

Drill-Tec™ Polymer Gyptec™

Data Sheet

Updated: 1/10



*Quality You Can Trust Since 1886...
From North America's Largest Roofing Manufacturer™*



DRILL-TEC™ POLYMER GYPTEC™

Use
With:
**Gypsum,
Tectum®
& Light-
weight-
Decks**

Description

The Drill-Tec™ Polymer GypTec™ is a glass-filled nylon auger fastener with 1" head designed to secure insulation and single-ply membrane to gypsum and cementitious wood fiber (i.e., Insulrock, Permadeck, Tectum®, etc.)

The fastener features a wide buttress thread design for excellent pull-out resistance, and tabs that lock the plate to the head of the fastener. The Polymer GypTec™ is designed to thread into the substrate but should not penetrate the deck. An internal 1/4" square (driver bit included) assures fast and easy installation.

The Polymer GypTec™ is used with 3" steel plates for insulation and 2" steel plates for membrane attachment. The Polymer GypTec™ fastener is Factory Mutual approved and available in lengths from 2 1/2" – 12".

Application

Drill-Tec™ Polymer GypTec™ fasteners can be installed into some cementitious wood fiber decks without predrilling. A pilot hole is required for gypsum. Use a 7/16", 1/2" or 9/16" drill bit as determined by pullout test results. Pilot holes must be a minimum of 1/2" deeper than embedment. Polymer GypTec™ fasteners should be installed using a heavy duty variable speed screw gun. Installation at a low rpm is recommended. Minimum fasteners embedment into the deck should be 1 1/2" (2" recommended).

Note: Care must be taken not to overdrive the fastener, causing subsequent damage to the insulation facer or single-ply membrane. Fastener must be tight enough so that the plate does not turn.

Code Approvals



Advantages

- Thread design and large rot diameter:
 - Increase pull-out resistance
 - Increase side shear strength
- Made from glass-filled nylon, which:
 - Eliminates corrosion
 - Eliminates thermal bridging and condensation
 - Yield high tensile strength
- Non-penetrating design. Fastener threads into the deck but not through.
- The Drill-Tec™ Polymer GypTec™ is **FM Approved for insulation attachment only.**

See system manufacturer for membrane attachment requirements.

- 1/4" driver bit included in every box.

Plates & Accessories

- Use 3" steel plate for insulation & 2" steel plate for single-ply membrane attachment.
- Use a carbide tip drill bit for gypsum and cementitious wood fiber applications.

Specifications

The fastener will be a Drill-Tec™ Polymer GypTec™ with a 1" head and a major thread diameter of 0.675. Drill-Tec™ Polymer GypTec™ will be used with a Drill-Tec™ GypTec™ 2" or 3" steel plate depending on the application. The fastener must be **Factory Mutual Approved for insulation attachment** and made in the U.S.A.

Product Data

Head Style	Internal 1/4" Square Drive
Head Size	1" Diameter
Major Thread Diameter	0.675"
Thread	3.5 T.P.I. Buttress
Material	Glass-filled Nylon
Packaging	250 or 500 per carton

SKU #	Length	Thread	Packaging	Weight
456G	2.5"	1.5"	500	13 lbs.
456H	3.0"	2.25"	500	16 lbs.
456J	3.5"	2.25"	500	18 lbs.
456K	4.0"	2.25"	500	20 lbs.
456L	4.5"	2.25"	500	22 lbs.
456M	5.0"	2.25"	500	23 lbs.
4582	5.5"	2.25"	500	24 lbs.
4583	6.0"	2.25"	500	26 lbs.
4584	6.5"	2.25"	500	28 lbs.
4585	7.0"	2.25"	500	30 lbs.
4586	7.5"	2.25"	500	32 lbs.
4587	8.0"	2.25"	250	17 lbs.
4588	8.5"	2.25"	250	19 lbs.
4589	9.0"	2.25"	250	20 lbs.
4590	9.5"	2.25"	250	21 lbs.
4591	10.0"	2.25"	250	22 lbs.
4592	10.5"	2.25"	250	23 lbs.
4593	11.0"	2.25"	250	24 lbs.
4594	11.5"	2.25"	250	25 lbs.
4595	12.0"	2.25"	250	26 lbs.

Drill-Tec™
Polymer
GypTec™



Example: Drill-Tec™ Polymer GypTec™ Selection Procedure

1. If applicable, determine thickness of existing roofing material.
 2. Add thickness of new insulation.
 3. Add 1 1/2" minimum fastener penetration (2" minimum embedment for all FM insulation attachment applications).
- NOTE:** When predrilling, allow extra 1/2". If odd size requirement, always size up in length, not down. See example:

Example

Existing Roofing:	1 3/4"
New Insulation:	+ 1/2"
Min. Embedment:	+ 1 1/2"
Total Fastening Range:	= 3 3/4"

The proper Drill-Tec™ Polymer GypTec™ for the example is 4".

Use this format to calculate correct fastener size:

Existing Roof:	
New Insulation:	+
Min. Embedment:	+ 1 1/2"
Total Fastening Range:	=

The proper Drill-Tec™ Polymer GypTec™ is: