



## SBS FR Cap

**Meets ASTM D 6164, Type I, Grade G  
Tested in Accordance with ASTM D 5147**

**Firestone Item Number:**  
**W71PUWS160F (UltraWhite™)**  
**W71PWS160F (White)**  
**W71PBS160F (Black)**  
**W71PFS160F (Buff)**

**DESCRIPTION:**

Firestone SBS FR Cap is a Styrene-Butadiene-Styrene modified bitumen membrane that is reinforced with a 190 g/m<sup>2</sup> (5.6 oz/yd<sup>2</sup>) non-woven polyester mat enhanced with continuous glass fiber strands in the machine direction. The combination results in a flexible, durable membrane. The addition of SBS rubber optimizes asphalts natural waterproofing characteristics and increases system performance. This proprietary compound provides resistance to thermal and physical forces over a wide range of temperatures.

SBS FR Cap is ideal for both new construction and reroofing applications. Low slope roofs of any size, even those with numerous penetrations, may accommodate a Firestone SBS FR Cap application. Firestone SBS FR Cap with UltraWhite granules has a highly reflective surface designed to meet national, state and local energy code requirements.



	<b>Solar Reflectance</b>	<u>Initial</u> 0.72	<u>Weathered</u> Pending
	<b>Thermal Emittance</b>	0.92	Pending
	<b>Rated Product ID</b>	0030	
	<b>Licensed Manufacturer ID</b>	0608	
		<b>Classification</b>	Production Line
<p>Cool Roof Rating Council ratings are determined for a fixed set of conditions, and may not be appropriate for determining seasonal energy performance. The actual effect of solar reflectance and thermal emittance on building performance may vary.</p> <p>Manufacturer of product stipulates that these ratings were determined in accordance with the applicable Cool Roof Rating Council procedures.</p>			

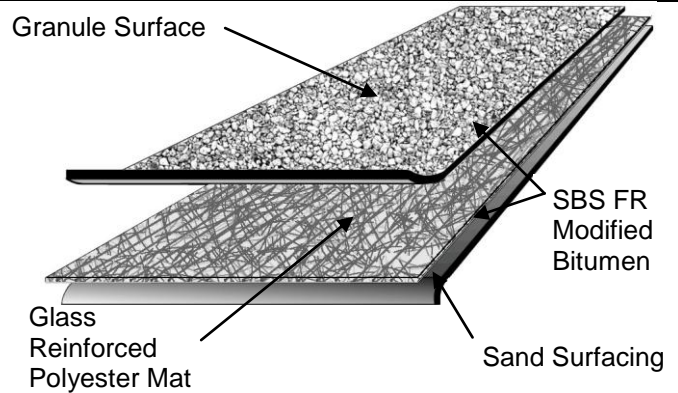
**Solar Reflectance Index (SRI) = 89**  
 SRI calculated using the ORNL (DOE) calculator, ASTM E 1980-01

UltraWhite granules can help achieve points in the U.S. Green Building Council's LEED® rating system and meet the requirements for California's Title 24 regulations.

**APPLICATION METHOD:**

SBS FR Cap shall be installed with conventional hot asphalt, or Firestone Multi-Purpose MB Cold Adhesive.

This sheet is meant to highlight Firestone's products and specifications and is subject to change without notice. Firestone takes responsibility for furnishing quality materials, which meet Firestone's published 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.



**Manufactured in an ISO 9001 Registered Facility**

**STORAGE:**

All material must be stored out of the weather in a clean, dry area in its original unopened packaging at a minimum of 40 °F (4 °C) and a maximum of 140 °F (60 °C) so that it will be a minimum of 40 °F (4 °C) at the time of application.

If material must be stored temporarily on the roof before application, it must be elevated from the roof surface on a pallet, stored on end, and covered from the weather with a light colored opaque tarp in a neat, safe manner not to exceed the allowable live load of the storage area.

**PACKAGING:**

Roll Width:	3.3 ft (1 m)
Roll Length:	33.5 ft (10.2 m)
Net Coverage:	100 sq ft (9.3 sq m)
Roll Weight:	97.7 lb (44.4 kg)
Pallet Size:	48" x 39" (1.2 m x 1 m)
Rolls Per Pallet:	20
Weight Per Pallet:	2,000 lb (907.1 kg)
Pallets Per Truckload:	22

**Stack Firestone SBS FR Cap Squarely In Original Unopened Packaging  
No More Than Two (2) Pallets High**

**PRECAUTIONS:**

1. Take care when transporting and handling Firestone Modified Bitumen rolls to avoid punctures and other types of physical damage.
2. Isolate waste products, petroleum products, grease, oil (mineral and vegetable) and animal fats from all Firestone Modified Bitumen membranes.
3. Contact Firestone Roof Solutions Department for specific recommendations.
4. Refer to Material Safety Data Sheet for SBS Membranes and Flashing.



**LEED INFORMATION:**

Post Consumer Recycled Content:	4%
Post Industrial Recycled Content:	0%
Manufacturing Location:	Beech Grove, IN



**CCMC 13263-L**

Note:  
 Dade County Approval of  
 UltraWhite products are  
 pending

**Firestone Building Products Company, LLC**  
 250 West 96<sup>th</sup> Street, Indianapolis, IN 46260  
 Sales: (800) 428-4442 • Technical (800) 428-4511  
 www.firestonebpco.com

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Dimensions and Mass	English			Metric		
	Property	Unit	ASTM Minimum	Firestone Nominal	Unit	ASTM Minimum
Product Thickness	mil	130	148	mm	3.3	3.8
Net Mass	lb/100 ft <sup>2</sup>	75	91	g/m <sup>2</sup>	3,661	4,443
Bottom Coating	mil	40	43	mm	1.0	1.1

### Physical Properties

Peak Load, at 0 °F (-18 °C) (Tensile Strength)	lbf/in	70	MD	109	kN/m	12.3	MD	21.9
			XMD	86			XMD	19.3
Elongation at Peak Load, at 0 °F (-18 °C)	%	20	MD	40	%	20	MD	44.0
			XMD	46			XMD	50.0
Peak Load, at 73.4 °F (25 °C) (Tensile Strength)	lbf/in	50	MD	67	kN/m	8.8	MD	13.6
			XMD	51			XMD	11.4
Elongation at Peak Load, at 73.4 °F (25 °C)	%	35	MD	47	%	35	MD	59.0
			XMD	73			XMD	74.0
Ultimate Elongation at 5% of Peak Load, at 73.4 °F (25 °C)	%	38	MD	73	%	38	MD	79.0
			XMD	93			XMD	92.0
Tear Strength, at 73.4 °F (25 °C)	lbf	55	MD	109	N	246	MD	489.5
			XMD	79			XMD	351.6
Dimensional Stability	% Change	1	MD	-0.2	% Change	1	MD	-0.2
			XMD	0.2			XMD	0.2
Low Temperature Flexibility	°F	0	-30		°C	-18	-34	
Compound Stability	°F	215	270		°C	102	132	
Granule Loss					g	2	0.7	

### Physical Properties After Heat Conditioning

Peak Load, at 0 °F (-18 °C) (Tensile Strength)	lbf/in	70	MD	118.5	kN/m	12.3	MD	22.6
			XMD	71.7			XMD	15.6
Elongation at Peak Load, at 0 °F (-18 °C)	%	20	MD	17.6	%	20	MD	30.0
			XMD	34.5			XMD	24.0
Peak Load, at 73.4 °F (25 °C) (Tensile Strength)	lbf/in	50	MD	88.1	kN/m	8.8	MD	16.4
			XMD	64.5			XMD	12.6
Elongation at Peak Load, at 73.4 °F (25 °C)	%	35	MD	45.4	%	35	MD	47.0
			XMD	57.4			XMD	53.0
Ultimate Elongation at 5% of Peak Load, at 73.4 °F (25 °C)	%	38	MD	52.0	%	38	MD	52.0
			XMD	63.0			XMD	63.0
Low Temperature Flexibility	°F	0	-10.0		°C	-18	-23.3	

## SBS FR Cap Canadian Standards



**Meets:**

**CGSB 37-GP-56M, Type I, Class A, Grade 1**  
**Tested in Accordance with CGSB 37-GP-56M**

### Physical Properties

Test	Unit	CGSB Requirement	Firestone Nominal	
			MD	XMD
Breaking Strength	N	≥ 294	MD	658
			XMD	509
Ultimate Elongation	%	≥ 4	MD	41
			XMD	56
Load Strain Product		≥ 2,940	MD	33,558
			XMD	36,648
Water Resistance Mass change	grams	≤ 1		0.04
	%	≤ ± 1%	MD	0.17
Dimensional Change	%	≤ ± 1%	XMD	0.71
Low Temperature Flexibility at -30 °C (-22 °F)	pass	4 of 5 samples pass the Watertightness Test after low temp flex	All samples passed the Watertightness Test after low temp flex	
Water Vapor Transmission	grams/m <sup>2</sup> in 24 hours	≤ 1	1	
Dynamic Impact <u>Steel underlay plate</u> at 23 °C at -10 °C <u>Rubber underlay plate</u> at 23 °C	No perforation passes Watertightness	Rating of 3 passed Watertightness	Passed	
	No perforation passes Watertightness	Rating of 3 passed Watertightness	Passed	
Static Puncture @ 23 °C, 245 N, 1 hr	N	No perforation passes Watertightness	Passed	
Lap Joint Strength <u>Initial</u> Machine Direction Cross Direction Watertightness	N	≥ 294	677	511
		No Leakage	Passed	
5 days in 50 °C water Machine Direction Cross Direction Watertightness	N	≥ 294	689	573
		No Leakage	Passed	
5 freeze-thaw cycles Machine Direction Cross Direction Watertightness	N	≥ 294	600	575
		No Leakage	Passed	
Granule Embedment	grams	≤ 0.5	0.44	
Crack Bridging Capability		No cracking, splitting or loss of adhesion	Passed	

# SBS FR Cap

## Canadian Standards

**Meets:**

CGSB 37-GP-56M, Type I, Class A, Grade 1  
Tested in Accordance with CGSB 37-GP-56M

### Physical Properties

Test	Unit	CGSB Requirement	Firestone Nominal
Accelerated Weathering		No cracking or blistering	Passed
<u>Breaking Strength</u>			
Machine Direction	% of Original strength	≥ 90	110%
Cross Direction		≥ 90	116%
<u>Elongation at break</u>			
Machine Direction	% of Original	≥ 90	106
Cross Direction		≥ 90	104