

MICHIGAN
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION
FOR
PRESSURE RELIEF JOINT

STM:JDC

1 of 2

APPR:TGH:TES:03-27-25
FHWA:APPR:04-14-25

a. Description. This work consists of constructing and sealing pressure relief joints. Perform this work in accordance with section 602 of the Standard Specifications for Construction, this special provision, and the details shown on the plans.

b. Materials. Furnish the open cell, self-expanding, silicone pre-coated joint filler material from the following list, or Engineer approved equal. Ensure furnished material is capable of ± 50 percent movement. Size the width of the joint material to accommodate a nominal 4-inch joint width.

<u>Company</u>	<u>Product Name</u>
LymTal International, Inc.	Iso-Flex SILFAST XL
Watson Bowman Acme Corp.	Wabo®FS Bridge Seal
EMSEAL Joint Systems Ltd.	BEJS System
FPT Infrastructure	Mataspan OC2000 Series
Silicone Specialties, Inc	Silspec SES

Furnish a general certification to the Engineer per *MQAP Manual* that the materials meet the requirements specified herein.

c. Construction. Construct pressure relief joints at the locations shown on the plans.

Sawcut and remove pavement at the location the pressure relief joint is to be installed to a width of no less than 4 inches and no more than 4¼ inches. Pavement removal widths outside of these tolerances will require alternate size joint material to be ordered to accommodate the actual opening width as saw-cut in the field.

Immediately prior to application of the adhesives or primers, clean joint faces by abrasive blasting to remove all materials that may interfere with the bonding or curing of the joint. Ensure the prepared joint faces meet the *International Concrete Repair Institute Guideline No. 03732*, CSP 3. Use a vacuum or oil-free moisture-free air blast to remove all dust and other loose material. Remove any oil or other contamination after initial cleaning. Ensure there is no visible moisture present on the surface of the concrete at the time of application. The Engineer will not allow the use of artificial heat to dry joints before sealing.

Ensure handling and mixing of the adhesives or primers is performed in a safe manner to achieve the desired results in accordance with the manufacturer's recommendations or as directed by the Engineer. Do not place adhesive or primer materials when the concrete surface is less than 50 °F or ambient air temperature is forecast to fall below 50 °F within 8 hours of application. Do not place adhesive or primer materials if weather or surface conditions are such that the material cannot be properly handled, placed, and cured in accordance with the manufacturer's

requirements and the specified requirements for traffic control.

Install joint materials in accordance with the manufacturer's installation procedures/guidelines. When possible, avoid installing the joint material seem in the general area of the vehicle wheel path. Apply epoxy adhesive to joint ends and apply firm pressure as sections are joined together. Recess the surface of the pressure relief joint material 1/2 inch below the concrete surface. Once the joint is installed, run a 1/4 inch bead of silicone adhesive along both sides of the joint and over all seams and transitions for a clean, aesthetic finish. Do not install joints on concrete surfaces that are less than the age specified by the manufacturer's recommendation. Obtain the Engineer's approval of installation procedures/guidelines prior to installation.

d. Measurement and Payment. The completed work, as described, will be measured and paid for at the contract unit price using the following pay item:

Pay Item	Pay Unit
Joint, Pressure Relief	Foot

Joint, Pressure Relief will be measured along the centerline of the joint.