

TECHNICAL INFORMATION SHEET

Heavy Duty Fastener

<u>Red Fasteners</u>		<u>Black Fasteners</u>		<u>White Fasteners*</u>	
1 1/4"	W56RAC4230	9"	W56RAC4247	1 1/4"	W56RAC4390
2"	W56RAC4232	11"	W56RAC4248	2"	W56RAC4391
3"	W56RAC4234	16"	W56RAC4244	3"	W56RAC4392
4"	W56RAC4236	18"	W56RAC4245	4"	W56RAC4393
5"	W56RAC4237	20"	W56RAC4246	5"	W56RAC4394
6"	W56RAC4249	22"	W56RAC4231	6"	W56RAC4395
7"	W56RAC4239	24"	W56RAC4233	7"	W56RAC4396
8"	W56RAC4240			8"	W56RAC4397
10"	W56RAC4241			10"	W56RAC4398
12"	W56RAC4242				
14"	W56RAC4243				



Product Information

Description:

The Firestone Heavy Duty Fastener is specifically designed to be used in roofing applications which require additional corrosion protection and additional pullout resistance. The Heavy Duty Fastener may be used for attachment of roofing insulation and base sheets in combination with Firestone Insulation Plates, or for attachment of Firestone Batten Strips, Seam Plates, Termination Bars, and other accessories to steel, wood, concrete and other decks where approved by Firestone Technical Specifications.

*NOTE: Firestone is not responsible for, nor guarantees that the white coating will remain on the fastener during or after installation. Because the coating on Firestone white fasteners is removed to some degree during the installation process, Firestone suggests that 1) the building owner be made aware of the expectations of the white fasteners and that repainting of the deck may be required after roofing is complete or 2) any deck painting take place after the roof is installed. In this case, any color of screw will work.

Product Packaging

Screw Length	Thread Length	Pieces per Plastic Pail	Pails per Pallet
1 1/4" (31.8 mm)	Full	1,000	40
2" (50.8 mm)	Full	1,000	40
3" (76.2 mm)	Full	1,000	60
4" (101.6 mm)	3" (76.2 mm)	1,000	60
5" (127.0 mm)	4" (101.6 mm)	1,000	40
6" (152.4 mm)	4" (101.6 mm)	500	60
7" (177.8 mm)	4" (101.6 mm)	500	60
8" (203.2 mm)	4" (101.6 mm)	500	60
10" (254.0 mm)	4" (101.6 mm)	500*	24
12" (304.8 mm)	4" (101.6 mm)	500*	24
14" (355.6 mm)	4" (101.6 mm)	500*	24
16" (406.4 mm)	4" (101.6 mm)	250*	15
18" (457.2 mm)	4" (101.6 mm)	250*	15
20" (508.0 mm)	4" (101.6 mm)	250*	15
22" (558.8 mm)	4" (101.6 mm)	125*	24
24" (609.6 mm)	4" (101.6 mm)	125*	24

* Packaged in cardboard boxes due to fastener length. May require additional lead time.

TECHNICAL INFORMATION SHEET

Heavy Duty Fastener

Method of Application:

1. Using the #3 Phillips tip provided, and a variable speed drill, engage the fastener into the deck as noted below. Take care not to over or under drive the fastener. Threads must engage the decking material per Firestone Technical Specifications.
2. Determine screw length as follows:
 - a. Steel Decks: Select fastener length to penetrate through the deck a minimum of ¾" (19.1 mm).
 - b. Wood Decks: Select fastener length to penetrate into or through the deck a minimum of 1" (25.4 mm).
 - c. Concrete Decks: Select fastener length to penetrate into deck a minimum of 1" (25.4 mm).
3. If pre-drilling of the deck substrate is necessary, use a hammer drill in impact mode with a 7/32" (5.6 mm) carbide drill bit. Install fasteners by using a variable speed drill at a maximum of 1,500 rpm.

Storage:

Store in original, unopened packaging protected from the weather.

Precautions:

Eye protection must be worn during the installation of the fasteners and any drilling operation.

LEED® Information:

Post-Consumer Recycled Content: 25%

Pre-Consumer Recycled Content: 0%

Manufacturing Location: Addison, IL

*NOTE: LEED® is a registered trademark of the U.S. Green Building Council.



Typical Properties

Property	Typical Performance
Material	SAE 1022, Heat Treated Steel
Thread Size	0.275" (6.98 mm) Nominal Diameter
Threads/Inch:	13 min.
Thread Design	Buttress thread
Fastener Tip	Drill point design
Fastener Head:	#3 Phillips drive
Pullout in New 22 gauge (0.76 mm) Steel Deck Grade C (Grade 33) Grade E (Grade 80)	595 lb (270 kg) min. 650 lb (295 kg) min.
Pullout in New Structural Concrete	700 lb (317.5 kg) min.
Pullout in New ¾" (19.0 mm) Plywood Deck	360 lb (163 kg) min.
Corrosion Resistant Coating	Electrocoating of Firestone's fasteners exhibit 15% or less red rust after 30 cycles of Kesternich and exceed requirements of FM 4470.

Please contact Firestone Technical Services at 1-800-428-4511 for further information.

This sheet is meant to highlight Firestone products and specifications and is subject to change without notice. Firestone takes responsibility for furnishing quality materials which meet published Firestone product specifications. Neither Firestone nor its representatives practice architecture. Firestone offers no opinion on and expressly disclaims any responsibility for the soundness of any structure. Firestone accepts no liability for structural failure or resultant damages. Consult a competent structural engineer prior to installation if the structural soundness or structural ability to properly support a planned installation is in question. No Firestone representative is authorized to vary this disclaimer.