



CONSTRUCTION MATERIALS

TECHNOLOGIES

LABORATORY TEST RESULTS

Report for: Jiangsu Canlon Building Materials Co., Ltd
NO.8, Hengtong Rd
Wujing Dist, Suzhou City 21534
People's Republic of China

Attention: Ms. Hannah Fang

Product Name(s): Canlon MBP-P	Manufacturers: Jiangsu Canlon Building Materials Co., Ltd
Date(s) Received: Jan. 22, 2018	Sampling: Jiangsu Canlon Building Materials Co., Ltd
PRI-CMT Project No.: JCBM-001-02-01	Dates Tested: Mar. 1 – 23, 2018

Subject: Determine the 'Peel Strength to Concrete' of the Canlon MBP-P waterproofing membrane in accordance with ASTM D 903: *Standard Test Method for Peel or Stripping of Adhesive Bonds* after immersion in client specified reagents. The Canlon MBP-P membrane is a 1.8mm thick pre-applied waterproofing membrane composed of a 1mm HPDE sheet with a continuous adhesive layer on one-side and a factory adhesive lap. The adhesive layer is covered in sand.

Test Methods: Specimen conditioning was conducted in accordance with ASTM D 543-14 *Standard Practices for Evaluating the Resistance of Plastics to Chemical Reagents* and client specified conditions. Specimens were fully immersed in the chemical reagents after preparation for a period of 7 days at 50±2°C. The following reagents were used for specimen conditioning:

1. Tap water
2. Water + 500 ppm BTEX
3. Water + 500 ppm Perchloroethylene (a.k.a. PCE or PERC)

BTEX was prepared by mixing the following reagents:

- Benzene (11% by weight)
- Toluene (26% by weight)
- Ethylbenzene (11% by weight)
- Xylene (52% by weight)

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Peel strength testing to concrete was conducted in accordance with ASTM D 903-98(2010): *Standard Test Method for Peel or Stripping of Adhesive Bonds*. Specimens were prepared by casting a minimum 2" thick concrete slab over the adhesive side of the membrane. Specimens were allowed to cure at 23±2°C & 50±5%RH for seven (7) days prior to immersion in the aforementioned reagents. Specimens were tested at 23±2°C & 50±5 %RH using a 25mm wide specimen at 300 mm/min constant rate of extension.

Product Sampling: Canlon BMP-P samples were received on Jan. 22, 2018 from Suzhou City, People's Republic of China.

Results:

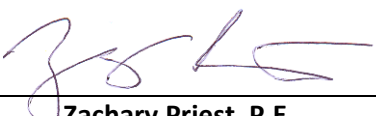
Table 1. ASTM D 903 Peel Strength over Concrete After Chemical Immersion

Conditioning Temperature	Peel Strength (N/m)		
	BTEX	Perchloroethylene	Unexposed Control ¹
50°C	4,260	4,150	4,680

Note: 1) Unexposed control specimens were maintained at 23±2°C & 50±5 %RH during the exposure period.

Statement of Attestation:

The results of testing were determined in accordance with test methods described herein. The laboratory test results presented in this report are representative of the material supplied.

Signed: 

Zachary Priest, P.E.
 Director

Report Issue History:

Issue #	Date	Pages	Revision Description (if applicable)
Original	03/23/2018	3	NA
Rev 1	04/09/2018	3	Updated data tables

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Raw Data:

Sample	Peel Strength (lbf/in.)											Avg.	St. Dev.
	1	2	3	4	5	6	7	8	9	10			
Canlon BTEX 50C	26.2	28.1	27.1	28.4	25.6	26.0	16.9	19.6	23.0	21.8	24.3	3.8	
Canlon PCE 50C	26.7	26.9	26.3	26.8	27.3	27.9	17.5	16.8	20.2	20.4	23.7	4.4	
Canlon Control	28.3	28.2	26.7	25.1	26.3	25.7	26.9	24.9	27.1	27.7	26.7	1.2	

Sample	Peel Strength (N/m)											Avg.	St. Dev.
	1	2	3	4	5	6	7	8	9	10			
Canlon BTEX 50C	4,590	4,920	4,750	4,970	4,480	4,550	2,960	3,430	4,030	3,820	4,260	670	
Canlon PCE 50C	4,680	4,710	4,610	4,690	4,780	4,890	3,060	2,940	3,540	3,570	4,150	770	
Canlon Control	4,960	4,940	4,680	4,400	4,610	4,500	4,710	4,360	4,750	4,850	4,680	210	

END OF REPORT

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