1500 Brigantine Drive
Coquitlam, BC V3K 7C1

Telephone: 604.520.3321
Facsimile: 604.524.9186
www.intertek-etlsemko.com

May 18, 2010

Mr. Dan Johnson
Stuc-O-Flex International Inc.
17639 NE 67th Court
Redmond, Washington 98052

Dear Mr. Johnson,

Subject: Project No. 100110643COQ-003B Letter Report rev.1

Intertek Testing Services NA Ltd. has conducted a water vapor permeance test for Stuc-O-Flex International Inc. on a drainage mat product. The product was identified as Waterway 9714 A with white geotextile fabric with drainage mat. The client submitted the samples to the evaluation center on March 9, 2010. The water permeance properties were determined as per ASTM E96/E96-05, *Standard Test Methods for Water Vapour Transmission of Materials*, water method. Four circular specimens of the material were prepared for testing. Three test dishes 229 mm (9 in.) in diameter were filled with distilled water to within 6.4 mm (¼ in.) of the top. The circular specimens were then attached to the top of each dish by sealing the perimeter of the material to the dish with a molten wax blend. The specimens were prepared with the product exterior surface placed face up. An additional control specimen was prepared in an identical manner to the other three test specimens with the exception that no water was placed in the dish. The four assemblies were placed in a controlled chamber operating at a temperature and relative humidity of 75°F and 50% respectively. The assemblies were then weighed periodically until eight data points were obtained. A copy of the data sheet is included in Appendix A and the results of the test are as follows:

Table 1. Test Results

Description	Test Result
Waterway 9714 A with white geotextile fabric with drainage mat	247 perms

If you require further assistance, do not hesitate to contact the undersigned directly at (604) 520-3321.

Sincerely,

INTERTEK TESTING SERVICES NA LTD.

Reported by: _____
Aldin Chang
Technnologist, Construction Products

Reviewed by: _____
Baldeep Sandhu
Technologist, Construction Products

All services undertaken are subject to the following general policy: This report is for the exclusive use of Intertek Testing Services NA Ltd.'s (Intertek's) client and is provided pursuant to the agreement between Intertek and its client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this report. Only the client is authorized to copy of distribute this report and then only in its entirety. Intertek must first approve any use of the Intertek name or one of its marks for the sale or advertisement of the testing materials, product or service in writing. The observations and test results in the report are relevant only to the sample tested. This report by itself does not imply that the material, product or service is or has ever been under Intertek's certification program.

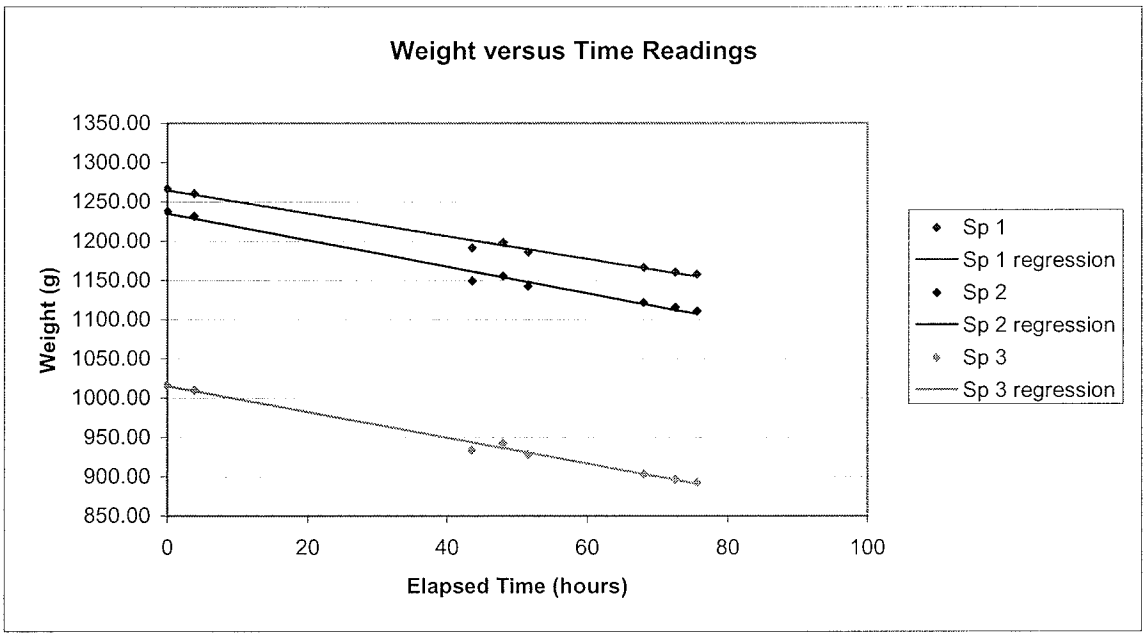
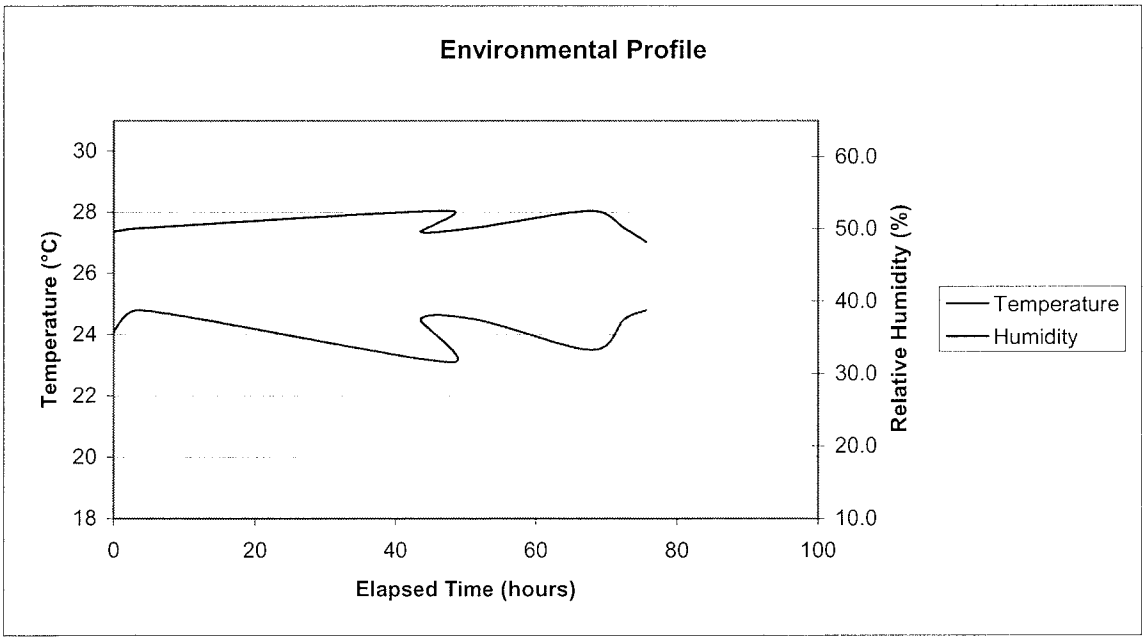
APPENDIX A: Test Data (2 pages)

Intertek

Test:	**Water Vapor Transmission**	Project:	G100110643
Date:	8-May-10	Eng/Tech:	Aldin Chang
Client:	Stuc-O-Flex International		
Product:	**Waterway 9714 A with white geotextile fabric with drainage mat**		
Orientation:	Exterior Face Up		
Test Methods:	ASTM E96/E96M-05, *Test Methods for Water Vapour Transmission of Materials*		
Test Procedure:	Water Method		
Conditioning:	24 hours at a temperature of 23 ± 2°C and relative humidity of 50 ± 2%		
Equipment:	Setra Balance 12500g (Intertek ID# 9-0118, cal due March 2011)		
	Test Chamber (Intertek ID# 9-0473)		
	Digital Calipers (Intertek ID# 1019, cal due May 2010)		
	Digital Anemometer (Intertek ID# 9-0145, cal due September 2010)		
	Tinytag Ultra (Intertek ID# P60101, cal due July 2010)		

Measurement	Specimen		
	1	2	3
Mean Barometric Pressure (kPa)	101.94	101.94	101.94
Mean Air Temperature (°C)	24.2	24.2	24.2
Mean Saturation Vapour Pressure[1] (Pa)	3079	3079	3079
Mean Relative Humidity in chamber (%)	50.4	50.4	50.4
Relative Humidity in test dish (%)	100	100	100
Specimen Weight Change (g)	109.165	126.933	123.692
Moisture Gain of Dessicant (%)	n/a	n/a	n/a
Moisture Gain Control Limit (%)	n/a	n/a	n/a
Test Dish Diameter (mm)	228.0	228.0	228.0
Test Area (m^2)	4.08E-02	4.08E-02	4.08E-02
Gradient of weight/time graph (g/hour)	1.45E+00	1.70E+00	1.64E+00
Specimen Mean Thickness (mm)	6.77	6.91	7.01
Uncorrected Water Transmission ($g/hour.m^2$)	3.56E+01	4.15E+01	4.02E+01
Uncorrected Water Permeance ($ng/Pa.s.m^2$)	6.47E+03	7.54E+03	7.31E+03
Permeability of Still Air (ng/Pa.s.m)	1.95E+02	1.95E+02	1.95E+02
Permeance of Still Air ($ng/Pa.s.m^2$)	3.04E+04	3.04E+04	3.04E+04
Vapor Resistance of Still Air ($m^2.s.Pa/kg$)	3.29E+07	3.29E+07	3.29E+07
Surface Resistances ($m^2.s.Pa./kg$)	4.00E+07	4.00E+07	4.00E+07
Total Still Air and Specimen Surface ($m^2.s.Pa/kg$)	7.29E+07	7.29E+07	7.29E+07
Four Times Test Area Divided By Perimeter (m)	2.28E-01	2.28E-01	2.28E-01
Excess Water Transmission Due to Mask (%)	2.39	2.43	2.46
Excess Water Permeance Due to Mask ($ng/Pa.s.m^2$)	1.55E+02	1.83E+02	1.80E+02
Mask-corrected Water Permeance ($ng/Pa.s.m^2$)	6.32E+03	7.36E+03	7.13E+03
Water Vapour Transmission ($g/hour.m^2$)	6.44E+01	8.73E+01	8.16E+01
Water Vapour Permeance ($ng/Pa.s.m^2$)	1.17E+04	1.59E+04	1.48E+04
Water Vapour Permeability (ng/Pa.s.m)	7.93E+01	1.10E+02	1.04E+02

[1]Estimated by the Clausius-Clapeyron equation

Test Result Summary	Metric units	Imperial Units
Water Vapor Transmission	7.78E+01 $g/hr.m^2$	1.11E+02 $grns/hr.ft^2$
	1.87E+03 $g/day.m^2$	2.67E+03 $grns/day.ft^2$
Water Vapor Permeance	1.41E+04 $ng/Pa.s.m^2$	2.47E+02 perms
	3.91E+00 per 25 mm	9.10E+02 per in.
Water Vapor Permeability	9.76E+01 ng/Pa.s.m	9.10E+02 Perm inch
Coefficient of Variation	15 %	15 %

Test:	**Water Vapor Transmission**	Project:	G100110643
Date:	8-May-10	Eng/Tech:	Aldin Chang
Client:	Stuc-O-Flex International		
Product:	**Waterway 9714 A with white geotextile fabric with drainage mat**		
Orientation:	Exterior Face Up		
Test Methods:	ASTM E96/E96M-05, *Test Methods for Water Vapour Transmission of Materials*		
Test Procedure:	Water Method		
Conditioning:	24 hours at a temperature of 23 ± 2°C and relative humidity of 50 ± 2%		
Equipment:	Setra Balance 12500g (Intertek ID# 9-0118, cal due March 2011)		
	Test Chamber (Intertek ID# 9-0473)		
	Digital Calipers (Intertek ID# 1019, cal due May 2010)		
	Digital Anemometer (Intertek ID# 9-0145, cal due September 2010)		
	Tinytag Ultra (Intertek ID# P60101, cal due July 2010)