

IMPORTANT NOTICE:

The local Fire District has individual authority to enforce fire code standards beyond the county’s requirements. Cooperation and coordination with your local fire district early in the process may prevent costly alterations to your project and ensure compliance with all applicable health and safety standards. See the Fire District web page for more information

THE 2018 JEFFERSON COUNTY RESIDENTIAL CODE SUPPLEMENT

Updated July 1, 2021

NOTE: a vertical line in the margin indicates a change effective July 1, 2021

SUMMARY of CHANGES: Modifications sections G2401.1.1, P2501.1.1 and E3401.1.1 added.
Appendix Z: Sections Z104 and Z105, roof covering and gutter requirements in Wildfire Zone 1 amended.

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THE JEFFERSON COUNTY SUPPLEMENT
to
THE 2018 INTERNATIONAL RESIDENTIAL CODE

Modifications sections G2401.1.1, P2501.1.1 and E3401.1.1 added, effective July 1, 2021

This supplement to the 2018 International Residential Code (the “Residential Code Supplement”) has been adopted by the Jefferson County Board of County Commissioners by resolution. The additions, deletions and revisions set forth in this Residential Code Supplement shall be deemed to modify the 2018 International Residential Code, as adopted by Jefferson County. The 2018 International Residential Code, as modified by this Residential Code Supplement, shall apply to all unincorporated areas of Jefferson County.

RESIDENTIAL BUILDING
Chapters 1 through 11

SECTION R101
GENERAL

Delete Section R101.1 (Title) in its entirety and replace it with the following:

R101.1 Title. These regulations shall be known as, and shall be cited as, the “2018 Residential Code for One-and Two-Family Dwellings of Jefferson County, Colorado” and shall be referred to herein as “this code.”

Add the following new Section:

R101.2.1 Date effective. (a) This code shall become effective on January 1, 2019 and shall apply to all *permits* applied for after January 1, 2019. Applications for *permits* made prior to January 1, 2019, shall be governed by the terms of the Residential Code for One-and Two-Family Dwellings of Jefferson County, Colorado in effect at the time of application.

(b) NOTICE:

ALL BUILDING *PERMITS*, INCLUDING BUT NOT LIMITED TO, ELECTRICAL, MECHANICAL, PLUMBING, ROOFING AND SIDING *PERMITS*, ISSUED THROUGH THE JEFFERSON COUNTY DIVISION OF BUILDING SAFETY PRIOR TO AUGUST 19, 1980, EXPIRED DECEMBER 31, 2000.

Add the following new Section:

R101.2.2 Standards. Whenever any State law or regulation imposes higher standards than are required by this code, the higher standards of that law or regulation shall govern. Whenever the standards imposed by this code are higher than the standards

imposed by any other law or regulation or resolution of any governmental body, then the standards of this code shall govern.

SECTION R104 DUTIES AND POWERS OF THE BUILDING OFFICIAL

Add the following new Section:

R104.7.1 Records. The *building official* shall keep an accurate account of all fees and other monies collected or received under this code, the date and amount thereof, the names of the persons upon whose account the same were paid, and the location of the building or premises to which they relate.

Delete Section R104.10.1 (Flood hazard areas) in its entirety and replace it with the following:

R104.10.1 Areas prone to flooding. The *building official* shall not grant modifications to any provisions of this code related to areas prone to flooding as established by Table R301.2(1) without the approval of the Jefferson County Planning and Zoning Division in accordance with County regulations.

Delete Section R104.11 (Alternative materials, design and methods of construction and equipment) in its entirety and replace it with the following:

R104.11 Alternative materials, design and methods of construction and equipment for specific permits. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been *approved* by the *building official*. An alternative material, design or method of construction for a specific *permit* may be *approved* on a case-by-case basis where the *building official* finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the limited purpose intended, at least the equivalent of that prescribed in this code in quality, strength, effectiveness, fire resistance, durability and safety. This Section does not give the *building official* the authority to allow the usage of alternative material, design, and/or methods of construction on an ongoing basis.

SECTION R105 PERMITS

Add the following new Section:

R105.1.1 Removal or Reinstallation of Solar Panels. The removal and reinstallation of solar panels shall require an electrical *permit*.

In Section 105.2 (Work exempt from permit), delete the following exemptions to the Building permit requirement and replace them with the following:

- Item 1. Single *story*, detached *accessory structures* provided the floor area does not exceed 200 square feet, the building height does not exceed 14 feet, and the horizontal roof area does not exceed 264 square feet.
- Item 2. Fences.
- Item 3. Retaining walls not part of a foundation.
- Item 4. Tanks.
- Item 5. Sidewalks and driveways.
- Item 6. Painting, papering, tiling, carpeting, cabinets, countertops and similar finish work.
- Item 7. Prefabricated swimming pools.
- Item 8. Swings and other playground equipment.
- Item 9. Window awnings supported by an exterior wall which do not project more than 54 inches (1372 mm) from the exterior wall and do not require additional support.
- Item 10. Decks that are not more than 30 inches above the grade plane.
- Item 11. Antennas.
- Item 12. *Roof repairs* consisting of 2 squares or less.
- Item 13. Siding repairs consisting of 2 squares or less.
- Item 14. Soffit and fascia repairs.
- Item 15. Detached tree houses.
- Item 16. Detached play houses.
- Item 17. Temporary structures without permanent foundations (see Section R107.3 of this code for temporary electrical).
- Item 18. Towers.
- Item 19. Non-Structural window and door replacements.
- Item 20. Re-roofing and/or re-siding of *structures* not requiring building *permit*.
- Item 21. Three-sided *structures* for agricultural use not exceeding 1000 square feet (i.e. loafing sheds).

Add the following paragraph to the end of Section R105.2 (Work exempt from permit):

Work exempted from requiring a building *permit* does not preclude any required approval from the Jefferson County Planning and Zoning Division. Unless otherwise exempted by this code, separate plumbing, electrical, and mechanical *permits* shall be required for the exempted items. Exemption from the *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 resolutions of this jurisdiction.

Add the following paragraph to the end of Section R105.3 (Application for permit):

8. A completed Move and Set Pre-Inspection Form (provided by the Division of Building Safety) shall be submitted to the Division of Building Safety prior to applying for a Move and Set *permit*. The original seal and signature of a Colorado Registered Professional Engineer shall be required unless waived by the division.

Delete Section R105.3.1.1 (Determination of substantially improved or substantially damaged existing buildings in flood hazard areas) in its entirety.

Delete Section R105.5 (Expiration) in its entirety and replace it with the following:

R105.5 Expiration. Building *permits* having a valuation of less than \$100,000 shall expire one (1) year after date of issuance unless voided for suspension, abandonment or failure to commence the work as provided above. Building *permits* having a valuation of \$100,000 or more shall expire two (2) years after date of issuance unless voided for suspension, abandonment or failure to commence the work. The *building official* may extend the expiration date for a period not exceeding 180 days upon 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 a *permit* after expiration, the permittee shall pay a new full *permit* fee, except the *building official* may authorize new fees where all rough inspections have been completed under the expired *permit*.

Re-roof *permits* and electrical, mechanical and plumbing sub-*permits* (not attached to building *permits*) shall expire one year from date of issuance. Upon request of the applicant the *building official* may extend the expiration date by a period not exceeding 180 days.

The existence of expired *permits* (*permits* which did not receive all required inspections) obtained by a *permit* holder may result in the restriction of issuance of any further *permits* to the *permit* holder until completion of inspections in accordance with this code as determined by the *building official*.

Add the following new Sections:

R105.10 Transfer or cancellation of permits. An unexpired *permit* may be cancelled or transferred from one party to another upon written application to the *building official* by the original permittee or owner of the property, provided no inspections have been made and there is no change in the *construction documents* and specifications. If any inspections have been completed on the original building *permit*, the new permittee may be required to pay one-half of the original *permit* fees as determined by the *building official*. No change shall be made in the expiration date of the original *permit*.

R105.10.1 Owner assuming role as contractor. The *building official* may allow the property owner to assume the role of contractor at any time on an active building *permit* by providing the *building official* with a letter listing the *permit* number and the address of the project and stating that the original contractor is no longer in the employ of the owner, provided that no change of ownership has occurred since the *permit* was issued.

This change may be done at no charge. No change shall be made in the expiration date of the original building *permit*.

SECTION R106 CONSTRUCTION DOCUMENTS

Add the following new Sections:

R106.1.1.1 Responsibility for preparation of construction documents. The *building official* shall require *construction documents*, computations, and specifications to be prepared, designed, and stamped by an engineer or architect licensed in the State of Colorado for, but not limited to:

1. All foundations except for detached *accessory structures* not greater than 1,000 square feet.
2. Wall or roof framing, other than standard construction, not conforming to the requirements of Chapters 6 and 8 of this code.
3. Foundations located in designated dipping bedrock areas and expansive soils areas, per Section R403.1.8.
4. Metal buildings and structures.
5. Log structures.
6. Where ground snow load is greater than 70 pounds p.s.f. (Reference Snow Load Table: Table R301.2.3)

R106.1.1.2 Fire protection system shop drawings. Shop drawings for the fire protection system(s) shall be submitted to indicate conformance with this code and the *construction documents* and shall be submitted and approved by the Division of Building Safety prior to the start of system installation. Shop drawings shall contain all information as required by the referenced installation standards in Chapter 9 of the 2018 Jefferson County Building Code and Supplement and/or Section P2904 of this code.

R106.1.1.3 Exterior wall envelope. *Construction documents* for all buildings shall describe the exterior wall envelope in sufficient detail to determine compliance with this code. The *construction documents* shall provide details of the exterior wall envelope as required, including flashing, intersections with dissimilar materials, corners, end details, control joints, intersections at roof, eaves, or parapets, means of drainage, water-resistant membrane, insulation, and details around openings, door and window schedules, U factors and R factors.

The *construction documents* shall include manufacturer's installation instructions that provide supporting documentation that the proposed penetration and opening details described in the *construction documents* maintain the weather resistance of the exterior wall envelope. Where applicable, the supporting documentation shall fully describe the exterior wall system that was tested, as well as the test procedure used.

Add the following paragraph to the end of Section R106.3.3 (Phased approval):

When the Division of Building Safety has issued a building *permit* for construction of part of a building or structure and the County adopts a new building code, the Division of Building Safety may issue the building *permits* for the remaining portion of the building or structure under the provisions and requirements of the code in effect at the time the first building *permit* was issued, if the remaining building *permits* are issued within one (1) year of the adoption of the new code.

Add the following new Section:

R106.3.4 Design professional required. When it is required that documents be prepared by a *registered design professional*, the *building official* shall be authorized to require the owner to engage and designate on the building *permit* application a *registered design professional* who shall act as the *registered design professional* in responsible charge. If the circumstances require, the owner shall designate a substitute *registered design professional* in responsible charge who shall perform the duties required of the original *registered design professional* in responsible charge. The *building official* shall be notified in writing by the owner if the *registered design professional* in responsible charge is changed or is unable to continue to perform the duties.

The *registered design professional* in responsible charge shall be responsible for reviewing and coordinating submittal documents prepared by others, including phased and deferred submittal items, for compatibility with the design of the building.

Where structural observation is required by Chapter 17 of the 2018 Jefferson County Building Code and Supplement, such structural observations shall be required under this code, and the inspection report shall name the individual or firms who are to perform structural observation and describe the stages of construction at which structural observation is to occur. The duties specified in Chapter 17 of the 2018 Jefferson County Building Code and Supplement are also incorporated into this code.

Add the following new Section:

R106.6 Expiration of plan review. When an application for which a *permit* is deemed to have been abandoned pursuant to Section R105.3.2, all *construction documents* and other data submitted for review in connection with the abandoned application will be returned to the applicant or destroyed by the *building official*. To renew action on an abandoned application, the applicant shall be required to resubmit the plans and pay a new plan review fee. If a new code has been adopted prior to the resubmittal of *construction documents*, the *construction documents* shall be designed to meet the requirements of the new code.

**SECTION R107
TEMPORARY STRUCTURES AND USES**

Delete Section R107.3 (Temporary power) in its entirety and replace it with the following:

R107.3 Temporary power. The *building official* is authorized to give permission to temporarily supply and use power in part of an electrical installation before such installation has been fully completed and the final electrical inspection has been *approved*. The part covered by the temporary power shall comply with the requirements specified for temporary lighting, heat or power in this code and the current Jefferson County Electrical Code and Supplement.

**SECTION R108
FEES**

Delete Section R108.2 (Schedule of permit fees) in its entirety and replace it with the following:

R108.2 Schedule of permit fees. A fee for each building *permit* shall be paid to the *building official* as set forth in Table R108.2. The determination of value or valuation under any of the provisions of this code shall be made by the *building official*. The value to be used in computing the building *permit* and building plan review fees shall be the total value of all construction work for which the *permit* is issued. All Division of Building Safety fees which contain a fraction of a dollar shall be rounded up to the next highest dollar.

**Table R108.2
BUILDING PERMIT FEES**

TOTAL VALUATION			FEE
\$1	to	\$1,000	\$55
\$1,001	to	\$2,000	\$70
\$2,001	to	\$40,000	\$69 for the first \$2,000 plus \$11 for each additional \$1,000 or fraction thereof, to and including \$40,000
\$40,001	to	\$100,000	\$487 for the first \$40,000 plus \$9 for each additional \$1,000 or fraction thereof, to and including \$100,000
\$100,001	to	\$500,000	\$1,027 for the first \$100,000 plus \$7 for each additional \$1,000 or fraction thereof, to and including \$500,000
\$500,001	to	\$1,000,000	\$3,827 for the first \$500,000 plus \$5 for each additional \$1,000 or fraction thereof, to and including \$1,000,000
\$1,000,001	to	\$5,000,000	\$6,327 for the first \$1,000,000 plus \$3 for each additional \$1,000 or fraction thereof, to and including \$5,000,000
\$5,000,001		and over	\$18,327 for the first \$5,000,000 plus \$1 for each additional \$1,000 or fraction thereof
Plan Review Fee for Building Permits			65% of Building Permit Fee. The plan review fee may be waived for residential projects under \$75,000.
Other Fees and Charges:			
1. Inspections outside of normal business hours..... \$100 per hour* (Minimum Charge -- two hours)			
2. Reinspection fees..... \$100 per hour*			
3. Inspections for which no fee is specifically indicated.....\$100 per hour*			
4. Additional plan review required by changes, additions or revisions.....\$100 per hour*			
5. For use of outside consultants for plan checking and inspections, or both.....Actual Cost**			
6. For issuance of each temporary certificate of occupancy.....\$750***			
7. Demolition Permits.....\$30			
* Or the total hourly cost to the jurisdiction, whichever is the greatest. The cost shall include supervision, overhead, equipment, hourly wages and fringe benefits of the employees involved.			
** Actual costs include administrative and overhead costs and any additional costs incurred by the jurisdiction.			
*** \$500 shall be refunded if a certificate of occupancy is issued prior to the expiration of the temporary certificate of occupancy. Written application for said refund must be filed no later than 60 days after the date of issuance of the certificate of occupancy.			
a. Other County fees may apply.			

Delete Section R108.3 (Building permit valuations) in its entirety and replace it with the following:

The applicant for a *permit* shall provide an estimated value of all the work to be performed including mechanical, electrical, and plumbing at time of application. Final building *permit* valuation shall be as determined by the *building official*. Construction cost valuations may be adjusted accordingly based on recommendations as published regularly by the International Code Council as “Building Valuation Data.”

Add the following new Sections:

R108.4.1 Investigation fee. Any person who commences work on a building, structure, electrical, gas, mechanical or plumbing system before obtaining the necessary *permits*, or who is in violation of the approved *construction documents*, or in violation of Section R109.6 of this code, shall be subject to an investigation fee that shall be in addition to the required *permit* fees waived by the *building official*. The investigation fee shall be in addition to the required *permit* fee, shall be equal to the *permit* fee, and shall be collected, whether a *permit* is then or subsequently issued.

R108.4.2 Temporary certificate of occupancy. There shall be a fee for a temporary certificate of occupancy as set forth in Table R108.2.

R108.4.3 Reinspection fees. A reinspection fee may be assessed for each inspection or reinspection when such portion of work for which inspection is called is not complete or when corrections called for are not made.

Reinspection fees may be assessed when the inspection record card is not posted or otherwise available on the work site, when the *approved construction documents* are not readily available to the inspector, for failure to provide access on the date for which inspection is requested, or for deviating from *construction documents* requiring the approval of the *building official* or for failure to post a readily visible address.

To obtain a reinspection, the applicant shall pay the reinspection fee in accordance with Table R108.2. In instances where reinspection fees have been assessed, no additional inspection of the work shall be performed until the required fees have been paid.

R108.4.4 Plan review fee. When submittal documents are required by Section 106.1, a plan review fee equal to sixty-five (65) percent of the *permit* fee shall be charged on all *permits*. This fee may be required at time of submittal of the documents for plan review. Plan review fees may be waived by the *building official* for projects with a valuation of less than \$75,000. Projects having received a Stop Work Order, may be charged a plan review fee regardless of valuation.

The plan review fees specified in this Section are separate fees from the *permit* fees specified in Section R108.2 and are in addition to the *permit* fees. Additional plan review fees required by changes, additions or revisions to *construction documents* may be charged in accordance with item 4 in Table R108.2.

108.5 Refunds. Add the following Sections:

R108.5.1 Refund processing fee. There shall be a minimum \$45 fee for processing any refund unless waived by the *building official*. All refunds must be requested on the Refund Request Form provided by the Division of Building Safety. The *building official* may authorize the refunding of any fee paid hereunder which was erroneously paid or collected.

R108.5.2 Permit fee refund. The *building official* may authorize the refunding or partial refunding of the *permit* fee paid when no work has been done under any *permit* issued in accordance with this code. Written application for said refund must be filed by the original permittee not later than sixty (60) days after the date of the fee payment.

Delete Section R108.6 (Work commencing before permit issuance) in its entirety.

Delete Section R109 (Inspections) in its entirety and replace it with the following:

SECTION R109 INSPECTIONS

R109.1 General. Construction or work for which a *permit* is required shall be subject to inspection by the *building official* and such construction or work shall remain accessible and exposed for inspection purposes until *approved*. Approval 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 accessible and exposed for inspection purposes. Neither the *building official* nor the jurisdiction shall be liable for expense entailed in the removal or replacement of any material required to allow inspection.

R109.2 Building permit inspection card. Work requiring a building *permit* shall not be commenced until the *permit* holder or an agent of the *permit* holder shall have posted the Building Permit Inspection Card in a conspicuous place on the premises and in a position as to allow the *building official* to make the required entries conveniently thereon regarding inspection of the work. The address of the building site shall be posted in a conspicuous place readily visible from the public road. This card shall be maintained in such position by the *permit* holder until all inspections have been made and final approval has been granted by the *building official*.

R109.3 Required inspections. The inspections set forth in Sections R109.3.1 through R109.3.16 are required if applicable to the construction design, and the *building official*, upon notification, shall make such inspections.

R109.3.1 Footing inspections. Footing inspections shall be made after trenches are excavated, forms erected and reinforcing steel, if any, placed and before any footings are poured.

R109.3.2 Drilled pier inspections. Drilled pier inspections shall be made while the piers are being drilled. The engineer of record or his authorized representative shall be present during the drilling operations and be available to the inspector during required inspections per Appendix X.

R109.3.3 Foundation wall inspections. Foundation wall inspections shall be made after the footings or piers have been poured. The foundation walls shall be formed and reinforcing steel and void material shall be in place prior to inspection.

R109.3.4 Concrete encased electrode (UFER) observation. Concrete encased electrode (UFER) observation shall be made prior to concrete placement surrounding UFER. Refer to Article 250.52 (A) (3) of the current Jefferson County Electrical Code and Supplement for additional Ufer requirements.

R109.3.5 Passive Radon Mitigation System Inspection. For new residential dwelling units, passive radon mitigation systems shall be inspected prior to covering the system. System shall be labeled.

R109.3.6 Structural concrete slab or under-floor inspection. Concrete slab and under-floor inspections shall be made after in-slab reinforcing steel and building service equipment, conduit, piping accessories and other ancillary equipment items are in place, but before any concrete is placed or floor sheathing is installed, including the subfloor.

R109.3.7 Building sheathing inspection. A building sheathing inspection shall be made after all sheathing is installed and fastened per reviewed *construction documents* and prior to concealment.

R109.3.8 Mid-roof inspection. A mid-roof inspection shall be required when the roof is at least 10 percent, but not more than 25 percent, completed. It shall be the applicant's duty to provide reasonable and safe access to all portions of the roof for both mid-roof and final inspections. The inspector has the authority to make the determination for what is reasonable and safe.

R109.3.9 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 framing inspection. Inspections shall include but are not limited to electric in-floor heat systems and poured-in-place shower pans.

Exception: Backfilling of ground-source heat pump loop systems tested in accordance with Section M2105.1 of this code prior to inspection shall be permitted.

R109.3.10 Frame inspection and masonry inspection. Inspection of framing and masonry construction shall be made after the roof deck or sheathing, all framing, fire blocking and bracing are in place and pipes, chimneys and vents to be concealed are complete and the rough electrical, plumbing, heating, wires, pipes and ducts inspections are *approved*.

R109.3.11 Gypsum board inspection. Gypsum board inspections shall be made after gypsum board, interior and exterior, is in place, before any plastering is applied or gypsum board joints and fasteners are taped and finished.

R109.3.12 Stucco lath inspection. Stucco lath inspections shall be made after windows and/or doors are installed and flashed and prior to application of any finish coatings.

R109.3.13 Fire-resistant assemblies and penetrations. Where fire-resistance-rated construction is required between dwelling units or due to the location on property, an inspection is required after gypsum products are in place but before panel joints and fasteners are taped and finished.

R109.3.14 Other inspections. In addition to the inspections specified above, the *building official* is authorized to make or require other inspections of any construction work to ascertain compliance with the provisions of this code and other laws that are enforced by the Division of Building Safety.

R109.3.15 Special inspections. For special inspections, see Chapter 17 of the 2018 Jefferson County Building Code and Supplement.

R109.3.16 Final building inspection. The Final Building Inspection shall be made after all work required by the building *permit* including permitted plumbing, mechanical, gas, and electrical systems are completed, and all required documents have been received and reviewed.

R109.4 Inspection agencies. The *building official* is authorized to accept reports of *approved* inspection agencies, provided such agencies satisfy the requirements as to qualifications and reliability.

R109.5 Inspection requests. It shall be the duty of the holder of the building *permit* or their duly authorized agent to notify the *building official* when work is ready for inspection. It shall be the duty of the *permit* holder to provide access to and means for inspection of such work for any inspections that are required by this code.

R109.6 Approval required. Work shall not be done beyond the point indicated in each successive inspection without first obtaining the approval of the *building official*. The *building official*, upon notification, shall make the requested inspections and shall either indicate the portion of the construction that is satisfactory as completed, or shall notify the *permit* holder or an agent of the *permit* holder wherein the same fails to comply with this code. Any portions that do not comply shall be corrected and such portion shall not be covered or concealed until authorized by the *building official*.

SECTION R110 CERTIFICATE OF OCCUPANCY

Delete Section R110.4 (Temporary Occupancy) in its entirety and replace it with the following:

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. The *building official* shall set a period during which the temporary certificate of occupancy is valid. The fee for a temporary certificate of occupancy is set forth in Table R108.2.

Delete Section R112 (Board of Appeals) in its entirety and replace it with the following:

SECTION R112 BOARD OF REVIEW

R112.1 General. The Jefferson County Board of County Commissioners has established a Board of Review with authority to hear and decide appeals of orders, requirements or decisions of the *building official* relating to the application and interpretation of this code. The Board of Review's organizational and procedural rules, including its rules and procedures governing the filing and conduct of appeals, are set forth in the Board of Review's administrative policy and bylaws, which may be amended from time to time. The Board of Review's current administrative policy, and any bylaws adopted by the Board of Review, are located [here](#) or copies can be provided at the Division of Building Safety Front Office.

SECTION R202 DEFINITIONS

In Section R202 (Definitions), add the following definition:

ACCESSORY DWELLING UNIT (ADU). A separate, complete housekeeping unit with a kitchen, sleeping area, and full bathroom facilities, which is an attached or detached extension to an existing single-family dwelling.

In Section R202 (Definitions), delete the definition of Building official in its entirety and replace it with the following.

BUILDING OFFICIAL. The officer or other designated authority charged with the administration and enforcement of this code, or a duly authorized representative. Code official and *building official* shall be equivalent and interchangeable terms.

SECTION R301 DESIGN CRITERIA

Add the following sentence to the end of Section R301.2 (Climactic and geographic design criteria):

Manufactured housing including HUD homes shall meet the wind and snow load requirements of Table R301.2(1)

Delete Table R301.2(1) in its entirety and replace it with the following Table R301.2(1) (Climatic and Geographic Design Criteria):

TABLE R301.2(1) - CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA

Ground and Roof Snow Load	Wind Design*		Seismic Design Category	Subject To Damage From			Winter Design Temp	Ice Barrier Underlayment Required	Flood Hazards	Air Freezing Index	Mean Annual Temp
	Speed (mph)	Topographic Effects		Weathering	Frost line depth	Termite					
Varies See Table	129 mph** V ^{ult} Exp. B	Yes	"B"	Severe	36"	Slight to Moderate	1° F	Yes	Varies	532	50.5° F
Manual J Design Criteria											
Elevation	Latitude	Winter Heating 99% Dry Bulb	Summer Cooling 1% Dry Bulb	Altitude Correction Factor	Indoor Design Temperature	Design Temperature Cooling	Heating Temperature Difference				
Below 7400 ft.	39° North	-7	95	Varies	72°	75°	79°				
Above 7400 ft.	39° North	-11	90	Varies	72°	75°	83°				
Cooling Temperature Difference	Wind Velocity Heating	Wind Velocity Cooling	Coincident Wet Bulb	Daily Range	Winter Humidity	Summer Humidity	--				
20°	15 mph	7.5 mph	59	High (H)	50%	50%	--				
15°	15 mph	7.5 mph	59	High (H)	50%	50%	--				
<p>* Rocky Mountain Metropolitan Airport area between Simms St. and Wadsworth Blvd. and north of 108th Ave. shall be 155 mph V^{ult} Exposure C (approx. 120 mph three second gust Exposure C)</p> <p>** Approximately Equivalent to 100 mph V^{asd} (three second gust) Exposure B (see Table R301.2.1.3 for conversion)</p>											

Add the following to the end of Section R301.2.3 (Snow loads):

R301.2.3 General. The design roof load shall not be less than the minimum amounts set forth in Table R301.2.3.

TABLE R301.2.3. SNOW LOAD TABLE
Minimum Roof and Ground Snow Load 30/42.9 PSF

Elevation	Ground Snow Load (p.s.f.)	Roof Snow Load (p.s.f.)	Elevation	Ground Snow Load (p.s.f.)	Roof Snow Load (p.s.f.)
<6,500	43	30	8,500	97	68
6,500	43	30	8,625	102	71
6,625	46	32	8,750	106	74
6,750	49	34	8,875	109	76
6,875	51	36	9,000	114	79
7,000	54	38	9,125	118	82
7,125	57	40	9,250	125	85
7,250	60	42	9,375	129	88
7,375	64	45	9,500	134	91
7,500	67	47	9,625	139	95
7,625	70*	49	9,750	143	98
7,750	74	52	9,875	147	100
7,875	77	54	10,000	152	106
8,000	82	57	10,125	156	109
8,125	86	60	10,250	162	113
8,250	89	62	10,275	167	117
8,375	93	65	10,500	172	120

Add the following new Section:

R301.2.3.1 Ground snow loads exceeding 70 p.s.f. Buildings and/or structures located in regions with ground snow loads exceeding 70 p.s.f. **shall** be designed in accordance with accepted engineering practice by a licensed design professional.

**SECTION R302
FIRE-RESISTANT CONSTRUCTION**

In Section R302.3 (Two-family dwellings), add the following to the end of Exception 1: “or P2904.”

Add the following new Section:

R302.3.2 Separation of Utilities. Two-Family dwellings shall have separate utility services.

In Section R302.13 (Fire protection of floors), delete Exception 2 in its entirety and replace it with the following:

Exception 2. Floor assemblies located directly over a crawlspace not intended for storage or for the installation of fuel-fired heating appliances.

**SECTION R308
GLAZING**

In Section R308.4.2 (Glazing adjacent to doors), delete item 2 in its entirety.

**SECTION R310
EMERGENCY ESCAPE AND RESCUE OPENINGS**

In Section R310.2.3 (Window wells), add the following new Exception:

Exception 2: Existing window wells with a minimum 24 inch horizontal projection that were legal at the time of installation shall be permitted to continue without complying with the requirements of this Section.

**SECTION R311
MEANS OF EGRESS**

In Section R311.7.5.3 (Nosings), add the following sentence to the end of the Exception:

A nosing projection is not required for concrete stairs.

**SECTION R313
AUTOMATIC FIRE SPRINKLER SYSTEMS**

Delete Section R313 (Automatic Fire Sprinkler Systems) in its entirety.

**SECTION R324
SOLAR ENERGY SYSTEMS**

Delete Section R324.6 (Roof access and pathways) in its entirety.

SECTION R403 FOOTINGS

Add the following new Sections:

R403.1.9 Design criteria for designated dipping bedrock area. Foundations in the designated dipping bedrock area shall conform with Appendix X and Section R403.1.9.

Note: The Designated Dipping Bedrock Area is determined by the Jefferson County Planning and Zoning Division.

R403.1.9.1 Piers. A minimum pier length of 25 feet is required when bedrock is shallower than 19 feet below surface grade. For piers designed for support in bedrock, a minimum 6 foot penetration into bedrock is required.

Minimum pier diameter of 10 inches.

Minimum 1.5% steel area (Grade 60) = 1.18 square inches on 10 inch diameter pier = (2) #7 Grade 60 bars in 10 inch diameter pier.

Pier steel shall extend into top row of wall steel.

R403.1.9.2 Foundation Walls. Foundation walls shall be designed for minimum 50 p.c.f. equivalent fluid pressure when house penetrates bedrock or when soils adjacent to basement swell greater than 4% at 1,000 pound surcharge or 5% at 500 pound surcharge. Higher minimum equivalent fluid pressures shall be used if geotechnical report indicates.

Structural basement floor is required if bedrock is encountered within 6 feet of basement floor or when soils within 6 feet swell greater than 4% at 1,000 pound surcharge or 5% at 500 pound surcharge. Adjustable tele posts shall be used at intermediate structural floor support.

No wall with a lateral surcharge on only one side shall be greater than 25 feet in length without counter fort or buttress.

Minimum 6 inch foundation voids shall be used when bedrock is encountered within 6 feet of basement or when soils within 6 feet of basement swell greater than 4% at 1,000 pound surcharge or 5% at 500 pound surcharge.

R403.1.9.3 Drainage and Grading. A foundation drain and sump pit shall be installed in all homes unless exempted by Section R405.1. If the sump pit is the sole discharge system used, an operational pump shall be installed with adequate surface discharge or discharge into positive sloped pipe to an underdrain. If the sump pit is used as a backup to an underdrain connection, a pump is not required.

Foundation drains shall have a minimum 1% fall with the low point at the discharge connection.

SECTION R507 EXTERIOR DECKS

Add the following new Section:

R507.1.1 Deck Loading Design. Loading for deck design shall be a minimum of 40 psf live load per Table R301.5. Loading shall be further increased based on roof snow load requirements in Table R301.2.3.

Delete Section R507.6 (Deck joists) in its entirety and replace it with the following:

R507.6 Deck Joists. Joist cantilevers greater than 2 feet shall bear the seal of a Colorado *Registered Design Professional*.

SECTION R602 WOOD WALL FRAMING

In Section R602.3.1 (Stud size, height and spacing), amend Exception 2 to change 25 (psf) to 30 (psf).

SECTION R905 ASPHALT SHINGLES

R905.2.8.3 Sidewall Flashing. The first sentence in this Section shall be amended by deleting the words “continuous or” (Step flashing shall be required, continuous flashing shall be prohibited.)

SECTION R908 REROOFING

Add the following Section:

R908.1.1 Re-roofing: *Any roof repair of more than 2 squares requires a permit.*

R908.3.1.1 Recovering versus replacement. Add Item:

Item 4. Where the existing *roof covering* is asphalt shingles.

SECTIONS 1003 & 1004 MASONRY AND FACTORY-BUILT FIREPLACES

R1003.1 Masonry fireplaces. General.
and

R1004.1 Factory-Built Fireplaces. General. Add the following paragraph to both Sections:

New fireplaces. Every new *fireplace* shall have one of the following permanently installed:

1. *Approved* gas logs;
2. Other *approved* gas or alcohol specific appliances;
3. An *approved* solid fuel appliance insert meeting the most stringent emission standards for wood stoves established under Colorado statute and/or regulations promulgated by the Colorado Air Quality Control Commission (AQCC) as of the time of installation of the *fireplace*; or
4. A solid fuel burning device that is classified as exempt from and not eligible for certification under the Standards of Performance for New Residential Wood Heaters promulgated by the United States Environmental Protection Agency (U.S. EPA) at 40 CFR §§ 60.530 et. seq. for wood heaters but has been tested by an accredited testing agency and demonstrated that its emission performance is in accordance with criteria and procedures not less stringent than those required by the U.S. EPA and/or AQCC for wood stoves manufactured after July 1, 1990, subject to the following:
 - (a) Emission performance approval of the solid fuel burning device shall be based upon test results that demonstrate to the Division of Building Safety's satisfaction that the solid fuel burning device meets the emission performance requirements of the U.S. EPA and/or AQCC for wood stoves manufactured after July 1, 1990.

SECTION N1102 (R402) BUILDING THERMAL ENVELOPE

Delete Section N1102.4.1.2 (R402.4.1.2) (Testing) in its entirety and replace it with the following:

Section N1102.4.1.2 Testing. (R402.4.1.2) Single family detached buildings or *dwelling units* shall be tested and verified as having an air leakage rate of not exceeding three air changes per hour or 0.24 cubic feet per minute at 50 Pascals/square feet of *dwelling unit enclosure area*.

Attached multifamily buildings or *dwelling units* shall be tested and verified as having an air leakage rate of less than five air changes per hour or 0.30 cubic feet per minute at 50 Pascals/square feet of *dwelling unit enclosure area*.

Testing shall be conducted in accordance with ASTM E 779 or ASTM E 1827 and reported at a pressure of 0.2 inch w.g. (50 Pascals). Where required by the *code official*, 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*.

During testing:

1. Exterior windows and doors, fireplace and stove doors shall be closed, but not sealed, beyond the intended weather stripping or other infiltration control measures.
2. Dampers, including exhaust, intake, makeup air, backdraft and flue dampers, shall be closed, but not sealed beyond the intended infiltration control measures.
3. Interior doors, if installed at the time of the test, shall be open.

4. Exterior doors for continuous ventilation systems and heat recovery ventilators shall be closed and sealed.
5. Heating and cooling systems, if installed at the time of the test, shall be turned off.
6. Supply and return registers, if installed at the time of the test, shall be fully open.

MECHANICAL
Chapters 12 through 23

SECTION M1201
GENERAL

Add the following new Section:

M1201.3 Permit fees. Table M1201.3 below shall be used to determine the mechanical *permit* fees for all mechanical *permits* issued for work not in conjunction with an active building *permit*.

Table M1201.3 MECHANICAL PERMIT FEE TABLE	
VALUATION OF WORK	PERMIT FEE
Not more than \$2,000	\$45
More than \$2,000 but not more than \$50,000	\$16 per each \$1,000 valuation or fraction thereof
More than \$50,000 but not more than \$500,000	\$150 plus \$13 per each \$1,000 valuation or fraction thereof
More than \$500,000	\$650 plus \$12 per each \$1,000 valuation or fraction thereof

SECTION M1307
APPLIANCE INSTALLATION

Add the following new Section:

M1307.1.1 Gas logs. *Approved* gas logs may be installed in new solid fuel burning *fireplaces* when required by Sections R1003 & R1004 of this code.

SECTION M1401
GENERAL

Add the following new Section:

M1401.1.1 Unvented room heaters. Unvented *room heaters* are prohibited.

SECTION M1414
FIREPLACE STOVES

Add the following new Section:

M1414.3 Solid fuel decorative appliances. Every new installation of a solid fuel burning vented decorative *appliance* or *room heater* shall meet the most stringent emission standards for wood stoves established under Colorado statute and/or regulations

promulgated by the Colorado Air Quality Control Commission as of the time of installation of the *appliance or room heater*.

**SECTION M1503
DOMESTIC COOKING EXHAUST EQUIPMENT**

Delete the first sentence of Section M1503.6 (Makeup air required) in its entirety and replace it with the following:

Where one or more gas, liquid or solid fuel-burning appliance that is neither direct-vent nor uses a mechanical draft venting system is located within a dwelling unit's air barrier, each exhaust system capable of exhausting in excess of 600 cub feet per minute shall be mechanically or passively provided with makeup air at a rate approximately equal to the exhaust air rate.

**SECTION M1504
EXHAUST DUCTS AND EXHAUST OPENINGS**

Delete Section M1504.2 (Duct Length) in its entirety.

FUEL GAS
Chapter 24

SECTION G2401 (101)
GENERAL

Add the following new Section: (effective 7/1/2021)

G2401.1.1 Modifications. Any modifications to or newer versions of Chapter 24 Fuel Gas, of the International Residential Code (IRC) that are adopted by the Colorado State Plumbing Board pursuant to its authority under C.R.S. § 12-155-106(2) which impose a higher standard shall be automatically incorporated herein and deemed to modify this code and shall become effective July 1 of the year following state adoption of such. (eff. 7/1/2021)

Add the following new Section:

G2401.2 Permit Fees. Table G2401.2 below shall be used to determine the fuel gas *permit* fees for all fuel gas *permits* issued for work not in conjunction with an active building *permit*.

Table G2401.2 FUEL GAS PERMIT FEE TABLE	
VALUATION OF WORK	PERMIT FEE
Not more than \$2,000	\$45
More than \$2,000 but not more than \$50,000	\$16 per each \$1,000 valuation or fraction thereof
More than \$50,000 but not more than \$500,000	\$150 plus \$13 per each \$1,000 valuation or fraction thereof
More than \$500,000	\$650 plus \$12 per each \$1,000 valuation or fraction thereof

SECTION G2406 (303)
APPLIANCE LOCATION

In Section G2406.2 (Prohibited locations), delete exceptions numbered 3 and 4 in their entirety.

SECTION G2407 (304)
COMBUSTION, VENTILATION AND DILUTION AIR

Add the following sentence to the end of Section G2407.11 (Combustion air ducts):

9. Combustion air ducts shall terminate within 4 feet of the *appliance* served.

**SECTION G2417 (406)
INSPECTION, TESTING AND PURGING**

Delete Section G2417.4.1 (Test pressure) in its entirety and replace it with the following:

G2417.4.1 Test pressure. The test pressure to be used shall be not less 1.5 times the proposed maximum working pressure, but not less than 10 psig (20 kPa gauge), irrespective of design pressure. Where the test pressure exceeds 125 psig (862 kPa gauge,) the test pressure shall not exceed a value that produces a hoop stress in the piping greater than 50 percent of the specified minimum yield strength of the pipe.

**SECTION G2432 (602)
DECORATIVE APPLIANCES FOR
INSTALLATION IN FIREPLACES**

G2432.1 General. Add the following sentence:

Approved gas logs may be installed in new solid fuel burning *fireplaces* when required by Sections R1003 & R1004 of this code.

Delete Section G2445 (Unvented Room Heaters) in its entirety and replace with the following:

**SECTION G2445 (621)
UNVENTED ROOM HEATERS**

G2445.1 Prohibited. Unvented *room heaters* are prohibited.

**SECTION G2447 (623)
COOKING APPLIANCES**

In Section G2447.2 (Prohibited location), delete Exception 2 in its entirety.

PLUMBING
Chapters 25 through 33

SECTION P2501
GENERAL

Add the following new Section: (effective 7/1/2021)

P2501.1.1 Modifications. Any modifications or newer versions of Part VII, Plumbing of the International Residential Code (IRC) that are adopted by the Colorado State Plumbing Board pursuant to its authority under C.R.S. §12-155-106(2) which imposes a higher standard shall be automatically incorporated herein and deemed to modify this code and shall become effective July 1 of the year following state adoption of such. (eff. 7/1/2021)

Add the following new Section:

P2501.3 Permit fees. Table P2501.3 below shall be used to determine the plumbing permit fees for all plumbing *permits* issued for work not in conjunction with an active building *permit*.

Table P2501.3 PLUMBING PERMIT FEE TABLE	
VALUATION OF WORK	PERMIT FEE
Not more than \$2,000	\$45
More than \$2,000 but not more than \$50,000	\$16 per each \$1,000 valuation or fraction thereof
More than \$50,000 but not more than \$500,000	\$150 plus \$13 per each \$1,000 valuation or fraction thereof
More than \$500,000	\$650 plus \$12 per each \$1,000 valuation or fraction thereof

SECTION P2603
STRUCTURAL AND PIPING PROTECTION

Delete Section P2603.5.1 (Sewer depth) in its entirety and replace it with the following:

P2603.5.1 Sewer depth. *Building sewers* that connect to private sewage disposal systems shall be a minimum of 12 inches below finished grade at the point of septic tank connection. *Building sewers* shall be a minimum of 12 inches below grade.

ELECTRICAL
Chapters 34 through 43

SECTION E3401
GENERAL

Add the following new Section: (effective 7/1/2021)

E3401.1.1 Modifications by newer version. Any modifications to or newer versions of the National Electrical Code (NFPA-70) that are adopted by the Colorado State Electrical Board pursuant to its authority under C.R.S. §12-115-107(2)(a) shall be automatically incorporated herein and deemed to modify this code. (eff 7/1/2021)

Add the following new Section:

E3401.5 Permit fees. Table E3401.5 below shall be used to determine the electrical *permit* fees for all electrical *permits* issued for work not in conjunction with an active building *permit*.

Table E3401.5 ELECTRICAL PERMIT FEE TABLE	
VALUATION OF WORK	PERMIT FEE*
Not more than \$2,000	\$45
More than \$2,000 but not more than \$50,000	\$16 per each \$1,000 valuation or fraction thereof
More than \$50,000 but not more than \$500,000	\$150 plus \$13 per each \$1,000 valuation or fraction thereof
More than \$500,000	\$650 plus \$12 per each \$1,000 valuation or fraction thereof

*not to exceed 15% above the amount charged by the state electrical board

APPENDICES ADOPTED

The following Appendices to the 2018 International Residential Code have been adopted by Jefferson County in their entirety.

Appendix A: Sizing and Capacities of Gas Piping

Appendix B: Sizing of Venting Systems Serving Appliances Equipped With Draft Hoods, Category I Appliances And Appliances Listed For Use With Type B Vents

Appendix C: Exit Terminals of Mechanical Draft and Direct-Vent Venting Systems

Appendix F: Radon Control Methods

Appendix K: Sound Transmission

Appendix M: Home Day Care –R-3 Occupancy

Appendix P: Sizing of Water Piping System

Jefferson County hereby adopts Appendix X (“Instructions for Completing the Foundation Compliance Form”), Appendix Y (“Unsafe Buildings and Structures”) and Appendix Z (“Special Building Construction Regulations in Wildfire Zone 1”) to the Jefferson County Residential Code Supplement, as set forth below:

Appendix X

Instructions for Completing the Foundation Compliance Form

A completed Foundation Compliance Form is required for all foundations designed by an engineer or architect unless waived by the building official.

1. Section A or B shall be filled out completely and stamped by a professional engineer or licensed architect. (In the case of drilled piers, a professional engineer's stamp is required.) Please refer to the form to determine whether Section A or B is applicable.
2. The form cannot be altered.
3. If a drilled pier foundation is used, drilling logs SHALL be attached.
4. The completed form shall be submitted PRIOR to requesting a final building inspection.
5. Failure to follow these outlined procedures will result in REJECTION of the Foundation Compliance Form and a delay in the final building inspection and/or issuance of the certificate of occupancy.

SITE CONDITIONS/PREPARATIONS

This section deals with the general onsite conditions found on a particular property to be inspected. These conditions include, but are not limited to:

Site Vegetation
Tree Roots
Lot Cut
Lot Fill

Site vegetation: Foundation excavations shall be inspected for the presence of organic matter and vegetation. Such vegetation includes native grasses, weeds, shrubs and other vegetation. The site shall be void of such materials before the installation of the foundation.

Tree roots: The areas of the foundation where concrete will be placed shall be inspected for the presence of roots of trees and shrubs and shall be void of such materials before the installation of the foundation.

Lot cut and fill: Cut and fills which may affect the performance of the structure shall be verified to be of a stable configuration and meet the bearing capacity specified in the geotechnical report and foundation design.

Drainage: Any site drainage conditions that would require special site preparation or foundation design shall be noted and reported to the design engineer prior to installation of the foundation.

Other: The existence of other site conditions specified in the *construction documents* shall be verified.

Tolerances: Any reference to a "tolerance" means the tolerance which is specified in the accepted *construction documents*.

Piers/pier holes: Piers (caissons) shall be inspected within the following parameters.

Number	Alignment
Size	Spacing
Depth	Concrete
Material Penetration	Cap Finish
Groundwater	Reinforcing
Refuse Material	Casings

Number: Total number of piers (caissons) shall be identical to pier number specified in design and specifications. Drilling logs shall be provided by the drilling contractor specifying the total number drilled and depth of each.

Inspections shall be made on a minimum of 50% of pier holes. Inspections shall include piers drilled on all levels of excavations, as well as at opposite ends of the excavations (two corners; diagonal). A sketch showing the location of pier holes shall be attached.

Size: Minimum diameter tolerance on piers. Any variation in pier diameter shall be approved by the design engineer and noted on the drill log submitted with the Foundation Compliance Form. Diameter to be measured with steel tape.

Depth: Depth shall be per design and specifications and shall be measured with steel tape.

Material penetration: Piers shall be drilled into bedrock or refusal per design and specifications. Inspection to be made with light and mirror test and onsite evaluation of material brought out of pier hole.

Groundwater: Pier holes should be dry at time of inspection. If conditions observed indicate more than 4" of groundwater in any pier hole, the inspector will remain to inspect all caissons and concrete placement.

Refuse material: Pier holes should be clean at the bottom and shall be visually inspected.

Alignment: Piers are to be straight, plumb, and true and shall be visually inspected. Proper alignment shall be verified at various depths of hole.

Spacing: Piers shall be located and spaced properly as per accepted foundation design and specifications.

Concrete: Concrete shall be placed and tested per the strength specifications and placement procedures contained in the accepted *construction documents*. Concrete shall be properly cured per the specified *construction documents* and standard engineering practice.

Cap finish: The pier cap shall be clean and the same diameter as the piers per accepted foundation design and specification.

Reinforcing: Reinforcing in pier shall be per accepted foundation and structural design and specifications.

Casing: If water is found in pier hole greater than 4" deep or if cave-in of pier hole sides occurs, design engineer shall specify remedy and should note the remedy on the submitted documentation accompanying the drill log.

PIER AND BEAM

Piers shall be inspected as outlined. Beams shall conform to the following:

Pier union to beam via steel shall be per *construction documents* and design specifications.

Grade beam shall be of proper dimension per design specifications.

Grade beam shall be placed as specified in accepted design and specifications.

The top of drilled piers shall be clean and placed per accepted design specifications to create a uniform pier shaft.

Steel should be continuous with no gaps, except as specified in the accepted *construction documents*.

Steel size and grade shall be per accepted *construction documents* and design specifications.

The pier cap shall be clean and the same diameter as the piers per the accepted specifications.

BEAM VOIDS

Proper void size and material shall be per *construction documents*.

Void material shall be properly placed per specifications in accepted *construction documents*.

Void material shall be in good condition.

Wet or collapsed void material shall be replaced prior to concrete placement or reestablished after forms are removed.

Joints in void material shall be sealed.

All concrete infiltration into void space shall be removed after forms are removed.

FOUNDATION WALLS/SPREAD AND PAD FOOTINGS/SLAB-ON-GRADE

Height, depth, width, length and reinforcing shall be per accepted foundation structural design and specifications.

Steel reinforcing: Reinforcement steel/mesh shall be as specified by accepted foundation and structural design as to size, type and grade. Steel shall be clean and free of loose rust. Any loose rust or scaling shall be removed before concrete placement. The steel/mesh shall be positioned in the center of the slab or as outlined in the accepted *construction documents*.

Foundation drains: Foundation drains to be located and placed as per accepted foundation design and specifications.

The drains shall be inspected to verify the fall specified in the *construction documents*. The daylight or discharge point shall also be inspected to verify positive flow.

FOUNDATION COMPLIANCE FORM

Do Not Alter This Form

(Please Print Legibly)

JEFFERSON COUNTY DIVISION OF BUILDING SAFETY PERMIT NO. _____

100 JEFFERSON COUNTY PARKWAY

GOLDEN, COLORADO 80419-3540

CONSTRUCTION SITE ADDRESS

CONTRACTOR'S NAME AND ADDRESS

Type of Foundation Drilled Piers Spread Footings Pad and Grade Beam

Narrow Spread Footings Other (Please Specify) _____

FOUNDATION INSPECTION PROCEDURE

All inspections shall be performed according to the procedures outlined in this Appendix X to the 2018 Jefferson County Building Code and Supplement and shall be signed, dated, and stamped by a Colorado Registered Professional Engineer or Colorado Licensed Architect. (Drilled pier foundations shall bear the seal of a Colorado Registered Professional Engineer.) This Appendix X provides procedural guidelines that are as comprehensive as possible, but cannot account for every possible situation encountered in the field. The guidelines shall be deemed to be the minimum inspection required and do not relieve the engineer or architect from any responsibility to conduct such additional inspections as may be necessary to determine that the foundation conforms to the *construction documents* and specifications accepted for construction for the above-referenced project. The inspecting engineer/architect is required to consult the design engineer/architect regarding any unusual conditions that are encountered on the job site. A set of foundation drawings bearing the Jefferson County Stamp shall be on the job site. Any modifications to accepted *construction documents* shall be approved by the design engineer and revised *construction documents* showing those modifications shall be submitted to the Division of Building Safety.

VERIFICATION OF INSPECTION

By signing and stamping below, the inspecting engineer or architect is verifying that he or she or their authorized representative has inspected the indicated portion(s) of the foundation and subsurface drainage system (where applicable) in accordance with the guidelines set forth in this Appendix X to the Jefferson County Building Code and Supplement and that such portion(s) were in compliance with the *construction documents* and specifications on file with the Division of Building Safety. However, this verification is not a guarantee as to the overall performance of the foundation system.

Drilling logs for drilled pier foundations SHALL be attached to the Foundation Compliance Form.

Section A may be used if one engineer or architect has completed and is responsible for all the required inspections.

Section B must be used **if more than one engineer or architect** has completed and is responsible for the required inspections.

SECTION A

Type Of Inspection		Dates of Inspections	Seal, Signature & Date
1.	Site Condition / Preparation		
2.	Pier Holes & Piers / Caissons / Footings		
3.	Grade Beams / Foundation Walls / Slab on Grade		
4.	Other:		
5.	Foundation Drains		
Engineer/Architect:			
Firm Name:			
Address:			

SECTION B

Site Condition Preparation	Dates of Inspections	Seal, Signature & Date
Engineer/Architect:		
Firm Name:		
Address:		

Pier Holes & Piers Caissons Spread Footings Pad Footings	Dates of Inspections	Seal & Signature
Engineer/Architect:		
Firm Name:		
Address:		

Grade Beams Foundation Walls Slab-on-Grade	Dates of Inspections	Seal & Signature
Engineer/Architect:		
Firm Name:		
Address:		

Other : Specify	Dates of Inspections	Seal & Signature
Engineer/Architect:		
Firm Name:		
Address:		

Foundation Drains	Dates of Inspections	Seal & Signature
Engineer/Architect:		
Firm Name:		
Address:		

NOTE: A completed Foundation Compliance Form shall be submitted and recorded with the Jefferson County Division of Building Safety PRIOR to requesting a final building inspection.

APPENDIX Y UNSAFE BUILDINGS AND STRUCTURES

Y101.1 Unsafe buildings or structures. All buildings or structures regulated by this code which are structurally unsafe or not provided with adequate egress, or which constitute a distinct fire hazard, or are otherwise dangerous to human life are, for the purpose of this Appendix, unsafe. Any building or structure constituting a distinct hazard to safety, health or public welfare by reason of inadequate maintenance, dilapidation, obsolescence, fire hazard, disaster, or damage or abandonment is, for the purpose of this Appendix, unsafe. Parapet walls, cornices, spires towers, tanks, statuary and other appendages or structural members which are supported by, attached to, or a part of a building and which are in deteriorated condition or otherwise unable to sustain the design loads which are specified in this code are hereby designated as unsafe building appendages.

Y101.2 Public nuisances. All such unsafe buildings are hereby declared to be public nuisances and shall be abated by repair, rehabilitation, demolition, or removal in accordance with the procedures specified in this Appendix.

Y101.3 Notice to owner. The *building official* shall examine or cause to be examined every building or structure or portion thereof reported as dangerous or damaged and, if such is found to be an unsafe building as defined in this Appendix, the *building official* shall give to the owner of such building or structure written notice stating the defects thereof. This notice may require the owner or person in charge of the building premises, within 48 hours, to commence either the required repairs or improvements or demolition and removal of the building or structure or portion thereof, and all such work shall be completed within 90 days from the date of notice unless otherwise stipulated by the *building official*. If necessary, such notice shall also require the building, structure or portion thereof to be vacated forthwith and not reoccupied until the required repairs and improvements are completed, inspected, and *approved* by the *building official*.

Proper service of such notice shall be by personal service upon, or by certified mail addressed to, the owner of record of the building premises; provided that, if such notice is by certified mail, the designated period within which said owner or persons in charge is required to comply with the order of the *building official* shall begin as of the date said owner received such notice.

If no address can be found for the owner of said property, the notice may be served by publishing a copy of the notice once in a newspaper of general circulation within Jefferson County, setting forth the address of the premises involved, if any, and the legal description of said premises and stating the defects complained of and the time in which said defects shall be corrected. Said notice shall be considered served three (3) days after the publication date of said newspaper.

Y101.4 Posting of signs. The *building official* shall cause to be posted at each entrance of such building or structure a notice reading "DANGER, KEEP OUT. THIS STRUCTURE IS UNSAFE FOR OCCUPANCY" and indicating the condition of the building or structure. Such notice shall not be removed without permission of the *building official*, and no person

shall enter the building or structure except for the purpose of making the required repairs or demolishing the building or structure as indicated on the notice.

Y101.5 Right to demolish. In case the owner shall fail, neglect, or refuse to comply with the notice to repair, rehabilitate, or to demolish and remove said building or structure or portion thereof, the Board of County Commissioners may order the owner to be prosecuted as a violator of the provisions of the code and may order the *building official* to proceed with the work specified in such notice. A statement of the cost of such work will be transmitted to the Board of County Commissioners who shall cause the same to be paid and levied as a special assessment against the property.

Y101.6 Costs. Costs incurred under Section Y115.5 shall be paid out of the County general fund. Such costs shall be charged to the owner of the premises involved as a special assessment on the land on which the building or structure is located and shall be collected in the manner provided for special assessments.

**ADDENDUM TO THE 2018 JEFFERSON COUNTY
RESIDENTIAL CODE AND SUPPLEMENT**

Changes to Sections Z104.2, Z104.2.1, Z104.2.2, Z104.4 and Z105.1 effective July 1, 2021

**APPENDIX Z
SPECIAL BUILDING CONSTRUCTION REGULATIONS IN WILDFIRE ZONE 1**

**SECTION Z101
GENERAL**

Z101.1 Scope. This Appendix applies to all buildings and structures located in Wildfire Zone 1, unless otherwise provided herein. In addition to meeting all applicable standards in the 2018 Jefferson County Residential Code and Supplement, all buildings and structures located in Wildfire Zone 1 shall be constructed in accordance with the standards set forth in this Appendix.

Z101.1.1 Conflict or inconsistency with Building Code. In the event of any conflict or inconsistency between the standards in this Appendix and the standards in the 2018 Jefferson County Residential Code and Supplement, the standards in this Appendix shall control with respect to all buildings and structures located in Wildfire Zone 1.

Z101.1.2 Date effective. The Appendix shall become effective on January 1, 2020 and shall apply to all permits applied for after January 1, 2020.

Z101.2 Objective. The objective of this Appendix is to establish minimum standards to locate, design and construct buildings and structures or portions thereof in Wildfire Zone 1 for the protection of life and property, to resist damage from wildfires, and to mitigate building and structure fires from spreading to wildland fuels.

Z101.3 Fire-resistance-rated construction. Where this Appendix requires 1-hour fire-resistance-rated construction, the fire resistance rating of building elements, components or assemblies shall be determined in accordance with the test procedures set forth in ASTM E119 or UL 263.

Exceptions:

1. The fire-resistance rating of building elements, components or assemblies based on the prescriptive designs prescribed in Section 721 of the 2018 Jefferson County Building Code and Supplement.
2. The fire-resistance rating of building elements, components or assemblies based on the calculation procedures in accordance with Section 722 of the 2018 Jefferson County Building Code and Supplement.

SECTION Z102 WILDFIRE ZONE 1

Z102 Wildfire Zones defined. For the purpose of this Appendix, the unincorporated portion of Jefferson County is divided into Wildfire Zones which shall be known and designated as Wildfire Zones 1 and 2.

The Wildfire Zones shall include such territory or portions of the unincorporated County as shown in Figure Z102, the Wildfire Zone Map.

For sites close to the dividing line, a larger scale map is available in the Jefferson County Planning and Zoning Division for determining within which Wildfire Zone a property is located.

Z102.1 Buildings located in more than one Wildfire Zone. A building or structure which is located partly in one Wildfire Zone and partly in another shall be considered to be in the Wildfire Zone in which more than one-third of its total floor area is located.

Z102.2 Moved buildings. Any building or structure moved within or into any Wildfire Zone shall be made to comply with all the requirements for new buildings in that Wildfire Zone.

Wildfire Zone Map

The Wildfire Zone line generally follows what is called the "mountain front," which is a line connecting the average Eastern-most points on the 6400-foot contour line of the U.S.G.S. topographic maps.

The State Forest Service concurs that this line indicates the predominant change from plain to mountain topography. The canyons are within the Wildfire Zone 1 because of the chimney-effect of the terrain.

The location of the Wildfire Zone line recognizes vegetation, slope, fire department accessibility, water supply, response time and infrastructure.

This line has been imposed on the Jefferson County Base Map to divide the County into two Wildfire Zones as described in Z102.

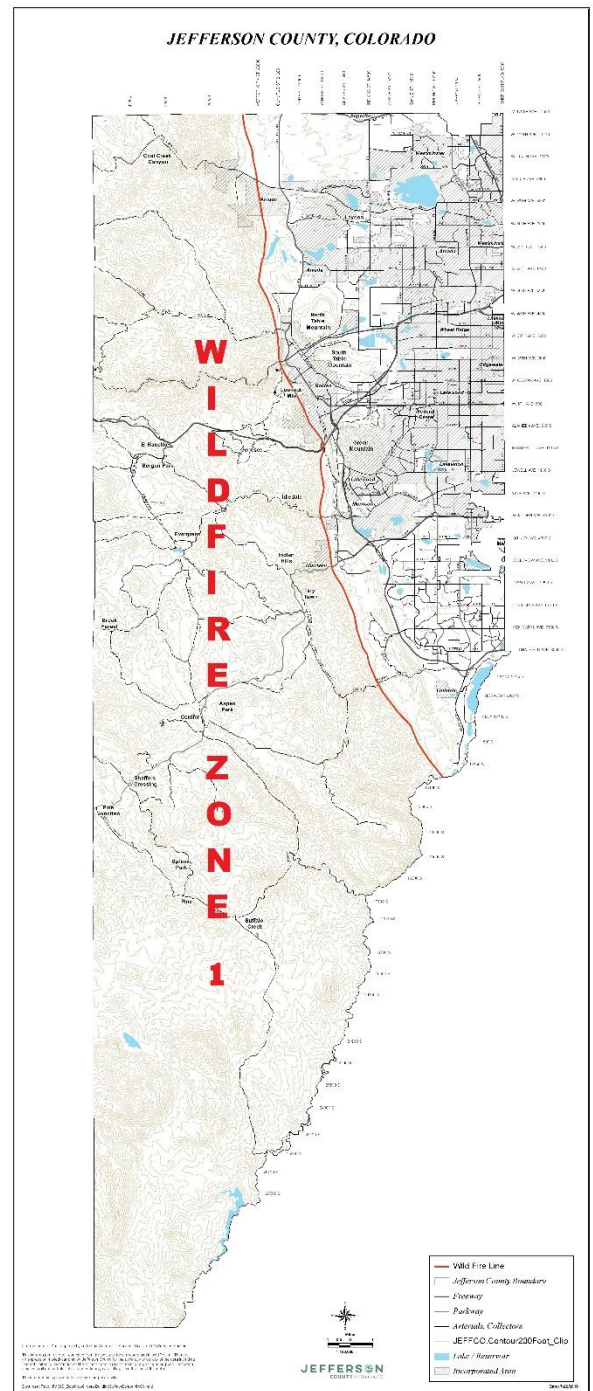


Figure Z102

**SECTION Z103
WILDFIRE ZONE 1
CONSTRUCTION AND MATERIAL**

Z103.1 General. Buildings and structures hereafter constructed, modified or relocated into or within Wildfire Zone 1 shall meet the construction requirements set forth in this Appendix. *Noncombustible* materials shall comply with the requirements of Section Z103.2.1. Materials required to be ignition-resistant shall comply with the requirements of Section Z103.3. Ignition-resistant construction shall comply with the requirements of Section Z104.

Z103.2 Definitions.

Z103.2.1 Noncombustible. For the purpose of this Appendix, *noncombustible* as applied to building construction material means a material that, in the form in which it is used, is either one of the following:

1. Material of which no part will ignite and burn when subjected to fire. Any material conforming to ASTM E136 shall be considered *noncombustible* within the meaning of this section.
2. Material having a structural base of *noncombustible* material as defined in Item 1 above, with a surfacing material not over 1/8 inch (3.2 mm) thick, which has a flame spread index of 50 or less. Flame spread index as used herein refers to a flame spread index obtained according to tests conducted as specified in ASTM E84 or UL 723.

“Noncombustible” does not apply to surface finish materials. Material required to be noncombustible for reduced clearances to flues, heating appliances or other sources of high temperature shall refer to material conforming to Item 1. No material shall be classified as noncombustible that is subject to increase in combustibility or flame spread index, beyond the limits herein established, through the effects of age, moisture or other atmospheric condition.

Z103.2.2 Other Italicized Terms. All other terms that appear in italics in this Appendix shall have the meaning assigned to them in the 2018 Jefferson County Residential Code and Supplement.

Z103.3 Ignition-resistant building material. Ignition-resistant building materials shall comply with any one of the following:

1. Material shall be tested on all sides with the extended ASTM E84 (UL 723) test or ASTM E2768, except panel products shall be permitted to test only the front and back faces. Panel products shall be tested with a ripped or cut longitudinal gap of 1/8 inch (3.2 mm). Materials that, when tested in accordance with the test

procedures set forth in ASTM E84 or UL 723 for a test period of 30 minutes, or with ASTM E2768, comply with the following:

- 1.1 Flame spread. Material shall exhibit a flame spread index not exceeding 25 and shall not show evidence of progressive combustion following the extended 30-minute test.
- 1.2 Flame front. Material shall exhibit a flame front that does not progress more than 10 ½ feet (3200 mm) beyond the centerline of the burner at any time during the extended 30-minute test.
- 1.3 Weathering. Ignition-resistant building materials shall maintain their performance in accordance with this section under conditions of use. Materials shall meet the performance requirements for weathering (including exposure to temperature, moisture and ultraviolet radiation) contained in the following standards, as applicable to the materials and the conditions or use:

- 1.3.1 Method A “Test method for Accelerated Weathering of Fire-Retardant-Treated Wood for Fire Testing” in ASTM D2898, for fire-retardant treated wood, wood-plastic composite and plastic lumber materials.

- 1.3.2 ASTM D7032 for wood-plastic composite materials.

- 1.3.2 ASTM D6662 for plastic lumber materials.

- 1.4. Identification. Materials shall bear identification showing the fire test results.

Exception: Materials composed of a combustible core and a *noncombustible* exterior covering made from either aluminum at a minimum 0.019 inch (0.48 mm) thickness or corrosion-resistant steel at a minimum 0.0149 inch (0.38 mm) thickness shall not be required to be tested with a ripped or cut longitudinal gap.

2. Noncombustible material. Material that complies with the requirements for *noncombustible* materials in Section Z103.2.1.
3. Fire-retardant-treated wood. Fire-retardant-treated wood identified for exterior use and meeting the requirements of Section 2303.2 of the 2018 Jefferson County Building Code and Supplement.
4. Fire-retardant-treated wood *roof coverings*. Roof assemblies containing fire-retardant-treated wood shingles and shakes that comply with the requirements of Section R902.2 of the 2018 Jefferson County Residential Code and Supplement and classified as Class A roof assemblies as required in Section 1505.2 of the 2018 Jefferson County Building Code and Supplement.

5. Materials currently *approved* for use in the Wildland Urban Interface (WUI) by the California Office of the State Fire Marshal, [Building Materials Listing Program \(BML\)](#).

SECTION Z104
WILDFIRE ZONE 1 CONSTRUCTION
(effective 7/1/2021)

Z104.1 General. Building and structure construction within Wildfire Zone 1 shall meet the requirements of Sections Z104.2 through Z104.11.

Z104.2 Roof Assemblies. New construction in Wildfire Zone 1 shall be provided with a Class A rated roof assembly in accordance with IBC 1505.2. (eff. 7/1/2021)

Z104.2.1 Roof Coverings. *Roof coverings* shall have a Class A fire rating in accordance with ASTM E108 or UL 790. Where the profile of a *roof covering* allows a space between the *roof covering* and roof decking, the space at the eave ends shall be screened or blocked to preclude the entry of embers; or have one layer of 72-pound mineral surfaced, nonperforated cap sheet complying with ASTM D3909 installed or approved alternate underlayment of equivalent protection where decking is of combustible materials. (eff. 7/1/2021)

Z104.2.2 Roof valleys. Where provided, open valley flashings shall be not less than 0.019 inch (0.48 mm) (No. 26 galvanized sheet gage) corrosion-resistant metal installed over a minimum 36-inch-wide (914 mm) underlayment consisting of one layer of 72-pound (32.4 kg) mineral-surfaced, nonperforated cap sheet complying with ASTM D 3909 running the full length of the valley, or an equivalent underlayment meeting Class A assembly requirements. (eff. 7/1/2021)

Z104.3 Protection of eaves. Eaves and soffits shall be protected on the exposed underside by ignition-resistant materials or by materials *approved* for not less than 1-hour fire-resistance-rated construction, 2-inch (51 mm) nominal dimension lumber, or 1-inch (25 mm) nominal fire-retardant-treated lumber or ¾ inch (19.1 mm) nominal fire-retardant-treated plywood, identified for exterior use and meeting the requirements of Section 2303.2 of the 2018 Jefferson County Building Code and Supplement. Facias are required and shall be protected on the backside by ignition-resistant materials or by materials *approved* for not less than 1-hour fire-resistance-rated construction or 2-inch (51 mm) nominal dimension lumber.

(effective 7/1/2021)

Z104.4 Gutters and downspouts. Where provided, gutters and downspouts shall be constructed of *noncombustible* material. New gutter installations shall be provided with a means to prevent the accumulation of leaves and debris in the gutter. (eff. 7/1/2021)

Z104.5 Exterior walls. Exterior walls of buildings or structures shall be constructed with one of the following methods:

1. Materials *approved* for not less than 1-hour fire-resistant-rated construction on the exterior side.
2. *Approved noncombustible* materials.
3. Heavy timber or log wall construction.
4. Fire-retardant-treated wood on the exterior side. The fire-retardant-treated wood shall be labeled for exterior use and meet the requirements of Section 2303.2 of the 2018 Jefferson County Building Code and Supplement.
5. Ignition-resistant materials complying with Section Z103.3 on the exterior side.

Such material shall extend from the top of the foundation to the underside of the roof sheathing.

Z104.6 Underfloor enclosure. Buildings or structures shall have underfloor areas enclosed to the ground with exterior walls in accordance with Section Z104.5.

Exception: Complete enclosure shall not be required where the underside of exposed floors and exposed structural columns, beams and supporting walls are protected as required for exterior 1-hour fire-resistance-rated construction or heavy timber construction or fire-retardant-treated wood. The fire-retardant-treated wood shall be labeled for exterior use and meet the requirements of Section 2303.2 of the 2018 Jefferson County Building Code and Supplement.

Z104.7 Decks, appendages, and projections. Decks and other unenclosed accessory structures attached to buildings shall be constructed of the following materials:

Z104.7.1 Deck surface: *Noncombustible* material, approved wood thermoplastic composite lumber with an ASTM E84 flame-spread index no greater than 200, ignition-resistant building materials or any approved Class A roof assembly.

Z104.7.2 Deck framing: Deck framing shall be constructed of one of the following:

1. 1-hour fire-resistance-rated construction
2. Heavy timber construction.
3. *Approved noncombustible* materials.
4. Fire-retardant-treated wood labeled for exterior use.
5. Ignition-resistant building materials.
6. Wood with a minimum nominal thickness of at least 2 inches for joists and 4 inches for beams and columns or posts.

Z104.8 Exterior glazing. Exterior windows, window walls and glazed doors, windows within exterior doors, and skylights shall be tempered glass, multilayered glazed panels, glass block or have a fire protection rating of not less than 20 minutes.

Z104.9 Exterior doors. Exterior doors shall be *approved* noncombustible construction, metal clad, solid core wood not less than 1 ¾ inches thick (44 mm) or have a fire protection rating of not less than 20 minutes. Windows within doors and glazed doors shall be in accordance with Section Z104.8.

Exception: Vehicle access doors.

Z104.10 Vents. Attic ventilation openings, foundation or underfloor vents, or other ventilation openings in vertical exterior walls and vents through roofs shall not exceed 144 square inches each. Such vents shall be covered with noncombustible corrosion-resistant mesh with openings not to exceed 1/8 inch or shall be designed and *approved* to prevent flame or ember penetration into the structure. Gable end and dormer vents shall be located at least 10 feet from lot lines. Under floor ventilation openings shall be located as close to grade as practical.

Z104.11 Detached accessory structures. Detached accessory structures shall have exterior walls constructed in accordance with Section Z104.5.

Z104.11.1 Underfloor areas. Where the detached structure is located and constructed so that the structure or any portion thereof projects over a descending slope surface greater than 10 percent, the area below the structure shall have underfloor areas enclosed to within 6 inches (152 mm) of ground, with exterior wall construction in accordance with Section Z104.5 or underfloor protection in accordance with Section Z104.6.

Exception: The enclosure shall not be required where the underside of exposed floors and exposed structural columns, beams and supporting walls are protected as required for exterior 1-hour-resistance-rated construction or heavy timber construction or fire-retardant-treated wood on the exterior side. The fire-retardant-treated wood shall be labeled for exterior use and meet the requirements of Section 2303.2 of the 2018 Jefferson County Building Code and Supplement.

SECTION Z105
REPLACEMENT OR REPAIR OF ROOF COVERING
(effective 7/1/2021)

Z105.1. General. *Roof covering* materials installed in Wildfire Zone 1 shall be listed Class A roof covering materials or be constructed as a Class A assembly in accordance with ASTM E108 or UL 790. (eff. 7/1/2021)