

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 attachments. It is easily field bent from 0° to 90°.

CAUTION: This clip can only be bent one time.

PRODUCT DIMENSIONS

Legs: 2" x 2"

Clip Lengths: 3", 4-3/8", 5", 6-3/8", 7", 9"

MATERIAL SPECIFICATIONS

Gauge: 18 gauge (43mils)

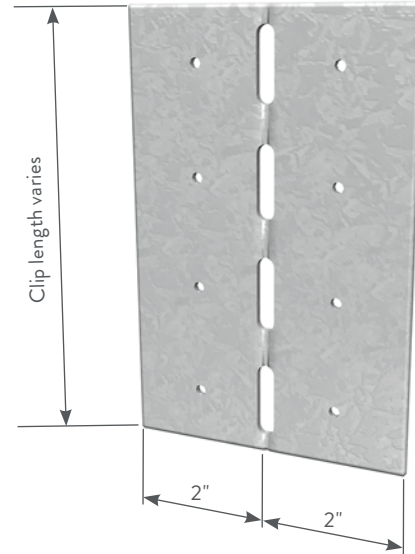
Design Thickness: 0.0451 inches

Coating: G90

ASTM: A653/A1003

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 holes with #10 screws or as required by design. Joist must be constrained against rotation when using a single Skewable Angle per connection.

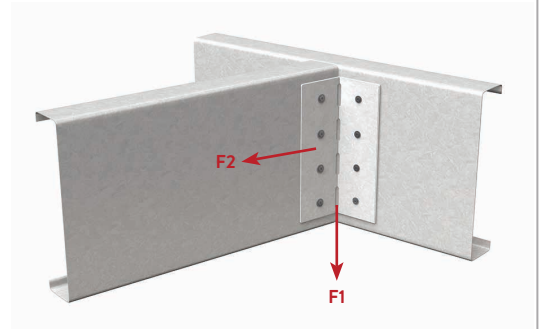


Skewable Angles (SA)

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

Skewable Angle Allowable Loads

Product code	Stud thickness Mils (Gauge)	Length (in)	Fasteners	Allowable Loads (lbs)	
				Shear (F1)	Tension (F2)
SA3	33mils (20ga)	3.000	6 - #10	339	251
	43mils (18ga)			372	328
	54mils (16ga)			372	594
	68mils (14ga)			372	677
	97mils (12ga)			372	677
SA4	33mils (20ga)	4.375	6 - #10	339	251
	43mils (18ga)			505	328
	54mils (16ga)			512	594
	68mils (14ga)			512	748
	97mils (12ga)			512	930
SA5	33mils (20ga)	5.000	8 - #10	510	335
	43mils (18ga)			744	437
	54mils (16ga)			744	792
	68mils (14ga)			744	998
	97mils (12ga)			744	1353
SA6	33mils (20ga)	6.375	10 - #10	690	419
	43mils (18ga)			884	546
	54mils (16ga)			884	990
	68mils (14ga)			884	1247
	97mils (12ga)			884	1607
SA7	33mils (20ga)	7.000	10 - #10	690	419
	43mils (18ga)			1027	546
	54mils (16ga)			1116	990
	68mils (14ga)			1116	1247
	97mils (12ga)			1116	1779
SA9	33mils (20ga)	9.000	14 - #10	1061	587
	43mils (18ga)			1116	765
	54mils (16ga)			1116	1386
	68mils (14ga)			1116	1746
	97mils (12ga)			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 mils) 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](http://itools.clarkdietrich.com) to view or download construction details in .dwg, .dxf, and .pdf formats.

