

DRILL-TEC™ #12 FASTENER

Description

Drill-Tec™ #12 Fastener is designed to secure insulation to steel (18 ga. – 24 ga.) and wood. It is available in lengths from 1-5/8" – 8" (41.3 mm – 203 mm). The Drill-Tec™ Standard #12 Roofing Fastener is Factory Mutual and Miami-Dade County Product Control approved.

Application

The Drill-Tec™ #12 Fastener must penetrate steel decks a minimum of ¾" (19.1 mm), wood plank decks a minimum of 1" (25.4 mm), and ½" (12.7 mm) through the underside for plywood decks. Using a screw gun, drive the fastener until the screw head is seated securely; with very rigid insulation boards, watch for the plate to dimple.

Note: Be careful not to overdrive the fastener and fracture the skin of the insula- tion. Fastener must be tight enough so that the plate doesn't turn.

For steel decks, Factory Mutual requires that the fastener penetrate the deck at the top flute.

To speed installation, this fastener is also available as a labor saving assembled screw and plate. See Drill-Tec ASAP® 3S.

Code Approvals





Advantages

- Heavier shank & thread diameters than most "standard" roofing fasteners.
- Deep buttress thread for high pull-out resistance.
- Extra sharp drill point for quick installation in new or reroof applications.
- Available with Hex Head or #3 Phillips Truss Head.

Plates & Accessories

- Use 3" (76 mm) steel or plastic plates, depending upon the application.
- For best installation results, use a variable speed 0-2500 rpm screw gun.

Specifications

The fastener will be a Drill-Tec™ #12 Fastener with a thread diameter of .220" (5.58 mm). The fastener must have 12.5 buttress threads per inch (per 25.4 mm) and a 30° drill point. Also, the fastener must be heat treated per specification OMG-1. The Drill-Tec™ #12 Fastener will be used with a Factory Mutual-approved, Drill-Tec™ Round Pressure Plate or Pressure Bar. The fastener must be Factory Mutual approved.

Coating Requirement

The fastener will be coated with the Drill-Tec™ CR-10 corrosion-resistant coating. When subjected to 30 Kesternich cycles (DIN 50018), the fastener must show less than 15% red rust and surpass Factory Mutual Approval Standard 4470.

Note: ASAP® is a registered trademark of OMG.

| Product Data | |
|-----------------|---|
| Thread Diameter | .220" (5.58 mm) |
| Head Diameter | |
| Truss Head | .435" (11.04 mm) |
| Hex Head | .390" (9.91 mm) |
| Head Style | #3 Phillips Truss Head* 1/4" (6.35 mm) Hex Head* |
| Coating | CR-10 |
| | |

*#3 Phillips bit or Hex Head drive included in each bucket.

| Length | Thread Length | Packaging (Bucket) | Weight |
|---|------------------|-----------------------|---------------------|
| 1 ⁵ /8" (41.3mm) | Full | 1,000 | 12 lb (5.44 kg) |
| 2 ¹ / ₄ " (57.1 mm) | Full | 1,000 | 15 lb (7.71 kg) |
| 3" (76 mm) | Full | 1,000 | 24 lb (10.89 kg) |
| 4" (102 mm) | 3" (76 mm) | 1,000 | 28 lb (12.70 kg) |
| 5" (127 mm) | 3" (76 mm) | 1,000 | 35 lb (15.88 kg) |
| 6" (152 mm) | 4" (102 mm) | 1,000 | 40 lb (18.14 kg) |
| 7" (178 mm) | 4" (102 mm) | 1,000 | 48 lb (21.77 kg) |
| 8" (203 mm) | 4" (102 mm) | 1,000 | 50 lb (22.68 kg) |
| | | | |

Note: All sizes are nominal.

Drill-Tec[™] #12 Fastener



Example: Drill-Tec™#12 Fastener Length Selection Procedure

- 1. If applicable, determine thickness of existing roofing material.
- 2. Add thickness of new insulation.
- 3. Add 3/4" (19.1 mm) minimum fastener penetration.
- 4. If odd size requirement, always size up in length, not down. See example below.

Example

Existing Roofing: 1 3/4" (44.4 mm)

New Insulation: + ½" (12.7 mm)

Min. Embedment: + 3/4" (19.1 mm)

Total Fastening Range: = 3" (76 mm)

The proper #12 Fastener for the example is 3 1/4" (82.6 mm).

Use this format to calculate correct fastener size:

Existing Roof:

New Insulation:

Min. Embedment: + 3/4" (19.1 mm)

Total Fastening Range:

The proper #12 Fastener is:

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