

1. DESCRIPTION

ISOVIT LIGHTFLEX is a bonding and surface regularisation mortar made from mixed binders, cork aggregates and **Natural Hydraulic Lime**. Its special formulation makes this mortar more efficient, lighter and easier to apply when compared to other mortars in the ISOVIT range.

2. FIELD OF USE

ISOVIT LIGHTFLEX is specially designed for bonding and surface regularisation, promoting increased thermal and acoustic performance of black cork agglomerate (ICB) boards in external thermal insulation systems, namely **ISOVIT CORK** on masonry, cement block, ICB boards and/or hydraulic-based substrates such as concrete and plasters.

ISOVIT LIGHTFLEX is suitable for renovation of the thermal insulation of painted or ceramic-tiled facades, as it allows exterior insulation systems to be bonded directly to this type of substrate in conjunction with the use of mechanical fixing – **ISOVIT BUCHA**.

For non-standard applications or special circumstances contact our Commercial-Technical Service.

3. PRODUCT FEATURES

Powder product	Value
Colour	Beige
Grade	<1.0 mm
Paste product	Value
Mixing water	31.5% ± 1.0%
Theoretical consumption	3.5 kg/m ² – Bonding 1.1 kg/m ² /mm – Regularisation
Hardened Product	Value
Compressive strength	≥ 6.0 MPa
Adherence to brick/block/Fracture mode	≥ 0.4 MPa/A and B
Adherence to insulation board (black cork agglomerate, ICB)	≥ 0.1 MPa Leakage within the insulation
Density	1050 ± 150 kg/m ³
Capillarity	Class W _c 2
Vapour permeability	≤ 20 μ
Reaction to fire	Class A1
Thermal conductivity (λ _{10, dry})	0.33 W/m.°C (P=50 %)

4. APPLICATION

a) Preparation of substrates

Surfaces must be hardened, clean of dust, releasing agents, crumbling or unstable materials, efflorescences, as well as any type of material affecting the conditions of adherence.

Highly absorbent surfaces must be pre-moistened or treated with a suitable primer to regulate water absorption by the substrate.

The surfaces must be checked with a two-metre ruler, ensuring that there are no irregularities greater than 1 cm. Otherwise, the substrates should be regularised with plaster.

Previously applied plasters must have a trowelled texture and cure for about 28 days, protected from the weather.

For application on painted surfaces, the paint must have sufficient adherence to support the new coating.

Should the surface be an old ceramic bonding, it must be ensured that it is sturdy, smooth and all parts adhere well to the surface. If this is not the case, the loose parts should be removed and the coating smoothened.

If necessary, clean the surface with suitable detergents to remove oils and residues accumulated on the surface.

b) Preparation of the mixture

ISOVIT LIGHTFLEX should be mixed with 6.1 to 6.5 litres of clean water (preferably drinking water) for each bag of product, using an electric mixer, until a smooth paste is obtained.

c) Application

- *Apply to masonry and uneven surfaces (gradient no more than 1 cm every 2 metres)*

Bond the panels (dimensions 1.0 x 0.5 m) by laying a discontinuous line of mortar around the perimeter, adding at least two bonding points in the centre. Provide for mechanical fixing with **ISOVIT BUCHA** (recommended minimum – 6 per/m²).

- *Apply to even plaster or concrete surfaces*

Simple continuous bonding should be carried out using a 10 mm jagged trowel, preferably placing the mortar on the back face of the panels. Provide for mechanical fixing with **ISOVIT BUCHA** (recommended minimum – 6 per/m²).

- *Recommendations for bonding*

The procedures for the development of bonding should ensure uniformity of surfaces, that the panels are level and without gaps and that there is no mortar between them.

- *Regularisation*

Plastering **ISOVIT LIGHTFLEX** mortar on the surface made up of the black cork agglomerate (ICB) boards, suitably arranged and adhered to the substrates. Apply a first layer with an 8 mm notched trowel and immediately soak with a fibreglass mesh with characteristics suitable for the application of **ISOVIT REDE 160** or **ISOVIT REDE 343**. Apply the second layer so as to completely hide the mesh and give the surfaces the flatness needed to receive the final finish. The total thickness of this layer must be at least 4 mm.

d) Restrictions

ISOVIT LIGHTFLEX should not be applied at room and substrate temperatures below 5 °C and above 30 °C. The panels should be applied out of direct sunlight, strong winds or high temperatures.

The surface of the front panels must be protected with trim solutions that effectively protect the materials from water ingress.

ISOVIT LIGHTFLEX must be coated within 30 days of applying the last layer. In the event of a longer period of time, the condition of the coating and the need for re-rendering should be assessed.

e) Complementary advice

- Do not use ISOVIT LIGHTFLEX to bond joints between insulation panels;
- The water in the mix must be free of impurities (clay, organic material, etc.), preferably being of drinking quality;
- No grout should be applied that has started the process of setting. Do not soften the mortar by adding water after preparation;
- Do not add any other products to the mortar ISOVIT LIGHTFLEX, it should be applied as shown on the original packaging;
- Do not apply in temperatures above 30 °C or below 5 °C;
- Do not apply to horizontal surfaces or inclines less than 60°;
- Protect the upper edges of the rainwater coating.

5. PACKAGING AND VALIDITY

Packaging

Plastic pallets of 60 x 20kg paper bags.

Expiry

12 months, provided the original packaging conditions remain unchanged and in storage conditions protected from extreme temperatures and humidity.

6. HYGIENE AND SAFETY

(DOES NOT PRECLUDE THE PRODUCT SAFETY DATA SHEET)

Irritant to the eyes, respiratory system and skin

- May cause sensitivity in contact with the skin;
- Do not inhale the dust;
- Avoid contact with the skin and eyes;
- In case of contact with the eyes, wash immediately with plenty of water and consult a specialist;
- Wear suitable protective clothing and gloves
- Keep out of the reach of children.

ISOVIT E-CORK

BONDING AND RENDERING MORTAR WITH NATURAL CORK AGGREGATES



ISOVIT LIGHTFLEX

EN 998-1

Light weight industrial mortar (LW) for bonding thermal insulation boards.

Declaration of performance DOP.13003

Since the conditions of application of our products are out of our control, we cannot be held responsible for their incorrect use. It is the customer's responsibility to verify the suitability of the product for its intended purpose. In any case our liability is limited to the value of the goods provided by us. The information contained in this factsheet may be changed without notice. In case of doubt, and should you require further clarification, we recommend you contact our technical services.

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