

Residential Wall Section (Basement)

Kandiyohi County Building Department (2007 MSBC)

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

Diagonal bracing is required on all gable end rafters.

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 starting at the eaves.

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.

Windwash barrier must go to the underside of the truss top cord.

Headers must be sized to carry all loads. All rough openings 6 feet or larger require a minimum 3 inch end bearing.

Pan flashing is required on all windows and exterior doors.

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

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-10 (use foil faced foam or provide a sealed vapor barrier over the fiberglass insulation).

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. See separate table for reinforcing requirements.

Masonry and poured concrete wall thickness and vertical reinforcing must comply with chapter 4 of the 2006 IRC and the 2007 MSBC. Concrete and masonry foundations inclosing useable or habitable space are required to have waterproofing applied in group II or III soil types. Damp proofing can only be applied in group I sand/gravel type soils. The block joints must be tooled on both sides of the wall. All block cores must be drained to an interior drainage loop.

Install a perforated drain tile with a rock cover that extends at least 6 inches above the top of the footing and not less than 12 inches beyond the outside edge of the footing.

Footings must be sized to carry all applied loads. Install two #4 rebar continuous with a minimum 20 inch lap and laps properly tied (rebar must be bent through the corners). Support the rebar 3 inches above ground and 3 inches in from the edges.

Rafter ties.

Provide attic access with a rough opening not less than 22'x30'.

5/8 inch gypsum board over a 4 mil vapor barrier (must be completely sealed). Provide a minimum R-38 attic insulation.

Provide a minimum R-19 wall insulation. 4 mil vapor barrier (it must be completely sealed).

1/2 inch gypsum board.

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

Treated sill plate.

Foundation walls that are parallel to floor framing, require solid blocking or diagonal bracing be installed at the anchor bolt locations in the first three joist spaces.

Floor joists and blocking shall be connected to the sill plate at the top of the wall by the prescriptive method called out in Table 404.1(1), or shall be connected with an approved connector with a listed capacity meeting Table R404.1(1).

Provide a minimum R-10 insulation from the top of the wall down to the top of the floor. If using foam plastic insulation a thermal barrier must be directly applied.

Concrete floor must be a minimum of 3 1/2 inches in thickness.

Provide a minimum 4' granular or rock base. Install a 6 mil vapor barrier with joints lapped not less than 6 inches.

Kandiyohi County Environmental Services
400 Benson Avenue SW
Willmar MN. 56201 (320-231-6229)

In new single family dwellings you are required to provide a radon mitigation system. (See County handout)