

Spazzer® 5400 Spacer Bar, Bar Guard™ & Grommet

Engineered to facilitate the rapid erection of exterior curtain wall framing

ClarkDietrich TradeReady® Spazzer® 5400 (16ga and 18ga) spacer bar is a pre-notched, galvanized steel spacer and bridging bar, engineered to facilitate the rapid, efficient erection of exterior curtain wall framing, load-bearing walls and high interior partitions constructed of structural studs. Until now, most bridging in steel studs was accomplished with cold-rolled channel that required bridging clips or welding. The Spazzer bridging bar features proprietary prepunched slots that enable faster installation by eliminating the need for a separate clip angle, while providing excellent torsional and lateral stud restraint. Up to 90% faster installation when used in non-loadbearing application. The Spazzer Bar Guard™ retainer clip or the Spazzer snap-in grommet should be used to secure the Spazzer bar when used in load-bearing applications.

ALTERNATIVE PRODUCTS

U-Channel with EasyClip™ U-Series™, U-Channel with SwiftClip™ LS-Series™ Support Clip, U-Channel with FastBridge Clip, Block and Strap

PRODUCT DIMENSIONS

1-1/4" x 1-1/4" x 50"

MATERIAL SPECIFICATIONS

Gauge: 16 gauge (54mils)

Design Thickness: 0.0566 inches

Gauge: 18 gauge (43mils)

Design Thickness: 0.0451 inches

Coating: CP60

Yield Strength: 50ksi

ASTM: A653/A653M, C955

Spazzer® 5400 Spacer Bar (SPZS)

Product Code	Thickness		Size (in)	Packaging	
	mils (ga)	Design Thickness (in)		Pcs./Carton	Pcs./Skid
SPZS-54	54 (16)	0.0566	1-1/4 x 1-1/4 x 50	20	680
SPZS-43	43 (18)	0.0451	1-1/4 x 1-1/4 x 50	20	680

Spazzer® Bar Guard™ (SPBG) and Spazzer® Grommet (SPGR)

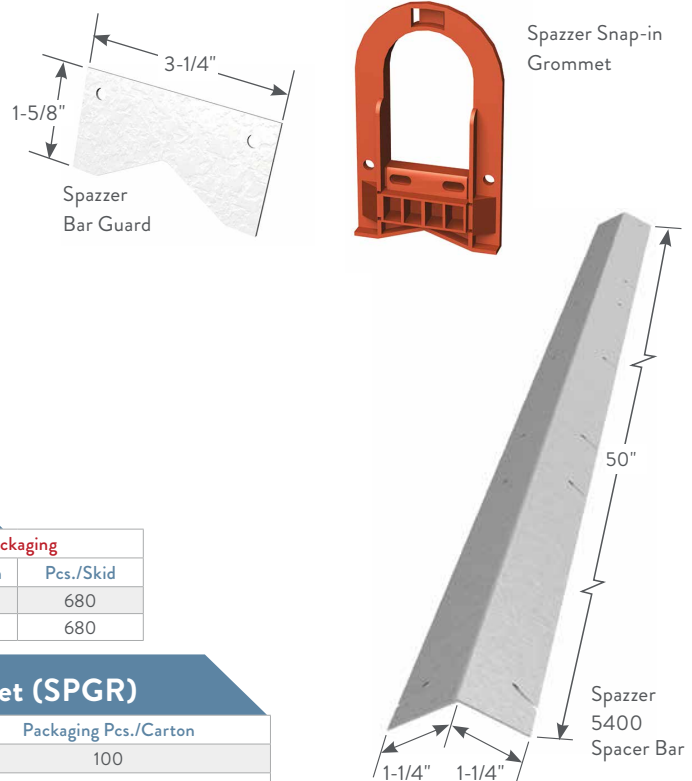
Product Code	Size (in)	Packaging Pcs./Carton
SPBG	3-1/4 x 1-5/8	100
SPGR	1-1/2 x 4	100

LOAD-BEARING WALL INSTALLATION

The TradeReady Spazzer bar is passed through the stud knockouts and rotated 90° into position, engaging each side of the knockout. For load-bearing studs, the Spazzer bar guard bar retainer clip and the Spazzer snap-in grommet both require screws to keep the bar in place. The TradeReady Spazzer bar should be installed at a maximum 4' o.c. vertically or per specification. The Spazzer 5400 is not designed for use with 12ga and heavier structural studs and should not be used in studs over 8" wide.

NONLOAD-BEARING WALL INSTALLATION

The TradeReady Spazzer bar is passed through the stud knockouts and rotated 90° into position, engaging each side of the knockout. For 20 gauge studs, the Spazzer bar guard retainer clip and the Spazzer snap-in grommet both require screws to keep the bar in place. The TradeReady Spazzer bar should be installed at maximum 5' o.c. vertically or per specification. The Spazzer 5400 is not designed for use with 12ga and heavier structural studs and should not be used in studs over 8" wide.



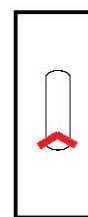
Spazzer® 5400 Spacer Bar (16ga)

Spazzer® 5400 Spacer Bar Connection Strength and Stiffness

Product Code	Stud Depth (in)	Allowable Capacities	Stud Thickness mils (ga)			
			33mils (20ga)	43mils (18ga)	54mils (16ga)	68mils (14ga)
SPZS54	3-5/8	Brace stiffness (lbs/in)	1320	1984	2792	3120
		Brace strength (lbs)	310	420	570	570
		Torsional Moment (in-lbs)	325	400	535	630
	6	Brace stiffness (lbs/in)	920	1680	2240	2400
		Brace strength (lbs)	300	400	555	555
		Torsional Moment (in-lbs)	265	365	610	705
	8	Brace stiffness (lbs/in)	–	1080	1440	2176
		Brace strength (lbs)	–	395	525	525
		Torsional Moment (in-lbs)	–	405	560	680

Notes:

- 1 Allowable loads are based on the use of cold-formed steel studs with a minimum yield strength, $F_y=33$ ksi and tensile strength, $F_u=45$ ksi for 43mils (18ga) or thinner and a minimum yield strength, $F_y=50$ ksi and tensile strength, $F_u=65$ ksi for 54mils (16ga) or thicker.
- 2 Allowable loads are based on 54mils (16ga) 5400 Spazzer Bar with a minimum yield strength, $F_y=50$ ksi and tensile strength, $F_u=65$ ksi.
- 3 Allowable loads are for the bridging connection only. The strength and serviceability of the framing members is the responsibility of the designer.
- 4 Allowable loads may not be increased for wind or seismic load.
- 5 Allowable loads are for use when using ASD design methodology. For LRFD loads, multiply ASD allowable loads by 1.6.
- 6 Allowable brace loads are based on ultimate test loads divided by a safety factor. Serviceability limits are not considered. Brace stiffness requirements are detailed in AISI S100 Section D3.3.
- 7 Axial brace stiffness values apply to both ASD and LRFD designs.
- 8 Listed Spazzer Bar capacities are based on Spazzer Bar fully seated in the bottom of the stud knockout as shown in Figure-1.

**Figure-1**

Spazzer® 5400 Spacer Bar Maximum Bridging Distance (ft.)

Product Code	Stud Spacing (in)	Stud Section (in)	Stud Thickness mils (ga)	Lateral Stud Pressure (psf)									
				5	10	15	20	25	30	35	40	45	50
SPZS54	12	362S162	33 (20)	8	8	8	8	7	5	5	4	4	—
			43 (18)	8	8	8	8	8	7	6	5	5	4
			54 (16)	8	8	8	8	8	8	8	7	6	6
			68 (14)	8	8	8	8	8	8	8	8	7	7
		362S200	33 (20)	8	8	8	6	5	4	4	—	—	—
			43 (18)	8	8	8	8	6	5	4	4	—	—
			54 (16)	8	8	8	8	8	7	6	5	5	4
			68 (14)	8	8	8	8	8	8	7	6	6	5
		600S162	33 (20)	8	8	8	8	6	5	4	4	—	—
			43 (18)	8	8	8	8	8	7	6	5	5	4
			54 (16)	8	8	8	8	8	8	8	8	8	7
			68 (14)	8	8	8	8	8	8	8	8	8	8
		600S200	33 (20)	8	8	8	6	5	4	—	—	—	—
			43 (18)	8	8	8	8	7	5	5	4	4	—
			54 (16)	8	8	8	8	8	8	8	7	6	6
			68 (14)	8	8	8	8	8	8	8	8	7	6
		800S162	43 (18)	8	8	8	8	8	8	8	7	6	5
			54 (16)	8	8	8	8	8	8	8	8	8	8
			68 (14)	8	8	8	8	8	8	8	8	8	8
			43 (18)	8	8	8	8	8	7	6	5	4	4
		800S200	54 (16)	8	8	8	8	8	8	8	7	6	6
			68 (14)	8	8	8	8	8	8	8	8	8	7
	16	362S162	33 (20)	8	8	8	6	5	4	4	—	—	—
			43 (18)	8	8	8	8	6	5	4	4	—	—
			54 (16)	8	8	8	8	8	7	6	5	5	4
			68 (14)	8	8	8	8	8	8	7	6	5	5
		362S200	33 (20)	8	8	6	5	4	—	—	—	—	—
			43 (18)	8	8	8	6	5	4	—	—	—	—
			54 (16)	8	8	8	8	6	5	5	4	4	—
			68 (14)	8	8	8	8	6	5	5	5	4	4
		600S162	33 (20)	8	8	8	6	5	4	—	—	—	—
			43 (18)	8	8	8	8	7	5	5	4	4	—
			54 (16)	8	8	8	8	8	8	8	7	6	6
			68 (14)	8	8	8	8	8	8	8	8	7	6
		600S200	33 (20)	8	8	6	4	4	—	—	—	—	—
			43 (18)	8	8	8	6	5	4	—	—	—	—
			54 (16)	8	8	8	8	8	7	6	5	5	4
			68 (14)	8	8	8	8	8	8	7	6	5	5
		800S162	43 (18)	8	8	8	8	8	7	6	5	4	4
			54 (16)	8	8	8	8	8	8	8	7	6	6
			68 (14)	8	8	8	8	8	8	8	8	8	7
			43 (18)	8	8	8	7	6	5	4	4	—	—
		800S200	54 (16)	8	8	8	8	8	7	6	5	5	4
			68 (14)	8	8	8	8	8	8	7	6	6	5
	24	362S162	33 (20)	8	8	5	4	—	—	—	—	—	—
			43 (18)	8	8	7	5	4	—	—	—	—	—
			54 (16)	8	8	8	7	6	5	4	—	—	—
			68 (14)	8	8	8	8	7	5	5	4	4	—
		362S200	33 (20)	8	6	4	—	—	—	—	—	—	—
			43 (18)	8	8	5	4	—	—	—	—	—	—
			54 (16)	8	8	7	5	4	4	—	—	—	—
			68 (14)	8	8	8	6	5	4	4	—	—	—
		600S162	33 (20)	8	8	5	4	—	—	—	—	—	—
			43 (18)	8	8	7	5	4	4	—	—	—	—
			54 (16)	8	8	8	8	7	6	5	5	4	4
			68 (14)	8	8	8	8	8	7	6	5	5	4
		600S200	33 (20)	8	6	4	—	—	—	—	—	—	—
			43 (18)	8	8	5	4	—	—	—	—	—	—
			54 (16)	8	8	8	7	6	5	4	—	—	—
			68 (14)	8	8	8	8	6	5	5	4	4	—
		800S162	43 (18)	8	8	8	7	5	4	4	—	—	—
			54 (16)	8	8	8	8	8	6	5	5	4	4
			68 (14)	8	8	8	8	8	8	7	6	5	5
			43 (18)	8	8	7	5	4	—	—	—	—	—
		800S200	54 (16)	8	8	8	7	6	5	4	—	—	—
			68 (14)	8	8	8	8	7	6	5	4	4	—

Notes:

- 1 Tabulated maximum bridging distances are for ASD lateral pressures.
- 2 Tabulated maximum bridging distances are based on the tested connection strength.
- 3 Studs must be checked for unbraced length separately.
- 4 Lateral pressures shall be determined based on the load combinations of the applicable building code.
- 5 For designs using 2009 IBC and earlier, wind pressures are at the working stress level and may be used directly.
- 6 For designs using 2012 IBC and 2015 IBC, wind pressures are at the strength level and must be multiplies by 0.6 for ASD load combinations.

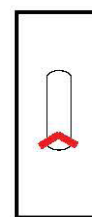
Spazzer® 5400 Spacer Bar (18ga)

Spazzer® 5400 Spacer Bar Connection Strength and Stiffness

Product Code	Stud Depth (in)	Allowable Capacities	Stud Thickness mils (ga)			
			33mils (20ga)	43mils (18ga)	54mils (16ga)	68mils (14ga)
SPZS43	3-5/8	Brace stiffness (lbs/in)	525	735	1160	1380
		Brace strength (lbs)	310	360	360	360
		Torsional Moment (in-lbs)	150	240	300	300
	6	Brace stiffness (lbs/in)	290	420	520	890
		Brace strength (lbs)	300	340	340	340
		Torsional Moment (in-lbs)	210	250	290	290
	8	Brace stiffness (lbs/in)	–	240	430	650
		Brace strength (lbs)	–	290	320	320
		Torsional Moment (in-lbs)	–	230	250	280

Notes:

- 1** Allowable loads are based on the use of cold-formed steel studs with a minimum yield strength, $F_y=33$ ksi and tensile strength, $F_u=45$ ksi for 43mils (18ga) or thinner and a minimum yield strength, $F_y=50$ ksi and tensile strength, $F_u=65$ ksi for 54mils (16ga) or thicker.
- 2** Allowable loads are based on 43mils (18ga) 4300 Spazzer Bar with a minimum yield strength, $F_y=33$ ksi and tensile strength, $F_u=45$ ksi.
- 3** Allowable loads are for the bridging connection only. The strength and serviceability of the framing members is the responsibility of the designer.
- 4** Allowable loads may not be increased for wind or seismic load.
- 5** Allowable loads are for use when using ASD design methodology. For LRFD loads, multiply ASD allowable loads by 1.6.
- 6** Allowable brace loads are based on ultimate test loads divided by a safety factor. Serviceability limits are not considered. Brace stiffness requirements are detailed in AISI S100 Section D3.3.
- 7** Axial brace stiffness values apply to both ASD and LRFD designs.
- 8** Listed Spazzer Bar capacities are based on Spazzer Bar fully seated in the bottom of the stud knockout as shown in Figure-1.

**Figure-1**

Spazzer® 5400 Spacer Bar Maximum Bridging Distance (ft.)

Product Code	Stud Spacing (in)	Stud Section (in)	Stud Thickness mils (ga)	Lateral Stud Pressure (psf)									
				5	10	15	20	25	30	35	40	45	50
SPZS43	12	362S162	33 (20)	8	8	5	4	-	-	-	-	-	-
			43 (18)	8	8	8	6	5	4	4	-	-	-
			54 (16)	8	8	8	8	6	5	4	4	-	-
			68 (14)	8	8	8	8	6	5	4	4	-	-
		362S200	33 (20)	8	6	4	-	-	-	-	-	-	-
			43 (18)	8	8	6	5	4	-	-	-	-	-
			54 (16)	8	8	8	6	5	4	-	-	-	-
			68 (14)	8	8	8	6	5	4	-	-	-	-
		600S162	33 (20)	8	8	8	6	5	4	4	-	-	-
			43 (18)	8	8	8	7	6	5	4	4	-	-
			54 (16)	8	8	8	8	7	6	5	4	4	-
			68 (14)	8	8	8	8	7	6	5	4	4	4
		600S200	33 (20)	8	8	6	5	4	-	-	-	-	-
			43 (18)	8	8	7	6	4	4	-	-	-	-
			54 (16)	8	8	8	7	5	4	4	-	-	-
			68 (14)	8	8	8	7	5	4	4	-	-	-
		800S162	43 (18)	8	8	8	8	6	5	4	4	-	-
			54 (16)	8	8	8	8	7	6	5	4	4	-
			68 (14)	8	8	8	8	8	6	5	5	4	4
			43 (18)	8	8	8	6	5	4	-	-	-	-
		800S200	54 (16)	8	8	8	6	5	4	4	-	-	-
			68 (14)	8	8	8	7	6	5	4	4	-	-
	16	362S162	33 (20)	8	6	4	-	-	-	-	-	-	-
			43 (18)	8	8	6	5	4	-	-	-	-	-
			54 (16)	8	8	8	6	5	4	-	-	-	-
			68 (14)	8	8	8	6	5	4	-	-	-	-
		362S200	33 (20)	8	4	-	-	-	-	-	-	-	-
			43 (18)	8	7	5	4	-	-	-	-	-	-
			54 (16)	8	8	6	4	4	-	-	-	-	-
			68 (14)	8	8	6	4	4	-	-	-	-	-
		600S162	33 (20)	8	8	6	5	4	-	-	-	-	-
			43 (18)	8	8	7	6	4	4	-	-	-	-
			54 (16)	8	8	8	7	5	4	4	-	-	-
			68 (14)	8	8	8	7	5	4	4	-	-	-
		600S200	33 (20)	8	7	5	-	-	-	-	-	-	-
			43 (18)	8	8	6	4	-	-	-	-	-	-
			54 (16)	8	8	7	5	4	-	-	-	-	-
			68 (14)	8	8	7	5	4	-	-	-	-	-
		800S162	43 (18)	8	8	8	6	5	4	-	-	-	-
			54 (16)	8	8	8	6	5	4	4	-	-	-
			68 (14)	8	8	8	7	6	5	4	4	-	-
			43 (18)	8	8	6	4	-	-	-	-	-	-
		800S200	54 (16)	8	8	6	5	4	-	-	-	-	-
			68 (14)	8	8	7	5	4	4	-	-	-	-
	24	362S162	33 (20)	8	4	-	-	-	-	-	-	-	-
			43 (18)	8	6	4	-	-	-	-	-	-	-
			54 (16)	8	8	5	4	-	-	-	-	-	-
			68 (14)	8	8	5	4	-	-	-	-	-	-
		362S200	33 (20)	6	-	-	-	-	-	-	-	-	-
			43 (18)	8	5	-	-	-	-	-	-	-	-
			54 (16)	8	6	4	-	-	-	-	-	-	-
			68 (14)	8	6	4	-	-	-	-	-	-	-
		600S162	33 (20)	8	6	4	-	-	-	-	-	-	-
			43 (18)	8	7	5	4	-	-	-	-	-	-
			54 (16)	8	8	6	4	-	-	-	-	-	-
			68 (14)	8	8	6	4	4	-	-	-	-	-
		600S200	33 (20)	8	5	-	-	-	-	-	-	-	-
			43 (18)	8	6	4	-	-	-	-	-	-	-
			54 (16)	8	7	4	-	-	-	-	-	-	-
			68 (14)	8	7	4	-	-	-	-	-	-	-
		800S162	43 (18)	8	8	5	4	-	-	-	-	-	-
			54 (16)	8	8	6	4	-	-	-	-	-	-
			68 (14)	8	8	6	5	4	-	-	-	-	-
			43 (18)	8	6	4	-	-	-	-	-	-	-
		800S200	54 (16)	8	6	4	-	-	-	-	-	-	-
			68 (14)	8	7	5	4	-	-	-	-	-	-

Notes:

- 1 Tabulated maximum bridging distances are for ASD lateral pressures.
- 2 Tabulated maximum bridging distances are based on the tested connection strength.
- 3 Studs must be checked for unbraced length separately.
- 4 Lateral pressures shall be determined based on the load combinations of the applicable building code.
- 5 For designs using 2009 IBC and earlier, wind pressures are at the working stress level and may be used directly.
- 6 For designs using 2012 IBC and 2015 IBC, wind pressures are at the strength level and must be multiplied by 0.6 for ASD load combinations.