



Make your space, a healthy place.

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NEW
GENERATION
BREATHABLE
BUILDING
MATERIAL



MAGNUM BOARD®

BEVEL BACK WEATHERBOARD 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 Exterior Cladding category.

: Features

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

: Framing Guidelines

- Magnum Board® Bevel Back Weatherboards can be fixed to steel or timber framing.
- 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 installed to level framing and fully supported at point of connection to framing - refer to technical manual.

: Size Available

- 3.6m x 1.8m x 16mm board with end match profile for ease of installation.

: Installation

- Refer to technical manual.



Technical Document No. :	# 044AU
Title :	Magnum Board® Weatherboard Technical Information
Issue Date :	25 / 11 / 2019
Version :	3.0

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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 timber framing



: 50 x 2.5-2.8mm
round head stainless
steel coil or cassette nail.

Use a suitably-powered coil nailer
or cordless nailer



1 : PRODUCT, TOOLS AND FASTENERS (cont.)



MAGNUM[®]
BOARD

: 16mm Magnum Board[®] Weatherboard.



: Mapei Mapeflux PU45 Adhesive and gun





: 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 : IMPORTANT INFORMATION

- Magnum Board® Bevel Back Weatherboard can be installed to solid timber framing, LVL framing and steel framing in compliance with local building codes.
- Stud spacing's not to exceed 600mm centres. Stud spacing's will reduce for use in specific wind classifications.
- A 35mm minimum stud width is required for timber or steel framing. Steel framing gauge to be 0.55 - 1.6 based metal thickness.
- Vapour permeable frame wrap must be in place between Magnum Board and steel framing to prevent corrosion of steel framing. Timber framing must be kiln dried. Framing quality must straight and level to a standard that supports Magnum Board® to all surfaces in contact with framing. Installation to buckled or bent framing will result in tension within Magnum Board that may lead to movement in T&G joints and establish surface cracking.
- Minimum distance from earth / ground to Magnum Board must be no less than 150mm. Minimum distance from decks, paths, driveways etc is 25mm.
- All wall openings, penetrations, intersections, connections, window sills, heads and jambs must be flashed prior to installation.
- Where screws are to be used, 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.



2 : IMPORTANT INFORMATION (cont.)

: 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® Bevel Back Weatherboard - along with all Magnum Board® products - no dialogue or negotiation will be considered if any method or third-part product has been used a part 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://healthbasedbuilding.co.nz/documents/MagnumBoardWarrantyDocument30-year.pdf>

: 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. Coating must commence within 30 days of installation. Resene Stone Strengthener as a primer, Resene acrylic and Foreverbreathe Silicate Paints have been approved for use with Magnum Board.

: Magnum Board® Flooring Underlay Technical Information Version

Version	Date	Author	Revision notes and changes
3.0	25 / 11 / 2019	Robin Curtis	



3 : MATERIAL SAFETY, HANDLING, MAINTENANCE AND STORAGE REQUIREMENTS

- Even though Magnum Board® is a non-toxic building material, always wear a dust 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.
- 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 : _____




4 : INSTALLATION PROCEDURE FOR EXTERIOR USE

: Purpose

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

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 8 if you are considering a different brand of product. For further information with regard to Mapei, go to www.mapei.com.au 
- Magnum Board® is to be installed using a staggered layout.
- Where waterproofing or expansion allowance is required, ensure a 2mm gap between butt ends. Gap can be filled with Mapei PU45.
- If surface imperfections or visible fixings require filling use FX Exterior Plaster. More information can be found at :
<https://www.healthbasedbuilding.com.au/shop/fx-super-base-coat-x-10l?gn=Magnum%20Board&gp=5>
- 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 continuous bead of Mapei PU45 adhesive is applied to the back edge of the male T&G portion before male and female portions are connected. Do not apply excessive volumes.
- 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 edges to be installed in contact with the framing.
- Where screws are to be used, 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.
- 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.
- Lap to be 30mm with fixing positions to be no less than 20mm down from top edge of board under lap. Fixing position in from ends of boards to be no less than 20mm.
- Minimum distance for T&G connection past framing is 100mm.

: Period of exposure

- Protection from direct exposure to weather must be in place within 30 days of installation. Contact Health Based Building™ for guidance as to protective coatings where longer periods of exposure are expected.



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5 : TECHNICAL DRAWINGS DIRECT FIX TIMBER AND STEEL FRAMING

Note :

- For further information, go to :

<https://healthbasedbuilding.co.nz/documents/MagnumBoard16mmBBWBDirectFixInstallationDrawings.pdf>



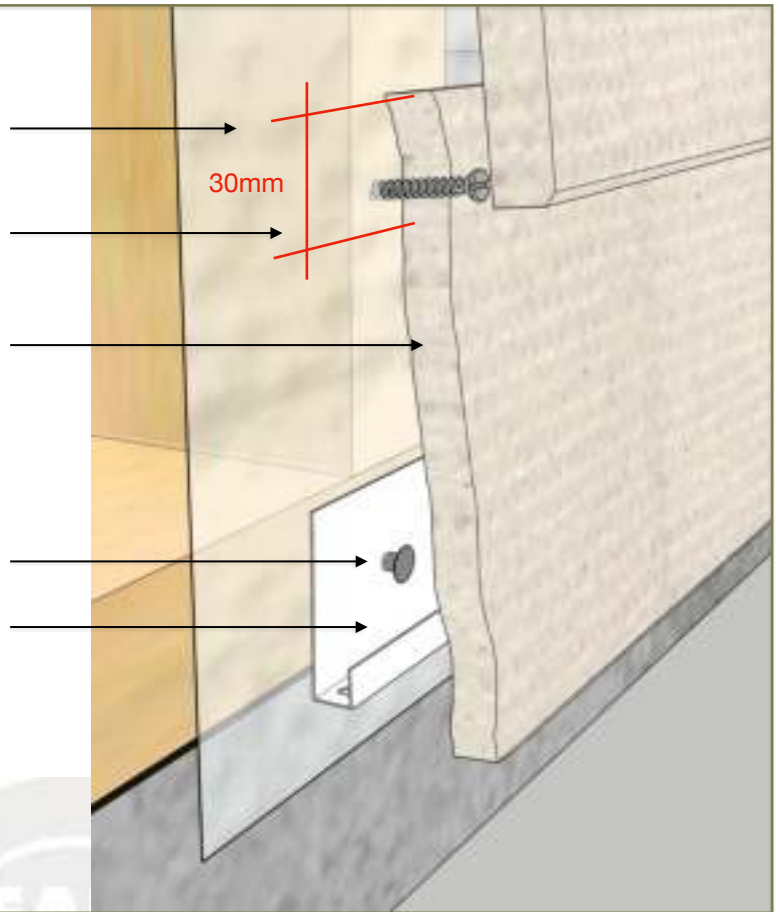
6 : PREPARATION : 1

Vapour barrier installed in strict accordance with code compliance and manufacturers instructions. Care and attention to detail with penetrations, joins, laps and fixings is paramount.

Magnum Board® Weather Board allow for 30mm lap as indicated. Ensure weather board is no less than 150mm above ground level

Fixings - see page 3.

PVC starter strip located to allow maximum weather board overhang of 20mm.



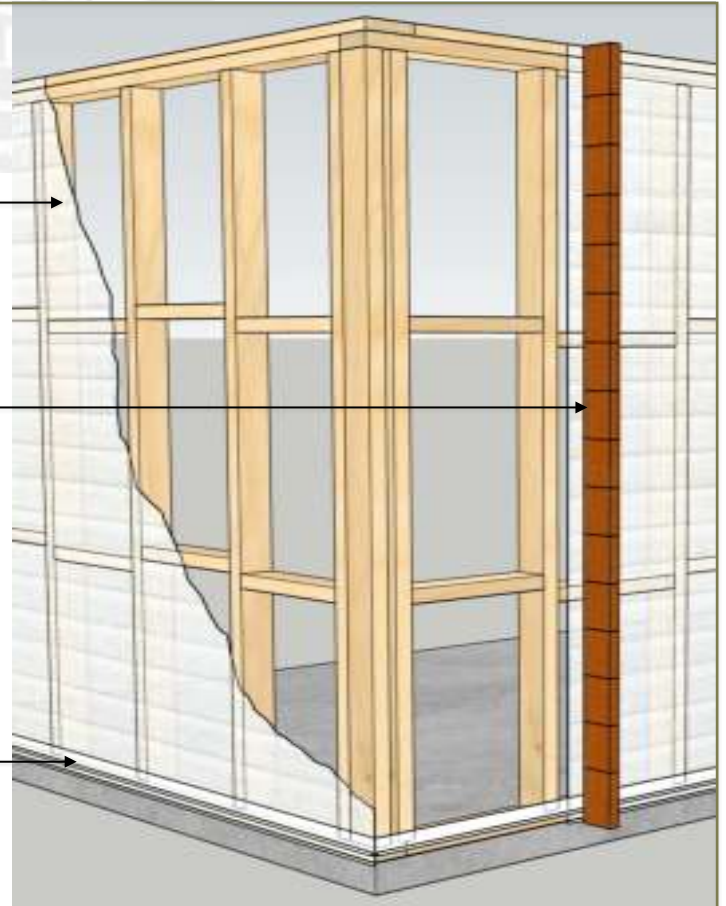
<https://www.healthbasedbuilding.com.au/shop/magnum-board-weatherboard-16mm?gn=Magnum%20Board&gp=2>

7 : PREPARATION : 2

Vapour barrier.

Storey rod - pre-mark at 150mm laps.

PVC starter strip.

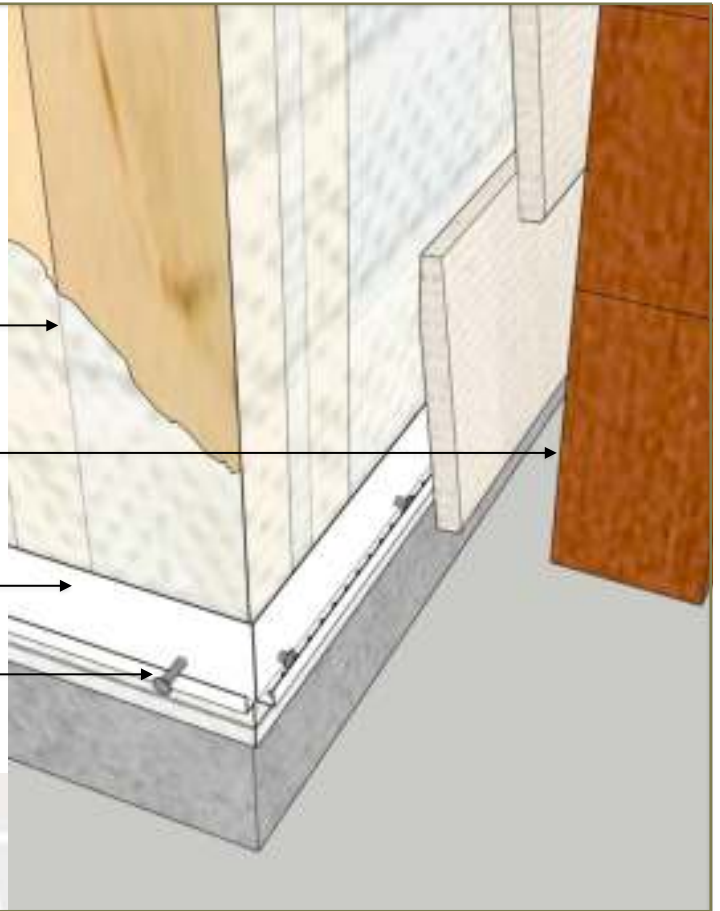


<https://www.healthbasedbuilding.com.au>

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8 : INSTALLATION

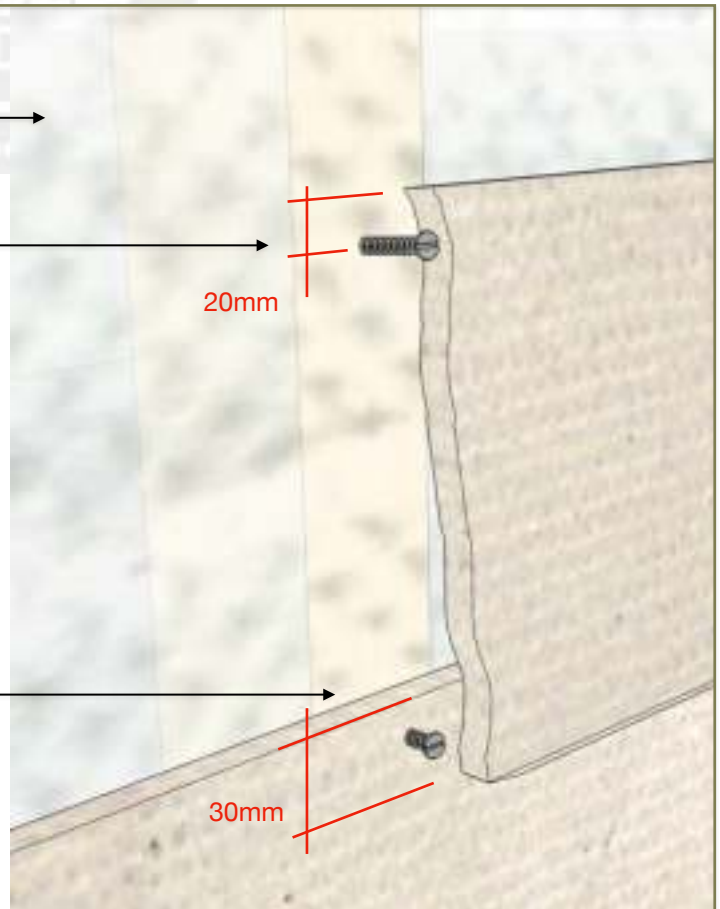
- Vapour barrier.
- Storey rod - set end at bottom of Magnum Board® Weather Board - allow for 150mm cover plus a 30mm lap.
- PVC starter strip.
- Nail.



<https://www.healthbasedbuilding.com.au/shop/magnum-board-weatherboard-16mm?gn=Magnum%20Board&gp=2>

9 : FIXING

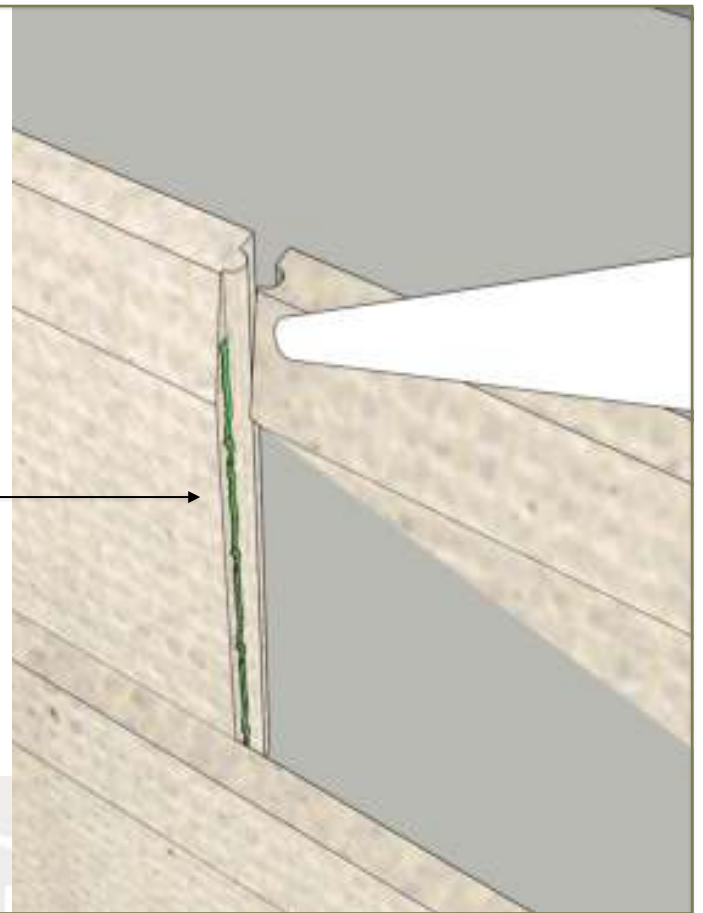
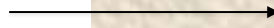
- Vapour barrier.
- Fixings to be 20mm from top to centre. Pre-drill hole when fixing.
- Magnum Board® Weather Board - allow for 150mm cover plus a 30mm lap.



10 : JOINTING

Vapour barrier not shown for clarity.

Magnum Board® Weather Board.
Apply Mapei Mapeflux PU45 to back of T&G joint.



<https://www.healthbasedbuilding.com.au/shop/magnum-board-weatherboard-16mm?gn=Magnum%20Board&gp=2>

11 : EAVE JUNCTION

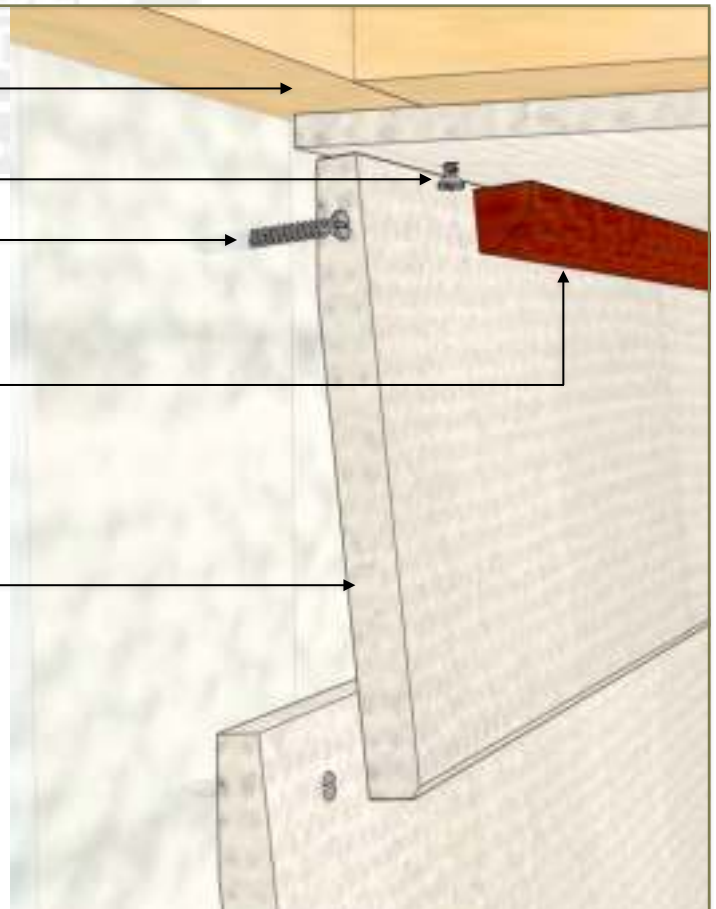
Soffit framing in accordance with code compliance
and good sound practice.

Fixings - see page 3.

Fixings.

Storm moulding.

Magnum Board® Weather Board.



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

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12 : SLAB JUNCTION

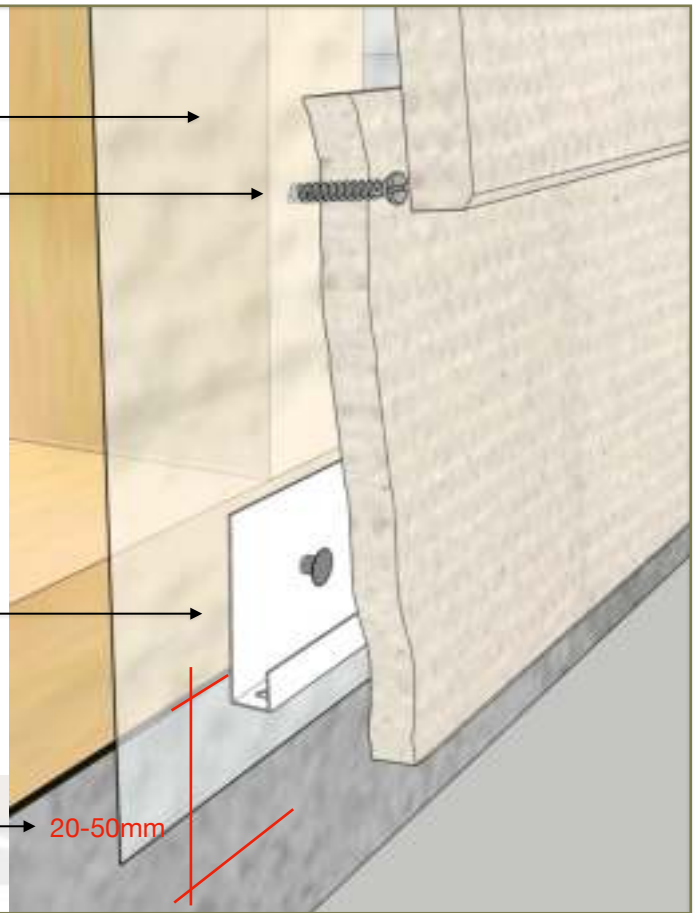
Vapour barrier.

Fixings.

PVC starter strip.

Magnum Board® Weather Board.
Allow 20 - 50mm overhang passed Finished Floor
Level (FFL) for weathering.

20-50mm



<https://www.healthbasedbuilding.com.au/shop/magnum-board-weatherboard-16mm?gn=Magnum%20Board&gp=2>

13 : WEATHERTIGHT DETAILS : EXTERNAL 13.1 : EXTERNAL CORNER : MITRE

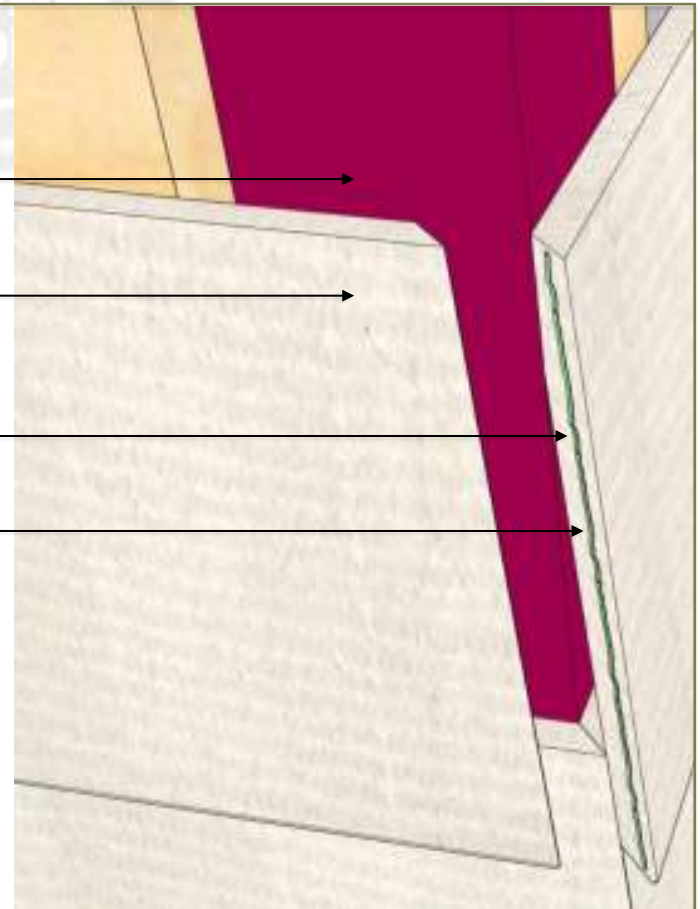
Vapour barrier not shown for clarity.

75x75mm flashing to be fixed over vapour barrier.
Avoid nailing through when fixing weather boards.

Magnum Board® Weather Board
- note Respiratory and Eye Protection instructions
under Section 8 on P24 when cutting.

Mitre to be 45° with a further allowance to be
made for bevel.

Allow to apply Mapei Mapeflux PU45FT adhesive
prior to fixing. Apply a strong pressure to ensure a
satisfactory bond and finish.



13 : WEATHERTIGHT DETAILS : EXTERNAL
 13.2 : EXTERNAL CORNER : SOAKER

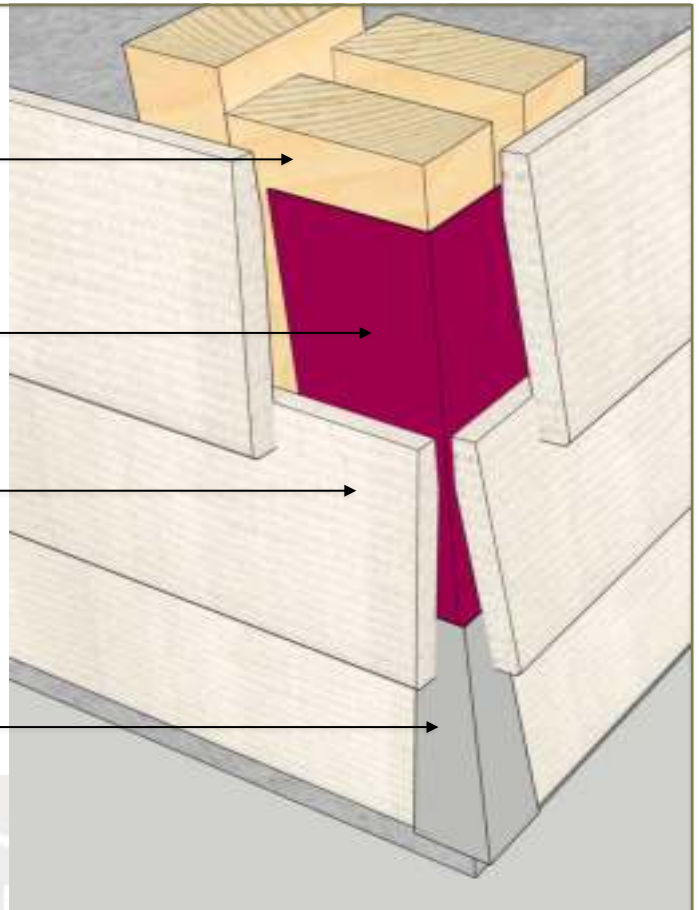
Corner framing in accordance with code compliance and good sound practice.

Vapour barrier not shown for clarity.

75x75mm flashing to be fixed over vapour barrier. Avoid nailing through when fixing weather boards.

Magnum Board® Weather Board.

Galvanised soaker.



<https://www.healthbasedbuilding.com.au/shop/magnum-board-weatherboard-16mm?gn=Magnum%20Board&gp=2>

13 : WEATHERTIGHT DETAILS : EXTERNAL
 13.3 : EXTERNAL CORNER : COVER BOARD & SCRIBERS

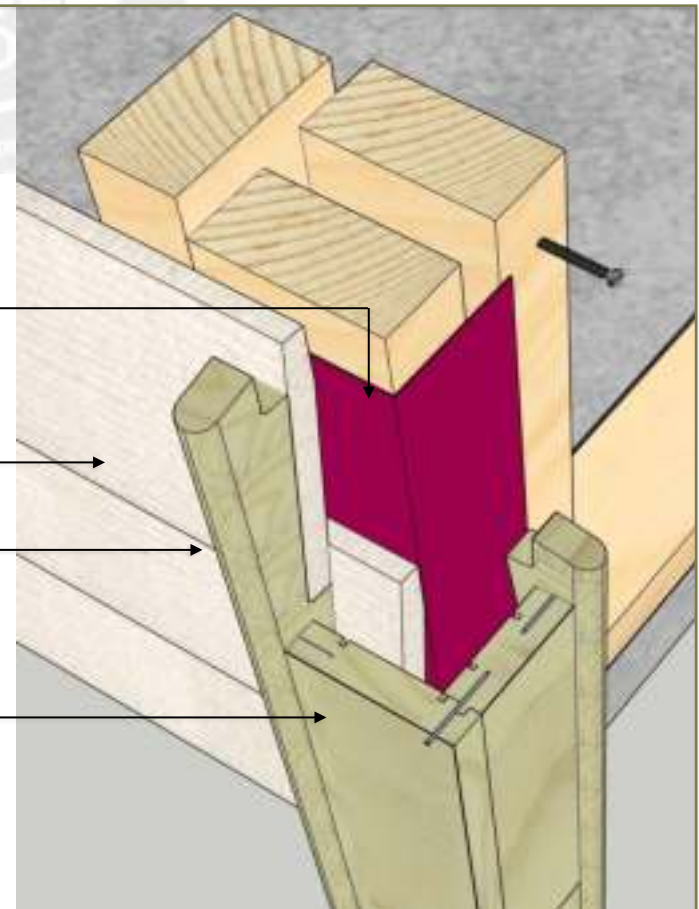
Vapour barrier not shown for clarity.

75x75mm flashing to be fixed over vapour barrier. Avoid nailing through when fixing weather boards.

Magnum Board® Weather Board.

Solid timber 43x18mm Pre-Cut Scriber.

Solid timber 90x20mm Box Corner Groove and Solid timber 70mm External Corner with Tongue.



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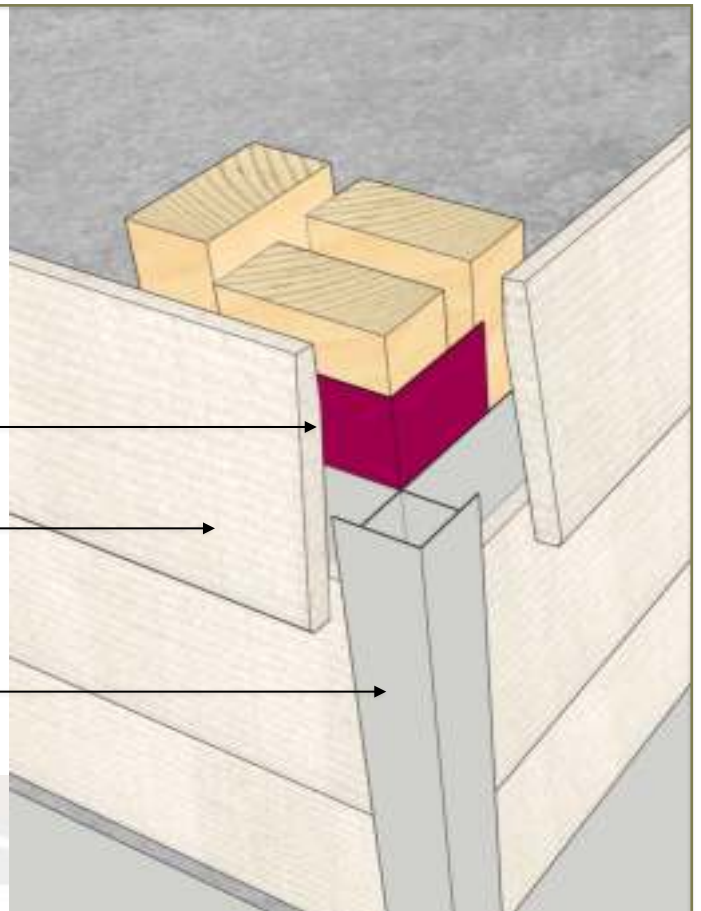
13 : WEATHERTIGHT DETAILS : EXTERNAL
 13.4 : EXTERNAL CORNER : MOULDING

Vapour barrier not shown for clarity. Ensure it wraps around the corner in a continuous length.

75x75mm flashing to be fixed over vapour barrier. Avoid nailing through when fixing weather boards.

Magnum Board® Weather Board. Leave a 2mm gap between end face of weatherboard and inside face of flashing.

Aluminium boxed corner - install in accordance with manufacturers instructions.



<https://www.healthbasedbuilding.com.au/shop/magnum-board-weatherboard-16mm?gn=Magnum%20Board&gp=2>

14 : WEATHERTIGHT DETAILS : INTERNAL
 14.1 : INTERNAL NOTCH & SCRIBE

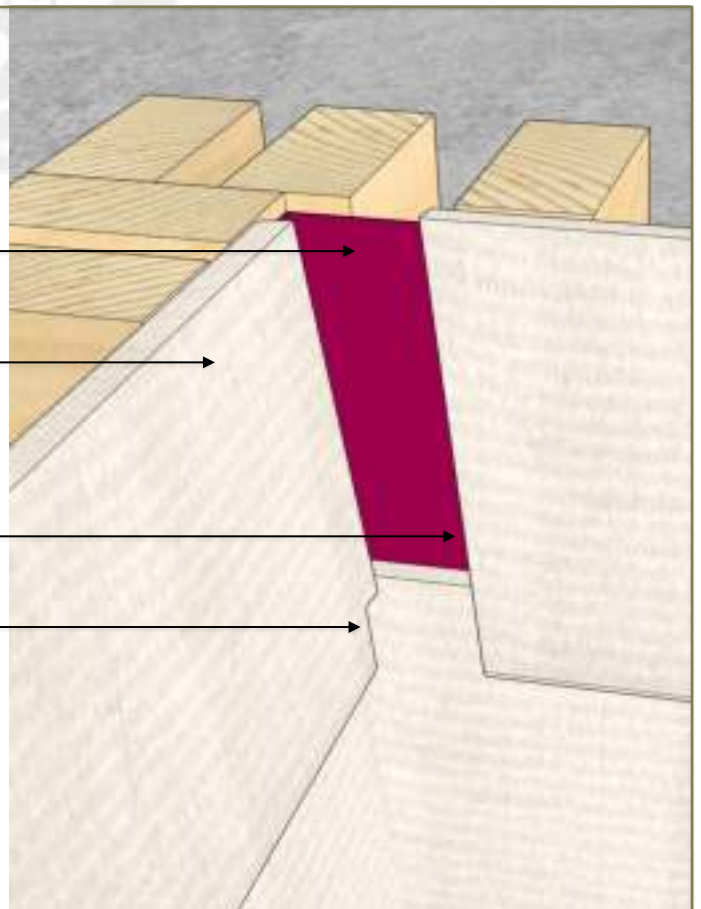
Vapour barrier not shown for clarity.

75x75mm flashing to be fixed over vapour barrier. Avoid nailing through when fixing weather boards.

Magnum Board® Weather Board
 - note Respiratory and Eye Protection instructions under Section 8 on P24 when cutting.

Allow to apply sealant to cut faces.

Cut to notch evenly to front face of weather board.



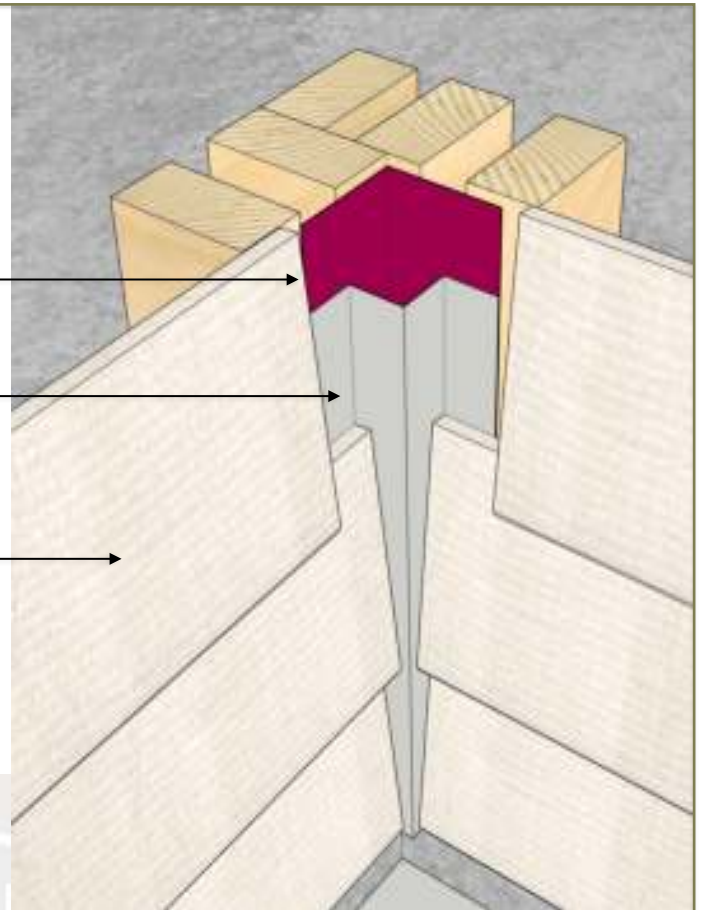
14 : WEATHERTIGHT DETAILS : INTERNAL 14.2 : INTERNAL MOULDING

Vapour barrier not shown for clarity. Ensure it wraps around the corner in a continuous length.

75x75mm flashing to be fixed over vapour barrier. Avoid nailing through when fixing weather boards.

Aluminium 'W' corner - install in accordance with manufacturers instructions.

Magnum Board® Weather Board. Allow to leave a 2mm gap and apply sealant between end face of weatherboard and 'W' corner.



<https://www.healthbasedbuilding.com.au/shop/magnum-board-weatherboard-16mm?gn=Magnum%20Board&gp=2>



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15 : WINDOWS : JAMB 1

Folded Colorsteel or similar head flashing.

Solid timber 43x18mm Pre-Cut Scriber.

Folded Colorsteel or similar cill flashing.



<https://www.healthbasedbuilding.com.au/shop/magnum-board-weatherboard-16mm?gn=Magnum%20Board&gp=2>

16 : WINDOWS : JAMB 2

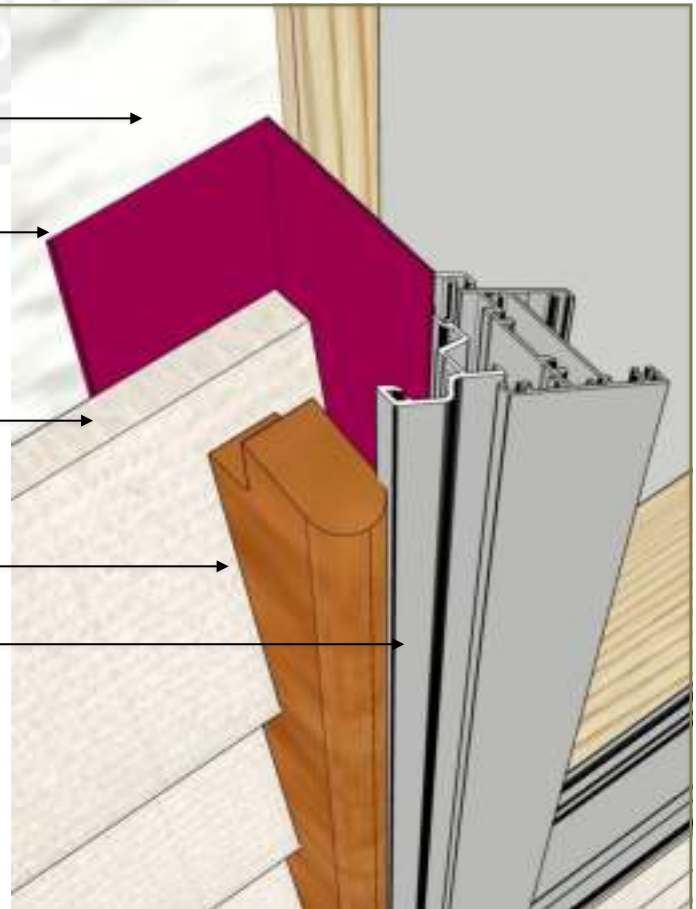
Vapour barrier.

75x75mm jamb flashing to be fixed over vapour barrier. Avoid nailing through when fixing weather boards.

Magnum Board® Weather Board.

Solid timber 43x18mm Pre-Cut Scriber.







Aluminium Window fitted in accordance with manufacturers instructions.

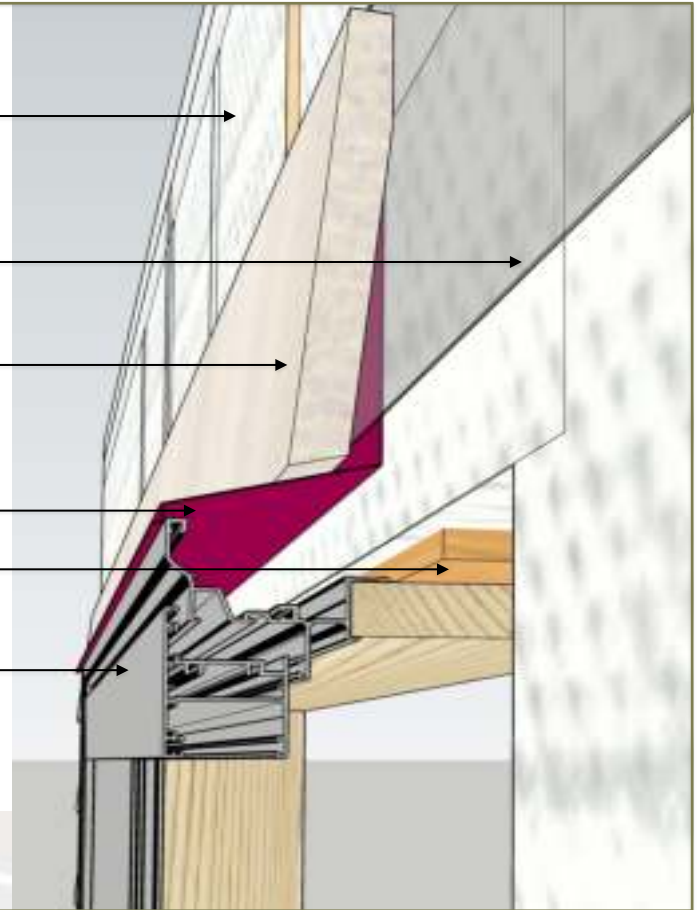


<https://www.healthbasedbuilding.com.au>






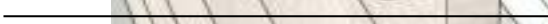

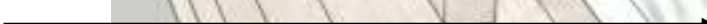
17 : WINDOWS : HEAD

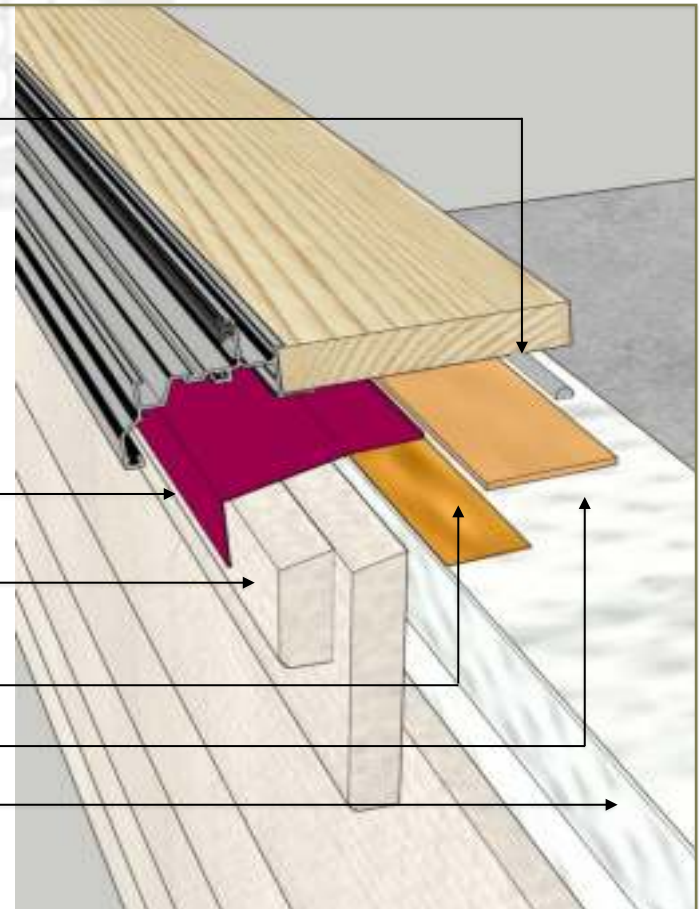
- Vapour barrier. 
- Flashing tape. 
- Magnum Board® Weather Board cut back over flashing as indicated - note Respiratory and Eye Protection instructions under Section 8 on P24 when cutting. 
- Folded Colorsteel or similar head flashing with flashing tape over as indicated. 
- Packer. 
- Aluminium Window fitted in accordance with manufacturers instructions. 



<https://www.healthbasedbuilding.com.au/shop/magnum-board-weatherboard-16mm?gn=Magnum%20Board&gp=2>

18 : WINDOWS : CILL

- PEF rod air-seal and sealant (not shown for clarity). 
- Folded Colorsteel or similar head flashing and cill tray. Ensure back edge is supported with a suitable packer to ensure fall away from building. Allow for 30-40mm front face of flashing. 
- Magnum Board® Weather Board cut forward under flashing and packed as indicated. Allow to screw-fix behind the flashing. 
- Cill tray packer. 
- Window packer. 
- Vapour barrier. 



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