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PHYSICAL PROPERTIES OF HIGH MOISTURE RESISTANT BOARD (HMR) A GRADE

PROPERTIES	TEST METHODS	UNITS	RANGES OF NORMAL THICKNESS (mm)						
			4.0	5.5 - 6.0	9.0	12.0	15.0 - 18.0	25.0	
THICKNESS TOLERANCE	EN 324-1	mm	± 0.2						
DENSITY	EN 323	Kg/m ³	800 - 860	800 - 860	760 - 820	760 - 820	740 - 780	730 - 770	
INTERNAL BONDING	EN 319	N/mm ²	≥ 1.2	≥ 1.2	≥ 1.0	≥ 0.80	≥ 0.80	≥ 0.80	
SWELLING IN THICKNESS (AFTER 24 hr. SOAKING)	EN 317	%	≤ 25	≤ 18	≤ 12	≤ 10	≤ 8	≤ 7	
MODULUS OF RUPTURE	EN 310	N/mm ²	≥ 40	≥ 40	≥ 40	≥ 38	≥ 38	≥ 35	
MODULUS OF ELASTICITY	EN 310	N/mm ²	≥ 2900	≥ 2900	≥ 2900	≥ 2700	≥ 2600	≥ 2500	
SCREW HOLDING FACE	EN 320	N/mm ²	N/A				≥ 1000		
SCREW HOLDING EDGE	EN 320	N/mm ²	N/A				≥ 800		
MOISTURE CONTENT	EN 322	%	4 - 11						
WIDTH & LENGTH TOLERANCE	EN 324-1	mm	± 2.0						
STANDARD SIZE		mm	1230 x 2450						
OPTION 1 (REFERENCE BY EN622-5)									
INTERNAL BONDING AFTER CYCLIC TEST (V313)	EN 321, EN 319	N/mm ²	≥ 0.35	≥ 0.35	≥ 0.3	≥ 0.25	≥ 0.2	≥ 0.15	
SWELLING IN THICKNESS AFTER CYCLIC TEST (V313)	EN 321, EN 317	%	≤ 40	≤ 25	≤ 19	≤ 16	≤ 15	≤ 15	
FORMALDEHYDE CONTENT									
E1 CLASS	ISO 12460-5	mg/100g oven dry board	≤ 8						
E2 CLASS	ISO 12460-5	mg/100g oven dry board	≤ 30						
FORMALDEHYDE CONTENT FOR EPA TSCA TITLE VI (ENVIRONMENTAL PROTECTION AGENCY)*									
THIN BOARD (THICKNESS ≤ 8.0 mm)	ASTM D6007	ppm.	≤ 0.13						
THICK BOARD (THICKNESS ≥ 8.0 mm)	ASTM D6007	ppm.	≤ 0.11						

* EPA TSCA TITLE VI ONLY THICKNESS 2.6, 2.7, 3.0, 4.0, 5.0, 5.5, 6.0, 7.4, 8.0, 9.0, 11.0, 12.0, 15.0, 16.0, 17.0, 18.0, 19.0, 22.0, 25.0 mm.

For Domestic