



Assessment of MAXSEALFLEX "M" Cement based waterproofing membrane to: AS 4654.1:2012 Waterproofing membrane systems for exterior use.

Report number 8229 - CSIRO Agreement number 20190402.01

Date of issue 14th August 2019

Client

Hanma Investments Pty. Ltd.

Unit 4/92 Bryant Street Padstow, NSW 2211, Australia

TERM OF VALIDITY

This CSIRO waterproofing membrane systems for exterior use above ground level report will lapse three years after the initial date of issue and assessment unless revalidation has been requested and granted.

The Report number 8229 valid until 14th August 2022

Comments

The MAXSEALFLEX "M" Cement based waterproofing membrane, as described herein, when subjected to the test methods of AS 4654.1:2012 the properties of (a) moisture vapour transmission, (b) water absorption, (c) cyclic movement (Class I), (d) durability, (e) Bond strength to concrete substrate and (f) membrane thickness met the performance criteria to AS 4654.1:2012 waterproofing membrane.

Commercial-in-confidence

Assessment of MAXSEALFLEX "M" Cement based waterproofing membrane from manufacturer Drizoro S.A. Spain

Testing to AS 4654.1:2012 Waterproofing membrane systems for exterior use -

Prepared on behalf of CSIRO by

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Signature:

A handwritten signature in black ink, appearing to read "Khanh Ho", written over a white background.

ASTM C794:2018 Standard test method for adhesion-in-peel of elastomeric joint sealants

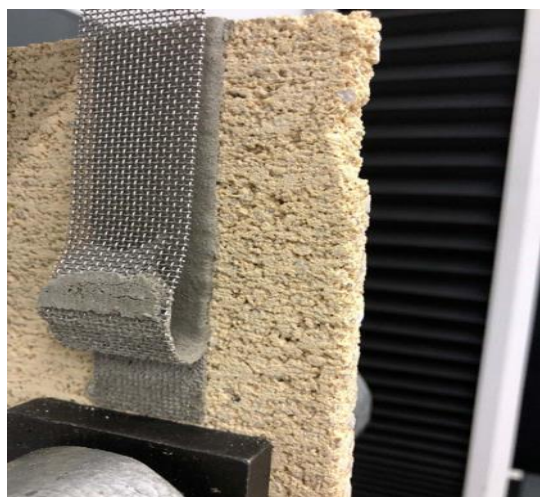
The measured dimensions of the test samples placed in the test rig stand are shown in Table 8, below.

Date of test: 5 June 2019 – 26 June 2019

TABLE 8 ADHESION-IN-PEEL STRENGTH TESTS RESULTS

Product	Samples	Length and Width of test samples	Concrete		James Hardie's Secura flooring	
			Peel Adhesion strength in Dry condition	Cohesive Failure Loss	Peel Adhesion strength in Dry condition	Cohesive & Adhesive Failure Loss
		mm	N	%	N	%
MAXSEALFLEX "M" Cement waterproofing membrane	8229/70	25x250	63.17	0	44.11	Cohesive substrate Failure
	8229/71	25x250	74.66	0	23.67	
				Average = 65 N	0%	Average = 40 N

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CONCRETE



SECURA FLOORIG

FIGURE 4 IMAGES OF TEST SAMPLE PERFORMING ADHESION-IN-PEEL