

TNTSS — Titen Turbo™ 316 Stainless Steel Concrete Screw Anchor

Ultimate and Allowable Loads for Type 316 Stainless-Steel Titen Turbo Screw Anchor Installed in Normal-Weight Concrete

Anchor Diameter in. (mm)	Drill Bit Diameter in.	Embed. Depth (mm)	Min. Edge Distance (mm)	Min. Spacing (mm)	$f'_c = 17.2 \text{ MPa}$			
					Tension Load		Shear Load	
					Ultimate (kN)	Allowable (kN)	Ultimate (kN)	Allowable (kN)
1/4 (6.5)	3/16	31.8	31.8	76.2	2.6	0.6	2.2	0.6
			63.5	38.1	2.6	0.6	4.2	1.1
		34.9	31.8	76.2	2.6	0.6	3.0	0.8
			63.5	38.1	2.6	0.6	4.8	1.2
		44.5	31.8	76.2	6.1	1.5	3.3	0.8
			63.5	38.1	5.0	1.2	7.1	1.8
		50.8	31.8	76.2	6.1	1.5	3.3	0.8
			63.5	38.1	8.5	2.1	7.1	1.8

- The allowable loads listed are based on a factor of safety of 4.0. Loads listed in this table are derived from Miami-Dade County Notice of Acceptance 25-1002.03.
- The minimum concrete thickness is 1.5 times the embedment depth.

Ultimate and Allowable Loads for Type 316 Stainless-Steel Titen Turbo Screw Anchor Installed in Face of Grouted CMU Wall (CMU)/Concrete block

Anchor Diameter in. (mm)	Drill Bit Diameter in.	Embed. Depth (mm)	Min. Edge Distance (mm)	Min. Spacing (mm)	Tension Load		Shear Load	
					Ultimate (kN)	Allowable (kN)	Ultimate (kN)	Allowable (kN)
1/4 (6.5)	3/16	50.8	50.8	76.2	10.9	2.2	8.9	1.8
			101.6	38.1	11.0	2.2	8.3	1.7
		57.2	50.8	76.2	10.9	2.2	8.9	1.8
			101.6	38.1	11.0	2.2	9.2	1.8

- The allowable loads listed are based on a factor of safety of 5.0. Loads listed in this table are derived from Miami-Dade County Notice of Acceptance 25-1002.03.
- The tabulated values are for screw anchors installed in minimum 200mm-wide grouted concrete masonry having reached a minimum f'_m of 13.8 MPa at time of installation.
- Screw anchors must be installed in grouted cell. The minimum edge distance and spacing must be maintained.

Ultimate and Allowable Loads for Type 316 Stainless-Steel Titen Turbo Screw Anchor Installed in Face of Hollow CMU Wall (CMU)/Concrete block

Anchor Diameter in. (mm)	Drill Bit Diameter in.	Embed. Depth (mm)	Min. Edge Distance (mm)	Min. Spacing (mm)	Tension Load		Shear Load	
					Ultimate (kN)	Allowable (kN)	Ultimate (kN)	Allowable (kN)
1/4 (6.5)	3/16	38.1	50.8	76.2	4.11	0.8	5.0	1.0
			101.6	76.2	4.0	0.8	6.1	1.2

- The allowable loads listed are based on a factor of safety of 5.0. Loads listed in this table are derived from Miami-Dade County Notice of Acceptance 25-1002.03.
- The tabulated values are for screw anchors installed in minimum 200mm-wide hollow masonry wall having reached a minimum f'_m of 13.8 MPa at time of installation.
- Screw anchors must be installed in cell of the block. The minimum edge distance and spacing must be maintained.

NOTE: 1 inch = 25.4 mm

The information presented in this table is to be used in conjunction with the design criteria of ACI 318-14 Chapter 17 or ACI 318-11 Appendix D.