

Technical Data Sheet (TDS)

ASSOCIATE PLAIN & MFC BOARDS



Mechanical & Physical Properties Of 18 MM ADL HMR GRADE , 18 MM EXTERIOR & INTERIOR GRADE PLAIN & MFC BOARDS

Sr.No.	Technical Specification	HMR Grade				Exterior Grade				Interior Grade			
		MFC	MFC	PPB	PPB	MFC	MFC	PPB	PPB	MFC	MFC	PPB	PPB
		HMR specification	ADL HMR	AS/NZS 1859	ADL HMR	IS 12823	ADL Exterior	IS 3087	ADL Exterior	IS 12823	ADL Interior	IS 3087	ADL Interior
Properties	Thickness 12 - 22mm	18mm Values	18mm	18mm Values	Spec.	18mm	Spec.	18mm	Spec.	18mm	Spec.	18mm	
1	Density Kg/m ³	500 - 900	735	500 - 900	730	500 - 900	685	500 - 900	675	500 - 900	635	500 - 900	620
2	Variation from mean density%	NA	±3	NA	±3	±10	±3	±10	±3	±10	±3	±10	±3
3	Moisture Content %	5 - 13	6.5	5 - 13	6.6	5 - 15	6.3	5 - 15	6.5	5 - 15	6.8	5 - 15	7.2
4	Water Absorption % max	NA		NA									
	After 2hrs soaking	NA	3	NA	4.5	7	4	10	6	15	8.5	40	16
	After 24 hrs soaking	NA	8	NA	10	15	10	20	14	30	16	80	40
5	Thickness swelling % max												
	2 hrs	NA	2	NA	4	5	4	8	6	8	6	12	8
	24hrs	12	7.6	12	8.6	NA	NA	NA	NA	NA	NA	NA	NA
6	Modulus of Rupture N/mm ²												
	Average	16	18.5	16	17.5	15	16.5	15	16	11	13	11	12
	Minimum	NA	15.6	NA	15	13	14.5	13	14	10	11	10	11
7	Modulus of Elasticity N/mm ²												
	Average	2400	2845	2400	2740	2500	2650	2500	2600	2500	2580	2000	2340
	Minimum	NA	2535	NA	2500	2200	2375	2250	2300	2200	2250	1800	2000
8	Internal Bond												
	Up to 20mm	0.4	0.95	0.4	0.92	0.45	0.8	0.45	0.75	0.3	0.5	0.3	0.5
	Above 20mm												
9	Screw withdrawal strength N												
	Face	700	2850	700	2850	1250	2450	1250	2285	1250	2000	1250	2000
	Edge	800	1750	800	1750	850	1450	850	1350	750	1000	700	1000
10	Accelerated water resistance												
	Test (Internal Bond)	NA	NA	NA	0.2	0.15	0.18	0.15	0.18	NA	NA	NA	NA
11	Cyclic Test												
	Internal Bond N/mm ²	0.35	0.42	0.35	0.42	0.2	0.3	0.2	0.3	NA	NA	NA	NA
	Thickness swelling % max	10	7.5	10	8.3	NA	NA	NA	NA	NA	NA	NA	NA
12	Abrasion Resistance test Rev.	350 Rev.	>450	NA	NA	450	>450	NA	NA	450	>450	NA	NA
13	Resistance to Steam	Should not effect	pass	NA	NA	No Effect	pass	NA	NA	No Effect	pass	NA	NA
14	Resistance to cracking	Should not effect	pass	NA	NA	No Effect	pass	NA	NA	No Effect	pass	NA	NA
15	Resistance to Stain	Should not effect	pass	NA	NA	No Effect	pass	NA	NA	No Effect	pass	NA	NA
16	Resistance to cigarette burn	Should not effect	pass	NA	NA	No Effect	pass	NA	NA	No Effect	pass	NA	NA

* MFC: Melamine Faced Chip Boards , PPB: Plain Particle Boards