

# TECHNICAL DATA SHEET POLYWATER<sup>®</sup> PEDFLOOR<sup>™</sup> SEALANT BARRIER

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## DESCRIPTION

Polywater<sup>®</sup> PedFloor<sup>™</sup> seals pad-mounted equipment openings to prevent outages and service disruptions due to entry of rodents, water, and humidity. This resilient, impermeable ground barrier improves service reliability. PedFloor is ideal for equipment replacement where pad opening dimensions and/or pad positions have changed.

Once PedFloor is mixed and poured into pad openings, its self-leveling expansion fills voids around conduit stub-ups and cable to create a smooth yet strong barrier. PedFloor adheres to fiberglass, polymer concrete, and concrete pads. The strong, lightweight seal withstands freezethaw cycles and environmental extremes. It will not settle, crack, shrink, or crumble.

### **SELF-LEVELING APPLICATION**

PedFloor is easy to install. It flows into the target area and expands into voids.



PedFloor is mixed and poured

PedFloor is engineered with a time delay that allows the material to flow throughout the target area. As the surface is covered, it expands and cross-links into its final, durable form. It will naturally flow into small spaces without need for troweling.



PedFloor flows and expands after 20 minutes



PedFloor repairs and creates a barrier for cabinet bases.

#### **PRODUCT BENEFITS**

- **Deterrent** Keeps mice, rats, snakes, insects, and water from entering the pedestal or cabinet.
- **Easy to Use** Ready to mix and apply. No water needed.
- **Strong** Structural, cross-linked matrix creates a sturdy seal.
- **Seals** Flows and self-levels before expansion to seal the entire opening.
- **Re-Enterable** Saw or drill after installation to install new ducts or cables.
- **Protects** Cured product offers permanent protection through weather extremes.

### **END USE**

PedFloor repairs small or large areas and can be used to level enclosure bases. Use it with:

- Pedestals
- Cabinets
- Other enclosures

## **COMPONENT PROPERTIES**

PedFloor is a two-part, reactive system. It is a viscous liquid that is manually mixed.

PROPERTY	PART A (RESIN)	PART B (CURING AGENT)
Color	Brown	Gray
Form	Viscous liquid 300 cps	Viscous liquid 1,100 cps
Specific gravity	1.24	1.07
VOC content	0 g/L	0 g/L

## **CURED PROPERTIES**

PedFloor cures to form a solid, closed-cell matrix.

PROPERTY	TYPICAL RESULT
Appearance	Light gray with small, even cells
Closed-cell content	98%
Density	8 lbs/ft <sup>3</sup> (128 kg/m <sup>3</sup> )
Compressive strength (ASTM D1691)	77 psi (0.53 N/mm²)
Tensile strength (ASTM D1623)	101 psi (0.70 N/mm²)
Flexural strength (ASTM D790)	87 psi (0.60 N/mm²)
Seal strength, water	1 ft (0.3 m) water head, continuous
Dielectric value (ASTM D149)	61 V/mil

### MATERIAL COMPATIBILITY

PedFloor is compatible with all cable jacket materials. The foam is an inert solid that will not attack the jacket material.

### **CHEMICAL RESISTANCE**

PedFloor is resistant to gasoline, oils, dilute acids and bases, and most unsaturated hydrocarbons.

## ADHESION

PedFloor has good adhesion to a variety of materials found in control cabinets.

PedFloor is cured around a one-inch bar at a depth of 1.5 inches (3.8 cm). Force required to remove the bar is measured. Adhesion is calculated based on seal surface area.

MATERIAL	ADHESION	VALUE
PVC	Excellent	100 psi (0.69 N/mm²)
Copper	Excellent	90 psi (0.62 N/mm²)
Aluminum	Excellent	95 psi (0.66 N/mm²)
HDPE	Good	25 psi (0.17 N/mm²)

#### WATER RESISTANCE

PedFloor was tested for water blocking performance, using ASTM D2842. A large block of the cured material was submersed in water for 96 hours. Weight water absorbed as a percentage was calculated.

#### WATER ABSORPTION

1.24%

PedFloor does not hold water. It keeps moisture out of the system and limits the effect of corrosion.

#### ENVIRONMENTAL RESISTANCE

PedFloor withstands the rigors of the environment.

#### **Temperature Use Range**

-20°F to 200°F (-30°C to 95°C) Continuous -40°F to 250°F (-40°C to 120°C) Peak

PedFloor withstands direct sunlight with no decrease in functionality. Surfaces exposed to UV will discolor and yellow. The cured product retains its hardness and continues to act as a barrier. Discoloration will not harm the performance of the material.

PedFloor may also be protected with a weatherproofing paint or coating. Acrylic, urethane, and epoxy-based products have excellent adhesion to the foam.

## **APPLICATION**

#### **Field-Ready Kits**

PedFloor is a two-part system packaged in premeasured quantities for easy on-site mixing.

#### **Application Temperature**

Working temperature for PedFloor is  $35^{\circ}F$  to  $110^{\circ}F$  (4°C to  $43^{\circ}C$ ).

## **Usage Quantity**

Carefully measure the area to be sealed by multiplying the width by the length of the opening pad in the structure. Do not subtract any conduits or other stub-up utilities. Use this measurement to estimate the minimum quantity required. Round up to determine the quantity of PedFloor required. It is best to use field measurements rather than measurements from plans or specs to calculate a job quantity, as the openings to be filled in the field may not have the same dimensions as the drawing.

Example: Pedestal measuring 1.25 feet (.38 m) by 1.5 feet (.45 m).

- Pedestal floor is 1.88 ft<sup>2</sup> (.17 m<sup>2</sup>).
- Seal requires <u>one PF-2 kit</u> to cover 2 ft<sup>2</sup> at 3 inches depth (.2 m<sup>2</sup> at 7.6 cm depth).

KIT SIZE	COVERAGE (3-IN, 7.5-CM DEPTH)	VOLUME COVERAGE
PF-1	1 ft², 0.1 m²	0.25 ft <sup>3</sup> , 7 L
PF-2	2 ft <sup>2</sup> , 0.2 m <sup>2</sup>	0.50 ft <sup>3</sup> , 14 L
PF-3	3 ft², 0.3 m²	0.75 ft <sup>3</sup> , 21 L

#### **Area Preparation and Application**

Prepare target area by filling holes and leveling the surface. Cover pea gravel with one inch of sand or dirt. Mix two parts well for at least 30 seconds until the product is a uniform gray color. Slowly pour onto target surface.

Circumstances may require an elevated or shelf application. Plastic sheeting for this method is included in the product kit.

For full installation information, please see the Polywater PedFloor Installation Instructions for <u>PF-1 and PF-2</u> or <u>PF-3</u>.

## **CURE RATE**

#### **Application Temperature**

PedFloor will set up and cure more quickly in warmer temperatures.

TEMPERATURE	SEAL FORMATION	FULL CURE
35°F (2°C)	1 hour	12 hours
70°F (20°C)	20 minutes	4 hours
110°F (43°C)	8 minutes	2 hours

## REENTERING

Additional conduits or cables may be passed through PedFloor with relative ease. Cured PedFloor may be drilled with auger bits or hole saws designed for wood. The overall integrity of the seal allows such drilling without collapsing the seal, an advantage over grout. Simply drill through the PedFloor and pass through the conduit or cable. Once the new conduit or cable is in place, an additional application of PedFloor can reseal the area against future intrusion.

## SAFETY

PedFloor is a two-part urethane containing reactive chemicals. Polyurethanes are common in the construction industry and have been used for many years. Some individuals may become sensitized to components in the unreacted resin. Precautions must be observed during use and handling of these materials.

The use of PedFloor in the prepackaged containers controls and reduces exposure. Use of protective gloves and eyewear is recommended. Once reacted, the foam is a solid, closed-cell polyurethane. The finished product may be considered non-toxic. See SDS for more information.

## **CLEAN-UP**

Any unreacted material may be cleaned from surfaces using Polywater's Grime-Away<sup>™</sup> Multipurpose Cleaner. Reacted material must be removed mechanically by scraping or sanding.

#### STORAGE AND HANDLING

Keep containers cool, dry, and away from sunlight. Product shelf life is 18 months.

## **MODEL SPECIFICATION**

The statement below may be inserted into a customer specification to help maintain engineering standards and ensure work integrity.

The approved enclosure/communications equipment pad opening sealant shall be Polywater PedFloor Sealant Barrier. The base sealant shall flow and self-level to create a strong cross-linked polymer matrix barrier to seal out water, gases, and rodents. The base sealant shall be a closedcell foam structure with compression strength >70 psi (480 kPa) (ASTM D1621) and dielectric strength >60 V/mil (2360 V/mm) (ASTM D149). Base sealant shall block 1-foot (0.03 bar) water head pressure continuously.

Base sealant shall be compatible with cable jacket materials. Base sealant shall be chemically resistant to gasoline, oils, dilute acids and bases, and most unsaturated hydrocarbons. Base sealant shall withstand direct sunlight with no decrease in functionality. Base sealant shall have excellent adhesion to plastics, PVC, HDPE, metals, copper, aluminum, wood, fiberglass, polymer concrete, and concrete. Base sealant shall withstand freeze/thaw cycles without loss of adhesion. Base sealant shall not propagate cracks or crumble when cut or drilled to allow service change-outs.

### **ORDER INFORMATION**

CAT #	PACKAGE DESCRIPTION
PF-1 (2 units/case)	1 – 750-mL burst pack 1 – pair of gloves 1 – instruction sheet
	Coverage is 1 ft <sup>2</sup> (0.1 m <sup>2</sup> )
PF-2 (2 units/case)	<ul> <li>1 – 1500-mL burst pack</li> <li>1 – pair of gloves</li> <li>1 – roll duct tape</li> <li>1 – plastic sheet</li> <li>1 – instruction sheet</li> <li>Coverage is 2 ft<sup>2</sup> (0.2 m<sup>2</sup>)</li> </ul>
PF-3 (1 unit/case)	<ul> <li>1 - bottle part A</li> <li>1 - bottle part B</li> <li>1 - pair of gloves</li> <li>1 - mixing pail</li> <li>1 - mixing stick</li> <li>1 - roll duct tape</li> <li>1 - plastic sheet</li> <li>1 - instruction sheet</li> <li>Coverage is 3 ft<sup>2</sup> (0.3 m<sup>2</sup>)</li> </ul>

## **CONTACT US**

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IMPORTANT NOTICE: The statements here are made in good faith based on tests and observations we believe to be reliable. However, the completeness and accuracy of the information is not guaranteed. Before using, the end- user should conduct whatever evaluations are necessary to determine that the product is suitable for the intended use.

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