

1510 - BRIDGE JOINT SYSTEM - TWO PART SILICONE

SECTION 1510

BRIDGE JOINT SYSTEM – TWO PART SILICONE

1510.1 DESCRIPTION

This specification covers material for bridge expansion joint system using a 2-part silicone as shown in the Contract Documents.

1510.2 REQUIREMENTS

a. Provide joint sealer that is a two part, self-leveling, and rapid curing joint sealant that cures to a low-modulus rubber upon exposure to atmospheric moisture. Provide sealant that complies with **TABLE 1510-1 and 1510-2**.

TABLE 1510-1: TWO PART SELF-LEVELING SILICONE JOINT SEALANT (RAPID CURE)		
Combined Components:		
Property	Test Method	Requirement
Tack Free Time 25°C	MIL-2-8802	30-60 Min
Extrusion Rate	MIL-2-8802	0.4 to 1.2 lbs./Min
Specific Gravity	ASTM D 1475	1.3-1.4
Joint Elongation	ASTM D 3583	600% (Min.)
Joint Modulus	ASTM D 3583	0.3 to 0.8 psi (@100%)
Skin-Over Time	ASTM C 679	Max. 15 Minutes
Non-Volatile Content	ASTM D 1644, Method A	93% (Min.)

TABLE 1510-2: JOINT CURE RATE:	
% of Total Cure	Hours
50 %	4 to 6
75 %	24
100 %	48 to 100

b. Place the primer solution for the silicone joint sealant along both edges of the expansion gap prior to the installation of the sealant. Use a primer type and apply the coating thickness as specified by the sealant manufacturer.

c. Provide backer rod material that is compatible with both the nosing mortar and joint sealant and approved by the manufacturers. Use backer rod that is be approximately 25% larger than the joint opening so as to provide a tight fit into the joint. Install it to a depth shown in the Contract Documents.

d. Clean all tools and other application or mixing equipment frequently using a solvent type that is approved by the nosing mortar and joint sealant manufacturer.

1510.3 TEST METHODS

Test the material in accordance with the ASTM and MIL standards cited above.

1510.4 PREQUALIFICATION

None required.

1510.5 BASIS OF ACCEPTANCE

Receipt and approval of a Type D Certification as specified in **DIVISION 2600**.