VERTICAL/OVERHEAD REPAIR

Master Format #: 03 37 19

TAMMS STRUCTURAL MORTAR

FIBER REINFORCED, NSF/ANSI 61 CERTIFIED LOW PRESSURE SPRAY OR HAND APPLIED REPAIR MORTAR

EUCLID CHEMICAL

PACKAGING

50 lb (22.7 kg) bag
Code: TR5090650
50 lb (22.7 kg) pail
Code: TR5090750

APPROXIMATE YIELD

50 lb (22.7 kg) unit: 0.45 ft^3 (0.012 m^3) per unit when mixed with 2.5 to 3.5 quarts (2.4 to 3.3 L) of potable water.

MINIMUM/MAXIMUM APPLICATION THICKNESS

3/8 to 2 inches (0.95 to 5 cm) per lift

CLEAN UP

Clean tools and equipment with water before the material hardens.

SHELF LIFE

18 months in original, unopened package

SPECIFICATIONS AND COMPLIANCES

- NSF/ANSI Standard 61 certified for use with potable water

DESCRIPTION

TAMMS STRUCTURAL MORTAR is a single-component repair mortar applied by low pressure spray or by hand for structural concrete repairs. TAMMS STRUCTURAL MORTAR is a proprietary formulation of portland cement, graded aggregates, unique fibers, and polymers used to increase adhesion, strength, and sprayability.

PRODUCT CHARACTERISTICS

FEATURES/BENEFITS

- Low pressure spray or trowel applied
- 30 minute working time
- Single-component, micro-fiber enhanced
- Silica fume and polymer enhanced
- 3/8" (0.95 cm) to 2.0" (5 cm) applications
- Contains an integral corrosion inhibitor
- Freeze-thaw resistant
- NSF/ANSI Standard 61 certified

PRIMARY APPLICATIONS

- Vertical and overhead concrete repairs
- Interior and exterior use
- Bridge, parking garages, and tunnels
- Compatible with galvanic anodes
- Manholes, pipelines, dams and other waste water structures

TECHNICAL INFORMATION

The following are typical values obtained under laboratory conditions. Expect reasonable variation under field conditions.

Test Method	Test Property	Values
ASTM C266 Gilmore	Set Time	Initial Set . . . . . 1 hour Final Set . . . . . 2 hours
ASTM C109	Compressive Strength	1 day . . . . . 3,200 psi (22.0 MPa) 7 days . . . . . 6,200 psi (42.7 MPa) 28 days . . . . . 8,500 psi (58.6 MPa)
ASTM C78	Flexural Strength	1 day . . . . . 1,500 psi (10.3 MPa) 28 days . . . . . 1,650 psi (11.4 MPa)
ASTM C882	Shear Bond Strength	28 days . . . . . 3,250 psi (22.4 MPa)
ASTM C496	Splitting Tensile Strength	7 days . . . . . 480 psi (3.3 MPa) 28 days . . . . . 660 psi (4.5 MPa)
ASTM C666	Freeze/Thaw Resistance	300 cycles . . . . . 96% RDF
ASTM C1202	Chloride Permeability	1,050 coulombs
	Volumetric Resistivity	11,300 oh-cm

DIRECTIONS FOR USE

Surface Preparation: Concrete surfaces must be structurally sound, free of loose or deteriorated concrete and free of dust, dirt, paint, efflorescence, oil and all other contaminants. Mechanically abrade the surface to achieve a surface profile equal to CSP 6 - 9 in accordance with ICRI Guideline 310.2. Properly clean profiled area.

Priming & Bonding (Saw Cut & Chipped Out Repairs): Thoroughly clean any exposed reinforcing steel, and apply DURALPREP A.C. to the concrete and the reinforcing steel within the repair area. Refer to the DURALPREP A.C. technical data sheet for full instructions. Alternatively, application of EUCOWELD 2.0 to a dry substrate or a scrub coat of TAMMS STRUCTURAL MORTAR to the saturated surface dry (SSD) concrete surface may be used for bonding. The repair material must be placed on the scrub coat before the scrub coat dries out.

Priming & Bonding (Vertical & Overhead Skim Coats): Apply EUCOWELD 2.0 to a dry substrate or a scrub coat of TAMMS STRUCTURAL MORTAR to the saturated surface dry (SSD) concrete surface. The repair material must be placed on the scrub coat before the scrub coat dries out.

If using low pressure spray equipment, TAMMS STRUCTURAL MORTAR can be applied over an SSD substrate.

Mixing: TAMMS STRUCTURAL MORTAR will require approximately 2.5 to 3.5 qt (2.4 to 3.3 L) of potable water per 50 lb bag (22.7 kg) to achieve the proper mix consistency. Pour the measured amount of water into a clean mixing container, then add the Tamms Structural Mortar, and mechanically mix for 3 to 4 minutes. For hand applications, the lower end of the water range is recommended.

Application: TAMMS STRUCTURAL MORTAR may be hand applied or with low-pressure spray equipment commonly used for plastering. It is always recommended to use spray equipment for larger repairs. Succeeding lifts may be placed after material reaches initial set. Prior to application, follow surface preparation and priming instructions above.

Curing: TAMMS STRUCTURAL MORTAR is a cementitious repair mortar and must be cured per ACI guidelines using a Euclid Chemical curing/cure and seal compound or appropriate water curing methods, such as wet burlap/burlene.

PRECAUTIONS/LIMITATIONS

- Protect stored bags from moisture.
- Protect repair from direct sunlight, wind, and other conditions that could cause rapid drying.
- Not to be used as a horizontal topping.
- Minimum ambient and surface temperature should be 40 °F (4 °C) and rising at the time of application.
- When necessary, follow the recommendations in ACI 305R "Guide to Hot Weather Concreting" or ACI 306R "Guide to Cold Weather Concreting".
- Curing according to ACI guidelines is required for optimum performance and durability.
- In all cases, consult the Safety Data Sheet before use.