

Building Department

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CUTTING / NOTCHING / DRILLING

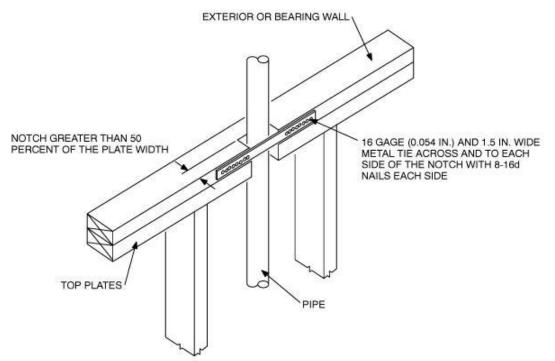
RESIDENTIAL CUTTING / NOTCHING / DRILLING OF WALLS, FLOOR JOIST, AND RAFTER/CEILING JOISTS

*A Building permit is required for any alteration or addition to any existing building or structure. *MN State Building Code Section 1300.0120 Subpart 1*.

Drilling and Notching

Section R602.6

- Notches or cuts limited in stud construction
 - Exterior wall or bearing wall, maximum 25% of width
 - Nonbearing partitions, maximum 40% of single stud width
- Bored or drilled holes limited in stud construction
 - Nonbearing partitions, maximum diameter of 60% of stud width
 - Exterior wall or bearing wall, maximum diameter of 40% of stud width
 - Maximum 60% permitted where studs are doubled and not more than two successive studs bored
 - No hole closer than 5/8 inch to edge of stud
 - Hole not located in same section as notch
- Where cut or notch exceeds 50% of top plate in exterior wall or interior, braced or loadbearing wall, galvanized metal tie required.
 - Minimum 16 gage thickness
 - Minimum width of 1 1/2 inches
 - Fastened to each plate with minimum of six 16d nails on each side of opening
 - Metal tie not required where entire side of wall with notch covered by wood structural panel sheathing



Cutting and Notching

Section R502.8

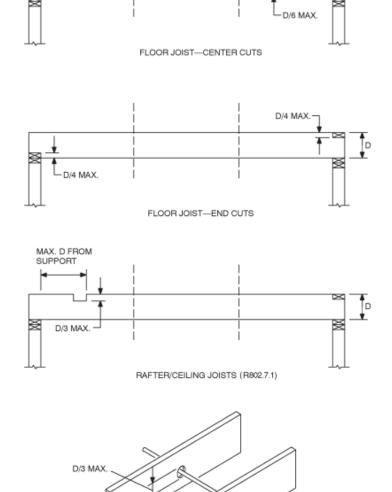
- Notches regulated in solid lumber joints, rafters and beams
 - Depth of notch limited to 1/6 of member depth
 - Depth limit of ¼ of member depth where notch at end of member
 - Length of notch limited to 1/3 the depth of the member
 - Notches to be located in middle 1/3 of member span
 - Members 4 inches or more in thickness may be notched on tension side only at ends
- Notches permitted on cantilevered portion of rafters, provided:
 - Rafter maintains minimum 4inch nominal dimension, and
 - Cantilever length does not exceed 24 inches
- Bored holes regulated in solid lumber joists, rafters and beams
 - Diameter of bored holes limited to 1/3 of member depth
 - Bored holes to be located at least 2 inches from top or bottom of member
- Bored hole to be separated at least 2 inches from adjacent notch
- In engineered wood products such as laminated veneer lumber, glue-laminated members or l-joists, notches and bored holes prohibited unless specifically considered in design of member

The language & depictions in this hand out is meant as a guide for the construction code & building process and may not contain exact code language. For exact code you may go online at <u>www.revisor.mn.gov</u> or contact the Austin Building Department.

PIPE OR CONDUIT

D (ACTUAL DEPTH)

FIGURE 502.8 CUTTING, NOTCHING AND DRILLING



NO NOTCHES

PERMITTED

D/3 MAX

D/6 MAX

2 IN. MIN. FROM TOP

AND BOTTOM OF JOIST

L/3

D/3 MAX

D