This handout is intended only as a guide and is based in part on the 2015 Minnesota State Building Code, City of Proctor ordinances, and good building practice. While every attempt has been made to insure the correctness of this handout, no guarantees are made to its accuracy or completeness. Responsibility for compliance with applicable codes and ordinances falls on the owner or contractor. For specific questions regarding code requirements, refer to the applicable codes or contact your local Building Safety Division.

The purpose of this handout is to provide the limitations for notching and boring wood studs, joists, and plates. For cutting, notching and boring trusses and manufactured lumber such as laminated veneer lumber, the manufacturer’s installation instructions should be consulted.

### NOTCHING AND BORING WOOD STUDS

<table>
<thead>
<tr>
<th>Location</th>
<th>Maximum Diameter of Hole</th>
<th>Distance From Hole to Edge of Stud</th>
<th>Location</th>
<th>Maximum Depth of Cut or Notch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bearing/Exterior Studs ¹</td>
<td>40% of Stud Width</td>
<td>5/8” Minimum</td>
<td>Not same section as cut or notch</td>
<td>25% of Width of Stud</td>
</tr>
<tr>
<td>Interior Nonbearing Studs</td>
<td>60% of Stud Width</td>
<td>5/8” Minimum</td>
<td>Not same section as cut or notch</td>
<td>40% of Width of Stud</td>
</tr>
</tbody>
</table>

1. **Exterior or bearing studs** may be bored or drilled provided that the diameter of the resulting hole is not greater than 60 percent of the stud width and provided that the studs are doubled and not more than two successive studs are bored, the edge of the hole is no closer than 5/8 inch to the edge of the stud, and the hole is not located in the same section as a cut or notch.

2. Approved stud shoes may be used when installed in accordance with the manufacturer’s recommendations.
CUTS/BORES IN FLOOR JOISTS

Max. Length = D/3

25% allowed in exterior and bearing walls
40% allowed in any non-bearing wall
40% allowed in any wall
60% allowed in any non-bearing walls

D = actual dimension
D/3 max.
D/4 max. at edges
D/6 max.

2" min. from top and bottom of joist
D/6 max.

Outer 1/3 of span
Notching not permitted in middle 1/3 of span

Effects of notches can be reduced by using a gradual tapered notch instead of a square-cornered notch.

NOTCH > THAN 50% OF PLATE WIDTH

EXTERIOR OR BEARING WALL

16 GA METAL TIE 1.5" WIDE TO EACH SIDE OF NOTCH WITH 8-16D NAILS EA SIDE