



CITY of CRYSTAL

Accessory Buildings

This handout provides answers to frequently asked questions (FAQs) relating to the construction of accessory buildings for single or two family dwellings.

Which buildings are defined as “detached accessory buildings?”

Detached accessory buildings include detached garages and carports, sheds, gazebos, workshops and non-commercial greenhouses. Detached accessory dwelling units (ADU) are also accessory buildings, but have different requirements and a handout.

What are the zoning requirements for a detached accessory building?

Building Type	Building Permit Required [1]	Minimum Setbacks [2], [3]	Max Height [4]	Max Size	Prohibited Exterior Materials
Garage or carport	Yes	<u>Front</u> : 30 ft. but cannot be closer to the street than the home. <u>Side/rear</u> : 5 ft. but eaves can be as close as 3 ft to property line. <u>Corner side</u> : 10 ft., but if the vehicle entrances faces an alley or street, the setback is 20 ft.	15 ft.	Subject to green space requirements. [5] Total size of all detached buildings cannot exceed the finished floor area of the home.	Fabric, canvas, concrete block, cloth, plastic sheets, tarps, unfinished or corrugated metal, exposed plywood, particle board or similar materials.
Shed	No, unless larger than 200 sq. ft.	<u>Front</u> : 30 ft., but cannot be closer to the street than the home. <u>Side/rear</u> : 3 ft. <u>Corner side</u> : 10 ft.	15 ft.	Same as garage/carport.	Same as garage/carport.
Gazebo	No, unless larger than 200 sq. ft.	Same as sheds.	15 ft.	Same as garage/carport.	Same as garage/carport.
Workshop	No, unless larger than 200 sq. ft.	Same as garage/carport.	15 ft.	Subject to green space requirements. Total workshop size cannot exceed 25% of home finished floor area.	Same as garage/carport.
Non-Commercial Greenhouse	No, unless larger than 200 sq. ft.	Same as sheds.	15 ft.	Same as garage/carport.	Same as garage/carport.

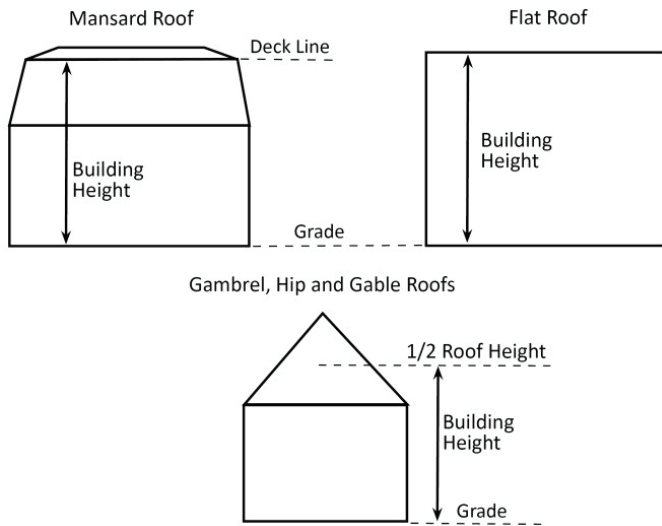
NOTES:

1. Although a building permit may not be required, the property owner or builder must meet building code requirements for that building.
2. Setbacks are measured to the property line. For buildings facing a street, the property line is typically 10 – 15 ft. from the curb. For further information on finding property lines see the handout on property surveys.

“NOTES” CONTINUED ON NEXT PAGE

NOTES (continued):

- Regardless of the required setback, no part of any building including eaves or foundations, can be located within an easement. A property survey or plat may show the location of easements or easements may be listed on your property's title. If you are having difficulty determining the presence of easements, you may contact the city planner.
- For one and two-family homes, a percentage of the area behind the home ("the back yard") must be left as green space (not occupied by buildings, driveways, or sidewalks). These requirements are found in a separate handout.
- Building height is measured as shown on the following graphic:



What needs to be submitted for a building permit application?

- City of Crystal building permit application
- Two copies of a Certificate of Survey or two copies of a site plan drawn to scale, indicating:
 - Lot dimensions.
 - location and dimensions of existing building(s), including all buildings, sheds, garages, decks, patios, sidewalks, porches and driveways.
 - Location and dimensions of the proposed building(s).
 - Setback measurements from property lines. If the proposed building is located close to property lines, you will be asked to locate your property corner markers or have a survey completed. See the handout on finding your property lines.
- Two copies of plans, drawn to scale, showing the design of proposed building(s) and type of materials being used for construction. The plans should also indicate:
 - Floor Plan: Proposed size, window and door openings, header sizes over openings and size, spacing and direction of rafter material.
 - Cross section: Footage and floor design and wall and roof construction and materials used
 - Elevations: Front and side view, indicating height of building.
 - Truss design: Two copies of stamped, pre-engineered truss design from contractor, if a truss roof system is to be used.

What are the building code requirements?

<p>Foundation</p>	<ul style="list-style-type: none"> A "floating slab" up to a maximum of 1,000 sq. ft. may be poured provided the soil has a bearing capacity of at least 1,500 pounds per sq. ft. All sod and root structures and other fibrous materials must be removed and covered with 4 ft. sand fill. At the perimeter, form a haunch to thickened edge having a minimum vertical dimension at the exterior face of 12 ft. with at least 6 ft. projecting above the finished grade. The bottom of the haunch shall be at least 8 inches wide and then sloped upward to the bottom of the slab. Screed block shall be placed to provide for a minimum slab thickness of 3.5 ft. The minimum concrete strength shall be at least 3,500 lbs. per sq. inch (28 day strength). In cold weather, protect concrete from freezing until concrete has cured for seven days. Slabs-on-ground with turned-down footings shall have a minimum of one (1) no. 4 rebar continuous at the top and bottom of the footing.
<p>Anchor Bolts</p>	<p>Embed 1/2-inch diameter anchor bolts, with nuts and washers, a minimum of 7 inches into concrete or into masonry cores filled with concrete grout (do not use mortar). Place anchor bolts at least 6 ft. O.C. and not greater than 1 ft. from the end of each treated sill plate section. Anchor bolt threads must be exposed to 1/2-inch above the top of sill plates. A minimum of two bolts in each sill plate section are required.</p> <p>NOTE: Steel strap sill anchors require pre-approval by the building official. Provide product data, listing ICC evaluation report number, for acceptance before placement of strap anchors. ACQ treated sill plates require special fasteners and connectors.</p>

BUILDING CODE REQUIREMENTS CONTINUED ON NEXT PAGE

Building code requirement coninued.

Sill Plates	The bottom plate shall be a minimum of 2 x 4. When in contact with concrete or masonry, sills will be decay-resistant, treated wood. ACQ treated wood requires special fasteners and connectors.
Wall Framing	Wood studs shall be at least 2 x 4's.
Top Plate	The top plate shall be overlapped double 2 x 4s.
Wall Sheathing and Siding	Fasten approved wall sheathing according to manufacturer's specifications. Sheathing shall be approved for 16 inch or 24 inch O.C. stud spacing.
Headers	For 16 ft. door in gable (nonbearing) end, header shall be minimum 2 – 2 x 12s. Hip roof 2 – 2 x 14s. When door is to be located in bearing wall, header shall be a minimum 3 – 2 x 14s.
Roof Framing and Covering	<p>For hand framed rafters, see 2020 Residential Code Table R802.5.1 (5), ground snow load = 50 psf (pounds per sq. ft.)</p> <p>If trusses are to be used, truss design drawings shall be stamped and approved by a third party agency. Submit two copies of truss plans signed by a structural engineer registered in the State of Minnesota.</p> <p>Nail approved roof sheathing according to manufacturer's specifications (sheathing shall be approved for a 16 or 24 inch O.C. rafter or truss spacing). Asphalt shingles shall comply with ASTM D225 or D3462 and be applied over underlayment conforming with ASTM D226, type 1, ASTM D4869, type 1 or ASTM D 6757 (IRC R905).</p> <p>Except for detached accessory buildings that contain no conditional floor area, ice protection must be provided, conforming to IRC R905.2.7.1, from the eave's edge to a point 24 inches inside the exterior wall line of the building. Ice protection material shall comply with ASTM D1970.</p> <p>Kick-out flashing shall be installed where the lower portion of a sloped roof stops within the plane of an intersecting wall cladding, in such a manner as to divert or kick water away from the assembly.</p>
Firewall	Garages within 5 ft. of a dwelling shall be protected with materials approved for one-hour fire resistive construction, or 3 ft. on same lot.