FACTORY IN-HOUSE TEST REPORT

PLYWOOD FOR CONCRETE SHUTTERING WORKS IS: 4990:2024

Date : 11-03-2026.

Brand **ARCHER (FILM FACE)** **Grade :** BWP

Size: 2440mm X 1220 mm **Type :** 3(CSFF)

Thickness : 12mm (34 KG) **Formaldehyde Class:** E_2

Sl. No.	TEST	PRESCRIBED VALUE	RESULTS
1	**Dimension (mm)** a) Length b) Width c) Thickness	Tolerance of a) + 6 mm, - 0 mm b) + 3 mm, - 0 mm c) ± 5%	Tolerance of a) 2442mm b) 1221mm c)11.92mm to 12.16 mm
2	**Squareness, %**	0.20%	0.08
3	**Edge Straightness, %**	0.20%	0.11
4	**Workmanship and finish**	As per Clause 8	Conforms
5	**Moisture content, %**	5 to 15	9.50%
6	**I) Glue Shear Strength in dry state** a) Average b) Minimum Individual **ii) Adhesion of plies (knife test)**	 a) 1350 N b) 1100 N ii) Min. Pass Standard	 a) 1512 N b) 1317N ii) Excellent
7	**Resistance of water (After 72 hour boiling)** i) Glue Shear Strength a) Average b) Minimum Individual **ii) Adhesion of plies (knife test)**	 a) 1000 N b) 800 N ii) Min. Pass Standard	 a) 1311 N b) 945 N ii)Excellent
8	**Resistance of Micro-organism** i) ***Glue Shear Strength*** a) Average b) Minimum Individual ii) ***Adhesion of plies (knife test)***	 a) 1000 N b) 800 N ii) a) No separation at edges b) Min. Pass Standard	 1223 N 987 N pass standerd
9	**Tensile Strength** i) Parallel to the face grain ii) Perpendicular to the face grain iii) Sum of the Tensile Strength	 i) Min : 28 N/ mm² ii) Min : 26 N/ mm² iii) Min : 60.0 N/ mm²	 a)42.5 N/ mm² b)32.5 N/ mm² c) 75.0 N/ mm²

10	**Modulus of Elasticity (Static Bending strength)**		
	Parallel to the face grain,	Avg. 6400 N/ mm²	Avg. 7054 N/ mm²
		Min. 5700 N/ mm²	Min. 6978 N/ mm²
	Perpendicular to the face grain,	Avg. 4600 N/ mm²	Avg. 4974 N/ mm²
		Min. 4100 N/ mm²	Min. 4430 N/ mm²
11	**Modulus of Rupture**		
	Parallel to the face grain,	Avg. 43 N/ mm²	Avg. 56 N/ mm²
		Min. 38 N/ mm²	Min. 48 N/ mm²
	Perpendicular to the face grain,	Avg. 35 N/ mm²	Avg. 39 N/ mm²
		Min. 31 N/ mm²	Min. 35 N/ mm²
12	**Modulus of Elasticity (Wet Bending Strength)**		
	Parallel to the face grain,	Avg. 3200 N/ mm²	Avg. 4286 N/ mm²
		Min. 2900 N/ mm²	Min. 4152 N/ mm²
	Perpendicular to the face grain,	Avg. 2300 N/ mm²	Avg. 2574 N/ mm²
		Min. 2100 N/ mm²	Min. 2425 N/ mm²
13	**Modulus of Rupture**		
	Parallel to the face grain,	Avg. 21 N/ mm²	Avg. 35 N/ mm²
		Min. 19 N/ mm²	Min. 33 N/ mm²
	Perpendicular to the face grain,	Avg. 17 N/ mm²	Avg. 27 N/ mm²
		Min. 15 N/ mm²	Min. 21 N/ mm²
14	**Retention**	Min 12 kg/m³	12.28 kg/m³
14	**Formaldhyde content (Oven dry sample)**	8mg/100gm to 30mg /100gm	11.2 mg/100gm

Remarks : Samples Conform to as per IS : 4990-2024

REGAL PLYWOOD INDUSTRIES PVT. LTD. * VISAKHAPATNAM *