FASTBRIDGE™ CLIP FB33

FB33 **SCREW REQUIREMENTS FOR LATERAL PRESSURE OF STUDS at *16"* o.c. with Bracing Distance from *4' to 8'***

Stud Section	Stud Thickness (mils)	FastBridge Type	Specified Wind Pressure (psf) and Bracing Distance (ft)																																							
			5psf					10psf					20psf					25psf					30psf					35psf					40psf					50psf				
			4'	5'	6'	7'	8'	4'	5'	6'	7'	8'	4'	5'	6'	7'	8'	4'	5'	6'	7'	8'	4'	5'	6'	7'	8'	4'	5'	6'	7'	8'	4'	5'	6'	7'	8'	4'	5'	6'	7'	8'
362S162	33	FB33														2*						-				-					-			-		-					-		
	43				1*					1*			1*					1*		2*				2*					2*				2*									
	54																						1*														-	2*				
362S200	33	FB33										2*				-					-			-		-				-												
	43				1*				1*							2*			2*				2*										2*			-				-		
	54												1*					1*									-		2*									2*				
362S250	33	FB33									2*					-					-				-					-												
	43				1*				1*					2*				2*																	-					-		
	54												1*											2*				2*					2*									
400S162	33	FB33																				-				-					-					-				-		
	43				1*					1*			1*			2*		1*		2*				2*				2*					2*									
	54																						1*															2*				
400S200	33	FB33									2*						-				-			-		-				-					-							
	43				1*					1*			1*		2*			2*					2*										2*							-		
	54																											2*										2*				
400S250	33	FB33										2*			-	-					-				-					-												
	43				1*				1*					2*				2*																	-					-		
	54																							2*				2*					2*									
600S162	33	FB33																								-					-					-				-		
	43				1*					1*				1*		2*		1*			2*		1*		2*				2*					2*								
	54																																					2*				
600S200	33	FB33															-				-				-	-			-		-				-					-		
	43				1*					1*			1*		2*				2*			-		2*				2*														
	54																															-		2*					2*			
600S250	33	FB33														-			-		-				-																	
	43				1*				1*			2*		2*			-	2*										2*			-				-					-		
	54																					-	2*										2*									
800S162	43	FB33			1*					1*				1*		2*					2*		1*			2*				2*		-		2*		-			2*		-	
	54																	1*										1*					1*									
800S200	43	FB33			1*					1*					2*						2*			2*		-		2*			-		2*			-					-	
	54													1*				1*					1*															2*				
800S250	43	FB33			1*				1*			2*		2*			-		2*		-		2*			-		2*			-				-					-		
	54												1*					1*															2*									

NOTES:

- "1*" indicates that one #10 screw used with the FB33 FastBridge Clip provides adequate torsional restraint to the stud for the designated lateral design pressure and brace spacing.
- "2*" indicates that two #10 screws used with the FB33 FastBridge Clip provides adequate torsional restraint to the stud for the designated lateral design pressure and brace spacing.
- Blank portions of the table indicates that the FB33 FastBridge Clip does not provide adequate torsional restraint to the stud for the designated lateral design pressure and brace spacing.
- Specified wind pressure to be obtained from NBC 2015.

FASTBRIDGE™ CLIP FB33

FB33 SCREW REQUIREMENTS FOR LATERAL PRESSURE OF STUDS at 24" o.c. with Bracing Distance from 4' to 8'

Stud Section	Stud Thickness (mils)	FastBridge Type	5psf (4' 5' 6' 7' 8')	10psf (4' 5' 6' 7' 8')	20psf (4' 5' 6' 7' 8')	25psf (4' 5' 6' 7' 8')	30psf (4' 5' 6' 7' 8')	35psf (4' 5' 6' 7' 8')	40psf (4' 5' 6' 7' 8')	50psf (4' 5' 6' 7' 8')
362S162	33	FB33			1*	1*	1*	1*	1*	1*
	43		1*	1* 2*	2* -	-	-	-	-	-
	54				1*	2*	2*	2*	2*	
362S200	33	FB33			-	-	2*			
	43		1*	1* 2*	2*		-	-	-	-
	54					2* - -	2*	2*		
362S250	33	FB33			-					
	43		1*	1* 2*		-	-	-	-	-
	54				2*	2*	2*			
400S162	33	FB33	2*	2* -	-	-	-	-	-	
	43		1*	1* 2*	2* -	2*	2*			-
	54				1*		-	2*	2*	2*
400S200	33	FB33			-	-	2*			
	43		1*	1* 2*	2*	2*	-	-	-	-
	54						2*	2*	2*	
400S250	33	FB33			-	-				
	43		1*	1* 2*			-	-	-	-
	54				2*	2*	2*			
600S162	33	FB33		2* -	-	-	-	-	-	
	43		1*	1*	1* 2*	2*	2*			-
	54							2*	2*	2*
600S200	33	FB33			1* -					
	43		1*	1* 2*	2*	2* -	2* -	-	-	-
	54							2*	2*	
600S250	33	FB33				2*				
	43		1*	1* 2*	2* -	-	-	-	-	-
	54					2*	2*			
800S162	43	FB33	1*	2*	2* -	-	-	-		
	54			1*	1* 2*	1* 2*	2*	2*	2* -	2* -
800S200	43	FB33	1*	1*	1* 2*	2*	2* -	2* -	2* -	-
	54					-				
800S250	43	FB33	1*	1* 2*	2* -	2* -	2* -	-	-	-
	54									

NOTES:
- "1*" indicates that one #10 screw used with the FB33 FastBridge Clip provides adequate torsional restraint to the stud for the designated lateral design pressure and brace spacing.
- "2*" indicates that two #10 screws used with the FB33 FastBridge Clip provides adequate torsional restraint to the stud for the designated lateral design pressure and brace spacing.
- Blank portions of the table indicates that the FB33 FastBridge Clip does not provide adequate torsional restraint to the stud for the designated lateral design pressure and brace spacing.
- Specified wind pressure to be obtained from NBC 2015.

BAILEY METAL PRODUCTS LIMITED

FASTBRIDGE™ CLIP FB33

FB33: FastBridge Connector - Maximum Specified Design Values						
FastBridge Model	Stud Depth (in.)	Maximum Specified Design Values	No. of Screws	Stud Thickness (mil)		
				33	43	54
FB33	3.625	Axial Brace Stiffness (lbs/in)	1	1027	1330	2016
			2	1220	1480	2270
		Axial Brace Force (lbs)	1	139	162	171
			2	232	253	343
		Torsional Brace Moment (lbs-in)	1	140	172	196
			2	270	323	440
FB33	4.00	Axial Brace Stiffness (lbs/in)	1	950	1460	1982
			2	1072	1520	2690
		Axial Brace Force (lbs)	1	144	163	163
			2	231	274	362
		Torsional Brace Moment (lbs-in)	1	129	172	187
			2	271	327	454
FB33	6.00	Axial Brace Stiffness (lbs/in)	1	260	590	1380
			2	380	860	1660
		Axial Brace Force (lbs)	1	101	159	159
			2	226	271	379
		Torsional Brace Moment (lbs-in)	1	157	160	162
			2	261	313	419
FB33	8.00	Axial Brace Stiffness (lbs/in)	1	-	312	760
			2	-	420	916
		Axial Brace Force (lbs)	1	-	167	168
			2	-	246	368
		Torsional Brace Moment (lbs-in)	1	-	143	199
			2	-	313	391

NOTES:

- Maximum specified loads are based on studs with a minimum yield stress, F_y = 33 ksi and tensile strength, F_u = 45 ksi for 43 mil or thinner and a minimum yield stress, F_y = 50 ksi and tensile strength, F_u = 65 ksi for 54 mil or thicker.
- Maximum specified loads are based on 54 mil bridging U-channel with a minimum yield stress, F_y = 33 ksi and tensile strength, F_u = 45 ksi.
- Maximum specified loads are based only on the bridging connection. It is the responsibility of the designer to verify the strength and serviceability of the framing members.
- Maximum specified loads are based on #10 self-drilling screws with a nominal diameter of 0.190 in. and a washer diameter of 0.375 in. Fasteners must have a minimum nominal shear resistance, P_{nvs} = 1718 lbs and a minimum nominal tensile resistance, P_{ts} = 2654 lbs.
- Maximum specified loads may not be increased for wind or seismic load.
- Serviceability limit state is not considered since brace stiffness requirements are given in Section C2.3 of CSA S136-16.
- Tabulated values are based on physical tests carried out by Clark Dietrich.