Garages, Sheds, and Other Accessory Buildings

Building permits must be obtained by an owner or authorized agent who intends to construct, enlarge, alter, repair, move, demolish, or change the occupancy of a building or structure (Minnesota Rules 1300.0120).

**PLEASE INCLUDE THE FOLLOWING WITH YOUR PERMIT:**

A. Completed **building permit form** (print form or available in our office).

B. **Two copies** of the following building plans (See below for detailed plan requirements):
   
   1. Site plan
   2. Foundation plan
   3. Floor plans
   4. Exterior elevations
   5. Cross section
   6. Truss design and layout

C. A signed **erosion control document** (must be included) agreeing to site erosion control requirements.

**BUILDING PLANS MUST SHOW THE FOLLOWING:**

Site plan showing:

1. Full legal description including lot, block and addition name.
2. Complete property drawn to scale according to an accurate boundary line survey
   (If no property corner markers are visible, a certificate of survey is required.)
   **Demolition:** indicate structures to be demolished and the size and location of structures that are to remain.
3. Size and location of existing buildings and proposed construction.
4. Setbacks from all property lines of all existing and proposed structure(s).
5. Any easements on the property.
6. Established street grades and proposed finished grades.
7. Proposed site drainage, driveway size and location.
8. Septic system area and wells if applicable.
9. Designation of side street for corner lot projects.

(The Building Official may waive or modify the requirement for a site plan if the application for permit is for alteration or repair or when otherwise warranted.)

This information corresponds to the 2006 **International Residential Code (IRC)** as adopted in **Minnesota Rules (MR), Chapter 1309** and applies to the construction, alteration, moving, demolition, repair and use of any detached one- and two-family dwellings as well as townhouses not more than three stories high. Other applicable codes and ordinances of the City of Saint Peter also apply.
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B. Complete **floor plan**:
   (1) Continuous and column pad footings.
       a. Width and thickness.
       b. Reinforcement size and placement.
   (2) Proposed size of garage.
   (3) Location and size of door and window openings.
   (4) Size of headers over all door and window openings.
   (5) Size, spacing, and direction of rafter (roof) materials.
   (6) Type (grade and species) of lumber to be used.

C. **Exterior elevations**, including:
   (1) All sides of the building.
   (2) Windows and doors.
   (3) Exterior finish.
   (4) Finish grade.

D. **Cross section** from footing to roof, including:
   (1) Footing dimensions, reinforcement and drainage
   (2) Foundation wall material, dimensions, and reinforcement.
       Damp-proofing and insulation if applicable.
   (3) Grade, distance from grade to bottom of footing and distance to wood framing.
   (4) Treated sill plate type and size as well as rim joist insulation.
   (5) Anchor bolt size, type, location and spacing.
   (6) Wall framing type, height, insulation, interior and exterior wall finishing materials.
   (7) Brick veneer, air space or lath, wall ties, weep holes and flashing if applicable.
   (8) Roof/ceiling framing, attachment to bearing walls.
   (9) Eave and rake overhang dimensions and fascia material.
   (10) Roof slopes, ice dam protection, roof underlayment and covering.

E. **Roof truss designs and layout**, including:
   (1) Headers, beams and columns with their sizes.
   (2) Hangers, hold-downs and special attachments.
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**REQUIRED INSPECTIONS:**

The following inspections shall be obtained during the construction of the building. It is the responsibility of the party doing the work to make arrangements with the building department for inspections (MR 1300.0120):

1. **Footing Inspection**  
   Done prior to the placement of any concrete, footings must be formed on both sides and have any required reinforcement secured in place.

2. **Framing Inspection**  
   To be made after the roof, interior partitions, fire blocking (for attached garages) and bracing are in place and all rough plumbing, heating and electrical work has been completed.

3. **Electrical Inspection:** (if applicable) A SEPARATE PERMIT IS REQUIRED.  
   Call Chris Gappa, State Electrical Inspector, at (507) 317-7289 between the hours of 7:00-8:30 a.m.

4. **Insulation Inspection** (if applicable)  
   Insulation and vapor barrier are in place prior to the installation of the wall covering.

5. **Gypsum Board (Sheetrock) Inspection** (if applicable)  
   To be made after all material, interior or exterior are in place but before any plastering is applied or gypsum board joints and fasteners are taped and finished.

6. **Plumbing Inspection** (if applicable)  
   Underground plumbing pipes must be inspected and air tested before covering with dirt or concrete. Above ground vent and waste pipes must be inspected and air tested before wall covering is applied.

7. **Gas Piping Inspection** (if applicable)  
   The inspection must be made after gas piping has been installed and before any piping has been covered or concealed. The inspection must include an air pressure test at which time the fuel piping must stand a pressure of not less than 25 pounds for at least 12 hours.

8. **Final Inspection**  
   The final inspection is to be made after finish grading and the building is completed and ready for occupancy.

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**CALL AT LEAST 2 FULL BUSINESS DAYS BEFORE YOU DIG.**

1-800-252-1166 1-651-454-1156 www.gopherstateonecall.org
NEW CONSTRUCTION MUST MEET THE FOLLOWING CODE PROVISIONS:

A. **Slabs on ground** with turned-down footings (R403.1.3.2):
   1. Shall have a minimum of one No. 4 bar at the top and bottom of the footing.
   2. If cast monolithically with a footing, one No. 5 bar or two No. 4 bars shall be located in the middle third of the footing depth.

B. **Footings** must be sized according to the following (IRC R403):
   1. Soil type.
   2. Number of stories supported.
   3. Total loads and point loads from point load path of structure.
   4. Frost depth.
   5. Must be placed at least 12 inches below the undisturbed ground.

C. **Roof members** must meet span and loading requirements, including:
   1. All ceiling joists (IRC 802.4).
   2. All rafters (IRC R802.5). They must also be able to support a minimum snow load of 35 psf (MR 1303 and 1309).

D. **Roofs** must meet the following requirements:
   1. Ventilation (IRC R806).
   2. Ice & water protection (IRC R905.2.7.1).

E. A 22-inch by 30-inch **attic access** is required in attics that are at least 30 inches in height (IRC R807.1).

F. **Enclosed attics** and **enclosed rafter spaces** are required to be vented as per IRC R806.

G. An **attached garage** is required to be:
   1. Separated from the house.
      a. A door in the common wall is required to be 20-minute fire rated or at least 1½ inches thick if made of solid wood (IRC 309.1).
      b. The house and its attic shall be separated by at least ½-inch gypsum board (IRC R309.2).

(2) Built on frost footings.
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- Asphalt Shingles
- Felt Paper
- Ice & Water Shield
- 1/2" Exterior Sheathing
- 2" x 4" Trusses 24" O.C.
- 1" Cont. Air Space
- Drip Edge
- 1" x 6" Alum. Fascia
- 1/2" x 6" Curb Fascia
- Vented Alum. Soffit
- RS Soffit Nailer
- 4" Lap Siding
- House Wrap (Building Paper)
- 1/2" Exterior Sheathing
- 2" x 4" Bottom Plate Treated
- 4" Concrete Floor w/ Wire Mesh
- 4" Gravel Base
- 1/2" Anchor Bolts 8" O.C.
- 2 Courses 6" Concrete Block
- 6" Full Concrete Block w/ Vertical Reinif (if required)
- Damp Proofing (to Grade)
- 5" x 20" Cont. Concrete footing w/ Re-bar (2)
**Minimum Garage Door Header Sizes**:  

**Douglas fir-larch #2 grade lumber** bearing roof and ceiling loads only.

<table>
<thead>
<tr>
<th>Garage Door Width (ft)</th>
<th>Distance from Ridge to Eave including Overhang</th>
<th>Header Sizes in Non-load Bearing (Gable) Walls</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10'-0&quot;</td>
<td>12'-0&quot;</td>
</tr>
<tr>
<td>8'</td>
<td>(2) 2×10</td>
<td>(2) 2×12</td>
</tr>
<tr>
<td>9'</td>
<td>(2) 2×12</td>
<td>(3) 2×10</td>
</tr>
<tr>
<td>10'</td>
<td>(3) 2×10</td>
<td>(3) 2×12</td>
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<tr>
<td></td>
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<td></td>
</tr>
<tr>
<td>12'</td>
<td>(3) 2×12</td>
<td>X</td>
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<tr>
<td>14'</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>16'</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>18'</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
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**Spruce-pine-fir #2 grade lumber** bearing roof and ceiling loads only.

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**Engineered lumber** (1 3/4” wide) bearing roof and ceiling loads only.

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<tr>
<td></td>
<td>10'-0&quot;</td>
<td>12'-0&quot;</td>
</tr>
<tr>
<td>8'</td>
<td>(1) 9 1/4&quot;</td>
<td>(1) 9 1/4&quot;</td>
</tr>
<tr>
<td>9'</td>
<td>(1) 9 1/2&quot;</td>
<td>(1) 11 1/4&quot;</td>
</tr>
<tr>
<td>10'</td>
<td>(1) 11 1/4&quot;</td>
<td>(2) 9 1/4&quot;</td>
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<tr>
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* Table based on 50 psf ground snow load and 10 psf dead load.

**Methods for Bracing Walls Adjacent to Garage Doors (Portal Bracing)**
A. Standard bracing method (IRC R602.10.3)
   (1) Length of braced panel is 48 inches minimum.
   (2) Sheathing does not have to be continuous.
   (3) Braced wall panels are sheathed with wood boards, wood structural sheathing, structural fiberboard sheathing, particleboard or Portland cement plaster.
   (4) No special tie-downs besides anchor bolts or straps are required.

B. Continuous structural panel sheathing (IRC R602.10.5)
   (1) Length of braced panel is indicated below:

<table>
<thead>
<tr>
<th>8-foot wall</th>
<th>9-foot wall</th>
<th>10-foot wall</th>
</tr>
</thead>
<tbody>
<tr>
<td>24&quot;</td>
<td>27&quot;</td>
<td>30&quot;</td>
</tr>
</tbody>
</table>

   (2) The structure must be completely sheathed with structural wood sheathing.
   (3) Wall corner detailing shall be as shown below.
   (4) The roof covering must not exceed a dead load of 3 psf.
   (5) No special tie-downs besides anchor bolts or straps are required.
C. APA’s Narrow Wall Bracing Method (see www.apawood.org/bracing):

1. Length of braced panel is indicated below:

<table>
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</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>18</td>
<td>20</td>
<td></td>
</tr>
</tbody>
</table>

2. The structure must be completely sheathed with structural wood sheathing.

3. No special tie-downs besides anchor bolts or straps are required.

4. Construction details shall be as shown below:
   Note the header extended past wall opening, the nailing pattern and the interior header straps.

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**Diagram:**

- Sheathing filler
- 16d sinker nails in 2 rows @ 3" o.c.
- 10d nails @ 6" o.c.
- 2" framing
- 16d nails @ 24" o.c.
- Framing for gypsum wallboard (optional)
- Portal frame wall segment typ.

**Notes:**

- All sheathable areas of exterior walls fully sheathed with plywood or OSB
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D. Engineered systems such as the Simpson Strong-Wall Shearwall:
(see www.strongtie.com/strongwall)

E. single portal assembly

single & double portal assembly