

Laboratory	Centre for Testing And Evaluation of Wood Composites, IPIRTI, Yeshwanthpur, Tumkur Road, Bangalore, Karnataka		
Accreditation Standard	ISO/IEC 17025: 2005		
Discipline	Mechanical Testing	Issue Date	17.12.2013
Certificate Number	T-1579	Valid Until	16.12.2015
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S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
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I. BUILDING MATERIALS

1. General Purpose Plywood IS: 303-1989 (RA 2003)	a. Moisture content	IS: 1734 1983 (RA 2003) Part I	0.1-20%
	b. Glue adhesion		
	i. Resistance to water (cyclic test)	IS: 303 Amendment No. 4	
	Adhesion of piles	IS: 1734 : 1983 (RA 2003) Part 5	Visual
	ii. Resistance to Micro-organisms, Adhesion of plies	IS: 1734 : 1983 (RA 2003) Part 7	Visual
	c. Modulus of elasticity	IS: 1734: 1983 (RA 2003) Part 11	
	Along the grain		1 -12000 N/mm ²
	Across the grain		1 -12000 N/mm ²
	d. Modulus of Rupture	IS: 1734: 1983 (RA 2003) Part 11	
2. Shuttering Plywood IS: 4990-1993 (RA 2003)/ Marine Plywood IS: 710-1976 (RA 2004)	a. Moisture content	IS: 1734 1983 (RA 2003) Part I	0.1-20%
	b. Glue adhesion strength in dry state		
	i. Glue shear strength	IS: 1734 : 1983 (RA 2003) Part 4	1 – 4000N
	ii. Adhesion of plies (Knife test)	IS: 1734 : 1983 (RA 2003) Part 5	Visual
	c. Resistance to water (After 72 hr. of boiling)		
	i. Glue shear strength	IS: 1734 : 1983 (RA 2003) Part 4 and Part 6	1 – 4000N
	ii. Adhesion of plies (Knife test)	IS: 1734 : 1983 (RA 2003) Part 5 and Part 6	Visual

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	Shuttering Plywood IS: 4990-1993 (RA 2003)/ Marine Plywood IS: 710-1976 (RA 2004)	d. Mycological test		
		i. Glue shear strength	IS: 1734 : 1983 (RA 2003) Part 4 and Part 7	1 – 4000N
		ii. Adhesion of plies (Knife test)	IS: 1734 : 1983 (RA 2003) Part 5 and Part 7	Visual
		e. Tensile Strength	IS: 1734-Part 9: 1983 (RA 2003)	
		i. Along the grain		0.1 -120 N/mm ²
		ii. Across the grain		0.1 -120 N/mm ²
		iii. Sum of tensile strengths		0.1 -240 N/mm ²
		f. Modulus of elasticity	IS: 1734-Part 11: 1983 (RA 2003)	
		i. Along the grain		1 -12000 N/mm ²
		ii. Across the grain		1 -12000 N/mm ²
		g. Modulus of Rupture	IS: 1734- Part 11:1983 (RA 2003)	
		i. Along the grain		0.1 -120 N/mm ²
		ii. Across the grain		0.1 -120 N/mm ²
3.	Flush Door (IS:2202-1999) / Panel Door (IS:1003 Part 1-2003)	Performance tests	IS: 4020-1998	
		a. Measurement of Dimensions	IS: 4020- Part 2:1998	1 – 2500 mm
		b. Thickness	IS: 4020 - Part 2:1998	0.01 – 50 mm
		c. Squareness	IS: 4020- Part 2: 1998	0.1 – 5 mm
		d. General flatness	IS: 4020- Part 3:1998	0.5 – 10 mm
		e. Local planeness	IS: 4020- Part 4:1998	0.1 – 2 mm
		f. Impact indentation	IS: 4020- Part 5: 1998	0.1 – 2 mm
		g. Slamming test	IS: 4020- Part 10: 1998	visual
		h. Flexure test	IS: 4020- Part 6: 1998	0.1 – 100 mm
		i. Shock resistance test	IS: 4020- Part 8: 1998	visual
		j. Buckling test	IS: 4020- Part 9: 1998	0.1 – 100 mm
		k. Edge loading test	IS: 4020- Part 7: 1998	0.1 – 100 mm
		l. Screw withdrawal strength	IS: 4020- Part 16: 1998	1 – 6000 N
	m. Misuse test	IS: 4020- Part 11:1998	visual	

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		n. End immersion test	IS: 4020- Part 13: 1998	visual
		o. Glue adhesion test	IS: 4020- Part 15:1998	visual
		p. Knife test	IS: 4020- Part 14: 1998	visual
		q. Varying humidity test	IS: 4020- Part 12: 1998	27°C ± 2°C/ 25% to 95% RH
4.	Block Board IS:1659-2004, RA 2009	a. Dimensional changes caused by humidity	IS: 1659 -2004	0.1 – 200 mm, Visual
		b. Resistance to water		Visual
		c. Adhesion of plies		Visual
		d. Modulus of elasticity		1 -12000 N/mm ²
		e. Modulus of rupture		1 -120 N/mm ²

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