

TECHNICAL DATA SHEET

Material Specification Criteria | Project Submittal Data



PREMISEAL™ 280

MEDIUM DENSITY • CLOSED CELL FOAM

PremiSeal™ 280 is a nominal 2.8 pcf density closed cell polyurethane foam roofing system intended for use by qualified contractors trained in the processing and application of spray polyurethane foam. PremiSeal™ 280 provides a superior R-value of 6.3 per inch and a continuous insulation without thermal breaks. The PremiSeal™ roofing system provides excellent self-adhering qualities with superior wind uplift, is self-flashing, seamless and with its closed cell nature provides a durable leak resistant roofing system. Its superior strength provides excellent resistance to foot traffic and abuses. The PremiSeal™ 280 roofing system can be used in most retrofit or new construction applications.

TYPICAL PHYSICAL PROPERTIES:

PROPERTY	PREMISEAL™ 280	TEST
R-VALUE	6.3 / Inch	ASTM C 518
CORE DENSITY	2.8 LB / Cubic Foot	ASTM D 1622
COMPRESSIVE STRENGTH	50-60 PSI	ASTM D 1621
TENSILE STRENGTH	65-75 PSI	ASTM D 1623 Type C
CLOSED CELL CONTENT	> 90%	ASTM D 6226
DIMENSIONAL STABILITY	< 4%	ASTM D 2126
WATER ABSORPTION	0.6%	ASTM C 2842
WIND UPLIFT	200 lb./ft ²	CSA 123.21
LIQUID COMPONENTS AS SUPPLIED	A (ISO)	B (RESIN)
SPECIFIC GRAVITY @ 74°F	1.24	1.19
VISCOSITY (BROOKFIELD) @ 74°F, CPS	250	1000-1200
WEIGHT PER DRUM - LBS	551	500

BUILDING CODE CERTIFICATIONS / FIRE TEST DATA		
FLAME SPREAD	ASTM E84	40
INTERNATIONAL BUILDING CODE (IBC)	Meets	Roofing and Foam Plastics
UL LISTING	Listed	TGFU.R26705
FACTORY MUTUAL GLOBAL (FMI)	Meets	FM 4470
CALIFORNIA BUREAU OF HOME FURNISHINGS	Listed	California
CALIFORNIA FIRE MARSHAL	Listed	California
CANADIAN STANDARDS ASSOCIATION	A123.21	Wind Uplift

GENERAL PROPERTIES: PremiSeal™ 280 is a two-component one to one by volume, spray applied polyurethane foam. The PremiSeal™ 280 liquid A component (Iso) and B component (Resin) are mixed through specialized proportioning spray equipment to produce a fast curing rigid foam plastic insulation. PremiSeal™ 280 utilizes an EPA approved, zero ozone depleting blowing agent.

RECOMMENDED USES: PremiSeal™ 280 is a roofing system designed for use in commercial and industrial applications. Use in lieu of more traditional forms of roofing systems. PremiSeal™ 280 can be applied as a new system over most decking substrates or over an existing built up roofing system as a cost effective alternative to a complete tear off. PremiSeal™ 280 is suitable for application to most construction materials including wood, masonry, concrete, metal and most roofing board stock materials. PremiSeal™ 280 can be applied to clean, dry and sound roofing surfaces such as BUR, mod bit, metal, concrete, single-ply and other properly prepared roofing systems. This system will provide a seamless monolithic roof system with no joints, seams, cracks or mechanical fasteners that would allow moisture, heat or cold to enter. Additional uses of this product are as an exterior coating for industrial tanks, agricultural structures, air barrier system, etc.

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COMPANION PRODUCTS: To complete the PremiSeal™ roofing system requires the application of a top coating from our PremiCote line of coatings. The PremiCote line of coatings is designed for specific use with the PremiSeal™ roof system. PremiCote provides an additional weather-tight seal along with the UV light protection required for exterior spray polyurethane foam applications.

APPLICATION GUIDELINES: Polyurethane foam systems should be processed through commercially available spray equipment designed for that purpose by a qualified professional applicator. All surfaces to be sprayed with PremiSeal™ 280 should be clean, dry and free of all dirt and contaminants. All metal to which the polyurethane foam is to be applied must be free of oils, grease, etc. Each pass or layer of the polyurethane foam should be at least .5 inch (13 mm) and no more than 1.5 inches (38 mm) thick. Allow at least 10 minutes between each pass to allow for cure and cooling. Multiple layers can be applied to reach the desired thickness and insulation value as well as facilitate positive drainage.

Prior to application of the PremiSeal™ 280 the substrate should be between 45°-120°F (7°- 49°C). Service temperatures for any surface to be sprayed with polyurethane foam should not exceed 180°-200°F (82°- 93°C). Moisture in the form of rain, fog, frost, dew or high humidity (>85%R.H.) will adversely affect the polyurethane foam formation and physical properties of the finished product. Wind velocities of excess of 15 mph may affect the foam surface texture, cure and physical properties as well as cause possible overspray problems.

The finished surface of the PremiSeal™ 280 must be protected from the adverse effects of sunlight, which can cause discoloration and degradation. The protective coating or covering should be applied over the polyurethane foam the same day as the application or within 24 hours. A variety of protective coatings designed for use with PremiSeal™ 280 are available from Carlisle Roof Foam and Coatings.

Consult the current CRFC application guidelines for PremiSeal™ 280 prior to installation. It is the responsibility of the professional applicator to thoroughly understand all equipment technical information and safe operating procedures that pertain to a spray polyurethane foam application.

MATERIAL HANDLING: Due to the reactive nature of these components respiratory protection is mandatory. The vapors and liquid aerosols present during application and for a short period thereafter must be considered – and appropriate protective measures taken – to minimize potential risks from overexposure through inhalation, skin, or eye contact. These protective measures include: adequate ventilation, safety training for installers and other workers, use of appropriate personal protective equipment, and a medical surveillance program. It is imperative that the applicator read and become familiar with all available information on proper use and handling of spray polyurethane foam. Additional Information is available at spraypolyurethane.org, polyurethane.org or by contacting the Technical Services dept. of CRFC.

PROPER STORAGE OF RAW MATERIALS: Shelf life is twelve (12) months from date of manufacture when stored indoors, in the original unopened containers and between the temperatures of 40° to 80°.

TECHNICAL ASSISTANCE: For additional assistance please contact the Technical Services dept. of CRFC at (844) 922-2355.

DISCLAIMER: To the best of our knowledge, all technical data contained herein is true and accurate as of the date of issuance and subject to change without prior notice. User must contact CRFC to verify correctness before specifying or ordering. We guarantee our products to conform to the quality control standards established by CRFC. We assume no responsibility for coverage, performance or injuries resulting from use. Liability, if any, is limited to replacement of the product. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY CRFC EXPRESSED OR IMPLIED; STATUTORY, BY OPERATION OF LAW, OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.



MANUFACTURED BY:

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EMERGENCY NOTIFICATIONS:

CHEMTREC : Material Leaks, Spills or Fire (800) 424-9300

