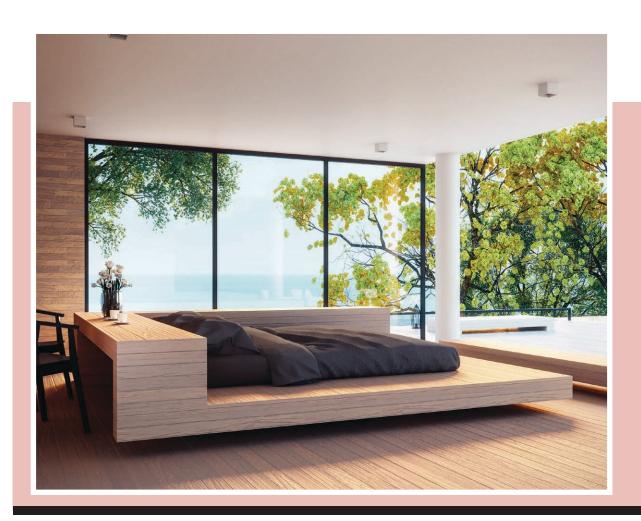
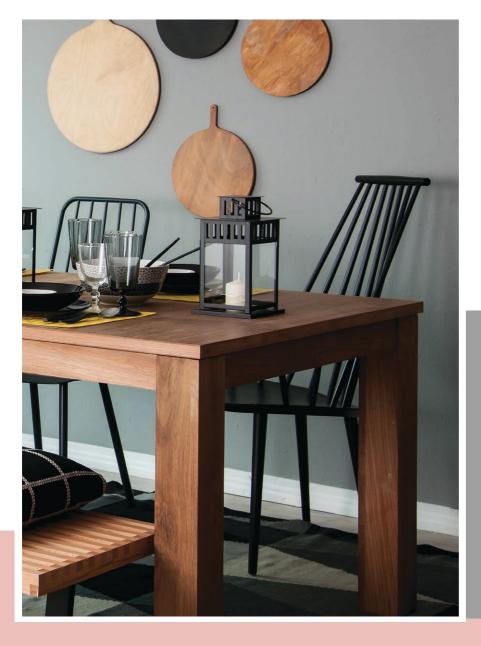
Dreamlike Homes

generation of plywood.

At Greenpanel, we turn your vision into reality. You seek perfection as you design your perfect space, and we bring you every bit of it, in every piece that you put together to build your dream. Greenpanel, India's largest wood panel manufacturer, is committed to bring the most advanced, good looking products across its portfolio to cater to the rapidly evolving needs of India's interior industry. From leading architects, interior designers, dealers, to your trusted wood contractors, our products are a trusted choice of everyone. Under the leadership of our Chairman and pioneer of the most iconic brand in the country, Mr. Shiv Prakash Mittal and our MD Mr. Shobhan Mittal we are proud to present the new





Content

1	Introduction	16	G PRO Plywood
5	Patented Quadra Pro Technology	20	Blockboards
6	Club Plywood	25	Flush Doors
8	BWP Plywood	27	Technical Specifications
10	MR Plywood		
12	Accurate 16 mm Plywood		
14	Gold Plywood		



Why Are We The Most Trusted Choice?

Greenpanel proudly fits the requirements of many national and international standards for different grades of plywood. Our plywood range can stand more than six cycles of boiling and drying, indicating the best-in-class bond quality. Our static bending properties MOR and MOE are higher than the required standard.

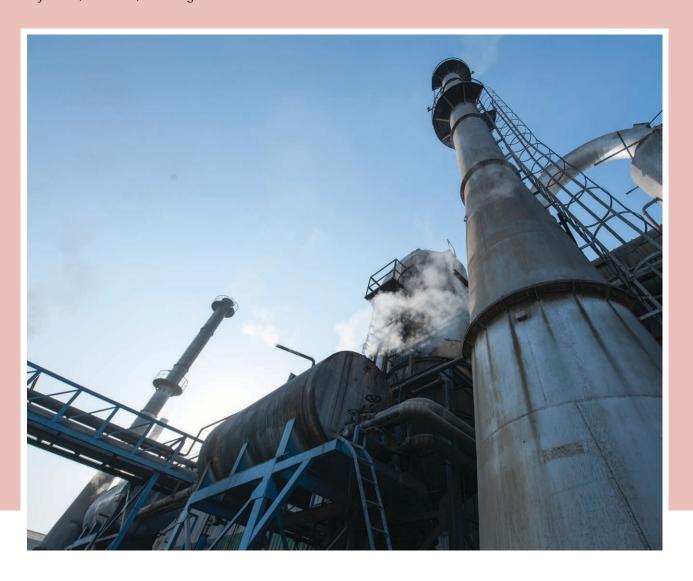
Reducing Our Carbon Footprint

We have made it a point to adopt only the best eco-friendly practices across our operations. Our resources are scarce, and it makes sense to use them judiciously. And so, instead of sourcing timber from natural forests, we source it from our agroforestry plantations, which have been setup for this sole purpose. In addition, the chain of custody while procuring raw material is strictly monitored so that each product that we offer can be marked with eco-friendly label.

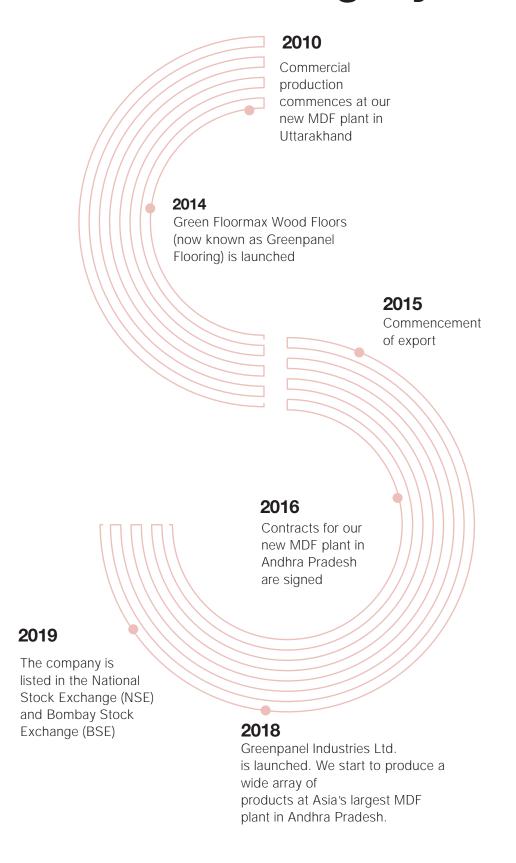


State-of-the-art Manufacturing Facility

Greenpanel is India's largest manufacturer of wood panels. We are a group of individuals who see a wood panel not for what it is, but for what it can be. As a result, we've grown to represent the infinite possibilities in wood panelling. Our state-of-the-art plants in Uttarakhand and Andhra Pradesh, with an annual combined capacity of more than 500,000 cubic metres, produce world-class MDF, Plywood, Veneers, Flooring and Doors.

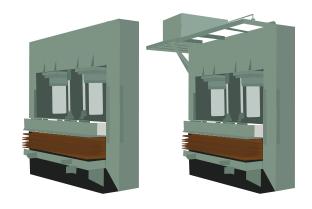


Our Rich Legacy



Patented Quadra Pro Technology

Greenpanel takes pride in being the pioneer of the revolutionary Patented Quadra Pro Technology, a 4-Stage, multi steps manufacturing process, that ensures no blisters, de-lamination or warping so that you get the perfect piece of plywood (perfect thickness & defect free surface).









- Log Selection
- Peeling into Veneer
- Drying
- Veneer Conditioning
- Veneer Preparation (Pre-setting)
- Veneer Screening/Upgradation
- Uniform Thickness Veneer
- · Pre-setting of Panel Core
- Matt Assembly
- · Pre-pressing
- · Surface Finish of Pre-pressed Matt
- Hot-pressing

- Rough Cutting
- Calibration
- Surface Preparation
- Inspection
- Gluing of Matt
- Overlaying with Face Veneer Trimming to Final Size
- Pre-pressing
- Hot-pressing

- Conditioning of Plywood
- Sanding
- Edge Finish

- Preservative Treatment
- Inspection
- Buffing
- Branding
- Dispatch

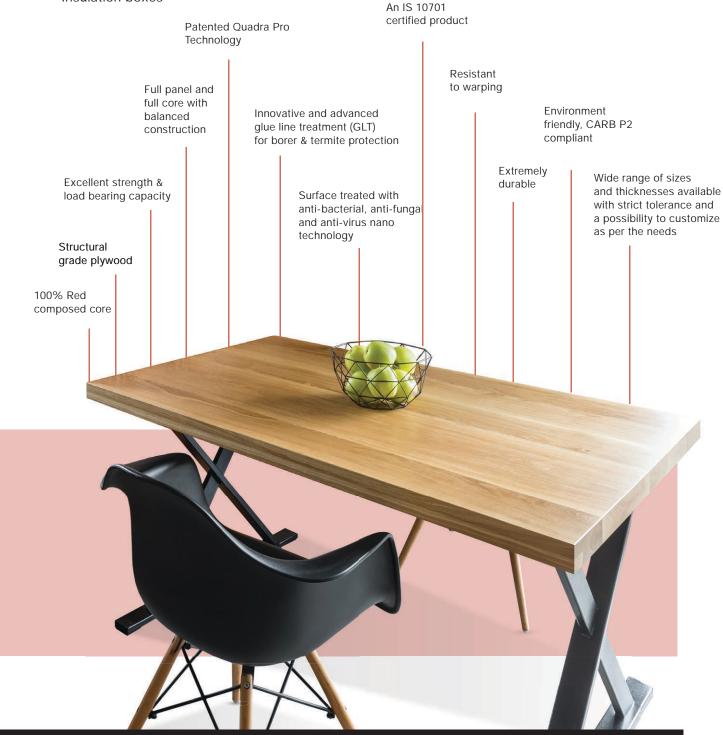


Club Plywood

Greenpanel Club Plywood is a structural grade plywood made of select hardwood species based on density, bonding strength, high impact resistance and surface finish characteristics. Engineered to deliver in performance with 100% both side calibration and double surface sanding for superior buffed surface. Constructed with boiling waterproof, exterior grade premium quality extremely low phenolic adhesives, this plywood is superior in both - being eco-friendly and stable.

If you're looking for a durable plywood, this is your answer. The plywood is manufactured using the Patented Quadra Pro Technology. It is calibrated on both sides for uniform thickness and it goes through 3 level of preservative treatments with glue line protection to ensure it is borer-proof, microbiological decay resistant and termite proof. It's the most preferred structural plywood with high strength-to-weight ratio. It is tensile, compressive and has high shear strength. Greenpanel Club Plywood ensures lifetime durability and is perfect for most building and structural applications.

- · Places of heavy footfall
- Indoor and outdoor furniture, interior designs, domestic and commercial buildings, cabinets and shelving
- Boat, yacht construction, ship flooring and furniture and other marine applications
- Building and construction purposes like beams and hoardings
- · False ceiling, wall and roof bracing
- Sports equipments
- Musical instruments
- Insulation boxes





BWP Plywood

Greenpanel BWP Plywood is a state-of-the-art waterproof, premium plywood that ensures excellent durability and environment sustainability. This BWP plywood is capable of handling changing conditions (wet and dry) without the risk of delamination, swelling and warping.

Our use of carefully select hardwood species timber gives it strength and stiffness. The BWP type synthetic resin makes it waterproof, and preservatives between every layer using GLT process protects it from termite, borer, fungus and virus infestation. Greenpanel BWP plywood is dimensionally stable and extremely sturdy. This product conforms to IS 710 specifications.

- Outdoor furniture
- Shipbuilding and other marine applications
- Areas exposed to moisture, both inside and outside
- · Interior design and fittings
- · Woodwork and joinery
- Furniture and kitchen cabinet

100% Composed core bonded with marine grade new generation PF resin for durability





MR Plywood

Greenpanel MR Plywood is fully loaded plywood, sourced from specially selected eco-friendly timber. It is borer and termite resistant with lesser susceptibility to weather variance.

MR Plywood is a high-quality construction material with excellent durability. It is easy to work with. It is moisture resistant and carpenters' friendly. This material is ideal for interior use and manufacturing of furniture parts.

- Best for partitions, panelling, door panels, cabins and false ceilings
- Other applications include furniture parts, lamps, interiors, toys, souvenirs, musical, instruments, speakers, interior designs and other product fabrication
- High-end packaging





Accurate 16 mm Plywood

Accurate 16mm plywood is a "fully calibrated plywood with accurate thickness". It is produced from rotary-cut, smooth, uniform thickness veneers, sourced from specially selected eco-friendly timber. Its medium and high-density layers of plywood ensure excellent cohesive bonding. Additionally, Accurate 16mm plywood is dimensionally stable and extremely durable with lesser susceptibility to weather variance. Accurate 16mm plywood is boiling waterproof with unextended BWP type resin and made up of 100% composed core. Borer proof and termite resistant - Accurate plywood is special range of 16mm calibrated plywood and is highly demanded by OEMs and interior designers.

- · Modular kitchen, cabinets and shelving
- Joinery, furniture, furniture fitments, interior design, domestic and commercial buildings
- · Vehicle flooring and laminate industry
- Shipbuilding, boat, yacht construction and other marine applications





Gold Plywood

Greenpanel Gold Plywood is waterproof and specifically designed for applications subject to permanent exposure to weather or moisture, at affordable cost. It is durable and has excellent dimensional stability. It is premium marine grade plywood, which can withstand continuous frequent shift of dry & wet conditions.

Gold Plywood is distinguished by its hardened properties and therefore it performs well in all applications demanding high strength and rigidity. The advanced technology ensures optimum adhesive strength. It is borer proof and termite resistant. Gold Plywood is boiling waterproof plywood and can be used in marine applications.

- Outdoor furniture
- Shipbuilding and other marine applications
- Areas exposed to moisture, both inside and outside
- Office woodwork
- · Partitions and panelling
- Cooling tower applications
- · Furniture and kitchen cabinet

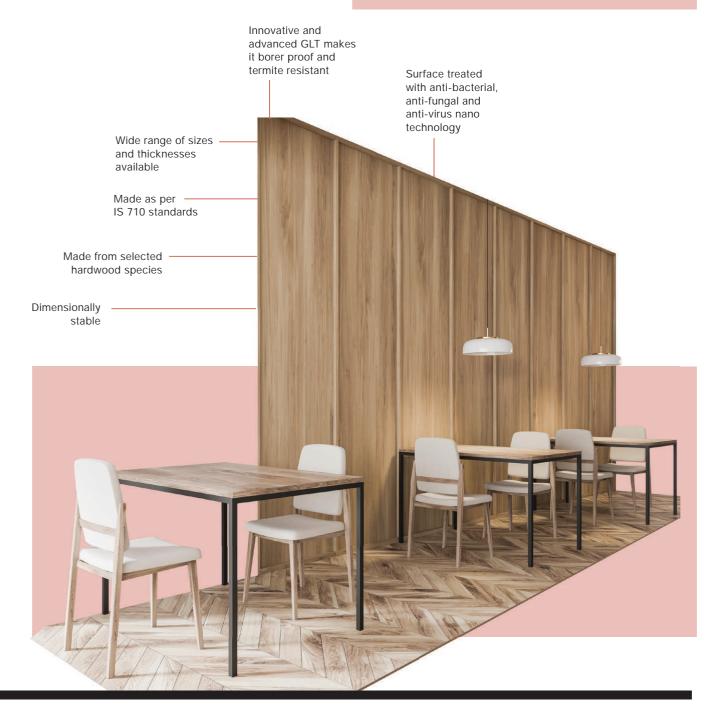




G PRO 710 Plywood

G PRO 710 plywood, "fully loaded plywood", is a versatile product that is superior in quality, craftsmanship and environment sustainability. It is made of carefully chosen timber, has the best of surfaces and is bonded with quality resin. It is high strength plywood that can withstand boiling water, dry heat, pests and extreme weathers. This versatile product adds value to interiors and exteriors in homes, offices and large installations.

- Joinery, furniture, furniture fitments, interior design, domestic and commercial buildings
- · Modular kitchen, cabinets and shelving
- Vehicle flooring and laminate industry
- High-end packaging





G PRO MR Plywood

G PRO MR Plywood is sourced from specially selected eco-friendly timber.
G PRO MR is borer and termite resistant with lesser susceptibility to weather variance. G PRO MR plywood is easy to work with and is moisture resistant.
This material is ideal for interior use and manufacturing of furniture parts.

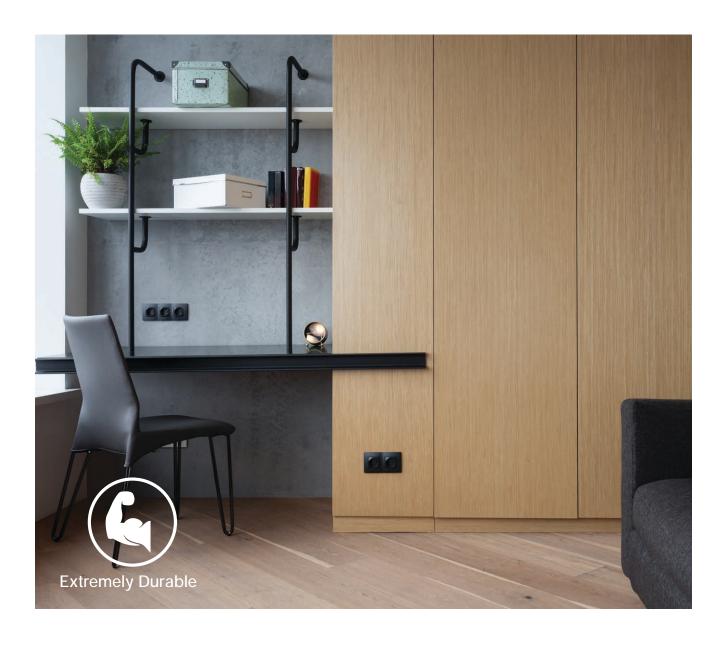
- Best for partitions, panelling, door panels, cabins and false ceilings
- Other applications include furniture parts, lamps, interiors, toys, souvenirs, musical instruments, speakers, interior design and other product fabrication





Blockboards

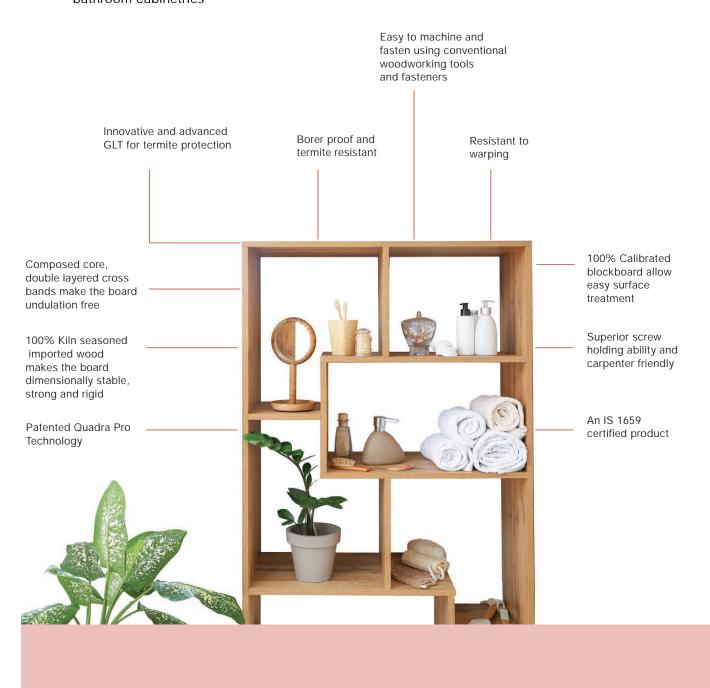
Greenpanel blockboards are superior quality blockboards that are ideal for all weather conditions and applications. Our range of blockboard is made with pine fillers and frame that are uniform in dimension and treated with preservatives, for greater strength and durability.



MR Blockboard

MR Blockboard is a premium quality board with high resistant properties against borer and termites. Face veneer, core veneer & wooden battens in blockboard are well selected and preservative treated against termites and borers. The wooden battens are thoroughly seasoned in scientifically run seasoning kiln plants and then cut with great precision to obtain uniform thickness. Double layered cross bands on top & bottom make the board stiff and warp free. The wood battens are long and systematically arranged in the supervision of qualified supervisor and utmost care is taken to avoid any extra gap between the battens. Regular tests are conducted to maintain the quality of blockboards as per the standards of IS 1659: 2004.

- Suitable for vertical applications such as doors, cupboards, racks, panel and partition walls
- Furniture, bookshelves and boxes
- Back support of wardrobe shutters and bathroom cabinetries





BWP Blockboard

Greenpanel BWP Blockboard is manufactured from 100% kiln seasoned hardwood species, bonded with BWP type synthetic resin, pressed at very high temperature and pressure that ensures excellent dimensional stability and uniform surface quality. Use of double layered cross bands on top and bottom of the assembly makes the blockboard stiff and warp free.

- Suitable for vertical applications such as doors, cupboards, racks, panel and partition walls
- Furniture, bookshelves and boxes
- Back support of structural work, kitchen and wardrobe shutters and bathroom cabinetries





Flush Doors

Greenpanel flush doors are stiff, impact resistant and possess high strength. Our doors are manufactured from select imported pine timber, are preservative treated and kiln seasoned. Due to their durability and high dimensional stability, these heavy-duty flush doors are used for exterior as well as interior purposes. Our doors are structurally sturdy and good insulators of heat and sound. Double layered cross bands on top and bottom are evenly tenderized and dried to the necessary moisture content as per IS: 1141-1991. Higher quality premium BWP type synthetic resin conforming to IS: 848-1974 is used for bonding, making our doors 100% boiling waterproof.

- Seamless for all classes of interiors and applications including commercial building, homes and offices
- Reception zone, a meeting chamber, an outlet, or any other kind of commercial arrangement
- High-rise apartments, hospitals, offices, hotels, factories, bungalows and villas
- · Kitchen and bathroom



Terms & Conditions Apply.

Technical Specifications

Greenpanel Club Plywood

S. No.	Test Parameter	Units	Prescribed Value as per Indian Specifications (IS 10701)	Observed Value Club Plywood
1)	Dimensions & tolerance			
	Length	mm	+6 / -0	+2 / -0
	Width	mm	+3 / -0	+1 / -0
	Thickness	%	±5%: 6mm & above	+1.0
	Squareness	%	Max 0.20	0.08
	Edge straightness	%	Max 0.20	0.07
2)	Moisture content	%	5-15	10
3)	Glue adhesion in dry state			
,	Glue shear strength	N	Avg.1,350, Min.1,100	Avg.1,420, Min.1,200
	Adhesion of plies		Min. Pass	Excellent
4)	Resistance to water			
,	Glue shear strength	N	Avg. 1,000, Min.800	Avg.1,370, Min.1,285
	Adhesion of plies		Min. Pass	Excellent
5)	Mycological test		IIIIII I God	ZAGONGIN
0)	Glue shear strength	N	Avg. 1,000, Min.800	Avg.1,390, Min.1,340
	Adhesion of plies	1 1	Min. Pass	Excellent
6)	Static bending strength		IVIII. I daa	LACCIICIT
U)		N/mm²		
	Modulus of rupture	11/1111111*		
	a) Along the grain		Min FO	4F 00
	i) Average		Min. 50	65.89
	ii) Min. Ind.	2	Min. 45	63.56
	b) Across the grain	N/mm ²		
	i) Average		Min. 30	45.76
	ii) Min. Ind.		Min. 27	35.91
	Modulus of elasticity			
	a) Along the grain	N/mm²		
	i) Average		Min. 7,500	8,100
	ii) Min. Ind.		Min. 6,700	7,800
	b) Across the grain	N/mm²		
	i) Average		Min. 4,000	4,600
	ii) Min. Ind.		Min. 3,600	4,100
7)	Wet bending strength			
	Modulus of rupture			
	a) Along the grain	N/mm ²		
	i) Average		Min. 25	30.6
	ii) Min. Ind.		Min. 22	28.0
	b) Across the grain	N/mm²		
	i) Average		Min. 15	21.0
	ii) Min. Ind.		Min. 13	18.0
	Modulus of elasticity		-	
	a) Along the grain	N/mm²		
	i) Average		Min. 3,750	4,080
	ii) Min. Ind.		Min. 3,400	3,850
	b) Across the grain	N/mm²	171111. 3,400	J,000
	i) Average	19/11/11	Min. 2,000	2,440
0)	ii) Min. Ind.	N/mm²	Min. 1,800	2,100
8)	Tensile strength	IV/IIIM²	EE	74
	Along the grain		55	76
	Across the grain		35	51
0)		***		
9)	Compressive strength	N/mm ²		
	Along the grain		35	47.5
	Across the grain		30	39.8
10)	Panel shear strength	N/mm ²	12.5	14.7
11)	Modulus of rigidity	N/mm ²	588	650
12)	Rolling shear strength	N/mm²	3	4.5
13)	Retention of preservatives	Kg/m³	12	15.7

Greenpanel BWP, Gold, Accurate and G PRO 710 Plywood

S. No.	Test Parameter	Units	Prescribed Value as per Indian Specifications (IS 710:2010)	Observed Value Greenpanel BWP	Observed Value Greenpanel GOLD	Observed Value Greenpanel ACCURATE	Observed Value Greenpanel G PRO 710
1)	Dimensions & tolerance						
	Length	mm	+6 / -0	+2 / -0	+3 / -0	+2 / -0	+3 / -0
	Width	mm	+3 / -0	+1 / -0	+2 / -0	+2 / -0	+3 / -0
	Thickness	%	±5%: 6mm & above	+1.6	+1.7	+2	+2.5
	Squareness	%	Max 0.20	0.11	0.12	0.1	0.12
	Edge straightness	%	Max 0.20	0.12	0.14	0.1	0.11
2)	Moisture content	%	5-15	8-10	8-10	8-10	8-10
3)	Glue adhesion in dry state						
	Glue shear strength	N	Avg.1,350	Avg.1,445	Avg.1,450	Avg.1,440	Avg.1,410
			Min.1,100	Min.1,280	Min.1,285	Min.1,275	Min. 1,208
	Adhesion of plies		Min. Pass	Excellent	Excellent	Excellent	Excellent
4)	Resistance to water						
	Glue shear strength	N	Avg. 1,000	Avg.1,170	Avg.1,175	Avg.1,160	Avg. 1,124
	-	N	Min. 800	Min. 985	Min. 990	Min. 980	Min. 925
	Adhesion of plies		Min. Pass	Excellent	Excellent	Excellent	Excellent
5)	Mycological test						
	Glue shear strength	N	Avg.1,000	Avg. 1,140	Avg.1,150	Avg.1,130	Avg. 1,121
	Ŭ		Min. 800	Min. 917	Min. 920	Min. 910	Min. 906
	Adhesion of plies		Min. Pass	Excellent	Excellent	Excellent	Excellent
6)	Static bending strength						
	Modulus of rupture	N/mm²					
	a) Along the grain						
	i) Average		Min. 50	53.7	54	52.5	51.7
	ii) Min. Ind.		Min. 45	47.8	48	46.2	46.9
	b) Across the grain	N/mm²					
	i) Average		Min. 30	33.56	33.70	32.1	31.45
	ii) Min. Ind.		Min. 27	29.53	30.00	28.5	28.14
	Modulus of elasticity						
	a) Along the grain	N/mm ²					
	i) Average	-	Min. 7,500	7,785	7,795	7,740	7,654
	ii) Min. Ind.		Min. 6,700	6,936	6,940	6,910	6,873
	b) Across the grain	N/mm ²					.,.
	i) Average		Min. 4,000	4,317	4,315	4,300	4,215
	ii) Min. Ind.		Min. 3,600	3,891	3,895	3,820	3,798
7)	Wet bending strength		5,555	5,0,,	5,5,5	3,323	5,, 70
.,	Modulus of rupture						
	a) Along the grain	N/mm²					
	i) Average		Min. 25	28.16	28.20	27.4	26.41
	ii) Min. Ind.		Min. 22	24.21	24.50	24.5	23.7
	b) Across the grain	N/mm²	22	22 .	21100	2 110	2017
	i) Average		Min. 15	17.62	17.71	17.5	16.98
	ii) Min. Ind.		Min. 13	14.98	15.11	14.2	14.54
	Modulus of elasticity		141111. 10	11.70	10.11	11.2	11.01
	a) Along the grain	N/mm²					
	i) Average	14/11111	Min. 3,750	3,914	3,978	3,970	3,842
	ii) Min. Ind.		Min. 3,400	3,652	3,655	3,650	3,588
	b) Across the grain	N/mm ²	27,100	-1	-,-30	-,	-,000
	i) Average	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Min. 2,000	2,340	2,346	2,340	2,248
	ii) Min. Ind.		Min. 1,800	2,011	2,015	2,010	2,009
8)	Tensile strength	N/mm²		2,011	2,010	2,010	2,007
٠,	Along the grain	TWITHIT	42	45.5	46.10	47.1	46.05
	Across the grain		25	39.6	40.05	38.4	39.39
	Sum of along & across		84.5	85.1	86.15	85.5	85.44
	Jam or along & across	Kg/m³	31.0	12.72	12.65	55.5	55.77

Greenpanel MR and G PRO MR Plywood

S. No.	Test Parameter	Units	Prescribed Value as per Indian Specifications (IS 303:1989)	Observed Value Greenpanel MR	Observed Value Greenpanel G PRO MR
1.	Dimensions & tolerance				
	Length	mm	+ 6 mm - 0 mm	3	2
	Width	mm	+ 3 mm - 0 mm	2	1
	Thickness	%	± 10 % for < 6mm & ±5 % for ≥6mm	1.5	1.7
	Squareness	%	0.2	0.05	0.06
	Edge straightness	%	0.2	0.07	0.08
2.	Moisture content	%	5-15	8	8
3.	Static bending strength	N/mm ²			
	Modulus of rupture				
	a) Along the grain	N/mm ²			
	i. Average		30	34.15	32.96
	ii. Min. Ind.		27	30.21	28.67
	b) Across the grain				
	i. Average		15	20.73	17.65
	ii. Min. Ind.		13	15.01	17.38
	Modulus of elasticity:				
	a) Along the grain	N/mm ²			
	i. Average		4,000	4,380	4,185
	ii. Min. Ind.		3,600	3,950	3,794
	b) Across the grain				
	i. Average	N/mm ²	2,000	2,349	2,126
	ii. Min. Ind.		1,800	2,146	1,945
4.	Glue adhesion water resistance test. (3 cycle of 3 hrs. in warm water @ 60±2°C & 8 hrs. drying at 65±2°C) in hot air oven as per IS:1734 (Part.5)		Min pass standard	Excellent	Excellent
5.	Mycological test	N/mm ²	Min. pass standard	Excellent	Excellent



Greenpanel BWP Blockboard

S. No.	Test Parameter	Units	Requirement as per IS:1659 : 2004	Observed Value BWP Blockboard
1.	Dimensions & tolerance			
	Length	mm	+ 6 mm - 0 mm	+1
	Width	mm	+ 3 mm - 0 mm	+1
	Thickness	%	± 5 %	2
	Squareness	%	0.2	0.15
	Edge straightness	%	0.2	0.15
2.	Dimensional change caused by humidity			
	a. Maximum local planeness		< 1/150	1/380
	b. At extreme range of humidity		No delamination	No delamination
3.	a) Modulus of elasticity	N/mm ²		
	Along the grain			
	i. Average		5,000	6,667
	ii. Min. Ind.		4,200	5,994
	b) Modulus of rupture	N/mm ²		
	Along the grain			
	i. Average		h50	58
	ii. Min. Ind.		42	56
4.	Resistance to water test (72 hrs. boiling)		Min. pass standard	Excellent
5.	Spot test		Through and through penetration of preservative chemicals	Confirms

Greenpanel MR Blockboard

S. No.	Test Parameter	Requirement as per IS:1659: 2004	Observed Value MR Blockboard
1.	Dimensions & tolerance		
	Length (mm)	+ 6 mm - 0 mm	3
	Width (mm)	+ 3 mm - 0 mm	2
	Thickness (mm)	+/- 5 %	1.75
	Squareness	0.20%	0.09
	Edge straightness	0.20%	0.08
2.	Dimensional change caused by humidity		
	Change in length		
	a) From 65% RH to 90 %RH	+/- 1	+0.01
	b) From 65% RH to 40 %RH	+/- 1	-0.01
	Change in thickness		
	a) From 65% RH to 90 %RH	+/- 1	+0.01
	b) From 65% RH to 40 %RH	+/- 1	-0.01
	Maximum local planeness	Not greater than 1/150	1/365
	At extreme range of humidity	No delamination	No delamination
3.	a) Modulus of elasticity (N/mm²)		
	Along the grain		
	i. Average	4,000	5,407
	ii. Min. Ind.	3,400	5,196
	b) Modulus of rupture (N/mm²)		
	Along the grain		
	i. Average	40	60.47
	ii. Min. Ind.	34	56.3
4.	Resistance to water test	Min. pass standard	Excellent
	(60±2 °C in warm water for 3 hours)		
5.	Mycological test	Min. pass standard	Excellent
6.	Spot test	Through and through	Confirms
		penetration of	
		preservative chemicals	

Greenpanel Flush Doors

S. No.	Test Parameter	Units	Requirement as per IS:2202(Pt-I): 1999	Observed Value Flush Doors
1	Dimensions	mm		
	Length	mm	± 5 mm	1.5
	Width	mm	± 5 mm	0
	Thickness	mm	± 1 mm	0.12
			Variation in the thickness between any	0.55
			two points not more than 0.8 mm	
	Squareness	mm	Deviation not more than 1 mm per 500 mm length	0.4
2	General flatness	mm	Twist, cupping & warping not greater than 6 mm	3
3	Local planeness	mm	Depth of deviation not greater than 0.5 mm	0.15
4	End immersion test		No delamination	Confirms
5	Glue adhesion test		No delamination	Confirms
6	Knife test		Minimum pass standard	Excellent
7	Impact indentation	mm	No cracking, tearing or delamination	Confirms
			Depth of indentation not greater than 0.2 mm	0.14
8	Slamming		No visible damage after 50 drops	Confirms
9	Flexure (deflection)	mm	Deflection at maximum load not greater than	
	15 mins after loading 50 Kg		1/30 of length & 1/15 of width, whichever is less	55.62
	3 mins after load removal	mm	Residual deflection not greater	2.44
			than 1/10 of maximum deflection	
10	Shock resistance			
	Soft and light body impact		No visible damage	Confirms
	Soft and heavy body impact		No visible damage	Confirms
11	Buckling (deflection in mm)		No deterioration	Confirms
	After 5 mins of 40 Kg loading		Initial deflection not greater than 50 mm	43.72
	15 mins after load removal		Residual deformation after 15 minutes of unloading not greater than 5 mm	3.17
12	Edge loading (deflection)			
	After 15 mins of 100 kgs loading	mm	Deflection at max. load not greater than 5 mm	3.18
	3 mins after load removal	mm	Residual deflection after removal of load not greater than 0.5 mm	0.35
	Lateral buckling		Not more than 2 mm during loading	1.22
	Residual lateral buckling		No residual lateral buckling after load removal	Confirms
13	Screw withdrawal strength	N	Not less than 1,000	2,000
	-		Surface condition: no visible damage to the surface either by delamination of extra chipping off at the points of withdrawal	Confirms
14	Varying humidity test		No visible warping, twisting or delamination	Confirms
			Maximum departure from the general	0.47
			planeness not more than 1 mm	
			Recovery – At least 90% of the change in dimension	99.02
15	Misuse		No permanent deformation of the fixing or any	Confirms
			other part of the door set in hindering its	
			normal working after test	

Certificates

Greenpanel is certified with- ISO 9001:2015, ISO 14001:2015, OHSA 18001: 2007, FSC, CARB, EPA, IGBC.