

Allowable Top Flange Notches in TJI[®] Joists

iLevel[®] recommends avoiding cutting or notching TJI[®] joist flanges whenever possible to ensure optimum performance. In cases where a notch is unavoidable or has already been cut, the following table shows the maximum allowable notch that may be cut into the **top** flange of a uniformly loaded TJI[®] joist, based on the joist span and spacing when used in typical residential floor framing situations. Notches falling outside these guidelines must be evaluated by iLevel for a repair. The notch must be in the side of the flange and located **no more** than 3' from the end of the joist. This table **does not apply** to notches cut across the top flange, notches cut near an intermediate support of a multi-span joist, or multiple notches in a single joist span.

Allowable notch location information is shown in Figure A, below. Notch dimension criteria are shown in Figure B. If these criteria are met, the table can be used to determine the maximum allowable joist span for a given notch size in that span. If the existing notch or span dimensions exceed those shown, please contact your iLevel divisional office or call 1.888.iLevel8 (1.888.453.8358).

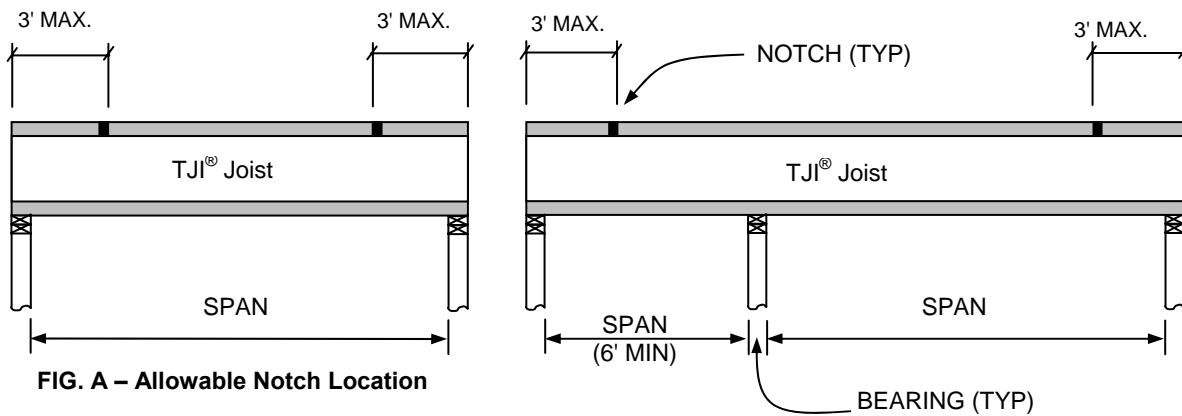


FIG. A – Allowable Notch Location



FIG. B – Allowable Notch Dimensions (Top View of Joist Flange)

Maximum Allowable Joist Span

Joist Series	Joist Depth	Notch Size	Maximum Allowable Joist Span, ft			
			12" o.c.	16" o.c.	19.2" o.c.	24" o.c.
110	9 1/2"	$d \leq 1/4"$	18'-9"	16'-11"	15'-4"	12'-11"
		$1/4" < d \leq 1/2"$	18'-9"	16'-11"	15'-0"	12'-7"
		$1/2" < d \leq 5/8"$	18'-9"	16'-0"	13'-10"	11'-8"
	11 7/8"	$d \leq 1/4"$	22'-0"	19'-0"	17'-4"	15'-6"
		$1/4" < d \leq 1/2"$	22'-0"	19'-0"	17'-4"	15'-2"
		$1/2" < d \leq 5/8"$	22'-0"	19'-0"	16'-8"	13'-11"
14"	$d \leq 1/2"$	23'-11"	20'-8"	18'-11"	16'-11"	
	$1/2" < d \leq 5/8"$	23'-11"	20'-8"	18'-11"	16'-0"	
210	9 1/2"	$d \leq 1/2"$	19'-8"	18'-0"	16'-11"	14'-11"
		$1/2" < d \leq 5/8"$	19'-8"	18'-0"	16'-11"	14'-4"
		$5/8" < d \leq 3/4"$	19'-8"	18'-0"	15'-11"	13'-4"
	11 7/8"	$d \leq 1/2"$	23'-4"	20'-10"	19'-0"	17'-0"
		$1/2" < d \leq 3/4"$	23'-4"	20'-10"	19'-0"	16'-1"
		$3/4" < d \leq 7/8"$	23'-4"	20'-10"	17'-10"	14'-10"
	14"	$1/2" < d \leq 3/4"$	26'-3"	22'-8"	20'-8"	18'-6"
		$3/4" < d \leq 7/8"$	26'-3"	22'-8"	20'-7"	17'-0"
16"	$d \leq 1/2"$	28'-1"	24'-3"	22'-2"	19'-8"	
	$1/2" < d \leq 3/4"$	28'-1"	24'-3"	22'-2"	19'-8"	
230	9 1/2"	$d \leq 1/2"$	20'-3"	18'-6"	17'-5"	15'-10"
		$1/2" < d \leq 3/4"$	20'-3"	18'-6"	17'-5"	15'-1"
		$3/4" < d \leq 7/8"$	20'-3"	18'-6"	16'-11"	14'-1"
	11 7/8"	$d \leq 1/2"$	24'-0"	21'-11"	20'-1"	17'-11"
		$1/2" < d \leq 3/4"$	24'-0"	21'-11"	20'-1"	17'-11"
		$3/4" < d \leq 7/8"$	24'-0"	21'-11"	20'-1"	17'-1"
	14"	$d \leq 3/4"$	27'-3"	23'-11"	21'-10"	19'-6"
		$3/4" < d \leq 7/8"$	27'-3"	23'-11"	21'-10"	19'-6"
16"	$d \leq 3/4"$	29'-7"	25'-7"	23'-4"	20'-9"	
	$3/4" < d \leq 7/8"$	29'-7"	25'-7"	23'-4"	20'-9"	
360	11 7/8"	$d \leq 3/4"$	25'-4"	23'-2"	21'-10"	20'-4"
		$3/4" < d \leq 7/8"$	25'-4"	23'-2"	21'-10"	20'-4"
	14"	$d \leq 7/8"$	28'-9"	26'-3"	24'-9"	21'-1"
16"	$d \leq 7/8"$	31'-10"	29'-0"	26'-5"	21'-1"	
560	11 7/8"	$d \leq 3/4"$	28'-10"	26'-3"	24'-9"	23'-0"
		$3/4" < d \leq 7/8"$	28'-10"	26'-3"	24'-9"	23'-0"
	14"	$d \leq 7/8"$	32'-8"	29'-9"	28'-0"	24'-9"
16"	$d \leq 7/8"$	36'-1"	32'-11"	30'-11"	24'-9"	

General Notes:

- Table based on:
 - Uniform design loading of 40 psf Live and 10 psf Dead.
 - More restrictive of simple or continuous span.
- Spans shown are clear spans.
- This table cannot be used to design floor systems or to verify joist spans. Refer to iLevel® Trus Joist® literature or software for joist span tables and other design information.