

Comparison of Wood Dispersion Adhesive Tests



Test method	EN 204			JAS No. 111
	D 2	D 3	D 4	
Degree of water resistance	Moisture resistance	Cold water resistance	Boiling water resistance	Repeating (two-cycle) boiling water resistance
Fields of application	Interior with occasional short-term exposure to running or condensed water and/or to occasional high humidity provided the moisture content of the wood does not exceed 18 %.	Interior with frequent short-term exposure to running or condensed water and/or to heavy exposure to high humidity. Exterior not exposed to weather.	Interior with frequent long-term exposure to running or condensed water. Exterior exposed to weather but with adequate protection by a surface coating.	Principally for structural laminated lumber and bearing panel
Conditioning	7 days in standard atmosphere	7 days in standard atmosphere 4 days in cold water	7 days in standard atmosphere 6 hours in boiling water 2 hours in cold water	4 h in boiling water 24 h drying at 70 °C 4 h in boiling water cold water until cooled
Test method		tensile shear		compressive shear
Minimum requirement	10 N/mm ²	2 N/mm ²	4 N/mm ²	5.4 - 9.6 N/mm ²
DORUS	MD 041/1	MD 074	MD 074 + R.397 MD 078 + R.475	MD 077 + R 396 (EPI system)



Comparison of Wood Dispersion Adhesive Tests



A Brand Like a Friend

Test method	EN 204			Japanese test methods	
	D 2	D 3	D 4		
Degree of water resistance	moisture resistance	cold water resistance	boiling water resistance	repetitive boiling resistant	warm water resistant
Fields of application	Interior with occasional short-term exposure to running or condensed water and/or to occasional high humidity provided the moisture content of the wood does not exceed 18 %.	Interior with frequent short-term exposure to running or condensed water and/or to heavy exposure to high humidity. Exterior not exposed to weather.	Interior with frequent long-term exposure to running or condensed water. Exterior exposed to weather but with adequate protection by a surface coating.	Principally for structural laminated lumber and bearing panel	Principally for structural fixtural lumber, furniture and general woodwork
Test pieces	beech/beech 150 x 20 x 5 mm			30 x 25 x 10 mm	
Bonding area	20 x 10 mm			25 x 25 mm	
Critical test (serial number of conditioning sequence)	no. 1	no. 3	no. 5		
Conditioning	7 days in standard atmosphere	7 days in standard atmosphere 4 days in cold water	7 days in standard atmosphere 6 hours in boiling water 2 hours in cold water	4 h in boiling water 20 h drying at 60 °C 4 h in boiling water cold water until cooled	3 h in 60 °C warm water cold water until cooled
Test method	tensile shear			compressive shear	
Minimum requirement	10 N/mm ²	2 N/mm ²	4 N/mm ²	Class 1/Grade 1 JIS K 6806-1985 (water-based PI glues) 5,88 N/mm ²	Class 1/Grade 2 5,88 N/mm ² JAS 0,69 N/mm ²

