

Client: **Koster American Corporation**
Project: **VAP 1 2000 FS E96 & D7234 Test**
Contact: **Mr. Basil Mewes**

CTLGroup project no.: **281326**
CTLGroup project mgr.: **H. Kanare**
Analyst/Technician: **E. Alikadic/E. Rodenkirch**
Approved: **H. Kanare**
Report Date: **30-Jul-12**

ASTM E96-10 Standard Test Method for Water Vapor Transmission of Materials

RESULTS

Koster VAP 1 2000 FS
100sf/gal **0.047** net perms (grains h⁻¹ ft² in Hg⁻¹)

SPECIMEN INFORMATION

Koster VAP 1 2000 FS
Client ID: **100sf/gal**
CTL Group ID: **3132402**
Material type: **Epoxy**
Concrete cast date: **14-May-12**
Moist cure: **3 days**
Drying: **20**
Surface Profile: **lapped then CSP3**
Coating Applied: **7-Jun-12**
Concrete thickness, in.: **1-in.**
Avg. Coating thickness, in.: **0.016**
Exposed area, in²: **56.35**
Mix Ratio A:B (V:V): **2:1**
No. Coats: **1**
No. Grams/Coat: **19.77**
Balance: **EP6102C s/n M028112**
Last Calibration: **7-Feb-12**
Prepared by: **E. Alikadic**

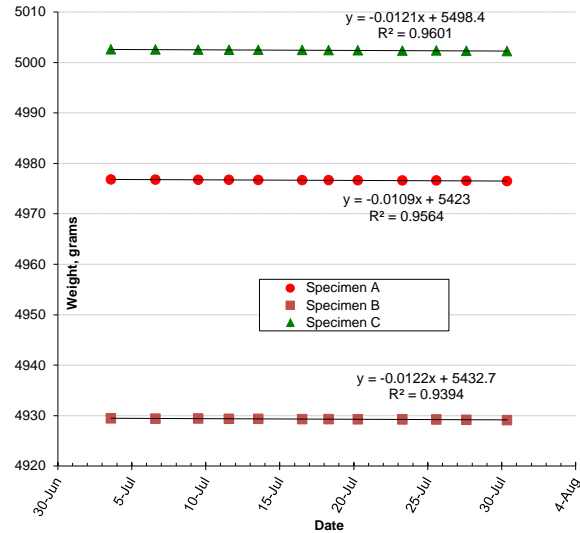
SPECIMEN PHOTOGRAPH



DATA COLLECTED

Specimen A		Specimen B		Specimen C	
date	wt, grams	date	wt, grams	date	wt, grams
6/22/12 5:48	4976.90	6/22/12 5:49	4929.56	6/22/12 5:49	5002.69
6/25/12 6:33	4976.83	6/25/12 6:34	4929.50	6/25/12 6:34	5002.64
6/29/12 8:57	4976.84	6/29/12 8:57	4929.50	6/29/12 8:57	5002.64
7/3/12 14:18	4976.78	7/3/12 14:18	4929.44	7/3/12 14:19	5002.57
7/6/12 14:35	4976.75	7/6/12 14:35	4929.37	7/6/12 14:35	5002.54
7/9/12 11:50	4976.74	7/9/12 11:50	4929.41	7/9/12 11:51	5002.53
7/11/12 13:40	4976.72	7/11/12 13:40	4929.36	7/11/12 13:41	5002.50
7/13/12 13:10	4976.70	7/13/12 13:10	4929.36	7/13/12 13:11	5002.49
7/16/12 12:18	4976.66	7/16/12 12:18	4929.30	7/16/12 12:18	5002.44
7/18/12 7:09	4976.65	7/18/12 7:09	4929.30	7/18/12 7:10	5002.41
7/20/12 6:42	4976.62	7/20/12 6:42	4929.26	7/20/12 6:42	5002.38
7/23/12 6:45	4976.59	7/23/12 6:45	4929.21	7/23/12 6:45	5002.34
7/25/12 13:57	4976.60	7/25/12 13:57	4929.22	7/25/12 13:57	5002.37
7/27/12 14:37	4976.52	7/27/12 14:37	4929.14	7/27/12 14:37	5002.30
7/30/12 8:31	4976.47	7/30/12 8:32	4929.09	7/30/12 8:32	5002.23

DATA GRAPH



Results linear in boxed range used for calculations.

CALCULATION OF RESULTS

	Water Vapor Transmission, grains 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 All Specimens	Net Perms, Corrected for Concrete Substrate grains h ⁻¹ ft ² in Hg ⁻¹
	Specimen A	Specimen B	Specimen C		Specimen B	Specimen C		
Koster VAP 1 2000 FS 100sf/gal	0.012	0.014	0.014	0.043	0.048	0.048	0.046	0.047
Control Concrete	0.68	0.71	0.74	2.4	2.4	2.5	2.4	--
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 2.0-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 E96-10 Sect. 13.
- These results represent specifically the samples submitted for testing. This report may not be reproduced except in its entirety.