

Skewable Angle

For rigid and off-angle attachments of joist-to-joist, joist-to-hip beam, or to other structural steel members.

ClarkDietrich Skewable Angles are used to make rigid attachments of joist-to-joist or joist-to-other-miscellaneous framing. This clip is ideal for making off-angle connections. It is easily field bent from 0° to 90°.

CAUTION: This clip can only be bent one time.

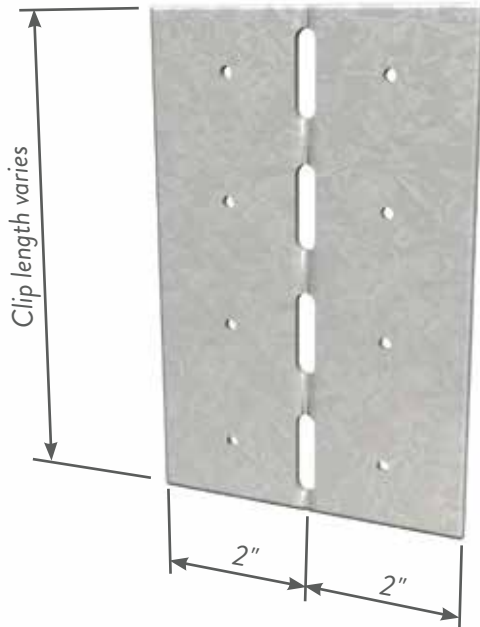
MATERIAL SPECIFICATIONS

- Gauge:** 18 gauge (43mil)
- Design Thickness:** 0.0451 inches
- Yield Strength:** 50ksi
- Coating:** G90
- ASTM:** A653/A1003

PRODUCT DIMENSIONS

LEGS: 2" x 2"

CLIP LENGTHS: 3", 4-3/8", 5", 6-7/8", 7", 9"



INSTALLATION

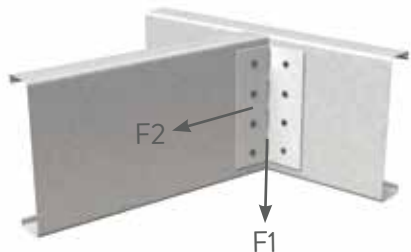
Use specified fasteners. For off-angle connections, field bend (ONE TIME ONLY) to the required degree so the Skewable Angle fits securely over the two adjoining members. Secure the Skewable Angle by filling all prepunched screw hole with #10 screws or as required by design. Joist must be constrained against rotation when using a single Skewable Angle per connection.

Skewable Angle

Product code	Size (in)	Thickness			Packaging Pcs./Carton
		Gauge	Mils	Design Thickness (in)	
SA3	3"	18	43	0.0451	100
SA4	4-7/8"				
SA5	5"				
SA6	6-3/8"				
SA7	7"				
SA9	9"				

Skewable Angle Allowable Loads

Designation	Stud thickness ga (mils)	Length (in)	Fasteners	Allowable Loads (lbs)	
				Shear (F1)	Tension (F2)
SA3 18ga (43mil)	20ga (33mil)	3.000	6 - #10	339	251
	18ga (43mil)			372	328
	16ga (54mil)			372	594
	14ga (68mil)			372	677
	12ga (97mil)			372	677
SA4 18ga (43mil)	20ga (33mil)	4.375	6 - #10	339	251
	18ga (43mil)			505	328
	16ga (54mil)			512	594
	14ga (68mil)			512	748
	12ga (97mil)			512	930
SA5 18ga (43mils)	20ga (33mil)	5.000	8 - #10	510	335
	18ga (43mil)			744	437
	16ga (54mil)			744	792
	14ga (68mil)			744	998
	12ga (97mil)			744	1353
SA6 18ga (43mils)	20ga (33mil)	6.375	10 - #10	690	419
	18ga (43mil)			884	546
	16ga (54mil)			884	990
	14ga (68mil)			884	1247
	12ga (97mil)			884	1607
SA7 18ga (43mils)	20ga (33mil)	7.000	10 - #10	690	419
	18ga (43mil)			1027	546
	16ga (54mil)			1116	990
	14ga (68mil)			1116	1247
	12ga (97mil)			1116	1779
SA9 18ga (43mils)	20ga (33mil)	9.000	14 - #10	1061	587
	18ga (43mil)			1116	765
	16ga (54mil)			1116	1386
	14ga (68mil)			1116	1746
	12ga (97mil)			1116	2030



Notes:

- 1 Screws shall be attached through the pre-drilled holes provided.
- 2 The allowable values for F1 and F2 are to be used only when the clip leg is attached to cold-formed steel framing. The capacity of the attachment to other materials and structures must be checked separately.
- 3 This table is intended for use by a qualified design professional. It is the responsibility of the engineer to verify that the tabulated values apply to a specific connection application. The 1/8-in deflection service load limit is not included in the listed tension (F2) capacities.
- 4 Values for 18ga (43 mil) skewable angles were based on using 33 ksi calculations for worst case. These angles are manufactured using 50 ksi.
- 5 The ultimate screw shear strength and tensile strength for #10 screws should be at least 1644 lbs and 1158 lbs respectively. These shear and tensile capacities of #10 screws are based on CFSEI Tech Note (F701-12).
- 6 Allowable loads have not been increased for seismic or wind.
- 7 Contact ClarkDietrich Engineering Services for technical assistance.

Typical Construction Details

Visit our CAD Library at itools.clarkdietrich.com to view or download construction details in .dwg, .dxf, and .pdf formats.

