

# ECMAS HARD

## WATERPROOF AND DRYING PLASTER

### Description

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Plastering and waterproofing in one step. ECMAS HARD is an extremely waterproof dry plaster mixture that will create a waterproof membrane after application; while it stays breathable at the same time. Proprietary Hydrophobic Ingredient WBD Component HARD is the key component that ensures waterproof characteristic of the product. ECMAS HARD offers a permanent solution by eliminating the problems of water leakage. The plaster is produced from natural materials and does not contain any harmful or inflammable ingredients and it is environment friendly, making it also possible for waterproofing drinking water tanks.

### Advantages

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- Applicable as above-grade or sub-grade waterproofing
- Breathable - Air and Vapor permeable allowing trap moisture to evaporate
- It is possible to apply to wet surfaces
- Frost-resistance and sulfate-proof
- Prevention against salt crystallization
- It can be applied manually (trowel) or with a spray applicator
- No need for additional membranes or ceilings
- Excellent cohesion and bonding strength
- No bituminous or toxic ingredients
- Prevents salt efflorescence

### Areas of Application

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- Cellars, shafts and underground constructions from groundwater
- Permanent interior and exterior renovation of soaked, wet, salt-damaged walls of traditionally built buildings
- Stuccoing of structured to protect against water damage
- Bathrooms, shower bath, balconies
- Oversized concrete tanks, roof-gardens, planter boxes and swimming pools

### Installation Guidelines

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**Surface Preparation:** Before applying ECMAS HARD, it is important to remove all existing plaster, stucco, loose particles, residual paint, oil, rust, dust, and other impurities. Defective wall 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.

Note- If there is any doubt about surface suitability before plastering, always test small area first

**Mixing**

To a 25 kg bag of ECMAS HARD, approximately 3.75 to 4.50 liters of water is added in a gravity mixer. Mix or stir for 7-10 min. Mixed material has a pot life of 3 hours. It is recommended to use electrically powered mixing tool, due to hydrophobic abilities of the plaster.

**DO NOT ADD ANYTHING INTO MIXED COMPOSITION!**

**Applying ECMAS HARD**

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 10mm; with a maximum of 3 layers (30mm) can be laid. It is necessary to slightly rough up the surface before application of the next layer.

**Care After Application:** It is necessary to prevent the plaster from drying too fast since the optimal moistness enables permanent hydration of cement materials and minimization of cracking. When the last layer is laid on it is important to keep the surface permanently wet for 2 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, Cement, WBD Component HARD
Density	1680 kg/m <sup>3</sup> +/- 50kg
Layer Thickness	One layer of 10mm Maximum 3 layers in total thickness of 30mm
Coverage	2.08 Sqm/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
Diffuse resistance of water vapor, coefficient	12.40

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