

Residential Wall Section (Crawl Space)

City of Willmar Building Department (2015 MSBC)

Manufactured trusses (provide a minimum 35 psf snow load). Provide copies of the roof truss drawings from the manufacturer.

Asphalt shingles, 15 pound felt, roof sheathing with spacer clips.
In a re-roofing application, the existing roof covering must be removed prior to the application of the new roofing material.

Ice and water barrier is required 24 inches beyond the exterior wall line.

Provide attic ventilation at a rate of one sq/ft per 300 sq/ft equally split at the ridge and eave.

Metal drip edge and fascia board.

Continuous vented soffit material.

Rigid windwash barrier must go to the underside of the truss top cord.

Headers must be sized to carry all loads.

Pan flashing is required under all exterior doors and windows.

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).

The rim joist must be insulated to a minimum R-20. If fiberglass insulation is to be used a sealed vapor retarder must be applied.

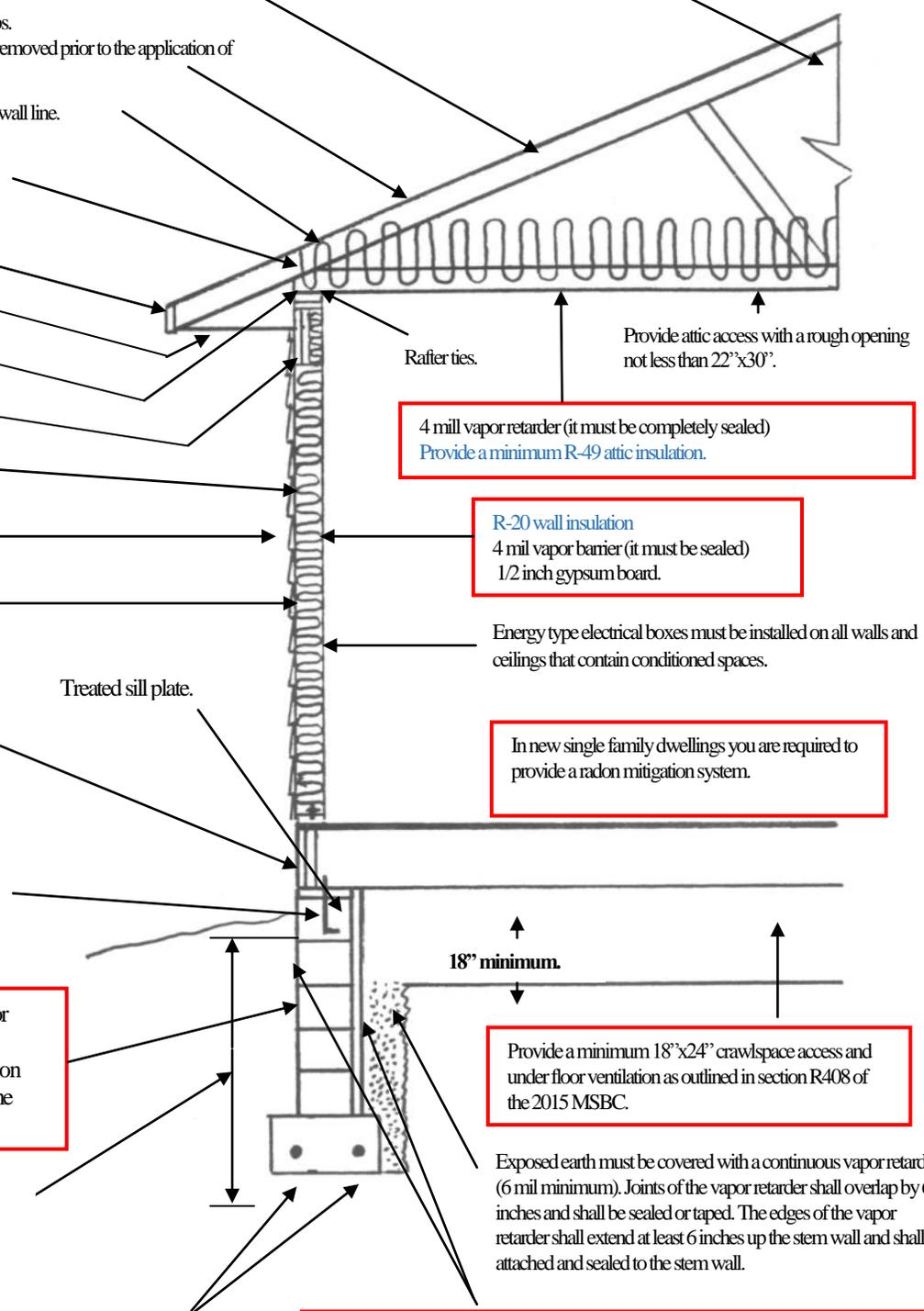
1/2 inch diameter anchor bolts with a 7 inch minimum concrete embedment. The anchor bolt shall have a 2 inch diameter by 0.125 inch thick washer tightened and countersunk 0.25 inch into the sill plate. See MSBC Table R404.1 (1) for anchor bolt spacing. Not less than two bolts per sill member or exceeding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

Concrete and masonry foundations inclosing useable or habitable spaces are required to waterproof. The waterproofing must extend over the top of the foundation wall to the inside face and be continuous to the top of the footing.

Provide adequate frost protection, footings must be placed a minimum of 42" below finished grade.

Footings must be sized to carry all applied loads. The footing concrete mix must be a minimum #5000. Install two #4 rebar continuous around the perimeter with a minimum 20 inch lap and laps properly tied. Rebar must be bent thru the corners. Support the rebar 3 inches above ground and 3 inches in from the edges.

Diagonal bracing is required on all gable end rafters.



4 mill vapor retarder (it must be completely sealed)
Provide a minimum R-49 attic insulation.

R-20 wall insulation
4 mil vapor barrier (it must be sealed)
1/2 inch gypsum board.

Energy type electrical boxes must be installed on all walls and ceilings that contain conditioned spaces.

In new single family dwellings you are required to provide a radon mitigation system.

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Provide a minimum 18"x24" crawlspace access and under floor ventilation as outlined in section R408 of the 2015 MSBC.

Exposed earth must be covered with a continuous vapor retarder (6 mil minimum). Joints of the vapor retarder shall overlap by 6 inches and shall be sealed or taped. The edges of the vapor retarder shall extend at least 6 inches up the stem wall and shall be attached and sealed to the stem wall.

Provide a minimum R-15 sub-grade insulation from the top of the wall to the top of the footing. A minimum R-10 must be applied on the exterior side of the foundation wall. (Foam plastic insulation that is applied on the interior side requires an ignition barrier and must be directly applied). Rigid protect the foam insulation on the exterior side from the top of the wall to 6" below grade minimum.