

Universal Joist Hanger

Floor joist connection to structural steel beams or CFS headers

The Universal Joist Hangers (UJH) 68mils (14ga) are used to connect joists to CFS headers (with screws, welds or PAF fasteners) and steel I-beams (with welds or PAF fasteners). The UJH is sized to fit joist sizes from 8" to 14" deep. Also available in 97mils (12ga).

PRODUCT DIMENSIONS

Dimensions: 4" x 7-1/2" long

Packaging: (25) pieces per bucket

MATERIAL SPECIFICATIONS

Gauge: 14 gauge (68mil)

Design Thickness: 0.0713 inches

Yield Strength: Structural Grade 50
Type H (ST50H), 50ksi

Coating: G90

ASTM: A1003, ASTM A653

Gauge: 12 gauge (97mil)

Design Thickness: 0.1017 inches

Yield Strength: Structural Grade 50
Type H (ST50H), 50ksi

Coating: G90

ASTM: A1003, ASTM A653

INSTALLATION

Clip to Joist Attachment:

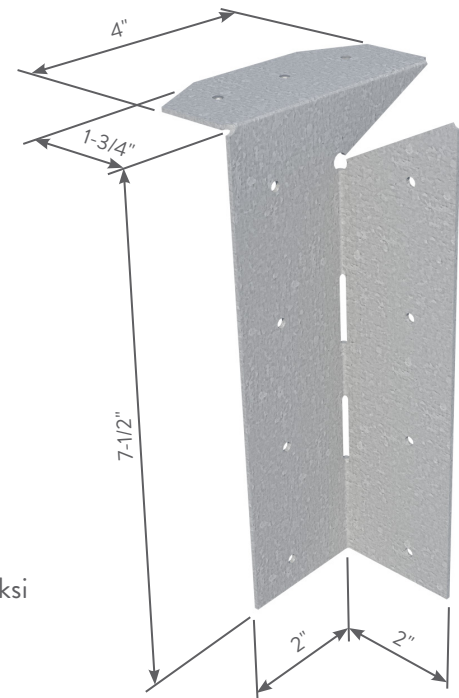
- The joist flange must rest on top of the Universal Joist Hanger as shown in the image to the right. Attach the UJH hanger with specified number of #10 or #14 screws as listed in the table below under the Joist column.

Clip attachment to CFS Header:

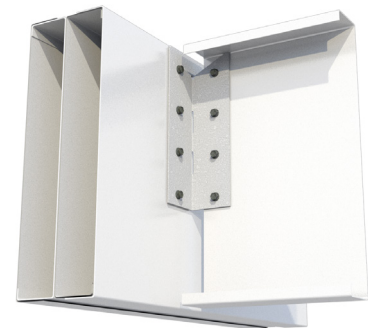
- Attach the UJH hanger to the top and side (face) of the CFS Header with specified number of #10 screws as listed in the table below.

Clip attachment to Structural/Steel Beam

- Welded Connection:**
The minimum required weld to the top flange is 2" fillet weld to each side of top flange. Special considerations must be taken when welding galvanized steel.
- PAF (Powder Actuated Fasteners):**
For powder actuated fasteners attachment (PAF, 0.157"), steel beam shall have minimum 3/16" thickness and minimum yield strength of 36ksi.



UJH-68



Universal Joist Hanger (UJH)

Product code	Thickness		Packaging Pcs./Bucket
	Mils (Gauge)	Design thickness (in)	
UJH-68	68mil (14ga)	0.0713"	50
UJH-97	97mil (12ga)	0.1017"	50

UJH-68 Mils (14ga)

ALLOWABLE HANGER LOADS

Product code	Joist (Ga)	Header (Ga)	Fasteners			Allowable ASD Loads (lbs)	
			Top	Face	Joist	Uplift	Down
ATTACHMENT TO CFS HEADER							
UJH-68	18	16	2 - #10	2 - #10	2 - #10	430	473
			3 - #10	4 - #10	4 - #10	860	946
			3 - #10	7 - #10	7 - #10	860	1021
	16	16	2 - #10	2 - #10	2 - #10	789	789
			3 - #10	4 - #10	4 - #10	1548	1548
			3 - #10	7 - #10	7 - #10	1548	1705
	14	14	2 - #10	2 - #10	2 - #10	852	935
			3 - #10	4 - #10	4 - #10	1639	1798
			3 - #10	7 - #10	7 - #10	2077	2115
	12	12	2 - #10	2 - #10	2 - #10	906	1035
			3 - #10	4 - #10	4 - #10	1710	1953
			3 - #10	7 - #10	7 - #10	2536	3026

ATTACHMENT TO STEEL HEADER							
UJH-68	18	2" long fillet [Weld to each side of top flange]		2 - #10	132	788	
				4 - #10	263	975	
				7 - #10	298	975	
	16		2 - #10	132	997		
			4 - #10	263	1148		
			7 - #10	334	1148		
	14		2 - #10	132	997		
			4 - #10	263	1148		
			7 - #10	334	1148		
	12		2 - #10	132	1035		
			4 - #10	263	1285		
			7 - #10	334	1285		
	18		2 x 0.157" PAF	2 - #10	126	784	
			3 x 0.157" PAF	4 - #10	136	869	
				7 - #10	136	869	
	16		2 x 0.157" PAF	2 - #10	132	965	
			3 x 0.157" PAF	4 - #10	171	1117	
				7 - #10	171	1117	
	14		2 x 0.157" PAF	2 - #10	132	965	
			3 x 0.157" PAF	4 - #10	171	1117	
				7 - #10	171	1117	
	12		2 x 0.157" PAF	2 - #10	132	1035	
			3 x 0.157" PAF	4 - #10	241	1279	
				7 - #10	241	1304	

Notes:

- 1 Screws shall be installed through the pre-drilled holes in the hanger or as detailed by the designer.
- 2 CFS joist shall be laterally braced per designer specification.
- 3 For a gap between the end of the joist and the face of the hanger ranging between 0" - 1/2", no adjustment factor is required. When the gap is between 1/2" and 7/8", an adjustment factor of 0.95 shall be used to the load capacities listed.
- 4 For skew condition up to 45°, an adjustment factor of 0.95 for 7-screw condition and 0.80 for 4-screw condition shall be used. No skew is allowed for 2-screw connection.
- 5 If the clip is installed hard side (exterior web) of CFS joist, an adjustment factor of 0.95 shall be used to the load capacities listed. In addition, if the clip has to be skewed up to 45°, an additional adjustment factor of 0.95 for 7-screw condition and 0.80 for 4-screw condition shall be used to the load capacities listed.
- 6 CFS header must be braced to prevent web crippling/buckling per designer specification.
- 7 CFS header must provide full bearing of 1-5/8" flange-depth.
- 8 Backing of the steel beam cavity is not required behind the hanger for the load listed.
- 9 The ultimate screw shear strength for #10 screws shall be at least 1644 lbs.
- 10 The screw shear strength capacities are based on CFSEI Tech Note (F701-12).
- 11 Allowable loads have not been increased for seismic or wind.
- 12 Contact ClarkDietrich Engineering Services for technical assistance.

Universal Joist Hanger

UJH-97 Mils (12ga)

ALLOWABLE HANGER LOADS

Product code	Joist (Ga)	Header (Ga)	Fasteners			Allowable ASD Loads (lbs)	
			Top	Face	Joist	Uplift	Down
ATTACHMENT TO CFS HEADER							
UJH-97	18	16	2 - #10	2 - #10	2 - #14	439	489
			3 - #10	4 - #10	4 - #14	860	959
			3 - #10	7 - #14	7 - #14	958	1021
	16	16	2 - #10	2 - #10	2 - #14	940	940
			3 - #10	4 - #10	4 - #14	1773	1773
			3 - #10	7 - #14	7 - #14	1773	1931
	14	14	2 - #10	2 - #10	2 - #14	1123	1327
			3 - #10	4 - #10	4 - #14	2041	2413
			3 - #10	7 - #14	7 - #14	2388	2445
	12	12	2 - #10	2 - #10	2 - #14	1238	1898
			3 - #10	4 - #10	4 - #14	2135	3273
			3 - #10	7 - #14	7 - #14	4092	4350

ATTACHMENT TO STEEL HEADER							
UJH-97	18	2" long fillet [Weld to each side of top flange]		2 - #14	201	837	
				4 - #14	401	975	
				7 - #14	431	975	
	16		2 - #14	201	1472		
			4 - #14	401	1570		
			7 - #14	577	1696		
	14		2 - #14	201	1472		
			4 - #14	401	1570		
			7 - #14	577	1696		
	12		2 - #14	201	1651		
			4 - #14	401	1738		
			7 - #14	598	1761		
	18		2 x 0.157" PAF	2 - #14	201	890	
			3 x 0.157" PAF	4 - #14	252	890	
				7 - #14	252	890	
	16		2 x 0.157" PAF	2 - #14	201	1380	
			3 x 0.157" PAF	4 - #14	332	1626	
				7 - #14	332	1626	
	14		2 x 0.157" PAF	2 - #14	201	1380	
			3 x 0.157" PAF	4 - #14	332	1626	
				7 - #14	332	1626	
	12		2 x 0.157" PAF	2 - #14	201	1644	
			3 x 0.157" PAF	4 - #14	367	1730	
				7 - #14	367	1812	

Notes:

- 1 Screws shall be installed through the pre-drilled holes in the hanger or as detailed by the designer.
- 2 CFS joist shall be laterally braced per designer specification.
- 3 For a gap between the end of the joist and the face of the hanger ranging between 0" - 7/8", no adjustment factor is required.
- 4 For skew condition up to 45°, an adjustment factor of 0.85 for 7-screw condition and 0.90 for 4-screw condition shall be used. No skew is allowed for 2-screw connection.
- 5 If the clip is installed hard side (exterior web) of CFS joist, no adjustment factor is required.
- 6 CFS header must be braced to prevent web crippling/buckling per designer specification.
- 7 CFS header must provide full bearing of 1-5/8" flange-depth.
- 8 Backing of the steel beam cavity is not required behind the hanger for the load listed.
- 9 The ultimate screw shear strength for #14 screws shall be at least 3048 lbs.
- 10 The screw shear strength capacities are based on CFSEI Tech Note (F701-12).
- 11 Allowable loads have not been increased for seismic or wind.
- 12 Contact ClarkDietrich Engineering Services for technical assistance.