

Attached or Detached Garage with Frost Footings

City of Willmar Building Department (2015 MSBC)

Manufactured trusses are required (35 psf minimum snow load is required).
Provide roof truss drawings from the truss manufacturer.

Provide diagonal bracing in all gable ends.

Asphalt shingles, 15 pound felt, roof sheathing with spacer clips.

Ice and water barrier is required 24 inches beyond the exterior wall line. (In attached accessory structures).
In detached accessory structures it's only required if the space is to be heated.

Metal drip edge and fascia board.

Soffit material.

Headers must be sized to carry all loads.

Pan flashing is required under all exterior doors and windows. Exception: Detached accessory structures.

7/16 inch wall sheathing minimum.

Siding: Vinyl siding allows for a maximum stud spacing of 16 inches on center including the gable ends (order the gable end rafters accordingly).

Building paper is required on all walls and the gable ends.

Treated bottom plate.

A 6 inch wood to earth separation is required.

Reduction in block width requires that the course below the reduction be of solid masonry or be slugged solid.

Properly compact all fill.

Rafter ties.

Double top plate.

2"x4" or 2"x6" studs.

Provide attic access with a rough opening not less than 22"x30" (if installing a finished ceiling).

1/2 inch diameter anchor bolts with a 7 inch minimum concrete embedment. The anchor bolt shall have a 2 inch diameter by 0.125 inch thick washer tightened and countersunk 0.25 inch into the sill plate. See MSBC Table R404.1 (2) for anchor bolt spacing. Not less than two bolts per sill member or exceeding 12 inches from corners.

The minimum slab thickness is 3 1/2 inches. Heated spaces require the installation of a 6 mil vapor retarder between the slab and ground below.

Remove all sod and roots from under the slab. Provide a minimum 4" granular base and compact all fill.

Footings must be sized to carry all applied loads. The footing mix must be a minimum #5000. Install two #4 rebar continuous with a minimum 20 inch lap and laps properly tied. The rebar must be bent through the corners. Support the rebar 3 inches above ground. Provide a minimum frost protection depth of 42" from finished grade to the bottom of the footing.

