S/JCT and S/HJCT Steel-Joist Connectors

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 S/JCT and S/HJCT are unique, skewable steel-joist framing connectors that combine strength, versatility and low installed cost. The connectors can be used with CFS headers, wood headers, steel I-beams (with welds or PAF fasteners) and masonry walls. Installed cost is minimized since these products are shear rather than bearing connectors, eliminating the need for web stiffeners. The connectors also feature horizontal tabs that facilitate top flange alignment and joist support during screw installation.

Material: S/JCT — 68 mil (14 ga.); S/HJCT — 97 mil (12 ga.)

Finish: Galvanized

Features:

- Uni-directional: Joist can be attached from left or right
- One size fits joists 8" through 14" deep
- Optional holes for additional load capacity
- Simplicity of design
- Quick and easy installation
- Field skewable up to 45° left or right

Installation:

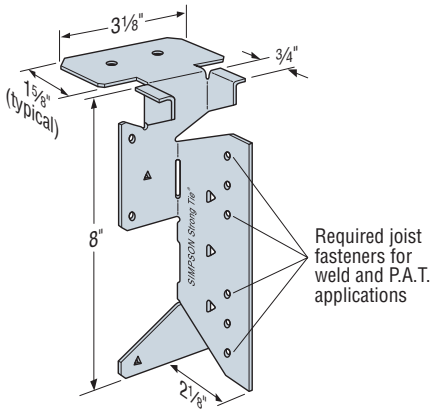
- Attach hanger with specified fasteners. Use round holes for minimum load, use round and triangle holes for maximum load.
- May be used for weld-on applications. The minimum required weld to the top flange is ⅛" x 2½" fillet weld to each side of top flange. Consult the code for special considerations when welding galvanized steel.
- May be installed using PDPAT-62KP (0.157" x ⅝") powder-actuated fasteners. Steel headers with thicknesses between ¼" and ¾" having a minimum F_y = 36 ksi. A Red (level 5) or Purple (level 6) powder load may be required to achieve specified penetration (p). See illustration on p. 179.

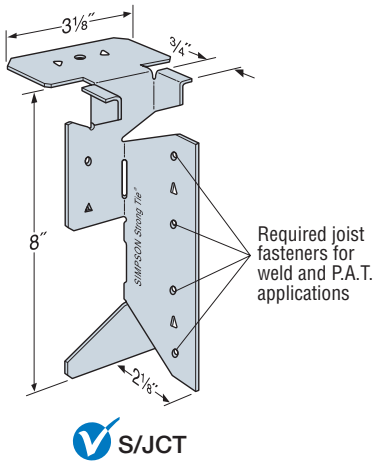
Codes: See p. 11 for Code Reference Key Chart

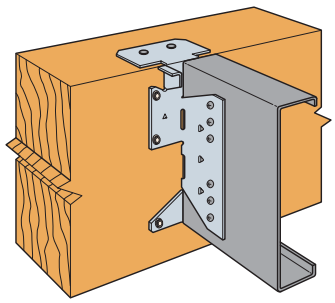
Ordering Information: The S/JCT is sold in cartons of 50. The S/HJCT is sold in kits as the S/HJCT-KT and contains five (5) connectors and (95) #14 screws.

Model No.	Fasteners[7]			Allowable Load[1]		Code Ref.
	Top	Face	Joist	Uplift	Down	
Attached to CFS Header: 54 mil (16 ga.)[3] — Straight Hanger						IBC, FL, LA
S/JCT (min.)	(1) #10	(2) #10	(4) #10	940	1,195	
S/JCT (max.)	(1) #10	(4) #10	(6) #10	1,435	2,105	
S/HJCT (min.)	(2) #10	(4) #14	(6) #14	1,510	2,920	
S/HJCT (max.)	(2) #10	(8) #14	(9) #14	1,670	3,855	
Attached to CFS Header: 54 mil (16 ga.)[3] — Skewed Hanger						
S/JCT (min.)	(1) #10	(2) #10	(4) #10	940	1,135	
S/JCT (max.)	(1) #10	(4) #10	(6) #10	940	1,185	
S/HJCT (min.)	(2) #10	(4) #14	(6) #14	1,510	2,305	
Attached to Steel Header[4] — Straight and Skewed Hanger						
S/JCT (min.)	⅛" x 2½" fillet weld to each side of top flange		(4) #10	145	940	
S/HJCT (min.)			(4) #14	195	1,450	
S/HJCT (min.) Skew			(4) #14	195	1,235	
S/JCT (min.)	(2) 0.157" x ⅝" powder-actuated fastener[8]		(4) #10	145	750	—
S/HJCT (min.)			(4) #14	195	1,185	
Attached to Masonry — Straight and Skewed Hanger						
S/HJCT (min.)	(2) ¼" x 2¼" Titen® 2	(4) ¼" x 2¼" Titen 2	(6) #14	710	1,785	
S/HJCT (min.) Skew				710	1,410	

Model No.	Fasteners[7]			Allowable Load[1,2]		Code Ref.
	Top	Face	Joist	Uplift (160)	Down (100)	
Attached to 4x DF/SP Wood Header — Straight Hanger						IBC, FL, LA
S/JCT (min.)	(1) 10d	(2) 10d	(4) #10	555	945	
S/JCT (max.)	(1) 10d	(4) 10d	(6) #10	945	1,465	
S/HJCT (min.)	(2) 10d	(4) ¼"x3" SDS	(6) #14	1,210	2,625	
S/HJCT (max.)	(2) 10d	(8) ¼"x3" SDS	(9) #14	1,475	2,980	
Attached to 4x DF/SP Wood Header — Skewed Hanger						
S/JCT (min.)	(1) 10d	(2) 10d	(4) #10	390	845	
S/JCT (max.)	(1) 10d	(4) 10d	(6) #10	775	1,300	
S/HJCT (min.)	(2) 10d	(4) ¼" x 3" SDS	(6) #14	1,210	1,935	



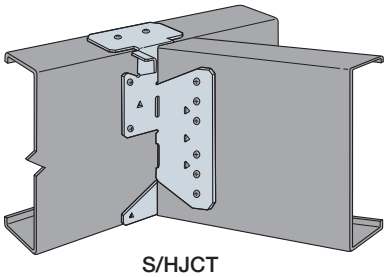




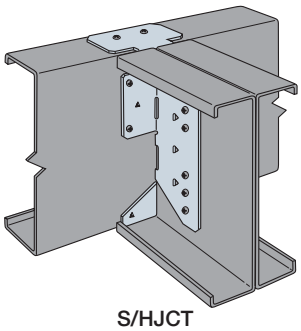
S/HJCT Installation with a 4x10 Wood Header

1. Allowable loads are based on on a minimum of single 54 mil (16 ga.) CFS joist member. CFS joist shall be laterally braced per designer specification.
2. Allowable loads for wood header are based on 4x DF/SP minimum, for SPF/HF wood species use an adjustment factor of 0.72.
3. CFS header must be braced to prevent web buckling per designer specification and header must have full bearing of 1⅝" flange-depth.
4. Backing in the steel beam cavity is not required behind the hanger for load listed.
5. Screws shall be installed using joist hanger holes screwing through the hanger into the joist.
6. CFS joists with up to a 0.50" gap (short cut), use an adjustment factor of 0.87 and joists with a 0.50" to 0.90" gap (short cut), use an adjustment factor of 0.75.
7. See *Fastening Systems* catalog (C-F-2019) on **strongtie.com** for more information on Simpson Strong-Tie fasteners.
8. See p. 179 for more information.

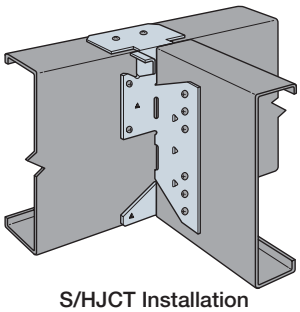
S/JCT and S/HJCT Steel-Joist Connectors



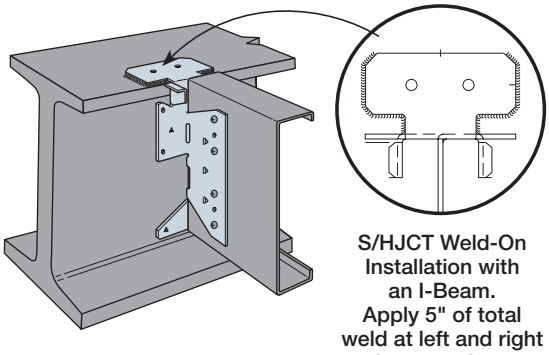
S/HJCT
Skewed 45° Installation



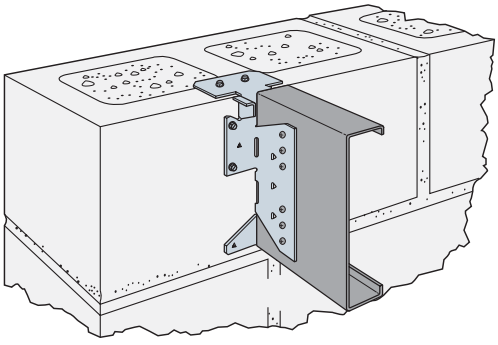
S/HJCT
Double-Joist Installation



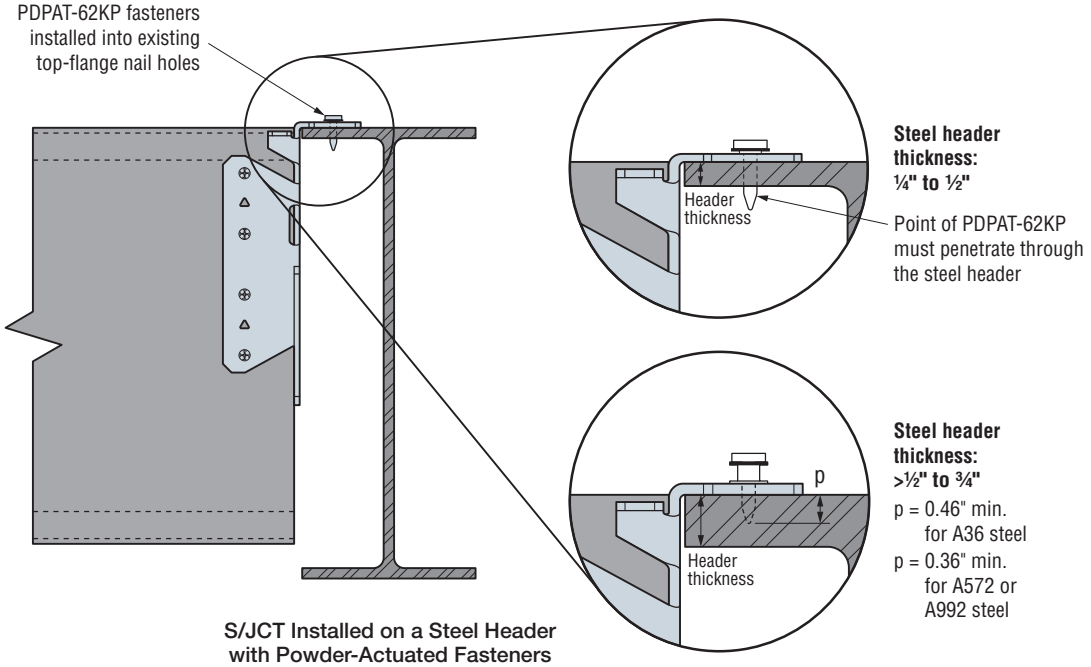
S/HJCT Installation
with a CFS Steel Header



S/HJCT Weld-On
Installation with
an I-Beam.
Apply 5" of total
weld at left and right
edges, as shown.



S/HJCT Installation
on Masonry Header



S/JCT Installed on a Steel Header
with Powder-Actuated Fasteners