



# 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, drawn to scale and complete the following (*hint: use graph paper with 1/4" squares. Example: 1/4" = 1'*): Check with your jurisdiction for additional requirements.

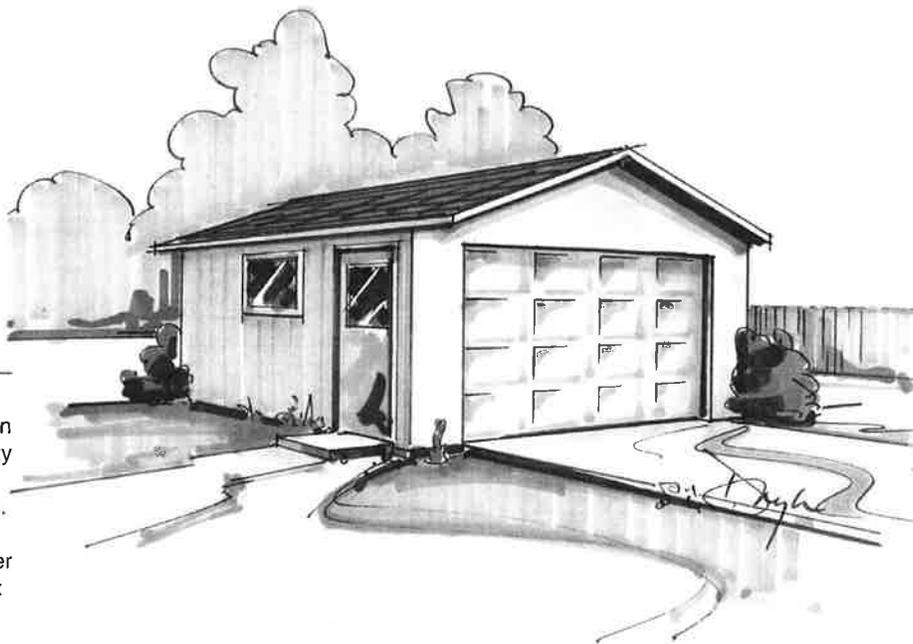
**1 Complete this Building Guide** by filling in the blanks on page two and four, and indicating which construction details will be used.

**2 Provide 2 Plot Plans** (site plan) showing dimensions of your project and its relationship to existing buildings or structures on the property and the distance to existing property lines, drawn to scale. See page3.

**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.  
<http://www.coloradochaptericc.org>



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## Directions

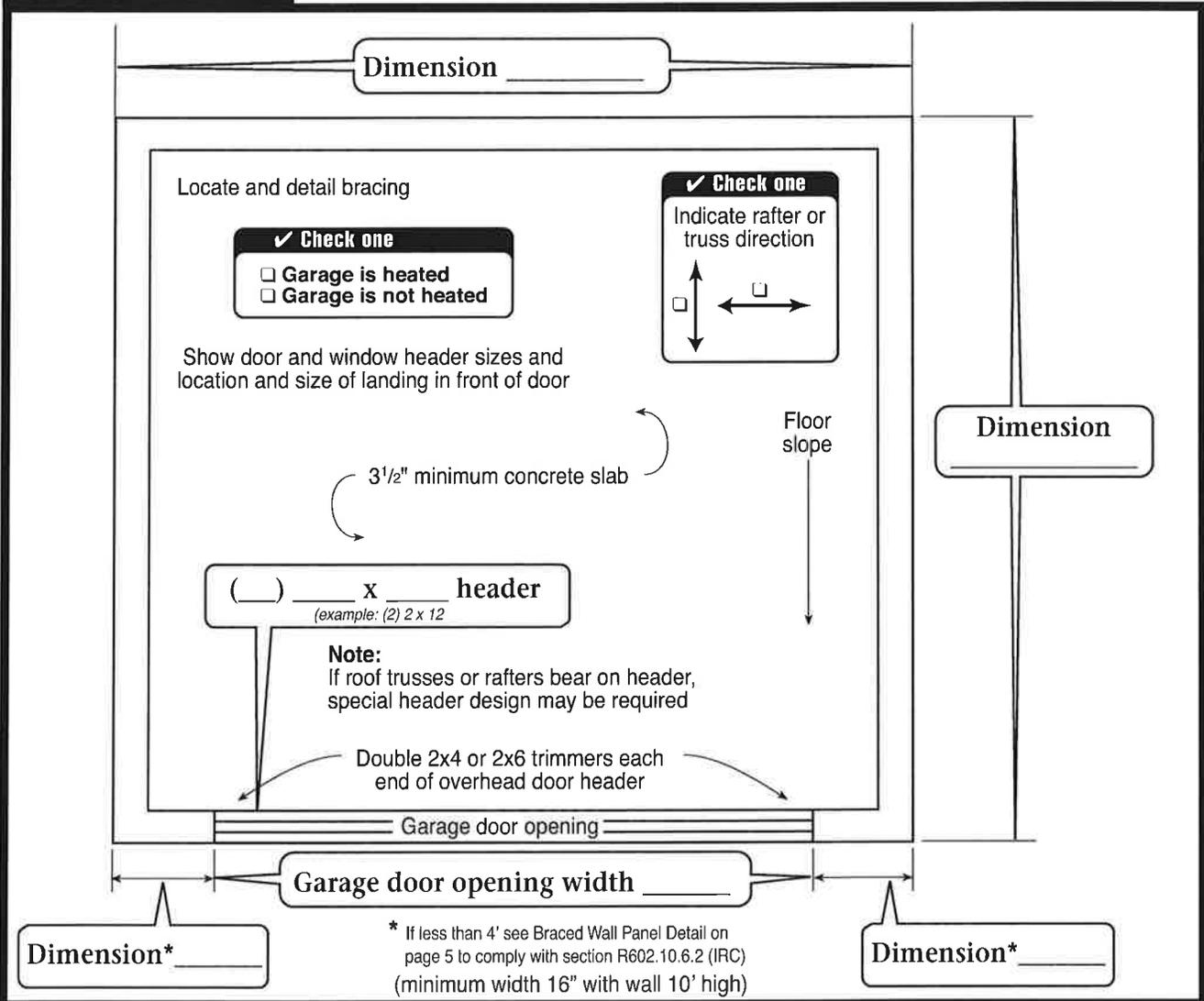
1. Fill in the blanks on pages 2 and 4 with dimensions and materials which will be used to build the structure. Please print legibly.

Address: \_\_\_\_\_

2. Indicate in the check boxes on page 4 which details from page 5 will be used.

Note: Heated garages will require insulation, such as ceilings, walls, and foundation.

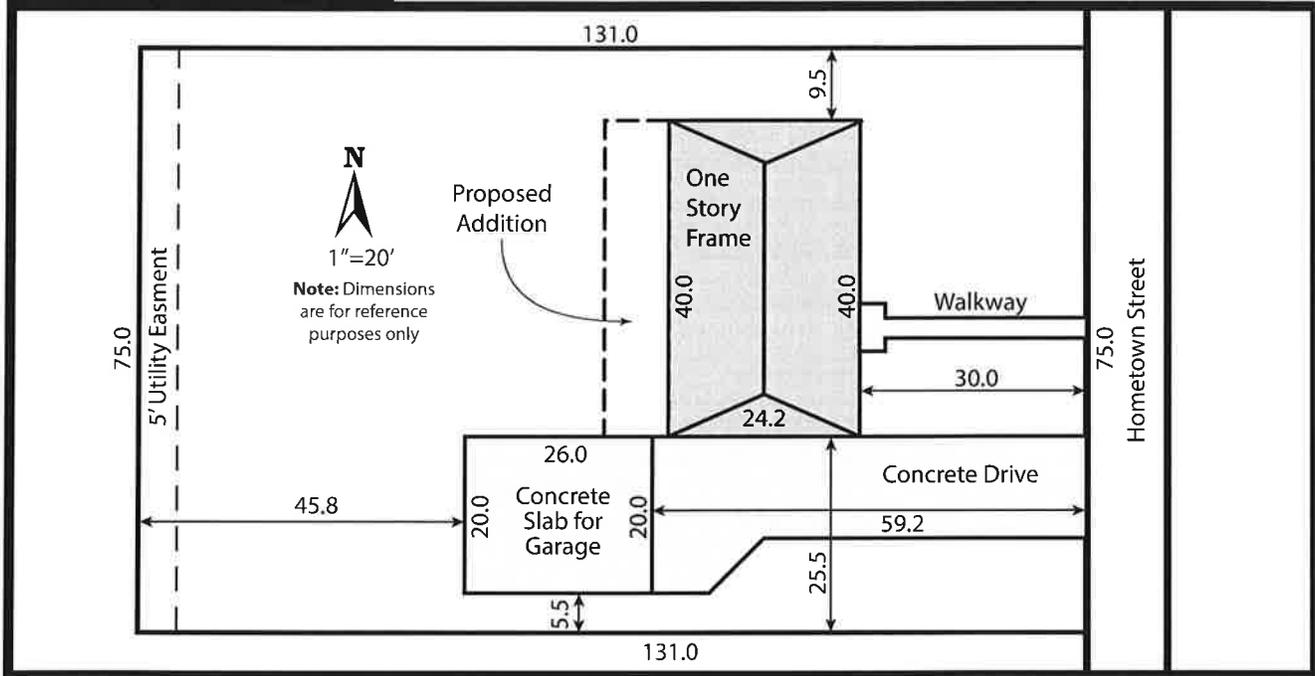
## Floor Plan



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## Site Plan Example

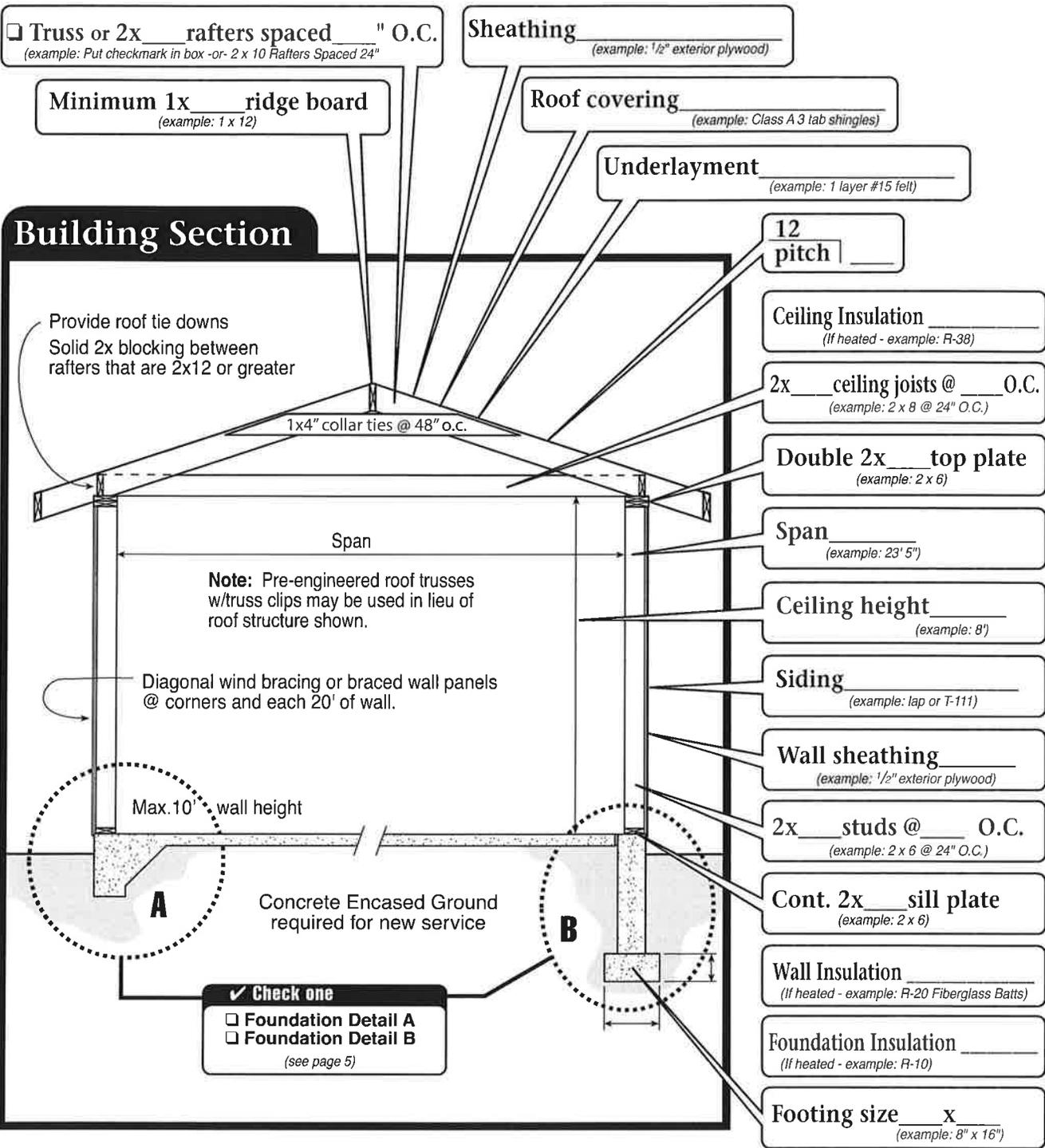


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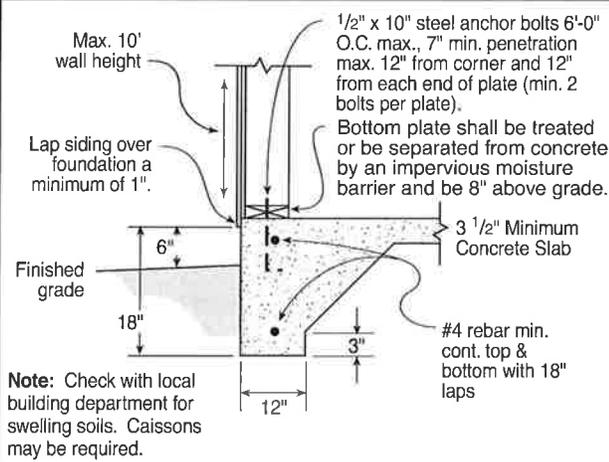
Note: For roofs with slopes less than 4:12, follow manufacturer's instructions for low slope application of roofing material.



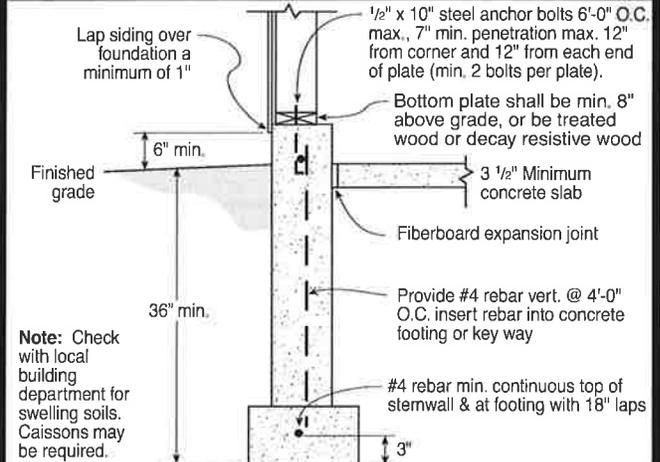
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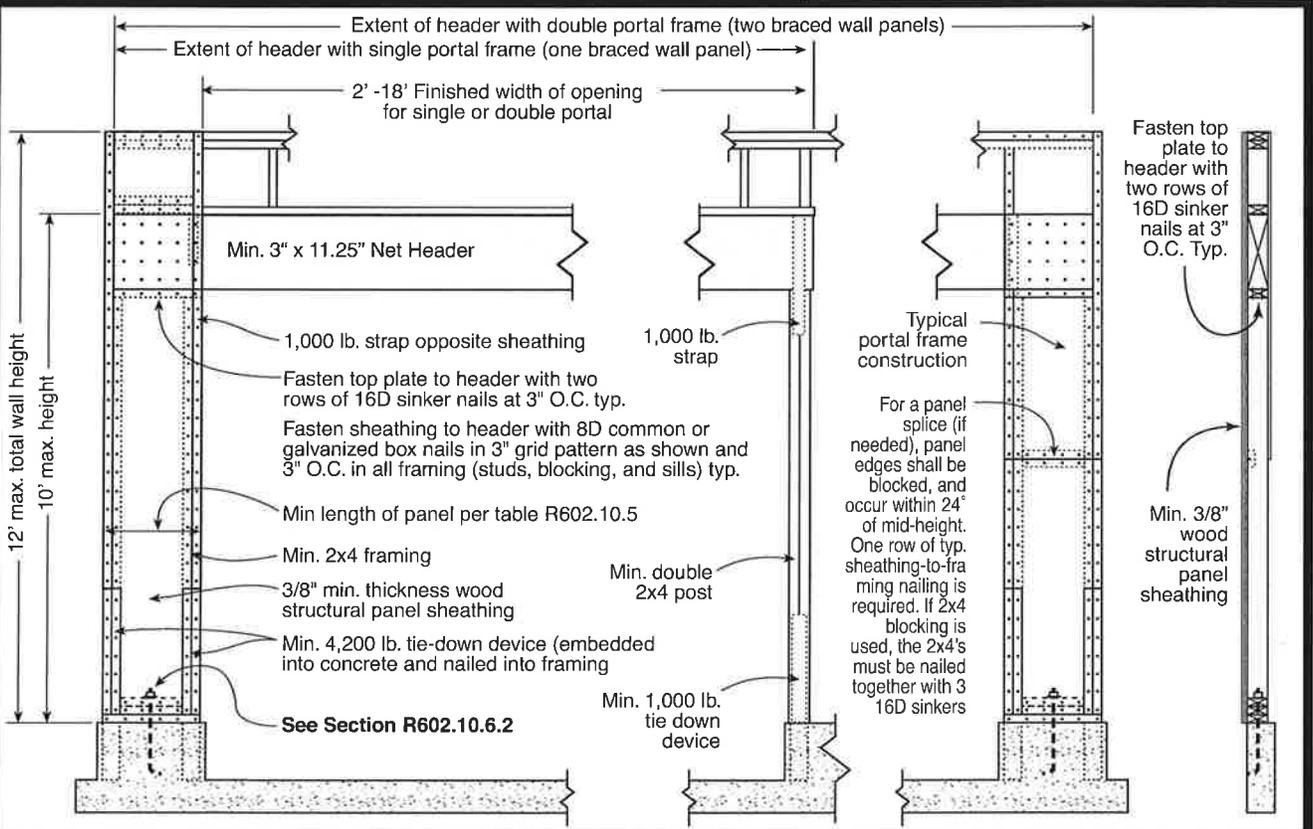
## Foundation Detail A



## Foundation Detail B



## Braced Wall Panel Detail figure 602.10.6.2



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## ROOF RAFTER TABLE

RAFTER SIZE	RAFTER SPACING	MAXIMAM SPAN
2 X 6	12" On Center	12'-7"
	16" On Center	11'-5"
	24" On Center	9'-7"
2 X 8	12" On Center	16'-7"
	16" On Center	14'-11"
	24" On Center	12'-2"
2 X 10	12" On Center	21'-0"
	16" On Center	18'-2"
	24" On Center	14'-10"
2 X 12	12" On Center	24'-4"
	16" On Center	21'-1"
	24" On Center	17'-3"

NOTE: Spans in this table were derived from the 2012 IRC, Table R802.51  
Design Criteria: Hem-Fir #2 rafters with a live/dead loading of 30/10 psf.

## CEILING JOIST TABLE

RAFTER SIZE	RAFTER SPACING	MAXIMAM SPAN
2 X 4	12" On Center	11'-7"
	16" On Center	10'-6"
	24" On Center	9'-2"
2 X 6	12" On Center	18'-2"
	16" On Center	16'-6"
	24" On Center	14'-5"
2 X 8	12" On Center	24'-0"
	16" On Center	21'-9"
	24" On Center	18'-6"
2 X 10	12" On Center	26'+
	16" On Center	26'+
	24" On Center	22'-7"

NOTE: Spans in this table were derived from the 2012 IRC, Table R802.5(1)  
Design Criteria: Hem-Fir #2 joists supporting drywall ceiling and live/dead loading of 10/5 psf.