



## Town of Eagle

### Residential Guidelines for One-and-Two-Family Dwellings and Townhouses

JANUARY 2024

#### BUILDING DEPARTMENT

200 Broadway Street, Eagle, CO 81631

[www.townofeagle.org](http://www.townofeagle.org)

Web page – <https://www.townofeagle.org/138/building>

Inspection Scheduling – Online - <https://app.communitycore.com>

Phone – 970-328-9626

**APPLICATION** All applications for permits are submitted electronically using the online portal *Community Core*. Over-the-counter submittals are not accepted as all apps and construction documents are uploaded to *Community Core*.

**MECHANICAL, ELECTRICAL, PLUMBING PERMITS** Applications for MEP sub-permits shall be submitted concurrently with the building permit. Sub-permits are aligned under the general permit and paid for in advance of issuance of the building permit. Plan review may still commence while MEP applications are being processed.

**FEE PAYMENT** All fees shall be paid in advance, including electrical, plumbing, mechanical, Impact fees, and PIF fees. The building permit shall not be issued and construction shall not commence until all fees are paid.

**CONTRACTOR REGISTRATION** Contractor Registration is created online in the *Community Core* portal which can be found on the website "townofeagle.org"; select "Permits & Forms"; and then select "Contractor Registration New/Renewal". The Town will then process the registration and you will be notified once complete. Registering is a great tool to pull permits, follow the progress of a permit, and request inspections. NOTE: New dwellings must be constructed by a general contractor only – not a "homeowner".

**SITE PREPARATION** *Work* shall not commence until a building permit or grading permit is obtained. *Work* includes installation of erosion control measures, perimeter collection fence, foundation excavation, setting of forms, soil removal, soil dumping, brush clearing, tree removal or demolition. Work without a permit is subject to an investigation fee.

**PLAN REVIEW** The Building Department established goal is to complete plan reviews within fifteen (15) business days, excluding day of submittal. The fifteen-day period begins when all required document submittals are on file. *Plan review times by other departments are subject to their established policies.*

**PLAN REVIEW SCOPE** Plan review for new dwelling projects shall be limited to the home and zoning requirements. Other components shown on site plans such as fences, pools, accessory structures, or other components shall not be reviewed for accuracy and require a separate permit.

#### **CONSTRUCTION DOCUMENT SUBMITTALS (all online electronic – no paper)**

All projects require online electronic submittal of construction documents per subset A thru E shown below. Incomplete plans, submittals, and/or missing documents can create delays.

**Construction documents shall be stamped by the DRB / HOA (where applicable).**

##### A. Plot Plan

- Building setbacks from all property lines
- Identify all flatwork (driveway, sidewalk, uncovered patio, or other impervious surfaces)
- Identify existing accessory buildings on site
- Identify underground utilities for electrical, plumbing, or gas that serve the new structure

B. Building Plans

- Floor plan
- Elevations (all sides))
- Electrical floor plan
- Mechanical plan - Manual J and Manual D calculations
- Framing plan - identify beams, joists, rafters with spans dimensioned
- Attic ventilation plan which includes calculations
- Door and window schedules noting where tempered glazing is provided
- Soils Report for property address (re
- Foundation plan (engineered) which includes finished floor and finished pad
- Foundation design letter from engineer
- Roof plan (as seen from above)
- Roof truss package (accepted as deferred submittal)
- Floor truss layout (for two story structures)
- Steel framing (accepted as deferred submittal)
- Wall bracing plan (engineered) demonstrating compliance with 2021 IRC Section 602.10 or solid structural sheathing

C. Drainage Plan

- Submit an engineered grading/drainage plan for the lot sealed by the engineer of record
- Town Engineer reserves the right to mandate lot grading/drainage design by professional engineer under any circumstances

D. Impervious Coverage Calculations

- Impervious coverage must comply with percentages established by the Land Use Development Code. Impervious coverage is determined by adding the area of all surfaces related to any roof, patio, driveways, sidewalk, or any other condition which sheds rainwater and dividing by the total lot area

E. Energy Code Compliance (Performance or Prescriptive must include [Energy Code Worksheet](#))

- Performance method – submit report using approved software
- Prescriptive requirements – compliance demonstrated on construction documents

F. Mechanical Plan

- Floor plan which identifies appliance locations of HVAC and water heating equipment
- For equipment located in crawl spaces or attics, demonstrate compliance with the following:
  - 1) Maximum 20-foot distance from the access opening to any unit(s)
  - 2) Unobstructed walkway with minimum clear dimensions of five feet (5') in height and three feet (3') in width
  - 3) Compartmentalization of equipment with 5/8" Type X sheetrock at ceilings and all sides

**UNFINISHED SPACES** For spaces identified as unfinished on the plans, the framing of walls and rough installations of electrical, plumbing, and mechanical systems is prohibited. Under-slab plumbing drains and vent stacks are permitted. Supply air discharging to the space shall be accounted for in system sizing and energy code compliance. **One plug and one light fixture is permitted in unfinished spaces.**

**AUTOMATIC FIRE SPRINKLER SYSTEMS** An approved automatic fire sprinkler system shall be installed in all townhomes and specific geographically-located single family dwellings in Eagle Ranch. A state-licensed fire protection contractor shall submit an application, pay fees, and obtain a fire permit through the Fire Marshal's office which is aligned under the Greater Eagle Fire Protection District.

**PERMIT FEES** See adopted fee schedule on department web page [www.townofeagle.org](http://www.townofeagle.org)

## **CODE ADOPTION**

The following model codes and local amendments have been adopted by ordinance:

- 2021 International Residential Code
- 2021 International Energy Conservation Code
- 2020 National Electrical Code
- 2021 International Fire Code

**INSPECTION PLANS** are stored electronically in *Community Core* and are available to the general contractor and the Inspector.

**INSPECTION REQUESTS:** Inspections are requested either online via *Community Core* (<https://app.communitycore.com>) or via the inspection request line (970-328-9626). Online scheduling of inspections is strongly encouraged in lieu of the inspection request line as voice messages can be problematic. Inspections must be scheduled **before 4:00 p.m.** the previous day for an inspection the next day.

- AM/PM requests and/or early/late requests must be approved in advance by the Inspector
- The General Contractor is responsible for scheduling all inspections
- **The work must be ready for inspection at the time of the request – not when anticipated**
- Re-inspection fees must be paid before any other inspections will be performed
- All inspections held back because of weather conditions must be re-scheduled
- Concrete, underground plumbing, underground electrical, or other outdoor inspections will not be performed if the Inspector determines weather conditions are not conducive for accuracy and safety

**SAME DAY INSPECTIONS** Reasonable efforts are made to complete inspections on the same day requested. Circumstances sometimes require inspections to be moved forward to the next business day. Check *Community Core* to review if your inspection has been rescheduled

**INSPECTION RESULTS** The Permit Tech does not provide inspection results. If a result is not posted by the end of the next business day, contact the Inspector or the Permit Tech for more information. Results can be reviewed online via *Community Core*. Inspection tags are NOT left on site

**INSPECTION CANCELLATIONS** Shall be communicated by calling the assigned Inspector directly or via email sent to [permits@townofeagle.org](mailto:permits@townofeagle.org)

## **RE-INSPECTION FEE**

\$75.00 RE-INSPECTION FEE may be charged when:

- The inspection called for is not ready when the inspector arrives.
- Performing work in violation of construction hours.
- The building is locked or work is otherwise not available for inspection when called.
- Correction tag item(s) are not addressed
- Violations exist on the property including erosion control, trash control or tree protection.

\$125.00 RE-INSPECTION FEE may be assessed for second and subsequent violations.

## **CONSTRUCTION HOURS**

The Town code regulates noise construction that is considered a nuisance. Variances to this ordinance may be authorized by the Building Official and/or Town Engineer or by the respective Director of either department. Such variance request shall be in writing with 24-hour advance notice and in accordance with any applicable policy or procedure.

Construction is permitted as follows:

**7:00am - 7:00pm**, Monday through Friday

**9:00am – 6:00pm Saturday**

**9:00am – 6:00pm Sunday** for indoor work only which does not involve any noise (i.e. painting, cleaning, etc.) Outdoor activity involving vehicles idling, music playing, saws, etc. which create noise are prohibited.

**WORK SHALL NOT BE PERFORMED ON TOWN HOLIDAYS** – New Year's Day, Memorial Day, Labor Day, July 4<sup>th</sup>, Thanksgiving, and Christmas

## LITTER

- Provide a litter container of sufficient size on the job site at all times.
- Verify each day that all lightweight materials, including food wrappers and drink containers are contained within the trash enclosure on the job site.
- If a commercial container (dumpster) is used, the Town of Eagle franchise agreement mandates an approved vendor must be contracted for that service.

**CONSTRUCTION ACCESS/STAGING** - The use of an adjacent lot for construction access or storage of materials is prohibited unless the owner's permission has been obtained in writing and erosion control is in place. Proof of permission shall be submitted to the Town for attachment to the permit.

## EROSION CONTROL

- Erosion control must be maintained at all times throughout the project
- All inspections may be cancelled and re-inspection fees assessed at any time erosion control is not properly maintained
- All activity on a site shall comply with Town, State, and Federal statutes for storm water pollution control

**CONSTRUCTION INSPECTIONS** The following list represents typical inspections required for most new residential projects. Each project is unique so determine which are applicable to your scope of work. Consult the Inspector to determine if special inspections may be applicable for your project. The Permit Tech cannot assist with this function.

- **FOOTING / FOUNDATION / FOUNDATION WALL** Contractors are strongly encouraged to utilize the inspection services of a state-licensed engineer. If the Town is to perform foundation/footing inspections, the following safety measures must be followed:
  - a) Steel catwalks with a foot-grip surface for traction shall be provided around the perimeter unless approved shoring in place
  - b) An approved and properly secured ladder shall be provided for access unless a gradual slope exists
  - c) Forms over five feet in height shall be provided with periodic leave-outs to demonstrate the placement of steel reinforcement
  - d) Steel catwalks with a foot grip surface for traction shall be installed for any required inspection access to forms
  - e) **Snow-covered catwalks will not be accessed by the Inspector**
- **SLAB** – Includes inspection of reinforcement and/or insulation and in-floor heat.
- **UFER GROUND** – System grounding materials and methods shall comply with the NEC. This inspection may be performed concurrently with the foundation/footing inspection
- **WATERPROOFING/DAMPPROOFING** – Approved material applied and inspected before concealment
- **FOUNDATION WALL INSULATION** – Continuous insulation shall be secured with fasteners spaced every two feet (2') on center each way or in accordance with manufacturer's installation instructions.
- **PERIMETER DRAIN** – Perforated piping must be exposed before placement of aggregate. Exception: photos submitted and approved by the Inspector
- **PLUMBING UNDERGROUND**
  - a) Pipe shall be bedded in sand, fine dirt, or gravel
  - b) Hot water lines must have minimum R3 (1/2") insulation, including in conditioned spaces (2021 IECC)
  - c) Pipes passing through concrete shall allow for movement utilizing material with a minimum wall thickness of 0.025 inches
  - d) Pipes passing under a footing or through a foundation wall shall be sleeved with material that is at least two pipe sizes larger than the pipe passing through the wall

- **WATER SERVICE (Public Works inspection)** Inspection of water line from building to street
- **SEWER LINE (Public Works inspection)** Inspection of building sewer from building to tap.
- **RADON MITIGATION – UNDERGROUND** – Piping inspected and approved before concealment. Exception: photographs submitted to and approved by the Inspector or expose the piping every ten (10) feet
- **ELECTRICAL UNDERGROUND** – Inspection of conduit pipe or direct burial conductors installed in a trench of sufficient burial depth
- **GAS LINE UNDERGROUND** – Gas piping shall be tested on an approved gauge. Minimum burial depth of 12 inches for underground piping as measured from the top of the pipe to existing grade. A yellow insulated copper tracer wire, minimum 18 AWG, shall be installed adjacent to any non-metallic underground piping
- **SHEATHING / SHEAR WALL** Exterior wall covering (siding, brick, stucco, etc.) shall NOT be applied until a sheathing inspection is approved. Solid structural sheathing is inspected to verify materials and fastener spacing before applying any moisture barrier for typical OSB or plywood sheathing. For pre-coated sheathing (i.e. Zip System), inspection approval is required before taping of seams.
- **ELECTRIC ROUGH (All electrical inspections are performed by State Electrical Inspector – not the Town)**
  - a) Electrical conduit piping installations that are to be concealed within masonry shall be inspected before cover up.
  - b) All splicing of conductors shall be complete at boxes.
- **PLUMBING ROUGH (includes gas piping installation)**
  - a) Water system shall be tested under static pressure or air tested at 60 psi. Gauges used shall be in good condition as determined by the Code Official.
  - b) DWV systems shall be tested air tested at 5 psi or water tested with a minimum 10-foot head. Gauges used shall be in good condition as determined by the Code Official.
  - c) Notching, boring, and cutting of framing shall comply with Section R602
  - d) Hot water lines in conditioned or unconditioned space shall be insulated to a minimum R3 (1/2 inch typical)
  - e) All vents must extend through the roof with flashings installed
- **GAS SYSTEM**
  - a) Gas system piping shall be installed in its entirety
  - b) Two approved gas pressure tests are required for a meter release. Inspection #1 at Plumbing Rough and Inspection #2 at Gas Meter
  - c) Gauges used shall be in good condition as determined by the Code Official.
  - d) Gauges used shall not exceed 5x the working pressure
  - e) At least one boiler or one furnace shall be installed and is connected to piping or ductwork or other approved system components which allows for immediate heat unless such appliances are not fuel fired
  - f) All gas appliance exhaust and/or intake vents shall be installed
  - g) Sediment traps shall be installed where required.
- **MECHANICAL ROUGH**
  - a) Air ducts shall be tested at rough-in stage (recommended) unless testing is deferred to post-construction.
  - b) Supply ducts in attics shall be insulated to a minimum of R-8. All other ducts shall be insulated to a minimum R-6. Exception: Ducts located completely within the building thermal envelope (spray-foamed attics) OR duct requirements as part of an approved performance plan.
- **IN-FLOOR HEAT** – Piping installed and tested in accordance with manufacturer's instructions

- **FRAMING (rough inspections of electrical, plumbing, and mechanical must be approved)**
  - a) Dwelling shall be “dried-in” with a windows installed, roof covering on or underlayment in place, and any required attic ventilation installed. Permanent doors are not required to be installed.
  - b) Roof sheathing is inspected from the underside and the roof covering may be applied at any time
  - b) Where applicable, steel framing plans sealed by a structural engineer shall be on file with the Town
  - c) Stairways serving living space or attic space shall have treads not less than 10”, risers not greater than 7.5 inches, and a maximum of 3/8” variance for either component within the flight
  - d) Pie-shaped treads are not permitted. No portion of the inside edge of the tread shall be less than 6-inches. A minimum 10-inch tread width shall be provided at the walkline as measured 12-inches from the inside edge of the tread. Exception: spiral stairs
  
- **FIREPLACE ROUGH**
  - a) Wood-burning fireplaces and/or fire pits are **prohibited** by Ordinance
  - b) Pre-fabricated fireplace shall be installed with gas line connected and flue pipe termination to exterior
  - c) Factory-built metal fireplaces and chimneys shall comply with the manufacturer’s installation requirements and/or Chapter 10 of the 2021 IRC (whichever is more restrictive). **Installation manual shall be provided at the unit for inspection.**
  - d) For masonry fireplaces, consult with the Inspector in advance to determine inspection requirements
  
- **INSULATION (walls and ceilings)**
  - a) Fully encapsulated structures – inspection performed when spray-applied foam insulation installed in all cavities enclosing the building thermal envelope
  - b) Hybrid installation with foam/batt insulation – inspection performed with both insulation systems installed
  - c) Hybrid installation with foam/cellulose insulation – inspection required to verify spray-applied foam insulation and another inspection required to verify cellulose insulation installation
  - d) Other insulation methods – verify with the Inspector before covering an system or portion thereof
  - e) Duct leakage testing is mandatory at rough stage or at Mechanical final
  - f) Inspections at rough stage and/or finals
  
- **DRYWALL** – Inspection areas are limited to the Garage/Dwelling Unit separation for walls and/or ceilings. Installation in accordance with IRC Table R702.3.5
  
- **BRICK TIES (for masonry stone or brick)** Anchored veneer requires a brick tie inspection. For masonry veneer, provide one tie per 3 ¼ square feet (for 16” O.C. framing - one every 24” high or for 24” O.C. framing - one every 16” high). Moisture barrier must be applied before inspection.
  
- **LATH (required for stucco or pre-cast stone)**

Lath and lath fasteners shall be corrosive resistant. Staples shall be spaced a maximum of 6 inches or as otherwise approved. Weep screeds shall be installed a minimum of 4 inches above grade or 2 inches above an impervious surface. Verify two layers of Kraft grade D building paper per Section R703.6 or other approved material. Upper layer shall overlap lower layer a minimum of 2 inches. Horizontal joints shall overlap minimum 6 inches. Window frames shall be properly sealed and flashed.
  
- **GAS METER** (meter is released by the Inspector via email to Black Hills Energy. Tags are not left at the meter)
  - a) Gas system piping must be installed in its entirety
  - b) Two approved gas pressure tests are required for a meter release. Inspection #1 - Plumbing Rough and Inspection #2 - Gas Meter Release
  - c) Gauges used shall be in good condition as determined by the Code Official.
  - d) Gauges used shall not exceed 5x the working pressure
  - e) All gas appliance exhaust and/or intake vents shall be installed
  - f) Sediment traps shall be installed where required.

- **DRIVEWAY / CULVERT (Public Works inspection – where applicable)**
- **PUBLIC WORKS / ENGINEERING FINAL**
- **RADON MITIGATION FINAL** – Submit radon test report
- **FIREPLACE FINAL**
- **ELECTRIC FINAL**
- **PLUMBING FINAL**
- **MECHANICAL FINAL**
- **BUILDING FINAL**
  - a) Electrical, Plumbing, and Mechanical finals must be approved in advance
  - b) Required document submittals must be on file with the Town in advance:
    - DRB/HOA letter of authorization for a Certificate of Occupancy or Temporary Certificate of Occupancy
    - Blower door testing certificate
    - Duct testing certificate (where required)
    - Radon mitigation testing report
    - ILS Survey

**TEMPORARY CERTIFICATE OF OCCUPANCY (TCO)** – Shall be implemented in accordance with the established Department policies and procedures. An initial Building Final inspection must be performed to determine the list of outstanding items and if a TCO may be authorized.

**REQUIREMENTS (not all-inclusive)**

- Submit DRB letter of approval (TCC)
- Submit TCO application
- Submit blower door test report
- Public Works inspection approval
- Fire Department inspection approval (for fire-sprinklered dwellings)

**PROCEDURE (not all-inclusive)**

- Request Building Final inspection after approval of MEP finals
- List of corrections developed by Inspector and list is worked down to maximum five outstanding items
- All life safety items must be corrected for TCO issuance