



SECTION 1073

JOINT MATERIAL FOR STRUCTURES

1073.1 Scope. This specification covers material for performed compression seals and strip seals with lubricant-adhesive for sealing joints, and expanded or extruded polystyrene material for use as bedding material under prestressed panels and in the corrugation areas of stay-in-place forms used on bridge decks.

1073.2 Acceptance. All material under this specification shall be obtained from a source identified on the PAL designated for this specification. All material will be inspected and accepted in accordance with [Sec 106](#).

1073.3 Preformed Compression Seal. Preformed compression seals shall be in accordance with ASTM D 3542 and with the following additional requirements.

1073.3.1 The movement range of the seal as defined in ASTM D 3542 shall be as shown in the contract documents, and the height of seal shall be no less than the nominal width. The seal shall be delivered in containers marked with the manufacturer's name, size of the seal, lot number and date of manufacture.

1073.3.2 The lubricant adhesive applied for installation shall be in accordance with the seal manufacturer and in accordance with [Sec 717](#). The lubricant adhesive shall be delivered in containers marked with the manufacturer's name, lot number, date of manufacture and instructions for storage and use.

1073.4 Strip Seal. Strip seals shall be in accordance with ASTM D 5973 and the following additional requirements.

1073.4.1 The gland lugs of the seal that fasten into the steel extrusion shall be of a type that exerts pressure to the contact surfaces. Glands with snap or arrowhead-type lugs will not be permitted. The seal shall be delivered in containers marked with the manufacturer's name, size of the seal, lot number and date of manufacture.

1073.4.2 The lubricant adhesive applied for bonding the gland to the steel extrusion shall be as recommended by the seal manufacturer and in accordance with [Sec 717](#). The lubricant-adhesive shall be delivered in containers marked with the manufacturer's name, lot number, date of manufacture and instructions for storage and use.

1073.5 Expanded or Extruded Polystyrene Material.

1073.5.1 Bedding Material for Prestressed Panels. The expanded or extruded polystyrene material shall be in accordance with the following:

Property	Test	Requirement
Compression Strength	ASTM D 1621	60 psi, min.
Water Absorption	ASTM D 2842	2% by volume, max.
Oxygen Index	ASTM D 2863	24 minimum

1073.5.2 Material for Corrugation Areas of Stay-In-Place Forms. Expanded polystyrene material shall be in accordance with the following:

Property	Test	Requirement
Compression Strength	ASTM D 1621	10 psi, min.
Water Absorption	ASTM D 2842	2% by volume, max.

1073.5.3 Adhesive for Expanded or Extruded Polystyrene Materials. Adhesive for use with expanded or extruded polystyrene material shall be in accordance with the polystyrene manufacturer's recommendations.

1073.6 Documentation. Prior to approval and use of this material, the manufacturer shall submit to Construction and Materials a certified test report showing specific test results in accordance with all requirements of these specifications. The certified test report shall contain the manufacturer's name, brand name of material, lot tested and date of manufacture. In addition, the manufacturer shall submit a sample of the seal or polystyrene material and a one-pint sample of the adhesive for laboratory testing, accompanied by a technical data sheet and an MSDS. With approval by the engineer of the certified test report and satisfactory results of tests performed on the sample submitted, the brand name and manufacturer will be placed on the appropriate pre-acceptance list. Pre-acceptance lists are available through Construction and Materials or MoDOT's web site. New certified test results and samples shall be submitted any time the manufacturing process or the material formulation is changed, and may be required when random sampling and testing of material offered for use indicates nonconformity with any of the requirements herein specified.