

## PORCHES

- This handout is intended only as a guide. It shall not be considered a complete set of requirements.
- Materials and installation must comply with the current Minnesota State Building Code and the manufacturers' installation specifications for each product.
- A building permits is required for construction of any new porch, as well as for the conversion of an **existing deck or space into a porch**. The Minnesota State Building Code requires porches that are heated (four seasons) to comply with the MN State Energy Code. **Most municipalities require a zoning review. Please check with your municipality regarding requirements.**
- Porches that project over 8'-0" from the house wall require a wall bracing plan. The connection from braced wall panels to the raised floor system must be designed in accordance with accepted engineering practice, per current Minnesota State Residential Building Code.

### **BUILDING Permit Submittal shall include:**

- Building Permit Application**, completed in its entirety, including signature and valuation.
- SUPPLEMENTAL WORKSHEET FOR PORCHES** (included in this handout).
- One set of plans** (drawn to scale) showing the proposed design, and including:
  - Floor plan indicating proposed porch size
  - Size and type of decking
  - Size, spacing and direction of floor joists
  - Size of posts
  - Size of beams
  - Depth, diameter and location of footings
  - Size of headers
  - Size and spacing of rafters/trusses (engineering required if using trusses)
  - Elevations indicating the height of structure from established grade
  - Type of roof covering material
  - Insulation-R value and window U-factor, if applicable
- One set of braced wall plans** (if porch projects over 8'-0" from house wall).
- A site plan** (or **Certificate of Survey** if required by municipality) drawn to scale and dimensioned, identifying proposed porch dimensions with measurements from the adjacent lot lines; as well as all lot lines, setbacks, easements, adjacent street names, and all existing structures on the property including dimensions. **Check with your municipality to determine setback requirements.**
- Additional information may be required by the plan reviewer.

**PERMIT CARD AND APPROVED PLANS (throughout the project) shall be: POSTED** prior to start of work - **VISIBLE** from street or driveway - **ACCESSIBLE** to the inspector

### **INSPECTION REQUIREMENTS:**

Inspections **MUST** be scheduled during office hours **AT LEAST** one business day prior to inspection. If a specific date and time is required, additional notice may be needed. Failure to cancel a scheduled inspection may result in a reinspection fee.

- **Office Hours:** Monday - Friday • 8:00 a.m. - 4:30 p.m.
- **Phone:** (952) 442-7520 or (888) 446-1801

**Inspections:** (Refer to your permit card regarding project-specific inspections)

- **Footings:** After forms and reinforcing are in place, but **PRIOR TO POURING CONCRETE**.
- **Framing:** After the roof and all framing is complete, and electrical rough-in inspection (if applicable) is completed, but prior to the application of any insulation or siding materials.
- **Insulation:** After the insulation and vapor barrier are in place and fully sealed.
- **Final:** After porch is complete including: stairs, handrails, and guardrails and electrical work (if any).

**NOTICE:** Construction or work for which a permit is required shall be subject to inspection by the Building Official, and such **construction or work shall remain accessible and exposed for inspection purposes until approved**. It is the responsibility of the permit applicant to be in attendance on site and provide access to the Building Official for all required inspections. If work is concealed and/or work is not complete at time of inspection, an additional inspection is required and a **reinspection fee may apply**.

**Note:** The State of Minnesota requires all residential building contractors, remodelers, roofers, plumbers, and electricians to obtain a state license, unless they qualify for a specific exemption. Any person claiming an exemption must provide a copy of a Certificate of Exemption from the Department of Labor & Industry to the Municipality before a permit will be issued.

**Note:** To determine contractor requirements, or to check the licensing status of a contractor, please call the Minnesota Department of Labor & Industry at 651-284-5065 or toll free 1-800-342-5354.

**Note:** For specific code requirements, contact the Building Inspection Department at 952-442-7520 or 888-446-1801 or e-mail: [infoMN@safebuilt.com](mailto:infoMN@safebuilt.com).

## PROJECT CHECKLIST:

The following is a guideline to assist in compliance with the requirements of the MN State Building Code.

- The home address must be visible from the street.
- BEFORE YOU DIG, contact Gopher State One Call to locate buried utilities: (651) 454-0002 or (800) 252-1166. [www.gopherstateonecall.org](http://www.gopherstateonecall.org).
- A minimum of 36" clear space is required above emergency escape and rescue openings.
- Porches shall not hang from the cantilever of a house unless joists/trusses are designed/engineered to carry additional porch loads, and truss/ floor loading is provided with plan submittal.
- Where the porch is supported by attachment to an exterior wall, porches shall be positively anchored to the primary structure and designed to resist both vertical loads (ledger to band joist) and lateral loads in compliance with Figure R507.9.2(1) or Figure R507.9.2(2).  
Vertical loads shall be transmitted to band joist with ledgers (R507.9.1):
  - Treated 2x8" ledger board (min).
  - Ledgers shall not support concentrated loads from beams or girders.
  - Ledgers shall not be supported on stone or masonry.
  - Fasteners shall be hot-dipped galvanized or stainless steel.
- Lateral connectors per Figure R507.9.2(1): Hold-down tension devices shall be installed in two locations minimum, within 24-inches of each end. Each device shall have an allowable stress design capacity of 1,500 lbs minimum.
- Lateral connectors per Figure R507.9.2(2): Hold-down tension devices shall be installed at no less than four locations, and each device shall have an allowable stress design capacity of 750 lbs minimum.
- Footings shall be designed to adequately support the structure and constructed below frost depth (42" min. below grade).
- (Table R507.5 note g) Beam cantilevers are limited to the adjacent beam's span divided by 4.
- All joist-to-beam, beam-to-post, and post-to-footing connections must have a positive connection to resist lateral displacement. (R507.5.1(2))
- All exposed wood used in the construction of porches is required to be a type with natural resistance to decay (redwood, cedar, etc.) or approved treated wood. This includes posts, beams, joists, flooring and railings. If wood is to be used below or in contact with grade, it must be approved for ground contact. (R507.2, R317.1.2)
- Field-cut ends, notches, and drilled holes of preservative-treated wood shall be treated in the field in accordance with AWWA M4 .and R317.1.
- All fasteners (nails, bolts, screws, hangers, etc.) must be corrosion resistant as required by the code.
- All (round) joist hanger holes must be fastened with nails/screws approved for joist hanger structural connections.
- If porch flooring is installed **perpendicular** to the joists, joist spacing of 24" on center requires 2" minimum (nominal) flooring, and joist spacing of 16" on center requires 5/4" minimum flooring. For **diagonally** installed flooring, joist spacing of 12" on center requires 5/4" minimum flooring, and joist spacing of 16" on center requires 2" minimum (nominal) flooring. Flooring may not be installed diagonally if joist spacing is greater than 16" on center. Composite decking shall be installed in accordance with Section R507.2 and the manufacturer's installation instructions.
- Guards are required on all porches more than 30" above grade or floor below. Guardrails must be 36" minimum in height. Open guardrails must have intermediate rails or an ornamental pattern that a 4" sphere cannot pass through. The top section of guardrails must be built to withstand 200 lbs. of load applied from any direction. Spindles and/or ornamental fill must withstand 50 lbs. of applied force.  
Stair Exception: Guardrails on stairs must be 34" minimum in height. Open guardrails on stairs must have intermediate rails or an ornamental pattern that a 4-3/8" sphere cannot pass through. The triangular opening formed by the riser, tread, and bottom element of a guardrail may be sized so that a 6" sphere cannot pass through.
- Stairways shall not be less than 36" clear width above the handrail. Maximum riser height is 7-3/4". Minimum stair tread depth is 10". The largest tread depth or riser height shall not exceed the smallest by more than 3/8". Open risers are permitted, provided that the opening between treads does not permit the passage of a 4" sphere, or the stair is less than 30" above grade. Nosing not less than 3/4" and not more than 1-1/4" shall be provided with solid risers unless the tread depth is 11" or greater. (R311.7.)
- Stairways must be attached to supporting construction with approved hangers.
- Lighting must be provided to illuminate the stairway and shall have a light source in the immediate vicinity of the top landing of the stairway.
- Handrails are required on at least one side of any stairway with 4 or more risers. The handrail must be placed so that the top of the handrail is between 34 and 38" measured above the plane of the nosing of the treads. The handrails must be continuous the full length of stairs to include ALL risers and must be returned at the ends. The handgrip must have a smooth surface with no sharp corners, and must meet the requirements for a Type 1 or Type 2 handrail as set forth in MRC Section R311.7.8.5.
- Landings are required at the top and bottom of each stairway. Minimum size of a landing shall be 3' in the direction of travel, by the width of the stair served. (R311.3)
- Kick-out flashing is required at any roof/wall intersection.

# **SUPPLEMENTAL WORKSHEET FOR PORCHES**

(This sheet **MUST** be included with your permit submittal)

The following information is required to be included with a Porch permit application.

1. Footing Diameter: \_\_\_\_\_ Depth \_\_\_\_\_ (See Table R507.3.1)
2. Size of posts: \_\_\_\_\_ (See Table R507.4)
3. Size of beams: \_\_\_\_\_ Number of plies: \_\_\_\_\_ (See Table R507.5)
4. Cantilever on beams: \_\_\_\_\_ (See R507.5)
5. Size of joists: \_\_\_\_\_ Spacing \_\_\_\_\_ (See Table R507.6)
6. Cantilever on joists: \_\_\_\_\_ (See Table R507.6)
7. Size of headers: \_\_\_\_\_
8. Type of wall system: \_\_\_\_\_ Spacing \_\_\_\_\_ (See Table R602.3(5))
9. Type of roof system:  Rafters  Trusses Spacing \_\_\_\_\_ (See Table R802.1(5))
10. Species of lumber (please check one):  Southern Yellow Pine  Ponderosa Pine  
 Spruce Pine Fir  Hemlock Fir  Douglas Fir  Cedar  Composite  Unknown
11. Dimensions of floor boards: \_\_\_\_\_ Type: \_\_\_\_\_  
If using composite decking materials please indicate the manufacturer. \_\_\_\_\_
12. Height of deck from ground: \_\_\_\_\_
13. Height of guardrail: \_\_\_\_\_
14. Spacing of spindles: \_\_\_\_\_
15. Height of handrail: \_\_\_\_\_
16. Dimensions of deck: \_\_\_\_\_
17. Distance to property lines (also identify on site plan):
  - a. Side 1: \_\_\_\_\_
  - b. Side 2: \_\_\_\_\_
  - c. Rear: \_\_\_\_\_
  - d. Other: \_\_\_\_\_