# **ECMAS ROOF**

## WATERPROOFING SOLUTION FOR ROOFS/FLOORS

## **Description**

**ECMAS ROOF** provides a total waterproof barrier without the need for a membrane. Developed for leveling and waterproofing floors and flat roofs. Manufactured to strictly control specifications and supplied pre bagged, it requires only the addition of water on site. **ECMAS ROOF** is environmentally friendly and does not contain any bitumen, resin derivatives or toxic ingredients.

#### **Advantages**

- 100% waterproof capability
- Simple application in one step
- Fiber reinforced for increased tensile strength
- Resistant to direct water contact
- Fire resistant
- Freeze/Thaw resistant
- Applicable as above-grade or sub-grade insulation
- It is possible to apply to wet surfaces
- Frost-resistance and sulfate-proof
- It can be applied manually (trowel) or with a spray applicator
- No need for additional waterproofing membranes
- Excellent cohesion and bonding strength
- No bituminous or toxic ingredients
- Prevents salt efflorescence

## **Areas of Application**

- Terrace slabs, cellar basement floor, showers, wet rooms, spas green roofs, terraces, patios and balconies.

## **Installation Guidelines**

**Surface Preparation**: Before applying **ECMAS ROOF**, it is important to remove all existing plaster, stucco, loose particles, residual paint, oil, rust, dust, and other impurities. Defective elements, such as damaged bricks, should be repaired or replaced. If used as a repair mortar, the old plaster should be removed 30-40 inches (800-1000mm) above the boundary of water incursion. If salt efflorescence is present, jointing must be raked to a depth of 20mm. The wall surface should be thoroughly cleaned with suitable equipment such as high-pressure air, water, or wire brush. Water absorbent surfaces should be well moistened with water before application. To maximize cohesion a thin mixture of cement and water should be spattered onto the surface before plastering. In cases of water leaking onto the plastered surface, it is important to ensure that the leakage is stopped for at least 72 hours or more, if possible, to ensure the proper setting of the plaster.

**Mixing:** One 25 kg bag of **ECMAS ROOF** is mixed with 15 kgs of crushed granite and with 6 liters of water. Grain size of crush granite should be from 0-6mm. Mix or stir for 7-10 min. Mixed material has a pot life of 1-3 hours depending on ambient conditions. It is recommended to use a gravity concrete mixer. The mixture is ready when it becomes entirely homogeneous. **DO NOT ADD ANYTHING IN TO MIXED COMPOSITION!** 



#### **Applying ECMAS ROOF**

The plaster is laid on the prepared surface manually with a smoother or with a spray applicator (commonly used method). The minimum thickness of one layer should be 10 mm; with a maximum of 3 layers (30mm) can be laid. For large spans it is recommended to use a glass fibre mesh. Initially on the prepared surface, a layer of 7.5mm thickness is applied. Immediately fiberglass mesh is gently pushed into fresh (not dry) first layer of **ECMAS ROOF**. Recommended size of fiberglass mesh is 10\*10mm with weight of 110gms. The overlay of fiberglass mesh should be minimum 100mm. Immediately apply second layer of **ECMAS ROOF** in thickness of 2.5mm. It is necessary to slightly rough up the surface before application of the next layer.

**Care After Application:** Approx. 15 minutes after application, **ECMAS ROOF** has to be covered with a plastic sheet for atleast 3 days. The plastic sheet protects the **ECMAS ROOF** from drying too quickly and minimization of cracking. The plaster has to be cured for a minimum of 7 days. Upon curing, the surface can be painted or tiles can be laid.

#### **Important**

While plastering extremely moist surfaces, aggregation of water drops on the plaster surface can occur. This is due to the 'drying-effect' of the plaster (Breathability).

## **Safety & Precautions**

Wear all PPE's at the time of Application like Safety boot, Safety Goggles, Hand Gloves, Mask, etc. and avoid contact with Skin and Eyes. Any direct skin contamination should be washed off immediately with soap and water.

### **Technical Specification**

Appearance/Color Powder / Grey

Chemical Base Sand, Granite Dust, Cement, WBD Component ROOF

Density 2100 kg/m3 +/- 50kg Layer Thickness One layer of 10mm

Maximum 3 layers in total thickness of 30mm

Coverage 3.5 Sgm/bag @ thickness 10 mm

Packaging 25 kg bag

Shelf-life 18 months when stored in dry condition

Maximum depth of water penetration into hardened plaster ≤ 1mm

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