

KANGARO[®]
PLYWOOD

Sabse Tezz, Sabse Aege !

Quality
Redefined

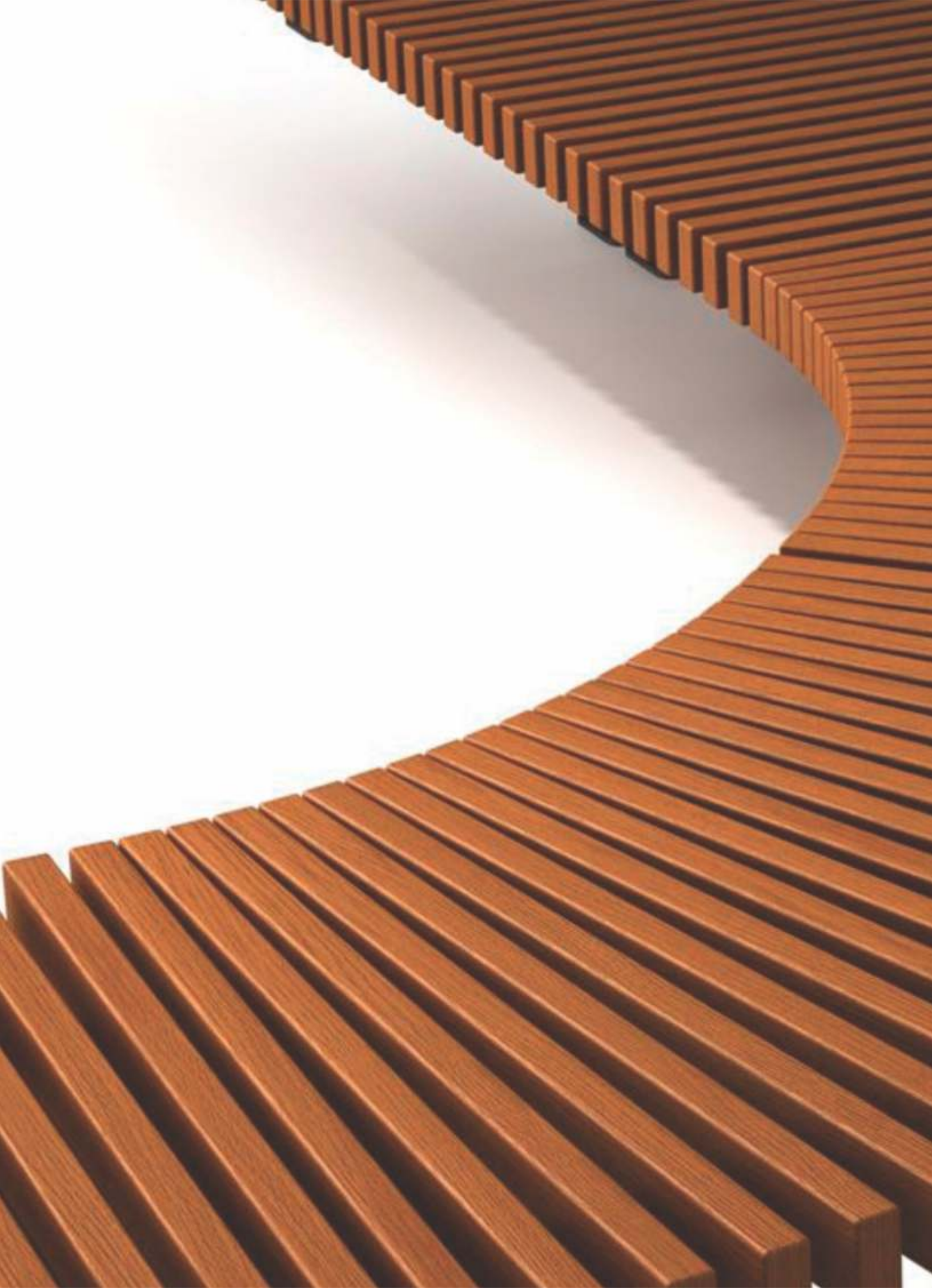






We believe in

Q
Factor



The Company

We are a leading plywood manufacturer in India for the last one decade. And promoting the brand "Kangaro". Manufacturing all kinds of higher grade Plywood, blockboard, shuttering, decorative plywood and flush doors.

The products are being developed with excellent manufacturing facilities with latest technology to provide durability and strength.



Veneers from high quality logs are mechanically dried and they undergo stress relieving process, which are assembled in such a way to form a balanced construction. High quality fortified synthetic resins are used for gluing the veneers. Glue line is poisoned by special formulations of chemicals to make Kangaro Plywood safe against borers. It is hot pressed under proper temperature and more than 16 Kg/cm² specific pressure. Conditioning is done after pressing, followed by preservative treatment.

Applications

Partition and paneling, ceilings in public rooms and corridors, floor underlayment, computer rooms, furniture, bus bodies, railway coaches, milk booths, sign boards, insert in panel doors, storage racks.

Technical Specification				
S.No.	Test	I.S.I. Requirement		Test Results
1.	Moisture Content	5 - 15%		7.5 %
2.	Glue Shear Strength in Dry Condition	a) Individual	1100 Newton	1400 Newton
		b) Average Min.	1350 Newton	1590 Newton
3.	Glue Shear Strength in Wet Condition	a) Individual	800 Newton	1080 Newton
		b) Average Min.	1000 Newton	1360 Newton
4.	Glue Shear Strength in Mycological Test	a) Individual	800 Newton	1090 Newton
		b) Average Min.	1000 Newton	1350 Newton
5.	Tensile Strength			
	a. Parallel to grain direction	42.0N/mm ²		645 KN./m ²
	b. Right angle to grain direction	25.0N/mm ²		395 KN./m ²
	c. Sum of both directions	84.5N/mm ²		1040 KN./m ²
6.	MOR N/mm ²	Avg./Min.		
	Parallel to grain	50 / 45		60 / 55
	Perpendicular to grain	30 / 27		40 / 35
7.	MOE N/mm ²	Avg./Min		
	Parallel to grain	7500 / 6700		8000 / 7500
	Perpendicular to grain	4000 / 3600		4500 / 4000



These are made out of excellent quality of Plantation Timbers. Logs are quarter sawn into Planks using SDR method, which are chemically treated and well seasoned before converting into battens in a multiple rip saw. Battens are sandwiched between glued mechanically dried veneers and are pressed in hot press under accurate temperature and pressure. Quarter sawing of logs and proper seasoning of planks make it dimensionally stable and treatment of planks, poisoning of glue line and preservative treatment of finished block board make it durable and safe against borers.

Applications

Cabinets, Almirahs and other furniture, Door Partitions, Shelves and other interior applications; Roofing, Fencing, and other external applications.

Technical Specification		
Test	Requirements of Is1659 Interior / Exterior	Test Result
Moisture Contents	5-15%	8%
Change caused by humidity	Not more than ± 1 mm	Less than 0.6mm
Adhesion of Ply	Minimum Pass Standard	Excellent
Water Resistance	3 Hours at $60^{\circ}\text{C} \pm 2^{\circ}\text{C}$	Good
Resistance to Microorganism (Mycological Test)	One Cycle of 21 days	No sign of separation at the edges
MOE Avg. N/mm ² Min Ind. N/mm ²	4000/5000 3400/4200	5200/6010 N./mm ² 4500/5000 N/mm ²
MOR Avg. N/mm ² Min Ind. N/mm ²	40/50 34/42	50/62 N/mm ² 42/48 N/mm ²





Shuttering Plywood

Kangaro offers a high quality Film Faced Shuttering Plywood. It is a multi functional product, which can be used in construction industry for buildings, bridges, heavy industry and structures etc. for use on walls, slabs, columns and beams etc. It is manufactured by selecting quality veneers impregnated with modified RPF resin for longer life and better performance in all applications.

Applications

Factories and buildings, sewer construction, construction of swimming pool, bridge construction, exterior and general shuttering work, beams and every construction and foundation job.

Technical Specification

S.No.	Test	I.S.I. Requirement		Test Results
1.	Moisture Content	5 - 15%		8 %
2.	Glue Shear Strength in dry condition	a) Individual b) Average min.	1100 Newton 1350 Newton	1470 Newton 1710 Newton
3.	Glue Shear Strength in wet condition Adhesion of Plies (Knife test)	a) Individual B) Average min.	800 Newton 1000 Newton	1370 Newton 1560 Newton
4.	Glue Shear Strength in mycological test Adhesion of Plies (Knife test)	a) Individual b) Average Min	800 Newton 1000 Newton	1350 Newton 1590 Newton
5.	Tensile Strength a. Parallel to grain direction b. Right angle to grain direction c. Sum of both directions	Min. 32.5 N/mm ² Min. 22.5 N/mm ² Min. 60.0 N/mm ²		70.5 N/mm ² 63.0 N/mm ² 133.5 N/cm ²
6.	MOE Parallel to grain Perpendicular to grain	8000 N/mm ² 4000 N/mm ²		9563 N/mm ² 7275 N/mm ²



These are made from High Density Farm Timbers, which are chemically treated and well seasoned. Battens are edge glued to make these doors durable and dimensionally stable. Special formulations of chemicals are used to poison the glue line against borers and fungus. External preservative treatment is given to make these doors perfectly resistant to all the Micro Organisms. Kangaro Flush doors are available in all sizes and thickness.

Applications

Door shutters in homes and offices.

Special Features :

**Lifetime
warranty**

TRIPLE LAYER CORE
PINE WOOD FRAME
HARD WOOD FILLER

Technical Specification

Test	Requirement of IS 2202	Test Result
Dimensions & Squareness	Length +0/mm Width +0/mm Thickness +/-1mm Squareness : not more than 1mm per 500mm length	+3mm +2mm +.6mm .5mm
General Flatness	6mm	2.0 mm
Local Planeness	0.5 mm	0.2 mm
Impact Indentation	0.2 mm	0.10 mm
Flexure Test	Max. Deflection 5mm	Max. Deflection 3mm
Edge Loading Tests	Residual deflection 0.5 mm Lateral buckling 2mm	Residual deflection .25mm 1mm
Shock Resistant Tests	Should withstand 5 impacts	Can withstand 10 impacts
Misuse Tests	No Permanent Deformation of the Fixing	No Permanent Deformation
End Immersion Tests	No Delamination	No Delamination
Knife/Glue Adhesion Test	Pass Standard	Excellent
Screw Withdrawl	1000N	1800N
Slamming Tests	No Visible Damage After 50 Drops	No Damage
Buckling Test	Pass Standard	Excellent



Decorative Plywood

Kangaro well chosen veneers, display a kind of expression that has a strong aesthetic appeal. Anti borer, termite resistance and other characteristic are of course present in every inch of Kangaro decorative plywood.

Kangaro Decorative Plywoods are processed in such a way that offers an excellent surface for gloss and matt polishing to suit the applications like paneling and furnishing. Kangaro products add an exclusive touch to the interiors. Manufactured from selected Gurjan core and fine teak veneers, bonded with phenol formaldehyde resin, Kangaro decorative confirms to IS : 1328 standards that gives a complete feeling of getting the dream come true designs.

Applications

Household Furniture specially for living room and paneling.

Technical Specification

Test	Requirements of IS : 1328	Test Result
Moisture Content	5-15%	6-10%
Water Resistance Test	Three Cycle 3 hour at 60+/-2°C In water and drying at 65+/-2°C for 8 hours	No Delamination
Torn grain, Dead knots dote, discolouration and sap wood	Free from such defect	Pass Standard
Open Split, Checks, open Joints	Not more than 150mm In length and 0.5mm in width rectified with Veneer insert bonded with Synthetic resin adhesive	Pass Standard

