

# 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.
  - Available in silver.
  - High button head resists cam-out during installation.
  - Delivers over 3,000 lbs. holding power in concrete.
  - Corrosion protection of UltraShield™ to combat aggressive environments.
  - 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 CORE <sup>1</sup>				GROUT-FILLED <sup>2</sup>			
					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.