# **EUCO THIXO RM**

Thixotropic, High Strength, Shrinkage Compensated, Cementitious Structural Repair Mortar



### **DESCRIPTION**

EUCO THIXO RM is a specially formulated, shrinkage compensated, fiber-reinforced, high strength cementitious repair mortar composed of high-quality cement, selected & well-graded aggregates, fibers & special additives. EUCO THIXO RM is suitable for a wide range of concrete and masonry especially in vertical and overhead locations because it is a thixotropic, shrinkage compensated, high strength reinforced mortar with excellent bonding properties. EUCO THIXO RM is formulated to be applied in thicknesses up to 50mm in one layer by hand application. Euco Thixo RM contains no metallic aggregates and is chloride free.

#### PRIMARY APPLICATIONS

- Multi-unit residential
- Loading docks
- Warehouses
- Roads
- Industrial/ commercial/ institutional floors
- Repair of structural members subjected to repetitive loading
- Bridges, Highways
- Pavements, Parking decks and ramps
- Vertical & overhead form and pour applications

# FEATURES/BENEFITS

- Shrinkage compensated.
- Early strength gain with extended working time
- Suitable for interior or exterior applications
- Micro-fiber reinforced.
- Shrinkage compensated.
- Ideal for vertical, overhead & horizontal applications.
- Shrinkage compensating hence reduces cracking.
- Low permeable & increased weatherproofing

- Bonding excellent bonding strength to old concrete.
- Excellent resistance to chloride and carbon dioxide
- No primer required allows rapid application at reduced cost.
- Can be spray applied rapid application of large quantities.
- Less rebound when spray applied rebound is minimal, with subsequent saving in material cost

#### TECHNICAL INFORMATION

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

Property	Test Method	Values at 25° C	
Components	-	Single	
Appearance	-	Grey Powder	
Bulk Density	-	$1.62 \pm 0.05  \text{Kg/L}$	
Application Thickness	-	5 – 50 mm	
Maximum Grain Size d <sub>max</sub>	-	1.62 mm	
Compressive Strength	ASTM C579	28 Days	> 70 N/mm²
Flexural Strength	ASTMC 580	28 Days	> 12 N/mm²
Tensile Strength	ASTMC307	28 Days	> 5 N/mm²

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Water absorption	-	< 1.7 %
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Values presented are typical and not necessarily referenced to create specifications.

# **PACKAGING**

EUCO THIXO RM is packaged in 25 kg bag.

#### SHELF LIFE

1 year in original, unopened package, covered well and stored in pallets, away from heat, Sun light and moisture. Care should be taken that hard & lumpy materials are not used

# COVERAGE/YIELD

~1.2 m<sup>2</sup> at 10 mm thickness with addition of 3.75 ltr water for 25 Kg bag.

### **DIRECTIONS FOR USE**

**Surface Preparation:** It is important that the concrete substrate to be repaired is sound, clean and free of all contamination. Prior to application of EUCO THIXO RM, the damaged areas of concrete should be clearly identified before being removed.

The perimeter of the surface area should be saw cut to a depth of 10mm and the edges cut as neatly as possible keeping the sides square. Featheredging is not permitted and a minimum thickness of 10mm must be maintained over the whole repair area.

The concrete substrate should be prepared to provide a rough surface having at least a 5 mm amplitude at 20 mm frequency. If unsound or contaminated concrete is found to extend beyond the pre-marked area, consult the engineer in charge. Subject to his approval cut out as necessary back to clean sound concrete.

If reinforcement is corroded or contaminated, ensure that the back of the steel has been exposed. Reinforcement should have all rust removed with suitable power tools, abrasive blasting (wet or dry) or wire brush. Reinforcing steel should be exposed and cleaned around its whole circumference. Steel should be prepared to Swedish Standard SIS 05-900:1967-SA 2½ or BS 4232 Ref. 24 second quality. Additional protection to the reinforcement can be provided by use of Zinc rich primer CARBOZINC 858 or EUCO SBR LATEX (1:3 ratio with OPC) dependent upon the circumstances of use and requirement of the client. Sentinel Galvanic anodes can be used for extra corrosion protection of steel in an aggressive environment. Severely corroded reinforcement may require replacement, and the engineer must be consulted

**Priming:** Thoroughly saturate the surface of the concrete to provide a saturated surface dry condition (SSD). Poor quality concrete may require soaking for a substantial length of time.

Mixing: EUCO THIXO RM must be mixed mechanically. The following mixing equipment is suitable, heavy duty slow speed drill with spiral mixing paddle, forced action mixer, such as Crete angle, Mixal, Pan Mixers etc. Mixers attached to spray units such as Putzmeister etc are also suitable. Add 3.5 L of water into the mixer. Start the mixer and add the EUCO THIXO RM powder rapidly and continuously. Mix for 3-5 minutes after all the powder has been added until mortar is homogeneous and lump free. Add water, if necessary, within the limits given (max 3.75 L / bag), until the required consistency is achieved. Mix for a further 1-2 minutes. The amount of water required will be affected by ambient temperature and relative humidity. EUCO THIXO RM can be used when the ambient temperature is between 5-50°C. If ambient temperature is >30°C, use chilled water to ensure that the maximum mixed temperature should be no more than 35°C.

**Application:** When application by hand EUCO THIXO RM must be forced tightly into the substrate to ensure intimate contact with the pre-wetted concrete substrate. Levelling and initial finishing should

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be carried using a wooden or plastic float. Final finishing should be carried out using a steel float. When the material has stiffened to the point where finger pressure lightly marks the surface, a final firm trowelling can be done using a steel float.

**Curing:** Good curing is required, and additional care is required in hot and/or windy conditions. Curing can either be with a single coat of EUCO CURE AR curing membrane, which is compatible with most subsequent protective coatings, or by covering the work with plastic sheet fixed over wet hessian or wet foam rubber.

#### CLEAN-UP

Clean tools and equipment with water before the material hardens.

## PRECAUTIONS / LIMITATIONS

- Strictly follow water-powder ratio as specified.
- In all cases, consult the Safety Data Sheet before use.

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