Building Guide

Colorado Chapter of the International Code Council

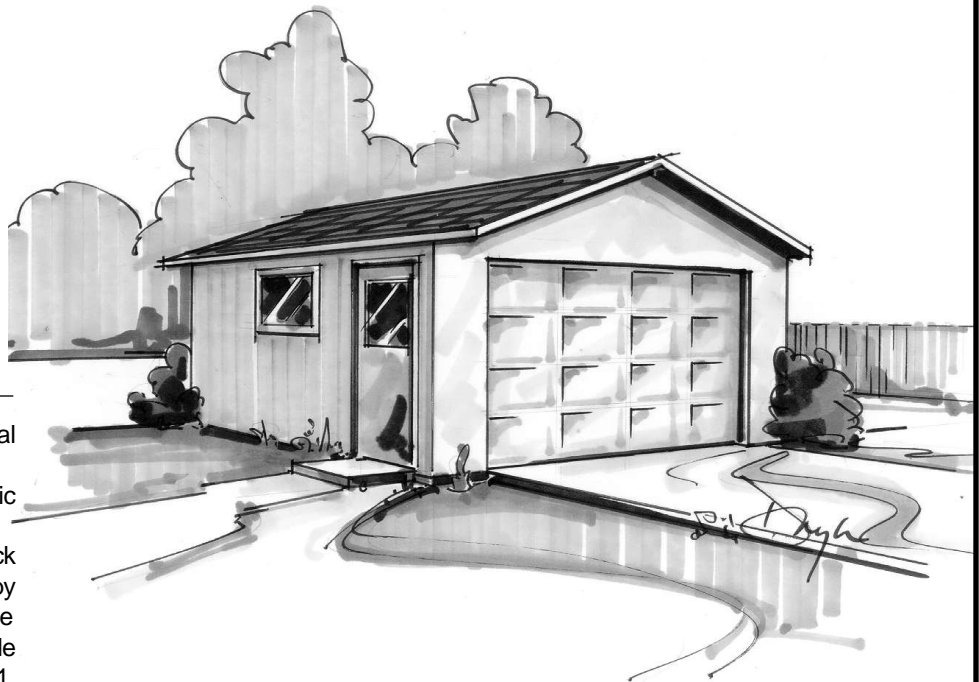# Single Family Residential One Story Detached Garage

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.

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.

This handout was developed by the Colorado Chapter of the International Code Council as a basic plan submittal under the 2003 International Residential Code. It is not intended to cover all circumstances. Check with your Department of Building Safety for additional requirements.

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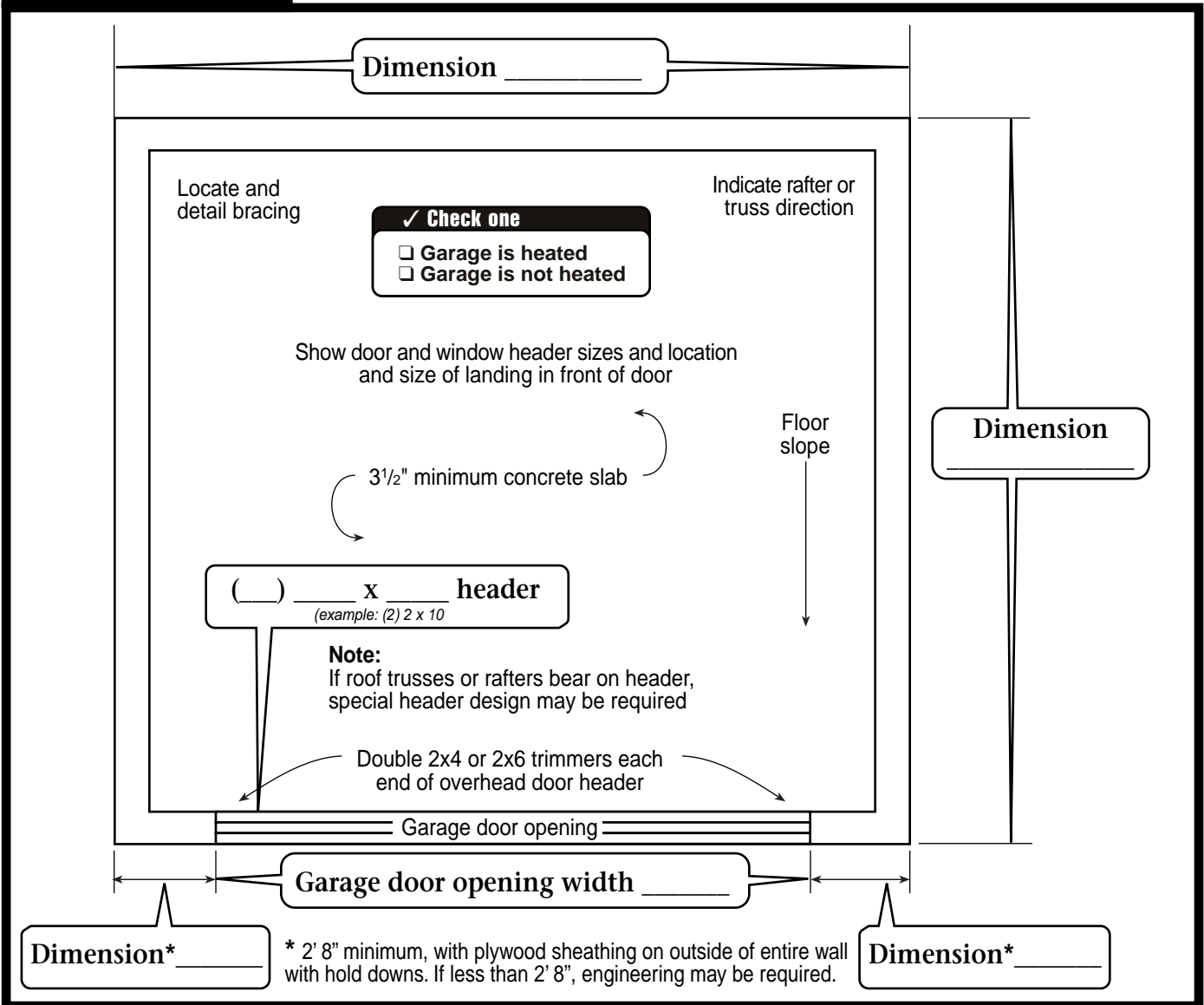# Single Family Residential One Story Detached Garage

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.

Address:
_____

Floor Plan

Dimension _____

Locate and detail bracing

Indicate rafter or truss direction

✓ Check one
❏ **Garage is heated**
❏ **Garage is not heated**

Show door and window header sizes and location and size of landing in front of door

Floor slope

Dimension _____

$3^{1}/_{2}$" minimum concrete slab

(___) ____ x _____ header
(example: (2) 2 x 10

Note:
If roof trusses or rafters bear on header, special header design may be required

Double 2x4 or 2x6 trimmers each end of overhead door header

Garage door opening

Garage door opening width _____

Dimension* _____

* 2' 8" minimum, with plywood sheathing on outside of entire wall with hold downs. If less than 2' 8", engineering may be required.

Dimension* _____

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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 Rafters Spaced 24" O.C.)

Minimum 1x____ridge board
(example: 1 x 12)

Sheathing_____
(example: 1/2" exterior plywood)

Roof covering_____
(example: Class A 3 tab shingles)

Underlayment_____
(example: 1 layer 15# felt)

Building Section

$\frac{12}{\text{pitch}}$ ____

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")

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

Span

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 25' of wall.
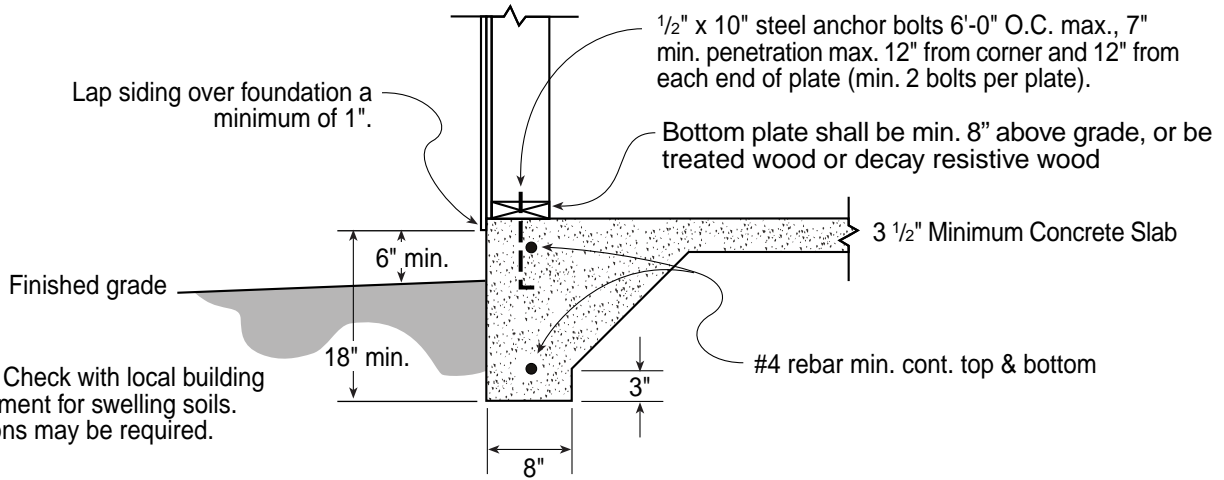
A

B

✓ **Check one**

❏ **Foundation Detail A**
❏ **Foundation Detail B**
(see page 4)

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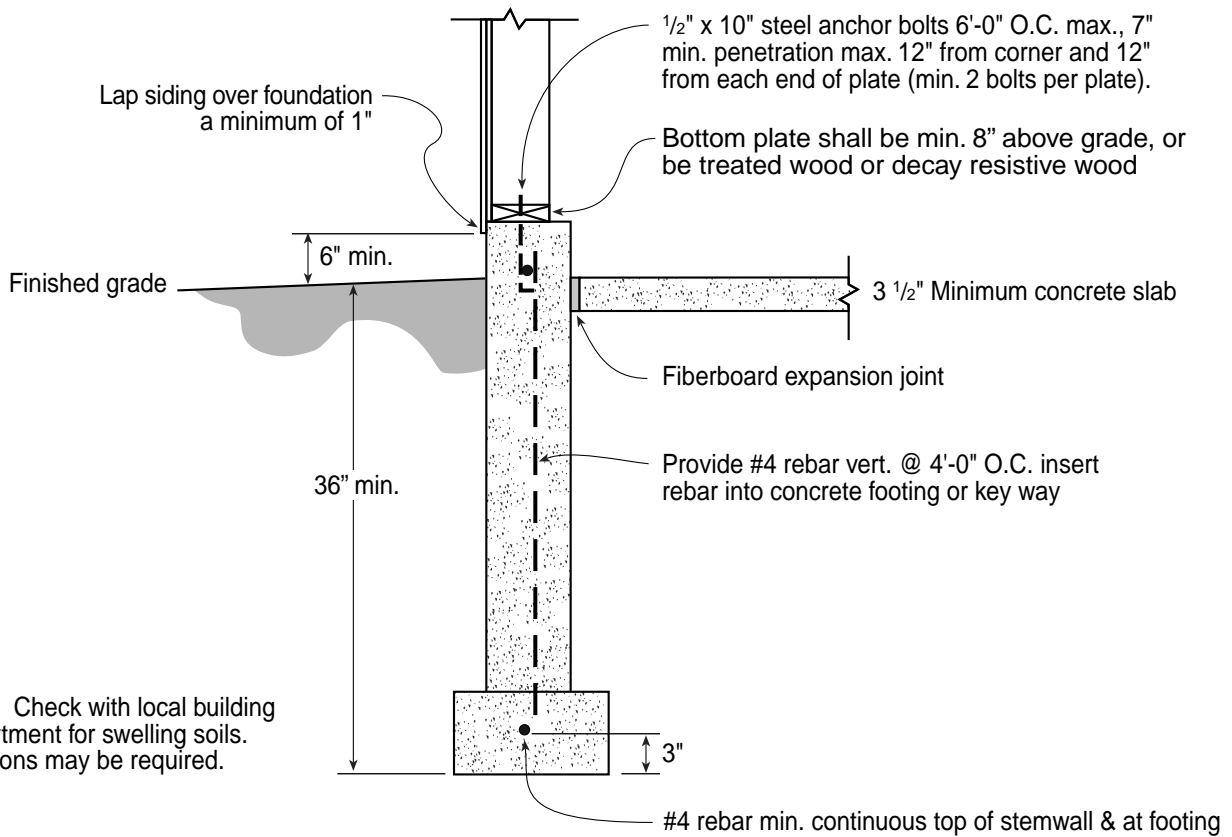
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Foundation Detail A

½" 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 ½" Minimum Concrete Slab

6" min.

Finished grade

18" min.

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

#4 rebar min. cont. top & bottom

3"

8"

Foundation Detail B

½" 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

6" min.

Finished grade

3 ½" Minimum concrete slab

Fiberboard expansion joint

Provide #4 rebar vert. @ 4'-0" O.C. insert rebar into concrete footing or key way

36" min.

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

3"

#4 rebar min. continuous top of stemwall & at footing