



Industrial Research Services

Materials Science & Engineering, 37 Graham Road (PO Box 56), Highett, Victoria 3190, Australia
Telephone: 61 3 9252 6000 Facsimile: 61 3 9252 6244 Web: <http://www.cmse.csiro.au>

Registered Testing Authority - CSIRO

26 June 2009

Our Ref: EN 1498 03/0211

TEST REPORT No. 4887

Requested by: AMALFI Mosaics Pty Ltd
Client: Mr Anthony Aloj
on (date): 19 May 2009
Product Descriptions: AMAFLI Glass Mosaic Blue 50x50mm Tiles
Laticrete Super Floor & Wall Thin-Set Adhesive
Laticrete 4237 Thin-Set Mortar Additive
Laticrete SpectraLOCK® PRO Grout
Laticrete 1222 Midnight Black Colour

Sampling Details
Date: 19 May 2009
How (methods): Delivered to Highett

The results reported relate only to the sample(s) tested.
No responsibility is taken for the accuracy of the sampling unless it is done under our own supervision.

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This test report consists of 5 pages.

**These samples have been assessed to AS 4992.2-2006 Ceramic tiles – Grouts & adhesives.
The Standard is based on ISO 13007-1:2004.**

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REPORT NO: 4887
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CLIENT: AMALFI Mosaics Pty Ltd
PRODUCT DESCRIPTION: System: AMAFLI glass mosaic tiles
Laticrete Super Floor & Wall Thin-Set Adhesive, Thin-set Mortar Additive, SpectraLOCK® PRO Grout
ADHESIVE MANUFACTURER: Laticrete

SUMMARY OF RESULTS

AS 4992:2006 Ceramic tiles – Grouts and adhesives
Part 1 Terms, definitions and specifications for adhesives
Part 2 Test methods for adhesives (ISO 13007-2:2005, MOD)

Tensile adhesion strength

Normal Setting Adhesives C2

Assessment Description:

Tensile adhesion strength after water immersion

Requirement

≥ 0.5 N/mm²

Result

1.14 N/mm²

PASS

SUMMARY:

The failure of the tiling system; tiles, adhesive, and grout, occurred between the tiles and backing mesh. A dry adhesive mixture will have less penetration of the mesh to form a cohesive bond with the tiles.

The tiling system; AMAFLI glass mosaic tiles, Laticrete Super Floor & Wall Thin-Set Adhesive, Thin-set Mortar Additive, SpectraLOCK® PRO Grout with 1222 Midnight Black colour met the requirements for water immersion.



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ADHESIVE MANUFACTURER: Laticrete

Determination of tensile adhesion strength.

Test carried out in accordance with
AS 4992.2-2006 Ceramic tiles – Grouts & adhesives

Test Date: 25 June 2009

Laboratory: CSIRO, Highett
Substrate: Concrete 400mm x 400mm x 40mm
Test Conditions: 23°C and 50% RH
In accordance with ISO 13007-2: - 4.4.4.3
Mix Ratio: 22.7 Kg Cementitious powder / 5.5L Additive

Water Immersion: AMAFLI Glass Tiles

Sample No.	Total Load Newton Force (N)	Tensile Strength (MPa)	Tensile Strength (MPa) within 20% mean	Failure Mode
1	2.83	1.13	1.13	100% AF-T
2	2.87	1.15	1.15	100% AF-T
3	2.53	1.01	1.01	100% AF-T
4	2.84	1.14	1.14	100% AF-T
5	2.97	1.19	1.19	100% AF-T
6	3.10	1.24	1.24	100% AF-T
7	2.91	1.16	1.16	100% AF-T
8	2.51	1.00	1.00	100% AF-T
9	3.09	1.24	1.24	100% AF-T
10	2.88	1.15	1.15	100% AF-T
Mean	2.85	1.14	1.14	

Failure Code: Adhesion Failure (AF-S or AF-T), Cohesive failure within the adhesive (CF-A), Cohesive failure in the substrate or in the tile (CF-S or CF-T). See Failure mode informative annex.

Requirements: Normal setting adhesives (C1): => 0.50 N/mm² Obligatory

Determination of Adhesion: **21 days water immersion** **PASS** **1.14 N/mm²**

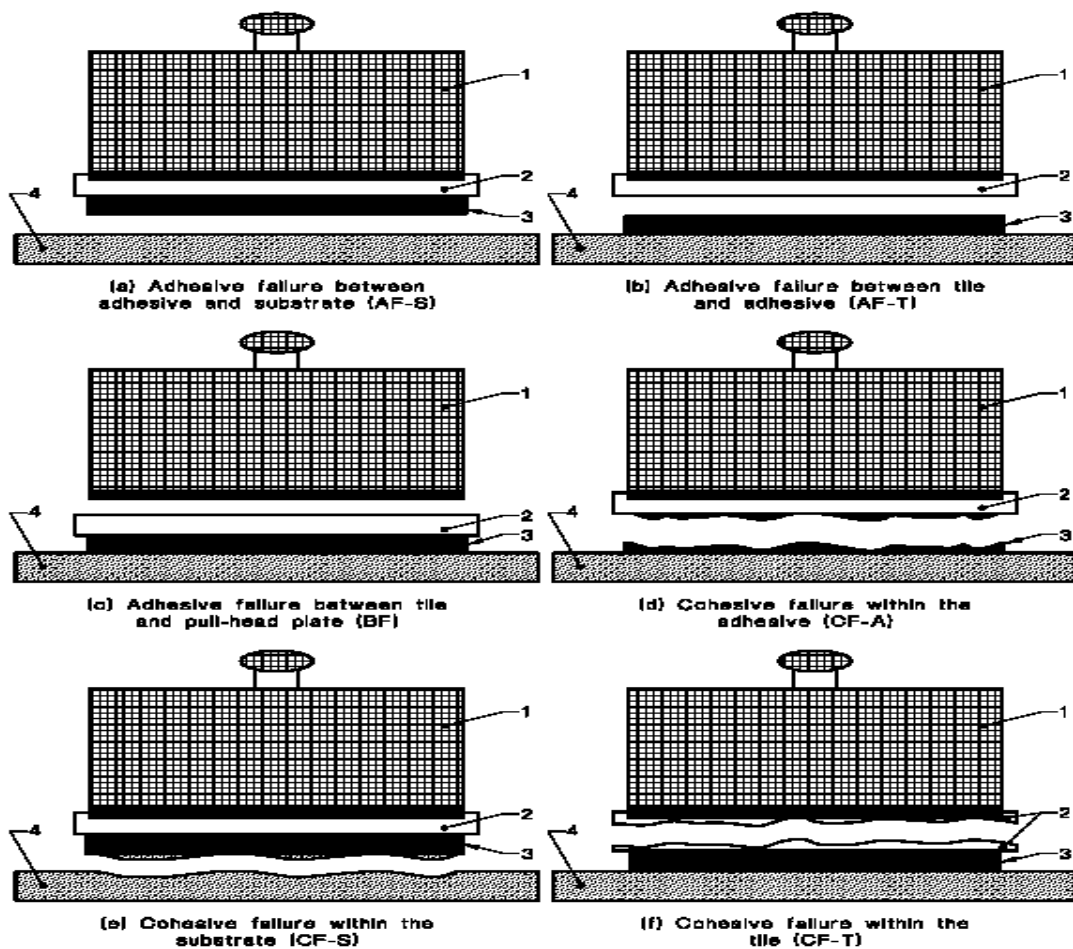
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 ADHESIVE MANUFACTURER: Laticrete

Informative annex:

FAILURE MODES

AS 4992.2(Int)—2003

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LEGEND:
 1 = Pull-head plate
 2 = Test tile
 3 = Adhesive
 4 = Substrate (concrete slab)

DIMENSIONS IN MILLIMETRES

FIGURE 3 FAILURE PATTERNS



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ADHESIVE MANUFACTURER:	Laticrete

Date and Place

26 June 2009

Highett, Victoria

Name, Title and Digital Signature:

A handwritten signature in black ink, appearing to read 'D. Weeks'.

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**DAVID WEEKS
TECHNICAL OFFICER
INDUSTRIAL RESEARCH SERVICES**