

## Evaluation Table

|                      |                      |
|----------------------|----------------------|
| <b>PEP ID:</b>       | XXXXX                |
| <b>Manufacturer:</b> | Name of Manufacturer |
| <b>Product Name:</b> | Name of Product      |

1015 Epoxy Resin Adhesives

1015 Hardened Concrete to Fresh Concrete

ADOT Standard Specification: 1015, 1015-3(A), 105-3(C)

Responsible Section: Materials Group

| Material Property                   | Specification/<br>Test Method | Requirement  | Results | Pass<br>/ Fail |
|-------------------------------------|-------------------------------|--|---------|----------------|
| General                             | 1015-1<br>ASTM C881           | Epoxy resin adhesives shall be a two-component system that meets the requirements of ASTM C881.  |         |                |
| Properties                          | 1015-1                        | All epoxy resin adhesives must be resistant to the action of weathering, moisture, acids, alkalis, and other environmental factors.  |         |                |
| Labeling                            | 1015-1.01                     | Each container shall be clearly labeled with the product type and identification code, component designation (A or B), manufacturer's name, date of manufacture, batch or lot number, all directions for use, and such warnings or precautions concerning the contents as may be required by State or federal laws or regulations. |         |                |
| Pot Life                            | 1015-3(A)                     | The pot life of the material shall be determined in accordance with AASHTOT237, Part I.  |         |                |
| Hardened Concrete to Fresh Concrete | 1015-3(C)<br>ASTM C881        | Epoxy resin base materials to be utilized for adhering or bonding freshly mixed concrete to hardened concrete shall conform to the requirements of ASTM C881, Type II for non load bearing application and Type V for load bearing applications.   |         |                |

|  |                        |   |  |  |
|--|------------------------|---|--|--|
| Viscosity, Pa-s (P)                                  | 1015-3(C)<br>ASTM C881 | Grade 1: 2.0 (20) max (Type II & V)   |  |  |
|  |                        | Grade 2: 2.0 (20) min (Type II & V)   |  |  |
|  |                        | Grade 2: 10 (100) max (Type II & V)   |  |  |
| Consistency, mm (in), max                            | 1015-3(C)<br>ASTM C881 | Grade 3: 6.0 (1/4) (Type II & V)  |  |  |
| Gel Time, minutes                                    | 1015-3(C)<br>ASTM C881 | 30 (Type II & V)  |  |  |
| Bond Strength, min, MPa (psi)                        | 1015-3(C)<br>ASTM C881 | Freshly Mixed Concrete to Hardened Concrete:<br>14 days: 10.0 (1,500) (Type II & V) |  |  |
| Absorption, 24hr, max %                              | 1015-3(C)<br>ASTM C881 | 1 (Type II & V)   |  |  |
| Heat Deflection Temperature, min, MPa (psi)          | 1015-3(C)<br>ASTM C881 | 7 days: 50 (120) (Required for Type V Only)   |  |  |
| Linear Coefficient of shrinkage on cure, max         | 1015-3(C)<br>ASTM C881 | 0.005 (Type II & V)   |  |  |
| Compressive Yield Strength, min, MPa (psi) at 7 days | 1015-3(C)<br>ASTM C881 | 7 days: 35.0 (5,000) (Type II)  |  |  |
|  |                        | 7 days: 55.0 (8,000) (Type V)   |  |  |
| Compressive Modulus, MPa (psi), min                  | 1015-3(C)<br>ASTM C881 | 600 (90,000), min (Type II)   |  |  |
|  |                        | 1,000 (150,000), min (Type V)   |  |  |
| Tensile Strength, 7 days min, MPa (psi)*             | 1015-3(C)<br>ASTM C881 | 14.0 (2,000) (Type II)  |  |  |
|  |                        | 40.0 (6,000) (Type V)   |  |  |
| Elongation at Break, %, min*                         | 1015-3(C)<br>ASTM C881 | 1 (Type II & V)   |  |  |

\*Not Required for Viscosity Grade 3 Systems