

TEST REPORT

REPORT NO : 2015CB1360

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Applicant : MEG MANUFACTURING SDN. BHD.
No.2, Jalan 1M 316, Kawasan Perindustrian 1M3,
Bandar Indera Mahkota,
25200 Kuantan,
Pahang Darul Makmur.

Manufacturer : MEG MANUFACTURING SDN. BHD.

Product : 1-p polymer - modified waterproofing membrane

Reference Standard/
Method of test : 1) ASTM D 412 - 06a (2013)
Standard Test Methods for Vulcanized Rubber and Thermoplastic
Elastomers – Tension.
2) *BS EN 13580 : 2002,
Products and systems for the protection and repair of concrete
structures - Test methods - Water Absorption and resistance to alkali for
hydrophobic impregnations.
3) ASTM D 4541 : 2002
Standard Test Methods for Pull – Off Strength of Coatings Using Portable
Adhesion Testers
4) *ASTM E96/E96M-14, Standard Test Methods for Water Vapor
Transmission of Materials

Description of sample : The following items were received for testing.
a) Three (5) sheets of membrane of tesonshield (30 cm x 30 cm)
b) Three (3) pieces of treated concrete cube coated with tesonshield & three
(3) pieces of untreated concrete cube (100 mm x 100 mm x 100 mm)
c) One (1) piece of concrete slab coated with tesonshield (400 mm x 300
mm x 40 mm)
Brand : TESON
Model : TW 111 TESONSHIELD

Date Received of
Complete Application : 30th June 2015

Job no./Ref. no. : J20151430596/SQAS/CCST/T.REC/CSL/01

Description of test
results : The test results of the submitted test samples are described in Page 2,3 4 & 5
of this test report.

Issued date : 08 SEP 2015

Approved Signatories

(HANON NAZIR MOHD BASIR)
Testing Executive



(M RAJA NOR SIHA RAJA ABD. HANAN)
Head
Civil & Construction Section
Testing Services Department

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TEST RESULTS:

Product : 1-p polymer - modified waterproofing membrane
 Model : TW 111 TESONSHIELD
 Method of Test : ASTM D 412 - 06a (2013)
 Standard Test Methods for Vulcanized Rubber and Thermoplastic
 Elastomers – Tension.

NO.	TYPE OF TEST METHODS	TEST RESULT
1.	Determination of tensile strength	1) 1.92 N/mm ² 2) 2.23 N/mm ² 3) 1.83 N/mm ² 4) 1.85 N/mm ² 5) 1.82 N/mm ² 6) 1.77 N/mm ² 7) 1.69 N/mm ² Mean : 1.87 N/mm²
2.	Determination of elongation	1) 151.5 % 2) 201.1 % 3) 382.7 % 4) 543.4 % 5) 346.0 % 6) 255.6 % 7) 365.6 % Mean : 320.9 %

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TEST RESULTS:

Product : 1-p polymer - modified waterproofing membrane
 Model : TW 111 TESONSHIELD
 Method of Test : BS EN 13580: 2002,
 Products and systems for the protection and repair of concrete structures – Test methods – Water Absorption and resistance to alkali for hydrophobic impregnations.

NO.	TYPE OF THE METHODS	TEST RESULT
1.	<u>Water Absorption</u> Absorption ratio %, compared with the treated and untreated specimen	1) 2.72 % 2) 2.69 % 3) 2.54 % Mean : 2.65 %

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TEST RESULTS:

Product : 1-p polymer - modified waterproofing membrane
 Model : TW 111 TESONSHIELD
 Method of Test : ASTM D 4541: 2002
 Standard Test Methods for Pull-Off Strength of Coatings Using Portable Adhesion Tester

NO.	TYPE OF THE METHODS	TEST RESULT
1.	Pull-Off Strength of Coatings Using Portable Adhesion Tester	<u>Pull Off Strength</u> 1) 0.12 N/mm ² 2) 0.07 N/mm ² 3) 0.07 N/mm ² 4) 0.10 N/mm ² 5) 0.08 N/mm ² Mean : 0.07 N/mm²

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TEST RESULTS:

Product : 1-p polymer - modified waterproofing membrane
 Model : TW 111 TESONSHIELD
 Method of Test : *ASTM E 96 / E96M - 12,
 Standard test Methods for Water Vapor Transmission of Materials

NO.	TYPE OF THE METHODS	TEST RESULT
1.	* Water Vapor Transmission Rate, g/h.m ² Procedure B- Water Method <u>Test Condition:</u> <i>Temperature</i> : 23 ± 1°C <i>Relative Humidity</i> : 50 ± 2% RH <i>Average Thickness</i> : 0.183 mm	
1.1	Water Vapor Transmission Rate, g/h.m ²	0.88
1.2	Water Vapor Permeance, g/Pa.s.m ²	4.36 x 10 ⁻⁸ (0.76 Perm)
1.3	Water Vapor Permeability, g/Pa.s.m ²	2.71 x 10 ⁻¹² (0.002 Perm Inch)

Note: *Test conducted by Chemical & Consumer Section, Testing Services Department, SIRIM QAS International Sdn Bhd

08 SEP 2015

