

A Monolithic, Liquid, Polyurethane-Methacrylate (PUMA) Expansion Joint System

### **Product Description**

Tremco<sup>®</sup> PUMA Expansion Joint System (EJS) is a monolithic, liquid, Polyurethane-Methacrylate (PUMA) expansion joint system with superior durability and excellent movement capabilities. PUMA Technology is designed to have tenacious adhesion and extreme abrasion resistance. It can be walked on in one hour, which will minimize operation disruption.

Tremco PUMA EJS is comprised of an aluminum butyl-backed tape, aluminum heat-resistant tape, primer, joint compound material, and top coat. Throats over 2" will require 20-gauge sheet metal in lieu of the aluminum butyl-backed tape. All PUMA components are cured using Tremco PUMA Initiator.

Tremco PUMA Primer is a methyl-methacrylate (MMA), two-component primer for porous and non-porous substrates.

Tremco PUMA EJ Basic is a two-part, chemical curing, PUMA modified membrane used as an elastomeric joint compound material.

Tremco PUMA TC is a methyl methacrylate (MMA) top coat. Interlaminary adhesion to Tremco PUMA TC is exceedingly strong. The top coat affords excellent abrasion resistance, UV stability and chemical resistance to complete the Tremco PUMA EJS.

The Tremco PUMA EJS is poured into Tremco's patent-pending Beveled Anchor Profile to sit completely flush with the surrounding deck, making it seamless and completely snag-free.

# **Basic Uses**

Tremco PUMA EJS can be used in exposed and/or multi-story parking garages in both new construction and restoration.

### **Features and Benefits**

- Seamless and snag-free
- Multiple system configurations to accommodate most +/- movement requirements
- Waterproof and air-tight
- Offers significant sound, shock and vibration reduction compared to traditional mechanical expansion joint systems
- Polyurethane-methacrylate (PUMA) technology delivers extreme durability while maintaining its crack-bridging characteristics
- Rapid set-up times allow for quick overall installation, as well as the ability to open to vehicular traffic one hour later
- Can be applied at temperatures below 20 °F (-7 °C), which allows for continuation of projects in the colder months
- Initiator adjustments allow for 30 to 45 min cure time between applications, even at temperatures below freezing
- Extreme durability stands up to heavy vehicular traffic, including snow plows
- Excellent abrasion and chemical resistance
- Industry-leading leak-free warranty (terms dependent on system configuration)
- Compatible with Tremco sealants and coatings, which is essential for tie-ins, detailing and penetrations
- Zero Volatile Organic Compounds (VOCs)

- Extremely forgiving application allows users to apply additional coats long after the previous coat has cured
- Unique chemistry allows for easy repair

#### **Availability**

Immediately available from your local Tremco Sales Representative.

#### Packaging

Tremco PUMA Primer: 6-gal pails

Tremco PUMA EJ Basic: 6-gal pails

Tremco PUMA TC: 6-gal pails

Tremco PUMA Initiator: 22 or 55-lb bags

Tremco PUMA Cleaner: 6-gal pails

Reinforcing Bars: 3.3' x 6" (1 m x 15.2 cm) sections

### Colors

Tremco PUMA TC is available in Gray, Slate Gray, Tintable and Decorative.

# Limitations

- Do not apply to damp or contaminated surfaces.
- Use with adequate ventilation.
- Joints shall not be greater than 2 in (5 cm) nominal width at 72°F (22° C).
- For joint sizes that are greater than 2 in (5 cm) nominal width at 72°F (22° C) please contact your local Tremco Representative
- Joint movement should not exceed +/- 0.5 in (1.27 cm). Joint movement is to be determined by the engineer of record or a third-party consultant.

### Warranty

Tremco warrants its Products to be free of defects in materials but makes no warranty as to appearance or color. Since methods of application and on-site conditions are beyond our control and can affect performance, Tremco makes no other warranty, expressed or implied, including warranties of MERCHANTABILITY and FITNESS FOR A PARTICULAR PURPOSE with respect to Tremco Products. Tremco's sole obligation shall be, at its option, to replace or to refund the purchase price of the quantity of Tremco Products proven to be defective, and Tremco shall not be liable for any loss or damage.

Please refer to our website at <u>www.tremcosealants.com</u> for the most up-to-date Product Data Sheets.

NOTE: All Tremco Safety Data Sheets (SDS) are in alignment with the Globally Harmonized System of Classification and Labelling of

# Tremco<sup>®</sup> PUMA Expansion Joint System (EJS) A Monolithic Liquid Polyurethane-Methacrylate (PUMA) Expansion Joint System

**TYPICAL PHYSICAL PROPERTIES** PROPERTY **TEST METHOD TREMCO PUMA EJ Basic TREMCO PUMA TC** VOC Content Method 310 0 a/L 0 a/L % Solids (by Weight) **ASTM D1353** 100% 100% Drying Time @ 75° F (24° C), 50% RH **ASTM D1640** 750 mil, 1 hr 17 mil film, 1 hr ASTM D822 Weatherometer 350 hr Weathering N/A No effect Elongation ASTM D638 407%-420% 130% Elongation ASTM D412 218% N/A ASTM D5147 Elongation Min 30% Min 30% Tensile Strength ASTM D638 @ 75°F 991 - 1680 psi 986 psi **Tensile Strength** ASTM D412 N/A 752 psi Tear Strength ASTM D624, Die C 175 psi N/A **Tearing Resistance ASTM D4073** 91 lbf 203 lbf Hardness (Shore D) ASTM D2240 18 - 35 55 Hardness (Shore A) ASTM D2240 65 - 87 100 Hardness (Shore A) ASTM C661 89 N/A Abrasion Resistance (1000 cycles) N/A ATSM D4060 51 mgm Low-Temperature Crack Bridging **ASTM C1305** Passes N/A Low-Temperature Flexibility **ASTM D1970** Passes N/A Taber Abrasion ASTM C501 Passes N/A >70 lbf/in Peak Load @ 73° F (23° C), avg. ASTM D5147 238 lb/in **ASTM D5602** Puncture Resistance > 56 lbs >56 lbs ASTM D570 Water Absorption N/A < 0.1% Water Vapor Transmission ASTM E96 0.03 perms 0.03 perms Adhesion-in-Peel ASTM C794 Concrete failure with primer N/A Self-Ignition Temperature **ASTM D1929** 800° F (427° C) 850° F (454° C) Smoke Density **ASTM D2843** 4.1% 2.1% Rate of Burn ASTM D635 1.2 in/min 0.2 in/min

#### 11/19/TPEJSDS-EJ

Please refer to our website at www.tremcosealants.com for the most up-to-date Product Data Sheets.

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