# Foam-Gard

SPF + FLUID-APPLIED ROOFING SYSTEM

# **SPF-URETHANE ROOF RESTORATION SYSTEM**

Foam-Gard is a high-density, plural-component, spray polyurethane foam (SPF) and coating roof restoration system designed to stop leaks, improve energy efficiency, and extend roof life. Combining SPF with a urethane top coat provides the system with the ultimate level of insulation performance, adhesion, reflectivity, durability, and elemental protection.

Both lightweight and strong, the Foam-Gard system is a highly-versatile, longlasting roofing solution that can increase structural integrity and withstand the effects of thermal shock (normal expansion and contraction). It can also indefinitely sustain the pressures of severe weather, heavy equipment, and pedestrian foot traffic.

# **BASIC USES**

Due to its excellent adhesion qualities, the Foam-Gard roof restoration system is ideal for use on a variety of commercial roof substrates. Foam-Gard is light-weight and can be applied in varying thickness to add slope and fill in low areas.

# **FEATURES & BENEFITS**

- Cost less than a conventional roof replacement
- Reduce energy costs by decreasing HVAC system workloads
- Provides a lightweight, weather-resistant, energy-efficient air barrier
- · Superior strength and durability-increases structural integrity
- · Seamless, fully-adhering, and self-flashing
- Sustainable, long-term warranty options
- Minimal interruption to business

# **SUITABLE SUBSTRATES**

- Metal
- · Modified Bitumen
- · Smooth BUR
- · Single-Ply
- EPDM
- Concrete
- Plywood

# **APPLICATION PROCESS**

# EXISTING ROOF SURFACE

The roof is pressure-washed to ensure maximum adhesion of the system to the existing roof surface.

# **2** SPRAY POLYURETHANE FOAM

The High-density, plural-component Spray Polyurethane Foam (SPF) provides the system with a strong, lightweight, high-performance, insulation barrier.

# BASE COAT

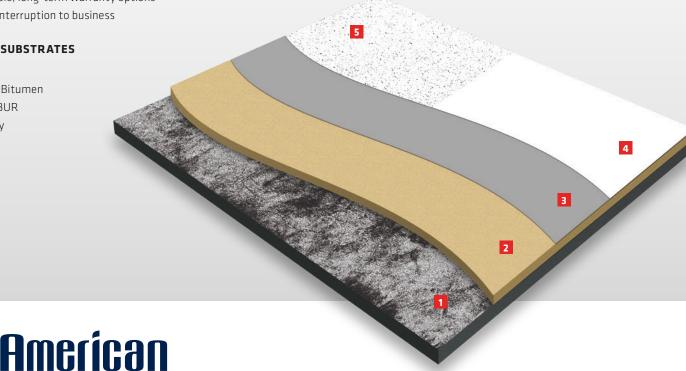
A base coat of Aromatic Urethane 520 helps installers build and maintain uniform mil thickness.

# 4 TOP COAT

A top coat of Aliphatic Urethane 510 or Aromatic Urethane 520 provides the system with a seamless, bright-white, highly-reflective, and mildew-resistant membrane.

# **5** ROOFING GRANULES

Roofing granules are then broadcast into the top coat to increase weather-resistance and durability.





#### **ADHESION TEST**

To ensure successful application, an adhesion test is recommended to ensure maximum adhesion of the spray polyurethane foam to the existing roof substrate(s).

# PRE-INSPECTION

Before system application, pre-inspect roof for necessary repairs. Inspection should include, but not be limited to:

- HVAC Flashing
- · Proper Drainage
- · Single-Ply Seams
- Roof Penetrations
- · Sign of Display Anchorage
- Drains & Location of Drains
- · Water Leakage
- · Seam, Terminators, Reglets
- · Parapet Roof Detail
- Wet or Damp Insulation
- · Coping and Flashing
- · Sleepers & Pitch Pockets

#### **INSTALLATION TIPS**

- All roof surfaces to be restored must be cleaned properly.
- Pressure washing at 3000-4000 psi is recommended.
- Existing coatings must be checked for proper adhesion. Before application, any loosely adhered coating must be removed and bare surfaces must be prepared, cleaned, and checked for compatibility.
- Spray Polyurethane Foam is uniformly spray-applied at a thickness of 1"-1.5" minimum, or more if specified, over the entire roof surface.
- Base coat and top coat of Aromatic Urethane 520/Aliphatic Urethane 510 must be applied to clean, dry, sound surfaces free of contaminants or other foreign matter.
- Allow 24 hours between coating applications.

# **COVERAGE RATES**

10-YEAR WARRANTY (SPF-URETHANE SYSTEM)			
Application	Product	Coverage Rate	
Base Coat	Aromatic Urethane 520	1.25 gallon/100 sq. ft.	
Intermediate Coat	-	-	
Top Coat	Aromatic Urethane 520	1.25 gallon/100 sq. ft.	

15-YEAR WARRANTY (SPF-HYBRID URETHANE SYSTEM)			
Application	Product	Coverage Rate	
Base Coat	Aromatic Urethane 520	1.25 gallon/100 sq. ft.	
Intermediate Coat	Aromatic Urethane 520	1.25 gallon/100 sq. ft.	
Top Coat	Aliphatic Urethane 510	1.25 gallon/100 sq. ft.	

# **CORE PRODUCT TECHNICAL DATA**

SPRAY POLYURETHANE FOAM				
Density	2.7-3.0	ASTM D1622		
Compressive Strength	40-65 psi	ASTM D1621		
R-Value	6.3-6.4/inch	ASTM C518		
Tensile Strength	55-80 psi	ASTM D1623		

AROMATIC URETHANE 520			
Solids by Volume	70% ± 2%	ASTM D2697	
Elongation	350 ± 50%	ASTM D2370	
Tensile Strength	975 ± 25 psi	ASTM D2370	
Viscosity	2,000 cps		
Color(s)	Silver		

ALIPHATIC URETHANE 510				
Solids by Volume	74%	ASTM D2697		
Elongation	350% ± 50	ASTM D2370		
Tensile Strength	1100 ± 25 psi	ASTM D2370		
Reflectivity	87%	ASTM C1549		
Emissivity	91%	ASTM C1371		
Viscosity	3,000 ± 1000 cps			
Color(s)	White, gray			

#### STORAGE

System components should be stored in original unopened containers at temperatures between 50°F and 75°F.

Note: Storage for prolonged periods of time at high temperatures may alter the reactivity profile of the product. Additionally, storing the side-B component at increased temperatures or in direct sunlight for prolonged periods may cause a build-up of pressure in the storage vessel. Containers should be opened slowly to release any pressure buildup.

Note: This document is intended as an overview of installation procedures. It is not meant to replace the application guideline. Please refer to application guidelines for complete installation details. Published technical information is subject to change without notice. Contact your American WeatherStar Field Sales Representative or visit www.americanweatherstar.com for current technical data and application guidelines.

