

Tapcon® XL Anchors



UltraShield

APPLICATIONS



Shutters - protective and decorative



Screened porch and pool enclosures.

Railings

Mounted electrical equipment



Sill plates

DESCRIPTION/SUGGESTED SPECIFICATIONS

EXTRA LARGE TAPCON FOR EXTRA LARGE CHALLENGES!

ADVANTAGES

- Internal TORX® T-40 drive assures easy installation.
 - High button head resists cam-out during installation.
 - Corrosion protection of UltraShield™ to combat aggressive environments.
 - Available in silver.
 - Delivers over 3,000 lbs. holding power in concrete.
 - Alternative to sleeve anchors.
- Use 1/4" Tapcon Drill Bit**

CORROSION RESISTANCE

Salt Spray Test (ASTM B117) UltraShield
1100 Hrs 10% or less rust

INSTALLATION STEPS

Read installation instructions before using!



WARNING:

If there are any questions concerning proper installation, applications or appropriate use of this product, please call our Technical Services Department at 1-800-848-5611. Failure to follow these instructions can result in serious personal injury.

1. Drill Hole minimum ¼" deeper than Tapcon Anchor to be embedded.

Minimum anchor embedment: 1"
Maximum anchor embedment: 1¾"

2. Drive anchor using T-40 Torx® Drive



WARNING:

Failure to wear safety glasses with side shields can result in serious personal injury. Always wear ANSI compliant eye protection (ANSI Z87.1-2003).



WARNING:

Using the wrong size drill bit will affect performance values and may cause failure.

SELECTION CHART

**Tapcon®
XL Anchors**

Diameter 5/16" Thread Form Reverse Hi-Lo®
Point Type Nail Finish UltraShield™
Head Style High button with TORX T-40 Drive

RECOMMENDED TAPCON LENGTH		PART NO.	FINISH
in.	(mm)		
2-1/4	(57.2)	3395902	Ultra Shield

XLs are packed 100 pieces per master carton.

PERFORMANCE TABLE

**Tapcon®
XL Anchors**

**Ultimate Tension and Shear Values (lbs/kN)
in Solid Concrete**

ANCHOR DIAMETER in. (mm)		MIN. DEPTH OF EMBEDMENT in. (mm)		EDGE DISTANCE in. (mm)		f'c = 3000 PSI (20.7 MPa)			
						TENSION		SHEAR	
						lbs.	(kN)	lbs.	(kN)
5/16	(7.9)	1-1/4	(31.8)	1-9/16	(39.7)	1,050	(4.7)	1,330	(5.9)
				2-3/16	(55.6)	1,205	(5.4)	1,725	(7.7)
		1-3/4	(44.5)	1-9/16	(39.7)	2,020	(9.0)	1,530	(6.8)
				2-3/16	(55.6)	2,250	(10.0)	2,505	(11.1)
		2-1/4	(57.2)	1-9/16	(39.7)	2,850	(12.7)	1,955	(8.9)
				2-3/16	(55.6)	3,120	(13.9)	3,250	(14.4)

Allowable working loads for the single installation under static loading should not exceed 25% capacity of the Ultimate Load. To calculate the Allowable Load, divide the Ultimate load by 4
Pilot hole diameter – Use 1/4" ANSI spec carbide tipped drill bit. Drill 1/4" longer than necessary embedment.
Recommended center to center distance of 3-3/4" is required for 100% efficiency and 1-7/8" for 50% efficiency.

PERFORMANCE TABLE

**Tapcon®
XL Anchors**

**Ultimate Tension and Shear Values
in Concrete Masonry Units**

ANCHOR DIAMETER in. (mm)		MINIMUM DEPTH OF EMBEDMENT in. (mm)		EDGE DISTANCE in.	HOLLOW BLOCK ¹				GROUT-FILLED BLOCK ²			
					TENSION		SHEAR		TENSION		SHEAR	
					lbs.	(kN)	lbs.	(kN)	lbs.	(kN)	lbs.	(kN)
5/16	(7.9)	1-1/4	(31.8)	4	1,045	(4.6)	2,280	(10.1)	1,045	(4.6)	2,280	(10.1)
		1-3/4	(44.5)	4	NOT RECOMMENDED		NOT RECOMMENDED		1,950	(8.7)	2,825	(12.6)
		2-1/4	(57.2)	4	NOT RECOMMENDED		NOT RECOMMENDED		3,770	(16.8)	3,140	(14.0)

Allowable working loads for the single installation under static loading should not exceed 25% capacity of the Ultimate Load. To calculate the Allowable Load, divide the Ultimate load by 4
1. CMU = 1,600 PSI minimum compressive strength.
2. CMU = 1,600 PSI minimum compressive strength with 2,000 PSI grout.
Embedment is through 1-1/4" face shell of hollow block.