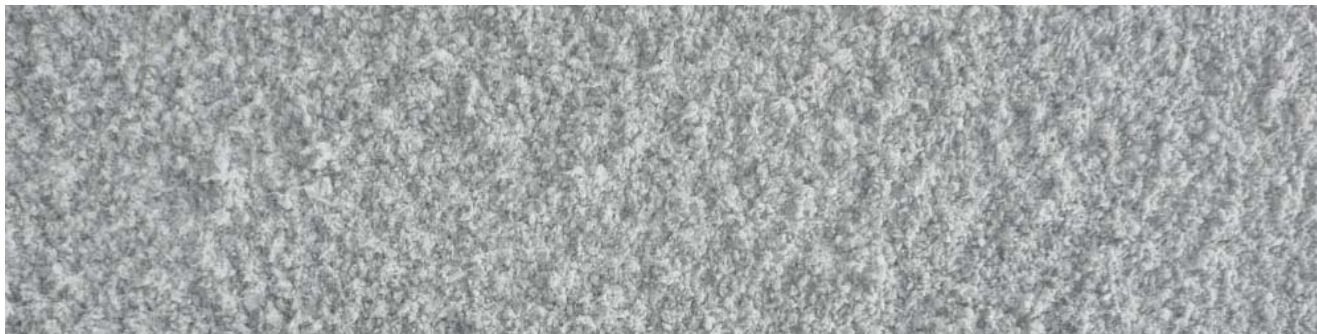


PASSIVE PROTECTION AGAINST FIRE



DESCRIPTION

Tecwool[®] F is a rock wool and cement mortar manufactured by **mercortecresa[®]**, specifically engineered for fire protection of all types of building structures and faces.

TESTS

Tecwool[®] F has been tested in laboratories certified by ENAC or identical international entities pursuant to UNE EN, ASTM or similar standards. Likewise, real scale tests have been performed in tunnels under particularly limiting conditions such as American UL curve.

DITE European technical approval

EC Certificate of conformity

APPLICATION AND USAGE

Spraying machine:

Tecwool[®] F application is made by pneumatic spraying machines. **Tecwool[®] F** neutralizes and mixes in nozzle application where the mortar is mixed with spray water at the nozzle head.

The application machine supplies a flow of up to 30 kg/min. Mortar is applied with a spreading gun perpendicular to the support at a distance between 50 and 150 cm.

The ratio water/mortar shall be 1,5/1 kg.

Prior to application:

Before mortar is applied on any surface, the following aspects should be considered:

- The substrate to be protected should be free from

dust, oil, waste, poorly attached particles, release agents, paint residue, etc.

- It is recommended to use water with the application hose to wash dirt away from the faces. This will also help achieve a thermal balance between the mortar and the applied surface.

- **Tecwool[®] F** can be applied directly over surfaces with a temperature between 2 °C and 45 °C.

Application substrate:

- **Wood:** A wire mesh must be fixed to the support before mortar is applied.

- **Asbestos cement:** The surface must be clean and free of cracks between sheets.

- **Galvanised or pre-lacquered metal sheet:** Prior to mortar application an adhesive primer must be spread.

- **Synthetic plastic:** Prior to mortar application an adhesive primer must be spread.

- **Plaster surfaces:** Plenty of water must be applied on the surfaces before mortar is sprayed. If the exposed face of the structure to be protected is too smooth, it must be keyed to improve **Tecwool[®] F** adherence. In any case, for applications more than 3 cm thick a wire mesh should be fixed to the support.

- **Bricks or porous substrates:** Plenty of water must be applied on the surfaces before mortar is sprayed.

- **Steel metal structure:** Directly applied to support. Compatible with anti-rust primers.

- **Concrete:** Directly applied to surface.

Once the mortar has been applied, water should be sprayed

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to ensure optimum curing.

As a general rule, regardless of the substrate to which the mortar is applied, for thickness greater than 55 mm a wire mesh should be used.

All warnings regarding cement apply to **Tecwool® F**. Application of this product on non-ferrous metals is prohibited.

FINISHES

Tecwool® F can provide different finishes: rugged, smooth, painted, etc., according to different aesthetic requirements.

Once the spraying is completed and in order to obtain a smooth finish, a roller could be used and pressed slightly over the wet mortar until the desired finish is obtained.

It is possible to paint the mortar with elastic acrylic coatings to form a steam barrier. Before painting the mortar should be completely dry (28 days).

HEALTH AND SAFETY

Tecwool® F is manufactured with inorganic components such as rock wool, classified according to European Directive 67/548 CEE, as Xi; R.38 (health risk-free).

Likewise, it is neither toxic nor pathogenic; it does not contain asbestos or crystalline silica; and it is not affected by fungi growth.

The following considerations must be taken into account when handling **Tecwool® F Mortar**:

- Wearing protective gloves to protect the hands is recommended.
- Wearing tight goggles to protect the eyes is recommended.
- Wearing anti-dust mask is recommended.
- Respect the regular work measures.

Consult the safety datasheet for further information.

STORAGE

Keep in a dry and well ventilated place.

TECHNICAL CHARACTERISTICS AND SPECIFICATIONS

Composition	Cement, rock wool and additives.
Fire reaction	Non-combustible/ Euroclass A1.
Bulk mortar density	250 Kg/m ³ ± 10%
Cured mortar apparent density	328 Kg/m ³ ± 10%
Sprayed fresh mortar apparent density	464 Kg/m ³ ± 10%
Performance	3 kg/m ² cm
Thermal conductivity	0,053 W/mk
Alkalinity (pH value)	12,4
Bulk product, dried at 105 °C	0,68% de H ₂ O
Stream permeability	2,1 (μ)
Resistance to fungi	Immune.
Protection against steel corrosion	Yes.
Flexural strength	0,09 Mpa
Compressive strength	0,24 Mpa
Wind erosion resistance	15 m/s β=90° y β= 15°
Toxic/Pathogenic	No.
Free crystalline silica asbestos	No.
Weighted sound absorption ratio	α _w =0,8 (H)
Acoustic absorption class	Class B.
Adherence	0,011 N/mm ² failure.
Marketing	25 kg sacks in 600 kg pallets.
Expiration	6 months.