

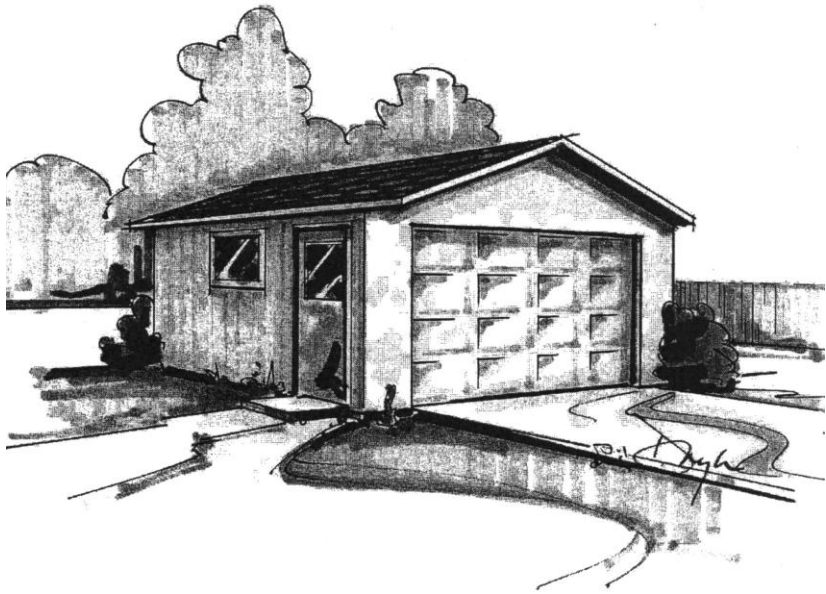


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building.inspection@longmontcolorado.gov

How to Use this Guide

Provide a digital set of plans on a USB/flashdrive or a digital pdf attachment in an email to building.inspection@longmontcolorado.gov.

- 1 Review this Building Guide
- 2 Provide an ISP or LSP or approved Plot Plan/ Site Plans, 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. See page 5.
- 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.



Based on graphics and information developed by the Colorado Chapter of the International Code Council.

Single Family Residential Accessory Buildings

General Permit Information

A building permit is required anytime there is new construction or addition, alteration, repair or demolition to; accessory buildings such as detached garages, or storage sheds *over 200 square feet* in floor area. Accessory buildings Less than or equal 200 square feet do not require a building permit or inspection. The footprint of any accessory structure may not exceed fifty percent of the principal dwelling's footprint. The total combined square footage (including second stories) of all accessory structures on the lot may not exceed 75% of the principal structure. The maximum height of an accessory structure is the height of the principle structure.

If you have questions about whether or not a permit is required, contact the Building Inspection Division, Civic Center Complex, Longmont, Colorado, 80501, (303) 651-8332.

The issuance of permits and subsequent inspections of the work performed ensures that all construction in the city is safe and in compliance with the City of Longmont Zoning and Building Codes. The primary purpose of these codes is to ensure a safe and healthy environment for the citizens of Longmont.

Permits are reviewed and issued at the Building Inspection Division office located at the Development Services Center, 385 Kimbark St. The office is open from 8:00 AM to 5:00 PM Monday - Friday. Call (303) 651-8332 for information.

As a homeowner you can act as your own contractor and work on the property where you reside without a contractor's license. You may subcontract parts of a project. Anyone you hire, however, must be insured and licensed with the City of Longmont. In addition, you are responsible for obtaining inspections and written approvals on the permit card. *Exception: electricians and plumbers are also licensed with the state and must obtain or be added to permits for all work they do.*

CAUTION: If you do work, or have any work done without obtaining a permit, you could be incurring liability in the event of a fire or accident related to the work. In some circumstances, your insurance could be invalidated.

Please Note:

- ⇒ **NOISE:** Section 10.20.100 of the Longmont Municipal Code prohibits making unreasonable noise which would cause a person of ordinary sensitivities significant annoyance and irritation.
- ⇒ **CONSTRUCTION DEBRIS & TRASH:** The Longmont Municipal Code requires debris and trash be contained on the job site.
- ⇒ **BEFORE DIGGING:** ALWAYS call the Utility Information Center at 811 to locate underground utility lines. Allow 3 working days for the lines to be located and marked.

Scheduling Inspections

Requests for inspection may be made online at :

<https://aca.ci.longmont.co.us/citizenaccess/longmont.aspx>

or on the Building Inspection voicemail by calling (303) 774-4595. You will need your permit number on the front of your permit. Inspections scheduled before or by 4 p.m. can be done the following business day, it is wise to anticipate when they need to be made to prevent delays.

No inspection will be made on subcontracted work done by an unlicensed subcontractor.

Your site address and permit card must be posted on-site throughout the project.

You should not proceed to cover-up any work that has not been inspected. Although you may request either morning or afternoon inspection times, it may not be possible to schedule a specific time for the inspector to be there. You **SHOULD NOT** schedule any concrete or other major work for the same day as the inspection to avoid costly problems. Inspections must be called in the day before needed in order to efficiently schedule and route the Field Inspectors.

Please have all animals including dogs under control and not in the areas to be inspected. Inspections may not be made if there are animals running loose and a re-inspection fee may be required if this occurs. The site address must be prominently posted during the construction process. The final inspection is the last step in the inspection process, and is your certification that the work has been satisfactorily completed according to building code.

Footing Inspections

- ⇒ Approved plans and site plan on site.
- ⇒ Lot Lines clearly marked with string lines or otherwise.
- ⇒ Footing/Foundation forms and reinforcement in place.
- ⇒ Erosion control in place.

Framing Inspections

- ⇒ Approved plans on site.
- ⇒ Engineer stamped and signed truss plans.
- ⇒ Trash enclosure on site to prevent litter and blowing trash.
- ⇒ Plumbing, mechanical, low voltage and electrical (if any) roughed in.

- ⇒ All framing, fire blocking and bracing done.

Plumbing/Mechanical/Electric

- ⇒ underground plumbing, gas line, rough plumbing, mechanical and electrical and low voltage wiring roughed in.

Insulation Inspections

- ⇒ Any other work that may be covered up inspected and approved.
- ⇒ Insulation installed.

Final Inspection

- ⇒ All plumbing, heating, electrical, flooring and framing work done and approved.
- ⇒ Final Grading and paving including any required driveways done.

Single Family Residential Accessory Buildings

Plans

All construction drawings must be legible and submitted electronically. Digital copies must be in PDF form or USB/flashdrive. Plans must either be drawn to scale or with all dimensions clearly shown. The following list includes the types of drawings needed for a typical detached garage, shed or other accessory building, whether new or remodel:

PLOT PLAN OR ILC (IMPROVEMENT LOCATION CERTIFICATE)

- 1 North Arrow.
- 2 Date of plan (and revisions).
- 3 Property address.
- 4 Lot dimensions and corner elevations.
- 5 Easements and adjoining street name(s).
- 6 Curb cuts, paving, parking, sidewalks and garage locations.
- 7 Location of proposed and existing structures including house, detached garages, and sheds.
- 8 Show dimensions of all buildings, distance to property lines and distance between buildings.
- 9 Height of structure, top of foundation and property corner elevations.
- 10 Location of utility lines inclusive of water, sewer, electric and gas lines. Show point of attachment to house.
- 11 Drainage pattern (must conform to approved development drainage plan).

FOUNDATION PLAN (stamped by a licensed Colorado engineer)

- 1 Dimensions of footing and foundation wall.
- 2 Overall foundation dimensions.
- 3 Depth of footings below grade.
- 4 Column footing size and locations.
- 5 Beam size and bearing locations.
- 6 Reinforcing steel size and anchor bolt size and locations.
- 7 Windows, vents, and access size and locations.

FRAMING

- 1 Building section with material specifications.
- 2 Grade and species of all wood framing members.
- 3 Size, location and spacing of studs, joists, rafters, pre-engineered trusses, hips, valleys, purlins, and struts.
- 4 Size and location of beams, columns and headers.
- 5 Roof and floor sheathing materials.
- 6 Bracing details.

ARCHITECTURAL

- 1 Exterior elevation - (Label FRONT, REAR, RIGHT, LEFT). Indicate building materials to be

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Single Family Residential Accessory Buildings

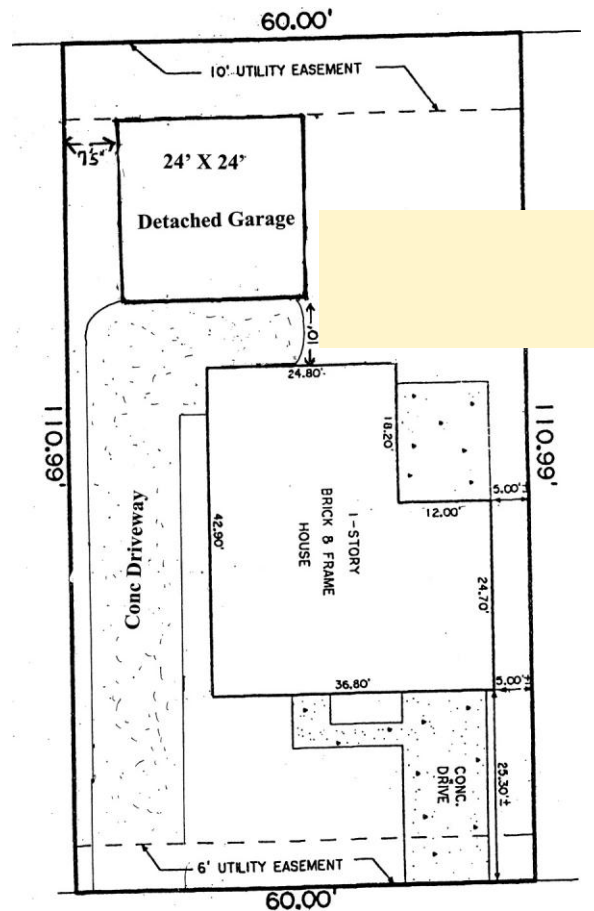
Plans, con't.

- used. Finish grade with slope shown.
- 2 Floor plan for each level:
- A Label rooms, and show dimensions.
 - B Location and size of walls, windows, doors, stairs, cabinets, guardrail and window wells.
 - C Plumbing fixtures, water heater, furnace, boiler, air conditioner and cooking appliance locations.
 - D Location of chases and chimneys for venting of fuel-burning appliances (specify type of fuel).
 - E Type, size R-value of insulation in walls and ceiling.
 - F Fireplace or stove location, type and installation details.

ELECTRICAL

- 1 Size of service.
- 2 Location of panel.
- 3 Electrical plan with outlets, switches, fixtures and smoke detectors.

Sample ILC/Plot/Site Plan



Important:
Do not alter existing drainage
pattern. Prevent run-off water from
crossing onto adjoining properties!

Single Family Residential Accessory Buildings

Information

SETBACKS

Detached garages on the same lot have a minimum three foot (3') setback from the main dwelling if not fire-rated. Table R302.6.

The minimum setback distance from side and rear property lines for accessory structures such as storage sheds, detached garages, and other similar structures is generally **5 feet**.

- a. No accessory structure shall be located within any platted or recorded easement or over any known utility, or in an area designated as a fire lane or emergency access route on an approved site plan.
- b. No accessory structure shall impede the access to or function of a vehicle use area.
- c. Accessory structures more than 120 square feet in size shall be located a minimum of five feet from the property line. Accessory structures less than 120 square feet shall not occupy more than 50 percent of the combined required rear and side setbacks and shall be located a minimum of three feet from the property line and located to accommodate lot drainage.
- d. Accessory structures shall not be located closer to the front property line than the principal structure.

LMC §15.04.040

MAXIMUM SIZE

- ⇒ The maximum size for residential storage buildings without needing a permit is 120 square feet

FOOTINGS/FOUNDATIONS

- 1 one story structures *less than or equal to 200 square feet* in floor area:

⇒ No permit is required, but securing the structure with proper tie downs or anchorage is recommended to ensure that it cannot be damaged by wind.
- 2 one story structures *greater than 200 square feet* in floor area:

⇒ All foundations must be designed by an engineer based on the type of soil under the structure. The drawings must be stamped and sealed by an engineer licensed in Colorado.

ANCHOR BOLTS

Anchor bolts are required to attach the mud sill to the foundation. The minimum size for anchor bolts is ½" diam x 10" long. Anchor bolts must be embedded in the wet concrete a minimum of 7", they shall be a maximum of 4' apart and be located within 1'-0" of each end of each individual piece. A minimum of 2 bolts per piece of mud sill is required.

BOTTOM PLATE / MUDSILL

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Single Family Residential Accessory Buildings

Information, con't.

The bottom plate or mud sill is attached to the foundation with anchor bolts. Pressure treated wood or Redwood must be used for this.

STUD WALLS

The minimum stud size is 2" x 4" placed a maximum of 24" apart in all exterior walls.

SWAY/CROSSBRACING

All exterior walls are required to be laterally braced, to resist wind and seismic forces. Typical sway bracing would be let-in 1 X 4, metal T brace or 4 X 8 exterior plywood sheathing at all corners.

Note: Regardless of square footage, the structure must still comply with the roof -member-to-wall -tie requirements of the International Residential Code.

TOP PLATES

A double top plate is required, for exceptions see International Residential Code.

ROOF AND CEILING FRAMING

Rafter ceiling joist sizes are determined by a 30 psf live load and a 10 psf dead load in combination with span lengths and spacing. Because there are many combinations of span and floor area, this pamphlet will not attempt to address all of these. The reader is referred to the International Residential Code. The minimum sizes will be verified by the Building Inspection office upon review of your project. Engineered trusses may also be used. Truss drawings must be submitted for review and approval at time of framing inspection.

ROOF SHEATHING and ROOFING

Please refer to the International Residential Code for information on plywood, particleboard sheathing and roofing. Asphalt shingles shall be installed fastened with 6 nails and hand or self sealed.

UTILITIES

Electric meter height must remain at 5'6" above grade including finished floor of deck. Proper height of overhead service drop must be maintained at a minimum of 10' above grade and above roofs dependent upon the roof slope and amount of overhang. The meter may need to be moved in some instances, such as if the accessory building is built under an overhead electrical service drop. The electrical meter may not be located in an enclosed room. Contact Longmont Power and Communications for additional information (303-651-8386).

Single Family Residential Accessory Buildings

Framing Worksheet

Address:

Note: for roofs with slopes between 2:12 to 4:12, follow manufacturer's instructions for low slope applications of roofing material.

☐ Truss or 2x _____ rafters spaced _____" OC
(example: check box or fill in 2x10 rafters spaced 24" OC)

Minimum 1x _____ ridge board
(example: 1x12)

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

Metal (e.g. H.25) connector and solid 2x blocking between rafters

Roof Covering
(example: asphalt shingles)

12 _____
Pitch _____

Underlayment
(example: 1 layer 15# felt)

Double 2x _____ top plate
(example: 2x6)

Span _____
(example: 23'5")

Siding
(example: lap or T-111)

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

Diagonal wind bracing or plywood shear panels @corners and each 25' of wall

See "Braced Wall Panel Detail" - page 10 for additional requirements.

Ceiling Height _____
(example: 8')

Ceiling Height _____
(example: 8')
Max 16' without engineering

Ceiling Insulation
(if heated, example: R-38)

2x _____ ceiling joists @ _____ OC
(example: 2x8 @ 24" OC)

2x _____ studs @ _____ OC
(example: 2x6 @ 24" OC)

Cont. 2x _____ sill plate
(example: 2x6)

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

Engineered Design: Caisson may be required if your site has swelling soils. A foundation designed by a Colorado licensed architect or engineer is required

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

Note: P re-engineered roof trusses with truss clips and hardened nails may be used in lieu of roof structure shown.

Single Family Residential Accessory Buildings

Directions

- 1 Fill in the blanks and check boxes on the figure below and on page 8 with dimensions and materials which will be used to build the structure. Please print legibly.
- 2 Provide Cross-section view, details of critical connections.

Note: Heated garages require special provisions such as using a switch as a temporary heat source, insulating walls, attic, and slab edge.

Floor Plan

Address: _____

The diagram is a floor plan of a rectangular garage. It includes several labels and checkboxes for construction details. At the top, there is a line for the 'Address'. Below it, a box labeled 'Dimension' is for the overall width. Inside the garage area, there is a 'Check one' box with two options: 'Garage is heated' (unchecked) and 'Garage is not heated' (checked). To the left of this box is the instruction 'Locate and detail bracing'. To the right is 'Indicate rafter or truss direction'. Below the 'Check one' box, it says 'Show door and window header sizes and location and size of landing in front of door'. A curved arrow points to the floor with the label '3 1/2" minimum concrete slab'. Another arrow points to the right wall with the label 'Floor slope'. In the center, there is a box for 'Header size x x for ex., 2x2x10'. Below this, a 'Note' states: 'If roof trusses or rafters bear on header, special header design may be required'. At the bottom, there is a label 'Double 2x4 or 2x6 trimmers each end of overhead door header' pointing to the header. Below the header is the 'Garage door opening'. At the very bottom, there is a box for 'Garage door opening width'. On the left and right sides of the garage, there are boxes labeled 'Dimension*' for the side walls. A note at the bottom center states: '* 2' 8" minimum, with plywood sheathing on outside of entire wall with hold downs. If less than 2' 8", engineering may be required. 2' 8", engineering may be required per International Residential Code.'

Dimension _____

Locate and detail bracing

✓ Check one
☐ Garage is heated
☒ Garage is not heated

Indicate rafter or truss direction

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

3 1/2" minimum concrete slab

Header size x x for ex., 2x2x10

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

Floor slope

Dimension _____

Garage door opening

Garage door opening width _____

Dimension* _____

Dimension* _____

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

Single Family Residential Accessory Buildings

Braced Wall Panel Detail figure 602.10.6.2

