

Estocem UL

Self-smoothing, Thin Layer Underlayment

Description

Estocem UL is a cement based self-smoothing floor underlayment system supplied in powder form. It is for application to both concrete and sound cement sand floors with minimum 20N/mm² compressive strength.

Estocem UL can be laid in a thin layer (2mm – 12mm) by a continuous mixer pump or by hand.

Uses

Estocem UL is highly recommended as a thin underlayment, for a wide variety of floor finishes such as tiles, carpets, vinyl sheeting, epoxy coatings and toppings.

Advantages

- Easy & fast application with rapid cure performance, allows speedy access without delaying subsequent works
- Can be installed in large areas with seamless
- Self-smoothing & applicable in thin layer, minimize surface preparation for subsequent floor finishes
- Good adhesion to concrete and cement screed substrate
- Form a dense and sound underlayment with non-powdery surface

Standards Compliance

- BS 890
- BS 8204 Part 1:1987

Physical Properties

Flow (Cone) @ 20°C, BS 890	265 to 275mm
Compressive Strength 28 Days	20N/mm ²
BRE Impact Resistance, BS 8204, part 1:1987 28 Days	Category A Highest rating
Minimum Thickness	2mm
Maximum Thickness	12mm
Traffic Time (20°C to 30°C) Foot Traffic Overlay Time	4-6 hours 24 hours

Application Instructions

Preparation

Relative humidity of the concrete floor must not be greater than 80% at time of installation and 75% if impermeable toppings or coverings such as epoxy floor screeds and vinyl tiles finish are being laid. Cracks and holes should be repaired with recommended Estop products.

New concrete floors should be cured for at least 21 days. The substrate should be sound, clean and non-porous.

In the case of contaminated old concrete floors, use mechanical cleaning such as blasting, grinding and scrubbing.

Priming

The substrate should be primed to prevent air release and to achieve good bonding. Air release may form bubbles and pinholes in the finish surface of the Estocem UL.

Prime the substrate with Estobond Acryl by a broom and brushed into the substrate, after the substrate saturated with clean water. Application by roller or spray is not recommended.

Avoid ponding of primer as this may lead to the failure at the bond line. Allow Estobond Acryl to semi-dry (become tacky). Apply another layer of Estobond Acryl before application of Estocem UL. A film formation can be seen on the surface when Estobond Acryl is dried.

For porous substrates and/or in hot weather, the surface should be soaked with clean water prior to application of Estobond Acryl.

Second layer of Estobond Acryl may need to be applied, after the first layer is dried, if the substrate is very porous.

Mixing

Do not part mixing, or add further water to the mixed material to prolong workability. These actions will result in an incorrect water powder ratio and affect the final material performance. Ensure a thoroughly and even mixing. The mixture should not be allowed to exceed 30°C.

Mix the whole bag of Estocem UL (25 kg) with 5.7 – 6.5 litres of cool, clean water in a suitably sized and clean vessel. Add Estocem UL powder gradually to the water and mix continuously with a heavy-duty drill and purpose made paddle. Mixing should continue for 3 to 5 minutes until a smooth and creamy consistency is obtained.

Estocem UL shall be laid within 2 minutes after mixing.

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Pour and spread the mixed material onto the semi-dry primed surface and allow to level.

Roll surface with a spiked roller to release trap and to aid leveling properties. Rolling must be done immediately. Do not over roll and do not attempt to float finish the setting surface.

The required thickness must be achieved when the pouring and leveling is a continuous process.

The product when installed will follow the existing floor gradient. If a floor with a particular slope is required, it will be necessary to use leveling equipment to obtain the desired gradient.

If the mixture stiffens, it should be discarded, do not attempt to re-mix with water.

It is important to ensure sufficient labour is available to enable continuous mixing and pouring as the product is fast setting.

Cleaning

Tools and equipment should be cleaned immediately with water. Cured material can only be removed by mechanical means.

Curing

Curing is generally not required. In harsh curing conditions such as high ambient temperatures, direct sunlight, drying winds, etc, the freshly hardened surfaces should be covered completely with a polythene sheet for 2 days.

Limitations

It is important to prevent rapid drying, protect from direct sunlight and / or drying winds during applications and the initial curing period.

If the substrate onto which **Estocem UL** is applied moves or cracks, reflective cracking may occur.

Estocem UL should not be applied to asphalt substrates.

As **Estocem UL** is formulated as a Floor Underlayment system, surface cracks / crazing can be expected.

Packing & Size

Estocem UL	25 kg bag
Estobond Acryl	20 litre pail

Yield

Estocem UL	14.7 litres per 25 kg bag
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Coverage

Estocem UL	14.7 m ² /mm/25 kg bag
Estobond Acryl	4 – 6 m ² per litre depending on porosity of substrate

Technical Support

Estop offers a comprehensive range of high performance, high quality of repair product for both new and existing concrete surfaces. In addition, the company offers a technical support package to specifiers, end-users and contractors, as well as on-site technical assistance.

Storage

Estocem UL should be stored on pallets in cool and dry conditions. The product shelf life is of 12 months.

It shall be protected from high humidity and extreme heat.

Precaution

Estocem UL contains cement powder, which might be harmful to sensitive skin. In case of contacted with eyes, immediately rinse with water and seek medical advice.

Additional Information

Estop manufactures and offers a wide range of complementary products which includes waterstops, waterproofing products, grouts, anchors, specialized flooring products. In addition, a wide range of products formulated for repair and refurbishment of spalled concrete are available.

Important Note

Estop products are guaranteed against defective materials and manufacture and are sold subject to its standard Terms and Conditions of Sale, copies of which may be obtained on request. Whilst Estop endeavors to ensure that any advice, recommendation, specification or information in may give is accurate and correct, it shall not, because it has no direct or continuous control over where or how its products are applied, accept any liability either directly or indirectly arising from the use of its products, whether or not in accordance with any advice, specification, recommendation or information given by it.