

# Heavy Duty Roofing Fastener

## PRODUCT DATA SPECIFICATIONS

### PRODUCT DESCRIPTION

The Flex Heavy Duty Roofing Fastener (#14) is designed to secure insulation and single-ply membrane to steel (18 to 22 ga.), wood and structural concrete decks. It is available in lengths from 1¼- to 24-inches, and Factory Mutual and Miami-Dade County approved.

### FEATURES & BENEFITS

- Heavier shank and thread diameters for maximum strength.
- Deep thread for high pullout resistance.
- Extra sharp spade point for quick installation in new or reroof applications
- In concrete applications, fastener may be reversed out of predrilled hole without damaging the deck.

### COATING

CR-10 corrosion resistant coating passes the corrosion requirements of FM Approval Standard 4470 and ETAG 006.

### APPLICATION

Using a screw gun,\* drive fastener until a slight depression is seen around the plate. Watch for the plate to dimple on very rigid insulation boards.

**Steel & Wood Decks:** The Flex Standard RoofGrip Fastener must penetrate steel decks a minimum of ¼-in., wood plank decks a minimum of 1-in. and ½-in. through the underside for plywood decks.

**Structural Concrete Decks:** The fastener must penetrate structural concrete decks a minimum of 1-in. Pre-drill a ⅜-in. pilot hole at least ½-in. deeper than fastener embedment using a carbide tip SDS or straight shank bit.

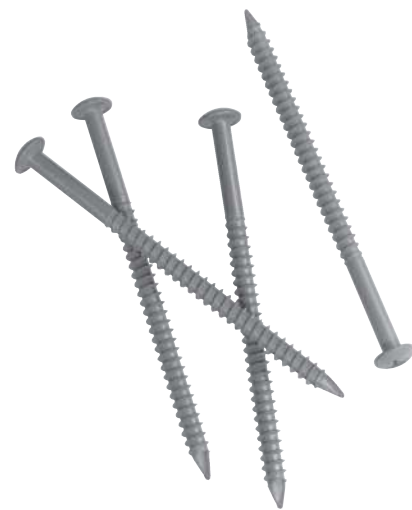
**NOTE: Prior to job-start, contact Flex to perform a pullout test to determine pullout values.** Also, care must be taken not to overdrive the fastener causing subsequent damage to the insulation facer. Fastener must be tight enough so that the plate does not turn.

For best results use a variable speed 0–2500 RPM screw gun. The fastener should always be tested on site by a Flex representative to determine performance.

### PLATES & ACCESSORIES

Use appropriate steel or plastic plates, depending on the application. **See Plates Section.** On structural concrete decks, use a ⅜-in. carbide tip SDS or straight shank bit.

### APPROVALS



USE WITH  
**S**  
**W**  
**SC**  
 DECK TYPES

### PHYSICAL DATA

The data below is constant for each Flex Heavy Duty Roofing Fastener.

HEAD	THREAD
#3 Phillips Truss Head** .435" Diameter	.245" Diameter
SHANK	COATING
.190" Diameter	CR-10

\*\*#3 Phillips bit included in each carton.

### ORDERING INFORMATION

CAT. NO.	LENGTH	THREAD	PKG	WEIGHT
CR114B	1¼"	Full	1000	13 lbs.
CR134B	1¾"	Full	1000	17 lbs.
CRHD2B	2"	Full	1000	19 lbs.
CRHD3B	3"	Full	1000	27 lbs.
CRHD4B	4"	3"	1000	34 lbs.
CRHD5B	5"	4"	500	23 lbs.
CRHD6B	6"	4"	500	26 lbs.
CRHD7B	7"	4"	500	30 lbs.
CRHD8B	8"	4"	500	34 lbs.
CRHD9	9"	4"	500	37 lbs.
CRH10	10"	4"	500	40 lbs.
CRH11	11"	4"	500	44 lbs.
CRH12	12"	4"	250	25 lbs.
CRH14	14"	4"	250	29 lbs.
CRH16	16"	4"	250	37 lbs.

#### KEY:

<b>S</b> Steel	<b>SC</b> Structural Concrete
<b>W</b> Wood	<b>LC</b> Lightweight Concrete
<b>G</b> Gypsum	<b>LWIC</b> Lightweight Insulating Concrete
<b>P</b> Purlins	<b>CWF</b> Cementitious Wood Fiber

**Flex**  
 Thermoplastic Single Ply and Multi-Ply  
 Roofing & Waterproofing Systems

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PL2810 Rev. 1116

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### SPECIFICATION

The fastener will be a Flex Heavy Duty Roofing Fastener (#14) with a shank diameter of .190 and a thread diameter of .245. The fastener must have 10 threads per inch and have a 30° spade point. Also, the fastener must be heat treated per specification OMG-1. The Flex Heavy Duty Roofing Fastener will be used with a Factory Mutual approved, Flex pressure plate. The fastener must be Factory Mutual approved and made in America.

### COATING REQUIREMENT

The fastener will be coated with the CR-10 corrosion resistant coating which passes the corrosion requirements of FM Approval Standard 4470 and ETAG 006.

### APPLICATION

Drive fastener until a slight depression is seen around the plate. Watch for the plate to dimple on very rigid insulation boards.

**Steel & Wood Decks:** The Flex Standard RoofGrip Fastener must penetrate steel decks a minimum of ¾-in., wood plank decks a minimum of 1-in. and ½-in. through the underside for plywood decks.

**Structural Concrete Decks:** The fastener must penetrate structural concrete decks a minimum of 1-in. Pre-drill a ⅜-in. pilot hole at least ½-in. deeper than fastener embedment using a carbide tip SDS or straight shank bit.

**NOTE: Prior to job-start, contact Flex to perform a pullout test to determine pullout values.** Also, care must be taken not to overdrive the fastener causing subsequent damage to the insulation facer. Fastener must be tight enough so that the plate does not turn.

### PHYSICAL DATA

The data below is constant for each Flex Heavy Duty Roofing Fastener.

HEAD	THREAD
#3 Phillips Truss Head** .435" Diameter	.245" Diameter
	SHANK
	.190" Diameter
PACKAGING	COATING
250, 500, 1000/carton	CR-10

### HEAVY DUTY ROOFING FASTENER LENGTH SELECTION PROCEDURE

1. If applicable, determine the thickness of the existing roofing material.
2. Add thickness of new insulation.
3. **For steel:** Add ¾-inch minimum fastener penetration.  
**For structural concrete** add 1" minimum fastener penetration **NOTE:** When predrilling for structural concrete, allow an extra ½".
4. If odd size requirement, always size up in length, not down. See example:

Steel Deck:	Example:	Your Project:
Existing Roofing	1¾"	
New Insulation	½"	
Min. Embedment	¾"	¾"
Total Fastening	3"	
Correct Length	3"	

The proper Heavy Duty Roofing Fastener for this steel deck example is 3".

Structural Concrete Deck:	Example:	Your Project:
Existing Roofing	2¼"	
New Insulation	½"	
Min. Embedment	1"	1"
Total Fastening	3¾"	
Correct Length	4"	

The proper Heavy Duty Roofing Fastener for this structural concrete deck example is 3".

**Flex**<sup>TM</sup>  
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