

****THIS IS A NEW IM. – PLEASE READ CAREFULLY.****

ELASTOMERIC CONCRETE FOR CONCRETE REPAIR

<u>GENERAL</u>

Elastomeric concrete used for concrete repair shall meet the requirements of applicable Iowa Department of Transportation Specifications. Acceptance of elastomeric concrete for use in Department of Transportation projects will be on the basis of approved manufacturer and brand name. Approved manufacturers and brand names of elastomeric concretes are listed in Appendix A.

MANUFACTURER AND BRAND NAME PPROVAL

To obtain approval for elastomeric concrete, the manufacturer shall submit the following items to the Office of Materials in Ames, Iowa:

- 1. Product identification including brand name and product number
- 2. Complete manufacturer recommendations for usage
- 3 A current Material Safety Data Sheet (MSDS)
- 4 A sample consisting sufficient material for laboratory evaluation.

LABORATORY EVALUATION FOR APPROVAL

In order to be placed on this approval list, an elastomeric material shall meet the following criteria.

A. <u>Compressive Strength (ASTM C 109/C 579, Method B)</u>

Three 2-in. cubes cured for 24 hours at $73 \pm 4^{\circ}F$ ($23 \pm 2^{\circ}C$) before testing.

<u>Cure time</u> 24.0 hours <u>Strength, psi (MPa)</u> 2000 (13.8) minimum

B. Bond to Concrete by Slant Shear (ASTM C 882)

WetBond

- Soak dummy section for 24 hours
- Allow dummy section to air dry for 15 minutes then air blast surface
- Apply primer to dry surface of dummy section.
- Allow to cure 30 minutes
- Mix elastomeric concrete according to manufacturer's recommendation
- Cast the material against dummy section
- Cure at $73 \pm 4^{\circ}$ F ($23 \pm 2^{\circ}$ C) before testing at 24 hours.

<u>Cure time</u> 24 hours Strength, psi (MPa) 300 (2.1) minimum

YEARLY REAPPROVAL

The manufacturer shall file a certification with the Office of Materials at the beginning of each calendar year stating that the material supplied during that year is identical with the formulation previously tested and approved by the Office of Materials.