

ECMASCREED LWD

100% Waterproof, Drying, Lightweight, Thermal & Sound Insulating Screed

Description

ECMASCREED LWD is a dry-mixed, lightweight, thermal and sound insulating screed/ mortar which is 100% waterproof, breathable along with dehumidifying ability. It is based on Portland cement, silica sand, unique natural admixture and reinforced with poly propylene fibers. It is mixed at construction site with polystyrene beads and can be used on above-ground constructions used as replacement for traditional waterproofing and thermal insulation materials. Provides long-term solution to a problem of water penetration to the concrete slab and simultaneously provides long-term solution of ventilation and drying of wet concrete slab. It does not contain any harmful or toxic ingredients.

Advantages

- Unique lightweight mortar combining thermal and sound insulation, waterproofing, breathability and Dehumidifying ability simultaneously
- 100% waterproof - Resistant against penetration of water from heavy rain/ monsoon rain
- Dehumidifying ability - constantly dries out moisture from the slab and allows it to evaporate outside
- Excellent adhesion to the substrate with minimum waste during application
- Resistant against salt crystallization
- Applicable on damp surface
- Non-toxic

Areas of Application

Horizontal concrete slabs/ surfaces like roof deck, floor decks, wet areas, etc. on above ground constructions for renovation of existing / historical buildings and new buildings as light weight, waterproofing and insulating mortar/ screed.

Installation Guidelines

Surface Preparation: All surfaces must be thoroughly cleaned by a wire brush or other mechanical means, to remove all dust, laitance or debris. The surface must also be free from oil, grease, wax or any other form of foreign matter which might affect adhesion. All joints and cracks are to be treated separately. The substrate must be thoroughly moistened with water immediately before applying ECMASCREED LWD. If application area contains parapet wall, ECMAS EXTRA is applied on the parapet wall in minimum 5 mm thickness, at least 30 cm height on wall portion and 30 cm width on slab portion which results in L-shape-applied ECMAS EXTRA. Excessive water must be removed prior to application.



Mixing

It is advisable to use a gravity mixer (concrete mixer) to mix ECMASCREED LWD. Use 11 - 12 liters of water per 25 kg bag of ECMASCREED LWD and 0.5-1 Kg of polystyrene beads (depending on the desired density).

Add the prescribed amount of water into the mixer first, followed by ECMASCREED LWD powder and mix for at least 5 minutes in constant slowly mixing, into a homogeneous smooth slurry. Add 0.5-1 Kg of polystyrene beads after 5 minutes and mix for additional 7 minutes. Mixed ECMASCREED LWD must be used within 3 hours. Do not add anything into mixed composition.

Applying ECMASCREED LWD

ECMASCREED LWD is applied manually (using standard tools for screeding and plastering). Minimum recommended thickness is 25 mm applied at one layer. Higher thicknesses can be applied if required. Surface of ECMASCREED LWD is finished by steel trowel. Surface of ECMASCREED LWD can be sloped if slope to drain is required.

Care After Application: It is necessary to prevent ECMASCREED LWD from drying too fast since the optimal moisture level enables adequate hydration of cement materials and minimization of cracking. Protect freshly applied ECMASCREED LWD prior to rapid drying using appropriate protective methods for at least 3-4 days, especially during dry and windy weather, or when exposed to direct sunlight. Let ECMASCREED LWD to dry / harden at least 2 weeks before applying final finishing surface. ECMASCREED LWD can remain exposed without any final coating / painting / tiling. If tiling/coating/painting is required, tiles or decorative coatings with high water vapor permeability should be used to maintain its breathing and drying abilities (highly breathable - diffusion-open decorative coatings / paints like silicate paints, cement paints, lime paints).

Technical Specification

Appearance / color	Powder / grey
Chemical composition	Silica sand, Portland cement, natural admixture, PP fibers
Additional material to be mix with	0.5-1 kg of polystyrene beads (3-5 mm size)
Water / powder ratio	11-12 liters of clean water for 25 kg bag of ECMASCREED LWD
Pot life / workability	Minimum 3 hours (at temperature 20 °C)
Thickness of layer	25-60 mm
Theoretical Coverage	2.6 m ² / 25 Kg bag (25 mm)
Depth of water penetration	<3 mm (exposed to heavy rain / monsoon rain)
Packaging	25 kgs
Shelf Life	18 months in original, unopened, sealed condition.

Storage and Handling

Material should be stored in moisture free, cool and dry shade. Please avoid stacking of containers and handle carefully during transport.

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.

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