

# **Drill-Tec™** **#14 Fastener**

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North America's Largest Roofing Manufacturer!™*



# DRILL-TEC™ #14 FASTENER

## Description

Drill-Tec™ #14 Fastener is designed to secure insulation to heavy steel decks (18 ga.– 20 ga.), wood decks, and structural concrete. It is available in lengths from 1-1/4" – 16" (31.8 – 406 mm). The Drill-Tec™ #14 Fastener is Factory Mutual and Miami-Dade County Product Control approved.

## Application

The Drill-Tec™ #14 Fastener must penetrate steel decks a minimum of 3/4" (19.1 mm), wood plank decks a minimum of 1" (25.4 mm), and 1/2" (12.7 mm) through the underside for plywood decks. The Drill-Tec™ #14 Fastener requires a minimum embedment of 1" (25.4 mm) penetration into structural concrete. Pre-drill a 3/16" (4.76 mm) pilot hole using a carbide-tip SDS bit. The pre-drilled pilot hole must be a minimum of 1/2" (12.7 mm) deeper than the fastener embedment (at least a 2" [51 mm] deep pilot hole recommended). Using a screw shooter, 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 insulation. Fastener must be tight enough so that the plate doesn't turn.

## Code Approvals



## Advantages

- Heavier shank & thread diameters than most "heavy duty" roofing fasteners.
- Deep thread for high pull-out resistance.
- Extra sharp drill point for quick installation in new or reroof applications.

## 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.

Drill-Tec™ #14 Fastener



## Specifications

The fastener will be a Drill-Tec™ #14 Fastener with a shank diameter of .190 (.423 mm) and a thread diameter of .245 (6.22 mm). The fastener must have 10 threads per inch (per 25.4 mm) and have a 30° drill point. Also, the fastener must be heat treated per specification OMG-1. The Drill-Tec™ #14 Fastener will be used with a Factory Mutual-approved, Drill-Tec™ Round Pressure Plate. 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.

## Product Data

Thread Diameter	.245" (6.22 mm)
Shank Diameter	.190" (.423 mm)
Head Diameter	.435" (11.04 mm)
Head Style	#3 Phillips Truss Head*
Coating	CR-10

\*#3 Phillips bit included in each carton or bucket

Length	Thread Length	Packaging	Weight
1 1/4" (31.8 mm)	Full	1,000*	13 lb (5.90 kg)
1 3/4" (44.4 mm)	Full	1,000*	17 lb (7.71 kg)
2" (51 mm)	Full	1,000*	19 lb (8.62 kg)
3" (76 mm)	Full	1,000*	27 lb (12.25 kg)
4" (102 mm)	3" (76 mm)	1,000*	35 lb (15.88 kg)
5" (127 mm)	4" (102 mm)	500*	23 lb (10.43 kg)
6" (152 mm)	4" (102 mm)	500*	26 lb (11.79 kg)
7" (178 mm)	4" (102 mm)	500*	30 lb (13.61 kg)
8" (203 mm)	4" (102 mm)	500*	34 lb (15.42 kg)
9" (227 mm)	4" (102 mm)	500**	37 lb (16.78 kg)
10" (254 mm)	4" (102 mm)	500**	40 lb (18.14 kg)
11" (279 mm)	4" (102 mm)	500**	44 lb (19.96 kg)
12" (305 mm)	4" (102 mm)	250**	25 lb (11.34 kg)
14" (357 mm)	4" (102 mm)	250**	29 lb (13.15 kg)
16" (406 mm)	4" (102 mm)	250**	38 lb (17.24 kg)
18" (457 mm)	4" (102 mm)	250**	41 lb (18.6 kg)
20" (508 mm)	4" (102 mm)	250**	47 lb (21.32 kg)
22" (558.8 mm)	4" (102 mm)	250**	51 lb (23.13 kg)
24" (609 mm)	4" (102 mm)	250**	56 lb (24.4 kg)

\*Bucket \*\*Box  
Longer Lengths Available Upon Request.  
Call GAF For Information.

## Example: Drill-Tec™ #14 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:	+ 1/2" (12.7 mm)
Min. Embedment:	+ 3/4" (19.1 mm)
Total Fastening Range:	= 3" (76 mm)

**The proper #14 Fastener for the example is 3" (76 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 #14 Fastener is:**