

Tapcon® XL Anchors



UltraShield White 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™ and White UltraShield™ to combat aggressive environments.
- Available in silver or white to complement standard fixtures.
- Delivers over 3,000 lbs. holding power in concrete.
- Alternative to sleeve anchors.
- 1/4" SDS Tapcon drill bit for added convenience.
- Condrive® XL with MegaGrip™ bit holder for rapid one-tool installation.

CORROSION RESISTANCE

Salt Spray Test (ASTM B117)	UltraShield	White UltraShield
	1100 Hrs 10% or less rust	1500 Hrs no red 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. **Select proper fastener – diameter / head style / length.**
 - a) Use selection chart to choose proper length.
2. **Drill Hole – use selection chart to determine drill bit length and depth of hole.**
 - a) Choose appropriate drill of Tapcon Anchor.
 - b) Drill hole minimum 1/4" deeper than Tapcon Anchor to be embedded.
Minimum anchor embedment: 1"
Maximum anchor embedment: 1-3/4"
3. **Insert the adjustable MegaGrip bit tip holder in the small opening of sleeve. Slide the open end of the Condrive XL Installation Tool sleeve over the drill bit and snap in place.**
4. **Drive anchor using MegaGrip adjustable magnetic bit holder with TORX T-40 bit tip**



MegaGrip PART#	DESCRIPTION
3400910	MegaGrip Bit Holder



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™ or *White UltraShield™
Head Style.....High button with TORX T-40 Drive

RECOMMENDED TAPCON LENGTH In. (mm)	PART NO.	FINISH	BIT LENGTH In. (mm)	1/4" DRILL BITS FOR TAPCON XL PART NO.
2-1/4 (57.2)	3395902	Ultra Shield	6-3/4" SDS drill bit with hex	3394910

XLs are packed 100 pieces per master carton.

PART NO.	DESCRIPTION	CARTON QTY
3401910	Condrive® XL Installation Tool with MegaGrip™ Bit Holder with TORX® T-40 Bit Tip	10 per master carton
3400910	MegaGrip™ Magnetized Bit Holder with TORX T-40 Bit Tip	10 per bag
3394910	1/4" x 6-3/4" SDS Tapcon Drill Bit with Hex	1 piece per tube

Tapcon XL Anchors must be installed using all Red Head system components (Tapcon XL Anchors, Condrive XL Installation Tool and Tapcon Drill Bits) in order to qualify for ITW Red Head system support.

PERFORMANCE TABLES

Tapcon®
XL Anchors

Ultimate Tension and Shear Values (Lbs/kN) in Concrete

ANCHOR DIA. In. (mm)	MIN. DEPTH OF EMBEDMENT In. (mm)	EDGE DISTANCE	f _c = 3000 PSI (20.7 MPa)	
			TENSION Lbs. (kN)	SHEAR 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)

Safe working loads for single installation under static loading should not exceed 25% of the ultimate load capacity. Divide by 4.

- Pilot hole diameter shall be 0.263" and drilled 1/4" longer than the necessary embedment.
- Allowable loads are based ultimate test load divide by 4.
- Recommended center to center distance of 3-3/4" is required for 100% efficiency and 1-7/8" for 50% efficiency.
- Embedment is through 1-1/4" face shell of hollow block.

Tapcon®
XL Anchors

Ultimate Tension & Shear Values in Concrete Masonry Units

ANCHOR DIA. In. (mm)	MINIMUM DEPTH OF EMBEDMENT In. (mm)	EDGE DISTANCE (Inches)	HOLLOW CORE ¹		GROUT-FILLED ²	
			TENSION Lbs. (kN)	SHEAR Lbs. (kN)	TENSION Lbs. (kN)	SHEAR 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)

Safe working loads for single installation under static loading should not exceed 25% of the ultimate load capacity.

1 CMU = 1,600 PSI minimum compressive strength.

2 CMU = 1,600 PSI minimum compressive strength with 2,000 PSI grout.