

Name and Address of Certificate Holder: **M/s Dalmia Cement (Bharat) Ltd. New Building Solutions** 11th & 12th Floor, Hansalaya Building, 15, Barakhamba Road, New Delhi – 110001 Ph no. 9007813453 Performance Appraisal Certificate No. PAC No.:**1055-P/2021**

Issue No. 01

Date of Issue: 10.02.2021





DALMIA MAGIC PREMIUM SKIM COAT

<image><image>

Dalmia

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User should check the validity of the Certificate by contacting Member Secretary, BMBA at BMTPC or the Holder of this Certificate.





PERFORMANCE APPRAISAL CERTIFICATE

FOR

DALMIA MAGIC PREMIUM SKIM COAT

ISSUED TO

M/s Dalmia Cement (Bharat) Ltd., New Building Solutions, New Delhi

S.	Issue	Date of	Date of	Amer	ndment	Valid up	Remarks	Signature of
No	No.	Issue	renewal	No.	Date	to (Date)		authorized signatory
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STATUS OF PAC No: 1055-P/2021

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PART 1 CERTIFICATION

1.1 Certificate Holder:

M/s Dalmia Cement (Bharat) Ltd. New Building Solutions 11th & 12th Floor, Hansalaya Building, 15, Barakhamba Road, New Delhi – 110001 Website: <u>www.dalmiainnobuild.com</u> Phone No. 9007813453

1.2 Description of Product – Skim Coat

1.2.1 Name of the Product – Dalmia Magic Premium Skim Coat

1.2.2 Brief Description

It is a polymer optimized cementitious Skim Coat in required thickness that provides smooth leveling finish and protective coat for internal and external rendering surfaces. It provides the option of "not painting" the externally rendered surfaces, by giving a "natural tone" finish, that is aesthetically pleasing and durable.

It is an innovative building product with natural tone color and is made of "Active Cement Particles". The various tests conducted indicate that the product formulation is superior to common white wall putty in terms of giving more life to the paint with higher tensile adhesion & higher coverage area.

1.2.3 Features and Characteristics of Dalmia Magic Premium Skim Coat

- Paint can be applied with or without primer
- Reduces use of paint on surface to about 10% & provides higher coverage
- Excellent tensile adhesion and compressive strength
- Excellent workability
- Prevents hair crack caused by material shrinkage
- Self-curing due to high water retentive property
- Enhances turnaround cycle time of finishing application
- Water resistant
- Resists growth of algae and fungus
- It satisfies best in class fire resistance category i.e Class A as per ASTM E84.
- Emulates light pink or sandstone colour
- Textured finish can be obtained by the use of texturing tools/rollers as per the local practice





- Can be developed to a lustrous and smooth surface which can be left unpainted
- Suitable for all type of cementitious surfaces or cement fibe boards

1.2.4 Application process of Dalmia Magic Premium Skim Coat

1.2.4.1 Surface Preparation

The surface should be made clean and free from dust, dirt and foreign materials 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. Absorbent substrates must be prewetted to saturated surface dry (SSD) conditions. For new masonry plaster surfaces, 28 days of curing is recommended before application.

1.2.4.2 Mixing

For 1 kg of Dalmia Magic Premium Skim Coat, 400-450 ml water is required. 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.

1.2.4.3 Application

- Apply the first coat on the moistened surface evenly with the help of flat trowel or Putty blade
- 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 and allow it to dry. After drying the second coat, 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, 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 1.5-2 mm
- Thickness building: The versatility of the Dalmia Magic Premium Skim Coat allows the usage up to 5mm thicknesses on cementious surfaces. However, maximum thickness per coat should be 2 mm, be allowed to dry before applying the second, third coat etc. to build up the thickness.

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1.2.4.4 Coverage

The coverage shall depend on the quality of the applied substrate, applied thickness, based on application and weather conditions.

1.3 Assessments

1.3.1 Scope of Assessment

Suitability of Dalmia Magic Premium Skim Coat for use as Wall Putty for rendering and finishing application works of internal and external cementitious plastered/concrete walls, ceilings and other cementitious surfaces.

1.3.2 Basis of Assessment

The assessment is based on the following results & reports;

- (i) Inspection of the factory, the manufacturing equipment used & assessment of quality assurance procedures implemented in the factory
- (ii) Assessment of R&D laboratory Quality Control and Quality assurance procedures implemented in the factory
- (iii) Assessment of Sample done on Cementitious surface during inspection of factory
- (iv) Comparative Test for Properties of Dalmia Magic Premium Skim Coat and White Cement based Wall Putty got done in independent laboratory at M/s Shriram Institute for Industrial Research, New Delhi by the manufacturer of the product
- (v) Fire Resistant Test (as per ASTM E84 16, Standard Test Method for Surface Burning Characteristics of Building Materials) got done in independent laboratory at M/s Spectro Analytical Labs Ltd., New Delhi by the manufacturer of the product
- (vi) Tensile adhesion strength after Accelerated Weathering Test (as per BS EN 1015 - 12 : 2000) got done in independent laboratory at M/s SETSCO Services Pte Ltd., Singapore (Accredited Laboratory by HDB, Singapore) by the manufacturer of the product
- (vii) Physical Characteristic Testing (as per BS EN 4551: 2005+A2:2013, BS EN 196 : Part 3:1995+A1:2008:Annex A, BS EN 1015 11 : 1999, BS EN 1015 12 : 2000, ASTM C531:2000, Reapproved 2012) got done in independent laboratory at M/s SETSCO Services Pte Ltd., Singapore (Accredited Laboratory by HDB, Singapore) by the manufacturer of the product





 (viii) Comparative testing of Dalmia Magic Premium Skim Coat with White Cement based Wall Putty (as per BS EN 196:Part 6:2010, BS EN 1015 – 12 : 2000) got done in independent laboratory at M/s SETSCO Services Pte Ltd., Singapore (Accredited Laboratory by HDB, Singapore) by the manufacturer of the product

1.3.3 Scope of Inspection

Scope of inspection included the verification of manufacturing, performance and testing facilities at the factory including competence of technical personnel and status of quality assurance in the factory. The virtual inspection (through video conferencing) was carried out in prevailing scenario of COVID-19.

1.3.4 Manufacturing Process

- (i) The raw material RABH (Ultrafine cementitious particles) and OPC (active cement fillers) are loaded to the designated Hopper through a Compressor installed at Plant (as per Production SOP of Dalmia Magic Premium Skim Coat).
- (ii) Polymers are filled manually to the additive hopper.
- (iii) The raw materials i.e.Ultrafine cementitious particles, active cement fillers and polymers are added to the blender through batch bin as per defined proportion. The whole process is controlled through computerized Control room.
- (iv) Each batch is mixed for 12 minutes through a blender to get a homogeneous mixture. After mixing, the Dalmia Magic Premium Skim Coat is transferred to Product Bin.
- (v) During production, at least one sample (500 gm) from each batch is collected to control the color coordinate, Blaine & Residue of Dalmia Magic Premium Skim Coat. The acceptance quality of Dalmia Magic Premium Skim Coat as per Color index parameters as follows:

Sample		L *		a*	b *	
Dalmia Magic	Premium	68.0	to	2.60 to 3.5	5.0	to
Skim Coat		72.0			8.5	

- (vi) After collection of Dalmia Magic Premium Skim Coat, it goes to packing unit and through two spout stationary packer with 30 kg (±50 gm) and 40 kg (±40 gm) and bag is collected on random basis to ensure weight of dispatch lot.
- (vii) Each lot sample is mixed properly to make dispatch average. One part of the average sample to be kept for analysis as per





Standard Operating Procedures (following Indian and European standards) and other part to be stored as counter sample for a period of 25 weeks. The acceptance criteria of Dalmia Magic Premium Skim Coat as follows:

Sr.	Characteristics/ Parameters	Test Method	Quality	Tolerance
110.		IS: 4031	NOTINS	
1	Blaine (m2/Kg.)	(Part-2) - 1999	660	± 75
	Residue (%) on 212	IS: 4031	0.50.16	
2	Mic.	(Part-1) - 1996	0.50 Max.	-
3	Color Coordinate	_	L: 68.0 to	
	(L*a*b*)		72.0	
			a: 2.60 to	
			3.5	
			b: 5.0 to 8.5	
4	Powder Bulk density (Kg/m3)		960	± 50
5	Standard	EN 196-	27	+ 3
5	Consistency (%)	3:2016	21	± 0
6	Setting Time / Initial	EN 196-	200	+ 40
0	(Minutes)	3:2016	290	± +0
7	Pot Life (in Minutes)	In House	160	± 20
8	Pull off adhesion Strength (MPa)	EN 1015- 12: 2000	1.20	± 0.20

(Photograph shows Manufacturing Process of Dalmia Magic Premium Skim Coat)







1.4 Testing facilities at manufacturing plant

- (i) Permeability Apparatus with Six Cell Model with an end pressure gauge (As per IS:2645-2003)
- (ii) Physical Testing of Cement as per Indian Standard: 4031 (Part-1 to Part-15)
- Sample preparation facility for Cement Mortar/Skim Coat cube & prism, Curing tank with Digital Temperature Control and Humidity Cabinet
- (iv) Compression and Flexural Testing Machine with Automatic Pace rate Controller (Capacity: 500 KN, 50KN & 15KN)
- (v) Water Retention Test apparatus (ASTM C1506/ASTM C110)
- (vi) High precision Isothermal Calorimeter (Make: Calmetrix, Model: i- cal 2000 HPC)
- (vii) European Standard Laboratory facilities
- (viii) Automatic setting time tester (Conforming to BS EN: 196-3: 2016)
- (ix) Planetary Mixer (Conforming to BS EN: 196-1: 1994)
- (x) Colour scan Spectro Photometer (Make: BYK Gardner USA)
- (xi) Pull off tester for adhesion strength (Make: PROCEQ, Model: DY 206) (conforming to BS EN : 1015-12: 2000)
- (xii) Chemical analysis facility for raw materials
- (xiii) X-ray fluorescence Analyser (Panalytical, AXIOS)
- (xiv) X-ray powder Defraction Analyser (Panalytical, QUBIX PRO)

1.5 Standard Testing Procedure of Product at manufacturing plant

1.5.1 Determination of Fineness by Blaine Air Permeability Method [AS per IS: 4031 (Part-2) - 1999]

This standard Operating Procedure covers the procedure for determining by Blaine air permeability apparatus as per IS: 4031 (Part-2)-1999, the fineness of Dalmia Magic Premium Skim Coat, RM & In Process Samples as represented by specific surface expressed as total surface area in cm^2/gm or m^2/Kg .

1.5.2 Determination of Fineness (Residue) by Dry Test Sieve Method (As per IS: 4031 (Part-1)-1996)

This standard operating procedure covers the determining the fineness (f) of Dalmia Magic Premium Skim Coat by dry sieving as represented by the mass of residue left on a standard 250µm IS Sieve as per IS: 4031 (Part-1) - 1996.

1.5.3 Determination of Color Coordinates (As per the Instrument maker - BYK Gardner USA procedure)

The standard operating procedure covers the determination of colour





coordinates for raw material, in-process and Finish Products testing as per the Instiment maker (BYK Gardner USA) procedure

1.5.4 Determination of Bulk density (As per ASTM D1895B)

This standard Operating Procedure covers the Bulk density of powder materials/ Dalmia Magic Premium Skim Coat as defined by the weight per unit volume of material as per ASTMD1895B.The test can provide a gross measure of particle size and dispersion which can affect material flow consistency and reflect packaging quantity

1.5.5 Determination of Standard Consistency (As per BS EN 196-03: 2016)

This standard Operating Procedure covers the procedure for determining the Standard Consistency of Dalmia Magic Premium Skim Coat as per BS EN 196-03:2016 to determine the water quantity require for measurement of setting time.

1.5.6 Determination of Initial and Final Setting Time (As per BS EN 196-03: 2016)

This standard Operating Procedure covers the procedure for determining the initial and final setting time of Dalmia Magic Premium Skim Coat as per BS EN 196-03:2016.

1.5.7 Determination Pot Life (In House Test Procedure

Determining time required for setting or Hardening of upper surface of the mortar paste of Dalmia Magic Premium Skim Coat.

1.5.8 Determination of Pull Off Adhesion Strength (As per EN 1015-12: 2000)

This standard Operating Procedure covers the procedure for determining the pull off adhesive strength between rendering and plastering and a substrate as per EN 1015-12:2000

1.6 Use of the Product & its Limitations

1.6.1 The product shall be used as use as Wall Putty for rendering and finishing application works of internal and external cementitious plastered/concrete walls, ceilings and other cementitious surfaces..

1.6.2 Limitations of Use

(i) Application should not be done on damped surface or water borne leakage area.





- (ii) Application should not be done on Dry and/or Dirty surfaces.
- (iii) Application should not be initiated on sealants/primers/paints/wax coated surfaces or any other coated and/or non-cementitious surface.
- (iv) Application where thickness building has to be carry forward, application should not exceed 2 mm per coat.
- (v) Application cannot be done over Earth Kiln Burnt Red bricks/Flyash bricks wall with joint pointing by Cement Sand mortarts as bonding agent between bricks. In this Case Dalmia Magic Premium Skimcoat cannot replace Cement sand mortar as mechanical property of cement sand plaster thickness cannot be neglected.

1.7 Conditions of Certification

- **1.7.1 Technical Conditions** Raw materials and the finished product shall conform to the requirements of the prescribed specifications.
- **1.7.2 Quality Assurance** The Certificate Holder shall implement & maintain a quality assurance system in accordance with Quality Assurance Plan (QAP) as per manufacturing procedure. The quality assurance plan is at **Annexure-I.**
- **1.7.3 Brochure/Guidelines** The Certificate holder shall provide detail instruction/technical data sheet (TDS) for application of the Dalmia Magic Premium Skim Coat starting from surface preparation, prewetting of surface and then application.

1.7.4 Handling of User Complaints

- 1.7.4.1 The Certificate holder shall provide quick redressal to consumer/user complaints proved reasonable & genuine and within the conditions of warranty period.
- 1.7.4.2 The Certificate holder shall implement the procedure included in the QAP. As part of PACS Certification, manufacturer shall maintain data on such complaints with a view to assess the complaint satisfaction and suitable preventive measures taken.

1.8 Certification

1.8.1 On the basis of assessment given in Part III of this Certificate & subject to the conditions of certification, use & limitations set out in this Certificate and if selected, application done as set out in Part I & II of this Certificate, Dalmia Magic Premium Skim Coat covered by this Certificate is fit for use set out in the Scope of Assessment.





PART 2 CERTIFICATE HOLDER'S TECHNICAL SPECIFICATIONS

2.1 General

2.1.1 The PAC holder shall manufacturer the Dalmia Magic Premium Skim Coat in accordance with the requirements specified in relevant BS EN, ASTM and IS Standards and other codal provisions. In addition, it shall follow Company standards specifying requirements of various materials used in the manufacturer of the product (See 2.2)

2.2 Specifications of the Product and Production & Inspection

2.2.1 Technical Specifications

2.2.1.1 Raw materials

1. Ultrafine Cementitious Nano Particles

The function of cement is well known as a binder for filler and aggregates. The cement in skim coat makes use of polymers to achieve self-curing properties. The water retaining polymer works as water reservoirs to eliminate curing requirements and this process continues from 7-14 days depending on the weather conditions.

2. Cementitious Active Fillers

The fillers in the skim coat are active and bind better compared to ordinary dolomitic fillers used in white cement based wall putty generally available in India. It is known that finely ground calcium carbonate and nano siliceous filler binds well with cement because of their pozzolanic nature (synergises as binder for cement).

3. Dispersible Polymers

Functions as a secondary binder, also known as dispersible polymer powder. This helps the skim coat to achieve tensile adhesive strength & smoothness.

4. Cellulose Ether Polymer

These are chemically modified cellulose derivatives and act as water retaining agents. These primarily contributes to make skim coat achieve the rheology responsible for its workability and plays a dual role to make the material self-curing as well as workable.





5. Rheology Modifier Polymer

These are chemically modified starch ether molecules which synergistically work along with Polymer Type 2 by breaking its gel network when tool/blade is moved during application.

2.2.2 **Product specifications**

Sr. No.	Characteristics/Parameters	Test Method	Quality Norms
1	Blaine (m2/Kg.)	IS: 4031 (Part-2) - 1999	660
2	Residue (%) on 212 Mic.	IS: 4031 (Part-1) - 1996	0.50 Max.
3	Color Coordinate (L*a*b*)	-	L: 68.0 to 72.0 a: 2.60 to 3.5 b: 5.0 to 8.5
4	Powder Bulk density (Kg/m3)		960
5	Standard Consistency (%)	EN 196-3:2016	27
6	Setting Time :- Initial (Minutes)	EN 196-3:2016	290
7	Pot Life (in Minutes)	In House	160
8	Pull off adhesion Strength (MPa)	EN 1015-12: 2000	1.20

 Table 1. Product specifications

2.2.3 Production & Inspection

- 2.2.3.1 Production Dalmia Magic Premium Skim Coat is manufacturerd by a process of Blending the Ultrafine cementitious particles. Active cement fillers, Polymers and after that Dalmia Magic Premium Skim Coat goes to packing unit and through two spout stationary packer with 30 kg (±50 gm) and 40 kg (±40 gm).
- **2.2.3.2 Inspection** shall be done at each appropriate stage of manufacturing process. The packed Dalmia Magic Premium Skim Coat bags shall be transported well to ensure that no damage occurs during transportation. As part of quality assurance regular in-process inspections shall be carried out by the trained personnel of the PAC holder.
- 2.2.4 Performance Criteria of Dalmia Magic Premium Skim Coat shall meet the following performance criteria:





	Specification as per BS EN 998-1 : 2003								
Physical Characteristics		Method of Test	BS EN 998-1 : 2003 Requirements		Dalmia Magic Premium Skim C Values		gic 1 Coat		
Water Retentivity (in %)		BS EN 4551 : 2005+A2:2013	-		- 99.9				
Setting	Initial	BS EN 196 : Part3	-		BS EN 196 : Part3 - 245		245		
Time (in minutes)	Final	:1995+A1:2008:Anne x A		_	315				
Average C	compressive	BS EN 1015 – 11 :	CS I	CS II	CS III	CS IV	0 /		
Strength	(in N/mm2)	1999	0.4 - 2.5	1.5 - 5.0	3.5 - 7.5	≥6	0.4		
Average Shrikage (in %)		ASTM C531:2000 (Reapproved 2012)	-		0.7				
Tensile Adhesion Strength at 14 Days (in N/mm2)		BS EN 1015 - 12 : 2000	Declar 0	e Value .8	0.9				

Table 2. Performance Criteria & Results

- **2.3** Selection & Application The user is responsible for the proper use of the product at site. PAC holder shall provide required guidance and instructions for usage of the product at site.
- **2.3.1 Good practice for Application the product at site** Dalmia Magic Premium Skim Coat shall be used at site in accordance with the applicable specifications, instructions and guidelines of the manufacturerr. The user shall also follow the Brochure of the product supplied by the manufacturerr.

2.3.2 Packing, Handling and Marking end using the Product

- 2.3.2.1 Packing After collection of Dalmia Magic Premium Skim Coat, it goes to packing unit and through two spout stationary packer with 30 kg (±50 gm) and 40 kg (±40 gm) and bag to be collected on random basis to ensure weight of dispatch lot.
- **2.3.2.2 Marking** The following information are legibly marked on each package:
 - a) Name of Brand/Product
 - b) Brand/Product Logo
 - c) Sign of Use NO HOOK
 - d) Name of Manufacturerr and address
 - e) MRP (Maximum Retail Price)
 - f) Customer Care details
 - g) Net Weight of Bag
 - h) Batch no. (Week no Month Year)
 - i) Net weight of Bag





2.4 Application process

2.4.1 Surface Preparation

The surface should be made clean and free from dust, dirt and foreign materials 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. Absorbent substrates must be pre-wetted to saturated surface dry (SSD) conditions. For new masonry plaster surfaces, 28 days of curing is recommended before application.

2.4.2 Mixing

For 1 kg of Dalmia Magic Premium Skim Coat, 400-450 ml water is required. 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.

2.4.3 Application

- Apply the first coat on the moistened surface evenly with the help of flat trowel or Putty blade
- 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 and allow it to dry. After drying the second coat, 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, 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 1.5-2 mm.
- Thickness building: The versatility of the Dalmia Magic Premium Skim Coat allows the usage up to 5mm thicknesses. However, maximum thickness per coat should be 2 mm, be allowed to dry before applying the second, third coat etc. to build up the thickness.

2.4.4 Precaution

Although Dalmia Magic Premium Skim coat 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.

2.4.5 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 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.

2.5 Do's and Don't's of Product

2.5.1 Do's for using Dalmia Magic Premium Skim Coat

- Apply over thoroughly cleaned (free of laitance) and properly pre-wetted substrates. Dry and old walls must be ensured proper pre-wetting prior to application.
- Mechanical mixer/stirrer is a must for proper mixing of water resistant and strength enhancing polymers.
- Make sure that the surface is plastered or rendered with cementitious material.
- Substrate must be thoroughly cured at least for 21 days prior to application, particularly with M-sand plaster.
- All the structural cracks should be filled with special mortars made for crack filling commonly available in market.
- All the seepage areas should be sealed/treated properly before application.
- Use at least 8 inches or longer blade for application for better levelling and less blade marks.
- 1 kg Dalmia Magic Premium Skim Coat requires 400-450 ml of water depending upon mechanical strength requirement. Putting more water affects strength.
- Put water incrementally in two steps; first, add 300 ml of water to 1 kg of Dalmia Magic Premium Skim Coat and mix it for some time and then add the remaining water. Mix it till a consistent paste is achieved.
- Extra care must be taken for regions with high salt content; wash the skirting area thoroughly to clean up salt accumulation, if any. A cementitious waterproofing coating may be required in some damp areas.
- Mix only that much quantity of skim coat which can be consumed preferably within 90 minutes to avoid debonding failure of skim coat.





2.5.2 Don't's for using Dalmia Magic Premium Skim Coat

- Do NOT apply on Dry and/or Dirty surfaces
- Do NOT apply on sealants/primers/paints or any other coated and/or non-cementitious surface as such
- Do NOT use hand or stick/rod for mixing skim coat.
- Do NOT apply the 2nd coat of skim coat if the first coat is not properly dried.
- For thicker applications, do not exceed 2mm per coat.
- Do Not apply skim coat when the wall surface is hot in case of exterior surface facing sun.
- Do NOT apply in random directions. Use the blade either vertically or horizontally to avoid random blade marks.
- Do NOT add water into the dry mix powder. Instead, take the water in a container and then add the dry mix powder into the water.
- Do Not mix additional skim coat powder once the mixing operation is complete.
- Do Not keep the skim coat after mixing for more than 90-120 minutes and do not apply after remixing once 90-120 min are over.
- Do Not leave the skim coat surface without coating with clear coat in case the exterior surface is to be left unpainted.
- Do NOT use sand papers coarser than 320 grit; rather, use >320 grit sand paper for sanding.
- Do NOT sand the skim coat within 24 hrs of application.

Note : Please note that these points are directly related to the bonding of the skim coat with the substrate; if not followed, the skim coat will eventually debond and peel off from the surface on which it is applied.

- 2.6 Skills /Training Needed or Application No special skills other than normal skills of a painter/applicator as required for application of coat of Dalmia Magic Premium Skim Coat shall be required. However, the PAC holder shall provide on request necessary guidance to the users at site, if required.
- 2.7 Guarantees/ Warranties Provided by the PAC Holder- The manufacturerr shall furnish a warranty for a period from the date of manufacturing for product at plant and thereafter storage and application at the owner of the building/structure over which surface this product has to be applied before painting application, provided this Dalmia Magic Premium Skim Coat is applied strictly in accordance with the applicable specifications, instructions and guidelines of the manufacturerr.





2.8 Services Provided by the PAC Holder to the Customer

- **2.8.1** The PAC holder shall provide pre-sale advisory regarding the product. Customer/user may obtain from the PAC holder details of the advice that may be provided to him.
- **2.8.2** Users/Customers should ascertain from the PAC holder the type of service, the PAC holder is prepared to provide.





Part 3 BASIS OF ASSESSMENT AND BRIEF DESCRIPTION OF ASSESSMENT PROCEDURE

3.1 Basis of Assessment

3.1.1 Factory Inspection

The manufacturing plant was inspected by Officers of the Council through video conferencing in the prevailing COVID-19 scenario. During the visit, the manufacturing process, raw materials & finished products were found to be in line with the manufacturing process description covered as part of this certificate & Quality Assurance Plan. The technical persons were also found to be conversant with technical aspects. The product formulation was prepared & applied on the surface of one existing wall within factory premise & process was explained during virtual visit.

3.2 Laboratory Tests Done for Assessment

3.2.1 Testing of samples

- i. The performance tests for Dalmia Magic Premium Skim Coat conforms to the Specification requirement of BS EN 998-1:2003 namely Water Retentivity, Setting Time, Compressive Strength, Shrinkage, Tensile Adhesion Strength, density of Hardened Prism, Tensile Adhesion Strength after Accelerated weathering carried out at M/s Ltd., SETSCO Services Pte Singapore a Housing Development Board, Singapore accredited Third Party Laboratory, Singapore.
- ii. Comparison of Coverage Characteristics, Shade Reproducibility of Paint with and without Primer on surface of Dalmia Magic Premium Skim Coat, Pull off Adhesion Strength of Paint with Dalmia Magic Premium Skim Coat and White Cement based Wall Putty carried out by M/s Shriram Institute for Industrial Research, New Delhi.
- iii. Comparison test for the fineness, Average Polymer content and Tensile Adhesion Strength of with Dalmia Magic Premium Skim Coat and White Cement based Wall Putty carried at M/s SETSCO Services Pte Ltd., Singapore. The various performance characteristics tests conducted by different laboratories on the product conform to stipulated codal requirements & are as per the various Tables below;





Table 3. Test done at M/s SETSCO Services Pte Ltd., Singapore a Housing Development Board, Singapore accredited Third Party Laboratory, Singapore) for Physical Characteristics of Dalmia Magic Premium Skim Coat

Specification as per BS EN 998-1 : 2003								
Physi Characte	cal pristics	Method of Test	BS I R	Dalmia Magic Premium Skim Coat				
Water/P Rati	owder .o			-			0.32	
Wate Retentiv %)	er ity (in	BS EN 4551 : 2005+A2:2013		-			99.9	
Setting Time (in	Initia 1	BS EN 196 : Part3 -1995+41-2008-App	_			245		
minutes)	Final	ex A			315			
Avera Compre	age essive	BS EN 1015 – 11 :	CS I	CS II	CS III	C S IV	8.4	
N/mr	n2)	1999	0.4 - 2.5	1.5 - 5.0	3.5 - 7.5	≥6		
Average Shrikage (in %)		ASTM C531:2000 (Reapproved 2012)	-				0.7	
Tensile Adhesion Strength at 14 Days (in		BS EN 1015 – 12 : 2000	Dec	clare Val	ue 0.8		0.9	



(Photograph shows Tensile Adhesion Strength test at age of 14 days) Table 4. Test done at M/s SETSCO Services Pte Ltd., Singapore a Housing





Development Board, Singapore accredited Third Party Laboratory, Singapore) for Density of Hardened Prism of Dalmia Magic Premium Skim Coat

Sample Reference	mple Reference Dalmia Magic Premium Skim Co				
Specimen Reference	1 2 3				
Size (in mm)	40 x 40 x 160				
Weight of Prism (in gm)	284.3	280.4	285		
Density (in Kg/m3)	1110	1100	1110		
Average Density (in Kg/m3)		1110			

Table 5. Test done at M/s SETSCO Services Pte Ltd., Singapore a Housing Development Board, Singapore accredited Third Party Laboratory, Singapore) for Tensile Adhesion Strength after Accelerated Weathering of Dalmia Magic Premium Skim Coat

Tensile Adhesion Strength (in N/mm2) after Accelerated Weathering															
Sample Reference		Dalmia Magic Premium Skim Coat							Method of Test						
Specimen Reference	1	2	3	4	5	6	7	8	9	10	11	12	BS EN 1015 - 12 · 2000		
Flow (in mm)						18	80						(100 cycles)		
Curing Condition	14	· day	s un 100	der S Cycl	Shado es of	ed ar acce	nbier lerat	nt co ed w	nditi eath	on fo ering	ollow g	by	of accelerated		
Observation after Weathering	Ap	Applied Skim Coat shows no discoloration or cracks							cks	weathering, each cycle					
Bond Area (in mm2)		1963						consists of 4 hrs of UVA							
Age of Test (in days)						4	.3						340 lamps at 60°C		
Tensile Adhesion Strength (in N/mm2)	0. 9	0. 9	0. 9	0. 9	0. 8	0. 9	0. 9	0. 9	0. 9	0. 9	0. 8	0. 9	followed by 10 minutes of water		
Average Tensile Adhesion Strength (in N/mm2)	0.9 spray Ten strer							spray before Tensile adhesion strength							
Mode of Failure		Coh	iesio	n Fra	actur	e (Fr	actu	re in	mor	tar it	self)		Test		



(Photograph shows Tensile Adhesion Strength after Accelerated Weathering)





Table 6. Comparison Test done at M/s Shriram Institute for Industrial Research, New Delhi) for Coverage characteristics of Dalmia Magic Premium Skim Coat and market Wall Putty.

Sample	Coverage	e (Sqft per Kg)	Remarks
	Market wall Dalmia Magic		
	Putty	Premium Skim	
		Coat	
Market Wall Putty/			29% Higher Coverage
Dalmia Magic	45 60	58.06	in case of Dalmia
Premium Skim Coat	43.09	36.90	Magic Premium Skim
			Coat
Primer (Single coat)			4% lower coverage in
	111.86	107.1	case of Dalmia Magic
			Premium Skim Coat
Paint (Asian Paint L-			6% More Coverage in
143) Double Coat on	222.61	236.40	case of Dalmia Magic
Primer Surface			Premium Skim Coat
Paint (Asian Paint L-			11% More Coverage
143) Double Coat	109.24	010.80	in case of Dalmia
directly Without	190.04	219.09	Magic Premium Skim
Primer Surface			Coat

Table 7. Comparison Test done at M/s Shriram Institute for Industrial Research, New Delhi) for Pull off Adhesion Strength of Paint with Dalmia Magic Premium Skim Coat and market wall Putty.

Sample	Pull off T	ensile Adhesion	Remarks
	Stren	igth (in MPa)	
	Market	Dalmia Magic	
	Wall Putty	Premium Skim	
	-	Coat	
Directly			31% Higher Strength
Painted			in case of Dalmia
Surface	1.16 MPa	1.52 MPa	Magic Premium Skim
(Without			Coat
Primer)			
Painted			95% Higher Strength
Surface (With 0.00 MPc		1 76 MDo	in case of Dalmia
Primer)	0.90 MFa	1.70 MFa	Magic Premium Skim
			Coat

Table 8. Test done at M/s Shriram Institute for Industrial Research, New Delhi) for Shade Reproducibility of Paint with and without Primer on Dalmia Magic Premium Skim Coat

Shade Reproducibility of Paint with and without Primer on surface of Dalmia Magic Premium Skim Coat										
Sample Reference	Paint Applied	ΔE Values	Remarks							
Dalmia Magic Premium Skim Coat	Asian Paints L-143	0.97	All the values are < 1.0 No.							
Dalmia Magic Premium Skim Coat + Primer	(Tractor Emulsion, Water Based)- Light Ivory	0.93	variation in shade was							
Dalmia Magic Premium	Asian Paints L-315	0.54	observed on							





Skim Coat	(Tractor Emulsion, Water		application on
Dalmia Magic Premium Skim Coat + Primer	Based)- Rain Drop	0.41	Dalmia Magic Premium Skim Coat as compared to market wall Putty.
			Putty.

Table 9. Comparison Test done at M/s SETSCO Services Pte Ltd., Singapore a Housing Development Board, Singapore accredited Third Party Laboratory, Singapore) for Fineness and Average Polymer Content of Dalmia Magic Premium Skim Coat and White Cement based Wall Putty.

Property	Method/Standard Code of Testing	White Cement based Wall Putty	Dalmia Magic Premium Skim Coat	Remarks
Average Polymer Content (in %)	CTD/TP/08 – 2016 (TGA & SDTA)	1.9%	2.3%	21% more Polymer Content in case of Dalmia Magic Premium Skim Coat
Fineness Blaine (in m2/Kg)	As per BS EN 196:Part 6:2010	894 m2/Kg	1211 m2/Kg	35% Higher Fineness in case of Dalmia Magic Premium Skim Coat

Table 10. Comparison Test done at M/s SETSCO Services Pte Ltd., Singapore a Housing Development Board, Singapore accredited Third Party Laboratory, Singapore) for Tensile adhesion Strength of Dalmia **Magic** Premium Skim Coat and White Cement based Wall Putty.

······································																				
Tensile Adhesion Strength (in N/mm2) as per BS EN 1015 – 12 : 2000																				
Sample Reference		Dalmia Magic Premium Skim Coat White Cement based Wall Putty																		
Specimen Reference	1	1 2 3 4 5 6 7 8 9 10 1 2 3 4 5 6 7 8 9 10																		
Substrate for application	Gypsum																			
Bond Area (in mm2)	1963																			
Age of Test (in days)	28																			
Tensile Adhesion Strength (in N/mm2)	0.05	0.05	5 0.	.53 0.05	5 0.24	0.23	0.89	0.05	0.69	0.38	0.05	0.16	0.23	0.05	0.05	0.05	0.05	0.05	0.16	0.11
Average Tensile Adhesion Strength (in N/mm2)	0.53 0.1																			
Mode of Failure	Failure in the Gypsum Layer																			







Table 11. Surface during behavior of Dalmia Magic Premium Skim Coat by spectro analytical lap ltd, Greater Noida

Simple	Test meth	Test method ASTM E 84-16 Acceptance Criteria									
	1	Class – A	Class – B	Class – C	Observed value						
Dalmia Magic Premium Skim Coat 2.75 -3.00 mm coating thickness	Flame Spread Test	0-25	26-75	76-200	5						
	Smoke Test	0-450	0-450	0-450	20 Conforming to Class A						





- **3.3** Application of Product at Project site Test results of Pull off Adhesion Strength
- **3.3.1** Pull off Adhesion Strength of Dalmia Magic Premium Skim Coat at Lodha Developers, Mumbai

B U REAU VERITAS	Test Re	sport	
Test Order/Report No.: BVIPL SPL : 25943C/985/12/2018 Date of Receipt : 10.12.2018 NEW BUILDING SOLUTIONS DALMAA CENERT (Bharvit Jumitte) Itim and 21th Toor, Hansel Age, Building, 15 Barakhamba Road, New Delhi- Itim and 21th Toor, Hansel Age, Building, 15 Barakhamba Road, New Delhi- Source of Sample Tested : 01 (Dnc only), Customer's Reference : Email d1.0.12.2018 Condition of Sample Tested : 01 almia magi premiur Project/Sitas : State-Actory Product Name# : Delmia magi premiur Project/Sitas : Site - Iodha Palava Froject/Sitas : Site - Iodha Palava Product Name# : Delmia magi premiur Project/Sitas : Site - Iodha Palava Project/Sitas : Site - Iodha Palava Project/Sitas : Site - Iodha Palava Project/286653 Period of Test : 10.12.2018 To 10.12	Date: 11.12.2018 Page 1 of 1 HESION a. m skim coat. oni Goan, Dombivali our-1 2018		
SI. No. Test Conducted & Description	Results (MPw)		
A DALMIA MAGIC PREMIUM SKIM COAT (THICKNESS- 2mm) APPLY ON 26.11	.2018.		
1 Point-1 (on plaster)	1.18 MPa		
2 Point-2 (on RDC Col)	1.09 MPa		
A furnished by the customer. The Tests are not covered under the NAML scope of accreditation. Note: I. The result relate only the hans tested. 2. Report Hall not be reproduced except in full, without the written appro 3. Any correction invalidates the sport. For Bureau Veritas (India) PV. Ltd. Construction Services Laboratory Shabman Kazi Operations Manager-Lab AuthOffsed Signatory	usi of the lab.	1	

3.3.2 Pull off Adhesion Strength of Dalmia Magic Premium Skim Coat at Rohan Builders, Mumbai

	BUREAU VERITAS	Test Report	Proceq Proceq
Test Ord Date of 1 New Bu Dalmia 11 th and 15 Barak	er/Report No: 8VIPI: SPI: 259415/2023/3/2020 Recent: (Bio3.2020 Riding Solution, Commet (Binarat) Limited 31 ¹⁰ Room, Hanalaya, Budieng, Hamba RoadWoo (Bini - 110001	Date: 03.03.2020 Page 1 of 1	302 02032000 tos2 1.455HPa 30% 0.559Hpa 30% 0.559Hpa 0.559Hpa 0.550Hpa 0.500Hpa
Source o Number Oustome Project # Condition Lab Refe Sample D Period of Test Met	TSST REPORT ON FULL OFF ADMESSOR 1 sample Sample supplied by the customer. of sample Freded 0.10m covidy is Reference Email dL8.00.2020 val Sample Satistationy var Sengle Satistationy exception 4 2020/AdX/327127 rest No. 2020/AdX/327127 Tett 1.402.2020 to 02.03.2020 Red Satistationy	Pune	
SIL No.	Test Conducted & Description	Results	
A	RCC WALL + DALMIA MAGIC PREMIUM SKIM COAT (Server Thickneys)	DMPa)	A CARDINAL STATE OF THE OWNER OF
1	Point-1		
2	Point-2	145	ALLER
3	Point.3	1.34	
8	RCC CEIUNG + DALMIA MAGIC PREMIUM SKIM COAT (3mm Thickness)	2.39	
1	Point-1		
2	Point-2	101	
1	Paint-3	1.00	
As furnist	ed by the customer.	2.09	40 40 2020 (103)
Test Witne Limited on Note: 1. 2. 3. For Bureau Construction	A school water and a school of school and sc	Velapure (Damis Cement (Bharat)	Roy Royal Start St
C	Decut Ge Manager Authersed Signatory	CEMAWEER	





3.3.3 Pull of Adhesion Strength of Dalmia Magic Premium Skim Coat at Sethia Infrastructure, Mumbai







PART 4 STANDARD CONDITIONS

The certificate holder shall satisfy the following conditions:

- 4.1 The certificate holder shall continue to have the product reviewed by BMBA.
- **4.2** The product shall be continued to be manufacturerd according to and in compliance with the manufacturing specifications and quality assurance measures which applied at the time of issue or revalidation of this certificate. The Scheme of Quality Assurance separately approved shall be followed.
- **4.3** The quality of the product shall be maintained by the certificate holder.
- **4.4** The product user should install, use and maintain the product in accordance with the provisions in this Certificate.
- **4.5** This certificate does not cover uses of the product outside the scope of this appraisal.
- **4.6** The product is appraised against performance provisions contained in the standards listed in Part-5. Provisions of any subsequent revisions or provisions introduced after the date of the certificate do not apply.
- Where reference is made in this Certificate to any Act of Parliament of India, 4.7 Rules and Regulations made there under, statutes, specifications, codes of practice, standards etc. of the Bureau of Indian Standards or any other national International standards bodv and the Organization for Standardization manufacturerr's (ISO), company standards. instruction/manual etc., it shall be construed as reference to such publications in the form in which they were in force on the date of grant of this Certificate (and indicated in Part 5 to this Certificate)
- **4.8** The certificate holder agrees to inform BMBA of their distributors / licensees whenever appointed by him and agrees to provide to BMBA a six monthly updated list thereof.
- **4.9** The certificate holder agrees to provide to BMBA feedback on the complaints received, the redressal provided, and the time taken to provide redressal on complaint to complaint basis as soon as redressal is provided. BMBA agrees to provide the certificate holder the user feedback received by it, if any.
- **4.10** If at any time during the validity period, PACH is unable to fulfill the conditions in his PAC, he should on his own initiative suspend using the PAC and notify Chairman, TAC the date from which he has suspended its use, the reason for suspension and the period by which he will be able to resume. He shall not resume without the prior permission of BMBA. He shall also inform, simultaneously, his agents, licensees, distributors, institutional, government, public sector buyers, other buyers and all those whom he has informed about his holding the PAC. He shall also inform all those who buy his product(s) during the period of suspension. He shall provide to BMBA at the earliest the list of who have been so informed by him.

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- 4.11 In granting this Certificate, BMBA takes no position as to:
 - i. The presence or absence of patent or similar rights relating to the product;
 - ii. The legal right of the Certificate holder to market, install or maintain the product;
 - iii. The nature of individual installations of the product, including methods of workmanship.
- **4.12** BMTPC and the Board of Agreement of BMTPC (BMBA) take no position relating to the holder of the Performance Appraisal Certificate (PACH) and the users of the Performance Appraisal Certificate (PAC) respecting the patent rights / copy rights asserted relating to the product / system/ design / method of installation etc. covered by this PAC. Considerations relating to patent / copy rights are beyond the scope of the Performance Appraisal Certification Scheme (PACS) under which this PAC has been issued. PACH and users of this PAC are expressly advised that determination of the Claim / validity of any such patent rights / copy rights and the risk of infringement of such rights are entirely the responsibility of PACH on the one hand and that of the users on the other.
- **4.13** It should be noted that any recommendations relating to the safe use of the product which are contained or referred to in this Certificate are the minimum standards required to be met with when the product is installed, used and maintained. They do not purport in any way to restate or cover all the requirements of related Acts such as the Factory Act, or of any other statutory or Common law duties of care, or of any duty of care which exist at the date of this Certificate or in future, nor is conformity with the provisions of this Certificate to be taken as satisfying the requirements of related Acts.
- **4.14** In granting this Certificate,BMTPC and BMBA does not accept responsibility to any person or body for any loss or damage, including personal injury, arising as a direct or indirect result of the use of this product.
- **4.15** The Certificate Holder indemnifies BMBA, its officers and officials involved in this assessment against any consequences of actions taken in good faith including contents of this certificate. The responsibility fully rests with the Certificate Holder and User of the Product.
- **4.16** The responsibility for conformity to conditions specified in this PAC lies with the manufacturerr who is granted this PAC. The Board (BMBA) will only consider requests for modifications or withdrawal of the PAC.
- **4.17** The PAC Holder shall not use this certificate for legal defense in cases against him or for legal claims he may make from others.

Butground

Chairman TAC & for and on behalf of Member Secretary, BMBA

Dr. Shailesh Kr. Agrawal Chairman, TAC 27 & Member Secretary, BMBA Building Materials and Technology Promotion Council Ministry of Housing and Urban Affairs, Govt. of India Core 5A, 1st Floor, India Habitat Centre Lodhi Road, New Detri 100/03*

Place: New Delhi Date of issue_____





- **4.11** In granting this Certificate, BMBA takes no position as to:
 - i. The presence or absence of patent or similar rights relating to the product;
 - ii. The legal right of the Certificate holder to market, install or maintain the product;
 - iii. The nature of individual installations of the product, including methods of workmanship.
- **4.12** BMTPC and the Board of Agreement of BMTPC (BMBA) take no position relating to the holder of the Performance Appraisal Certificate (PACH) and the users of the Performance Appraisal Certificate (PAC) respecting the patent rights / copy rights asserted relating to the product / system/ design / method of installation etc. covered by this PAC. Considerations relating to patent / copy rights are beyond the scope of the Performance Appraisal Certification Scheme (PACS) under which this PAC has been issued. PACH and users of this PAC are expressly advised that determination of the Claim / validity of any such patent rights / copy rights and the risk of infringement of such rights are entirely the responsibility of PACH on the one hand and that of the users on the other.
- **4.13** It should be noted that any recommendations relating to the safe use of the product which are contained or referred to in this Certificate are the minimum standards required to be met with when the product is installed, used and maintained. They do not purport in any way to restate or cover all the requirements of related Acts such as the Factory Act, or of any other statutory or Common law duties of care, or of any duty of care which exist at the date of this Certificate or in future, nor is conformity with the provisions of this Certificate to be taken as satisfying the requirements of related Acts.
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- **4.17** The PAC Holder shall not use this certificate for legal defense in cases against him or for legal claims he may make from others.

Place: New Delhi Date of issue_____ Chairman TAC & for and on behalf of Member Secretary, BMBA





PART 5 LIST OF STANDARDS AND CODES USED IN ASSESSMENT

5.1 Standards - These Standards are referred for carrying out a particular test only and do not specify the requirement for the whole product as such.

- 5.1.1 BS EN 998-1:2003 Specification for mortar for masonry Rendering and Plastering mortar
- 5.1.2 IS: 4031 (Part-1)-1996 Determination of Fineness (Residue) by Dry Test Sieve Method
- 5.1.3 IS: 4031 (Part-2) 1999 Determination of Fineness by Blaine Air Permeability Method
- 5.1.4 Determination of Color Coordinates (As per the Instrument maker -BYK Gardner USA procedure)
- 5.1.5 BS EN 4551: 2005+A2:2013 Method of test for mortar and screed – Chemical and Physical testing
- 5.1.6 BS EN 196: Part 3:1995+A1:2008:Annex A Determination of Setting Times and Soundness.
- 5.1.7 BS EN 196: Part 6:2010- Determination of Fineness.
- 5.1.8 CTD/TP/08 2016 (TGA & SDTA) Determination of Polymer content
- 5.1.9 BS EN 1015 11: 1999 Determination of flexural and compressive Strength of hardened mortar.
- 5.1.10 ASTM C531: 2000 (Reapproved 2012) Determination of Linear Shrinkage
- 5.1.11 BS EN 1015 12:2000 Determination of adhesive strength of hardened rendering and plastering mortars on substrate.
- 5.1.12 ASTM- D 4541 Standard Test Method for Pull-Off Strength of Coatings Using Portable Adhesion Tester.
- 5.1.13 ASTM D1895B Determination of Bulk density
- 5.1.14 BS EN 196-03: 2016 Determination of Standard Consistency
- 5.1.15 IS : 5513-1976 Determination Pot Life (In House Test Procedure)
- 5.1.16 BS EN 1015-12: 2000 Determination of Pull Off Adhesion Strength
- 5.1.17 ASTM E84 –16 Standard Test Method for Surface Burning

Characteristics of Building Materials

5.2 Company Standards of the PAC holder – The branded design & specifications of the raw materials and finished product are as submitted by the manufacturer. The PAC holder has to make available the company standards to the consumers according to which testing have been done.

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CERTIFICATION

In the opinion of Building Materials & Technology Promotion Council's Board of Agreement (BMBA), **Dalmia Magic Premium Skim Coat** bearing the mark manufactured by M/s Dalmia Cement (Bharat) Ltd., New Building Solutions Unit is satisfactory if used as set out above in the text of the Certificate. This Certificate PAC No: 1055-P/2021 is awarded to **M/S Dalmia Cement (Bharat) Ltd., New Building Solutions,** 11th & 12th Floor, Hansalaya Building, 15, Barakhamba Road, New Delhi.

The period of validity of this Certificate is as shown on Page 1 of this PAC. This Certificate consists of a cover page and pages 1 to 32.



On behalf of BMTPC Board of Agreement, Chairman, Technical Assessment Committee (TAC) of BMBA & Member Secretary, BMTPC Board of Agreement (BMBA) Under Ministry of Housing and Urban Affairs, Government of India





PART 6 ABBREVIATIONS

Abbreviations

BMBA	Board of Agreement of BMTPC
BMTPC Council	Building Materials and Technology Promotion
CPWD	Central Public Works Department
ED	Executive Director of BMTPC
Ю	Inspecting Officer
MS	Member Secretary of BBA
PAC	Performance Appraisal Certificate
PACH	PAC Holder
PACS	Performance Appraisal Certification Scheme
QAP	Quality Assurance Plan
TAC	Technical Assessment Committee (of BMBA)
IS	Indian Standard
HDB	Housing Development Board
ASTM	American Society for Testing and Materials
BS EN	British Standard European Norm
CTD	Common Technical Document
TGA	Thermal Gravimetric Analysis
SDTA	Single Differential Thermal Analysis
DSC	Differential Scanning Calorimetry





Performance Appraisal Certification Scheme - A Brief

Building Materials & Technology Promotion Council (BMTPC) was set up by the Government of India as a body under the Ministry of Housing &Urban Poverty Alleviation to serve as an apex body to provide inter-disciplinary platform to promote development and use of innovative building materials and technologies laying special emphasis on sustainable growth, environmental friendliness and protection, use of industrial, agricultural, mining and mineral wastes, cost saving, energy saving etc. without diminishing needs of safety, durability and comfort to the occupants of buildings using newly developed materials and technologies.

During the years government, public and private sector organizations independently or under the aegis of BMTPC have developed several new materials and technologies. With liberalization of the economy several such materials and technologies are being imported.

However, benefits of such developments have not been realized in full measure as understandably the ultimate users are reluctant to put them to full use for want of information and data to enable them to make informed choice. In order to help the user in this regard and derive the envisaged social and economic benefits the Ministry of Housing &Urban Poverty Alleviation has instituted a scheme called Performance Appraisal Certification Scheme (PACS) under which a Performance Appraisal Certificate (PAC) is issued covering new materials and technologies. PAC provides after due investigation, tests and assessments, amongst other things information to the user to make informed choice.

To make the PACS transparent and authentic it is administered through a Technical Assessment Committee (TAC) and the BMTPC Board of Agreement (BMBA) in which scientific, technological, academic, professional organizations and industry interests are represented.

The Government of India has vested the authority for the operation of the Scheme with BMTPC through Gazette Notification No. 1-16011/5/99 H-II in the Gazette of India No. 49 dated 4th December, 1999.

Builders and construction agencies in the Government, public and private sectors can help serve the economic, development and environmental causes for which the people and Government stand committed by giving preference to materials and technologies which have earned Performance Appraisal Certificates.

Further information on PACS can be obtained from the website: <u>www.bmtpc.org</u>





ANNEX –1

QUALITY ASSURANCE PLAN FOR DALMIA MAGIC PREMIUM SKIM COAT

Sr.No.	Material / Process	Stage	Inspection/ Testing	Sampling	Responsibility
1	RABH/Aggt. Powder	Raw Material	Inspection/ Testing	1500 gm/Consignment	Section In Charge
2	OPC	Raw Material	Inspection/ Testing	3000 gm/Consignment	Section In Charge
3	Adhesive Polymer Resin	Raw Material	Inspection/ Testing	500 gm/Consignment	Section In Charge
4	Dalmia Magic Premium Skim Coat Powder	In-Process	Inspection/ Testing	500 gm/Sample	Section In Charge
5	Dalmia Magic Premium Skim Coat Powder	Finished Products	Inspection/ Testing	2000 gm/Consignment	HOD
6	Dalmia Magic Premium Skim Coat Powder	Finished Products	Inspection/ Testing	2500 gm/Week Avg.	HOD