



# TAMMS STRUCTURAL MORTAR

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

VERTICAL/OVERHEAD REPAIR

TAMMS STRUCTURAL MORTAR

MASTER FORMAT #:  
03 37 19

## 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.

## 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

## 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

## TECHNICAL INFORMATION

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

**Set Time** ASTM C 266, Gilmore

**Initial Set** approx hrs ..... 1

**Final Set** approx hrs ..... 2

**Compressive Strength** psi (MPa) ASTM C109

1 day ..... 3,200 (22.0)

7 days ..... 6,200 (42.7)

28 days ..... 8,500 (58.6)

**Flexural Strength** psi (MPa) ASTM C78

7 days ..... 1,500 (10.3)

28 days ..... 1,650 (11.4)

**Volumetric Resistivity** ..... 11,300 ohm-cm

**Shear Bond Strength** psi (MPa) ASTM C882

28 days ..... 3,250 (22.4)

**Splitting Tensile Strength** psi (MPa) ASTM C496

7 days ..... 480 (3.3)

28 days ..... 660 (4.5)

**Freeze Thaw Resistance** ASTM C666)

300 cycles ..... 96% RDF

**Chloride Permeability**

ASTM C 1202 ..... 1,050 coulombs

## SHELF LIFE

18 months in original, unopened package

## PACKAGING

TAMMS STRUCTURAL MORTAR is packaged in 50 lb (22.7 kg) poly-lined bags

## COVERAGE/YIELD

One 50 lb (22.7 kg) bag yields approximately 0.45 ft<sup>3</sup> (0.012 m<sup>3</sup>)

## SPECIFICATIONS/COMPLIANCES

TAMMS STRUCTURAL MORTAR is NSF/ANSI Standard 61 certified for use with potable water

## 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.

## CLEAN-UP

Clean application tools and mixing equipment with water immediately following use.

## 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.

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