CertainTeed

SmartFlash

Flashing Membrane Flash Pack





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SmartFlash flashing membranes are two-component, UV-stable, cold fluid-applied polyester-reinforced, solvent-free, odor-free polyurethane systems which are compatible with CertainTeed modified bitumen and built-up roofing assemblies.

SmartFlash Advantages

SmartFlash membranes form full closure to irregular flashings and penetrations of every imaginable shape, eliminating the need for pitch pockets. SmartFlash, when cured, virtually becomes part of the substrate. SmartFlash may be used to form watertight flashings at joints, parapets, walls and other penetrations. SmartFlash provides excellent resistance to tearing, puncture, high winds, structural movement and routine foot traffic.

Flash Pack Contents

SmartFlash Flash Pack is a versatile high-performance, seamless and self-terminating waterproofing system that includes all the tools and materials necessary to flash and repair approximately 25 square feet of area.

- 3 x 2.5 kg sachets SmartFlash Resin
- 1 x 1.0 kg SmartFlash R Primer
- 30 sq. ft. roll SmartFlash Fleece (13.8" w x 25' l)
- Roller Handle (1) 4"
- Rollers (2) 4"
- Brush (1) 2"
- Stirrer (1) wooden
- Scissors (1) pair
- Gloves (2) pair latex

SmartFlash Resin and R Primer are both packaged in their own mixing bag.

SmartFlash Resin Component Properties

Property	Component A	Component B
Color:	Cream	Dark Brown
Physical State:	Liquid	Liquid
Specific Density:	1.25	1.22
Viscosity:	5000	50
Flash Point:	>212°F/100°C	>392°F/200°C

SmartFlash R Primer Component Properties

Property	Component A	Component B
Color:	Cream	Dark Brown
Physical State:	Liquid	Liquid
Specific Density:	1.01	1.22
Viscosity:	900	100
Flash Point:	>392°F/200°C	>392°F/200°C

Fleece Properties

Physical Property	165
Color:	White
Physical State:	Solid
Thickness:	50 mils
Weight (g/m²):	165
Tensile Strength @ Break:	>1,775 lbs.
Elongation:	>75%
Tear Resistance:	>665 lbs.
Puncture Strength:	>1,110 lbs.
Permeability:	
Water Absorption:	<1%

Application Instructions

IMPORTANT NOTE: Wear protective latex gloves during application of primer and resin. Urethane resins adhere to skin and are difficult to remove once cured.

Temperature Considerations

SmartFlash may be applied when the ambient temperature is 40°F and rising, and the substrate temperature is a minimum of 5 degrees above the dew point. The maximum application temperature is approximately 90°F.

Quality Assurance Tips

- Adequate surface preparation is the key to achieving a good bond to the substrate surface.
- Do not apply primers and resins to wet or damp surfaces. Pay attention to the dew point on the substrate surface.
- Primers and resins are moisture sensitive. Avoid contaminating the substrate surface and newly applied materials with sweat, condensation from coolers or water bottles, etc., as blisters will develop.

- Tape off substrates with duct tape or painter's tape prior to primer and membrane application, and then remove tape before primer/resin cure. This will result in a clean termination line.
- Take the time to cut and fit reinforcement fleece when the fleece is dry and prior to resin application. This is particularly important at penetration flashings that require the use of multiple pieces of reinforcing fabric.
- Make sure that sufficient resin is applied to the substrate surface before the fleece reinforcement is placed into the wet resin. Lack of sufficient resin under the fleece reinforcement will result in unsaturated fleece and a poor bond to the substrate surface. Additional resin applied over the top of the fleece cannot penetrate through the fleece to address this problem.
- Roll out all air bubbles from beneath the membrane so that full bonding to the substrate surface is achieved.

Fleece Preparation

Cut and fit fleece prior to application of any resin. Fleece overlaps shall be 2 inches. Cut and fit fleece to conform tightly to the substrate/penetration. Neat and accurate fleece cutting and fitting is the key to achieving a professional result.

Cleaning and Priming

Metal

Clean and prepare to near white metal in accordance with SSPC - SP3 (power tool clean). Provide a roughened surface.

NOTE: A wire brush finish is NOT considered to be a roughened finish.

Plywood

Smooth and seal joints and knotholes with a high-quality polyurethane sealant.

All Substrate Surfaces

As a final step following mechanical surface preparation, wipe the substrate surface with MEK Cleaner to remove residue, and allow surface to dry completely before applying primer.

NOTE: MEK Cleaner is not included in Flash Pack.

Primer Mixing

Remove the inner bag from the aluminum packaging. Knead larger bag section of resin Component A thoroughly until a uniform consistency and appearance is achieved. Pull away the rubber cord separating the two components so that resin Component A and hardener Component B can be mixed together. Knead the bag quickly and thoroughly for approximately 60 seconds so that a homogenous primer is formed. The primer should be a uniform color, with no light or dark streaks present.

Primer Application

Cut off one corner of the bag and pour all of the primer onto the substrate surface or into a separate container. Working quickly, brush or roll the primer evenly onto the surface to fully saturate the substrate in one application. Do not allow ponding of the primer. Do not extend primer past the required extent of the membrane flashing termination.

NOTE: Mineral-surfaced cap sheets DO NOT require priming.

Primer Working/Curing Times

SmartFlash R Primer working time, INCLUDING MIXING TIME, is 5 - 10 minutes. DO NOT continue to use primer once it has begun to thicken and become warm to the touch. R Primer curing time is typically 2 hours, but will be longer in colder weather. Expect a 4-hour curing time in temperatures between $40^{\circ} - 50^{\circ}$ F.

Resin Mixing

Remove the inner bag from the aluminum packaging. Knead larger bag section of resin Component A thoroughly until a uniform consistency and appearance is achieved. Pull away the rubber cord separating the two components so that resin Component A and hardener Component B can be mixed together.

Knead the bag quickly and thoroughly for approximately 60 seconds so that a homogenous resin is formed. The resin should be a uniform color, with no light or dark streaks present. Pour resin into a separate container.

Resin Application 1

Apply 2/3 of the mixed resin liberally to the primed substrate surface, rolling or brushing with a broad, even stroke. More resin must be applied to the substrate because this application bonds both the membrane to the substrate and also saturates the fleece.

Fleece Application

Roll out the fleece directly into the resin, avoiding folds and wrinkles. Use the roller to work the resin into the fleece, saturating from the bottom up, and forcing any trapped air out from beneath the fleece. The appearance of the fleece should be a light opaque gray with no white spots. White spots are indications of unsaturated fleece or lack of adhesion. Remove fleece from the substrate and apply additional resin under the fleece, and reinstall the fleece to address this condition.

Resin Application 2

Apply 1/3 of the mixed resin to the fleece surface to finish the fleece saturation, rolling or brushing with a broad, even stroke to achieve a glossy appearance. Apply additional resin between fleece layers at all overlaps. The fleece can only hold so much resin and all excess should be rolled forward to the unsaturated fleece areas. The correct amount of resin will leave no whiteness in fleece and there will be a slightly fibrous surface texture.

Resin Working/Curing Times

SmartFlash Resin working time, INCLUDING MIXING TIME, is 20 – 40 minutes. DO NOT continue to use resin once it has begun to thicken and become warm to the touch. SmartFlash Resin initial curing time is typically 6 hours, but will be longer in colder weather. Expect a 12-hour curing time in temperatures between 40° – 50°F.

Disposal

Cured SmartFlash Resin and R Primer may be disposed of in standard landfills. This is accomplished by mixing all resin components or primer components together.

Uncured materials are considered hazardous substances, however, and must be handled as such in accordance with local, state and federal regulations.

CertainTeed Full Systems



For more information on CertainTeed Commercial Roofing Products, go to www.certainteed.com.

Caution: CertainTeed Flintlastic roofing products are intended for use by professional roofing contractors only. It is the responsibility of the installer to follow all appropriate and required safety precautions in conjunction with the installation of any CertainTeed roofing product.

Meets or exceeds ASTM D6164 (SA Mid Ply and SA Cap), ASTM D6163 (SA Cap FR) and ASTM D4601 (SA NailBase and PlyBase).



UL 2218 Class 4 Impact Resistance – Certain systems are UL classified as to impact resistance as described in the UL Roofing Materials and Systems Directory.



M ICC-ES ESR-1388

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