



Make your space, a healthy place.

OUR
COMMON
FUTURE



NEW
GENERATION
BREATHABLE
BUILDING
MATERIAL

**MAGNUM
BOARD®**

MAGNUM BOARD®

FLOORING UNDERLAY TECHNICAL INFORMATION

Ensure your next build is healthy, sustainable and cost effective.

Magnum Board® is a technologically advanced, high-quality Magnesium Oxide Board, providing superior performance in the Flooring Underlay category.



: Features

- Vapour permeable
- Free of nasty chemicals
- High moisture resistance
- High impact resistance
- Non-combustible with zero flame spread
- Mould and insect proof
- CO² negative
- Excellent adhesion
- Installer friendly
- Supported by independent test data
- Suitable for use in Foreverbreathe™ Specification

: Framing Guidelines

- Magnum Board® flooring can be fixed to steel or timber joists at 450mm centres.
- Construction of timber framing must be in accordance with local building codes for timber framed buildings.
- Construction of steel framing must be in accordance with local building codes for steel framed buildings.
- Must be fully supported by level joists to square edges and T&G edges at joist positions - refer to technical manual.

: Size Available

- Ergonomic size 2.7 x 0.6 x 18mm sheet for ease of installation over 450mm joist spacing's.

: Installation

- Magnum Board® Flooring Underlay must be fitted using a staggered layout. Where waterproofing is required, ensure butt joints have a 2mm gap between them, and are filled with PU45 sealant prior to application of waterproof membrane - refer to sections 5 and 6.

Technical Document No. :	# 043AU
Title :	Magnum Board® Flooring Underlay Technical Information
Issue Date :	23 / 10 / 2019
Version :	3.0

OUR
COMMON
FUTURE



1 : CONTENTS	
1 : PRODUCT, TOOLS AND FASTENERS	3
2 : INSTALLATION PROCEDURE FOR INTERIOR AND EXTERIOR USE	6
3 : IMPORTANT INFORMATION	7
4 : MATERIAL SAFETY, HANDLING, MAINTENANCE AND STORAGE REQUIREMENTS	8
5 : INSTALLATION PROCEDURE FOR INTERIOR USE	9
6 : INSTALLATION PROCEDURE FOR EXTERIOR USE : BALCONIES AND TILED DECKS	10
7 : MAGNUM BOARD MSDS	12
8 : PRE-CHECKLIST	20
9 : FINAL CHECKLIST	21
10 : NOTES	22



: Health Based Building

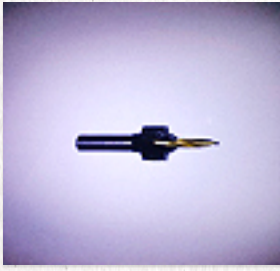
: New Zealand

1062 Colombo Street
 Edgware
 Christchurch 8014
 0800 611 711
enquiries@healthbasedbuilding.co.nz
www.healthbasedbuilding.com

: Australia

43 - 45 Overseas Drive
 Noble Park
 VIC 3174
 03 9701 2777, 03 9701 2677 (fax)
sales@mccormackhardwoodsales.com.au
www.healthbasedbuilding.com.au

1 : PRODUCT, TOOLS AND FASTENERS



: 5mm Ø screw and countersink bit



: Simpson Strong-Tie Code WSCBGA158SA
for use with steel framing



: Simpson Strong-Tie Code CBSDG158SA
for use with steel framing



: Simpson Strong-Tie Code WSCBGA158SA
for use with timber framing

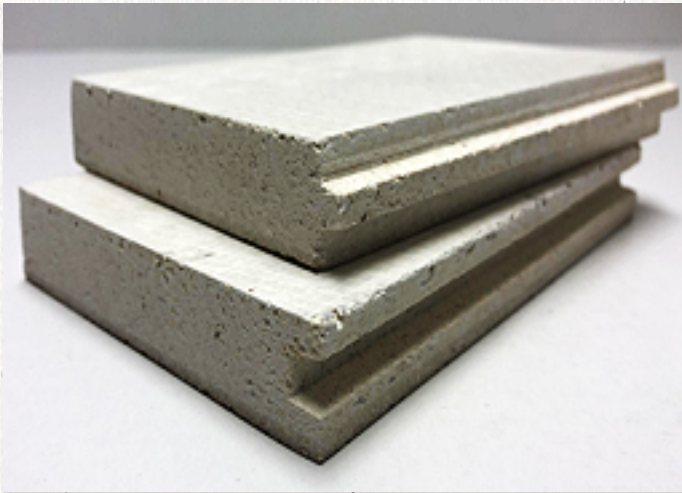


: 50 x 2.5-2.8mm
round head stainless
steel coil or cassette nail
for use with timber framing.

Use a suitably-powered coil nailer
or cordless nailer



1 : PRODUCT, TOOLS AND FASTENERS (cont.)



**MAGNUM
BOARD**®

: 18mm Magnum Board® flooring underlay.



: Mapei Mapeflux PU45 sealant and adhesive





**MAGNUM
BOARD**[®]

: Battery-powered drill gun with torque control.



: Coil Nailer

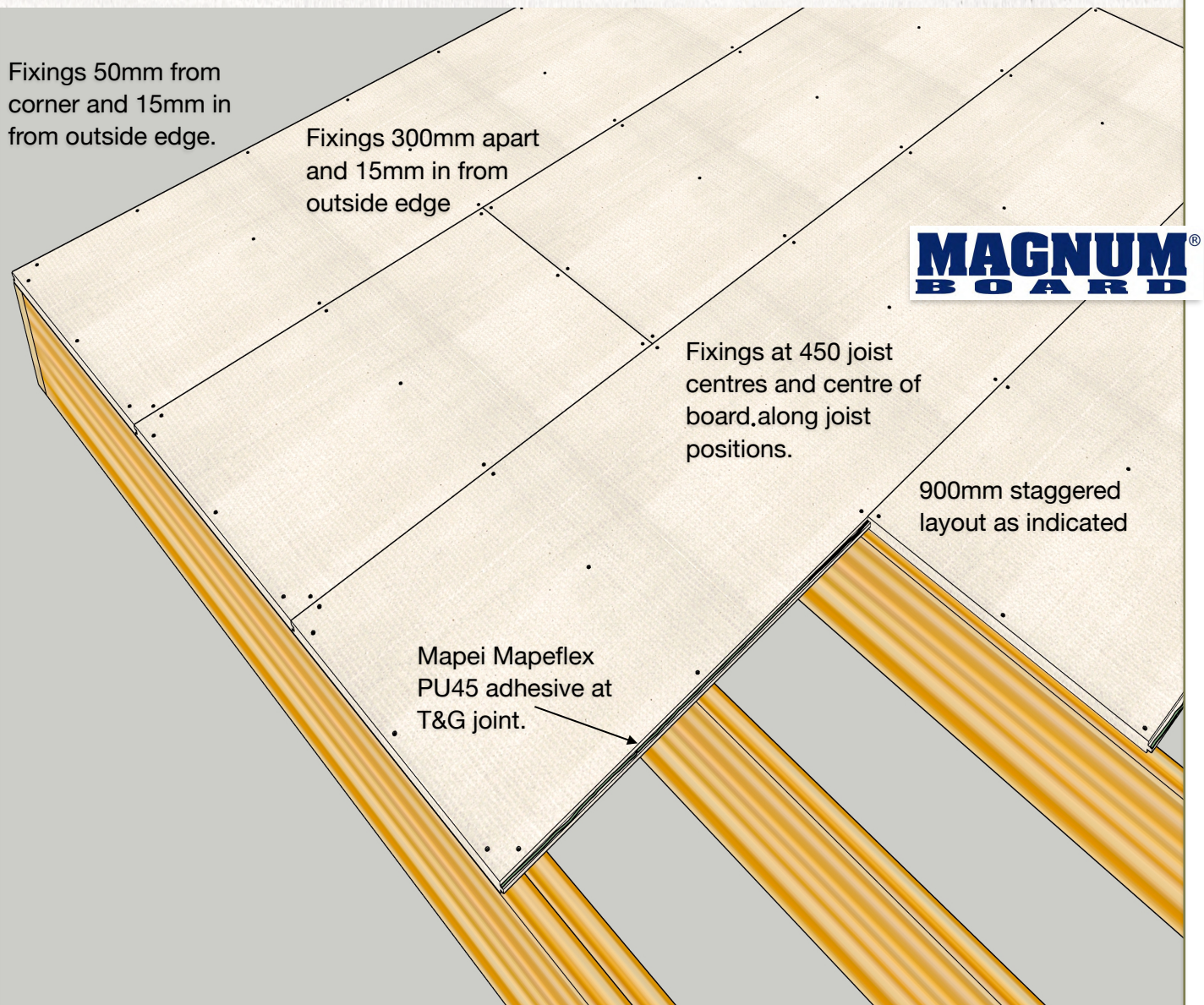
Coil / compressor or gas-powered nailer with N—Mar tip.



: HEPA extraction system with recommended cutting equipment.



2 : INSTALLATION PROCEDURE FOR INTERIOR AND EXTERIOR USE



18mm Magnum Board® flooring underlay.

- Nail or screw fixings - refer fastener options Product, Tools and Fasteners.
- When installing with screws always pre-bore and counter-sink before fixing.
- Specified adhesive applied as per manufacturers instructions.
- Apply a bead of PU45 to the top of steel joists.



3 : IMPORTANT INFORMATION

Magnum Board® 18mm Flooring Underlay can be installed to solid timber framing, LVL framing and steel framing in compliance with local building codes. Joist spacings must be at 450 mm c/c's. Framing quality must be to a standard that fully supports Magnum Board® to all square edges, to be installed in contact with framing.

: Responsibility

It is the responsibility of the installer to inspect their workplace prior to beginning the installation of Magnum Board® to ensure installed work will meet the owner / contractor's requirements. The owner / contractor must be notified of any concerns prior to the start of Magnum Board® flooring underlay placing.

: Warranty

While every effort has been made to ensure a satisfactory outcome with respect to the use of Magnum Board® Flooring Underlay - along with all Magnum Board® products - no dialogue or negotiation will be considered if any method or third-part product has been used apart from those described in this technical manual. Any warranty - written or implied - will be subject to examination, and will apply solely to the quality of the Magnum Board® product being deficient at the point of purchase only, or the subsequent deficient performance of the product once the correct method of installation has been determined. Any deficient performance resulting from the application of a third party product, will become the responsibility of that products manufacturer and / or agents. Magnum Board and its associated agents will not be held responsible for any such incident or outcome.

For more information see : <https://www.healthbasedbuilding.com.au>

: Surface Finishes

The surface of the Magnum Board® must be clean, dust and contaminant free prior to the commencement of any successive treatment or process. Mapei products have been tested for use in application of timber, tiles, carpet and vinyl.

For more information see : <https://www.healthbasedbuilding.com.au>

: Magnum Board® Flooring Underlay Technical Information Version

Version	Date	Author	Revision notes and changes
3.0	23 / 10 / 2019	Robin Curtis	



4 : MATERIAL SAFETY, HANDLING, MAINTENANCE AND STORAGE REQUIREMENTS

- Even though Magnum Board® is a non-toxic building material, always wear a dusk mask, safety glasses and follow MSDS Guidelines.
- Never use a circular saw blade that is inappropriate for the specific operation being undertaken.
- Never use a grinder or continuous rim diamond blade for cutting.
- All fixing holes to be pre-bored with a 5mm Ø drill and countersink bit prior to screw-fixing, in order to prevent cracking. Care must be taken to ensure that the hole does not continue into the framing beneath.
- Never dry sweep.
- It is good construction practice to marshal or stage the materials to be installed as close to the point of installation as possible.
- Always lay Magnum Board® on a solid surface and protect it from weather and dirt prior to and during installation.
- Always protect all edges of Magnum Board® prior to and during installation.
- Do not stack other materials on top of Magnum Board®.
- During construction, ensure Magnum Board's® surface is kept clean and unmarked by the removal of any building material waste, soil, or any organic or other potential contaminant, before the application of decorative coverings and coatings.
- Magnum Board® must be stored inside, in a well ventilated area, up off concrete floors, kept dry, out of direct sunlight and away from freezing conditions.

: Using Magnum Board® in relation to other manufacturers products :

- Magnum Board® must be free of all dust, paint and / or other surface contaminants before the commencement of any third party application or process.
- In case of an apparent conflict between the Magnum Board instructions and those of a third party, contact <https://www.healthbasedbuilding.com.au> for clarification.

: Installer

- To be installed either by, or under the direct supervision of, a qualified building practitioner.

Building Practitioner name : _____

Licence number : _____



5 : INSTALLATION PROCEDURE FOR INTERIOR USE

: Purpose

To define the guidelines for cutting and installing Magnum Board® Flooring Underlay.

Note :

- The following procedures require the use of an adhesive and sealant system, for which we have specified Mapei products. Please note the disclaimer on page 7 if you are considering a different brand of product. For further information with regard to Mapei, go to www.mapei.com
- Magnum Board® flooring is to be installed using a staggered layout.
- Where waterproofing or expansion allowance is required, ensure there is a 2mm gap between butt ends, and to be filled with Mapei PU45 prior to application of waterproof membrane.
- Magnum Board® can be cut and bored using hand held equipment with tungsten carbide tooling. We recommend the use of HEPA cutting and extraction systems
- Ensure a bead of Mapei PU45 adhesive is applied to the top of the steel joists before the installation of Magnum Board®, as well as to the top edge profile of the T&G joint.
- Install fixings working from the central joist positions supporting each sheet to outside edges
- Always use minimum C3 coated fixings or 316 stainless steel fixings as per the technical manual.
- Framing quality must be to a standard that fully supports Magnum Board® to all square edges to be installed in contact with the framing.
- Nail and screw heads are to finish flush or slightly below flush when installed to timber or steel joists. Embedding the nail or screw head below the recommended level will result in edge cracking. We recommend the use of torque or impact controlled, air or electric screw and nail guns.



Note :

- A bead of Mapei PU45 sealant is to be applied to top of steel framing to prevent possible corrosion of steel coating system.
- The following instructional guides can be found as download in the Magnum Board® flooring underlay listings at www.healthbasedbuilding.com.au
- Adhesive Instructions - Carpet Floor Coverings Adhesive Instructions - Vinyl Floor Coverings.
- Adhesive Instructions - Timber Flooring.
- Adhesive Instructions - Tile Cladding External Substrate.
- Adhesive Instructions - Tile Cladding Internal Substrate.

: Period of exposure

- Protection from direct exposure to weather must be in place within 60 days of installation. Contact Health Based Building™ for guidance as to protective coatings where longer periods of exposure are expected.



<https://www.healthbasedbuilding.com.au>

OUR
COMMON
FUTURE

6 : INSTALLATION PROCEDURE FOR EXTERIOR USE : BALCONIES & TILED DECKS

- Magnum Board® must be installed in strict accordance with this technical documents installation instructions.
- Magnum Board® must be dry and free of all dust, paint and / or other surface contaminants before the application of Mapie products.
- Mapie PU45 must be applied to T&G edge, and 2mm gap between square ends.
<https://www.mapei.com/au/en/products-and-solutions/detail/mapeflex-pu-45-ft>
- Prime the suitably prepared Magnum Board® with Eco Prim Grip neat.
<https://www.mapei.com/au/en/products-and-solutions/detail/eco-prim-grip>
- Upon suitable curing of the Primer, installation of the waterproofing is to be carried out using Mapelastic Smart and Mapenet 150 embedded into the body of its first coat. Mapeband SA is to be used at all expansion joints, with Mapeband SA gaskets at all penetrations.

Note :

- Mapenet 150 must not be fitted over or under the Mapeband SA
- The two-coat application must have a minimum thickness of 2mm.
<https://www.mapei.com/au/en/products-and-solutions/detail/mapelastic-smart>
<https://www.mapei.com/au/en/products-and-solutions/detail/mapenet-150>
<https://www.mapei.com/au/en/products-and-solutions/detail/mapeband-sa>
- Once the waterproofing membrane has cured, installation of the tiles can be carried out using Kerabond Plus mixed 100% with Isolastic. For rapid-set applications, use Keraquick S1 mixed 100% with Latex Plus.

Note :

- Depending on the size of the tile being used, an 8mm or 10mm 'V' notched trowel is recommended, notwithstanding that a 100% contact between the adhesive bed and tile is required.
- Consideration should be given to using the double spread (back-buttering) method of installation to achieve a solid adhesive bed as per the BRANZ Good Practice Guide to Tiling, Section 10.11.10.
<https://www.mapei.com/au/en/products-and-solutions/detail/kerabond-plus>
<https://www.mapei.com/au/en/products-and-solutions/detail/isolastic>
<https://www.mapei.com/au/en/products-and-solutions/detail/keraquick-s1>
<https://www.mapei.com/au/en/products-and-solutions/detail/latex-plus>

Grouting :

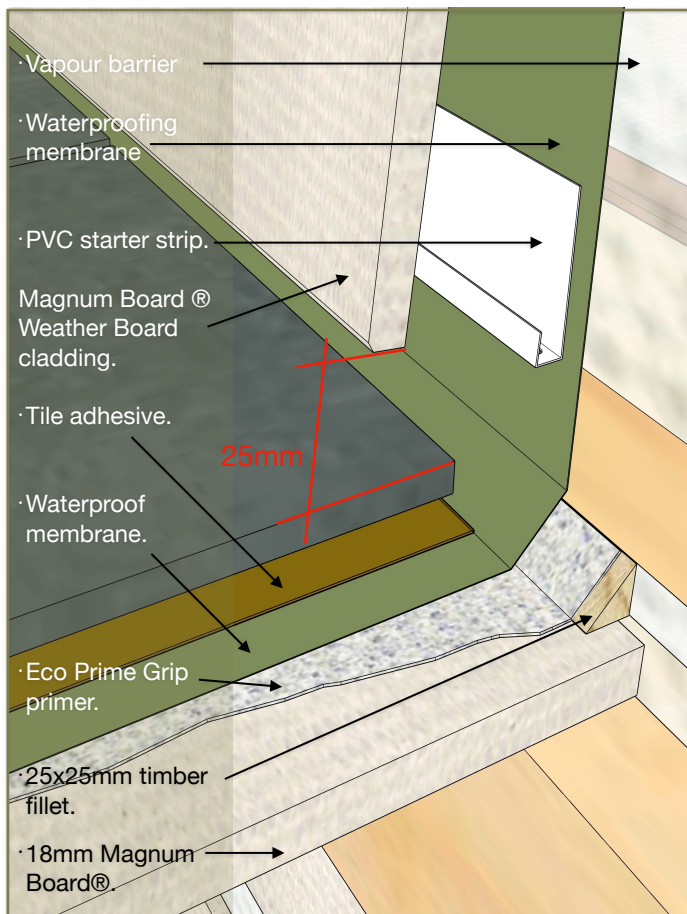
Upon satisfactory curing of the adhesive, grouting can commence using Ultracolor Plus with a 2mm minimum joint width.

<https://www.mapei.com/au/en/products-and-solutions/detail/ultracolor-plus>

Silicone Sealant :

- Installation of the silicone sealant is to be carried out using Mapesil LM.
<https://www.mapei.com/au/en/products-and-solutions/detail/mapesil-lm>



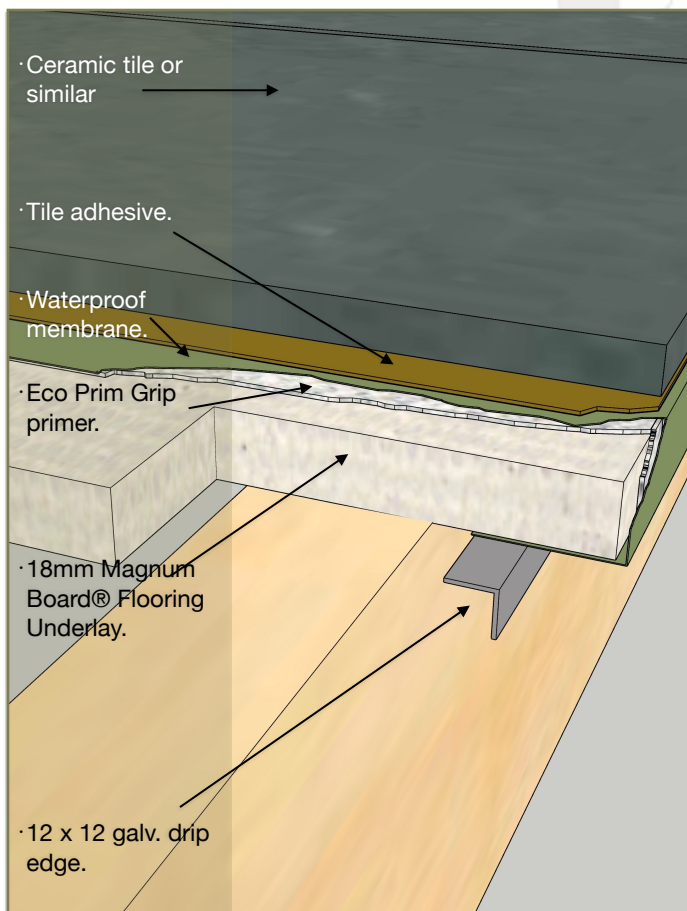


6 : INSTALLATION PROCEDURE FOR EXTERIOR USE : BALCONIES & TILED DECKS

- Mapei Mapelastic Smart and Mapenet 150 Waterproof membrane to be over prepared and primed Magnum Board® surface. Mapeband SA to be applied at expansion joints.
- 25x25mm fillet to support waterproof membrane, to be screw-fixed and primed prior to application of Eco Prime Grip.
- Ceramic or similar tile to be laid in strict accordance with sound practice as recommended in BRANZ Good Practice Guide to Tiling, Section 10.11.10.
- Allow for a 25mm clearance between the underside of the cladding and the top surface of the deck or balcony.
- Ensure F.F.L (finished floor level) 20mm min above finished surface of balcony or deck.

Note :

Health Based Building are not tiling specialists. Mapei products have been approved for use with Magnum Board® using the described preparation, application, and finishing process.



- Magnum Board® Flooring Underlay to be fixed to compliant framing - allow a 1° min fall to framing away from the exterior wall.
- 12 x 12 galv. angle to be fixed as indicated to provide drip edge at minimum 25mm back from leading edge.

