FERO LOAD TABLE AND DESIGN INFORMATION

FAST™ BRACKET DEPTH "D"	MAXIMUM ALLOWABLE VERTICAL LOAD PER BRACKET	MAXIMUM BRACKET SPACING	MAXIMUM ALLOWABLE VENEER HEIGHT			
			CLAY BRICK	LIGHTWEIGHT CONCRETE BLOCK	NORMAL WEIGHT CONCRETE BLOCK	NATURAL STONE
in. (mm)	lb. (kN)	ft. (mm)	ft. (m)	ft. (m)	ft. (m)	ft. (m)
1.0 (25)	1500 (6.7)	2 (600)	18.7 (5.6)	25.0 (7.6)	19.7 (6.0)	15.3 (4.6)
		3 (900)	12.5 (3.8)	16.6 (5.0)	13.1 (3.9)	10.4 (3.1)
		4 (1200)	9.3 (2.8)	12.5 (3.8)	9.8 (2.9)	7.7 (2.3)
1.5 (38)	1400 (6.2)	2 (600)	17.5 (5.3)	23.3 (7.1)	18.4 (5.6)	15.3 (4.6)
		3 (900)	11.6 (3.5)	15.5 (4.7)	12.2 (3.7)	10.4 (3.1)
		4 (1200)	8.7 (2.6)	11.6 (3.5)	9.2 (2.8)	7.7 (2.3)
2.0 (51)	2100 (9.3)	2 (600)	26.2 (7.9)	35.0 (10.6)	27.6 (8.4)	23.3 (7.1)
		3 (900)	17.5 (5.3)	23.3 (7.1)	18.4 (5.6)	15.6 (4.7)
		4 (1200)	13.1 (3.9)	17.5 (5.3)	13.8 (4.2)	11.6 (3.6)
2.5 (64)	2100 (9.3)	2 (600)	26.2 (7.9)	35.0 (10.6)	27.6 (8.4)	23.3 (7.1)
		3 (900)	17.5 (5.3)	23.3 (7.1)	18.4 (5.6)	15.6 (4.7)
		4 (1200)	13.1 (3.9)	17.5 (5.3)	13.8 (4.2)	11.6 (3.6)
3.0 (76)	2100 (9.3)	2 (600)	26.2 (7.9)	35.0 (10.6)	27.6 (8.4)	23.3 (7.1)
		3 (900)	17.5 (5.3)	23.3 (7.1)	18.4 (5.6)	15.6 (4.7)
		4 (1200)	13.1 (3.9)	17.5 (5.3)	13.8 (4.2)	11.6 (3.6)
3.5 (89)	2100 (9.3)	2 (600)	26.2 (7.9)	35.0 (10.6)	27.6 (8.4)	23.3 (7.1)
		3 (900)	17.5 (5.3)	23.3 (7.1)	18.4 (5.6)	15.6 (4.7)
		4 (1200)	13.1 (3.9)	17.5 (5.3)	13.8 (4.2)	11.6 (3.6)
4.0 (102)	1925 (8.6)	2 (600)	24 (7.3)	32.0 (9.7)	25.3 (7.7)	21.4 (6.5)
		3 (900)	16 (4.8)	21.3 (6.4)	168 (5.1)	14.3 (4.4)
		4 (1200)	12 (3.6)	16.0 (4.8)	12.6 (3.8)	10.6 (3.2)
4.5 (114)	1750 (7.8)	2 (600)	21.8 (6.6)	29.1 (8.8)	23.0 (7.0)	19.4 (5.9)
		3 (900)	14.5 (4.4)	19.4 (5.9)	15.3 (4.6)	13.0 (4.0)
		4 (1200)	10.9 (3.3)	14.5 (4.4)	11.5 (3.5)	9.7 (2.9)
5.0 (127)	1575 (7.0)	2 (600)	19.6 (5.9)	26.2 (7.9)	20.7 (6.3)	17.5 (5.3)
		3 (900)	13.1 (3.9)	17.5 (5.3)	13.8 (4.2)	11.7 (3.6)
		4 (1200)	9.8 (2.9)	13.1 (3.9)	10.3 (3.1)	8.7 (2.7)
5.5 (140)	1400 (6.2)	2 (600)	17.5 (5.3)	23.3 (7.1)	18.4 (5.6)	15.5 (4.7)
		3 (900)	11.6 (3.5)	15.5 (4.7)	12.2 (3.7)	10.4 (3.2)
		4 (1200)	8.7 (2.6)	11.6 (3.5)	9.2 (2.8)	7.7 (2.4)
6.0 (152)	1250 (5.6)	2 (600)	15.6 (4.7)	20.8 (6.3)	16.4 (4.9)	13.9 (4.2)
		3 (900)	10.4 (3.1)	13.8 (4.2)	10.9 (3.3)	9.3 (2.8)
		4 (1200)	7.8 (2.3)	10.4 (3.1)	8.2 (2.4)	6.9 (2.1)
6.5 (165)	1100 (4.9)	2 (600)	13.7 (4.1)	18.3 (5.5)	14.4 (4.3)	12.2 (3.7)
		3 (900)	9.1 (2.7)	12.2 (3.7)	9.6 (2.9)	8.2 (2.5)
		4 (1200)	6.8 (2)	9.1 (2.7)	7.2 (2.1)	6.1 (1.9)
7.0 (178)	1020 (4.5)	2 (600)	12.7 (3.8)	17.0 (5.1)	13.4 (4.0)	11.3 (3.4)
		3 (900)	8.5 (2.5)	11.3 (3.4)	8.9 (2.7)	7.5 (2.2)
		4 (1200)	6.3 (1.9)	8.5 (2.5)	6.7 (2.0)	5.6 (1.7)

Notes: 1. Design loads are the maximum allowable vertical loads that a FAST Thermal Bracket can support using its standard L4x4x1/4" (L102x102x6mm). Tests used a stiffened backing and FAST Thermal shelf angle in order to isolate FAST Thermal Bracket capacities. Brackets were anchored using a 5/8" (16mm) bolt vertically centred in the bracket slot and a point load was applied 0.79" (20mm) o/c from the end (toe) of the angle. Tabled allowable loads are (unfactored) service loads, and have been established by test and calculation, and demonstrate a level of safety and performance consistent with North American design standards. Tabled allowable veneer heights are calculated as (maximum allowable vertical load per bracket) ÷ (weight of veneer per unit area x bracket spacing). 2. Anchor bolt slip resistance is higher than the stated design loads with proper FAST Thermal Bracket installation. Slots must be alternating and bolts should be tightened to snug plus half turn. 3. Veneer weights used are: 40lb/ft² (195kg/m²) for clay brick; 30lb/ft² (146kg/m²) for 105lb/ft³ (1682kg/m³) lightweight concrete block; 38lb/ft² (185kg/m²) for 125lb/ft³ (2002kg/m³) normal weight concrete block; and 45.0lb/ft2 (220kg/m²) for natural stone. 4. The typical FAST Thermal Bracket slots are sized for a 5/8" (16mm) diameter anchor bolt, but brackets can be made for other anchor bolt diameters upon request. Comply with all manufacturer's design and installation requirements pertaining to capacity, edge distances, torqueing etc. FERO does not assume responsibility for the design of the anchorage of the FAST Thermal Brackets. The values shown in this FAST System Load Table assume that the FAST Thermal Bracket is adequately anchored. 5. Where the FAST^M system is designed/intended to support masonry veneer having panel height exceeding 30' (9.1m), contact FERO for additional design information. 6. The bracket spacing may vary by ±4" (100mm). 7. Use the FERO Rectangular Washer when installing the FAST Thermal Bracket (required). 8. The FAST System Load Table applies to the FAST Standard, FAST Lintel, and FAST Inverted. This table will generally apply to the Extended FAST systems and custom FAST Thermal Brackets as well, but additional engineering may be required. Contact FERO for more information. 9. FERO recommends not installing over gypsum sheathing (unless otherwise engineered) as tension from the anchor bolt may crush gypsum sheathing; unrelated to the FAST Thermal Brackets.

Bracket Depth "D"

Expert Support

Talk to FERO for help determining the FAST[™] Thermal Bracket solution for your building project. We can engineer and customize all types of FAST Thermal Brackets including for use with curved veneer walls.

Technical Support: engineering@ferocorp.com

Download Specifications & Resources

Download FERO FAST Thermal Bracket specs, CAD files, and installation guides to start designing your project.

www.ferocorp.com

Contact Us

Talk to our sales team for any other inquiries.

- 780.455.5098 or Toll Free 1.877.703.4463
- ≤ sales@ferocorp.com
- \kappa www.ferocorp.com



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