



STRAWCTURE ECO

EMPOWERING SUSTAINABLE CONSTRUCTION

About Us

We manufacture next-gen building materials from agri-waste. We add value to waste and produce high efficiency and sustainable panels for built environment

We also help to tackle the problem of stubble burning and follow a Circular economy model

AGRIBIOPANEL

MADE FROM STRAW



Our Processes

A person wearing a light-colored, long-sleeved shirt is holding a large, vibrant green leaf in front of their face, completely obscuring it. The leaf is held by its stem, which the person is holding with both hands. The background is a plain, light-colored wall.

MANUFACTURING

STRAW

Bought locally from farmers.
Converted into bales
transported to Stracwture Eco mfg.
plant.

TO

Drying to reduce moisture
Mixed with proprietary resin and
organic dyes
Multiple rounds of compression
under pressure

PANELS

Panels of sized 10x6 ft and 8x4ft are
cut
Pre-lamination is done by vacuum
pressing laminates over raw boards.
Quality Inspection is done and then
sent tirectly to project or warehouse



**Carbon
Negative**



**Fire
Resistant
2hrs**



Low VOC



**Moisture
Resistant**



**Acoustic
Insulation
40dB+**



**Termite
Proof**



Drywall Partitons



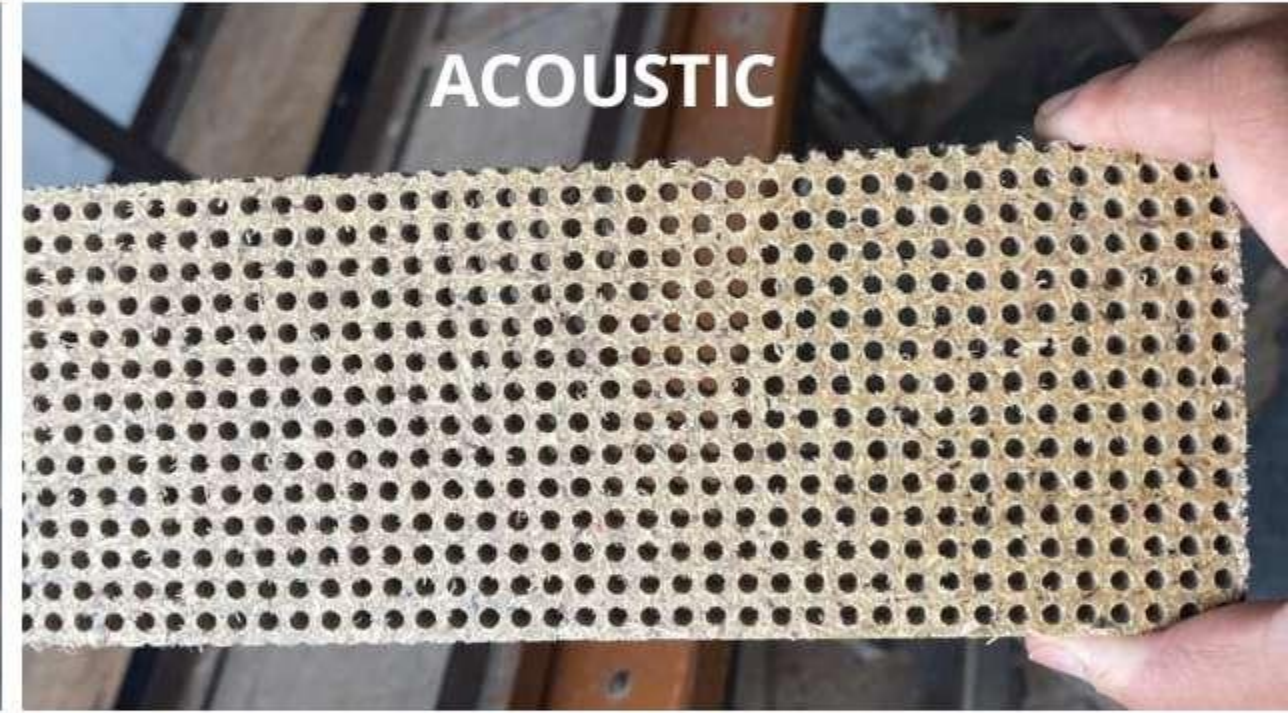
Fire Proof Door



Ceiling



ACOUSTIC



Mezzanine Flooring



Furniture



DRYWALL PARTITIONS

(MADE OF AGRIBIOPANEL)

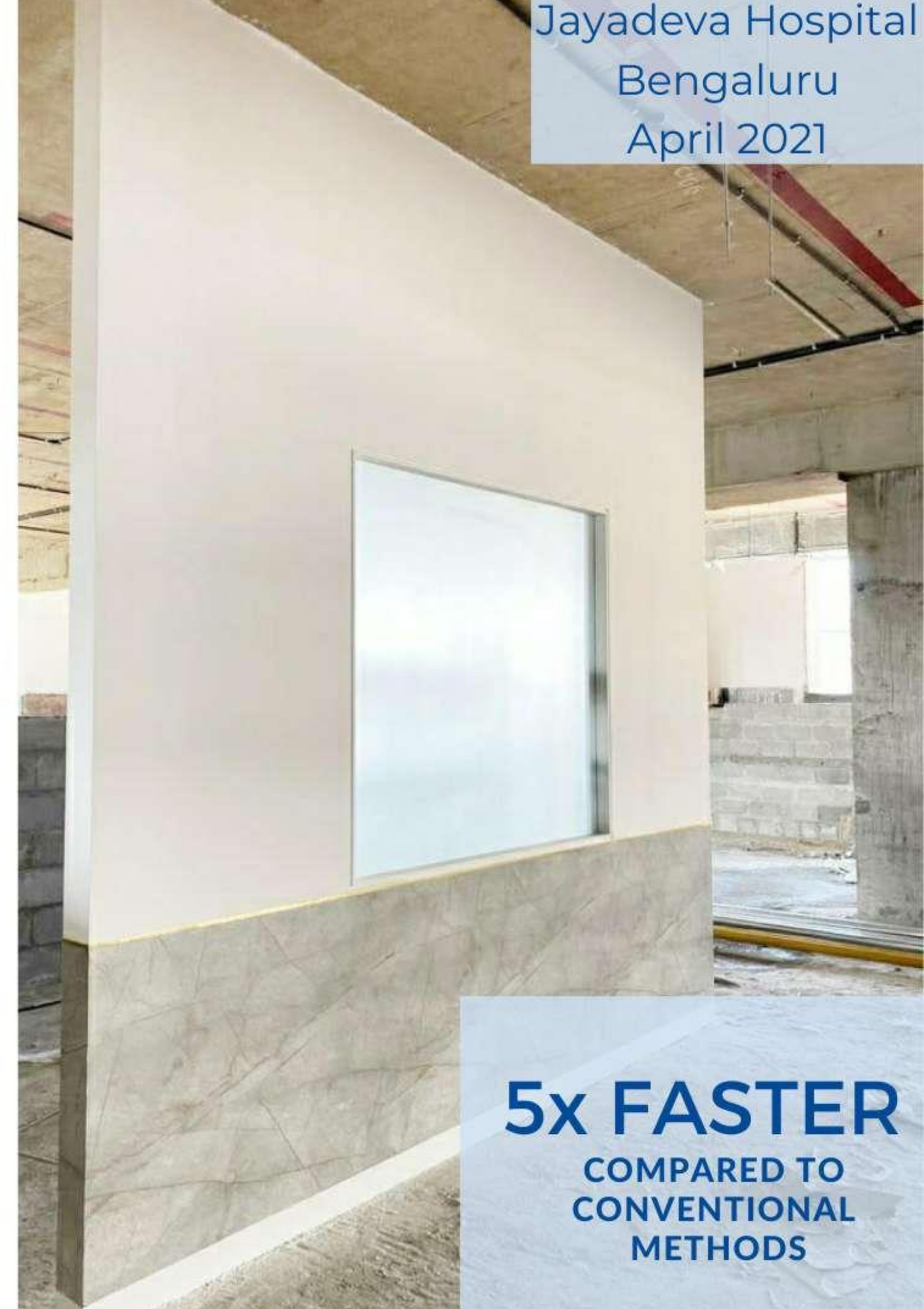
- ACOUSTIC & FIRE RATED WALLS

- BIGGER SIZE BOARDS PREVENTING WASTAGE OF MATERIAL

- 15-20 % LOWER FRAMING COST



**2 x 12 MM
AGRIBIOPANEL
10'x6'**

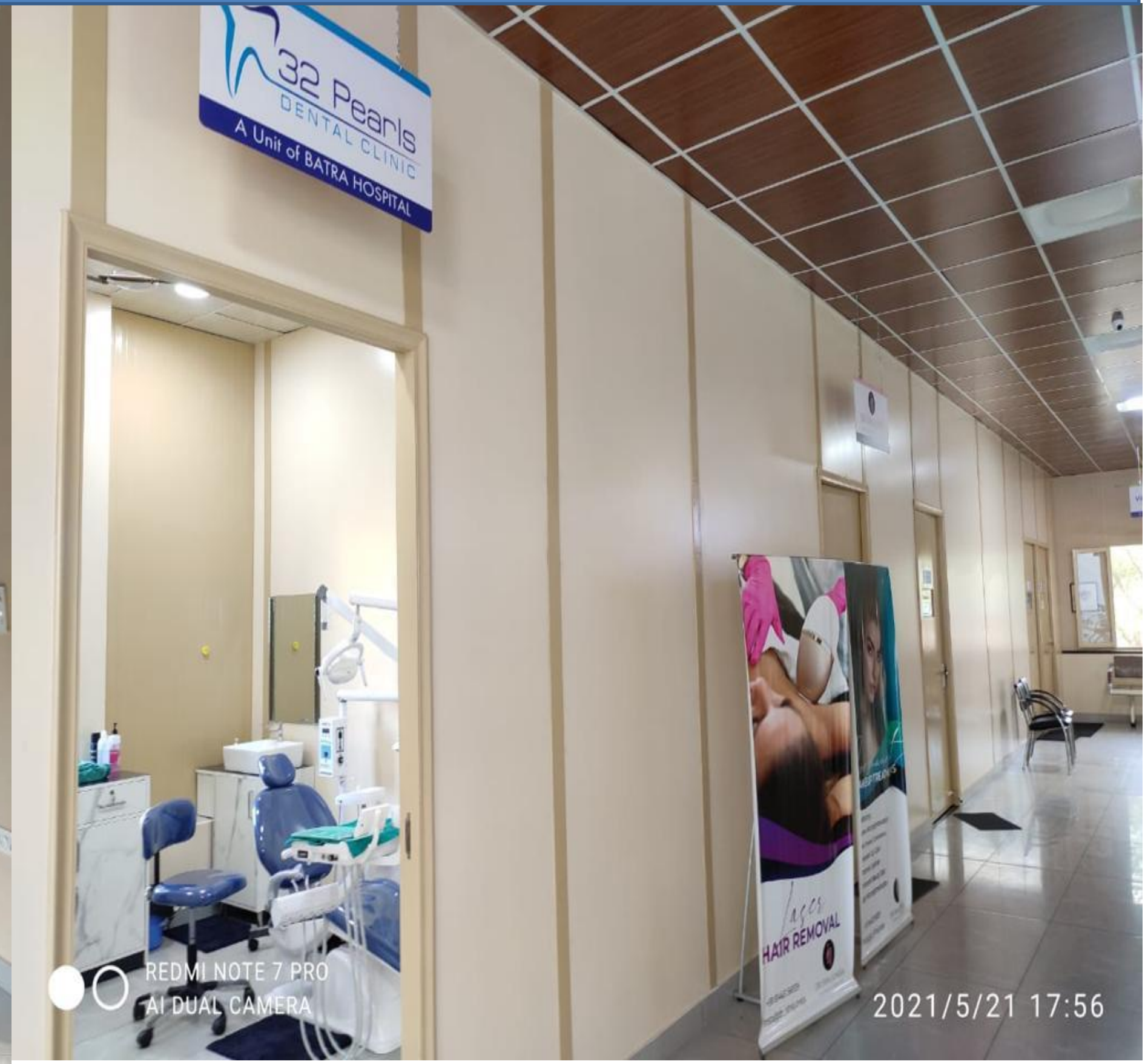


5x FASTER
COMPARED TO
CONVENTIONAL
METHODS

Jayadeva Hospital
Bengaluru
April 2021

DRYWALL PARTITIONS

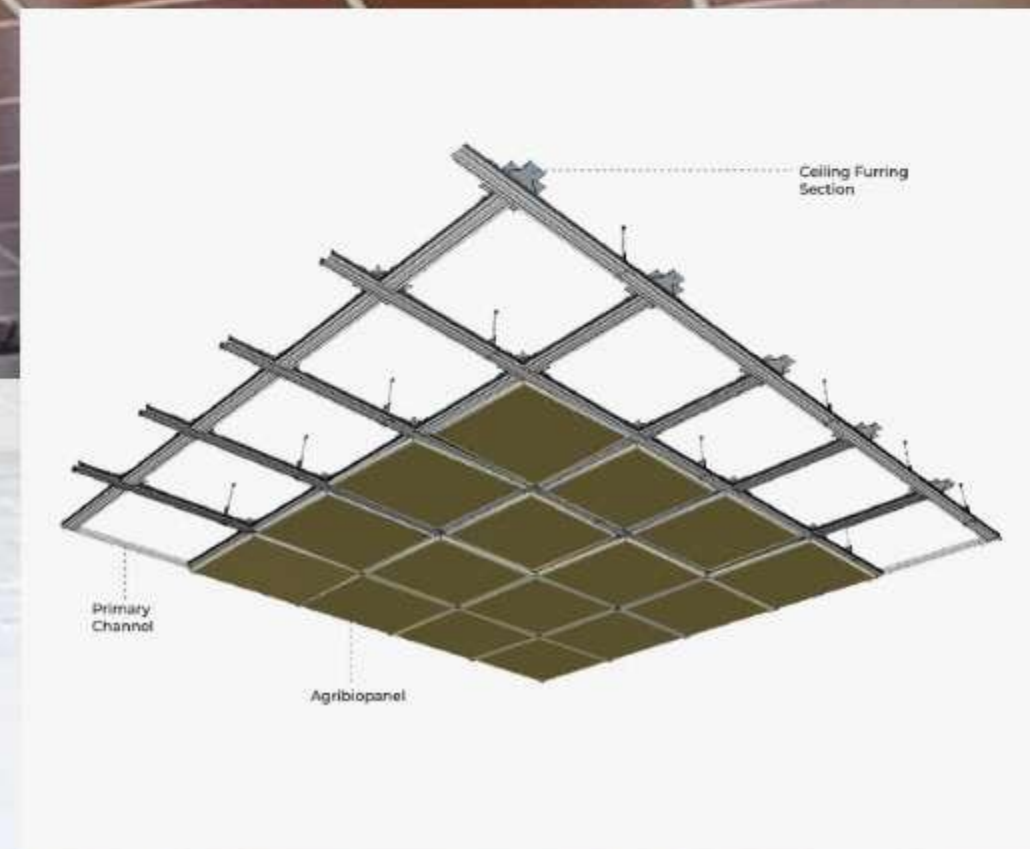
Batra Hospital , Jalandhar, Punjab



GRID | CONCEALED | ACOUSTIC

FALSE CEILING

MOISTURE PROOF | 9MM/12MM



FALSE CEILING



DOORS

FIRE RATED DOORS

Excellent Fire rating (120 mins+)

Noise Barrier

Solid Core, 35 mm thickness

Minimum maintenance reqd.



FIRE RATED DOORS



FURNITURE

E1Grade panels

Low VoC emission

High Screw holding capacity

Easy workability



FURNITURES



FURNITURES



FURNITURES



PROJECTS



Vistex Hospital, Patna



Urmul Facility, Bikaner



Iron Mountain, B'lore



Batra Hsopital, Jalandhar

What makes AgriBioPanels a superior, sustainable alternative for interiors and furniture?

Product Name	Description		
AgribioPanel	AgriBioPanel is a engineered Panel made of annually renewable agri-fiber and a binding agent.		
Raw Material	96% Agri fiber (Bagasse waste)		
Test Parameter	Test Value	Product Description	Test Method
Thermal Conductivity	0.0195 W/m-k	12mm AgribioPanel with Dry-Air Sandiwch of 48 mm	ASTM C518
Compression Strength @10% Deflection	1.74kg/cm2	12mm AgribioPanel with Dry-Air Sandiwch of 48 mm	ASTM D695
Toxicity Index		Testing Lab	
Gases	Toxicity Index	IIRTI	
Carbon Monoxide	0.361	IIRTI	
Ammonia	0	IIRTI	
Hydrogen Chloride	0	IIRTI	
Sulphur Dioxide	0.024	IIRTI	
Nitrous oxide	0.038	IIRTI	
Hydrogen Cyanide	0	IIRTI	
Hydrogen Fluoride	0.096	IIRTI	
Total Toxicity Index for 7 Gases	0.519 for 100gm Sample.		
Formayldhye Content	4.79	Should be Less then or equal to 8	
The Panel confirms to FTP-1, Formaldehyde Class E-1 of IS 3087-1985			



काष्ठ कम्पोजिट जाँच एवं मूल्यांकन केन्द्र
Center for Testing And Evaluation of Wood Composites
भारतीय प्लाईवुड उद्योग अनुसंधान एवं प्रशिक्षण संस्थान
INDIAN PLYWOOD INDUSTRIES RESEARCH & TRAINING INSTITUTE

(भारत सरकार, पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय का स्वायत्त संस्थान)
(Autonomous Body of the Ministry of Environment, Forests & Climate Change, Govt. of India)
पोस्ट बैग नं. 2273, तुमकुर रोड, बंगलूर - 560 022
Post Bag No. 2273, Tumkur Road, Bangalore-560 022

बनारस/General: +91-80-2839 4231/32/33, 3053 4000-4001; फ़ैक्स/Fax: +91-80-3053 4006; कार/ग्रामा: IPIRTI
e-mail : samplecell@ipirti.gov.in, Websites : http://www.ipirti.gov.in; http://www.bamboocomposites.com



TC917821000000247F

सं./No. JD/EIL/0125/Chem-247F/2021/Pune

Date: 23.04.2021

Table 1: Toxicity index of Eco board (Eco Board) sample
(Average gas concentration of 2 readings)

Gases	Concentration in ppm For mass of 1.04 gms C _i (ppm)	Concentration of gas considered fatal to man for a 30 minute exposure time C _f (ppm)	Toxicity index value
Carbon monoxide (CO)	15 (Correction factor 0)	4000	0.361
Ammonia (NH ₃)	0	750	0.000
Hydrogen chloride (HCl)	0	500	0.000
Sulphur dioxide (SO ₂)	0.1	400	0.024
Nitrous oxide (NO ₂)	0.1 (Correction factor 0)	250	0.038
Hydrogen cyanide (HCN)	0	150	0.000
Hydrogen fluoride (HF)	0.1	100	0.096
TOTAL TOXICITY INDEX for 7 gases listed above for 100 gms sample	-	-	0.519

Result: The toxicity index of the material for 7 gases enlisted by client is found to be 0.519 for 100 gm sample.

OBSERVATIONS: During the test period or burn time for 120 seconds, it was observed that the flame spread was very low and no fumes were observed. Within 120 seconds the flame on the sample also arrested. No burning observed in the sample beyond 120 seconds. Charring of the sample with complete ash formation was noticed. Dripping of material or erratic burning was not observed. The entire mass was charred during the test duration.

TOXICITY INDEX

Note: The test report is relevant to be sample received for testing.



SGMA

TEST & RESEARCH CENTRE

99, Badli Industrial Area,
Phase-2, New Delhi 110042
Ph. : +91 11 49491400
E-mail : mail@sigmatest.org
web : www.sigmatest.org



TESTING OF FOOD | WATER | CHEMICALS | PETROLEUM PRODUCTS | BUILDING MATERIAL | ENVIRONMENT

TEST CERTIFICATE

(This certificate is not valid without a hologram)

Sample : Wood Prelaminated 18mm HDUMR Panel	Report No. : 21003798
Sample Description : Wood Prelaminated 18mm HDUMR Panel	
Customer Ref : Nil	Report Issue Date: 12/02/2021
Customer Name & Address : Strawture Eco Pvt. Ltd. 52, Hari Om Nagar Colony, Phase-2, Civil Lines, Bichhiya, Gorakhpur, Uttar Pradesh - 273001	Job Code : STRC/21003798 Sample Received On : 01/02/2021 Date of Testing : 01/02/2021-12/02/2021 Sample Quantity : 4 Pcs.

S. No.	Test Parameters	Test Result	Test Method
1.	Tensile Strength Perpendicular to Surface. (kg/cm ²)	33.7	IS: 2380 (P-5) 1977
2.	Thickness Swelling After 2 hr. (%)	8.5	IS: 2380 (P-17) 1977
3.	Crack Resistance	No Defects Such as Cracking, Tearing or Delamination has found	IS: 4020 (P-5) 1998

***** End of Report *****



SGMA

TEST & RESEARCH CENTRE

99, Badli Industrial Area,
Phase-2, New Delhi 110042
Ph. : +91 11 49491400
E-mail : mail@sigmatest.org
web : www.sigmatest.org



TESTING OF FOOD | WATER | CHEMICALS | PETROLEUM PRODUCTS | BUILDING MATERIAL | ENVIRONMENT

TEST CERTIFICATE

(This certificate is not valid without a hologram)

Sample : Wood Raw 18mm HDUMR Panels	Report No. : 21003797
Sample Description : Wood Raw 18mm HDUMR Panels	
Customer Ref : Nil	Report Issue Date: 23/02/2021
Customer Name & Address : Strawture Eco Pvt. Ltd. 52, Hari Om Nagar Colony, Phase-2, Civil Lines, Bichhiya, Gorakhpur, Uttar Pradesh - 273001	Job Code : STRC/21003797 Sample Received On : 01/02/2021 Date of Testing : 01/02/2021-22/02/2021 Sample Quantity : 4 Pcs. Sample Condition: Packed properly

S. No.	Test Parameters	Test Result	Test Method
1.	Density, (kg/m ³)	733	IS: 2380 (P-3) 1977
	Variation from mean density, %	6.0	--
2.	Moisture Content, (%)	9.8	IS: 2380 (P-3) 1977
	Variation from mean moisture, %	No variation	--
3.	Water Absorption, (%)	--	IS: 2380 (P-16) 1977
	(a) After 2 h soaking	15.8	--
	(b) After 24 h soaking	43.0	--
4.	Modulus of Rupture, (N/mm ²)	--	IS: 2380 (P-4) 1977
	Average	17.82	--
	Minimum individual	16.70	--
5.	Modulus of Elasticity, (N/mm ²)	--	IS: 2380 (P-4) 1977
	Average	1508	--
	Minimum individual	1407	--
6.	Internal Bond, (N/mm ²)	--	IS: 2380 (P-5) 1977
	Average	1.15	--
	Minimum individual	1.12	--
7.	Internal Bond, (N/mm ²), (a) After Cyclic Test	--	IS: 2380 (P-5) 1977 & IS: 2380 (P-19) 1977
	Average	0.77	--
	Individual	0.74	--
8.	Internal Bond, (N/mm ²), (B) After accelerated water resistance test	--	IS: 2380 (P-5) 1977 & IS: 2380 (P-20) 1977
	Average	0.60	--
	Individual	0.59	--
9.	Screw Withdrawal Strength, (N)	--	IS: 2380 (P-14) 1977
	(a) Face	1212	--



Rahul Mahaur
Section In charge

MECHANICAL PROPERTIES



SGMA

TEST & RESEARCH CENTRE

99, Badli Industrial Area,
Phase-2, New Delhi 110042
Ph. : +91 11 49491400
E-mail : mail@sigmatest.org
web : www.sigmatest.org



TESTING OF FOOD | WATER | CHEMICALS | PETROLEUM PRODUCTS | BUILDING MATERIAL | ENVIRONMENT

TEST CERTIFICATE

(This certificate is not valid without a hologram)

Sample : Wood Raw 18mm HDUMR Panels	Report No. : 21003797
Sample Description : Wood Raw 18mm HDUMR Panels	
Customer Ref : Nil	Report Issue Date: 23/02/2021
Customer Name & Address : Strawture Eco Pvt. Ltd. 52, Hari Om Nagar Colony, Phase-2, Civil Lines, Bichhiya, Gorakhpur, Uttar Pradesh - 273001	Job Code : STRC/21003797 Sample Received On : 01/02/2021 Date of Testing : 01/02/2021-22/02/2021 Sample Quantity : 4 Pcs.

S. No.	Test Parameters	Test Result	Test Method
10.	Dimensional Stability Test, (%)	0.11	IS: 2380 (P-18) 1977

***** End of Report *****



SGMA

TEST & RESEARCH CENTRE

99, Badli Industrial Area,
Phase-2, New Delhi 110042
Ph. : +91 11 49491400
E-mail : mail@sigmatest.org
web : www.sigmatest.org



TESTING OF FOOD | WATER | CHEMICALS | PETROLEUM PRODUCTS | BUILDING MATERIAL | ENVIRONMENT

TEST CERTIFICATE

(This certificate is not valid without a hologram)

Sample: High Density Moisture Resistant Biopanel 25 mm Thick
Sample Description: High Density Moisture Resistant Biopanel 25 mm Thick

Ref. No.: Nil
Issued To: STRAWTURE ECO PVT. LTD.
52, Hari Om Nagar Colony,
Phase-2, Civil Lines, Bichhiya,
Gorakhpur, Uttar Pradesh-273001.

Report No: 21004289
Report Issue Date: 13/05/2021
Job Code: STRC/21004289
Date of testing: 26/04/2021-13/05/2021
Sample Received On: 26/04/2021
Sample Qty.: 12 Pcs.
Page 1 of 3

Client: SELCO FOUNDATION, 690, 15TH Cross, 2nd Phase, J.P.Nagar, Bangalore-560078.

S. No.	Test Parameter(s)	Result	Test- Method
A.	Fire Resistance Properties		
A1.	Fire Rating	Class B1	DIN 4102-1 & DIN 4102-16
A2.	Flammability Test	--	UL 94
A2.1	Classification	94HB 94V-0	--
A2.2	Rate of Burning, (inch/min)	0.09	Do not start to burn within 10 seconds.
A3.	Fire Proof	Combustibility Property	AS 1530.1-1994
B.	Physical Properties		
B1.	Breaking Load, (MPa)	--	IS:2542 (Part-2/Sec-4)-1981
B1.1	Transverse	3730	--
B1.2	Longitudinal	--	--

FIRE RATING

A1. Test Required: Determination of Fire

Test Method: DIN 4102-1 & DIN 4102-16

Testing Period: 26.04.2021 to 13.05.2021

Temperature Conditions: Dry the sample at 105°C for six hours.

Dimensions of the Specimen: 305mm*50mm*25mm

Mass per unit Area: 19.4kg/m²

Flame Application	Vertical			Horizontal		
	Trail 1	Trail 2	Trail 3	Trail 1	Trail 2	Trail 3
Ignition Time, (s)	55.25	54.98	56.25	62.34	61.98	62.18
Maximum flame height in 20s, (mm)	2.14	2.08	2.02	1.92	1.98	1.96
Fire ceased after, (s)	46.23	46.15	46.58	73.25	72.56	72.15

Result: The Fire Designation as per DIN 4102-1 is **Class B1 (Self-Extinguishable)**.

A2. Test Required: Determination of Flammability Test.

Test Method: UL 94

Testing Period: 26.04.2021 to 13.05.2021

Temperature Conditions: Dry the sample at 105°C for six hours.

Dimensions of the Specimen: 305mm*50mm*25mm

Mass per unit Area: 19.4kg/m²

S. No.	Flammability Test	
	A2.1 Classification	A2.2 Rate of Burning, (inch/min)
1.	94HB	0.09
2.	94V-0	Do not start to burn within 10 seconds.



KELVN LABS

(AN ISO 9001:2015 CERTIFIED LABORATORY)
AN ISO/IEC 17025:2017 (NABL) ACCREDITED LABORATORY
Crestella Building, Plot No.59, Road No.12, Ground Floor, TSIC Tech Park, IDA Nacharam, Hyderabad-500076, Telangana.
Email : kelvnlabs@gmail.com, www.kelvnlabs.com

Issued to: M/S EcoBoard Industries Ltd, 65/1-A, Akarshak Building, Opp. Nal Stop, Karve Road, Pune, Maharashtra, 411004
Report No: KL/055/2020-21
Date: 18.06.2020

S.No.	Test Parameter	Test Method	Test Result
1.	Thermal Conductivity	ASTM C518	0.0195 W/m-k
2.	Compression Strength @10% Deflection	ASTM D695	1.74 Kg/cm ²

Work Order No: Nil
Tests required : Compression Strength and Thermal Conductivity.
Sample Particulars : EcoBoard & Dry Air Sandwich of 48mm.
Sample Quantity : 01 No.
Date of receipt of samples : 12.06.2020.
Date of starting of analysis : 14.06.2020.
Date of completion of analysis : 18.06.2020.
Samples Conditioning : Nil
Testing Room Conditions : 23±2°C, 50±5% RH.

Note:
1. Samples condition at receipt: Found ok.
2. Test Method: As agreed with the customer.
3. This report shall not be reproduced except in full without the approval of the laboratory.
4. This report pertains to the samples submitted.

THERMAL INSULATION

CERTIFICATES TEST



CONTACT US

+91 7607776756

strawcturegram@gmail.com

www.strawcture.com