

Client: **Resinwerks, LLC.**
 Project: **Resinwerks E96 Testing**
 Contact: **Mr. David Schneider**

CTLGroup project no.: **281473**
 CTLGroup project mgr.: **M. Klaric**
 Analyst/Technician: **W. Demharter**
 Approved: **C.Olson**
 Report Date: **2-Dec-19**

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

RESULTS

Resinwerks VBE @ 12
 mils **0.059** net perms (grains h⁻¹ ft² in Hg⁻¹)

SPECIMEN INFORMATION

Client ID **Resinwerks VBE @ 12 mils**
 CTLGroup ID **0**
 Material type **2-comp epoxy**
 Concrete cast date **13-May-19**
 Moist cure **3 days**
 Drying **138 days**
 Surface Profile **CSP-3**
 Coating Applied **1-Oct-19**
 Concrete thickness, in. **1-in.**
 Ave. Coating thickness, in. **0.012**
 Exposed area, in². **54.3**
 Mix Ratio A:B (wt:wt) **2.21:1**
 No. Coats **1**
 No. Grams/Coat **14.43**
 Balance **EP6102C s/n M028112**
 Last Calibration **21-Jan-19**
 Prepared by **M. Klaric**

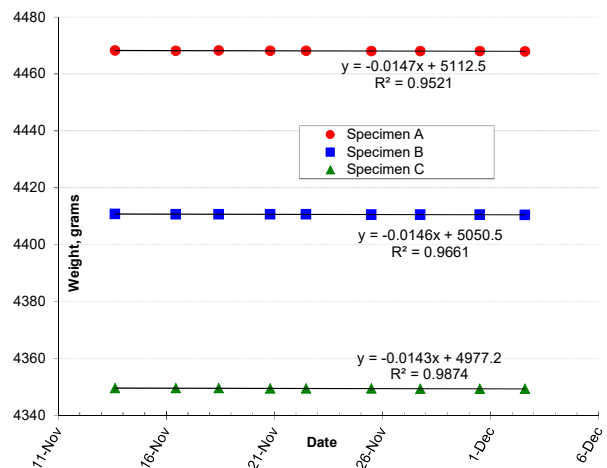
SPECIMEN PHOTOGRAPH



DATA COLLECTED

Specimen A		Specimen B		Specimen C	
date	wt, grams	date	wt, grams	date	wt, grams
10/16/19 17:27	4468.40	10/16/19 17:28	4410.91	10/16/19 17:28	4349.82
10/18/19 10:42	4468.40	10/18/19 10:43	4410.92	10/18/19 10:43	4349.82
10/21/19 10:52	4468.40	10/21/19 10:53	4410.91	10/21/19 10:53	4349.81
10/22/19 8:51	4468.42	10/22/19 8:51	4410.91	10/22/19 8:51	4349.81
10/25/19 13:38	4468.41	10/25/19 13:39	4410.88	10/25/19 13:39	4349.76
10/28/19 11:22	4468.40	10/28/19 11:22	4410.87	10/28/19 11:22	4349.71
10/30/19 16:14	4468.38	10/30/19 16:15	4410.85	10/30/19 16:16	4349.67
11/1/19 0:00	4468.36	11/1/19 0:00	4410.84	11/1/19 0:00	4349.66
11/4/19 9:40	4468.32	11/4/19 9:40	4410.81	11/4/19 9:40	4349.65
11/6/19 10:56	4468.28	11/6/19 10:56	4410.82	11/6/19 10:56	4349.66
11/8/19 11:29	4468.29	11/8/19 11:30	4410.76	11/8/19 11:30	4349.57
11/11/19 10:23	4468.30	11/11/19 10:23	4410.75	11/11/19 10:23	4349.53
11/13/19 14:58	4468.28	11/13/19 14:59	4410.77	11/13/19 14:59	4349.55
11/16/19 10:38	4468.20	11/16/19 10:38	4410.70	11/16/19 10:38	4349.53
11/18/19 10:09	4468.23	11/18/19 10:09	4410.71	11/18/19 10:09	4349.51
11/20/19 19:05	4468.18	11/20/19 19:05	4410.64	11/20/19 19:05	4349.45
11/22/19 10:59	4468.13	11/22/19 10:59	4410.61	11/22/19 10:59	4349.43
11/25/19 11:20	4468.09	11/25/19 11:20	4410.60	11/25/19 11:22	4349.40
11/27/19 17:40	4468.08	11/27/19 17:40	4410.53	11/27/19 17:41	4349.36
11/30/19 12:01	4468.05	11/30/19 12:01	4410.53	11/30/19 12:01	4349.33
12/2/19 13:55	4467.97	12/2/19 13:55	4410.48	12/2/19 13:56	4349.28

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		
Resinwerks VBE @ 12 mils	0.016	0.017	0.016	0.056	0.060	0.057	0.057	0.059
Control Concrete	0.48	0.55	0.51	1.7	1.9	1.8	1.8	--
Aluminum Blanks	<0.001	0.0033	--	<0.01	0.012	--	<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 ft² 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