or wading.

**Exception:** All pools that are 24" deep or greater shall comply with Section 305 "Barrier Requirements."

**The following section is hereby amended to read as follows:**

**102.7 Referenced codes and standards.** The codes and standards referenced in this code shall be those that are listed in Chapter 11 and such codes as adopted and amended by Town of Estes Park and standards shall be considered to be part of the requirements of this code to the prescribed extent of each such reference. Where differences occur between provisions of this code and the referenced standards, the provisions of this code shall be the minimum requirements.

**The following section is hereby amended to read in its entirety as follows:**

**SECTION 103 CODE COMPLIANCE AGENCY.** All items related to Code Compliance Agency shall be as set forth in Section 103 ("Code Compliance Agency") of the adopted International Building Code (IBC).

**The following section is hereby amended to read in its entirety as follows:**

**SECTION 104 DUTIES AND POWERS OF CODE OFFICIAL.** All items related to Duties and Powers of Code Official shall be as set forth in Section 104 ("Duties and Powers of Code Official") of the adopted IBC.

**The following section is hereby amended to read in its entirety as follows:**

**SECTION 105 PERMITS.** All items related to Permits shall be as set forth in Section 105 ("Permits") of the adopted IBC.

**The following section is hereby amended to read in its entirety as follows:**

**SECTION 106 CONSTRUCTION DOCUMENTS.** All items related to Construction Documents shall be as set forth in Section 107 (“Construction Documents”) of the adopted IBC.

*The following section is hereby amended to read in its entirety as follows:*

**SECTION 108 FEES.** All items related to Fees shall be as set forth in Section 109 (“Fees”) of the adopted IBC.

*The following section is hereby amended to read in its entirety as follows:*

**SECTION 109 SERVICE UTILITIES.** All items related to Service Utilities shall be as set forth in Section 112 (“Service Utilities”) of the adopted IBC.

*The following section is hereby amended to read in its entirety as follows:*

**SECTION 110 INSPECTIONS.** All items related to Inspections shall be as set forth in Section 110 (“Inspections”) of the adopted IBC.

*The following section is hereby amended to read in its entirety as follows:*

**SECTION 111 MEANS OF APPEAL.** All items related to Means of Appeal shall be as set forth in Section 113 (“Means of Appeal”) of the adopted IBC.

*The following section is hereby amended to read in its entirety as follows:*

**SECTION 112 BOARD OF APPEALS.** All items related to Board of Appeals shall be as set forth in Section 113 (“Means of Appeal”) of the adopted IBC.

*The following section is hereby amended to read in its entirety as follows:*

**SECTION 113 VIOLATIONS.** All items related to Violations shall be as set forth in Sections 114 (“Violations”), 112.3 (“Authority to disconnect utility services”) and 116 (“Unsafe Structures and Equipment”) of the adopted IBC.

*The following section is hereby amended to read in its entirety as follows:*

**SECTION 114 STOP WORK ORDER.** All items related to Stop Work Orders shall be as set forth in Section 115 (“Stop Work Order”) of the adopted IBC.

## **Chapter 2 Definitions**

*The following section is hereby amending by adding a definition to read as follows:*

### **SECTION 202 GENERAL DEFINITIONS**

**INTERNATIONAL FIRE CODE.** The International Fire Code as adopted, amended, and administered by and within the Estes Valley Fire District.

## **Chapter 3 General Compliance**

*The following section is hereby amended in its entirety to read as follows:*

**304.2 General.** Pools and spas located in flood hazard areas indicated within the *International Building Code* or the *International Residential Code* shall comply with the Town of Estes Park Land Use Code.

## **Chapter 4 Public Swimming Pools**

*The following section is hereby amended in its entirety to read as follows:*

**403.1 Maximum bather load.** The maximum bather occupant load of pools shall be in accordance with International Building Code Section 1004.

EXHIBIT B

**2021 INTERNATIONAL RESIDENTIAL CODE (IRC) CHAPTER 1 SCOPE AND ADMINISTRATION**

***The following section is hereby amended to read as follows:***

**R101.1 Title.** These provisions shall be known as the Residential Code for One- and Two-Family Dwellings of Town of Estes Park and shall be cited as such and will be referred to herein as “this code.”

***The following section is hereby amended to read as follows:***

**R101.2 Scope.**

**Exceptions:** The following shall be permitted to be constructed in accordance with this code:

1. Live/work units complying with the requirements of Section 508.5 of the *International Building Code*.
2. Owner-occupied lodging houses with five or fewer guestrooms where complying with Sections R332.2 through R332.2.14 and R332.3.
3. A care facility with five or fewer persons receiving custodial or medical care within a dwelling unit, where provided with an automatic sprinkler system complying with Section P2904 or International Building Code Section 903.2.8.
4. *Resort lodge cottages* not exceeding 10 occupants, where complying with Sections R332.2 through R332.2.14 and R332.3 5. *Short-term (Vacation Home) rentals*.
6. Family childcare homes complying with Appendix M and Colorado state licensing requirements.

***The following section is hereby amended to read as follows:***

**R102.4 Referenced codes and standards.** The codes as adopted and amended by Town of Estes Park and standards referenced in this code shall be considered part of the requirements of this code to the prescribed extent of each such reference and as further regulated in Sections R102.4.1 and R102.4.2.

**Exception:** Where enforcement of a code provision would violate the conditions of the listing of the equipment or appliance, the conditions of the listing and manufacturer’s instructions shall apply.

***The following section is hereby amended to read as follows:***

**R103.1 Creation of enforcement agency.** The Building Division is hereby created and the official in charge thereof shall be known as the Chief Building Official, hereinafter referred to as the building official.

***The following section is hereby amended to read as follows:***

**R103.2 Appointment.** The building official shall be appointed by the Community Development Department Director.

***The following section is hereby amended to read in its entirety as follows (items 1 through 5 are deleted):***

**R104.10.1 Flood Hazard areas.** The Town Engineer shall not grant modifications to any provisions required in flood hazard areas as established by the Town of Estes Park Land Use Code without the granting of a variance to such provisions if allowed and as described under the Code.

***The following section is hereby amended to read as follows:***

**R105.1 Required.** Any owner or owner’s authorized agent who intends to construct, enlarge, alter, repair, move, demolish or change the occupancy of a building or structure, including bridges and culverts, or to erect, install, enlarge, alter, repair, remove, convert or replace any electrical, gas, mechanical or plumbing system, the installation of which is regulated by this code, or to cause any such work to be done, shall first make application to the *building official* and obtain the required *permit*.

***The following section is hereby amended by amending items 1, 3, 8 & 10 and adding items 11-16 to read as follows:***

**R105.2 Work exempt from permit.** Exemption from permit requirements of this code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of this jurisdiction. Permits shall not be required for the following:

**Building:**

1. One-story detached accessory structures used as storage sheds, playhouses, and similar non-habitable uses, provided that the floor area does not exceed 200 square feet (18.58 m<sup>2</sup>) and there are no utilities.
2. Fences not over 7 feet (2134 mm) high.
3. Retaining walls that are not over 4 feet (1219 mm) in height measured from a point eight feet horizontally downslope from the low side finish grade to the high side finish grade behind the wall, provided that the horizontal distance to the next uphill retaining wall is at least equal to twice the height of the upper wall, unless supporting a surcharge or impounding Class I, II or IIIA liquids. [See Figure 105.2.3]
4. Water tanks supported directly upon grade if the capacity does not exceed 5,000 gallons (18,927 L) and the ratio of height to diameter or width does not exceed 2 to 1.
5. Sidewalks and driveways.
6. Painting, papering, tiling, carpeting, cabinets, counter tops and similar finish work.
7. Prefabricated swimming pools that are less than 24 inches (610 mm) deep.
8. Swings and other playground equipment, including one elevated playhouse per lot, designed, and used exclusively for play, not exceeding 64 square feet (5.9 m<sup>2</sup>) of floor area nor 8 feet (2.44 m) in height measured from the floor to the highest point of such structure.
9. Window awnings supported by an exterior wall that do not project more than 54 inches (1372 mm) from the exterior wall and do not require additional support.
10. Decks that are not more than 30 inches (762 mm) above *grade* at any point and do not serve the exit door required by Section R311.2.
11. Roofing repair or replacement work not exceeding one square (100 square feet (9.29m<sup>2</sup>) of covering per building.
12. Window replacement requiring no structural alterations. (Replacement windows must meet Appendix J requirements.)
13. Replacement of non-structural siding that is not part of a fire-rated assembly when the removal of siding is performed in accordance with State laws regarding asbestos and lead paint. (Replacement siding must meet Wildfire Hazard Area and other code requirements.)
14. Shade cloth and maximum 6 mil single layer poly-roofed structures, constructed for nursery or agricultural purposes, with no entry by the general public, not including service systems.
15. Public bridges, private culverts and pedestrian bridges that serve only one property, do not provide a means of egress or access to the property, and are not in a regulatory floodplain or county-designated major drainage area of interest (see map at <https://www.larimer.org/engineering/stormwater-drainage>)
16. Pergolas, arbors or trellises whose roof area is at least 67% open.

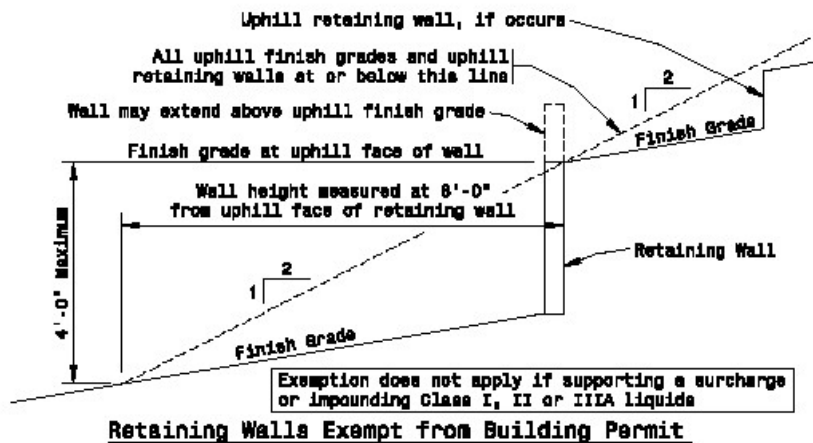


Figure 105.2.3

**The following section is hereby amended by amending Item # 2 under Plumbing: to read as follows: R105.2. Work exempt from permit.**

**Plumbing:**

1. The stopping of leaks in drains, water, soil, waste or vent pipe; provided, however, that if any concealed trap, drainpipe, water, soil, waste or vent pipe becomes defective and it becomes necessary to remove and replace the same with new material, such work shall be considered as new work and a permit shall be obtained and inspection made as provided in this code.

2. The clearing of stoppages or the repairing of leaks in pipes, valves or fixtures, and the removal and replacement of plumbing fixtures, provided such repairs or replacements do not involve or require the replacement or rearrangement of valves, pipes or fixtures.

*The first paragraph in the following section is hereby amended to read as follows. The remainder is unchanged:*

**R105.3.1.1 Determination of substantially improved or substantially damaged existing buildings in flood hazard areas.** For applications for reconstruction, rehabilitation, addition, or other improvement of existing buildings or structures located in a flood hazard area as established by the Town of Estes Park Land Use Code, the Town Engineer shall examine or cause to be examined the construction documents as well as other documents necessary for a determination of substantial improvement or substantial damage. The Town Engineer shall make a determination with regard to the value of the proposed work. For buildings that have sustained damage of any origin, the value of the proposed work shall include the cost to repair the building or structure to its pre-damaged condition. If the Town Engineer finds that the proposed work constitutes a substantial improvement or repair of substantial damage in accordance with the Town of Estes Park Land Use Code, the building or structure shall meet the requirements of Section R322.1.

*The following section is hereby amended to read as follows:*

**R105.5 Expiration.** Every permit issued shall expire 18 months after the date of issue unless the project is completed in compliance with this code. The building official is authorized to grant, for justifiable cause demonstrated, a one-time written extension of 18 months at no charge, making the original permit valid for three years. Additional 18-month extensions will cost one-half the amount of the original building permit fee or a minimum of \$50, whichever is more. Every permit shall become null and void if the building or work authorized by such permit is not commenced within 180 days from the date of issue of such permit, if the person or entity to whom the permit is issued fails to request a first inspection within 180 days of the date of such permit, or if the building or work authorized by such permit is suspended or abandoned at any time after the work is commenced for a period of 180 days or more. Before such work can be recommenced, a new permit shall be first obtained to do so. The fee for such new permit shall be one-half of the amount required for a new permit for such work, provided no changes have been made or will be made in the original plans and specifications for such work and provided further that the suspension or abandonment has not exceeded one year. Changes in the plans and specifications or abandonment exceeding one year shall require an additional permit fee and plan review fee as described in Section R108. Permits for "as-built" construction must have final inspection approval within 180 days of permit issuance. The building official is authorized to grant a one-time extension of twelve months for "as-built" permits, at no charge, provided evidence of progress towards final inspection or justifiable cause is shown.

*The following section is hereby added to read as follows:*

**R105.10 Premises Identification During Construction.** The approved permit number and street address number shall be displayed and be plainly visible and legible from the public street or road fronting the property on which any new building is being constructed.

*The following section is hereby amended to read as follows:*

**R106.1.3 Information on braced wall design.** For buildings and structures utilizing braced wall design, braced wall lines shall be identified on the construction documents. Pertinent information including, but not limited to, bracing methods, location and length of braced wall panels and foundation requirements of braced wall panels at top and bottom shall be provided.

*The following section is hereby amended by deleting item #3 and renumbering and amending #4 to read as follows:*

**R106.1.4 Information for construction in flood hazard areas.** For buildings and structures located in whole or in part in flood hazard areas as established by Table R301.2, construction documents shall include:

1. Delineation of flood hazard areas, floodway boundaries and flood zones and the design flood elevation, as appropriate.
2. The elevation of the proposed lowest floor, including basement; in areas of shallow flooding (AO zones), the height of the proposed lowest floor, including basement, above the highest adjacent grade.
3. If design flood elevations are not included on the county's Flood Insurance Rate Map (FIRM), the Town Engineer and the applicant shall obtain and reasonably utilize any design flood elevation and floodway data available from other sources.

*The following section is hereby amended to read as follows:*

**R106.3.1 Approval of construction documents.** Where the *building official* issues a permit, the construction documents shall be approved in writing, electronically, or by a stamp indicating the approved permit number. One set of construction documents so reviewed shall be retained by the building official. The other set shall be returned to the applicant, shall be kept at the site of work and shall be open to inspection by the building official or a duly authorized representative.

*The following section is hereby amended to read as follows:*

**R107.1 General.** The building official is authorized to issue a permit for temporary structures and temporary uses. Such permits shall be limited as to time of service but shall not be permitted for more than 18 months. The building official is authorized to grant extensions for demonstrated cause.

*The following section is hereby added to read as follows:*

**R108.7 Expiration of Plan Review.** Applications for which no permit is issued within one hundred and eighty (180) days following the date of application shall expire by limitation; plans submitted for review may thereafter be returned to the applicant or destroyed by the building official. The building official may extend the time for action by the applicant for a period not exceeding ninety (90) days upon written request by the applicant showing that circumstances beyond the control of the applicant have prevented action from being taken. In order to renew action on an expired application, the applicant shall resubmit plans and pay a new plan review fee.

*The following section is hereby added to read as follows:*

**R108.8 Re-inspections.** A re-inspection fee may be assessed for each inspection or re-inspection when access to the work is not provided on the date for which inspection is requested, a readily visible address is not posted, the inspection record card is not posted or otherwise available on site, the approved plans are not readily available in a visible location for the inspector, such portion of work for which inspection is called for is not complete, corrections called for are not made, work deviates from plans approved by the building official, or for other good and sufficient cause as determined by the building official. To obtain a re-inspection, the applicant shall pay the re-inspection fee in accordance with the adopted Town of Estes Park fee schedule. When re-inspection fees have been assessed, no additional inspection of the work will be performed until the required fees have been paid.

**R109.1.1 Foundation inspection.** Inspection of the foundation shall be made after poles or piers are set or trenches or basement areas are excavated, and any required forms erected, and any required reinforcing steel is in place and supported prior to the placing of concrete. The foundation inspection shall include excavations for thickened slabs intended for the support of bearing walls, partitions, structural supports, or equipment and special requirements for wood foundations.

*The following section is hereby added to read as follows:*

**109.1.1.1 Underground inspection.** Underground and underslab inspections shall be made after trenches or ditches are excavated and bedded, piping, tubing, ducts, and electrical wiring is installed, before backfill is put in place and before concrete is placed. Where excavated soil contains rocks, broken concrete, frozen chunks, and other rubble that would damage or break the piping or cause corrosive action, clean backfill shall be on the job site.

*The following section is hereby added to read as follows:*

**109.1.1.2 Energy efficiency inspections.** Inspections shall be made to determine compliance with Chapter 11 and shall include, but not be limited to, inspections for footing, foundation, slab, and thermal envelope insulation *R*- and *U*-values, fenestration *U*-value, duct system *R*-value, HVAC and water-heating equipment efficiency, air sealing, plumbing protection, lighting system controls, components and meters, and installation and proper operation of all required building controls.

*The following section is hereby amended to read as follows:*

**R109.1.2 Plumbing, mechanical, gas and electrical systems inspection.** Rough inspection of plumbing, mechanical, gas and electrical systems shall be made prior to covering or concealment, before fixtures or appliances are set or installed, and prior to or concurrent with framing inspection.

**Exception:** Backfilling of ground-source heat pump loop systems tested in accordance with Section M2105.28 prior to inspection shall be permitted.

*The following section is hereby amended to read as follows:*

**R109.1.3 Floodplain inspections.** For construction in flood hazard areas as established by the Town of Estes Park Land Use Code, upon placement of the lowest floor, including basement, and prior to further vertical construction, the building official and/or the Town Engineer may require submission of documentation, prepared and sealed by a

registered professional land survey or design professional, of the elevation of the lowest floor, including basement, required in Section R322.

*The following section is hereby amended to read as follows:*

**R109.1.4 Frame and masonry inspection.** Inspection of framing and masonry construction shall be made after the roof, masonry, framing, firestopping, draftstopping and bracing are in place and after the plumbing, mechanical, gas, radon mitigation and electrical rough-ins are completed and prior to concealment.

*The following section is hereby amended to read as follows:*

**R110.1 Use and change of occupancy.** A building or structure shall not be used or occupied in whole or in part, and a change of occupancy of a building or structure or portion thereof shall not be made, until the building official has issued a certificate of occupancy therefor as provided herein. Issuance of a certificate of occupancy shall not be construed as an approval of a violation of the provisions of this code or of other ordinances of the jurisdiction. Certificates presuming to give authority to violate or cancel the provisions of this code or other ordinances of the jurisdiction shall not be valid.

**Exceptions:**

1. Certificates of occupancy are not required for work exempt from permits under Section R105.2.
2. Cabins, agricultural and accessory buildings or structures, and work authorized under miscellaneous permits shall not receive certificates of occupancy; a letter of completion will be issued upon request.

*The following section is hereby amended to read as follows:*

**R110.4. Temporary occupancy.** The building official is authorized to issue a temporary certificate of occupancy before the completion of the entire work covered by the permit, provided that such portion or portions shall be occupied safely. A Temporary Certificate of Occupancy (TCO) shall be valid for 180 days. The fee for a TCO shall be in accordance with the fee schedule as established by Town of Estes Park. The building official may grant additional TCOs for justifiable cause.

*The following section is hereby amended to read as follows:*

**R112.4 Administration.** To appeal a written determination of the building official to the Board of Appeals, a written appeal must be received by the Town of Estes Park Building Division within thirty (30) days of the date of the determination being appealed. The appellant shall, at the time of making such appeal, pay to the Town of Estes Park Building Division a docket fee as specified in the Town of Estes Park fee schedule. The Town of Estes Park Building Division shall send written notice of hearing to all parties concerned at least fourteen (14) days prior to the hearing by mailing the same to such parties' last known address by regular mail. The building official shall take immediate action in accordance with the decision of the Board of Appeals. All meetings or hearings shall be open to the public. The Board of Appeals may, from time to time, adopt such additional rules and regulations as it deems necessary and advisable for the conduct of its hearings and for carrying out the provisions hereof.

## CHAPTER 2 DEFINITIONS

*The following section is hereby amended by adding or amending these terms to read as follows:*

### **R202 DEFINITIONS**

**CABIN.** A structure that contains at least one habitable room for living, sleeping, eating, or cooking that lacks one of the following: an approved electrical system, an approved sanitation system, a potable water system, a water heater, or a primary heat source.

**FIREPLACE INSERT.** A woodburning device designed to be installed in an existing fireplace.

**INTERNATIONAL FIRE CODE.** The International Fire Code as adopted, amended, and administered by and within a fire district.

**NON-RESTRICTED AREA.** That part of unincorporated Town of Estes Park located west of Range 71, or north of the north half of Township 10 and east of Range 72 as shown on the Town of Estes Park Fireplace Area Map.

**PRIMARY HEAT SOURCE.** A permanent heating system capable of maintaining room temperatures at 68 degrees Fahrenheit at a point three feet above the floor and two feet from exterior walls in all habitable rooms at all times, even when the structure is unoccupied.

**RESORT LODGE COTTAGES** – A building or group of buildings, under single management and ownership, containing rooms and/or dwelling units available for temporary rental to guests where the primary attraction is generally recreational features or activities.

**RESTRICTED AREA.** That part of unincorporated Town of Estes Park located outside the Non-restricted Area as shown on the Town of Estes Park Fireplace Area Map.

**SOLIDLY SHEATHED DECK.** A roof deck with gaps between planks or sheathing not exceeding 1/8 inch (3.18 mm).

**TRANSIENT.** Occupancy of a dwelling unit or sleeping unit for not more than 30 days.

**WOODSTOVE.** An appliance designed for or capable of burning wood and capable of and intended for domestic space heating or domestic water heating.

## CHAPTER 3 BUILDING PLANNING

The following table is hereby amended to read as follows:

**TABLE R301.2 CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA**  
(These criteria shall be used for mechanical load calculations and designs.)

Ground Snow Load <sup>o</sup> (P <sub>g</sub> )	Wind Design				Seismic Design Category <sup>f</sup>	Subject to Damage from		
	Speed <sup>d</sup> (mph)	Topographic effects <sup>k</sup>	Special Wind Region <sup>l</sup>	Wind-borne debris zone <sup>m</sup>		Weathering <sup>a</sup>	Frost Line Depth <sup>b</sup>	Termite <sup>c</sup>
35psf≤5000' 45psf≤6000' 50psf≤6500' 60psf≤7000' 70psf≤8000' 100psf≤9000' 140psf≤10000'  <b>Engineered design is required over 8,000'</b>	115-225 mph  Ultimate Design Wind Speed V <sub>ult</sub>	YES	YES	NO	B	Severe	30 inches	Slight to Moderate
<b>Ice Barrier Underlayment Required<sup>h</sup></b>		<b>Flood Hazards<sup>g</sup></b>		<b>Air Freezing Index<sup>i</sup></b>		<b>Mean Annual Temperature<sup>j</sup></b>		
YES		(a) 1973 (b) Feb. 6, 2013 (c) Panels 08069C0025 through 08069C1420		906 in the Front Range  926 in the Wildfire Hazard Area (foothills & mountains)		43.2 F		

For SI: 1 pound per square foot = 0.0479 kPa, 1 mile per hour = 0.447m/s.

MANUAL J DESIGN CRITERIA <sup>n</sup>						
Elevation	Altitude Correction Factor	Summer Design wet blub	Indoor Winter Design Relative Humidity	Indoor winter design dry-bulb temperature	Outdoor winter design dry-bulb temperature	Heating Temperature Difference
4,790 to 13,573	varies with elevation	62° F	30%	72° F	4° F	68° F
Latitude	Climate Zone	Daily Range	Indoor summer design relative humidity	Indoor summer design dry-bulb temperature	Outdoor summer design dry-bulb temperature	Cooling Temperature Difference
40° 15' to 40° 59' North	5B	High (H)	50%	75° F	91° F	16° F

**Footnotes to Table 301.2 are hereby amended to read as follows:**

- Where weathering requires a higher strength concrete or *grade* of masonry than necessary to satisfy the structural requirements of this code, the frost line depth strength required for weathering shall govern. The weathering column shall be filled in with the weathering index, "negligible," "moderate" or "severe" for concrete as determined from Figure R301.2(1). The grade of masonry units shall be determined from ASTM C34, ASTM C55, ASTM C62, ASTM C73, ASTM C90, ASTM C129, ASTM C145, ASTM C216 or ASTM C652.
- Where the frost line depth requires deeper footings than indicated in Figure R403.1(1), the frost line depth strength required for weathering shall govern. The *jurisdiction* shall fill in the frost line depth column with the minimum depth of footing below finish grade.
- The *jurisdiction* shall fill in this part of the table to indicate the need for protection depending on whether there has been a history of local subterranean termite damage.
- The Ultimate Design Wind Speed (Vult) for the determination of site wind loads shall comply with the Colorado Front Range Gust Map – ASCE 7-10 Compatible, published by the Structural Engineers Association of Colorado (dated November 8, 2013) or the Town of Estes Park Ultimate Design Wind Speed Map. Wind Load design values shall be determined from Section 1609 of the IBC. Wind exposure category shall be Exposure C unless designated otherwise by the design professional based on site-specific conditions and approved by the building official.
- The *jurisdiction* shall fill in this section of the table to establish the design criteria using Table 10A from ACCA Manual J or established criteria determined by the *jurisdiction*. Deviations from this table shall be permitted to reflect local climates or local weather experience as determined by the *building official*.
- The *jurisdiction* shall fill in this part of the table with the seismic design category determined from Section R301.2.2.1.
- The *jurisdiction* shall fill in this part of the table with: (a) the date of the *jurisdiction's* entry into the National Flood Insurance Program (date of adoption of the first code or ordinance for management of flood hazard areas); (b) the date(s) of the Flood Insurance Study and (c) the panel numbers and dates of the currently effective FIRMs and FBFMs or other flood hazard map adopted by the authority having *jurisdiction*, as amended.
- In accordance with Sections R905.1.2, R905.4.3.1, R905.5.3.1, R905.6.3.1, R905.7.3.1 and R905.8.3.1, where there has been a history of local damage from the effects of ice damming, the *jurisdiction* shall fill in this part of the table with "YES." Otherwise, the *jurisdiction* shall fill in this part of the table with "NO."
- The *jurisdiction* shall fill in this part of the table with the 100-year return period air freezing index (BF-days) from Figure R403.3(2) or from the 100year (99 percent) value on the National Climatic Data Center data table "Air Freezing Index-USA Method (Base 32°F)."
- The *jurisdiction* shall fill in this part of the table with the mean annual temperature from the National Climatic Data Center data table "Air Freezing Index-USA Method (Base 32°F)."
- In accordance with Section R301.2.1.5, where there is local historical data documenting structural damage to buildings due to topographic wind speed-up effects, the *jurisdiction* shall fill in this part of the table with "YES." Otherwise, the *jurisdiction* shall indicate "NO" in this part of the table.
- In accordance with Figure R301.2(2), where there is local historical data documenting unusual wind conditions, the *jurisdiction* shall fill in this part of the table with "YES" and identify any specific requirements. Otherwise, the *jurisdiction* shall indicate "NO" in this part of the table.

- m. In accordance with Section R301.2.1.2 the jurisdiction shall indicate the wind-borne debris wind zone(s). Otherwise, the jurisdiction shall indicate "NO" in this part of the table.
- n. The jurisdiction shall fill in these sections of the table to establish the design criteria using Table 1a or 1b from ACCA Manual J or established criteria determined by the jurisdiction. Alternative design criteria based on site-specific data may be used when proposed by the *registered design professional* and approved by the *building official*.
- o. The design ground snow load  $P_g$  shall comply with the column above or the Colorado Design Snow Loads, published by the Structural Engineers Association of Colorado (dated April 2016). The design roof snow load values shall be determined from Chapter 7, ASCE 7-16, including all applicable factors, and loading and drifting considerations. In no case shall the final design roof snow load be less than a uniformly distributed load of 30 psf, except greenhouses may take full load reductions allowed per ASCE 7. Loafing sheds and pole barns may be constructed per Town of Estes Park Prescriptive Design Standards.

**The following section is hereby amended to read as follows: R301.2.1.1 Wind limitations and wind design required.**

The wind provisions of this code shall not apply to the design of buildings where the ultimate design wind speed,  $V_{ult}$ , as determined in compliance with the Colorado Front Range Gust Map – ASCE 7-10 Compatible, published by the Structural Engineers Association of Colorado (dated November 8, 2013), equals or exceeds 140 miles per hour (225 kph).

**Exceptions:**

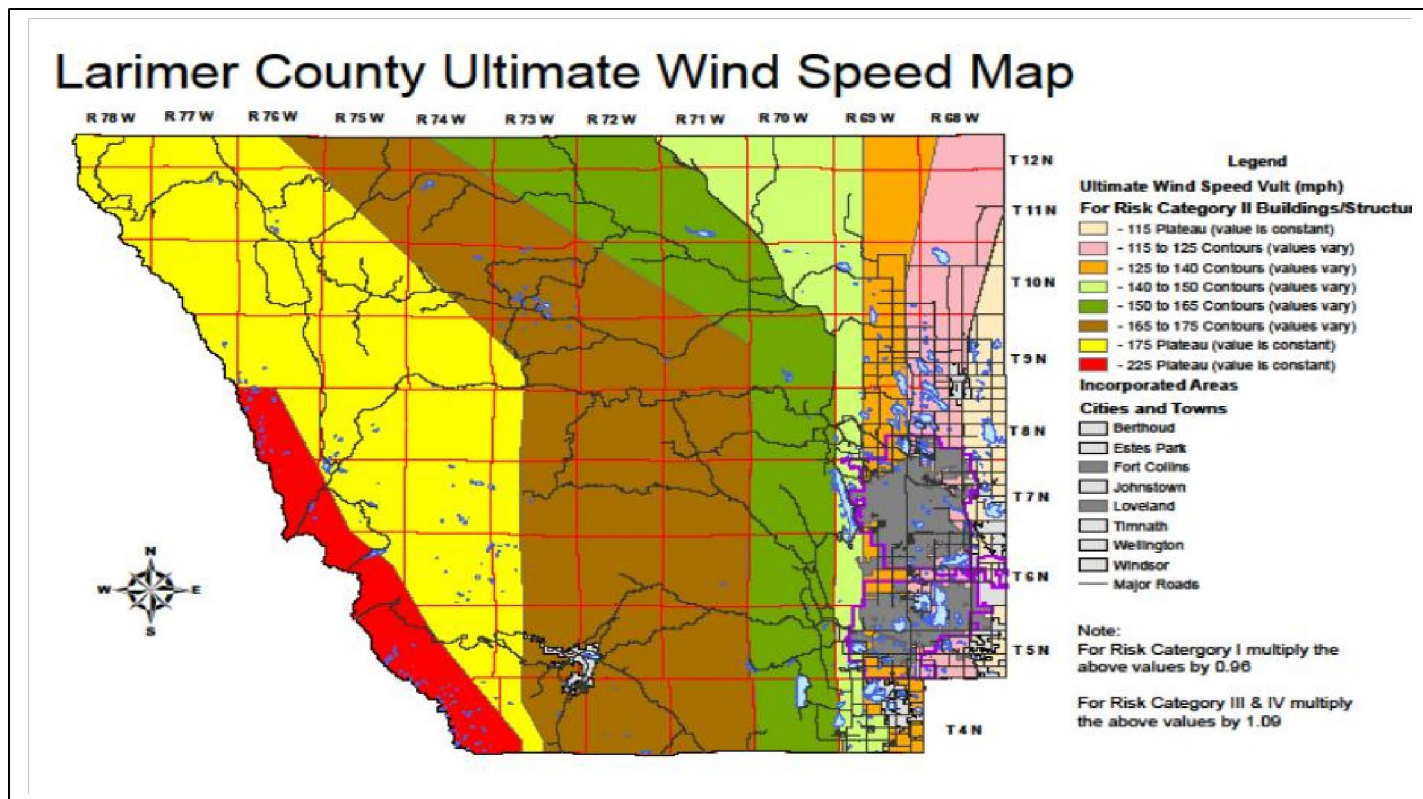
1. For concrete construction, the wind provisions of this code shall apply in accordance with the limitations of Sections R404 and R608.
2. For structural insulated panels, the wind provisions of this code shall apply in accordance with the limitations of Section R610.
3. For cold-formed steel light-frame construction, the wind provisions of this code shall apply in accordance with the limitations of Sections R505, R603 and R804.

Where the ultimate design wind speed,  $V_{ult}$ , as determined above equals or exceeds 140 miles per hour (225 km/h), the design of buildings for wind loads shall be in accordance with one or more of the following methods:

1. AWC Wood Frame Construction Manual (WFCM).
2. ICC Standard for Residential Construction in High-Wind Regions (ICC 600).
3. ASCE Minimum Design Loads for Buildings and Other Structures (ASCE 7).
4. AISI Standard for Cold-Formed Steel Framing—Prescriptive Method for One- and Two-Family Dwellings (AISI S230).
5. International Building Code.
6. Town of Estes Park Prescriptive Design Standards for Pole Barns in High Wind Areas.
7. Town of Estes Park Prescriptive Design Standards for Loafing Sheds.
8. Any other Prescriptive Design Standards for High Wind or Heavy Snow Areas subsequently issued by Town of Estes Park.

The elements of design not addressed by the methods in Items 1 through 8 shall be in accordance with the provisions of this code.

Where ASCE 7 or the International Building Code is used for the design of the building, the Colorado Front Range Gust Map – ASCE 7-10 Compatible, published by the Structural Engineers Association of Colorado (dated November 8, 2013), and exposure category requirements as specified in ASCE 7 and the International Building Code shall be used.



**The following section is hereby amended to read as follows:**

**R302.1 Exterior walls.** Construction, projections, openings, and penetrations of *exterior walls* of *dwelling*s and accessory buildings shall comply with Table R302.1 (1); or *dwelling*s equipped throughout with an *automatic sprinkler system* installed in accordance with Section P2904 shall comply with Table R302.1 (2). **Exceptions:**

1. Walls, projections, openings, or penetrations in walls perpendicular to the line used to determine the fire separation distance.
2. Walls of individual dwelling units and their accessory structures located more than six feet (1.8 m) apart on the same lot.
3. Detached tool sheds and storage sheds, playhouses and similar structures exempted from permits are not required to provide wall protection based on location on the lot. Projections beyond the exterior wall shall not extend over the lot line.
4. Foundation vents installed in compliance with this code are permitted.

**The following Table is hereby amended to read as follows:**

**Table R302.1 (1) Exterior Walls**

TABLE R302.1 (1) EXTERIOR WALLS			
EXTERIOR WALL ELEMENT		MINIMUM FIRE-RESISTANCE RATING	MINIMUM FIRE SEPARATION DISTANCE
Walls	Fire-resistance rated	1 hour-tested in accordance with ASTM E119, UL 263 or Section 703.2.2 of the International Building Code with exposure from both sides	0 feet
	Not fire resistance rated	0 hours	3 feet
Projections	Not allowed	NA	Less than 2 feet
	Fire-resistance rated	1 hour on the underside, or heavy timber, or fireretardant treated wood <sup>a, b</sup>	2 feet

	Not fire resistance rated	0 hours	3 feet
Openings in walls	Not allowed	NA	Less than 3 feet
	Unlimited	0 hours	3 feet
Penetrations	All	Comply with Section R302.4	Less than 3 feet
		None required	3 feet

For SI: 1 foot = 304.8 mm.

NA = Not Applicable.

- The fire-resistance rating shall be permitted to be reduced to 0 hours on the underside of the eave overhang if fireblocking is provided from the wall top plate to the underside of the roof sheathing.
- The fire-resistance rating shall be permitted to be reduced to 0 hours on the underside of the rake overhang where gable vent openings are not installed.

**The following Table is hereby amended by deleting footnote a and renumbering footnotes b and c to read as follows:**

**Table R302.1 (2) Exterior Walls – Dwellings with Fire Sprinklers**

- The fire-resistance rating shall be permitted to be reduced to 0 hours on the underside of the eave overhang if fireblocking is provided from the wall top plate to the underside of the roof sheathing.
- The fire-resistance rating shall be permitted to be reduced to 0 hours on the underside of the rake overhang where gable vent openings are not installed.

**The following section is hereby amended to read as follows:**

**R302.5.1 Opening protection.** Openings from a private garage, barn, or similar utility space directly into a room used for sleeping purposes shall not be permitted. Other openings between the garage, barn or similar utility space and residence shall be equipped with solid wood doors not less than 1 3/8 inches (35 mm) in thickness, solid or honeycomb-core steel doors not less than 1 3/8 inches (35 mm) thick, or 20-minute fire-rated doors. Doors shall be self-latching and equipped with a self-closing or automatic-closing device.

**The following section is hereby amended to read as follows:**

**R302.6 Dwelling-garage/barn/utility space fire separation.** The garage, barn or similar utility space shall be separated as required by Table R302.6. Openings in such walls shall comply with Section R302.5. Attachment of gypsum board shall comply with Table R702.3.5. This provision does not apply to walls of utility spaces that are perpendicular to the adjacent dwelling unit wall.

**The following section is hereby added to read as follows:**

**R302.6.1** Private garages, barns and similar utility buildings exceeding 5,000 sq. ft. (464.5 m<sup>2</sup>) in floor area within 6' (1.8 m) at any point from a dwelling unit on the same lot shall be separated from the dwelling by 1-hour fire-rated wall, roof and soffit construction.

**The following section is hereby amended to read as follows:**

**TABLE R302.6 DWELLING-GARAGE/BARN/SIMILAR UTILITY SPACE SEPARATION**

SEPARATION	MATERIAL
From the residence and attics	Not less than 1/2-inch gypsum board or equivalent applied to the utility space side
From all habitable rooms above the utility space	Not less than 5/8-inch Type X gypsum board or equivalent
Structure(s) supporting floor/ceiling assemblies used for separation required by this section	Not less than 1/2-inch gypsum board or equivalent
Garages/barns/similar utility buildings located less than 6 feet from a dwelling unit on the same lot <sup>a</sup>	Not less than 1/2-inch gypsum board or equivalent applied to the interior side of exterior walls and roof/ceiling assemblies that are within this area

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

- Garages, barns, and similar utility buildings exceeding 5,000 sq. ft. (464.5 m<sup>2</sup>) in floor area shall comply with Section R302.6.1

**The following section is hereby amended in its entirety to read as follows:**

**R302.13 Fire protection of floors above fuel-burning appliances.** In new construction or a new location for an appliance, where fuel-fired heating or water-heating appliances are installed below a combustible floor, floor assemblies that are not required elsewhere in this code to be fire-resistance rated shall be provided with a minimum ½ inch (12.7 mm) gypsum wallboard membrane, 5/8-inch (16 mm) wood structural panel membrane, or equivalent on the underside of the floor framing member. Penetrations or openings for ducts, vents, electrical outlets, lighting, devices, luminaires, wires, speakers, drainage, piping and similar openings or penetrations shall be permitted.

**Exceptions:**

1. Floor assemblies located directly over a space protected by an automatic sprinkler system in accordance with Section P2904, NFPA 13D, or other approved equivalent sprinkler system.
2. Floor assemblies located above direct vent appliances with both intake and exhaust pipes installed continuously to the outside.
3. Portions of floor assemblies shall be permitted to be unprotected where complying with all of the following:
  - 3.1. The appliances are enclosed in a framed mechanical room with no less than ½" (12.7 mm) gypsum wallboard or the equivalent installed on the ceiling and walls. Clearances to combustible materials and for appliance access and service, as specified in this code and the manufacturer's installation instructions, shall be maintained.
  - 3.2. The aggregate area of the room does not exceed 80 square feet (7.4 m²) per story.
  - 3.3. Fireblocking in accordance with Section R302.11.1 is installed along the perimeter of the mechanical room.
  - 3.4. The room is insulated and sealed in accordance with Section N1102.4.4.
  - 3.5. Openings from a mechanical room directly into a room used for sleeping purposes are prohibited. Other openings shall be equipped with solid wood doors not less than 1 3/8 inches (35 mm) in thickness, solid or honeycomb-core steel doors not less than 1 3/8 inches (35 mm) thick, or 20-minute fire-rated doors. Doors shall be self-latching and equipped with a self-closing or automatic-closing device.
4. Wood floor assemblies using dimension lumber or *structural composite lumber* equal to or greater than 2-inch by 10-inch (50.8 mm by 254 mm) nominal dimension, or other *approved* floor assemblies demonstrating equivalent fire performance.

**The following section is hereby amended to read as follows:**

**R303.10 Required heating.** Every dwelling unit shall be provided with a *primary heat source* capable of maintaining a minimum room temperature of 68°F (20°C) at a point three feet (914 mm) above the floor and two feet (610 mm) from exterior walls in all habitable rooms at the design temperature.

**The following section is hereby amended to read as follows:**

**R308.4.7 Glazing adjacent to stair landings.** Glazing adjacent to the landings at the bottom of a stairway where the glazing is less than 36 inches (914 mm) above the landing and within a 60 inch (1524 mm) horizontal arc less than 180 degrees from the top or bottom tread nosing shall be considered a hazardous location.

**Exception:** Where the glazing is protected by a guard complying with Section R312 and the plane of the glass is more than 18 inches (457 mm) from the guard.

**The following section including exceptions is hereby amended to read as follows:**

**R310.1 Emergency escape and rescue opening required.** Basements, habitable attics, habitable lofts and mezzanines, and every sleeping room shall have not less than one operable emergency escape and rescue opening. Where basements contain one or more sleeping rooms, an emergency escape and rescue opening shall be required in each sleeping room. Emergency escape and rescue openings shall open directly into a public way, or to a yard or court having a minimum width of 36 inches (914 mm) that opens to a public way.

**Exceptions:**

1. Storm shelters and basements used only to house mechanical equipment not exceeding a total floor area of 200 square feet (18.58 m²).
2. A yard shall not be required to open directly into a public way where the yard opens to an unobstructed path from the yard to the public way. Such path shall have a width of not less than 36 inches (914 mm).

**The following section is hereby amended to read as follows:**

**R310.2.2 Minimum dimensions.** The minimum net clear opening height dimension shall be 24 inches (610 mm). The minimum net clear opening width dimension shall be 20 inches (508 mm). The net clear opening dimensions shall be the result of normal operation of the opening, with casement windows measured when open perpendicular to the exterior wall.

***The following section is hereby amended to read as follows:***

**R310.7.1 Existing emergency escape and rescue openings.** Where a change of occupancy would require an emergency escape and rescue opening in accordance with Section 310.1, operable windows serving as the emergency escape and rescue opening shall comply with the following:

1. An existing operable window shall provide a minimum net clear opening of 5 square feet (0.46 m<sup>2</sup>) with a minimum net clear opening height of 22 inches (559 mm) and a minimum net clear opening width of 20 inches (508 mm).
2. A replacement window where such window complies with both of the following:
  - 2.1. The replacement window meets the size requirements in Item 1.
  - 2.2. The replacement window is the manufacturer's largest standard-size window that will fit within the existing frame or existing rough opening. The replacement window shall be permitted to be of the same operating style as the existing window or a style that provides for an equal or greater window opening area than the existing window.

***The first sentence in the following section is hereby amended to read as follows (the remainder is unchanged):*** **R311.7.5.1 Risers.** The riser height shall be not more than 7<sup>3</sup>/<sub>4</sub> inches (196 mm) and not less than 4 inches (102 mm).

***The following section is hereby added to read as follows:***

**R312.1.1.1 Area wells, bulkheads, and similar enclosures.** Where any area well wall, bulkhead enclosure wall or similar retaining wall or barrier is located less than 36 inches (914 mm) from the nearest intended walking surface, parking surface, or driveway, and the surface elevation difference between the higher and lower side of the well wall, bulkhead enclosure wall or retaining wall is greater than 30 inches, such wall shall be protected with guards or be provided with an equivalent barrier.

**EXCEPTIONS:**

1. The access side of stairways need not be barricaded.
2. Area wells provided for emergency escape and rescue windows may be protected with approved grates or covers that comply with Section 310.4.4.
3. Covers and grates may be used over stairways and other openings used exclusively for service access or for admitting light or ventilation.
4. Area well walls, bulkhead enclosure walls, or retaining walls adjacent to a building that are located 24 inches (610 mm) or less measured perpendicular from the building.
5. Where the slope of the embankment or the side of the opening enclosure adjacent to such wall does not exceed one unit vertical to two horizontal.

***The following section is hereby amended in its entirety to read as follows:***

**SECTION R313**

**AUTOMATIC FIRE-SPRINKLER SYSTEMS**

**R313.1 Townhouse automatic fire sprinkler design.** An automatic sprinkler system shall be installed in Townhouses.

**Exception:** An automatic sprinkler system shall not be required for additions or alterations to existing buildings that are not already provided with a sprinkler system.

**R313.1.1 Design and installation.** Automatic sprinkler systems for Townhouses shall be designed and installed in accordance with Section P2904 or NFPA 13D.

**Exception:**

Within the Estes Valley Fire Protection District, automatic sprinkler systems for Townhouses shall be designed and installed in accordance with NFPA 13D.

**R313.2 One- and two-family dwellings automatic fire sprinkler design.** An automatic fire sprinkler system shall be installed in all one- and two-family dwellings.

**Exception:** An automatic sprinkler system shall not be required for additions or alterations to existing buildings that are not already provided with a sprinkler system.

**R313.2.1 Design and installation.**

Automatic sprinkler systems shall be designed and installed in accordance with Section P2904 or NFPA 13D.

**Exception:**

Within the Estes Valley Fire Protection District, automatic fire sprinkler systems for one- and two-family dwellings shall be designed and installed in accordance with NFPA 13D.

***The following section is hereby amended by deleting exception #2 to read as follows:***

**R314.2.2 Alterations, repairs, and additions.** Where alterations, repairs or additions requiring a permit occur, the individual dwelling unit shall be equipped with smoke alarms located as required for new dwellings.

**Exception:** Work involving the exterior surfaces of dwellings, such as the replacement of roofing or siding, the addition or replacement of windows or doors, or the addition of a porch or deck.

*The following section is hereby amended by adding an Exception to read as follows:*

**R314.4 Interconnection.** Where more than one smoke alarm is required to be installed within an individual dwelling unit in accordance with Section R314.3, the alarm devices shall be interconnected in such a manner that the actuation of one alarm will activate all of the alarms in the individual dwelling unit. Physical interconnection of smoke alarms shall not be required where listed wireless alarms are installed and all alarms sound upon activation of one alarm.

**Exception:** Smoke alarms required for installation, alteration, or repairs of plumbing or mechanical systems need not be interconnected.

*The following section is hereby amended to read as follows: R315.2.1 New construction.*

For new construction, carbon monoxide alarms shall be provided in *dwelling units* where either or both of the following conditions exist.

1. The *dwelling unit* contains a fuel-fired *appliance*.
2. The *dwelling unit* has an attached garage.

*The following section is hereby amended by deleting Exceptions #2 and #3 to read as follows:*

**R315.2.2 Alterations, repairs, and additions.** Where alterations, repairs or additions requiring a permit occur, or where one or more sleeping rooms are added or created in existing dwellings, the individual dwelling unit shall be equipped with carbon monoxide alarms located as required for new dwellings.

**Exception:** Work involving the exterior surfaces of dwellings, such as the replacement of roofing or siding, the addition or replacement of windows or doors, or the addition of a porch or deck.

*The following section is hereby amended to read as follows:*

**R315.3 Location.** Carbon monoxide alarms in dwelling units shall be installed outside of each separate sleeping area in the immediate vicinity of the bedrooms and not more than fifteen feet (4.6 m) from the door to each bedroom. Where a fuel-burning appliance is located within a bedroom or its attached bathroom, a carbon monoxide alarm shall be installed within the bedroom.

*The following section is hereby amended by adding Exception #2 and renumbering the existing Exception as #1 to read as follows:*

**R315.5 Interconnectivity.** Where more than one carbon monoxide alarm is required to be installed within an individual dwelling unit in accordance with Section R315.3, the alarm devices shall be interconnected in such a manner that the actuation of one alarm will activate all of the alarms in the individual dwelling unit. Physical interconnection of carbon monoxide alarms shall not be required where listed wireless alarms are installed and all alarms sound upon activation of one alarm.

**Exceptions:**

1. Interconnection of carbon monoxide alarms in existing areas shall not be required where alterations or repairs do not result in removal of interior wall or ceiling finishes exposing the structure, unless there is an attic, crawl space or basement available that could provide access for interconnection without the removal of interior finishes.
2. Carbon monoxide alarms required for installation, alteration, or repairs of plumbing or mechanical systems.

*The following section is hereby amended to read as follows:*

**R322.1 General.** Buildings and structures constructed in whole or in part in flood hazard areas, including A Zones, as established in the Town of Estes Park Land Use Code, and substantial improvement and repair of substantial damage of buildings and structures in flood hazard areas, shall be designed and constructed in accordance with the provisions contained in the Town of Estes Park Land Use Code.

*The following section is hereby added to read as follows:*

**R331 WILDFIRE HAZARD MITIGATION REQUIREMENTS**

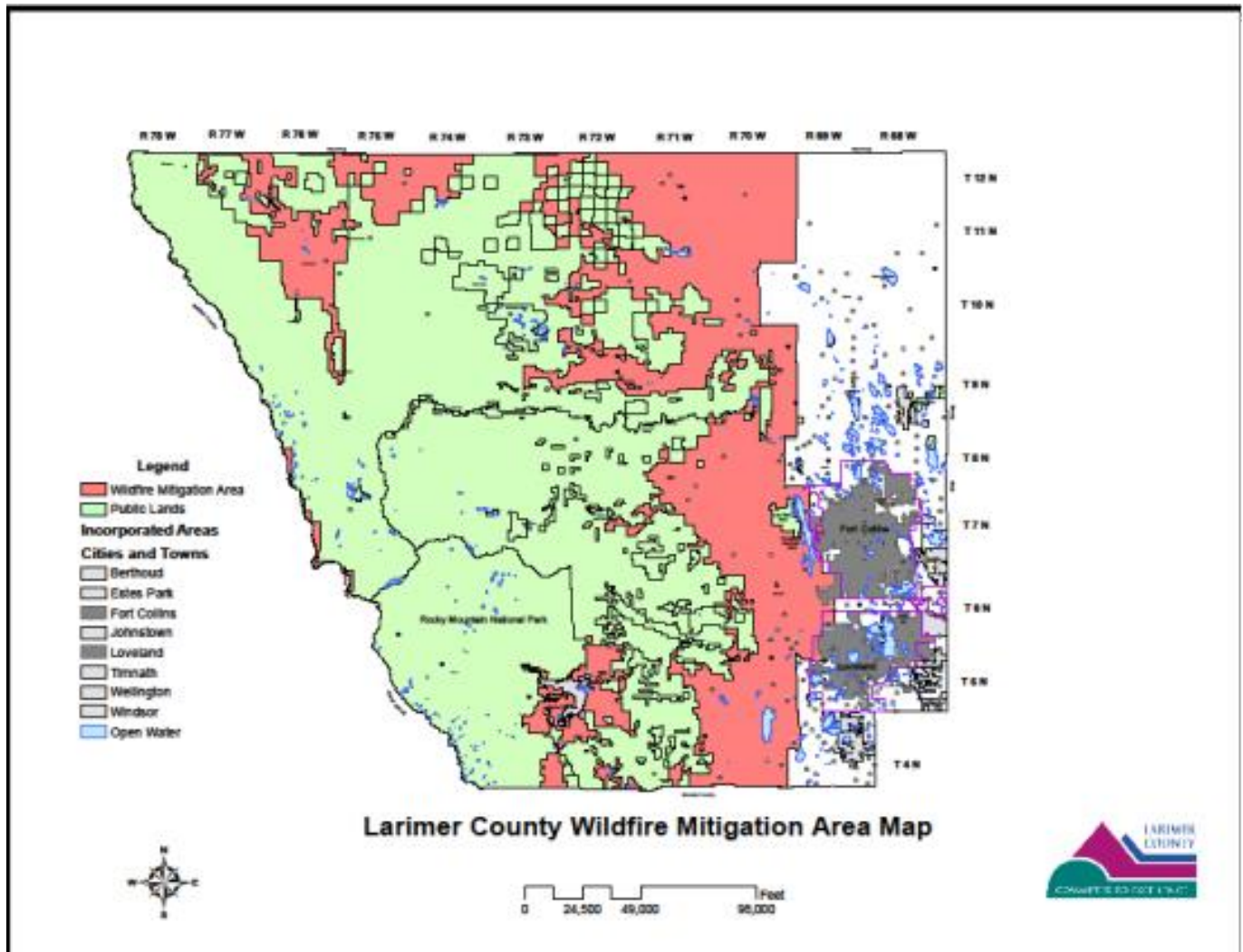
**R331.1 General Purpose.** The purpose of this section is to establish minimum standards for design and construction of new buildings or portions thereof for the protection of life and property from wildfire hazards.

**R331.2 Scope.** Within the *wildfire hazard area*, as defined herein and shown in Figure R331, all new building construction including additions shall comply with the provisions of this section.

**EXCEPTIONS:**

1. Sheds, greenhouses, and similar detached accessory structures not exceeding 600 sq. ft. (55.7 m<sup>2</sup>) in area.
2. Loafing sheds and similar unenclosed accessory structures of any size.

**FIGURE R331 Town OF ESTES PARK WILDFIRE HAZARD AREA MAP**



**R331.3 Alternate Materials and Methods of Compliance.** The provisions of this chapter are not intended to prevent the use of any material or method of compliance not specifically prescribed by this chapter, provided any alternate has been *approved* and its use authorized by the building official in accordance with Section 104.11.

**R331.4 Definitions.** For the purpose of this section, certain terms are defined as follows:

**COMBUSTIBLE** - a material that fails to meet the acceptance criteria of Standard Method of Test for Determination of Noncombustibility in Building Materials (ASTM E136).

**COMBUSTIBLE CONSTRUCTION** - a type of construction that does not meet the requirement for noncombustible construction.

**DEFENSIBLE SPACE** - a natural or man-made area, where woody vegetation capable of allowing a fire to spread unchecked has been treated or modified to slow the spread and reduce the intensity of an advancing wildfire, and to create an area for fire suppression operations to occur.

**FIRE-RESISTIVE CONSTRUCTION** - construction designed to resist the spread of fire.

**FIRE-RESISTIVE RATING** - the time that the material or construction will withstand the standard fire exposure as determined by a fire test made in conformity with the standard methods of fire tests of buildings construction and materials.

**FLAME-SPREAD INDEX (FSI)** - a relative index describing the surface-burning characteristics of building materials. The test used to establish FSI evaluates the flame spread over the building material surface when exposed to a test fire. The rate at which flame spreads across the specimen is compared on a scale of 0 for inorganic reinforced cement board, to 100 for red oak. The following table identifies the Flame Spread Classification and Flame Spread Index:

Flame Spread Classification	Flame Spread Index
Class A	0 to 25
Class B	26 to 75
Class C	76 to 200

**FUEL** - combustible material.

**NONCOMBUSTIBLE** - materials that meet the acceptance criteria of Standard test Method for determination of non-combustibility in building materials. (ASTM E136)

**NONCOMBUSTIBLE CONSTRUCTION** - a type of construction in which a degree of fire safety is attained by the use of noncombustible materials for structural members and other building, assemblies.

**ONE-HOUR FIRE-RESISTIVE CONSTRUCTION** - will withstand the standard fire exposure for one hour as determined by a fire test made in conformity with the standard methods of fire tests of building construction and materials.

**WILDFIRE HAZARD** - the relative threat that a wildland fire may cause the destruction of life and improved property.

**WILDFIRE HAZARD AREA** - The area west of a line starting at the intersection of the Wyoming border line and range 69 west, then South nine miles to S.W. corner of section 31,Township 11, Range 69, then West three miles to N.W. corner of Section 3,Township 10, Range 70, then South five miles to S.W. corner of Section 27,Township 10, Range 70, then East three miles to S.W. corner of Section 30,Township 10, Range 69, then South nine miles to S.W. corner of Section 7,Township 8, Range 69, then West one mile to N.W. corner of Section 13,Township 8, Range 70, then South four miles to S.W. corner of Section 36,Township 8, Range 70, then East two miles to N.W. corner of Section 6,Township 7, Range 69, then South three miles to S.W. corner of Section 17,Township 7, Range 69, then East one mile to S.E. corner of Section 17,Township 7, Range 69, then South four miles to S.W. corner of Section 4,

Township 6, Range 69, then East one mile to S.E. corner of Section 4, Township 6, range 69, then South four miles to S.W. corner of Section 27, Township 6, Range 69, then West one mile to S.W. corner of Section 28, Township 6, Range 69, then South three miles to intersection of U.S. Highway 34, then West following U.S. Highway 34 two miles to intersection with Range 69 West, then South seven and three quarter miles to S.W. corner of Section 18, Township 4, Range 69, then West one mile to S.W. corner of Section 13, Township 4, Range 70, then South three miles to where the S.W. corner of Section 36, Township 9, Range 70 meets the Boulder County Line.

**WILDFIRE MITIGATION** - action taken to eliminate or reduce the wildfire hazard.

**R331.5 Fire-Resistive Construction.** Fire-resistive construction on all new structures shall be one of the following types:

1. One-hour fire-resistive shell providing not less than one-hour fire-resistive construction at all exterior walls, excluding openings and decks.
2. Exterior siding materials with a flame-spread classification of Class C or better. Exterior siding shall be composed entirely of noncombustible materials for a minimum of 4 feet (1.2 m) above finished grade.

**EXCEPTION:**

Non-combustible siding for the lowest 4 feet (1.2 m) is not required if 5 feet (1.5 m) or more of non-combustible landscaping material or natural ground cover is provided in accordance with Section 331.6.

3. Log structures using solid logs with a minimum tip diameter of 6 inches (152.4 mm) for exterior wall construction and 8 inches (203.2 mm) for roof beams, purlins and supporting columns.

**R331.6 Defensible Space.** Defensible space in compliance with current Colorado State Forest Service guidelines shall be required on all new construction in the Wildfire Hazard Area. Any landscaping materials or natural ground cover within 5 feet of the exterior walls of the building shall be non-combustible. For additions equal to or greater than 50% of the total square footage of the original structure, or changes in the occupancy or use of existing buildings that would place the building under the scope of Section R331.2, defensible space shall be provided around the entire building.

**EXCEPTION:** Five feet of non-combustible landscaping material or natural ground cover is not required if the lowest 4 feet of siding is non-combustible in accordance with Section 331.5.

**R331.7 Evaluation.** Evaluation of the defensible space will

- be based upon:
1. Current Colorado State Forest Service standards and guidelines, and
  2. Site specific vegetation and topographical characteristics.

The Building Official may allow alternatives to the Colorado State Forest Service Standards and Guidelines based on specific site conditions.

**R331.8 Completion.** The defensible space must be approved prior to issuing a certificate of occupancy or letter of completion.

**R331.9 Liquid Propane Gas.** Liquid propane gas facilities installed in the Wildfire Hazard Area shall comply with current county requirements, the International Fire Code and NFPA 58, for installation of such facilities. Liquid propane gas containers and tanks shall be located within the defensible space.

**R331.10 Spark Arresters.** Chimneys serving fireplaces, woodstoves, barbecues, incinerators, or decorative heating appliances in which solid fuel or liquid fuel is used, shall be provided with a spark arrestor. Spark arrestors shall be constructed of woven or welded wire screening of 12 USA standard gage wire (0.1046 inch) (2.66 mm) having openings not exceeding ½ inch. The net free area of the spark arrestor shall not be less than four times the net free area of the outlet of the chimney.

**R331.11 Fees.** Fees shall be assessed in accordance with the adopted Town of Estes Park wildfire assessment and inspection fee schedule.

**R331.12 Appeals.** Appeals of interpretations made by the building official relative to the application of this section shall be made to the Board of Appeals in accordance with Section 112.

**R331.13 Maintenance.** Defensible space areas created as required by this code or other ordinances shall be maintained by the property owner. No re-planting or new planting of trees, shrubs or other vegetation that would violate the defensible space requirements of this section shall be permitted.

The following section is hereby added to read as follows:

### SECTION 333 ADDITIONAL ENVIRONMENTAL REQUIREMENTS

**R333.1 Passive radon mitigation system required.** All new dwellings, and additions exceeding 1,000 sq. ft., shall install a passive radon mitigation system. Such systems shall be designed and installed in accordance with Appendix AF "Radon Control Methods."

**R333.2 Electric Vehicle readiness.** All new dwelling units with an attached garage or carport shall be provided with a continuous 50amp, 208/240-volt dedicated branch circuit for electric vehicle supply equipment that is terminated at a receptacle or electric vehicle supply equipment in a readily accessible location at a likely vehicle parking space in the garage or carport.

**R333.3 Renewable energy readiness.** All new dwelling units shall be provided with a continuous 50-amp, 208/240-volt dedicated branch circuit installed from the attic space beneath the roof surface most likely to support a rooftop photovoltaic or wind energy system, to a junction box within 12" (305 mm) (55.7 m2) of the dwelling's electrical meter or connected directly to the electrical panel board.

## CHAPTER 4 FOUNDATIONS

*The first two sentences in the following section are hereby amended to read as follows:*

**R401.1 Application.** The provisions of this chapter shall control the design and construction of the foundation and foundation spaces for all buildings. In addition to the provisions of this chapter, the design and construction of foundations in areas prone to flooding as established by Table 301.2(1) shall be designed and constructed in accordance with the Town of Estes Park Land Use Code. All foundations shall be designed by a qualified professional licensed in the State of Colorado, in accordance with accepted and approved engineering practices, including considerations for soil load-bearing capacities, surface and subsurface water conditions, adequate foundation and floor drainage, adequate ventilation of enclosed interior foundation spaces, and foundation waterproofing and damp-proofing.

**Exceptions:**

1. In subdivisions where engineered footings and foundations are not required by the conditions of approval.
2. Outside of subdivisions, where engineered design is not required by Sections R403.1.7 or R403.1.8.
3. Unenclosed patio covers and porches, decks, one-story agriculture pole buildings under 3000 square feet (278.7 m<sup>2</sup>), and accessory, unheated, detached one-story utility buildings with a maximum depth (truss length) of 24 feet (7.32 m), a maximum width not exceeding twice the depth, and a maximum area of 600 square feet (55.7 m<sup>2</sup>), when following Town of Estes Park's Prescriptive Design Standards.

Wood foundations shall be designed and installed in accordance with AWC PWF.

**Exception:** The provisions of this chapter shall be permitted to be used for wood foundations only in the following situations:

1. In buildings that have not more than two floors and a roof.
2. Where interior basement and foundation walls are constructed at intervals not exceeding 50 feet (15,240 mm).

*The following section is hereby amended to add Exception #5 to read as follows:* **R403.1.4.1 Frost Protection. Exceptions**

5. An unheated, one-story accessory building may be placed on a slab-on-grade cast monolithically with a footing placed at least 12 inches (9305 mm) below the undisturbed ground with one No. 5 bar or two No. 4 bars located in the middle of the footing depth. Such accessory building shall have a maximum depth (truss length) of 24 feet (7.31 m), a maximum width not exceeding twice the depth, a maximum area of 600 square feet (55.7 m<sup>2</sup>) and shall be equipped with a controlled method of water disposal from roofs in accordance with section R801.3.

*The following section is hereby amended in its entirety to read as follows:*

**R403.1.8 Foundations on expansive soils.** Foundation and floor slabs for buildings located on expansive soils shall be designed in accordance with Section 1808.6 of the International Building Code.

**Exception:** Slab-on-grade foundation systems may be used for unheated, one-story accessory buildings in accordance with Section R403.1.4.1 Exception 5.

*The following section is hereby amended to read as follows:*

**R405.1 Concrete or masonry foundations.** Drains shall be provided around concrete or masonry foundations that retain earth and enclose habitable or usable spaces located below grade. Drainage tiles, gravel or crushed stone drains, perforated pipe or other approved systems or materials shall be installed at or below the top of the footing or below the bottom of the slab and shall discharge by gravity or mechanical means into an approved drainage system. Gravel or crushed stone drains shall extend not less than 1 foot (305 mm) beyond the outside edge of the footing and 6 inches (152 mm) above the top of the footing and be covered with an approved filter membrane material. The top of open joints of drain tiles shall be protected with strips of building paper. Except where otherwise recommended by the drain manufacturer, perforated drains shall be surrounded with an approved filter membrane, or the filter membrane shall cover the washed gravel or crushed rock covering the drain. Drainage tiles or perforated pipe shall be placed on not less than 2 inches (51 mm) of washed gravel or crushed rock not less than one sieve size larger than the tile joint opening or perforation and covered with not less than 6 inches (152 mm) of the same material. **Exceptions:**

1. A drainage system is not required where determined by the engineer of record that the foundation is installed on well-drained ground or sand-gravel mixture soils according to the Unified Soil Classification System, Group I soils, as detailed in Table R405.1.
2. A drainage system is not required for additions where the existing construction lacks a drainage system to connect to.

*The following section is hereby added to read as follows:*

**R408.3.1 Spaces under below-grade floors.** Mechanical ventilation systems for spaces under below-grade floors shall be designed by a professional engineer and installed in accordance with such designs or a mechanical ventilation system for spaces under belowgrade floors shall be provided with an active, fan-assisted submembrane depressurization system installed per APPENDIX AF, RADON CONTROL METHODS. In addition, the space above the soil-gas-retarder and below the floor shall be provided with continuously operated mechanical exhaust ventilation at a rate equal to 1 cubic foot per minute (0.47 L/s) for each 50 square feet (4.7 m<sup>2</sup>) of underfloor area and either mechanical supply air at the same rate, or an air pathway to the common area (such as a duct or transfer grille).

*The following section is hereby amended to read as follows:*

**R408.7 Flood resistance.** For buildings located in flood hazard areas as established in Table R301.2, the design and construction of foundations shall be in accordance with the Town of Estes Park Land Use Code.

## CHAPTER 5 FLOOR CONSTRUCTION

*The following section is hereby amended to read as follows:*

**R502.6 Bearing.** The ends of each joist, beam or girder shall have not less than 1 1/2 inches (38 mm) of bearing on wood or metal, have not less than 3 inches of bearing (76 mm) on masonry or concrete or be supported by approved joist hangers. The bearing on masonry or concrete shall be direct, or a sill plate of 2-inch-minimum (51 mm) nominal thickness shall be provided under the joist, beam or girder. The sill plate shall provide a minimum nominal bearing area of 48 square inches (30 865 mm<sup>2</sup>).

*The following section is hereby amended to read as follows:*

**R507.3 Footings.** Decks shall be supported on concrete footings or other approved structural systems designed to accommodate all loads in accordance with Section R301. Deck footings shall be sized to carry the imposed loads from the deck structure to the ground as shown in Figure R507.3.

**Exceptions:**

1. Footings shall not be required for free-standing decks consisting of joists directly supported on grade over their entire length.
2. Footings shall not be required for free-standing decks that meet all of the following criteria:
  - 2.1. The joists bear directly on precast concrete pier blocks at grade without support by beams or posts.
  - 2.2. The area of the deck does not exceed 200 square feet (18.6 m<sup>2</sup>).

2.3. The walking surface is not more than 30 inches (762 mm) above grade at any point within 36 inches (914 mm) measured horizontally from the edge.

## CHAPTER 6 WALL CONSTRUCTION

**The following section is hereby amended by deleting Exceptions #2 and #3 to read as follows:**

**R602.3.1 Stud size, height and spacing.** The size, height and spacing of studs shall be in accordance with Table R602.3(5). **Exception:** Utility grade studs shall not be spaced more than 16 inches (406 mm) on center, shall not support more than a roof and ceiling, and shall not exceed 8 feet (2438 mm) in height for exterior walls and load-bearing walls or 10 feet (3048 mm) for interior nonload-bearing walls.

**The following Table is deleted in its entirety:**

**Table R602.3 (6) ALTERNATE WOOD BEARING WALL STUD SIZE, HEIGHT AND SPACING**

**The following section is hereby amended to read as follows:**

**R610.1 General.** Structural insulated panel (SIP) walls shall be designed in accordance with the provisions of this section. Plans for structural insulated panel walls, project drawings, typical details and specifications shall bear the seal of the architect or engineer responsible for design.

## CHAPTER 7 WALL COVERING

**The following section is hereby amended to read as follows:**

**R702.7 Vapor retarders.** Vapor retarder materials shall be classified in accordance with Table R702.7(1). A vapor retarder may be provided on the interior side of frame walls of the class indicated in Table R702.7(2), including compliance with Table R702.7(3) or R702.7(4) where applicable. Class I vapor retarders are not allowed on basement foundation walls or any concrete or masonry below grade wall. An approved design using accepted engineering practice for hygrothermal analysis shall be permitted as an alternative. The climate zone for Town of Estes Park, as determined in accordance with Section N1101.7, is 5B.

**Exception:** Construction where accumulation, condensation or freezing of moisture will not damage the materials.

**The following table is hereby amended to read in its entirety as follows:**

**TABLE R702.7(2) VAPOR RETARDER OPTIONS**

CLIMATE ZONE	VAPOR RETARDER CLASS		
	CLASS I <sup>a</sup>	CLASS II <sup>a</sup>	CLASS III
5	Permitted <sup>b</sup>	Permitted <sup>c</sup>	Permitted

a. Vapor retarders with vapor permeance greater than 1 perm when measured by ASTM E96 water method (Procedure B) shall be allowed on the interior side of any frame wall.

b. Use of a Class I interior vapor retarder in frame walls with a Class I vapor retarder on the exterior side shall require an approved design.

c. Where a Class II vapor retarder is used in combination with foam plastic insulating sheathing installed as continuous insulation on the exterior side of frame walls, the continuous insulation shall comply with Table R702.7(4) and the Class II vapor retarder shall have a vapor permeance greater than 1 perm when measured by ASTM E96 water method (Procedure B).

**The following section is hereby added to read as follows:**

**Section R703.11.3 Vinyl siding and soffits on new buildings.** Vinyl siding and soffits on new buildings shall be installed over one-hour fire-rated assemblies listed for exterior fire exposure, in both the vertical and horizontal plane.

**The following section is hereby added to read as follows:**

**Section R703.13.2 Insulated vinyl siding and soffits on new buildings.** Insulated vinyl siding and soffits on new buildings shall be installed over one-hour fire-rated assemblies listed for exterior fire exposure, in both the vertical and horizontal plane.

**The following section is hereby added to read as follows:**

**Section R703.14.4 Polypropylene siding on new buildings.** Polypropylene siding on new buildings shall be installed over one-hour fire-rated assemblies listed for exterior fire exposure, in both the vertical and horizontal plane.

## CHAPTER 9 ROOF ASSEMBLIES

*The following section is hereby amended to read as follows:*

**R902.1 Roofing covering materials.** Except as otherwise allowed, roofs shall be covered with materials listed as Class A and with materials as set forth in Sections R904 and R905. Class A, B or C roofing required to be listed by this section shall be tested in accordance with ASTM E108 or UL 790. Roof assemblies with coverings of brick, masonry, slate, clay or concrete roof tile, exposed concrete roof deck, ferrous or copper shingles or sheets, and metal sheets and shingles, shall be considered Class A roof coverings. **Exception:** Any Class B or Class C roof covering may be applied on any new construction that is added to an existing building, provided the roof extremities of such existing building and new construction are located a minimum distance of 3 feet (1.524 m) from the nearest adjacent property line and are a minimum distance of 6 feet (3.048 m) from another building.

*The following section is hereby amended to read as follows:*

**R905.1.2 Ice barriers.** An ice barrier shall be installed for asphalt shingles, metal roof shingles, mineral-surfaced roll roofing, slate and slate-type shingles, wood shingles and wood shakes. The ice barrier shall consist of not fewer than two layers of underlayment cemented together, or a self-adhering polymer-modified bitumen sheet shall be used in place of normal underlayment and extend from the lowest edges of all roof surfaces to a point not less than 24 inches (610 mm) inside the exterior wall line of the building. On roofs with slope equal to or greater than 8 units vertical in 12 units horizontal (67-percent slope), the ice barrier shall also be applied not less than 36 inches (914 mm) measured along the roof slope from the eave edge of the building.

**Exceptions:**

1. Detached accessory structures not containing conditioned floor area
2. Roof recover where the existing roof covering has not been removed.

*The following section is hereby added to read as follows:*

**R905.2.4.2 Impact resistance of asphalt shingles.** Asphalt shingles shall be Class 4 impact resistant, tested in accordance with UL 2218, and installed in accordance with the manufacturer's installation instructions. **Exceptions**

1. When an owner wishes to replace existing asphalt shingles that are less than class 4 impact resistant with tiles of a similar color or style, and there are no class 4 impact resistance shingles available of similar color or style, the building official may approve alternate materials that are less than class 4 impact resistant, so long as the replacement shingles are the highest class of impact resistant shingles available that match the color or style of the existing shingles. If no impact resistant materials are available, the building official may approve non-impact resistant materials that meet all other applicable requirements of this Code.
2. For repairs or additions to existing asphalt shingles that are less than class 4 impact resistant, the owner may use the same or similar materials regardless of impact resistance of the new shingles.

*The following section is hereby amended to read as follows:*

**R908.1 General.** Materials and methods of application used for recovering or replacing an existing roof covering shall comply with the requirements of Chapter 9 and Section R806 ("Roof Ventilation"). No portion of an existing nonrated roof covering may be permanently replaced or covered with more than one square of nonrated roof covering.

**Exceptions:**

1. Reroofing shall not be required to meet the minimum design slope requirement of one-fourth vertical in 12 units horizontal (2percent slope) in Section R905 for roofs that provide *positive roof drainage*.
2. Any existing roof covering system may be replaced with a roof covering of the same materials and classification, provided the roof covering has a minimum rating of Class B for buildings located in the *Wildfire Hazard Area* and a minimum rating of Class C outside the *Wildfire Hazard Area*.
3. The reroofing of 50 percent or more during a one-year period of any existing structure requires Class A roof covering materials.

## CHAPTER 10 CHIMNEYS AND FIREPLACES

*The following section is hereby added to read as follows:* Section R1001.1.1 Installation

- A. All fireplaces installed in the Restricted Area (Figure R1001.1.1 Town of Estes Park Fireplace Area Map) shall be one of the following:
  - (i). A gas fireplace or fireplace with a gas log installed and functioning at time of final inspection.
  - (ii). An electric device; or
  - (iii). A fireplace that meets the most current emissions standards for wood stoves established by the Colorado Air Quality Control Commission, or any other clean-burning device that is approved by the commission.
- B. All fireplaces installed prior to January 1, 2002, in the Restricted Area shall be allowed to remain in use until such time as the owner voluntarily replaces it. Upon replacement, such fireplace shall be one of the types specified in Subsection (A) (i), (ii), or (iii).
- C. Within the Non-restricted Area, fireplaces including but not limited to masonry and factory-built fireplaces shall be allowed without being required to meet the standards in Subsection (A).

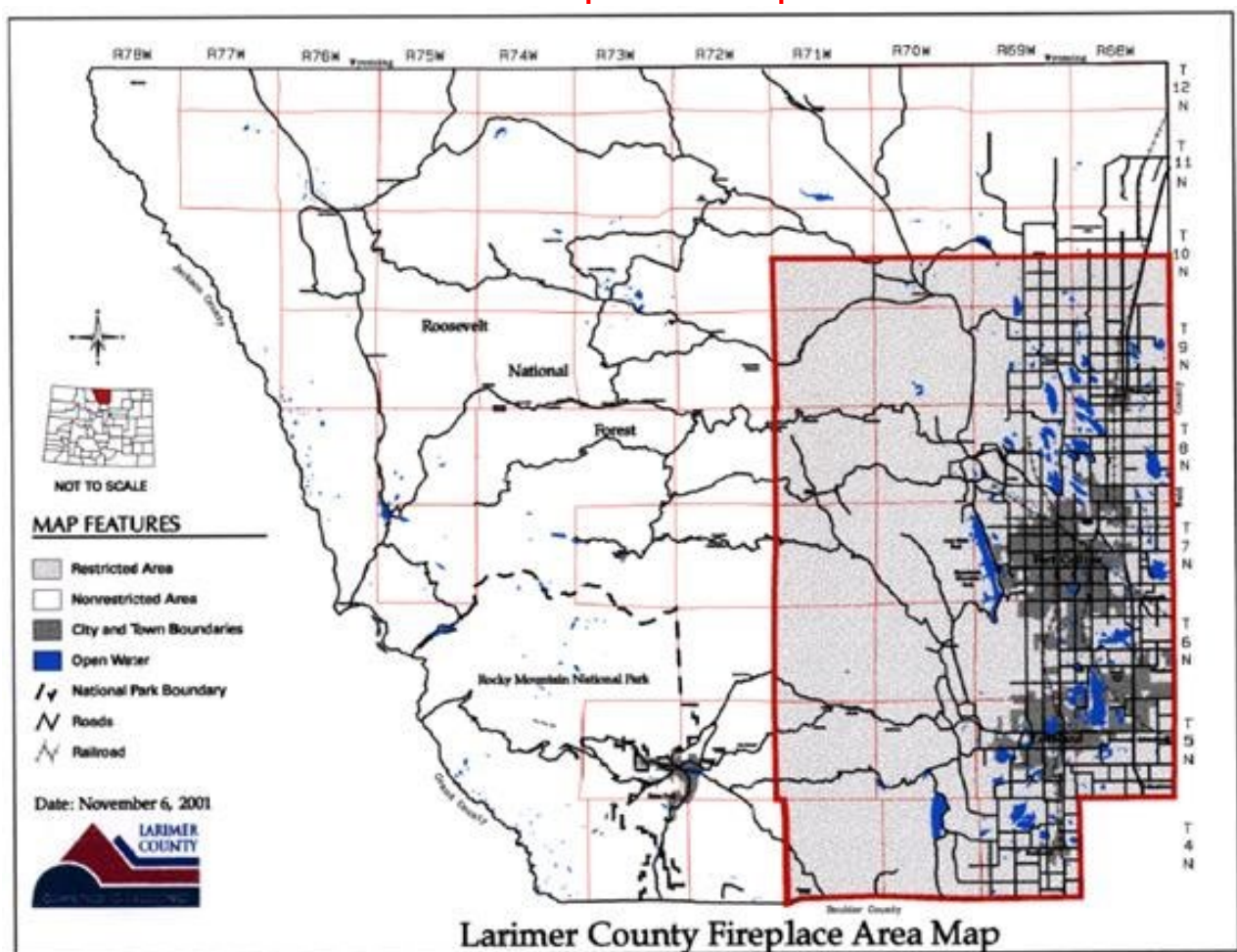
**The following section is hereby amended by adding a new sentence to read as follows:**

**R1004.1 General.** Factory-built fireplaces shall be listed and labeled and shall be installed in accordance with the conditions of the listing. Factory-built fireplaces shall be tested in accordance with UL 127. Factory-built fireplaces shall comply with Section R1001.1.1.

**The following section is hereby amended to read as follows:**

**R1004.4 Unvented gas log heaters.** An unvented gas log heater shall not be installed in a factory-built fireplace.

**FIGURE R1001.1.1 Town of Estes Park Fireplace Area Map**



## CHAPTER 11 ENERGY EFFICIENCY

**The following section is hereby amended to read as follows:**

**N1101.1 (R101.2) Scope.** This chapter regulates the energy efficiency for the design and construction of buildings regulated by this code.

**Exceptions: The following buildings and portions thereof are exempted from the provisions of this chapter:**

1. Detached accessory utility or agricultural buildings which are neither heated nor cooled by fuel or electrical energy.
2. Detached accessory utility or agricultural buildings heated or cooled in their interior for short periods of time and switched with a timer of two hours or less.
3. Detached accessory utility or agricultural buildings not heated above 50° F.
4. Detached accessory utility or agricultural buildings, and *thermally isolated* attached accessory utility and agricultural areas, so long as they meet or exceed the following criteria:
  - a) They do not contain *habitable space*.
  - b) Any heating or cooling equipment installed therein is sized assuming a maximum Indoor Winter Design Dry-bulb Temperature of 60°F and a minimum Indoor Summer Design Dry-bulb Temperature of 80°F.
  - c) Thermal envelope walls are insulated to a minimum of R-15.
  - d) The roof/ceiling is insulated to a minimum of R-30.
  - e) Windows and glazing in doors have a maximum U-factor of 0.40 and in total do not exceed 10% of the floor area.
  - f) Doors with minimum R-3 value are sealed to prevent infiltration to the extent practical as determined by the building official.
  - g) Any plumbing installed therein is protected from freezing by an *approved* method.

**The following section is hereby amended to read as follows:**

**N1101.3 (R101.5.1) Compliance materials.** The code official shall be permitted to approve specific computer software, worksheets, compliance manuals and other similar materials that meet the intent of this chapter. A REScheck compliance certification verifying the home meets or exceeds 2018 or 2021 International Energy Conservation Code requirements shall be deemed to satisfy the requirements of this code.

**The following section is hereby amended by amending Exception #1.2 and adding Exception #3 to read as follows:**

**N1102.1 (R402.1) General (Prescriptive).** The building thermal envelope shall comply with the requirements of Sections N1102.1.1 through N1102.1.5.

**Exceptions:**

1. The following low-energy buildings, or portions thereof, separated from the remainder of the building by *building thermal envelope* assemblies complying with this section shall be exempt from the *building thermal envelope* provisions of Section N1102.
  - 1.1. Those with a peak design rate of energy usage less than 3.4 Btu/h • ft<sup>2</sup> (10.7 W/m<sup>2</sup>) or 1.0 watt/ft<sup>2</sup> of floor area for spaceconditioning purposes.
  - 1.2. Those that do not contain conditioned or habitable space.
2. Log homes designed in accordance with ICC 400.
3. Greenhouses.

**The following section is hereby amended to read as follows:**

**TABLE N1102.1.2 (R402.1.2) MAXIMUM ASSEMBLY U-FACTORS<sup>a</sup> AND FENESTRATION REQUIREMENTS**

CLIMATE ZONE	FENESTRATION U-FACTOR <sup>f</sup>	SKYLIGHT U-FACTOR	GLAZED FENESTRATION SHGC <sup>d,e</sup>	CEILING U-FACTOR	WOOD FRAME WALL UFACTOR <sup>c</sup>	MASS WALL UFACTOR <sup>b</sup>	FLOOR U-FACTOR	BASEMENT WALL UFACTOR	CRAWL SPACE WALL UFACTOR
<b>5</b>	.32	0.55	.40	0.024	0.045	0.082	0.033	0.050	0.055

- a. Nonfenestration U-factors shall be obtained from measurement, calculation, or an approved source.
- b. Mass walls shall be in accordance with Section N1102.2.5. Where more than half the insulation is on the interior, the mass wall U-factors shall not exceed 0.065.
- c. Class 1 vapor retarders shall not be installed on the interior of framed walls where exterior ci value is less than R-7.5. d. The SHGC column applies to all glazed fenestration.

**The following section is hereby amended to read as follows:**

**TABLE N1102.1.3 (R402.1.3) INSULATION MINIMUM R-VALUES AND FENESTRATION REQUIREMENTS BY COMPONENT<sup>a</sup>**

Fenestration U-Factor <sup>b,i</sup>	Skylight <sup>b</sup> U-Factor	Glazed Fenestration SHGC <sup>b,e</sup>	Ceiling RValue	Wood Frame Wall R-Value <sup>f,g</sup>	Mass Wall R-Value <sup>h</sup>	Floor RValue	Basement <sup>c, f, g</sup> Wall R-Value	Slab <sup>d</sup> R-Value & Depth	Crawl Space <sup>c, f, g</sup> Wall R-Value
.32	.55	.40	<b>R-60</b>	30 or 23+3 or 20+5 or 13+10 or 0+15	13/17	30	19 or 13+5 or 0+15	10ci, 30 in. <sup>e</sup>	19 or 13+5 or 0+15

**For SI: 1 foot = 304.8 mm. ci = continuous insulation**

a. R-values are minimums. U-factors and SHGC are maximums. Where insulation is installed in a cavity that is less than the label or design thickness of the insulation, the installed R-value of the insulation shall be not less than the R-value specified in the table.

b. The fenestration U-factor column excludes skylights. The SHGC column applies to all glazed fenestration.

Exception: In Climate Zones 0 through 3, skylights shall be permitted to be excluded from glazed fenestration SHGC requirements provided that the SHGC for such skylights does not exceed 0.30.

c. "5ci or 13" means R-5 continuous insulation (ci) on the interior or exterior surface of the wall or R-13 cavity insulation on the interior side of the wall. "10ci or 13" means R-10 continuous insulation (ci) on the interior or exterior surface of the wall or R-13 cavity insulation on the interior side of the wall.

"15ci or 19 or 13 + 5ci" means R-15 continuous insulation (ci) on the interior or exterior surface of the wall; or R-19 cavity insulation on the interior side of the wall; or R-13 cavity insulation on the interior of the wall in addition to R-5 continuous insulation on the interior or exterior surface of the wall. d. R-5 insulation shall be provided under the full slab area of a heated slab in addition to the required slab-edge insulation R-value for slabs, as indicated in the table. The slab edge insulation for heated slabs shall not be required to extend below the slab. e. 30" (762 mm) or top of footings or bottom of monolithic slab, whichever is greatest.

f. Class 1 vapor retarders shall not be installed on the interior of framed walls where exterior ci value is less than R-7.5

g. The first value is cavity insulation; the second value is continuous insulation. Therefore, as an example, "13 + 5" means R-13 cavity insulation plus R-5 continuous insulation.

h. Mass walls shall be in accordance with Section N1102.2.5. The second R-value applies where more than half of the insulation is on the interior of the mass wall.

**The following section is hereby amended to read as follows:**

**N1102.2.4 (R402.2.4) Access hatches and doors.** Access hatches and doors from conditioned to unconditioned spaces such as attics and crawl spaces shall be insulated to the same R-value required by Table N1102.1.3 for the wall or ceiling in which they are installed.

**Exception:** Vertical attic entries providing access from conditioned spaces to unconditioned spaces not required to be a swinging door shall be less than or equal to U-0.10 or have an average insulation R-value of R-10 or greater. If foam plastic insulation is used it shall comply with section R316.5.3. The reduction shall not apply to the total UA alternative in Section N1102.1.5.

**The following section is hereby amended to read as follows:**

**N1102.2.10.1 (R402.2.10.1) Crawl space wall insulation installations.** Where crawl space wall insulation is installed, it shall be permanently fastened to the interior or exterior wall and shall extend downward from the top of the foundation wall to the footing. Exposed earth in unvented crawl space foundations shall be covered with a continuous Class I vapor retarder in accordance with this code. Joints of the vapor retarder shall overlap by 6 inches (153 mm) and be sealed or taped. The edges of the vapor retarder shall extend not less than 6 inches (153 mm) up the stem walls and shall be attached to the stem walls and footings pads.

**The following section is hereby amended to read as follows:**

**N1102.2.12 (R402.2.12) Sunroom and heated garage insulation.**

Sunrooms enclosing conditioned space and heated garages shall meet the insulation requirements of this code.

**Exception:** For sunrooms and heated garages provided thermal isolation, and enclosing conditioned space, the following exceptions to the insulation requirements of this code shall apply: 1. The minimum ceiling insulation R-values shall be R-24.

2. The minimum wall insulation R-value shall be R-13. Walls separating a sunroom or heated garage with thermal isolation from conditioned space shall comply with the building thermal envelope requirements of this code.

3. Slab-on-grade insulation shall not be required.

**The following section is hereby added to read as follows:**

**N1102.2.13 (R402.2.13) Rim insulation requirements.** All rims and adjoining plates shall require complete air sealing and full encapsulation of insulation to a minimum R-Value of R-15 for spray foam or foam board, R-19 for fiberglass or a hybrid of foam board and fiberglass. Plates and rims which are part of the thermal envelope shall be insulated and shall have an air barrier on the conditioned side of the assembly.

**The following section is hereby amended to read as follows:**

**N1102.4.1.1 (R402.4.1.1) Building envelope performance verification.** The components of the building thermal envelope as indicated in Table R402.4.1.1 shall be installed in accordance with the manufacturer's instructions and the criteria indicated in Table R402.4.1.1, as applicable to the method of construction. The installation of the continuous air barrier shall be verified by the *code official* and an *approved* air leakage testing agency in accordance with the following:

1. A review of the construction documents and other supporting data shall be conducted to assess compliance with the requirements in this section.
2. Inspection of continuous air barrier components and assemblies shall be conducted during construction while the air barrier is still accessible for inspection and repair to verify compliance with the requirements of this section and Table N1102.4.1.1.
3. An air barrier and air sealing inspection report shall be provided for inspections completed by the *approved* air leakage testing agency. The air barrier and air sealing inspection report shall be provided to the building owner or owner's authorized agent and the code official at the time of the framing or insulation inspection. The report shall identify deficiencies found during the review of the construction documents and inspection and details of corrective measures taken.

**The following section is hereby amended by adding Exceptions #2 and #3 to read as follows:**

**N1102.4.1.2 (R402.4.1.2) Testing.** The building or dwelling unit shall be tested for air leakage. The maximum air leakage rate for any building or dwelling unit under any compliance path shall not exceed 5.0 air changes per hour or 0.28 cubic feet per minute (CFM) per square foot  $[0.0079 \text{ m}^3/(\text{s} \times \text{m}^2)]$  of dwelling unit enclosure area. Testing shall be conducted in accordance with ANSI/RESNET/ICC 380, ASTM E779 or ASTM E1827 and reported at a pressure of 0.2-inch w.g. (50 Pascals). Testing shall be conducted by an approved third party. A written report of the results of the test shall be signed by the party conducting the test and provided to the code official. Testing shall be performed at any time after creation of all penetrations of the building thermal envelope have been sealed. **Exceptions:**

1. For heated, attached private garages and heated, detached private garages accessory to one- and two-family dwellings and Townhouses not more than three stories above grade plane in height, building envelope tightness and insulation installation shall be considered acceptable where the items in Table N1102.4.1.1, applicable to the method of construction, are field verified. An approved third party independent from the installer shall inspect both air barrier and insulation installation criteria. Heated, attached private garage space and heated, detached private garage space shall be thermally isolated from all other conditioned spaces in accordance with Sections N1102.2.12 and N1102.3.5, as applicable.
2. Cabins without a primary heat source are not required to be tested for air leakage.
3. Existing building additions, alterations or change of use to residential are not required to be tested for air leakage.

**[The remainder of the section is unchanged.]**

**The following section is hereby amended to read as follows:**

**N1102.4.1.3 (R402.4.1.3) Leakage rate.** Where complying with Section N1101.13.1, the building or dwelling unit shall have an air leakage rate not exceeding 3.0 air changes per hour when tested in accordance with Section N1102.4.1.2.

**The following section is hereby amended to read as follows:**

**N1102.4.4 (R402.4.4) Rooms containing fuel-burning appliances.** In new construction, where open combustion air ducts providing combustion air to open combustion fuel-burning appliances are installed, the appliances and combustion air openings shall be located outside the building thermal envelope or enclosed in a room that is isolated from inside the thermal envelope. Such rooms shall be sealed and insulated in accordance with the envelope requirements of Table N1102.1.3, where the walls, floors and ceilings shall meet a minimum of the basement wall R-value requirement. The door into the room shall be fully gasketed and any water lines and ducts in the room insulated in accordance with Section N1103. The combustion air duct shall be insulated where it passes through conditioned space to an R-value of not less than R-8.

**Exceptions:**

1. Direct vent appliances with both intake and exhaust pipes installed continuous to the outside.
2. Fireplaces and stoves complying with Sections N1102.4.2 and Section R1006.
3. Rooms containing combustion air ducts not exceeding 4" (102 mm) in diameter.

***The following section is hereby amended to read as follows:***

**N1103.7 (R403.7) Equipment sizing and efficiency rating.** Heating and cooling equipment shall be sized in accordance with ACCA Manual S based on building loads calculated in accordance with ACCA Manual J or other approved heating and cooling calculation methodologies, such that the total sensible capacity of the cooling equipment does not exceed the total sensible load by more than 25% for cooling-only applications, or by more than 40% for heating applications, using the Manual J Design Criteria in Table 301.2. All ducted combination heating and cooling systems shall be sized using cooling loads. New or replacement heating and cooling equipment shall have an efficiency rating equal to or greater than the minimum required by federal law for the geographic location where the equipment is installed.

***The following section is hereby amended to read as follows:***

**N1111.1.1 (R503.1.1) Building envelope.** Building envelope assemblies that are part of the alteration shall comply with Section N1102.1.2 or N1102.1.4, Sections N1102.2.1 through N1102.2.12, N1102.3.1, N1102.3.2, N1102.4.3 and N1102.4.5.

**Exception:** The following alterations shall not be required to comply with the requirements for new construction provided that the energy use of the building is not increased:

1. Storm windows installed over existing fenestration.
2. Existing ceiling, wall or floor cavities exposed during construction provided that these cavities are filled with insulation. If the cavities are not filled, they shall be filled with insulation to the maximum extent practically possible in the judgment of the building official, without requiring additional framing or installation of exterior insulation.
3. Construction where the existing roof, wall or floor cavity is not exposed.
4. Roof recover.
5. Roofs without insulation in the cavity and where the sheathing or insulation is exposed during reroofing shall be insulated either above or below the sheathing.
6. Surface-applied window film installed on existing single-pane fenestration assemblies to reduce solar heat gain provided that the code does not require the glazing or fenestration assembly to be replaced.

## CHAPTER 13 GENERAL MECHANICAL SYSTEM REQUIREMENTS

***The following section is hereby amended to read as follows:***

**M1307.3 Elevation of ignition source.** Appliances having an ignition source shall be elevated such that the source of ignition is not less than 18 inches (457 mm) above the floor in garages, barns, and similar utility spaces. For the purpose of this section, rooms or spaces that are not part of the living space of a dwelling unit and that communicate with a private garage through openings shall be considered to be part of the garage.

**Exception:** Elevation of the ignition source is not required for appliances that are listed as flammable-vapor-ignition resistant.

## CHAPTER 14 HEATING AND COOLING EQUIPMENT

***The following section is hereby amended to read as follows:***

**M1401.3 Equipment and appliance sizing.** Heating and cooling equipment and appliances shall be sized in accordance with ACCA Manual S or other approved sizing methodologies based on building loads calculated in accordance with ACCA Manual J or other approved heating and cooling calculation methodologies, such that the total sensible capacity of the cooling equipment does not exceed the total sensible load by more than 25% for cooling-only applications, or by more than 40% for heating applications, using the Manual J Design Criteria in Table 301.2. All ducted combination heating and cooling systems shall be sized using cooling loads. New or replacement heating and cooling equipment shall have an efficiency rating equal to or greater than the minimum required by federal law for the geographic location where the equipment is installed.

**Exception:** Heating and cooling equipment and appliance sizing shall not be limited to the capacities determined in accordance with ACCA Manual S where either of the following conditions applies:

1. The specified equipment or appliance utilizes multistage technology or variable refrigerant flow technology and the loads calculated in accordance with the approved heating and cooling calculation methodology are within the range of the manufacturer's published capacities for that equipment or appliance.

2.The specified equipment or appliance manufacturer's published capacities cannot satisfy both the total and sensible heat gains calculated in accordance with the approved heating and cooling calculation methodology and the next larger standard size unit is specified.

**The following section is hereby added to read as follows:**

**M1401.3.2 Room loads.** Room-by-room design heating and cooling loads shall be calculated.

**The following section is hereby amended to read as follows:**

**M1414.1 General.** Fireplace stoves shall be listed, labeled and installed in accordance with the terms of the listing. Fireplace stoves shall be tested in accordance with UL 737. Wood-burning appliances shall meet the latest emission standards as established by the State of Colorado and Federal Regulation 40 CFR Part 60, Subpart AAA.

## CHAPTER 15 EXHAUST SYSTEMS

**The following section is hereby added to read as follows:**

**M1501.2 Indoor depressurization.** Ducted exhaust systems shall not induce or create a negative pressure sufficient to cause backdrafting of naturally vented, open combustion-chamber, fuel-burning appliances, or create negative pressure in excess of negative 3 Pa. in the immediate proximity of combustion chambers of such appliances.

**The following section is hereby amended to read as follows:**

**Section M1502.4.2 Duct installation.** Exhaust ducts shall be supported at intervals not to exceed 12 feet (3658 mm) and shall be secured in place. The insert end of the duct shall extend into the adjoining duct or fitting in the direction of airflow. Exhaust duct joints shall be sealed in accordance with Section M1601.4.1 and shall be mechanically fastened. Ducts shall not be joined with screws or similar fasteners. Where dryer exhaust ducts are enclosed in wall or ceiling cavities, such cavities shall allow the installation of the duct without deformation.

**The following section is hereby amended to read as follows:**

**M1502.4.6 Duct length.** The maximum allowable exhaust duct length shall be determined by one of the methods specified in Sections M1502.4.6.1 or M1502.4.6.2.

**M1502.4.6.1 Specified length.** The maximum length of the exhaust duct shall be 35 feet (10,668 mm) from the connection to the transition duct from the dryer to the outlet terminal. Where fittings are used, the maximum length of the exhaust duct shall be reduced in accordance with Table M1502.4.6.1. The maximum length of the exhaust duct does not include the transition duct.

**M1502.4.6.2 Dryer exhaust duct power ventilator.** The maximum length of the exhaust duct shall be determined in accordance with the manufacturer's instructions for the dryer exhaust duct power ventilator.

**The following section is hereby amended to read as follows:**

**M1503.1 General.** Domestic cooking exhaust equipment shall comply with the requirements of this section. In new construction, kitchens with gas-fired cooking appliances shall be supplied with an exhaust system vented to the exterior. Ducts serving kitchen exhaust systems shall not terminate in an attic, crawl space or areas inside the building, and shall not induce or create a negative pressure in excess of negative 3 Pa or adversely affect gravity-vented appliances.

**The following section is hereby amended to read as follows:**

**M1503.6 Makeup air required.** Where one or more gas, liquid or solid fuel-burning appliances that are neither direct-vent nor use a mechanical draft venting system are located within a dwelling unit's air barrier, each exhaust system capable of exhausting in excess of 600 cubic feet per minute (0.19 m<sup>3</sup>/s) shall be mechanically or passively provided with makeup air at a rate approximately equal to the exhaust air rate. Such makeup air systems shall be equipped with not fewer than one damper complying with Section M1503.6.2. **Exception:** Makeup air is not required for exhaust systems installed for the exclusive purpose of space cooling and intended to be operated only when windows or other air inlets are open.

## CHAPTER 16 DUCT SYSTEMS

**Below Table M1601.1, this supplemental information is added to read as follows:**

Thickness (inches)	.013	.016	.018	.019	.023	.024	.027	.034
--------------------	------	------	------	------	------	------	------	------

Galvanized Steel (gauge)	32	30	28	28	25	25	24	21
Aluminum (gauge)	28	26	25	24	23	22	21	19

*The following section is hereby amended by deleting item #7 and renumbering item #8 as item #7 to read as follows [numbers 1 through 6 are unchanged]:*

**M1601.1.1 Above-ground duct systems.** Above-ground duct systems shall conform to the following:

7. Volume dampers, equipment, and other means of supply, return and exhaust air adjustment used in system balancing shall be provided with access.

*The following section is hereby added to read as follows:*

**M1601.4.11 Construction debris and contamination.** Mechanical air-handling systems and their related ducts shall be protected from the entrance of dirt, debris, and dust during the construction and installation process. Prior to passing final inspection or issuance of a Certificate of Occupancy, such systems shall be substantially free of construction-related contaminants.

*The following section is hereby amended by adding one sentence at the beginning to read as follows (Items #1 through #7 are unchanged):*

**M1602.2 Return air openings.** A return air path shall be provided in all habitable rooms by means of ducts or transfer grills. Return air openings for heating, ventilation and air-conditioning systems shall comply with all of the following:

## CHAPTER 24 FUEL GAS

*The following section is hereby amended to read as follows:*

**G2404.11 (307.6) Condensate pumps.** Condensate pumps located in uninhabitable spaces, such as attics and crawl spaces, shall be connected to the appliance or equipment served such that, when the pump fails, an audible alarm shall sound in the habitable area. Pumps shall be installed in accordance with the manufacturer's instructions.

*The following section is hereby amended by deleting exceptions 3 and 4 and renumbering exception 5 and 6 as follows: G2406.2 (303.3) Prohibited locations.* Appliances shall not be located in sleeping rooms, bathrooms, toilet rooms, storage closets or surgical rooms, or in a space that opens only into such rooms or spaces, except where the installation complies with one of the following:

1. The appliance is a direct-vent appliance installed in accordance with the conditions of the listing and the manufacturer's instructions.
2. Vented room heaters, wall furnaces, vented decorative appliances, vented gas fireplaces, vented gas fireplace heaters and decorative appliances for installation in vented solid fuel-burning fireplaces are installed in rooms that meet the required volume criteria of Section G2407.5.
3. The appliance is installed in a room or space that opens only into a bedroom or bathroom, and such room or space is used for no other purpose and is provided with a solid weather-stripped door equipped with an approved self-closing device. Combustion air shall be taken directly from the outdoors in accordance with Section G2407.6.
4. A clothes dryer is installed in a residential bathroom or toilet room having a permanent opening with an area of not less than 100 square inches (0.06 m<sup>2</sup>) that communicates with a space outside of a sleeping room, bathroom, toilet room or storage closet.

*The following section is hereby amended to read as follows:*

**G2415.12 (404.12) Minimum burial depth.** Underground piping systems shall be installed a minimum depth of 18 inches (457 mm) below grade, except as provided for in Section G2415.12.1.

*The following section is hereby amended to read as follows:*

**G2415.12.1 (404.12.1) Individual outdoor appliances.** Individual lines to outside lights, grills or other appliances shall be installed not less than 18 inches (457 mm) below finished grade.

**Exception:** Approved materials installed a minimum of 6 inches (152 mm) below finished grade when covered with a concrete slab 4 inches (102 mm) in minimum thickness.

*The following section is hereby amended to read as follows:*

**G2417.4.1 (406.4.1) Test pressure.** The test pressure to be used shall be 10 psi for non-welded pipe for natural gas, 30 psi for liquid propane gas.

**Exception:** One-piece tubing without joints other than at regulators is not required to be tested during inspection.

***The last sentence in the following section is hereby amended to read as follows:***

**G2420.5.1 (409.5.1) Located within same room.** The shutoff valve shall be located in the same room as the appliance. The shutoff valve shall be within 6 feet (1829 mm) of the appliance, and shall be installed upstream of the union, connector or quick disconnect device it serves. Such shutoff valves shall be provided with access. Shutoff valves serving movable appliances, such as cooking appliances and clothes dryers, shall be considered to be provided with access where installed behind such appliances. Appliance shutoff valves located in the firebox of a fireplace shall be installed in accordance with the appliance manufacturer's instructions and shall have a secondary shutoff outside the firebox.

***The following section is hereby amended to read as follows:***

**G2421.3 (410.3) Venting of regulators.** Pressure regulators that require a vent shall be vented directly to the outdoors. The vent shall terminate at least 3 feet from any openings into the building. The vent shall be designed to prevent the entry of insects, water and foreign objects.

**Exception:** A vent to the outdoors is not required for regulators equipped with and labeled for utilization with an approved vent-limiting device installed in accordance with the manufacturer's instructions.

***The following section is hereby amended by amending items #1 and #2 and deleting item 7 to read as follows:***

**G2425.8 (501.8) Appliances not required to be vented.** The following appliances shall not be required to be vented:

1. Electric ranges.
2. Electric built-in domestic cooking units listed and marked for optional venting.
3. Hot plates and laundry stoves.
4. Type 1 clothes dryers (Type 1 clothes dryers shall be exhausted in accordance with the requirements of Section G2439).
5. Refrigerators.
6. Counter appliances.

***The following section is hereby amended to read as follows:***

**G2427.4.1 (503.4.1) Plastic piping.** Where plastic piping is used to vent an appliance, the appliance shall be listed for use with such venting materials and the appliance manufacturer's installation instructions shall identify the specific plastic piping material. The plastic pipe venting materials shall be labeled in accordance with the product standards specified by the appliance manufacturer or shall be listed in accordance with UL 1738. Where installed as an exhaust vent for a gas-fired water heater, the new plastic pipe shall be tested with 5 psi maximum air pressure by the installer prior to being connected to the water heater.

***The following section is amended to read as follows:***

**G2427.8 (503.8) Venting system terminal clearances.** The clearances for through-the-wall direct-vent and nondirect-vent terminals shall be in accordance with Figure G2427.8 and Table G2427.8. Vents shall terminate 12" (305 mm) minimum above anticipated snow level and a minimum of 22 inches (559 mm) above the surface or grade directly below.

**Exception:** The clearances in Table G2427.8 shall not apply to the combustion air intake of a direct-vent appliance.

***The following section is hereby amended to read as follows:***

**G2439.7.2 (614.8.2) Duct installation.** Exhaust ducts shall be supported at 4-foot (1219 mm) intervals and secured in place. The insert end of the duct shall extend into the adjoining duct or fitting in the direction of airflow. Ducts shall not be joined with screws or similar fasteners. Where dryer exhaust ducts are enclosed in wall or ceiling cavities, such cavities shall allow the installation of the duct without deformation.

***The following section is hereby amended to read as follows:***

**G2439.7.4 (614.9.4) Duct length.** The maximum allowable exhaust duct length shall be determined by one of the methods specified in Sections G2439.7.4.1 through G2439.7.4.2.

**G2439.7.4.1 (614.9.4.1) Specified length.** The maximum length of the exhaust duct shall be 35 feet (10,668 mm) from the connection to the transition duct from the dryer to the outlet terminal. Where fittings are used, the maximum length of the exhaust duct shall be reduced in accordance with Table G2439.7.4.1.

**G2439.7.4.2 (614.9.4.3) Dryer exhaust duct power ventilator length.** The maximum length of the exhaust duct shall be determined by the dryer exhaust duct power ventilator manufacturer's installation instructions.

*The following section is hereby deleted in its entirety:*

**G2445 (621) UNVENTED ROOM HEATERS.**

*The following section is hereby added to read as follows:*

**G2447.6 Kitchens with gas cooking appliances.** In new construction, kitchens with gas-fired cooking appliances shall be supplied with an exhaust system vented to the outside in accordance with section M1503.

## CHAPTER 25 PLUMBING ADMINISTRATION

*The following section is hereby amended to read as follows:*

**P2503.5.1 Rough plumbing.** DWV systems shall be tested on completion of the rough piping installation by water, by air, or by a vacuum of air for plastic piping systems, without evidence of leakage. The test shall be applied to the drainage system in its entirety or in sections after rough-in piping has been installed, as follows:

1. Water test. Each section shall be filled with water to a point not less than 10 feet (3048 mm) above the highest fitting connection in that section, or to the highest point in the completed system. Water shall be held in the section under test for a period of 15 minutes.

The system shall prove leak free by visual inspection.

2. Air test. The portion under test shall be maintained at a gauge pressure of 5 pounds per square inch (psi) (34 kPa) or 10 inches of mercury column (34 kPa). This pressure shall be held without introduction of additional air for a period of 15 minutes.

3. Vacuum test. The portion under test shall be evacuated of air by a vacuum-type pump to achieve a uniform gauge pressure of -5 pounds per square inch or a negative 10 inches of mercury column (-34 kPa). This pressure shall be held without the removal of additional air for a period of 15 minutes.

*The following section is hereby deleted in its entirety as follows: P2503.6 Shower liner test.*

## CHAPTER 26 GENERAL PLUMBING REQUIREMENTS

*The following section is hereby amended to read as follows:*

**P2602.1 General.** The water-distribution system of any building or premises where plumbing fixtures are installed shall be connected to a public water supply. Where a public water-supply system is not available, or connection to the supply is not feasible, an individual water supply shall be provided. Individual water supplies shall be constructed and installed in accordance with the applicable state and local laws.

Sanitary drainage piping from plumbing fixtures in buildings and sanitary drainage piping systems from premises shall be connected to a public sewer. Where a public sewer is not available, the sanitary drainage piping and systems shall be connected to a private sewage disposal system in compliance with state or local requirements.

**Exception:** Sanitary drainage piping and systems that convey only the discharge from bathtubs, showers, lavatories, clothes washers and laundry trays shall comply with all applicable regulations.

*The following section is hereby amended to read as follows:*

**P2603.5 Freezing.** A water, soil or waste pipe shall not be installed outside of a building, in exterior walls, in attics or crawl spaces, or in any other place subjected to freezing temperature unless adequate provision is made to protect it from freezing by insulation or heat or both. Water service pipe shall be installed not less than 54 inches below finished grade.

*The following section is hereby amended to read as follows:*

**P2603.5.1 Sewer Depth.** Building sewers that connect to private sewage disposal systems shall be not less than 12" below finished grade and shall comply with all applicable regulations.

## CHAPTER 27 PLUMBING FIXTURES

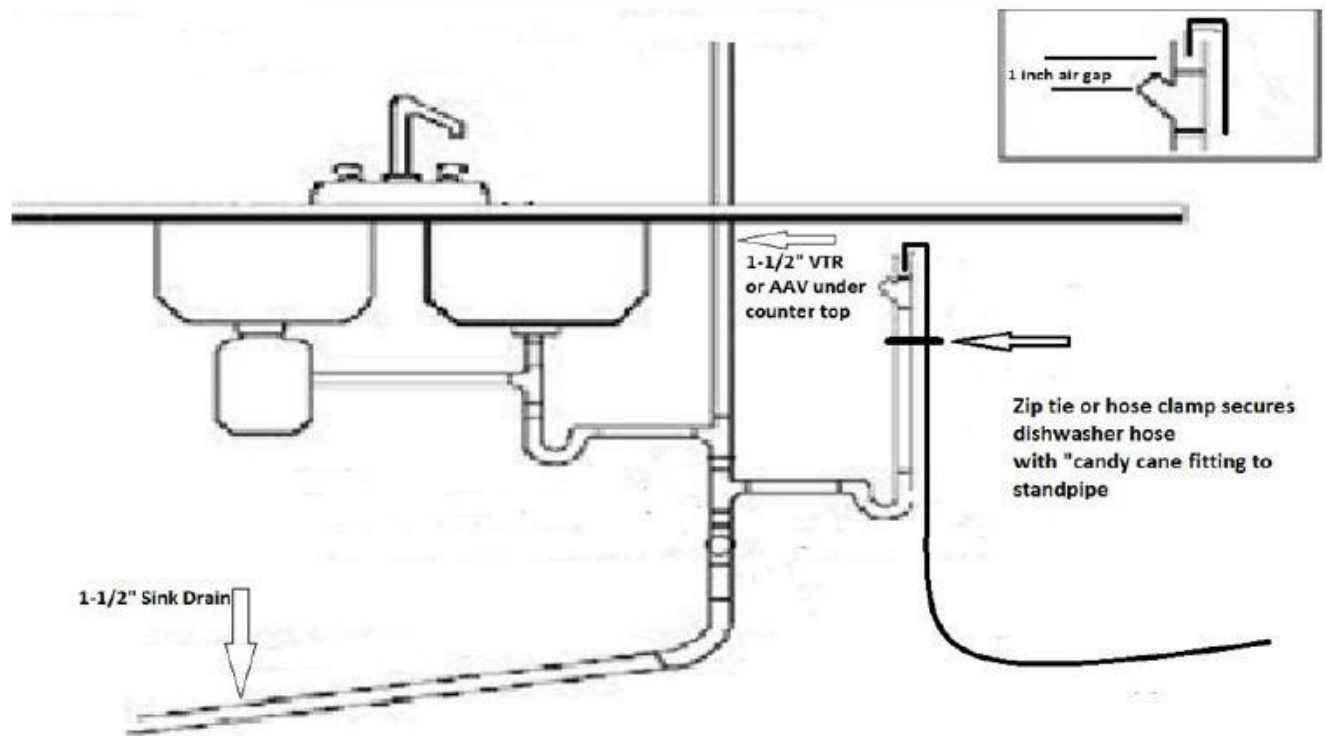
*The following section is hereby added to read as follows:*

**P2708.4.1. Shower head location.** Shower heads shall be so located on the sidewall of shower compartments or be arranged so the shower head does not discharge directly at the entrance to the compartment and the bather can adjust the valve prior to stepping into the shower spray.

**The following section is hereby amended to read as follows:**

**P2717.2 Sink and dishwasher.** The combined discharge from a dishwasher and a one- or two-compartment sink, with or without a food-waste disposer, shall be served by a trap of not less than 1½ inches (38 mm) in outside diameter. The dishwasher discharge pipe or tubing shall rise to the underside of the counter and be fastened or otherwise held in that position before connecting to the head of the food-waste disposer or to a wye fitting in the sink tailpiece. Dishwashers may drain into a separately trapped standpipe provided with an air break as shown in Figure P2717.

**FIGURE P2717**



## **CHAPTER 29 WATER SUPPLY AND DISTRIBUTION**

**The following section is hereby amended to read as follows:**

**P2901.2 Identification of nonpotable water systems.** Where nonpotable water systems are installed, the piping conveying the nonpotable water shall be identified either by color marking, metal tags or tape in accordance with Sections P2901.2.1 through P2901.2.2.3. Non-potable water systems shall comply with all applicable regulations.

**The following section is hereby amended to read as follows:**

**P2903.4 Thermal expansion control.** A means for controlling increased pressure caused by thermal expansion shall be installed where required in accordance with Sections P2903.4.1 and P2903.4.2. Thermal expansion tanks shall be installed and supported in accordance with the manufacturer's instructions. Thermal expansion tanks shall not be supported by the piping that connects to such tanks.

**The following section is hereby amended to read as follows:**

**P2904.1 General.** The design and installation of residential fire sprinkler systems shall be in accordance with NFPA 13D or Section P2904, which shall be considered to be equivalent to NFPA 13D. Partial residential sprinkler systems shall be permitted to be installed only in buildings not required to be equipped with a residential sprinkler system. Section P2904 shall apply to multipurpose wet-pipe sprinkler systems that do not include the use of antifreeze. A multipurpose fire sprinkler system shall provide domestic water to both fire sprinklers and plumbing fixtures. A backflow preventer shall not be required to separate a sprinkler system from the water distribution system.

**Section P2910.1 Scope.** The provisions of this section shall govern the materials, design, construction, and installation of systems for the collection, storage, treatment, and distribution of nonpotable water. The use and application of nonpotable water shall comply with all applicable regulations.

*The following section is hereby amended to read as follows:*

**P2911.1 General.** The provisions of this section shall govern the construction, installation, alteration, and repair of on-site nonpotable water reuse systems for the collection, storage, treatment, and distribution of on-site sources of nonpotable water as permitted by the jurisdiction. Non-potable water systems shall comply with all applicable regulations.

*The following section is hereby amended to read as follows:*

**P2912.1 General.** The provisions of this section shall govern the construction, installation, alteration and repair of rainwater collection and conveyance systems for the collection, storage, treatment and distribution of rainwater for nonpotable applications. The use and application of nonpotable water shall comply with all applicable regulations.

*The following section is hereby amended to read as follows:*

**P2913.1 General.** The provisions of this section shall govern the construction, installation, alteration, and repair of systems supplying nonpotable reclaimed water. Non-potable reclaimed water systems shall comply with Larimer County Department of Health and Environment regulations.

## CHAPTER 30 SANITARY DRAINAGE

*The following section is hereby amended by deleting the exception in its entirety to read as follows:*

**P3003.9.2 Solvent cementing.** Joint surfaces shall be clean and free from moisture. A purple primer, or other approved primer, that conforms to ASTM F656 shall be applied. Solvent cement not purple in color and conforming to ASTM D2564, CSA B137.3 or CSA B181.2 shall be applied to all joint surfaces. The joint shall be made while the cement is wet and shall be in accordance with ASTM D2855. Solvent-cement joints shall be installed above or below ground.

*The following section is hereby amended to read as follows:*

**P3005.2.3 Building drain and building sewer junction.** The junction of the building drain and the building sewer shall be served by a cleanout that is located at the junction or within 10 feet (3048 mm) developed length of piping upstream of the junction. For the requirements of this section, removal of a water closet shall not be required to provide cleanout access. When the cleanout is installed at the junction of the building drain and building sewer, it shall be an approved two-way fitting with a single riser not to exceed 4 feet in depth or a two-riser cleanout using back-to-back combination fittings of schedule 40 material.

*The following section is hereby amended to read as follows:*

**P3009.1 Scope.** The provisions of this section shall govern the materials, design, construction and installation of subsurface graywater soil absorption systems connected to nonpotable water from on-site water reuse systems. Subsurface graywater soil absorption systems connected to nonpotable water from on-site water reuse systems shall comply with Larimer County Department of Health and Environment all applicable regulations.

## CHAPTERS 34 - 43 DELETED

*Chapters 34 through 43 are hereby deleted in their entirety.*

## APPENDICES

**Appendix AE “Manufactured Housing used as Dwellings” is hereby adopted as amended.**

***The following section is hereby amended to read as follows:***

**AE102.6 Relocation.** Where manufactured homes are to be located at or above 6,000 feet (1829 m) elevation, or in areas where ultimate design wind speeds equal or exceed 140 mph (225 km/h), the permit holder shall install or take snow and wind mitigation measures pre-approved by the Town of Estes Park Building Division. Such measures may include independent, engineered structural roof systems capable of resisting the site design snow load, approved snow removal plans, engineered wind fences, or other engineered site-specific designs considering prevailing winds, exposure, topography, trees and other relevant natural features.

***The following sections are hereby deleted in their entirety:***

**SECTION AE105 APPLICATION FOR PERMIT**

**SECTION AE106 PERMITS ISSUANCE**

**SECTION AE107 FEES**

**SECTION AE108 INSPECTIONS**

**SECTION AE109 SPECIAL INSPECTIONS**

**SECTION AE110 UTILITY SERVICE**

**Appendix AF “Radon Control Methods” is hereby adopted as amended.**

***The following section is hereby amended to read as follows:***

**AF101.1 General.** This appendix contains requirements for new radon-resistant construction for all new dwellings and additions exceeding 1,000 sq. ft. (92.9 m<sup>2</sup>) in floor area constructed under this code

***The following section is hereby amended to read as follows:***

**AF103.1 General.** The following construction techniques are intended to resist radon entry and prepare the building for postconstruction radon mitigation (see Figure AF103.1).

***The following section is hereby amended to read as follows:***

**AF103.2 Subfloor preparation.** A layer of gas-permeable material shall be placed under all concrete slabs and other floor systems that directly contact the ground and are within the walls of the living spaces of the building, to facilitate installation of a sub-slab depressurization system. Each radon reduction vent pipe riser shall serve no more than 4000 square feet (371.6 m<sup>2</sup>) of uninterrupted under slab/floor area. The gas-permeable layer shall consist of one of the following:

1. A uniform layer of clean aggregate, not less than 4 inches (102 mm) thick. The aggregate shall consist of material that will pass through a 2-inch (51 mm) sieve and be retained by a 1/4-inch (6.4 mm) sieve.
2. A uniform layer of sand (native or fill), not less than 4 inches (102 mm) thick, overlain by a layer or strips of geotextile drainage matting designed to allow the lateral flow of soil gases.
3. Other materials, systems or floor designs with demonstrated capability to permit depressurization across the entire subfloor area.

***The following section is hereby amended to read as follows:***

**AF103.5 Passive submembrane depressurization system.** In buildings with crawl space foundations, the following components of a passive submembrane depressurization system shall be installed during construction.

***The following section is hereby deleted:***

**AF103.5.1 Ventilation.**

***The following section is hereby amended to read as follows:***

**AF103.5.1 Soil-gas-retarder.** The soil in crawl spaces shall be covered with a continuous layer of minimum 6-mil (0.15 mm) polyethylene or 3 mil (0.076 mm) cross laminated polyethylene soil gas retarder. The ground cover shall be lapped not less than 12 inches (305 mm) at joints and sealed or taped. The edges of the ground cover shall extend a minimum of 12 inches (305 mm) up onto all foundation walls enclosing the under-floor space and be sealed to the wall and any footing pads. An interior perimeter drain tile loop shall be connected to a plumbing tee or other approved connection as per AF103.5.3.

***The following section is hereby amended to read as follows:***

**AF103.5.2 Vent pipe.** A plumbing tee or other approved connection shall be inserted horizontally beneath the sheeting and connected to a 3- or 4-inch-diameter (76 or 102 mm) fitting with a vertical vent pipe installed through the sheeting. The vent pipe shall be extended up through the building floors and terminate not less than 12 inches (305 mm) above the roof in a location not less than 10 feet (3048 mm) away from any window or other opening into

the conditioned spaces of the building that is less than 2 feet (610 mm) below the exhaust point, and 10 feet (3048 mm) from any window or other opening in adjoining or adjacent buildings.

***The following section is hereby added to read as follows:***

**AF103.13 Provisions for future depressurization fan installation.** Permanent provisions shall be made for the future installation of an in-line fan to be connected to every radon vent pipe. Such designated fan locations shall be outside of the conditioned envelope of the building, such as in the attic, garage, and similar locations, excluding crawl spaces and other interior under-floor spaces. Designated locations shall accommodate an unobstructed permanent cylindrical space with the following minimum dimensions: 12 inches (305 mm) measured radially around the radon vent pipe along a vertical distance of 30 inches (760 mm). Designated fan locations shall be permanently accessible for servicing and maintenance. An electrical receptacle outlet shall be provided within 4 feet (1,219 mm) of and within sight from designated fan locations and installed so as to not be covered by insulation. A light fixture shall be installed in the area of future fan location.

***The following section is hereby amended by amending item #10 and deleting #11 to read as follows:***

**AF104.1 Testing.** Radon testing shall be as specified in Items 1 through 10:

1. Testing shall be performed after the dwelling passes its air tightness test.
2. Testing shall be performed after the radon control system and HVAC installations are complete. The HVAC system shall be operating during the test. Where the radon system has an installed fan, the dwelling shall be tested with the radon fan operating.
3. Testing shall be performed at the lowest occupied floor level, whether or not that space is finished. Spaces that are physically separated and served by different HVAC systems shall be tested separately.
4. Testing shall not be performed in a closet, hallway, stairway, laundry room, furnace room, bathroom or kitchen.
5. Testing shall be performed with a commercially available radon test kit or testing shall be performed by an approved third party with a continuous radon monitor. Testing with test kits shall include two tests, and the test results shall be averaged. Testing shall be in accordance with this section and the testing laboratory kit manufacturer's instructions.
6. Testing shall be performed with the windows closed. Testing shall be performed with the exterior doors closed, except when being used for entrance or exit. Windows and doors shall be closed for not fewer than 12 hours prior to the testing.
7. Testing shall be performed by the builder, a registered design professional or an approved third party.
8. Testing shall be conducted over a period of not less than 48 hours or not less than the period specified by the testing device manufacturer, whichever is longer.

9. Written radon test results shall be provided by the test lab or testing party. The final written test report with results less than 4 picocuries per liter (pCi/L) shall be provided to the code official.

10. Where the radon test result is 4 pCi/L or greater, the fan for the radon vent pipe shall be installed as specified in Sections AF103.12 and AF103.13.

**Exception:** Testing is not required where the occupied space is located above an unenclosed open space.

**Appendix AH "Patio Covers" is hereby adopted as amended:**

***The following section is hereby amended to read as follows:***

**AH105.2 Footings.** In mobile home parks for patio covers supported independently of the home using approved post bases on a slab-on-grade without footings, the slab shall conform to the provisions of Section R506, shall be not less than 3.5 inches (89 mm) thick and the columns shall not support live and dead loads in excess of 750 pounds (3.34 kN) per column.

**Appendix AJ "Existing Buildings and Structures" is hereby adopted as amended.**

***The following section is hereby amended to read as follows:***

**AJ102.4.3 Replacement windows for emergency escape and rescue openings.** Where windows are required to provide emergency escape and rescue openings, replacement windows shall be exempt from Sections R310.2 and R310.4 provided that the replacement window meets the following conditions:

1. The replacement window is the manufacturer's largest standard size window that will fit within the existing frame or existing rough opening. The building official may allow the replacement window to be of the same operating style as the existing window so long as it provides for an equal or greater window opening area, or require upgrading to a window style that maximizes the opening area within the existing window frame.
2. Where the replacement window is not part of a change of occupancy.

Window opening control devices and fall prevention devices complying with ASTM F2090 shall be permitted for use on windows serving as required emergency escape and rescue openings.

***The following section is hereby added to read as follows:***

**AJ 102.10 Moved buildings or structures.** Building and structures moved into or within Town of Estes Park shall comply with the provisions of the codes in effect when the building was built, or the 1970 Uniform Building Code and the 1977 Colorado Energy Conservation as amended and adopted by Town of Estes Park if the building was constructed prior to January 1, 1972. In addition, moved buildings and structures shall meet the requirements of wind loads, snow loads, flood hazard areas, wildfire hazard areas, and fireplace-restricted areas of their new location.

***The following section is hereby added to read as follows:***

**AJ 102.11 Moved manufactured or mobile homes.** Where manufactured or mobile homes are to be located at or above 6,000 feet (1829 m), or in areas where ultimate design wind speeds equal or exceed 140 mph (225 km/h), the permit holder shall install or take snow and wind mitigation measures pre-approved by the Town of Estes Park Building Division. Such measures may include independent, engineered structural roof systems capable of resisting the site design snow load, approved snow removal plans, engineered wind fences, or other engineered site-specific designs considering prevailing winds, exposure, topography, trees and other relevant natural features.

**Appendix AM “Home Day Care – R3 Occupancy” is hereby adopted in its entirety.**

**Appendix AQ “Tiny Houses” is hereby adopted in its entirety.**

**Appendix AR “Light Straw-Clay Construction” is hereby adopted in its entirety.**

**Appendix AS “Strawbale Construction” is hereby adopted in its entirety.**

**Appendix AU “Cob Construction (Monolithic Adobe)” is hereby adopted in its entirety.**

EXHIBIT C

AMENDMENTS TO THE 2021 INTERNATIONAL RESIDENTIAL CODE  
RELATING TO VACATION HOMES

**Add the following exceptions to Section R101.2 Scope:**

3. *Vacation homes* shall be permitted to be regulated in accordance with the International Residential Code for one-and two-family dwellings, where the dwellings legally existed prior to the effective date of this provision and where compliant with Section R332.
4. *Large vacation homes* shall be permitted to be regulated in accordance with the International Residential Code for one-and two-family dwellings, where a 2017 *vacation home* or *large vacation home* registration was applied for prior to April 01, 2017 and where compliant with Section R332. The occupant load for large vacation homes regulated by the International Residential Code shall be determined based on the number of bedrooms approved in conjunction with the 2017 registration application received prior to April 01, 2017.
5. *Vacation homes* constructed under permits applied for on or after June 26, 2017 shall be permitted to be regulated in accordance with the International Residential Code for one-and two-family dwellings, where new large vacation homes are prohibited by land use regulations and where compliant with Section R332.
6. *Vacation homes* constructed under permits applied for on or after June 26, 2017 shall be permitted to be regulated in accordance with the International Residential Code for one-and two-family dwellings; where new large vacation homes are allowed; where they have less than 2200 square feet of enclosed floor area, excluding attached garages, an occupant load of less than nine and do not have more than three bedrooms; and where compliant with Section R332.
7. *Vacation homes* constructed under permits applied for on or after June 26, 2017 shall be permitted to be regulated in accordance with the International Residential Code for one-and two-family dwellings, where constructed under a Development Plan approved prior to the effective date of this provision and no floor area or additional rooms used for sleeping purposes are added beyond the approved Development plan and where compliant with Section R332.

**Add the following definitions to Section R202 Definitions:**

***Accessory Dwelling Unit (ADU).*** A dwelling unit, either attached or detached, which is on the same lot and under the same ownership as the primary dwelling. When accessory dwelling units and primary dwelling units are attached, they shall be regulated as two attached single-family dwellings.

***Approved Development Plan.*** Approved Development Plans are those projects which have been formally submitted, reviewed and approved pursuant to the residential and accommodations provisions of Table 3-3 of the Estes Park Development Code.

***Hotel.*** A building or a portion of a building which contains dwelling units and/or sleeping units where accommodations are provided for nine or more occupants transient in nature and where units may be individually rented.

***Large Vacation Home.*** A one-family dwelling constructed in compliance with the scoping provisions of the International Residential Code, where accommodations are provided for a single group of nine or more occupants transient in nature and where rooms may not be individually rented to guests which are not part of the group.

***Large Vacation Home Occupant Load.*** For the purposes of using a dwelling as a large vacation home, the approved maximum number of occupants shall be determined by allowing 2 occupants per approved bedroom plus 2 additional occupants. In large vacation homes, all occupants shall sleep only in rooms designated and approved for sleeping purposes. Large vacation homes

regulated by the International Building Code shall comply with minimum design occupant load requirements of the International Building Code.

**Small Hotel.** A building or a portion of a building which contains dwelling units and/or sleeping units where accommodations are provided for less than nine occupants, transient in nature and where units may be individually rented.

**Transient.** Occupancy of a dwelling unit or sleeping unit for not more than 30 days.

**Vacation Home.** A one-family dwelling constructed in compliance with the scoping provisions of the International Residential Code, where accommodations are provided for a single group of less than nine occupants transient in nature and where rooms may not be individually rented to guests which are not part of the group.

**Vacation Home Occupant Load.** For the purposes of using a dwelling as a vacation home, the approved maximum number of occupants shall be determined by allowing 2 occupants per approved bedroom plus 2 additional occupants. In vacation homes, all occupants shall sleep only in rooms designated and approved for sleeping purposes.

**Add Section R332 as follows:**

### **SECTION R332 VACATION HOME AND LARGE VACATION HOME LIFE SAFETY INSPECTION**

**R332.1 Life safety inspection.** *Vacation homes and large vacation homes* shall comply with section R332. A *vacation home* or a *large vacation home* shall not be approved for occupancy unless the vacation home owner has made a full and complete application for a life safety inspection building permit to convert the home to a *vacation home* or *large vacation home*, the Chief Building Official or designee performs a life safety inspection, and the home has obtained the applicable Certificate of Occupancy in accordance with section R332.3. At minimum, vacation home and large vacation home life safety inspections shall include the provisions of R332.2.1 through R332.2.20.

**R332.2.1 Address identification.** *Vacation homes and large vacation homes* shall have approved address identification, in compliance with the code in effect at the time of the initial inspection.

**R332.2.2 Unapproved uses.** Uses of all rooms/spaces shall comply with approved uses per Building Division records. Change of use permits, inspections and approvals shall be required for all rooms with uses different from Building Division records.

**R332.2.3 Unpermitted work.** All unpermitted work shall be permitted, compliant and approved.

**R332.2.4 Unapproved work.** All unapproved work authorized by permits which have expired shall be re-permitted, compliant and approved.

**R332.2.5 Structural concerns.** Obvious structural concerns shall be mitigated.

**R332.2.6 Emergency escape and rescue openings.** Compliant emergency escape and rescue openings shall be provided for all spaces used for sleeping purposes. For dwellings constructed after December 31, 1968, said openings shall comply with the code in effect at the time the opening was required. For dwellings constructed prior to January 01, 1969, the minimum requirements for said openings shall be at the discretion of the Building Official until determined by amendment based on documentation of existing conditions.

**R332.2.7 Window wells.** Where required, compliant window wells shall be properly installed at emergency escape and rescue openings. For dwellings constructed after December 31, 1968, said window wells shall comply with the code in effect at the time the well was required. For dwellings constructed prior to January 01, 1969, the minimum requirements for said window wells shall be at the discretion of the Building Official until determined by amendment based on documentation of existing conditions.

**R332.2.8 Smoke alarms.** Approved smoke alarms shall be properly installed at all locations in compliance with the code in effect at the time of the initial inspection.

**R332.2.9 Carbon monoxide alarms.** Approved carbon monoxide alarms shall be properly installed at all locations in compliance with the code in effect at the time of the initial inspection.

**R332.2.10 Fuel gas appliances.**

- a. Fuel gas appliances shall be in approved locations.
- b. Fuel gas appliances shall be in dedicated spaces, where applicable.
- c. Fuel gas appliances shall comply with required clearances.
- d. Fuel gas appliances shall be provided with required combustion air.
- e. Fuel gas appliances shall be connected to approved venting systems.
- f. Fuel gas appliances shall have required temperature and pressure relief valves.
- g. Fuel gas appliances shall have proper condensate disposal.
- h. Rooms/spaces containing fuel gas appliances shall be properly fire-blocked.
- i. Other than existing cook tops, no ventless fuel gas appliances are allowed in Estes Park.

**R332.2.11 Dwelling/garage separation.** Dwellings shall be separated from garages with materials on the garage side in compliance with the code in effect at the time of the initial inspection.

**R332.2.12 Environmental duct terminations.** Dryer ducts and exhaust fans shall terminate at approved locations.

**R332.2.13 Handrails.** Approved handrails shall be properly installed at locations in compliance with the code in effect at the time of the initial inspection.

**R332.2.14 Guards.** Approved guards shall be properly installed at locations in compliance with the code in effect at the time of the initial inspection.

**R332.2.15 Cook stove.** Anti-tip devices shall be installed for all cook stoves.

**R332.2.16 Wildfire hazard.** Wildfire defensible spaces shall be maintained as required for new construction, as it relates to vegetation, not to building construction.

**R332.2.17 Fire pits.** Exterior fire pits shall comply with Fire Department requirements. Solid fuel burning appliances are further regulated under section 5.20.110 of the Municipal Code.

**R332.2.18 Lighting at exterior stairs.** Lighting at exterior stairs shall be properly installed in compliance with the code in effect at the time of the initial inspection.

**R332.2.19 Ground-Fault Circuit-Interrupter Protection.** Ground-fault circuit-interrupter protection for personnel shall be provided in locations in compliance with the code in effect at the time of the initial inspection.

**R332.2.20 Private Septic Systems.** Dwellings with private septic systems require approval from the Larimer County Health Department prior to the addition of any bedroom.

**R332.3 Certificate of Occupancy.** After a life safety inspection has been performed and no violations of the inspection are existing, the Building Official shall issue a Certificate of Occupancy for use as a *vacation home* or a *large vacation home*. In addition to other requirements for Certificates of Occupancy in this code, Certificates of Occupancy for *vacation homes* and *large vacation homes* shall specify the number of rooms approved for sleeping purposes and the maximum approved occupant load for use as a *vacation home* or *large vacation home*.

## EXHIBIT D

### AMENDMENTS FOR 2021 IECC ADOPTION

#### INTERNATIONAL ENERGY CONSERVATION CODE

Section xx. The International Energy Conservation Code, 2021 Edition, (the "IECC"), as published by the International Code Council, 500 New Jersey Avenue, NW, 6th Floor, Washington, DC 20001, a copy of which is on file and open for inspection in the office of the Town clerk, is hereby adopted by reference subject to the additions, amendments, and appendices set forth herein. The IECC includes appendices CB and RB by the International Code Council, and new appendices CD and RD as set forth below. The subject matter of the IECC includes the design of energy-efficient and high-performance buildings and related energy uses including mechanical, lighting, power systems, and electric vehicle infrastructure for the purpose of protecting the public health, safety and welfare. The 2021 IECC, as amended in this Article, shall apply to all property within the Town of Estes Park.

The IECC is amended as follows:

#### COMMERCIAL

1. Section C101.1 Title is retained in its entirety with the following amendments:

**C101.1 Title.** This code shall be known as the International Energy Conservation Code of the Town of Estes Park and shall be cited as such. It is referred to herein as "this code" or "the IECC."

This ensures fuel source, electric-ready, solar-ready, and EV-ready are shown on the construction documents. Since some of these are new elements, this also helps with compliance.

2. **Section C103.2 Information on construction documents**, is amended by modifying item 6 and adding items 14, 15, and 16 as follows:
  6. Mechanical and service water heating systems and equipment types, sizes, fuel source, and efficiencies.
  14. Details of additional electric infrastructure, including branch circuits, conduit, or pre-wiring, and panel capacity in compliance with the provisions of this code.
  15. Location of pathways for routing of raceways or cable from the solar ready zone to the electrical service panel.
  16. Location of designated EVSE spaces, EV-Ready spaces, and EV-Capable spaces in parking facilities.

This adds the electric-ready infrastructure to inspection.

3. Section C105.2.5 Electrical system is amended to read:

**C105.2.5 Electrical system.** Inspection shall verify lighting system controls, components, ~~and~~ meters, and additional electric infrastructure, as required by the code, *approved* plans and specifications.

This adds definitions to accommodate all-electric building.

4. **Section C202 GENERAL DEFINITIONS** is amended to add or revise the following definitions in alphabetical order:

ALL-ELECTRIC BUILDING. A building and building site that contains no combustion equipment, or plumbing for combustion equipment, and that uses heat pump technology as the primary supply for heating, cooling, and service water heating loads.

COMBUSTION EQUIPMENT: Any equipment or appliances used for space heating, cooling, water heating (including pools and spas), cooking, clothes drying or lighting that uses natural gas, propane, other fuel gas, or fuel oil.

MIXED-FUEL BUILDING. A building and building site that contains combustion equipment, or plumbing for combustion equipment, for space heating, cooling, water heating (including pools and spas), cooking, or clothes drying.

This adds electric-ready and electric-preferred for commercial buildings selecting the Total Building Performance path.

5. Section C401.2.1 International Energy Conservation Code, item 2, is amended to read as follows:

**2. Total Building Performance.** The Total Building Performance option requires compliance with Section C407 and, for *mixed fuel buildings*, Section C405.13 and 10 credits from Tables C406.1(1) through C406.1(5).

This adds electric-ready and electric-preferred for commercial buildings selecting ASHRAE 90.1.

6. Section C401.2.2 ASHRAE 90.1 is amended to read as follows:

**C401.2.2 ASHRAE 90.1.** Commercial buildings shall comply with the requirements of ANSI/ASHRAE/IESNA 90.1 and, for *mixed fuel buildings*, Section C405.13 and 10 credits from Tables C406.1(1) through C406.1(5).

This ensures that renewable energy used to meet the exemption is not also double-counted towards compliance with C406.

7. C404.2.1 High input service water-heating systems, item 1 under exceptions, is amended to read as follows:

1. Where not less than 50 percent of the annual *service water heating* requirement is provided by *on-site renewable energy* or site-recovered energy not including any capacity used for compliance with Section C406 of this code, the minimum thermal efficiency requirements of this section shall not apply.

This is part of electric-ready. It ensures sufficient physical space for future electric water heating systems. It only applies to water heaters with a clear path to electrification presently and exempts systems that don't.

8. Section C404.10 is added as follows:

**C404.10 Water heating equipment location.** Water heaters with *combustion equipment* shall be located in a space with the following characteristics:

1. Minimum dimensions of 3 feet by 3 feet by 7 feet high.

2. Minimum volume of 760 cubic feet, or the equivalent of one 16-inch by 24-inch grill to a heated space and one 8-inch duct of no more than 10 feet in length for cool exhaust air.
3. Contains a condensate drain that is no more than 2 inches higher than the base of the installed water heater and allows natural draining without pump assistance, installed within 3 feet of the water heater.

**Exceptions:**

1. Instantaneous water heaters located within 10 feet of the point of use.
2. Water heaters with an input capacity of more than 300,000 Btu/h.

This disallows gas-powered lighting. Gas lighting is rarely used anymore, but this adds assurance that it can't be.

9. Section C405.5.3 Gas lighting is amended to read as follows:

**Section C405.5.3. Gas lighting.** Gas fired lighting appliances ~~shall not be equipped with continuously burning pilot ignition systems~~ are not permitted.

Adding a category for monitoring EV charging separately allows the building load to be measured independently from this non-building load. This will be critical with the wider adoption of Building Performance Standards or other existing building energy use policies as it will allow EV charging to be easily excluded from the building loads for the purposes of regulating actual energy use in buildings. (Approved for the 2024 IECC by the full Commercial Consensus Committee.)

10. **Table C405.12.2 ENERGY USE CATEGORIES** is amended to add a new line at the end:

<u>Electric vehicle charging</u>	<u>Electric vehicle charging loads.</u>
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This adds electric-ready wiring for combustion equipment.

11. A new Section C405.13 is added to read as follows:

**C405.13 Additional electric infrastructure.** All combustion equipment shall be provided with a junction box that is connected to an electrical panel by continuous raceways that meet the following requirements:

1. The junction box, raceway, and bus bar in the electric panel and conductors serving the electric panel shall be sized to accommodate electric equipment sized to serve the same load as the combustion equipment.
2. The panel shall have reserved physical space for a three-pole circuit breaker.
3. The junction box and electrical panel directory entry for the dedicated circuit breaker space shall have labels stating "For future electric equipment."
4. The junction box shall allow for the electric equipment to be installed within the same place of the combustion equipment that it replaces.

**Exceptions:**

1. Warm air furnaces serving spaces that also have space cooling.
2. Water heating equipment with an input capacity more than 300,000 Btu/h
3. Industrial, manufacturing, laboratory, and high hazard occupancy combustion equipment.

This is the electric-preferred section. To encourage electrification of buildings while allowing for mixed-fuel construction, mixed fuel buildings are required to achieve more efficiency credits (20 instead of 10).

12. Section C406.1 Additional energy efficiency credit requirements, first sentence, is amended to read as follows with the other parts of the paragraph and section to remain:

**C406.1 Additional energy efficiency credit requirements.** New *all-electric buildings* shall achieve a total of 10 credits and new *mixed-fuel buildings* shall achieve a total of 20 credits from Tables C406.1(1) through C406.1(5) where the table is selected based on the use group of the building and from credit calculations as specified in relevant subsections of C406.

Continuing with electric preferred, this fixes a problem where fossil fuel water heaters were given more credits than high-efficiency electric. (This problem is also fixed in the 2024 IECC by the Commercial Consensus Committee.)

13. TABLE C406.1(2) ADDITIONAL ENERGY EFFICIENCY CREDITS FOR GROUP R AND I OCCUPANCIES is retained in its entirety, except Sections C406.7.3 and C406.7.4 in Climate Zone 5B are amended to read as follows:

**TABLE C406.1(2)**  
**ADDITIONAL ENERGY EFFICIENCY CREDITS FOR GROUP R AND I OCCUPANCIES**

SECTION	CLIMATE ZONE 5B
C406.7.3: Efficient fossil fuel water heater <sup>b</sup>	<del>9</del> <u>3</u>
C406.7.4: Heat pump water heater <sup>b</sup>	<del>5</del> <u>9</u>

14. TABLE C406.1(3) ADDITIONAL ENERGY EFFICIENCY CREDITS FOR GROUP E OCCUPANCIES is retained in its entirety, except Sections C406.7.3 and C406.7.4 in Climate Zone 5B are amended to read as follows:

**TABLE C406.1(3)**  
**ADDITIONAL ENERGY EFFICIENCY CREDITS FOR GROUP E OCCUPANCIES**

SECTION	CLIMATE ZONE 5B
C406.7.3: Efficient fossil fuel water heater <sup>a</sup>	<del>3</del> <u>N/A</u>
C406.7.4: Heat pump water heater <sup>a</sup>	<del>4</del> <u>3</u>

a. For schools with showers or full-service kitchens.

15. TABLE C406.1(5) ADDITIONAL ENERGY EFFICIENCY CREDITS FOR OTHER OCCUPANCIES is retained in its entirety, except Sections C406.7.3 and C406.7.4 in Climate Zone 5B are amended to read as follows:

**TABLE C406.1(5)**  
**ADDITIONAL ENERGY EFFICIENCY CREDITS FOR OTHER<sup>a</sup> OCCUPANCIES**

SECTION	CLIMATE ZONE 5B
C406.7.3: Efficient fossil fuel water heater <sup>b</sup>	<u>9.3</u>
C406.7.4: Heat pump water heater <sup>b</sup>	<u>5.9</u>

a. Other occupancies include all groups except Groups B, E, I, M, and R.

b. For occupancy groups listed in Section 406.7.1

This adds the thermal energy certification, slab, and radiant heating insulation to the Total Building Performance pathway, to match the other pathways.

16. **TABLE C407.2 REQUIREMENTS FOR TOTAL BUILDING PERFORMANCE** is retained in its entirety and amended to add the following items:

**TABLE C407.2  
REQUIREMENTS FOR TOTAL BUILDING PERFORMANCE**

SECTION	TITLE
<b>Envelope</b>	
<u>C401.3</u>	<u>Thermal envelope certificate</u>
<u>C402.2.4</u>	<u>Slabs-on-grade</u>
<u>C402.2.6</u>	<u>Insulation of radiant heating system</u>

## COMMERCIAL APPENDIX CB

This is part of the solar-ready adoption. This amendment fixes the gap for multi-family.

17. CB103.1, first sentence, is amended to read as follows, with the exceptions to remain:

**CB103.1 General.** A solar-ready zone shall be located on the roof of all new buildings that are ~~five stories or less in height above grade plane~~ subject to the commercial provisions of the IECC and that are oriented between 110 degrees and 270 degrees of true north or have low-slope roofs. Solar-ready zones shall comply with Sections CB103.2 through CB103.9.

## COMMERCIAL APPENDIX CD

This is the EV-ready appendix for commercial and commercial multi-family (four stories and greater).

18. Appendix CD is added as follows:

### **APPENDIX CD EV READINESS - COMMERCIAL**

**CD101. Purpose and intent.** The purpose and intent of this Appendix CD is to accommodate the growing need for EV charging infrastructure. Including these measures during initial commercial

construction substantially reduces the costs and difficulty of installing EV infrastructure at a later date.

**CD102. Applicability.** This Appendix CD shall apply to all new commercial construction to which the current International Building Code applies.

**Section CD103. Definitions.**

**AUTOMOBILE PARKING SPACE.** A space within a building or private or public parking lot, exclusive of driveways, ramps, columns, office, and work areas, for the parking of an automobile.

**DIRECT CURRENT FAST CHARGING (DCFC) EVSE:** EV power transfer infrastructure capable of fast charging on a 100A or higher 480VAC three-phase branch circuit. AC power is converted into a controlled DC voltage and current within the *EVSE* that will then directly charge the *electric vehicle*.

**EV LOAD MANAGEMENT SYSTEM:** A system designed to allocate charging capacity among multiple *EVSE* and that complies with the current National Electric Code.

**ELECTRIC VEHICLE (EV).** An automotive-type vehicle for on-road use, such as passenger automobiles, buses, trucks, vans, neighborhood *electric vehicles*, and electric motorcycles, primarily powered by an electric motor that draws current from an electric source.

**ELECTRIC VEHICLE SUPPLY EQUIPMENT (EVSE).** Equipment for plug-in power transfer including the ungrounded, grounded, and equipment grounding conductors, and the *electric vehicle* connectors, attachment plugs, personal protection system and all other fittings, devices, power outlets or apparatus installed specifically for the purpose of transferring energy between the premises wiring and the *electric vehicle*.

**ELECTRIC VEHICLE SUPPLY EQUIPMENT INSTALLED SPACE (EVSE space).** An automobile parking space that is provided with a dedicated *EVSE* connection.

**ELECTRIC VEHICLE CAPABLE SPACE (EV CAPABLE SPACE).** A designated automobile parking space that is provided with electrical infrastructure, such as, but not limited to, raceways, cables, electrical capacity, and panelboard or other electrical distribution equipment space, necessary for the future installation of an *EVSE*.

**ELECTRIC VEHICLE READY SPACE (EV READY SPACE).** An automobile parking space that is provided with a branch circuit and a ground fault circuit interrupter (GFCI/GFI) outlet, junction box, or receptacle, that will support an installed *EVSE*.

**CD104 Electric vehicle power transfer infrastructure.** New parking facilities shall be provided with *electric vehicle* power transfer infrastructure in compliance with Sections CD104.1 through CD104.6, and CD105.

**CD104.1 Quantity.** The number of required *EVSE spaces*, *EV ready spaces*, and *EV capable spaces* shall be determined in accordance with this Section and Table CD104.1 based on the total number of *automobile parking spaces* and shall be rounded up to the nearest whole number. For R-2 buildings, the Table requirements shall be based on the total number of dwelling units or the total number of *automobile parking spaces*, whichever is less.

1. Where more than one parking facility is provided on a building site, the number of required *automobile parking spaces* required to have EV power transfer infrastructure shall be calculated separately for each parking facility.
2. Where one shared parking facility serves multiple building occupancies, the required number of spaces shall be determined proportionally based on the floor area of each building occupancy.
3. Installed *EVSE spaces* that exceed the minimum requirements of this section may be used to meet minimum requirements for *EV ready spaces* and *EV capable spaces*.
4. Installed *EV ready spaces* that exceed the minimum requirements of this section may be used to meet minimum requirements for *EV capable spaces*.
5. Where the number of *EV ready spaces* allocated for R-2 occupancies is equal to the number of dwelling units or to the number of *automobile parking spaces*, whichever is less, requirements for *EVSE spaces* for R-2 occupancies shall not apply.
6. In commercial multi-family (R-2, R-3, and R-4) complexes, four stories or greater, that contain multiple buildings, required EV spaces shall be dispersed throughout parking areas so that each building has access to a similar number of spaces per dwelling unit.
7. Requirements for a Group S-2 parking garage shall be determined by the occupancies served by that parking garage. Where new *automobile parking spaces* do not serve specific occupancies, the values for Group S-2 parking garage in Table CD104.1 shall be used.
8. Direct Current Fast Charging. The number of *EVSE spaces* for Groups A, B, E, I, M and S-2 Occupancies may be reduced by up to ten per *DCFC EVSE* provided that the building includes not less than one parking space equipped with a *DCFC EVSE* and not less than one *EV ready space*. A maximum of fifty spaces may be reduced from the total number of *EVSE spaces*.

**Exception:** Parking facilities, serving occupancies other than R-2 with fewer than 10 *automobile parking spaces*.

**TABLE CD104.1  
REQUIRED EV POWER TRANSFER INFRASTRUCTURE**

BUILDING TYPE	MINIMUM EV INSTALLED SPACES	MINIMUM EV READY SPACES	MINIMUM EV CAPABLE SPACES
Group A, B, E, M	10%	5%	10%
Group F, I, R-3, R-4	2%	0%	5%
Group R-1 and R-2 <sup>a</sup>	15%	5%	40%
Group S-2 Parking Garages	10%	5%	0%

a. Where all (100%) parking serving R-2 occupancies are EV ready spaces, requirements for *EVSE spaces* for R-2 occupancies shall not apply.

**CD104.2 EV capable spaces.** Each *EV capable space* used to meet the requirements of Section CD104.1 shall comply with all of the following:

1. A continuous raceway or cable assembly shall be installed between an enclosure or outlet located within 3 feet (914 mm) of the *EV capable space* and a suitable panelboard or other onsite electrical distribution equipment.
2. Installed raceway or cable assembly shall be sized and rated to supply a minimum circuit capacity in accordance with CD104.5
3. The electrical distribution equipment to which the raceway or cable assembly connects shall have sufficient dedicated space and spare electrical capacity for a 2-pole circuit breaker or set of fuses.
4. The electrical enclosure or outlet and the electrical distribution equipment directory shall be marked: "For future electric vehicle supply equipment (EVSE)."
5. Reserved capacity shall be no less than 4.1 kVA (20A 208/240V) for each *EV capable space*.

**CD104.3 EV ready spaces.** Each branch circuit serving *EV ready spaces* used to meet the requirements of Section CD104.1 shall comply with all of the following:

1. Terminate at an outlet or enclosure, located within 3 feet (914 mm) of each *EV ready space* it serves.
2. Have a minimum circuit capacity in accordance with CD104.5.
3. Branch circuit on the panelboard or other electrical distribution equipment directory designated as "For electric vehicle supply equipment (EVSE)" and the outlet or enclosure marked "For electric vehicle supply equipment (EVSE)."

**CD104.4 EVSE spaces.** An installed *EVSE* with multiple output connections shall be permitted to serve multiple *EVSE spaces*. Each *EVSE* installed to meet the requirements of Section CD104.1, serving either a single *EVSE space* or multiple *EVSE spaces*, shall comply with all of the following:

1. Have a minimum circuit capacity in accordance with CD104.5.
2. Have a minimum charging rate in accordance with CD104.4.1.
3. Be located within 3 feet (914 mm) of each *EVSE space* it serves.
4. Be installed in accordance with Section CD104.6 and CD104.7.

**CD104.4.1 EVSE minimum charging rate.** Each installed *EVSE* shall comply with one of the following:

1. Be capable of charging at a minimum rate of 6.2 kVA (or 30A at 208/240V).
2. When serving multiple *EVSE spaces* and controlled by an energy management system providing load management, be capable of simultaneously charging each *EVSE space* at a minimum rate of no less than 3.3 kVA.
3. When serving *EVSE spaces* allowed to have a minimum circuit capacity of 2.7 kVA in accordance with CD104.5.1 and controlled by an energy management system providing load management, be capable of simultaneously charging each *EVSE space* at a minimum rate of no less than 2.1 kVA.

**CD104.5 Circuit capacity.** The capacity of electrical infrastructure serving each *EV capable space*, *EV ready space*, and *EVSE space* shall comply with one of the following:

1. A branch circuit with a rated capacity not less than 8.3 kVA (or 40A at 208/240V) for each *EV ready space* or *EVSE space* it serves.
2. The requirements of CD104.5.1.

**CD104.5.1 Circuit capacity management.** The capacity of each branch circuit serving multiple *EVSE spaces*, *EV ready spaces* or *EV capable spaces* designed to be controlled by an energy

management system providing load management in accordance with NFPA 70, shall comply with one of the following:

1. Have a minimum capacity of 4.1 kVA per space.
2. Have a minimum capacity of 2.7 kVA per space when serving *EV ready spaces* or *EVSE spaces* for a building site where all (100%) of the automobile parking spaces are designed to be *EV ready* or *EVSE spaces*.

**CD104.6 EVSE installation.** *EVSE* shall be installed in accordance with NFPA 70 and shall be listed and labeled in accordance with UL 2202 or UL 2594.

**CD104.7. EVSE ENERGY STAR.** All *EVSE* shall be ENERGY STAR certified.

**CD105. Identification.** Construction documents shall designate all *EV capable spaces*, *EV ready spaces*, and *EVSE spaces* and indicate the locations of conduit and termination points serving them. The circuit breakers or circuit breaker spaces reserved for the *EV capable spaces*, *EV ready spaces*, and *EVSE spaces* shall be clearly identified in the panel board directory. The conduit for *EV capable spaces* shall be clearly identified at both the panel board and the termination point at the parking space.

## RESIDENTIAL

19. Section R101.1 Title is retained in its entirety with the following amendments:

**R101.1 Title.** This code shall be known as the International Energy Conservation Code of the Town of Estes Park, and shall be cited as such. It is referred to herein as “this code” or “the IECC.”

This ensures fuel source, electric-ready, solar-ready, and EV-ready are shown on the construction documents. Since some of these are new elements, this also helps with compliance.

20. **Section R103.2 Information on construction documents**, is amended by modifying item 6 and adding items 10, 11, and 12 as follows:

6. Mechanical and service water heating systems and equipment types, sizes, fuel source, and efficiencies.
10. Details of additional electric infrastructure, including branch circuits, conduit, or pre-wiring, and panel capacity in compliance with the provisions of this code.
11. Location of pathways for routing of raceways or cable from the solar ready zone to the electrical service panel.
12. Location of designated *EVSE spaces*, *EV-ready spaces*, and *EV-capable spaces* in parking facilities, as applicable.

This adds definitions to accommodate all-electric buildings.

21. **Section R202 GENERAL DEFINITIONS** is amended to add the following definitions in alphabetical order:

**ALL-ELECTRIC BUILDING.** A *building* and building site that contains no *combustion equipment*, or plumbing for *combustion equipment*, and that uses heat pump technology as the primary supply for heating, cooling, and service water heating loads.

**COMBUSTION EQUIPMENT:** Any equipment or appliances used for space heating, cooling, water heating (including pools and spas), cooking, clothes drying or lighting that uses natural gas, propane, other fuel gas, or fuel oil.

**MIXED-FUEL BUILDING.** A *building* and building site that contains *combustion equipment*, or plumbing for *combustion equipment*, for space heating, cooling, water heating (including pools and spas), cooking, or clothes drying.

This encourages electrification and more evenly weighs the impact of the additional efficiency credits by requiring a mixed-fuel home to select three packages whereas an all-electric home selects one. Of the three packages required for the mixed-fuel home, one must address the envelope (improved envelope or reduced infiltration plus better ventilation) while the remaining two impact HVAC (better equipment or more efficient ducts) and water-heating (better equipment) requirements.

22. Section R401.2.5 Additional energy efficiency is amended as follows:

**R401.2.5 Additional energy efficiency.** This section establishes additional requirements applicable to all compliance approaches to achieve additional energy efficiency.

1. For buildings complying with Section R401.2.1, ~~one of the additional efficiency package options shall be installed according to Section R408.2~~ the building shall meet one of the following:
  - 1.1. For all-electric buildings, one of the additional efficiency package options shall be installed according to Section R408.2.
  - 2.2. For mixed-fuel buildings, three of the additional efficiency packages shall be installed, at least one of which addresses the envelope.
2. For buildings complying with Section R401.2.2, the building shall meet one of the following:
  - 2.1. For all-electric buildings, one of the additional efficiency package options in Section R408.2 shall be installed without including such measures in the proposed design under Section R405.
  - 2.2. For mixed-fuel buildings, three of the additional efficiency packages shall be installed, at least one of which addresses the envelope, without including such measures in the proposed design under Section R405.
  - 2.3. For all-electric buildings, the proposed design of the building under Section R405.3 shall have an annual energy cost that is less than or equal to 95 percent of the annual energy cost of the standard reference design.
  - 2.4. For mixed-fuel buildings, the proposed design of the building under Section R405.3 shall have an annual energy cost that is less than or equal to 80 percent of the annual energy cost of the standard reference design.
3. For buildings complying with the Energy Rating Index alternative Section R401.2.3, the Energy Rating Index value shall be at least 5 percent less than the Energy Rating Index target specified in Table R406.5.

The options selected for compliance shall be identified in the certificate required by Section R401.3.

This adds fuel sources, solar-ready, and electric-ready information to the certificate.

23. Section R401.3 Certificate, item 4, is amended and new items 8, 9, and 10 are added as follows:

**R401.3 Certificate.** A permanent certificate shall be completed by the builder or other approved party and posted on a wall in the space where the furnace is located, a utility room or an approved location inside the building. Where located on an electrical panel, the certificate shall not cover or obstruct the visibility of the circuit directory label, service disconnect label or other required labels. The certification shall indicate the following:

4. The types, sizes, fuel sources, and efficiencies of heating, cooling and service water heating equipment. Where a gas-fired unvented room heater, electric furnace or baseboard electric heater is installed in the residence, the certificate shall indicate “gas-fired unvented room heater,” “electric furnace” or “baseboard electric heater,” as appropriate. An efficiency shall not be indicated for gas-fired unvented room heaters, electric furnaces and electric baseboard heaters.
8. The fuel sources for cooking and clothes drying equipment.
9. Where combustion equipment is installed, the certificate shall indicate information on the installation of additional electric infrastructure including which equipment and/or appliances include additional electric infrastructure, capacity reserved on the electrical service panel for replacement of each piece of combustion equipment and/or appliance.
10. Where a solar-ready zone is provided, the certificate shall indicate the location, dimensions, and capacity reserved on the electrical service panel.

This and the next are part of electric-ready. They ensure sufficient physical space for future electric water heating systems.

24. Section R403.5 Service hot water systems is amended as follows:

**R403.5 Service hot water systems.** Energy conservation measures for service hot water systems shall be in accordance with Sections R403.5.1 through ~~R403.5.3~~ R403.5.4.

25. Section R403.5.4 Water heating equipment location is added as follows:

**R403.5.4 Water heating equipment location.** Water heaters with *combustion equipment* shall be located in a space with the following characteristics:

1. Minimum dimensions of 3 feet by 3 feet by 7 feet high.
2. Minimum volume of 760 cubic feet, or the equivalent of one 16-inch by 24-inch grill to a heated space and one 8-inch duct of no more than 10 feet in length for cool exhaust air.
3. Contains a condensate drain that is no more than 2 inches higher than the base of the installed water heater and allows natural draining without pump assistance, installed within 3 feet of the water heater.

**Exceptions:**

1. Water heats with an input capacity of greater than 300,000 Btu/h that serves multiple dwelling units or sleeping units.

This prohibits fuel gas lighting. This type of lighting is rare.

26. Section R404.1.1 Fuel gas lighting is amended to read as follows:

**Section R404.1.1. Fuel gas lighting.** Fuel gas lighting systems are prohibited.

This adds electric-ready wiring for combustion equipment.

27. A new Section R404.4 Additional electric infrastructure is added as follows:

**R404.4 Additional electric infrastructure.** All *combustion equipment* shall be installed in accordance with Section R403.5.4 and shall be provided with a junction box that is connected to an electrical panel by continuous raceways that meet the following requirements:

1. The junction box, raceway, and bus bar in the electric panel and conductors serving the electric panel shall be sized to accommodate electric equipment sized to serve the same load as the *combustion equipment*.
2. The panel shall have reserved physical space for a dual-pole circuit breaker.
3. The junction box and electrical panel directory entry for the dedicated circuit breaker space shall have labels stating “For future electric equipment.”
4. The junction box shall allow for the electric equipment to be installed within the same place of the *combustion equipment* that it replaces.

**Exceptions:**

1. Fossil fuel space heating equipment where a 208/240-volt electrical circuit with a minimum capacity of 40 amps exists for space cooling equipment.
2. Water heating equipment with an input capacity greater than 300,000 Btu/h that serves multiple dwelling units or sleeping units.

This adds electric-ready to the Total Building Performance table.

28. Table R405.2 Requirements for Total Building Performance adds a new row under Mechanical and a new row under Electrical Power and Lighting Systems as follows:

**TABLE R405.2 REQUIREMENTS FOR TOTAL BUILDING PERFORMANCE**

SECTION	TITLE
Mechanical	
<u>R403.5.4</u>	<u>Water heating equipment location</u>
Electrical Power and Lighting Systems	
<u>R404.4</u>	<u>Additional electric infrastructure</u>

This clarifies that the ERI can use the HERS Index.

29. Section R406.2 ERI compliance, first paragraph, is amended to read as follows with the other parts of the section to remain:

**R406.2 ERI compliance.** Compliance based on the ERI, utilizing the HERS Index Score, requires that the rated design meets all of the following:

1. The requirements of the sections indicated within Table R406.2.
2. The maximum ERI of Table R406.5.

This adds electric-ready to the ERI mandatory requirements table.

30. Table R406.2 Requirements for Energy Rating Index adds a new row under Mechanical and a new row under Electrical Power and Lighting Systems as follows:

**TABLE R406.2 REQUIREMENTS FOR ENERGY RATING INDEX**

SECTION	TITLE
Mechanical	
<u>R403.5.4</u>	<u>Water heating equipment</u>
Electrical Power and Lighting Systems	
<u>R404.4</u>	<u>Additional electric infrastructure</u>

This incorporates electric-preferred into the ERI path.

31. Section R406.5 ERI-based compliance is amended as follows:

**R406.5 ERI-based compliance.** Compliance based on an ERI analysis requires that the rated proposed design and confirmed built dwelling be shown to have an ERI less than or equal to the appropriate value for the proposed all-electric or mixed-fuel building as indicated in Table R406.4 when compared to the ERI reference design.

**TABLE R406.5 MAXIMUM ENERGY RATING INDEX**

CLIMATE ZONE	ALL-ELECTRIC BUILDING	<u>MIXED FUEL BUILDING</u>
5	55	<u>50</u>

## RESIDENTIAL APPENDIX RB

This is part of the solar-ready adoption. These two amendments, along with a similar amendment in Appendix CB, fixes the gap for multi-family.

32. Appendix RB Title is amended to read: “**Appendix RB Solar Ready Provisions.**”

33. RB103.1, first sentence, is amended as follows, with the rest of the section remaining:

**RB103.1 General.** New ~~detached one- and two-family dwellings, and townhouses~~ residential buildings with not less than 600 square feet (55.74 m<sup>2</sup>) of roof area oriented between 110 degrees and 270 degrees of true north shall comply with Sections RB103.2 through RB103.8.

This is the EV-ready appendix for residential, including multi-family three stories or less.

34. Appendix RD is added as follows:

## APPENDIX RD EV READINESS - RESIDENTIAL

**RD101. Purpose and intent.** The purpose and intent of this Appendix RD is to accommodate the growing need for EV charging infrastructure, in particular meeting preferences for charging at home. Including these measures during initial construction substantially reduces the costs and difficulty of installing EV infrastructure at a later date.

**RD102. Applicability.** This Appendix RD shall apply to all new residential construction to which the International Residential Code applies.

**RD103. Definitions.**

**AUTOMOBILE PARKING SPACE.** A space within a building or private or public parking lot, exclusive of driveways, ramps, columns, office, and work areas, for the parking of an automobile.

**DIRECT CURRENT FAST CHARGING (DCFC) EVSE:** EV power transfer infrastructure capable of fast charging on a 100A or higher 480VAC three-phase branch circuit. AC power is converted into a controlled DC voltage and current within the *EVSE* that will then directly charge the *electric vehicle*.

**EV LOAD MANAGEMENT SYSTEM:** A system designed to allocate charging capacity among multiple *EVSE* and that complies with the current National Electric Code.

**ELECTRIC VEHICLE (EV).** An automotive-type vehicle for on-road use, such as passenger automobiles, buses, trucks, vans, neighborhood *electric vehicles*, and electric motorcycles, primarily powered by an electric motor that draws current from an electric source.

**ELECTRIC VEHICLE SUPPLY EQUIPMENT (EVSE).** Equipment for plug-in power transfer including the ungrounded, grounded, and equipment grounding conductors, and the *electric vehicle* connectors, attachment plugs, personal protection system and all other fittings, devices, power outlets or apparatus installed specifically for the purpose of transferring energy between the premises wiring and the *electric vehicle*.

**ELECTRIC VEHICLE SUPPLY EQUIPMENT INSTALLED SPACE (EVSE space).** An automobile parking space that is provided with a dedicated *EVSE* connection.

**ELECTRIC VEHICLE CAPABLE SPACE (EV CAPABLE SPACE).** A designated automobile parking space that is provided with electrical infrastructure, such as, but not limited to, raceways, cables, electrical capacity, and panelboard or other electrical distribution equipment space, necessary for the future installation of an *EVSE*.

**ELECTRIC VEHICLE READY SPACE (EV READY SPACE).** An automobile parking space that is provided with a branch circuit and receptacle that will support an installed *EVSE*.

**RD104 One- and two- family dwellings and townhouses.** One *EV ready* space shall be provided for each dwelling unit. The branch circuit shall be identified as *EV ready* in the service panel or subpanel directory, and the termination location shall be marked as *EV ready*.

**Exception:** Dwelling units where no parking spaces are either required or provided.

**RD105 Residential multi-family dwellings, 3-stories or less.** New dwelling units for residential multi-family buildings, other than duplexes and townhomes, shall be provided with *electric vehicle* power transfer infrastructure in compliance with Sections RD105.1 through RD105.6 and Sections RD106 through RD107.

**RD105.1 Quantity.** The number of required *EVSE spaces*, *EV ready spaces*, and *EV capable spaces* shall be determined in accordance with this Section and Table RD105.1 based on the total number of *automobile parking spaces* and shall be rounded up to the nearest whole number. For

R-2 buildings, the Table requirements shall be based on the total number of dwelling units or the total number of *automobile parking spaces*, whichever is less.

1. Where more than one parking facility is provided on a building site, the number of required *automobile parking spaces* required to have EV power transfer infrastructure shall be calculated separately for each parking facility.
2. Installed *EVSE spaces* that exceed the minimum requirements of this section may be used to meet minimum requirements for *EV ready spaces* and *EV capable spaces*.
3. Installed *EV ready spaces* that exceed the minimum requirements of this section may be used to meet minimum requirements for *EV capable spaces*.
4. Where the number of *EV ready spaces* allocated for R-2 occupancies is equal to the number of dwelling units or to the number of *automobile parking spaces* allocated to R-2 occupancies, whichever is less, requirements for *EVSE spaces* for R-2 occupancies shall not apply.
5. In residential multi-family complexes that contain multiple buildings, required EV spaces shall be dispersed throughout parking areas so that each building has access to a similar number of spaces per dwelling unit.

**TABLE RD105.1**  
**REQUIRED EV POWER TRANSFER INFRASTRUCTURE FOR MULTI-FAMILY**

BUILDING TYPE	MINIMUM EV INSTALLED SPACES	MINIMUM EV READY SPACES	MINIMUM EV CAPABLE SPACES
Group R-1 and R-2 <sup>a</sup>	15%	5%	40%
Group R-3 and R-4	2%	0%	5%

- a. Where all (100%) parking serving R-2 occupancies are EV ready spaces, requirements for *EVSE spaces* for R-2 occupancies shall not apply.

**RD105.2 EV capable spaces.** Each *EV capable space* used to meet the requirements of Section RD105.1 shall comply with all of the following:

1. A continuous raceway or cable assembly shall be installed between an enclosure or outlet located within 3 feet (914 mm) of the *EV capable space* and a suitable panelboard or other onsite electrical distribution equipment.
2. Installed raceway or cable assembly shall be sized and rated to supply a minimum circuit capacity in accordance with RD105.5.
3. The electrical distribution equipment to which the raceway or cable assembly connects shall have sufficient dedicated space and spare electrical capacity for a 2-pole circuit breaker or set of fuses.
4. The electrical enclosure or outlet and the electrical distribution equipment directory shall be marked: "For future electric vehicle supply equipment (EVSE)."
5. Reserved capacity shall be no less than 4.1 kVA (20A 208/240V) for each *EV capable space*.

**RD105.3 EV ready spaces.** Each branch circuit serving *EV ready spaces* used to meet the requirements of Section RD105.1 shall comply with all of the following:

1. Terminate at a receptacle with overcurrent protection and GFCI protection as required by NFPA 70, located within 3 feet (914 mm) of each *EV ready space* it serves.
2. Have a minimum circuit capacity in accordance with RD105.5.

3. Have a branch circuit on the panelboard or other electrical distribution equipment directory designated as “For electric vehicle supply equipment (EVSE)” and the outlet or enclosure shall be marked “For electric vehicle supply equipment (EVSE).”

**RD105.4 EVSE spaces.** An installed *EVSE* with multiple output connections shall be permitted to serve multiple EVSE spaces. Each *EVSE* installed to meet the requirements of Section RD105.1, serving either a single *EVSE space* or multiple *EVSE spaces*, shall comply with all of the following:

1. Have a minimum circuit capacity in accordance with RD105.5.
2. Have a minimum charging rate in accordance with RD105.4.1.
3. Be located within 3 feet (914 mm) of each *EVSE space* it serves.
4. Be installed in accordance with Section RD105.6 and RD105.7

**RD105.4.1 EVSE minimum charging rate.** Each installed *EVSE* shall comply with one of the following:

1. Be capable of charging at a minimum rate of 6.2 kVA (or 30A at 208/240V).
2. When serving multiple *EVSE spaces* and controlled by an energy management system providing load management, be capable of simultaneously charging each *EVSE space* at a minimum rate of no less than 3.3 kVA.
3. When serving *EVSE spaces* allowed to have a minimum circuit capacity of 2.7 kVA in accordance with RD105.5.1 and controlled by an energy management system providing load management, be capable of simultaneously charging each *EVSE space* at a minimum rate of no less than 2.1 kVA.

**RD105.5 Circuit capacity.** The capacity of electrical infrastructure serving each *EV capable space*, *EV ready space*, and *EVSE space* shall comply with one of the following:

1. A branch circuit with a rated capacity not less than 8.3 kVA (or 40A at 208/240V) for each *EV ready space* or *EVSE space* it serves.
2. The requirements of RD105.5.1.

**RD105.5.1 Circuit capacity management.** The capacity of each branch circuit serving multiple *EVSE spaces*, *EV ready spaces* or *EV capable spaces* designed to be controlled by an energy management system providing load management in accordance with NFPA 70, shall comply with one of the following:

1. Have a minimum capacity of 4.1 kVA per space.
2. Have a minimum capacity of 2.7 kVA per space when serving *EV ready spaces* or *EVSE spaces* for a building site when all (100%) of the automobile parking spaces are designed to be *EV ready* or *EVSE spaces*.

**RD105.6 EVSE installation.** *EVSE* shall be installed in accordance with NFPA 70 and shall be listed and labeled in accordance with UL 2202 or UL 2594.

**RD105.7. EVSE ENERGY STAR.** All *EVSE* shall be ENERGY STAR certified.

**RD106. Identification.** Construction documents shall designate all *EV capable spaces*, *EV ready spaces*, and *EVSE spaces* and indicate the locations of conduit and termination points serving them. The circuit breakers or circuit breaker spaces reserved for the *EV capable spaces*, *EV ready spaces*, and *EVSE spaces* shall be clearly identified in the panel board directory. The conduit for *EV capable spaces* shall be clearly identified at both the panel board and the termination point at the parking space.

# Colorado Model Electric Ready and Solar Ready Code DRAFT

## Chapter 1 Scope and Administration

### 101 SCOPE AND GENERAL REQUIREMENTS.

**101.1 Title.** This code shall be known as the Electric Ready and Solar Ready Code of [NAME OF JURISDICTION], and shall be cited as such. It is referred to herein as “this code”.

**101.2 Scope.** This code applies to all buildings and dwelling units, and the buildings’ sites and associated systems and equipment.

**101.3 Intent.** This code shall regulate the design and construction of buildings to prepare new buildings for solar photovoltaic or solar thermal, electric vehicle charging infrastructure, and electrification of building systems. This code is intended to provide flexibility and to provide maximum cost effectiveness, balancing upfront construction costs with the future cost to retrofit buildings to accommodate these systems. This code is not intended to abridge safety, health or environmental requirements contained in other applicable codes or ordinances.

**101.4. Applicability.** Where, in any specific case, different sections of this code specify different materials, methods of construction or other requirements, the most restrictive shall govern. Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall govern.

**101.4.1. Residential buildings.** *Residential buildings* must comply with the Residential Chapters of this code.

**101.4.2. Commercial buildings.** *Commercial buildings* must comply with the Commercial Chapters of this code.

## **102 WAIVER AND VARIANCE.**

**102.1 Scope.** The following waivers shall be permitted to be requested if buildings meet the following requirements.

**102.1.1 Commercial Buildings 10,000 sq ft or greater.** *Commercial buildings* that have a gross floor area greater than 10,000 sq. ft. shall be eligible to request a partial waiver to the requirements of this code if they meet the requirements of Section **102.2**.

**102.1.2 Buildings Impacted by a Natural Disaster.** [NAME OF JURISDICTION] is permitted to authorize, upon appeal in specific cases, a waiver from the requirements of this code where, owing to a declared natural disaster that has destroyed buildings or resulted in other exceptional and extraordinary circumstances as determined by [NAME OF JURISDICTION] and [NAME OF JURISDICTION] determines enforcement of the provisions of this code will result in unnecessary hardship.

**102.2 Substantial Cost Differential Waiver.** [NAME OF JURISDICTION] shall be permitted to authorize, upon appeal, a waiver from the requirements of this code for an applicant that asserts that compliance with this code will result in a substantial cost differential. [NAME OF JURISDICTION], when authorizing such a waiver, shall be permitted to waive certain requirements of this code only until the cost differential for compliance with the remaining requirements reaches one percent or less. The burden of proof is upon the applicant to provide substantiation of a cost differential, such as quotes or other engineering analyses as *approved* by [NAME OF JURISDICTION].

**102.2.1 Substantial Cost Differential:** For the purposes of Section **102.2**, “substantial cost differential” means costs incurred as a result of compliance with the requirements of this code would exceed one percent of total mechanical, electrical, and plumbing construction costs inclusive of materials and labor.

## **103 CONSTRUCTION DOCUMENTS.**

**103.1 General.** Construction documents and other supporting data shall be submitted in one or more sets, or in a digital format where allowed by the building

official, with each application for a permit. The construction documents shall be prepared by a registered design professional where required by the statutes of the jurisdiction in which the project is to be constructed. Where special conditions exist, the *code official* is authorized to require necessary construction documents to be prepared by a registered design professional.

**Exception:** The *code official* is authorized to waive the requirements for construction documents or other supporting data if the *code official* determines they are not necessary to confirm compliance with this code.

**103.2 Information on Construction Documents.** Construction documents shall be drawn to scale on suitable material. Electronic media documents are permitted to be submitted where *approved* by the *code official*. Construction documents shall be of sufficient clarity to indicate the location, nature, and extent of the work proposed, and show in sufficient detail pertinent data and features of the building, systems, and equipment as herein governed. Details shall include, but are not limited to, the following as applicable:

1. Location and size of *the solar-ready zone*.
2. Structural design loads of roof dead load and roof live load.
3. Pathways for routing of conduit from the *solar-ready zone* to the electrical service panel.
4. Number and location of *EV capable light spaces*.
5. Number and location of *EV capable spaces*.
6. Number and location of *EV ready spaces*.
7. Number and location of *EVSE installed spaces*.
8. Locations of conduit and termination points serving the aforementioned parking spaces.
9. Location for condensate drainage where *combustion equipment* for space heating is installed.

**103.3 Examination of Documents.** The *code official* shall examine or cause to be examined the accompanying documents and shall ascertain whether the construction indicated and described is in accordance with the requirements of this code and other pertinent laws or ordinances. The *code official* is authorized to utilize a registered design professional, or other *approved* entity not affiliated with the

building design or construction, in conducting the review of the plans and specifications for compliance with the code.

**103.3.1 Approval of Construction Documents.** When the *code official* issues a permit where construction documents are required, the construction documents shall be endorsed in writing and stamped "Reviewed for Code Compliance." Such *approved* construction documents shall not be changed, modified, or altered without authorization from the *code official*. Work shall be done in accordance with the *approved* construction documents.

One set of "Reviewed for Code Compliance" construction documents shall be retained by the *code official*. The other set shall be returned to the applicant, kept at the site of work, and shall be open to inspection by the *code official* or a duly authorized representative.

**103.3.2 Previous approvals.** This code shall not require changes in the construction documents, construction, or designated occupancy of a structure for which a lawful permit has been heretofore issued or otherwise lawfully authorized, and the construction of which has been pursued in good faith within 180 days after the effective date of this code and has not been abandoned.

**103.3.3 Phased approval.** The *code official* shall have the authority to issue a permit for the construction of part of a solar-ready, EV-ready, or electric-ready installation before the construction documents for the entire system have been submitted or *approved*, provided that adequate information and detailed statements have been filed complying with all pertinent requirements of this code. The holders of such permit shall proceed at their own risk without assurance that the permit for the entire solar-ready, EV-ready, or electric-ready installation will be granted.

**103.4 Amended construction documents.** Changes made during construction that are not in compliance with the *approved* construction documents shall be resubmitted for approval as an amended set of construction documents.

**103.5 Retention of construction documents.** One set of *approved* construction documents shall be retained by the *code official* for a period of not less than 180

days from the date of completion of the permitted work, or as required by state or local laws.

**103.6 Building documentation and closeout submittal requirements.** The construction documents shall specify that the documents described in this section be provided to the building owner or owner's authorized agent within 90 days of the date of receipt of the certificate of occupancy.

**103.6.1 Record documents.** Construction documents shall be updated to convey a record of the completed work. Such updates shall include mechanical, electrical, and control drawings that indicate all changes to size, type, and location of components, equipment, and assemblies.

**103.6.2 Compliance documentation.** Compliance documentation and supporting calculations shall be delivered in one document to the building owner as a part of the project record documents or manuals, or as a standalone document. This document shall include the specific energy code edition utilized for compliance determination for each system.

## **104 INSPECTIONS.**

**104.1 General.** Construction or work for which a permit is required shall be subject to inspection by the *code official*, his or her designated agent or an *approved agency*, and such construction or work shall remain visible and able to be accessed for inspection purposes until *approved*. Approval as a result of an inspection shall not be construed to be an approval of a violation of the provisions of this code or of other ordinances of the jurisdiction. Inspections presuming to give authority to violate or cancel the provisions of this code or of other ordinances of the jurisdiction shall not be valid. It shall be the duty of the permit applicant to cause the work to remain visible and/or able to be accessed for inspection purposes. Neither the *code official* nor the jurisdiction shall be liable for expense entailed in the removal or replacement of any material, product, system or building component required to allow an inspection to validate compliance with this code.

**104.2 Required Inspections.** The *code official*, his or her designated agent or an *approved agency*, upon notification, shall make the inspections set forth in Sections **104.2.1** through **104.2.4**.

**104.2.1 Solar-ready.** Inspections shall verify all of the following as required by this code, *approved plans*, and specifications:

1. The location and size of the *solar-ready zone* or the capacity of an installed on-site renewable energy system.
2. Electrical capacity and reserved physical space for circuit breakers in the main electrical service panel that are properly labeled.

**104.2.2 Electric vehicle-ready.** Inspections shall verify all of the following as required by this code, *approved plans*, and specifications:

1. *EV* power infrastructure requirements.
2. Electrical equipment associated with each parking space type, including branch circuits, conduit and/or raceway, junction boxes, receptacles, and *EVSE* are properly labeled and installed.
3. Electrical capacity and reserved physical space for circuit breakers in the main electrical service panel that are properly labeled, if applicable.

**104.2.3 Electric-ready.** Inspections shall verify all of the following as required by this code, *approved plans*, and specifications:

1. Branch circuits, conduit and/or raceway, wiring, junction boxes, and receptacles for *future electric equipment* or appliances are properly labeled and installed, as applicable.
2. Reserved physical space for *future electric equipment* or appliances.
3. Electrical capacity and reserved physical space for circuit breakers in the main electrical service panel that are properly labeled.

**104.2.4 Final inspection.** The final inspection shall include verification of the installation and proper labeling of all requirements of this code.

**104.3 Reinspection.** A building shall be reinspected where determined necessary by the *code official*.

**104.4 Approved inspection agencies.** The *code official* is authorized to accept reports of third-party inspection agencies not affiliated with the building design or construction, provided that such agencies are *approved* as to qualifications and reliability relevant to the building components and systems that they are inspecting.

**104.5 Inspection requests.** It shall be the duty of the holder of the permit or their duly authorized agent to notify the *code official* when work is ready for inspection. It shall be the duty of the permit holder to provide access to and means for inspections of such work that are required by this code.

**104.6 Reinspection and testing.** Where any work or installation does not pass an initial test or inspection, the necessary corrections shall be made to achieve compliance with this code. The work or installation shall then be resubmitted to the *code official* for inspection and testing.

## **105 NOTICE OF APPROVAL.**

**105.1 Approval.** After the prescribed inspections indicate that the work complies in all respects with this code, a notice of approval shall be issued by the *code official*.

**105.2 Revocation.** The *code official* is authorized to suspend or revoke, in writing, a notice of approval issued under the provisions of this code wherever the certificate is issued in error, or on the basis of incorrect information supplied, or where it is determined that the building or structure, premise, or portion thereof is in violation of any ordinance or regulation or any of the provisions of this code.

## **106 VALIDITY.**

**106.1 General.** If a portion of this code is held to be illegal or void, such a decision shall not affect the validity of the remainder of this code.

## **107 REFERENCED STANDARDS.**

**107.1 General.** The codes and standards referenced in this code shall be listed in Section **107.2**, and such codes and standards shall be considered as part of the requirements of this code to the prescribed extent of each such reference.

**107.2 Referenced Codes and Standards.** The codes and standards referenced in this code are as follows:

1. International Building Code
  - a. Chapter 3

b. Chapter 11

2. International Energy Conservation Code
3. International Fire Code
4. International Residential Code
5. National Electrical Code Article 625
6. UL2202 and 2594

**107.2.1 Conflicts.** Where conflicts occur between provisions of this code and referenced codes and standards, the provisions of this code shall apply.

**107.2.2 Provisions in referenced codes and standards.** Where the extent of the reference to a referenced code or standard includes subject matter that is within the scope of this code, the provisions of this code, as applicable, shall take precedence over the provisions in the referenced code or standard.

**107.3 Applications of References.** References to chapter or section numbers, or to provisions not specifically identified by number, shall be construed to refer to such chapter, section, or provision of this code.

**107.4 Other laws.** The provisions of this code shall not be deemed to nullify any provisions of local, state, or federal law.

**108 STOP WORK ORDER.**

**108.1 Authority.** Where the *code official* finds any work regulated by this code being performed in a manner contrary to the provisions of this code or in a dangerous or unsafe manner, the *code official* is authorized to issue a stop work order.

**108.2 Issuance.** The stop work order shall be in writing and shall be given to the owner of the property, the owner's authorized agent, or the person performing the work. Upon issuance of a stop work order, the cited work shall immediately cease. The stop work order shall state the reason for the order and the conditions under which the cited work is authorized to resume.

**108.3 Emergencies.** Where an emergency exists, the *code official* shall not be required to give a written notice prior to stopping the work.

**108.4 Failure to Comply.** Any person who shall continue any work after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be subject to fines established by the authority having jurisdiction.

## **109 BOARD OF APPEALS.**

**109.1 General.** In order to hear and decide appeals of orders, decisions, or determinations made by the *code official* relative to the application and interpretation of this code, there shall be and is hereby created a board of appeals. The *code official* shall be an ex officio member of said board but shall not have a vote on any matter before the board. The board of appeals shall be appointed by the governing body and shall hold office at its pleasure. The board shall adopt rules of procedure for conducting its business and shall render all decisions and findings in writing to the appellant with a duplicate copy to the *code official*.

**109.2 Limitations on Authority.** An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder have been incorrectly interpreted, the provisions of this code do not fully apply or an equally good or better form of construction is proposed. The board shall not have the authority to waive the requirements of this code.

**109.3 Qualifications.** The board of appeals shall consist of members who are qualified by experience and training and are not employees of the jurisdiction.

## **Chapter 2 Definitions**

### **201 GENERAL.**

**201.1 Scope.** Unless stated otherwise, the following words and terms in this code shall have the meanings indicated in this chapter.

**201.2 Interchangeability.** Words used in the present tense include the future; words in the masculine gender include the feminine and neuter; the singular number includes the plural and the plural includes the singular.

**201.3 Terms defined in other codes.** Terms that are not defined in this code but are defined in the International Building Code, International Fire Code, International Fuel Gas Code, International Mechanical Code, International Plumbing Code, International Energy Conservation Code, or International Residential Code shall have the meanings ascribed to them in those codes.

**201.4 Terms not defined.** Terms not defined by this chapter shall have ordinarily accepted meanings such as the context implies.

## **202 GENERAL DEFINITIONS.**

**APPROVED.** Acceptable to the *code official*.

**APPROVED AGENCY.** An established and recognized agency that is regularly engaged in conducting tests or furnishing inspection services, or furnishing product certification, where such agency has been approved by the *code official*.

**CODE OFFICIAL.** The officer or other designated authority charged with the administration and enforcement of this code, or a duly authorized representative.

**COMBUSTION EQUIPMENT.** For this code, any equipment or appliance used for space-heating, service water heating, cooking, clothes drying or lighting that uses *fuel gas* or *fuel oil*.

**COMMERCIAL BUILDING.** Commercial buildings are defined, for this code, as all commercial buildings and R-Occupancies that are covered by the International Building Code.

**CORE AND SHELL.** The first phase of a commercial project that has the outer building envelope constructed and may contain interior lighting and heating and has not received a permanent Certificate of Occupancy.

**DIRECT CURRENT FAST CHARGER (DCFC) EVSE.** Equipment capable of fast charging on a 100A or higher 480VAC three-phase branch circuit. AC power is converted into a controlled DC voltage and current within the *EVSE* that will then directly charge the *electric vehicle*.

**ELECTRIC VEHICLE (EV).** An automotive-type vehicle for on-road use, including but not limited to, passenger automobiles, buses, trucks, vans, neighborhood electric vehicles, and electric motorcycles, primarily powered by an electric motor that draws current from a building electrical service, *EVSE*, a rechargeable storage battery, a fuel cell, a photovoltaic array, or another source of electric current. Off-road, self-propelled electric mobile equipment, including but not limited to, industrial trucks, hoists, lifts, transports, golf carts, airline ground support equipment, tractors, and boats are not considered electric vehicles.

**ELECTRIC VEHICLE CAPABLE SPACE (EV CAPABLE SPACE).** A designated vehicle parking space that has the electric panel capacity and conduit and/or raceway installed to support future implementation of *electric vehicle* charging.

**ELECTRIC VEHICLE CAPABLE LIGHT SPACE (EV CAPABLE LIGHT SPACE).** A designated vehicle parking space that has conduit and/or raceway installed to support future implementation of *electric vehicle* charging installation, and has sufficient physical space adjacent to the existing electrical equipment for future electric upgrades.

**ELECTRIC VEHICLE READY SPACE (EV READY SPACE).** A designated vehicle parking space that has the electric panel capacity, raceway wiring, receptacle or junction box, and circuit overprotection devices installed to support future implementation of *electrical vehicle* charging.

**ELECTRIC VEHICLE SUPPLY EQUIPMENT (EVSE).** An *electric vehicle* charging system or device that is used to provide electricity to a plug-in *electric vehicle* or *plug-in hybrid electric vehicle*, is designed to ensure that a safe connection has been made between the electrical grid and the vehicle, and is able to communicate with the vehicle's control system so that electricity flows at an appropriate voltage and current level.

**ELECTRIC VEHICLE SUPPLY EQUIPMENT INSTALLED SPACE (EVSE INSTALLED SPACE).** A vehicle parking space that is provided with a dedicated *EVSE* connection.

**FIRST TENANT FINISH.** The first tenant finish(es) in a new structure or *core and shell* building that is credited towards meeting the requirements of this Chapter.

**FUEL GAS.** A natural gas, manufactured gas, liquefied petroleum gas, or mixtures of these gasses.

**FUEL OIL.** Kerosene or any hydrocarbon oil having a flash point of not less than 100°F (38°C).

**FUTURE ELECTRIC EQUIPMENT.** Equipment necessary to support future all-electric space and water heating equipment or appliances.

**PLUG-IN HYBRID ELECTRIC VEHICLE.** An *electric vehicle* having a second source of motive power.

**RESIDENTIAL BUILDING.** Residential buildings are defined, for this code, as one- and two-family dwellings and townhouses as defined in the International Residential Code.

**SOLAR-READY ZONE.** A section or sections of the roof or building overhang designated and reserved for future installation of a solar photovoltaic system or solar thermal system.

## Chapter 3 Electric Ready

### PART 1 RESIDENTIAL ELECTRIC READY

#### SECTION RE301 – SCOPE

**RE301.1 General.** These provisions shall be applicable for all new construction.

#### SECTION RE302 Additional Electric Infrastructure

**RE302.1 Additional Electric Infrastructure.** *Combustion equipment in residential buildings* must meet the requirements of Sections **RE302.2** through **RE302.6**.

**Exception:** Interior and exterior fireplaces and fire pits.

**RE302.2 Combustion Equipment.** *Combustion equipment* shall be provided with all of the following:

1. A dedicated, appropriately phased branch circuit sized to accommodate future electric equipment or appliances to serve a comparable capacity to meet the heating load.
2. An electric receptacle or junction box that meets the requirements of Section **RE302.5**, and is connected to the electrical panel through the branch circuit. Each electrical receptacle or junction box shall have reasonable access to the *combustion equipment* or dedicated physical space for *future electric equipment* with no obstructions other than the current *combustion equipment*.
3. Where *combustion equipment* is used for space or water heating, dedicated physical space shall be provided for *future electric equipment*, including an electric resistance backup coil for ducted systems, if applicable.

**Exception:** Dwelling units with installed air conditioning systems are not required to provide additional dedicated physical space for an outdoor heat pump.

**RE302.3 Electrical Panel Space.** The electrical panel shall have a reserved space for a minimum two-pole circuit breaker for each branch circuit provided for *future electric equipment* or appliances.

**RE302.4 Labeling.** The junction box or receptacle and the dedicated circuit breaker space serving *future electric equipment* or appliances in the electrical panel shall be labeled for their intended use.

**RE302.5 Adjacency.** The electrical receptacle or junction box must be provided within 3 feet of the *combustion equipment* or appliances, or within 3 feet of the dedicated physical space for *future electric equipment* or appliances.

**Exception:** For *combustion equipment* dedicated to space or water heating, the electrical receptacle or junction box shall be located not more than 6 feet from the *combustion equipment* or the dedicated physical space for *future electric equipment*.

**RE302.6 Condensate Drain.** Where *combustion equipment* for space heating is installed, a location shall be provided for condensate drainage.

## PART 2 COMMERCIAL ELECTRIC READY

### SECTION CE301 – SCOPE

**CE301.1 General.** These provisions shall be applicable for all new buildings, additions, and *first tenant finish* permits.

**CE301.1.1 First Tenant Finishes.** In the case that a *first tenant finish* to a commercial *core and shell* building or unfinished space is credited towards meeting the requirements of this Chapter, the *code official* shall not issue a Certificate of Occupancy to the tenant until the requirements of Section **CE302** are met.

### SECTION CE302 – Additional Electric Infrastructure

**CE302.1 Additional Electric Infrastructure.** *Combustion equipment* in commercial buildings shall meet the electric infrastructure requirements of Sections **CE302.2** or **CE302.3**.

#### Exceptions:

1. Interior and exterior fireplaces and fire pits.
2. Additions to buildings that do not provide new space-heating equipment and connect to existing space-heating equipment and ductwork will not be required to provide additional electrical infrastructure to the existing space-heating equipment.

**CE302.2 Commercial buildings less than 10,000 sq. ft.** *Commercial buildings*, excluding R-occupancies, that have a gross floor area of less than 10,000 sq. ft., and all R-occupancies of any size, shall comply with Sections **CE302.2.1** through **CE302.2.6**.

**CE302.2.1 Combustion Equipment.** *Combustion equipment* shall be provided with all of the following:

1. A dedicated, appropriately phased branch circuit sized to accommodate *future electric equipment* or appliances to serve a comparable capacity to meet the heating load.
2. An electric receptacle or junction box that meets the requirements of Section **CE302.2.5**, and is connected to the electrical panel through the branch circuit. Each electrical receptacle or junction box shall have reasonable access to the *combustion equipment* or dedicated physical space for *future electric equipment* with no obstructions other than the current *combustion equipment*.
3. Where *combustion equipment* is used for space or water heating, dedicated space shall be provided for all *future electric equipment*, including an electric resistance backup coil for ducted systems if applicable.

**Exception:** Buildings with installed air conditioning systems are not required to provide additional dedicated physical space for an outdoor heat pump.

**CE302.2.3 Electrical Panel Space.** The electrical panel shall have reserved physical space for a minimum two-pole or three-pole circuit breaker for each branch circuit provided for *future electric equipment* or appliances. The physical space in the electrical panel for each circuit breaker shall be sized with sufficient breaker capacity to meet the electrical demand of the *future electric equipment* or appliance that is sized to serve a comparable capacity to meet the heating load.

**CE302.2.4 Labeling.** The junction box or receptacle and the dedicated circuit breaker space serving *future electric equipment* or appliances in the electrical panel shall be labeled for their intended use.

**CE302.2.5 Adjacency.** The electrical receptacle or junction box must be provided within 3 feet of the *combustion equipment* or appliances or within 3 feet of the dedicated physical space for *future electric equipment* or appliances.

**Exception:** For *combustion equipment* dedicated to space or water heating, the electrical receptacle or junction box shall be located not more than 6 feet from the *combustion equipment* or the dedicated physical space for *future electric equipment*.

**CE302.2.6 Condensate Drain.** Where *combustion equipment* for space-heating is installed, a location shall be provided for condensate drainage.

**CE302.3 Commercial Buildings 10,000 sq. ft. or Greater.** All *commercial buildings* that have a gross floor area of 10,000 sq. ft. or greater shall comply with the following requirements.

**Exception:** R-occupancies.

**CE302.3.1 Combustion Equipment or Appliances.** All *combustion equipment* shall be provided with the following:

1. A dedicated, appropriately phased branch circuit sized to accommodate *future electric equipment* or appliances to serve a comparable capacity to meet the heating load.
2. Where *combustion equipment* is used for space and water heating, dedicated physical space shall be provided for all *future electric equipment*.

**CE302.3.2 Electrical Panel Space.** The electrical panel shall have reserved physical space for a minimum two-pole or three-pole circuit breaker for each branch circuit provided for *future electric equipment* or appliances. The physical space in the electrical panel for each circuit breaker shall be sized with sufficient breaker capacity to meet the electrical demand of the *future electric equipment* or appliance that is sized to serve a comparable capacity to meet the heating load.

**CE302.3.3 Labeling.** The dedicated circuit breaker space serving *future electric equipment* or appliances in the electrical panel shall be labeled "For future electric equipment".

**CE302.3.4 Physical Space.** Dedicated physical space shall be provided for additional electric equipment, including but not limited to transformers and cabinets, necessary for electrical service to *future electric equipment* or appliances.

## Chapter 4 Solar Ready

### PART 1 RESIDENTIAL SOLAR READY.

#### SECTION RS401 – SCOPE.

**RS401.1 General.** These provisions shall be applicable for new construction.

#### SECTION RS402 – SOLAR READY ZONE.

**RS402.1 General.** New *residential buildings* with not less than 600 square feet of roof area oriented between 110 degrees and 270 degrees of true north or that is a low-sloped roof, shall comply with Sections **RS402.2** through **RS402.8**.

##### Exceptions:

1. New residential dwelling units with a permanently installed on-site renewable energy system that provides electricity to the dwelling unit's electrical system.
2. A building where all areas of the roof that would otherwise meet the requirements of Section **RS402** are in full or partial shade for more than 70 percent of daylight hours annually.

**RS402.2 Construction document requirements for solar-ready zone.** Construction documents shall indicate the *solar-ready zone*.

**RS402.3 Solar-ready zone areas.** The total *solar-ready zone* area for each dwelling unit shall be not less than 300 square feet exclusive of mandatory access or setback

areas as required by the International Fire Code. The *solar-ready zone* shall be composed of areas not less than 5 feet in width and not less than 80 square feet exclusive of access or setback areas as required by the International Fire Code.

**Exception:** New townhouses three stories or less in height above grade plane and with a total floor area less than or equal to 2,000 square feet of conditioned space per townhouse unit shall have a *solar-ready zone* area of not less than 150 square feet.

**RS402.4 Obstructions.** *Solar-ready zones* shall be free from obstructions, including but not limited to vents, chimneys, and roof-mounted equipment.

**RS402.5 Shading.** The *solar-ready zone* shall be set back from any existing or new permanently affixed object on the building or site that is located south, east, or west of the *solar-ready zone* a distance not less than two times the object's height above the nearest point on the roof surface. Such objects include, but are not limited to, taller portions of the building itself, parapets, chimneys, antennas, signage, rooftop equipment, trees, and roof plantings.

**RS402.6 Roof load documentation.** The structural design loads of roof dead load and roof live load shall be clearly indicated on the construction documents.

**RS402.7 Interconnection pathway.** Construction documents shall indicate pathways for routing of conduit and/or raceway from the *solar-ready zone* to the electrical service panel.

**RS402.8 Electrical service reserved space.** The main electrical service panel shall have sufficient reserved space to allow the installation of a dual pole circuit breaker for future solar electric installation and shall be labeled "For Future Solar Electric." The reserved space shall be positioned at the opposite (load) end from the input feeder location or main circuit location.

## PART 2 COMMERCIAL SOLAR READY

### SECTION CS401 – SCOPE

**CS401.1 General.** These provisions shall be applicable for new construction.

### SECTION CS402 – SOLAR-READY ZONE

**CS402.1 General.** A *solar-ready zone* shall be located on the roof of all new *commercial buildings* and are oriented between 110 and 270 degrees of true north or have low-slope roofs. *Solar-ready zones* shall comply with Sections **CS402.2** through **CS402.7**.

#### Exceptions:

1. A building with a permanently-installed, on-site renewable energy system that meets the following criteria.
  1. The system produces the energy output equivalent to covering 40 percent of the net roof area with solar photovoltaic calculated as the horizontally projected gross roof area less the area covered by skylights, occupied roof decks, vegetative roof areas, and mandatory access or set back areas as required by the International Fire Code.
  2. The system is located on the roof or overhang of the building or on the roof or overhang of another structure located within 250 feet of the building, on the building premise, on covered parking, or another *approved* location installed with the building project and under the same property ownership.
2. A building with a *solar-ready zone* that is shaded for more than 70 percent of daylight hours annually.
3. A building where the licensed design professional certifies that the incident solar radiation available to the building is not suitable for a *solar-ready zone*.

4. A building where the licensed design professional certifies that the *solar-ready zone* area required by Section **CS402.3** cannot be met because of extensive rooftop equipment, skylights, vegetative roof areas, or other obstructions.

**CS402.2 Construction document requirements for a solar-ready zone.** Construction documents shall indicate the *solar-ready zone*.

**CS402.3 Solar-ready zone area.** The total *solar-ready zone* area shall not be less than 40 percent of the roof area calculated as the horizontally projected gross roof area less the area covered by skylights, occupied roof decks, vegetative roof areas, and mandatory access or set back areas as required by the International Fire Code. The *solar-ready zone* shall be a single area or smaller, separated sub-zone areas. Each sub-zone area shall be not less than 5 feet in width in the narrowest dimension.

This zone shall be located on the roof or overhang of the building or on the roof or overhang of another structure located within 250 feet of the building, on the building premise, on covered parking, or another *approved* location installed with the building project and under the same property ownership .

**CS402.4 Obstructions.** *Solar-ready zones* shall be free from obstructions, including pipes, vents, ducts, HVAC equipment, skylights, and roof-mounted equipment.

**CS402.5 Roof loads and documentation.** A collateral dead load of not less than 5 pounds per square foot shall be included in the gravity and lateral design calculations of the *solar-ready zone*. The structural design loads for roof dead load and roof live load shall be indicated on the construction documents.

**CS402.6 Interconnection pathway.** Construction documents shall indicate pathways for routing of conduit and/or raceway from the *solar-ready zone* to the electrical service panel.

**CS402.7 Electrical service reserved space.** The main electrical service panel shall have a minimum bus bar rating of not less than 200 amps. The main electrical service panel shall have a reserved space to allow installation of a dual-pole circuit breaker for future solar electric. These spaces shall be labeled "For Future Solar

Electric.” The reserved spaces shall be positioned at the end of the panel that is opposite from the panel supply conductor connection.

## **PART 3 RESIDENTIAL SOLAR PANEL CAPACITY**

### **SECTION RS410 – SCOPE**

**RS410.1 General.** These provisions shall be applicable for all new construction.

**RS410.2 Electric Service Reserved Space.** The main electrical service panel shall have sufficient reserved space to allow installation of a dual pole circuit breaker for future solar electric installation and shall be labeled “For Future Solar Electric.” The reserved space shall be positioned at the opposite (load) end from the input feeder location or main circuit location.

**Exception:** A dwelling unit that already must comply with the solar-ready provisions in Chapter 4.

## **PART 4 COMMERCIAL SOLAR PANEL CAPACITY**

### **SECTION CS410 – SCOPE**

**CS410.1 General.** These provisions shall be applicable for new construction.

**CS410.2 Electric Service Reserved Space.** The main electrical service panel shall have a minimum bus bar rating of not less than 200 amps. The main electrical service panel shall have sufficient reserved space to allow installation of a dual pole circuit breaker for future solar electric installation and shall be labeled “For Future Solar Electric.” The reserved space shall be positioned at the opposite (load) end from the input feeder location or main circuit location.

**Exception:** A building that already must comply with the solar-ready provisions in Chapter 4.

## PART 5 JURISDICTIONAL OPTIONS

**CS403.X Electrical energy storage system-ready area.** The floor area of the electrical energy storage system-ready area shall be not less than 2 feet in one dimension and 4 feet in another dimension, and located in accordance with Section 1207 of the International Fire Code. The location and layout diagram of the electrical energy storage system-ready area, including the conduit and/or raceway or plumbing running to the energy storage system-ready area, shall be indicated on the construction documents. The main electrical service panel shall have a reserved space to allow installation of a dual-pole circuit breaker for future electrical energy storage system installation.

**RS403.X / CS403.X Construction documentation certificate.** A permanent certificate, indicating the *solar-ready zone* and other requirements of Chapter 1/Chapter 2, shall be posted near the electrical distribution panel, water heater, or other conspicuous location by the builder or registered design professional.

## Chapter 5 Electric Vehicle Ready

### PART 1 RESIDENTIAL ELECTRIC VEHICLE READY

#### SECTION RV501 – SCOPE

**RV501.1 General.** These provisions shall be applicable for all new construction.

#### SECTION RV502 Electric Vehicle Power Transfer Infrastructure

**RV502 Electric Vehicle Power Transfer Infrastructure.** New vehicle parking spaces for *residential buildings* shall be provided in accordance with Sections **RV502.1** and **RV502.3**.

**RV502.1 One- and Two-family dwellings and townhouses.** Each dwelling unit with a dedicated attached or detached garage or other onsite designated parking provided for the dwelling unit shall be provided with one *EV ready space* per dwelling unit.

**RV502.2 EV Ready Spaces.** Each *EV ready space* shall have a branch circuit that complies with all of the following:

1. Terminate at a receptacle, located within 3 feet of each *EV ready space* it serves. *EV ready* includes two adjacent parking spaces if the receptacle for the electrical facilities of this section is installed adjacent to and between both parking spaces.
2. Have a minimum circuit capacity of 8.3 kVA (40A 208/240V).
3. The electrical panel, electrical distribution equipment directory, and all outlets or enclosures shall be marked "For future electric vehicle supply equipment".

**RV502.3 Identification.** Construction documents shall designate the *EV ready spaces* and indicate the locations of raceway and/or conduit and the termination points serving them. The circuits or spaces reserved for *EV ready spaces* shall be clearly identified in the panel or subpanel directory.

## **PART 2 COMMERCIAL ELECTRIC VEHICLE READY**

### **SECTION CV501 – SCOPE**

**CV501.1 General.** These provisions shall be applicable for all new construction.

### **SECTION CV502 Electric Vehicle Power Transfer Infrastructure**

**CV502 Electric Vehicle Power Transfer Infrastructure.** Where new parking is provided for *commercial buildings* it shall be provided with *electric vehicle* power transfer infrastructure in compliance with Sections **CV502.1** through **CV502.9**.

**CV502.1 Quantity.** The number of required *EVSE installed spaces*, *EV ready spaces*, *EV capable spaces*, and *EV capable light spaces* shall be determined in accordance with this Section and **Table CV502.1** based on the total number of provided vehicle parking spaces and shall be rounded up to the nearest whole number. This includes all covered parking under carports or detached garages.

**CV102.1.1.** Where more than one parking lot is provided on a building site, the number of provided vehicle parking spaces required to have *EV* power transfer infrastructure shall be calculated separately for each parking lot.

**CV102.1.1.1.** R-2 Occupancies, as defined in Chapter 3 of the International Building Code, shall use the total parking requirement for the entire development to determine the *EV* power transfer infrastructure requirements using **Table CV502.1**.

**CV102.1.2.** All *commercial buildings* that install a *DCFC EVSE installed space* are permitted to substitute for up to five spaces of any type, when the building provides a minimum of 20 percent parking spaces as *EV capable*, *EV ready*, or *EVSE installed* for *commercial buildings* other than R-2 occupancies, or 60 percent for R-2 occupancies.

**CV102.1.3.** *EVSE installed spaces* that exceed the minimum requirements of this section are permitted to be used to meet minimum requirements for *EV ready spaces*, *EV capable spaces*, and *EV capable light spaces*.

**CV102.1.4.** *EV ready spaces* that exceed the minimum requirements of this section are permitted to be used to meet minimum requirements for *EV capable spaces* and *EV capable light spaces*.

**CV103.1.5.** *EV capable spaces* that exceed the minimum requirements of this section are permitted to be used to meet the minimum requirements for *EV capable light spaces*.

**CV103.1.6** All attached garages with direct connection to an apartment will be required to have one *EV ready space*.

Table CV502.1: EV power transfer infrastructure requirements

<b>Building Type / Space Type</b>	<b><i>EVSE Installed Space</i></b>	<b><i>EV Ready Space</i></b>	<b><i>EV Capable Space</i></b>	<b><i>EV Capable Light Space</i></b>
<b>All commercial buildings with 10 or</b>	0	2 spaces	0	0

<b>less parking spaces.</b>				
<b>Commercial buildings, except for R-2 occupancies, with greater than 10 parking spaces.</b>	2% of spaces	8% of spaces	10% of spaces	10% of spaces
<b>R-2 occupancies with greater than 10 parking spaces.</b>	5% of spaces	15% of spaces	10% of spaces	30% of spaces

**CV502.2 EV Capable Light Spaces.** Each *EV capable light space* shall comply with all of the following:

1. A continuous raceway and/or conduit shall be installed between a suitable electrical panel or other electrical distribution equipment and terminate within 3 feet of the *EV capable light space* and shall be capped. *EV capable light* includes two adjacent parking spaces if the raceway and/or conduit for the electrical facilities terminates adjacent to and between both parking spaces.
2. Installed raceway and/or conduit shall be sized and rated to supply a minimum of 208 volts and a minimum of 40-ampere rated circuits.
3. Dedicated physical space to accommodate all equipment necessary for electrical service to future *EV* supply equipment.
4. The routing of the raceway and/or conduit must be noted on the construction documents and the raceway shall be permanently and visibly marked "EV CAPABLE" at the load center and termination point locations.

**CV502.3 EV Capable Spaces.** Each *EV capable space* shall comply with all of the following:

1. A continuous raceway and/or conduit shall be installed between a suitable electrical panel or other electrical distribution equipment and terminate within

3 feet of the *EV capable space* and shall be capped. *EV capable* includes two adjacent parking spaces if the raceway and/or conduit for the electrical facilities terminates adjacent to and between both parking spaces.

2. Installed raceway and/or conduit shall be sized and rated to supply a minimum of 208 volts and a minimum of 40-ampere rated circuits.

3. The electrical panel or other electrical distribution equipment to which the raceway and/or conduit connects shall have sufficient dedicated space and spare electrical capacity to supply a minimum of 208 volts and a minimum of 40-ampere rated circuits.

4. The termination point of the conduit and/or raceway and the electrical distribution equipment directory shall be marked: "For future electric vehicle supply equipment (EVSE)."

5. Reserved capacity shall be no less than 8.3 kVA (40A 208/240V) for each *EV capable space*.

**CV502.4 EV Ready Spaces.** Each *EV ready space* shall have a branch circuit that complies with all of the following:

1. Terminate at a receptacle or junction box, located within 3 feet of each *EV ready space* it serves. *EV ready* includes two adjacent parking spaces if the receptacle for the electrical facilities of this section is installed adjacent to and between both parking spaces.

2. Have a minimum circuit capacity of 8.3 kVA (40A 208/240V).

3. The electrical panel, electrical distribution equipment directory, and all outlets or enclosures shall be marked "For future electric vehicle supply equipment (EVSE)."

**CV502.5 Electric Vehicle Supply Equipment (EVSE).** All *EVSE* shall meet all of the following requirements:

1. The installed *EVSE* shall meet one of the following requirements:

1. A power capacity of at least 6.2 kilowatts and has the ability to connect to the internet.

2. An inductive charging system for battery-powered electric vehicles that:

- 2.1. Is ENERGY STAR certified; and

- 2.2. Has the ability to connect to the internet.

2. An *electric vehicle* charging system shall be wall-mounted or pedestal style and may provide multiple cords to connect with *electric vehicles*.

3. An *electric vehicle* charging system shall be listed and labeled for *EV* charging and must comply with the current version of Article 625 of the National Electrical Code.

**CV502.6 EVSE Installed Spaces.** An installed *EVSE* with multiple output connections shall be permitted to serve multiple *EVSE installed spaces*. Each *EVSE* installed serving either a single *EVSE installed space* or multiple *EVSE installed spaces*, shall comply with all of the following:

1. Have a minimum charging rate in accordance with Section **CV502.7**.

2. Be located within 3 feet of each *EVSE installed space* it serves.

3. Be installed in accordance with Section **CV502.8**.

4. Have a minimum circuit capacity of 8.3 kVA (40A 208/240V).

5. Must meet the requirements of Section **CV502.5**.

**CV502.7 EVSE Minimum Charging Rate.** Each installed *EVSE* shall comply with one of the following:

1. Be capable of charging at a minimum rate of 6.2 kVA (or 30A at 208/240V).

2. When serving multiple *EVSE spaces* and controlled by an energy management system providing load management, be capable of

simultaneously sharing each *EVSE space* at a minimum charging rate of no less than 3.3 kVA.

**CV502.8 EVSE Installation.** *EVSE* shall be installed in accordance with NFPA 70 and shall be listed and labeled in accordance with UL 2202 or UL 2594. When serving an accessible parking space, *EVSE* shall be accessible in accordance with the International Building Code Chapter 11.

**CV502.9 Identification.** Construction documents shall designate all *EVSE installed spaces, EV ready spaces, EV capable spaces, and EV capable light spaces* and indicate the locations of raceway and/or conduit and termination points serving them. The circuits or spaces reserved for *EVSE installed spaces, EV ready spaces, and EV capable spaces* shall be clearly identified in the panel or subpanel directory. The raceway and/or conduit for *EV ready spaces, EV capable spaces and EV capable light spaces* shall be clearly identified at both the panel or subpanel and the termination point at the parking space.

## **JURISDICTIONAL OPTIONS**

**RV / CV Disbursement.** Required *EVSE installed spaces, EV ready spaces, EV capable spaces, and EV capable light spaces* shall be dispersed throughout parking areas in R-2 occupancies that contain multiple buildings so that each building has access to roughly the same number of spaces.

**RV / CV Service Fees.** The property owner is not restricted from collecting a service fee for the use of an *EV* charger utilized at a required *EVSE* made available to residents, employees, and visitors to the property.

The property owner may limit the use of *EV* charging spaces to ensure that it remains available for employees and customers.

REMINDER: All adoptions after July 1, 2023 must include solar-ready, electric-ready, and EV-ready. Adoptions before that date are flexible.

## OPTION 1: IECC + State Model Code

- Currently in near-final draft form; final expected June 1
- Includes all items below in one document
- Can't as easily be changed or amended

### Solar-Ready

- Based on IECC Appendices CB and RB
- Includes all multifamily

### EV-Ready

- 1 EV-ready spot per home
- Combination of EV-capable-light, EV-capable, EV-ready, and EV-installed for multifamily and commercial
- Stronger requirements for multifamily than commercial

### Electric-Ready

- Fairly basic/standard language

### Commercial Energy Storage-Ready

- Optional for jurisdictions

## OPTION 2: IECC + Cohort Package

- Combination of official IECC appendices and other local code language
- Pick which items you want to include
- Each item could be strengthened or weakened

### Solar-Ready

- IECC Appendices CB and RB (adopt by reference)
- Needs a small amendment to includes all multifamily
- Could be strengthened to require, for instance, a certain amount of solar on new commercial and multifamily buildings

### EV-Ready

- No "official" ICC language (can't be adopted by reference) but the language is fairly standard
- Local jurisdictions adjust the numbers/percentages

### Electric-Preferred

- No "official" ICC language (can't be adopted by reference) but the language is fairly standard
- Requires extra energy efficiency when using fossil fuels
- Could be weakened to be just "electric-ready" or strengthened to "all electric with exceptions"

### Commercial Energy Storage-Ready

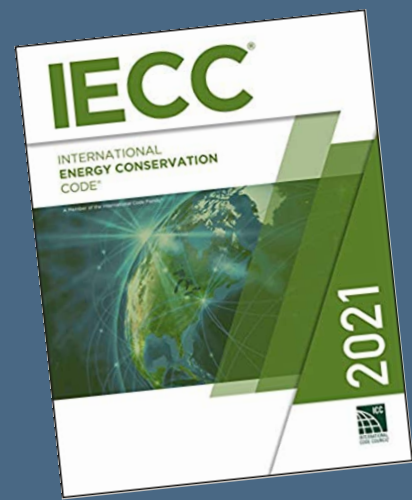
- Automatically included in Solar-Ready Appendix CB

Optional Add-on: IECC Net Zero Appendices CC and RC

All One Package

# 2021 International Energy Conservation Code

Prepared for the DOLA Code Cohort of  
Northwest Metro Area / Boulder County



**About I-Codes:** Building codes improve the quality of construction of the built environment and thereby promote the health, safety, resiliency, affordability, sustainability, and general welfare of our communities. Building codes set a bare minimum construction quality that local officials deem necessary and that consumers expect. Most jurisdictions across the country adopt model building codes published by the International Code Council, and these are updated every three years in an extensive process involving builders, trades, architects, manufacturers and suppliers, low-income advocates, and, crucially, local building officials who are ultimately responsible for enforcing the codes. These codes are then adopted at local level. The 2021 codes are the most recent edition.

**About the 2021 International Energy Conservation Code (IECC):** After two previous cycles of stagnant efficiency, building officials voted overwhelmingly in favor of provisions in the latest IECC to strengthen energy efficiency. Overall, the 2021 IECC reduces energy by 8-9% (and reduces energy bills by 8-9%) compared to the previous 2018 IECC. The 2021 also includes language clean-up and clarifications, and an expanded focus on flexibility and options. Most of the changes "tighten up" provisions already in the code. Key changes for residential new construction include a better "thermal envelope" (e.g. walls, insulation, windows, doors, etc.), windows that take into account "solar heat gain" in climate zone 5B (the climate zone for the front range of Colorado), changes to duct testing, and increased use of lighting controls. On the commercial side, key changes include air barrier commissioning (i.e. testing and verification of the layer in walls that keeps outside air out and clean, conditioned inside air in), more efficient mechanical systems, technology for energy monitoring in larger buildings so that building operators can better measure and track their building's energy use, and increased options for additional energy efficiency "points."

**Jurisdictions with the 2021 IECC:** Arapahoe County, Aurora, Carbondale, Crested Butte, Denver, Dolores, Erie, Fort Collins, Golden, Larimer County, Littleton, Longmont, Louisville, Parker, Superior, and Vail. At least 66 other jurisdictions covering 70% of Colorado's population have announced plans to adopt the 2021 IECC in the next year.

**New Colorado Law (2022):** The Colorado legislature passed a new bipartisan law that updates minimum energy code requirements. Jurisdictions must adopt at least the 2021 IECC, along with EV-ready, PV-ready, and electric-ready, when updating any other building codes between July 1, 2023 and July 1, 2026. After that date, jurisdictions must adopt at least a low-energy and carbon code. A new Energy Code Board will identify code language for the EV-ready, PV-ready, electric-ready, and low energy and carbon code, and jurisdictions can choose to adopt that code language, something equivalent, or something stronger.

**Cost Discussion:** An extensive [analysis](#) from the Pacific Northwest National Labs (PNNL, the entity charged by the U.S. Congress to perform energy code cost-effectiveness studies) calculates that the increased first cost per household is \$3,376 for the 2021 IECC versus the 2015 IECC in Climate Zone 5B (as of Dec. 2021). PNNL's analysis is considered the most credible compared to other estimates because of PNNL's long-standing peer-reviewed methodology, and its absence of profit motive or conflict of interest. The majority of the first cost increase compared to the 2015 IECC is an increase in insulation levels. (Cost data is roughly similar between the 2015 and 2018 IECC, since the efficiency levels were similar.)

Increased First Cost (vs 2015)	Mortgage Increase	Annual Energy Savings	Net Savings	Years to Positive Savings	Lifecycle Cost Savings
\$3,376	\$122	\$161	\$20/yr	9	\$1,247

Other studies of incremental upfront costs to builders for the 2021 IECC (not including local, state, utility, or federal incentives):

- ICF International: \$3,651-\$4,809
- PNNL for Louisville using NAHB 19% inflation adder and larger house size: \$5,118
- City of Louisville (via Group 14) survey of two local builders: \$6,450
- Diverge Homes (high-end efficient homes in Marshall Fire area: \$8,000
- NAHB (via Home Innovation Research Lab): \$9,435-\$11,900 (note: ICF study found HIRL study used incorrect economic assumptions)

**Mild/Medium/Aggressive Rating:** Mild. The 2021 IECC is the minimum energy code required by the state of Colorado and even before the state law, jurisdictions covering half of Colorado's population had already announced plans to adopt it. As such, "mild" also includes EV-ready, PV-ready, and electric-ready as required by Colorado law. A "medium" rating would include a higher degree of electric transition – for instance, allowing a choice of either all-electric or mixed fuel new construction but requiring mixed fuel homes and buildings to pursue additional energy efficiency to make up for the extra emissions from fossil gas use onsite. An "aggressive" rating would include either all-electric requirements, the zero energy appendices, or both.

**Prepared For:** DOLA Code Cohort for Northwestern Metro / Boulder County

**Date Updated:** January 8, 2023



# Solar-Ready

Prepared for the DOLA Code Cohort of  
Northwest Metro Area / Boulder County



**About:** Solar-Ready appendices (RB for residential and CB for commercial) are officially prepared by the International Code Council as “add-on” to the IECC. They prepare homes and buildings for the future installation of solar by requiring conduit, space on the electrical panel, space reserved on the roof free from obstructions and shady objects, adequate roof structural capacity, notation on construction documentation, and a permanent certificate. Shady roofs are exempted. The current appendices only include multifamily buildings 4-5 stories tall, so an amendment is needed to include all multifamily buildings – a provision we call “expanded solar-ready”.

**Cost Discussion:** Upfront costs are minimal (<\$200). Cost savings include avoiding the need to tear up walls, redo wiring, and potentially upgrade an electrical panel. They also avoid the situation where roof penetrations for attic vents, etc. are poorly placed in a way that prevents future solar.

**Jurisdictions with Solar-Ready:** Avon, Boulder, Boulder County, Breckenridge,\* Carbondale, Craig, Crested Butte, Denver, Fort Collins, Frisco,\* Golden, Lafayette, Louisville, Superior, Vail, and Wheat Ridge. Others considering or in the process of adopting it, besides Code Cohort communities, include Eagle County (\*via Summit County sustainability program). Note: a new 2022 Colorado law requires all upcoming IECC adoptions to include solar-ready provisions equivalent to or better than a version to be identified by the state's Energy Code Board. We highly anticipate Appendices RB and CB with the multifamily fix will meet the law.

**Mild/Medium/Aggressive Rating:** Mild. A “medium” rating would require solar to actually be installed on some buildings for part of the energy load, plus a residential solar access law. An “aggressive” rating would require solar installed on all buildings for all of the energy load, a residential solar access law, and a retrofit policy.

**Prepared For:** DOLA Code Cohort of Northwest Metro / Boulder County

**Date Updated:** November 9, 2022



**LOTUS**  
Engineering & Sustainability



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# EV-Ready

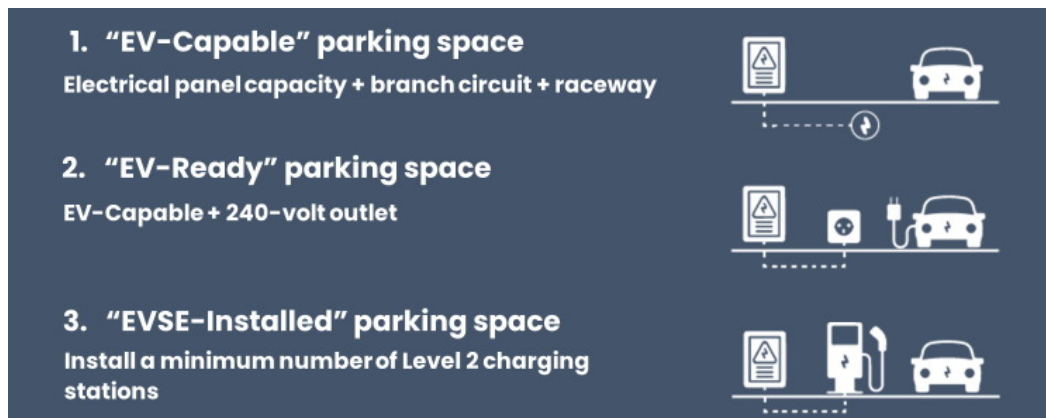
Prepared for the DOLA Code Cohort of  
Northwest Metro Area / Boulder County



**About:** Electric Vehicle Ready (EV-Ready) appendices prepare homes and buildings for the current transition to electric vehicles. These appendices recognize that the vast majority of all electric vehicle charging will occur at home, with some charging infrastructure needed at work or around town. New single family homes will require one EV-ready space, and new multifamily and commercial buildings will require a percentage of EV-capable, EV-ready, and EV-installed spaces depending on the building type and use.

- Note: EV-ready is especially important for multifamily buildings, for equity reasons, since renters can't retrofit their parking lot or garage to install a 240-volt outlet on their own.

These percentages align with levels recently approved by Denver's code committee, and are less than the percentages adopted in some other jurisdictions (Superior, for instance). Multifamily percentages were reduced to ease the cost impact to new housing, and commercial building percentages were reduced to account for charging behavior based on building type.



Building Type	Minimum EV Installed Spaces	Minimum EV Ready Spaces	Minimum EV Capable Spaces
Single-family Duplex, Townhome	N/A	1 Space	N/A
Group A, B, E, M	10%	5%	10%
Group F, I, R-3, R-4	2%	0%	5%
Group R-1 and R-2 <sup>a</sup>	15%	5%	40%
Group S-2 Parking Garages	10%	5%	0%

a. Where all (100%) parking serving R-2 occupancies are EV ready spaces, requirements for EVSE spaces for R-2 occupancies shall not apply.

(In I-code terminology, Group A is Assembly, B is Business, E is Education, F is Factory & Industrial, I is Institutional, M is Mercantile, R-1 is transient residential, R-2 is apartments and other non-transient residential, R-3 and R-4 are small group homes including halfway houses, rehab centers, care facilities, etc., and S is Storage.)

**Market Discussion:** EVs comprised [9% of new vehicle sales](#) in Colorado in Q1 2022, and dealers continue to have long waitlists, especially with the recent rises in gas prices. [All major auto brands](#) have announced plans to shift the majority of their fleets to EVs by the mid-2030s or sooner. Newer models have ranges of well over 300 miles. Besides the reduced environmental impact, buyers like the faster acceleration, the low maintenance, the safety ratings, and the convenience of avoiding trips to the gas station.

**Cost Discussion:** One EV-ready space for a single-family home averages about [\\$325-\\$400](#) at the time of construction. Federal and Xcel Energy rebates are available. Retrofitting even just the wiring later can run [\\$481-\\$1,493](#) per space (depending on the distance from the panel to the garage) plus potential costs to upgrade the electrical panel. For commercial and multifamily, costs can run [\\$300](#) for EV-capable, [\\$1,300](#) for EV-ready, and [\\$2,500](#) for EV-Installed per space. Federal, Colorado, and Xcel Energy rebates are available. Retrofits done later can cost several times more, and may include the need to tear up and rebuild walls (and in the case of commercial and multifamily, parking lots and landscaping), redo wiring, and upgrade the electrical panel.

**Climate Impact:** It depends on adoption by homeowners, but for an average-sized household, a new EV in Colorado [reduces CO<sub>2</sub>e](#) 8,175 pounds per year compared to new gas car (a 63% reduction), as of 2022. The CO<sub>2</sub>e reductions improve over time as Xcel's grid adds increasing levels of renewables.

**Jurisdictions with EV-Ready:** Aspen, Avon, Boulder, Boulder County, Breckenridge, Broomfield, Crested Butte, Carbondale, Denver, Dillon, Durango, Eagle County, Fort Collins, Frisco, Golden, Lafayette, Lakewood, Larimer County, Louisville, Longmont, Pueblo County, Steamboat, Summit County, Superior, and Vail, Others in the Code Cohort communities are also planning to adopt it. Note: a new 2022 Colorado law requires all upcoming IECC adoptions to include EV-ready provisions equivalent to or better than a version to be identified by the state's Energy Code Board. We highly anticipate these amendments will meet the new law.

**Mild/Medium/Aggressive Rating:** Medium. A "mild" rating would have lower percentages for commercial and multifamily. An "aggressive" rating would require every space in multifamily to have some level of infrastructure, plus a policy for renovations.

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**Prepared For:** DOLA Code Cohort of Northwest Metro Area / Boulder County

**Date Updated:** November 9, 2022



# Electric-Ready and Electric-Preferred

Prepared for the DOLA Code Cohort of  
Northwest Metro Area / Boulder County



**About:** Electric-ready amendments prepare homes and buildings for the choice between electric and gas equipment and appliances by ensuring they have the wiring and panel capacity available for future electric equipment (and enough physical space, in the case of water heaters). Electric-preferred amendments, the next step, still allow new construction to be either all-electric or "mixed fuel" (e.g. natural gas) but mixed fuel homes and buildings require extra efficiency to make up for extra emissions.

**Code Amendment Specifics:** In particular, the residential amendments in the prescriptive path require mixed fuel homes to select three "additional efficiency packages" instead of one. Mixed fuel homes choosing the "Total Building Performance" pathway would similarly choose three additional efficiency packages instead of one, or have annual energy costs less than or equal to 80% of the standard reference design instead of 95%. Mixed fuel homes choosing the "Energy Rating Index" (ERI) pathway would seek a score of 52 instead of 55.\* For commercial buildings, mixed fuel buildings would choose extra efficiency options totaling an extra 10 points. The amendment also fixes two places in the commercial code where gas systems were given more points than electric.

**Market Developments:** Air source heat pumps have been commonplace in other parts of the country, and are now making inroads in Colorado thanks to rapid technological developments that allow "cold climate" heat pumps to supply heat even when outdoor temps fall to -22F. Other configurations are possible as well, such as a non-cold-climate heat pump plus extra "strip heat" that can kick in for extra cold times. (This configuration is cheaper upfront but more expensive to run in extra cold temperatures.) For water heating, heat pump water heaters are an easy replacement for a typical gas or electric hot water storage tank. Finally, on the cooking side, some homeowners may express a preference for gas, but induction stoves are proving their mettle with twice-as-fast boil times, more finely-tunable controls, safety protections (e.g. the ability to touch the burner and not get burned) and the near-elimination of harmful air pollutants that lead to increased asthma rates and other respiratory distress. Note that reliability of electric systems during a power outage is the same as for gas systems, since gas systems require electricity to run as well.

**Cost Discussion:** Upfront costs depend highly on the configuration selected by the builder. All-electric homes, depending on supply chain availability and builder/contractor familiarity, can be built at [no additional cost](#) compared to mixed fuel [1]. Although the upfront costs of an air source heat pump and heat pump water heater are typically more than gas equivalents, the big savings come from avoiding the gas connection and gas piping costs to and within the home or building, and state and utility rebates offset the cost as well. Separate market transformation efforts are underway to train builders and contractors for the transition to all-electric equipment, and the familiarity and economies of scale are expected to bring total costs down further.

\* Before 5% efficiency required in R401

**(Cost Discussion Cont'd):** For mixed fuel homes, electric-ready infrastructure is estimated at \$300 for a water heater and the same for a stove (or possibly increased to \$400 each with inflation and a tight labor market). No additional costs are incurred for electric readiness for a furnace, because central air conditioning or other space cooling would be provided anyway. The cost of the additional two efficiency packages, required for mixed fuel homes, range from \$467 for the HVAC efficiency option to \$1,453 for the ventilation option (not including inflation since 2021).

**Jurisdictions with Electric-Ready and/or Electric Preferred:** Boulder, Boulder County, Carbondale, Crested Butte (all-electric) Denver (in progress), Fort Collins, Louisville, Superior, other Code Cohort communities (in progress). Note: a new 2022 Colorado law requires all upcoming IECC adoptions to include electric-ready provisions equivalent to or better than a version to be identified by the state's Energy Code Board. We highly anticipate these amendments will be in compliance with the law.

**Mild/Medium/Aggressive Rating:** Medium. A “mild” rating would be just electric ready – i.e. just the wiring and panel capacity. An “aggressive” rating would require all-electric heating and water heating for most residential, multifamily, and commercial buildings, or, even further, no gas connections at all.

[1] Despite a few recent studies, a couple local home builders report challenges getting the costs to “pencil out.” State policies passed since then, like the 10% tax credit for heat pumps, heat pump water heaters, and panels, plus regulatory dockets underway at the Public Utilities Commission, in addition to incentives in the Inflation Reduction Act, may improve the cost calculations.

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**Prepared For:** DOLA Code Cohort of Northwest Metro Area / Boulder County  
**Date Updated:** November 11, 2022



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# Energy Code Amendments

## Background

### **Energy Codes:**

The International Energy Conservation Code (IECC) is one of a suite of model building codes prepared and published by the International Code Council (ICC) and updated every three years through an extensive public process. It is typically adopted by local jurisdictions as part of a comprehensive building code update. Some jurisdictions routinely update their building codes every three years, some “skip a cycle” and update every six years, and some update only occasionally on an as-needed basis.

The 2021 IECC improves energy efficiency 8-9% over the 2018 IECC and 2015 IECC. This translates roughly to 8-9% savings on energy bills. [Finish]

Recently, local jurisdictions have been adding additional provisions to the energy code, to support local jurisdictions’ climate goals or to “future-proof” new homes and buildings for increasingly-common technology. These additional provisions are added either through amendments or appendices or both. They typically include some combination of solar-ready, EV-ready, electrification (either electric-ready, electric-preferred, or all-electric with exceptions), exterior energy offset programs, and/or net zero requirements. Sometimes these additional provisions are called “stretch codes.”

**Colorado State Law:** Colorado state law has specific requirements for local energy code adoptions, but these requirements differ based on if an adoption happens *before* July 1, 2023 or *after* July 1, 2023. Before July 1, 2023, the “old rules” are in effect, whereby any local building code update must include at least one of the three most recent versions of the IECC (i.e. the 2021, 2018, or 2015 edition). After July 1, 2023, the “new rules” kick in, whereby any local building code update must include the 2021 IECC along with solar-ready, EV-ready, and electric ready provisions. To be clear, no changes are necessary or required *until* a local jurisdiction updates any other building codes.

**Overview of Colorado Model Code:** The legislation established an officially-appointed state Energy Code Board to review and develop model solar-ready, EV-ready, and electric-ready code language. Local jurisdictions can choose this model code or can adopt their own custom language that is at least as stringent. The model code is currently titled the “Colorado Model Electric-Ready and Solar-Ready Code.” It does include EV-ready even though that’s not in the title. This model code is in near-final draft version; the final will be released on or before June 1, 2023.

### **Overview of Regional Code Cohorts:**

Prior to and parallel to development of the state’s model code, local jurisdictions in Colorado have been collaborating on drafting and adopting their own regionally-consistent code language. The State of Colorado recently funded two separate Code Cohorts of local governments to review, discuss, plan, and adopt regionally-consistent energy codes with supporting amendments, the first in the Northwestern metro area and Boulder County area and the second in Eagle County jurisdictions. Both Code Cohort cohorts independently agreed to adopt the 2021 IECC, solar-ready (expanded to include all multifamily), EV-ready, electric-preferred, and

certain efficiency strengthening amendments. The Eagle County cohort also added an Exterior Energy Offset Program, also called a Renewable Energy Mitigation Program, which adds either solar or a fee-in-lieu to offset outdoor natural gas uses like snowmelt or hot tubs. These cohorts have amendment language, factsheets, and presentation slides that are available for other jurisdictions to copy or adapt. The language adopted by each Code Cohort does comply with state law.

#### **Overview of Jurisdictions Going Beyond Those Options:**

- Denver adopted all-electric space and water heating for commercial buildings, electric-preferred for residential, and extra energy efficiency for both residential and commercial
- Louisville adopted all-electric space and water heating for commercial and multifamily buildings, residential net zero requirements, and extra energy efficiency
- Crested Butte adopted an all-electric code, exempting restaurants
- Lafayette is underway adopting an all-electric code for both residential and commercial (with exceptions including restaurants) as well as partial solar required for commercial
- Golden is underway adopting a full net zero decarbonization code

## **Solar**

#### **Option 1: No Change / No Adoption**

New homes and buildings are allowed to voluntarily add solar at any point. The roof space may or may not be built to accommodate solar panels. Electrical panel will likely not have reserved space for future solar.

#### **Option 2: Solar-Ready Appendices CB and RB (amended to include all multifamily)**

The IECC includes optional Solar-ready appendices, called Appendix CB on the commercial side and Appendix RB on the commercial side. **[Finish]**

- See attachment

#### **Option 3: Partial solar required on larger commercial and multifamily buildings**

- **[Finish]**

## **Electrification**

#### **Option 1: No Change / No Adoption**

#### **Option 2: Electric-Ready**

#### **Option 3: Electric-Preference**

- See attachment

#### **Option 4: All-electric with Exceptions**

## **EV-Ready**

#### **Option 1: No Change / No Adoption**

## **Option 2: Code Cohort levels**

- See attachment

## **Option 3: State Energy Code Board levels**

# **Net Zero**

## **Option 2: Net Zero Appendix RC**

The IECC includes two optional Net Zero appendices, called Appendix RC. Adoption of this appendix is very rare. In Colorado, only Louisville has adopted Appendix RC. Golden is underway with adoption of a somewhat similar approach, using New Buildings Institute's Decarbonization Code Overlay.

Appendix RC requires homes to be built more energy-efficient than the base code, and then requires the remaining energy use (both electric and gas) to be met through renewable energy.

In general, adoption of Appendix RC is discouraged amongst code officials, builders, and certain advocate groups, given a combination of the cost and the bang-for-the-buck.

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## **Amendment Summary**

Here is a summary of the actual proposed amendments for solar-ready, EV-ready, electric-ready/electric-preferred, energy efficiency, and administrative clarifications. The numbers in parentheses refer to the amendment number in the "clean" version in Exhibit A and the "redline" version in Exhibit B.

### **Solar-Ready**

- Show on the construction documents (3, 28)
- Include info on the certificate for new homes (typically posted in the utility room) (31)
- Apply the solar-ready requirements to all sizes of multifamily buildings (25, 46)

### **EV-Ready**

- Show on the construction documents (amendment 3 and 28)
- Submeter energy use from EV charging separately from other commercial building loads (12)
- Repeal existing EV-ready requirements in the municipal code (xx and xx)
- Enact new EV-ready requirements, as an appendix to the IECC (26, 47)

### **Electric Ready / Electric-Preferred**

- Show on the construction documents (3, 28)
- Include information on the certificate for new homes (typically posted in the utility room) (31)
- Include in the inspection (4)

- Add definitions of all-electric building, combustion equipment, and mixed fuel building (5, 29)
- Add electric-preferred into the all the various compliance pathways (6, 7, 38, 39, 40)
- Ensure sufficient physical space for future electric water heating systems (10, 32, 34)
- Require electric-ready wiring for combustion equipment (13, 37)
- Require extra efficiency for mixed fuel buildings (14, 30)
- Give more “additional efficiency credits” for efficient heat pump water heaters compared to efficient fossil fuel water heaters (15, 16, 17)
- Ensure newer high-efficiency electric equipment replaces older, inefficient electric equipment instead of adding new fossil fuel infrastructure (21, 43)
- Require replacements of a gas furnace or air conditioner to show they at least priced out a heat pump alternative (22, 44)

### **Energy Efficiency Improvements**

- Add definition of Electrification Retrofit Feasibility Report and Electrification Retrofit Bid (5 and 29, respectively)
- Add a timer and/or moisture sensor for heat tape used for roof and gutter de-icing, so they are not left running when they are not necessary (8, 35)
- Disallow gas-powered lighting (11, 36)
- Require thermal energy certification, slab insulation, and radiant heating insulation in the commercial Total Building Performance pathway, to match the other pathways (18)
- Require an energy audit at the time of a major alteration or addition (19, 41)
- Add programmable thermostat controls anytime a commercial HVAC system is replaced or expanded, and add a programmable thermostat anytime a residential HVAC system is replaced or expanded (20, 42)
- Require commercial HVAC systems and water heating systems that are part of an alteration to undergo retro-commissioning (i.e. tuning and verification that the system is operating as intended) (23, 24)
- Require insulation around all residential hot water pipes, not just those with a diameter of 3/4 inch and greater (33)

### **Administrative / Clarifications**

- Delete Chapter 11 of the IRC and instead require the IECC (this is standard) (1)
- Ensure renewable energy isn't double-counted (9)
- Other Avon-specific standard or administrative amendments

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**Fwd: 2021 CODE ADOPTION**

Frank Theis <ftheis3@gmail.com>

Mon, Apr 24, 2023 at 2:37 PM

These are a couple of comments I received from members of the Estes Valley Contractors Association regarding the 2021 Building Codes, which the Board will be discussing at their meeting tomorrow night. Please forward them to the Board.

Thanks,

Frank Theis

President of the Estes Valley Contractors Association

----- Forwarded message -----

From: **Thomas W. Beck** <[thomas@twbeckarchitects.com](mailto:thomas@twbeckarchitects.com)>

Date: Tue, Mar 14, 2023 at 8:41 AM

Subject: RE: 2021 CODE ADOPTION

To: Mike Kingswood <[mike@homesbykingswood.com](mailto:mike@homesbykingswood.com)>, Frank Theis <[ftheis3@gmail.com](mailto:ftheis3@gmail.com)>

Cc: Charles Santagati <[glaciercreekinc@gmail.com](mailto:glaciercreekinc@gmail.com)>, Michael J Aldrich <[aldrichmj@gmail.com](mailto:aldrichmj@gmail.com)>, Joe Calvin <[joe@intersticearch.com](mailto:joe@intersticearch.com)>, Don Darling <[don@darlingenterprise.com](mailto:don@darlingenterprise.com)>, Nathan <[nathan@kinleybuilt.com](mailto:nathan@kinleybuilt.com)>

Frank, Sprinklers No thank you. Too costly, and not effective with wildfires.

Thomas W. Beck, AIA, NCARB

[215 Park Lane](#)

PO Box 57

Estes Park, CO 80517

970-586-3913

[www.twbeckarchitects.com](http://www.twbeckarchitects.com)

-----Original Message-----

From: Mike Kingswood <[mike@homesbykingswood.com](mailto:mike@homesbykingswood.com)>

Sent: Monday, March 13, 2023 9:36 PM

To: Frank Theis <[ftheis3@gmail.com](mailto:ftheis3@gmail.com)>

Cc: Charles Santagati <[glaciercreekinc@gmail.com](mailto:glaciercreekinc@gmail.com)>; Michael J Aldrich <[aldrichmj@gmail.com](mailto:aldrichmj@gmail.com)>; Thomas W. Beck <[thomas@twbeckarchitects.com](mailto:thomas@twbeckarchitects.com)>; Joe Calvin <[joe@intersticearch.com](mailto:joe@intersticearch.com)>; Don Darling <[don@darlingenterprise.com](mailto:don@darlingenterprise.com)>; Nathan <[nathan@kinleybuilt.com](mailto:nathan@kinleybuilt.com)>

Subject: Re: 2021 CODE ADOPTION

Thank you Frank !

My vote is nay and I am open to a meeting amongst us as well .

Perhaps we should list reasons for our stance as a group.

Such as ...

- cost

- effectiveness...being we don't have land to create subdivisions, what's effectiveness of having a single new home that's sprinkled amongst existing dozens that aren't ?

This is a surprise recommendation and I am concerned the building department is leaving us out of the teamwork process we established 4 years ago.

Sent from my iPhone

Mike Kingswood

970-214-8844

> On Mar 13, 2023, at 8:04 PM, Frank Theis <[ftheis3@gmail.com](mailto:ftheis3@gmail.com)> wrote:

>

>

> For those who haven't heard yet, the Town Staff recommended that the Town Board adopt the 2021 Code with the requirement that new single-family homes are required to have fire sprinklers installed at the Board's last study session. They were supposed to come back to the Board at their next study session to further discuss sprinklers and

the new energy code. However, the town administrator has requested that they come back to the Board at one of the next regular meetings (possibly at the meeting in two weeks) at which time the Board could vote to adopt the 2021 Code, including the sprinkler requirement.

> I know from talking to several of you that there is a lot of opposition to this requirement. Please email me back and let me know if you'd like to get together to discuss this, and I'll schedule a meeting. Or, if you email comments to me, I'll put them all together and send them to the Town at the appropriate time. Please let me know your preference.

> Thanks, Frank

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## 2021 BUILDING CODE

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Frank Theis <ftheis3@gmail.com>

Tue, Apr 25, 2023 at 12:01 PM

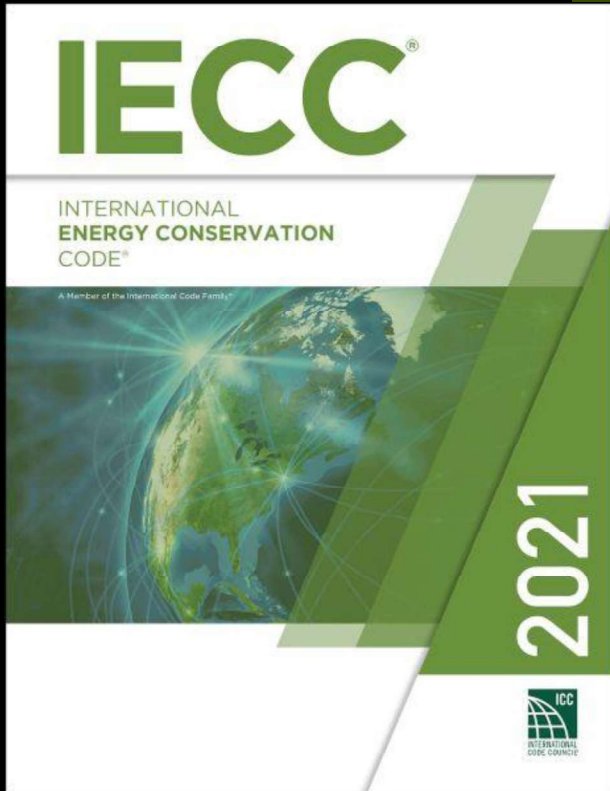
I recommend that the Town of Estes Park adopt the 2021 Building Code with an amendment exempting single-family houses less than 2,000 square feet in size from the fire sprinkler requirement. This amendment would keep smaller homes' costs lower, thus encouraging the construction of more efficient housing. Smaller homes are also more likely to be owner-occupied year-round and more likely to house working families.

Thanks for your consideration,

Frank Theis  
CMS Planning & Development



# Community Development



2021 International Building Code Discussion

Gary Rusu, Building Official &  
Jessica Garner, AICP, Community  
Development Director

April 25, 2023

## Process:

- Tonight's meeting is to set the date for the public hearing to consider all of the IBC items listed in the staff memo
- On May 23<sup>rd</sup>, the Town Board will vote on the adoption of the 2021 IBC, plus the International Residential Code and the International Pool and Spa Code
- Additionally, staff presented four options in the memo for consideration, and are seeking clarification from the Board tonight. ***While the preferred option cannot be voted on tonight, the Board can direct staff to revise the Ordinance with any of the options for final adoption in May.***

# 2021 IECC + Appendices

Staff recommends adopting the 2021 Energy Code and one of the two options:

1. 2021 IECC, plus the following appendices:
  - Appendix RB: Solar-Ready Provisions- Detached One- and Two-Family Dwellings and Townhouses (Although Appendix RB does not require solar systems to be installed for a building, it does require the space(s) for installing such systems, providing pathways for connections and requiring adequate structural capacity of roof systems to support the systems)
  - Appendix CB: Solar-Ready Zone- Commercial (Intended to encourage the installation of renewable energy systems by preparing buildings for the future installation of solar energy equipment, piping and wiring)
2. \*Or the 2021 IECC, plus the Colorado Model Electric Ready and Solar Ready Code (Exhibit E in the packet)- *Staff Recommendation\**

## Additional IECC Appendices

**Staff does not recommend adopting the Appendices below:**

- Appendix RC: Zero Energy Residential Building Provisions (Provides requirements for residential buildings intended to result in net zero energy consumption over the course of a year)
- Appendix CC: Zero Energy Commercial Building Provisions (Intended to supplement the International Energy Conservation Code and require renewable energy systems of adequate capacity to achieve net zero carbon)

## Options for Consideration

Option One: Approve adoption of the 2021 IBC and related codes with amendments presented at the Town Board meeting on May 23, 2023, including optional Energy Code Appendices CB and RB.

Option Two: Approve adoption of the 2021 IBC and related codes with amendments presented at the Town Board meeting on May 23, 2023, excluding optional Energy Code Appendices CB and RB.

## Options for Consideration

**\*Option Three: Approve adoption of the 2021 IBC and related codes with amendments presented at the Town Board meeting on May 23, 2023, including the Colorado Model Electric Ready and Solar Ready Code, and schedule a study session to discuss the possibility of adding Appendices RC and CC, as well as electric-preferred provisions presented by SWEEP at a later date.**

**\* *Staff Recommendation***

Option Four: *Possible Alternative as the Legislative Authority* The Board of Trustees may postpone adoption of the 2021 International Codes or direct staff to revise any portions of the codes.

## 2021 IRC: Sprinklers

Currently, the draft IRC would require all new single-family homes, two-family homes, duplexes, and townhomes to have sprinklers installed throughout the residence. Should the Board decide to revise this requirement, staff can make the amendment prior to the public hearing on May 23rd.



# Report

**To:** Honorable Mayor Koenig  
Board of Trustees

**Through:** Town Administrator Machalek

**From:** Jackie Williamson, Town Clerk

**Date:** April 25, 2023

**RE:** Estes Park Board of Trustees Vacancy Letters of Interest

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**Objective:**

To review the letters of interest received for the vacancy on the Town Board and provide staff with direction on the next steps in the process to fill the vacancy, such as conducting public interviews.

**Present Situation:**

As a statutory community, the Town is required to follow the guidelines outlined in the Colorado Revised Statutes 31-4-303 *Trustee to Fill Vacancy*. The Board must either appoint or set an election within 60 days from the date of the vacancy to fill the term of the Trustee, which is May 26, 2023. If the Board does not take action within 60 days, an election must be set to fill the vacancy. The Board considered its options for the process at its April 11 meeting and directed staff to request letters of interest for an appointment to the Board of Trustees to serve until the next regular Municipal Election in April 2024.

The Town Clerk has received 9 letters of interest from the following individuals, listed alphabetically and attached to this memo for review:

William Brown  
John Howell  
Ward Nelson

Bruce Darby  
Frank Lancaster  
Kurt Ratsch

Nathan Harger  
John Meissner  
Jason Van Tatenhove

The Town Clerk has verified each individual meets the requirements to serve on the Town Board, i.e. (1) be a United States citizen; (2) be at least 18 years old; (3) be a resident of the Town of Estes Park for the past twelve consecutive months; and (4) be a registered elector.

**Proposal:**

As noted in the previous memo of April 11, 2023, staff would bring forward the letters of interest and discuss with the Town Board next steps in filling the vacancy, including but not limited to holding a public interview process at an upcoming meeting or special meeting and hold a vote to appoint an individual. The Town Board must appoint an individual to the vacant position within 60 days, i.e. May 26, 2023.

Sample calendar:	April 25 <sup>th</sup>	Board to determine next steps in the process
	TBD	Special meeting to hold public interviews and Board vote at conclusion of the interviews or moved to the May 9 <sup>th</sup> meeting
	May 9 <sup>th</sup>	Hold public interviews and/or Board vote
	May 23 <sup>rd</sup>	Swearing In

The sample calendar provides the Board with a couple of options if public interviews are to be held. Staff recommends utilizing questions similar to the questions outlined in the draft application provided at the previous meeting, see attached. The interviews could be scheduled for 15 – 20 minutes and be held in the Board room. As noted above, the Board could vote immediately following the interviews or at an upcoming meeting.

In lieu of a formal interview process, the Board could require written responses to questions for review by the Board prior to the next Town Board meeting on May 9<sup>th</sup>. This would eliminate the need for a special meeting; however, it does not provide the Board the ability to ask follow up questions or determine how an individual engages the Board and the public.

#### **Advantages:**

- Providing Town staff with direction will allow the process to fill the vacancy to move forward, ensure quorum for meetings and maintain the number of board members needed for a majority and super-majority votes.
- A public interview process would allow the public the opportunity to learn more about the individuals interested in serving on the Board.

#### **Disadvantages:**

- The Board may find it difficult to identify a date to hold additional in person processes before May 26<sup>th</sup>.

#### **Action Recommended:**

Staff does not have a recommendation on the next steps as this is a decision of the Board. Staff requests the Board provide direction on the next steps in reviewing the letters of interest.

#### **Budget:**

Appointment process – staff time

#### **Level of Public Interest:**

Medium

#### **Attachments:**

1. Redacted Letters of Interest
2. Draft BOT Application

April 14, 2023

Town Clerk Jackie Williamson  
170 MacGregor Avenue, Room 130  
Estes Park, CO 80517

Dear Ms. Williamson,

I am hereby submitting this letter of interest with respect to the open Trustee position due to the passing of Mayor Pro Tem Scott Webermeier. I am eligible for appointment since I am a U.S. citizen, at least 18 years of age, have been a resident of the Town of Estes Park for the past 12 consecutive months, and am a registered elector.

I have been a practicing attorney for 46 years, working primarily in the areas of taxation and mergers and acquisitions. I was previously the managing partner of a 70 attorney law firm in Des Moines, Iowa and chose to move here in partial retirement 2-1/2 years ago. During my years in Iowa, I was active in state and local politics, having served as Chair of the largest business trade association in Iowa, the Iowa Association of Business and Industry.

Since moving to Colorado I have served as the Legislative Affairs Ambassador for the Estes Chamber and also facilitated the Visit Estes Park task force which recommended the passage of ballot initiative 6E extending the local marketing district lodging tax to fund workforce housing and childcare in the Estes Valley. After facilitating that task force, I was active with a group promoting the passage of 6E and spoke at an Estes Park League of Women Voters coffee regarding that initiative. I have also served on the board of the Estes Valley Short Term Rental Alliance and have advocated on behalf of short-term rental owners and managers with respect to the development of short-term rental regulation by the Town and by the County. I have also acted as an officer of the local Newcomers Club.

I believe my long experience as a practicing attorney, my involvement with business trade groups and my ongoing involvement with state and local public policy issues, including those of the Town of Estes Park, qualifies me to serve out the remainder of Mr. Webermeier's term. I have a passion for Estes Park, with family roots reaching back to the 1960's when my father developed 28 acres of land in the Estes Valley and served both on the hospital board and the board of the Upper Thompson Sanitation District. Growing up I worked summers in the Estes Valley through high school and college and couldn't wait until I could relocate here. I hope to carry on my father's tradition of service to the Estes community.

If selected, I will commit to attend all regular Town Board meetings and special meetings, serve on other boards and committees as a liaison, attend Trustee Talks and participate in other Town related functions. Since I am partially retired and doing only a minimal amount of legal work, I have plenty of time available to devote to Town matters and would be very enthusiastic to serve as a Town Trustee should I be selected for that role. Having just completed the Community Information Academy, I have also rounded out my knowledge of Town government and the services the Town provides.

If you, Town staff or any of the members of the Town Board would like to discuss my interest, please reach out to me. I can be reached by phone at 515-360-4292 or by email at

Sincerely yours,



William Brown

Mailing address:

To the Town Clerk and the members of the Town Board of Trustees,

Please consider this my letter of interest for the open Trustee position.

My name is Bruce Darby and I first want to express my sincere condolences on the recent passing of your friend and colleague Scott Webermeier. I realize how difficult it must be to have to push ahead so soon to fill this position and I wish you all the best while you consider the responses to your request for letters of interest.

I am a forward-thinking person who has a long-term interest in Estes Park's success and a genuine desire to serve on the Town Board. I have had this desire for quite some time, but until recently, haven't had the ability to commit to the time and responsibilities that are required.

I recently sold my business and have settled into a 25 hour a week job in a General Contractor's office managing the administrative side of the business. I have a wife who is the Program Director at the YMCA and a son and daughter, 7 & 9, who are students at the Elementary School. We own our home near the hospital and absolutely love our life here in Estes Park.

I find myself in the unique position for the first time to be able to balance the commitments and obligations to my family and work, as well as serving as a member of the Town Board. If appointed, I would be excited to attend all regular Town Board meetings, special meetings, serve on other boards and committees as a liaison, attend Trustee Talks, and other Town related functions. I would, of course, be interested in continuing the journey by running for the position in the next election cycle. It would be an honor to have the opportunity to contribute and work with other members of the board and the Town Administrators to help with the ongoing business of Estes park as well as the goals of the Strategic Plan and the Town's roll in the Comprehensive plan.

There are a multitude of reasons why I want to take on the responsibilities of the role of Town Trustee. The main two reasons are; 1) My desire to be immediately and acutely involved in helping serve the town where we will raise our kids and eventually retire, achieve the goal of a balanced prosperity and success for businesses and residents. 2) I think I would be good at it. As most everyone who knows me would attest to, I have a solid work ethic, a diplomatic approach to finding solutions to pressing issues, and strive to be the voice of reason to find common ground in situations that are conducive to conflicting, emotional opinions. I realize that I will no doubt find myself in unfamiliar waters as I do not have previous municipal experience. It very well may be overwhelming at first, sort of like throwing myself in the deep end so to speak, but I have found that I can and have in the past, thrived in that sort of circumstance and would look forward to the opportunity to immerse myself in getting up to speed in an expeditious manner.

I first moved to Estes Park in 1999 after living on the Island of Key West for 10 years right out of college. I had sought a career as a professional mariner and had success as a charter boat captain, and later on as an upper level captain running the ship assist tug boats handling Cruise ships and Naval vessels from the US and other countries at Florida Keys Harbor Services. Having been involved with the inner workings of the Port of Key west, I was able to establish the first Ambassador Services office in Key West. This was a Ships' Agency providing port agency representation, bonded US Customs and Border Protection Entry and Clearance procedures, ship supply and procurement services, crew change/repatriation coordination, offshore launch services, and general vessel attendance designed to expedite any port call of US and foreign flagged vessels.

I visited Estes Park for a friend's wedding and immediately fell in love and within a few months I had moved here, bought my first home on Aspen Ave. as well as a long term rental property on Virginia Dr. and gotten a job with the Trail Gazette as the bundle paper delivery guy on Wednesday and Friday mornings complete with 90 stops with the Trail Plus for guest houses, gas stations, convenience stores and hotels. This was the first time TG paper boxes came into play as I helped place the first 12 boxes around town. This was the best introduction to the people of Estes Park imaginable, as well as a crash course in learning my way around town. I still maintain many friendships I developed on my routes 24 years ago.

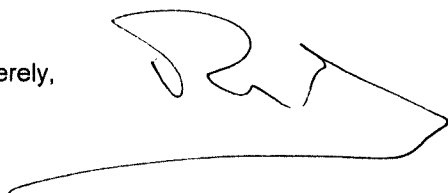
Since then I have had a few different incarnations of my life including a 4-year position as the head captain and project manager for RPM Nautical Foundation, a nonprofit engaged in finding historically significant shipwrecks. We worked with the United States Government as well as many countries in Europe and North Africa to search for, identify, provide archaeological expertise and help to preserve and display historical and cultural artifacts found on these shipwrecks.

I subsequently moved back to Estes Park and Built an off-the grid home on Longs Peak Road and bought the Rock Inn Western Steakhouse property on Highway 66. With the help of several others, we took the buildings that had been vacant for 5 years and remodeled and created the entity that is today, The Rock Inn Mountain Tavern.

Life led me back to Key West one more time for 4 years where I built a 52-foot sailing catamaran, started a property management business, initiated the beginning of a 13 relationship that has moved us back here for good with our two beautiful kids and two amazing dogs in 2019 when my wife got the career job as the Program Director at the YMCA.

We love our friends, family and our life here in Estes Park and our roots are growing deeper every year. It would be an honor and a privilege to serve the town and people of Estes Park in the position left open on the Board of Trustees and I thank you for taking the time to read this and consider me for the job.

Sincerely,

A handwritten signature in black ink, appearing to be 'R. J.', with a long horizontal line extending from the bottom of the signature.

I am writing this letter to inform the town board of my interest in the vacant trustee position.

My name is Nathan Harger and I have been a permanent resident of Estes Park for a little more than sixteen months. I am employed as a maintenance tech at Trout Haven. I have held this position since moving here.

I was born and raised in Albuquerque. After receiving a degree in Criminal Justice from Texas Christian University, I returned to Albuquerque and spent 20 years as a deputy sheriff with the Bernalillo County Sheriff's Department. I retired from this department in 2018.

After retiring, I moved to Taylor, Texas. I lived there for three years and while there I was a member of the Taylor police department.

In December 2021 my son and I moved to Estes

My father grew up here and for the first eighteen years of my life, I spent time here every summer. I have seen Estes change dramatically over this time. Some of these changes have been good and some have not.

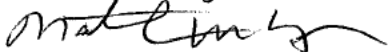
I feel I bring a unique perspective to this position. My time in law enforcement taught me how to deal with positive and negative situations. It taught me how to interact with people in a fair and equitable manner. Most importantly, it taught me how to listen and how to measure my words and resolve conflicts. These are valuable attributes to have as a town trustee.

Working in the community I meet and talk with other residents and visitors every day. This gives me insight into what they care about and what concerns they may have.

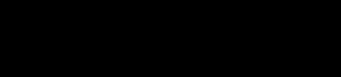
I am aware of the time commitment that being a trustee requires and I am more than willing to make that commitment.

Thank you

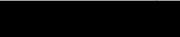
Nathan M. Harger



Nathan Harger



[Nharger02@outlook.com](mailto:Nharger02@outlook.com)



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## JOHN HOWELL

Estes Park, CO 80517

[john.r.howell@outlook.com](mailto:john.r.howell@outlook.com) | [LinkedIn](#)

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April 21, 2023

Ms. Jackie Williamson  
Town Clerk  
Town of Estes Park  
170 MacGregor Ave  
Room 130  
Estes Park, CO 80517

Re: Letter of Interest, Trustee position

Dear Ms. Williamson:

I am writing to express my interest in the position on the Board of Trustees for the Town of Estes Park. I have a proven track record of success in leadership and strategic planning roles, and I am confident that I can make a significant contribution to the Town's efforts to achieve its goals.

I recently retired from the Foreign Service as a Commercial Diplomat for the U.S. Department of Commerce. I have been a resident of Estes Park since 2017, although I have been visiting the area since I was a Cheley camper when I was much younger. I have served on the board of directors for several international organizations, including the American Chamber of Commerce in Guatemala and France. In these roles, I have gained valuable experience in facilitating trade and investment, marketing, and event planning. I have also developed strong relationships with community leaders and stakeholders.

In my professional career, I have held leadership positions in the private sector and the public sector. I have a strong understanding of financial management, strategic planning, and project management. I am also an effective communicator and negotiator. I am confident that my skills and experience would be a valuable asset to the Board of Trustees.

I am passionate about serving my community, and I believe that the Town of Estes Park has a bright future. I am eager to contribute my time and energy to help the Town achieve its goals. I am available to meet with you at your earliest convenience to discuss my qualifications in more detail. In the meantime, I have included my CV as well as a letter of recommendation from my most recent supervisor.

Thank you for your time and consideration.

Sincerely,



April 13, 2023

Town Clerk Jackie Williamson

Town of Estes Park

Dear Ms. Williamson,

I am writing to express my interest in the open seat on the Town Board, due to the passing of Trustee Webermeier.

I have dedicated my career to public service, and I believe I have the qualifications and skills to serve in this role until such time as the Town holds a municipal election to fill the position. This is an unfortunate and unique situation for the Town. My background and experience would enable me to fill the position and contribute to the success of the Board immediately, with no extended learning curve. My understanding of the role of the board, the governance structure of the Town of Estes Park, the staff and the broader community, enables me to hit the ground running. My interest in the position is simply to help out and contribute to the community, if my background and experience fits the expectations and needs of the Board.

Although I have no experience in an elected position, I have over 40 years' experience in local government. I have been a resident of Estes Park for eleven years and a resident of Larimer County for 47 years.


My specific experience and qualifications include:

- 31 years with Larimer County, 18 as the County Manager
- 7 years as the Town Administrator for Estes Park
- Association of County Administrators' County Manager of the Year 2001
- Colorado City/County Managers Association Lifetime Achievement Award 2019
- Currently serving as a Senior Advisor for the Colorado City/County Managers Association and the International City/County Managers Association.
- Extensive experience with Policy Governance
- Master of Business Administration (MBA) from Colorado State University
- Colorado native

I retired from the Town in 2019 and I can commit to attend all regular Town Board meetings and special meetings, serve on other boards and committees as a liaison, attend Trustee Talks, and other Town related functions. The only conflict I currently have is that I will be out of town for two previously planned trips from June 11<sup>th</sup> through July 22<sup>nd</sup>. I would be unable to attend any meetings during this time. After July 22<sup>nd</sup>, I see no conflicts.

I look forward to speaking with the Board further, if my qualifications fit the bill for what you are looking for.

Sincerely,

A handwritten signature in black ink, appearing to read "Frank Lancaster". The signature is fluid and cursive, with a long horizontal stroke at the end.

Frank Lancaster



Jackie Williamson &lt;jwilliamson@estes.org&gt;

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**Letter of Interest for open Trustee position**1 message

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**John Meissner** <jo.meis@gmail.com>

Wed, Apr 12, 2023 at 2:01 PM

To: Jackie Williamson <jwilliamson@estes.org>, trustees <trustees@estes.org>, wkoenig <wkoenig@estes.org>, Patti Brown <pbrown@prairiemountainmedia.com>, Michael Romero <mromero@prairiemountainmedia.com>, Jason Van Tatenhove <jason@coloradoswitchblade.com>

I am writing a letter to express my interest in the open Trustee position in the town of Estes Park. I am a U.S. citizen, well over 18 years of age, a permanent resident of Estes Park since 2008, and a registered elector in Larimer County.

The history of Estes Park filling vacant positions on the town board unrelated to recalls has generally been one of reaching back to the prior election and choosing the candidate with the next highest vote total. That would be Karen Randinitis. Current members of the town board seem to be squelching that possibility, as if the world is somehow their oyster.

I find it intriguing and a bit problematic that members of the current board made it very clear at the most recent town board meeting they want someone with prior town board experience (as if they have already selected their replacement), and that this "requirement" seems to be weighted over and above anything related to educational background, business or professional acumen/success, ability and willingness to serve, etc. It is as if the public is not really going to choose the replacement for a duly elected official, but rather the town board has arbitrarily set the one essential parameter for an individual they like. Is this truly a representative government, or is it instead the Best Buds Club?

Did the citizens vote in the most recent trustee election as to prior town board experience with no other factors playing a role? Under the current regime with overweighted emphasis on prior town board experience, would Kirby Hazelton be appointed in such a scenario? Would Cindy Younglund? Would Barbara MacAlpine? How can ability to attend Trustee Talks be one of the requirements for consideration, as our mayor has yet to attend more than one Trustee Talk in three years of serving on the board? -john

## LETTER OF INTEREST / ESTES PARK TRUSTEE APPOINTMENT

Ward Nelson



wardnelson1972@gmail.com

### **OBJECTIVE:**

Appointment to the Estes Park Town Board

### **QUALIFICATIONS / CIVIC EXPERIENCE:**

Master of Education in Supervision and Instruction, Roosevelt University

Bachelor of Arts in Sociology; Physical Education; Secondary Education, Cornell College

Before retiring, I was a central office administrator for the largest K-8 school district in Illinois (17,000 students from seven municipalities). I worked extensively within several governmental organizations and specialized in empowering the stakeholders of those organizations.

My long interest in Estes Park and its government led me to complete the Citizens Information Academy in 2010 and, in 2014, to run for office of Town Trustee. I was elected and held the position for four years. Currently I am a citizen representative on the Larimer County Open Lands Advisory Board, a board member for the Estes Valley Land Trust, and the president of the Reserve homeowners association.

### **TOPIC FAMILIARITY AND ACCOMPLISHMENTS AS A TRUSTEE:**

- The first Comprehensive Water Plan (May 2015)
- The first Capital Improvements Plan (May 2016)
- The Streets Improvement Plan following the passage of 1A (2014)
- The first Storm Water Master Plan (grant funding)
- Light and Power Smart Grid
- Replacement of aging power lines with underground lines
- Replacement of Moraine Avenue Bridge (grant funding)
- Downtown Visioning Plan (grant funding)
- The 415 space parking structure (grant funding)
- Broadband initiatives (grant funding)
- Attainable workforce housing and childcare catalysts
- Appropriate short term rental regulations (creation and implementation)
- Simplification of Town Codes
- Balanced budgets
- Collaboration with civic organizations: EDC, EVICS, EVRPD, SD R-3, EVLT, RMNP, Larimer County

### **STATEMENT:**

"Estes Park and the northern Colorado Front Range are in the midst of rapid growth and changing demographics. Navigating the future requires unique governmental leadership that incorporates what residents love about Estes Park while planning for imminent changes. Rather than exploring reasons to inhibit progress, we must proactively work toward planning our change. It is essential that while enjoying and appreciating our beautiful community, we also anticipate and thoughtfully prepare for its future."

### **CONCLUSION:**

In addition to the above contributions and connections, I have closely followed town business. If appointed to this position, I would be able to "hit the ground" running. My experience with several current Board members would further a cohesive transition.

April 19, 2023

Jackie Williamson

Town of Estes Park  
170 MacGregor Avenue  
Estes Park, CO 80517  
970.577.4771  
jwilliamson@estes.org

RE: Trustee Seat

Dear Mrs. Williamson,

This letter is sent in consideration for the open trustee seat in the town of Estes Park. I believe I meet all the requirements set forth by Colo. Rev. Stat 31-35-105.

Recently, most of my interaction with local Estes Park government is in the form of dealing with different municipality departments i.e. Power & Communications, Water, Billing and of course the citizens of Estes Park themselves. I've also participated in several citizen's academies; Thornton, CO Police Department Citizen's Academy, Thornton, CO Fire Department Citizen's Academy, Estes Park Police Citizen's Academy.

Prior to moving to Estes Park I was involved in several commercial projects which required interfacing with not only local but federal government officials. A few of the larger more difficult projects include:

General Motors Global Headquarters: Detroit, MI.  
The Diplomat Beach Resort: Hollywood, FL.  
Neiman Marcus Retail Store: San Francisco, CA.  
Remax Global Headquarters: Denver, CO  
Denver International Airport / MOD- C Baggage Handling & X-ray Scanning Project / Denver, CO

I look forward to meeting with you to discuss this opening.

All the best,

Kurt Ratsch  




Jackie Williamson &lt;jwilliamson@estes.org&gt;

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**Letter of interest**

1 message

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Jason Van Tatenhove <jasonvantat@me.com>  
To: Jackie Williamson <jwilliamson@estes.org>

Wed, Apr 12, 2023 at 6:11 PM

Jason Van Tatenhove



April 12, 2023

Estes Park Board of Trustees

Estes Park

[170 MacGregor Ave](#)[Estes Park, CO 80517](#)

Dear Members of the Board of Trustees,

I am writing to express my interest in the vacant Town Trustee position that has become available. As a resident of Estes Park and someone who has experience working on boards both in Larimer County and here in Estes Park, I am well-suited to contribute to the Town's strategic plan and assist in achieving its goals moving toward a better future.

I have a list of experiences that have prepared me to serve in this capacity, including previously being elected to the Larimer County Republican Party as a bonus member (Please note I am politically independent these days.) Where I served as the PR Director. I also was on the State Central Committee and was appointed to serve on the Larimer County Citizen Review Board, the board working with the 8<sup>th</sup> Judicial District. My previous experience working with county government has given me a deep understanding of how local governments operate and their challenges. I have also been on the Estes Arts District Board of Directors and served as the training officer of a Search and Rescue Team in Lincoln County, Montana.

I have also developed skills in communication in my work as a published author writing about political science topics and as a consultant with Georgetown Law's Institute for Constitutional Advocacy and Protection. I feel that this experience has helped me to find ways to work for political unity. I have also helped provide insight and perspective as a featured speaker on political violence at regional convenings nationwide for local, state, and federal public officials and community activists.

I am particularly drawn to this position because Estes Park has become our home where my family will grow old. I strongly believe in civic participation in the community. I can help to add a voice that is both younger and has a shared life experience with some of our community's underrepresented populations. I want to help facilitate a more diverse community that can better provide a sustainable life to those that live and work here, including affordable workforce housing and childcare, which are vital for the future of Estes Park.

I am firmly committed to public service and desire to positively impact the community where I live.

I can help shape Estes Park's future and contribute to its ongoing success by serving on the Town Board.

I am fully prepared to make the necessary commitment to serve in this role, including attending all regular Town Board meetings and special meetings, serving on other boards and committees as a liaison, attending Trustee Talks, and other Town-related functions: my previous experience and willingness to make this commitment make me an ideal candidate for this position.

I am interested in this position on the Town Board, as opposed to other opportunities for civic engagement, because it is the most direct way to affect positive change for the future.

Thank you for considering my application. I look forward to the opportunity to discuss further my qualifications and interest in serving on the Board of Trustees.

Sincerely,

Jason Van Tatenhove

Cell: [REDACTED]



Town of Estes Park  
Board of Trustees Vacancy Application

Applicant's Name:	Home Phone:	Cell Phone:
Present Residential Address:		How long at this address:
Email Address:		
Have you been a continuous resident of the Town of Estes Park for the year previous to the Board's appointment of their preferred candidate?	Yes: <input style="width: 40px; height: 30px;" type="checkbox"/>	No: <input style="width: 40px; height: 30px;" type="checkbox"/>
Does your personal schedule permit your regular attendance at scheduled meetings? <i>(The Board of Trustees meet twice a month in the evenings, typically on the 2<sup>nd</sup> and 4<sup>th</sup> Tuesday of each month.)</i>	Yes: <input style="width: 40px; height: 30px;" type="checkbox"/>	No: <input style="width: 40px; height: 30px;" type="checkbox"/>
Highest level of education completed: <i>(Circle one)</i> <div style="text-align: right; margin-top: 5px;">6   7   8   9   10   11   12   13   14   15   16   17+</div>		
<b>NARRATIVE QUESTIONS</b> <i>(Please respond to each question in the space provided)</i>		
1. Why do you want to be on the Estes Park Board of Trustees and why did you run/not run in the last election?		
2. What is your background and how can your experience benefit your service on the Board?		
3. What is your agenda, if any, and/or what do you expect to accomplish as a Trustee?		

4. What improvements, changes, and ideas do you have for the Town of Estes Park?

5. How would you deal with an irate, disgruntled citizen who may call or approach you about an unpopular decision or town ordinance, or complaint about town services?

6. What's your opinion on ordinance enforcement – strictly enforced or on an individual or exception basis?

7. What is your vision for the future of Estes Park?

Signature:

Date:

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# Report

**To:** Honorable Mayor Koenig  
Board of Trustees

**Through:** Town Administrator Machalek

**From:** Vanessa Solesbee, CAPP, CCTM, Mobility Services Manager  
Greg Muhonen, PE, Public Works Director

**Date:** April 25, 2023

**RE:** *Estes Transit Branding Project Update*

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**Objective:**

Update the Town Board on the Estes Transit Branding Project, including presentation of the draft Brand Discovery Report, proposed new transit system name, and design concepts for vehicle wraps.

**Present Situation:**

Development of a new brand for Estes Transit and complementary strategic marketing plan to increase transit ridership was defined as a 2022 Town Board Strategic Plan goal and has been carried over into 2023.

In fall 2022, a Request for Proposals (RFP) for Transit Branding Services was published by Public Works (PW). Through a competitive selection process that included input from PW staff and the Transportation Advisory Board (TAB), the Fort Collins-based Slate Communications was selected for its robust public sector experience and previous work with the Town of Estes Park.

The goals of this consulting engagement with Slate Communications are to:

1. Increase ridership of Town transit service offerings among locals and visitors.
2. Disperse information and increase awareness of Town transit service offerings and service changes among the general public and targeted audiences.
3. Brand the public transit system in a memorable and unique way that is in line with the Town's vision and mission statements.

To date, the consultant team has completed about a third of their total project scope, including engagement of the local community via individual meetings and two presentations to the TAB. Additionally, a project steering committee—composed of Town staff (PW and the Public Information Office), TAB members, and an Estes Transit driver and representative of the Town's contracted transit service provider—have held frequent meetings to provide guidance to the consulting team on various creative elements.

Most notably, the steering committee recently participated in developing a visual palette, design concepts for transit vehicle wraps, and a proposed new system name. Since these elements will be foundational to the new brand and very visible to the public, PW staff is providing the Town Board with this opportunity to review input from the project's stakeholder process, learn about the creative process, and provide input on the proposed new name for Estes Transit and bus wrap design concepts.

**Proposal:**

Report on work completed to date for the Estes Transit Branding Project, including presentation of the draft Brand Discovery Report and the process for selection of a new name for Estes Transit, "The Peak." PW staff would also like Town Board input on proposed route-based transit bus theming and graphics.

**Advantages:**

- This project will help increase awareness about the Town's free shuttle service offerings.
- Transit branding is a proven strategy to increase ridership, which would support Town efforts to reduce traffic congestion.

**Disadvantages:**

- Full implementation of recommendations from this planning process will take time, staff resources, and financial resources; however, staff will work with the consulting team to define a phased implementation plan and identify grant opportunities.

**Action Recommended:**

None. This is a report only.

**Finance/Resource Impact:**

The total budget for this project is \$49,815 from 101-560-456.22-98 (Transportation, Other). Sixty-four percent (64%) of this project will be covered by grant funding. This percentage is based on the fact that FY 2022 grants funds required zero percent (0%) local match and FY 2023 grant funds require a fifty percent (50%) match. Funding for implementation of several key project elements in 2023, including transit bus wraps, updated transit stop signage, and an updated brochure/map are budgeted in 2023 in 101-5600-456.26-52 (Transportation, Traffic Signs) and 101-5600-456.26-03 (Transportation, Printing/Forms). Funding for future implementation phases will need to be addressed on a year-to-year basis.

**Level of Public Interest**

Public interest is expected to be low to moderate.

**Attachments:**

1. Estes Transit Brand Discovery Presentation

ESTES PARK TRANSIT

# Discovery Report and Brand Management Guidelines



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STAKEHOLDER  
INTERVIEWS

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BRAND COMMITTEE  
MEMBERS  
- 6 MEETINGS -

**STAKEHOLDER, TAB  
AND BRAND COMMITTEE FEEDBACK**

**BRAND PLATFORM**

**LOGO & BUS DESIGN**

**CREATIVE  
FOUNDATION**

**BRAND  
IMPLEMENTATION**

**STYLE GUIDE**

## Brand Methodology

Slate spoke with the staff, community members, and local stakeholders to create a brand platform. Once the brand committee approves the logo and bus design, we can build a creative foundation, including fonts, colors, templates, and more. The brand implementation creates a timeline for putting your new assets to work, with a style guide and path forward.

## Five Key Takeaways

The following common themes emerged after discussions with staff and community stakeholders.

1	RESIDENTS DON'T CONSIDER THE TRANSIT SYSTEM AS SOMETHING THEY COULD USE TO GET AROUND TOWN DUE TO CURRENT ROUTES AND SCHEDULES.
2	VISITORS ARE COMING FOR A NOSTALGIC EXPERIENCE IN A BEAUTIFUL PLACE. THEY ARE LOOKING FOR EASY-TO-UNDERSTAND OPTIONS WITH MINIMAL PLANNING AND STRESS.
3	VISITORS ARE UNAWARE OF THE PARKING STRUCTURE OPTION, AND RESIDENTS FEEL IT IS TOO FAR AWAY FROM DOWNTOWN.
4	ESTES IS A TIGHT-KNIT COMMUNITY WHERE WORD OF MOUTH REIGNS AND RESIDENTS ARE APPREHENSIVE OF CHANGE.
5	J1 EMPLOYEES AND NON-ENGLISH SPEAKING RIDERS DEPEND ON THE TRANSIT SYSTEM. HOWEVER, THE CURRENT ROUTES DO NOT MEET THEIR NEEDS.

### WHAT WE HEARD FROM STAFF & STAKEHOLDERS

Estes Park Transit is...

GREAT FOR VISITORS  
 NOSTALGIC  
 AN EXPERIENCE  
 UNDERUTILIZED  
 EASY TO UNDERSTAND  
 USED BY J1 WORKERS  
 PROFESSIONAL  
 COMMUNITY PARTNER  
 FOCUSED DRIVERS  
 SUSTAINABLE

## SWOT Analysis

### STRENGTHS

- » Driver team
- » Nimble
- » Easy-to-understand routes
- » All ADA accessible
- » Town org and stakeholder support
- » Grants program
- » Fun trolley

### WEAKNESSES

- » Cost of operating transit system
- » Infrastructure
- » Rural town layout
- » Seasonal schedule
- » Hours of operation
- » Free and abundant parking

### OPPORTUNITIES

- » Flexibility to offer on-demand options
- » Environmentally friendly direction
- » J1 workforce
- » International visitors
- » Partnerships - lodging, state
- » Pay parking
- » Younger generation ridership

### THREATS

- » Maintaining current funding levels
- » Expanding services
- » Hesitancy to be in groups post COVID
- » Traffic
- » Lack of diverse visitor population
- » Car centric visitors and residents
- » Road layout

## Target Markets



### PRIMARY MARKET: VISITORS

People coming primarily from Colorado, Texas, and the midwest to experience Rocky Mountain National Park. They often road trip in with their families and are there to see the park, experience Estes Park charm, and get outside during the summer months. Visitors that live in Colorado come up for frequent day trips to access their favorite trails year-round. Most visitors are reluctant to leave their cars and may not be familiar with riding public transportation systems.



### PRIMARY MARKET: J1 STUDENTS

International students housed within Estes Park that work at hotels or restaurants for a few months at a time. They do not have their own form of transportation and heavily rely on public transit. They are often in the area through October.



### SECONDARY MARKET: RESIDENTS

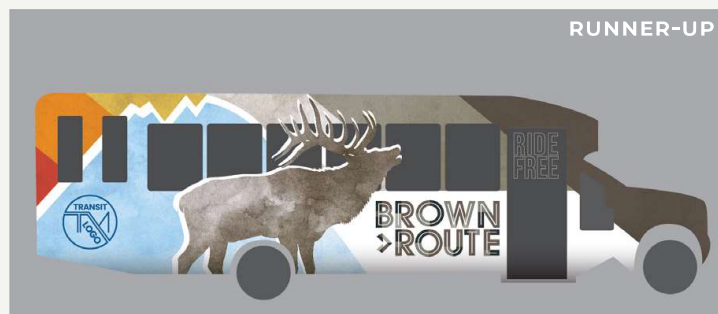
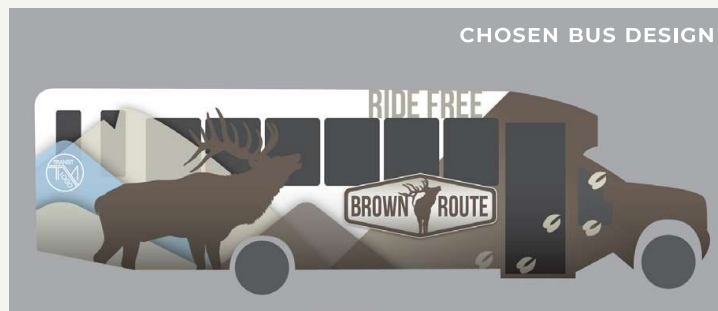
Those who live in Estes Park year-round. Many of them are retired and choose to live in Estes Park to experience the outdoors. Others own local businesses or work in town. They navigate through town to run errands, go to doctor appointments, and access their favorite trails. They are not often riding public transit and prefer to avoid crowds of tourists.



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## Bus Design Wraps

The brand committee determined to create a bus wrap design that appealed to those looking for a unique Estes Park experience. Each route will have an animal that reflects the chosen color of the various routes in the system. Long's Peak should have a significant presence in the bus wrap design. Most importantly, each route will have a unique design to better assist with non-English speaking riders to ensure they board the correct bus.



# The Peak

The brand committee wanted to explore the possibility of a unique transit organization label. Therefore, "The Peak" was chosen to honor the outstanding vista of Long's Peak. Regarding the bus routes, each will keep its designated color. For ADA compliance and non-English speakers, the bus color and the animal will help with the association when finding the correct bus to board.



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