

Single Family Residential Accessory Buildings

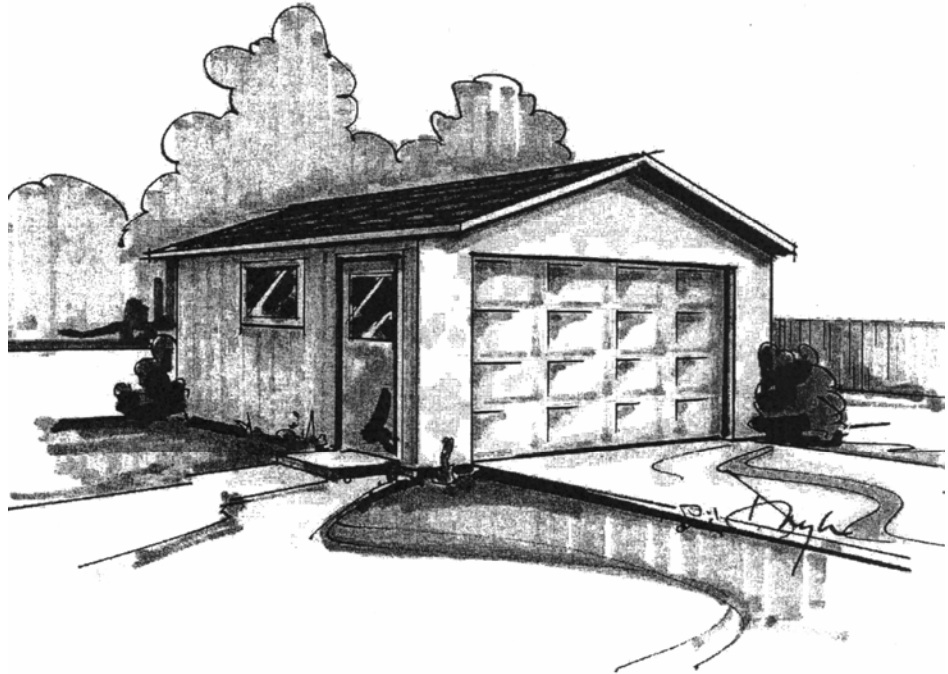
Building Guides
Building Inspection
385 Kimbark St
303-651-8332



How to Use this Guide

Provide two sets of plans and complete the following:

- 1 Review this Building Guide
- 2 Provide 2 Plot Plans (**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.

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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, storage sheds or playhouses over 120 square feet in floor area. Accessory buildings less than 120 square feet do not require a Building Permit or inspection but do require a free plot plan review to ensure compliance with zoning ordinance setback requirements. The footprint of any accessory structure may not exceed fifty percent of the principal dwelling's first floor footprint, minus any attached garage. The maximum number of accessory structures on any lot is three. The total square footage (including second stories) of all accessory structures on the lot may not exceed ten percent of the gross lot area or fifty percent of the gross floor area of the principal building, whichever is greater. The maximum height is 16' to the top plate.

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 Civic Center Complex, 350 Kimbark St. The office is open from 8:00 AM to 5:00 PM Monday, Wednesday and Friday. It is also open from 7:45 AM to 6:00 PM on Tuesday and Thursday. 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 additions, you are responsible for obtaining inspections and written approvals on the permit card. *Exception: electricians and plumbers are also licensed with the state and electricians must pull a permits for all work they do.*

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:** Section 9.04.100 of the Longmont Municipal Code requires debris and trash be contained on the job site.
- ⇒ **BEFORE DIGGING:** ALWAYS call the Utility Information Center at 1-800-922-1987 to locate underground utility lines. Allow 3 working days for the lines to be located and marked.

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.

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Calling for Inspections

Requests for inspection may be made on the Building Inspection automated phone system by calling (303) 774-4595 or through the Internet (<https://safariweb.ci.longmont.co.us/building/default.asp>). You will need your permit number and inspection card. Follow the voice mail prompts. Inspections are usually made on the following 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 and Vapor retarder installed.

Final Inspection

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

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Plans

All construction drawings must be legible and submitted in duplicate. Plans may be blueprints or originals on a good grade of plain white paper. 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

- 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 (done by a licensed 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.

Con't on next page

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

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Plans, con't.

- 6 Bracing details.

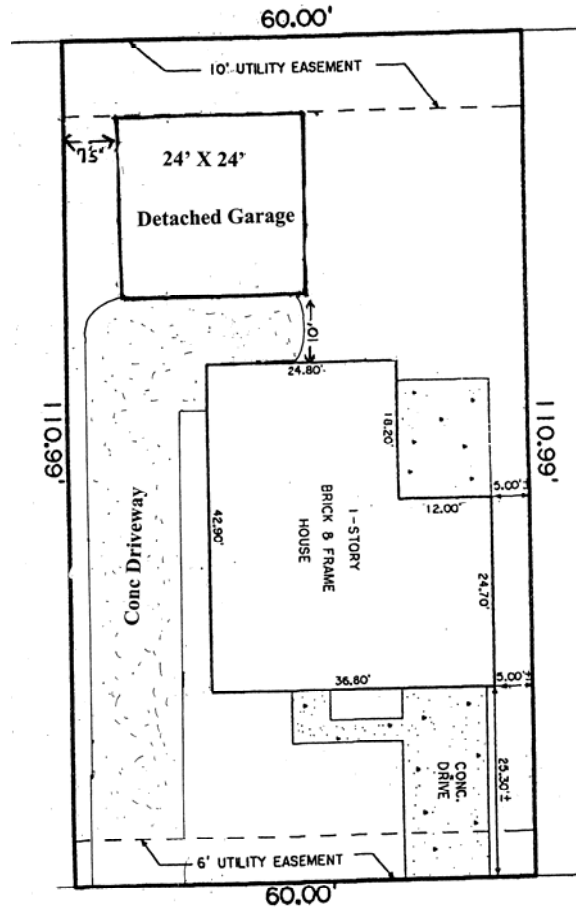
ARCHITECTURAL

- 1 Exterior elevation - (Label FRONT, REAR, RIGHT, LEFT). Indicate building materials to be 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. (walls R-18, attic R-38)
 - 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 Plot Plan



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Information

SETBACKS

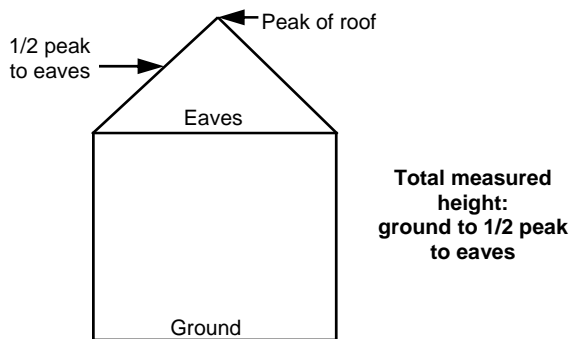
The minimum setback distance for accessory structures such as detached garages, storage sheds, play houses and other similar structures is as follows:

From side and rear property lines. One foot (1') for every two and one half feet (2 1/2') or fraction thereof of building or structure height. If the structure or building is screened from the view of the adjoining property by a solid fence, then a structure or building no taller than that fence may be placed up to the property line, regardless of height/setback requirements.

From other buildings and structures on the same lot. All accessory buildings and structures shall be placed at least six feet away from all other buildings and structures on the same lot. If closer than 6' they are considered to be attached and the combined structure must meet the setback requirements.

Note: The height of the accessory structure is measured from the ground to one half (1/2) the distance between the eave and the roof peak.

Easements. Buildings shall not be located within any easement of record unless all approvals have been obtained from the appropriate utilities; check your recorded deed or subdivision record for any and all easements.



MAXIMUM SIZE

⇒ The maximum size for residential storage buildings is 200 square feet

FOOTINGS/FOUNDATIONS

- 1 one story structures *less than 120 square feet* in floor area:
 - ⇒ No permit is required but securing the structure to insure that it cannot be damaged by wind with proper tie downs or anchorage is recommended.
- 2 one story structures *greater than 120 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. This is due to Footing/Foundations which support large loads, or that are constructed on poor soils may require different foundation designs.

Con't on next page

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Information, con't.

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

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 or metal T brace, 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, Chapter R802.11.

TOP PLATES

A double top plate is required, for exceptions see International Residential Code, Chapter R602.3.2.

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 engineering 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 Communication with additional questions (303-651-8386).

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Directions

- 1 Permit application form. (1 only)
- 2 Plot plan. Show all dimensions. (2 sets).
- 3 Footing and foundation design. (2 sets)
- 4 Cross-section view, details of critical connections. (2 sets).
- 5 Fill in the blanks and check boxes on the figure below and on page 9 with dimensions and materials which will be used to build the structure. Please print legibly.

Note: Heated garages may require special provisions.

Floor Plan

Address: _____

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

Garage door opening

Floor slope

Dimension _____

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 per *International Residential Code*, R602.

In one-story buildings, each panel shall be sheathed on one face with 3/8-inch-minimum-thickness (10 mm) wood structural panel sheathing nailed with 8d common or galvanized

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Framing Worksheet

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

