

TECHNICAL INFORMATION SHEET

All-Purpose Fastener

All-Purpose Fasteners

- 1 ¼" Red: W56RAC4200 / White: W56RAC4199E
- 1 ⅝" Red: W56RAC4201 / White: N/A
- 2 ¼" Red: W56RAC4202 / White: W56RAC4215E
- 2 ⅞" Red: W56RAC4203 / White: W56RAC4216E
- 3 ¼" Red: W56RAC4204 / White: W56RAC4217E
- 3 ¾" Red: W56RAC4205 / White: W56RAC4218E
- 4 ½" Red: W56RAC4206 / White: W56RAC4219E
- 5" Red: W56RAC4207 / White: W56RAC4220E
- 5 ½" Red: W56RAC4198 / White: N/A
- 6" Red: W56RAC4208 / White: W56RAC4221E
- 7" Red: W56RAC4209 / White: W56RAC4222E
- 8" Red: W56RAC4210 / White: W56RAC4222E



Product Information

Description:

Firestone All-Purpose Fasteners are used in applications for the attachment of roofing insulation and base sheets in combination with Firestone Insulation Plates and for the attachment of Firestone Batten Strips, Seam Plates, Termination Bars, and other accessories to steel and wood substrates where approved by Firestone Technical Specifications. The Firestone All-Purpose Fastener is Factory Mutual (FM) approved.

NOTE: Firestone is not responsible for, nor does it guarantee that the white coating will remain on the fastener during or after installation. Because the coating on white Firestone All-Purpose Fasteners is removed to some degree during the installation process, Firestone suggests that: 1) the building owner be made aware of the limitations 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 fastener will work.

Product Packaging

Screw Length	Thread Length	Pieces per Plastic Pail	Pails per Pallet
1 ¼" (31.75 mm)	Full	1,000	60
1 ⅝" (41.28 mm)	Full	1,000	60
2 ¼" (57.15 mm)	Full	1,000	60
2 ⅞" (73.03 mm)	Full	1,000	60
3 ¼" (82.55 mm)	2 ⅞" (73 mm)	1,000	60
3 ¾" (95.25 mm)	2 ⅞" (73 mm)	1,000	60
4 ½" (114.3 mm)	3 ⅞" (98.4 mm)	1,000	60
5" (127.0 mm)	3 ⅞" (98.4 mm)	1,000	60
5 ½" (139.7 mm)	3 ⅞" (98.4 mm)	1,000	60
6" (152.4 mm)	3 ⅞" (98.4 mm)	1,000	60
7" (177.8 mm)	3 ⅞" (98.4 mm)	500	60
8" (203.2 mm)	3 ⅞" (98.4 mm)	500	60

NOTE: Lead time for Red Fasteners: may require a lead time of thirty (30) days.

NOTE: Lead time for White Fasteners: 30-45 days.

TECHNICAL INFORMATION SHEET

All-Purpose 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 3/4" (19.1 mm).
 - b. Wood Decks: Select fastener length to penetrate into or through the deck a minimum of 1" (25.4 mm).
3. All-Purpose Fasteners may not work as expected through existing roof systems or unusual substrates. Consideration should be given to using Firestone HD Fasteners in these instances.

Storage:

Store in original, unopened packaging protected from the weather.

Precautions:

Eye protection must be worn during the installation of the fasteners.

LEED® Information:

Recycled Content: 20%
 Manufacturing Location: Bryan, OH
 *NOTE: LEED® is a registered trademark of the U.S. Green Building Council.



Typical Properties

Property	Typical Performance
Material:	SAE 1022, Heat Treated Steel with Epoxy E-Coat
Thread Size:	0.237" (6.0 mm)
Threads/Inch:	13
Thread Design:	Symmetrical
Fastener Tip:	Drill point
Fastener Head:	#3 Phillips drive
Ultimate Tensile Strength:	3,254 lbf (14.47 kN)
Ultimate Shear Strength in Threaded Region:	2,216 lbf. (9.86 kN)
Corrosion Resistant Coating:	Electrocoating of Firestone's Red and White fasteners both exhibit 15% or less red rust after 30 cycles of Kesternich and exceed requirements of FM 4470.

TECHNICAL INFORMATION SHEET**All-Purpose Fastener****Pullout Values**

Wood Substrates					
Thickness:	Per inch of thread not including tip	7/16" (11.1 mm)	15/32" (11.9 mm)	19/32" (15.1 mm)	23/32" (18.3 mm)
OSB:	N/A	270 lbf (1,201 N)	290 lbf (1,290 N)	310 lbf (1,379 N)	410 lbf (1,824 N)
APA Rated Plywood:	N/A	N/A	360 lbf (1,601 N)	410 lbf (1,824 N)	730 lbf (3,247 N)
SPF #2 Wood 2x4	795 (360.6 kg)	N/A			
Corrugated Steel Deck Substrates with various Yield Strengths					
	33.0 ksi	36.5 ksi	80.0 ksi	102.0 ksi	
24 ga.	N/A	255 lbf (1,134 N)	N/A	N/A	
22 ga.	315 lbf (1,401 N)	N/A	480 lbf (2,135 N)	560 lbf (2,491 N)	
20 ga.	420 lbf (1,868 N)	N/A	615 lbf (2,736 N)	710 lbf (3,158 N)	
18 ga.	675 lbf (3,003 N)	N/A	885 lbf (3,937 N)	985 lbf (4,382 N)	
16 ga.	850 lbf (3,781 N)	N/A	1,115 lbf (4,960 N)	1,240 lbf (5,516 N)	

NOTE: Pullout resistance needs to be field verified on every project by testing per SPRI/ANSI FX-1.

Please contact Technical Services Department 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.