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Technical Data Sheet

FireSkin 2K

FireSkin 2K super-polymer is an insulating microcellular polymeric material that will withstand direct flame contact. It emits low smoke and flame spread during flame exposure making it a valuable resource for diverse fire protection enclosure applications.

It has been specially designed to coat polyurethane and polystyrene foams for fire protection. Other uses include protecting buildings, humans, animals and all nature against the destructive force of fire. Uses include deployable fire barrier systems, mobile structures, hazardous containers and specialily shielding systems for schools and apartments.

Technical Application Data

FireSkin 2K is a two component 100% solids spray formulation which does not contain VOCs. This material may require the use of a primer to obtain proper adhesion. All surfaces must be clean and free of contaminates. Application temperature ranges from 20°F to 120°F. Gel Time is 8-10 sec at 75°F with full cure in 24 hours. Use standard 1:1 high pressure plural component spray machine such as Graco EXP2. Functional operation temperature ranges from -40°F to 300°F. Application spray thickness may be continuous build. Foam coverage at 60 mils thickness is 33 sq. ft./ mixed gal.

Physical Properties

FireSkin Physical Properties		
Fire Rating	ASTM E84	Class 1
Flex Modulus	ASTM C203	*48000 psi
Compressive Strength	ASTM D1623	*2500 psi
Tensile Strength	ASTM D1623	*1800 psi
Shear Strength	ASTM C273	*2000 psi
Shear Modulus	ASTM C273	*20000 psi

Water Vapor Transmission	ASTM E96	<1.0% perm-inch.
Water Absorption (24 hr. immersion)	ASTM C272	<0.25% by vol.
Dimensional Stability	ASTM D2126	<0.1% @-40F, <1.0% @158F, <1.2% @212F
Closed Cell Content	ASTM D2856	>*97%

* Property Values will be relative to a particular skin density. Values shown are for 55 PCF.

Adhesion Results

Adhesion Results of Typical Substrates per ASTM D-4541 Elcometer

Concrete- Primed	>300 psi	Concrete cohesive failure; excellent bonding
Steel- Primed	>1000 psi	Excellent bonding
Wood- Primed	>300 psi	Wood failure; excellent bonding

Substrate Surface Preparation

Preparation of substrate surface prior to the application of SuperSkinSystem is extremely important as durability is only as good as the weakest link in the coating system. A typical concrete substrate cleaning method is described herein.

Concrete must be fully cured and should be prepared with a sandblasting, shot blasting, diamond grinding or machine sanding depending on the severity of the concrete surface condition. Always power clean substrate with mild detergent or grease wax remover prior to any sanding or grinding operation. Similar preparation must be performed for metals to eliminate corrosion and provide a surface propfile acceptable for bonding prior to priming. Call TechSupport Group for assistance with using a SSS application system. Also read the Application Page on this website. If patching concrete, use our mineral filled fast-set Acrylic Modified Epoxy applied by trowel. For expansion joints, use Joist Seal applied by hand cartridge dispensing gun. It is always best to perform a test area section of the SSS application system prior to full scale engagement.