Thermosit Mortar C

Single component polymer rich fiber reinforced adhesive/mortar

Sprayteк Coatings

Technical Data Sheet

Description

Thermosit Mortar C is a single component polymer rich fiber reinforced adhesive/mortar in dry form for the installation of expanded or extruded polystyrene boards and for producing the fiber mesh reinforcement layer for External Insulation Façade System. **Thermosit EIFS** is designed to provide energy saving and excessive emission of CO^2 into the atmosphere, and protection against Thermal attack. These superior properties are further enhanced by the availability of a wide range colours of weather proof top-coats available for aesthetics.

Advantages

- Specially developed for hot weather
- Excellent thermal resistance
- Excellent acoustic properties
- Polymer-rich
- Non-toxic
- VOC complaint
- Machine or hand applied
- Top coats available in range of standard colors

Uses

External Walls, columns & beams

- Thermal insulation for new built or renovation

Physical Properties*

PROPERTY	TYPICAL RESULTS
Compressive strength (BS 6319)	>9 MPa – at 28 days
Flexural Strength (BS 6319)	>2.5 MPa – at 28 days
Impact resistance	No cracking
Bond strength to concrete	Greater then cohesive strength of concrete
*The above properties are average laboratory values	

Volatile Organic Content

VOC Free

Fire performance

BS 476 Part 6: Class 0 surface spread of flame.

Packing

Thermosit Mortar C is available in 50 kg bag.

Theoretical Yield/Coverage

Approximate yield would be 32 litres per 50 kg bag.
The theoretical coverage would be 10 m² for 50 kg at 3mm thick.
Note: Actual coverage may be less and dependent on substrate profile and application skills.

Shelf Life

6 months when stored in cool dry environment in factory packed unopened bags.

Installation Guidelines

Spraytek provides detailed method statements on all its products for use in various applications. These must be referred to prior to starting the work. The information below is a summary intended for guidance only.

Surface Preparation

Substrates must be structurally sound. Loose or unsound substrate should be removed. Surfaces must be entirely free of oil, curing compounds, grease, paint, corrosion deposits, dust, laitance or other surface deposits.

Priming

The substrate must be pre-wet with clean water prior to application of **Thermosit Mortar C**.

If the substrates are too porous, then it is recommended to use **Thermosit Prime RC** to create the 'key' for bonding.

Mixing

Thermosit Mortar C is single component consisting of powder, mix one 50 kg bag into 8.5 to 9.0 liters of clean water using with low speed drill (300-500 rpm) with mixing paddle. Mix approximately for 3 minutes to achieve lump-free consistency.

Do not mix more material that can be safely used in 30 minutes at 25°C at 50% Relative Humidity. If the mixed product thickens, re-mix to reduce consistency. Do not add additional water.

Application

Fixing of Polystyrene boards

The mixed material should be applied immediately after mixing is complete. Apply one coat at a thickness of 1 to 1.5mm to perimeter of the insulation boards and spots. Do not spread more than 0.5 m^2 at time. Applying large areas may result in mortar drying out before boards can be stuck to the **Thermosit Mortar C**, resulting in poor adhesion. The actual pot life will vary depending upon the porosity of the substarte and ambient conditions.

Fixing of fiber reinforcing mesh

The mixed material should be applied immediately after mixing is complete. Apply one coat at a thickness of 1 to 2mm. Do not spread more than 0.5 m^2 at time. Applying large areas may result in mortar drying out before fiber reinforcing mesh can be stuck to the applied mortar/adhesive, then apply one coat of mixed **Thermosit Mortar C** on the fixed reinforcement mesh and embed the mesh and build-up the mortar layer to 3.0 to 4.0mm thick.

Curing

It is not essential to cure the applied **Thermosit Mortar C**.

Precautions

Do not add additional water or re-temper the mix.

Ensure the temperature of the mortar does not exceed 35° C at the time of mixing.

Do not mix by hand.

Do not part mix, use only full bags.

Do not apply in rain or wet conditions or at temperature below 5° C

Lower temperature produces a slower set; higher temperature produces a faster set.

Do not expose to running water until the product is fully dried.

Technical Support

Spraytek offers full technical support package to specifiers, contractors and end users, as well as technical assistance on site and after sales consultations.

Health & Safety

As with all chemical products, caution should always be exercised. Protective clothing, such as gloves and goggles, should be worn. See packaging/MSDS for specific instructions.

Treat any splashes to the skin or eyes with fresh water immediately. Should any of the products be accidentally swallowed, do not induce vomiting, but call for medical assistance immediately.

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