

ipse
ipsa 
ipsum
GREEN



Burning Rice Fields



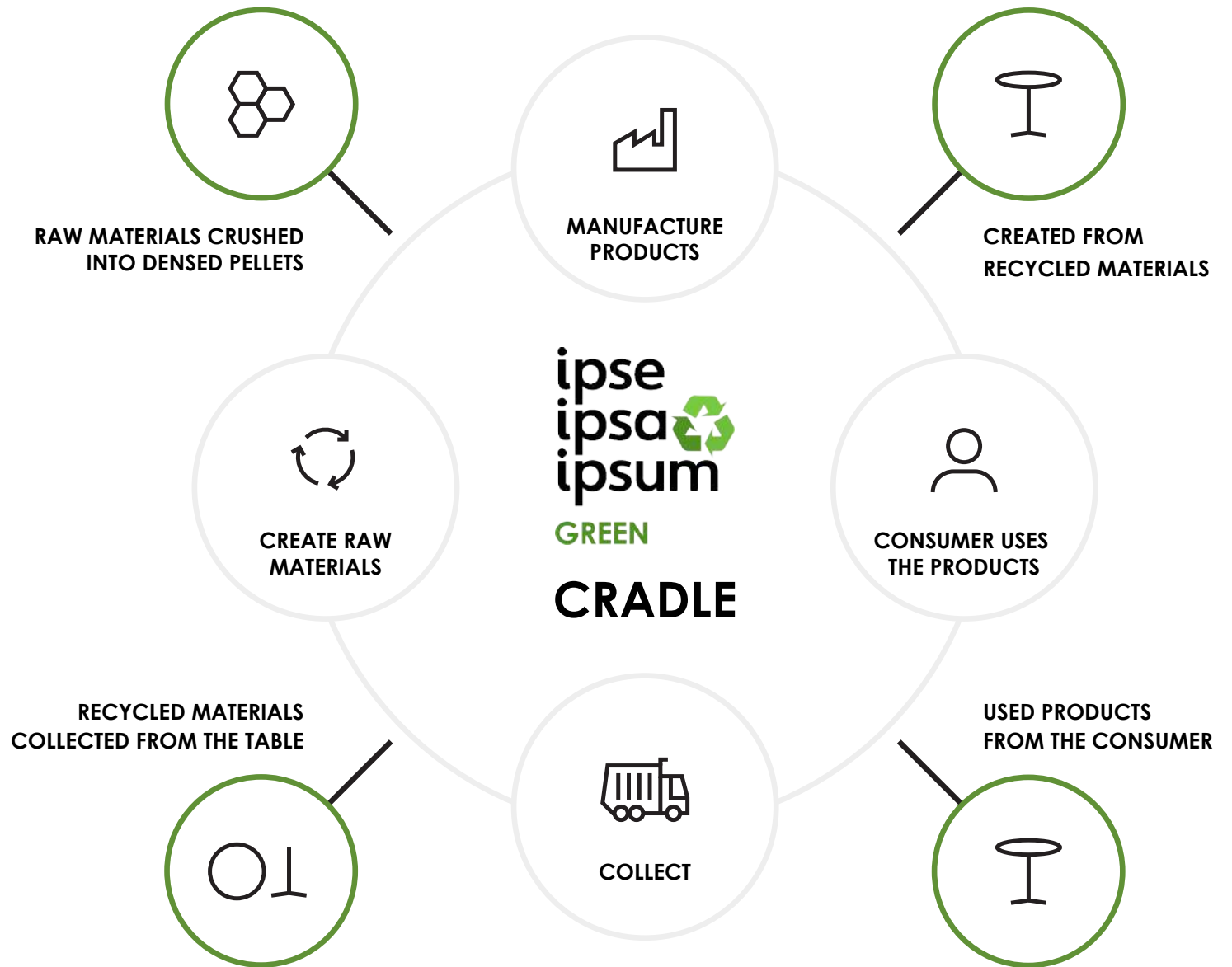
Landfill Wastes



Deforestation



The Problem



The Solution

GREEN

For burning rice fields

Collect rice husks and create alternatives products for building materials



The
Solution

GREEN

For landfill wastes

Collect soda cans, aluminum foils and polymers and create an alternative for MDF, Particle Boards and Plyboards.



The
Solution

GREEN

For deforestation

Collect teak woods and convert the wood into a wood flooring



The
Solution



ipse
ipsa 
ipsum
GREEN



MATERIALS

Rice Husk Board

Material Specification and Applications

SPECIFICATION:

It is a sustainable eco-friendly panel product for interiors, exterior and joinery applications. It is a zero wood panel product created with high content of natural fibres derived from Agri-residues like rice husk and straw over 100PHR. It is a superior alternative to tropical wood and wood-based panel products in many ways. It is termite proof, waterproof, flame retardant, smoke suppressant (passes Class 1 / A in ASTM E84 test) and resistant to electrical short circuits. It has efficient sound absorption / acoustic properties and work as a sound barrier due to its internal homogeneous structure. It is easy to thermoform and to mould in any shape and design - just like solid surface and provide opportunities to the architects and designers to bring imaginations from drawing board to reality. It is a zero emissions product - free from hazardous formaldehyde and other VOC emissions. Its natural wood like appearance allows it to print, paint, stain, varnish, overlay veneer/ laminate, CNC rout, etc. High content of natural fibres gives better physical and mechanical properties like screw holding and strength when compare to other peer products.

Sustainability
GreenPro certified

Certifications
ROHS, ISO 9001:2015, ISO 14001:2015 and ISO 45001:2018 certified

APPLICATION:

It can be used for exterior / interior furnishing and joinery applications. It can be used for Cabinets, wardrobes, paneling, terrace furniture, garden furniture, exterior paneling, facades, fencing, partitions, ceiling, roofing, gates, sea side homes etc..

- Housing, luxury ships/yacht,
- Sea or river side housing and furnitures
- Pool or river side furnitures.

The product is 100% recyclable and is GreenPro certified.



Rice Husk Board is a GreenPro certified product and adds merits to projects with Green Rating	
Module Compliance	Maximum Points with Rice Husk Board
Materials with recycled	★★★
Wood based material with FSC certification and/or rapidly renewable	★★★
Local Materials	★★★
Use of certified Green Building materials	★
Composite wood with no urea formaldehyde	★

Green

Rice Husk Board

Floor Decking



Green

Rice Husk Board

Doors



Green

01/09

Rice Husk Board

Facade, Roofing and Fencing



Green

01/09

Rice Husk Board

Panelling and Partitions



Green

01/09

Rice Husk Board

Thermoform and CNC Routing



Rice Husk Board



Comparative study of rice husk board with others

	RICE HUSK BOARD	PVC/WPC FOAM BOARD	PLYWOOD	MDF
DENSITY	700-800	400-600	650-750	600-700
RAW MATERIALS	Natural fibers and Thermoplastics	PVC and fillers materials	Medium/Softwood, Formaldehyde, Urea/Phenol	Medium/Softwood, Formaldehyde
TERMITE PROOF	✓	Not always	✗	✗
WATER PROOF	✓	✓	For some time	✗
FLAME RESISTANT	✓	Not known	✗	✗
SCREW HOLDING	Above par	Below par	Above par	Below par
CONVENTIONAL TOOLS	✓	✓	✓	✓
OVERLAY LAMINATE/VENEER	✓	Not always	✓	✓
OUTDOOR AND INDOOR APPLICATION	Both indoor & outdoor	Preferably indoor	Indoor	Only indoor
SHRINKING AND SWELLING	✗	✗	✓	✓
WEATHER AND AGEING RESISANT	✓	✗	✗	✗
ECO-FRIENDLY	✓	✓	✗	✗



Rice Husk Board



Tests carried out on the samples

By the National Test House, Central Institute of Plastic Engineering & Technology (CIPET), Indian Plywood Industries Research & Training Institute (IPIRTI), Spectro Labs and SGS Labs.

TEST	METHOD	UNIT	RESULT
DENSITY	ASTM D792	Kg/CBM	800.349
WATER ABSORPTION AFTER 2 HRS	IS : 2380	%	0.02
WATER ABSORPTION AFTER 24 HRS	IS : 2380	%	0.12
THICKNESS SWELLING AFTER 2 HRS	IS : 2380	%	0.06
MODULUS OF RUPTURE - AVERAGE	IS : 2380	%	0.06
MODULUS OF RUPTURE - MINIMUM INDIVIDUAL	IS : 2380	%	0.06
MODULUS OF ELASTICITY - AVERAGE	IS : 2380	%	0.06
MODULUS OF ELASTICITY - MINIMUM INDIVIDUAL	IS : 2380	%	0.06
SCREW WITHDRAWAL - FACE	IS : 2380	%	0.06
SCREW WITHDRAWAL - EDGE	IS : 2380	%	0.06

TEST	METHOD	UNIT	RESULT
TENSILE STRENGTH	ASTM D638	MPa	7.6
COMPRESSION STRENGTH	ASTM D792	Kg/CBM	800.349
ELONGATION @ BREAK	IS : 2380	%	0.02
CHARPY IMPACT STRENGTH	IS : 2380	%	0.12
HEAT DEFLECTION @ 0.45 MPA	IS : 2380	%	0.06
SOFTENING TEMPERATURE @ 1 KG	IS : 2380	%	0.06
VOC EMISSIONS	IS : 2380	%	0.06
TEST FOR TERMITE RESISTANCE	IS : 2380	%	0.06
TEST FOR FUNGAL RESISTANCE	IS : 2380	%	0.06
TEST FOR BORER RESISTANCE	IS : 2380	%	0.06



Rice Husk Board



Tests carried out on the samples

By the National Test House, Central Institute of Plastic Engineering & Technology (CIPET), Indian Plywood Industries Research & Training Institute (IPIRTI), Spectro Labs and SGS Labs.

SOUND ABSORTION COEFFICIENT AS PER IS 10420:1982 AND TRANSMISSION LOSS AS PER ISO 10534-2:1998		
FREQUENCY (Hz)	SOUND ABSORPTION CO-EFF	TRANSMISSION LOSS (dB/ 1.0)
125	0.02	26.19
250	0.03	22.53
500	0.04	32.85
1000	0.06	40.20
1500	0.06	44.50
2000	0.05	47.33
2500	0.05	45.61
3000	0.06	47.83
3500	0.08	46.6
4000	0.10	47.56
Sound Transmission Class (Average of Tranmission Loss) : 40.12		

TEST	METHOD	LIMIT	RESULT
FLAMMABILITY	UL94	26.19	V0 Rating
FLAME SPREAD INDEX	ASTM E84 : 2020	0 -25 CLASS 1 OR A	6 CLASS 1 OR A
SMOKE DEVELOPED INDEX	0.04	32.85	100
UL94, is a flammability standard released by the Underwriters Laboratories of the United States of America. The standard determines the material's tendency to either extinguish or spread the flame once the specimen is ignited. Rice husk board rated V0 - burning stops within 10 seconds, similar to class 1/A			



Rice Husk Board

Certifications



Certificate



Certificate of Compliance

We hereby declare that the technical file of product complies with the requirement of Construction products regulation EU 305/2011

Manufacturer
Name: **INDIAN PLYWOOD INDUSTRIES LIMITED**
Address: **INDIAN PLYWOOD INDUSTRIES RESEARCH & TRAINING INSTITUTE, Post Bag No. 2273, Tumkur Road, Bangalore-560 022**

Product : **MFC - NATURAL FIBRE COMPOSITE PRODUCTS LIKE SHEETS, BOARDS, PLANKS, DECKING, GLADDING**

The Certification body has performed an audit of the above product quality system covering the design, manufacture and final inspection of the certified product. The quality system has been assessed, approved and is subject to continuous surveillance according to Construction products regulation EU 305/2011.

This certificate is issued under the following conditions:

1. The certificate is for the quality system maintained in the manufacturing of above referenced products and it does not substitute the design or type examination procedures, if any, applied.
2. The certificate remains valid only if the manufacturing conditions or final quality systems are not changed.
3. The certificate validity is conditioned by periodic audits or surveillance audits.
4. After fulfilling the relevant EU legislation, the manufacturer shall affix to each device, of the above subject product, the CE mark.
5. The CE mark as shown below can be used, under the responsibility of the manufacturer after completion of an EU Declaration of conformity and compliance with all relevant EU Directives. The statement is based on a risk evaluation of one sample of above mentioned product. It does not imply an assessment of the whole production.

Date of Registration : 24 June 2022
1st Surveillance Due : 23 June 2023
2nd Surveillance Due : 23 June 2024
Certificate Expiry (subject to the company maintaining its system to the required standard) : 23 June 2025

Certificate No:- 102240622
To Verify this certificate please visit at www.qvcert.co.uk




Quality Veritas Certification Limited
Validity of this certificate is subject to annual surveillance audits done successfully. The Certificate System Remains in Force only when the certificate holder fulfills the conditions of the system. Email: info@qvcert.co.uk Website: www.qvcert.co.uk
Suite 48, 88-90 Hatton Garden, London, EC1N 8PN, UK

GreenPro



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 विभाग का स्वायत्त संस्थान)
(Autonomous Body of the Ministry of Environment, Forests & Climate Change, Govt. of India)
पते: के. नं. 2273, तुमकूर रोड, बंगलूरु - 560 022
Post Bag No. 2273, Tumkur Road, Bangalore-560 022
संख्या/General: +91-80-2839 4231/02/33, 3053 4000-4001, फ़ैक्स/Fax: +91-80-3053 4008; का/ Grams : IPRITI
e-mail : sampliceit@ipriri.gov.in, Websites : <http://www.ipriri.gov.in>, <http://www.bamboocomposites.com>

Page 1 of 2
Sheet Post
र.नं. ID/PPPL/SR90/Prp-320E/2019/Chemical / 2304
Date: 31.01.2020

प्रति,
Dear Sir,


विषय: **शुद्धि के लिए धन्यवाद।**
Sub: **Test report for Sound absorption coefficient as per IS: 10420-1982 & Transmission Loss as per ISO 10534-2:1998**
दिनांक: **5 अक्टूबर 2019**
Ref: **Your email dated 24.12.2019**

आपका पत्र दिनांक 24.12.2019 को प्राप्त हुआ था।
आपका पत्र दिनांक 24.12.2019 को प्राप्त हुआ था।
आपका पत्र दिनांक 24.12.2019 को प्राप्त हुआ था।

आपका पत्र दिनांक 24.12.2019 को प्राप्त हुआ था।
आपका पत्र दिनांक 24.12.2019 को प्राप्त हुआ था।
आपका पत्र दिनांक 24.12.2019 को प्राप्त हुआ था।

आपका पत्र दिनांक 24.12.2019 को प्राप्त हुआ था।
आपका पत्र दिनांक 24.12.2019 को प्राप्त हुआ था।
आपका पत्र दिनांक 24.12.2019 को प्राप्त हुआ था।

Sound Absorption Test Report Page 1



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 विभाग का स्वायत्त संस्थान)
(Autonomous Body of the Ministry of Environment, Forests & Climate Change, Govt. of India)
पते: के. नं. 2273, तुमकूर रोड, बंगलूरु - 560 022
Post Bag No. 2273, Tumkur Road, Bangalore-560 022
संख्या/General: +91-80-2839 4231/02/33, 3053 4000-4001, फ़ैक्स/Fax: +91-80-3053 4008; का/ Grams : IPRITI
e-mail : sampliceit@ipriri.gov.in, Websites : <http://www.ipriri.gov.in>, <http://www.bamboocomposites.com>

Page 2 of 2
TC62951800000320E
र.नं. ID/PPPL/SR90/Prp-320E/2019/Chemical
Date: 30.01.2020

TEST REPORT
Ref: **Your email dated 24.12.2019**
Natural fibre composite board samples were received from **INDIAN PLYWOOD INDUSTRIES LIMITED**.
Samples were tested for Sound Absorption Coefficient as per IS:10420-1982 & Transmission Loss as per ISO 10534-2:1998. The test results are as follows:

Frequency Hz	Acoustic Property	
	Sound Absorption Coefficient	Transmission Loss (dB(A))
125	0.02	26.19
250	0.03	22.53
500	0.04	32.83
1000	0.06	40.2
1500	0.06	44.3
2000	0.05	47.33
2500	0.05	45.61
3000	0.06	47.93
3500	0.08	36.6
4000	0.10	47.56

Note: The test results are relevant only to the material received for testing.

Sound Absorption Test Report Page 2



Rice Husk Board

Certifications



विशेष : इंडियन स्टैंडर्ड्स एंटी-फॉर्जिंग टेम्पलेटोंजी
 (एन ई आई स्टैंडर्ड्स, एन ई आई)
 (एन ई आई - एन ई आई)
 एन ई आई-44-2225 (एन ई आई) : एन ई आई-2225 (एन ई आई)
 ई-मेल : ipse@ipse.com; वेब : www.ipse.com

परीक्षण रिपोर्ट
TEST REPORT

को जारी / Issued to : **विशेष : इंडियन स्टैंडर्ड्स एंटी-फॉर्जिंग टेम्पलेटोंजी**
 (एन ई आई स्टैंडर्ड्स, एन ई आई)
 (एन ई आई - एन ई आई)
 एन ई आई-44-2225 (एन ई आई) : एन ई आई-2225 (एन ई आई)
 ई-मेल : ipse@ipse.com; वेब : www.ipse.com

रिपोर्ट नं. / REPORT NO. : **60320**
 भाग / Part : **Part A, B, C & D**
 तिथि / Date : **09.05.2019**

रिपोर्ट / Ref. : **Dated: 12.04.2019**
 परीक्षण मानक को भी उद्धरण करें / TEST REPORT AS PER TEST STANDARD : **ISIRI PIR G**

उपरोक्त विवरण / PARTICULARS OF SAMPLE SUBMITTED

अ) नमूने का नाम / (a) Name of the Sample : **Natural Fibre Composite Board Samples -as stated by the party**

ब) नमूने प्राप्त होने की तिथि / (b) Date of Receipt of sample : **12.04.2019**

क) ग्रेड/वर्ग/वर्गीकरण / (c) Grade / variety / type / size / ORR : **300MM X 300MM X 6MM Thick - 7 Nos.
300MM X 300MM X 12mm Thick - 2 Nos.
[1No. With nailing & 1No. With Screwing]
300MM X 300MM X 18mm Thick - 2 Nos.
[1No. With nailing & 1No. With Screwing]**

द) घोषित मानक / (d) Declared value, if any : **Not applicable**

ए) कोड नं. / (e) Code No. : **Not applicable**

फ) बैच नं. एवं निर्माण तिथि / (f) Batch No. and Date of Manufacture : **Not applicable**

ग) मात्रा / (g) Quantity : **01 Box**

घ) पैकेजिंग विधि / (h) Mode of Packing : **Packed in carton pack.**

ङ) सेंसिबल / (i) Sensitive or not : **Not Sensitive**

च) अन्य जानकारी / (j) Any other information : **---**

अनुपूरक सूचनाएँ / SUPPLEMENTARY INFORMATIONS

अ) नमूने संग्रहण प्रक्रिया / (a) Reference to sampling procedure : **Sampling not done by this lab.**

ब) समर्थन दस्तावेजों के लिए मापदंडों का उल्लेख / (b) Supporting documents for the measurement taken and result derived : **As given in Part C**

क) परीक्षण विधि में अंतर / (c) Deviation from the test method as prescribed in relevant work instructions, if any : **No deviation from the standard**

CIPET Test Report Page 1

विशेष : इंडियन स्टैंडर्ड्स एंटी-फॉर्जिंग टेम्पलेटोंजी
 (एन ई आई स्टैंडर्ड्स, एन ई आई)
 (एन ई आई - एन ई आई)
 एन ई आई-44-2225 (एन ई आई) : एन ई आई-2225 (एन ई आई)
 ई-मेल : ipse@ipse.com; वेब : www.ipse.com

परीक्षण रिपोर्ट
TEST REPORT

रिपोर्ट नं. / REPORT NO. : **60320**
 भाग / Part : **Part - C**
 तिथि / Date : **09.05.2019**

रिपोर्ट / Ref. : **Dated: 12.04.2019**
 परीक्षण मानक को भी उद्धरण करें / TEST REPORT AS PER TEST STANDARD : **ISIRI PIR G**

उपरोक्त विवरण / TEST RESULTS

Test Duration: 12.04.2019 to 09.05.2019

Sample Details : **1. Natural Fibre Composite Board Sample
Size : 300MM X 300MM X 6MM Thick - 7 Nos.**

TEL No.	Property	Standard	Unit	Results Obtained
1	Tensile Strength Test Speed: 50mm/min	ASTM D-638	MPa	7.0
2	Elongation @ break	ASTM D-638	%	2.0
3	Flexural Strength	ASTM D-790	MPa	13.6
4	Charpy Impact Strength (Unnotched)	ASTM D-6119	kJ/m ²	6.25
5	Compressive Strength	ASTM D-695	MPa	40.2
6	Flammability	UL 94	---	V ₀
7	Heat Deflection Temperature @ 0.45 MPa	ASTM D-648	°C	64.45
8	Vicat Softening Temperature @ 1 kg load	ASTM D-1525	°C	72.5
9	Density	ASTM D-792	kg/cm ³	0.00349
10	Water Absorption For 24 hours	ASTM D-670	%	0.78

20001 91 20001 2019 12 02 2019
 AUTHORIZED SIGNATORY

CIPET Test Report Page 2

विशेष : इंडियन स्टैंडर्ड्स एंटी-फॉर्जिंग टेम्पलेटोंजी
 (एन ई आई स्टैंडर्ड्स, एन ई आई)
 (एन ई आई - एन ई आई)
 एन ई आई-44-2225 (एन ई आई) : एन ई आई-2225 (एन ई आई)
 ई-मेल : ipse@ipse.com; वेब : www.ipse.com

परीक्षण रिपोर्ट
TEST RESULTS

रिपोर्ट नं. / REPORT NO. : **60320**
 तिथि / Date : **09.05.2019**

Sample Details : **2. Natural Fibre Composite Board Sample
Size : 300MM X 300MM X 12mm Thick - 2 Nos.
[1No. With nailing & 1No. With Screwing]**

Sl. No.	Property	Standard	Unit	Results Obtained
11	Shore 'D' Hardness	ASTM D-2240	---	69.2
12	Surface roughness	ASTM D-257	µm/ra	5.44 X 10 ¹
13	Volume roughness	ASTM D-257	µm-cm	2.55 X 10 ¹

PART - D

REMARKS - Nil
NOTE:

1. The results related only to the items tested as supplied by the party.
 2. The test certificate shall not be reproduced in full except without the written approval of the laboratory.

20001 91 20001 2019 12 02 2019
 AUTHORIZED SIGNATORY

CIPET Test Report Page 3



Rice Husk Board

Certifications



GreenPro Certification

Test Report for termite, borer, fungus Page 1

Test Report for termite, borer, fungus Page 2



Multi Layered Plastic Recycled Boards 1

The non-biodegradable output which contains plastics, polymers, aluminium foils and multilayered plastics and other non-recyclable components as well is sterilized and recycled into recycled boards.

These boards are a direct replacement to particle board, MDF and plyboards. Thus, saving the environment from the huge damage being done by cutting trees to make furniture.

These boards are converted into beautiful furniture items by local carpenters and artisans creating scores of jobs and supporting livelihood. We not only prevent dumping of plastics but also help the environment by preventing the trees from being cut.



Technical Specifications

Green Manufacturing

Using our patented technology, we convert low value plastics, multi-layered, plastic and non-recyclable plastics that nobody recycles into recycled sheets that can then be cut to make value products.

Properties

- Re-Recyclable
- Fire Retardant
- Corrosion Proof
- Water Proof
- Sound Insulation
- Fungus Proof
- Termite Proof
- Thermal Insulation
- High Strength

Multi Layered Plastic Recycled Boards 2



Technical Specifications

Dimensions MM
440 x 1220 x 12

Weight/Board KG
35.5

Boards/M2
0.34

Weight/M2 KG
12.07

Tensile Strength N / MM2
Longitudinal 5.8; Transverse 8.35

Flexural Strength N / MM2
Longitudinal 11.37; Transverse 12.79

Flexural Modules N / MM2
Longitudinal 400; Transverse 462

Modulus of Elasticity N / MM2
Longitudinal 743; Transverse 552

Modulus of Rupture N / MM2
Longitudinal 8.46; Transverse 8.45

Moisture Content %
0.38

Density KG/M3
994

Water Absorption %
After 2 hrs: 1; After 24 hrs: 2.2

Test for Thickness Swelling
**AVG% of Swelling, 2 hrs. Soaking:
0.73**

Test for Linear Expansion
**Swelling in Water, 2 hrs.
Soaking: Width 0.06, Length 0.1**

Test for Swelling due to Surface
Absortion

**Avg% of Swelling in Thickness in 2
hrs. %: 0.62**

Test for Screw Withdrawal Strength N
**Along the Face: 963; Along the
Edge 235**

Tetra Pak Waste Boards



Comparative study with others

	HEAVY DUTY	LIGHT	MDF	PLYWOOD	WOOD PLASTIC COMPOSITE
DENSITY	1.06 gm/cm3	0.87 gm/cm3	0.75 gm/cm3	0.75 gm/cm3	1.85 gm/cm3
COMPRESSIVE STRENGTH (ACROSS GRAINS)	19.99 N/mm2	18.77 N/mm2	10.00 N/mm2	15.30 N/mm2	35.43 N/mm2
COMPRESSIVE STRENGTH (ALONG GRAINS)	39.12 N/mm2	36.92 N/mm2	36.64 N/mm2	32.28 N/mm2	35.43 N/mm2
TENSILE STRENGTH	19.41 N/mm2	33.71 N/mm2	18.00 N/mm2	24.80 N/mm2	35.43 N/mm2
FLEXTURAL STRENGTH	22.73 N/mm2	31.73 N/mm2	15.78 N/mm2	24.80 N/mm2	23.48 N/mm2
IMPACT TEST NO.OF BLOWS	827	1007	-	-	-
WATER ABSORPTION	0.13 – 0.25%	6.74%	22 – 24%	8 - 25%	4%
MOISTURE CONTENT	0.5%	0.80%	8%	15%	4.73%
4 HRS BOILING AND 4 HRS AIR DRY	No Delamination	No Delamination	Slight Water Absorption	Delamination	Distortion
72 HRS BOILING	No Swelling	No Swelling	Swelling	Delamination	Distortion
SCREW HOLDING STRENGTH	139 Kg	139 Kg	82 Kg	-	-
NAIL HOLDING STRENGTH	18.0 Kg	18.0 Kg	2.0 Kg	-	-
DRILLING AND SCREWIG	Easy	Easy	Easy	Easy	Easy
HEATING 100-105 °C	No Change	No Change	Burn	Burn	Burn

Multilayered Plastic Flooring - 60*60cm Floor Tile

Low value plastics, multi-layered plastics and non-recyclable plastics are recycled into sheets that can then be cut to make value products. This solves the problem of urban waste management by minimising the amount of Single Use Plastics(SUP) and Multi Layer Plastic (MLP) that's being sent to the landfills and increases the amount of recyclables recovered from the wastes. By upcycling the SUP and MLP, we avoid the air pollution caused by their inceneration. The recycled boards are termite, water proof and are durable with high strength and can be used in a wide variety of applications.

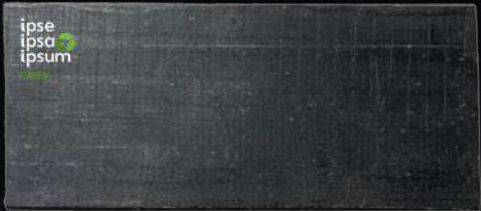
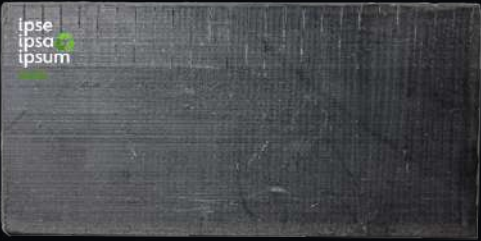


Green

05/09

Plastic Lumber

This is made with Single use Plastics and is a great way to remain the use structural material in the future.





Green

06/09

Recycled Teak Flooring

ipse reclaim teak flooring is a custom-design reclaimed teak company, manufacturing high-quality, recycled, 100% teak flooring and decking.

Our mission is to offer the most environmentally responsible, beautiful, durable, and authentic hardwood material on the market. This teak is reclaimed by hand from old doors and windows of houses which are demolished.

Why we do it?

Too many woodlands are diminished as the result of deforestation, and one factor of that is improper systems of recycling. We aim to provide high-quality Teak hardwood floors without any damage to the environment.

By properly utilizing Recycled 100% Teak salvaged from production works as a zero-waste process. This means no trees are cut down as a result of their work.

Green

07/09

Cement Tiles Design Options 1



Cement Tiles Design Options 2



Cement Tiles

Procedure: Micro Cement Flooring

Prerequisites

1. Proper stage to start Micro concrete flooring work will be once site is ready and only final coat of paint is balance. Base for floor should be stable and firmly fixed and levelled vitrified tiles 20 days cured condition
2. No other activities like carpentry, painting or any dust related shall be carried in premises during execution. From start date to end date of project – The area should be closed for other activities for period of execution
3. Complete all the ceiling related work before that so that no scaffolding and ladders will be used afterwards.

Site Preparation before work begins

1. Grinding the surface with the Hand grinder of sandpaper to make it Rough in the area where micro cement surface is required and application of premier.

Note: only roughen the area where the micro cement finish will come. Applying masking tape so that other area is not spoiled.

2. Repairing any cracks before we start it mandatory. Once all done, clear and clean the surface base coat to be applied onto the surface
3. Application of topcoat of micro cement

Note: At this stage, the floor will not be hard. Do not allow anyone to walk on the floor.

4. Application of Varnish and on next day sealer application. Varnish and sealer will be required 24-24 hours to get dry. Air curing of Micro cement floor 2-3 days minimum

5. Final materials thickness of micro materials will be 2-4 mm.
Note: A Floor protection in form of bubble guard to be used in case further site work is happening



Cement Tiles

Fixing and Polishing Instructions

The appearance and life of your floor depends not only on the excellent quality of our tiles, but also on the quality of fixing and polishing. We suggest that you do this through a contractor recommended by us. In case you already have your own contractor, we give below information which, if followed properly, will ensure a smooth, attractive floor.

1. Tiles should be fixed within a week of arrival on site. In case this is not possible, tiles should be stored in a covered area, or covered with plastic or tarpaulin. These are cement rich tiles and therefore some crazing is inevitable. When tiles are left in the sun for extended periods the crazing will accentuate.
2. Slight variation in shade of tiles from batch to batch may exist, due to variation in cements and pigments. In case your tiles have a colour stripe marking on the edge, tiles of the same colour stripe should be laid at the centre and tiles of other colour stripe should be laid on the periphery of the floor.
3. The base on which the tiles are to be fixed should be level.
4. Always buy the grouting mixture only from us along with the tiles. Use grouting mix within 30 days of despatch. Close bags / containers tightly between use.
5. Laying should normally start from the centre of the room going outward to the periphery. Laying out tiles in the desired pattern before fixing in mortar is advisable to avoid errors.
6. Fix tiles on an average 2cm to 3.5cm bed mortar with ratio not leaner than 7:1 (sand: cement) with a neat cement slurry on top. For better results we recommend a slurry of white cement for white cement based i.e. light colour tiles.
7. The next morning after laying, and not later, the joints are to be filled with a slurry of the grouting mixture. Joints should be properly cleaned with a blade before filling the same. Ensure that each part of the joint is filled with the colour which matches that part of the tile, and press it into the joint. Ensure water is sprinkled on the tiles for at least 3 days to enable cement to set.
8. The next morning after laying, and not later, the joints are to be filled with a slurry of the grouting mixture. Joints should be properly cleaned with a blade before filling the same. Ensure that each part of the joint is filled with the colour which matches that part of the tile, and press it into the joint.
9. A difference in thickness of 3 mm between tiles is normal and well within ISI parameters. The mason must adjust bed mortar to ensure that there is negligible variation in the level of laid tiles. Hasty and uneven laying will result in heavy cutting at the polishing stage and consequent damage to the design, corners, edges etc.
10. The tiles should be polished with an Italian polishing machine a week after laying. The first coat of polishing is the most important one. It is the cutting / levelling coat and should be done using No.1 polishing stone (Suri Porex Synthetic stone). Do not use No. 0 stone.
11. After 1st coat of polishing tiny pinholes will occur, which should be thoroughly grouted using our grout-mix to match the colour on the tiles. Grouting is to be left for 2 days and cured with water before the tiles are subjected to the second coat of polishing using No.2 stone, followed by Nos. 3, 4, 5 and EX i.e. very fine stone (Suri Porex Synthetic stones). Ensure floor is washed with water between each polishing.
12. Protect the floor from staining, damage, etc as a result of other agencies working on site. Wet wood shaving, oil and varnish stains cannot be removed. Use Plaster of Paris or plastic covering if there is a time gap between fixing and polishing. To avoid scratches, all furniture, ladders etc should be lifted, or dragged on a thick cloth.
13. You may require the same tile in future. Preferably keep extra tiles, and definitely keep a sample for re-ordering.



Cement Tiles

Cleaning and Maintenance Instruction for Tiles

The floor will become - and remain - a thing of beauty if the following instructions are carried out right from the time the tiles are fixed.

- No gritty substances, grease, putty, oil paint, dirty water, chemical solutions, etc. should be allowed to fall on the floor.
- No carpentry, plumbing or masonry work should be done on the floor, stains from wet wood shavings or polish are very difficult / impossible to remove. Protect the floor with a thick plastic if polishing / melaminizing your furniture. No heavy articles should be dropped or dragged across the floor. If such work has to be carried out, the floor must be protected by placing wooden planks or heavy and clean gunnysacks over it. Once the floor is damaged on account of rough treatment, you will suffer unnecessary extra expenses for getting the floor re-polished or repaired. Even then, it may not be possible to remove the damage completely.
- A newly laid and polished cement-tile floor will develop a dull, greyish appearance. This is caused by "efflorescence" or a greyish film on the surface of the tiles due to the soluble alkalis in the cement / chunam bedding in which the tiles are fixed. Efflorescence will not ultimately effect the quality or the beauty of the floor. It will disappear after some months when all the salts have come to the surface and been washed off by daily cleaning. This normally takes about 3 to 6 months. Thereafter the floor will show a beautiful sheen and improve with use and age, if properly maintained.

- To bring out the sheen or polish of the floor, the following simple method should be followed, right from the day the polishing of the tiles or in-situ terrazzo has been completed.
 1. The floor should be swept, to remove all loose dust and dirt.
 2. To half a bucket of clean water, add about 2 tablespoons of kerosene or a mild liquid soap cleaner like Godrej Grease Cutter, preferably daily.
 3. Dip a coarse, thick piece of cloth into the solution, squeeze out the excess liquid from the cloth, and then scrub the floor and dado (if any) hard and thoroughly. It is most important to prepare a new solution as and when the old one has become dirty. Each room should be cleaned with a fresh bucket of water / Solution.
 4. Take a dry cloth and again rub the floor hard and dry. Cleaning should be done correctly and daily for the first 2 to 3 months or longer, after the floor is polished, till the efflorescence disappears. Thereafter swabbing of the floor should preferably be done daily or at least 2 to 3 times a week. Tiled or in-situ wall areas should be treated the same way.

WARNING ! NEVER USE ANY KIND OF ACID, ALKALI, DETERGENT, HOUSHOLD CLEANING OR SCOURING POWDERS, POLISHING OR ABRASIVE STONES, SCOURING SOAPS, ETC. FOR CLEANING YOUR TILES FLOOR OR REMOVING STAINS FROM IT. DO NOT USE ANY WAX OR PHENYL ON THE FLOOR.



Green

07/09

Cement Tiles Option 1



Technical Specifications

Product Name

Heritage and Plain Designer Tiles

Technical Data Composition (Topping Layer)

**White cement, Grey cement pigment fillers,
dolomite**

Topping Layer

12mm

Backing Layer

11mm

Standard size

20cm x 20cm

Thickness

22mm-23cm

Green

07/09

Cement Tiles Option 2



Technical Specifications

Product Name

Self Colour Mosaic Tiles (Confirming to IS 1237)

Technical Data Composition (Topping Layer)

White cement, Grey cement pigment, chips, dolomite powder

Wet Transverse Strength

Above 3N/mm²

Abrasion Resistance

Below 3.00mm

Water Absorption

Below 10%

Standard size

25cm x 25cm, 30cm x 30cm, 40cm x 40cm

Thickness

25mm

Green

07/09

Cement Tiles Option 3



Technical Specifications

Product Name

**Stilan Heavy Duty Non slip tiles
(Confirming to IS 13801-1993)**

Technical Data Composition (Topping Layer)

**Cement, Filler, Abrasion resistance grain
pigment.**

Backing

Grey cement, Stone Grit/Dust

Types

Non-Slip Designs

Standard size

**25cm x 25cm x 2.5cm to 3cm,
30cm x 30cm x 2.7cm to 3cm**

Topping Layer

6mm - 8mm (Is Spec 5mm - 6mm)

Wet Transverse Strength

Above 3N/mm²

Abrasion Resistance

General Purpose Max 3.5mm

Abrasion Resistance

Heavy Duty Max 2mm

Impact Resistance

Good



Green

Pavers

08/09

OBSERVATION TABLE & TEST RESULTS

1. MECHANICAL TESTING 1. BUILDING MATERIAL – PAVING BLOCKS

WATER ABSORPTION OF PAVING BLOCK

SR.	TEST PARTICULARS	1	2	3	AVERAGE	TEST METHOD
1	SATURATED SURFACE DRY WT (Ww) (GM)	1755.9	1786.9	1410.9	--	--
2	CONSTANT OVEN DRY WT. (Wd) (gm)	1749.6	1783.0	1405.3	--	--
3	WATER ABSORPTION (%)	0.36	0.22	0.40	0.33	IS 15658 : 2021

COMPRESSIVE STRENGTH OF PAVING BLOCK

SR.	TEST PARTICULARS	1	2	3	4	5	6	7	8	AVERAGE	TEST METHOD
1	ID MARK										
2	THICKNESS (MM)	70	52	65	60	61	60	63	53	--	--
3	PLAN AREA OF PAVING BLOCK (SQ MM)	25194	25224	25284	25134	25224	25254	25209	24612	--	--
4	MAX LOAD (kN)	1759	1879	1964	1883	1806	1907	1830	1837	--	--
5	APPARENT COMPRESSIVE STRENGTH (N/SQ MM)	69.82	74.49	77.68	74.92	71.60	75.51	72.59	74.64	--	--
6	CORRECTION FACTOR	1.09	0.96	1.075	1	1.063	1	1.069	0.96	--	--
7	CORRECTED COMPRESSIVE STRENGTH (N /SQ MM)	76.1	71.5	83.5	74.9	76.1	75.5	77.6	71.7	75.9	IS 15658 : 2021

SPECIFICATION LIMITS AS PER IS 15658 : 2006

SR.	TESTS	M-30	M-35	M-40	M-50	M-55
1	INDIVIDUAL MIN. COMP. STRENGTH IN N / MM2	25.50	29.75	34.00	42.50	46.75
2	AVG. 28 DAYS COMP. STRENGTH IN N / MM2	$\geq 30 + 0.825 X$	$\geq 35 + 0.825 X$	$\geq 40 + 0.825 X$	$\geq 50 + 0.825 X$	$\geq 55 + 0.825 X$

Recycled Pet Yarn Flooring

RECYCLED PET-Yarn is a synthetic material made from recycled plastic bottles, making it an environmentally friendly alternative. The material withstands water, sunlight and dirt in an extraordinary way, hence a PET yarn rug is an excellent choice for both in- and outdoor use.

Wipe off spills and stains using a damp cloth, and if necessary some foamed hand detergent. Frequent vacuum cleaning is recommended. Avoid powerful power heads and stiff bristle brushes as this might damage the rug. If the rug is placed outdoors for longer periods of rain it needs to dry up properly in between uses. The fibers in the rug can eventually deteriorate if the rug can't dry up. Carpet shedding and pilling is normal and can easily be removed by using a fabric shaver or carefully cut away with scissors. Use a rug underlay to protect your rug and your floor. This also serves as a slip protection.










THE NATURE OF HAND MADE ITEMS:

Handmade products will always have minor differences when we compare them as they are not made by machines. The "perfection" found in machine woven rugs is not something we are aiming for in our rugs as we value the hand of the artisan. All our rugs are hand woven one at a time, and it is therefore very rare to create identical items. Each piece will be unique and the product will always have minor variation keeping the same theme constant in artistic manner. Smaller variations in color, shading, texture and shape are inherent in a handmade item.. And remember - this is really what makes your rug truly one-of-a-kind!





Contact

-  @ipseipsaipsum
-  @IpseIpsaIpsum.LiveTheOrdinaryExtraordinarily
-  www.ipseipsaipsum.com
-  [AR Feature](#)
-  [Ipseipsaipsum Linktree](#)
-  www.ipseipsaipsum.com
-  founder@ipseipsaipsum.com
-  [+65 62644789](tel:+6562644789) | [+65 92717176](tel:+6592717176)
-  11-02 Tan Boon Liat Building,
315 Outran Road,
Singapore 169074