

# **TECHNICAL DATA SHEET**

## POLYSET® BOARD-MAX

### LOW PRESSURE POLYURETHANE FOAM INFORMATION

Description	Low pressure, low-rise, two-component polyurethane roofing adhesive
Applications	Bead applied foam adhesive specifically designed to adhere a variety of insulations to various substrates in both new and existing applications.
Preparation for use	Substrate must be clean, dry, firm, free of loose particles or sharp edges that may interfere with the placement and complete contact of material being installed. Protect surfaces not to be foamed. Read SDS, Operating Instructions, and Product Stewardship Guidelines. For additional information go to <a href="https://www.icpadhesives.com">www.icpadhesives.com</a>
Use	Warm/Cool chemical to 70-85°F (21-29°C). Follow instructions for set-up found in the operating instructions. SPF Roofing Adhesives are combustible and will burn if exposed to open flame. High-intensity heat sources such as welding or cutting torches must not be used in contact with or in close proximity to Polyset Board-Max or any polyurethane foam.

PPE W IV I

Wear protective glasses with side shields or goggles, nitrile gloves, and clothing that protects against dermal exposure. Recommend dispensing product in a well-ventilated area with certified respiratory protection; however, well ventilated exterior applications may not need respiratory protection. It is the responsibility of the employer to complete a PPE evaluation and/or exposure assessment to determine if respiratory protection is required. Read all instructions, ICP Product Stewardship Guidelines, and SDS (Section 8) prior to use of any

required. Read all instructions, ICP Product Stewardship Guidelines, and SDS (Section 8) prior to use of any product.

Note

FOR PROFESSIONAL USE ONLY. Always check the local building code before use. Cured low pressure polyurethane foam is non-toxic and inert.

**Temperature** Please see chart located on page 2. Lower substrate application temperatures will increase gel and tack free

times. The applicator can also expect a slower rise time.

**Product Storage** Store in a dry area. Optimum chemical storage temperature is 60-90°F (16-32°C). Excessive heat can cause premature aging of components resulting in a shorter shelf-life. Do not allow material to freeze.

**Disposal** Refer to SDS (Section 13) for instructions. Always dispose of empty cylinders in accordance with applicable

local/regional/national/international regulations.

Shelf-life 12 months

**Compatibility** Polyset Board-Max is compatible with rigid insulation board, gypsum board, recover board, spray foam, smooth

or gravel BUR, mineral cap sheets, smooth or granulated mod-bit. Decks include: 15/32" APA rated plywood, 22

MSG steel, and structural concrete.

**Limitations** Do not use with board stock larger than 4' x 4'. Do not use during inclement weather. Do not use after the

expiration date. Do not apply on wet materials. Existing SPF roofs may need to be primed or scarfed depending

on coating before application.

# TECHNICAL DATA STANDARDS RESULTS

Density	ASTM D1622	2.9 lb/ft³ (46.4 kg/m³)
Tensile Strength	ASTM D1623	47 psi (324 kPa)
Water Absorption	ASTM D2842	4.39%
Fire Rating	ASTM E84	Flame Spread Index 15-25 at 1/2" thick
		Smoke Developed 150-200 at 1/2" thick

#### **PROPERTIES**

Rise Time	2-16 seconds <sup>1</sup>
Mixing Nozzle Working Time	30-60 seconds <sup>1</sup>
Gel Time	15-140 seconds <sup>1</sup>

# **PROPERTIES (Continued)**

Set-up Time (Tack Free)

Cure Time

24 hours¹

VOC Content

Contains 28.8 g/L when mixed as intended (Minus Exempted Materials)

<sup>1</sup>Times may be affected by temperature and weather conditions

#### APPROVALS/STANDARDS/CLASSIFICATIONS

**UL- Underwriters Laboratories - R39032** Testing in accordance with UL1897 (See UL's website for the different construction configurations)

**FM- Factory Mutual** - Completed testing in accordance with FM Approval Class 4470 and is a component in many roof assemblies identified by a FM Roof Assembly Number. Detailed information regarding roofing assemblies is accessible from FM Approval's RoofNav online tool. Roof Decks: Concrete, Steel and Recover available. Uplift range is between 60 psf to 990 psf.

Miami Dade NOA - 17-0214.04

Florida Product Approval - FBC Approved - FL22256



#### **TEMPERATURE GUIDELINES**

Chemical Storage Temperature	60-90°F (16-32°C)
Outside Application Temperature/Ambient	30-100°F (-1-38°C)
<b>Process Core Chemical Temperature</b>	70-85°F (21-29°C)
Surface Temperature (Substrate/Deck)	30-100°F (-1-38°C)
<b>Cured Foam</b>	<sup>-</sup> 200°F to <sup>+</sup> 240°F ( <sup>-</sup> 129°C to <sup>+</sup> 116°C)

#### YIELD\*

Product Number	Yield	Net Weight
62000280322	9 squares	27.6 lbs (12.5 kg)/ Kit
62496580322	32 squares	A-side 44.5 lbs (20.2 kg); B-side 43.8 lbs (19.9 kg)
62001480325,62001580327	89 squares	A-side 132 lbs (59.8 kg); B-side 130 lbs (59 kg)
*Coverage rates may vary based on ambient temperature and application		

# COMPATIBLE ROOF DECKS AND SUBSTRATES COMPATIBLE ROOF INSULATIONS AND COVER BOARDS

Structural Concrete	Polyisocyanurate (flat or tapered)	
Asphalt Primed Concrete	Extruded or Expanded Polystyrene	
Pre-cast Concrete	High density wood fiber	
Various BUR (smooth or gravel)	Gypsum boards	
Base Sheets	Cement roof boards	
Steel-22 gauge or lower with approved cross section		
Lightweight Structural Concrete		
Cementitious Wood Fiber Planks		
Insulating Concrete		
Vapor Retarders (hot, cold, torch-applied)		
Gypsum		

NOTE: Physical properties shown are typical and are to serve only as a guide for engineering design. Results are obtained from specimens under ideal laboratory conditions and may vary upon use, temperature and ambient conditions. Right to change physical properties as a result of technical progress is reserved. Yields shown are optimum and will vary slightly depending on ambient conditions and application. This information supersedes all previously published data. The Customer is responsible for deciding whether products and associated TDS information are appropriate for customer's use.

#### WARNING:

ICP low pressure one-component polyurethane foam sealants and adhesives (OCF), low pressure spray polyurethane foams and foam adhesives (SPF), and low pressure pour-in-place polyurethane foams (PIP) are composed of diisocyanate, hydrofluorocarbon, hydrocarbon or hydrofluoroclefin blowing agent, and a polyol blend. The urethane foam produced from these ingredients will support combustion and may present a fire hazard if exposed to a fire or excessive heat about 240°F (116°C). Read all instructions, ICP Product Stewardship Guidelines and SDS (Section 8) prior to use of any product. ICP polyurethane products are for professional use only.

Before using any OCF, SPF or PIP product, read the SDS and instructions carefully before use (www.icpadhesives.com). OCF Products: wear protective glasses with side shields or goggles, nitrile gloves, and clothing that protects against dermal exposure. Recommend using in a wellventilated area. Avoid breathing vapors. SPF/PIP Products: wear protective glasses with side shields or goggles unless using a full-face respirator, nitrile gloves, and clothing that protects against dermal exposure. Recommend dispensing product in a well-ventilated area and with certified respiratory protection or a powered air purifying respirator (PAPR); however, well ventilated exterior applications may not need respiratory protection. It is the responsibility of the employer to complete a PPE evaluation and/or exposure assessment to determine if respiratory protection is required. Personal Protective Equipment can be purchased through ICP Building Solutions Group by ordering the Polyset® Contractor Safety Kit (F65251). The Contractor Safety Kit includes: nitrile gloves, contractor safety glasses, and a size Medium NIOSH-approved negative pressure half mask respirator.

Refer to each product's TDS for specifications, testing results, and other attributes. The customer is ultimately responsible for deciding whether products and associated TDS information are appropriate for customer's use. For professional use only. Building practices unrelated to materials can lead to potential mold issues. Material suppliers cannot provide assurance that mold will not develop in any specific system. Product uses a nonflammable compressed gas. Keep away from heat. Smoking and open flames, including hot work, should be prohibited in the vicinity of a foaming operation. Avoid contact with skin and eyes. May cause sensitization by inhalation and/or direct skin contact. Persons previously sensitized to Isocyanates may develop a cross-sensitization reaction to other isocyanates. Avoid prolonged or repeated breathing of vapor. Use in conformance with all local, state and federal regulations and safety requirements. Failure to strictly adhere to any recommended procedures and reasonable safety precautions shall release ICP Building Solutions Group of all liability with respect to the materials or the use thereof. For additional information and location of your nearest distributor, call ICP Building Solutions Group 330.753.4585.

LIMITED WARRANTY and LIMITATION OF DAMAGES: ICP Building Solutions Group warrants only that the product shall meet ICP Building Solutions Group's specifications for the product when shipped by ICP Building Solutions Group. NO OTHER EXPRESSED OR IMPLIED WARRANTIES APPLY AND ANY IMPLIED WARRANTIES OF MERCHANTABILITY, NON-INFRINGEMENT OUTSIDE THE U.S. AND FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY DISCLAIMED. Buyer and users assume all risks of use, handling and storage of the product. Failure to strictly adhere to any recommended procedures shall release ICP Building Solutions Group from all liability. The user of the product is responsible to determine suitability of the product for the particular use. The exclusive remedy as to any breach of warranty, negligence or other claim is limited to the replacement of the product. Liability for any indirect, incidental or consequential damage or loss is specifically excluded.

