



Building Guide

Colorado Chapter of the International Code Council

Single Family Residential One Story Addition

How to Use this Guide

Check with your jurisdiction regarding type of submittal (paper or electronic) and for additional requirements. Draw to scale and complete the following (*hint: use graph paper with 1/4" squares. Example: 1/4" = 1'*).

1. Complete this Building Guide by filling in the blanks on page three and indicating which construction details will be used, and R value of insulation used.

2. Provide Plot Plan showing dimensions of your project or addition and its relationship to existing buildings or structures on the property. Show all easements and the distance to existing property lines drawn to scale. See example on page 2.

3. Provide Floorplans.

Drawn to scale. See example on page 5. Structural, section view, elevation or other drawings may be required.

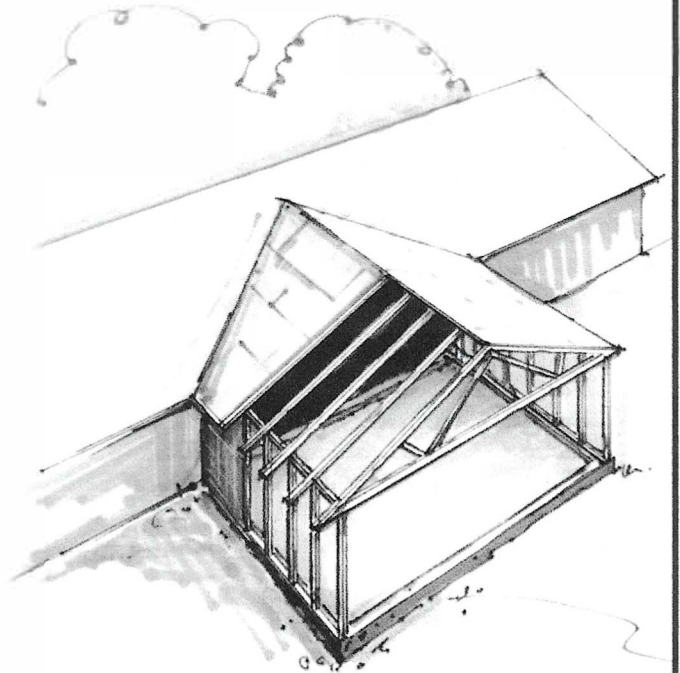
4. Fill out a Building Permit Application.

The majority of permit applications are processed with little delay. The submitted documents will help determine if the project is in compliance with building safety codes, zoning ordinances and other applicable laws.

Smoke alarms and carbon monoxide alarms are required.

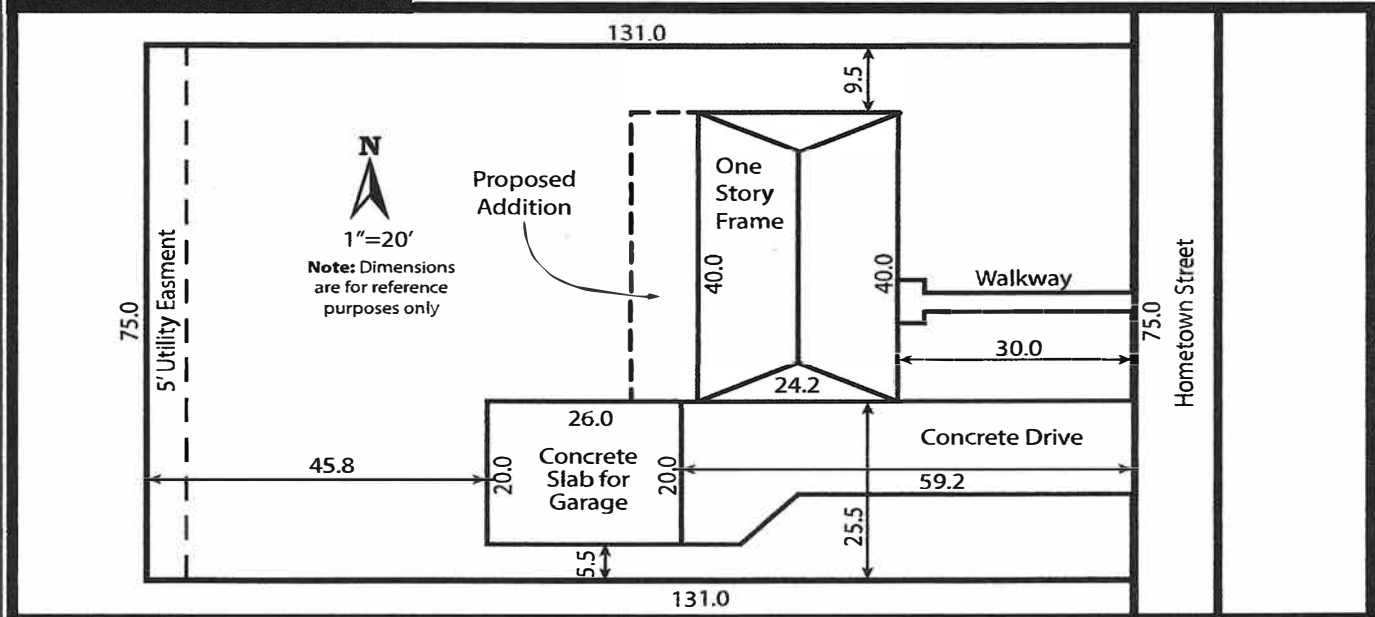
The Colorado Chapter of the International Code Council is a professional organization seeking to promote the public health, safety and welfare to building construction. We appreciate your feedback and suggestions please write to the Colorado Chapter of the International Code Council, P.O. Box 961, Arvada, CO 80001. This building guide can be found on the Colorado Chapter of the International Code Council website at <http://www.coloradochaptericc.org>

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Note: A plot plan (plan view) showing the dimensions of your project or additions and its relationships to existing buildings or structures on the property must be included. In addition to project dimensions, your plot plan must also show other details such as post locations and spacing, joist and beam spans, and any other pertinent information not shown on the section drawing.



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2x _____ rafters spaced _____ " O.C. or
Manufactured Trusses spaced _____ " O.C.
(example: 2 x 12 Rafters Spaced 24" O.C.)

Sheathing _____
(example: 1/2" exterior plywood)

Minimum 1x _____ ridge board
(example: 1 x 12)

Roof covering _____
(example: Class A 3 tab shingles)

12
pitch _____

Note: For roofs with slopes less than 4:12, follow manufacturer's instructions for low slope application of roofing material.

Note: Attic ventilation and access may be required

Provide roof tie downs
 Solid 2x blocking between rafters that are 2x12 or greater

1x4" collar ties @ 48" o.c.

Note: Pre-engineered roof trusses w/truss clips may be used in lieu of roof structure shown.

Diagonal wind bracing or braced wall panels @ corners and each 20' of wall.

Note: Pre-engineered floor systems may be used and should be installed according to the manufacturers installation instructions.

☒ **Check one**
☐ Vented
☐ Unvented

Access required

18" minimum (See Detail A page 4)

Engineered Design: Cassions may be required if your site has swelling soils. A foundation designed by a Colorado licensed architect or engineer may be required.

☒ **Check one**
☐ **Foundation: Engineered Design**
☐ **Foundation: Detail A**
☐ **Other options such as Monolithic**

Ceiling Insulation _____
(example: R-49)

Wall Insulation _____
(example: R-20 Fiberglass Batts)

2x _____ ceiling joists @ _____ O.C.
(example: 2 x 8 @ 24" O.C.)

Double 2x _____ top plate
(example: 2 x 6)

Span _____
(example: 23' 5")

Ceiling height _____
(example: 8')

Siding _____
(example: lap or T-111)

Wall sheathing _____
(example: 1/2" exterior plywood)

2x _____ studs @ _____ O.C.
(example: 2 x 6 @ 24" O.C.)

Cont. 2x _____ sill plate
(example: 2 x 4) decay resistant

2x _____ Joists @ _____ O.C.
(example: 2x10 @ 24" O.C.)

Wall width _____ "
(example: 8")

Footing size _____ " x _____ "
(example: 8" X 16")

Property Address: _____

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Site Plan

1. When drawing your plot plan be sure to show the location of electric, gas, sewer and water service lines. If you don't know where they are, call the Public Service Utility Notification Center of Colorado, 1-800-922-1987 or 811. They will come out and locate lines for you. Remember to ask them about the cost.

2. Show where the existing electric and gas meters are located on your home. These meters may have to be relocated and it is best to know this before you start construction.

Floor Plan

1. Smoke alarms and CO alarms. Smoke alarms are required to be hardwired and interconnected in new and existing bedrooms, halls and one on each level unless removal of interior wall or ceiling finishes would be required. Wireless alarms and battery-operated alarms may be accepted in existing areas as approved by your local Building Dept. Carbon Monoxide alarms shall be installed per Section **R315.3** when fuel burning appliances are contained in the dwelling unit or if an attached garage has an opening into the dwelling unit. Follow manufacturer's installation instructions for location, testing, and replacement.

2. Additions shall not obstruct or reduce sizes of bedroom or basement egress windows.

3. Safety glass is required in some locations. The plan reviewer can identify where safety glass is required.

4. Heat is required in all habitable rooms. Show how the addition will be heated.

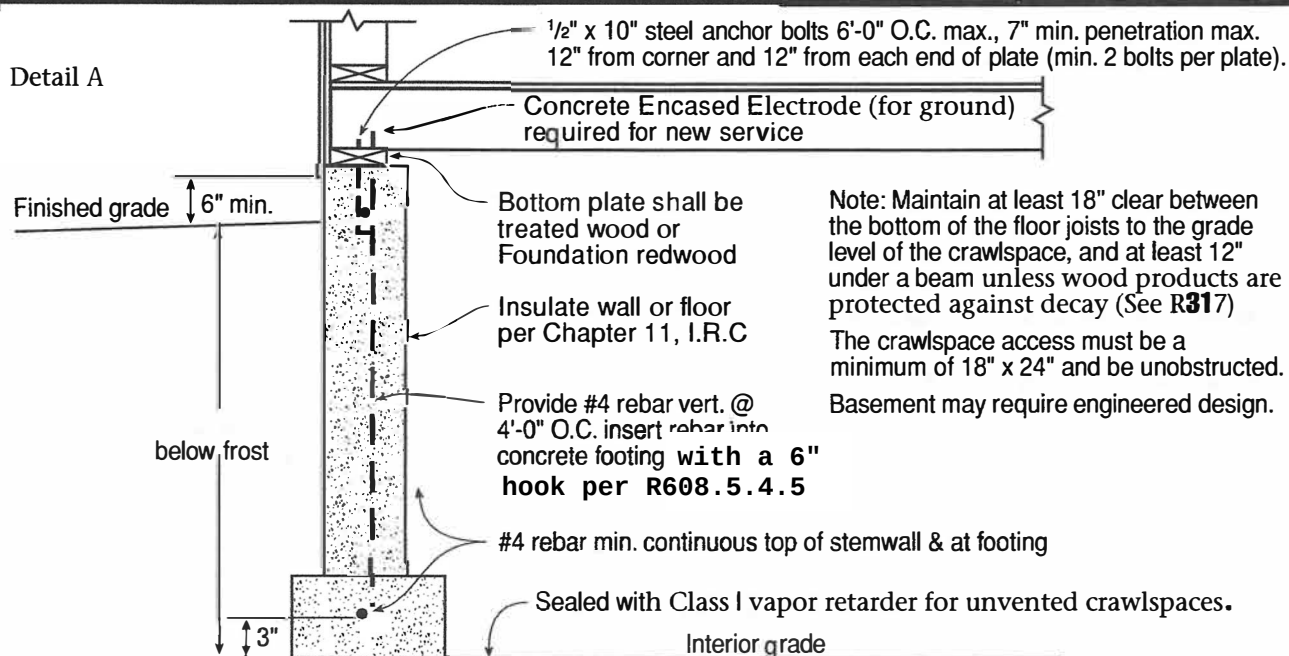
Electric Code

Existing electric service may require an upgrade or relocation. Indicate the size of your electric service (the number on the main breaker) on your plan. This can help the plan reviewer determine if an upgrade is needed before you start construction.

Roof Overframe

When constructing a new valley, use a continuous board under the bottom cut of the new rafters to provide a solid nailing surface. The board should be at least 2" thick, nominal and should be at least as wide as the base of the new rafter.

Detail A

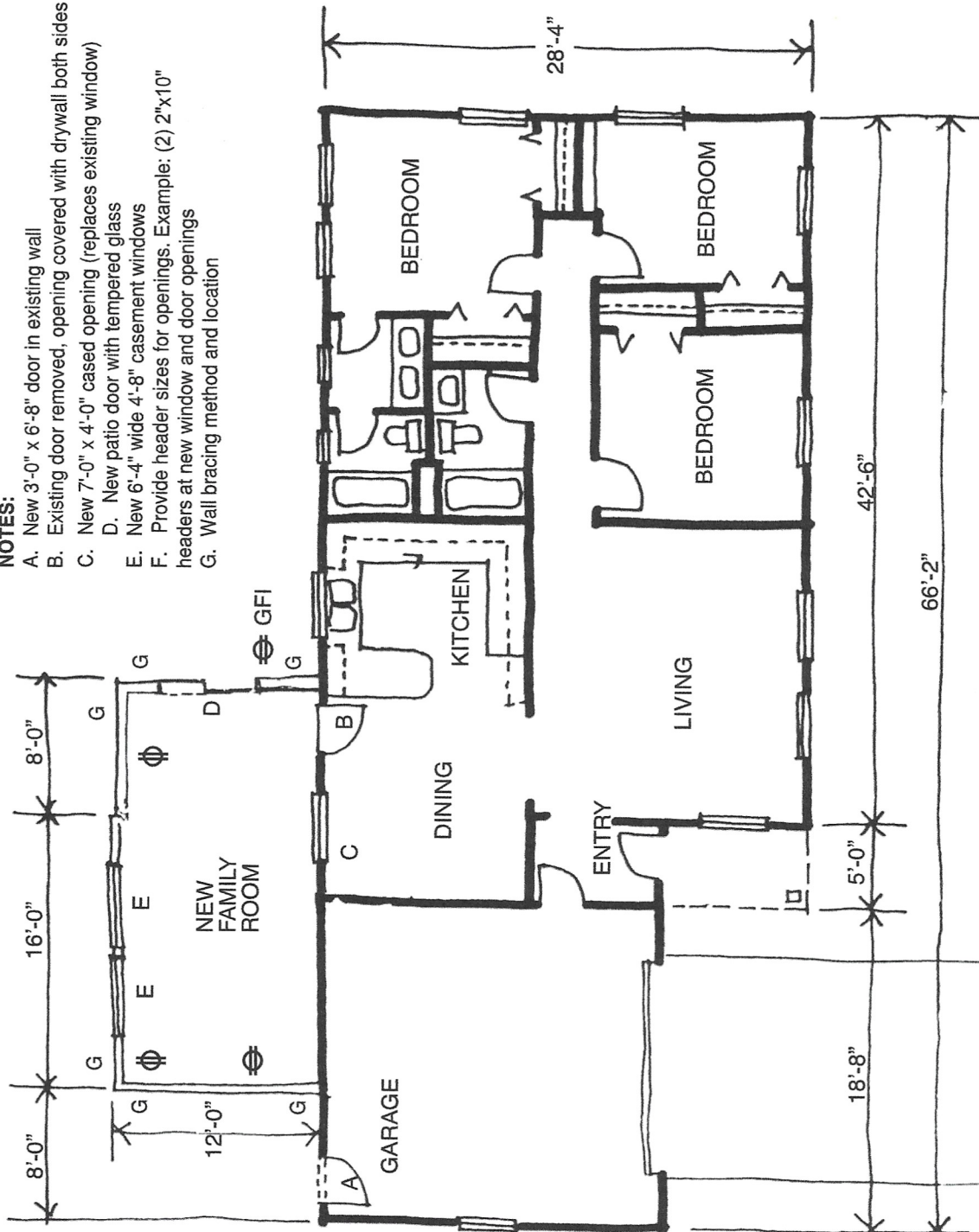


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NOTES:

- A. New 3'-0" x 6'-8" door in existing wall
- B. Existing door removed, opening covered with drywall both sides
- C. New 7'-0" x 4'-0" caset opening (replaces existing window)
- D. New patio door with tempered glass
- E. New 6'-4" wide 4'-8" casement windows
- F. Provide header sizes for openings. Example: (2) 2"x10" headers at new window and door openings
- G. Wall bracing method and location



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