

Mid-MN Inspections LLC

Tad Winterfield 14295 70th St. Milaca MN 56353 763-360-9433

Detached Garage

Permits:

1. Signed, completed building permit application form
2. Two copies of plans showing proposed layout and materials. Plans shall be drawn to scale and should include the following information:

A floor plan indicating:

- Proposed size
- Window and door openings
- Header sizes over openings
- Size, spacing and direction of rafters

A cross section plan indicating:

- Footing and floor design
- Wall and roof construction, including materials used

Elevations, front and side view indicating height of structure.

Required inspections:

1. **Footing/foundation:** To be made before concrete is poured.
2. **Framing:** To be made after all framing is complete and rough-in electrical, plumbing and heating systems are inspected and approved.
3. **Insulation:** To be made after insulation is installed.
4. **Final:** To be made when work is complete and after final inspection and approval of any heating, electrical or plumbing work.

24 HOUR NOTICE REQUIRED FOR ALL INSPECTIONS

Building Code Requirements

1. Foundation:

- Footings must extend to frost depth for all attached garages. Footing depth for structures in Zone 1 minimum 60 inches below grade. Structures in Zone 2 is 42 inches minimum below grade. See map at http://www.dli.mn.gov/sites/default/files/pdf/bc_map_frost_depth.pdf.
- A “floating slab” may be used for foundation support of a detached garage on all soils except peat and muck up to 1000 square feet. Slabs larger than 1000 square feet will need to be designed by a Minnesota licensed structural engineer.
- Slabs-on-ground cast monolithically with footing, one #5 bar or two #4 bar shall be located in the middle third of the footing depth. All exterior footings shall be placed at least 12 inches below the undisturbed ground surface. The minimum slab thickness shall be 3 ½ inches. The minimum concrete strength shall be at least 3,500 lbs. Per square inch (28-day strength). Protect concrete from freezing until cured. One course of concrete block will be required to meet the minimum separation from final grade to the structure.

2. Sill Bolts:

- **Section R404.1** The wood sill plate should be anchored to the foundation with anchor bolts spaced a maximum of 6 feet on center. When vertical reinforcing is required, the anchor bolts or straps should align with the reinforcing. *Note: Not all bolts or straps need to be placed at core fills.* Anchor bolts should also be located within 12 inches from the ends of each plate section. Bolts should be at least ½ inch in diameter and should extend a minimum of 7 inches into masonry or concrete. *Foundation anchor straps may be used when spaced as required to provide equivalent anchorage at ½ inch diameter anchor bolts. When vertical reinforcing is required by other sections of this code, the foundation anchor straps should align with the reinforcing.*

3. Sill Plates:

- The bottom plate shall be a minimum of 2” x 4” and it shall be treated, redwood or other decay resistant wood.

4. Wall Framing:

- Wood studs shall be a minimum of 2" x 4".
- 6-inch minimum separation from structure to finished grade is required.

5. Top Plate

- The top plate shall be minimum 2" x 4", overlapped and doubled. End joints in double top plate must be offset by at least 24 inches.

6. Wall Sheathing:

- Sheathing shall be approved for 16 inch or 24 inch on center stud spacing. Exterior wall covering shall be approved siding materials. Fasten according to manufacturer's specifications.

7. Roof Construction:

- Roof snow load in Zone 1 is 42 psf and 60 psf ground snow load. Roof snow load in Zone 2 is 35 psf and 50 psf ground snow load. See map at http://www.dli.mn.gov/sites/default/files/pdf/bc_map_snowload.pdf
- If engineered roof trusses are used, documentation is required at framing inspection.

8. Fire Wall:

- Garages within 3 feet of a dwelling shall be protected with materials approved for fire resistive construction, ½ inch minimum sheetrock. Doors shall be of approved solid wood at least 1 3/8-inch in thickness or have a rating of not less than 20 minutes.