TuffTex Materials
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RepJoint PF-UV - Pre-formed Closed-cell, Low density, Cross-linked EVA/PE Foam Joint Seal

DESCRIPTION
RepJoint PF-UV is a pre-formed closed-cell, low-density cross-linked EVA/PE (Ethyl Vinyl Acetate-Polyethylene) foam joint seal. **RepJoint PF-UV** is an expansion joint seal for use in bridge decks, commercial buildings, parking decks, water treatment facilities, and other industrial applications. **RepJoint PF-UV** contains a HALS (Hindered Amine Light Stabilizer - UV inhibitor) which provides increased performance to U.V. light than other foam products containing carbon black.

USES:
- Expansion, Seismic joints
- Gaskets
- Seismic retrofit
- Cast-in-place joints
- Bridges/Highways/Tunnels/Airport Runways
- Commercial Buildings
- Water Treatment Facilities
- Tanks/Pools
- Industrial Facilities

FEATURES:
- Superior chemical resistance
- UV Protection
- Custom fit to any configuration
- Contains no carbon black pigments
- Hydrostatic pressure resistant
- Withstands size and directional changes of joints
- Noise suppression
- No maintenance required

TECHNICAL DATA:
Meets ASTM 1056 Type 2, Class B, Grade 2 & AASHTO T-42-84 Modified

MOVEMENT CAPABILITY:
RepJoint PF-UV is capable of functioning in 60% compression and 30% tension movement range. **RepJoint PF-UV** can handle up to 50% ± total horizontal or vertical shear movement.

SIZING GUIDELINES:
RepJoint PF-UV is typically sized at a minimum of 25% larger than the joint opening. The amount of compression will vary due to seasonality, temperature and designed movement of the joint. Please contact your local sales representative for assistance.

ENGINEERED SURFACE PROTECTION:
The joint material shall have E.S.P. (Engineered Surface Protection) grooves along the bond surfaces at a distance of no less than ¼" and no more than ½" a part (6mm – 13mm). The grooves are approximately ⅛" deep x ⅛" (3mm x 3 mm) wide and run the entire length of the joint, increasing the bond surface for enhanced bond performance.

PERFORMANCE INSTALLATION ENHANCEMENT:
For joint openings exceeding 3 inches in width and depth, Performance Installation Enhancement or P.I.E. is recommended. When P.I.E. is added to the joint material, an additional inch of depth is added for beveling. This bevel creates a natural trapezoidal shaped product that is easier to install.

INSTALLATION PROCEDURES:
Surface Preparation: Brush blast all concrete surfaces in direct contact with joint seal. Concrete surfaces should be clean, free of all contaminants and latent build up. Blow dirt or debris from the joint openings and joint surfaces with oil free compressed air. Steel surfaces must be cleaned to SSPC 10 or better. Ensure that all moisture is removed from steel surfaces prior to applying the bonding agent. Use of a propane wand is acceptable.
Seal Installation: The manufacturer's published installation procedures shall be followed at all times. Mask the areas adjacent to the joint opening. Use approximately 12" (300mm) of plastic sheeting and tape along edges to keep the surrounding areas clean. Be sure that the tape does not actually go into the joint opening but back approximately 1/8" (3mm) from the joint edge.

Lay out the **RepJoint PF-UV** material next to the joint opening to check for appropriate length and width. Heat welds and other directional changes should be cut and made. All welds should be allowed to cool before mixing the adhesive.

Begin mixing the **RepPoxy PA** epoxy adhesive following the manufacturer's specified mixing procedures. Start at one end or at an intersection or corner. Apply the epoxy adhesive to both sides of the concrete substrate surfaces.

Apply enough **RepJoint PA** adhesive to coat the substrate to an approximate thickness of 40 mils (1mm). Apply the epoxy bonder on both surfaces working in the direction ahead of the joint material, not more than 20' (6m) ahead.

Next, apply the **RepJoint PA** epoxy adhesive to the grooved sides of the joint material. Apply enough to coat and fill the grooves on the joint material, approximately 40 mils (1mm) thick. Install the coated material at the curb, intersection, or corner, where the epoxy was initially applied on the substrate.

The joint material should be recessed 1/8" (3mm) below the joint edge and should not protrude above the joint edge. Continue in the same direction as the **RepJoint PA** epoxy was initially applied. DO NOT push at an angle or pull the material, as this will stretch the material and is unacceptable.

Clean the epoxy left on the surface of the material as soon as it is pushed into the desired depth. DO NOT allow the epoxy to cure on the exposed surface of the foam before removing it. Use a clean trowel or a putty knife tilted at an angle opposite the direction of movement. DO NOT allow any epoxy bonder near any area to be cut and welded until the weld is completed otherwise the weld will not hold. Once the joint is installed and cleaned, remove the tape from the joint edges before the epoxy cures.
Allow the bonder to set, approximately 20 minutes, at 77°F (25°C), before traffic is allowed onto the joint. Slightly longer time is required during cooler weather.
When a continuous joint cannot be finished, the epoxy bonder on the substrate and on the joint material must end evenly. Install the joint past the epoxied surface at least 6 to 12 inches (150-300mm) dry, or without epoxy. This can be pulled out later to be re-welded and the installation continued.

JOINT MATERIAL LIMITATIONS:
Directional Changes: For all directional changes in the joint material, heat welding must be performed. This is done by placing the Joint Material ends against a Teflon coated heating iron at 350°F (176°C) for 10 – 20 seconds. The ends are then placed firmly together and fusion bonded. If heat welding is not an option: Vertical turns - the maximum angle the joint material can sustain without heat welding is 115°. Horizontal turns - the maximum angle the joint material can sustain without heat welding is 135°F. Heat welds will add to the aesthetics of an installation and are suggested for horizontal 90° turns.
Joint Variations: If a joint opening is not uniform, please contact your sales representative for assistance.
Skews: **RepJoint PF-UV** with H.A.L.S. does not have skew limitations.
Operational Temperature Range: The physical and chemical properties of **RepJoint PF-UV** are not altered significantly within the recommended temperature range of -94°F to 160°F (-70°C to 71°C).

Maximum Joint Opening: When the expansion joint is subjected to pedestrian or vehicular traffic, the following limitations apply:

Vehicular Traffic: Maximum Joint Opening of 4" without a cover plate.
Pedestrian Traffic: Maximum Joint Opening of 4" without a cover plate.

MANUFACTURING TOLERANCES:
RepJoint PF-UV will be manufactured in accordance with the contract or plan to within a tolerance of ± 5% depth and ± 2% width.

PACKAGING:
RepJoint PF-UV is custom fabricated to your specific order. Please contact your local sales representative.

CLEAN UP:
Tools and Equipment: Clean with **TMI Solvent 100** or other solvents.

PACKAGING:
As specified

COLOR:
Beige

STORAGE:
The material should be stored between 40°F – 95°F (4°C – 35°C) in a cool, dry area away from direct sunlight.

SHELF LIFE:
Shelf life of properly stored, unopened containers is 24 months (Two years)

LIMITATIONS:
1) Material is sized based on anticipated movement & season of installation.
2) Material must be installed under compression. Compression amount can vary between 15% and 35% depending on the temperature at time of installation.
3) Bonding surface of substrate should be chemically **(PrepEtch)** or mechanically abraded. Sandblasting is preferred.
   a. Concrete should have a CSP 3 which is the approx. texture of 100 grit sand paper.
   b. Steel should be cleaned to SPCC 10 or near white metal. All moisture should be removed from steel surface prior to installation.
   c. Contact TMI for installation instructions when bonding to specialty steels such as stainless or galvanized.
4) DO NOT place at temperatures below 40ºF (5ºC) unless special provisions are followed. Avoid hazards by following all precautions found in the Safety Data Sheets (SDS), product labels, and technical literature.

CAUTION:
READ SDS PRIOR TO USING THIS PRODUCT.
Do not dilute. Wear protective gloves and goggles. Avoid prolonged skin contact.

WARRANTY:
Due to the use of this product beyond our control, we assume no liability for damages of any kind, and the user accepts the product "as is" and without warranties, expressed or implied, from either **TuffTex Materials, Inc.** or its agents. The suitability of the product for an intended use shall be solely up to the user. Our only obligation shall be to replace or pay for any material proved defective, with our liability limited to the purchase price of materials supplied by us.

PHYSICALS:		
TESTS	***TEST METHOD***	***RESULT***
Compression Set	ASTM D3575 Suffix B	2 hr Recovery 10% 24 hr Recovery 9%
Compression Deflection 25%	ASTM D3575 Suffix B	9 psi avg.
Elongation	ASTM D3575 Suffix T	185% - 275%
Density	ASTM D3575 Suffix W	2.7 – 3.4 lbs/ft^3
Water Absorption	ASTM D3575 Suffix L	.02 lbs/ft^2 avg.
Weatherability	ASTM G154 3000 Hrs HH-F-341a	No chalking, flaking, blistering, checking, or cracking No degradation
Tensile	ASTM D3575 Suffix T	92 – 140 psi (640 – 950 KPa)
Tear Resistance	ASTM D624	10 – 20 lbs/in (1.79 – 3.57 kg/cm)
Thermal Stability	ASTM D3575 Suffix S	5.9% Max
Recovery	ASTM D3575	98.9%