Single Family Residential
One Story Detached Garage

How to Use this Guide

Provide two sets of plans and complete the following:

1 **Complete this Building Guide** by filling in the blanks on page two and three, and indicating which construction details will be used.

2 **Provide 2 Plot Plans** (site plan) showing dimensions of your project or addition and its relationship to existing buildings or structures on the property and the distance to existing property lines, drawn to scale.

3 **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.

This handout was developed by the Colorado Chapter of the International Code Council as a basic plan submittal under the 2006 International Residential Code. It is not intended to cover all circumstances. Check with your Department of Building Safety for additional requirements.

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. To obtain a master copy of this building guide, please write to the Colorado Chapter of the International Code Council, P.O. Box 961, Arvada, CO 80001.

http://www.coloradochaptericc.org
Directions

1. Fill in the blanks on pages 2 and 3 with dimensions and materials which will be used to build the structure. Please print legibly.

2. Indicate in the check boxes on page 3 which detail from page 4 will be used.

Note: Heated garages may require special provisions.

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

- Truss or 2x___ rafters spaced ___" O.C. (example: Put checkmark in box -or- 2 x 10 Rafter Spaced 24" O.C.)

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

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

- Underlayment (example: 1 layer 15# felt)

- Minimum 1x___ ridge board (example: 1 x 12)

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

- Diagonal wind bracing or braced wall panels @ corners and each 25' of wall.

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

- Concrete Encased Ground required for new service

- Check one
  - Foundation Detail A
  - Foundation Detail B (see page 4)

- 12 pitch ___

- Ceiling Insulation
  (If heated - example: R-38)

- 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 6)

- Wall Insulation
  (If heated - example: R-19 Fiberglass Batts)

- Footing size____ x____
  (example: 8” x 16")

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Foundation Detail A

- 1/4" x 10" steel anchor bolts 6'-0" O.C. max., 7" min. penetration max. 12" from corner and 12" from each end of plate (min. 2 bolts per plate).
- Lap siding over foundation a minimum of 1".
- Bottom plate shall be min. 8" above grade, or be treated wood or decay resistive wood
- 3 1/2" Minimum Concrete Slab
- #4 rebar min. cont. top & bottom with 18" laps

*Note:* Check with local building department for swelling soils. Caissons may be required.

Foundation Detail B

- 1/4" x 10" steel anchor bolts 6'-0" O.C. max., 7" min. penetration max. 12" from corner and 12" from each end of plate (min. 2 bolts per plate).
- Lap siding over foundation a minimum of 1".
- Bottom plate shall be min. 8" above grade, or be treated wood or decay resistive wood
- 3 1/2" Minimum Concrete Slab
- #4 rebar min. cont. top of stemwall & at footing with 18" laps
- 36" min.
- 8" min.
- 6" min.

*Note:* Check with local building department for swelling soils. Caissons may be required.

Braced Wall Panel Detail

- Extent of header
  - Double portal frame (two braced wall panels)
  - Single portal frame (one braced wall panel)
- 6’ to 18’
- 1,000 lb. strap opposite sheathing
- Fasten top plate to header with two rows of 16D sinker nails at 3” O.C. typ.
- Fasten sheathing to header with 8D common or galvanized box nails in 3” grid pattern as shown and 3” O.C. in all framing (studs, blocking, and sills) typ.
- Min. width = 16” for one story structures
- Min. width = 24” for use in the first of two story structures
- Min. 2x4 framing
- 3/8” min. thickness wood structural panel sheathing
- Min. 4,200 lb. tie-down device (embedded into concrete and nailed into framing)
- Min. double 2x4 post

*See Section R602.10.6.2*

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