

www.alishanply.com

Alishan Veneer &
Plywood Pvt. Ltd.
Corp. Office: 46,
BB Ganguly Street (5th Floor),
Road No. 8, Kolkata - 700 012
F: +91 33 2221 9391
E: info@alishanply.com



THE
WOODEN SIDE
OF LIFE





From the kitchen to the living room to the boardrooms to shipping docks - our plywood has strengthened them all. A carpenter's delight and a home maker's pride, we have made a significant impact on the wooden side of life. And the endeavour continues.

We are Alishan, an ISO 9001 certified manufacturer of choice plywood products and veneer. Over the last 10 years, the strength and quality of Alishan ply has quietly built a strong trust among its customers. Today, we are one of the leading industry torchbearers, supplying high calibre products to corporate houses, architects, designers and individuals. With advanced processes and sophisticated plant & machinery in place, we aim at continuously bettering our performance and earn customers trust.



IMPACTING
THE **WOOD**
INDUSTRY

Scientifically, wood is a hard and fibrous plant tissue. It has been used for centuries as both, fuel and a construction material. Our journey has been all about changing 'the crude' to 'exclusive' for you.

Ever since we stepped into the profession of shaping, toning and treating wood, we've never missed an opportunity to understand the finer nuances of this art. Being on the lookout for the most special varieties of wood, across geographies of the world, has been a hobby and passion to us.

In fact, at Alishan, each of our lives revolves around the common mission of turning best woods to premium products. Our passion has paid off. We take pride when our clients endorse our brand as the most durable.

Yes, we made a difference to wood!

FROM THE DIRECTOR'S DESK

George Baselitz, a famous German artist, once said, 'Wood isn't important in itself but rather in the fact that objects made in it are unique, simple, unpretentious.' And as I roll out this message for you, I take pride in the fact that Alishan has justified the purpose of wood!

In the last 10 years, Alishan has conquered places almost everywhere. Right from the desk where my computer currently sits to the meeting rooms of reputed corporate houses, Alishan is everywhere. That's because our focus on quality is growing with every passing day.

We place as much importance on procuring the right raw materials as on processing. In fact, we source a rare timber species from the forests of South East Asia. And follow a 16-stage process to deliver something long-lasting.

Going forward, my team and I will further commit ourselves to help you experience a rich wooden side of life!

Ramesh Kumar Agarwal

THE 'GURJAN' EDGE

The most critical task in making high-quality plywood is the right choice of ingredients. Our long-standing presence in the marketplace is in fact the result of this choice.

Alishan sources a rare timber species called Gurjan from the forests of South East Asia. Gurjan wood is reputed as a key timber species in making strong plywood. With Gurjan lending the much needed strength, Alishan plywood ranks as the strongest and the most durable of all.



ALISHAN PRODUCT LINE

Alishan has wide ranging plywood and veneer products to cater industries as diverse as marine and housing. Our products have carved an indomitable presence in specific sectors.



USP: Made from 100% Burmese Gurjan, each of its veneer layer is treated with 100% Boric Borax solution and is glue line poisoned to ensure complete protection from insects.

Quality: IS 710 certified.

Promise: Lifetime guarantee with peace of mind for generations.

Rigor proof: Bonded with very high quality phenol formaldehyde synthetic resin of BWP grade and treated with right chemicals to offer maximum protection against termites.



Test Report [Agency: Indian Plywood Industries Research & Training Institute (IPIRTI)]

| Sl. No. | Test Prescribed | Prescribed Value | Alishan Crystal Result |
|---------|--|--|--|
| 1 | Moisture content (%) | 5% - 15% | 9 % |
| 2 | Glue adhesion strength (in dry state) | Min. individual - 1100 N Average - 1350 N | 1420 1490 N |
| 3 | Adhesion of ply (knife test) | Minimum pass standard | Minimum pass standard |
| 4 | Resistance to water (after 72 hrs. boiling) | Minimum - 800 N Average - 1000 N | 1100 N 1200 N |
| 5 | Tensile strength N/mm ² Along the grains Across the grains Sum of strength | 42 N 25 N 84.5 N | 57.3 N 55.8 N 113.1 N |
| 6 | Modulus of elasticity N/mm ² Along the grains Across the grains | 7500 N 6700 N | 8836 N 8602 N |
| 7 | Modulus of rupture N/mm ² Along the grains Across the grains | Minimum - 45 N Average - 50 N Minimum - 27 N Average - 30 N | 48.0 N 55.6 N 46.8 N 54.0 N |
| 8 | Retention of preservative Chemicals (kg/m81-ccb type) | Minimum - 12 Kg | 13.1 Kg |



USP: Made from single wood species Gurjan, imported from South East Asia. Designed specifically for construction, repair and maintenance of marine and river craft.

Quality: IS 710 certified.

Promise: 100% protection against wood borers, termites, beetles & fungus.

Rigor proof: Bonded with very high quality phenol formaldehyde synthetic resin of BWP grade and treated with right preservatives to survive rigorous conditions - temperature changes, humidity and alternate wetting & drying faced by marine and river craft.

Solid testing: Tested for 72 hours at 100°C.



COMPOSITION OF MATERIAL

Sizes (mts.): 2.44x1.22, 2.44x0.92, 2.14x1.22, 2.14x0.92, 1.84x1.22, 1.84x0.92

Thickness (mm): 3, 4, 6, 9, 12, 16, 19, 25

End uses: Construction, repairing and maintenance of marine and river craft.
All types of furniture / partitions / wall paneling etc.

TECHNICAL SPECIFICATIONS

| | | |
|---|--------------------------------|------------|
| Grade | BWP (boiling water proof) | |
| Tolerances | Dimension | Tolerances |
| | Thickness upto 4 mm | +/-10% |
| | Above 4 mm | +/-5% |
| | Width upto 90 cm | + 3 mm |
| | Length upto 120 cm | + 6 mm |
| Moisture content | 8% - 10% | |
| Preservative treatment | Acid copper chrome composition | |
| Mycological test | Complies with the requirement | |
| Glue shear strength (average) dry state | 1425 N | |

TENSILE STRENGTH

- A) 43.000 N/mm² in the direction parallel to grain of the face veneers
B) 25.50 N/mm² in the direction of the right angles to grain direction of the face veneers
C) 85.00 N/mm² the sum of the tensile strength in both directions

STATIC BENDING STRENGTH

Direction: Parallel to the grain direction of face veneers

| | | |
|--|----------------|-------------------|
| Modulus of Elasticity (N/mm ²) | Average - 7800 | Individual - 7000 |
| Modulus of Rupture (N/mm ²) | Average - 60 | Individual - 53 |

Direction: Right angles to grain direction of the face veneer

| | | |
|--|----------------|-------------------|
| Modulus of Elasticity (N/mm ²) | Average - 4050 | Individual - 4000 |
| Modulus of Rupture (N/mm ²) | Average - 7800 | Individual - 30 |



USP: Made from single wood species Gurjan, imported from South East Asia. Designed specifically for construction, repair and maintenance of marine and river craft.

Quality: IS 303 certified.

Promise: 100% protection against wood borers, termites, beetles & fungus.

Rigor proof: Bonded with very high quality phenol formaldehyde synthetic resin of BWR grade and treated with right preservatives to survive rigorous conditions - temperature changes, humidity and alternate wetting & drying - faced by marine and river craft.

Solid testing: Tested for 8 hours at 100°c.



COMPOSITION OF MATERIAL

Sizes (mts.): 2.44x1.22, 2.44x0.92, 2.14x1.22, 2.14x0.92, 1.84x1.22, 1.84x0.92

Thickness (mm): 3, 4, 6, 12, 16, 19, 25

End uses: All types of furniture, wall paneling, partitions, penal insert of panel door, false ceiling etc.

TECHNICAL SPECIFICATIONS

| | |
|---------------------------|-------------------------------|
| Grade | BWR (Boiling water resistant) |
| Type | AA |
| Thickness | |
| Less than 6 mm | +/-10% |
| 6 mm & above | +/-5% |
| Dimension | |
| Length | +6 mm |
| Width | +3 mm |
| Moisture content | 8 - 12% |
| Specific gravity | 0.70 |
| Water absorption | 2% |
| Shear strength-min (N) | |
| (Average) Dry state | 1350 |
| (Average) Water resistant | 1000 |
| (Average) Mycological | 1050 |

BWP
BLOCKBOARD
IS: 1659

USP: Uses only one species of timber as specified by the IS standards. New Zealand pine is used as the cross core and face veneer.

Quality: IS 1659 certified.

Promise: 100% protection against termites and borers .

Chemical mix: Bonded with very high quality phenol formaldehyde synthetic resin of BWP Grade.

Solid testing: Tested for 72 hours at 100°c.

End uses: Furniture, partitions, panelling, pre-fabricated houses, railway carriages, bus bodies etc.

COMPOSITION OF MATERIAL

Sizes (mts.): 2.44x1.22, 2.44x0.92, 2.14x1.22, 2.14x0.92, 1.84x1.22, 1.84x0.92

Thickness (mm): 16, 19, 25

End uses: Furniture, partitions, paneling, pre-fabricated houses, railway arriages, bus bodies etc

TECHNICAL SPECIFICATIONS

| | |
|---|---------------------------|
| Grade | BWP (Boiling Water Proof) |
| Moisture content | 8 to 10% |
| Adhesion of plies | Excellent |
| Modulus of rupture (Average) N/mm ² | 50 |
| Modulus of elasticity (Average) N/mm ² | 5500 |
| Water absorption | 5% |



FLUSH
DOOR

USP: Engineered wood flush door shutters with...

- Imported calibrated wood that acts as filler
- Solid hardwood that acts as timber in stiles & rails
- Gurjan wood acts as cross core and face veneer

Quality: IS 2202 certified.

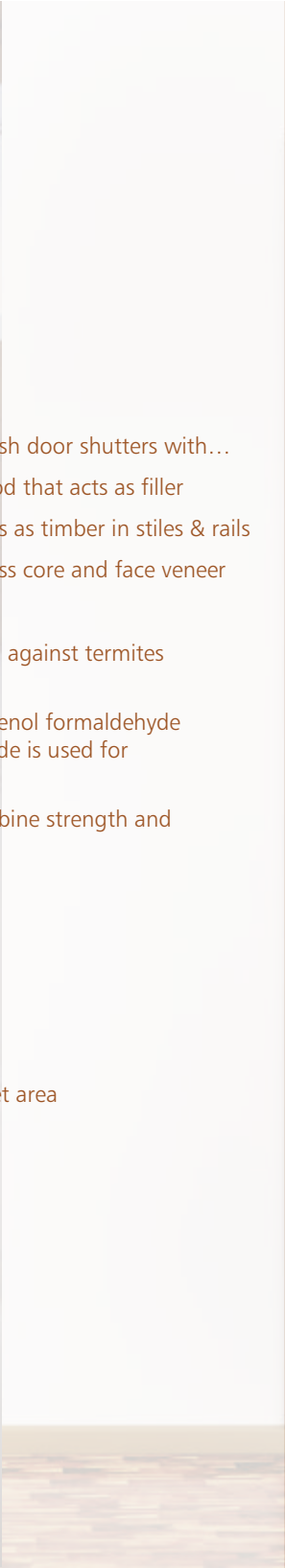
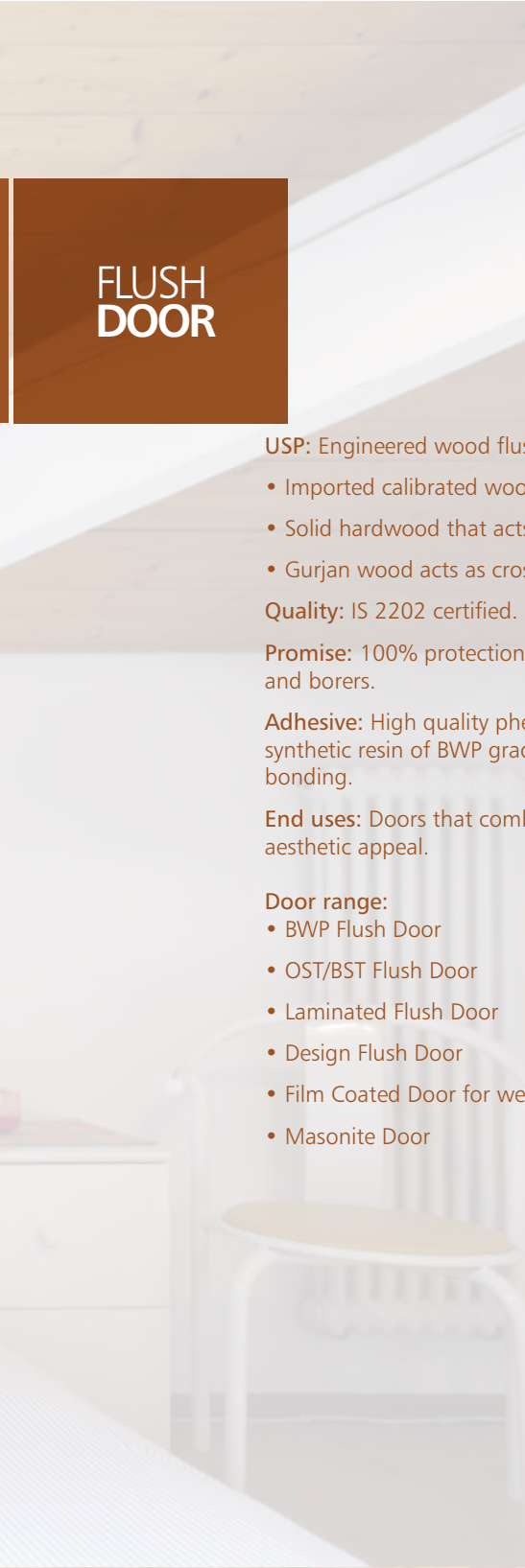
Promise: 100% protection against termites and borers.

Adhesive: High quality phenol formaldehyde synthetic resin of BWP grade is used for bonding.

End uses: Doors that combine strength and aesthetic appeal.

Door range:

- BWP Flush Door
- OST/BST Flush Door
- Laminated Flush Door
- Design Flush Door
- Film Coated Door for wet area
- Masonite Door



DECORATIVE
VENEER

USP: Alishan Decorative Plywood is made from rare wood veneers procured from overseas with Gurjan veneer as core and bottom.

Quality: IS 1328 certified.

Promise: 100% protection against termites and borers.

Adhesive: High quality phenol formaldehyde synthetic resin of BWVP grade is used for bonding.

End uses: Decorative plywood with ornamental veneers enhances aesthetic appeal of furniture, wall partitions, penal inert if panel door, false ceiling etc.

COMPOSITION OF MATERIAL

Sizes (mts.): 2.44x1.22, 2.44x0.92, 2.14x1.22, 2.14x0.92, 1.84x1.22, 1.84x0.92

Thickness (mm): 4, 6, 9, 12, 19

Adhesive: Phenol formaldehyde synthetic resin - BWR Grade

End uses: All types of furniture, wall partitions, penal insert of panel door, false ceiling etc.

TECHNICAL SPECIFICATIONS

| | | |
|------------------|-----------|---|
| Grade | | BWR grade |
| Type | | 1(one) |
| Moisture content | | 8 - 12% |
| Tolerance | Dimension | Tolerance |
| | Length | +6 mm -0 mm |
| | Width | +3 mm -0 mm |
| | Thickness | Less than 6 mm +/-10% Above 6 mm +/-5% |
| Finish | | Uniform thickness |



FLEXI
PLY

USP: Alishan Flexiply is a strong and durable plywood made exclusively from Gurjan wood that can be used in bent or curved structures.

Promise: 100% protection against termites and wood borers.

Adhesive: High quality phenol formaldehyde synthetic resin of BWP grade is used for bonding.

End uses: Most suitable for use in curved furniture at home / office.

COMPOSITION OF MATERIAL

| | |
|----------------|---|
| Sizes (mts.) | 2.44x1.22, 1.84x1.22 |
| Thickness (mm) | 3, 5, 7, 12 |
| End uses | Suitable in bent / curved furniture for homes and offices |

TECHNICAL SPECIFICATIONS

| | |
|----------------|--|
| Grade | BWP (Boiling Water Proof) |
| Thickness | 3, 5, 7, 12 mm 0.75 gm/cc |
| Bending Radius | For 3 mm, min. 6.5 cms For 5 mm, min. 10.5 cms For 7 mm, min. 14.5 cms For 12 mm, min. 40 cms |



FILM FACE
SHUTTERING
PLY

USP: Alishan Film Face Shuttering Ply made with a surface film of phenol formaldehyde on suitable paper gives a smooth and waterproof surface.

Promise:
Offers smooth surface to the concrete shuttering work and requires very little or no additional plastering.

Scores high on re-use value (10 - 15 times casting can be done each side of plywood, subject to proper use at the site).

Enhances economy due to large size of Alishan panels (8' * 4').

Withstands boiling water, corrosion and adverse conditions.

Adhesive: High quality phenol formaldehyde synthetic resin of BWP grade is used for bonding.

End uses: Concrete shuttering.

Thickness: 12 mm, 19 mm.

TEST RESULTS

| | |
|-------------------------|---------------------------|
| Moisture Content | 8% |
| Glue shear strength | Min.: 1280 N Avg.: 1450 N |

| | |
|----------------------------|-------------|
| Moisture Resistance | |
| 72 hour boiling | Avg.:1080 N |
| Adhesion of plies | Avg.:1290 N |

| | |
|-------------------------|-------------|
| Mycological Test | |
| Glue Shear strength | Avg.:1050 N |
| Adhesion of piles | Avg.:1220 N |

| | |
|-------------------------|--------------|
| Tensile Strength | |
| Along the grain | 48.5 N/sq.mm |
| Across the grain | 40.0 N/sq.mm |

| | |
|--------------------------------|--------------|
| Static Bending Strength | |
| Along the grain | 8500 N/sq.mm |
| Across the grain | 4500 N/sq.mm |

| | |
|---------------------------|------------|
| Modulus of Rupture | |
| Along the grain | 60 N/sq.mm |
| Across the grain | 37 N/sq.mm |

CARING ENVIRONMENT

All products of Alishan use high quality BWP grade phenol formaldehyde synthetic resin. This resin doesn't just lend strength and help the wood bond better. It is also eco-friendly as it doesn't contribute to environmental pollution.

In fact, at Alishan, we consider and emphasise eco-friendliness right from sourcing to processing. All our processes area aligned to the common goal of a safe environment. Also, since we make a business out of nature's creation, we shoulder the responsibility to safeguard it too!



THE PERFECT PROCESS

| |
|---------------------------------------|
| Collecting timber |
| Lifting timber from pond |
| Cutting of logs |
| Loading logs onto the peeling machine |
| Peeling logs for veneer |
| Moving veneer into drier |
| Spreading glue |
| DD saw cutting |
| Chopping the core to size |
| Assembling the panel core veneer |
| Drying face veneer |
| Loading assembly into the hot press |
| Treating chemically |
| Putting through wide belt sander |
| Stock room |
| Checking for quality |

REACHING OUT

Like the branches of the trees, we are spread everywhere. We have branched out of Kolkata and hold a deep-rooted presence across states.

With a wide distributor network and a fast spreading dealer network, we have a strong pan-India presence.



THE BEST INGREDIENTS

GURJAN

Imported Gurjan hardwood logs are used to make the core of Alishan Ply. Gurjan timber provides an intrinsic strength to the plywood.



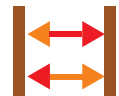
PREPRESSED

Alishan Ply is prepressed, making the bonding very strong and uniform, resulting in zero warping.



BONDING

Alishan Ply uses phenol formaldehyde resin to maximise the gluing strength and dimensional stability of its products. The resin is subjected to high temperature and pressure to enable perfect bonding.



COMPOSED CORE

Alishan Ply is made of composed core that results in zero gaps and offers uniform thickness. As a result, Alishan Ply scores high on quality as compared to plywood that has a manually assembled core.



PROTECTION

A unique GLP technology is used in manufacturing Alishan Ply to make it termite and borer resistant.



BOIL PROOF

Phenol formaldehyde resin, the glue used to make Alishan Ply, is boiling water proof and can withstand any amount of climatic change, be it excess rain or extreme hot conditions.





LIST OF CLIENTS

ALLAHABAD BANK

AMBUJA REALTY

BANK OF BARODA

EMAMI

ESSEL MINING

HERO HONDA

HYATT

LIFE INSURANCE CORPORATION OF INDIA

MAYFAIR

MAHA CEMENT

PWD

TATA

TGV

UCO BANK

AND MORE...