

# Type 316 Stainless-Steel Titen Turbo™ Screw Anchor



## You've Got to Drive it to Believe It!

### Easy, Fast and Reliable.

Simpson Strong-Tie now offers a Type 316 stainless-steel Titen Turbo medium-duty anchor for concrete and masonry applications.

This model provides all the benefits of our standard Titen Turbo anchor, but with the added corrosion resistance of Type 316 stainless steel.

Type 316 is the optimal choice for applications in severe environments, especially those with chlorides.

The Titen Turbo screw anchor features a patented Torque Reduction Channel that displaces dust so it can't obstruct the thread action, reducing the likelihood of binding, stripping and snapping without compromising strength. The patented thread design enables smooth driving with less torque while providing superior holding power. The Titen Turbo screw anchors feature a serrated leading edge to cut into concrete or masonry, and a pointed tip for fast, easy installation when fastening wood.

Titen Turbo delivers what pros want — consistently trouble-free installation and fastening strength they can depend on.

### Features

- Type 316 stainless-steel body for long-lasting corrosion resistance in severe environments.
- Hardened alloy steel tip with serrations to cut through concrete.
- Engineered TruShield™ coating provides additional protection against dissimilar metals.
- Available with either a hex head or, for a flush profile, a 6-lobe-drive trim head.
- 6-lobe drive provides positive bit engagement resulting in easy installations and long bit life.
- 6-lobe bit included in packaging for the trim-head version.
- Superior tension load performance.
- Matched-tolerance bit not required; use a standard ANSI drill bit for installation.
- Designed for installation with an impact driver or cordless drill. Installation using the Titen Turbo installation tool is recommended.

**Material:** Type 316 stainless steel

**Finish:** TruShield coating — silver

**Codes:** Miami-Dade NOA No. 25-0221.04

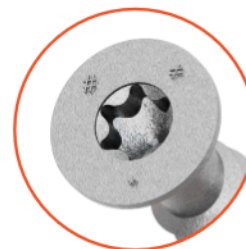
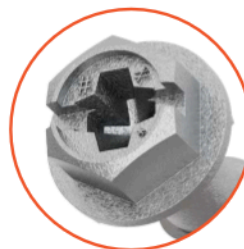
Corrosion Resistance Level  
  
**SEVERE**



Titen Turbo 316-SS  
hex head



Titen Turbo 316-SS  
6-lobe-drive trim head

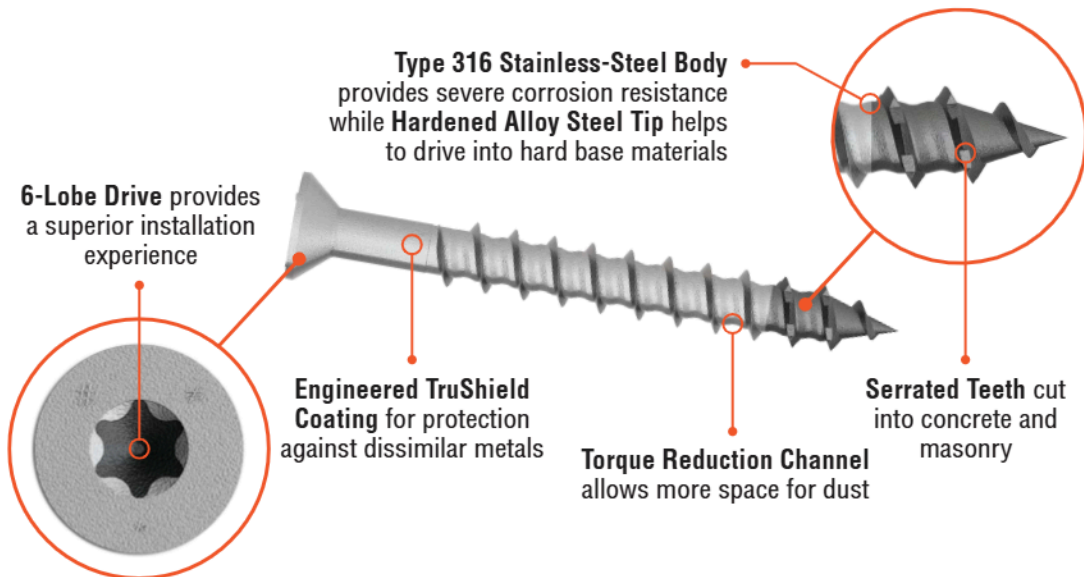
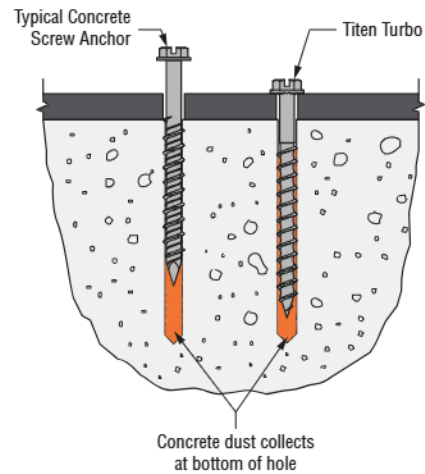


Head-stamped for easy identification

# Type 316 Stainless-Steel Titen Turbo™ Screw Anchor

## Anatomy of the Titen Turbo (TNT) Concrete and Masonry Screw Anchor

The TNT screw anchor is designed to improve installation experience with lower torque and higher loads than the competition. For the first time, Titen Turbo features a stainless-steel body with a hardened steel tip to properly cut through concrete or masonry. The engineered TruShield™ coating offers superior protection against galvanic reaction from dissimilar metals. The tip features the same revolutionary Torque Reduction Channel with patented thread design and dust channel that allows for more space for dust. Serration on leading threads and pointed tip enable an effective cut into the concrete or masonry. Smooth driving with less torque while providing superior holding power, the Titen Turbo delivers what pros want — consistently trouble-free installation and fastening strength they can depend on.



## 316 Stainless-Steel Titen Turbo Product Data (1/4" diameter)

Size (in.)	Head Style	Model No.	Drill Bit Dia. (in.)	Quantity	
				Pack	Carton
1/4 x 1 1/4	5/16" Hex	TNTSS625114H	3/16	50	800
1/4 x 1 3/4		TNTSS625134H		50	250
1/4 x 2 1/4		TNTSS625214H		50	250
1/4 x 2 3/4		TNTSS625234H		50	200
1/4 x 3 1/4		TNTSS625314H		50	200
1/4 x 3 3/4		TNTSS625334H		50	200
1/4 x 4		TNTSS625400H		50	200
1/4 x 1 1/4	T25 6-Lobe Trim	TNTSS625114TTR	3/16	50	800
1/4 x 1 3/4		TNTSS625134TTR		50	250
1/4 x 2 1/4		TNTSS625214TTR		50	250
1/4 x 2 3/4		TNTSS625234TTR		50	200
1/4 x 3 1/4		TNTSS625314TTR		50	200
1/4 x 3 3/4		TNTSS625334TTR		50	200
1/4 x 4		TNTSS625400TTR		50	200

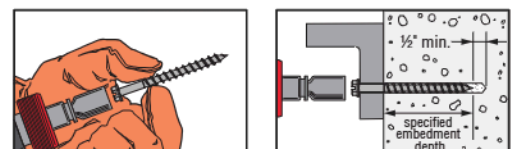
## Titen Turbo Installation Tool

Model No.	Quantity	
	Clamshell	Carton
TNTINSTALLKIT	1	4



Titen Turbo Screw Anchor Installation Kit

## Installation



# Type 316 Stainless-Steel Titen Turbo™ Screw Anchor

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

Anchor Diameter (in.)	Drill Bit Diameter (in.)	Embed. Depth (in.)	Min. Edge Distance (in.)	Min. Spacing (in.)	$f'_c = 2,500$ psi			
					Tension Load		Shear Load	
					Ultimate (lb.)	Allowable (lb.)	Ultimate (lb.)	Allowable (lb.)
1/4	3/16	1 1/4	1 1/4	3	575	145	495	125
			2 1/2	1 1/2	575	145	945	235
		1 3/8	1 1/4	3	575	145	670	170
			2 1/2	1 1/2	575	145	1,070	270
		1 3/4	1 1/4	3	1,365	340	750	190
			2 1/2	1 1/2	1,115	280	1,605	400
		2	1 1/4	3	1,365	340	750	190
			2 1/2	1 1/2	1,905	475	1,605	400

1. The allowable loads listed are based on a factor of safety of 4.0.
2. The minimum concrete thickness is 1.5 times the embedment depth.
3. For installation where high or severe corrosion resistance is not required, embedment depth may be reduced by 1/4".

## Ultimate and Allowable Loads for Type 316 Stainless-Steel Titen Turbo Screw Anchor Installed in Face of Grouted CMU Wall

Anchor Diameter (in.)	Drill Bit Diameter (in.)	Embed. Depth (in.)	Min. Edge Distance (in.)	Min. Spacing (in.)	Tension Load		Shear Load	
					Ultimate (lb.)	Allowable (lb.)	Ultimate (lb.)	Allowable (lb.)
1/4	3/16	2	2	3	2,440	490	1,995	400
			4	1 1/2	2,465	495	1,865	375
		2 1/4	2	3	2,440	490	1,995	400
			4	1 1/2	2,465	495	2,060	410

1. The allowable loads listed are based on a factor of safety of 5.0.
2. The tabulated values are for screw anchors installed in minimum 8"-wide grouted concrete masonry having reached a minimum  $f'_m$  of 2,000 psi at time of installation.
3. Screw anchors must be installed in grouted cell. The minimum edge distance and spacing must be maintained.
4. For installation where high or severe corrosion resistance is not required, embedment depth may be reduced by 1/4".

## Ultimate and Allowable Loads for Type 316 Stainless-Steel Titen Turbo Screw Anchor Installed in Face of Hollow CMU Wall

Anchor Diameter (in.)	Drill Bit Diameter (in.)	Embed. Depth (in.)	Min. Edge Distance (in.)	Min. Spacing (in.)	Tension Load		Shear Load	
					Ultimate (lb.)	Allowable (lb.)	Ultimate (lb.)	Allowable (lb.)
1/4	3/16	1 1/2	2	3	925	185	1,130	225
			4	3	895	180	1,370	275

1. The allowable loads listed are based on a factor of safety of 5.0.
2. The tabulated values are for screw anchors installed in minimum 8"-wide hollow masonry wall having reached a minimum  $f'_m$  of 2,000 psi at time of installation.
3. Screw anchors must be installed in cell of the block. The minimum edge distance and spacing must be maintained.
4. For installation where high or severe corrosion resistance is not required, embedment depth may be reduced by 1/4".



# Type 316 Stainless-Steel Titen Turbo™ Screw Anchor

**SIMPSON**

**Strong-Tie**

## TruShield™ — Engineered Coating

The Titen Turbo Stainless-Steel has a proprietary engineered coating called TruShield, that provides additional protection against dissimilar metals. This coating provides an excellent barrier against galvanic interaction between the base Type 316 stainless steel and the metal fixture. Additionally, the coating is durable, protecting the integrity of the installation over time.

## For Use in Various Corrosive Environments



Outdoor railings



Storm shutter rail



Outdoor handrails



ACQ lumber to concrete/masonry



Balcony attachments



Window and door framing

## Type 316 Stainless Steel Common Installation Areas

- Window and door frames
- Balconies and railings in coastal environments
- Light fixtures
- Clean rooms
- Food processing facilities
- Agricultural facilities
- Parking structures
- Breweries, distilleries and wineries
- Screen enclosures
- Hurricane shutters
- Curtain walls



# TITEN®

## SCREW ANCHORS

**Strength Runs in the Family.**

Learn more about our full line of easy-to-install Titen solutions, visit [go.strongtie.com/titenfamily](https://go.strongtie.com/titenfamily).