

# DynaGlas<sup>®</sup> FR

# Fire-Retardant, Fiber Glass-Reinforced, SBS Mineral-Surfaced Cap Sheet

## Meets the requirements of ASTM D 6163, Type 1, Grade G

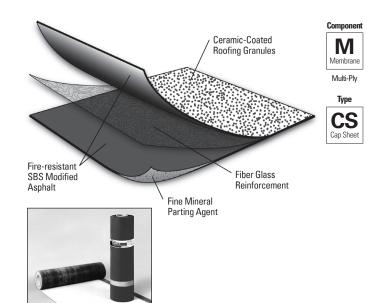
## **Features and Components**

DynaGlas FR is used as a fiber glass-reinforced mineral-surfaced cap sheet in a variety of multi-ply roofing systems.

**Ceramic-Coated Roofing Granules:** Specifically engineered for optimal embedment in the SBS-blend sheet. The ceramic coating promotes excellent long-term adhesion.

**High-Quality SBS Rubber and Asphalt Blend:** Lends elasticity and flexibility to the sheet. The elongation and recovery properties allow the product to easily accommodate the continual expansion and contraction experienced on all roofs. The FR blend contains additional fire-retardant additives.

**Fiber Glass Reinforcement Mat:** Offers excellent dimensional stability and tensile strength and withstands differential movement. Because it has no thermal memory less time is needed to relax the sheet, allowing for ease of installation. The fiber glass mat also has good lay-flat characteristics.



Color: Black, White, Burnt Sienna, Grey, Tan & 3M™ Smog Reducing Granule

System Compatibility This product may be used as a component in the following systems. Please reference product application for specific installation methods and information.

Ply	BUR APP		SBS			Plv	TF	<b>)</b> 0			PVC			EPDM				
iti Titi	HA	CA	HW	HA	CA	HW	SA	MF	alu	AD	SA	IW	MF	AD	IW	MF	AD	BA
Ĕ	Compatible with the selected multi-ply systems above					Sin		Do	o not us	e with s	single p	ly syste	ms					

Key: HA = Hot Applied CA = Cold Applied HW = Heat Weldable SA = Self Adhered MF = Mechanically Fastened IW = Induction Weld BA = Ballasted AD = Adhered

### **Energy and the Environment**

Test	Initial	3-Year Aged	
Reflectivity* (ASTM C 1549)	0.28	0.25	
Emissivity* (ASTM C 1371)	0.89	0.92	
Solar Reflectance Index* (SRI) - E 1980	29	26	
Pre-Consumer Recycled Content	0%		
Post-Consumer Recycled Content	0%		

\*Standard White Granule only

### **Peak Advantage® Guarantee Information**

Systems	Guarantee Term
When used in most 2-5 ply JM SBS systems.*	Up to 30 years

\*Contact JM Technical Services for specific system requirements or guarantee terms.

#### **Codes and Approvals**



# **Product Application**



Hot Asphalt Cold Applied

- May be installed in Type IV asphalt or in an approved JM adhesive
- · Laps may be installed using heat-welding techniques
- Refer to JM SBS modified bitumen specifications and detail drawings for application and slope information

#### **Packaging and Dimensions**

Roll Coverage*	95.8 ft² (8.9 m²)					
Roll Length	32' 10" (10.01 m)					
Roll Width	39 ¾" (1 m)					
Roll Weight	102 lb (46 kg)					
Rolls per Pallet	20					
Pallet Weight	2,130 lb (966 kg)					
Pallets per Truck**		22				
Producing Locations	South Gate, CA	Macon, GA	Plattsburgh, NY			

\*Assumes a 4" side lap \*\*Assumes 48' flatbed truck.



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## **Tested Physical Properties**

			ASTM	Standard for ASTM D 6163.	DynaGlas FR			
Physical Properties			Test Method	Type 1, Grade G (Min.)	MD*	XMD**		
÷	Tensile Tear	D 5147	35 lbf (156 N)	100 lbf (445 N)	90 lbf (400 N)			
Strength	Peak Load at 0°F (-18°C)	D 5147	70 lbf/in (12.3 kN/m)	130 lbf/in (22.8 kN/m)	100 lbf/in (17.5 kN/m)			
St	Peak Load at 73.4°F (23°C)	D 5147	30 lbf/in (5.3 kN/m)	70 lbf/in (12.3 kN/m)	50 lbf/in (8.8 kN/m)			
	Laur Tama Flauibilita	Unconditioned	D 5147	0°F (-18°C)	-10°F (-23°C)			
	Low Temp. Flexibility	90-Day Heat Conditioned	D 5147	0°F (-18°C)	-10°F (	-23°C)		
	Compound Stability	D 5147	215°F (102°C)	250°F (121°C)				
ţ	Granule Loss	D 4977	2 g (0.07 oz)	0.7 g (0.02 oz)				
Longevity	Thickness	D 5147	95 mil (2.4 mm)	157 mil (4.0 mm)				
P	Selvage Edge Thickness	D 5147	N/A	122 mil (3.1 mm)				
	Elongation at Peak Load at 0°F	D 5147	1%	5%	5%			
	Elongation at Peak Load at 73.	D 5147	2%	4%	4%			
	Ultimate Elongation at 73.4°F (2	D 5147	3%	50%	55%			
e	90-Day Heat-Conditioned Peal	( Load at 0°F (-18°C)	D 5147	70 lbf/in (12.3 kN/m)	135 lbf/in (23.6 kN/m)	100 lbf/in (17.5 kN/m)		
manc	90-Day Heat-Conditioned Elong	D 5147	1%	5%	4%			
Aged Performance	90-Day Heat-Conditioned Peal	D 5147	30 lbf/in (5.3 kN/m)	100 lbf/in (17.5 kN/m)	75 lbf/in (13.1 kN/m)			
jed P	90-Day Heat-Conditioned Elonga	D 5147	2%	4%	4%			
Ą	90-Day Heat-Conditioned Ultin	D 5147	3%	5%	6%			
ion	Dimensional Stability	D 5147	0.5%	0.1%	0.1%			
Installation	Net Mass per Unit Area	D 146	65 lb/100 ft² (30 kg/9.29 m²)	94 lb/100 ft² (4	13 kg/9.29 m²)			
Inst	Roll Weight	D 146	N/A	102 lb	(46 kg)			

\*MD = Machine Direction

\*\*XMD = Cross-Machine Direction

Note: All data represents tested values.

## **Supplemental Testing**

Physical Properties		ASTM Test Method	DynaGlas FR Result
	Initial	D 5849	Pass at 500 cycles*
Cyclic Joint Displacement	After 90-Day Heat Conditioning per ASTM D 5147	D 5849	Pass at 200 cycles*
	After 180-Day Heat Conditioning per ASTM D 5147	D 5849	Pass at 200 cycles**
Coefficient of Friction	Static	D 1894	1.32
	Kinetic	D 1894	0.89

\*In a min 2-ply system when adhered with any combination of cold applied, hot applied and or heat-weld that is approved by JM for application.

\*\*When adhered to DynaBase in hot asphalt.

Technical specifications as shown in this literature are intended to be used as general guidelines only. Please refer to the Safety Data Sheet and product label prior to using this product. The Safety Data Sheet is available by calling (800) 922-5922 or on the web at www.jm.com/ roofing. The physical and chemical properties of the product listed herein represent typical, average values obtained in accordance with accepted test methods and are subject to normal manufacturing variations. They are supplied as a technical service and are subject to change without notice. Check with the regional sales representative nearest you for current information.

All Johns Manville products are sold subject to Johns Manville's standard Terms and Conditions, which includes a Limited Warranty and Limitation of Remedy. For a copy of the Johns Manville standard Terms and Conditions or for information on other Johns Manville roofing products and systems, visit www.jm.com/terms-conditions.