



CODEMARK
Australia
Certification Body:



**BUREAU
VERITAS**

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Certificate Holder:



Unitex Granular Marble
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Certificate of Conformity

Certificate number: CM70007

THIS TO CERTIFY THAT

Unitex Granular Marble Non-Cavity Base Board System

Type and/or use of product:

Insulation and surface protection of external walls of buildings

Description of product:

Unitex Granular Marble Base Board System is an expanded polystyrene external wall cladding system (for full product description refer to page 4 of this certificate)

COMPLIES WITH THE FOLLOWING BCA PROVISIONS AND STATE OR TERRITORY VARIATION(S)

BCA 2016

	Volume One	Volume Two	
Performance Requirement(s)	N/A	P2.1.1 (Non-Cyclonic Areas – Region A & B)	Structural stability and resistance to actions
		P2.2.2	Weatherproofing
		P2.3.4	Bushfire areas
		P2.6.1	Building
Deemed-to-Satisfy Provision(s)	N/A	3.12.1.1	Building fabric thermal insulation
		3.12.1.4	External walls
State or territory variation(s)	N/A	Vic P2.6.1	Building
		NSW P2.6.1(a)	Building
		NT 3.12(2005)	Energy efficiency
		Part 3.12 does not apply in NSW (BASIX applies)	Energy efficiency

Date of issue: 30-01-2019

Date of expiry: 30-01-2022

Certification Body name and signature

Daniel Darakas - Unrestricted Building Certifier

Bureau Veritas Australia Pty Ltd

Hendry Group Pty Ptd



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SUBJECT TO THE FOLLOWING LIMITATIONS AND CONDITIONS AND THE PRODUCT TECHNICAL DATA IN APPENDIX A AND EVALUATION STATEMENTS IN APPENDIX B

Limitations and conditions:

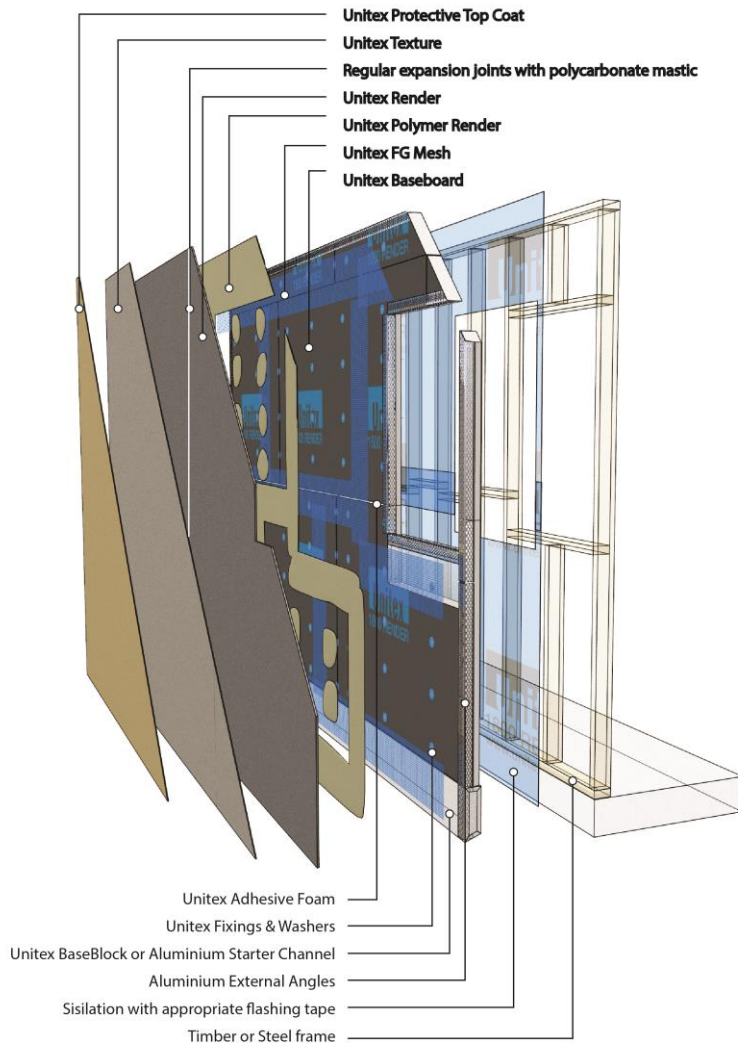
1. The product to be limited for use in Class 1 and 10 buildings.
2. The Installation is installed in accordance with the Unitex Baseboard Non-Cavity Technical Manual dated June 2015.
3. Suitable for bushfire prone areas, limited to a BAL29. Must be installed in accordance with the Exova Warringtonfire Test Report (EWFA Report No. 2856500.1), dated 18 July 2013.
4. The product is not to be used as a wall requiring achieving a fire resistance level, or form part of a wall requiring achieving a fire resistance level.
5. The product cannot be used for Class 1 and Class 10a buildings located within 900mm of the building or within 1.8m of another detached building on the same property.
6. The product cannot be used internally where a group rating less than Group 4 is required.
7. The product must only be used with breathable sarking behind the panels.
8. All fastenings must be protection against corrosion as set out in Table 3.3.3.1 of the Building Code of Australia Volume 2.
9. All fixtures and architectural features attached to the wall must be secured into the wall framing.
10. The product is permitted to be used in non-cyclonic areas (Wind Regions A & B) up to and including N3. Refer to Unitex Baseboard Cavity Technical Manual dated June 2015, and Unitex Baseboard Non-Cavity Technical Manual dated June 2015 for fixing requirements.

Building classification/s:

Class 1 and 10

Scope of certification: The CodeMark Scheme is a building product certification scheme. The rules of the Scheme are available at the ABCB website www.abcb.gov.au. This Certificate of Conformity is to confirm that the relevant requirements of the Building Code of Australia (BCA) as claimed against have been met. The responsibility for the product performance and its fitness for the intended use remain with the certificate holder. The certification is not transferrable to a manufacturer not listed on Appendix A of this certificate.

Disclaimer: The Scheme Owner, Scheme Administrator and Scheme Accreditation Body do not make any representations, warranties or guarantees, and accept no legal liability whatsoever arising from or connected to, the accuracy, reliability, currency or completeness of any material contained within this certificate; and the Scheme Owner, Scheme Administrator and Scheme Accreditation Body disclaim to the extent permitted by law, all liability (including negligence) for claims of losses, expenses, damages and costs arising as a result of the use of the product(s) referred to in this certificate.



APPENDIX A – PRODUCT TECHNICAL DATA

A1 Type and intended use of product

Insulation and surface protection of external walls of buildings

A2 Description of product

Unitex Granular Marble Base Board System is an expanded polystyrene external wall cladding system.

The Unitex Granular Marble Base Board System consists of; Base Board®, Unitex specified screws and plastic washers, expanding adhesive foam, Unitex® Polymer Render, Dry Cote® Base Board Render and a Décor decorative texture or Dry Cote powder texture finish

- Unitex Breathable Vapour Permeable Wall Wrap
- Self-adhesive flashing tape for weatherproofing around all window frames including sills, doors, openings, penetrations, intersections, connections, heads and jambs and also to join sheets of wall wrap - all of which must be flashed prior to panel installation
- Unitex IB-Board Panel or Unitex Base Board – available in 50mm, 75mm & 100mm thicknesses
- Unitex adhesive expanding foam
- Unitex fixing washer & Class 3, 10-gauge bugle head screws (further than 1km of coastal areas);
- Unitex fixing washer & Class 4, 10-gauge bugle head screws (within 1km of coastal areas of breaking surf);
- Unitex aluminium Starter Channel and or Unitex Base Blocks (BAL29 & BAL40)
- Aluminium Corner angles and Aluminium pre-meshed Corner angles and expansion beads installed prior to render application
- Unitex Polymer Render patching over all joints, fixings and corner angles
- Unitex IM-250 or 1m AR Fibreglass Mesh
- Unitex Décor decorative texture or Dry Cote powder texture finish
- Unitex polycarbonate sealant
- Finished with PTC protective top coat 2-3 coats for coverage

A3 Product specification

Expanded Polystyrene [EPS]

- Factory coated Unitex Base Boards® are 50, 75 and 100 mm thick Class SL EPS with a nominal density of 11.1 kg/m³ or Class M EPS with a nominal density of 19 kg/m³. The boards are supplied 1200 mm wide x 21.000 mm long and must be manufactured to meet the requirements of AS 1366 Part 3. The boards are factory coated with polymer modified cement-based render with an embedded alkali-resistant fibreglass mesh.
- Uncoated Unitex Base Boards® are 50, 75 or 100 mm thick Class S EPS with a nominal density of 16 kg/m³. Class M EPS with a nominal density of 19 kg/m³, or Class H EPS with a nominal density of 21.1 kg/m³. The sheets are supplied 1200 mm wide x 21.000 mm long and must be manufactured to meet the requirements of AS 1366 Part 3.
- Unitex Levelling Base Blocks are manufactured from lightweight concrete with a Class SL EPS insert. The Base Blocks are factory manufactured with polymer modified cement render with an embedded alkali-resistant fibreglass mesh and are supplied 2.4m long and are suitable for BAL-29 and BAL-40 projects, or for non BAL rated projects, Unitex supplied Aluminium Starter Channels are suitable
- Uni-Shape® Sill Blocks are manufactured from lightweight concrete with a Class SL EPS insert and are used to provide rigidity and slope to the window sill area. The sill blocks are factory coated with polymer modified cement render with an embedded alkali-resistant fibreglass mesh, and are supplied in lengths to suit the window frame.

Renderers

- Unitex Uni Cote® Dry Polymer Render is a Portland cement -modified, polymer-based render supplied in 20 kg bags and mixed on site with clean drinking water to a fine consistency. It is applied over the reinforcing mesh at all joints in the Unitex Base Board® factory coated sheets, window returns, internal and external corners and all washer heads.
- Unitex Polymer Render is a polymer-based paste render supplied in 15 litre pails that is adjusted on site with an addition of 5-10 % Portland cement. It is applied as a base coat with embedded alkali resistant fibreglass reinforcing mesh over site coated Unitex Base Board® uncoated sheets. window returns. internal and external corners and all washer heads.
- Uni Dry Cote® Base Board@ Render is a polymer-modified, Portland cement-based render supplied in 20 kg bags and mixed on site with clean drinking water. It is applied as the levelling/ filling coat over factory coated or site coated (with Unitex Polymer Render] Unitex Base Board® in a minimum 5 mm layer.
- Unitex Applied Decorative Dry Powder Textures [Uni Dry Cote@ Textures) are a range of polymer-modified. Portland cement-based finishing renders supplied in 20 kg bags and mixed on site with clean drinking water. They are available in scratch, fine scratch, fine trowel and medium trowel to provide different surface finishes.
- Unitex Applied Decorative Pre-Coloured Paste Textures (Uni Decor@ Textures) are a range of or pre-coloured acrylic textures supplied in 15 litre pails. They are available in fine-medium grade, heavy-coarse grade, 2-3 mm scratch. 1-2 mm scratch, 0.5-1 mm scratch. fine trowel finish. medium trowel finish, rough trowel finish, fine sand finish and medium sand finish to provide different surface finishes.

Paint System Specification

- At least two coats of a 100% acrylic-based exterior paint must be used over the finishing textures to improve the system's weathertightness and give the desired finish colour to exterior walls. Uni®-PTC is a 100% acrylic-based exterior paint formulated for use over Uni Dry Cote® cement-based applied texture finishes and optionally over Uni Decor® pigmented acrylic polymer based applied texture finishes. To maintain the exterior durability and freshness of the Unitex Base Board® System, regular maintenance and re-coating with Uni®-PTC every 7-10 years is recommended. Uni®-PTC is supplied in 15 litre pails. Paint colours must have a light reflectance value of £JO% minimum regardless of gloss value.

Accessories

- Reinforcing mesh - Uni-Mesh® IM 250 is an alkali-resistant fibreglass mesh with a nominal mesh size of approximately 5 mm square and a weight of 160 g/m² for use in domestic and light commercial situations.
- Angle beads - Uni-304 stainless steel or aluminium angles beads for use at external corners.
- Starter Channels - Uni-304 stainless steel or aluminium starter channels as alternative to Base Blocks in areas of BAL rating less than 29
- Fixings for Unitex Pre-Meshed Boards and uncoated EPS sheet (timber frame) - 100 x 3.55 mm [for 50 mm thick], 125 x 3.55 mm [for 75 mm thick] and 150 x 3.55 mm [for 100 mm thick] AS 3566 Corrosion Class 3 wood screws in mild or moderate industrial or marine environments and Corrosion Class LJ or stainless steel [Grade 316 or 316L] wood screws in severe marine environments with 50 mm diameter washers.
- Fixings for Unitex Pre-Meshed Boards and uncoated EPS sheet (steel frame) - 100 x 3.55 mm [for 50 mm thick], 125 x 3.55 mm [for 75 mm thick] and 150 x 3.55 mm [for 100 mm thick] self-drilling AS 3566 Corrosion Class 3 screws in mild or moderate industrial or marine environments and Corrosion Class LJ or stainless steel [Grade 316 or 316L] screws in severe marine environments with 50 mm diameter washers.
- Washers - LJ5 mm diameter HOPE washers.
- Waterproof membrane tapes - tapes covered by a valid BRANZ Appraisal for use as waterproofing membranes over tops of plastered parapets, balustrades, fixing blocks and the like.
- Flexible sealant - sealant complying with Type F, Class 25LM of ISO 11600. The sealant must be recommended by Unitex Granular Marble Pty Ltd.
- Adhesive foam - self-expanding, moisture cure polyurethane foam for use at junctions between factory coated and uncoated Unitex Base Boards®.
- Accessories used with the system which are supplied by the building contractor are:
- Sarking - kraft-based paper complying with AS/NZS LJ200, or breather-type membranes covered by a valid BRANZ Appraisal for use as wall wraps.
- Flexible sill and jamb flashing tapes - flexible flashing tapes complying with ICBO Acceptance Criteria AC1LJ8, or flexible flashing tapes covered by a valid BRANZ Appraisal for use around window and door joinery openings.
- Flashings - including window and door joinery head flashing, parapet cap flashings and horizontal joint flashings. All terminations and junctions must be adequately flashed using materials which are compatible with the Unitex Base Board® Non-Cavity System and comply with AS/NZS 290LJ.



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A4 Manufacturer and manufacturing plant(s)

Unitex Granular Marble Pty Ltd, 22 Park Drive Dandenong VIC 3175

A5 Installation requirements

The boards shall only be installed in accordance with the Technical Manual Unitex Base Board system – non cavity Version November 2018

A6 Other relevant technical data

Termites

Where the building is required to be protected from subterranean termite attack, the building must be protected by a barrier system that complies with the requirements of AS 3660.1. The selected system must be compatible with the use of EPS in the system.

Electrical Cables

PVC sheathed electrical cables must be prevented from direct contact with the Unitex Base Board®. When cables must penetrate the Unitex Base Board® for exterior electrical connections, the cable must be directly supported by passing through an electrical conduit.

Expansion/Control Joints

Expansion/Control joints must be constructed in accordance with the Technical Literature, and be provided as follows:

- Horizontal expansion/control joints - at maximum 6 m centres; at floor levels in timber framed construction and at floor levels in steel framed construction where significant movement is expected.
- Vertical expansion/control joints - at maximum 6 m centres; aligned with any control joint in the structural framing or substrate; where the system abuts different cladding types, where the system covers different substrate materials or where significant structural movement occurs such as changes in roofline, building shape, or structural system.

Note: Horizontal and Vertical Expansion/Control joints must be located over structural supports. The design of vertical expansion/control joints where the system abuts different cladding types is outside the scope of this Appraisal and is the responsibility of the designer who will consult Unitex for a drawn solution.

Inter-storey Junctions

Inter-storey drained joints must be provided for walls over 2 storeys in height. Inter-storey junctions must be constructed in accordance with the Technical Literature.

Note: It is the responsibility of the building designer to determine the requirements for barriers to vertical fire spread at inter-storey junctions.



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Impact Resistance

The system has adequate resistance to impacts likely to be encountered in normal residential use. The likelihood of impact damage to the system should be considered at the design stage, and appropriate protection such as the installation of bollards and barriers should be considered for vulnerable areas.

Wind Zones

The Unitex Base Board® Cavity System is suitable for use in non-cyclonic wind zones up to and including N4.

Unitex Base Board® Fixing

Unitex Base Boards® must be fixed through the cavity battens and cavity spacers to the wall framing at the maximum centres specified in Table 1.

Table 1: Uncoated Unitex Base BoardGI Fixing Centres for Edges and Intermediate Studs.

BCA Wind Class	Maximum fixing centres (mm) with studs at maximum 600mm centres	Maximum fixing centres (mm) with studs at maximum 400mm centres
N2	300	300
N3	300	300
N4	200	300

1. One fixing is required into each noggin and top and bottom plates at mid-nog length.
2. Fixings are also required into each noggin at 200 mm centres and top and bottom plates at mid-nog.

Serviceable Life

The Unitex Base Board® Non-Cavity System is expected to have a serviceable life of at least 40 years provided the system is maintained in accordance with this Appraisal, and the fixings, Unitex Base Boards® and renders are continuously protected by a weathertight coating and remain dry in service. Also based on Unitex's 40 year history of installing Unitex EIFS Systems.



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Maintenance

Regular maintenance is essential to ensure the performance requirements of the BCA are continually met and to ensure the maximum serviceability of the system.

Regular cleaning (at least annually) of the surface coating is required to remove grime, dirt and organic growth and to maximise the life and appearance of the coating. Grime may be removed by brushing with a soft brush, warm water and detergent. Solvent based cleaners must not be used.

Annual inspections must be made to ensure that all aspects of the cladding system including the finishing system, base render, flashings and any sealed joints remain in a weatherproof condition. Any cracks damaged areas or areas showing signs of deterioration which would allow water ingress must be repaired immediately. Sealant coatings and the like must be repaired in accordance with the instructions of Unitex Granular Marble Pty Ltd.

Minimum ground clearances as set out in this Appraisal and the Technical Literature must be maintained at all times during the life of the system. Failing to adhere to the minimum ground clearances given in this Appraisal and the Technical Literature will adversely affect the long term durability of the Unitex Bose Board® Non-Cavity System.

Installation Skill Level Requirements

Installation and finishing of components and accessories supplied by Unitex Granular Marble Pty Ltd must be completed by applicators that have been trained and recommended by Unitex Granular Marble Pty Ltd.

Installation of the accessories supplied by the building contractor must be completed by tradespersons with an understanding of Exterior Insulation and Finishing System wall claddings, in accordance with instructions given within the Unitex Base Board® Non-Cavity System Technical Literature and this Appraisal.

APPENDIX B – EVALUATION STATEMENTS

B1 Evaluation methods

1. Structural Assessment – A2.2(a)(iii) (Volume 1) Structural Assessment (Reference No. TP1806) issued by Stuart J Thurston of Branz Pty Ltd dated 06 October 2009 – testing to NCC BCA P2.1.1 (Volume 2).
2. Structural Assessment – A2.2(a)(iii) (Volume 1), Statement of Compliance issued by Daryl Collins of Collins Design Engineering Pty Ltd dated 19 March 2011. – Expert Judgement to NCC BCA P2.1.1 (Volume 2).
3. Structural Assessment – A2.2(a)(iii) (Volume 1), Certificate of Accreditation - Certificate Number V11/03 dated 09 June 2011 issued by Building Commission of Victoria. – Evidence of Suitability to NCC BCA P2.1.1 (Volume 2).
4. Structural Assessment – A2.2(a)(iii) (Volume 1), Branz Appraisal No. 758(2001) dated 22 November 2011. – Evidence of Suitability to NCC BCA P2.1.1 (Volume 2).
5. Weatherproofing Assessment – A2.2(a)(i) (Volume 1), Unitex Base Board System – Direct Fixed NCC-2016 Verification Methods FV1 and V2.2.1 (Test Report No. 2018-068-S1) issued by Ian Bennie and Associates – Verification Method to NCC BCA P2.2.2 (Volume 2).
6. Fire Resistance and Smoke Propagation Assessment – A2.2(a)(i) (Volume 1) CSIRO Report No. FNE10077 dated 23 March 2011 by CSIRO Materials Science and Engineering – tested to NCC BCA CP4 (Volume 1) as per AS/NZS 1530.3:1999
7. Bushfire Resistance Assessment – A2.2(a)(i) (Volume 1) EWFA Report Number 2856500.1 dated 07 August 2013 issued by Exova Warringtonfire – testing to NCC BCA GP5.1 (Volume 1), P2.3.4 (Volume 2) – Construction of building in bushfire-prone areas (as per AS3959).
8. Bushfire Resistance Assessment – A2.2(a)(i) (Volume 1) EWFA Certificate of Test (Certificate No. 2856500.1) dated 05 August 2013 issued by Exova Warringtonfire – testing to NCC BCA GP5.1 (Volume 1), P2.3.4 (Volume 2) – Construction of building in bushfire-prone areas (as per AS3959).

B2 Reports

1. Structural Assessment (Reference No. TP1806) issued by Stuart J Thurston of Branz Pty Ltd dated 06 October 2009.
This report provides the tests results of the Unitex Baseboard Non-Cavity System, and Unitex Baseboard Cavity System, when tested for use in Wind Regions A & B, non-cyclonic areas.
2. Statement of Compliance issued by Daryl Collins of Collins Design Engineering Pty Ltd dated 19 March 2011
This expert judgement provides the tests results of the Unitex Baseboard Non-Cavity System, and Unitex Baseboard Cavity System, when tested for use in Wind Regions A & B, non-cyclonic areas.
3. Certificate of Accreditation - Certificate Number V11/03 dated 09 June 2011 issued by Building Commission of Victoria
This evidence of suitability provides the tests results of the Unitex Baseboard Non-Cavity System, and Unitex Baseboard Cavity System, when tested for use in Wind Regions A & B, non-cyclonic areas, as well as the appropriate fixing methods for the installation of this product.

4. Branz Appraisal No. 758(2018) dated 22 November 2011
This evidence of suitability provides the tests results of the Unitex Baseboard Non-Cavity System, and Unitex Baseboard Cavity System, when tested for use in Wind Regions A & B, non-cyclonic areas, as well as the appropriate fixing methods for the installation of this product.
5. BRANZ – Letter outlining test results for wind speed fixings – Reference TP1806 (Date 6 October 2009)
This report provides the results of testing of different wind speeds on the fixings.
6. Unitex Base Board System – Direct Fixed NCC-2016 Verification Methods FV1 and V2.2.1 (Test Report No. 2018-068-S1) issued by Ian Bennie and Associates
This report is a performance-based solution via a verification method providing justification for the Unitex Baseboard Non-Cavity System, and Unitex Baseboard Cavity System for weatherproofing purposes.
7. EWFA Report Number 2856500.1 dated 07 August 2013 issued by Exova Warringtonfire
This report provides the justification based on the test results for the Unitex Baseboard Non-Cavity System, and Unitex Baseboard Cavity System, when installed up to and within a BAL 29 bushfire prone area.
8. EWFA Certificate of Test (Certificate No. 2856500.1) dated 05 August 2013 issued by Exova Warringtonfire
This report provides the test results for the Unitex Baseboard Non-Cavity System, and Unitex Baseboard Cavity System, when installed up to and within a BAL 29 bushfire prone area when assessed to AS1530.8.1
9. CSIRO, Materials Science and Engineering – Certificate of Test, Report No: FNE10077 (Date of Issue 28 March 2011)
This report provides the results of testing to AS/NZS 1530.3:1999 and specifies the fire hazard properties of the material.
10. CSIRO, Materials Science and Engineering – Test Report, Report No: FNK 10091 (Date of Issue 17 April 2011)
This report provides the results of testing to AS/NZS 3837.3:1998 for heat and smoke release rates of the material.
11. CSIRO, Materials Science and Engineering – Test Report, Report No: BCE Doc02/133 (Date May 2002)
This report provides the results of testing of the structural strength of the mechanical fastening system used to fix the expandable polystyrene panel to the framing system.
12. CSIRO, Materials Science and Engineering – Test Report, Report No: BCE Doc02/181 (Date June 2002)
This report provides the results of testing for ladder loading resistance.
13. CSIRO, Materials Science and Engineering – Test Report, Report No: BCE Doc02/182 (Date June 2002)
This report provides the results of testing of Soft Body Impact Resistance.
14. CSIRO, Materials Science and Engineering – Test Report, Report No: BCE Doc02/183 (Date June 2002)
This report provides the results of testing of Hard Body Impact Resistance.
15. CSIRO, Manufacturing Infrastructure and Technology – Test Report, Report No: MIT Doc02/214 (Date November 2002)
This report provides the results of testing of spacing of the mechanical fixings.
16. CSIRO, Manufacturing Infrastructure and Technology – Test Report, Report No: MHF-1444 (Date 24 June 2002)
This report provides the results of testing of materials for the thermal insulation of dwellings in accordance with AS/NZS 4859-2002