

Description

The WM-Series System is an expansion joint product designed for parking garages and open-air structures, as well as buried joint applications where leak stoppage is critical. The design features an

extruded elastomeric membrane, which is fusion-bonded to the concrete deck with Polycrete Elastomeric Concrete. Once installed, the system provides a watertight seal, while flexing in response to fluctuations in joint width.

There are three distinct sizes in the WM-Series family group, namely, the WM-175, WM-225, WM-325. Each is designed for a different joint opening and movement capability.

The WM-Series' shapes are an appropriate selection for use where thin topping slabs require a proportionately shallow expansion joint profile. The single-ply membrane installs more easily than other multi-celled shapes that must be compressed and forced down into the joint opening. This product is not recommended for applications where pedestrian traffic may be of concern. The CR-Series and DW-Series are better suited for such applications.

A further use for the product is for buried applications where it is extremely important to specify and install a watertight system.

LEED Credits - Up to two (2) LEED credits depending on the location of the project.

Physical Properties

The system consists of two items: an extruded elastomeric membrane and Polycrete Elastomeric Concrete. The membrane is available in several sizes. It is an extruded shape made from an EPDM-based, thermo-rubber material (Santoprene®). The material's physical properties are as shown in Table 1.

The Polycrete consists of a combination of a resin mixture and a gradation of sands and aggregate sizes, blended per recommendations of the manufacturer. (See the Polycrete data sheet for further information and technical properties.)

TABLE 1 – Physical Properties of the EPDM-Based Thermo-Rubber Seal Element

Property	ASTM Test Method	Requirement
Tensile strength, min.	D412	1000 psi
Elongation at break, mir	n. D412	410%
Hardness, Type A duron	neter D2240 (modified)	67
Compression set	D395 (Method B)	
168h @ 77°F		24%
168h @ 212°F		36%
Tear strength	D624	140 lb/in
Tension set	D412	10%
100% modulus	D412	420 psi
Specific gravity	D792	0.97
Brittle point	D746	< -81°F



PRODUCT	MIN. WIDTH IN (MM)	MID-RANGE IN (MM)	MAX. WIDTH IN (MM)	DIM. A: IN (MM)	DIM. B : IN (MM)	DIM. C: IN (MM)	TOTAL MOVEMENT IN (MM)
WM-175	1.00" (25)	1.75" (44)	2.50" (64)	1.75" (44)	3.50" (89)	0.75" (19)	1.50" (38)
WM-225	1.06" (27)	2.25" (57)	3.50" (89)	2.25" (57)	3.50" (89)	0.75" (19)	2.44" (62)

