



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. सं. 2273, तुमकुर रोड, बेंगलूर - 560 022

Post Bag No. 2273, Tumkur Road, Bangalore-560 022

जनरल/General: +91-80-2839 4231/32/33, 3053 4000-4001; फैक्स/Fax: +91-80-3053 4008; तार/Grams : IPIRTI  
e-mail : samplecell@ipirti.gov.in, Websites : http://www.ipirti.gov.in; http://www.bamboocomposites.com



**NABL**  
ACCREDITED LABORATORY  
Cert. No. : T-1578 & T-1579

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**TEST REPORT**

**TC659519000000036F**

Report Issued to:

M/s. Balaji Action Buildwell.,  
G-11, Udyog Nagar,  
Main Rohtak Road,  
New Delhi - 110041

TEST REPORT AS PER IS: 2202 (Part I) -1999 (RA 2004) [WITH AMENDMENT NO(s) 2]

REPORT NO: JD/BAB/5766/Phy-036F/2019/New Delhi

Date: 24.06.2019

Your Ref: Your email

Dated: 18.04.2019

Date(S) of performance of test: From: 26.04.2019 To: 19.06.2019

**PART - A: PARTICULARS OF THE SAMPLE SUBMITTED:**

(a) Nature of Sample	:	HDHMR Door ( as declared by client)
(b) Grade/Variety/Type/Class/Abbreviation	:	BN
(c) Size of Sample	:	2140 x 920 x 32 mm
(d) Brand Name, if any	:	--
(e) Declared Values	:	--
(f) Code No.	:	--
(g) Batch No. & Date of Mfg.	:	--
(h) Quantity	:	01 No.
(i) Mode of Packing	:	--
(j) Date of Receipt	:	24.04.2019
(k) Seal / Stamp	:	--
(l) IO's Signature	:	--
(m) Any Other Information	:	--

  
संयुक्त निदेशक/Joint Director

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REPORT NO: JD/BAB/5766/Phy-036F/2019/New Delhi

Date: 24.06.2019

**PART – B: SUPPLEMENTARY INFORMATIONS:**

- (a) Reference to the sampling procedure, wherever applicable : N.A.
- (b) Supporting documents for the measurement taken and results derived like graphs, tables, sketches and/or photographs as appropriate to the test report if any (To be attached) : N.A.
- (c) Deviations from test methods as prescribed in relevant ISS/Work Instructions, if any : N.A.

**PART – C: TEST RESULT:**

Sl. No.	Tests	Cl. No.	Test Method	Requirement as per IS:2202(Pt-I) : 1999	Results
1	2	3	4	5	6
1.	a) Dimensions, mm	11.1	IS 4020(Part 2): 1998	Tolerance: Height $\pm$ 5 mm ( nominal dimensions) Width $\pm$ 5 mm (nominal dimensions) Thickness $\pm$ 1 mm (nominal dimension) Variation in the thickness between any two points – not more than 0.8 mm	0 0 + 0.2 0.16
	b) Squareness, mm			Deviation not more than 1 mm per 500 mm length	0.0
2.	General flatness, mm	11.2	IS 4020(Part 3) : 1998	Twist, cupping & warping not greater than 6 mm	2.0
3.	Local planeness, mm	11.3	IS 4020(Part 4) : 1998	Depth of deviation not greater than 0.5mm	0.35
4.	End immersion test	11.12	IS 4020(Part 13) : 1998	No Delamination	No Delamination
5.	Glue adhesion test	11.14	IS 4020(Part 15) : 1998	No Delamination	No Delamination
6.	Knife Test	11.13	IS 4020(Part 14) : 1998	Minimum pass standard	Pass standard
7.	Impact indentation, mm	11.4	IS 4020(Part 5) : 1998	No cracking, tearing or delamination Depth of indentation not greater than 0.2mm	Conforms 0.06
8.	Slamming	11.9	IS 4020(Part 10) : 1998	No visible damage after 50 drops	No damage
9.	Flexure (deflection in mm)	11.5	IS 4020(Part 6) : 1998	Deflection at maximum load not greater than 1/30 of length & 1/15 of width, whichever is less	39.08
	15 mins after loading 50 Kg 3 mins after load removal			Residual deflection not greater than 1/10 of maximum deflection	2.3

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Sl. No.	Tests	Cl. No.	Test Method	Requirement as per IS:2202(Pt-I) : 1999	Results
1	2	3	4	5	6
10.	Shock resistance. Soft and light body impact Soft and heavy body impact	11.7	IS 4020(Part 8) : 1998	No visible damage No visible damage	No visible damage No visible damage
11.	Buckling (deflection in mm) After 5 mins of 40 Kg loading 15 mins after load removal	11.8	IS 4020(Part 9) : 1998	No deterioration Initial deflection not greater than 50mm Residual deformation after 15 minutes of unloading not greater than 5 mm	No deterioration 36.5 2.46
12.	Edge loading (deflection in mm) After 15 mins of 100 kgs loading 3 mins after load removal Lateral buckling	11.6	IS 4020(Part 7) : 1998	Deflection at max. load not greater than 5 mm Residual deflection after removal of load not greater than 0.5 mm Not more than 2 mm during loading No residual lateral buckling after load removal	2.15 0.96 No lateral buckling No residual buckling
13.	Screw withdrawal strength, N	11.15	IS 4020(Part 16) : 1998	Not less than 1000 Surface condition: No visible damage to the surface either by delamination of extra chipping off at the points of withdrawal	1575 No visible damage
14.	Varying humidity test	11.11	IS 4020(Part 12) : 1998	No visible warping, twisting or delamination Maximum departure from the general planeness not more than 1 mm Recovery - At least 90% of the change in dimension	Conforms 0.70 99.4
15.	Misuse	11.10	IS 4020(Part 11) : 1998	No permanent deformation of the fixing or any other part of the doorset in hindering its normal working after test	No permanent deformation

Sample Conforms to IS 2202 (Part-1) -1999.

**PART - D: REMARKS:**

1. Test results are relevant only to the material received for testing.
2. Remnant of tested material if any will be retained for a period of 6 months only, from the date of issue of test report.

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