



DRILL-TEC™ POLYMER GYPTEC® FASTENER

Description

Drill-Tec™ Polymer GypTec® Fastener is a glass-filled nylon auger fastener with 1" (25.4 mm) 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. Drill-Tec™ Polymer GypTec® is designed to thread into the substrate but should not penetrate the deck. An internal 1/4" (6.35 mm) square (driver bit included) assures fast and easy installation.

Drill-Tec™ Polymer GypTec® Fastener is used with Drill-Tec™ 3" (76 mm) GypTec® Plate for insulation and Drill-Tec™ 2" (51 mm) GypTec® Plate for membrane attachment. Drill-Tec™

Polymer GypTec® Fastener is Factory Mutual approved and available in lengths from 2 1/2" – 12" (64 – 305 mm).

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" (11.1 mm), 1/2" (12.7 mm) or 9/16" (14.3 mm) drill bit as determined by pullout test results. Pilot holes must be a minimum of 1/2" (12.7 mm) deeper than embedment. Drill-Tec™ 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" (38.1 mm) (2" [51 mm] 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.

Note: GypTec® is a registered trademark of OMG.

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" (6.35 mm) driver bit included in every box.

Plates & Accessories

- Use 3" (76 mm) steel plate for insulation & 2" (51 mm) 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® Fastener with a 1" (25.4 mm) head and a major thread diameter of 0.675" (17.1 mm). Drill-Tec™ Polymer GypTec® will be used with a Drill-Tec™ GypTec® 2" (51 mm) or 3" (76 mm) steel plate depending on the application. The fastener must be Factory Mutual Approved for insulation attachment.

Product Data

Head Style	Internal 1/4" (6.35 mm) Square Drive
Head Size	1" (25.4 mm) Diameter
Major Thread Diameter	0.675" (17.1 mm)
Thread	3.5 T.P.I. Buttress
Material	Glass-filled Nylon
Packaging	250 or 500 per carton

Length	Thread	Packaging (Box)	Weight
2 1/2" (64 mm)	1 1/2" (38.1 mm)	500	13 lb. (5.9 kg)
3.0" (76 mm)	2 1/4" (57.2 mm)	500	16 lb. (7.26 kg)
3 1/2" (89 mm)	2 1/4" (57.2 mm)	500	18 lb. (8.16 kg)
4.0" (102 mm)	2 1/4" (57.2 mm)	500	20 lb. (9.07 kg)
4 1/2" (114 mm)	2 1/4" (57.2 mm)	500	22 lb. (9.98 kg)
5.0" (127 mm)	2 1/4" (57.2 mm)	500	23 lb. (10.43 kg)
5 1/2" (140 mm)	2 1/4" (57.2 mm)	500	24 lb. (10.89 kg)
6.0" (152 mm)	2 1/4" (57.2 mm)	500	26 lb. (11.79 kg)
6 1/2" (165 mm)	2 1/4" (57.2 mm)	500	28 lb. (12.7 kg)
7.0" (178 mm)	2 1/4" (57.2 mm)	500	30 lb. (13.61 kg)
7 1/2" (191 mm)	2 1/4" (57.2 mm)	500	32 lb. (14.52 kg)
8.0" (203 mm)	2 1/4" (57.2 mm)	250	17 lb. (7.71 kg)
8 1/2" (216 mm)	2 1/4" (57.2 mm)	250	19 lb. (8.62 kg)
9.0" (227 mm)	2 1/4" (57.2 mm)	250	20 lb. (9.07 kg)
9 1/2" (241 mm)	2 1/4" (57.2 mm)	250	21 lb. (9.53 kg)
10.0" (254 mm)	2 1/4" (57.2 mm)	250	22 lb. (9.98 kg)
10 1/2" (267 mm)	2 1/4" (57.2 mm)	250	23 lb. (10.43 kg)
11.0" (279 mm)	2 1/4" (57.2 mm)	250	24 lb. (10.89 kg)
11 1/2" (292 mm)	2 1/4" (57.2 mm)	250	25 lb. (11.34 kg)
12.0" (305 mm)	2 1/4" (57.2 mm)	250	26 lb. (11.79 kg)

Note: All sizes are nominal.

Drill-Tec™
Polymer
GypTec® Fastener



Example: Drill-Tec™ Polymer GypTec® Fastener Selection Procedure

1. If applicable, determine thickness of existing roofing material.
2. Add thickness of new insulation.
3. Add 1 1/2" (38.1 mm) minimum fastener penetration (2" [51 mm] minimum embedment for all FM insulation attachment applications).

NOTE: When predrilling, allow extra 1/2" (12.7 mm). If odd size requirement, always size up in length, not down. See example:

Example	
Existing Roofing:	1 3/4" (44.4 mm)
New Insulation:	+ 1/2" (12.7 mm)
Min. Embedment:	+ 1 1/2" (38.1 mm)
Total Fastening Range:	= 3 3/4" (95.3 mm)

The proper Drill-Tec™ Polymer GypTec® for the example is 4" (102 mm).

Use this format to calculate correct fastener size:

Existing Roof:	
New Insulation:	+
Min. Embedment:	+ 1 1/2" (38.1 mm)
Total Fastening Range:	=

The proper Drill-Tec™ Polymer GypTec® is: