

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**

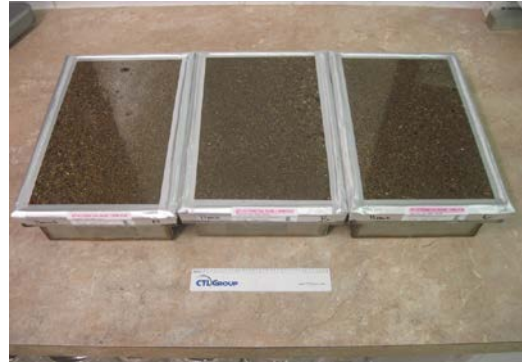
**RESULTS**

Koster VAP 1 2000 FS  
150sf/gal **0.070** net perms (grains h<sup>-1</sup> ft<sup>2</sup> in Hg<sup>-1</sup>)

**SPECIMEN INFORMATION**

Koster VAP 1 2000 FS  
Client ID: 150sf/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.: 0.011  
Exposed area, in<sup>2</sup>: 56.35  
Mix Ratio A:B (V:V): 2:1  
No. Coats: 1  
No. Grams/Coat: 13.70  
Balance: EP6102C s/n M028112  
Last Calibration: 7-Feb-12  
Prepared by: E. Alikadic

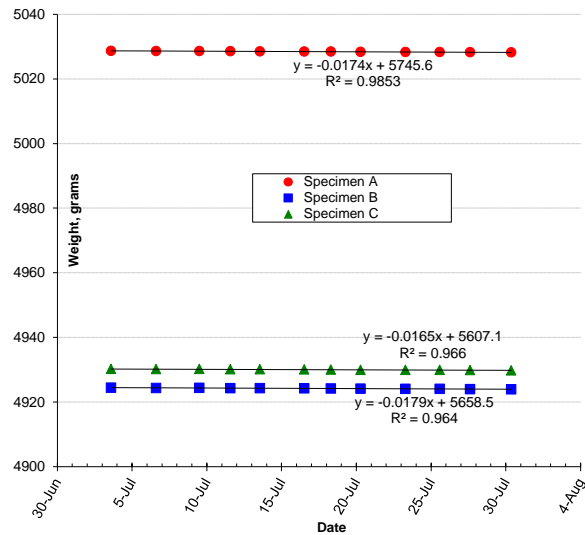
**SPECIMEN PHOTOGRAPH**



**DATA COLLECTED**

Specimen A		Specimen B		Specimen C	
date	wt, grams	date	wt, grams	date	wt, grams
6/22/12 5:49	5028.81	6/22/12 5:50	4924.59	6/22/12 5:50	4930.44
6/25/12 6:34	5028.73	6/25/12 6:35	4924.51	6/25/12 6:35	4930.37
6/29/12 8:58	5028.73	6/29/12 8:58	4924.51	6/29/12 8:58	4930.37
7/3/12 14:19	5028.63	7/3/12 14:19	4924.42	7/3/12 14:19	4930.27
7/6/12 14:36	5028.58	7/6/12 14:36	4924.36	7/6/12 14:36	4930.20
7/9/12 11:51	5028.58	7/9/12 11:51	4924.38	7/9/12 11:51	4930.23
7/11/12 13:41	5028.53	7/11/12 13:41	4924.28	7/11/12 13:42	4930.13
7/13/12 13:12	5028.49	7/13/12 13:11	4924.29	7/13/12 13:12	4930.13
7/16/12 12:18	5028.44	7/16/12 12:19	4924.22	7/16/12 12:19	4930.08
7/18/12 7:10	5028.42	7/18/12 7:10	4924.21	7/18/12 7:10	4930.07
7/20/12 6:43	5028.36	7/20/12 6:43	4924.15	7/20/12 6:43	4929.97
7/23/12 6:45	5028.29	7/23/12 6:46	4924.08	7/23/12 6:46	4929.95
7/25/12 13:57	5028.28	7/25/12 13:58	4924.10	7/25/12 13:58	4929.95
7/27/12 14:38	5028.24	7/27/12 14:38	4923.99	7/27/12 14:38	4929.88
7/30/12 8:32	5028.17	7/30/12 8:32	4923.93	7/30/12 8:33	4929.82

**DATA GRAPH**



Results linear in boxed range used for calculations.

**CALCULATION OF RESULTS**

	Water Vapor Transmission, grains h <sup>-1</sup> m <sup>2</sup>			Specimen A	Measured Permeance, Perms grains h <sup>-1</sup> ft <sup>2</sup> in Hg <sup>-1</sup>		Average Measured Permeance, Perms grains h <sup>-1</sup> ft <sup>2</sup> in Hg <sup>-1</sup> All Specimens	Net Perms, Corrected for Concrete Substrate grains h <sup>-1</sup> ft <sup>2</sup> in Hg <sup>-1</sup>
	Specimen A	Specimen B	Specimen C		Specimen B	Specimen C		
Koster VAP 1 2000 FS 150sf/gal	0.020	0.020	0.019	0.069	0.071	0.065	0.068	0.070
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<sup>-1</sup> ft<sup>2</sup> in Hg<sup>-1</sup>) 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<sub>(total)</sub> = 1/Perm<sub>(concrete)</sub> + 1/Perm<sub>(coating)</sub>
- 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.