Resistance of Greenlam Clads to airborne chemical stresses

Air and rain contain natural and manmade chemicals, such as:

- Carbon dioxide CO_2
- Sulphur Oxides SO_x
- Nitrous gases NOx
- Hydrogen chloride HCl

Greenlam Clads offer protection against weather and are largely resistant to acid rain containing one or more of the above chemicals.

Test description:	**To study effect on Décor Surface of Greenlam Exterior Grade Compact Laminate-Clads upon immersion in 10% HCl for 24 hours.**

S. No.	Details of sampling and test	Particulars
1.	Sample Size/ Nos. per variant	**100mm X 100 mm/ Four each**
2.	Thickness of samples	**6.0mm**
3.	Decor description /Finish	**Vermilion Red (9275) Suede Finish** **Arch Wood (9108) Suede Finish**
4.	Manufacture Standard	**EN 438-Part 6 2016, Grade EDF**
5.	Test Start Date	**25.12.2019, 11.30 AM**
6.	Test Completion Date	**26.12.2019, 11.30 AM**
7.	Sampling Method	**Random From Production**
8.	Conditioning	**None**
9.	Laboratory Environment	**Temperature:25˚±2ºC** **Relative Humidity, RH 50± 5%**
10.	Discipline	**Chemical Testing**

Samples' surface appearance before and after the test:

Sample before immersion	Sample after immersion	Remark
		**No Change in surface appearance of the décor**
		**No Change in surface appearance of the décor**

Test Results:

Sl. No.	Particulars of test	Test condition	Test Method	Observation		
				Time	#9275 Suede	#9108 Suede
01	Resistance to immersion in 10% HCl solution	Observe the sample specimen for appearance for a total test Duration of 24 hours –on 8 hourly basis	In house. Each sample is immersed 50mm into the test solution	After 8 hours	No visible changes in appearance and tested surface area is indistinguishable from the adjacent unexposed portion.	No visible changes in appearance and tested surface area is indistinguishable from the adjacent unexposed portion
				After 16 hours	No visible changes in appearance and tested surface area is indistinguishable from the adjacent unexposed portion.	No visible changes in appearance and tested surface area is indistinguishable from the adjacent unexposed portion
				After 24 hours	No visible changes in appearance and tested surface area is indistinguishable from the adjacent unexposed portion.	No visible changes in appearance and tested surface area is indistinguishable from the adjacent unexposed portion

Conclusion: It is demonstrated that in a 24-hour test with 10% Hydrochloric Acid there is no visible changes in the surface appearance of the panel.

Tested by**: Sukesh Jangir** Checked by**: Ankush Kumar**

Validated & Approved by: **GSRA Sharma**

----------End of the Test Report----------