# Z today's SMart edge LEGOT



We supply long-lasting, high-quality & eco-friendly products like

# PLYWOOD BLOCK BOARD FLUSH DOOR



Carpenter friendly easy to apply



Architect's



Cost effective Pocket friendly



NEVON that gives you the freedom to create home into a masterpiece

## Enough Strong... Life Long...

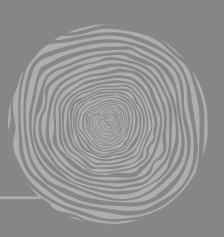
Ornato is a company with a rich legacy of excellence. With impeccable quality and unflinching commitment to provide the finest, we have earned the trust of our customers, many of whom we are serving since our inception.

Not surprisingly,

WHEN PEOPLE THINK OF PLY OR ANY RELATED PRODUCTS;

one name unquestionably comes to their mind - NEVON.







### **VISION**

We work with the firm determination to serve the nation with the manufacturing and supplying high quality plywood products that not only suit to the spirit of modernity but at the same time remain strictly eco-friendly. Through our consistent efforts we look forward to getting a major market share of the plywood industry at home and abroad.



### **MISSION**

We work to support our National integration and always aspire to contribute to the well being of the society that surrounds us. We, with our endeavors, dream to sustain the ecology surrounding us and contribute to the social welfare of the society by setting an ideal corporate house that not just remains interested in selfish motives of earning profits but through philanthropic contributions takes lead in constituting a happy society of our nation.

### WHAT MAKES NEVON SPECIAL?



BEST DIMENSIONAL STABILITY



100% GUARANTEED THICKNESS



100% DEFECT FREE



QUALITY DOUBLE-CHECKED



HIGH LOAD BEARING CAPACITY



ALL WEATHER RESISTANT



TERMITE, BORER, FUNGUS RESISTANT



HIGH NAIL & SCREW HOLDING CAPACITY



WIDER CORE & PANEL



# **PLYWOOD**

### -GRADE

Boiling Water Resistance (BWR)  $^{igspace}$ Moisture Resistance (MR)

### -STANDARD THICKNESS (IN MM)

L4, 6, 8/9, 12, 15/16, 18/19

### STANDARD SIZE (IN MM)

- 2440 X 1220, 2440 X 920

- 2140 X 1220, 2140 X 920

- 1840 X 1220, 1840 X 920

### **SALIENT FEATURES**

Best Quality Face Veneer

Hardwood Core Veneer

Glue Line Protection

No Waviness, Smooth Surface

- Full Core & Panel (No Fali Core)

**Consistent Thickness** 

- Borer, Fungus, Termite Resistant

Suitable for all Weather Conditions

- No Delamination, Bleed-Through, Warpage & Indentation



WOOD



TERMITE/BORER **RESISTANT** 





**CHEMICALLY TREATED** 



**UNIFORM STRENGTH** 



**STRUCTURALLY BALANCED** 





# PLYWOOD TEST RESULT

TESTS	REQUIREMENTS	OBTAINED RESULTS
Types of Surface of Plywood	AA/BB/AB	АА
Dimensions: Length: Width: Thickness a) Less than 6 mm b) 6 mm & above Squareness Edge straightness	Tolerance: +6 mm, -0 mm +3 mm, -0 mm  ±10% ±5% 0.2% 0.2%	+2 mm +1 mm ±3% ±4% 0.08% 0.05%
Moisture Content %	5-15%	8%
Density:  Static Bending Strength:	70 gm/mm <sup>2</sup> Grade: BWR	80 gm/mm <sup>2</sup> Grade: BWR
a) Minimum Average: b) Individual: (Along the grain) Static Bending Strength: a) Minimum Average: b) Individual: (Across the grain) Static Bending Strength: a) Minimum Average: b) Individual: (Along the grain) Static Bending Strength: a) Minimum Average: b) Individual: (Along the grain) Static Bending Strength: a) Minimum Average: b) Individual: (Across the grain)	MOR MOE  40 5000  36 4500  MOR MOE  20 5000  18 3600  Grade: MR  MOR MOE  30 4000  27 3600  MOR MOE  15 2000  13 1800	MOR MOE  55 6500  45 5500  MOR MOE  30 6200 25 3800  Grade: MR  MOR MOE  40 5500 35 4500  MOR MOE  25 3000 20 2500
Glue Adhesion Water Resistance Test  BWR Grade: 8 hrs Boiling and dried for 16 hrs at a temperature of $65\pm2^{\circ}$ C (3 cycle)  MR Grade: 3 hrs Soaking and dried for 8 hrs at a temperature of $65\pm2^{\circ}$ C (3 cycle)	Minimum Pass Standard Minimum Pass Standard	Pass Standard
<b>Mycological Test</b> After conditioning of sample for 3 weeks at 27±2°C	Minimum Pass Standard	Pass Standard

# **BLOCK BOARD**

### -GRADE

Boiling Water Proof (BWP)Moisture Resistance (MR)

### -STANDARD THICKNESS (IN MM)

<sup>1</sup> 19, 25

### STANDARD SIZE (IN MM)

- 2440 X 1220, 2440 X 920

- 2140 X 1220, 2140 X 920

└ 1840 X 1220, 1840 X 920

### SALIENT FEATURES

Best Quality Face Veneer

- Glue Line Protection

- No Waviness, Smooth Surface

- Imported Pine Timber

- Consistent Thickness

- Accuracy & Stability in Dimension

No Expand, Contract, Warping and Delamination when subject to change in Atmospheric Condition

Free from Borer, Termite & Powder





TERMITE/BORER RESISTANT





CHEMICALLY TREATED



UNIFORM STRENGTH



**BALANCED** 





# BLOCK BOARD TEST RESULT

TESTS	REQUIREMENTS	OBTAINED RESULTS
Core I) Moisture Content,% ii) Width of strips, mm iii) Width of edge strips along the length, mm	12 Max. 30 Max. 45 Max.	8.8 26 37
Dimensions a) Length in b) Width in c) Thickness in Min / Max d) Variation in thickness in e) Edge straightness, % f) Squareness,%	Tolerance on declared value +6 mm , -0 mm +3 mm , -0 mm ±5% 0.5 mm 0.2% 0.2%	1831 916 19.20 – 19.42 0.22 0.08% 0.05%
Surface Defects	As per clause 8.1.3/6.3.3	Conforms to the requirements
Dimensional Changes caused by humidity  a) At 90% RH  i) Difference in length  ii) Difference in thickness  b) At 40% RH  i)Difference in length  ii)Difference in thickness  c) There shall be no delamination at the extreme ranges of humidity  d) There shall be no change in local planeness measure as d/L < 1/150	±1mm ±1mm ±1mm ±1mm No delamination <1/150	0.09 0.10 0.09 0.08 Complies to requirement Complies to requirement
Resistance to water, BWP Grade: boiling for 72 h MR Grade: 3 hrs soaking at 60±2°C	Min. Pass Standard Min.Pass Standard	Pass Standard Pass Standard
Adhesion of plies	Min.Pass Standard	Pass Standard
Modulus of Rupture (N/mm²)  a) Average b) Minimum individual Modulus of Elasticity (N/mm²) a) Average b) Minimum individual	BWP MR 50 40 42 34  5000 4000 4200 3400	BWP MR 70 50 65 40  6000 5000 5000 4000
Spot Test	Shall show through and through penetration of preservative of chemical	Clearly visible through and through penetration of preservative chemical

# **FLUSH DOOR**

### -GRADE

-Boiling Water Proof (BWP)

### STANDARD THICKNESS (IN MM)

 $\lfloor$  25, 30, 32, 35 & as per specific orders.

### -STANDARD SIZE (IN MM)

1905 X 700, 1905 X 800, 1905 X 900
2005 X 700, 2005 X 800, 2005 X 900
& as per specific orders.

### -SALIENT FEATURES

- Best Quality Face Veneer
- Glue Line Protection
- No Waviness, Smooth Surface
- Imported Pine Timber
- Consistent Thickness
- Boiling Water Proof
- Borer, Termite & Powder free
- Accuracy & Stability in Dimension
- No Warping & Delamination when Subject to change in Atmospheric Condition
- Excellent Screw Holding Capacity.
- Sufficient Strength in the sheathing material to resist normal knocks and blows.



SEASONED WOOD



TERMITE/BORER RESISTANT





CHEMICALLY TREATED



UNIFORM STRENGTH



STRUCTURALLY BALANCED





# FLUSH DOOR TEST RESULT

TESTS	REQUIREMENTS	OBTAINED RESULTS
Dimension & Squareness Height Width Thickness, Min/Max Variation in thickness between any two points Squareness	Tolerance: ±5 mm ±5 mm ±1 mm Max.0.8 Deviation not more than 1mm per 500mm length	±2 mm ±2 mm 30.00 – 30.50mm 0.50mm 0.50mm
General Flatness		
Twist	Max. 6 mm	Less than 6 mm
Cupping	Max. 6 mm	Less than 6 mm
Warping	Max. 6 mm	Less than 6 mm
Local Planeness	Max. 0.5 mm	0.18
	No cracking, tearing or delamination. Indentation depth, max 0.2mm	No cracking, tearing or delamination.0.14mm
Flexure Test (Deflection in mm) 15 minutes after 50 kg 3 minutes after load removal	Deflection at maximum load not greater than 1/30th of length or 1/15th of width, whichever is less. Residual deflection not greater than 1/10 of maximum deflection.	MD: Less than 1/30th of length & 1/15th of width. RD: Less than 1/10th of MD
Edge loading Test (deflection in mm) After 15 minutes of 100 kg loading 5 minutes after load removal Lateral buckling	Deflection at maximum load not greater than 5 mm. Residual deflection after removal of load not greater than 0.5mm. Not more than 2mm during loading. No residual buckling after load removal.	MD: Less than 5mm. RD:Less than 0.5mm Lateral Buckling:0.1mm Conforms to the requirement
Shock Resistance Test Soft & light body impact Soft & heavy body impact	No visible damage No visible damage	Conforms to the requirement Conforms to the requirement
Slamming Test	No visible damage after 50 drops.	Conforms to the requirement
Glue adhesion Test	No delamination/ No single delamination of more than 50mm in length & more than 3mm in depth	Conforms to the requirement
End immersion Test	No delamination 8 cycle-1 day wet & 1 day dry	Conforms to the requirement
Knife Test	Minimum Pass standard	Pass Standard
Screw withdrawal Test	Not less than 1000 N Surface condition : No visible damage to the surface either by delamination or extra chipping off	3000 N Conforms to the requirement
Buckling test (deflection in mm) After 5 minutes of 40 kg loading 15 minutes after load removal	No deterioration Initial Deflection not greater than 50mm Residual deformation after 15 minutes of unloading not greater than 5mm	Conforms to the requirement
Misuse test	No permanent deformation of the fixing or any other part of the door set in hindering its normal working after the test.	Conforms to the requirement
Varying humidity test	No visible warping, twisting or delamination. Maximum departure from the general planeness not more than 0.1mm Recovery- At least 90% of the change in dimension.	Conforms to the requirement









# Product by: ORNATO PANELS AN ISO 9001 : 2015 CERTIFIED COMPANY

