

## DBC Drywall Bridging Connector

### Work smarter, not harder

Patented design allows for one- or two-screw installation of the DBC, significantly reducing labor and material cost. The first and only connector load rated for 3/4" u-channel, the DBC joins the SUBH line of bridging connectors tested as a system, ensuring that published design capacities capture the influence of stud web depth and thickness.

#### Features:

- Most applications require only a single screw
- Designed for 3/4" u-channel to fit smaller web knockouts common to drywall studs
- Compatible with drywall stud depths of 3 5/8" and 6" with 1 1/2" wide knockouts

**Material:** 33 mil (20 ga.) carbon steel

**Finish:** Galvanized (G90)

#### Installation:

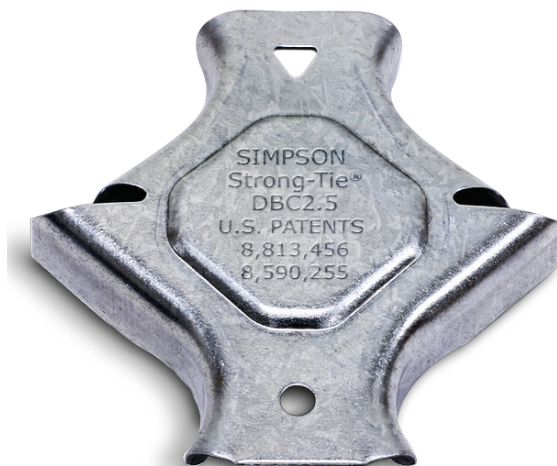
- With 3/4" x 54 mil (16 ga.) u-channel installed through the stud web knockouts, insert the DBC2.5 through the knockout so that the DBC slots engage the stud web and the DBC flanges engage the u-channel as shown in the illustration
- Use the specified number of #8 screws to fasten the DBC to the u-channel

**Codes:** See p. 13 for Code Reference Key Chart

**Ordering Information:** DBC2.5-R200 (Bucket of 200)



This product is preferable to similar connectors because of a) easier installation, b) higher loads, c) lower installed cost, or a combination of these features.



 **DBC2.5**

US Patents:  
8,813,456 and 8,590,255

# DBC Drywall Bridging Connector

## DBC — Bridging Connector Strength Allowable Loads

Model No.	Stud Depth	Stud Thickness and Yield Strength			Fasteners		Laterally Loaded C-Stud Allowable Torsional Moment (in.-lb.)	Code Ref.	
		Mil	Gauge <sup>3</sup>	F <sub>y</sub> (ksi)					
DBC2.5	3%	15	25 EQ.	50	Min.	(1) #8	65	—	
		18	25	33					
		19	20 EQ.	65					
		20	20 EQ.	57					
		30	20 DW	33	Min.	(1) #8			85
					Max.	(2) #8			125
				Min.	(1) #8	85			
				Max.	(2) #8	125			
	6	15	25 EQ.	50	Min.	(1) #8	65		
			18	25					33
			19	20 EQ.					65
			21	20 EQ.					57
		30	20 DW	33	Min.	(1) #8			85
					Max.	(2) #8			125
33			20 STR	33	Min.	(1) #8		85	
					Max.	(2) #8		125	

- Allowable loads are for use when utilizing Allowable Stress Design methodology.  
For LRFD loads, multiply the ASD tabulated values by 1.6.
- Min. fastener quantity and tabulated values — fill round hole (one screw total);  
Max. fastener quantity and tabulated values — fill round and triangle holes (two screws total).
- EQ — equivalent, DW — drywall, STR — structural.

## Design Example

### Given

- 600S125-18 (33 ksi) studs at 24" o.c., 10' tall  
Mid-point bracing (5' o.c.)  
Distance from shear center to mid-plane of web,  $m = 0.408$  in.  
(SFIA Technical Guide Version 2022)
- Lateral load = 5 psf

### Laterally-Loaded Stud Design

ASD Design load tributary to brace:

$$W = (5 \text{ psf})(2 \text{ ft.})(5 \text{ ft.}) = 50 \text{ lb.}$$

Required bracing force (AISI S100 Eq. C2.2.1-3):

$$P_{L1} = -P_{L2} = 1.5(m/d)W = (1.5)(0.408 \text{ in.}/6 \text{ in.})(50 \text{ lb.}) = 5.1 \text{ lb.}$$

Torsional moment:

$$M_z = P_{L1}d = -P_{L2}d = (5.1 \text{ lb.})(6 \text{ in.}) = 30.6 \text{ in.-lb.}$$

From Allowable Loads table above, for 6"-18 mil stud:

- ➔ Select DBC2.5 with Min. fasteners ((1) #8)  
Allowable torsional moment = 65 in.-lb. > 30.6 in.-lb. **OK**

