

Date of issue: Thursday, 22 September 2022

Jerome Capper Managing Director Crest Showers Ltd

BTS2217 CERTIFICATE OF TEST: TR220907-1

An Assessment of the performance of the Joint Tape for Shear Adhesion when adhered to "aquamox tile backer board"

1. Objective:

- 1.1 BEAL Testing Services were contracted by Crest Group Ltd to verify that the tape used to seal the joins between sheets of "aquamox tile backer board" will meet the performance requirements of the New Zealand Building Code.
- 1.2 Testing was carried out to assess the ability of the tape to provide adhesion to the aquamox tile backer board before a waterproofing membrane was applied over.

2. Methodology:

- 2.1 This method is based on BTS Test Procedure TP207 Assessment of Tape Shear Adhesion, which has been derived from ASTM D3330 Standard Test Methods for Peel Adhesion of Pressure-Sensitive Tape.
- 2.2 This test procedure has been developed in accordance with ISO 17007.

3. Test Criteria:

3.1 The test sample is deemed to have failed the performance requirement if the force is considered too low by an expert from BEAL.

4. Test Equipment:

4.1 Use was made of a Tinius Olsen Universal Testing Machine together with a tape and a 100mm serigated face grip.

5. Preparation of Samples

- 5.1 A sample comprising a sheet of the aquamox tile backer board, with the tape adhered 50mm over the edge, was constructed.
- 5.2 The board was attached to the serigated face grip, and the tape with backing liner still attached, gripped by the tape grip. Refer photo 1.

6. Test Conditions:

6.1 Testing was conducted at room conditions.

7. Results:

Break Distance (mm)	Ultimate Force (N)	Ultimate Stress (MPa)
9.21	43.7	0.0175
5.53	34.7	0.0139
6.28	44.3	0.0177
6.08	37.8	0.0151
6.45	24.8	0.0099
5.98	38.3	0.0145
Average:	36.9	
SD:	7.11	

8. Comment:

8.1 The results indicate acceptable tape shear adhesion.

9. Attachments:

9.1 Relevant Photos.

Colin Prouse - Building Scientist

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Authorised signatory

Building Element Assessment Laboratory Limited

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Tinius Olser	1
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Client:	Crest Showers		
Job Number:	BTS2217		
TR #:	220907 - 1		
Product Name:	Aquamox Wall Board		
Acc. Aging:	yes		

Standard:	ASTM C297	
Speed:	4.00 mm/min	
Test Start Date and Time:		
Graph Offset:	5.00 %	
Tested by:	David C	

Specimen #	Area mm²	Ultimate Force N	Ultimate Stress MPa	Break Distance mm
	2500	43.7	0.0175	9.21
	2500	34.7	0.0139	5.53
	2500	44.3	0.0177	6.28
	2500	37.8	0.0151	6.08
	2500	24.8	0.00993	6.45
	2500	36.3	0.0145	5.98
Average		36.9		6.59
SD		7.11		1.32

