



EUCLID CHEMICAL

Guide Specification

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DURAL LPL MV EPOXY

Extended Working Time, High Modulus Epoxy Bonding Adhesive

DURAL LPL MV EPOXY is a 100% solids, 2 component material designed as a moisture insensitive adhesive and binder for numerous application needs.

{Note to Specifier: The paragraphs below are meant to be incorporated into Parts 2 and 3 of a standard CSI 3 Part Format specification, project's General Structural Notes or directly onto the plans. They must be carefully reviewed by a qualified design professional and edited to meet the particular requirements of the project at hand, assure compliance with any governing building codes, and coordinate with other specification sections and drawings.}

PART 2: PRODUCT

2. EPOXY ADHESIVE

- A. Two component, high modulus, pre-proportioned, moisture insensitive, VOC compliant, 100% solids epoxy adhesive. Product shall conform to:
ASTM C 881 Types II, Grade 2, Class C, E, F.
Material shall have the following properties:
 - 1. Minimum 10,000 psi Compressive Strength
 - 2. Minimum 2,000 psi Bond Strength
 - 3. Product:
 - a) Euclid Chemical Company (The); Dural LPL MV Epoxy
 - b) www.euclidchemical.com

{Note to Specifier: This product is also suitable for dowel bars and crack repairs.}

- 2. Manufacturer shall have ISO 9001 Quality Certification. To ensure compatibility repair mortar and curing compound shall be from the same manufacturer.

PART 3: EXECUTION

3. EXAMINATION

- A. Examine concrete surfaces to receive epoxy bonding agent. Notify Engineer if surfaces are not acceptable. Do not begin surface preparation or application until unacceptable conditions are corrected.

3. SURFACE PREPARATION

- A. Concrete Removal: Remove all loose and unsound concrete per ICRI Guideline 310.1R "Guide for Surface Preparation".
 - 1. Unsound concrete surface areas shall have the perimeter boundaries saw cut to a minimum depth of 1/2 inch or less if such depth will cause saw to come in contact with embedded reinforcing steel. All saw cuts shall be made perpendicular to the concrete surface and all concrete removal boundaries shall be straight and aligned parallel to opposite boundary edges resulting in repair areas that are rectangular in shape.

2. All concrete shall be removed from within the repair boundary to minimum depth of 1/2 inch. Provide a surface with suitable profile for bond as defined in repair mortar manufacturer's written recommendations. If delaminations, cracking, or unsound materials exist beyond the minimum removal depth, then removal shall continue until all unsound, delaminated, and cracked concrete has been removed from the cavity.
 3. Provide concrete surface profile CSP stated on manufacturer's literature per ICRI Guideline 310.2R "Selecting and Specifying Concrete Surface Preparation for Sealers, Coatings, and Polymer Overlays".
- B. Preparing Reinforcing Steel: Clean and prepare embedded reinforcing steel per ICRI Guideline 310.1R.
1. Where 1/2 or more of the diameter of the reinforcement steel is exposed either by existing conditions or concrete removal, the bond between the concrete and the reinforcing steel is broken, or corrosion is present the concrete shall be removed to provide a minimum 3/4 inch clearance around the entire perimeter of the steel and along the entire exposed length.
 2. Clean all exposed reinforcing steel to bright steel, prior to installation of repair mortar.
 - a) If section loss of a reinforcing bar is more than 25% or 20% in two or more adjacent bars contact Engineer.
- C. Concrete Preparation and Cleaning: Areas to receive concrete repair shall be structurally sound and free from deteriorated concrete, dust, dirt, paint, oil, efflorescence, laitance, and other contaminants, and shall have a Concrete Surface Profile (CSP) equal to that recommended by the repair mortar manufacturer per ICRI Guideline 310.2R.
- D. Clean surface using un-oiled compressed air or vacuum clean.
- 3.____ APPLICATION
- A. Mix and place epoxy adhesive in accordance with manufacturer's written instructions.
 - B. Place concrete or repair mortar over epoxy adhesive within the maximum allowable time.