

# TEST CHARGES

Effective from 1<sup>st</sup> November 2010



Center for Testing and Evaluation of  
Wood composites

Indian Plywood Industries Research and  
Training Institute

(Autonomous Body under the Ministry of Environment & Forests,  
Government of India)

P.B.No.2273, Tumkur Road, Bangalore 560 022

Sl. No.	Test Material	I.S. Specification No.	Minimum size of sample cm x cm	Test Charges per sample Rs.
<b>A. Wood</b>				
1	Classification of Timber	399	15 x 10	1,020
2	Identification of species		15 x 10	1,020
3	Moisture content determination.	1708 (part I)/287	15 x 10	420
4	Thickness			420
5	Spot test for Preservative treatment (Treatment given such as boron compounds/CCA/ACC/CCB should be specified)	401/5539/121-20/1920	15 x 10	540
6	Quantitative estimation of preservative chemicals a) CCA/CCB/ACC 2753(Pt. 1) b) Boron 2753(Pt. 1) (Treatment given should be specified)	401/2753	15 x 10 15 x 10	8100 3000
7	Non Coniferous timber in converted form for general purposes	5966		2,400
8	Preservative treated & seasoned sawn timber from rubber wood a) CCA/CCB/ACC 2753 (part I) b) Boron 2753 (part II)	14960		8100 3000
9	Specific Gravity / Density	1734/1708	1 plank	540
10	Face Veneer / Core Veneer (ID, MC & Thickness)	303		1860
11	Seasoning	1141		900
12	Weight			540
13	Cracks			540
14	Warping			540
15	Knots			540
16	Strength of finger jointed teak section against clean teak wood section	1708		3000
17	Block Shear Strength	1708		1200

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<b>B. PLYWOOD</b>				
1	Commercial plywood	303	Full Size	4,020
2	Structural Plywood	10701	-do-	14,400
3	Shuttering Plywood	4990	-do-	15600* 7500**
4	Marine Plywood	710	-do-	14760* 6660**
5	<b>Aircraft plywood</b>			
	i) Medium strength	709	-do-	8,820
	ii) High strength	4859	-do-	8,820
6	Fire retardant plywood	5509	-do-	5,220
7	Decorative plywood	1328	-do-	3,180
8	Visual Defects in Veneer (face)	303	-do-	420

\* Includes preservative estimation

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<b>C. PARTICLE BOARD</b>				
1	Wood particle board	3087	Full size board	5,220
2	Veneered particle board	3097	-do-	5,220
3	Rice husk particle board	3097	-do-	5,220
4	Cement bonded particle board	14276	-do-	9,600
5	Prelaminated particle board	12823	-do-	10,020
6	Prelaminated Cement Bonded Particle Board	15786-2008	-do-	14400
7	High density particle board	3478	-do-	6,360
8	P.B. Composition		-do-	3,600
9	Internal Bonding Test	2380	-do-	1200
<b>D. FIBRE BOARD</b>				
1	Medium density fibre board (MDF)	12406	-do-	5,220
2	Prelaminated MDF	14587	-do-	10,020
<b>E. HARDBOARD</b>				
1	Fibre hardboard	1658	-do-	3,600

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<b>F. FLUSH DOOR</b>				
1	Flush door shutter	2202(Pt I)	Full size door 2 Nos.	13,080
1a	Flush door shutter acceptance tests only as per	IS:2202, part I	1 Door	3,600
2	Hollow Core Flush door	2191	-do-	13080
3	Type tests for door Shutter	4020	Full size door 2 Nos.	13,080
<b>4</b>	<b>Type test for door shutter - Individual Tests</b>			
i	Dimensional & Squareness test	4020	Full size door	540
ii	General flatness test	-do-	-do-	540
iii	Local Planeness test	-do-	-do-	540
iv	Impact indentation test	-do-	-do-	1,500
v	Flexure test	-do-	-do-	1,500
vi	Edge loading test	-do-	-do-	1,500
vii	Shock resistance	-do-	-do-	2,400
viii	Buckling test	-do-	-do-	1,500
ix	Slamming test	-do-	-do-	900
x	Misuse test	-do-	-do-	1,500

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xi	Varying Humidity	-do-	-do-	4,200
xii	End immersion test	-do-	-do-	900
xiii	Knife test	-do-	-do-	540
xiv	Glue adhesion test	-do-	-do-	660
xv	Screw withdrawal test	-do-	-do-	1,500
<b>G. PANEL DOORS SHUTTER</b>				
a)	As per IS:1003 (Part 1)	1003 (Part I)	Full size door	13,080
b)	<b>Moulded Panel Door</b>			
	i) Panel Door	IS15380	-do-	13,080
	ii) Skin	IS15380	-do-	8,220
<b>H. OTHER PANEL PRODUCTS</b>				
1	Blockboard	1659	-do-	6,300
2	Bamboo mat board (BMB)	13958	-do-	4,500
3	Compreg (General Purpose)	3513 (Part I)	-do-	9,600
4	BMCS	IS15476	Full Sheet	10,800
5	BMVC	14588-1999	-do-	10,800

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6	Coir Veneer Board	14842	Full size	4,020
7	Laminated Veneer Lumber	14616	-do-	14,400
<b>I. Individual Tests</b>				
1	Density	1734/1708	30 x 30	540
2	Modulus of rupture / Bending Strength	-do-	100 x 30	1,200
3	Modulus of elasticity	-do-	100 x 30	1,200
4	Tensile strength	-do-	50 x 30	1,500
5	Compressive strength	-do-	50 x 30	1,200
6	Nail/ Screww holding power	-do-	50 x 30	1,200
7	Hardness	1734/1708	50 x 30	1,200
8	Thermal conductivity	3346	100 x 100	3,600
9	Termite Resistance	4833	30 x 30	4,080
10	Fungal resistance	4873	30 x 30	4,080
11	Borerresistance Natural infestation	-do-	30 x 30	4,080
12	Abrasion resistance test	-do-	30 x 30	2,400
13	Aging			420
14	Boiling			420
15	Water Resistance for Plywood	303/710/4990		1320
16	Solid Contents			1200
17	Flow Time			1200
18	Gel Time			1200
19	Block shear strength			1200

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19	Dimensional Tests for Windows		Full size window	540
20	Glue test for joints	4021 (part II)		660
21	Mycological Test	1734	150 x 100	1,080
22	Water absorption, swelling, etc (for particle board)	2380	-do-	840
23	Acoustic Properties			
i	Sound absorption co-efficient	10420	50 x 50	6,000
ii	Transmission loss co-efficient	-	50 x 50	6,000
24	Load bearing capacity test	15476		3,000
25	Impermeability test	15476		1,000
26	Falling weight test	15476		1,000

**Note: Facilities for testing various other materials for conformity to relevant I.S.Specifications are also available. Details will be furnished on request. Testing of samples as per other specifications will also be carried out subject to availability of facilities.**

## **II CHEMICALS**

<b>1</b>	<b>Resin and adhesives</b>				
a	Identification of resin used in plywood using spot test			660	
b	PVAc adhesive	4835	0.5 kg	3,900	
c	Resin for plywood	848	1 kg	3,600	
<b>2</b>	<b>Extender for synthetic resins</b>		1508	1 kg	6,660
a	Fineness of granules	-do-	250g	1,200	
b	Moisture content	-do-	250g	600	
c	Ash content	-do-	250g	1,800	
d	Fat content	-do-	250g	1,200	
e	Nitrogen content	-do-	250g	2,400	
f	Acidity	-do-	250g	600	
<b>3</b>	<b>Formaldehyde Emission</b>				
a	Perforated Method	13745		3000	
b	Chamber Method	EN 717-I		12000	
<b>4</b>	<b>Maida</b>		<b>1508</b>		

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<b>5</b>	<b>Formaldehyde solution</b>			
a	Acidity	3321	250 ml	600
b	Ash content	-do-	-do-	1,800
c	Aldehyde content	-do-	-do-	1,200
d	Iron content	-do-	-do-	1,200
e	Methanol content	-do-	-do-	2,400
<b>6</b>	<b>Phenol</b>			
a	Phenol content	538	-do-	2,580
b	Crystallizing point	-do-	-do-	600
<b>7</b>	<b>Urea</b>			
a	Total Nitrogen content	5406	-do-	2,580
b	Moisture	-do-	-do-	600
c	Residue on ignition	-do-	-do-	1,200
d	pH of 10% solution	-do-	-do-	600
e	Melting point	-do-	-do-	600
<b>8</b>	<b>Paraformaldehyde</b>			
a	Aldehyde content	5271	250 g	1,200
b	Ash content	-do-	-do-	1,800
c	Acidity	-do-	-do-	600
<b>9</b>	<b>Copper sulphate</b>			
a	Copper content	261	250 g	1,200
b	Insoluble matter of copper sulphate in water	-do-	-do-	1,200
c	pH	-do-	-do-	600
d	Soluble iron & aluminium compounds	-do-	-do-	1,800

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<b>10</b>	<b>Ammonium chloride (Technical &amp; pure)</b>			
a	Moisture	1113	250 g	600
b	Ammonium chloride (% by weight dry basis)	-do-	-do-	2,400
c	pH	-do-	-do-	600
d	Matter insoluble in water	-do-	-do-	1,200
<b>11</b>	Percent of ammonia in liquor ammonia	799	-do-	1,800
<b>12</b>	Base Paper/Resin impregnated Paper		30 x 30	600
<b>13</b>	Formaldehyde content in Plywood/Particle board (Sample should be sealed in polyethelene)	13745	30 x 30	3,000
<b>14</b>	Total nitrogen content in urea/melamine			2,580

### III.GENERAL INFORMATION

1. Request for testing should be addressed to the Director, giving full details.
2. Materials along with the indent may be handed over at the Institute on all working days Monday through Friday between 9 A.M. and 4 P.M. If they are sent by post, rail, road or air they should be on door delivery basis and freight paid. Otherwise all expenses incurred in connection with collection and handling of materials including demurrage, if any, have to be borne by the customers.
3. Materials, unless otherwise requested by the customer, will be tested as per the latest version of the Specification.
4. Charges in full for testing should be paid in advance by crossed Demand Draft drawn on any nationalised bank in Bangalore, in favour of the Director, IPIRTI.
5. For testing purposes, samples damaged or spoiled, primer/varnish coated or without sufficient details are not accepted. Such cases may result in prolonged correspondence and delay in taking up the testing work.
6. Tests will normally be carried out on first cum first serve basis and would take approximately 4-8 weeks for completion and issue of test reports depending on the materials.
7. Test reports will be sent by Registered Post, only after receipt of test charges.
8. Facilities are also available at kolkata field station Officer in charge may be contacted for availing the same. be contacted for availing the same.

***For further details please contact:***

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