



**DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)
BOARD AND CODE ADMINISTRATION DIVISION
NOTICE OF ACCEPTANCE (NOA)**

**MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION**
11805 SW 26 Street, Room 208
Miami, Florida 33175-2474
T (786) 315-2590 F (786) 315-2599
www.miamidade.gov/building

**Simpson Strong-Tie Company, Inc.
5956 W. Las Positas Blvd.
Pleasanton, CA 94588**

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER-Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

DESCRIPTION: 3/16" & 1/4" Titen™ Turbo (TNT) Concrete and Masonry Screw Anchors

APPROVAL DOCUMENT: Drawing No. TNTMD2024, titled "Titen™ Turbo Concrete and Masonry Screw Anchors", sheets 1 through 3 of 3, prepared by Simpson Strong-Tie Company, Inc., dated 07/11/2024, signed and sealed by Keith E. Cullum, P.E. bearing the Miami-Dade County Product Control Approval stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: None

LABELING: Each box shall bear a permanent label with the manufacturer's name or logo, Kaohsiung, Taiwan and following statement: "Miami-Dade County Product Control Approved or MDCPCA", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA consists of this page 1 and evidence pages E-1, as well as approval document mentioned above. The submitted documentation was reviewed by **Carlos M. Utrera, P.E.**



08/01/24

**NOA No. 24-0111.01
Expiration Date: August 8, 2029
Approval Date: August 8, 2024**

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Drawing No. **TNTMD2024**, titled “Titen™ Turbo Concrete and Masonry Screw Anchors”, sheets 1 through 3 of 3, prepared by Simpson Strong-Tie Company, Inc., dated 07/11/2024, signed and sealed by Keith E. Cullum, P.E.

B. TESTS

| | <u>Test Report No.</u> | <u>Testing Standard</u> | <u>Date</u> | <u>Signature</u> |
|-----|-------------------------------|--------------------------------|--------------------|-------------------------|
| 1. | ESP029459P.1R0 | ACI 355.2, AC193, ASTM E488 | 12/18/23 | Jason R. Steen, P.E. |
| 2. | ESP035980P.1R0 | ACI 355.2, AC193, ASTM E488 | 10/07/21 | Jason R. Steen, P.E. |
| 3. | ESP029460P.1R0 | AC 106, ASTM E488 | 01/02/24 | Jason R. Steen, P.E. |
| 4. | HETI-23-S855 | ASTM G85-11 | 11/15/23 | Ram N. Tewari, P.E. |
| 5. | HETI-23-S856 | ASTM G85-11 | 11/15/23 | Ram N. Tewari, P.E. |
| 6. | HETI-23-S857 | ASTM G85-11 | 11/15/23 | Ram N. Tewari, P.E. |
| 7. | HETI-23-S858 | ASTM G85-11 | 11/15/23 | Ram N. Tewari, P.E. |
| 8. | HETI-23-S859 | ASTM G85-11 | 11/16/23 | Ram N. Tewari, P.E. |
| 9. | HETI-23-S860 | ASTM G85-11 | 11/16/23 | Ram N. Tewari, P.E. |
| 10. | HETI-23-S861 | ASTM G85-11 | 11/16/23 | Ram N. Tewari, P.E. |
| 11. | HETI-23-S864 | ASTM G85-11 | 11/17/23 | Ram N. Tewari, P.E. |

C. CALCULATIONS

1. Sample calculation, prepared by Simpson Strong-Tie Company, Inc., dated 07/11/2024, signed and sealed by Keith E. Cullum, P.E.

D. QUALITY ASSURANCE

1. Miami-Dade Department of Regulatory and Economic Resources (RER).

E. MATERIAL CERTIFICATIONS

1. None.

F. STATEMENTS

1. Statement letter of code conformance with the 8th edition (2023) of the FBC and of no financial interest, issued by Simpson Strong-Tie Company, Inc., dated 07/11/2024, signed and sealed by Keith E. Cullum, P.E.
2. Distributor agreement dated 12/15/2023.



Carlos M. Utrera, P.E.
Product Control Examiner
NOA No. 24-0111.01
Expiration Date: August 8, 2029
Approval Date: August 8, 2024

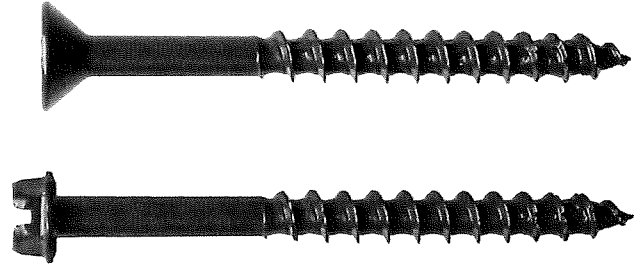
Simpson Strong-Tie®

Titen Turbo™ Concrete and Masonry Screw Anchor

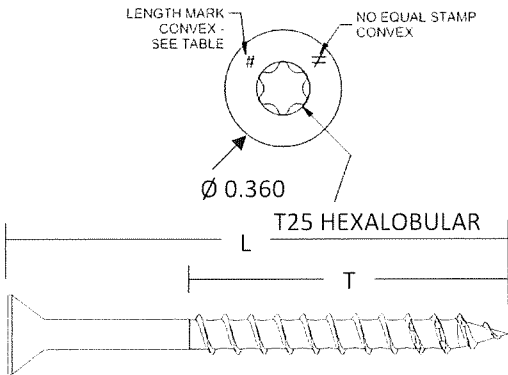


Description

Carbon steel screw anchors have a minimum yield strength of 100 ksi and a minimum tensile strength of 125 ksi. The screw anchors have zinc plating with a baked ceramic coating. 3/16 in. and 1/4 in. carbon steel screw anchors are available in both flat head and hex head, and the 1/4 in. is also available in a trim head style. The length of the screw anchors range from 1-1/4 in. to 6 in.



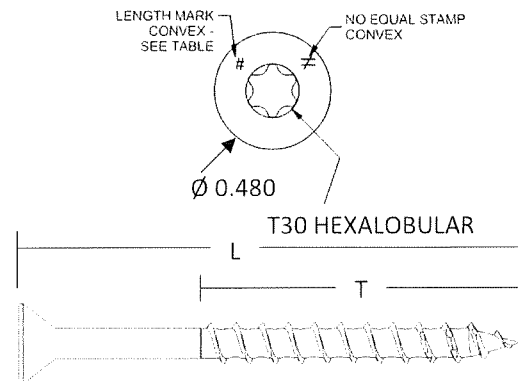
3/16" Titen Turbo – Flat Head:



| MODEL | L | T | LENGTH MARK |
|------------|---------------|---------------|-------------|
| TNT18114TF | 1.250 [31.75] | 0.938 [23.83] | NONE |
| TNT18134TF | 1.750 [44.45] | 1.438 [36.53] | A |
| TNT18214TF | 2.250 [57.15] | 1.750 [44.45] | B |
| TNT18234TF | 2.750 [69.85] | 1.750 [44.45] | C |
| TNT18314TF | 3.250 [82.55] | 1.750 [44.45] | D |
| TNT18334TF | 3.750 [95.25] | 1.750 [44.45] | E |

Model numbers shown are for the standard Blue color. Models in White begin with "TNTW".

1/4" Titen Turbo – Flat Head:



| MODEL | L | T | LENGTH MARK |
|------------|----------------|---------------|-------------|
| TNT25114TF | 1.250 [31.75] | 0.938 [23.83] | NONE |
| TNT25134TF | 1.750 [44.45] | 1.438 [36.53] | A |
| TNT25214TF | 2.250 [57.15] | 1.750 [44.45] | B |
| TNT25234TF | 2.750 [69.85] | 1.750 [44.45] | C |
| TNT25314TF | 3.250 [82.55] | 1.750 [44.45] | D |
| TNT25334TF | 3.750 [95.25] | 1.750 [44.45] | E |
| TNT25400TF | 4.000 [101.60] | 1.750 [44.45] | F |
| TNT25500TF | 5.000 [127.00] | 1.750 [44.45] | H |
| TNT25600TF | 6.000 [152.40] | 1.750 [44.45] | J |

Model numbers shown are for the standard Blue color. Models in White begin with "TNTW".

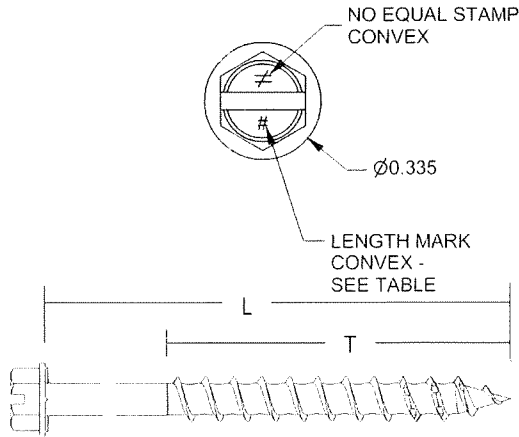
| | | |
|---|---|--|
| <p>Report Holder:</p> <p>Simpson Strong-Tie 5956 W. Las Positas Blvd. Pleasanton, CA 94588 (800) 999-5099 strongtie.com</p> <p>Drawing: TNTMD2024 Date: 7/11/2024</p> | <p>For Miami-Dade County:</p> <p>PRODUCT APPROVED as complying with the Florida Building Code NOA-No. 24-0111.01 Approval Date 08/08/2024 By  Miami-Dade Product Control</p> |  <p>COA#30003</p> |
|---|---|--|

Simpson Strong-Tie®

Titen Turbo™ Concrete and Masonry Screw Anchor



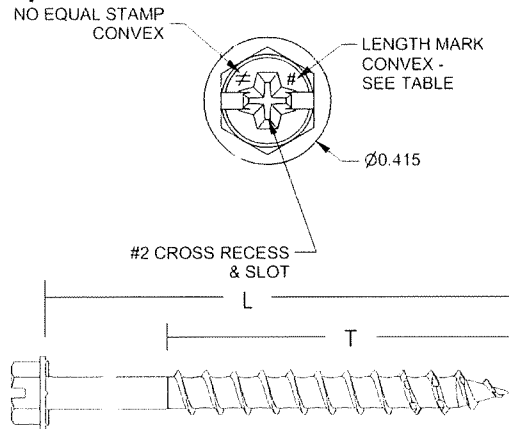
3/16" Titen Turbo – Hex Head:



| MODEL | L | T | LENGTH MARK |
|-----------|---------------|---------------|-------------|
| TNT18114H | 1.250 [31.75] | 1.125 [28.58] | NONE |
| TNT18134H | 1.750 [44.45] | 1.625 [41.28] | A |
| TNT18214H | 2.250 [57.15] | 1.750 [44.45] | B |
| TNT18234H | 2.750 [69.85] | 1.750 [44.45] | C |
| TNT18314H | 3.250 [82.55] | 1.750 [44.45] | D |
| TNT18334H | 3.750 [95.25] | 1.750 [44.45] | E |

Model numbers shown are for the standard Blue color.

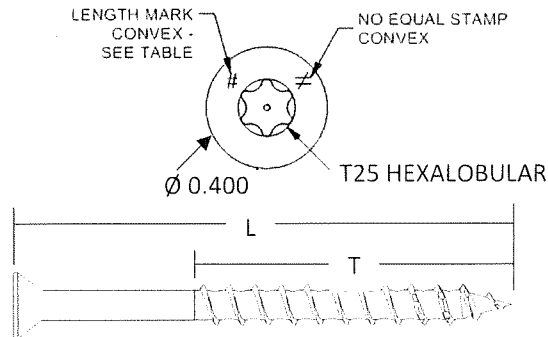
1/4" Titen Turbo – Hex Head:



| MODEL | L | T | LENGTH MARK |
|-----------|----------------|---------------|-------------|
| TNT25114H | 1.250 [31.75] | 1.125 [28.58] | NONE |
| TNT25134H | 1.750 [44.45] | 1.625 [41.28] | A |
| TNT25214H | 2.250 [57.15] | 1.750 [44.45] | B |
| TNT25234H | 2.750 [69.85] | 1.750 [44.45] | C |
| TNT25314H | 3.250 [82.55] | 1.750 [44.45] | D |
| TNT25334H | 3.750 [95.25] | 1.750 [44.45] | E |
| TNT25400H | 4.000 [101.60] | 1.750 [44.45] | F |
| TNT25500H | 5.000 [127.00] | 1.750 [44.45] | H |
| TNT25600H | 6.000 [152.40] | 1.750 [44.45] | J |

Model numbers shown are for the standard Blue color.

1/4" Titen Turbo – Trim Head:



| MODEL | L | T | LENGTH MARK |
|-------------|---------------|---------------|-------------|
| TNT25234TTR | 2.750 [69.85] | 1.750 [44.45] | C |
| TNT25314TTR | 3.250 [82.55] | 1.750 [44.45] | D |

Model numbers shown are for the standard Blue color. Models in White begin with "TNTW". Models in Bronze begin with "TNTB".

| | | |
|---|--|------------------|
| <p>Report Holder:</p> <p>Simpson Strong-Tie 5956 W. Las Positas Blvd. Pleasanton, CA 94588 (800) 999-5099 strongtie.com</p> <p>Drawing: TNTMD2024 Date: 7/11/2024</p> | <p>For Miami-Dade County:</p> <p>PRODUCT APPROVED as complying with the Florida Building Code NOA-No. <u>24-0111.01</u> Approval Date <u>08/08/2024</u> By <u>[Signature]</u> Miami-Dade Product Control</p> | <p>COA#30003</p> |
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Simpson Strong-Tie®

Titen Turbo™ Concrete and Masonry Screw Anchor

SIMPSON

Strong-Tie

Installation Instructions

- 1) Drill a hole in the un-cracked base material using the appropriate diameter carbide drill bit as specified in the table. Drill the hole to the specified embedment depth plus 1/2" to allow the thread tapping dust to settle. While not required, dust may be cleaned from a drilled hole using compressed air prior to screw installation for best results.
- 2) Position fixture, insert screw and tighten using drill and Titen Turbo screw installation tool fitted with a hex socket or 6-lobe bit socket.

Allowable Loads in Normal-Weight Concrete (f'c=2500 psi)

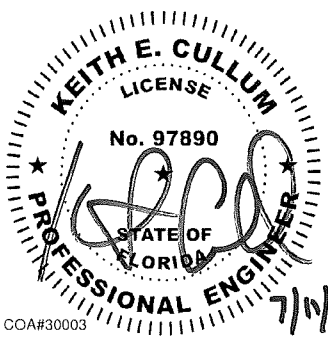
| Anchor Diameter (in.) | Drill Bit Diameter (in.) | Embedment Depth (in.) | Critical Edge Distance (in.) | Minimum Edge Distance (in.) | Minimum Spacing (in.) | Wind Allowable Loads (lb.) | |
|-----------------------|--------------------------|-----------------------|------------------------------|-----------------------------|-----------------------|----------------------------|-------|
| | | | | | | Tension | Shear |
| 3/16 | 5/32 | 1-3/4 | 3 | 1-3/4 | 1 | 385 | 170 |
| | | | | 3 | | 590 | 170 |
| 1/4 | 3/16 | 1-3/4 | 3 | 1-3/4 | 2 | 360 | 250 |
| | | | | 3 | | 590 | 260 |

1. Wind allowable loads are calculated based on the strength design provision of ACI 318-19 Chapter 17 using a conversion factor of $\alpha = 1/0.6 = 1.67$. The conversion factor α is based on the load combination assuming 100% wind load.
2. Tabulated values are calculated with Cmin on one side and Cac on three sides.
3. Tabulated values are for a single anchor with no influence of another anchor.

Allowable Loads in CMU

| Anchor Diameter (in.) | Drill Bit Diameter (in.) | Embedment Depth (in.) | Minimum Edge Distance (in.) | End Distance (in.) | Minimum Spacing (in.) | Allowable Loads (f'm ≥ 1,500 psi) (lb.) | | | |
|-----------------------|--------------------------|-----------------------|-----------------------------|--------------------|-----------------------|---|-------|---------|-------|
| | | | | | | UngROUTED CMU | | GFCMU | |
| | | | | | | Tension | Shear | Tension | Shear |
| 3/16 | 5/32 | 1-1/4 | 3-7/8 | 3-7/8 | 3 | 117 | 164 | - | - |
| | | 2 | 3-7/8 | | | - | - | 267 | 218 |
| | | 2 | 1-1/2 | | | - | - | 267 | 218 |
| 1/4 | 3/16 | 1-1/4 | 3-7/8 | 3-7/8 | 4 | 117 | 190 | - | - |
| | | 2 | 3-7/8 | | | - | - | 393 | 342 |
| | | 2 | 1-1/2 | | | - | - | 343 | 283 |

1. The allowable loads listed are based on a safety factory of 5.0 for CMU.
2. Allowable loads may not be increased for the duration of the load.
3. The attached member or element may govern the allowable load. The designer shall verify allowable load.
4. Refer to strongtie.com for additional information on the Titen Turbo.

| | | |
|---|---|--|
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|---|---|--|