

SUR/SUL/HSUR/HSUL

Skewed 45° Face-Mount Hangers

Solid Sawn Joist Hangers



This product is preferable to similar connectors because of (a) easier installation, (b) higher loads, (c) lower installed cost, or a combination of these features.

The SUR and HSUR series of hangers are skewed 45° left or right. Angled nail slots direct nails for proper installation.

Material: SUR and SUL — 16 gauge; HSUR and HSUL — 14 gauge

Finish: Galvanized. Some products available in ZMAX® coating. See Corrosion Information, pp. 12–15.

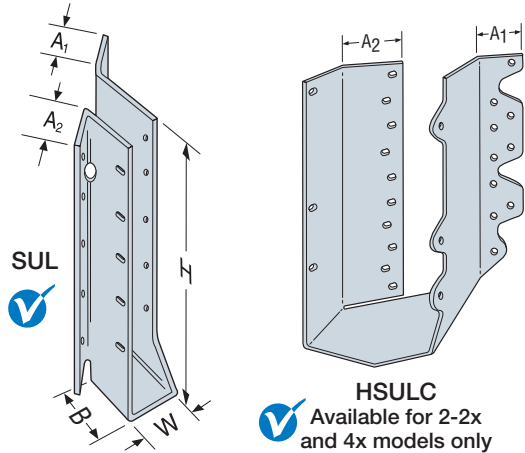
Installation:

- Use all specified fasteners; see General Notes
- These hangers will normally accommodate a 40° to 50° skew
- Illustration shows left and right skews SUR/L (SUR = skewed right; SUL = skewed left)
- The joist end may be square cut or bevel cut

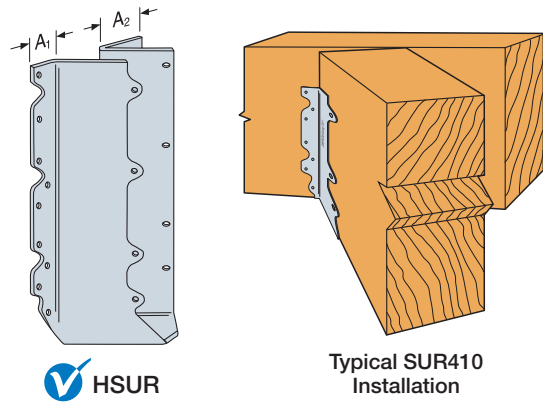
Options:

- Available with the A₂ flange turned in on the 2-2x and 4x models only (see illustration)
- To order, add “C” (for concealed) to the product name
- For example, specify HSURC46, HSULC46, SURC46, or SULC46

Codes: See p. 11 for Code Reference Key Chart

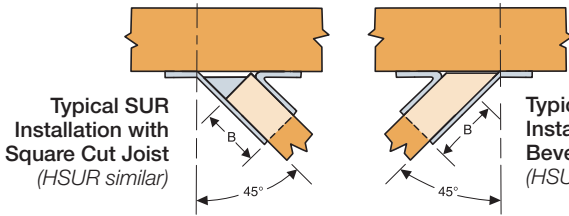


HSULC
Available for 2-2x and 4x models only



HSUR

Typical SUR410 Installation



These products are available with additional corrosion protection. For more information, see p. 14.

SS For stainless-steel fasteners, see p. 21.

SD Many of these products are approved for installation with Strong-Drive® SD Connector screws. See pp. 348–352 for more information.

Joist Size	Model No.	Dimensions (in.)					Fasteners (in.)		DF/SP Species Header Allowable Loads				SPF/HF Species Header Allowable Loads				Code Ref.
		W	H	B	A ₁	A ₂	Face	Joist	Uplift (160)	Floor (100)	Snow (115)	Roof (125)	Uplift (160)	Floor (100)	Snow (115)	Roof (125)	
2x4	SUR/L24	1 ¹ / ₁₆	3 ¹ / ₂	2	1 ¹ / ₈	1 ¹ / ₄	(4) 0.162 x 3 ¹ / ₂	(4) 0.148 x 1 ¹ / ₂	395	575	650	705	340	495	560	605	IBC, FL, LA
SS 2x6, x8	SUR/L26	1 ¹ / ₁₆	5	2	1 ¹ / ₈	1 ¹ / ₈	(6) 0.162 x 3 ¹ / ₂	(6) 0.148 x 1 ¹ / ₂	675	865	980	1,055	580	745	845	905	
SS 2x10, x12	SUR/L210	1 ¹ / ₁₆	8 ³ / ₁₆	2	1 ¹ / ₈	1 ¹ / ₈	(10) 0.162 x 3 ¹ / ₂	(10) 0.148 x 1 ¹ / ₂	1,250	1,440	1,630	1,760	1,075	1,240	1,400	1,515	
2x14	SUR/L214	1 ¹ / ₁₆	10	2	1 ¹ / ₈	1 ¹ / ₈	(12) 0.162 x 3 ¹ / ₂	(12) 0.148 x 1 ¹ / ₂	1,890	1,730	1,955	2,110	1,625	1,490	1,680	1,815	
3x10, x12	SUR/L2.56 /9	2 ³ / ₁₆	8 ¹ / ₁₆	3 ³ / ₁₆	1 ¹ / ₈	2 ¹ / ₈	(14) 0.162 x 3 ¹ / ₂	(2) 0.148 x 1 ¹ / ₂	210	2,015	2,280	2,465	180	1,735	1,960	2,120	
3x14	SUR/L2.56 /11	2 ³ / ₁₆	11 ³ / ₁₆	3 ³ / ₁₆	1 ¹ / ₈	2 ¹ / ₈	(16) 0.162 x 3 ¹ / ₂	(2) 0.148 x 1 ¹ / ₂	210	2,305	2,610	2,665	180	1,980	2,245	2,290	
(2) 2x6, x8	SUR/L26-2	3 ¹ / ₈	4 ¹ / ₁₆	2 ⁵ / ₈	1 ⁷ / ₁₆	2 ⁵ / ₈	(8) 0.162 x 3 ¹ / ₂	(4) 0.162 x 2 ¹ / ₂	725	1,150	1,305	1,325	625	990	1,120	1,140	
(2) 2x6, x8	HSUR/L26-2	3 ¹ / ₈	4 ¹ / ₁₆	2 ⁷ / ₁₆	1 ¹ / ₄	2 ³ / ₁₆	(12) 0.162 x 3 ¹ / ₂	(4) 0.162 x 2 ¹ / ₂	725	1,790	1,795	1,795	625	1,540	1,545	1,545	
(2) 2x10, x12	SUR/L210-2	3 ¹ / ₈	8 ¹ / ₁₆	2 ⁵ / ₈	1 ⁷ / ₁₆	2 ⁵ / ₈	(14) 0.162 x 3 ¹ / ₂	(6) 0.162 x 2 ¹ / ₂	1,150	2,015	2,280	2,345	990	1,735	1,960	2,015	
(2) 2x10, x12	HSUR/L210-2	3 ¹ / ₈	8 ¹ / ₁₆	2 ⁷ / ₁₆	1 ¹ / ₄	2 ³ / ₁₆	(20) 0.162 x 3 ¹ / ₂	(6) 0.162 x 2 ¹ / ₂	1,150	2,980	3,360	3,410	990	2,565	2,890	2,935	
(2) 2x14	HSUR/L214-2	3 ¹ / ₈	12 ¹ / ₁₆	2 ⁷ / ₁₆	1 ¹ / ₄	2 ³ / ₁₆	(26) 0.162 x 3 ¹ / ₂	(8) 0.162 x 2 ¹ / ₂	1,490	3,875	4,370	4,680	1,280	3,335	3,760	4,025	
4x6, x8	SUR/L46	3 ³ / ₁₆	4 ³ / ₄	2 ⁵ / ₈	1	2 ⁵ / ₈	(8) 0.162 x 3 ¹ / ₂	(4) 0.162 x 3 ¹ / ₂	730	1,150	1,265	1,265	630	990	1,090	1,090	
4x6, x8	HSUR/L46	3 ³ / ₁₆	4 ³ / ₄	2 ⁷ / ₁₆	1	2 ³ / ₁₆	(12) 0.162 x 3 ¹ / ₂	(4) 0.162 x 3 ¹ / ₂	725	1,790	1,795	1,795	625	1,540	1,545	1,545	
4x10, x12	SUR/L410	3 ³ / ₁₆	8 ¹ / ₂	2 ⁵ / ₈	1	2 ⁵ / ₈	(14) 0.162 x 3 ¹ / ₂	(6) 0.162 x 3 ¹ / ₂	1,140	2,015	2,245	2,245	980	1,735	1,930	1,930	
4x10, x12	HSUR/L410	3 ³ / ₁₆	8 ¹ / ₂	2 ⁷ / ₁₆	1	2 ³ / ₁₆	(20) 0.162 x 3 ¹ / ₂	(6) 0.162 x 3 ¹ / ₂	1,150	2,980	3,360	3,410	990	2,565	2,890	2,935	
4x14	SUR/L414	3 ³ / ₁₆	12 ¹ / ₂	2 ⁵ / ₈	1	2 ³ / ₁₆	(18) 0.162 x 3 ¹ / ₂	(8) 0.162 x 3 ¹ / ₂	1,490	2,400	2,400	2,400	1,280	2,065	2,065	2,065	
4x14	HSUR/L414	3 ³ / ₁₆	12 ¹ / ₂	2 ⁷ / ₁₆	1	2 ³ / ₁₆	(26) 0.162 x 3 ¹ / ₂	(8) 0.162 x 3 ¹ / ₂	1,490	3,875	4,370	4,680	1,280	3,335	3,760	4,025	

1. Uplift loads have been increased for earthquake or wind loading with no further increase allowed. Reduce where other loads govern.
2. Roof loads are 125% of floor loads unless limited by other criteria. Floor loads may be adjusted for load durations according to the code provided they do not exceed those in the roof column.
3. Truss chord cross-grain tension may limit allowable loads in accordance with ANSI/TPI 1-2014. Simpson Strong-Tie® Connector Selector® software includes the evaluation of cross-grain tension in its hanger allowable loads. For additional information, contact Simpson Strong-Tie.
4. **Fasteners:** Nail dimensions are listed diameter by length. See pp. 21–22 for fastener information.

SUR/SUL/HSUR/HSUL

Skewed 45° Hangers



This product is preferable to similar connectors because of (a) easier installation, (b) higher loads, (c) lower installed cost, or a combination of these features.

The SUR/L1.81, 2.06, 2.1, 2.37, 2.56 and HSUR/L series are 45° skewed hangers designed specifically to ease the installation of single and double I-joists. In addition to Positive Angle Nailing these hangers encapsulate the top flange of the I-joist, so no web stiffeners are required for standard installation.

The full range of 45° skewed hangers feature obround nail holes on the acute side, allowing nails to be easily installed parallel to the joist. Installation is further simplified with no required bevel cuts.

Material: See table on p. 155

Finish: Galvanized. Some products available in ZMAX® coating; See Corrosion Information, pp. 12–15.

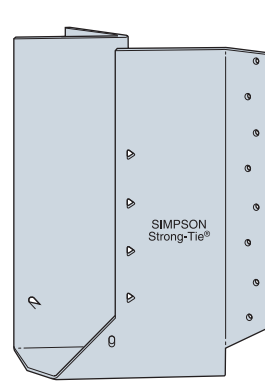
Installation:

- Use all specified fasteners; see General Notes.
- Illustrations show left and right skews SUR/L (SUR = skewed right; SUL = skewed left).
- The joist end may be square cut or bevel cut.
- Fill all round and obround nail holes with specified fasteners to achieve table loads. Where noted, triangle holes in the joist flange may be filled for additional uplift capacity (see footnote on p. 155).
- For I-joists with flanges less than 1 $\frac{5}{16}$ " , web stiffeners are required for all double joist hangers when using hangers that are 14 gauge and lighter.

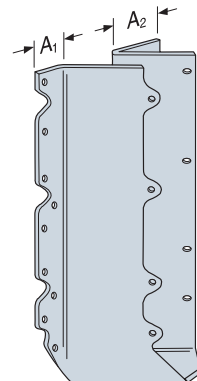
Options:

- These hangers cannot be modified but will accommodate a 40° to 50° skewed joist.
- Available with the A₂ flange turned in on (2) 2x and 4x models only (see illustration). For example, specify HSURC410, HSULC410, SURC210-2 or SULC210-2.

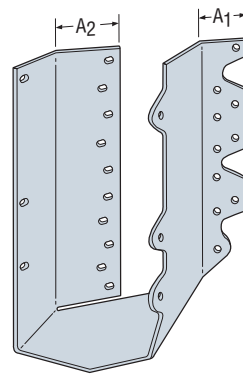
Codes: See p. 11 for Code Reference Key Chart



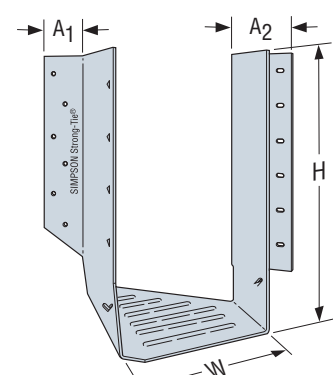
SUL2.56/11



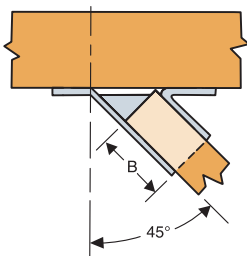
HSUR414



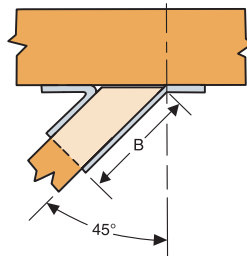
HSULC
Available for
3"- and 3 $\frac{1}{2}$ "-wide
joists only



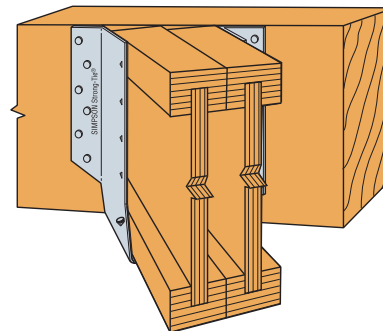
HSUR4.12/9



**Typical SUR Installation
with Square Cut Joist**
(HSUR similar)



**Typical SUL Installation
with Bevel Cut Joist**
(HSUL similar)



**Typical HSUR4.12/9
Installation**

SUR/SUL/HSUR/HSUL

Skewed 45° Hangers (cont.)

These products are available with additional corrosion protection. For more information, see p. 14.

SS For stainless-steel fasteners, see p. 21.

SD Many of these products are approved for installation with Strong-Drive® SD Connector screws. See pp. 348–352 for more information.

Actual Joist Size (in.)	Model No.	Web Stiff Req.	Ga.	Dimensions (in.)					Fasteners (in.)		Allowable Loads								Code Ref.
				W	H	B	A1	A2	Face	Joist	DF/SP Species Header				SPF/HF Species Header				
											Uplift (160)	Floor (100)	Snow (115)	Roof (125)	Uplift (160)	Floor (100)	Snow (115)	Roof (125)	
SS 1½x9¼-12	SUR/L210	✓	16	1¾	8¾	2	1½	1½	(10) 0.162 x 3½	(10) 0.148 x 1½	1,250	1,440	1,630	1,760	1,075	1,240	1,400	1,515	IBC, FL, LA
1½x10-16	SUR/L214	✓	16	1¾	10	2	1½	1½	(12) 0.162 x 3½	(12) 0.148 x 1½	1,890	1,730	1,955	2,110	1,625	1,490	1,680	1,815	
1¾x9¼-9½	SUR/L1.81/9	—	16	1¾	9	3	1½	2½	(12) 0.162 x 3½	(2) 0.148 x 1½	175	1,730	1,945	1,945	150	1,490	1,675	1,675	
1¾x11¼-11½	SUR/L1.81/11	—	16	1¾	11	3	1½	2½	(16) 0.162 x 3½	(2) 0.148 x 1½	175	2,305	2,465	2,465	150	1,980	2,120	2,120	
1¾x14	SUR/L1.81/14	—	16	1¾	13¾	3	1½	2½	(20) 0.162 x 3½	(2) 0.148 x 1½	175	2,470	2,470	2,470	150	2,125	2,125	2,125	
2x9½	SUR/L2.06/9	—	16	2¼	9½	3¾	1½	2½	(14) 0.162 x 3½	(2) 0.148 x 1½	175	2,015	2,285	2,465	150	1,735	1,965	2,120	
2x11½	SUR/L2.06/11	—	16	2¼	11½	3¾	1½	2½	(16) 0.162 x 3½	(2) 0.148 x 1½	175	2,305	2,525	2,525	150	1,980	2,170	2,170	
2x14	SUR/L2.06/14	—	16	2¼	13¾	3¾	1½	2½	(18) 0.162 x 3½	(2) 0.148 x 1½	175	2,525	2,525	2,525	150	2,170	2,170	2,170	
2x16	SUR/L2.06/14	✓	16	2¼	13¾	3¾	1½	2½	(18) 0.162 x 3½	(2) 0.148 x 1½	175	2,525	2,525	2,525	150	2,170	2,170	2,170	
2½x9½	SUR/L2.1/9	—	16	2¼	9½	3¾	1¾	2½	(14) 0.162 x 3½	(2) 0.148 x 1½	175	2,015	2,285	2,465	150	1,735	1,965	2,120	
2½x11½	SUR/L2.1/11	—	16	2¼	11¾	3¾	1¾	2½	(16) 0.162 x 3½	(2) 0.148 x 1½	175	2,305	2,525	2,525	150	1,980	2,170	2,170	
2½x14	SUR/L2.1/14	—	16	2¼	13¾	3¾	1¾	2½	(18) 0.162 x 3½	(2) 0.148 x 1½	175	2,525	2,525	2,525	150	2,170	2,170	2,170	
2½x16	SUR/L2.1/14	✓	16	2¼	13¾	3¾	1¾	2½	(18) 0.162 x 3½	(2) 0.148 x 1½	175	2,525	2,525	2,525	150	2,170	2,170	2,170	
2¼-2½x9½	SUR/L2.37/9	—	16	2¾	8½	3¾	1½	2½	(14) 0.162 x 3½	(2) 0.148 x 1½	175	2,015	2,285	2,465	150	1,735	1,965	2,120	
2¼-2½x11½	SUR/L2.37/11	—	16	2¾	11¾	3¾	1½	2½	(16) 0.162 x 3½	(2) 0.148 x 1½	175	2,305	2,525	2,525	150	1,980	2,170	2,170	
2¼-2½x14	SUR/L2.37/14	—	16	2¾	13¾	3¾	1½	2½	(18) 0.162 x 3½	(2) 0.148 x 1½	175	2,525	2,525	2,525	150	2,170	2,170	2,170	
2¼-2½x16	SUR/L2.37/14	✓	16	2¾	13¾	3¾	1½	2½	(18) 0.162 x 3½	(2) 0.148 x 1½	175	2,525	2,525	2,525	150	2,170	2,170	2,170	
2½x9½ (3x10,12)	SUR/L2.56/9	—	16	2¾	8½	3¾	1½	2½	(14) 0.162 x 3½	(2) 0.148 x 1½	210	2,015	2,280	2,465	180	1,735	1,960	2,120	
2½-2¾x11¼-11½	SUR/L2.56/11	—	16	2¾	11¾	3¾	1½	2½	(16) 0.162 x 3½	(2) 0.148 x 1½	210	2,305	2,610	2,665	180	1,980	2,245	2,290	
2½x14 (3x14)	SUR/L2.56/14	—	16	2¾	13¾	3¾	1½	2½	(18) 0.162 x 3½	(2) 0.148 x 1½	210	2,525	2,525	2,525	180	2,170	2,170	2,170	
2½x16	SUR/L2.56/14	✓	16	2¾	13¾	3¾	1½	2½	(18) 0.162 x 3½	(2) 0.148 x 1½	210	2,525	2,525	2,525	180	2,170	2,170	2,170	
3x9¼-14	SUR/L210-2	✓	16	3¼	8½	2¾	1¾	2¾	(14) 0.162 x 3½	(6) 0.162 x 2½	1,150	2,015	2,280	2,345	990	1,735	1,960	2,015	
	HSUR/L210-2	✓	14	3¼	8½	2¾	1¼	2¾	(20) 0.162 x 3½	(6) 0.162 x 2½	1,150	2,980	3,360	3,410	990	2,565	2,890	2,935	
3x14-20	SUR/L214-2	✓	16	3¼	12½	2¾	1¾	2¾	(18) 0.162 x 3½	(8) 0.162 x 2½	1,580	2,265	2,265	2,265	1,360	1,950	1,950	1,950	
	HSUR/L214-2	✓	14	3¼	12½	2¾	1¼	2¾	(26) 0.162 x 3½	(8) 0.162 x 2½	1,490	3,875	4,370	4,680	1,280	3,335	3,760	4,025	
3½x9¼-14	SUR/L410	✓	16	3¾	8½	2¾	1	2¾	(14) 0.162 x 3½	(6) 0.162 x 3½	1,140	2,015	2,245	2,245	980	1,735	1,930	1,930	
	HSUR/L410	✓	14	3¾	8½	2¾	1	2¾	(20) 0.162 x 3½	(6) 0.162 x 3½	1,150	2,980	3,360	3,410	990	2,565	2,890	2,935	
3½x14-20	SUR/L414	✓	16	3¾	12½	2¾	1	2¾	(18) 0.162 x 3½	(8) 0.162 x 3½	1,490	2,400	2,400	2,400	1,280	2,065	2,065	2,065	
	HSUR/L414	✓	14	3¾	12½	2¾	1	2¾	(26) 0.162 x 3½	(8) 0.162 x 3½	1,490	3,875	4,370	4,680	1,280	3,335	3,760	4,025	
4x9½	HSUR/L4.12/9	—	14	4¼	9	3	1¾	2¾	(12) 0.162 x 3½	(2) 0.148 x 1½	165	1,785	2,015	2,025	140	1,535	1,735	1,740	
4x11½	HSUR/L4.12/11	—	14	4¼	11½	3	1¾	2¾	(16) 0.162 x 3½	(2) 0.148 x 1½	165	2,380	2,685	2,890	140	2,045	2,310	2,485	
4x14	HSUR/L4.12/14	—	14	4¼	13¾	3	1¾	2¾	(20) 0.162 x 3½	(2) 0.148 x 1½	165	2,975	3,330	3,330	140	2,560	2,865	2,865	
4x16	HSUR/L4.12/16	—	14	4¼	15¾	3	1¾	2¾	(24) 0.162 x 3½	(2) 0.148 x 1½	165	3,330	3,330	3,330	140	2,865	2,865	2,865	
4½x9½	HSUR/L4.28/9	—	14	4¾	9	3	1¾	2¾	(12) 0.162 x 3½	(2) 0.148 x 1½	165	1,785	2,015	2,025	140	1,535	1,735	1,740	
4½x11½	HSUR/L4.28/11	—	14	4¾	11½	3	1¾	2¾	(16) 0.162 x 3½	(2) 0.148 x 1½	165	2,380	2,685	2,890	140	2,045	2,310	2,485	
4½x14-16	HSUR/L4.28/11	✓	14	4¾	11½	3	1¾	2¾	(16) 0.162 x 3½	(2) 0.148 x 1½	165	2,380	2,685	2,890	140	2,045	2,310	2,485	
4½x9½	HSUR/L4.75/9	—	14	4¾	8½	2¾	1¾	2¾	(12) 0.162 x 3½	(2) 0.148 x 1½	165	1,785	2,015	2,025	140	1,535	1,735	1,740	
4½x11½	HSUR/L4.75/11	—	14	4¾	10½	2¾	1¾	2¾	(16) 0.162 x 3½	(2) 0.148 x 1½	165	2,380	2,685	2,890	140	2,045	2,310	2,485	
4½x14	HSUR/L4.75/14	—	14	4¾	13¾	2¾	1¾	2¾	(20) 0.162 x 3½	(2) 0.148 x 1½	165	2,975	3,330	3,330	140	2,560	2,865	2,865	
4½x16	HSUR/L4.75/16	—	14	4¾	15¾	2¾	1¾	2¾	(24) 0.162 x 3½	(2) 0.148 x 1½	165	3,330	3,330	3,330	140	2,865	2,865	2,865	
5x9½	HSUR/L5.12/9	—	14	5¼	9	2¾	1¾	2¾	(12) 0.162 x 3½	(2) 0.148 x 1½	165	1,785	2,015	2,025	140	1,535	1,735	1,740	
5x11½	HSUR/L5.12/11	—	14	5¼	11	2¾	1¾	2¾	(16) 0.162 x 3½	(2) 0.148 x 1½	165	2,380	2,685	2,890	140	2,045	2,310	2,485	
5x14	HSUR/L5.12/14	—	14	5¼	13¾	2¾	1¾	2¾	(20) 0.162 x 3½	(2) 0.148 x 1½	165	2,975	3,330	3,330	140	2,560	2,865	2,865	
5x16	HSUR/L5.12/16	—	14	5¼	15¾	2¾	1¾	2¾	(24) 0.162 x 3½	(2) 0.148 x 1½	165	3,330	3,330	3,330	140	2,865	2,865	2,865	

- Uplift loads have been increased for earthquake or wind loading with no further increase allowed. Reduce where other loads govern.
- Triangular nail holes may be filled with 0.148" x 1½" nails for additional uplift (requires web stiffeners).
 - SUR/SUL 9" and 11", SUR/SUL1.81/14, and all HSUR/HSUL models have additional holes that, when filled, can resist 795 lb. for DF/SP or 685 lb. for SPF/HF.
 - SUR/SUL 14" models have (6) additional holes that, when filled, can resist 1,190 lb. for DF/SP and 1,025 lb. for SPF/HF.
- When the supported member is an I-joist with flanges less than 1½" thick, the allowable uplift shall not exceed 190 lb. without web stiffeners.
- Allowable downloads are based on a joist-bearing capacity of 750 psi.
- Fasteners:** Nail dimensions are listed diameter by length. See pp. 21–22 for fastener information.