

Client: **Koster American Corporation**
 Project: **VAP1 2000 Zero VOC E96**
 Contact: **Mr. Basil Mewes**

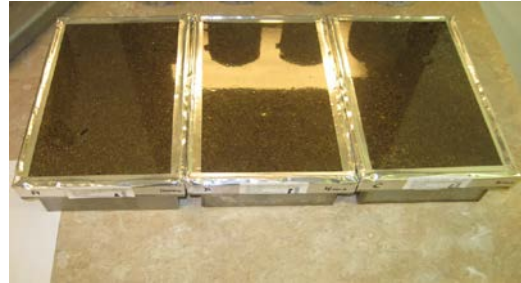
CTLGroup project no.: **281326**
 CTLGroup project mgr.: **H. Kanare**
 Analyst/Technician: **E. Rodenkirch/E. Alikadic**
 Approved: **H. Kanare**
 Report Date: **18-Mar-13**

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

RESULTS

Koster VAP1 2000 Zero
 VOC 100sf/gal **0.056** net perms (grains h⁻¹ ft⁻² in Hg⁻¹)

SPECIMEN PHOTOGRAPH



SPECIMEN INFORMATION

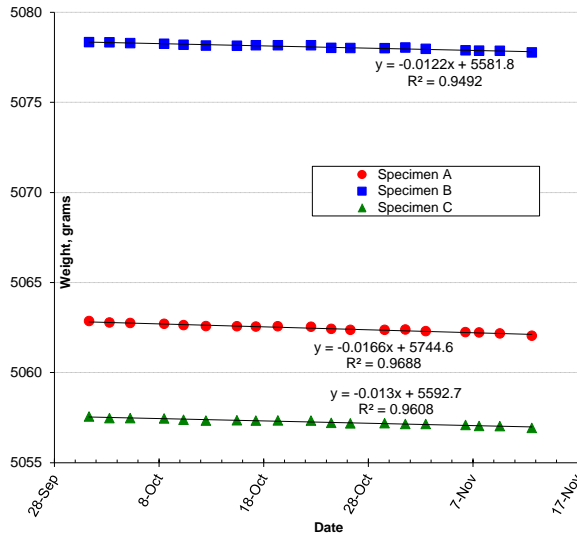
Koster VAP1 2000 Zero
 VOC 100sf/gal
 Client ID **3208201**
 CTL Group ID
 Material type **Epoxy**
 Concrete cast date **6-Aug-12**
 Moist cure **3 days**
 Drying **26**
 Surface Profile **lapped then CSP3**
 Coating Applied **4-Sep-12**
 Concrete thickness, in. **1-in.**
 Avg. Coating thickness, in. **0.016**
 Exposed area, in². **56.35**
 Mix Ratio A:B (V:V) **2:1**
 No. Coats **1**
 No. Grams/Coat **19.67**
 Balance **EP6102C s/n M028112**
 Last Calibration **7-Feb-12**
 Prepared by **E. Alikadic**

DATA COLLECTED

Specimen A		Specimen B		Specimen C	
date	wt, grams	date	wt, grams	date	wt, grams
9/17/12 6:30	5062.96	9/17/12 6:30	5078.40	9/17/12 6:31	5057.59
9/19/12 6:22	5062.94	9/19/12 6:23	5078.42	9/19/12 6:23	5057.57
9/21/12 6:08	5062.95	9/21/12 6:08	5078.41	9/21/12 6:08	5057.61
9/24/12 6:47	5062.87	9/24/12 6:47	5078.37	9/24/12 6:48	5057.52
9/26/12 13:22	5062.87	9/26/12 13:23	5078.35	9/26/12 13:23	5057.54
9/28/12 6:10	5062.83	9/28/12 6:10	5078.32	9/28/12 6:11	5057.50
10/1/12 7:39	5062.86	10/1/12 7:39	5078.33	10/1/12 7:39	5057.56
10/3/12 6:21	5062.78	10/3/12 6:21	5078.32	10/3/12 6:21	5057.47
10/5/12 6:00	5062.75	10/5/12 6:01	5078.28	10/5/12 6:01	5057.47
10/8/12 11:48	5062.70	10/8/12 11:49	5078.24	10/8/12 11:49	5057.45
10/10/12 8:30	5062.63	10/10/12 8:30	5078.19	10/10/12 8:30	5057.38
10/12/12 11:47	5062.58	10/12/12 11:48	5078.14	10/12/12 11:48	5057.33
10/15/12 10:59	5062.57	10/15/12 11:00	5078.13	10/15/12 11:00	5057.35
10/17/12 6:12	5062.55	10/17/12 6:13	5078.16	10/17/12 6:13	5057.33
10/19/12 8:35	5062.57	10/19/12 8:36	5078.16	10/19/12 8:36	5057.34
10/22/12 12:37	5062.54	10/22/12 12:37	5078.16	10/22/12 12:38	5057.33
10/24/12 11:18	5062.42	10/24/12 11:19	5078.02	10/24/12 11:19	5057.20
10/26/12 6:50	5062.37	10/26/12 6:50	5078.01	10/26/12 6:51	5057.18
10/29/12 13:41	5062.37	10/29/12 13:41	5078.00	10/29/12 13:42	5057.19
10/31/12 13:05	5062.39	10/31/12 13:06	5078.03	10/31/12 13:06	5057.14
11/2/12 11:43	5062.30	11/2/12 11:43	5077.96	11/2/12 11:44	5057.14
11/6/12 7:00	5062.24	11/6/12 7:01	5077.88	11/6/12 7:01	5057.09
11/7/12 14:10	5062.22	11/7/12 14:11	5077.86	11/7/12 14:11	5057.03
11/9/12 13:53	5062.17	11/9/12 13:53	5077.85	11/9/12 13:53	5057.02
11/12/12 15:04	5062.04	11/12/12 15:04	5077.76	11/12/12 15:04	5056.92

*Results linear in boxed range used for calculations.

DATA GRAPH



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 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 VAP1 2000 Zero VOC 100sf/gal	0.019	0.014	0.015	0.065	0.048	0.051	0.055	0.056
Control Concrete	0.80	0.64	0.68	2.7	2.2	2.3	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 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 E96-10 Sect. 13.
- These results represent specifically the samples submitted for testing. This report may not be reproduced except in its entirety.