

SECTION 07910

PREFORMED JOINT SEALS

PART GENERAL

SECTION INCLUDES

Sealing of joints specified in Schedule at end of Section.

RELATED SECTIONS

Section 07900 - Joint Sealers: Gunnable and pourable joint sealants.

REFERENCES

ASTM D 816 - Standard Test Methods for Rubber Cement.

ASTM D 3574 - Standard Test Methods for Flexible Cellular Materials--Slab, Bonded, and Molded Urethane Foams.

ASTM G 53 - Standard Practice for Operating Light- and Water-Exposure Apparatus (Fluorescent UV-Condensation Type) for Exposure of Nonmetallic Materials.

UL 94 - Tests for Flammability of Plastic Materials for Parts in Devices and Appliances.

SUBMITTALS

Submit under provisions of Section 01300.

Product Data: Manufacturer's data showing product characteristics and application methods.

Selection Samples: Color charts for color selection.

QUALITY ASSURANCE

Installer Qualifications: Trained and experienced in the installation of this type of sealant.

DELIVERY, STORAGE, AND HANDLING

Deliver joint seals to site in manufacturer's original

unopened containers; store and move to installation location in original containers.

Store materials in dry, enclosed area, off the ground, out of direct sunlight.

Store materials at minimum of 68 degrees F (20 degrees C) for at least 24 hours prior to installation, regardless of temperature at location of installation.

WARRANTY

Provide manufacturer's 10-year warranty against product defects.

PART PRODUCTS

MANUFACTURERS

Provide products of Polytite Manufacturing Corporation, 324 Rindge Avenue, Cambridge, MA 02140. ASD. Tel: (617) 864-0930. Fax: (617) 864-9006.

Requests for substitutions will be considered in accordance with provisions of Section 01600.

Substitutions: Not permitted.

MATERIALS

Preformed Joint Seals - Performance Requirements:

Installed water resistance: No penetration at 50 percent compression.

Movement capability: 100 percent compression and expansion, with 100 percent recovery.

Water absorption: Maximum 3 percent of weight, when tested at 50 percent compression for 100 hours under 6 ft (1830 mm) of water.

Ultraviolet light resistant.

Mildew resistant.

Non-staining to adjacent materials.

Non-bleeding, at up to 212 degrees F (100 degrees C) and 20 percent compression.

Resistant to gasoline, diesel fuel, jet fuel, solvents, salts, anti-freeze, industrial cleaners, corrosive vapors, and acids.

Flammability (UL 94): VO, self-extinguishing.

Tensile strength (ASTM D 3574): 21.8 psi (150 kPa), min.
Compression set (ASTM D 3574): 2 percent, max.
Shear strength: 8 N/cu cm, min.
Resistance to aging (ASTM G 53, 825 hrs): No more than minor surface degradation.
Softening point (ASTM D 816): 50 degrees C, minimum.
Flash point: 590 degrees F (310 degrees C), min.

Preformed Joint Seals (Standard): Polytite Manufacturing Corp. "Polytite"; precompressed, self-expanding polyurethane foam impregnated with hydrophobic polymer waterproofing agent, with self-adhesive faces.

Exposed surfaces: Puncture-resistant elastomeric coating; "Polytite R"; color as selected.

Exposed surfaces: Bond breaker release agent; "Polytite B."

Density: 10 lb/cu ft (160 kg/cu m).

Thickness: Selected by Contractor for minimum ____ percent material compression, based on manufacturer's data and expected width of actual joints under most extreme conditions.

Color: Black.

Color: Selected from manufacturer's full range.

Traffic Joint Seals: Polytite Manufacturing Corp. "Polytite N"; precompressed, self-expanding polyurethane foam impregnated with neoprene copolymer waterproofing agent, with self-adhesive faces.

Density: 10 lb/cu ft (160 kg/cu m).

Thickness: Selected by Contractor for minimum 50 percent material compression based on manufacturer's data and expected width of actual joint under most extreme conditions.

Seismic Joint Seals: Polytite Manufacturing Corp. "Seismic Polytite"; dense PVC foam core, laminated with polyurethane foam impregnated with hydrophobic polymer waterproofing agent, with self-adhesive faces.

Density: 16 lb/cu ft (260 kg/cu m).

Thickness: Selected by Contractor for minimum ____ percent material compression, based on manufacturer's data and expected width of actual joint under most extreme conditions.

Joint Sealant for Application over Preformed Joint Seals:
As specified in Section 07900.

PART EXECUTION

EXAMINATION

Verify that:

Joints are clean, dry, sound, smooth, straight and parallel, and otherwise ready to receive joint seals. Joint seals are of the correct width to provide specified compression. Joints are of sufficient depth.

Do not proceed with installation until detrimental conditions have been corrected.

PREPARATION

Clean and prime joints where required or recommended by manufacturer.

Install bond breaker on back surface of joint if necessary.

INSTALLATION

Install joint seals in accordance with manufacturer's instructions.

Do not install joint seals when temperature is below -14 degrees F (-25 degrees C) or above 95 degrees F (35 degrees C).

Do not install joint seals in rain or snow.

Do not use scrap material.

SCHEDULE

Preformed Joint Seals (Standard): Use in the following locations:

Vertical exterior joints wider than 1-1/4 inches (32 mm).

Masonry expansion and control joints.

Vertical joints in concrete, stone, or masonry.

Vertical joints between different materials.

Below grade joints in foundation walls.

Exterior joints around door and window openings.

Concealed joints in metal curtain wall, metal panels,

and similar applications.
Joints in exterior insulation and finish system.
Interior expansion and control joints.
Other joints indicated to be sealed, that are not specified to be sealed with another material.
All other joints in exterior envelope that are not specified to be sealed with another material, whether indicated to be sealed or not.

Traffic Joint Seals: Use in the following locations:
Parking deck floor slab joints.
Bridge deck joints.
Concrete paving joints, including sidewalks, terraces, and drives.
Runway paving joints.
Other joints subject to gasoline, jet fuel, or other solvents.
Interior floor expansion and control joints.
Other joints so indicated.

Seismic Joint Seals: Use in the following locations:
All exterior vertical joints 2 inches (50 mm) wide or wider.
Other joints so indicated.

END OF SECTION