

TEST REPORT

Test Report Issued To:

GREENPLY INDUSTRIES LIMITED.

VILLAGE-KRIPARAMPUR,
PO-SUKHDEVPUR,DIST-SOUTH24, PARGANAS, WEST
BENGAL, INDIA,

Test Report No: N180516008/N180516008-1

Date of Issue: 26-Jun-2018



Sample Booking/Receipt Date: 16-May-2018

Date of Start of Testing: 04-Jun-2018

Date of Completion of Test: 04-Jun-2018

Customer Relationship Number 50213

Sample Description :

PLY BOARD



Customer Reference No :

WO/PO No:

Kind Attention : PARTHA NATH

E-Mail: parthan.krp@greenply.com

Contact No:

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.

Spectro Analytical Labs Limited S-1, GNEPIP, Surajpur Industrial Area,Phase-V, Kasna, Greater Noida-201308 (India)

Phone : +91-120-2341250,2341251 || URL : www.spectro.in || Email: care@spectro.in

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

Please refer to our Website www.spectro.in for Terms & Condition

Test Requested

Steiner Tunnel Test for determining the spread of flame and Smoke developed during burning behavior of building materials.

Scope of Job

Performing spread of flame and Smoke developed test on PU foam as per ASTM E84 –16: Standard Test Method for Surface Burning Characteristics of Building Materials.

Test Period

Sample Receiving Date : 16th May 2018
Test Starting Date : 04th June 2018
Test Completion Date : 04th June 2018

Product Name

PLY BOARD

Manufacturer

Greenply Pvt. Ltd.

Test Report Issued To

Greenply Pvt. Ltd.

Details of Specimen Tested

Length : 2440 mm
Breadth : 1220 mm
Thickness : 11 mm

Details Verified By: Spectro Analytical Labs Ltd.

Ambient Temperature

At the time of Commencement of Test the Average Ambient Temperature was 39.6^oC.




Analyst Signature

Authorised Signatory

Sample Preparation

The sample was 11 mm in total thickness by 600 mm in width by 2440 mm in length. Approx. 3 numbers of samples were used to spread over the tunnel to form the requisite specimen length. Prior to the testing, the sample was conditioned to constant weight at a temperature of $73 \pm 5^\circ\text{F}$ ($23 \pm 3^\circ\text{C}$) and a relative humidity of $50 \pm 5\%$. During testing the sample was self-supporting and was symmetrical from both sides.

Results and Discussion

Flame Spread Result

Calculated Flame Spread (CFS)	11.69
Flame Spread Index	12

Smoke Developed Result

Calculated Smoke Developed	154.73
Smoke Developed Index	155

Note: For Further details and observations refer to Annexure A and B



Analyst Signature



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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.

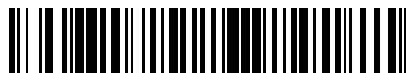
CORRECTION FACTOR FOR CALCULATING SMOKE DEVELOPED INDEX

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 = $\frac{\text{Area under the Obscuration Curve}}{\text{Area under the Red Oak Curve}} \times 100$



Analyst Signature



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OBTAINED DATA

Flame Spread Data

Time(minutes)	Distance(Feet)
1	2.29
2	2.29
3	2.29
4	2.29
5	2.29
6	2.29
7	2.29
8	2.29
9	2.29
10	2.29

Flame Spread data

Calculated Flame Spread (CFS)	11.59
Flame Spread Index	12
Time to Ignition (sec)	11 sec
Maximum Flame Spread (Ft)	2.29 ft.
Area under the Flame Spread Curve (Ft. Min)	22.518 ft. min.

Smoke Data

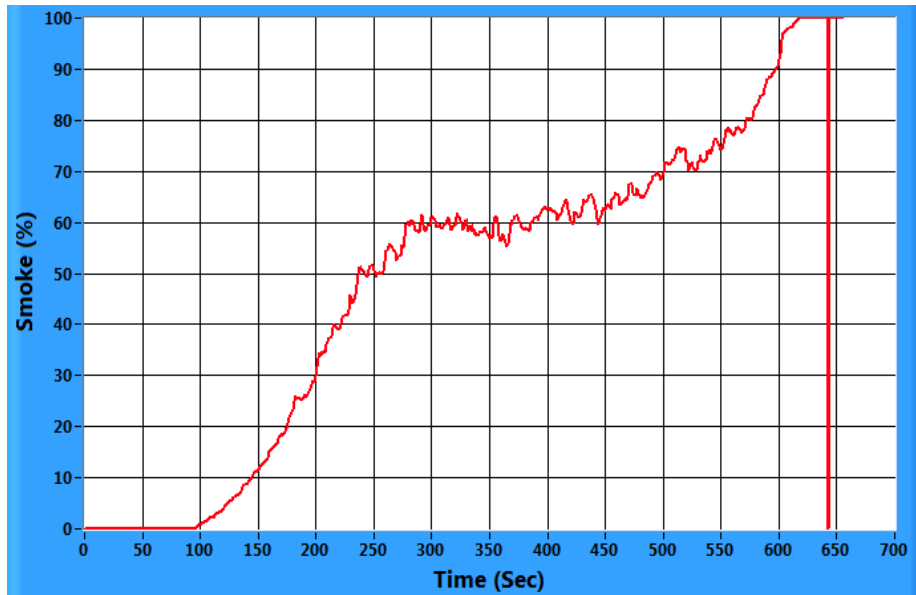
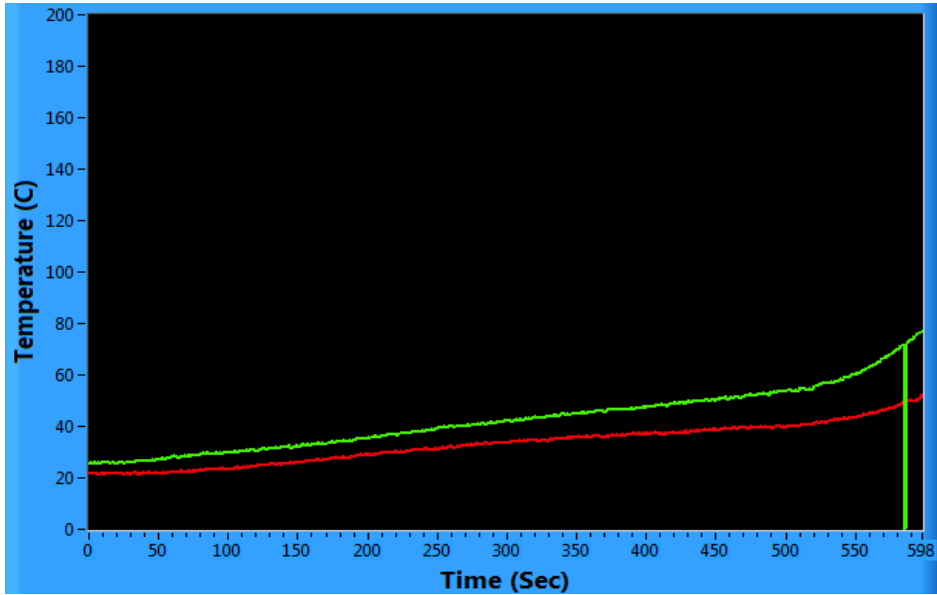
Calculated Smoke Developed	154.73
Smoke Developed Index	155
Area under the Smoke Curve (Ft. Min)	114.3
Area under Red Oak Curve (Ft. Min)	73.87

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**ANNEXURE B
GRAPHS**



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Photograph Exposed face before starting the test



Photograph Sample after the test



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Test Location

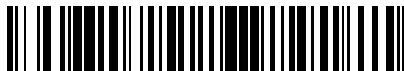
The test was conducted at our Laboratory
M/s. Spectro Analytical Labs Limited
S-1 GNEPIP, Surajpur Industrial Area
Kasna, Greater Noida, Phase – V
Gautam Budha Nagar (U.P.)
Pin Code: 201308
Ph: 0120-2341251/52

SPECTRO ANALYTICAL LABS LTD.

-- End of Test Report --



Analyst Signature



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