



# EverEdge<sup>™</sup> Series I-Joist (EEI<sup>™</sup> Joist)

Weyerhaeuser Company

Date of Initial Acceptance: September 14, 2017

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MANUFACTURER IDENTIFICATION:

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TYPE OF ACCEPTANCE: Product Material — Wood, Plastic and Composites

CSI Specification Division: 06 00 00 and Section: 06 17 3 (Wood I-Joists)

# **PRODUCT DESCRIPTION:**

The EverEdge™ Series I-Joist (EEI™ joist) is a pre-fabricated structural member manufactured using structural composite lumber (SCL) flanges and structural wood panel webs, bonded together with an exterior exposure adhesive, forming an "I" cross-sectional shape. Refer to Table 1 for EEI joist series dimensions and material descriptions.

#### 1. Material Specification

- (a) Flanges: Flange material is laminated veneer lumber (LVL) complying with PFS TECO Research Report 0105, with widths and depths as outlined in Table 1. The flange material proprietary grades are specified in the EEI joist manufacturing standard.
- (b) Webs: Web material conforms to US DOC Voluntary Product Standard PS 2. Performance Standard for Wood-Based Structural-Use Panels, Exposure 1 bond classification. Web material thickness requirements are outlined in Table 1.
- (c) Adhesives: Adhesives are exterior exposure structural adhesives and are specified in the EEI joist manufacturing standard.

EEI Joist Series	Flange Depth x Width (inches)	Web Thickness (inches)	Joist Depths (inches)				
EEI 20	Minimum 1.25 x 2.3	0.375					
EEI 30	Minimum 1.375 x 2.3	0.375	0.5 16				
EEI 50	Minimum 1.375 x 3.5	0.4375	9.5 - 16				
EEI 60	Minimum 1.5 x 3.5	0.4375					

# **Table 1: EEI Joist Description**

### APPLICABLE CODES AND STANDARDS:

- 2009, 2012, 2015, and 2018 International Building Code<sup>®</sup> (IBC<sup>®</sup>)
- 2009, 2012, 2015, and 2018 International Residential Code<sup>®</sup> (IRC<sup>®</sup>)

### CHARACTERISTICS REVIEWED:

*EEI joists* described in this Report must be designed and installed in accordance with this Report, the manufacturer's installation instructions, the applicable code and ANSI/AWC National Design Specification<sup>®</sup> (NDS<sup>®</sup>) for Wood Construction. Increase for duration of load (DOL) is permitted. If the requirements in the manufacturer's installation instructions differ from those in this Report, this Report governs.

#### 1. Design Properties:

(a) Table 2 specifies reference design moments, reactions, vertical shear and stiffness (EI) for *EEI joists* to be used with the load requirements specified in the codes and the NDS.

#### 2. Connections:

- (a) Reference lateral and withdrawal design capacities of fasteners installed into the flange of *EEI joists* must be determined in accordance with the NDS using information provided in PFS TECO Research Report 0105 and the applicable design code. Adjustments for DOL may be used for *EEI joists* and their fastenings.
- (b) Nail spacing for diaphragm applications must be in accordance with Table 3. For non-diaphragm applications, minimum nail spacing into the flange must be in accordance with PFS TECO Research Report 0105.

#### 3. Web Stiffeners:

(a) Web stiffener requirements for reactions and concentrated loads are noted in Table 4 and Fig. 3.

#### 4. Lateral Support:

(a) Compression flanges require lateral support every 24 inches on center. Each connection must be capable of transferring a 75-lb horizontal load. All joist ends must be restrained to prevent roll over. Code prescribed lateral restraint procedures specified for solid sawn lumber are acceptable. Bridging is not required for *EEI joists* used in floor or roof joist applications when installed in accordance with this Report and the manufacturer's installations instructions.

#### 5. Web Holes:

(a) Holes may be located in the webs of *EEI joists* as shown in Table 5 and Fig. 2.

#### 6. Member Spans:

(a) Joist spans other than those noted in Table 6 must be determined in accordance with the design requirements specified in the codes and the NDS, using the design properties noted in Table 2. Refer to Table 6 for floor joist span tables.

#### 7. Blocking Panels:

(a) *EEI joists* used as blocking panels have a maximum vertical load transfer capacity of 2,000 plf for the EEI 20, EEI 30, and EEI 50; and 2,560 plf for the EEI 60. Perpendicular bearing walls supported by *EEI joists* require full depth blocking (I-joists or SCL) at both end and intermediate supports.

#### 8. Rim Joist:

(a) EEI joists have a maximum load transfer capacity of 2,000 plf for the EEI 20, EEI 30, and EEI 50; and 2,560 plf for the EEI 60. EEI joists used as rim joists must be laterally supported at the top and continuously supported at the bottom, and gravity loads must be uniformly applied along the top. Other loading conditions must be designed by a design professional.

#### 9. Diaphragm Framing:

- (a) Prescriptive: *EEI joists* can be used as framing members in prescriptive floor and roof diaphragm applications in accordance with applicable sections in Section 2308 of the IBC and applicable sections in Chapters 5 and 8 of the IRC. For EEI 20 series joists, floor sheathing must be 19/32 in. thick or greater.
- (b) Engineered: *EEI joists* can be used as framing members in blocked and un-blocked engineered floor and roof diaphragm applications when designed using Table 2306.2.1(1) of the 2009 IBC, or Tables 4.2A and 4.2C of the ANSI/AWC Special Design Provisions for Wind and Seismic (SDPWS), with the limitations in Table 3 of this Report.

#### 10. Cantilevered Joists:

(a) Uniformly loaded *EEI joists* can be cantilevered up to 1/3 of the adjacent span unless designed by a design professional.

# APPLICABLE USES:

*EEI joists* are intended to be used as floor joists, roof joists, blocking panels and rim joists to support code required loads. *EEI joists* outlined in this Report comply with Section 2303.1.2 of the IBC (2018) for allowable stress design; and Section R502.1.2 of the IRC (2018).

# LIMITATIONS OF ACCEPTANCE:

*EEI joists* described in this Report comply with or are suitable alternatives to what is specified in those codes listed in the Applicable Codes section of this Report, subject to the following conditions:

- 1. **EEI joists** must be manufactured, identified, designed and installed in accordance with this Report, the manufacturer's published installation instructions and the applicable code(s). If the requirements in the manufacturer's installation instructions differ from those in this Report, this Report governs.
- 2. The product described in this Report is limited to dry service conditions where the in-service equilibrium moisture content is less than 16 percent.
- 3. Design calculations and details must be furnished to the building official or authority having jurisdiction, verifying that the *EEI joists* are used in compliance with this Report. The calculations must be prepared by a registered design professional where required by the statutes of the jurisdiction in which the project is constructed.
- 4. Cutting or notching of the flange is not permitted. Holes in the web are permitted as noted in Table 5 and Fig. 2 of this Report.
- 5. *EEI joists* are manufactured at the Weyerhaeuser manufacturing facilities located in Castleberry, Alabama or Natchitoches, Louisiana. Quality control inspections are performed by PFS TECO (AA-652).

# **DOCUMENTATION SUBMITTED:**

Submitted data was provided in accordance with PFS TECO 1601 (quality control manual, specifications, manufacturer's installation instructions, test data and descriptive information). Test data and analysis was also provided and reviewed in accordance with ASTM D5055, *Standard Specification for Establishing and Monitoring Structural Capacities of Prefabricated Wood I-Joists*; ICC-ES Acceptance Criteria for Prefabricated Wood I-Joists (AC14); and ICC-ES Acceptance Criteria for Rim Board Products (AC124).

#### **PRODUCT IDENTIFCATION:**

*EEI joists* described in this Report are identified by a mark bearing the product name, series, production date, plant number, the PFS TECO Research Report number (RR 0106) and the PFS certification mark (see Fig. 1).



Fig. 1: PFS Check Certification Mark with United States country identifier

			Design Values														
							Reaction Properties (4)										
EEI		Joist Weight					End Reaction (lbs)						Intermed	iate React	ion (lbs)		
Joist	Depth (in.)		Resistive	Vertical	EI x 10 <sup>6</sup>		1-	3/4"	3-	1/2"	Nella	3-1	/2"	5-	1/4"		
Series	()	(plf)	Moment (5) (ft-lbs)		(lbs-in²)	к	Bearing	g Length	Bearing	g Length	Nails Req'd	Bearing	Length	Bearing	g Length	Nails	
				(			Web S	tiffeners	Web S	Web Stiffeners		Web St	iffeners	Web Stiffeners		Req'd	
							NO	YES	NO	YES		NO	YES	NO	YES		
	9½	2.7	3,185	1,265	206	4.5	1,060	NA	1,265	NA	NA	2,410	NA	2,790	NA	NA	
EEI 20	11%	3.0	4,020	1,570	347	4.5	1,060	1,420	1,485	1,570	3 - 8d	2,410	2,765	2,790	3,150	3 - 8d	
EEI 20	14	3.3	4,750	1,850	509	4.5	1,060	1,420	1,485	1,840	3 - 8d	2,410	2,765	2,790	3,150	3 - 8d	
	16	3.5	5,425	2,080	691	4.5	1,060	1,420	1,485	1,840	3 - 8d	2,410	2,765	2,790	3,150	3 - 8d	
	9½	2.7	4,555	1,355	249	4.5	1,080	NA	1,355	NA	NA	2,460	NA	3,000	NA	NA	
EEI 30	11%	3.0	5,880	1,620	419	4.5	1,080	1,440	1,505	1,620	3 - 8d	2,460	2,815	3,000	3,360	3 - 8d	
ELI 50	14	3.3	6,980	1,855	612	4.5	1,080	1,440	1,505	1,855	3 - 8d	2,460	2,815	3,000	3,360	3 - 8d	
	16	3.5	7,995	2,080	830	4.5	1,080	1,440	1,505	1,865	3 - 8d	2,460	2,815	3,000	3,360	3 - 8d	
	9½	3.6	6,995	1,585	378	5.3	1,265	NA	1,585	NA	NA	3,000	NA	3,455	NA	NA	
EEI 50	11%	4.0	9,035	1,945	636	5.3	1,265	1,740	1,725	1,945	3 - 16d	3,000	3,475	3,455	3,930	3 - 16d	
ELI 50	14	4.2	10,725	2,270	926	5.3	1,265	1,740	1,725	2,200	3 - 16d	3,000	3,475	3,455	3,930	3 - 16d	
	16	4.5	12,295	2,575	1252	5.3	1,265	1,740	1,725	2,200	3 - 16d	3,000	3,475	3,455	3,930	3 - 16d	
	9½	3.8	7,035	1,655	381	5.3	1,400	NA	1,655	NA	NA	3,350	NA	3,965	NA	NA	
EEI 60	11%	4.2	9,115	2,140	643	5.3	1,400	1,875	1,885	2,140	3 - 16d	3,350	3,825	3,965	4,440	3 - 16d	
22100	14	4.5	10,845	2,410	940	5.3	1,400	1,875	1,885	2,355	3 - 16d	3,350	3,825	3,965	4,440	3 - 16d	
	16	4.7	12,445	2,665	1,273	5.3	1,400	2,030	1,885	2,515	4 - 16d	3,350	3,980	3,965	4,600	4 - 16d	

#### Table 2: Reference Design Values for EverEdge Series I-Joists (1)(2)(3)

Refer to Fig. 2 for web stiffener details.
Deflection is calculated as follows:

Uniform	load:	Δ =	22.5 w L <sup>4</sup> E I	- +	12 w L <sup>2</sup> K d x 10 <sup>5</sup>	Concentrated load at midspan:	Δ = -	36 P L <sup>3</sup> E I	+	24 P L K d x 10⁵
where	P = cond	centrated	load, lbs.	d = de	epth, in.	L = clear span, ft				
	w = unifo	orm load,	plf	EI = V	alue from table	K = value from table				

(3) The stated reference design values are for normal duration of load. Adjustments to the reference design values must be in accordance with the applicable code except as noted in footnote 5 below.

(4) Interpolation between bearing and joist depths is permitted for reference design reactions.

(5) No additional increase is permitted for repetitive member installations. Repetitive member factor for designs using this table is 1.0.

EEI	Equivalent Nominal	Equivalent	Closest	Nail Spacir	ng (in) <sup>(2)</sup>	Maximum Allowable Stress Design (Unit Shear) Seismic Design Capacity (plf) <sup>(3)</sup>					
Joist Series	Framing	Specific Gravity	6d	8d	10d common	Blocked	Unblocked				
	Width (in.)		common	common			Case 1	Case 3	Cases 2, 4, 5, 6		
EEI 20	3	0.5	4	4	4	480	320	240	205 (4)		
EEI 30											
EEI 50	3	0.5	3	3	4	720	320	240	240		
EEI 60											

# Table 3: Engineered Diaphragm Framing Design Information for EverEdge Series I-Joists (1)

(1) Allowable shear loads for wood structural panel diaphragms with EEI joist framing must be determined in accordance with Tables 4.2A and 4.2C of ANSI/AWC SDPWS, Special Design Provisions for Wind and Seismic standard, or Table 2306.2.1(1) of the 2009 IBC, using the equivalent nominal framing width and the specific gravities specified in Table 3 of this Report and must not exceed the maximum permitted design capacity given in Table 3 of this Report. The minimum fastener penetration in framing specified in the SDPWS Tables 4.2A and 4.2C and the 2009 IBC Table 2306.2.1(1) does not apply provided the fastener penetrates through the flange.

(2) One row of nails is permitted along each sheathing panel end and edge. When nail spacing is less than 6 in. on center, adjacent nails within a row must be staggered. The closest permitted nail spacing is indicated in Table 3.

(3) The maximum allowable seismic design capacities given in Table 3 may be increased by a factor of 1.4 for wind design applications.

(4) The design unit shear capacities of unblocked diaphragms framed with EEI 20 joists may be multiplied by a factor of 1.18 where subfloor adhesives, which have been qualified as Class 1/8 in., Type P/O per ASTM D3498-19, are used in combination with mechanical fastener attachment. Continuous special inspection is not required for this adhesive application.

EEI Joist Series	Minimum Dime	Grade		
	Width	Thickness	Grade	
EEI 20 EEI 30	2.3125	0.875	PS 1 or PS 2 <sup>(5)</sup>	
EEI 50 EEI 60	3.5	1.5	Construction Grade 2x4	

# Table 4: Web Stiffener Specification (1)(2)(3)(4)

- (1) Web stiffeners must be installed at bearing points as required in Table 2.
- (2) Web stiffeners must be installed at all concentrated loads greater than 1,500 lbs and nailed in accordance with the intermediate reaction schedule in Table 2.
- (3) Web stiffeners are to be installed on each side of the webs with nails equally spaced.
- (4) A gap is required at the top of the web stiffener (between stiffener and top flange) at bearing locations. For concentrated loads, a gap is required at the bottom of the web stiffener (between the stiffener and the bottom flange).
- (5) "PS 1" refers to US DOC Voluntary Product Standard PS 1, Structural Plywood; and "PS 2" refers to US DOC Voluntary Product Standard PS 2, Performance Standard for Wood-Based Structural-Use Panels.

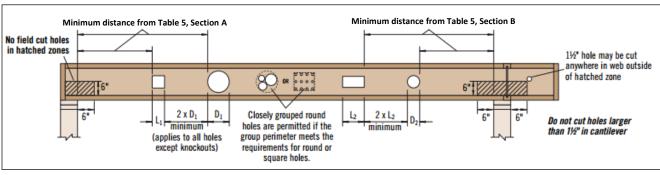


Fig. 2: Permitted Hole Locations

				Ro	und Hol	e Size (	in.)		Square or Rectangular Hole Size (in.)								
Depth (in.)	EEI Joist	2	3	4	5	6½	81/8	11	13	2	3	4	5	6½	81⁄8	11	13
	Series				Section	A - End Su	pport: Min	imum dist	ance from	edge of ho	ole to insid	le face of r	iearest end	d support			
	EEI 20	1'-6''	2'-0"	2'-6"	3'-6"	6'-0"				1'-0"	2'-0''	3'-0''	4'-0''	5'-0''			
01/	EEI 30	1'-6"	2'-6"	3'-6"	4'-6''	6'-0"				1'-6"	2'-6"	3'-6"	5'-0''	5'-6''			
91⁄2	EEI 50	2'-0''	3'-0"	4'-0"	5'-0''	7'-0"				2'-0"	3'-0''	4'-0''	5'-6''	6'-0''			
	EEI 60	2'-0''	3'-0"	4'-0"	5'-0''					2'-0"	3'-0"	4'-0''	5'-0''				
	EEI 20	1'-6''	1'-6"	2'-0"	2'-6''	3'-6"	6'-6"			1'-0"	2'-0''	2'-6"	3'-0''	5'-0''	7'-0"		
11%	EEI 30	1'-6''	2'-6"	3'-0"	3'-6"	4'-6"	7'-6"			1'-6"	2'-6"	3'-6"	4'-6''	6'-6''	7'-6"		
1178	EEI 50	2'-0''	3'-0"	3'-6"	4'-6''	5'-6"	8'-6"			2'-6"	3'-6"	4'-6''	5'-6''	7'-0''	8'-0"		
	EEI 60	2'-0''	2'-6"	3'-6"	4'-6''	5'-6"				3'-0"	3'-6"	4'-6''	5'-6''	7'-0''			
	EEI 20	1'-0''	1'-0"	1'-6"	2'-0''	2'-6"	4'-0"	7'-0"		1'-0"	1'-0''	2'-0''	2'-6"	4'-0''	6'-6"	9'-0"	
	EEI 30	1'-0''	1'-6"	2'-0"	2'-6''	3'-6"	5'-6"	8'-6''		1'-0"	1'-6''	2'-6"	3'-6"	5'-6''	8'-0"	9'-6"	
14	EEI 50	1'-0''	1'-6"	2'-6"	3'-6''	4'-6"	7'-0"	9'-6''		1'-6"	3'-0''	4'-0''	5'-0''	7'-0''	9'-0"	10'-0''	
	EEI 60	1'-0''	1'-6"	2'-6"	3'-0''	4'-6"	7'-0"			2'-0"	3'-0''	4'-0''	5'-0''	6'-6''	8'-6"		
4.0	EEI 20	1'-0''	1'-0"	1'-0"	1'-0''	1'-6"	3'-0"	4'-0''	7'-0"	1'-0"	1'-0''	1'-0''	2'-0''	3'-6''	6'-6"	8'-6"	11'-0"
	EEI 30	1'-0''	1'-0"	1'-0"	1'-6''	2'-6"	4'-6"	6'-6"	9'-6"	1'-0"	1'-0''	1'-6"	3'-0''	4'-6''	8'-6"	10'-0''	11'-6"
16	EEI 50	1'-0''	1'-0"	1'-0"	1'-6''	3'-0"	5'-6"	7'-6"	10'-6"	1'-0"	2'-0''	3'-0''	4'-6''	6'-6''	10'-0''	11'-0''	12'-0"
	EEI 60	1'-0''	1'-0"	2'-0"	2'-6''	3'-6"	5'-6"	8'-0''		1'-6"	2'-6"	3'-6"	4'-6''	6'-0''	9'-6"	10'-6"	
			Section B	- Intermed	liate or Ca	ntilever Su	pport: Min	imum dist	ance from	edge of h	ole to insia	le face of r	nearest inte	ermediate o	or cantilev	er support	t
	EEI 20	2'-6"	3'-6"	4'-0"	5'-6''	8'-6"				2'-0"	3'-0''	4'-0''	6'-6''	7'-6''			
91⁄2	EEI 30	3'-6"	4'-6"	5'-6"	6'-6''	9'-0"				3'-0"	4'-6''	5'-6''	7'-6"	8'-0''			
572	EEI 50	4'-0''	5'-0"	6'-6"	7'-6''	10'-6''				4'-0"	5'-0''	6'-6''	8'-0''	9'-0''			
	EEI 60	4'-0''	5'-0"	6'-6"	7'-6''					4'-0"	5'-0''	6'-0''	8'-0''				
	EEI 20	1'-6''	2'-0"	3'-0"	3'-6''	5'-0"	10'-0''			1'-0"	2'-6"	3'-6"	5'-0''	8'-0''	10'-6''		
11%	EEI 30	2'-0''	3'-6"	4'-6"	5'-6''	7'-0"	11'-0''			2'-0"	3'-6"	5'-0''	6'-6''	9'-6''	11'-0''		
1178	EEI 50	2'-0''	3'-6"	5'-0"	6'-0''	8'-0"	12'-6''			3'-0"	4'-6''	6'-0''	8'-0''	10'-6"	12'-0''		
	EEI 60	2'-6"	4'-0"	5'-0"	6'-6''	8'-0"				4'-0"	5'-0''	6'-6''	8'-0''	10'-0"			
	EEI 20	1'-0''	1'-0"	1'-6"	2'-0''	3'-6"	6'-0"	10'-6"		1'-0"	1'-0''	2'-6"	4'-0''	6'-0''	10'-6''	13'-0"	
14	EEI 30	1'-0''	1'-6"	2'-6"	4'-0''	5'-6"	9'-0"	12'-6"		1'-0"	2'-0''	3'-6"	5'-6''	8'-6''	12'-0''	14'-0"	
14	EEI 50	1'-0''	1'-0"	2'-6"	4'-0''	6'-6"	10'-0''	14'-0"		1'-0"	3'-0''	5'-0''	7'-0''	10'-0"	13'-6''	15'-0''	
	EEI 60	1'-0''	2'-0"	3'-6"	5'-0''	7'-0"	10'-0''			2'-6"	4'-6"	6'-0''	7'-6"	10'-0"	12'-6''		
	EEI 20	1'-0''	1'-0"	1'-0"	1'-0''	2'-0"	4'-6"	6'-6"	11'-0"	1'-0"	1'-0''	1'-0''	2'-6"	5'-0''	10'-0''	13'-0"	16'-0"
16	EEI 30	1'-0''	1'-0"	1'-0"	2'-0''	4'-0"	7'-0"	10'-0"	14'-0"	1'-0"	1'-0''	1'-6''	4'-0''	7'-0''	13'-0''	14'-6"	17'-0"
10	EEI 50	1'-0''	1'-0"	1'-0"	1'-0''	3'-6"	7'-6"	11'-6"	15'-6"	1'-0"	1'-0''	3'-6''	5'-6''	9'-0''	14'-6''	16'-0''	18'-0"
	EEI 60	1'-0''	1'-0"	1'-6"	3'-0''	5'-0"	8'-6"	12'-0"		1'-0"	3'-0''	5'-0''	6'-6''	9'-6''	14'-0''	15'-6"	

# Table 5: Permitted Holes (1)(2)(3)

(1) Holes may be located vertically anywhere within the web. A minimum 0.125 in. of web must be provided at top and bottom of hole.

(2) For simple spans (5 ft. minimum) with uniformly loaded joists, one maximum size hole may be located in the web at the center of the joist span provided no other holes occur in the joist.

(3) Joists may be manufactured with 1.5-in.-diameter perforated knockouts in the web, spaced approximately 12 in. on center.

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Depth	EEI Joist	40 ps	f Live Load	/10 PSF Dead	d Load	40 psf Live Load/20 PSF Dead Load					
(in.)	Series	12" o.c.	16" o.c.	19.2" o.c.	24" o.c.	12" o.c.	16" o.c.	19.2" o.c.	24" o.c.		
	·		l	_/480 Live Lo	ad Deflectio	n					
	EEI 20	18'-3"	16'-8''	15'-9''	14'-8"	18'-3"	16'-8''	15'-9"	14'-5"		
01/	EEI 30	19'-4''	17'-7"	16'-7''	15'-5"	19'-4"	17'-7"	16'-7"	15'-5"		
9½	EEI 50	21'-11"	19'-11''	18'-9''	17'-5"	21'-11"	19'-11"	18'-9"	17'-5"		
	EEI 60	22'-0"	20'-0''	18'-10''	17'-6"	22'-0"	20'-0''	18'-10"	17'-6"		
	EEI 20	21'-8"	19'-10''	18'-8''	17'-5"	21'-8"	19'-10''	18'-2"	16'-3" <sup>(1)</sup>		
4 4 7 /	EEI 30	22'-11"	20'-11''	19'-8''	18'-4"	22'-11"	20'-11"	19'-8"	17'-10" <sup>(1)</sup>		
117⁄8	EEI 50	26'-1"	23'-8"	22'-4"	20'-9"	26'-1"	23'-8"	22'-4"	20'-9" (1)		
	EEI 60	26'-2"	23'-9"	22'-5"	20'-10''	26'-2"	23'-9"	22'-5"	20'-10''		
	EEI 20	24'-8"	22'-6''	21'-2"	19'-4" <sup>(1)</sup>	24'-8"	21'-8"	19'-9"	17'-6" <sup>(1)</sup>		
	EEI 30	26'-0"	23'-8"	22'-4"	20'-9" (1)	26'-0"	23'-8"	22'-4'' <sup>(1)</sup>	17'-10" <sup>(1)</sup>		
14	EEI 50	29'-6"	26'-10''	25'-4''	23'-6"	29'-6''	26'-10"	25'-4'' <sup>(1)</sup>	20'-11" (1)		
	EEI 60	29'-8"	27'-0"	25'-5"	23'-7"	29'-8''	27'-0"	25'-5"	23'-2" (1)		
	EEI 20	27'-3"	24'-10''	23'-2"	20'-8" (1)	26'-9"	23'-2"	21'-1'' <sup>(1)</sup>	17'-6" <sup>(1)</sup>		
	EEI 30	28'-9"	26'-2"	24'-8" (1)	21'-5" <sup>(1)</sup>	28'-9"	26'-2" <sup>(1)</sup>	22'-4'' <sup>(1)</sup>	17'-10" <sup>(1)</sup>		
16	EEI 50	32'-8"	29'-8''	28'-0''	25'-2" (1)	32'-8"	29'-8"	26'-3" (1)	20'-11" (1)		
	EEI 60	32'-10"	29'-10''	28'-1''	26'-1"	32'-10"	29'-10"	<b>28'-1''</b> <sup>(1)</sup>	23'-2" (1)		
		_	l	_/360 Live Lo	ad Deflectio	n					
	EEI 20	20'-3"	18'-6''	17'-5''	15'-10''	20'-3''	17'-8''	16'-2"	14'-5''		
01/	EEI 30	21'-4"	19'-6''	18'-5''	17'-2"	21'-4"	19'-6''	18'-5"	16'-3" <sup>(1)</sup>		
9½	EEI 50	24'-3"	22'-1"	20'-10''	19'-5"	24'-3"	22'-1"	20'-10"	19'-5''		
	EEI 60	24'-4"	22'-2"	20'-11"	19'-5"	24'-4"	22'-2"	20'-11"	19'-5''		
	EEI 20	24'-0''	21'-10"	19'-11''	17'-9"	23'-0"	19'-11''	18'-2"	16'-3" <sup>(1)</sup>		
4.47/	EEI 30	25'-4''	23'-2"	21'-10"	20'-4" (1)	25'-4"	23'-2"	<b>21'-10"</b> <sup>(1)</sup>	17'-10" <sup>(1)</sup>		
117⁄8	EEI 50	28'-10"	26'-3"	24'-9"	23'-0"	28'-10"	26'-3"	24'-9"	20'-11" (1)		
	EEI 60	28'-11"	26'-4''	24'-10"	23'-1"	28'-11"	26'-4"	24'-10"	<b>23'-1"</b> <sup>(1)</sup>		
	EEI 20	27'-3"	23'-9"	21'-8''	19'-4" <sup>(1)</sup>	25'-0"	21'-8"	19'-9"	17'-6" <sup>(1)</sup>		
	EEI 30	28'-9"	26'-3"	24'-9''(1)	21'-5" <sup>(1)</sup>	28'-9"	<b>26'-3''</b> <sup>(1)</sup>	22'-4" (1)	17'-10" (1)		
14	EEI 50	32'-8"	29'-9''	28'-0''	25'-2" (1)	32'-8"	29'-9"	<b>26'-3''</b> <sup>(1)</sup>	20'-11" (1)		
	EEI 60	32'-10''	29'-11''	28'-2"	26'-2"	32'-10"	29'-11"	<b>28'-2''</b> <sup>(1)</sup>	23'-2" (1)		
	EEI 20	29'-4"	25'-4''	23'-2"	20'-8" (1)	26'-9"	23'-2"	21'-1'' <sup>(1)</sup>	17'-6" <sup>(1)</sup>		
10	EEI 30	31'-10"	29'-0''	26'-10" (1)	21'-5" <sup>(1)</sup>	31'-10"	<b>26'-10''</b> <sup>(1)</sup>	22'-4'' <sup>(1)</sup>	17'-10" (1)		
16	EEI 50	36'-1"	32'-11"	31'-0" (1)	25'-2" (1)	36'-1"	<b>31'-6"</b> <sup>(1)</sup>	26'-3" (1)	20'-11" (1)		
	EEI 60	36'-4''	33'-1"	31'-2"	27'-10" (1)	36'-4"	33'-1"	<b>29'-0''</b> <sup>(1)</sup>	23'-2" (1)		

Table 6: Maximum Span in Floor Applications

Please refer to Footnote and General Notes on following page.

(1) Web stiffeners are required at intermediate supports of continuous-span joists when the intermediate bearing length is less than 5.25 in. and the span on either side of the intermediate bearing is greater than the following spans:

EEI Joist Series	40 p	sf Live Load	10 psf Dead	Load	40 psf Live Load / 20 psf Dead Load					
	12" o.c.	16" o.c.	19.2" o.c.	24" o.c.	12" o.c.	16" o.c.	19.2" o.c.	24" o.c.		
EEI 20			Not req'd	19'-2"		Not req'd	19'-11''	15'-11"		
EEI 30	Not roa'd	Not rogid	24'-5''	19'-6''	Not us what	24'-5''	20'-4''	16'-3"		
EEI 50	Not req'd	Not req'd	29'-10''	23'-10"	Not req'd	19'-10''	24'-10''	19'-10"		
EEI 60			Not req'd	26'-8"	-	Not req'd	27'-9''	22'-2"		

# **General Notes for Table 6**

- Span values are based on:
  - Uniform loads;
  - The more restrictive condition of simple or continuous span;
  - Clear distance between supports (minimum bearing); and
  - Minimum bearing lengths of 1.75 in. at end supports (no web stiffeners) and 3.5 in. at intermediate supports.
- Assumed composite action for deflection when a single layer of 24oc span-rated single-floor panels are glued with sub-floor adhesive, which has been qualified as Class 1/8 in., Type P/O per ASTM D3498-19, and nailed. Spans shall be reduced 6 in. when floor panels are nailed only.
- Note that other conditions require a design to be submitted to the authority having jurisdiction.
- Long-term deflection under dead load, which includes the effect of creep, has not been considered. Spans listed in a **Bold Italic** font reflect initial dead load deflection exceeding 0.33 in.

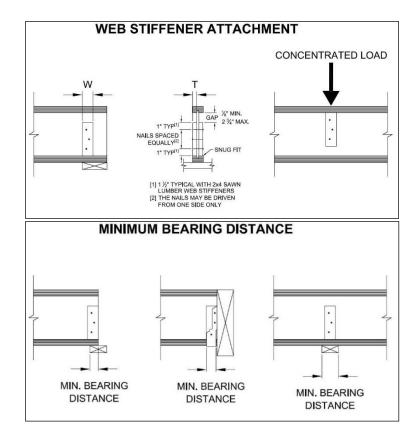


Fig. 3: Web Stiffener Attachment and Minimum Bearing Distance Details