

# TRI-BUILT® Heavy Duty Fastener

FOR STEEL,  
WOOD &  
STRUCTURAL  
CONCRETE  
ROOF DECKS

## PRODUCT DESCRIPTION

The TRI-BUILT® 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 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

TRI-BUILT® Heavy Duty Fasteners are coated with CR-10 corrosion resistant coating, which exhibits less than 15% red rust after 30 Kesternich cycles. CR-10 coating exceeds F.M. Approval Standard 4470.

## 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 fastener must penetrate steel and wood decks a minimum of ¾-inch.

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

NOTE: 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.

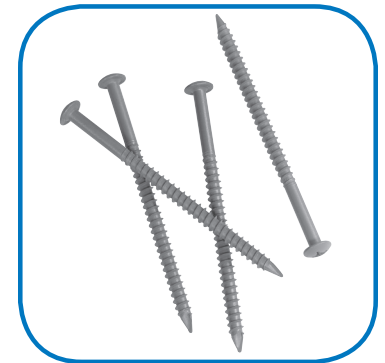
For best results use a variable speed 0–2500 RPM screw gun.

## PLATES & ACCESSORIES

Use appropriate steel or plastic plates, depending on the application.

## PACKAGING

TRI-BUILT® Heavy Duty Fasteners are available in boxes of 100 or in bulk quantity buckets. Bucket quantities range from 250 to 1,000 depending upon fastener length.



## APPROVALS



## PHYSICAL DATA

PROPERTY	RESULTS
Head	#3 Phillips Truss Head*, 0.435" Diameter
Thread	0.245" Diameter
Shank	0.190" Diameter
Fastener Coating	CR-10

\*#3 Phillips bit included in each carton.

## ORDERING INFORMATION

CAT. NO.	LGTH.	THD.	PKG.	WT. LBS.	CAT. NO.	LGTH.	THD.	PKG.	WT. LBS.
33751200	1¼"	Full	100	N/A	33751405	1¼"	Full	1000	16
33751205	2"	Full	100	N/A	33751410	2"	Full	1000	18
33751210	3"	Full	100	N/A	33751415	3"	Full	1000	26
33751215	4"	3"	100	N/A	33751420	4"	3"	1000	34
33751220	5"	4"	100	N/A	33751450	5"	4"	500	22
33751225	6"	4"	100	N/A	33751455	6"	4"	500	26
33751400	1¼"	Full	1000	12	33751460	7"	4"	500	30
					33751465	8"	4"	500	34
					33751470	9"	4"	500	37
					33751475	10"	4"	500	40
					33751480	11"	4"	500	44
					33751485	12"	4"	250	25

## SPECIFICATION

The fastener will be a TRI-BUILT® 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. The TRI-BUILT® Heavy Duty Roofing Fastener will be used with a Factory Mutual approved, TRI-BUILT® 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. When subjected to 30 Kesternich cycles (DIN 50018), the fastener must show less than 15% red rust and surpass Factory Mutual Approval Standard 4470.

## 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 fastener must penetrate steel and wood decks a minimum of ¾-inch.

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: 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

PROPERTY	RESULTS
Head	#3 Phillips Truss Head, 0.435" Diameter
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Fastener Coating	CR-10

## HEAVY DUTY FASTENER LENGTH SELECTION PROCEDURE

1. If applicable, determine the thickness of the existing roofing material.
2. Add thickness of new insulation.
3. For steel or wood applications 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 OR WOOD	EXAMPLE:	YOUR PROJECT:
Existing Roofing	1 ¾"	
New Insulation	+ ½"	
Min. Embedment	+ ¾"	¾"
Total Fastening	= 3"	
Correct Length	= 3"	

The proper TRI-BUILT® Heavy Duty Fastener for this example is 3 inches.

STRUCTURAL CONCRETE	EXAMPLE:	YOUR PROJECT:
Existing Roofing	2 ¼"	
New Insulation	+ ½"	
Min. Embedment	+ 1"	1"
Total Fastening	= 3 ¾"	
Correct Length	= 4"	

The proper TRI-BUILT® Heavy Duty Fastener for this example is 4 inches.