

Client: **Allied Construction Technology, Inc.**
 Project: **ACTech ASTM E96 Testing**
 Contact: **Mr. Alex Rogers**

CTLGroup project no.: **281471**
 CTLGroup project mgr.: **E. Rodenkirch**
 Analyst/Technician: **M. Klaric/W. Demharter**
 Approved: **E. Rodenkirch**
 Report Date: **23-Aug-19**

ASTM E96-16 Standard Test Method for Water Vapor Transmission of Materials

RESULTS

ACTECH OBS-C @ 16 mils
0.17 net perms (grains h⁻¹ ft⁻² in Hg⁻¹)

SPECIMEN PHOTOGRAPH



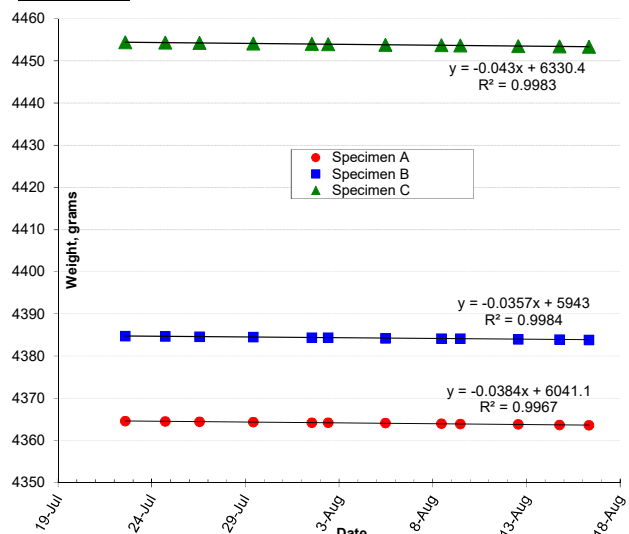
SPECIMEN INFORMATION

Client ID: **ACTECH OBS-C @ 16 mils**
 CTLGroup ID: **4962712**
 Material type: **2-comp epoxy**
 Concrete cast date: **13-May-19**
 Moist cure: **3 days**
 Drying: **24 days**
 Surface Profile: **CSP-3**
 Coating Applied: **9-Jun-19**
 Concrete thickness, in.: **1-in.**
 Ave. Coating thickness, in.: **0.016**
 Exposed area, in²: **54.3**
 Mix Ratio A:B (wt:wt): **8.33:1**
 No. Coats: **1**
 No. Grams/Coat: **36.57**
 Balance: **EP6102C s/n M028112**
 Last Calibration: **21-Jan-19**
 Prepared by: **MK**

DATA COLLECTED

Specimen A		Specimen B		Specimen C	
date	wt, grams	date	wt, grams	date	wt, grams
6/26/19 11:46	4365.36	6/26/19 11:47	4385.42	6/26/19 11:47	4455.08
6/28/19 14:09	4365.29	6/28/19 14:10	4385.40	6/28/19 14:10	4455.04
7/1/19 10:07	4365.22	7/1/19 10:07	4385.31	7/1/19 10:08	4454.99
7/3/19 7:39	4365.21	7/3/19 7:39	4385.31	7/3/19 7:40	4454.97
7/5/19 11:46	4365.14	7/5/19 11:46	4385.25	7/5/19 11:46	4454.90
7/8/19 12:03	4365.05	7/8/19 12:04	4385.15	7/8/19 12:04	4454.84
7/10/19 13:07	4365.01	7/10/19 13:08	4385.11	7/10/19 13:08	4454.77
7/12/19 10:35	4364.93	7/12/19 10:35	4385.06	7/12/19 10:35	4454.73
7/15/19 9:18	4364.85	7/15/19 9:19	4384.99	7/15/19 9:19	4454.67
7/19/19 11:58	4364.72	7/19/19 11:58	4384.88	7/19/19 11:58	4454.48
7/22/19 14:01	4364.63	7/22/19 14:01	4384.78	7/22/19 14:01	4454.42
7/24/19 17:26	4364.54	7/24/19 17:26	4384.70	7/24/19 17:26	4454.32
7/26/19 13:20	4364.45	7/26/19 13:21	4384.62	7/26/19 13:21	4454.26
7/29/19 10:21	4364.40	7/29/19 10:21	4384.53	7/29/19 10:21	4454.13
8/1/19 13:18	4364.25	8/1/19 13:19	4384.43	8/1/19 13:19	4454.01
8/2/19 10:10	4364.22	8/2/19 10:10	4384.39	8/2/19 10:10	4453.97
8/5/19 11:19	4364.12	8/5/19 11:19	4384.28	8/5/19 11:19	4453.85
8/8/19 11:23	4364.01	8/8/19 11:24	4384.19	8/8/19 11:24	4453.71
8/9/19 11:15	4363.95	8/9/19 11:16	4384.16	8/9/19 11:16	4453.69
8/12/19 13:46	4363.83	8/12/19 13:46	4384.03	8/12/19 13:47	4453.51
8/14/19 18:20	4363.73	8/14/19 18:20	4383.95	8/14/19 18:21	4453.42
8/16/19 8:06	4363.66	8/16/19 8:06	4383.87	8/16/19 8:06	4453.35

DATA GRAPH



Results linear in boxed range used for calculations.

CALCULATION OF RESULTS

	Water Vapor Transmission, grams h ⁻¹ m ⁻²			Specimen A	Measured Permeance, Perms grains h ⁻¹ ft ⁻² in Hg ⁻¹		Average Measured Permeance, Perms grains h ⁻¹ ft ⁻² in Hg ⁻¹	Net Perms, Corrected for Concrete Substrate grains h ⁻¹ ft ⁻² in Hg ⁻¹
	Specimen A	Specimen B	Specimen C		Specimen B	Specimen C		
ACTECH OBS-C @ 16 mils	0.046	0.042	0.051	0.16	0.15	0.18	0.16	0.17
Control Concrete	0.53	0.64	0.63	1.8	2.2	2.2	2.1	--
Aluminum Blanks	<0.001	<0.001	--	<0.01	<0.01	--	<0.01	--

Notes

- Water Method with coated side facing 50%RH/73°F and bottom side over water. Specimens exposed over 6.75 x 10.75 x 1.0-in. stainless steel flanged pans using SM5143 vacuum sealant tape. Results are specifically for these test conditions
- Permeance in PERMS (grains h⁻¹ ft⁻² in Hg⁻¹) applies to specimens at thickness tested.
- Net permeance is calculated from the sum of the inverse perm values. These are a measure of resistance to moisture vapor movement: 1/Perm_(total) = 1/Perm_(concrete) + 1/Perm_(coating)
- Uncoated concrete substrate (0.6 w/c) and aluminum blanks are used as control specimens.
- Calculation by least squares linear regression analysis per ASTM E96-16 Sect. 13.
- These results represent specifically the samples submitted for testing. This report may not be reproduced except in its entirety