Technical Service Report

MOMENTUM TECHNOLOGIES LABORATORIES

Testing Laboratory:	**Momentum Technologies Laboratories, Inc.**
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Customer:	**Innovative Waterproofing Solutions**
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Project #:	AX22H9A
Quote #:	2019-265
Date of Report:	Friday, December 6, 2019
PO#:	1009

Abstract: Analysis of one (1) product in accordance with ASTM E2178 Standard Test Method forAir Permeance of Building Materials.

MTI#	Description of Material	Receiving Date
MTI-182517	Six (6)- 1m x 1m IWS Water Proof cured film samples assembled by customer	8/22/2019

Results and Conclusion

Laboratory Conditions

Average Lab Barometric Pressure, kPa	97.20
Average Air Flow Temperature, °C	25.50
Density of Air Through Flow Meter, kg/m^3	1.20

Conclusion: These laboratory conditions are used to convert all flow readings to STP in accordance with ASTM E 283 Section 12.1.

Test setup

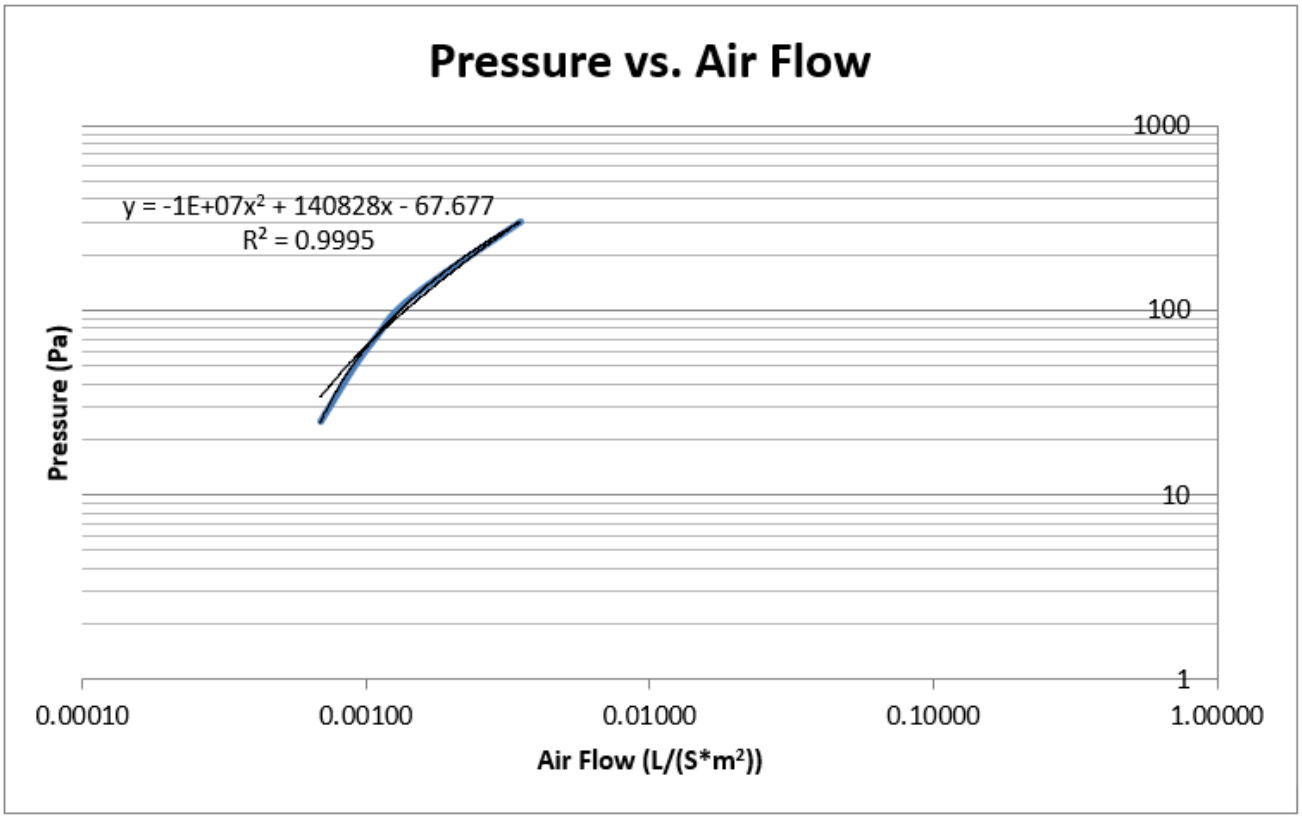
The above specimens were attached as a free film to a wooden frame for support with a 1m x 1m opening and an embedded screen with an air permeance greater than the film being tested. The testing apparatus was then attached to the wooden frame and tested per ASTM E 2178 section 8. **These specimens were not applied to any substrate; they were tested as a free film.**

Results and Conclusion

	ΔP, Pa					
	25	50	75	100	150	300
Std. Dev.	0.00058	0.00064	0.00065	0.00063	0.00066	0.00058
Average Flow, L/(s*m^2)	0.00069	0.00091	0.00111	0.00128	0.00179	0.00350
Average Flow, cfm/ft^2	0.00014	0.00018	0.00022	0.00025	0.00035	0.00069
Upper Limit @ 95% Confidence	0.00140	0.00171	0.00191	0.00207	0.00261	0.00422
Lower Limit @ 95% Confidence	0.00000	0.00011	0.00030	0.00050	0.00097	0.00277
Requirement, L/(s*m^2), cfm/ft^2, Max	N/A	N/A	0.02 0.004	N/A	N/A	N/A
Conclusion	N/A	N/A	Pass	N/A	N/A	N/A
*Material Permeance, P	0.000028	0.000018	0.000015	0.000013	0.000012	0.000012

*P= Q/(ΔP*A), Where Q= Flow Rate, ΔP= Pressure Differential, A= Area

Results and Conclusion



Results and Conclusion

Conclusion:

The results above indicate the flow through the specimens with a unit of measurement of L/(s*m2) in accordance with ASTM E 2178 Section 8. The permeance is calculated in accordance with ASTM E 2178 Section 10.3. The log/log graph indicates an excellent correlation between flow and air pressure differential with an r^2 value greater than 0.99, conforming with ASTM E 2178 Section 11.1.3.1.

Tested By:

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Revision Log

Revision #	Date	Revision
1	12/6/2019	Change Company Name
0	12/6/2019	Original