SUR/SUL/HSUR/HSUL *Skewed 45° Hangers for I-Joist and SCL*

SIMPSON Strong-Tie®

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.

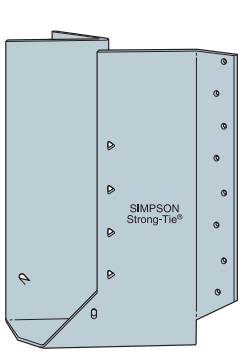
The full range of 45° skewed hangers feature obround nail holes on the acute side allowing nails to be easily installed parallel to the header and joist. Installation is further simplified with no required bevel cuts.

MATERIAL: See table

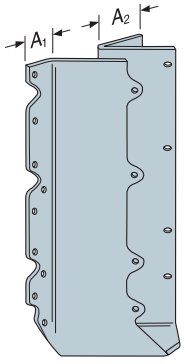
FINISH: Galvanized. Some products available in ZMAX® coating; see Corrosion Information, page 10-11.

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.
- Web stiffeners are required for I-joist applications except for the SUR/L1.81, 2.56, HSUR/L4.12, 4.75 and 5.12.
- 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 2).*

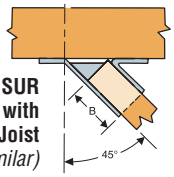
OPTIONS: • These hangers will accommodate a 40° to 50° skew.
- Available with the A_2 flange turned in on 2-2x and 4x models only *(see illustration).* For example, specify HSURC410, HSULC410, SURC210-2, or SULC210-2.



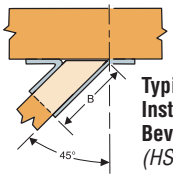
SUL2.56/11



HSUR



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



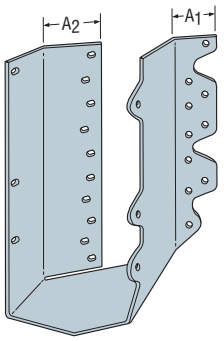
Typical SUL Installation with Bevel Cut Joist *(HSUL similar)*

Actual Joist Size	Model No.	Ga	Dimensions (in)					Fasteners		Factored Resistance			
										D.Fir-L		S-P-F	
			W	H	B	A_1	A_2	Header	Joist	Uplift (K_D=1.15) lbs kN	Normal (K_D=1.00) lbs kN	Uplift (K_D=1.15) lbs kN	Normal (K_D=1.00) lbs kN
1½x9¼-12	SUR/L210	16	1⁹⁄₁₆	8⅛	2	1⅛	1⁵⁄₁₆	10-16d	10-10dx1½	2355 10.49	3820 17.02	1665 7.42	2700 12.03
1½x10-16	SUR/L214	16	1⁹⁄₁₆	10	2	1⅛	1⁵⁄₁₆	12-16d	12-10dx1½	3260 14.52	4585 20.42	2330 10.38	3240 14.43
1¾x9¼-9½	SUR/L1.81/9	16	1¹³⁄₁₆	9	3	1⅝	2⁵⁄₁₆	12-16d	2-10dx1½	275 1.22	3140 13.97	195 0.87	2220 9.88
1¾x11¼-11⅞	SUR/L1.81/11	16	1¹³⁄₁₆	11	3	1⅝	2⁵⁄₁₆	16-16d	2-10dx1½	275 1.22	31.40 13.97	195 0.87	2220 9.88
1¾x14	SUR/L1.81/14	16	1¹³⁄₁₆	13¾	3	1⅝	2⁵⁄₁₆	20-16d	2-10dx1½	275 1.22	31.40 13.97	195 0.87	2220 9.88
NEW 2x9½	SUR/L2.06/9	16	2¹⁄₁₆	9¹⁄₁₆	3³⁄₁₆	1⅝	2⅛	14-16d	2-10dx1½	385 1.71	3945 17.55	385 1.71	2780 12.37
NEW 2x11⅞	SUR/L2.06/11	16	2¹⁄₁₆	11¼	3³⁄₁₆	1⅝	2⅛	16-16d	2-10dx1½	385 1.71	3945 17.55	385 1.71	2780 12.37
2¹⁄₁₆x9½	SUR/L2.1/9	16	2⅛	9¹⁄₁₆	3³⁄₁₆	1⁹⁄₁₆	2⅛	14-16d	2-10dx1½	385 1.71	3945 17.55	385 1.71	2780 12.37
2¹⁄₁₆x11⅞	SUR/L2.1/11	16	2⅛	11³⁄₁₆	3³⁄₁₆	1⁹⁄₁₆	2⅛	16-16d	2-10dx1½	385 1.71	3945 17.55	385 1.71	2780 12.37
NEW 2¼-2⁵⁄₁₆x9½	SUR/L2.37/9	16	2⅜	8¹⁵⁄₁₆	3³⁄₁₆	1⁵⁄₁₆	2⅛	14-16d	2-10dx1½	385 1.71	3945 17.55	385 1.71	2780 12.37
NEW 2¼-2⁵⁄₁₆x11⅞	SUR/L2.37/11	16	2⅜	11³⁄₁₆	3³⁄₁₆	1⁵⁄₁₆	2⅛	16-16d	2-10dx1½	385 1.71	3945 17.55	385 1.71	2780 12.37
NEW 2¼-2⁵⁄₁₆x14	SUR/L2.37/14	16	2⅜	13⁷⁄₁₆	3³⁄₁₆	1⁵⁄₁₆	2⅛	18-16d	2-10dx1½	385 1.71	3945 17.55	385 1.71	2780 12.37
NEW 2½x9½	SUR/L2.56/9	16	2⁹⁄₁₆	8¹³⁄₁₆	3³⁄₁₆	1⅛	2⅛	14-16d	2-10dx1½	385 1.71	3945 17.55	385 1.71	2780 12.37
2½-2⁹⁄₁₆x11¼-11⅞	SUR/L2.56/11	16	2⁹⁄₁₆	11³⁄₁₆	3³⁄₁₆	1⅛	2⅛	16-16d	2-10dx1½	385 1.71	3945 17.55	385 1.71	2780 12.37
NEW 2½x14	SUR/L2.56/14	16	2⁹⁄₁₆	13⁵⁄₁₆	3³⁄₁₆	1⅛	2⅛	18-16d	2-10dx1½	385 1.71	3945 17.55	385 1.71	2780 12.37

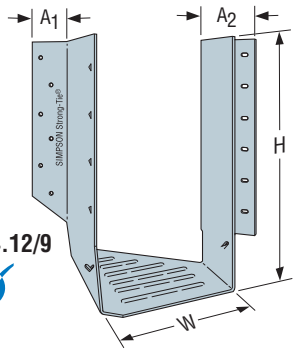
1. Factored uplift resistances have been increased by 15% for earthquake or wind loading with no further increase allowed; reduce for other load durations as required by code.
2. For additional uplift, use web stiffeners and fill the four triangle holes with N10 nails for a factored uplift resistance of 620 lbs (2.76 kN) for D.Fir-L and 445 lbs (1.98 kN) for S-P-F.
3. **NAILS:** 16d = 0.162" dia. x 3½" long, 10dx1½ = 0.148" dia. x 1½" long. See page 16-17 for other nail sizes and information.

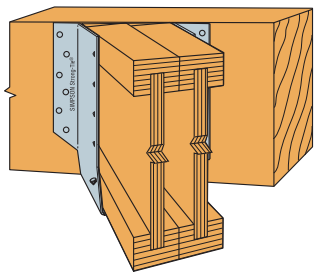
SUR/SUL/HSUR/HSUL *Skewed 45° Hangers for I-Joist and SCL*

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



HSUR4.12/9





Typical HSUR4.12/9 Installation

These products are available with additional corrosion protection. Additional products on this page may also be available with this option, check with Simpson Strong-Tie for details.

Actual Joist Size	Model No.	Ga	Dimensions (in)					Fasteners		Factored Resistance			
										D.Fir-L		S-P-F	
			W	H	B	A_1	A_2	Header	Joist	Uplift (K_D=1.15)	Normal (K_D=1.00)	Uplift (K_D=1.15)	Normal (K_D=1.00)
										lbs	lbs	lbs	lbs
										kN	kN	kN	kN
3x9¼-14	SUR/L210-2	16	3⅛	8 11⁄16	2⅝	1 7⁄16	2⅜	14-16d	6-10dx1½	1255	4065	890	2875
										5.59	18.11	3.96	12.81
	HSUR/L210-2	14	3⅛	8 11⁄16	2 7⁄16	1¼	2 7⁄16	20-16d	6-16dx1½	1975	5270	1395	3730
										8.80	23.47	6.21	16.61
3x14-20	SUR/L214-2	16	3⅛	12 11⁄16	2 7⁄16	1¼	2 3⁄16	18-16d	8-10dx1½	2175	4095	1555	2895
										9.69	18.24	6.93	12.90
	HSUR/L214-2	14	3⅛	12 11⁄16	2 7⁄16	1¼	2 3⁄16	26-16d	8-16dx1½	2615	6880	1845	4865
										11.65	30.65	8.22	21.67
3½x9¼-14	SUR/L410	16	3 9⁄16	8½	2⅝	1	2⅜	14-16d	6-16d	1975	4065	1395	2875
										8.80	18.11	6.21	12.81
	HSUR/L410	14	3 9⁄16	8½	2 7⁄16	1	2 3⁄16	20-16d	6-16d	1975	5270	1395	3730
										8.80	23.47	6.21	16.61
3½x14-20	SUR/L414	16	3 9⁄16	12½	2½	1	2⅜	18-16d	8-16d	2175	4095	1555	2895
										9.69	18.24	6.93	12.90
	HSUR/L414	14	3 9⁄16	12½	2 7⁄16	1	2 3⁄16	26-16d	8-16d	2615	6880	1845	4865
										11.65	30.65	8.22	21.67
4x9½	HSUR/L4.12/9	14	4⅛	9	3	1 7⁄16	2⅜	12-16d	2-10dx1½	275	2995	195	2350
										1.22	13.34	0.87	10.47
4x11⅞	HSUR/L4.12/11	14	4⅛	11⅞	3	1 7⁄16	2⅜	16-16d	2-10dx1½	275	4195	195	2965
										1.22	18.69	0.87	13.21
4x14	HSUR/L4.12/14	14	4⅛	13¾	3	1 7⁄16	2⅜	20-16d	2-10dx1½	275	4195	195	2965
										1.22	18.69	0.87	13.21
4x16	HSUR/L4.12/16	14	4⅛	15¾	3	1 7⁄16	2⅜	24-16d	2-10dx1½	275	4195	195	2965
										1.22	18.69	0.87	13.21
4⅝x9½	HSUR/L4.75/9	14	4¾	8 15⁄16	2¾	1 7⁄16	2⅜	12-16d	2-10dx1½	275	2995	195	2350
										1.22	13.34	0.87	10.47
4⅝x11⅞	HSUR/L4.75/11	14	4¾	10 15⁄16	2¾	1 7⁄16	2⅜	16-16d	2-10dx1½	275	4195	195	2965
										1.22	18.69	0.87	13.21
4⅝x14	HSUR/L4.75/14	14	4¾	13¾	2¾	1 7⁄16	2⅜	20-16d	2-10dx1½	275	4195	195	2965
										1.22	18.69	0.87	13.21
4⅝x16	HSUR/L4.75/16	14	4¾	15¾	2¾	1 7⁄16	2⅜	24-16d	2-10dx1½	275	4195	195	2965
										1.22	18.69	0.87	13.21
5x9½	HSUR/L5.12/9	14	5⅛	9	2 13⁄16	1 7⁄16	2⅜	12-16d	2-10dx1½	275	2995	195	2350
										1.22	13.34	0.87	10.47
5x11⅞	HSUR/L5.12/11	14	5⅛	11	2 13⁄16	1 7⁄16	2⅜	16-16d	2-10dx1½	275	4195	195	2965
										1.22	18.69	0.87	13.21
5x14	HSUR/L5.12/14	14	5⅛	13¾	2 13⁄16	1 7⁄16	2⅜	20-16d	2-10dx1½	275	4195	195	2965
										1.22	18.69	0.87	13.21
5x16	HSUR/L5.12/16	14	5⅛	15¾	2 13⁄16	1 7⁄16	2⅜	24-16d	2-10dx1½	275	4195	195	2965
										1.22	18.69	0.87	13.21

1. Factored uplift resistances have been increased by 15% for earthquake or wind loading with no further increase allowed; reduce for other load durations as required by code.
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