

DOC No. : HTS-TR-24-020305 Plot No. 36, Sector 1, HSIIDC IGC Saha, Ambala Cantt,
Telephone : +91 9355002828 Ambala Cantt, Ambala, Haryana, India - 133104
FAX : -
E-Mail : hindustaantesthouse@gmail.com
BO Code : AHBO

Test REPORT AS PER : IS 710 (2024)**QR Code/Barcode : 100000934075****REPORT NO : AHBO/120000641/20250122/FS/
1_1**

DATE : 19 Mar, 2025

PART A. PARTICULARS OF SAMPLE SUBMITTED

a) Customer Name & Address : -
b) Nature of sample : FS
c) Grade/Variety/Type/Class Size etc : Type / Size / Grade / Variety : Marine Plywood:
Grade: BWP
d) Declare values, if any : Thickness 12 mm : Size Length 2440 mm x
Width 1220 mm : Formaldehyde Class E1 :
Marine Plywood. Grade BWP
e) Batch No. & Date of Manufacture : 19A25/
f) Quantity : 1 sheet
g) Date of Receipt : 03 Feb, 2025
h) BIS Seal : Verified by Sample Cell
i) IO's Signature : Verified by Sample Cell
j) Any other Information / Expiry Date, If any : Marine Plywood. Grade: BWP, Formaldehyde
Class: E1, Size: Length 2440 mm x Width 1220
mm, Thickness: 12 mm/
k) Date of Commencement of Testing : 08 Feb, 2025
l) Date of Completion of Testing : 19 Mar, 2025
m) Section Code : 25MB542N
n) Section Report No. : 25MB542N_1
o) Report Type : New
p) Reference Report No. :
q) Remarks :

Johnny R
OIC SAMPLE CELL
(Authorized Signatory)
Authorized on: 19 Mar, 2025 16:00 PM

1. Hindustaan Testing Solutions LLP

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PART B. SUPPLEMENTARY INFORMATION

- | | |
|--|----------------|
| 1. Reference to sampling procedure, wherever applicable. | Not Applicable |
| 2. Supporting documents for the measurements taken and results derived like graphs, table sketches and or photographs as appropriate to test report, if any. | Yes |
| 3. Deviation from the test methods as prescribed in relevant ISS/Work instruction, if any. | Not Applicable |
| 3. NABL Report required ? | - |

Rakesh Kumar
OIC Mechanical
(Authorized Signatory)
Authorized on: 19 Mar, 2025 15:28 PM

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PART C. TEST RESULT

S.No.	Clause No Table No. Sl. No	Parameter - Method of test	Test Description	Min Limit	Max Limit	Unit	Result/ Observation
1	5.1.1	Defects in veneers	-	-	-	-	Test Not Applicable
2	CI-9.4.2	Adhesion of Plies	As per "As per IS 1734 (Part 5). "	-	-	-	PASS STANDARD
3	CI-9.11	Formaldehyde Content Test	As per IS 13745	-	-	-	Test Not Applicable
4	CI-9.10	Retention of Preservative	As per IS 2753 (Part 1 and 2)	-	-	-	Test Not Applicable
5	CI-9.9, Table-3	Wet Bending Strength- Modulus of Rupture (MOR)	-	-	-	-	ALONG MOR AVERAGE- 25.23 N/mm ² , MIN. INDIVIDUAL-22.82 N/mm ² , ACROSS MOR AVERAGE- 35.46 N/mm ² , MIN. INDIVIDUAL-32.32 N/mm ² (Requirements- ALONG AVERAGE-21 N/mm ² / MIN. INDIVIDUAL-19 N/mm ² , ACROSS AVERAGE-17 N/mm ² / MIN. INDIVIDUAL-15 N/mm ²)
6	CI-9.9, Table-3	Wet Bending Strength- Modulus of Elasticity (MOE)	-	-	-	-	ALONG MOE AVERAGE-4742.65 N/mm ² , MIN. INDIVIDUAL-4576.63 N/mm ² , ACROSS MOE AVERAGE- 4559.17 N/mm ² , MIN. INDIVIDUAL-4389.52 N/mm ² (Requirements- ALONG AVERAGE-3200 N/mm ² / MIN. INDIVIDUAL-2900 N/mm ² , ACROSS AVERAGE-2300 N/mm ² / MIN. INDIVIDUAL-2100 N/mm ²
7	CI-9.8, Table-2	Static Bending Strength- Modulus of Rupture (MOR)	-	-	-	-	ALONG MOR AVERAGE- 44.96 N/mm ² , MIN. INDIVIDUAL-41.32 N/mm ² , ACROSS MOR AVERAGE- 60.31 N/mm ² , MIN. INDIVIDUAL-49.93 N/mm ² (Requirements- ALONG AVERAGE-43 N/mm ² / MIN. INDIVIDUAL-38 N/mm ² , ACROSS AVERAGE-35 N/mm ² / MIN. INDIVIDUAL-31 N/mm ²)

8	CI-9.8, Table-2	Static Bending Strength- Modulus of Elasticity (MOE)	IS 1734 (Part 11)	-	-	-	ALONG MOE AVERAGE-7131.47 N/mm ² (MIN. INDIVIDUAL-6696.09 N/mm ²) ACROSS MOE AVERAGE- 6512.02 N/mm ² (MIN. INDIVIDUAL-6142.23 N/mm ² (Requirements- ALONG AVERAGE-6400 N/mm ² / MIN. INDIVIDUAL-5700 N/mm ² , ACROSS AVERAGE-4600 N/mm ² / MIN. INDIVIDUAL-4100 N/mm ²)
9	CI-9.7	Mycological Test	As per IS 1734 (Part 7)	-	-	-	GLUE SHEAR STRENGTH AVERAGE-1245 N, MIN. INDIVIDUAL -1062 N,ADHESION OF PLIES-PASS STANDARD
10	CI-9.6	Tensile Strength	AS per IS 1734 (Part 9)	-	-	-	ALONG THE GRAIN-40.82 N/mm ² , ACROSS THE GRAIN-46.99 N/mm ² , SUM OF TENSILE STRENGTH-87.81 N/mm ²
11	CI-9.5.1.2	Water Resistance Test-Adhesion of plies	"As per IS 1734 (Part 5)."	-	-	-	PASS STANDARD
12	CI-9.5.1.1	Water Resistance Test-Glue shear strength	AS per IS 1734 (Part 4)	-	-	-	AVERAGE-1287 N (MIN. INDIVIDUAL -1047 N)
13	CI-9.4.1	Glue Adhesion in Dry State- Glue Shear Strength	AS per IS 1734 (Part 4)	-	-	-	AVERAGE-1898 N (MIN. INDIVIDUAL -1590 N)
14	CI-9.4.2	Glue Adhesion in Dry State- Adhesion of Plies	"As per IS 1734 (Part 5)."	-	-	-	PASS STANDARD
15	CI-9.3	Moisture Content	"As per IS 1734 (Part 1)."	5.0	15.0	%	8.14
16	CI-7.1, 7.2, 7.3, 7.4, 7.5 & 7.6	Workmanship and finish	-	-	-	-	SATISFACTORY
17	CI-6.3	Squareness and Edge Straightness	As per Annex C	-	-	-	SQUARENESS-0.13 %, EDGE STRAIGHTNESS-0.08 % (TOLERANCE - SQUARENESS & EDGE STRAIGHTNESS- 0.2 % MAX.)
18	CI-6.2	Thickness	-	11.4	12.6	MM	12.21
19	CI-6.1	Dimensions (length and width)	-	-	-	-	LENGTH-2443 MM, WIDTH-1223 MM (TOLERANCE- LENGTH = +6 MM ,WIDTH= +3 MM)
20	CI-5.4	Moisture Content	As per IS 287	-	-	-	Test Not Applicable
21	CI-5.3	Treatment	-	-	-	-	Test Not Applicable
22	CI - 5.2.4	Grain Direction	-	-	-	-	Test Not Applicable
23	CI - 5.2.3.4	Scarf joints	-	-	-	-	Test Not Applicable
24	CI - 5.2.3.3	End joints	-	-	-	-	Test Not Applicable
25	CI - 5.2.3.2	Edge joints	-	-	-	-	Test Not Applicable
26	CI - 5.2.3.1	Joint in Veneers	-	-	-	-	Test Not Applicable

27	CI -5.2.2	Thickness of Veneers	-	-	-	-	Test Not Applicable
28	CI-5.2.1	Glueing	-	-	-	-	Test Not Applicable
29	CI-5.1	Veneers	-	-	-	-	Test Not Applicable
30	CI-4.2	Adhesive	As per IS 848	-	-	-	Test Not Applicable
31	CI-4.1	Timber	As per Annex B	-	-	-	Test Not Applicable

Rakesh Kumar
OIC Mechanical
 (Authorized Signatory)
 Authorized on: 19 Mar, 2025 15:28 PM

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PART D. REMARKS

Report Atttached

Rakesh Kumar
OIC Mechanical
(Authorized Signatory)
Authorized on: 19 Mar, 2025 15:28 PM

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TC-7509

Page 1 of 3

TEST-REPORT

Issued to:	BUREAU OF INDIAN STANDARDS (AHBO)	Job No.:	HTS/TR/24/020305
Address:	3 rd Floor, Navajivan Amrut Jayanti Bhavan Behind Gujarat Vidhya Pith Off. Ashram Road Ahmedabad Gujarat, India- 380014	ULR No.:	TC750925000000319F
Test Report	As per IS: 710-2024	Issued date:	19.03.2025

PART A: PARTICULARS OF TEST ITEM

Sample description:	Marine Plywood	Sample Quantity:	One
Declared values, if any:	Grade- BWP, Formaldehyde Class E1	Sample Size:	2440x 1220x 12 mm
Date of receipt:	03.02.2025	Sample Code No.:	AHBO/120000641/20250122/FS/1
Batch No. & Mfg date:	19A25 & 19.01.2025	BIS seal:	Sealed
Any other Information/Expiry date, if any: ---		IO's Signature:	Signed
Date of commencement of Testing:	08.02.2025	QR Code:	100000934075
Date of Completion of Testing:	19.03.2025	Encoded Code:	25MB542N

PART B: SUPPLEMENTARY INFORMATIONS

a) Reference to sampling procedure, wherever applicable	: NA
b) Supporting documents taken and results derived graphs, tables, sketches and/or photographs as appropriate to test report, if any (To be attached)	: NA
c) Deviation from the test methods as prescribed in relevant ISS, work Instructions, if any	: NA

PART C: RESULTS OF ANALYSIS

I. Mechanical (Wood & Wood Products)

S. No.	Test Parameter(s)	IS Clause	Unit	Result(s)/ Observation (s)	Specified Values/ Tolerance	Test Method
1.	Dimensions and Tolerance	6				IS: 710-2024
	a) Length		mm	2443 (+3)	+6, -0	
	b) Width		mm	1223 (+3)	+3, -0	
	c) Thickness		mm	12.21 (+1.75%)	± 5 %	
	d) Edge Straightness		%	0.08	0.2 (Max.)	
	e) Squareness		%	0.13	0.2 (Max.)	
2.	Workmanship and Finish	7	---	Satisfactory	Satisfactory	IS: 710-2024
3.	Moisture Content	9.3	%	8.14	5 - 15	IS: 1734 (P1) 1983

Terms & Conditions: 1. The above results relate only to the item tested. 2. Sample(s) is/are not drawn by Hindustaan Testing Solutions LLP. 3. Total liability of Hindustaan Testing Solutions LLP is limited to invoiced amount. 4. The Test-Report is not reproduced wholly or in part and cannot be used as in court of law; should not be used as evidence in the court. 5. Hindustaan Testing Solutions LLP is an NABL accredited laboratory vide certificate number TC-7509 and BIS approved laboratory.



Kapal
Analyst



Rakesh
Rakesh Kumar
Authorized Signatory



Laboratory Address: Plot No. 36, Sector 1, HSIIDC IGC Saha, Ambala-133104, Haryana



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TEST-REPORT

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Address: 3rd Floor, Navajivan Amrut Jayanti Bhavan
Behind Gujarat Vidhya Pith Off. Ashram Road
Ahmedabad Gujarat, India- 380014

Job No.: HTS/TR/24/020305
ULR No.: TC750925000000319F

Issued date: 19.03.2025

Test Report As per IS: 710-2024

S. No.	Test Parameter(s)	IS Clause	Unit	Result(s)/ Observation (s)	Specified Values/ Tolerance	Test Method
4.	Glue Adhesion in Dry State a) Glue Shear Strength i. Average ii. Minimum, individual b) Adhesion of Plies	9.4	N ---	1898 1590 Pass Standard	1350 (Min.) 1100 (Min.) Shall be min. Pass Standard	IS 710-2024 IS: 1734 (P4) 1983 IS: 1734 (P5) 1983
5.	Water Resistance Test a) Glue Shear Strength I. Average II. Minimum, individual b) Adhesion of Plies	9.5	N ---	1287 1047 Pass Standard	1000 (Min.) 800 (Min.) Shall be Min. Pass Standard	IS: 710-2024 IS: 1734 (P4) 1983 IS: 1734 (P5) 1983
6.	Tensile Strength a) Along the grain direction b) Across the grain direction c) Sum of Tensile Strength (a + b)	9.6	N/mm ²	40.82 46.99 87.81	36 (Min.) 29 (Min.) 84.5 (Min.)	IS:1734 (P9) 1983
7.	Mycological Test a) Edge of the Specimen b) Glue Shear Strength I. Average II. Minimum, individual c) Adhesion of Plies	9.7	--- N ---	No sign of Separation at edges 1245 1062 Pass Standard	Shall be no sign of separation 1000 (Min.) 800 (Min.) Shall be Min. Pass Standard	IS: 1734 (P7) 1983 IS: 1734 (P4) 1983 IS: 1734 (P5) 1983
8.	Static Bending Strength a) Modulus of Elasticity I. Along the grain direction i. Average ii. Minimum, individual II. Across the Grain Direction i. Average ii. Minimum, individual	9.8	N/mm ²	7131.47 6696.09 6512.02 6142.23	6400 (Min.) 5700 (Min.) 4600 (Min.) 4100 (Min.)	IS: 710-2024 IS: 1734 (P11) 1983

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Rakesh Kumar
Analyst



Rakesh Kumar
Rakesh Kumar
Authorized Signatory





HINDUSTAAN TESTING SOLUTIONS LLP

TAX INVOICE

Issued to:	BUREAU OF INDIAN STANDARDS (AHBO)	Invoice Number:	HTS240519
Address:	3 rd Floor, Navajiva Amrut Jayanti Bhavan Behind Gujarat Vidyapith, Off. Ashram Road Ahmedabad-380014 (Gujarat), India GSTIN: 24AAATB0431G1ZH	Invoice Date:	19.03.2025
		HTS Job ID:	HTS/TR/24/020305
		Reference No.:	Test Request Letter
			27.01.2025

Test charges

S. No.	Item Description(s)/Test Parameter(s)	Quantity	HSN/SAC Code	Rate/Unit (Rs.)	Amount (Rs.)
1.	Testing of Marine Plywood as per IS 710-2024 QR Code: 100000934075 Sample Code: AHBO/120000641/20250122/FS/1	1	998346	17500	17500

Sub Total 17500

Amount after @20% discount 14000

IGST@18% 2520.00

CGST@9% 0.00

SGST@9% 0.00

Total Amount 16520

Rupees (In words): Sixteen Thousand Five Hundred Twenty only


GSTIN: 06AAQFH7892D1ZX

PAN NUMBER: AAQFH7892D

Terms:

- Subject to Ambala Cantt Jurisdiction Only
- Cheques/DD to be made in the name of **Hindustaan Testing Solutions LLP**
- HDFC Bank current A/C 50200096693882 with IFSC code HDFC0002563

For Hindustaan Testing Solutions LLP


-SD-
Sign
Authorized Signatory

Postal Address: Plot No. 36, Sector 1, HSIIDC IGC Saha, Ambala. Haryana; Phone: 7876199888
e-mail: hindustaantesthouse@gmail.com