

Client: **Koster American Corporation**  
 Project: **Koster E96 & D7234 Testing**  
 Contact: **Mr. Basil S. Mewes**

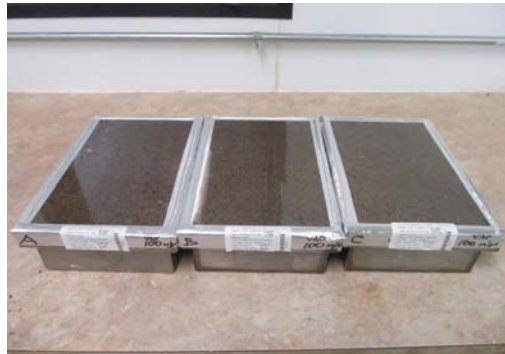
CTLGroup project no.: **281382**  
 CTLGroup project mgr.: **H. Kanare**  
 Analyst/Technician: **M. Klaric/D. Adams**  
 Approved: **E. Rodenkirch**  
 Report Date: **19-Jul-13**

**ASTM E96-12 Standard Test Method for Water Vapor Transmission of Materials**

**RESULTS**

VAP I 2000 UFS @  
 100sf/gal **0.060 net perms (grains h<sup>-1</sup> ft<sup>2</sup> in Hg<sup>-1</sup>)**

**SPECIMEN PHOTOGRAPH**



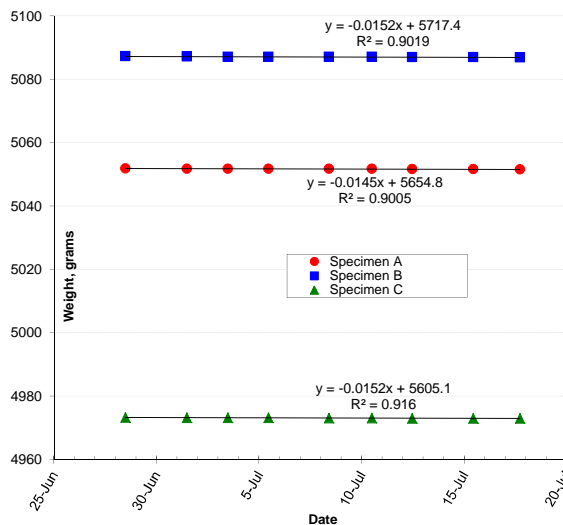
**SPECIMEN INFORMATION**

VAP I 2000 UFS @  
 100sf/gal  
 Client ID: **3406809**  
 CTLGroup ID: **3406809**  
 Material type: **Epoxy**  
 Concrete cast date: **18-Mar-13**  
 Moist cure: **3 days**  
 Drying: **70 days**  
 Surface Profile: **CSP-3**  
 Coating Applied: **30-May-13**  
 Concrete thickness, in.: **1-in.**  
 Avg. Coating thickness, in.: **0.016**  
 Exposed area, in<sup>2</sup>: **56.3**  
 Mix Ratio A:B (wt:wt): **2.00:1**  
 No. Coats: **1**  
 No. Grams/Coat: **19.63**  
 Balance: **EP6102C s/n M028112**  
 Last Calibration: **5-Feb-13**  
 Prepared by: **D. Adams**

**DATA COLLECTED**

Specimen A		Specimen B		Specimen C	
date	wt, grams	date	wt, grams	date	wt, grams
6/10/13 12:23	5052.01	6/10/13 12:24	5087.37	6/10/13 12:24	4973.42
6/12/13 12:57	5052.08	6/12/13 12:58	5087.41	6/12/13 12:58	4973.51
6/14/13 9:26	5052.00	6/14/13 9:26	5087.38	6/14/13 9:26	4973.44
6/17/13 10:07	5051.94	6/17/13 10:07	5087.34	6/17/13 10:08	4973.37
6/19/13 6:03	5051.87	6/19/13 6:03	5087.23	6/19/13 6:03	4973.29
6/21/13 16:24	5051.82	6/21/13 16:24	5087.26	6/21/13 16:24	4973.31
6/24/13 10:48	5051.86	6/24/13 10:48	5087.25	6/24/13 10:48	4973.30
6/28/13 11:33	5051.90	6/28/13 11:33	5087.31	6/28/13 11:33	4973.31
7/1/13 11:27	5051.82	7/1/13 11:28	5087.20	7/1/13 11:28	4973.22
7/3/13 11:15	5051.78	7/3/13 11:16	5087.15	7/3/13 11:17	4973.17
7/5/13 10:58	5051.75	7/5/13 10:58	5087.14	7/5/13 10:58	4973.16
7/8/13 9:33	5051.75	7/8/13 9:33	5087.15	7/8/13 9:33	4973.12
7/10/13 11:42	5051.75	7/10/13 11:42	5087.13	7/10/13 11:42	4973.15
7/12/13 10:50	5051.69	7/12/13 10:50	5087.07	7/12/13 10:51	4973.05
7/15/13 10:35	5051.66	7/15/13 10:35	5087.02	7/15/13 10:35	4973.05
7/17/13 17:05	5051.55	7/17/13 17:05	5086.95	7/17/13 17:06	4972.96

**DATA GRAPH**



Results linear in boxed range used for calculations.

**CALCULATION OF RESULTS**

	Water Vapor Transmission, grams 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>	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		
VAP I 2000 UFS @ 100sf/gal	0.017	0.017	0.017	0.057	0.060	0.060	0.059	0.060
Control Concrete	0.69	0.69	1.1	2.4	2.4	3.8	2.9	--
Aluminum Blanks	0.002	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 E96-12 Sect. 13.
- These results represent specifically the samples submitted for testing. This report may not be reproduced except in its entirety.