



AccreditMark Appraisal Certificate

AccreditMark

Appraisal No: AML0001AU
Expires: 15 May 2024
Version: 1.6, May 2023

Magnum Board Flooring Underlay

MAGNUM[®]
BOARD

Certificate Holder:
Health Based Building Limited
Address: 1062 Colombo Street, St Albans
Christchurch 8014, New Zealand
Phone: +64 3 732 8414



1. Product Description:

- Magnum Board[®] Flooring Underlay is an 18mm thick, fibre reinforced Magnesium Oxide (MgO) product used for interior flooring and exterior tiled areas in residential and light commercial buildings.
- It is supplied in sheets of size and weight that can be carried by one person and in one length that is suitable for installation onto 450 and 600mm joist centres.
- A tongue and groove is machined into the long edges and enables the product to be installed without the need for dwangs along the long edge joints.

2. Purpose and Use:

- Magnum Board[®] Flooring Underlay is intended for use as an interior flooring material and a tile underlay for interior wet areas and exterior tiled decks and balconies.
- The product has been assessed for use at 450 joist centres over solid timber joists, beams and laminated veneer lumber (LVL), and light gauge steel joists.
- Design, technical and installation information is provided in the Magnum Board[®] Flooring Underlay Technical Information (Technical Document No. #043AU, Version 3.0) produced by Health Based Building Ltd.
- The Technical Information also contains details about the installation equipment required, fixings, sealant / adhesive, other components used during installation, safety guidance, handling and storage instructions.
- The Magnum Board[®] Product Quality Plan, PQP Version 2.2 produced by Health Based Building Ltd describes the quality processes and procedures distributors and installers of Magnum Board[®] Flooring Underlay must follow.



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3. Building Certifier Information:

Supporting evidence and technical content for this appraisal certificate has been provided by the certificate holder, Health Based Building Limited. This information has been evaluated by AccreditMark Limited, and reviewed and approved by Barrie Titheradge, Unrestricted Building Certifier.

4. Product Technical Information:

Material:

- 18mm thick fibre reinforced Magnesium Oxide board (MgO).

Size:

- 2.7m x 0.6m x 18mm.

Profile:

- square ends, tongue and groove long edges.

Components:

- For Timber framing: Simpson Strong Tie Fasteners, 10g x 50 Square drive, CSK, coarse thread T17 305 S/S screw, and;
- 50 x 2.5-2.8mm round head coil or cassette stainless steel nail.
- For Steel framing: Simpson Strong Tie Fasteners 10g x 50 Square drive, CSK, 16TPI (medium) thread, winged self-drilling 316 stainless steel screws.
- Mapei Mapeflux PU45 adhesive / sealant.

Properties:

- non-hazardous.
- freeze-thaw resistant.
- suitable for wet areas.
- suitable for tiled deck areas and balconies
- dimensionally stable - freeze, thaw, heat and humidity.
- non-combustible.
- moisture resistant.
- mould and insect proof.
- good adhesion properties with tiling substrates, floor coverings and finishes.
- can be finished with a range of products.
- vapour permeable.



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5. Design and Installation:

Details regarding the design, use and installation of Magnum Board® Flooring Underlay are contained in Technical Document No. #043AU, v3.0 available from:

www.healthbasedbuilding.com.au

It is the responsibility of the Installer to correctly install Magnum Board® Flooring Underlay and comply with the appropriate requirements of the National Construction Code and applicable regulations and standards at the time of installation. The Installer must also follow the requirements of the Magnum Board® Product Quality Plan, PQP Version 2.2.

Design:

- Magnum Board® Flooring Underlay is suitable for installation over joists at 450mm centres.
- Floor or deck framing is to be installed according to AS 1684-2010 SAA National Timber Framing Code or Nash Standard for Residential and Low-Rise Steel Framing Parts 1 and 2.
- Waterproofing shall meet AS3740-2010 and AS4654.1-2012
- Magnum Board® Flooring Underlay:
 - is classified as non combustible.
 - tolerates heat and cold.
 - is vapour permeable (1.0 - 4.2 g/h.m²)
 - has an R-value of 0.13 m².K/W
- Magnum Board® has a specified waterproofing system using Mapei products. If other waterproofing systems are used, all components must be compatible with MgO board and be from one manufacturer.

Installation:

- Interior use - Magnum Board® Flooring Underlay must be installed to level framing and be fully supported on all square edges.
- Tiled deck exterior use - Magnum Board® Flooring Underlay must be installed with a minimum 1:100 fall away from the building and joists must run in the direction of the fall. The fall can be achieved by trimming or sloping the joists.
- There must be a minimum step down of 50mm from door sill level to the finished surface of the deck
- Magnum Board® Flooring Underlay must be fitted in a staggered layout.
- For applications where a waterproofing membrane is to be applied under tiles, Magnum Board® Flooring Underlay should have 2mm gap between all butt joints, filled with Mapei Mapeflux PU45.



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6. Assessment against the National Construction Code (NCC) Building Code of Australia, Volumes One & Two:

- Magnum Board® Flooring Underlay has been assessed as compliant with the following provisions:

NCC 2022 Volume One:

- Performance Requirements B1P1 (1) (a), (b); (2) (a), (b) & J4D1 (1), (2)
- Deemed to Satisfy Provisions Not applicable
- State or Territory Variations Not applicable

NCC 2022 Volume Two:

- Performance Requirements H1P1 (1), (2) (a), (b)
- Deemed to Satisfy Provisions Not applicable
- State or Territory Variations Not applicable

Building classifications: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10a

7. Product Appraisal Evaluation:

Summary of the assessment process:

- The product has been evaluated against all applicable NCC provisions.
- AccreditMark has considered the following during the assessment process: expected uses, installation practices, use as tile substrate for internal wet areas and exterior tiled decks and balconies.

Reason for granting certification:

- AccreditMark has found that Magnum Board® Flooring Underlay meets the relevant Performance Requirements and or Deemed to Satisfy Provisions of the NCC 2019, Volumes One and Two.

Performance was assessed from:

- In-service history: 15 years in USA and China; 5 years in Canada and New Zealand.
- Expert opinion/s, and or;
- Local or overseas test data supplied by the certificate holder:
 - structural (Flexural) testing - Holmes Solutions;
 - spread of Flame fire testing - BRANZ test report FAR 4338;
 - physical properties testing - RADCO Resources Applications Design and Controls Inc.



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8. Magnum Board® Flooring Underlay Limitations of Use:

- For use as flooring and tile substrate.
- Framing must be level prior to interior installation.
- Exterior use decks and balconies must have a fall of at least 1:100 away from the building.
- Square edges must be fully supported on each Magnum Board® Flooring Underlay sheet.
- Joints must be sealed where waterproofing is required.
- Magnum Board® Flooring Underlay:
 - is not assessed for bracing resistance to wind and earthquake.
 - must not be exposed to the weather for more than 60 days.
 - should be kept out of contact with copper piping as corrosion can occur.

9. Product Maintenance and Warranty:

- If Magnum Board® Flooring Underlay is intended to be used as a direct flooring surface without tiles, carpet or timber flooring installed, it should be finished to seal the surface and provide a decorative finish.
- No other maintenance is required apart from re-applying the finish (if applicable) when it becomes worn.
- Details of the warranty provided for Magnum Board® Flooring Underlay can be found in the Technical Document No. #043, v3.0 provided by Health Based Building Ltd.

10. Handling and Storage:

Handling:

- Magnum Board® Flooring Underlay is non-toxic, however it is advisable to always wear a dust mask, safety glasses and follow MSDS Guidelines.
- Only use a circular saw blade intended for the specific operation being undertaken.
- Do not use a grinder or continuous rim diamond blade for cutting.
- Do not dry sweep - use an extraction system with HEPA filtration.

Storage:

- Magnum Board® Flooring Underlay must be stored inside, on a solid surface in a well ventilated area up off concrete floors.
- Magnum Board® Flooring Underlay should be kept dry and protected from direct sunlight, rain and freezing conditions.
- Protect from dirt prior to and during installation.
- Protect the corners of Magnum Board® Flooring Underlay prior to, and during installation.
- Do not stack other materials on top of Magnum Board® Flooring Underlay.



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11. Conditions of Certification:

1. This Appraisal:
 - Relates only to Magnum Board® Flooring Underlay;
 - Must be read, considered and used together with the technical documentation supplied by Health Based Building Ltd.;
 - Does not address any legislation, regulations, codes or standards not mentioned herein;
 - Is revalidated annually by AccreditMark Limited;
 - Is copyright of AccreditMark Limited.
2. Health Based Building must:
 - Notify AccreditMark Limited of changes to:
 - their contact or ownership details
 - Magnum Board® Flooring Underlay product details, specifications, technical information, installation method, components, quality plan and marketing information;
 - the manufacture of Magnum Board® Flooring Underlay;
 - the manufacturing quality management system.
 - Carry out periodic quality control and conformity tests as requested by AccreditMark Limited.
 - Keep the Magnum Board® Flooring Underlay Technical Information - Technical Document No. #043AU, v3.0 up to date;
 - Ensure the Magnum Board® Product Quality Plan, PQP Version 2.2 plan is kept up to date and is used by all staff and installers;
 - Comply with AccreditMark Limited's Terms and Conditions.
3. To maintain validity of their certificate Health Based Building is:
 - Subject to annual audits and surveillance by AccreditMark Limited of:
 - A building site where Magnum Board® Flooring Underlay is being installed;
 - The Magnum Board® Flooring Underlay Technical Information - Technical Document No. #043, v3.0, and;
 - The Magnum Board® Product Quality Plan, PQP Version 2.2.

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11. Conditions of Certification (continued from previous page):

4. AccreditMark Limited makes no warranty or representation as to:
 - The nature of examples, or batches of, or individual installations of Magnum Board® Flooring Underlay including methods and workmanship;
 - The presence or absence of any patent or similar rights subsisting in the product or any other product;
 - The performance of any waterproofing system used with Magnum Board® Flooring Underlay;
 - Any guarantee or warranty offered by Health Based Building Ltd.
5. AccreditMark Limited's assessment of Magnum Board® Flooring Underlay is based on the technical evidence and documentation available at the time of assessment. If the technical evidence and or documentation is changed or updated in the future, the validity of this appraisal certificate will be re-assessed.

12. For AccreditMark Limited:

Greg Richardson BE (Hons)
Director and Certification Manager

Barrie Titheradge
Unrestricted Building Certifier