



# PREMISEAL™ 280

## TECHNICAL DATA

Spray Polyurethane Foam  
2.8lb Density  
For Professional Use Only

EQUIPMENT AND APPLICATION PARAMETERS	TYPICAL VALUE
Preheated Temperature	120-125°F
Hose Heat Temperature	120-125°F
Mixing Ratio	1:1 by vol., A:B
Fluid Pressures	1,000-1,200 psi
Substrate Temperature	45°- 120°F
Ambient Air Temperature	>45°F
Max. Service Temperature	180°-200°F
Thickness per pass	1.5" maximum

SURFACE BURNING CHARACTERISTICS	TYPICAL VALUE
Flammability	ASTM E 84
Flame Spread index	40
Smoke Dev. Index	>500

### Credentials



#### Underwriters Laboratories (UL)

See file TGFU.R26705

#### Factory Mutual Global (FM)

Meets FM 4470

#### Canadian Standards Assoc. (CSA)

A123.21 for wind uplift

Meets IBC codes for Roofing and Foam Plastics

Listed with CA Bureau of Home Furnishing and CA Fire Marshal

### Product Information

**PRODUCT TYPE:** Premium Spray Products, Inc. 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.

**GENERAL PROPERTIES:** PREMISEAL™ 280 is a nominal 2.8lb/cu ft. 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.

**RECOMMENDED USES:** PREMISEAL™ 280 is designed for use as a roofing system in commercial, industrial and institutional construction applications. 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.

### PHYSICAL PROPERTIES

LIQUID COMPONENTS AS SUPPLIED:	A (ISO)	B (RESIN)	
Specific Gravity@74°F (23°C)	1.24	1.19	
Viscosity (Brookfield)@74°F (23°C), cps	250	1,000-1,200	
Weight per drum, lbs. /kg	551/250	500/227	
AS CURED:			
Core Density	2.8 lb/cu ft	44.8 kg/m3	ASTM D1622
Compressive Strength	50-60 psi	345-414 kpa	ASTM D1621
Tensile Strength	65-75 psi	448-517 kpa	ASTM D1623 Type C
Closed Cell Content	>90%	>90%	ASTM D6226
Dimensional Stability	<4%	<4%	ASTM D2126
Water Absorption	0.6%	0.6%	ASTM C2842
Thermal Resistance (R-value) aged	6.3/in.		ASTM C518
Wind uplift	200 lb. /ft2	9,576 pa	CSA 123.21

### PRODUCT REACTIVITY

PRODUCT DESIGNATION	TEMPERATURE RANGE
Fast	50°-75° (10°-24°C)
Mid-Range	65°-90° (19°-32°C)
Slow	85°-110° (29°-43°C)

The information herein is to assist customers in determining whether our products are suitable for their applications. Customer assumes full responsibility for quality control, testing and determination of suitability of product for its intended use or application. Premium Spray Products, Inc. warrants only that the material shall meet its specifications; this warranty is in lieu of all other written, expressed or implied warranties and Premium Spray Products, Inc. expressly disclaims any warranty of merchantability, fitness for a particular purpose, or freedom from patent infringement. Accordingly, buyer assumes all risks whatsoever as to the use of the material. Buyer's exclusive remedy as to any breach of warranty, negligence or other claim shall be limited to the purchase price of the material. Failure to adhere to any recommended procedures shall relieve Premium Spray Products, Inc. of all liability with respect to the material or the use thereof.

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# PREMISEAL™ 280

Spray Polyurethane Foam

2.8lb Density

For Professional Use Only

Experience the  
Premium Difference

## General Information

### Application Guidelines

PREMISEAL™ 280 is suitable for application to most construction materials including wood, masonry, concrete and metals. All surfaces to be sprayed with PREMISEAL™ 280 polyurethane foam 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 ½ 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 polyurethane foam 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 PREMISEAL™ 280 polyurethane foam surface 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 Premium Spray Products.

### Equipment Parameters

PREMISEAL™ 280 polyurethane foam should be processed through commercial available plural component spray equipment designed for this purpose. This equipment should include a proportioning pump designed for 1:1 ratio applications. 2:1 ratio transfer pumps to feed

the material from the drums to the proportioner are recommended. The system should include material heaters for each component. The material heaters and hose heat should be set at 125°F (52°C). The equipment should be able to maintain the material temperatures at the application flow rates. The proportioner should be set to maintain dynamic output fluid pressures (while spraying) of 1,000-1,200 psi. Plural component spray guns should be designed for the application.

### Safe Handling and Storage of Liquid Components

Each person handling the liquid A or B components of PREMISEAL™ 280 polyurethane foam should familiarize themselves with the hazards of such by reading and understanding the SDS. Premium Spray Products recommends taking "SPF Chemical Health & Safety Training" available online at: [www.spraypolyurethane.org](http://www.spraypolyurethane.org). When removing bungs from containers use caution, contents may be under pressure. Loosen the small bung slowly first and let any built up vapor escape before completely removing. B-component will froth at elevated temperatures. Avoid prolonged breathing of vapors. In case of chemical contact with eyes, flush with water for at least 15 minutes and seek medical attention. For further information refer to the technical documents available at: [www.polyurethane.americanchemistry.com](http://www.polyurethane.americanchemistry.com).

Material storage temperatures should be 70°-85°F (21°-30°C) for several days prior to use and should not exceed 90°F (32°C). Cold materials can cause poor mixing, pump cavitations or other process problems due to higher viscosities at lower temperatures. Do not store where the containers will be exposed to rain, snow or high heat. Keep containers tightly closed when not in use and under dry air or nitrogen pressure of 1-2 psi after they have been opened. Shelf life of B-component is six months from date of manufacture and shelf life of A-component is one year from date of manufacture when stored per recommended temperatures and conditions.

Your Local Authorized Contractor



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