



Product Data Sheet

TL FASTENER

PRODUCT DESCRIPTION

Revision Date: Dec 2019

The TL Fastener is designed to mechanically attach rigid insulation boards and single-ply membrane to cementitious wood fiber (Tectum®), gypsum and lightweight insulating concrete roof decks. It features a high thread profile with a tapered root diameter and sharp point. Its unique design allows it to penetrate the roof deck and progressively compact the base material, creating a stronger hold in weak material. The TL Fastener is used in conjunction with the 2" TL Membrane Plate and 3" TL Insulation Plate

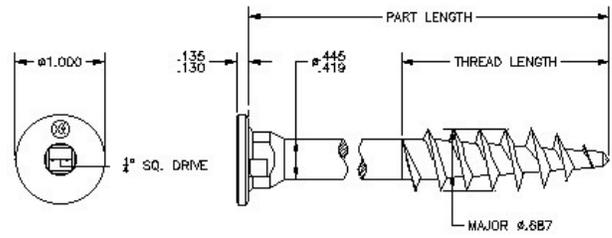
APPROPRIATE ACCESSORIES

3" TL Insulation Plates and 2" TL Membrane Plates are designed to be used with the TL Fastener.

PRODUCT SPECIFICATIONS

Fastener Length	Thread Length	Pkg.	Pkg. Wt.
2"	1.447"	500/Carton	12 lbs.
2-1/2"	1.947"	500/Carton	13 lbs.
3"	2.300"	500/Carton	15 lbs.
3-1/2"	2.300"	500/Carton	16 lbs.
4"	2.300"	500/Carton	19 lbs.
4-1/2"	2.300"	500/Carton	21 lbs.
5"	2.300"	500/Carton	23 lbs.
5-1/2"	2.300"	500/Carton	25 lbs.
6"	2.300"	500/Carton	26 lbs.
6-1/2"	2.300"	500/Carton	28 lbs.
7"	2.300"	250/Carton	15 lbs.
7-1/2"	2.300"	250/Carton	16 lbs.
8"	2.300"	250/Carton	17 lbs.
8-1/2"	2.300"	250/Carton	19 lbs.
9"	2.300"	250/Carton	20 lbs.
9-1/2"	2.300"	250/Carton	21 lbs.
10"	2.300"	250/Carton	22 lbs.
11"	2.300"	250/Carton	24 lbs.
12"	2.300"	250/Carton	26 lbs.
13"	2.300"	250/Carton	28 lbs.
14"	2.300"	250/Carton	30 lbs.

Fastener Body: Reinforced Nylon



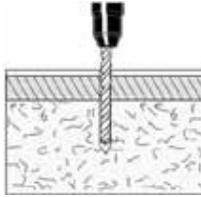
Average Ultimate Pullout Values

Substrate	Pre-Drill Dia.*	Min. Embedment	Pullout (lbf.)
Tectum™	N/A	1-1/2"	280
		2"	440
		2-1/2"	595
3" Insulrock	5/16"	2-1/2"	365
Poured Gypsum	3/8"	2"	540

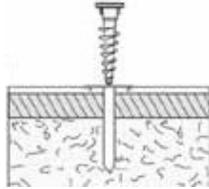
* A pre-drilled 5/8" clearance hole is only necessary when plywood or other rigid materials are fastened to roof deck. **A plate is not required in this application**

INSTALLATION GUIDELINES

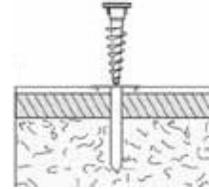
Using the ¼" drive bit provided and an electric impact tool that provides a high torque and relatively low rpm, install the fastener into the deck. A heavy-duty variable speed screw gun operated at a low speed is also acceptable. Pre-drilling is normally not required for installation into cementitious wood fiber decks such as Tectum®. Decks such as Insulrock may require a 5/16" pre-drilled hole. Gypsum and lightweight insulating concreted decks should be pre-drilled using a 3/8" or 7/16" carbide tipped bit. Larger carbide tipped bits up to ½" dia. can be used in denser materials. The drill bit size to be used should be determined during the job site test.



If pre-drilling is required, drill a hole into the base material to a depth ½" greater than the embedment required.



Place the Mule-Hide TL Plate on the insulation (TL 3" Plate) or seam (TL 2" Plate).



Drive the TL Fastener through the plate into the base material until the head of the fastener is properly seated in the plate. The plate should be seated securely against the insulation or membrane. - Do not overdrive.

NOTE

The performance specifications published in this Mule-Hide Product Data Sheet are based on controlled laboratory tests and are intended as a guideline only. They are not guaranteed in any way by Mule-Hide Products Co., Inc. or its supplier, since the building design, engineering and construction (including workmanship and materials) are beyond our control. Mule-Hide recommends that fastener pull tests be conducted to verify the substrate provides adequate pullout resistance.

PROTECTION & SAFETY

Mule-Hide maintains Safety Data Sheets on all of its non-exempt products. Safety Data Sheets contain health and safety information for your development of appropriate product handling procedures to protect your employees and customers. Mule-Hide Safety Data Sheets should be read and understood by all of your supervisory personnel and employees before using Mule-Hide products in your facilities.

ADDITIONAL INFORMATION

The information given on this PDS is subject to change without notice. Always check the Mule-Hide website at www.mulehide.com for the latest information, changes and updates or contact Mule-Hide Products Company at 800-786-1492.

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