

DETACHED RESIDENTIAL GARAGE - REQUIREMENTS FOR BUILDING PERMIT

Building a Detached Garage?

Before submitting a building permit application please be aware of the following:

- A residential permit is required.
- Two sets of building plans **drawn to scale** (1/4" = 1' scale is preferred) need to be submitted. Plans shall be no smaller than 8.5" x 11" paper and no larger than 24" x 36".
- Three (3) site plans (include all existing structures, proposed location of the detached garage, and setbacks from all property lines to the proposed detached garage) are required. (See site plan handout for more details.)
- Building plans must include a roof framing plan, section plan, and elevation details. Foundation plans must be provided as well.

An engineered foundation plan may be required based on the location and/or design of the garage. If engineered foundation plans are required, two original wet stamped plans must be submitted with all detailed drawings.

- All monolithic foundations greater than 24'-0' in width (truss length), more than twice as long as they are wide, or greater than 600 sq. ft. in floor area shall be designed by a Colorado Registered Engineer.
- All monolithic foundations greater than 600 sq. ft. must be frost protected.
- Size, spacing, specifications of studs, rafters, beams, ridge board or ridge beam, collar ties, and top and bottom plates must be specified.
- All electrical work must comply with the 2020 National Electrical Code as adopted and administered by Larimer County. Electrical plans not required.

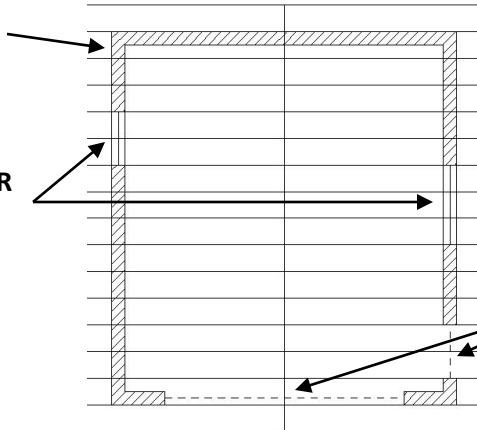


DETACHED GARAGE - REQUIREMENTS FOR BUILDING PERMIT

ROOF FRAMING AND PLAN VIEW

INDICATE TYPE OF ROOF
SYSTEM & SPACING OF
RAFTERS OR TRUSSES

INDICATE HEADER
SIZES FOR ALL
OPENINGS



NOTE: GARAGE LENGTH
NOT TO EXCEED TWICE ITS
WIDTH OR ENGINEERING
WILL BE REQUIRED

SHOW LOCATION
OF ALL OPENINGS

BUILDING SECTION

INDICATE ROOF
COVERING & SLOPE

RAFTER COLLAR TIES ARE
TO BE LOCATED IN LOWER
1/3 OF ROOF PITCH IF
RIDGE BOARD IS USED

METAL FRAMING
ANCHORS

INDICATE STUD
SIZE & SPACING

SPECIFY SIDING
MATERIAL

TREATED SILL PLATE

PERMANENT
FOUNDATION
REQUIRED

PROVIDE WIND BRACING
AT ALL CORNERS AND
EVERY 25' OF WALL.
SEE SECTION R602.10 OF
THE 2021 IRC FOR MORE
INFORMATION ON WALL
BRACING AND GARAGE
DOOR PORTAL FRAMING.

Single Family Residential One Story Detached Garage

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")

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)

12 pitch | _____

Ceiling Insulation _____
(If heated - example: R-36)

2x _____ ceiling joists @ _____ O.C.
(example: 2 x 6 @ 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-20 Fiberglass Batts)

Foundation Insulation _____
(If heated - example: R-10)

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

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.

Max. 10' wall height

Concrete Encased Ground
required for new service

✓ Check one
☐ Foundation Detail A
☐ Foundation Detail B

This handout was developed by the Colorado Chapter of the International Code Council as a basic plan submittal under the 2012 International Residential Code. It is not intended to cover all circumstances. Check with your Department of Building Safety for additional requirements.