Greenlam

ELECTROSTATIC DISSIPATIVE LAMINATE

Technical Specifications

GREENLAM ESD LAMINATES: 1.0MM THICKNESS
(Non-Post Forming Variant)

S.NO.	PROPERTIES	UNITS	TEST METHOD AS PER EN 438 PART 2:2016	SPECIFICATION	TYPICAL GREENLAM ESD HPL
1	Classification & Specification		EN 438-3	**D-275-Suede Finish* (*varies with finish in folder)**	
2	Resistance to Surface Wear	Revolutions, (min)	EN 438-2 -10	150	**650 min**
3	Resistance to Scratching	N, (min)	EN 438-2 - 25	3.0	**4.5 min**
4	Resistance to immersion in boiling water, appearance	Rating (min)	EN 438-2-12	4	**4, complies**
5	Resistance to staining Group 1 & 2	Rating (min)	EN 438-2 - 26	5	**5**
	Group 3	Rating (min)		4	**4**
6	Dimensional Stability at Elevated Temperature		EN 438-2 - 17		
	Longitudinal	% Max	L (a)	0.55	**0.32**
	Transverse	% Max	T (b)	1.05	**0.69**
7	Resistance to Impact by Large Diameter Ball (Optional)				
	a) Drop Height	mm (min)	EN 438-2 - 21	800	**Complies**
	b) Indent Diameter	mm (max)		10	**5**
8	Resistance to Impact Small Diameter Ball	N (min)	EN 438-2 - 20	25	**Complies**
9	Resistance to Dry Heat at 160° C	Rating (min)	EN 438-2 -16	4	**4**
10	Resistance to cracking under stress	Rating (min)	EN 438-2 - 23	4	**4**
11	Resistance to Wet Heat (100 °C)	Rating (min)	EN 438-2-18	4	**4**
12	Resistance to water vapour	Rating (min)	EN 438-2-14	4	**4**
13	Density	g/cm³ (min)	EN ISO 1183 -1:2004	1.35	**1.40 ± 0.05**
14	Light Fastness (Xenon Arc)	Contrast Grey scale rating	EN 438-2-27	4 to 5	**5**
	ESD Properties as per IEC 61340 & ESD S-4.1, S-20.20				
15	Surface Resistance	**Test Condition:** Temperature: 25 °C, Humidity (%): 45% **Instrument Used:** SURFACE RESISTIVITY METER		Preferred Value	Greenlam ESD HPL Results
	Surface to Ground Resistance (Max.)			< 1.0x10^9 Ohm/Square	**Complies**
	Point to Point Resistance (Max.)			< 1.0x10^8 Ohm/square	**Complies**

CARE AND MAINTENANCE FOR GREENLAM ESD LAMINATE

1. When cleaning the ESD surface becomes necessary, it is important to use non-abrasive cleaners only. If the surface is stained, baking soda and water may be used to remove the stain but excessive scrubbing may damage the surface.
2. It is important that no film or residue be left on the surface of the ESD top. Failure to thoroughly clean the surface will reduce the dissipative properties of the laminate. Work surface must be grounded for proper dissipation.