



WESTIND

Resin Surfaced
Concrete Shuttering Plywood



TOUGH DURABLE ECONOMICAL

Resin Surfaced Concrete Shuttering Plywood

As one attempts to reduce costs in building construction it is evident that shuttering boards for casting concrete is one area where considerable savings can be made. This area of economy can be safely exploited to the hilt by using Westind Resin Surfaced Concrete Shuttering Plywood instead of natural softwoods and costly steel plates.

Westind Resin Surfaced Concrete Shuttering Plywood is a revolutionary product from the makers of world class plywoods and hardboards - The Western India Plywoods Ltd.

Manufacture :

Westind Resin Surfaced Concrete Shuttering Plywood is Boiling Water Proof Plywood coated with a special grade phenolic resin.

Westind Resin Surfaced Concrete Shuttering Plywood is bonded with specially formulated high grade phenol formaldehyde resin under controlled conditions of temperature, pressure and pressing time to ensure flawless bonding. Selected species of hard wood are used to ascertain structural stability. In addition to these, specified preservatives are used to treat the plywood to make it free from attack by organisms like termite, rot, fungus and wood boring insects.

The selected species of hard wood, the preservatives, the specially formulated phenol formaldehyde and special grade phenolic resin for surface coating that run into the production of Westind Resin Surfaced Concrete Shuttering Plywood make it conform to IS : 4990.

SALIENT FEATURES

1. Durability

Westind Resin Surfaced Concrete Shuttering Plywood, manufactured using superior quality raw materials, is highly durable. It has the ability to withstand a minimum of 60 repeated shuttering applications with appropriate handling. It is highly resistant to water, dilute acids, alkalies, ordinary solvents and stringent environmental conditions. The phenolic coating is very rough and continuous, so, as a result, the chances of water seeping into the plywood are virtually non-existent. This in effect enhances the durability of Westind Resin Surfaced Concrete Shuttering Plywood.

2. Smooth Surface

The phenolic resin finish of Westind Resin Concrete Shuttering Plywood is superior to all other wood based shuttering materials with or without plastic coatings. Its superior surface finish imparts an evenly fine finish to the concrete and this in turn enables one to avoid the tedious, time consuming and expensive plastering operation. Its superior finish totally eliminates the problem of the concrete sticking to the shuttering material at the time of removal.

3. Dimensional Stability

The expansion and contraction of Westind Resin Surfaced Concrete Shuttering Plywood is negligible and therefore provides uninterrupted concrete surfaces without ridges in length or width.

4. Economy in Fixing Cost

Westind Resin Surfaced Concrete Shuttering Plywood possesses high strength to weight ratio and good coverage thereby contributing to:

- 1) Economy on supports and frames.
- 2) Economy in site labour and time.

Further more, it can be easily sawn, drilled and nailed with conventional wood tools thereby avoiding tedious site operations.

5. Strength

Westind Resin Surfaced Concrete Shuttering Plywood is free of warping and has very good structural strength. Owing to its cross grain structure, it possesses very high impact strength.

6. Thermal barrier

Westind Resin Surfaced Concrete Shuttering Plywood is an excellent thermal barrier and this protects the concrete from thermal shocks during the drying and setting cycles and provides optimum setting conditions

7. Design Flexibility

Phenolic surface coating contributes extra design flexibility to Westind Resin Surfaced Concrete Shuttering Plywood, can be bent to various forms, shapes and moulds without structural damage.

8. Salvage value

Even after repeated concrete shuttering applications, the reddish brown phenolic surface finish of Westind Resin Surfaced Concrete Shuttering Plywood will be retained and the same can be used for partitions, site office furniture, protective barriers, cupboards and other temporary structures.

TECHNICAL DATA

Loading and deflection

Taking the maximum permitted deflection as 1:270 (Viz. 1/270 of the span between the bearers), the maximum permissible loads per Sq. Meter are as per the following tables.

Case I

When the face grain of Westind Resin Surfaced Concrete Shuttering Plywood is perpendicular to bearers.

Center distance of bearers	Maximum Load in Kg./ Sq.M.	
	9mm	12mm
30 Cm. (12")	1297	1968
40 Cm. (16")	545	868
50 Cm. (20")	326	650
60 Cm. (24")	195	382

Case II

When the face grain of Plywood is parallel to bearers.

Center distance of bearers	Maximum Load in Kg./ Sq.M.	
	9mm	12mm
30 Cm. (12")	775	1240
40 Cm. (16")	336	557
50 Cm. (20")	207	416
60 Cm. (24")	124	195

The above loads are applicable when concrete is laid on dry Westind Resin Surfaced Concrete Shuttering Plywood as in slabs and beams. Thinner boards may be used for holding same thicknesses of concrete in a wall without any excess deflection.

If the boards are in wet condition the maximum loads shown above should be reduced to 70%.

Working Radius of Curvature

When dry, the following are the approximate minimum bending radii of Westind Resin Surfaced Concrete Shuttering Plywood.

Thickness	Across the grain of the outer ply	Parallel to the grain of outer ply
6 mm. (1/4")	97 cm	138 cm
9 mm. (3/8")	178 cm	227 cm
12 mm. (1/2")	270 cm	345 cm

Thickness of Solid Timber planks	Equivalent thickness of Westind Resin Surfaced Concrete Shuttering Plywood
12-15 mm	6 mm
25-30 mm	9 mm
35-40 mm	12 mm

Westind Resin Surfaced Concrete Shuttering Plywood

- ◆ Saves on transportation cost.
- ◆ Saves on fixing Cost.
- ◆ Saves on hardware cost.
- ◆ Saves on supporting poles / scaffoldings.
- ◆ Saves on replastering and finishing costs.
- ◆ Saves on labour.

Westind Resin Surfaced Concrete Shuttering Plywood Vs. Steel Plates

Westind Resin Surfaced Concrete Shuttering Plywood

- ◆ Being of lighter weight it facilitates economically viable speeding up of construction activities and minimizes expenditure on supports, frames and handling and accidents.
- ◆ Being free of dents, it imparts an evenly fine finish to the concrete.
- ◆ Being cheaper, it slashes the initial investments cost.
- ◆ It is easily machinable and thereby eliminates tedious fixing operations.

In brief, Westind Resin Surfaced Concrete Shuttering Plywood is superior in every aspect compared to Steel Shuttering Plates.

Standard Size	Standard Thickness
244 cm X 122 cm	6 mm, 9mm, 12 mm, 15 mm, 18mm



Tips to Boost Durability

After 3 to 4 uses, and especially when Westind Resin Surfaced Concrete Shuttering Plywood has been stored for a long time, it should be coated with heavy mineral oil (used engine / transformer oil may be used) before it's next use, in order to enhance durability.

After each use....

1. Stack flat on dry level platforms using stickers to permit drying.
2. Long-time storage should be indoors (tarpaulins may prevent proper air circulation and cause moisture to collect.)
3. Use wooden wedges rather than pinch bars in stripping.
4. Lower carefully from high places. Do not drop on edges or permit careless handling.
5. Clean panels thoroughly after each use.
6. Don't swab on too much oil; just enough so that panel surfaces feel greasy to the touch.
7. For longer life, all newly cut edges should be sealed with white lead oil or other effective sealers.

Other Applications:

Westind Resin Concrete Surfaced Concrete Shuttering Plywood with its pleasing reddish brown phenolic finish eliminates the need to paint and has proven its mettle in enriching the elegance of interiors especially wall panelling and furniture.

Westind Resin Surfaced Concrete Shuttering Plywood gives extra touch of finish and durability for panel doors, specifically for bath-rooms and other application where water resistance requirements are very high.

In addition to these, it is being extensively used for constructing structures like barracks, milk booths, bus shelters, tourist cottages and temporary exhibition stalls and for other allied applications.

For further details and requirements, write to:



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