

The TL (Tectum & Lightweight) Non-Penetrating Fastener System For Lightweight Roof Decks

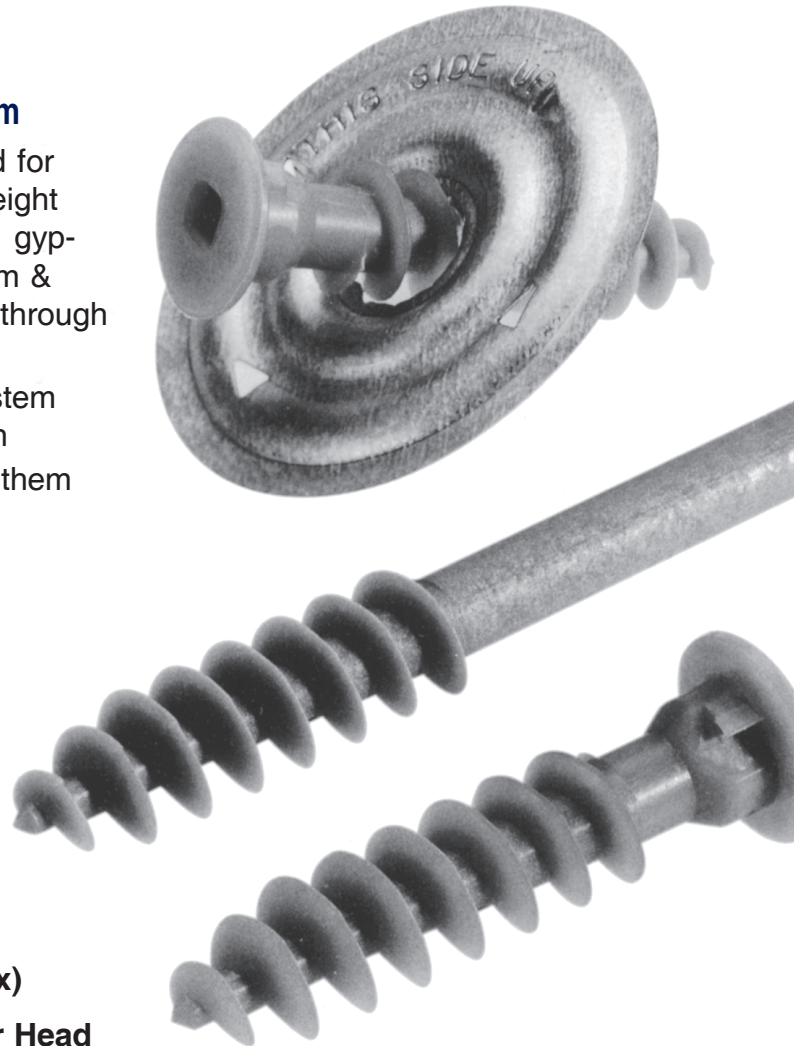
TL FASTENER SYSTEM

TL (Tectum & Lightweight) Fastener System

This fastener along with the plate are used for fastening insulation and membrane to lightweight deck substrates, such as cement wood fiber, gypsum and insulation concretes. The TL (Tectum & Lightweight) Fastener can even be installed through old B.U.R. into tectum without pre-drilling.

The TL (Tectum & Lightweight) Fastener System has many benefits you will find valuable when working with lightweight roof decks. Some of them are as follows:

- High Thread - Small Root
- Tapered Root
- High Holding Power
- Diaphragm Insulation Plate Design
- 38 Inch - Pounds Backout Torque
- 2" Round Membrane Plate and 3" Galvalume™ Insulation Plate
- Internal Square Drive Bit (one per box)
- Fastener Length Marked on Fastener Head
- Available lengths 2" to 10" in 1/2" increments



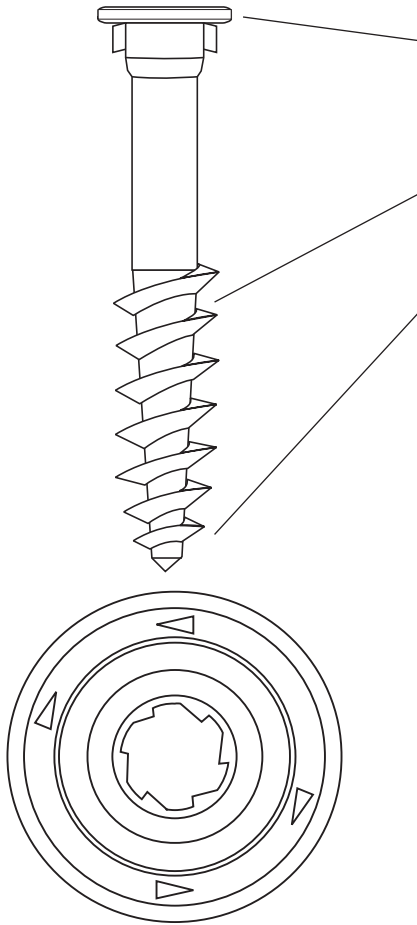
Subject to the condition of Approval as a roofing component when installed as shown in the current edition of the Factory Mutual Research Approval Guide



APPROVED



TL (Tectum & Lightweight) Fastener System



Fastener Length Marked on Fastener Head: The head of the TL (Tectum & Lightweight) is clearly marked with the length of the fastener making it easy to identify each fastener.

High Thread - Small Root: This provides greater reach into the base material.

High Holding Power: Because of the tapered root and large thread, the TL (Tectum & Lightweight) has 10-30% higher holding power.

LOAD CAPACITIES FOR TL FASTENER

Substrate Material	Pre-Drill	Embedment	Tension Load
Tectum® Deck	-	1 -1/2"	280 lbs.
Tectum® Deck	-	2"	440 lbs.
Tectum® Deck	-	2 -1/2"	595 lbs.
3" Insulrock	5/16"	2 -1/2"	365 lbs.
Poured Gypsum	3/8"	2"	540 lbs.

Note: Test data above represent average ultimate loads sustained in the materials indicated and should be used as guidelines only. **TRUFAST CORPORATION** recommends that pullout tests be conducted to verify that the substrate provides adequate pullout values.

Galvalume™ Plate

Tectum® is a registered trademark of Tectum Inc.

FASTENER INSTALLATION INSTRUCTIONS AND WARRANTY

Place Plate on insulation (3" round) or membrane (2" round). With driver bit provided in fastener box, use an electric impact tool (recommended) or 1/2" electric drill (in rotary mode) to install fastener through plate into substrate a minimum of 1-1/2". Predrilling of a 5/16" pilot hole in Insulrock or 7/16" hole in gypsum is recommended. Hole size may be varied to maximize pullout. Drilling is not required in Tectum. Fastener should be driven until plate seats against membrane/insulation securely (do not overdrive). For proper seating of plate see item #4 below. Details regarding installation and fastener warranty are listed below and should be read carefully prior to using this product.

- On all applications pullout load tests must be done in various areas to determine the structural integrity of the substrate and the holding ability of the fastener. Pullout load tests should be submitted to the insulation board and membrane manufacturers and both should approve the fastening patterns in writing.
- Install fasteners into non-degrading environment. Do not install through wet insulation or when interior environment of the building would be degrading to the fastener material.
- Fasteners should be driven perpendicular to work surface.
- Fasteners that are improperly installed (i.e. overdriven, underdriven, snapped, bent, stripped) should be removed or corrected.
 - Overdriven:** Fastener is driven causing stress plate to be concave or to deform which can cause reduction in holding force or thread stripping of substrate.
 - Underdriven:** Fastener head is not properly seated on stress plate.
 - Snapped:** Fastener breaks under driving load.
 - Bent:** Fastener is bent to the point that is adversely affects installation.
 - Stripped:** Fastener thread strips out of substrate causing low pullout force.
- Wear safety goggles when installing fasteners.
- Proper installation tools are recommended for proper application of fasteners in all deck types.
- Suitability of a fastener's use for a particular application is determined solely by acceptance of the building owner or his representative and is not the responsibility of the manufacturer or seller of this product.
- In no event shall the manufacturer or seller be liable for incidental, consequential, punitive or personal liability or other damages, including but not limited to loss of profits or damage to the building or contents.
- If employees or representatives of the manufacturer or seller assists in pullout testing of the fastener, these companies assume no responsibility for the accuracy or representations of such testing. Suitability of a fastener's use for a particular application is not the responsibility of the manufacturer or seller and no agent or employee can recommend or specify a fastener for a particular installation.
- The Manufacturer certifies that the fastener, when properly installed in accordance with its published fastener-and-plate assembly installation instructions, will not backout of the substrate or fail for a period of ten (10) years in both new and reroofing installations.
- The Manufacturer and/or seller will not indemnify against failures due to improper anchor selection; incorrect installation pattern; insufficient deck strength; careless installation; overdriven or underdriven fasteners or any other mode of failure beyond the actual breakage of the Fastener or matching stress plate.
- This certification states that the manufacturer's and seller's liability shall be limited to the cost of repair or installation of fasteners by an authorized roofing applicator to maintain a watertight condition, cost not to exceed the original purchase price of the fasteners per roofing project. Further, any costs determined to be the manufacturer's responsibility shall be calculated on a prorated ten year basis.
- Contractor should review product manual thoroughly before job startup. To obtain a manual, call TRUFAST CORPORATION 1-800-443-9602.

To Obtain an installation manual contact a representative at **TRUFAST CORPORATION.**



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