



# Technical Specifications

S. NO.	PROPERTIES	UNIT	TEST METHOD AS PER EN 438 Part 2 & 4 : 2016	SPECIFIED VALUES	TYPICAL GREENLAM RESULTS	SPECIFIED VALUES	TYPICAL GREENLAM RESULTS
1	CLASSIFICATION		EN 438-4- 4	COMPACT GENERAL PURPOSE STANDARD, CGS		COMPACT GENERAL PURPOSE FLAME- RETARDANT, CGF	
	Surface Coating		--	ELECTRON BEAM CURED CHEMICAL RESISTANT RESIN			
	Core Colour		--	Available in Brown & Black Color Cores. Unicore optional.			
	Size Offered	mm	--	1525mm x 3660mm—single size to suit multiple cut sizes			
2	Surface Quality	mm <sup>2</sup> /M <sup>2</sup>	EN 438-4, 6.2.4.2	1.0 (max.)	Complies	1.0 (max.)	Complies
3	Fibers, Hairs & Scratches	mm/M <sup>2</sup>		10.0 (max.)	Complies	10.0 (max.)	Complies
4	Thickness & Maximum variation	mm	EN 438-2 – 5	8.0 ± 0.50	8.0 ± 0.35	8.0 ± 0.50	8.0 ± 0.35
				13.0 to 16.0 ± 0.60	13.0 to 16.0 ± 0.40	13.0 to 16.0 ± 0.60	13.0 to 16.0 ± 0.40
5	Length & Width	mm	EN 438-2 – 6	+10mm /-0mm	+5mm /-0mm	+10mm /-0mm	+5mm /-0mm
6	Flatness	mm/M	EN 438-2 – 9	5.0 (max.)	Complies	5.0 (max.)	Complies
7	Edges Straightness	mm/M	EN 438-2 – 7	1.5 (max.)	≤ 1	1.5 (max.)	≤ 1
8	Edges Squareness	mm/M	EN 438-2 – 8	1.5 (max.)	Complies	1.5 (max.)	Complies
9	Resistance to Dry Heat at 160° C	Rating	EN 438-2 -16	4 (min.)	5	4 (min.)	5
10	Resistance to Surface Wear, Initial point	Rev.	EN 438-2 -10	150 (min.)	450 (min)	150 (min.)	450 (min.)
11	Resistance to Water Vapour, Appearance	Rating	EN 438-2 -14	4 (min.)	5	4 (min.)	5
12	Resistance to Immersion in Boiling Water (2 hours)		EN 438-2 – 12				
	Mass Increase	%		2.0 (max.)	0.62	3.0 (max.)	1.10
	Thickness	%		2.0 (max.)	0.92	6.0 (max.)	1.86
	Surface appearance	Rating		4 (min.)	5	4 (min.)	5
	Edge appearance	Rating		3 (min.)	4	3 (min.)	4
13	Dimensional Stability at Elevated Temperature		EN 438-2 – 17				
	Longitudinal	%		0.30(max.)	0.10	0.30(max.)	0.18
	Transverse	%		0.60 (max.)	0.21	0.60 (max.)	0.38
14	Resistance to Impact by Large Diameter Ball		EN 438-2 – 21				
	Drop Height	mm		1800	2000	1800	2000
	Diameter of Indentation	mm		10 (max.)	7	10 (max.)	7
15	Resistance to Scratching, Force	Rating	EN 438-2 – 25	3 (min.)	4	3 (min.)	4
16	Resistance to Staining	Group 1 & 2	EN 438-2 – 26	5	5	5	5
		Group 3		Rating	4	≥ 4	4
	<b>Chemical &amp; Stain Resistance</b>		SEFA 8.1-PL-2010				
17	Resistance to Wet heat (100°C), Appearance	Rating	EN 438-2 – 18	4 (min.)	5	4 (min.)	5
18	Resistance to Crazing, Appearance	Rating	EN 438-2 – 24	4 (min.)	5	4 (min.)	5
19	Resistance to Cigarette Burns	Rating	--	No requirement in the latest specification			
20	Flexural Modulus	Mpa	EN ISO 178:2003	9000 (min.)	11000	9000 (min.)	10700
21	Flexural Strength	Mpa	EN ISO 178:2003	80 (min.)	100	80 (min.)	100
22	Tensile Strength	Mpa	EN ISO 527-2:1996	No requirement in the latest specification			
23	Light Fastness (Xenon Arc), Grey Scale	Rating	EN 438-2 - 27	4 to 5	Complies	4 to 5	Complies
24	Density	g/cm <sup>3</sup>	EN ISO 1183 -1 :2004	1.35	1.38	1.35	1.38
25	Resistance to fixing (Screw pull out strength) - 8.0mm thick board	N	ISO 13894-1; 9	3000 (min.)	>3000	3000 (min.)	≥3000
				4000 (min.)	>4000	4000 (min.)	>4000
27	Thermal Conductivity/ Resistance	W/m <sup>2</sup> K	EN-12524:2000, EN-12664:2001		0.24		0.24
28	Formaldehyde Release, Greenguard Gold standards		UL-2818:2013		7.3 ppb		7.3 ppb
29	Reaction to Fire (Tested according to EN 13823:2010 & EN 11925-2 :2010)*	Euro Class	EN 438-7 & EN 13501-1: 2007+ A1:2009	D-s2,d0 or better	C-S2, d0 Superior, better	B-s2,d0	B-S1, d0, Superior, better

Greenlam LabGuardian's surface is best suitable for stains caused by

General Purpose Chemicals	Biomedical Reagents	Biological Spills and Wastes	Petrochemical Products	Food Stuffs and Edible Oils	All Beverages	Dairy Products
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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.