

# Monneli Thermal Plaster

Advanced modified cementitious thermal insulating plaster

## Product Description

Monneli Thermal Plaster is blend of OPC, silica sand and graded light weight aggregates plus functional additives for enhancing Workability and adhesion. It can be applied on all surfaces after the proper preparation of the surface. The product provides thermal insulation for building wall sections relying on advanced material technologies.

## Uses

- ▶ Thermal insulation of residential and industrial concrete buildings.
- ▶ Save energy consumption related to heating and cooling.
- ▶ Internally or externally in wet & dry conditions onto block walls & rough surfaces.

## Advantages

- ▶ Excellent thermal insulation properties
- ▶ Fast mixing application using spray machine
- ▶ Contains special additive that reduces friction and prolongs lifespan of equipment.
- ▶ Factory controlled pre-blend ensures consistent high quality.
- ▶ Requires only addition of water on-site at the time of usage.
- ▶ Uniform color/mass.
- ▶ Improved workability & curing.
- ▶ Easy application with uniform work flow enables high productivity & superior finishing.
- ▶ Strong adhesion on variety of substrates.
- ▶ Internal & external applications.
- ▶ Shrinkages control reduces surface cracks.

## Usage Instructions

### Surface Preparation

Substrate should be sound, clean, free from loose material, grease, laitance, dirt curing compound, etc.

Prior to Monneli Premix Plaster S application, wet the entire surfaces with potable water and surface should look damp at the time of Monneli Thermal Plaster.

### Mixing

For manual application add to the mixing container 6.6 - 7.4 liters of water for each 20 Kg bag of Monneli Thermal Plaster or 33 - 37% of weight for machine application. Add the powder to the water and mix with a mechanical plaster mixer or low speed electric drill fitted with a suitable paddle for 3-4 minutes, until a uniform, lump-free consistency is achieved.

Manual mixing is allowed for small batch quantities, mix for approx. 1-2 min or when homogeneous mix is achieved.

### Application

Monneli Thermal Plaster can be applied in a single or two coats on rough or smooth surfaces by manual or machine application to achieve desired thickness 25-100 mm.

Apply mixed material using spray machine or hawk & trowel technique. Rod or screed to uniform thickness, not exceeding 25 mm for single coat or 25 mm each coat for multiple layers. First layer should be pressed hard against the surface.

For second layer allow the first layer to partially set (60-120min depending on weather). Apply second layer as described above.

Water spray the surface if second layer is carried out next day.

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### Curing

Monneli Thermal Plaster is best cured by spraying water evenly on the surfaces of applied materials every 12 hrs for minimum of 3 days. During hot & dry conditions allow curing for minimum of 5 days. It will help to obtain high mechanical strengths.

### Technical Data

Category	Typical Values
Appearance	Grey Granular Powder
Dry Density	450 ± 50 g/L
Hardened Density	650 ± 50 g/L
Recommended Application Thickness	25 – 100 mm @ 50 mm (R value 0.63 m <sup>2</sup> K/W)
Pot Life	90 minutes
Setting Time	4-6 hours
Water Demand	33-37%
Compressive Strength (BS EN 1015-11)	≥ 4.5 N/mm <sup>2</sup> @ 28 days
Flexural Strength (BS EN 1015-11)	≥ 0.3 N/mm <sup>2</sup> @ 28 days
Bond Strength (ASTM C518)	≥ 0.08 N/mm <sup>2</sup> @ 28 days

All values are subject to 5-10% tolerance

### Standards Compliance

- ▶ BS:EN 998-1 CSIII, W0, T1
- ▶ Cement type: ASTM C150, type1.
- ▶ ASTM C518

### Legal disclaimer

Monneli endeavors to ensure that any advice, recommendations, information it may give, is accurate and correct. It cannot accept any liability either directly or indirectly arising from the use of its products, because it has no direct or continuous control over where or how its products are applied, whether or not in accordance with any advice, specification, recommendation or information given by us. Monneli has the right to change any of the specifications mentioned in the Technical data sheets upon its discretion without prior notification. Hard copies of TDSs are printed once or twice a year, while our technical data sheets are continuously being updated as per R&D improvements and new 3rd party testing; kindly refer to our website for the latest updated TDSs.

### Consumption

Monneli Thermal Plaster usage yields 32 liters per 50 Kg bag or bulk.

### Packaging

Monneli Thermal Plaster is supplied in 20 Kg bag or bulk sizes.

### Shelf Life & Storage

Original sealed bags of Monneli Thermal Plaster has a shelf life of 12 months provided it is stored clear of ground in a dry shaded place.

### Health & Safety

Monneli Thermal is highly alkaline therefore avoid direct contact with eyes or skin. It is recommended to use protective gloves and goggles during application. Any skin contact should be wash with soap & water. In case of eyes irritation, immediately wash with copious amount of cold water. Seek medical advise. For further information, please refer to material safety data sheet.