



EUCLID CHEMICAL

TAMMS STRUCTURAL MORTAR

Fiber Reinforced, NSF/ANSI 61 Certified Low Pressure
Spray or Hand Applied Repair Mortar

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, migrating corrosion inhibitors, unique fibres and polymers to increase adhesion, strength and sprayability.

FEATURES/BENEFITS

- Low pressure spray or trowel applied
- Excellent workability up to 30 minutes
- Silica fume and polymer enhance
- Single-component, micro-fiber enhanced
- 10 mm to 50 mm application in single layer
- Contains Migrating Corrosion Inhibitor
- NSF / ANSI Standard 61 certified globally

PRIMARY APPLICATIONS

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

TECHNICAL INFORMATION

Material properties tested under laboratory conditions @ 25°C, 50% RH

Property	Test Method	Values at 25° C	
Components	-	Single	
Colour	-	Grey	
Working Time	-	30 minutes	
Setting Time	ASTM C266, Gilmore	Initial	± 60 min
		Final	± 90 min
Compressive Strength	ASTM C109	1 Day	22 N/mm ²
		7 Days	40 N/mm ²
		28 Days	58 N/mm ²
Flexural Strength	ASTM C78	7 Days	10.3 N/mm ²
		28 Days	11.4 N/mm ²
Slant Shear Bond Strength	ASTM C882	28 Days	22.4 N/mm ²
Splitting Tensile Strength	ASTM C496	28 Days	4.5 N/mm ²
Rapid Chloride Permeability	ASTM C1202	< 1050 coulombs	
Application Thickness	-	Min/Max: 10 mm to 50 mm per layer	

Expect reasonable variation under field conditions.

PACKAGING

TAMMS STRUCTURAL MORTAR is packaged in 25 kg bag.

SHELF LIFE

12 Months if stored between 15°C to 30°C

COVERAGE/YIELD

~13.9 ltr/25 Kg bag with 3.5 ltr of water addition.

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 expose the main aggregate and achieve a surface profile equal to CSP (Concrete Surface Profile) 6 to 9 in accordance with ICRI Guideline 310.2. Properly clean profiled area.

Pre-saturation of the Substrate: Method for pre-saturation to be determined on-site to achieve required saturated surface dry (SSD) condition of the substrate.

Priming & Bonding (Saw Cut & Chipped Out Repairs): Thoroughly clean any exposed reinforcing steel and apply Carbozinc 858 to the concrete and the reinforcing steel within the repair area. Refer to the Carbozinc 858 technical data sheet for full instructions. Alternatively, apply 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 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 3.0 to 3.75 litres of potable water per 25kg bag 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, slightly less water may be required.

Application: TAMMS STRUCTURAL MORTAR may be hand applied or with low-pressure wet 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 tools and equipment with water before the material hardens.

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 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 Material Safety Data Sheet before use.
- Do not allow repairs to freeze until the material has reached a minimum of 7 MPa compressive strength.
- Use only potable water for mixing.
- For optimum results, condition material to 18°C to 26°C at least 24 hours prior to use

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