



Made from high-quality agro-plantation trees such as eucalyptus, Lower Emission Particle Board is a premium quality board that offers strength and lifelong durability by virtue of its synthetic resin bondage under intense heat and pressure. Its E1 Grade certification makes it absolutely safe for indoor applications in homes and offices.

Properties (Physical & Mechanical)	Specification as per IS 12823:1990 Grade II, Type II	Century Prelam Particle board	Specification as per IS 12823:1990 Grade I, Type II	Century Prelam Particle board
Length	2440, +6mm, -0mm	2440 mm	2440 +6mm, -0mm	2440 mm
Width	1830, +3mm, -0mm	1830 mm	1830 +3mm, -0mm	1830 mm
Thickness (mm)	Thick. ± 5%	18.10 mm	Thick ± 5%	18.10 mm
Straightness	2mm per 1000mm or 0.2%	0.5 mm	2mm per 1000mm or 0.2%	0.5 mm
Squareness	2mm per 1000mm or 0.2%	0.5 mm	2mm per 1000mm or 0.2%	0.5 mm
Appearance	No A B C defects	Defect free	No A B C defects	Defect free
Density, kg/m³	500- 900 kg/m³	640	500 - 900 kg/m³	670
Density variation % (max.)	Var.± 10%	5	Var ± 10%	5
Water absorption % (max.)				
(a) 2 hours	15	11	7	6
(b) 24 hours	30	24	15	12
Thickness swelling (%), 2 hours (max.)	8	6.5	5	3.5
Tensile strength Perpendicular to surface (N/mm²) Up to 20mm thick. Above 20mm thick.	0.3 N/mm²	0.35 N/mm²	0.45 N/mm² 0.40 N/mm²	0.50 N/mm² 0.45 N/mm²
Tensile strength (N/mm²) (i) After cyclic test (ii) Accelerated water Resistance test	Nil	Nil	0.2 0.15	0.22 0.18
Modulus of rupture, N/mm² (min.) avg				
(a) Average	11 N/mm²	13.5 N/mm²	15 N/mm²	17.5 N/mm²
Modulus of elasticity, N/mm²				
(a) Average	2500 N/mm²	2600 N/mm²	2500 N/mm²	2650 N/mm²
Screw withdrawal, N (min.)				
(a) Face	1250 N	1400 N	1250 N	1500 N
(b) Edge	750 N	900 N	850 N	1000 N
Moisture content %	5 – 15 %	7%	5 – 15 %	7%
Abrasion resistance (min.) in no. of revolutions	Min 450	475	Min 450	475
Resistance to steam	Shall not show any sign of blister delamination or change in surface finish	Conforms	Shall not show any sign of blister delamination or change in surface finish	Conforms
Crack resistance	Shall not show any signs of crack or delamination	Conforms	Shall not show any signs of crack or delamination	Conforms
Resistance to cigarette burn	Shall not leave any mark or stain	Conforms	Shall not leave any mark or stain	Conforms
Resistance to stains	Shall not leave any mark or stain	Conforms	Shall not leave any mark or stain	Conforms
Emission standard as per BIS norms	Formaldehyde class E1 : Fc ≤ 8mg/100g for oven dry board	6.5mg/100g of oven dry board		
	Formaldehyde class E2 : 8 < Fc ≤ 30mg/100g for oven dry board	18mg/100g of oven dry board		

Properties (Physical & Mechanical)	Specification as per IS 3087 : 2005 (Grade-II)	Century Plain Particle board	Specification as per IS 3087 : 2005 (Grade-I)	Century Plain Particle board
		18 mm		18 mm
Density	500- 900 kg/m³	640	500 - 900 kg/m³	670
Density variation	± 10%	5	± 10%	5
Moisture content (%)	5 – 15%	7	5 – 15% +3	7.5
Water absorption (%) max.				
(a) After 2 hours	40	28	10	7
(b) After 24 hours	80	65	20	16
Linear expansion (%) max.				
(i) Length	0.5%	0.3%	0.5%	0.3%
(ii) Width	0.5%	0.3%	0.5%	0.3%
Thickness swelling (%), 2 hours	12%	7.9%	8%	4.30%
Swelling in thickness due to surface absorption (%)	9%	7%	6%	4.00%
Tensile strength Perpendicular to surface (N/mm²) Up to 20mm thick. Above 20mm thick.	0.3 N/mm²	0.35 N/mm²	0.45 N/mm² 0.40 N/mm²	0.5 N/mm² 0.45 N/mm²
Tensile strength (N/mm²) (i) After cyclic test (ii) Accelerated water resistance test			0.2 0.15	0.22 0.18
Modulus of rupture (N/mm²)	Avg. 11 N/mm²	13.2	Avg. 15 N/mm²	16.9
Modulus of elasticity (N/mm²)	Min. Ind. 10 N/mm²	12.4	Min. Ind. 13 N/mm²	14.3
Screw withdrawal, N (min.)	Avg. 2000 N/mm²	2360	Avg. 2500 N/mm²	2680
	Min. Ind. 1800 N/mm²	1940	Min. Ind. 2200 N/mm²	2340
(a) Face side	1250 N	1340	1250 N	1460
(b) Edge (for thick >12mm)	700 N	870	850 N	980
Emission standard as per BIS norms	Formaldehyde class E1 : Fc ≤ 8mg/100g for oven dry board	6.5mg/100g of oven dry board		
	Formaldehyde class E2 : 8 < Fc ≤ 30mg/100g for oven dry board	18mg/100g of oven dry board		

STANDARD SIZE

2440mm x 1220mm; Other variants available as per specifications

THICKNESS (mm)

3.00, 5.50, 8.00, 12.00, 16.00, 16.75, 18.00

RANGES

One-side laminated (OSL), Both-side laminated (BSL), One-side Bare (OSB), Both-side Balancing (BSB)

FINISHES

Suede and Matt

Century Plyboards (India) Limited

Engineered Panel Products Division

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THE ULTIMATE DEFENDER

Equip your spaces with Fire Smart Panel, designed to defend you from unfortunate fire incidents. This ultimate defender safeguards your furniture with unparalleled efficacy against immediate fire risk.



FROM THE HOUSE OF CENTURY PROWUD



The Ultimate Defender

Introducing Fire Smart Panel, the ultimate defender of your furniture and interiors. Our cutting-edge boards combine unrivalled strength with exceptional fire resistance, ensuring your safety and peace of mind. It not only protects from the entry of borers and termites like a true and fearless defender, it also combats moisture and fire to give exceptional durability and performance to your furniture and interiors in any environment.



SPECIFICATION - FIRE SMART PANEL PRODUCT

Sr. No.	Properties	UOM	FSP Standard
1.	Dimension tolerance		
	Length & width	mm/mtr	±3
	Thickness	mm	±0.30
	Edge straightness & squareness (max.)	mm/mtr	±2
2.	Density	Kg/m³	850 - 870
3.	Variation from mean density	%	±10
4.	Moisture content	%	4 - 8
5.	Variation from mean moisture content	%	±3
6.	Linear expansion (Thickness swelling in water) Due to general absorption after 24 hours soaking (Max.)	%	5
7.	Internal bond strength (min.)	N/mm²	1.0 - 1.20
8.	Internal bond strength (min.)		
	a) After cyclic test	N/mm²	N/A
	b) After accelerated water resistant test	N/mm²	0.25 - 0.30
9.	Modulus of rupture (min.)	N/mm²	32 - 35
10.	Modulus of elasticity (min.)	N/mm²	3000 - 3200
11.	Screw withdrawal strength (min.)		
	Face	N	2000
	Edge for 12 mm and above thickness	N	1500
12.	Formaldehyde content	mg/100 gm for oven dry board	E2: Fc ≤ 8
13.	FR class	As per ASTM E84	Class A



Made at the most
advanced plant in India



Plant spread over
1,57,600 sq. m. in
Hoshiarpur, Punjab



Annual production
of 2.5 Lakh cbm



State-of-the-art
machinery and
research facility



World-class board
with superior density



Available in a wide
range of shades

- Conforms to **ASTM E84-2021 Class A**
- Available in both Plain and Prelam Boards
- Available thickness (in mm): 5.50, 8.00, 12.00, 16.75, 18.00

CenturyHDF offers quality that's unparalleled. These boards are as stunning as they are eco-friendly. Made with the hardwood of specially grown Eucalyptus trees, these boards undergo careful processing in the state-of-the-art plant to get rid of all the drawbacks which come with wood while maintaining its strength and shine. The residual produced is recycled into the energy plant keeping in line with our objective of sustainability. With sustainability & safety at the forefront of our minds, each board is bonded with specially formulated adhesives which emit minimal formaldehyde fumes and each board is recyclable in nature. This ensures the well-being of the environment of your home and the natural environment.

E2 compliant for a better future

E2 materials' formaldehyde release has to be $\leq 8\text{ mg / }100\text{g}$ for oven dry board, which is identical to its purity. This means that the E2 standard is set at a humane level. Since this material will contain some amount of formaldehyde, you should know that standards only accept formaldehyde emissions at an extremely low rate.

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Specifications – Lower Emission Premium Plus

Sr. No.	Properties	UOM	Lower Emission Premium Plus E2 Standard
1.	Dimension tolerance		
	Length & width	mm/m	± 3
	Thickness	mm	± 0.3
	Edge straightness & squareness (max.)	mm/m	2
2.	Density	kg/m ³	850-870
3.	Variation from mean density	%	± 10
4.	Moisture content	%	4-8
5.	Variation from mean moisture content	%	± 3
6.	Linear expansion (Thickness swelling in water), due to general absorption after 24 hours soaking (max.)	%	5
7.	Internal bond strength (min.)	N/mm ²	1.00-1.20
8.	Internal bond strength (min.)	N/mm ²	
	(a) After cyclic test		N/A
	(b) After accelerated water resistance test		0.25-0.30
9.	Modulus of rupture (min.)	N/mm ²	
	(a) Average		32-35
	(b) Individual		
10.	Modulus of elasticity (min.)	N/mm ²	
	(a) Average		3000-3200
	(b) Individual		
11.	Screw withdrawal strength (min.)	N	
	(a) Face		2000
	(b) Edge		1500
12.	Formaldehyde content	mg/100gm for oven dry board	E2 : 8< Fc ≤ 30
13.	Steady-state formaldehyde emission (optional requirement)	mg/m ³	E2 : Fc >0.124



Healthy & eco-friendly in nature, Lower Emission Premium Plus boards are ideal for all your furniture needs. Durable & versatile in nature, these boards are borer, termite and fungus resistant. They exude minimal formaldehyde fumes and can withstand high temperatures and moisture without losing their shine and strength. These boards are available in all thicknesses of Pre-laminated and Plain Premium Plus. All these qualities are made available at no extra cost.



**E2
GRADE
COMPLIANT**



**20
YEAR WARRANTY**



**Uniform &
Higher Density**



**High Moisture
Resistance**



**Borer, Termite &
Fungus Resistant**



**Super Smooth
& Paintable**



**Long Lasting &
Value for Money**



**Vast Range of
Prelam Decor**



**Special Ingredients
for Toughness**

40%

**LESS price than
Branded Plywood**



**Specially Developed
for Indian Conditions**

VIROKILL

Kills 99.99% Viruses

*T&C apply. Virokill feature is available only on Prelam MDF and Prelam Particle Board.



Optimal for a diverse range of interiors, CARB Certified MDF is the ideal choice for all your furniture needs. Its homogenous structure, pest resistance, and heat plus moisture resistant properties that complement its low formaldehyde emissions make it ideal for an endless array of designs in residential and commercial interiors. The formaldehyde emissions for Thin Panel (up to 80mm) is 0.13ppm and the Thick Panel (Above 08mm) is 0.11ppm.

			Grade-1									Grade-2									
S.N.	Properties	UOM	Requirement									Requirement									
			≤ 2.5mm	>2.5mm to 4.0mm	>4.0mm to 6.0mm	>6.0mm to 9.0mm	>9.0mm to 12.0mm	>12.0mm to 19.0mm	>19.0mm to 30.0mm	>30.0mm to 45.0mm	>45.0 mm	≤ 2.5 mm	>2.5mm to 4.0mm	>4.0mm to 6.0mm	>6.0mm to 9.0mm	>9.0mm to 12.0mm	>12.0mm to 19.0mm	>19.0mm to 30.0mm	>30.0mm to 45.0mm	>45.0 mm	
1	Dimension Tolerance																				
	Length & Width	mm/mtr	± 3									± 3									
	Thickness	mm	± 0.3									± 0.3									
	Edge straightness & Squareness (Max)	mm/mtr										2									
2	Density	Kg/m³	600-900									600-900									
3	Variation from mean density	%	± 10									± 10									
4	Moisture Content	%	5-10									5-10									
5	Variation from mean Moisture Content	%	± 3									± 3									
6	Linear expansion (thickness swelling in water), due to general absorption after 24 h soaking (Max.)	%	35	30	18	12	10	8	7	7	6	45	35	30	17	15	12	10	8	6	
7	Internal bond strength (Min.)	N/mm²	0.70	0.70	0.70	0.70	0.65	0.65	0.60	0.55	0.50	0.65	0.65	0.65	0.65	0.60	0.55	0.55	0.50	0.50	
8	Internal bond strength (Min.)	N/mm²																			
	(a) After cyclic test		0.35	0.35	0.35	0.30	0.25	0.20	0.15	0.10	0.10	-	-	-	-	-	-	-	-	-	
	(b) After accelerated water resistance test		0.2	0.2	0.2	0.15	0.15	0.12	0.12	0.10	0.10	-	-	-	-	-	-	-	-	-	
9	Modulus of rupture (Min.)	N/mm²																			
	(a) Average		27	27	27	27	26	24	22	17	15	23	23	23	23	22	20	18	17	15	
	(b) Individual		24	24	24	24	23	21.5	19.5	15	13.5	20.5	20.5	20.5	20.5	19.5	18	16	15	13	
10	Modulus of elasticity (Min.)	N/mm²																			
	(a) Average		2800	2800	2700	2700	2500	2400	2300	2100	1900	2800	2800	2700	2700	2500	2200	2100	1900	1700	
	(b) Individual		2500	2500	2400	2400	2300	2100	2000	1900	1700	2500	2500	2400	2400	2250	1950	1900	1700	1500	
11	Screw withdrawal strength (Min.)	N																			
	(a) Face					1250									1250						
	(b) Edge		N/A				850				N/A				700						
12	Formaldehyde content	mg/100gm for oven dry board	Formaldehyde class E1 : Fc ≤8									Formaldehyde class E1 : Fc ≤8									
			Formaldehyde class E2 : 8< Fc ≤ 30									Formaldehyde class E2 : 8< Fc ≤ 30									
13	Steady-state Formaldehyde emission (optional requirement)	mg/m³	Formaldehyde class E1 : Fc ≤0.124									Formaldehyde class E1 : Fc ≤0.124									
			Formaldehyde class E2 : Fc >0.124									Formaldehyde class E2 : Fc >0.124									
14	Abrasion Resistance (Min)	Number of Revolutions	450 for Type- 2									450 for Type- 2									
15	Resistance to Steam /water vapours	Visual Inspection	No blister, delamination or change in surface finish.									No blister, delamination or change in surface finish.									
16	Resistance to crack	Visual Inspection	No sign of cracks or delamination.									No sign of cracks or delamination.									
17	Resistance to cigarette burn	Visual Inspection	No mark or stain on the specimen aftercleaning with water or solvent.									No mark or stain on the specimen aftercleaning with water or solvent.									
18	Resistance to Stain	Visual Inspection	No stain on the specimen after cleaning with solvent or detergent.									No stain on the specimen after cleaning with solvent or detergent.									



FSC® -
certified products
available upon
request



CM/L-9700098



Indian Green
Gourmet & More



			Grade-1									Grade-2								
S.N.	Properties	UOM	Requirement									Requirement								
			≤ 2.5mm	>2.5mm to 4.0mm	>4.0mm to 6.0mm	>6.0mm to 9.0mm	>9.0mm to 12.0mm	>12.0mm to 19.0mm	>19.0mm to 30.0mm	>30.0mm to 45.0mm	>45.0 mm	≤ 2.5mm	>2.5mm to 4.0mm	>4.0mm to 6.0mm	>6.0mm to 9.0mm	>9.0mm to 12.0mm	>12.0mm to 19.0mm	>19.0mm to 30.0mm	>30.0mm to 45.0mm	>45.0 mm
1	Dimension Tolerance																			
	Length & Width	mm/mtr	± 3									± 3								
	Thickness	mm	± 0.3									± 0.3								
	Edge straightness & Squareness (Max)	mm/mtr	2									2								
2	Density	Kg/m³	600-900									600-900								
3	Variation from mean density	%	± 10									± 10								
4	Moisture Content	%	5-10									5-10								
5	Variation from mean Moisture Content	%	± 3									± 3								
6	Linear expansion (thickness swelling in water), due to general absorption after 24 h soaking (Max.)	%	35	30	18	12	10	8	7	7	6	45	35	30	17	15	12	10	8	6
7	Internal bond strength (Min.)	N/mm²	0.70	0.70	0.70	0.70	0.65	0.65	0.60	0.55	0.50	0.65	0.65	0.65	0.65	0.60	0.55	0.55	0.50	0.50
8	Internal bond strength (Min.)	N/mm²																		
	(a) After cyclic test		0.35	0.35	0.35	0.30	0.25	0.20	0.15	0.10	0.10	-	-	-	-	-	-	-	-	-
	(b) After accelerated water resistance test		0.2	0.2	0.2	0.15	0.15	0.12	0.12	0.10	0.10	-	-	-	-	-	-	-	-	-
9	Modulus of rupture (Min.)	N/mm²																		
	(a) Average		27	27	27	27	26	24	22	17	15	23	23	23	23	22	20	18	17	15
	(b) Individual		24	24	24	24	23	21.5	19.5	15	13.5	20.5	20.5	20.5	20.5	19.5	18	16	15	13
10	Modulus of elasticity (Min.)	N/mm²																		
	(a) Average		2800	2800	2700	2700	2500	2400	2300	2100	1900	2800	2800	2700	2700	2500	2200	2100	1900	1700
	(b) Individual		2500	2500	2400	2400	2300	2100	2000	1900	1700	2500	2500	2400	2400	2250	1950	1900	1700	1500
11	Screw withdrawal strength (Min.)	N																		
	(a) Face		1250									1250								
	(b) Edge		N/A			850						N/A			700					
12	Formaldehyde content	mg/100gm for oven dry board	Formaldehyde class E1 : Fc ≤8									Formaldehyde class E1 : Fc ≤8								
			Formaldehyde class E2 : 8< Fc ≤ 30									Formaldehyde class E2 : 8< Fc ≤ 30								
13	Steady-state Formaldehyde emission (optional requirement)	mg/m³	Formaldehyde class E1 : Fc ≤0.124									Formaldehyde class E1 : Fc ≤0.124								
			Formaldehyde class E2 : Fc >0.124									Formaldehyde class E2 : Fc >0.124								