THE STANDARDS INSTITUTION OF ISRAEL

TEST REPORT No. 8811208675/1

Supersedes Report no. 8811208675
Issued under Section 12 of the Standards Law, 1953

Details of order:

The test was ordered by : Modul Beton Ltd. (Carmit)

Address : P.O. Box 1017, Pardes Hanna Industrial Zone 37110, ISRAEL

Date of order : 03/2008

The sample was selected by : an SII representative in 05/2008

Sample size: One sack of powder weighing: 20 kg + additive in a container weighing 5 kg.

Description of sample:

Sample of a two-component cement sealant designated: "Bitumseal".

Consisting of: Part A – packaged powder Manufacturing no. 8080301.
Part B – liquid additive Manufacturing no. 3080237.

Nature of test:

Testing the compliance of the samples in accordance with the SII program.

This document contains five pages and may be used only in full.	The test results in this document refer only to the item tested.	

Conclusions:

The test program is given on page 2.

Note:
In this report, the product name from Report no. 8811208675 dated 11/09/08 was changed at the customer's request.

The test results are given on pages 4-5.

The original Test Certificate was signed by :

Name : Peisic Zohar

Position : Head, Sealant and Coatings Section

Name : Eng. Moshe Haim

Position : Head, Construction, Finishing and Sealing Products Branch

2/...

13/01/09

A. Test program

1. Tensile strength and elongation (in accordance with the method given in ASTM D 412). The test was performed on a sealant sample only, in the shape of a paddle of thickness recommended by the customer's representative.

2. Water penetration under pressure of 1, 3 and 7 atm (in accordance with the method given in SI 26/5). The sealant was placed on a weak concrete sample (water permeating) of dimensions: 20 × 20 × 12 cm).

3. Water penetration under negative pressure of 1.5 atm (in accordance with the method given in the SI Specification, SII 390, clause 7.2.4) on a weak concrete sample (water permeating) of dimensions: 20 × 20 × 12 cm)

4. Crack bridging (Flexibility) (in accordance with the method given in SII 390, clause 7.2.6). The sealant was placed on a concrete substrate as given in the specification.

5. Water penetration under pressure of 1 atm on an original crack, 2 mm wide.

6. General absorption after immersion in water at a temperature of 23 °C for 24 hours. The sealant was placed in a mold of dimensions: 4 × 4 × 16 cm.

7. Capillary absorption coefficient (capillary absorption) in accordance with the method given in SI 1414, clause 4.2.2.

8. Passage of water vapor (in accordance with the method given in SI 1731, clause 2.3.5). The sealant was placed on a sand-plaster substrate, approximately 15 mm thick in an interior dry saturated condition.

9. Adhesion to concrete (in accordance with the method given in the SI Specification, SII 390, clause 7.2.2). The sealant was placed on a concrete substrate, in an interior dry saturated condition.

3/...

B. **Description of sample**:

Material designated: "Bitumseal".

C. **Ratio of components**:

Powder: 1 kg .

Liquid additive: 0.25 liters .

D. **Preparation of samples**

Mixing was carried out according to the instructions of the customer's representative.

E. **Conditioning**

Conditioning for 28 days under normal environmental conditions at a temperature of 25±3 °C, humidity of 50±5 %.

Test results

Clause	Property tested	Description of sample	Test methods	Units	Test results	
1	Tensile strength	Sample of sealant approximately 2 mm thick	ASTM D 412	MPa	Single	Average
					0.75 - 0.85	0.79
	Maximum elongation	Number of sealant layers: 2	ASTM D 412	%	41.6 - 51.0	45.9
2	Water penetration under pressure of 1, 3 and 7 atm	Sealant sample, 2 mm thick.	SI 26/5	1, 3 and 7 atm	A. No signs of water penetration were observed on the back side of the sample.	
		Number of sealant layers: 2 .		mm	B. After breaking the prism, water penetration depth after breaking samples: approx. 1 cm	
3	Water penetration under negative pressure of 1.5 atm	Sealant sample, 2 mm thick Number of sealant layers: 2 .	SII 390, clause 7.2.4	1.5 atm	Water did not penetrate through the samples.	
4	Bridging cracks	Sealant sample, 2 mm thick. Number of sealant layers: 2 .	SII 390, clause 7.2.6	mm	Single	Average
					1.70 – 2.42	2.03
5	Water penetration under pressure of 1 atm on an original crack, 2 mm wide	Sealant sample, 2 mm thick on concrete with a 2 mm wide crack.	–	Visual	Water did not penetrate through the sample.	

Test Report No. 8811208675/1 Page 5 of 5 pages

Test results (continued)

Clause	Property tested	Description of sample	Test methods	Units	Test results	
6	General absorption	Sealant sample of dimensions: 40 × 40 × 160 mm, one layer.	Immersion in water for 24 hours	%	Single	Average
					0.23 – 0.26	0.24
7	Capillary absorption coefficient	Sealant sample in cylindrical shape of 200 mm diameter, one layer.	SI 1414, clause 4.2.2	kg/m²/h	0.02 – 0.03	0.02
8	Passage of water vapor	Sealant sample, 2 mm thick. Number of sealant layers: 2 .	SI 1731, clause 2.3.5	m	1.51 -3.06	2.20
9	Adhesion to concrete	Sealant sample, 2 mm thick. Number of sealant layers: 2 .	SII 390, clause 7.2.2	MPa	1.06 – 1.20	1.13
					Fracture location: in the sealant layer	

Invoice/

Tel-Aviv: 13/01/09

F:\AVRAHAM\Building\8675-1ModulSealant.doc