

# TL FASTENER

Polymer Auger Fasteners

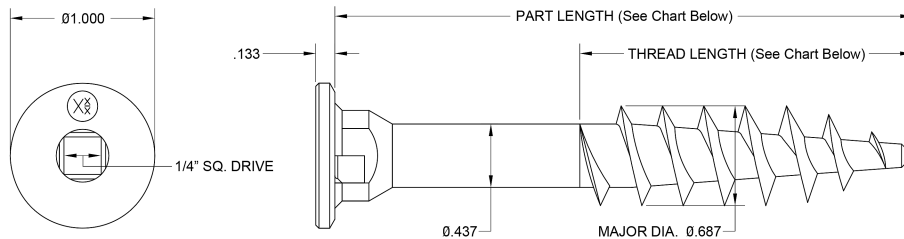
## DESCRIPTION

TL Fasteners are designed to mechanically attach rigid insulation board and single-ply membrane to structural cement wood fiber, gypsum and lightweight insulating concrete roof decks.

## ADVANTAGES

- ▶ Deep, coarse thread and large root diameter provides increased pullout resistance and shear strength
- ▶ Made from glass-filled nylon which eliminates corrosion, thermal bridging and condensation
- ▶ TL Plates are specifically designed to lock onto the head of the fastener

## PRODUCT SPECIFICATIONS



Enlarged to show detail

## PRODUCT PACKAGING

PART #	PART LENGTH		THREAD LENGTH *		PACKAGING		QTY/ PALLET
	Inches	MM	Inches	MM	QTY/Bucket	Weight (lb)	
TL-2000	2	50.8	1.447	36.8	500	12	27,000
TL-2500	2 1/2	63.5	1.947	49.5	500	13	27,000
TL-3000	3	76.2	2.3	58.4	500	15	27,000
TL-3500	3 1/2	88.9	2.3	58.4	500	16	27,000
TL-4000	4	101.6	2.3	58.4	500	19	27,000
TL-4500	4 1/2	114.3	2.3	58.4	500	21	27,000
TL-5000	5	127.0	2.3	58.4	500	23	27,000
TL-5500	5 1/2	139.7	2.3	58.4	500	25	27,000
TL-6000	6	152.4	2.3	58.4	500	26	27,000
TL-6500	6 1/2	165.1	2.3	58.4	500	28	27,000
TL-7000	7	177.8	2.3	58.4	250	16	13,500
TL-7500	7 1/2	190.5	2.3	58.4	250	16	13,500
TL-8000	8	203.2	2.3	58.4	250	17	13,500
TL-8500	8 1/2	215.9	2.3	58.4	250	19	13,500
TL-9000	9	228.6	2.3	58.4	250	20	13,500
TL-9500	9 1/2	241.3	2.3	58.4	250	21	13,500
TL-10000	10	254.0	2.3	58.4	250	22	13,500
TL-11000	11	279.4	2.3	58.4	250	24	13,500
TL-12000	12	304.8	2.3	58.4	250	26	13,500
TL-13000	13	330.2	2.3	58.4	250	28	13,500
TL-14000	14	355.6	2.3	58.4	250	30	13,500

\* All values shown are nominal. Thread length measured from tip of the drill point to end of the threads

# TL FASTENER

Solid Glass-Reinforced Nylon Fasteners

## AVERAGE ULTIMATE PULLOUT VALUES\* (lbf)

SUBSTRATE	MIN. EMBEDMENT DEPTH (Inches)		
	1-1/2	2	2-1/2
Tectum	280	440	595
3" Insulrock	—	—	365
Poured Gypsum	—	540	—

\* A pre-drilled 5/8" clearance hole is necessary only when plywood or other rigid materials are fastened to a roof deck. A plate is not required in this application.

## INSTALLATION

TL Fasteners can be installed into some cementitious wood fiber decks without predrilling. A pilot hole is required for gypsum and LWIC decks. **If pre-drilling is required, contact Performance Roof Systems Technical Services to perform a pullout test to determine drill bit size and pullout values.** Pilot holes must be a minimum of 1/2 inch deeper than the embedment required.

Using the 1/4 inch drive bit provided and a low rpm screw gun, install the fastener into the deck. Minimum fastener embedment should be 1 1/2 inches. TL fasteners should never penetrate the underside of the deck. Care should be taken not to overdrive the fastener to prevent damaging the insulation facer.

## PULLOUT TESTING

The strength of different roof decks can vary widely and can be adversely affected by moisture and other conditions. Therefore, it is recommended that a fastener pull test be conducted to help evaluate deck condition and fastener suitability. Contact Performance Roof Systems Technical Services to schedule testing.

## APPROVED PLATES

- 3" TL Insulation Plate
- 2" TL Seam Plate