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Hilwud[®]
Quality with Long Life.

The logo features a stylized green tree with a thick trunk and a rounded canopy. The background is a grayscale photograph of a forest with tall, thin trees.

Plywood
Block Board
Flush Door
Laminates
Caliberated Ply
Flexi Ply
Marine Ply
Film Face Ply
Teak Ply



Hilwud[®]

Quality with Long Life.



An ISO 9001 : 2008 Certified Company

100% Trusted Plywood Company
Quality
Growth in customer base



Premium Brand / Pan India Network / Quality Plywood Range





Mr. Shyam Agarwal

Director

"Our quality is a reflection of our values"



Haploos Plywoods Pvt. Ltd. is a story of fine A Heritage, Leadership and Vision. Mr. Shyam Agarwal have led the company successfully and created the brand, Hillwud, a name known for quality Plywood products.

Our Promise

Hillwud is a name synonymous with quality. Our product stands on our principles, which stand on the three pillars of Consistency, Change and Customer. Consistency- because of our stringent quality control methods and desire to provide a high quality product consistently. Change- because change is the only constant and adapting to that is part of survival. Customer- because customer satisfaction and pride is our policy.

We have been in the business of manufacturing our products for over 30 years. To cement our quality name in the market we have been working on our brand "Hillwud" which allows the consumer to associate Hillwud with excellence, durability and affordability.

We take great pride in our quality and encourage our customers to pass on that pride with confidence to the consumer. Our brand ambassador is a tortoise named Mr. Long Life which reflects our product's longevity.



"We Consider Plywood Making As An Art, & we Put In Great Effort And Focus To Paint A Picasso"

Team

A great team forms the backbone of a company. A perfect blend of experience and youth allows this company to stay on its toes and provide the stability and continuity using years of learning and growth.

Company has a good quality control team who take care of product quality and from start to finish and are always ready to provide unparalleled customer service.



Vision

- ▲ To be known as a manufacturer of high quality products in the plywood trade and continuously set higher standards.
- ▲ To nurture a sense of ownership amongst our workers, employees, dealers and customers by following transparency and honesty in our dealings with one & all.
- ▲ To innovate continuously by implementing better use of human resource and technology to forever improve our product.
- ▲ To be sensitive towards the environment by reducing wastage, pollution and developing energy efficient processes and systems.
- ▲ To pursue economy of scale by implementing the Japanese concept of lean manufacturing known as KANBAN.
- ▲ To give our customers a product that lasts life long.





An Infrastructure of Growth

The manufacturing process in our company is vertically integrated. Most of the material viz. core veneer, resin, planks, frames etc are manufactured in-house. This insures round the clock availability of quality raw material at competitive prices.



- High Production Capacity
- Quality Check
- IS Standardisation
- Vast Infrastructure



Haploos Plyboards Pvt. Ltd an ISO 9001:2000 certified company is spread over a huge area and it is equipped with all modern machinery. A complete indigenous semi-automatic plant where errors are minimized & precision is maximized.



Research & Development



Plywood samples are regularly tested in the lab, equipped with state of art testing instruments, to check the product's conformity with ISI specifications. Quality control inspector inspects every panel with stringent quality control norms.



“ Our Quality comes after Stringent Lab Testing ”



Going for the Top

Stringent Quality Control,
Maintaining Standardization Batch after Batch-
that is one of the reasons our
customer base is increasing day by day...



Blockboard IS : 1659

The uniqueness of Hilwud block board is that the batons are uniform in dimension as they have been sawn from latest generation of Gangsaw machine. Besides, they are kept in a closed environment, submerged in preservative solution to ensure the diffusion of preservatives inside the fibers of the timber. Further, anti-termite and anti-borer chemicals are infused in the manufactured board to impart superior resistance.

Technical SPECIFICATIONS (IS : 710)

Test	Specified Value	Observation
Construction	MR Grade	Full core used
Adhesive used for bonding	MR Grade	Resin tested & conform to meet IS:848-1974
Preservative treatment	As per IS 5539	Borate-Boric acid treatment
Dimensions All length B/Width	Up to + 6mm Up to + 3mm	Dimensions observed in tolerance limit
Thickness Variation III	±5% Not more than 0.5mm	±5% Variation of thickness Within tolerance limit
Moisture	8 to 12%	Within tolerance limit
Squareness	Not more than 0.2%	Under control limit
Edge straightness	Not more than 0.2%	Under control limit
Resistance to water	After 3hrs in 60 ± 2°C temp sample should not delaminated 4hrs	Sample have not delaminated up to
Adhesion of plies	Pass standard	Excellent
Mycological test	After 21 days in micro organism's sample should not delaminated	Bonding not effected
Modulus of rupture	Min. individual 34N Min. average 40 N	Min. individual 42 N Min. average 48 N
Modulus of elasticity	Min. individual 3400 N Min. average 4000 N	Min. individual 3800 N Min. average 4500 N
Spot test (preservative treatment)	2% solution of boric acid & borax in water	Yellow color changes into ind
Changes caused by humidity	Less than 1/150	Less than 0.50 /150

Plywood (IS : 303)

Hilwud MR Grade Plywood is manufactured from eco-friendly species of hardwood bonded with latest generation of aminoplast resin- Urea Melamine Formaldehyde.

BWR Grade plywood is bonded with fortified phenol formaldehyde synthetic resin as per standards of IS:848-1974 under controlled temperature and pressure with adequate timing to obtain unmatched bonding.

The products MR and BWR are further fortified with anti-termite and anti-borer chemicals for protection from termite and borers.

Technical SPECIFICATIONS (IS : 303)

Test	ISI requirement	Observed Value
Construction	5% - 15%	Full core used
Adhesive used for bonding	MR Grade BWR Grade	Resin tested & conform to meet IS:848-1974
Preservative treatment	As per IS 5539	Borate-Boric acid treatment
Dimensions All length B/Width	Up to + 6mm Up to + 3mm	Dimensions observed in tolerance limit
Thickness	Below 6mm ±10% 6mm & above ±6mm ±5%	Below 6mm ±10% Above 6mm thickness should not in lower side
Moisture	8 to 12%	Within tolerance limit
Edge Straightness	Not more than 0.2%	Under control limit
M.O.R Along the grain	BWR MR Ind.- 36 27 Avg.- 40 30	BWR MR Ind.- 40 30 Avg.- 45 35
M.O.R Across the grain	Ind.- 18 13 Avg.- 20 15	Ind.- 20 18 Avg.- 25 20
M.O.E Along the grain	Ind.- 4500 3600 Avg.- 5000 4000	Ind.- 5200 4500 Avg.- 5500 4700
M.O.R Across the grain	Ind.- 2200 1800 Avg.- 2500 2000	Ind.- 2500 2200 Avg.- 2800 2500
Mycological test	Excellent/ Pass/Poor	No separation found after test. Excellent
Water resistance test	BWR- 100°C, 72hrs MR- 60°C, 33 hrs 3 cycle	No separation found after 3 cycle test. Excellent bond
Adhesion of plies	Excellent/Pass/Poor	Excellent





Marineply IS : 710

Hilwud Marine Plywood is specially treated to resist rotting in a high-moisture environment. It is frequently used in the construction docks, boats and other marine vessels.

It is manufactured with utmost care under the supervision of technical experts from selected pieces of hardwood core and face veneers. These are bonded with Phenol Formaldehyde BWP Grade resin under high temperature and pressure. Further, the finished plywood is subjected to proper chemical treatment with water-soluble fixed type preservatives under vacuum pressure to ensure protection against wood-destroying organisms.



TECHNICAL SPECIFICATIONS (IS : 710)

Test	ISI requirement	Observed Value	
Moisture content	5% - 15%	8%	
Glue shear strength (dry state)	Min. Ind 1100N	1950N	
	Min. Avg. 1350N	1500N	
Adhesion of plies	Min. pass standard	Excellent	
Glue shear strength (after 72 hrs. boiling)	Min. Ind. 800N	1150N	
	Min. Avg. 1000N	1250N	
Tensile strength			
	Along the grain	4200N/Sq. mm.	5200N/Sq. mm.
	Across the grain	2500N/Sq. mm.	3950N/Sq. mm.
Sum of Tensile strength	8450N/Sq. mm	9400N/Sq. mm.	
Static bending strength			
	Modulus of rupture		
	Along the grain	50N/Sq. mm.	65N/Sq. mm.
Across the grain	30N/Sq. mm.	40N/Sq. mm.	
Modulus of elasticity			
	Along the grain	7500N/Sq. mm.	8300N/Sq. mm.
	Across the grain	4000N/Sq. mm.	4170N/Sq. mm.

Flushdoor IS : 2202

Hilwud BWP Flushdoor is a durable product due to its excellent quality, exceptional finish and unique dimensional stability. It is made of selected pine wood frames and light weight batons of Poplar timber. The pine wood frame provides superior screw-holding strength and the overall lightweight of the door prevents it from drooping at the hinges.

BWP Grade of Phenol Formaldehyde Resin is used for bonding the layers. It has extra lock rail that provides sufficient strength to the handle and lock. The complete testing of flush door enables the company to render assured strength, safety and peace. These flush doors are shop-floor tested and conform to IS:2202 specification.



TECHNICAL SPECIFICATIONS CONFORMING TO IS : 2202 (PART-1) - 1999

Test	Requirement	Observed Value
Dimension	Length, Width -±5mm	Within limits
	Thickness -±1mm	Within limits
Squareness	Deviation not more than 1 mm on a length of 500mm	Deviation below 1mm
	twist, cupping warping not to exceed 6mm	
General Flatness	Depth of deviation at any point to be less than 0.5mm	Within limits
Local Planeness	Depth of indentation not to exceed 0.2mm	Within limits
	Impact Indentation Test	Within limits
Edge Loading Test	Deflection of edge with max to be less than 5 mm	Within limits
Shock Resistance Test	No visible defect after test	No visible defects
Buckling Test	initial deflection <50 mm	Within limits
	residual deflection <5 mm	
Slamming Test	No visible damage after test	No visible damage
Mouse Test	No deformation after test	No deformation
Varying Humidity Test	No visible warping, twisting or de-lamination	No such defects observed
	Screw Withdraw Test	No de-lamination at the end
End Immersion Test	Minimum Pass Standard	Excellent
Knife Test	No de-lamination	No de-lamination
Glue Adhesion Test	Load to withdraw screw to be more than 1000N	Load -> 1000N



Decorative Plyboard IS : 1328

Hilwud Decorative Plywood is made from natural veneers and bonded with PF as well as MUF resin to provide the durability and beauty of nature in an exclusive manner.

With a wide range of species, colors, finish and grain consistency, Hilwud Decorative range is the preferred choice of interior designers and architects. The speciality of the ply is its exceptional quality for the purpose of aesthetic value.



TECHNICAL SPECIFICATIONS (IS : 1328)

Test	ISI requirement	Observed Value
Open Splits	Not more than 150mm length and 0.5 mm in width rectified with veneer insert bonded with synthetic resin	No open splits
Torn grain, dead knots, dot discoloration and sawwood.	Free from such defects	Free from such defects
Moisture content	5% - 15%	8%
Water resistance test (3 cycles of 3 hr boiling at formation 60°C & 8 hr drying at 65°C)	No delamination or blister formation	No delamination or blister formation

A Designer's Delight



Filmface IS : 4990

Hilwud densifying shuttering plywood is compact and toughened quality structural plywood. This is the most elegant, durable, superior film-faced ply. Its strength allows it to withstand heavy load and vibrations which arise while pouring concrete. The technique used to manufacture this plywood is a unique heating-cooling cyclic process. It does not degrade against wear and tear. Its protective properties resist attack from termite, fungi, rot and other destructive elements.



TECHNICAL SPECIFICATIONS (IS : 4990)

Test	ISI requirement	Observed Value
Moisture content	5% - 15%	8%
Glue shear strength (in dry state)	Min. Ind. 1100 N Min. Avg. 1310 N	1310 N 1520 N
Adhesion of ply	Min. pass standard	Excellent
Glue shear strength (after 72 hrs. boiling)	Min. Ind. 800 N Min. Avg. 1000 N	1060 N 1250 N
Adhesion of plies	Min. pass standard	Excellent
Mycological Test	No sign of separation	No separation
Glue shear strength	Min. Ind. 800 N Min. Avg. 1000 N	1060 N 1250 N
Tensile strength		
Along the grain	32.5 N/Sq. mm.	46.5 N/Sq. mm.
Across the grain	22.5 N/Sq. mm.	32.2 N/Sq. mm.
Sum of strength	60.0 N/Sq. mm.	84.7 N/Sq. mm.
Static bending strength		
Modulus of elasticity		
Along the grain	8000 N/Sq. mm.	9100 N/Sq. mm.
Across the grain	4000 N/Sq. mm.	4320 N/Sq. mm.



Boiling Water & Moisture Resistance



Caliberated Ply

Hilwud Caliberated ply is specially constructed to meet the ever increasing and specific requirement of the modular kitchen industry. It is a doubly pressed plywood which goes through the calibrator to reduce it's variations to a range of 0.1-0.2 mm.

Usage of higher quality of face and core veneer in addition to thoroughly monitored resin making gives it strong bonding and a much better ability to bond with other materials required in it's application.



Flexi Ply

Hilwud densifying shuttering plywood is compact and toughened quality structural plywood. This is the most elegant, durable, superior film-faced ply. Its strength allows it to withstand heavy load and vibrations which arise while pouring concrete.

The technique used to manufacture this plywood is a unique heating-cooling cyclic process. It does not degrade against wear and tear; Its protective properties resist attack from termites, fungi, rot and other destructive elements.



Laminates

Hilwud Laminates are constructed using high quality ITC craft papers using phenolic resin from a solid bond.

It is sanded using Italian machines to give it the perfect surface to bond with any material. These come in various designs to suit your residential as well as commercial needs



Plywood / Block Board / Flush Door / Laminates / Caliberated Ply
Flexi Ply / Marine Ply / Shuttering Ply / Teak Ply



We don't just provide a product,
we provide an **experience.**



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