

ELASTOMERIC CONCRETE

Polycrete 1600



Description

Polycrete 1600 is an elastomeric concrete, engineered for use in nosing applications alongside expansion joint systems. The material is an epoxy blend that resists wear due to the impact of vehicular loadings and also resists cracking at low temperatures.

Polycrete outperforms traditional nosing materials such as concrete, epoxies, and asphalt. These materials have historically shown breakdown due to cracking and allowed moisture and salts to penetrate the concrete surrounding the expansion joint system. If moisture and salt travel down through the joint opening to the structure's support members it may cause premature deterioration of those members.

Polycrete has a track record of excellent performance. It is used to anchor our extensive line of expansion joint products including applications with the CR-Series, DW-Series and WM-Series winged seals as well as our Aluminum Strip Seal Systems.

Physical Properties

The Polycrete system consists of three (3) items: two resin components and a pre-measured, blended aggregate. The material is an ambient-cured epoxy mixture. The product meets the physical property requirements shown in Table 1.

TABLE 1 – Physical Properties of Polycrete 1600		
Property	ASTM Test Method	Requirement
Tensile strength, min.	D638	1200 psi
Elongation at break, min. %	D638	50%
Hardness, Type A durometer	D2240 (modified)	80A
Compression set 22h @ 158°F	D395 (method B)	48%
Tear resistance, min.	D624	174 lb/in ²
Water absorption, min (weight)	D570	1.2%
Heat shrinkage, min	D1299	0.65%
Pot life, min	20 minutes @ 70° F 10 minutes @ 80° F	
Oven Aging at 70°F for 72h	D638	
Tensile strength, min		1250 psi
Elongation, loss max		198
Bond test (on cured binder-stone Mixture, direct tension method After 25 freeze-thaw cycles	See Note A	250 psi

Features and Benefits

Ideal for Rehabilitation Work – Polycrete, used with our membrane systems, quickly replaces urethane wide-joint products with little or no modification to the existing recess.

Permanent Header System – Polycrete provides durability under vehicular loadings, unlike other cementitious and epoxy products. Its elastomeric properties resist cracking, particularly in colder temperatures.

Performance Acknowledged by Prime Specifiers – Major specifiers throughout North America include Polycrete as a primary item for parking deck joint work.

