

HSKP™

Heavy Seated Knife Plate

The new HSKP heavy seated knife plate connector preserves the look of mass timber beams while meeting high-demand loads. Offering the highest load ratings yet in our line of concealed beam hangers, the HSKP is tested for inter-story drift and is ICC-ES code listed. The HSKP installs in the factory with Strong-Drive® SDCF Timber-CF structural screws, saving valuable time on the jobsite. It offers generous fit-up tolerance for easy beam placement. For additional information, see *Connectors and Fasteners for Mass Timber Construction* catalog, C-C-MASSTIMBER at strongtie.com.

Features:

- High capacity
- Code listed in ICC-ES ESR-2552
- ASTM E119 1- and 2-hour fire tests pending; contact Simpson Strong-Tie
- Factory installation of connector reduces onsite labor
- Inclined screw hole feature reduces the overall screw count compared to horizontal screws
- Seated connector design allows for faster field installation and better crane cycle-time
- Options for wood-to-wood and wood-to-steel concealed connection
- Recommended for use at beam-to-beam or beam-to-column connections in any Seismic Design Category; see engineering letter L-C-HSKPDRIFT at strongtie.com for more information

Material: Back and knife plate — 3 gauge; bearing plate — ½"; HSKP5.75x19.5 and HSKP5.75x19.5-W knife plate — ⅜"

Finish: HSKP/HSKP-W — Simpson Strong-Tie gray paint, HSKP available in HDG and powder coat; SDCF screw — yellow zinc
CJTPL steel dowel — mechanically galvanized

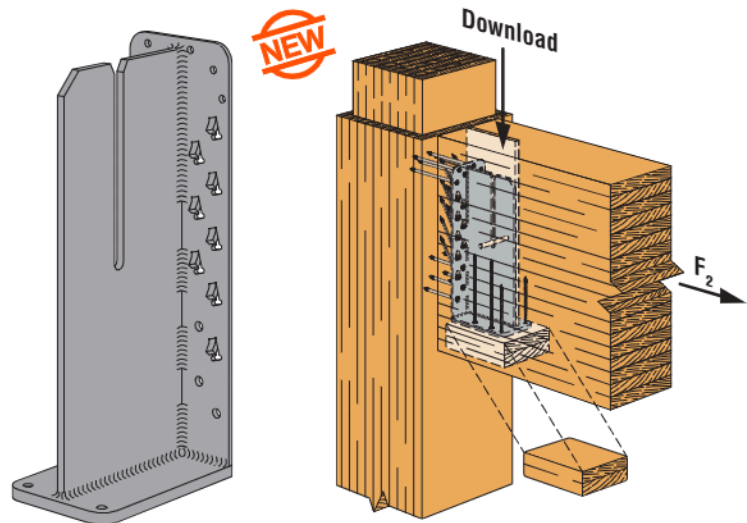
Installation:

- Use all specified fasteners; see General Notes.
- For additional installation information and routing details, visit strongtie.com/HSKP.
- Prior to connection of the carried member to the HSKP hanger, supported member shall be prerouted to allow for the concealed installation of the HSKP and predrilled for the installation of the optional steel dowel.
- Designer shall determine the desired beam-end rout depth and bottom-of-beam rout depth for the desired concealed installation and potential fire considerations.
- For fully concealed installations requiring a bottom filler block, the connection is to be determined by the building designer.

Note: When installing SDCF screws for the HSKP connection, do not exceed recommended seating torque values (reference engineering letter L-C-MTINSTALL at strongtie.com).

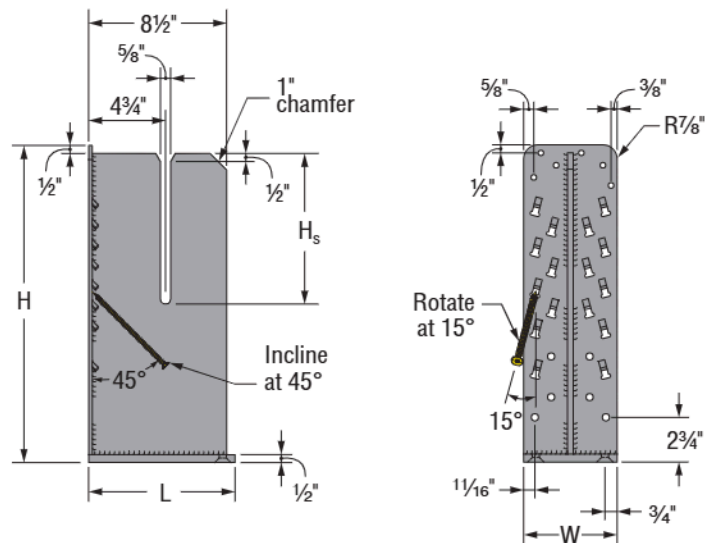
Environment: Dry-service applications only

Codes: See p. 13 for Code Reference Key Chart

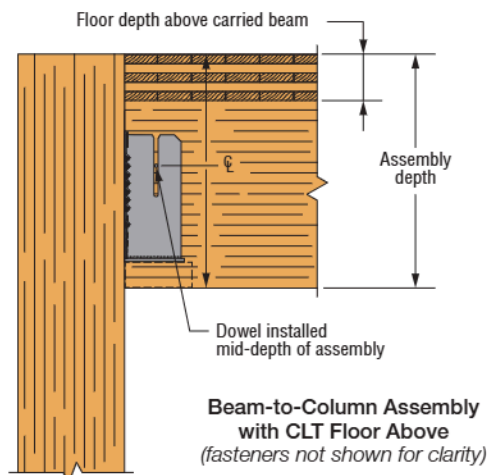


HSKP5.75x19.5
(others similar)
US Patent Pending

Typical HSKP Installation



HSKP Side and Front Views
Inclined SDCF Installation Angles Shown
(HSKP5.75x19.5 shown, others similar)



Beam-to-Column Assembly
with CLT Floor Above
(fasteners not shown for clarity)

HSKP™

Heavy Seated Knife Plate (cont.)

HSKP Wood-to-Wood Allowable Loads

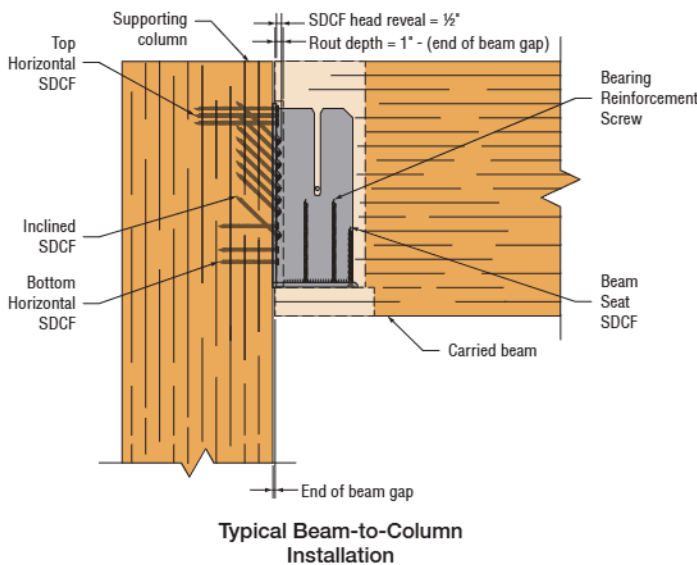
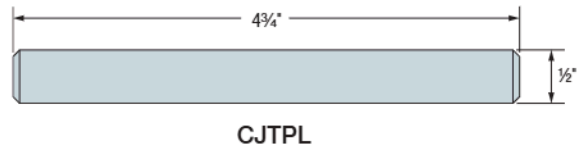
Model No.	Fasteners (SDCF Screws)					Allowable Loads						Code Ref.		
	Carried Beam		Carrying Column/Beam			DF/SP			SPF/HF					
	Beam Seat	Bearing Reinforcement	Bottom Horizontal	Inclined	Top Horizontal	Uplift (160)	Download (100/125)		F ₂ (160)	Uplift (160)	Download (100/125)		F ₂ (160)	
							Column	Beam			Column			Beam
HSKP5.75x14.5	(2) 27614	—	(6) 27614	(8) 27614	(6) 22858	3,190	22,415	21,260	3,640	2,410	17,700	17,815	3,050	
	(2) 27614	—	(6) 27400	(8) 27614	(6) 22858		20,115	20,040			16,190	16,230		
HSKP5.75x17	(2) 27614	(2) 22858	(6) 27614	(12) 27614	(6) 22858	3,190	26,800	26,090	3,640	2,410	22,080	21,935	3,050	
	(2) 27614	(2) 22858	(6) 27400	(12) 27614	(6) 22858		24,505	24,140			20,570	20,350		
HSKP5.75x19.5	(2) 27614	(4) 22858	(6) 27614	(16) 27614	(6) 22858	3,190	31,930	30,915	3,640	2,410	26,460	26,055	3,050	
	(2) 27614	(4) 22858	(6) 27400	(16) 27614	(6) 22858		28,960	29,700			24,950	24,470		

1. Uplift and F₂ loads have been increased for wind or seismic with no further increase allowed; reduce where other loads govern.
2. For HSKP installations on opposite faces (back-to-back) of the same supporting member, the minimum depth of the supporting member is 12 1/4" when installing the SDCF27614 (6 1/4" long) bottom horizontal screws and 8 3/4" when installing the SDCF27400 (4" long) bottom horizontal screws.
3. **Fasteners:** SDCF27400 and SDCF27614 = 0.390" O.D. by 4" long and 6 1/4" long Strong-Drive® SDCF TIMBER-CF screw, respectively. SDCF22858 = 0.315" O.D. by 8 3/4" long Strong-Drive SDCF TIMBER-CF screw.

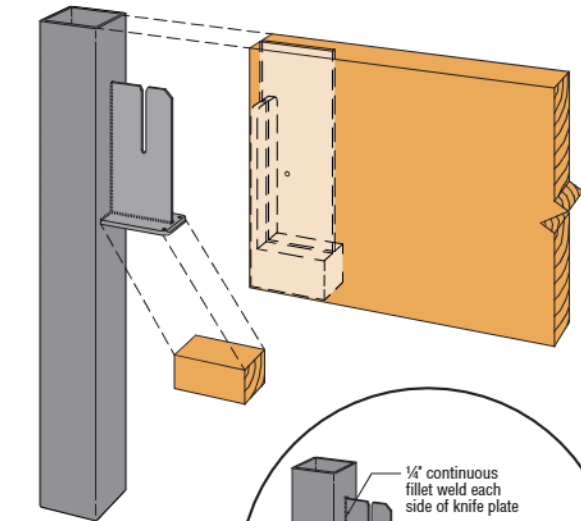


Strong-Drive® SDCF TIMBER-CF Screw

- SDCF22858 = 0.315" O.D. by 8 3/4" (220 mm) long
- SDCF27614 = 0.390" O.D. by 6 1/4" (160 mm) long
- SDCF27400 = 0.390" O.D. by 4" (100 mm) long



Typical Beam-to-Column Installation



Typical HSKP-W Welded Installation

For welded connections, visit strongtie.com/HSKP