

Tapcon[®]

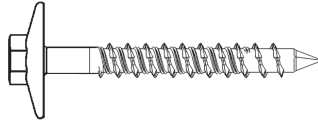
Maxi-Set Anchors



UltraShield White UltraShield

DESCRIPTION/SUGGESTED SPECIFICATIONS

FOR TAPCON APPLICATIONS THAT REQUIRE MORE ANCHOR BEARING SURFACE.



ADVANTAGES

- Same reliable performance and speed of installation as regular Tapcon.
- Large 5/8" diameter flange provides more bearing surface and increases pullover resistance. High 5/16" hex head adds driving stability.
- Compatible with DrivTru™ socket system. Improves installation. Protects paint finish.
- UltraShield™ and White UltraShield™ long-life finish deliver excellent corrosion resistance.

APPROVAL/LISTINGS

ICC Evaluation Service, Inc. – #ESR-1671

Miami-Dade County – #07-0315.03

Florida Building Code

INSTALLATION STEPS

Read instructions before using (installation)!



WARNING:

If there are any questions concerning proper installation, applications or appropriate use of this product, please call our Technical Services Department at 1-800-899-7890. 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 ¼" deeper than Tapcon Anchor to be embedded.
 - Minimum anchor embedment: 1"
 - Maximum anchor embedment: 1-3/4"
3. **Drive anchor using DrivTru HWH Socket.**



APPLICATIONS



Shutters - protective and decorative

Screened porch and pool enclosures.



Various sheet metal flashings.

Decorative wrought iron.

Wood nailers and plywood attachment.

DrivTru PART#	DESCRIPTION	APPLICATIONS
1513910	DrivTru Socket	All 5/16" across flats HWH fasteners



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.

Tapcon® Maxi-Set Anchors

SELECTION CHART

Tapcon® Maxi-Set Anchors

Diameter.....1/4" Thread Form..... Advanced Threadform Technology™
 Point Type.....Nail Finish.....UltraShield™ or *White UltraShield™
 Head Style.....5/16" across flats hex with 5/8" diameter flange.

RECOMMENDED TAPCON LENGTH In. (mm)	PART NO. 1/4" HEX HEAD	FINISH	BIT LENGTH In. (mm)	STRAIGHT SHANK BITS FOR 1/4" TAPCON PART NO.
1-3/4 (44.5)	3294000	Ultra Shield	3-1/2 (88.9)	7901014
2-1/4 (57.2)	3295000	Ultra Shield	4-1/2 (114.3)	7901018
1-3/4 (44.5)	3383100*	White Ultra Shield	3-1/2 (88.9)	7901014*
2-1/4 (57.2)	3384100*	White Ultra Shield	4-1/2 (114.3)	7901018*
2-3/4 (69.9)	3408100*	White Ultra Shield	4-1/2 (114.3)	7901018*
3-1/4 (82.6)	3409100*	White Ultra Shield	5-1/2 (139.7)	7901022*

*Available with bronze painted head over White UltraShield™ NOTE: 2-3/4" and 3-1/4" lengths are special orders. Contact customer service for lead-times.
 Maxi-Sets are packed 1,000 pieces per master carton except 3409100 is packed 750 pieces.

Tapcon® SDS Bits

PART NUMBER	DESCRIPTION
790059	7" (SDS Rotohammer Bits for use with 3/16" Tapcon)
7901060	5" (SDS Rotohammer Bits for use with 1/4" Tapcon)
7901059	7" (SDS Rotohammer Bits for use with 1/4" Tapcon)

PERFORMANCE TABLES

Tapcon® Maxi-Set Anchors

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

ANCHOR DIA. In. (mm)	MIN. DEPTH OF EMBEDMENT In. (mm)	f'c = 2000 PSI (13.8 MPa)		f'c = 3000 PSI (20.7 MPa)		f'c = 4000 PSI (27.6 MPa)		f'c = 5000 PSI (34.5 MPa)	
		TENSION Lbs. (kN)	SHEAR Lbs. (kN)	TENSION Lbs. (kN)	SHEAR Lbs. (kN)	TENSION Lbs. (kN)	SHEAR Lbs. (kN)	TENSION Lbs. (kN)	SHEAR Lbs. (kN)
1/4 (6.4)	1 (25.4)	750 (3.3)	900 (4.0)	775 (3.4)	900 (4.0)	800 (3.6)	1,360 (6.1)	950 (4.2)	1,440 (6.4)
	1-1/4 (31.8)	1,050 (4.7)	900 (4.0)	1,160 (5.2)	900 (4.0)	1,270 (5.6)	1,360 (6.1)	1,515 (6.7)	1,440 (6.4)
	1-1/2 (38.1)	1,380 (6.1)	1,200 (5.3)	1,600 (7.2)	1,200 (5.3)	1,820 (8.1)	1,380 (6.1)	2,170 (9.7)	1,670 (7.4)
	1-3/4 (44.5)	2,020 (9.0)	1,670 (7.4)	2,200 (9.8)	1,670 (7.4)	2,380 (10.6)	1,670 (7.4)	2,770 (12.3)	1,670 (7.4)

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

Tapcon® Maxi-Set Anchors

Ultimate Tension and Shear Values (Lbs/kN) in Hollow Block

ANCHOR DIA. In. (mm)	ANCHOR EMBEDMENT In. (mm)	LIGHTWEIGHT BLOCK		MEDIUM WEIGHT BLOCK	
		TENSION Lbs. (kN)	SHEAR Lbs. (kN)	TENSION Lbs. (kN)	SHEAR Lbs. (kN)
1/4 (6.4)	1 (25.4)	250 (1.1)	620 (2.8)	500 (2.2)	1,000 (4.4)

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

NOTE: 3/16" Tapcon requires 5/32" bit, 1/4" Tapcon requires 3/16" bit.

Tapcon® Maxi-Set Anchors

Allowable Edge and Spacing Distances

PARAMETER	ANCHOR DIA. In. (mm)	NORMAL WEIGHT CONCRETE			CONCRETE MASONRY UNITS (CMU)		
		FULL CAPACITY (Critical Distance Inches)	REDUCED CAPACITY (Minimal Distance Inches)	LOAD REDUCTION FACTOR	FULL CAPACITY (Critical Distance Inches)	REDUCED CAPACITY (Minimal Distance Inches)	LOAD REDUCTION FACTOR
Spacing Between Anchors - Tension	1/4	4	2	0.66	4	2	0.84
Spacing Between Anchors - Shear	1/4	4	2	0.82	4	2	0.81
Edge Distance - Tension	1/4	2-1/2	1-1/4	0.82	4	2	0.88
Edge Distance - Shear	1/4	3	1-1/2	0.59	4	2	0.80

For SI: 1 inch = 25.4 mm

