

Chelfix Thermo Render 100

Thermal Insulation Board Plaster



Product Description It is cement based ready-mixed mortar which is used to plaster on polystyrene based thermal insulating panels, has high strength, high adherence, modified polymer and it is ready to use.

- Areas of Application**
- It is used as a super quality plaster for Extruded Polystyrene (XPS), or Expanded Polystyrene (EPS) sheets, and stone wall thermal insulation boards on horizontal and vertical surfaces and on interior and exterior of building facades.
 - For plastering on concrete, gas concrete, hollow foam at inner and outer spaces.
 - At residences, shopping centers and hospitals.
 - For all kinds of reinforced concrete civil engineering constructions.

- Advantages**
- Shrinkage controlled polymer modified structural plaster and repair mortar.
 - It is easy to apply and to give shape.
 - Extremely low permeability to water (Doesn't get affected by water).
 - Resistant against external effects and frost.
 - Thixotropic properties allowing extra high build for vertical and overhead applications.
 - Paint can be applied directly on it.
 - It has high impact resistance thanks to polymer powders in its formulation.
 - Very good adherence.
 - Suitable for internal and external applications.
 - Cost effective (Economical), hand applied no formwork is required.

Application Instructions

Surface Quality: The surfaces must be clean, smooth, solid and free of substances and residuals preventing adhesion such as all kinds of dust, grease, rust, molding oil, and detergents, etc. The surfaces must be smooth, the weak parts must be removed. If there are cracks, pits on the surfaces or walls which the applications shall be made, they must be repaired with appropriate CHELFIX Repairing mortars.

Surface Preparation: The gaps remaining between the heat insulation boards should be filled by small pieces which shall be cut again from these boards. Before plastering application, the places which wall plugs shall be placed are opened on the board via a punch attached to the drill bit. The wall plugs are driven. Plug choice must be made depending on the thickness of the concrete, brick, gas concrete, and heat insulation board. At least 6 plugs must be driven for 1 m² area. As the story height increases, the number of plugs must also be increased. Opening the plugs properly, increases the quality of the application. If the wide round end (head) remains excessively outside or excessively inside of the board plain, a bad appearance results after the rain or with the sunlight. The locations of the plugs become clear. After the plugging process finishes, CHELFIX THERMO RENDER 100 application can be started. 6.25 – 6.50 liters of clean and clear water at normal ambient temperature is added into a clean pot purged from all materials that could prevent adhesion. CHELFIX IZO FIX 100 in the 25 kg bag in powder form, is emptied in the pot filled with water. It is stirred with a low-speed mixer until a smooth and homogeneous appearance is obtained. Mixture period must be minimum 5 minutes. The mortar obtained at the end of the process should be rested for 3 m., and stirred again for 2 m. until it becomes homogeneous. CHELFIX THERMO RENDER 100 is applied on heat insulation boards after plugging process finishes, and on heat insulation boards having a thickness of 4 mm via 10x10 notched steel trowel. The alkali resistant glass fiber mesh (160 gr/m²) is overlapped 10 cm, pressed 1 – 1.5 cm as to be near to the external wall by trowel before the plaster dries, and plaster surface is leveled out. An additional plaster mesh reinforce and CHELFIX THERMO RENDER 100 application must be done on locations where sudden cross-sectional changes exist such as doors and windows. It is recommended to prefer meshed corner profile for the profile applications made to ensure the structure edges to be smooth. Ambient temperature and surface temperature should be between minimum +5°C and max +35°C during application or drying.

Application Notes / Restrictions

- For Mineral wool applications CHELFIX THERMO RENDER 100 Thermal Insulation Board Plaster firstly should be applied as primer to the surface.
- CHELFIX THERMO RENDER 100 should not be applied on places having direct sunlight, in rain and strong wind.
- The product should be protected against frost until it is set. The application should be protected against wetting due to rain or various reasons until its drying period completed.
- In case the ambient and surface temperature exceeds +25°C, the surface should be wetted by spraying method (with non-pressurized water) at certain intervals in order to prevent sudden dehydration and ensure the plaster sets in a good manner.
- The surface should be covered without being exposed to excessive dew, humidity and rain after Plaster Mortar application.
- Decorative plaster application can be made 1 day after the application for summer season and 2 days after the application for winter season.
- Product may irritate the skin in case of contact. Work clothes, protective gloves, mask and goggles should be used. Before starting to work, protective cream may be put on hands. In case the mortar contacts with eyes, eyes should be washed immediately with warm water, and medical advice should be get.
- Do not add foreign substances.
- Ensure that the rock wool plate is dry and have sufficient resistances for the applications to be made on rock wool plates.

Technical Data

General Information	
Appearance	Grey
Shelf Life	12 months in dry environment in its unopened package
Package	25 kg kraft bag
Application Information	
Application Temperature	(+5°C) - (+35°C)
Service temperature	-40 °C to +80 °C
Mixture Proportion	6.25 – 6.50 lit water / 25 kg powder
Pot Life	3 hours
Mortar Density	~1.60 kg/lit
Performance Information	
Adhesion Strength to insulation Board (TS EN 13494)	≥ 0.08 N/mm ²
Flexibility	High
Consumption	On polystyrene plate: 4.5 – 5.2 kg/m ² On rock wool plate: 5.2 – 6.3 kg/m ²
Bending Strength (TS EN 1015-11)	≥ 2.0 N/mm ²
Compressive Strength (TS EN 1015-11)	≥ 6.0 N/mm ²
Water Absorption (TS EN 1015-18)	≤ 0.5 (kg/(m ² .min0.5)
Water Vapor Permeability (TS EN 1015-19)	≤ 15 (μ)
Reaction to Fire	A1