# **TITEN**<sup>®</sup> Concrete and Masonry Screw Anchors





# A complete line of high-performance solutions

The Titen® family of concrete and masonry anchoring solutions from Simpson Strong-Tie offers a broad range of versatile, high-performance products designed for strength and reliability with fast and easy installation for every application. Backed by extensive evaluation reports, rigorous testing and longstanding legacy of expert engineering, each of our innovative screw anchors are designed for maximum ease and efficiency — ensuring a quick, smooth installation the first time, every time. With reliable, widespread product availability and skilled field support teams, you'll always have the Titen solutions and technical knowledge to help you build better than ever.





Titen HD® Heavy-Duty Screw Anchor

Titen HD Stainless-Steel Heavy-Duty Screw Anchor







Titen HD Countersunk Screw Anchor

Titen® Stainless-Steel Hex-Head Screw Anchor

Titen HD Rod Hanger



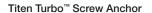


Titen HD Heavy-Duty Screw Anchor with Washer-Head

Titen HD Countersunk Screw Anchor Stainless-Steel



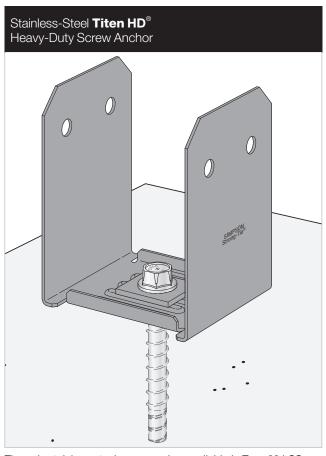




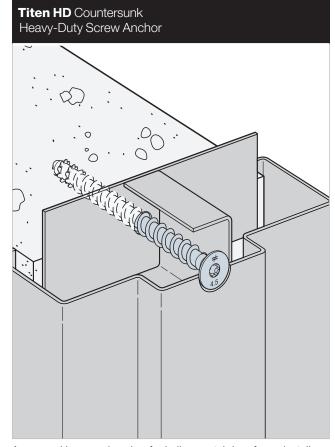
#### **Titen Products**

|   | Material/Coating |                            |                      |        |        |  |
|---|------------------|----------------------------|----------------------|--------|--------|--|
|   | Carbo            | n Steel                    | Stainless Steel Type |        |        |  |
|   | Zinc Plated      | Mechanically<br>Galvanized | 304 SS               | 316 SS | 410 SS |  |
| Titen HD Heavy-Duty Screw Anchor                        | ✓                | ✓                          | ✓                    | ✓      | _      |  |
| Titen HD Heavy-Duty Screw Anchor Countersunk Head Style | ✓                | _                          | _                    | ✓      | _      |  |
| Titen HD Heavy-Duty Screw Anchor Washer-Head Head Style | ✓                | _                          | _                    | _      | _      |  |
| Titen Turbo Concrete and Masonry Screw Anchor           | ✓                | _                          | _                    | _      | _      |  |
| Titen HD Threaded Rod Hanger                            | ✓                | _                          | _                    | _      | _      |  |
| Titen HD Rod Coupler                                    | ✓                | _                          | _                    | _      | _      |  |
| Titen Stainless-Steel Concrete and Masonry Screw        | _                | _                          | _                    | _      | ✓      |  |

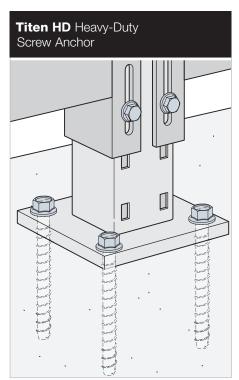
# **TITEN** Screw Anchors



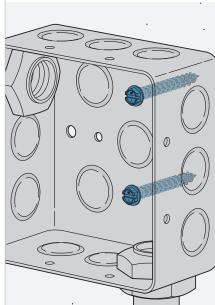
The only stainless-steel screw anchor available in Type 304 SS.



A new and improved anchor for hollow metal door frame installs.



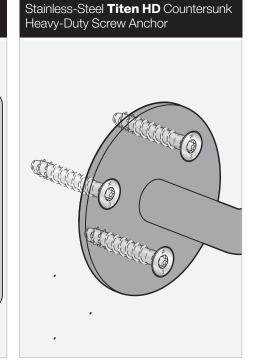
Faster and removable vs. wedge anchor, perfect for racking applications.



Titen Turbo™Concrete and

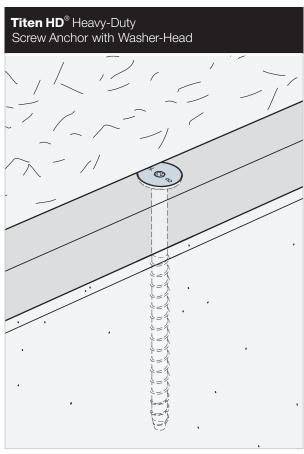
Masonry Screw Anchor (Hex-Head)

Faster, more reliable installation for light-duty applications.

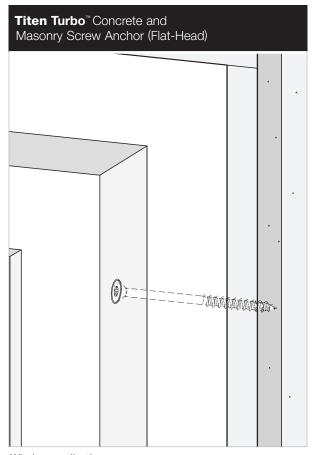


Gives a clean, architectural look for handrail installations.

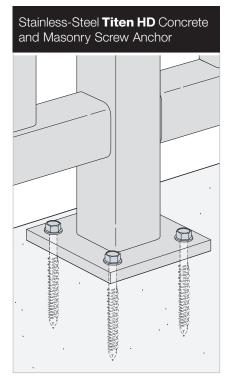




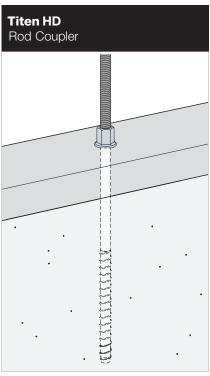
The only heavy-duty screw anchor available in a low profile head style.



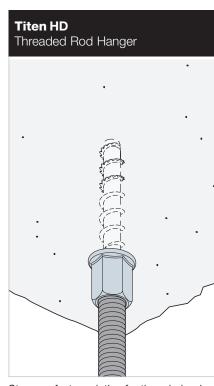
Window applications.



Light-duty stainless-steel anchor versatile for a variety of applications.



Code-listed screw anchor where reinforced threaded rod wall systems are required.



Stronger, faster solution for threaded rod attachments vs. traditional drop-in anchor.

### **TITEN** Screw Anchors



| Product            |  | Tested Base Materials and Code Listings       |                             |                              |                             |                             |         |     |
|--------------------|--|---|-----------------------------|------------------------------|-----------------------------|-----------------------------|---------|-----|
|                    |  | Concrete Concrete                             |                             | СМИ                          |                             | Other<br>Listings           |         |     |
|                    |  | Cracked                                       | Uncracked                   | Metal Deck                   | Grout-Filled                | Hollow                      |         |     |
|                    | Titen HD®<br>(THD)                                     |   | ESR-2713 (COLA),<br>FL15730 |                              | ESR-1056 (COLA),<br>FL15730 | IBC                         | FM, DOT |     |
|                    | Stainless-Steel<br>Titen HD<br>(THD-SS)                |   | ER-493 (COLA),<br>FL16230   |                              |                             | ESR-1056 (COLA),<br>FL15730 |         | DOT |
| Mechanical Anchors | Titen HD Countersunk<br>(THD-CS)                       |   | ESR-2713 (COLA),<br>FL15730 |                              |                             | ESR-1056 (COLA),<br>FL15730 | IBC     | DOT |
|                    | Stainless-Steel<br>Titen HD Countersunk<br>(THD-CS-SS) | CHANNING CONTRACTOR                           | ER-493 (COLA),<br>FL16230   |                              |                             | ESR-1056 (COLA),<br>FL15730 |         | DOT |
|                    | Titen HD<br>Washer Head<br>(THD-WH)                    |   | ESR-2713 (COLA)<br>FL 15730 |                              |                             | IBC                         |         | DOT |
|                    | Titen HD<br>Rod Coupler<br>(THD-RC)                    | <b>—</b> ************************************ | ESR-2713 (COLA),<br>FL15730 |                              | _                           | _                           | DOT     |     |
|                    | Titen HD<br>Rod Hanger<br>(THD-RH)                     |   | ESR-2713 (COLA),<br>FL15730 |                              | _                           | _                           | FM      |     |
|                    | Titen Turbo™<br>(TNT)                                  | 1   | _                           | ER-712<br>(COLA),<br>FL16230 | _                           | ER-716<br>FL16              |         | _   |

# Trusted quality, code-listed and innovative anchors that can be installed in exterior and corrosive environments.

When it comes to anchorage, specifying a material that can withstand the environment is critical. Proper protection comes from materials that are capable of resisting corrosion while maintaining their strength.

Most anchor products are made from carbon steel. This material is easy to form into a screw or an expansion anchor and can be heat treated to increase its strength and durability. Steel is versatile but can weaken in a corrosive environment. Left unprotected, the iron in the steel will react with oxygen and moisture to form iron oxide — also known as rust.

**Note:** For detailed information, see **strongtie.com** *Anchoring, Fastening, Restoration and Strengthening Systems for Concrete and Masonry* catalog (Appendix).

#### **Environments**

There are four levels of corrosive environments (as shown on this table).

#### Minimum Corrosion Resistance Recommendations

| Corrosion Resistance<br>Classification by Environment | Recommended Product<br>Material or Coating     |  |  |
|---|--|--|--|
| Low   | Zinc plated                                    |  |  |
| Medium  | Mechanically galvanized (ASTM B695 — Class 55) |  |  |
|   | Hot-dip galvanized (ASTM A153 — Class C)       |  |  |
| High  | Type 303 or 304 stainless steel                |  |  |
| Severe  | Type 316 stainless steel                       |  |  |

#### **TITEN** Screw Anchors



# A legacy of service and support

Simpson Strong-Tie prides itself on delivering a knowledgeable team of sales and engineering experts that our customers have trusted for over 60 years. On the phone, online or on your jobsite, our people are always there to help your projects run smoother, faster and smarter.

# Everywhere you are with the products and training you need.

As a leader in innovation, research and testing, Simpson Strong-Tie is one of North America's largest suppliers of structural building products. With facilities from coast to coast and a distribution network that's second to none, we can have any product on your jobsite exactly when you need it. And our extensive network of onsite training centers and remote workshops ensure that you'll have the knowledge you'll need to get the job done right.



## Anchor software and web apps



#### **Anchor Reference Tool**

Easily identify the Simpson Strong-Tie alternative to specified mechanical or adhesive anchor product(s), either by specified product name or code listing.

Visit: strongtie.com/softwareandwebapplications/category.



#### Post-to-Foundation Designer

Easily design holdowns and anchors that resist uplift loads per latest building codes. For a given uplift load, quickly identify cost-effective Simpson products by filtering thousands of solutions.

# Anchor Designer™ software for ACI 318, ETAG and CSA

Simpson Strong-Tie Anchor Designer Software is the latest anchorage design tool for structural engineers to satisfy the strength design provisions and methodologies. Anchor Designer will quickly and accurately analyze an existing design or suggest anchorage solutions based upon user-defined design elements in cracked and uncracked concrete conditions.

The real-time design is visually represented in a fully-interactive 3D graphic user interface, supports imperialand metric-sized Simpson Strong-Tie mechanical and adhesive anchors, and offers cast-in-place anchor solutions. Anchor Designer can calculate single anchor solutions or with multiple anchors in a single plate. Anchor locations are fully customizable to assist engineers in complex design conditions.



#### Features include:

- Design standards: ACI 318-14 Chapter 17 / ACI 318-11 Appendix D, CAN / CSA A23.3 Annex D, ETAG 001 Annex C or EOTA TR029.
- Customizable anchor pattern.
- Easy-to-use menus.
- Ability to calculate single anchor model or to calculate multiple anchor models at once.
- Multi-lingual options include English, German, French, Spanish, Polish and Danish languages.
- Rectangular, circular, L-shape and T-shape base plate geometries with the option to include slotted holes.
- And much more!

