

# TECHNICAL DATA SHEET

## Paint Ready Ceiling without Cement Sand Plaster – Ceiling Thickness Builder

### Description

Dalmia Magic Premium Skim Coat CEILINGFAST is a high quality fibre polymer modified cement based plaster with unique natural tone, super smooth surface finish and thickness building solution which is a unique formulation for ceiling surfaces of RCC and precast concrete. It replaces the conventional method of plastering works in a clean and speedy manner that requires only water to be added on site before application with self curing property. It is hydraulically and organically bound to ceiling surface with good adhesion and strength.

It can be built up to 6-12 mm thicknesses without cracks due to presence of high quality fibre polymers and special additives that provides paint ready ceiling surfaces with self curing property. Dalmia Magic Premium Skim Coat CEILINGFAST has been tested at Singapore Housing Board's accredited laboratory in Singapore and conforms to the Singapore HDB specs and also the European Standards BS: EN 998-1.

### Characteristics / Advantages

- Emulates natural tone like light pink colour.
- Decreases 51% Dead Load
- Prevents hair crack caused by material shrinkage.
- Water resistant
- Excellent workability.
- Self-curing due to high water retentive property.
- Ready to use for painting applications.
- Resists growth of algae and fungus.
- Provides high and unique coverage.

### Area of Application

For ceiling surfaces of Precast Concrete and RCC surfaces.

### Technical Specification

Technical parameters comply with BS EN 998-1:2003

Characteristics	Specifications	Specifications Confirming Standards
Base	High quality fibre polymer modified cementitious base	
Appearance/Colour	Powder/Light Pink	
Fineness (Blaine) m2/Kg	400 to 450	IS: 4031 (Part-2) -1999
Dry Bulk Density (gm/Ltr.)	1000 to 1100	In-House
Wet Density (gm/Ltr.)	1750 to 1850	EN 1015-6: 1999
Consistence of fresh mortar (in mm)	170 @ Water to Powder Ratio 0.36	EN 1015-3: 1999
Air content (%)	< 10	EN 1015-7: 1999
Initial Setting (Minutes)	240 to 260	EN 196-3: 2016
Final Setting (Minutes)	300 to 320	EN 196-3: 2016
Compressive Strength at 28 Days ( N/mm2)	≥ 12	EN 1015-11: 1999
Flexural Strength( N/mm2)	≥ 2.5	EN 1015-11: 1999
Tensile Adhesion Strength (N/mm2)	≥ 0.6	EN 1015-12: 2000
Fire Resistance	Class A	ASTM E 84
Water Absorption	Under Testing at House	Karsten Tube
Water Retention (%)	≥ 98	BS 4551-1: 2005
Water Powder ratio	0.35 to 0.40	
Pot Life/Working Time (minutes)	120	EN 1015-9: 1999
Single Coat thickness (minimum)	2.5 mm	
Single Coat thickness (maximum)	4 - 6.0 mm	
Maximum Thickness	12 mm	

### Surface Preparation

- The surface should be made clean and free from curing compound, dust, dirt and other impurities such as oil, grease, salts, application of other Acrylic/PU/Oilpaint, etc using suitable sandpaper, blade, wire brush and clean water. There should not be any mildew or algae on the surface. Voids and cracks on the surface should be repaired prior to the cleaning of the surface.
- The concrete ceiling surface to be grinded (grinder and GI 18 brush) with undue undulations and there after chipping (mechanical chisel) of surface to be initiated and then cleaning/brooming of the ceiling surface.
- Absorbent substrates must be pre-wetted to saturated surface dry (SSD) conditions. For new ceiling surfaces, 28 days of curing is recommended before application.

### Mortar Mixing

**Mortar Mixing:** 35 to 40 % of water by weight of material. Water : Powder = 35 to 40 by weight (14 litres to 16 litres water per 40 kg bag). For 1 Kg of Powder, 350 to 400 ml water is required.

**Mixing Time:** 3 to 5 minutes. Mixing to the measured quantity of water using mechanical stirring for 5 minutes to ensure a consistency free of lumps. For better consistency and results, it is recommended that mechanical mixture/stirrers must be used. Water should be added incrementally and mixing should be continued until a uniform consistent paste is achieved.

## Application

- Apply the first coat on the moistened surface evenly with the help of notched trowel or flat trowel or Putty blade.
- With notched trowel application, maintain the distance and flow of application
- Allow the first coat to dry for minimum 4-5 hours in hot condition and 8-10 hours in cold/winter condition.
- Apply the second coat as per the thickness required and allow it to dry.
- After drying the second coat, apply third coat for final finishing and remove any type of marks with the help of moist sponge and rub surface very gently with the help of blades.
- Although it is not essential to rub the surface done while using Dalmia Magic Premium Skim Coat CEILINGFAST, however it is important to remove unevenness before applying any kind of paints or coatings using emery paper (size should not exceed 400 micron)
- Finished surface shall be allowed to dry completely.
- The total thickness for the above 2 coats should be between 6-12 mm.
- Thickness building: The versatility of the Dalmia Magic Premium Skim Coat CEILINGFAST allows the maximum thickness per coat should be 4 - 6 mm, be allowed to dry before applying the second, third coat etc. to build up the thickness.

## Coverage Estimate

In Single Coat, 4 mm average thickness, 1.2 to 1.4 Sq.ft/Kg (5 to 6 Sq.ft/Kg/mm).

For 4 mm average thickness, 1.2 to 1.4 Sq.ft/Kg depending on the quality of the applied substrate, based on application and weather conditions.

## Precaution

Although Dalmia Magic Premium Skim Coat CEILINGFAST does not contain any toxic material, it is advisable to wear suitable protective clothing, gloves and eyes/face protection. In case of contact with skin and eyes, please rinse immediately with plenty of clean water and seek medical advice if required. Keep the product out of reach of children.

## Storage and Shelf Life

Should be stored in a dry place and protected against moisture. We recommend that the storage time should not exceed 6 months from the date of production. Storage beyond the date specified does not necessarily mean that the material is unusable, but the user should perform a quality check on the properties necessary for the intended application.

## Packaging

Available in 40 bags.

## Limitation

Cementitious substrates must be at least 28 days old. Do not exceed the recommended water dosage. Apply only to sound, prepared substrates. Do not exceed the maximum layer thickness. Protect freshly applied material from freezing and rain etc.

## Additional Information

The information supplied in the data sheet is based on the outcome of extensive in-house research and development. We reserve the right to update this information from time to time without prior notice. We guarantee the consistent high quality of our product, however since we have no control over site conditions or the execution of the work at site, we accept no liability for any loss or damage which may arise as a result thereof.

