

Web: www.agniply.com



P R O D U C T B R O C H U R E

Bheed se Alag Bharosemand Humsafar



Quality Aisi Ki
Moh Na Chhute

Tested Trusted and loved by millions of people across India, AGNI plywood is year old brand, known by its power packed quality that is manufactured in India's most advance automated plant. Every machines installed in the plant is chosen after testing its live performance to make flawless products. It took a long time to make AGNI plywood manufacturing unit a model unit for manufacturing best and flawless panel products.

Unlike other brands, which came in market directly after manufacturing, AGNI plywood is first get checked in highly sophisticated laboratory by quality control inspectors and then get ready for the dispatch.



A Sustainable Building Material

Using plywood is a good way to help reduce the growth of global warming because wood is a renewable building material; as trees grow, they absorb carbon dioxide from the atmosphere, giving out the oxygen we breathe. The carbon is then stored for the life of the tree and the life of the product. It can even be recycled.

Plywood is a highly versatile building material which spans a wide range of applications from wall and floor sheathing to designer interiors and glider fuselages. There are many types of plywood available, including specialist tropical veneers such as marine plywood which, while having very good weather resistance and strength properties, comply to specific standards such as IS:710 (plywood in marine use).

With over 30 years production experience, Agni plywood provides exceptional uniformity as well as quality, making it easy to use in building and construction projects, while constant research and development by the production team ensures all specifications meet today's stringent building requirements.

Not Just a Ply It's **Agni Plywood**

How **AGNI PLY** is different from crowd?

Made with perfection and passion in ultra modern plant, having numerous semi and automatic machineries **AGNI PLY** is replica of quality. Following points make **AGNI PLY** *Bheed Se Alag and Bharosemand.*

- Manufactured with high density core and panel
- Assembled with auto core composer to minimise gap inside the panel
- Tenderised core veneer for strong bond and flatness
- Numeric control manufacturing process
- Conditioned panel for perfect architectural work
- Guaranteed precise dimension and thickness.
- Edges cut with numeric controlled double dimension saw.
- Three times treated against termite, borer and micro organisms
- Quality tested in advance lab by IPIRTI qualified person



agni
PERFECTION SE BANI POWER-PACKED PLY



Best for all Architectural Work

As **AGNI PLY** is manufactured with utmost care in supervision of experienced and technical team. Every raw material either it is timber, face veneer, resin or treatment chemical, selected after proper quality check by quality inspectors. There are specialist for each section of production and they bear individual responsibility for their section better performance. With the fully developed in-house research lab, the stringent supervision, and the consistent quality policies, **AGNI PLY** gets fit in all type of woodworking.

- Bonded with high solid content PF resin and manufactured in India's best hydraulic press, so there is no chance of de-lamination of plywood.
- Manufactured with pre-joint wider core and panel to avoid the manual fault during assembly of core and panels. This practice reduces the chances of gap inside the plywood.
- Calibrated in highly accurate calibration machine to get the even surfaces with equal thickness at all points.
- It has high nail holding capacity, You can nail it with any size of nail at any point of its surface because of its zero gap construction
- High load bearing capacity than any other plywood. You can provide load as per the requirements, it will not bent because of high density timber.

Products

PLYWOOD

- Hardwood Plywood ■ Alternate Construction Plywood ■ Marine Grade Plywood
- Film Face Plywood ■ Laminated Plywood ■ Kitchen Special Plywood ■ Imported Gurjan Plywood ■ Imported Natural Teak Plywood ■ Imported Flexi Plywood
- Imported MDF

BLOCK BOARD

- Poplar Block Board ■ Pine Block board ■ 7layer Block Board

DOORS

- Flush Doors ■ Membrane Doors ■ Laminated Doors ■ Veneer Doors
- Panel Doors





agni PLATINA

HARDWOOD PLY

(Marine Grade Plywood IS:710)

This is our top-of-the-range plywood, It is made from multi-laminate hardwood veneers for stability, and has extremely high quality rotary Gurjan face. Designed for high loading uses where strength is a pre-requisite, it has a superb load bearing quality, and specially treated against termite and borer in vacuum pressure impregnate plant thus Agni PLATINA is extremely resistant to fungal attack and is ideal for persistently wet and dry environments. Used and approved in high risk applications, and manufactured according to BIS standards as per IS:710.

Marine Grade

Features of AGNI PLATINA:

- Made with 100% hard wood timber.
- Bonded with water proof PF resin.
- Treated against termite and borer.
- Double pressed for extra strength.
- Calibrated for perfect thickness.
- Made with pre-jointed wider core & panel.
- 100%water proof panel.
- High nail holding capacity.

Sizes: 8x4ft, 7x4ft, 6x4ft, 6x3ft.

Thickness: 19mm and 20mm

Marine Technical Specifications (IS: 710:2024)

	Dimensions	ISI Requirements		Observed Values
1.	Length	2440 +6 0		2442 mm
2.	Width	1220 +3 0		1222 mm
3.	Thickness	19 mm ± 5%		18.60 mm
4.	Squareness	0.20%		0.10%
5.	Edge Straightness	0.20%		0.03%
	Physical Properties			
6.	Density	0.65		0.68
7.	Moisture Contents	5-15 %		7.35%
8.	Adhesion of Plies (in dry state)	Some adherent fibre distributed more or less uniformly		Satisfactory
9.	Adhesion of Plies (in wet state)	Do		Satisfactory
10.	Glue Shear Strength(in dry state)	Avg. – 1350 N Min. Ind. - 1100 N		Avg. – 1450 N Min. Ind. - 1200 N
11.	Glue Shear Strength(in wet state)	Avg. – 1000 N Min. Ind. - 800 N		Avg. – 1272 N Min. Ind. - 930 N
12.	Tensile Strength	Along the Grain Across the Grain Sum of tensile in both directions	Min. - 36 N/mm ² Min. - 29 N/mm ² Min. – 84.5 N/mm ²	60.05 N/mm ² 38.24 N/mm ² 98.29 N/mm ²
13.	Static Bending Strength(Dry State)			
	Along the Grain M.O.E	Avg. – 6400 N/mm ² Min. - 5700 N/mm ²		8510 N/mm ² 7250 N/mm ²
	Across the Grain M.O.E	Avg. – 4600 N/mm ² Min. - 4100 N/mm ²		5052 N/mm ² 4424 N/mm ²
	Along the Grain M.O.R	Avg. – 43 N/mm ² Min. - 38 N/mm ²		55 N/mm ² 46 N/mm ²
	Across the Grain M.O.R	Avg. – 35 N/mm ² Min. - 31 N/mm ²		49 N/mm ² 41 N/mm ²
14.	Static Bending Strength(Wet State)			
	Along the Grain M.O.E	Avg. – 3200 N/mm ² Min. - 2900 N/mm ²		4520 N/mm ² 3750 N/mm ²
	Across the Grain M.O.E	Avg. – 2300 N/mm ² Min. - 2100 N/mm ²		2890 N/mm ² 2427 N/mm ²
	Along the Grain M.O.R	Avg. – 21 N/mm ² Min. - 19 N/mm ²		35 N/mm ² 26 N/mm ²
	Across the Grain M.O.R	Avg. – 17 N/mm ² Min. - 15 N/mm ²		23 N/mm ² 19 N/mm ²
15.	Retention of Preservatives (ACC)	Min. 12 Kg/ m ³		12.98 Kg/ m ³
16.	Mycological Test			Satisfactory
	a) Show no Separation Sign.	Avg. 1000 N		1250 N
	b) Glue Shear Strength	Ind. 800 N		1010 N
	c) Adhesion of Plies	Adherent fibre distributed more or less uniformly		Excellent





agni emporia

HARD WOOD PLY

(Moisture Resistant (MR) Grade Plywood IS:303)

Agni EMPORIA is premium grade, bonding chemicals empowered, 100% Hardwood, Densified plywood available in Moisture Resistant (MR) Grade. It confirms to the standards of IS: 303. It is bonded with Melamine Fortified UF Synthetic Resin as per standards of IS: 848:1974 under controlled temperature and pressure with adequate timings to obtain unmatched bonding. All the veneers, which go to the manufacturing, are empowered with Anti-Termite & Anti-Fungus chemicals.

Advantages:

Being bonding chemical empowered, this 100% Moisture resistant plywood has greater resistance power to fight against borers & termites. In fact, the infusion of GLP in the glue line area ensures that it remains protected & safe from the attack of borers & termites.

Technical Specifications (IS: 303:2024)

Test	ISI Requirements	Observed values	Observed values
1. Grade	BWP, BWR, MR	BWR	MR
2. Moisture Content	5-15%	7%	7%
3. Density	0.65 to 0.70 gm/ cm ³	0.70 gm/ cm ³	0.70 gm/ cm ³
4. Resistance to Water 3 Cycles of 8 hr. boiling and 16 hr. drying @65°C ± 2°C (For BWR Grade) Moisture Resistance to Water(3 cycles of 3 hr. @ 60°C ± 2°C and 8 hr. drying @65°C± 2°C (For MR Grade)	Min. Pass	Excellent	Excellent
5. Resistance to Micro Organism-Adhesion to Plies	Min. Pass	Excellent	Excellent
A Modules of Elasticity(For MR Grade) Along the Grain Across the Grain Modulus of Elasticity(For BWR Grade) Along the Grain Across the Grain	Avg. 3400 N/mm ² Min. 3100N/mm ² Avg. 2300 N/mm ² Min. 2100N/mm ² Avg. 4300 N/mm ² Min. 3800N/mm ² Avg. 2900 N/mm ² Min. 2500N/mm ²	Avg. 6000 N/mm ² Min. 5000N/mm ² Avg. 3800 N/mm ² Min. 3400N/mm ² Avg. 6000 N/mm ² Min. 4800N/mm ² Avg. 3700 N/mm ² Min.3500N/mm ²	Avg. 6000 N/mm ² Min. 5000N/mm ² Avg. 3800 N/mm ² Min. 3400N/mm ² Avg. 6000 N/mm ² Min. 4800N/mm ² Avg. 3700 N/mm ² Min.3500N/mm ²
B Modules of Rupture(For MR Grade) Along the Grain Across the Grain Modulus of Elasticity(For BWR Grade) Along the Grain Across the Grain	Avg. 26 N/mm ² Min. 23 N/mm ² Avg. 17 N/mm ² Min. 15 N/mm ² Avg. 34 N/mm ² Min. 31 N/mm ² Avg. 23 N/mm ² Min. 21 N/mm ²	Avg. 54 N/mm ² Min. 43 N/mm ² Avg. 39 N/mm ² Min. 33 N/mm ²	Avg. 53 N/mm ² Min. 45 N/mm ² Avg. 36 N/mm ² Min. 31 N/mm ²
6. Bending Class	F 10 – F 50	F 30	F 30

Made with
100% Hard
WOOD **TIMBER**



agni MINGLE

Alternate Construction Plywood

AGNI MINGLE is available in Moisture Resistant (MR) and Boiling Water Resistant (BWR) grades. Both the grades are used for the interior and exterior woodworking application. It is manufactured by the combination of POPLAR and SAFEDA timer together. This ISI marked M.R. grade plywood is bonded with Melamine Urea Formaldehyde Synthetic Resin. While the BWR grade plywood is bonded with Fortified Phenol Formaldehyde Synthetic Resin as per standards of IS: 848:1974 under controlled temperature & pressure with adequate timings to obtain unmatched bonding.

AGNI MINGLE is used in any application that needs high quality wooden sheet material and it is an economical option for better wood working. It also has resistance to cracking, breaking, shrinkage, twisting and warping.

Technical Specifications (IS: 303:2024)

Test	ISI Requirements	Observed values	Observed values
1. Grade	BWP, BWR, MR	BWR	MR
2. Moisture Content	5-15%	7%	7%
3. Density	0.65 to 0.70 gm/ cm ³	0.70 gm/ cm ³	0.70 gm/ cm ³
4. Resistance to Water 3 Cycles of 8 hr. boiling and 16 hr. drying @65°C ± 2°C (For BWR Grade) Moisture Resistance to Water(3 cycles of 3 hr. @ 60°C ± 2°C and 8 hr. drying @65°C± 2°C (For MR Grade)	Min. Pass	Excellent	Excellent
5. Resistance to Micro Organism-Adhesion to Plies	Min. Pass	Excellent	Excellent
A Modules of Elasticity(For MR Grade) Along the Grain Across the Grain Modulus of Elasticity(For BWR Grade) Along the Grain Across the Grain	Avg. 3400 N/mm ² Min. 3100N/mm ² Avg. 2300 N/mm ² Min. 2100N/mm ² Avg. 4300 N/mm ² Min. 3800N/mm ² Avg. 2900 N/mm ² Min. 2500N/mm ²	Avg. 6000 N/mm ² Min. 5000N/mm ² Avg. 3800 N/mm ² Min. 3400N/mm ² Avg. 6000 N/mm ² Min. 4800N/mm ² Avg. 3700 N/mm ² Min.3500N/mm ²	Avg. 6000 N/mm ² Min. 5000N/mm ² Avg. 3800 N/mm ² Min. 3400N/mm ² Avg. 6000 N/mm ² Min. 4800N/mm ² Avg. 3700 N/mm ² Min.3500N/mm ²
B Modules of Rupture(For MR Grade) Along the Grain Across the Grain Modulus of Elasticity(For BWR Grade) Along the Grain Across the Grain	Avg. 26 N/mm ² Min. 23 N/mm ² Avg. 17 N/mm ² Min. 15 N/mm ² Avg. 34 N/mm ² Min. 31 N/mm ² Avg. 23 N/mm ² Min. 21 N/mm ²	Avg. 54 N/mm ² Min. 43 N/mm ² Avg. 39 N/mm ² Min. 33 N/mm ²	Avg. 53 N/mm ² Min. 45 N/mm ² Avg. 36 N/mm ² Min. 31 N/mm ²
6. Bending Class	F 10 – F 50	F 30	F 30





KITCHEN SPECIAL PLYWOOD

Kitchen is one place around the home, where furniture is likely to be exposed to water, and will keep on getting wet. So the plywood that we select for making the kitchen cabinets has to have the ability to withstand water.

Keeping the need of kitchen we have manufactured a special plywood for kitchen application. It is made with high density timber and bonded with MUF resin to make it tough against moisture. Since it get used in kitchen interior so it is made with eco-friendly resin that resist to release & harmful emission.

Features:

- High density plywood
- Eco-friendly panel
- Water resistant
- Completely treated against termite and borer
- High load bearing capacity
- Perfect thickness to match up with kitchen carbonates.
- Calibrated thickness for precise and good looking kitchen

Boiling Water Resistant Grade Plywood



LAMINATED PLYWOOD



AGNI laminated plywood is a very useful panel for interior application. It is a kind of panel in which plywood get laminate with selected mica sheet. The benefit of using AGNI laminated plywood is that you get best quality decorative panel for your interior. As normally people select good looking and expensive MICA but get fail to select best base panel for its lamination. Using AGNI laminated ply eliminate the chance of using inferior quality decorative panel. AGNI laminate ply enhances the life of your decorative surface.

It is available in wider range of colour and texture. You can also select any laminate from market and we can make it for you on AGNI ply.

IMPORTED FLEXI PLYWOOD

AGNI ply FLEXI plywood is 100% Gurjan, Boiling Water proof with superior flexibility and elasticity, outlasting durability and is self supportive and does not require additional structural supports. Ideally suitable for host of applications like making furniture with curved or designer shapes, Staircase banister and casing for round concrete pillar casting etc.





IMPORTED TEAK PLYWOOD

Creative usage of wood in various design possibilities can be realized to perfection by using AGNI imported Teak plywood, available in a superior wide belt sanding finish. The superior finish of the surface gives the plywood, a natural edge over all the others in creating a classical and functional interior that emanates from the true depth of the imagination. An interior decorated with Teak plywood leaves a signature of its own. Another important feature of this decorative plywood is that the look and feel is so rich and full of glamour that it is compared with wine. The older it gets the better it looks. Many dignified hotels, showrooms and homes in India and abroad who do not want to take chance with any other wood variety go for Natural Teak plywood.

One can get the best out of this plywood if combined with a great designer's mind. This combination can take the beauty and look of the interior to unlimited heights.

Suggested uses:

Wall panelling, kitchen panelling, cabinets, partition wall, cupboard & wardrobes, shelves, racks & furniture etc.

IMPORTED MDF

It is a revolutionary product that is made with a selected wood fibre which leads to high bonding strength and rigidity and is loaded with features which are best suited for constructing strong and durable furniture and creating unique interiors. Its homogeneous construction gives it easy machining characteristics and enables it to be intricately and precisely routed, carved and moulded. It is termite, borer and fungus resistant. It is an eco-friendly product as it is manufactured from 100% renewable and sustainable wood.



FILM FACE PLYWOOD

AGNI Film face shuttering plywood is a product for high-end construction uses. The phenolic film plywood has a glossy surface that gives the product long life and great value in terms of re-use. This plywood withstands the corrosive action of cement, water & sunlight.

AGNI film face shuttering plywood is ideal for exposed concrete shuttering and frameworks. It is made of best-selected plywood veneers bonded with Phenol Formaldehyde Resin. An external coating of Phenolic Polymer Film made in-house with imported craft paper gives a super smooth, uniform surface finish. AGNI shuttering ply is foremost choice of leading quality conscious architects and civil construction engineers. All standard sizes and thickness are available.

Advantages of using AGNI shuttering ply:

- It gives more number of repetitions.
- Provides smooth surface to concrete form work.
- It is economical in ratio to its number of uses.
- It can be used in making furniture after the complete use of shuttering.

Tips to get maximum use of shuttering ply:

- Do not drag or drop from height.
- Stack on flat surface.
- Clean both side surfaces after use.
- Apply mould oil after 3-4 uses.
- Use sealant on cut edges.
- Use minimum nails.
- Use putty in the nail holes.

Technical Specifications (IS: 4990: 2024)

	Dimensions	ISI Requirements	Observed Values
1.	Length	2440 +6 0	2442 mm
2.	Width	1220 +3 0	1222 mm
3.	Thickness	12 mm ± 5%	11.90 mm
4.	Squareness	0.20%	0.05%
5.	Edge Straightness	0.20%	0.04%
Physical Properties			
6.	Density	0.95	0.95
7.	Moisture Contents	5-15 %	7.5%
8.	Adhesion of Plies (in dry state)	Some adherent fibre distributed more or less uniformly	Satisfactory
9.	Adhesion of Plies (in wet state)	Do	Satisfactory
10.	Glue Shear Strength(in dry state)	Avg. – 1350 N Min. Ind. - 1100 N	Avg. – 1520 N Min. Ind. - 1190 N
11.	Glue Shear Strength(in wet state)	Avg. – 1000 N Min. Ind. - 800 N	Avg. – 1260 N Min. Ind. - 900 N
12.	Tensile Strength	Along the Grain Across the Grain Sum of tensile in both directions	Min. - 28 N/mm ² Min. - 26 N/mm ² Min. - 60 N/mm ²
13.	Static Bending Strength(Dry State)		
	Along the Grain M.O.E	Avg. – 6400 N/mm ² Min. - 5700 N/mm ²	8420 N/mm ² 6975 N/mm ²
	Across the Grain M.O.E	Avg. – 4600 N/mm ² Min. - 4100 N/mm ²	5041 N/mm ² 4424 N/mm ²
	Along the Grain M.O.R	Avg. – 43 N/mm ² Min. - 38 N/mm ²	51 N/mm ² 43 N/mm ²
	Across the Grain M.O.R	Avg. – 35 N/mm ² Min. - 31 N/mm ²	45 N/mm ² 38 N/mm ²
14.	Static Bending Strength(Wet State)		
	Along the Grain M.O.E	Avg. – 3200 N/mm ² Min. - 2900 N/mm ²	4460 N/mm ² 3650 N/mm ²
	Across the Grain M.O.E	Avg. – 2300 N/mm ² Min. - 2100 N/mm ²	2880 N/mm ² 2527 N/mm ²
	Along the Grain M.O.R	Avg. – 21 N/mm ² Min. - 19 N/mm ²	35 N/mm ² 26 N/mm ²
	Across the Grain M.O.R	Avg. – 17 N/mm ² Min. - 15 N/mm ²	22 N/mm ² 19 N/mm ²
15.	Retention of Preservatives (ACC)	Min. 12 Kg/ m ³	12.95 Kg/ m ³
16.	Mycological Test		
	a) Show no Separation Sign.	Avg. 1000 N	Satisfactory
	b) Glue Shear Strength	Ind. 800 N	1240 N
	c) Adhesion of Plies	Adherent fibre distributed more or less uniformly	960 N Excellent





BLOCK BOARD

Agni premium quality boards have high resistant properties against borer and termite attacks. Face Veneer, Core Veneer & wooden battens are well selected and treated against anti termite and borer chemicals. The wooden battens are thoroughly seasoned in scientifically run seasoning kiln plants and then cut with great precision to obtain uniform thickness.

These battens are systematically arranged in the supervision of qualified supervisor and utmost care is taken to avoid any extra gap between the battens. Regular test are conducted to maintain the quality of block boards as per the standards of IS: 1659.

agñi
Origin

POPLAR wood block board



AGNI ORIGIN is a quality block board that is made with selected high grade POPLAR wood. It is liked by majority of people because of its availability & better work ability. Since it is made with POPLAR wood that is a carp so it help in environment preservation along with farmer's financial support. AGNI ORIGIN is available with all the quality benefits that AGNI provides.

Availability: Moisture resistant MR grade & Boiling water proof BWP grade.

agñi
Pinacal

PINE wood block board



AGNI PINACAL is premium quality block board that is manufactured with imported New zeland pine wood. PINACAL is better choice to make furniture because pine is a strong, shock-resistant material suitable for furniture, particularly if you like rough tough furniture that lost long. AGNI PINACAL is well treated and seasoned block board that fulfil all your wood working needs.

Availability: Moisture resistant MR grade & Boiling water proof BWP grade.

Also Available



Features that make Agni Block Board Bheed Se Alag:

- Treated and seasoned Frames and Battens
- Uniform width of battens, as per IS:1659.
- Pressed in hydraulic press with accurate temperature and pressure.
- Bonded with high solid content resin that is mix with anti termite borer chemical.
- Immunized block board against termites, borer and other wood generated micro organized.
- High load bearing capacity as made with high density timber.
- Conditioned block board, no bending and twisting after application.
- Surface finished with numeric controlled finishing machine that make it perfect for mica bonding.
- Boards have excellent screw holding capacity.
- Excellent water resistance properties.

Grades Available: MR grade Block Board and BWR grade Block Board

Thickness: 19 mm and 25mm | **Sizes:** 8x4, 7x4, 6x4, 6x3

B/B Technical Specifications (IS: 1659:2004)

	Test	ISI Requirements	Observed Values
1	Dimensional changes caused by humidity a) Changes, mm from 65% RH to 90% RH from 65% RH to 40% RH b) Local planeness c) At the extreme range of humidity	+ 1mm Max - 1mm Max. < 1/150 No de-lamination at the extreme range of humidity	+ 0.50 mm - 0.55 mm < 1/175 No de-lamination observed
2	Adhesion of the plies	Minimum pass standard	Excellent
3	Resistance to water (72 hours boiling)	No de-lamination after 72 hours boiling	No de-lamination
4	Resistance to micro organisms	No appreciable sign of separation at edges.	No separation at edges
5	Modulus of elasticity	Min. 5000 N / sq.mm	6050 N / sq.mm
6	Modulus of rupture	Min. 50 N / sq.mm	61 N / sq.mm
7	Spot test	Entire penetration of preservative chemicals through batten	Satisfactory



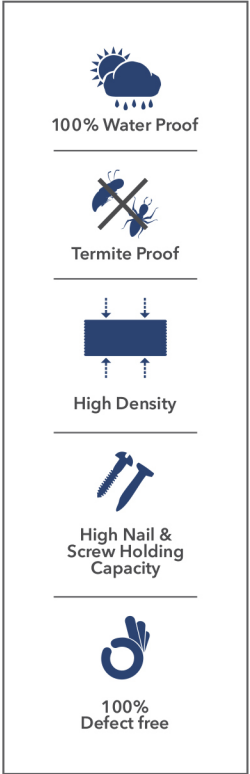
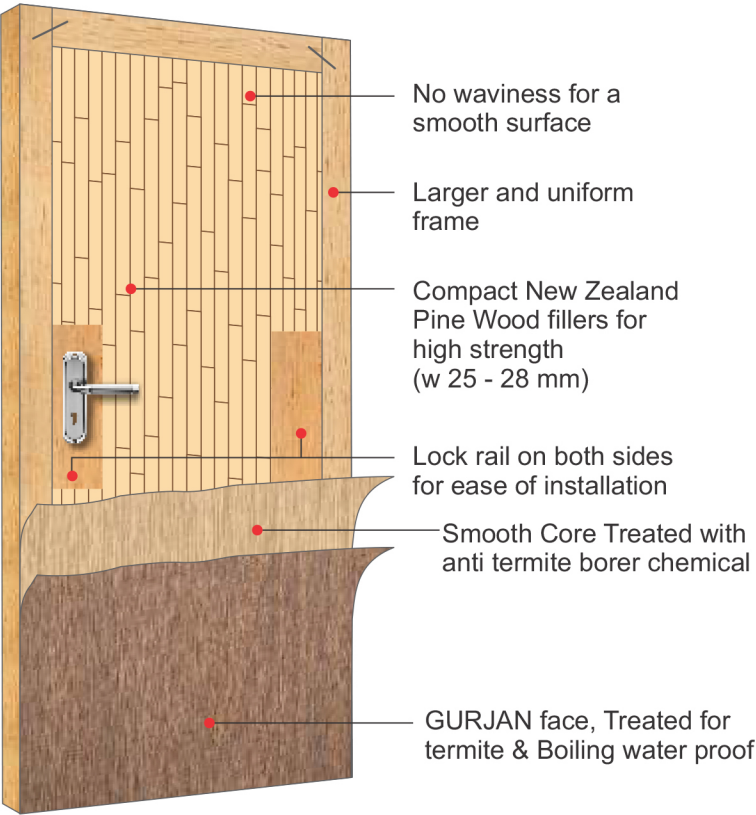


FLUSH DOOR

Door manufacturing need separate attention, it is very serious job than plywood and block board. There should not be any flaw or miss attention during manufacturing the door, because this is the door on which you believe most and you leave your dream home and its safety on the account of the door. We as a Agni Door manufacturer, guarantee you for the quality and strength of our doors on which you can trust.

Specialty of Agni Doors

- All Agni Doors are manufactured with unique strength booster Xpress Technology.
- Agni doors are manufactured with selected and high quality hard wood timber.
- Timbers used to manufacture Agni Doors are treated with anti termite borer chemical before sawing.
- Frames and battens are seasoned in advance seasoning chamber for equalize the moisture content.
- All the frames and battens are cut through rip saw machine and planer for equal size and thickness.
- The width of battens and frames are wider as per the specification of BIS.
- Extra lock rail is provided for the convenience of handle and lock fittings.
- Special care is taken during the assembly of battens to avoid any gap inside the door.
- High solid content water proof PF Resin is used for high strength.
- Agni doors are pressed with Gurjan face and wider core in India's best hydraulic press.
- All Agni doors are conditioned before cutting to avoid the warping and twisting.
- Agni doors are finished with highly précised wide belt sander.
- All doors are strictly checked by IPIRTI trained chemists as per the BIS guidelines.



Door Technical Specifications (IS: 2202: Part 1: 2023)

S.No.	Test	ISI Requirements	Observed Values
1	Dimension	Length, Width - + 5 mm Thickness - + 1 mm	Within limits
2	Squareness	Deviation not more than 1 mm on a length of 500mm	Deviation below 1 mm
3	General flatness	Twist, cupping, warping not to exceed 6 mm	
4	Local planeness	Depth of deviation at any point to be less than 0.5 mm	Within limits
5	Impact indentation test	Depth of Indentation not to exceed 0.2 mm	Within limits
6	Flexure test	The deflection at the maximum load shall not be more than 1/30 of length and 1/15 of width and the residual deflection should not be more than 1/10	Satisfactory
7	Edge loading test	Deflection of edge with max. To be less than 5 mm	Within limits
8	Shock resistance test	No visible defect after test	No visible defects
9	Buckling test	Initial deflection - < 50 mm residual deflection - < 5 mm	Within limits
10	Slamming test	No visible damage after test	No visible damage
11	Misuse test	No deformation after test	No deformation
12	Varying humidity test	No visible warping, twisting or de-lamination	No such defects observed
13	End immersion test	No de-lamination at the end	No de-lamination
14	Knife test	Minimum pass standard	Excellent
15	Glue adhesion test	No de-lamination	No de-lamination
16	Screw withdrawal test	Load to withdraw the screw shall not be less than 1000 N	1250 N

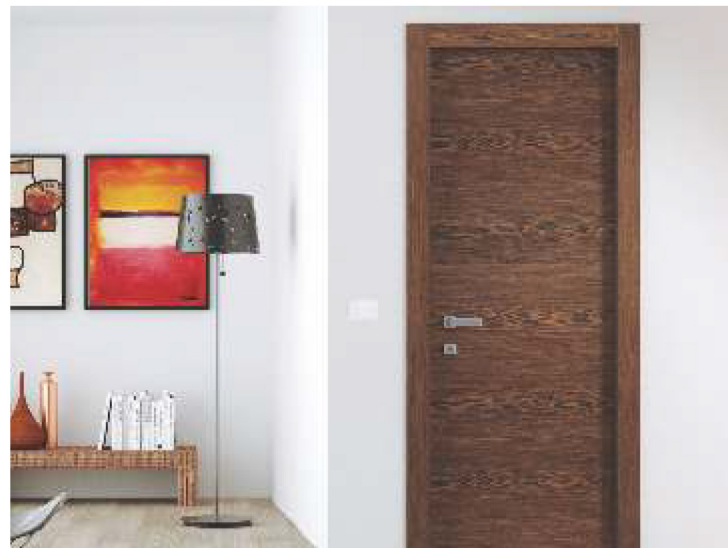


PVC MEMBRANE DOORS

Agni PVC membrane premium doors are manufactured with high density seasoned battens and frames with extra lock rail and pressed with water proof PF resin. PVC Membrane doors are laminated with imported PVC foil and pressed in vacuum pressure machine, which ensures better bonding and long life of the door. Doors are treated against termite and borer with latest chemical to ensure their protection against microorganism attack. PVC membrane doors do not require polishing and are maintenance free doors. Designs are available in multiple finishes like rosewood, natural teak, walnut, metallic wood, American cherry.

VENEER DOOR

AGNI veneer doors are perfect combination of beauty and strength. These doors are the best alternative to solid panel doors and manufactured by using HDF core, which resist shrinking, swelling, and warping. AGNI veneer doors are 100% waterproof and tested in highly sophisticated lab for any manufacturing defect. These doors are able to withstand any climatic condition & require very low maintenance.



LAMINATED DOORS

AGNI Laminated doors are recommended where absolute face aesthetic uniformity is desired. These doors are laminated with high-pressure laminate sheet of 1mm and 0.8mm on a calibrated base door. The base door is manufactured by seasoned battens and frames with waterproof PF resin. Laminate doors are available in a wide range of designs, using high quality laminate sheet for zero maintenance and long life.

PANEL DOOR

AGNI panel door is so intricately and beautifully designed that it becomes a symbol of craftsmanship in itself. These doors are manufactured with utmost care with seasoned solid wood in association with the world's largest door component thus assuring toughness, durability, resisting warping, shrinking and cracking better than a solid wood door. AGNI panel doors are long lasting, maintenance free and priced reasonably along with superior quality. The doors are available in a range of classy designs and can be finished in any colour as per taste and requirement of the customer



CERTIFICATES OF EXCELLENCE



Today the plywood market is chock-a-block with numerous brands and types of plywood. Once you enter a shop for purchasing plywood, you can't just choose like that. Several points' need to be kept in mind before buying plywood. As one gets plywood, the first thing that needs to be followed is the brand and further it has to be checked whether it has got quality certification mark like ISI.

Besides this, other factors that one can opt for judging good plywood are surface quality, its thickness variation, number of layers in plywood, its bonding and bending strength, its working environment, species of face/back, resistance to termites and borers etc.

Check Surface

Its plain and uniform face can judge surface quality of plywood. Surface should be perfectly even and finished well that determines its further glue ability and paint ability properties. Surface should be very clean and devoid from bumps, cups and any other deviation from normal flatness.

Uniformity

Thickness of the plywood should be uniform throughout the plywood. Non-uniform thickness may result from delaminating in certain areas of plywood due to poor bonding or steam pockets because of non-uniform moisture content during pressing of plywood in factory. By the use of a useful tool, 'micrometer' the uniformity of the ply can be checked easily and appropriately.

Bonding Strength

A very important factor is determining the bonding quality of plywood. Performing a very easy test can check bonding that is known as Knife test. Knife test is also done to check brittleness and toughness of plywood. Cutting a narrow strip of plywood's surface layer performs it; if the layer comes out easily it means that the bonding of plywood or adhesion of adjacent layers of plywood is not proper enough.

Hammer Test or Sound Test

Beating the plywood with a hammer at several places can present the toughness and solidity of plywood. This test gives a fair idea about sturdiness of plywood and also depicts whether it has any major gap or not.

Right Selection

Selection of plywood also depends on the end use of plywood in which location it is going to be used, if you want plywood for exterior/outdoor location then go for only BWP grade plywood. For interior application where there is no contact of water to the ply you can take MR grade. The main deciding factor while selecting decorative plywood. Ask for the species used, whether it is Birch, Maple Oak etc.

Along with all these factors, check for the bending property of plywood, check whether it possess good bending strength or not, it should not be very stiff and brittle.