

EasyClip™ QuickTwist™ Web Stiffener

Excellent reinforcement at critical load points to prevent web crippling.

ClarkDietrich EasyClip™ QuickTwist™ web stiffeners are used to provide reinforcement of joist webs to prevent crippling. Web reinforcement is often required by design to enhance the load capacity of joists. The unique design of QTWS allows the installer to easily insert the stiffener on the inside of the joist *after* the joist is installed. This stiffener eliminates the need to pre-insert traditional web stiffeners prior to joist installation. The one-piece assembly is easily rotated in-place for a tight fit.

PRODUCT DIMENSIONS

3-1/2" x 6"-14" x 1-1/4"

6" x 6"-14" x 1-1/4"

MATERIAL SPECIFICATIONS

Gauge: 12 gauge (97mils)

Design Thickness: 0.1017 inches

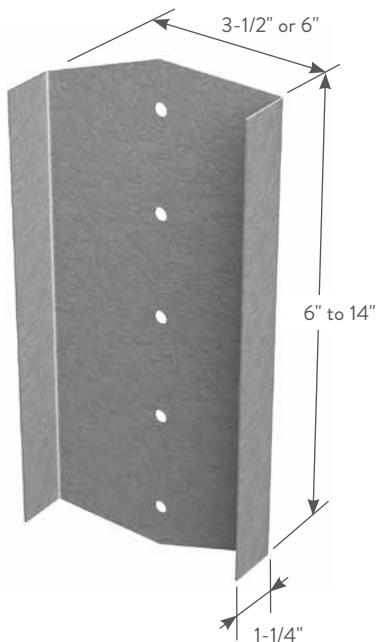
Coating: G90

Yield Strength: 50ksi

ASTM: A653/A653M

INSTALLATION

The unique design of the EasyClip QuickTwist web stiffener allows it to be easily rotated in-place for a tight fit between flanges. The web stiffener shall be secured to the web of the joist with (3) #10-16 screws. Screws shall be driven through the top, bottom and middle prepunched holes as shown in the illustrations.



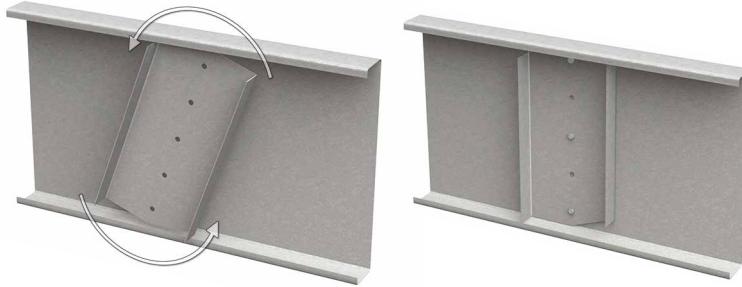
EasyClip™ QuickTwist™ Web Stiffeners (QTWS)

Product code	Size (in) width	Thickness		Size* (in) length	Packaging
		Mils (Gauge)	Design thickness (in)		
QTWS	3-1/2	97mils (12ga)	0.1017	6**	Dependent on order quantity
				7-1/4	
				8	
				9-1/4	
				10	
				11-1/4	
				12	
				14	
QTWS	6	97mils (12ga)	0.1017	6**	Dependent on order quantity
				7-1/4	
				8	
				9-1/4	
				10	
				11-1/4	
				12	
				14	

*Dimension is nominal size. Actual product is shorter to fit inside joist.

**Load data is not available for 6" length.

Note: The QTWS is designed to work with all floor joist flanges but the length of the QTWS clip shall match the depth of the supporting floor joist.



QTWS Allowable Web Crippling Loads (lbs)

Joist size (in)	Joist Mils (gauge)	Fy (ksi)	3-1/2" Web Stiffener			6" Web Stiffener		
			Cond. 1	Cond. 2	Cond. 3	Cond. 1	Cond. 2	Cond. 3
7.25	43 (18)	33	5,360	5,781	5,659	5,932	6,403	6,265
	54 (16)	33	5,457	6,155	5,924	6,042	6,817	6,558
	50	5,574	6,632	6,282	6,177	7,351	6,959	
	68 (14)	33	5,615	6,761	6,346	6,220	7,482	7,021
	50	5,813	7,550	6,921	6,447	8,359	7,660	
	33	6,074	8,524	7,559	6,733	9,401	8,340	
	50	6,509	10,222	8,759	7,224	11,267	9,659	
	43 (18)	33	5,350	5,752	5,645	5,920	6,370	6,249
8	54 (16)	33	5,443	6,116	5,905	6,027	6,773	6,537
	50	5,553	6,573	6,253	6,153	7,285	6,926	
	68 (14)	33	5,596	6,708	6,320	6,200	7,424	6,992
	50	5,786	7,470	6,882	6,416	8,270	7,617	
	33	6,045	8,438	7,516	6,700	9,307	8,293	
9.25	97 (12)	50	6,465	10,092	8,694	7,174	11,124	9,588
	43 (18)	33	5,334	5,707	5,623	5,902	6,320	6,224
	54 (16)	33	5,422	6,056	5,875	6,002	6,706	6,503
	50	5,521	6,481	6,208	6,116	7,182	6,876	
	68 (14)	33	5,568	6,626	6,279	6,167	7,332	6,947
10	50	5,742	7,345	6,820	6,366	8,132	7,548	
	33	5,999	8,304	7,450	6,649	9,159	8,220	
	50	6,396	9,888	8,594	7,096	10,900	9,477	
	54 (16)	33	5,410	6,021	5,858	5,988	6,667	6,484
	50	5,503	6,429	6,182	6,095	7,124	6,847	
11.25	68 (14)	33	5,552	6,579	6,256	6,148	7,280	6,922
	50	5,718	7,275	6,785	6,338	8,053	7,510	
	33	5,973	8,228	7,412	6,619	9,076	8,179	
	50	6,356	9,773	8,537	7,052	10,773	9,415	
	97 (12)	50	6,294	9,590	8,447	6,981	10,573	9,316
12	54 (16)	33	5,391	5,967	5,831	5,966	6,606	6,454
	50	5,474	6,347	6,141	6,062	7,032	6,802	
	68 (14)	33	5,526	6,505	6,220	6,119	7,198	6,881
	50	5,679	7,163	6,730	6,294	7,929	7,448	
	33	5,932	8,108	7,353	6,573	8,943	8,114	
14	50	6,294	9,590	8,447	6,981	10,573	9,316	
	54 (16)	33	5,380	5,936	5,816	5,954	6,571	6,437
	50	5,457	6,300	6,118	6,043	6,979	6,775	
	68 (14)	33	5,511	6,463	6,199	6,102	7,151	6,858
	50	5,657	7,099	6,699	6,268	7,858	7,413	
14	33	5,908	8,039	7,319	6,547	8,867	8,076	
	50	6,258	9,486	8,395	6,941	10,458	9,259	
	68 (14)	33	5,474	6,356	6,146	6,060	7,033	6,800
	50	5,601	6,937	6,619	6,204	7,678	7,325	
	97 (12)	50	5,849	7,865	7,233	6,480	8,677	7,982
	33	5,849	7,865	7,233	6,265	6,840	10,169	9,116

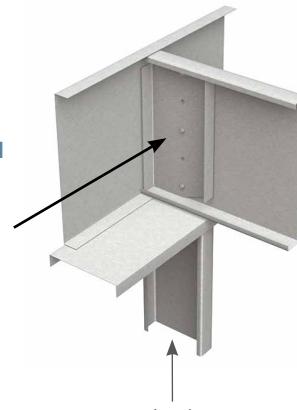
*Load data is not available for 6" length.

Notes:

- The tabulated values indicate the total allowable web crippling capacities of a ClarkDietrich joist of the listed size, stiffened with the QuickTwist web stiffener.
- The joist flanges must be fastened to the support at the bearing location.
- The 3-1/2" web stiffeners are to be used with bearing widths of 3-1/2" to 5-1/2" in the direction of the joist. The 6" web stiffeners are to be used with bearing widths 6" and greater, in the direction of the joist. A minimum-bearing dimension of 3" in the direction perpendicular to the joist is assumed.
- Use (3) #10 screws to attach the QuickTwist web stiffener to the joist. Drive screws through the top, bottom, and middle prepunched holes.
- This table is intended for use by qualified engineers only. It is the responsibility of the engineer to verify that the QuickTwist web stiffener configuration and tabulated values apply to a specific web crippling application.
- Contact ClarkDietrich at 888-437-3244 for technical assistance.

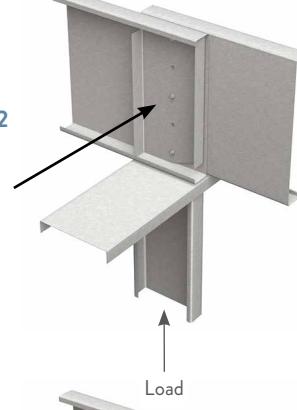
CONDITION 1

(3) #10-16 screws, top, bottom, and middle holes



CONDITION 2

(3) #10-16 screws, top, bottom, and middle holes



CONDITION 3

(3) #10-16 screws, top, bottom, and middle holes

