

# **Dural MMA Healer/Sealer**

DURAL MMA HEALER/SEALER is a 100% reactive ultra-low viscosity methyl methacrylate resin used as a penetrating crack healer/sealer or to fortify extremely porous concrete substrates. DURAL MMA HEALER/SEALER is typically used on bridge decks, parking structures or as a general penetrating sealer to prevent moisture intrusion. DURAL MMA HEALER/SEALER is a reactive methacrylate resin, which hardens rapidly with the addition of DURAL MMA HEALER/SEALER INITIATOR, even at low temperatures.

{Note: The paragraphs below are meant to be incorporated into Parts 2 and 3 of a standard CSI 3 Part Format specification, the General Structural Notes, or directly onto the plans. They must be carefully reviewed by a qualified design professional and edited to meet the requirements of the project and governing building codes. Coordinate with other specification sections and drawings. In no case shall these Guide Specifications be considered to be Contract Documents or serve as installation instructions for the product being discussed. In any cases of discrepancy the manufacturer's most recently published data sheet shall take precedent.}

#### PART 1: GENERAL

{Note to Specifier: Insert the following paragraph and sub paragraphs as required for your project. Euclid's recommended products are shown in italics. More info can be found on these products at <a href="https://www.euclidchemical.com">www.euclidchemical.com</a> or by clicking on the product links.}

## 1.01 RELATED WORK:

- A. Joint Fillers Eucolastic, Tammsflex, Dural 340, Qwikjoint UVR
- B. Concrete Repair:
  - 1. Vertical and Overhead: <u>Euco V-100</u>, <u>Tamms Structural Mortar</u>
  - 2. Horizontal: Express Repair, VersaSpeed
  - 3. Form and Pour: <u>Eucocrete</u>
- C. Crack Repair/Injection: Dural 452 LV, Dural Fast Set MMA Gel
- D. Bonding Agents: <u>Duralprep A.C.</u>, <u>Dural 452 MV</u>
- E. Waterproofing/Dampproofing: <u>Tamoseal</u>, <u>Vandex Super</u>, <u>Hey'Di K-11</u>, <u>Vandex BB75</u>
- F. Architectural Coatings: <u>Tammscoat</u>, Tammolastic
- G. Anti-Graffiti Coatings: AG 100, AG-400, Euco 563
- H. Traffic Deck Coatings: <u>Tammsdeck</u>, <u>Flexdeck</u>
- I. Decorative Floor Coatings: Duraltex
- J. MMA Chemical Resistant Coatings: <u>Duralkote 240</u>, <u>Duralkote 500</u>, <u>Duraltex 1705/07</u>, <u>Duraltex 1805/07</u>
- K. Penetrating Water Repellents:
  - 1. Horizontal and Vertical: <u>Baracade WB 244</u>, <u>Baracade 100C</u>, <u>Baracade Silane 40</u>
  - 2. Vertical: Chemstop WB Regular/Heavy Duty
- L. Penetrating MMA Sealer: Euco #512 VOX MMA Sealer
- M. Cathodic Protection: Sentinel Galvanic Anodes

# The Euclid Chemical Company

- 1. Prior to commencing Penetrating MMA Healer/Sealer application, prepare a minimum <<insert size>> full scale, reference mock-up of each type, [and][ texture] of Penetrating MMA Healer/Sealer surface for approval by Owner. Said reference mock-up shall be constructed in location designated by owner/architect, using the same equipment, tools, personnel and methods for installing all materials as will be used for the remaining work to be performed.
- 2. Once accepted by owner or owner's representative, mock-up is to remain, and is to be protected from damage. It shall become the standard for acceptance.
- 3. When Architect determines that mockup does not meet requirements, demolish and remove it from the site and cast another until the mockup is accepted.

## 1.03 JOB SITE CONDITIONS

- A. Penetrating MMA Healer/Sealer shall be stored indoors at temperatures below 80 deg F. Protect from freezing.
- B. Do not apply Penetrating MMA Healer/Sealer if surface temperature is within 5 deg F. of the dew point in work area.
- C. Do not mix or apply Penetrating MMA Healer/Sealer if rain is expected within 12 hours.
- Do not apply Penetrating MMA Sealer Healer if there is excessive moisture in the concrete. Contact manufacturer for recommendations if moisture vapor emission rate MVER exceeds 3.0 lbs per 1,000 sf when measured in accordance with ASTM F1869.

### PART 2 PRODUCT

# 2.01 PENETRATING MMA HEALER/SEALER

A. Penetrating Methyl Methacrylate (MMA) Sealer: (2) Component, 100 percent reactive, clear, penetrating MMA healer/sealer with the following properties:

1. Mixed Viscosity: 5 to 15 cps @ 75 deg F.

2. Working Time: 5 to 25 minutes

Flexural Strength: 11,000 psi (75.8 MPa) final per ASTM C790
 Bond Strength: >300 psi (2.1 MPa) per ASTM C1583
 Tensile Strength: 7,800 psi (53.8 MPa) per ASTM D638
 Tensile Elongation: 4.5 to 5.0 percent per ASTM D638

7. Basis of Design Product:

# a) Euclid Chemical Company (The): Dural MMA Healer Sealer www.euclidchemical.com

B. Manufacturer is to have ISO 9001 Quality Certification.

# PART 3 EXECUTION

#### 3.01 SURFACE PREPARATION

- A. New concrete surfaces must be a minimum 28 days old at time of application.
- B. Surface is to be structurally sound, clean, dry, free of dust, dirt, paint, efflorescence, laitance curing compounds and other contaminants that will prevent the proper penetration of Penetrating MMA Healer/Sealer.
- C. Blow debris and residue out of cracks and from the surface with a moisture-free and oil-free air jet.
- D. Mask expansion joint sealants to prevent adhesion of Penetrating MMA Healer/Sealer to the joint surface.
- E. Begin Penetrating MMA Healer/Sealer application only after unsatisfactory conditions have been corrected, and after surfaces are dry

#### 3.02 CRACK TREATMENT

- A. Inspect underside of elevated concrete decks to evidence of full depth cracks that may result in leakage of Penetrating MMA Healer/Sealer through crack. Contact manufacturer for recommendations for treatment and submit treatment procedure to engineer for approval.
- B. Fill cracks greater than 1/8 inch in width with loose dray silica sand as recommended by manufacturer. Then pour mixed Penetrating MMA Healer Sealer into crack and work with a paint brush. Allow to cure before application of flood coat.

### 3.02 PENETRATING MMA HEALER/SEALER APPLICATION:

- A. Mix MMA components in accordance with manufacturer's written instructions.
  - 1. Add manufacturer's recommended MMA accelerator and MMA initiator as recommended by manufacturer.
- B. Mix and apply 1 even coat per manufacturer's published recommendations.
  - 1. Pour or pump properly mixed Penetrating MMA Healer/Sealer onto the properly prepared surface in a wave form, and spread uniformly with a squeegee or a short nap roller to fill voids, cracks, and porous areas. Allow MMA to penetrate into the surface, re-applying to cracks and porous areas to refusal. Before the MMA becomes tacky, use a squeegee (on a smooth surface) or a broom (on a textured or tined surface) to remove any excess MMA that has not penetrated the surface.
  - 2. Broadcast clean, oven-dried silica sand into the wet MMA to provide a skidresistant surface, or where subsequent toppings or coatings will be applied. Broadcast the silica sand at rate of 0.2 to 0.8 lbs/ ft2 (0.68 to 2.7kg/m2) and/or until there are no wet spots. Wait until at least 15 minutes have elapsed since

- Penetrating MMA Healer/Sealer application before broadcasting aggregate, but broadcasting must be completed before MMA has become tack free.

  Upon completion allow MMA to dry completely and remove excess silica sand
- 3. from surface.
- Coverage shall be as recommended per manufacturer, and shall be dependent on surface porosity and cracks to be filled. 5.

**END OF SECTION**