

ULTIMATE TENSION/PULLOUT AND SHEAR LOADS IN CONCRETE

Modern design and high performance

FASTENER DESIGNATION	FASTENER SIZE	Concrete Drill Bit Size	Ultimate Tension/Pullout		Ultimate Shear
			Low 2,500 psi	High 6,000 psi	
Carbon Steel					
Universal, Cap, Fine, Re-Fine	#8	1/8"	368	1,247	484
Construction, Universal, Steel Siding Screw	#10	5/32"	716	1,451	886
Construction, Universal	#12 or #1/4	3/16"	939	1,176	993
Construction	#3/8	1/4"	943	1,588	1,744

1. Embedment: #8 screws with 1.4 inches, all others 1.5 inches. Drill holes a minimum 1/4" deeper than embedment depth.
2. No edge influences, 4" spacing, uncracked concrete.
3. Values are average max loads in lbs. These figures are only offered as a guide. They are not guaranteed and not reduced by any safety factors.
4. For safety factor requirements in your area, contact your local building official, architect, or engineer. Testing was performed according to ASTM standard E-488-96.

Drill

Use proper drill bit size.

Clean

Remove debris and dust from hole using compressed air, pump or a vacuum.

Drive

Install screw into the hole to the specified embedment.

Finish

Screw must be snug after installation.

