

Client: **AC Tech**
 Project: **AC Tech ASTM E96 Testing**
 Contact: **Mr. Alex Rogers**

CTLGroup project no.: **263588**
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 Approved: **C. Olson**
 Report Date: **April 29, 2022**

ASTM E96-21 Gravimetric Determination of Water Vapor Transmission Rate of Materials

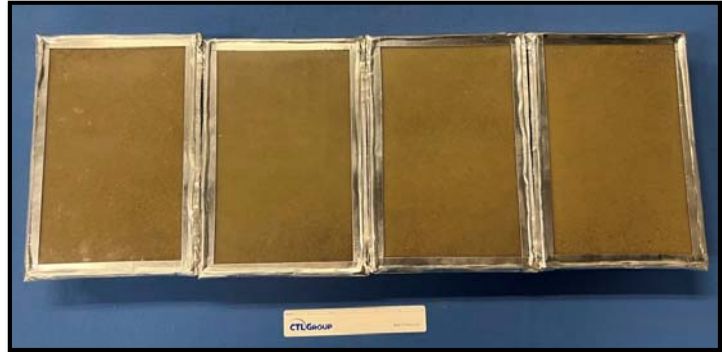
RESULTS

ACTECH Vapor Epoxy Slurry **0.015** net perms (grains h⁻¹ ft⁻² in Hg⁻¹)

SPECIMEN INFORMATION

Primer **ACTECH Vapor Epoxy Slurry**
 Topcoat **ACTECH Vapor Epoxy Slurry**
 Material type **Epoxy**
 Concrete cast date **April 12, 2021**
 Moist cure
 Drying **308 days**
 Surface Profile **CSP-3**
 Coating Applied **February 17, 2022**
 Concrete thickness, in. **1-in.**
 Ave. Coating thickness, in. **0.060**
 Exposed area, in². **54.3**
 Mix Ratio A:B (wt:wt) **2.00:1**
 No. Coats **1**
 No. Grams/Coat **105**
 Balance **EP6102C s/n M028112**
 Last Calibration **January 25, 2022**
 Prepared by **M. Klaric**

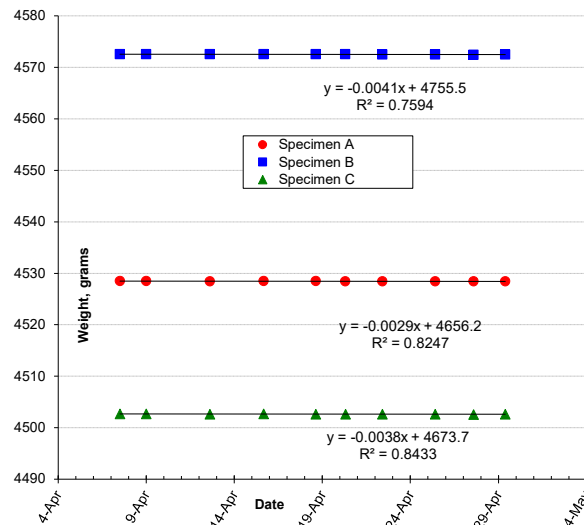
SPECIMEN PHOTOGRAPH



DATA COLLECTED

Specimen A		Specimen B		Specimen C	
date	wt, grams	date	wt, grams	date	wt, grams
3/9/22 11:53	4528.41	3/9/22 11:54	4572.53	3/9/22 11:54	4502.59
3/11/22 11:33	4528.42	3/11/22 11:33	4572.52	3/11/22 11:33	4502.62
3/14/22 15:37	4528.42	3/14/22 15:37	4572.52	3/14/22 15:37	4502.60
3/16/22 10:06	4528.40	3/16/22 10:07	4572.51	3/16/22 10:07	4502.62
3/18/22 14:01	4528.43	3/18/22 14:01	4572.53	3/18/22 14:01	4502.62
3/21/22 11:04	4528.42	3/21/22 11:04	4572.53	3/21/22 11:04	4502.62
3/23/22 9:48	4528.45	3/23/22 9:49	4572.54	3/23/22 9:49	4502.67
3/26/22 10:25	4528.46	3/26/22 10:25	4572.55	3/26/22 10:26	4502.67
3/28/22 15:20	4528.43	3/28/22 15:20	4572.48	3/28/22 15:20	4502.61
3/30/22 14:01	4528.44	3/30/22 14:01	4572.56	3/30/22 14:02	4502.68
4/1/22 14:00	4528.41	4/1/22 14:00	4572.51	4/1/22 14:01	4502.62
4/5/22 14:58	4528.47	4/5/22 14:58	4572.55	4/5/22 14:58	4502.66
4/7/22 12:01	4528.47	4/7/22 12:01	4572.55	4/7/22 12:02	4502.69
4/9/22 0:00	4528.45	4/9/22 0:00	4572.53	4/9/22 0:00	4502.67
4/12/22 14:58	4528.43	4/12/22 14:59	4572.51	4/12/22 14:59	4502.64
4/15/22 16:06	4528.44	4/15/22 16:06	4572.52	4/15/22 16:07	4502.65
4/18/22 15:12	4528.44	4/18/22 15:12	4572.53	4/18/22 15:13	4502.64
4/20/22 7:32	4528.43	4/20/22 7:32	4572.50	4/20/22 7:33	4502.63
4/22/22 10:04	4528.41	4/22/22 10:04	4572.49	4/22/22 10:04	4502.62
4/25/22 9:43	4528.42	4/25/22 9:43	4572.49	4/25/22 9:44	4502.63
4/27/22 14:17	4528.39	4/27/22 14:17	4572.43	4/27/22 14:17	4502.58
4/29/22 9:16	4528.40	4/29/22 9:17	4572.46	4/29/22 9:17	4502.60

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 Vapor Epoxy Slurry	0.0034	0.0049	0.0046	0.012	0.017	0.016	0.015	0.015
Control Concrete	0.69	0.69	0.62	2.4	2.4	2.1	2.3	--
Aluminum Blanks	0.0014	0.0034	--	<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 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 E96-21 Sect. 15.
- These results represent specifically the samples submitted for testing. This report may not be reproduced except in its entirety.