

# Technical Specifications

S.NO.	PROPERTIES	UNITS	TEST METHOD AS PER EN 438 PART 2 & 4 : 2016	SPECIFIED VALUES AS IN EN 438 PART 6:2016	TYPICAL GREENLAM RESULTS
1	Classification		EN 438-6- 4	<b>EXTERIOR GRADE-SEVERE USE-FIRE RETARDANT GRADE (EDF)</b>	
2	Panel Surface Quality		EN 438-2, 6.2.4.2		
	Dirt, Spots or any similar surface defect	mm <sup>2</sup> /M <sup>2</sup>		2.0 (max.)	Complies
	Fibers, Hairs, Scratches and similar defects	mm/M <sup>2</sup>		20.0 (max.)	Complies
3	Thickness & Maximum Variation	mm	EN 438-2 – 5	6.0 ± 0.40	6.0 ± 0.25
				8.0 ± 0.50	8.0 ± 0.27
4	Length & Width	mm	EN 438-2 – 6	+10mm /-0mm	+5mm /-0mm
5	Flatness	mm/M	EN 438-2 – 9	5.0 (max.)	Complies
6	Edges Straightness	mm/M	EN 438-2 – 7	1.5 (max.)	≤ 1
	Edges Squareness	mm/M	EN 438-2 – 8	1.5 (max.)	Complies
7	Resistance to Wet Conditions, Increase in Mass	%	EN 438-2 : 15	8.0 (max.)	4.1
	Appearance				
	Surface Rating	Rating		4 (min.)	5
	Edge Rating	Rating		3 (min.)	3
8	Dimensional Stability at Elevated Temperature		EN 438-2 – 17		
	Longitudinal	%		0.30(max.)	0.15
	Transverse	%		0.60 (max.)	0.29
9	Resistance to Impact by Large Diameter Ball		EN 438-2 – 21		
	Drop Height	mm		1800	2000
	Diameter of Indentation	mm		10 (max.)	7
10	Resistance to Cigarette Burns	Rating	-		
11	Flexural Modulus	Mpa	EN ISO 178:2003	9000 (min.)	10000
12	Flexural Strength	Mpa	EN ISO 178:2003	80 (min.)	90
13	Density	g/cm <sup>3</sup>	EN ISO 1183 -1 :2004	1.35	1.38 to 1.42
14	Resistance to Fixing (Screw Pull-out Strength) - 8.0mm Thick Board	N	ISO 13894-1; 9	3000 (min.)	>3000
15	Thermal Conductivity/ Resistance	W/m <sup>2</sup> K	EN-12524:2000, EN-12664:2001	-	0.24

## LIGHT FASTNESS AND WEATHER RESISTANCE PROPERTIES

Resistance to Artificial Weathering including Light Fastness, after 650 MJ/M <sup>2</sup> Radiant Exposure	Contrast	EN 438-2-29	Grey Scale Rating	Not worse than 3	3~4
	Appearance	EN 438-2-29	Rating	Minimum 4	4~5
Resistance to UV Light, after 1500 hours Exposure	Contrast	EN 438-2-28	Grey Scale Rating	Not worse than 3	3~4
	Appearance	EN 438-2-28	Rating	Rating Minimum 4	4~5
Resistance to Climatic Shock		EN 438-2-19	Index Ds (min.)	0.95	≥ 0.95
			Index Dm (min.)	0.95	≥ 0.95
			Rating (min.)	4	≥ 4

## FIRE PERFORMANCE PROPERTIES

S. No.	Performance Property	Test Standard	Unit		GREENLAM CLADS VALUE
1	Reaction to Fire	Classification Standards EN 13501-1 : 2007 Tested according to EN 13823:2010 & EN 11925-2 :2010	Euro Class	Classification t≥ 6.0 mm B-S2,d0	B-S1,d0 Superior
		DIN 4102-1	German	B1	B1
		Classification Flame Spread Smoke Developed Index	North America	UL 723	A 0-25 0-450

**Note:** Whereas Greenlam products are manufactured thoroughly to standards, the nature of the application procedure is beyond our control. The values given above are to the best of knowledge but without liability/warranty, expressed or implied.