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”.

- Seven plot 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 plot 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) shall be designed by a Colorado Registered Engineer.

- All monolithic foundations greater than 600 Ft\(^2\) are required to 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.
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

PROVIDE WIND BRACING AT ALL CORNERS AND EVERY 25’ OF WALL. SEE SECTION R602.10 OF THE 2018 IRC FOR MORE INFORMATION ON WALL BRACING AND GARAGE DOOR PORTAL FRAMING.

SPECIFY SIDING MATERIAL

TREATED SILL PLATE

PERMANENT FOUNDATION REQUIRED

Updated to 2018 I-Codes 06/20/19
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: Prefabricated box or 2x10 rafters Spaced 24"
- Sheathing (example: 15" exterior plywood)
- Minimum 1x__ ridge board (example: 1 x 12)
- Roof covering (example: Class A 3 tab shingles)
- Underlayment (example: 1 layer #15 batt)
- Provide roof tie downs
- Solid 2x blocking between rafters that are 2x12 or greater
- 1x4" collar ties @ 48" O.C.

Span
Note: Pre-engineered roof trusses with 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

- Ceiling Insulation (example: R-30)
- 2x__ ceiling joists @ __ O.C. (example: 2 x 6 @ 24" O.C.)
- Double 2x__ top plate (example: 2 x 10)
- Span (example: 25' 5"
- Ceiling height (example: 8')
- Siding (example: lap or T-111)
- Wall sheathing (example: 15" exterior plywood)
- 2x__ studs @ __ O.C. (example: 2 x 6 @ 24" O.C.)
- Cont. 2x__ sill plate (example: 2 x 6)
- Wall Insulation (example: R-20 Fiberglass Batt)
- Foundation Insulation (example: R-12)
- Footing size __ x __ (example: 8' x 16')

This handout was developed by the Colorado Chapter of the International Code Council as a basic plan submittal under the 2018 International Residential Code. It is not intended to cover all circumstances. Check with your Department of Building Safety for additional requirements.