

TEST REPORT

Test Report Issued To:

DALMIA CEMENT (BHARAT) LTD

11TH & 12TH FLOOR, HANSALAYA BUILDING, 15,
BARAKHAMBA ROAD,, NEW DELHI, DELHI, INDIA,

Test Report No: 170706070/170706070-1

Date of Issue: 26-Jul-2017



Sample Receipt Date: 06-Jul-2017

Date of Start of Testing: 20-Jul-2017

Date of Completion of Test: 20-Jul-2017

Customer Relationship Number 28946

Sample Description :

DALMIA MAGIC PREMIUM SKIM COAT



Customer Reference No :

WO/PO No:

Kind Attention : MR. SANDEEP TRIPATHI

E-Mail: tripathi.sandeep@dalmiacement.com

Contact No: NA

Sample Condition :

Sample Quantity (Approx) :

Sample Size (Approx) :

SAMPLE NOT DRAWN BY OUR LABORATORY. THE RESULTS RELATE ONLY TO THE ITEMS TESTED

Report Issued by

Authenticity of report can be verified by mail at verification@spectrolab.in

This is a Digitally Signed Report and hence doesn't require Physical Signature.

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BIS, DDA, Approved, ISO 9001:2008 & ISO 14001:2004 & OHSAS 18001:2007 Certified Laboratory

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INTRODUCTION

This report describes the results of the ASTM E84: **Standard Test Method for Surface Burning Characteristics of Building Materials**, a method for determining the comparative surface burning behaviour of building materials. This test is applicable to exposed surfaces, such as ceilings or walls, provided that the material or assembly of materials, by its own structural quality or the manner in which it is tested and intended for use, is capable of supporting itself in position or being supported during the test period.

The purpose of the method is to determine the relative burning behavior of the material by observing the flame spread along the specimen. Flame spread and smoke density developed are reported, however, there is not necessarily a relationship between these two measurements.

TEST METHOD

ASTM E84 –16: Standard Test Method for Surface Burning Characteristics of Building Materials

CRITERIA OF ACCEPTANCE

Class A	Flame spread Index	:	0-25
	Smoke Index	:	0-450
Class B	Flame spread Index	:	26-75
	Smoke Index	:	0-450
Class C	Flame spread Index	:	76-200
	Smoke Index	:	0-450



TEST REPORT

PRODUCT DETAIL

Name of Product : DalmiaMagic PREMIUM SKIM COAT
Description about Product : DalmiaMagic is a proprietary cementitious surface finish solution
Thickness of coating : 2.75 - 3.0 mm

RESULTS

1. Sample satisfies Class : **CLASS A**
2. Flame Spread Index : **5** range (0-25)
3. Smoke Index : **20** range (0-450)

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Annexure A CORRECTION FACTOR

CORRECTION FACTOR FOR CALCULATING FLAME SPREAD INDEX

- If this total area (A_T) is less than or equal to 97.5 ft·min then
The flame spread index shall be $FSI = 0.515 * A_T$.
- If the total area (A_T) is greater than 97.5 ft·min then
The flame spread index shall be $FSI = 4900 / (195 - A_T)$.

Here A_T represents Total Area i.e. $A_T = A_1 + A_2$

A_1 = Area Under the curve where first peak is observed.

A_2 = Area just above the curve in the line of First peak point.

CORRECTION FACTOR FOR CALCULATING SMOKE DEVELOPED INDEX

Smoke Developed (SD) is determined by dividing the total area under the obscuration curve by that of cement board, and multiplying by 100. SD is then rounded to the nearest multiple of 5 if less than 200. SD values over 200 are rounded to the nearest multiple of 50.

Smoke Developed Index = $\frac{\text{Area under the Obscuration Curve}}{\text{Area under the Cement Board}} \times 100$

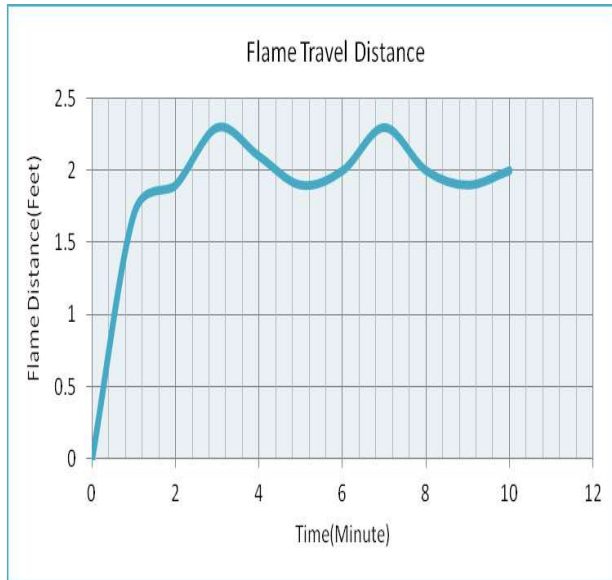
OBTAINED DATA

Time to Ignition (sec)	: 12 second
Time to Max FS (sec)	: 600 second
Maximum FS (feet)	: 2.3 feet
Max Temperature (°C)	: 62 °C
Time to Max Temperature (sec)	: 600 seconds
$A_T = (T_1+T_2)$: 11.30 ft.minute
Smoke Area	: 0.4 Ft.minute
Cement board Smoke Area	: 2 Ft.minute
Unrounded FSI	: 5.81
Hence the round off fig shall be [5.91 will be consider as 5]	
Smoke Developed Index	: 20
Flame Spread Index	: 5

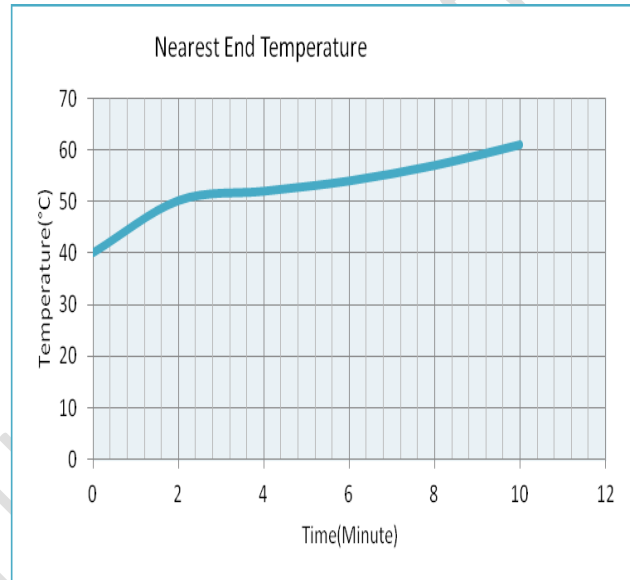


ANNEXURE B GRAPHS and PHOTOGRAPHS

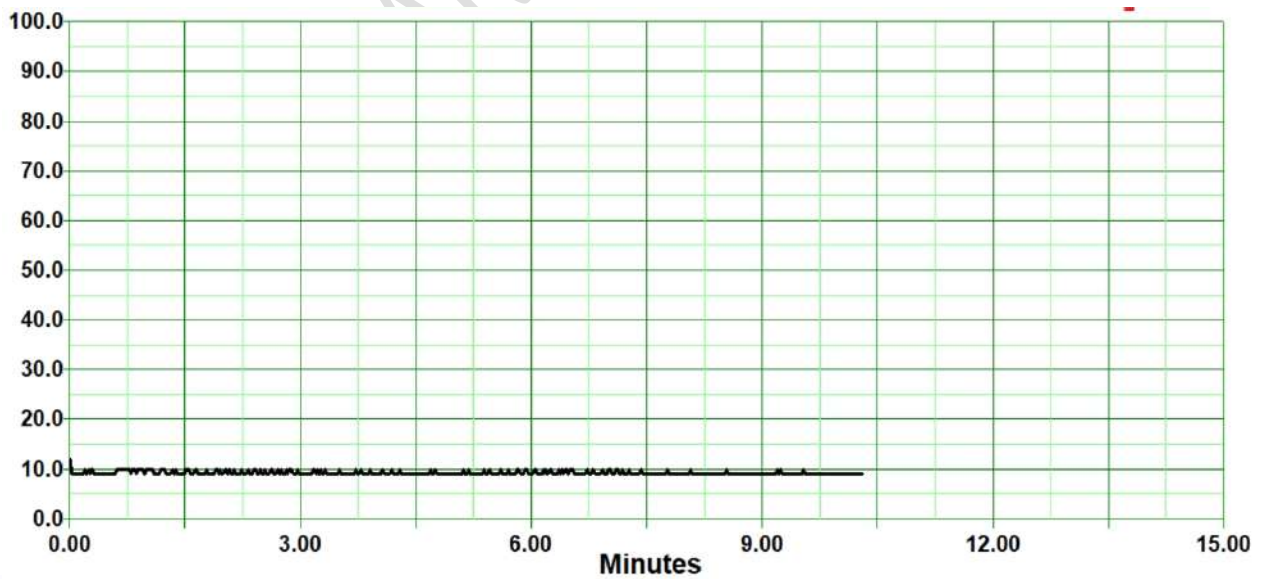
1. Flame Travel



2. Nearest end Temperature





3. Smoke Percentage (%)



R. K. Singh



PHOTOGRAPHS

Sample Before Test	Sample After Test
	

Flame Spread During Test



R. K.



TESTING LOCATION

The test was conducted at our Laboratory
M/s. Spectro Analytical Labs Limited
S-1 GNEPIP, Surajpur Industrial Area
Kasna, Greater Noida, Phase – V
Gautam Budha Nagar (U.P.)
Pin Code: 201308
Ph: 0120-2341251/52

Analyst

Authorised Signatory

-----End of Test Report-----

