LOW EMISSION
CENTURYPARTICLEBOARD®
The Eco-friendly and Economical Board

Made from high-quality agro-plantation trees such as eucalyptus, Low 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/m^3	500- 900 kg/m^3	640	500 - 900 kg/m^3	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/mm^2) Up to 20mm thick. Above 20mm thick.	0.3 N/mm^2	0.35 N/mm^2	0.45 N/mm^2 0.40 N/mm^2	0.50 N/mm^2 0.45 N/mm^2
Tensile strength (N/mm^2) (i) After cyclic test (ii) Accelerated water Resistance test	Nil	Nil	0.2 0.15	0.22 0.18
Modulus of rupture, N/mm^2 (min.) avg				
(a) Average	11 N/mm^2	13.5 N/mm^2	15 N/mm^2	17.5 N/mm^2
Modulus of elasticity, N/mm^2				
(a) Average	2500 N/mm^2	2600 N/mm^2	2500 N/mm^2	2650 N/mm^2
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/m^3	640	500 - 900 kg/m^3	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/mm^2) Up to 20mm thick. Above 20mm thick.	0.3 N/mm^2	0.35 N/mm^2	0.45 N/mm^2 0.40 N/mm^2	0.5 N/mm^2 0.45 N/mm^2
Tensile strength (N/mm^2) (i) After cyclic test (ii) Accelerated water resistance test			0.2 0.15	0.22 0.18
Modulus of rupture (N/mm^2)	Avg. 11 N/mm^2	13.2	Avg. 15 N/mm^2	16.9
Modulus of elasticity (N/mm^2)	Min. Ind. 10 N/mm^2	12.4	Min. Ind. 13 N/mm^2	14.3
Screw withdrawal, N (min.)	Avg. 2000 N/mm^2	2360	Avg. 2500 N/mm^2	2680
	Min. Ind. 1800 N/mm^2	1940	Min. Ind. 2200 N/mm^2	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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CENTURYPROWUD®
MDF-The wood of the future

THE ULTIMATE DEFENDER

Introducing Fire Shield Plus

It combines unrivalled strength with exceptional fire resistance, ensuring safety and peace of mind.

Build your furniture and interiors with **Fire Shield Plus**

CENTURYPROWUD®

The Ultimate Defender

Introducing Fire Shield Plus, 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.

FSP FIRE SHIELD PLUS

FIRE
FUNGUS
TERMITE
BORER
MOISTURE
RESISTANT
HIGH DENSITY
PREMIUM BOARD

SPECIFICATION - FIRE SHIELD PLUS 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/m^2	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	1.0 - 1.20
8.	Internal bond strength (min.)		
	a) After cyclic test	N/mm^2	N/A
	b) After accelerated water resistant test	N/mm^2	0.25 - 0.30
9.	Modulus of rupture (min.)	N/mm^2	32 - 35
10.	Modulus of elasticity (min.)	N/mm^2	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	E1: Fc ≤ 8
13.	FR class	As per ASTM E84	Class A

CENTURYPROWUD®

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 1**
- Available in both Plain and Prelam Boards
- Available thickness (in mm): 5.50, 8.00, 12.00, 16.75, 18.00

Century Prowud 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.

E1 compliant for a better future

E1 materials' formaldehyde release has to be ≤ 8mg / 100g for oven dry board, which is identical to its purity. This means that the E1 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.

Specifications – Low Emission Premium Plus

Sr. No.	Properties	UOM	Low Emission Premium Plus E1 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	E1 : Fc ≤8
13.	Steady-state formaldehyde emission (optional requirement)	mg/m^3	Fc ≤0.124

LOW EMISSION PREMIUM PLUS
High Density High Moisture Resistant Premium Boards

Healthy & eco-friendly in nature, Low 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.

E1 GRADE COMPLIANT

5 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

MADE IN INDIA
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.

CARB PHASE 2 COMPLIANT

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.

Specifications and Standards
Plain & Prelaminated MDF Boards

Sr. No.	Properties	Unit	IS 12406 Grade II DIR for Plain	IS 14587 Grade II DIR for Prelaminated
1.	Length & width tolerance	mm/m	±3.0	±3.0
2.	Thickness tolerance	mm	±0.30	±0.30
3.	Squareness & edge straightness tolerance	mm/m	2	2
4.	Density	kg/m^3	600-900	
5.	Variation from mean density	%	±10	±10
6.	Moisture content	%	5 to 10	
7.	Variation from mean moisture content (absolute)	%	±3	
8.	Water absorption (max.)	%		
	(a) After 2 hours soaking		9	6
	(b) After 24 hours soaking			12
	i. Upto 6.0mm thickness		45	
	ii. 7.0-12.0mm thickness		30	
	iii. 13.0-19.0mm thickness		20	
	iv. Above 20.0mm thickness		18	
9.	Linear expansion (swelling in water) (max.)	%		
	(a) Due to general absorption (24 hours soaking)			
	i. Thickness		10	
	ii. Length and width		0.4	
	(b) Due to surface absorption			
	i. Thickness after 2 hours soaking		5	
10.	Modulus of rupture (min.)	N/mm^2		
	(a) Upto 20.0mm			
	i. Average		28	28
	ii. Minimum		25	25
	(b) Above 20.0mm			
	i Average		25	25
	ii. Minimum		22	22
11.	Modulus of elasticity (min.)	N/mm^2		
	(a) Upto 20.0mm			
	i. Average		2800	2800
	ii. Minimum		2500	2500
	(b) Above 20.0mm			
	i Average		2500	2500
	ii. Minimum		2300	2300
12.	Tensile strength perpendicular to surface (IB)	N/mm^2		
	(a) Upto 20.0mm			
	i. Average		0.8	0.9
	ii. Minimum		0.7	0.8
	(b) Above 20.0mm			
	i Average		0.7	0.8
	ii. Minimum		0.6	0.7
13.	Tensile strength perpendicular to surface (IB)	N/mm^2		
	(a) After cyclic test			
	i. Average		NA	0.45
	ii. Minimum		NA	0.4
	(b) After accelerated water resistance test			
	i Average		NA	0.3
	ii. Minimum		NA	0.25
14.	Screw withdrawal strength	N		
	Face		1500	1500
	Edge (for thickness>12.0mm)		1250	1250
15.	Abrasion resistance, type II	Revolutions		450
16.	Resistance to steam	No sign of blister, delamination or change in surface finish. There may be slight color change in dark colors/patterns.		
17.	Resistance to crack	No sign of cracks or delamination.		
18.	Resistance to stain	No stain on the specimen after cleaning with water, solvent or detergent.		
19.	Resistance to cigarette burn	No mark or stain on the specimen after cleaning with water or solvent.		

*NA- Not applicable

FSC® - certified products available upon request

TSCA Title VI

IS 12406 CM/L-8700000221

IS 14587 CM/L-8700100013

Native Green Building Council

Environment Friendly

SUPERIOR QUALITY