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Analytical Labs Pvt. Ltd.
(formerly known as Spectro Analytical Labs Limited)
CIN:U74220DL1998PTC092698

TEST REPORT

Test Report Issued To:

SENSES AKUSTIK

PLOT NO. 102, NEW GIDC, GUNDLAV, VALSAD ,
VALSAD, GUJARAT - 396035,
INDIA

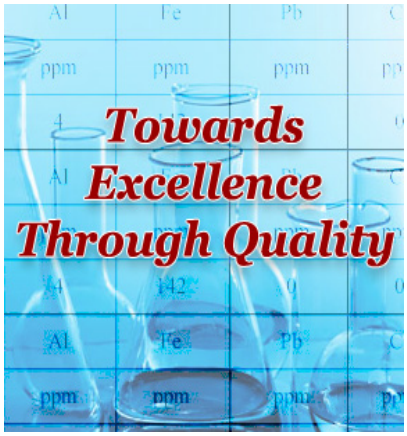
Test Report No: D220110026/D220110026-11

Date of Issue: 20-Jan-2022

Sample Booking/Receipt Date: 10-Jan-2022
Date of Start of Testing: 17-Jan-2022
Date of Completion of Test: 20-Jan-2022

Customer Relationship Number	67414

Sample Description :
Acoustic Panel 100% PET (60% recycled)



Customer Reference No :

Kind Attention : ANJU SHARMA
E-Mail: info@sensesakustik.com **Contact No:** 9999425991

Sample Condition : *Good*
Sample Quantity (Approx) : *1 - Nos* Sample Size (Approx) : *. - mm*

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

Digitally signed by PRASHANT KUMAR TIWARI
Date: 2022.01.20 14:58:24 +05:30

Report Issued by

ULR-TC631422000001207F

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

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

Discipline: Mechanical
Group: Building Materials

TEST REPORT FOR DETERMINING THE FLAME SPREAD AND SMOKE DEVELOPED INDEX

Test Sponsor:
SENSES AKUSTIK

Product Name:
Acoustic Panel 100% PET (60% recycled) (Name given by test sponsor)

Test Standards:
ASTM E84-2021; Standard Test Method for Surface Burning Characteristics of Building Materials.

Testing Laboratory:
Spectro Analytical Labs Private Limited
S-1 GNEPIP, Surajpur Industrial Area
Kasna, Greater Noida, Phase – V
Gautam Budha Nagar (U.P.)
Pin Code: 201308
Ph: 0120-2341251/52

Specimen Verification:

Length	**: 2440 mm**
Width	**: 610 mm**
Thickness	**: 12 mm**

Sample Preparation: The sample was 12 mm in thickness and 610 mm in width and 2440 mm in length. A numbers of samples were used to spread over the tunnel to form the requisite specimen length. During testing the sample was self-supporting.

Analyst Signature

TC-6314

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Authorised Signatory

Results and Discussion

Flame Spread Result	
Calculated Flame Spread (CFS)	11.02
Flame Spread Index	**11**
Smoke Developed Result	
Calculated Smoke Developed	288.02
Smoke Developed Index	**300**

Result: The tested specimen qualified for Class 1 as per IBC.
Classification Requirement as per IBC.

	Flame Spread Index	Smoke Development
Class 1 or A	0 - 25	450 Maximum
Class 2 or B	26 -75	450 Maximum
Class 3 or C	76 - 200	450 Maximum

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 = Area under the Obscuration Curve × 100
Area under the Red Oak Curve

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Annexure A

Flame Spread Data

Time(minutes)	Distance (Feet)
1	1.4
2	1.9
3	2.1
4	2.2
5	2.3
6	2.3
7	2.3
8	2.3
9	2.3
10	2.3

Flame Spread data	
Calculated Flame Spread (CFS)	11.02
Flame Spread Index	11
Maximum Flame Spread (Ft)	2.3 ft.
Area under the Flame Spread Curve (Ft. Min)	21.4 ft. min.

Smoke Data	
Calculated Smoke Developed	288.02
Smoke Developed Index	**300**
Area under the Smoke Curve (Ft. Min)	212.76
Area under Red Oak Curve (Ft. Min)	73.87

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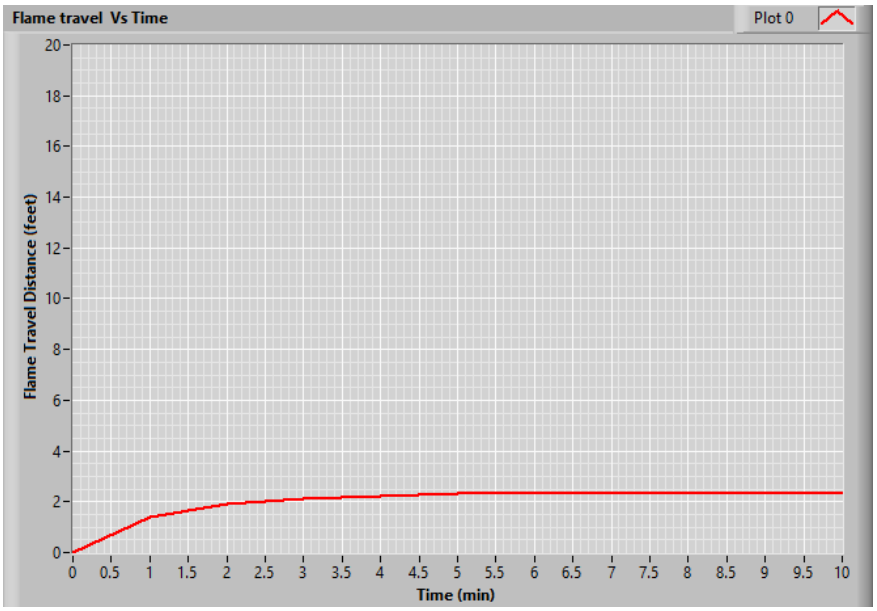
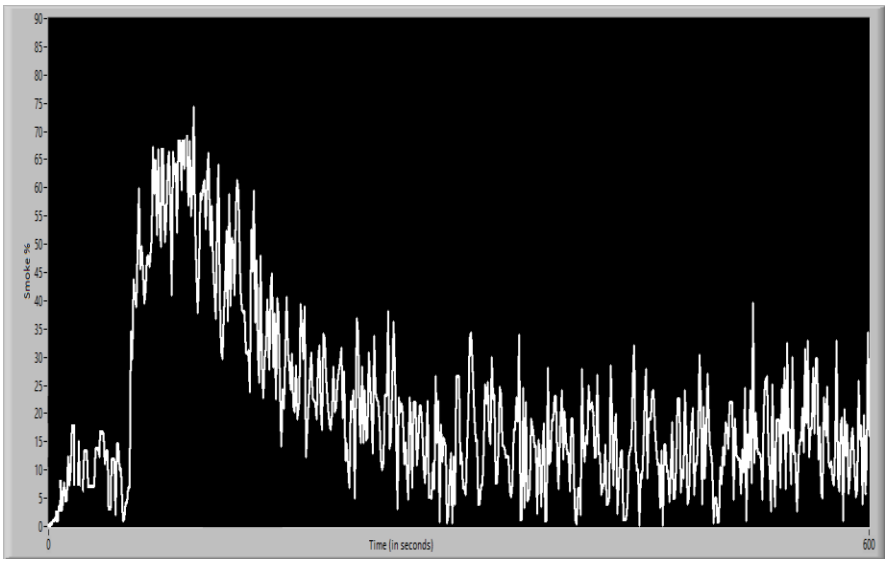
Annexure B

GRAPHS





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TEST REPORT

Photographs

Before Test

During Test

After Test

-- End of Test Report --

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