

Make your space, a healthy place.

OUR COMMON FUTURE

PROCEDURE TO INSTALL MAGNUM BOARD[™] INTERIOR WALL AND CEILING BOARD, INCLUDING WET AREAS



It is important to watch applicable Magnum Board Wall and Ceiling Board installation videos to ensure your understanding of the installation process is complete. Magnum Board Interior Wall and Ceiling Board videos can be access via links in each Magnum Board Wall and Ceiling Board listing <u>www.healthbasedbuilding.com</u>

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PRODUCT, TOOLS and FASTENERS



Magnum Board



Ultrabond S9771K construction adhesive for bonding Magnum Board to framing



Simpson Strong Tie 8g x 32mm C3 Galvanised Wing Tip Collated Square Drive Screws code CBSDG114SA for fixing Magnum Board to steel framing



Fortress Fasteners 6g x 32mm C3 Galvanised Collated Square Drive Screws code FCS632CL3COL for fixing Magnum Board to timber framing



Fortress Fasteners 6g x 32mm C3 Galvanised Collated Screws Individual code FCS632CL3J for fixing Magnum Board to timber framing



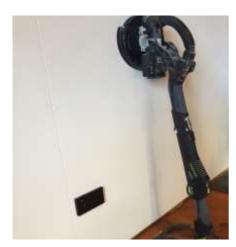
HEPA extraction system with recommended cutting equipment



Battery powered drill gun with torque controller



Auto Screw Gun



Recommended mechanical sanding equipment



Rebating Tool Available from <u>www.potters.co.nz</u>

PROCEDURE TO INSTALL MAGNUM BOARD INTERIOR WALL AND CEILING BOARD INCLUSIVE OF WET AREAS

Responsibility

It is the responsibility of the installer to inspect their workplace prior to beginning the installation of Magnum Board interior lining to ensure the installed work will meet the owner / contractors' requirements. Notify owner / general contractor of any concerns prior to the start of Magnum Board interior wall and ceiling board installation. Magnum Board is a non-toxic building material. Cutting can establish fine particulate that could irritate the respiratory system. Always wear a dusk mask, safety glasses and follow MSDS Guidelines. Always use correct tools when executing cutting operations.

Material General Requirements Storage & Handling

Protect Magnum Board from weather and dirt prior to and during installation. Always lay Magnum Board interior wall and ceiling board on a solid surface above moisture absorbing substrates on pallet or bearer layout than will not distort Magnum Board. It is good construction practice to marshal or stage the materials to be installed as close to the point of installation. Magnum Board can be installed over steel, wood, or laminated veneer lumber (LVL) framing that complies with the local building codes.

- Vertical framing member spacing can be no wider than 600mm centres
- Magnum Board is installed vertically
- All edges must be supported by framing.
- All framing must be straight and level

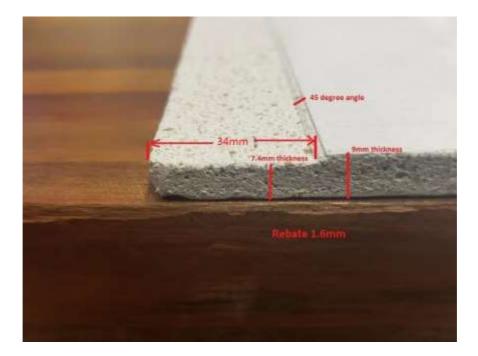
Cutting Procedure: We recommend the use of qualified installers.

Magnum Board can be cut with a carbide tipped scoring knife, keyhole saw, saber saw, or power saw equipped with a carbide blade and HEPA vacuum extraction. When rebating edges, the rebate dimensions must match with the dimensions below: figure 1.

A rebating video is available via the link below

https://www.dropbox.com/sh/ir8chply9fub42q/AADQ6VWwWqELs64J8gcolGqxa?dl=0

Figure 1



NOTE: We recommend use of FESTOOL cutting and extraction systems.

- Measure accurately and mark your cutting locations before cutting
- Make circular cuts and irregular angle cuts using a cement board bit, carbide tipped bit keyhole saw or a saber saw.
- To perform cut outs for electrical outlets, light receptacles, switches, carefully measure and mark the location of the opening on the face of Magnum Board. Outline the opening in pencil and cut it using equipment described
- Position cutting station so that wind will blow dust away from the user or others in the working area and allow for ample dust dissipation.
- Score and snap using carbide-tipped scoring knife or utility knife. NOTE: Ability to use this method depends on thickness of Magnum Board being installed.
- 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. Use wet suppression methods or HEPA vacuum.

Installation

Installation Pattern

Magnum Board Wall and Ceiling Board must be installed vertically as per fixing detail below. 15mm-20mm in from outside edges. 50mm in from corners. 300mm minimum spacing between fasteners. 600mm centers across 1200mm wide.

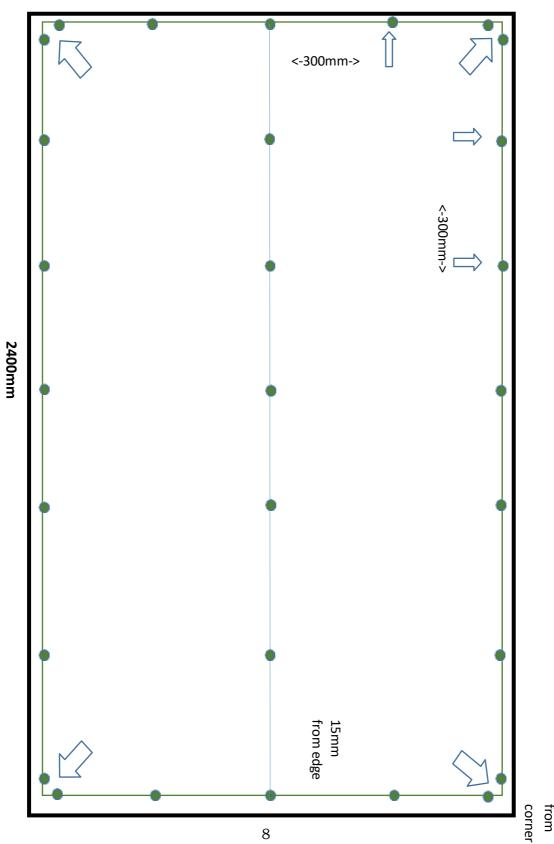
- Magnum Board interior wall and ceiling board shall be installed rebate edge to rebate edge.
- Apply Ultrabond S9771K construction adhesive using individual volume placement at 300mm spacings around the perimeter and centre of Magnum Board. A continuous bead application to the perimeter and centre of Magnum Board method can be involved using a battery powered applicator.
- Where end to end Joints are required, a rebated edge using a matching profile shall be added in preparation for plastering.
- Begin fixing at the central fixing position in the board with perimeter fixing once board is held in place.
- Magnum Board interior wall and ceiling board is screwed to steel framing. Screws for steel framing are collated Simpson Strong-Tie Screws code CBSDG114SA, to be embedded slightly under flush with Magnum Board surface.
- Magnum Board interior wall and ceiling lining is screwed to timber framing.
 Screws for timber framing are Fortress Fasteners 6g x 32mm C3 screws code
 FC632CL3 to be embedded slightly under flush with Magnum Board surface.

MAGNUM BOARD WALL AND CEILING BOARD FIXING PATTERN

2400x1200x09mm, 2700x1200x09mm and 3000x1200x09mm wall and ceiling board sizes

Fixing Pattern 15mm in from perimeter edges 50mm in from corners 300mm apart along perimeter edges and 600mm mid lines Figure 2

1200mm





HOME of MAGNUM BOARD®

"The New Generation *GREEN* Building Material" "Install It for Health-Install It for Life" Sheathing & Trim Products

Magnum Board Material Safety Data Sheet

MSDS No.: MBGEP-032107-5 Page 1 of 8

Magnum Board® Brand Products SECTION 1: COMPANY AND PRODUCT INFORMATION

Use: Exterior: Sheathing, ceiling board, drop ceiling, siding, cladding and trim material.

Interior: Wallboard, ceiling board, tile backer board, underlayment and trim materials.

Structural Insulated Panels (SIPS) and Exterior Insulated Finish Systems (EIFS)

Other uses viewable online at: https://www.healthbasedbuilding.com/magnum-board

SECTION 2: COMPOSITION / INFORMATION ON INGREDIENTS

<u>Ingredient</u>	CAS No.	Hazard Class
Magnesium Oxide	1309-48-4	None
Magnesium Chloride	7786-30-3	None
Cellulose	9004-34-6	None
Perlite	93763-70-3	None
Proprietary Additives	N/A	None
Fiberglass Scrim	65997-17-3	None

SECTION 3: HAZARDS IDENTIFICATION

Emergency Overview: Non-toxic, non-explosive and is not a fire hazard.

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Primary Routes of Entry:

Eyes:

Dust may irritate the eyes from mechanical abrasion causing watering and redness.

Skin:

Dust may cause irritation of the skin from friction but cannot be absorbed through intact skin.

Ingestion:

Unlikely under normal conditions of use but swallowing the dust from this product may result in irritation to the mouth and gastrointestinal tract.

Inhalation:

Dust may cause irritation of the nose, throat, and airways, resulting in coughing and sneezing. Certain susceptible individuals may experience wheezing (spasms of the bronchial airways) on inhaling dust during sanding or sawing operations.

SECTION 4: FIRST AID MEASURES

EYES:

Remove contact lens. Flush with running water or saline for at least 15 minutes. Seek medical attention if redness persists or if visual changes occur.

SKIN:

Wash with mild soap and water. Contact physician if irritation persists or later develops.

INGESTION:

If ingested, dilute by drinking large amounts of water. Do not induce vomiting. Seek medical attention.

If unconscious, loosen tight clothing and lay the person on his / her side. Give nothing by mouth to an individual who is not alert and conscious. Seek medical attention.

INHALATION:

Remove to fresh air. If shortness of breath or wheezing develops, seek medical attention.

NOTES TO PHYSICIAN OR FIRST AID PROVIDERS:

Treat symptomatically.

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SECTION 5: FIRE-FIGHTING MEASURES

Magnum[™] Building Products line of "Magnum Board®" Products are nonflammable, non-explosive and noncombustible.

Fire and Explosion Hazard

Flash Point:Not applicable.Auto-ignition:Not applicable

Extinguishing Media:

This material is noncombustible. Appropriate extinguishing media should be used for surrounding fire.

Fire Fighting:

Firefighting personnel should wear normal protective equipment.

SECTION 6: ACCIDENTAL RELEASE MEASURES

No special precautions are necessary to pick up product that has been dropped. The following applies only to spills or releases of dust generated during cutting or sanding Magnum Board[®].

Precautions:

Good housekeeping practices are necessary for cleaning up areas where dust has been produced. Take measures to either eliminate or minimize the creation of dust.

Wherever possible, practices likely to generate dust should be controlled with engineering controls such as local exhaust ventilation, dust suppression with water and containment, enclosure or covers.

Cleanup Methods:

A fine water spray may be used to suppress dust when sweeping (dry sweeping is not recommended). Vacuuming with an industrial vacuum cleaner outfitted with a high-efficiency particulate (HEPA) filter is recommended over sweeping. Waste may be disposed of by landfill in compliance with federal, provincial, state and local requirements governing non-toxic mineral materials

Avoid using materials and products that are incompatible with this product. (Refer to section 10.)

Magnum Board® Brand Products Page 4 of 8

SECTION 7: HANDLING AND STORAGE

Handling and Storage Products in their intact state do not present a health hazard. The controls below apply to dust generated from the boards by cutting, drilling, routing, sawing, crushing, or otherwise abrading, and cleaning or moving sawdust.

Other Precautions:

Even though Magnum Board® has been tested and deemed nontoxic, Magnum Building Products recommends that exposure to dust be kept as low as reasonably possible. Respirable levels should not exceed those specified by OSHA and MSHA and identified in this MISDS. Exposure to respirable (fine) dust depends on a variety of factors, including activity rate (i.e. cutting rate), method of handling (i.e. electric shears), environmental conditions (i.e. weather conditions, workstation orientation) and control measures used. Wherever possible, practices likely to generate dust should be carried out in well ventilated areas (i.e. outside). The work practices and engineering controls set out in Section 8 should be followed as precautions to reduce dust exposures.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls

Cutting Outdoors:

- 1. Magnum Building Products recommends positioning cutting station so that wind will blow dust away from user or others in working area and allow for ample dust dissipation.
- 2. Use one of the following methods based on the required cutting rate and jobsite conditions.

Best

- Score and snap using carbide-tipped scoring knife or utility knife (Ability to use this method depends on thickness of Magnum Board® being installed.)
- Fibercement board shears (electric or pneumatic).

Better

• Dust reducing circular saw equipped with appropriate blade and HEPA vacuum extraction.

Good (for low to moderate cutting only)

• Dust reducing circular saw with appropriate saw blade.

Always use correct tools when executing all cutting operations.

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Ventilation:

Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limit.

Respiratory Protection:

Dust mask is recommended.

Eye Protection:

When cutting material, dust resistant safety goggles / glasses should be worn and used in compliance with ANSI Standard Z87.1-1-1989 and applicable OSHA (i.e. 29 CFR 1910.133) standards.

Skin Protection

Loose comfortable clothing should be worn. Magnum Building Products recommends that direct skin contact with dust and debris be avoided when possible, by wearing long sleeved shirts and long trousers, a cap or hat, and gloves.

Sanding / Drilling / Other Machining:

If sanding, drilling, or other machining is conducted, Magnum Building Products recommends wear a NIOSH-approved dust mask.

Important Notes:

- 1. For maximum protection (lowest respirable dust production), Magnum Building Products recommends always using "Best" level cutting methods where feasible.
- 2. Always use a circular saw blade that is appropriate for the specific operation being undertaken.
- 3. Dry sweeping is not the preferred clean up method Magnum Building Production suggests wet suppression methods or HEPA vacuum.
- 4. It is not recommended that a grinder or continuous rim diamond blade be used for cutting.
- 5. Always follow tool manufacturer's safety recommendations.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:

Various colors depending on application, each with varying dimensions according to product used.

Odor:

Very mild

Physical State:

Solid boards

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Vapor Pressure:

Not relevant.

Specific Gravity: Not relevant.

Flammability Limits: Not relevant.

Boiling Point: Not relevant

Melting Points: Not relevant.

Flash Point:

Not relevant.

Auto-ignition Temperature: Not relevant.

Volatility: Not relevant.

Solubility in Water: Not relevant.

Evaporation rate:

Not applicable.

NFPA Ratings (Scale 0 - 4)

Health = 1 Flammability = 0 Reactivity = 0 Personal Protection = E

SECTION 10: STABILITY AND REACTIVITY

Stability:

The Magnum Board products identified in section 1 are stable under ordinary conditions.

Conditions to Avoid:

Excessive dust generation without proper dust mask protection.

Magnum Board® Brand Products Page 7 of 8

Materials to Avoid:

Incompatibility: Hydrofluoric acid will dissolve Magnesium Oxide and can generate Magnesium Chloride fumes.

SECTION 11: TOLXICOLOGICAL INFORMATION

Magnum Board[®] products are nontoxic in their intact form. The following applies to dust that may be generated during cutting and sanding.

Chronic Effects:

Inhaled: Repeated and prolonged overexposures to dust may cause increased risk of bronchitis. It is possible that repeated inhalation exposure to Magnum Board® fiber dust over time may lead to inflammation of the lungs in humans. All necessary precautions should be taken to prevent inhalation of dust to prevent these problems.

SECTION 12: ECOLOGICAL INFORMATION

Because Magnesium Oxide is a naturally occurring mineral, releases that may occur into the environment are not expected to leave any hazardous material that could cause a significant adverse impact.

SECTION 13: DISPOSAL CONSIDERATIONS

Dispose of material, as an inert, inorganic mineral, in conformance with federal, provincial, state and local regulations. Magnum Board® is not an RCRA hazardous waste.

SECTION 14: TRANSPORT INFORMATION

There are no special requirements for storage and transport of Magnum Board[™].

UN No:	None allocated
Dangerous Goods C	Class: None allocated
Hazchem Code:	None allocated
Poisons Schedule:	None allocated
Packing Group:	Not applicable
Label:	Not a DOT hazardous material.

SECTION 15: REGULATORY INFORMATION

DOT Hazard Classification: None

Placard Requirement: Not a DOT hazardous material.

PRE-CHECKLIST PRE-INSTALLATION OF MAGNUM BOARD WEATHERBOARD, MAGNUM BOARD RIGID AIR BARRIER & MAGNUM BOARD INTERIOR WALL AND CEILING BOARD & PANELLING

NOTE: It is the responsibility of the certified installer to inspect their workplace prior to beginning the installation of Magnum Board Weather Board and Magnum Board Rigid Air Barrier to ensure the installed work will meet the supplier's requirements. Notify owner/general contractor of any concerns prior to installation.

Company Name:		JOB#
Address of Job:		
Name of Contractor:		
Date / /	Signature:	

CHECKLISTS

Magnum Board Rigid Air Barrier	
Framing configuration and fixing detail	
Framing flush and level	
Truss and Roof/window gang nails or fixings are 'recessed' into framing	
Access and heights	
Services identified	
Health and Safety plan in place	

Magnum Board Weatherboard

Framing configuration and batten positioning	
Framing/Battens flush and level	
Access and heights	
Frame is straight	
Services identified	
Health and Safety plan in place	

Magnum Board Interior

Framing/batten/blocking position	
Pre-line is complete	
Services identified	
Access and heights	
Reveals or Architraves	
Framing/battens are flush and level	
Health and Safety plan in place	

FINAL-CHECKLIST FINAL-INSTALLATION OF MAGNUM BOARD WEATHERBOARD, MAGNUM BOARD RIGID AIR BARRIER & MAGNUM BOARD INTERIOR WALL AND CEILING BOARD & PANELLING

NOTE: It is the responsibility of the certified installer to inspect their workplace prior to beginning the installation of Magnum Board Weather Board and Magnum Board Rigid Air Barrier to ensure the installed work will meet the supplier's requirements. Notify owner / general contractor of any concerns prior to installation.

Company name:		JOB#
Address of job:		
Name of Contractor		
Date / /	Signature:	

CHECKLISTS

Magnum Board Rigid Air Barrier Fixing details match recommended fixing pattern Alignment with openings Sheets in good condition and fixed flush with face of framework Waste material is removed or positioned for removal as nontoxic material

Magnum Board Weatherboard

Fixing details match recommended fixing pattern	
Boards are straight and level	
Laps are tight	
Waste material is removed or positioned for removal as nontoxic material	

Magnum Board Interior

Fixing details match recommended fixing pattern	
Sheet connections are tight	
Fixing screws are below plastering level	
Waste material is removed or positioned for removal as nontoxic material	