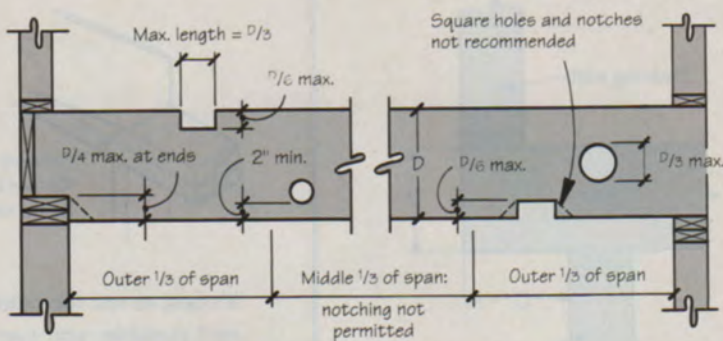


FRAMING GUIDELINES

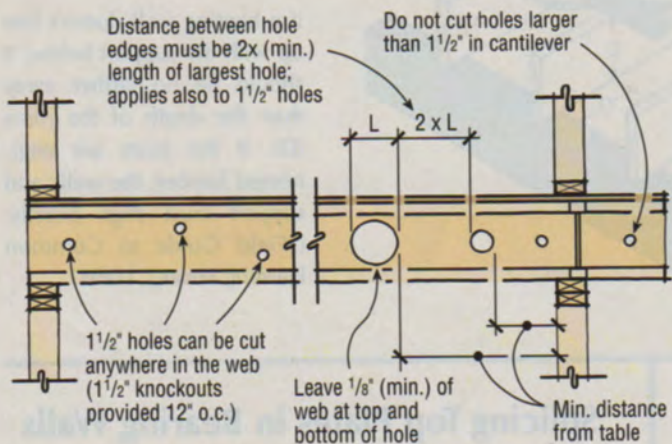
Cutting, Notching, and Boring Lumber Joists

Joist Size	Maximum Hole	Maximum Notch Depth	Maximum End Notch
2x4	None	None	None
2x6	1 1/2	7/8	1 3/8
2x8	2 3/8	1 1/4	1 7/8
2x10	3	1 1/2	2 3/8
2x12	3 3/4	1 7/8	2 7/8



In joists, never cut holes closer than 2 inches to joist edges, nor make them larger than 1/3 the depth of the joist. Also, don't make notches in the middle third of a span, where the bending forces are greatest. They should also not be deeper than 1/6 the depth of the joist, or 1/4 the depth if the notch is at the end of the joist. Limit the length of notches to 1/3 of the joist's depth. Use actual, not nominal, dimensions. ("Field Guide to Common Framing Errors," 10/91)

Hole-Cutting Rules for Wood I-Joists



With wood I-joists and other types of engineered lumber, it's best to consult the manufacturer's literature. The example provided here is courtesy of Trus Joist MacMillan. ("Repiping With PEX," 10/99)

Min. Distance from Inside Face of Support to Near Edge of Hole

Depth	TJI/Pro	2"	3"	4"	5"	6"
9 1/2"	150	1'-0"	1'-6"	3'-0"	5'-0"	6'-6"
	250	1'-0"	2'-6"	4'-0"	5'-6"	7'-6"
11 7/8"	150	1'-0"	1'-0"	1'-0"	2'-0"	3'-0"
	250	1'-0"	1'-0"	2'-0"	3'-0"	4'-6"
	350	1'-0"	2'-0"	3'-0"	4'-6"	5'-6"
	550	1'-0"	1'-6"	3'-0"	4'-6"	6'-0"
14"	250	1'-0"	1'-0"	1'-0"	1'-0"	1'-6"
	350	1'-0"	1'-0"	1'-0"	1'-6"	3'-0"
	550	1'-0"	1'-0"	1'-0"	2'-6"	4'-0"
16"	250	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"
	350	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"
	550	1'-0"	1'-0"	1'-0"	1'-0"	2'-0"

General Notes:

*Distances in the charts above are based on uniformly loaded joists using the maximum loads shown [in TJM's] brochure. For other load conditions or hole configurations, contact TJM representative.

*For simple span (5-foot minimum) uniformly loaded joists, one maximum-size hole may be located at the center of the joist span provided no other holes occur in the joist. DO NOT cut into joist flanges when cutting out web.

Notching and Boring Studs

Never notch in the middle third of a joist span, and limit the length of notches to one-third the depth of the member. The rules for notching and boring studs differ for bearing and nonbearing walls. ("Ten Common Framing Flaws," 4/95)

