

NHL FIXING AND LEVELLING MORTAR WITH NATURAL CORK AGGREGATES

### 1. DESCRIPTION

**ISOVIT E-CORK** is a fixing and surface levelling mortar, formulated from mixed binders, cork aggregates and **Natural Hydraulic Lime**.

### 2. FIELD OF USE

**ISOVIT E-CORK** is specially designed for surface fixing and levelling, promoting the increase of thermal and acoustic performance of dark expanded agglomerated cork panels (ICB) in thermal insulation systems on the exterior, namely **ISOVIT CORK**, on masonry substrates, cement block, ICB panels and/or hydraulic base substrates, such as concrete and renders.

**ISOVIT E-CORK** is suitable for the renovation of the thermal insulation of painted or ceramic coated facades, since it allows the fixing of external insulation systems directly on this type of substrates with the addition of mechanical fixings—**ISOVIT Bucha**.

For non-current uses or on particular substrates, we advise you to contact our Technical-Commercial Services.

### 3. PRODUCT CHARACTERISTICS

Powdered product	Value	Standard
Colour	Beige	-
Granulometry	< 1,0 mm	1
Paste product	Value	Standard
Mixing water	30,0 % ± 1,0 %	-
Theoretical consumption	3,5 kg/m² – Fixing 1,1 kg/m²/mm– Regularization	-
Hardened Product	Value	Standard
Compressive strength	≥ 6,0 MPa	EN 1015-11
Flexural strength	≥ 2,5 MPa	EN 1015-11
Adhesion to brick and block/ Mode of fracture	≥ 0,4 MPa/A and B	EN 1015-12
Adhesion to the insulation panel (black cork agglomerate, ICB)	≥ 0,1 MPa Break within the insulation	-
Density	1050 ± 150 kg/m³	EN 1015-10
Capillarity	Class W2	EN 1015-18
Permeability to vapour	≤ 10 µ	EN 1015-19
Reaction to fire	Class A1	EN 998-1
Thermal Conductivity (λ <sub>10, dry</sub> )	0,33 W/m.°C (P=50 %)	NP EN 1745





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#### 4. APPLICATION

## a) Substrate preparation

Substrates should be hardened, free from dust, release agents, loose or unstable materials, efflorescence, as well as from any type of material which affects normal adhesion conditions.

Substrates should be levelled, checking with a two-meter ruler that there are no irregularities greater than 1 cm. Otherwise substrates should be levelled with *REDUR H2FIBRA* render.

Pre-applied renders should have a "trowelled" texture and a cure of about 28 days, protected from bad weather.

For applications on painted substrates, there should be sufficient adhesion to withstand the new coating.

If the substrate is an old ceramic coating, it must be sturdy and levelled and all pieces must have good adhesion to the substrate. If this is not the case, remove the loose parts and level the coating.

If necessary, wash the substrate with suitable detergents in order to remove accumulated dirt and residues on the surface.

## b) Mixture preparation

**ISOVIT E-CORK** should be prepared by mixing 5,5 to 6,0 litres of clean water (preferably drinkable) per bag of product, using an electric mixer, until a homogeneous paste is obtained.

## c) Application

Adhesion on masonry and uneven substrates (unevenness not greater than 1 cm per 2 metres)

Fix the panels (dimensions 1,0 x 0,5 m) laying a discontinuous mortar string around the perimeter, adding at least two fixing points in the middle of it. Provide for mechanical fixing with *ISOVIT Bucha* (recommended minimum  $- 6 \text{ un/m}^2$ ).

• Adhesion on regular render or concrete surfaces

Simple continuous fixing should be carried out by using a 10 mm toothed trowel, preferably laying the mortar on the back of the panels. Provide for mechanical fixing with *ISOVIT Bucha* (recommended minimum -6 un/ $m^2$ ).

• Fixing recommendations

Fixing procedures should ensure surface uniformity, levelling and non-spacing of the panels, without joint openings and ensuring that there is no mortar left in between.

Levelling

Apply *ISOVIT E-CORK* mortar onto the surface of the cork panels (ICB), conveniently arranged and adherent to the substrates. Apply the first layer with a notched trowel and, immediately, embed a glass fibre mesh with characteristics appropriate to the application – *ISOVIT Rede 160/343*. The second layer should be applied over the first one to give the surfaces the flatness necessary to receive the final finish.





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## d) Restrictions

ISOVIT E-CORK should not be applied at room and substrate temperatures below 5 °C and above 30 °C.

Panel application should be carried out away from direct sunlight, strong wind and high temperature action.

Facade panels have to be protected on top with finishing solutions that effectively protect the applied materials from the water inlet.

## e) Complementary Advices

Do not use ISOVIT E-CORK for filling joints between thermal insulation panels.

The mixing water must be free of any impurities (clays, organic matter, etc.), and drinking water should be preferably used

No mortar that has initiated the setting process should be applied. Do not soften mortars by adding water after preparation.

Do not add any other products to the mortar. *ISOVIT E-CORK* should be applied as it is shown in its original packaging.

Do not apply under temperatures above 30 °C or below 5 °C.

Do not apply on horizontal surfaces or with a tilt of less than 45°.

Protect the top edges of the coating from rainwater.

### 5. PACKAGING AND VALIDITY

## **Packaging**

20 kg paper bags in plasticized pallets of 60 bags.

### Validity

12 months provided the conditions of the original packaging remain unaltered and in good storage conditions, protected from extreme temperature and humidity.





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### **6. HEALTH AND SAFETY**

(DOES NOT REPLACE CONSULTATION OF THE PRODUCT SAFETY DATA SHEET)

- Irritating to eyes, respiratory system and skin;
- May cause sensitization in contact with skin;
- Do not breathe dust;
- Avoid contact with skin and eyes;
- If it comes in contact with eyes, rinse immediately and thoroughly with water and seek a specialist advice;
- Use protective clothing and appropriate gloves;
- Keep out of children's reach.



Being the conditions of applying our products out of our reach we do not take responsibility for its misuse. It is the customer's duty to verify the suitability of the product for the intended purpose. In any case, our responsibility is limited to the value of the goods supplied by us. The information contained in the present data sheet may be altered without prior notice. In case of doubt and if you need any further advice please contact our Technical Services.

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