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MAGNUM® BOARD

PROCEDURE TO INSTALL 9MM MAGNUM BOARD™ RIGID AIR BARRIER SYSTEM



This technical document must be read, considered and used with the relevant Beal Appraisal Certificate. (Product Technical Statement).



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Products, Tools & Equipment Required

FIGURE 1



Magnum Board - Rigid Air Barrier
2.4m x 1.2m x 9mm
2.7m x 1.2m x 9mm
3.0m x 1.2m x 9mm

FIGURE 2



Thermakraft™
Premium Joining Tape 75mm

FIGURE 3



Thermakraft™
Flashing Tape 200mm

FIGURE 4



Thermakraft™
Flashing Tape 150mm

FIGURE 5



Thermakraft™
Flashing Tape 75mm

FIGURE 6



Thermakraft™ ONESEAL™
Multi-fit Pipe and Cable
Penetration Seals

FIGURE 7



Festool cutting equipment
or similar

FIGURE 8



HEPA extraction system

FIGURE 9 **TIMBER FRAMING**



SIFCO FCN90LB-ST
Nailer Gun
with No Mar Tip

FIGURE 10 **TIMBER FRAMING**



SIFCO FRP50V8SS/8
Coil Collated Nails
50 x 2.8mm Stainless Steel Flat Head
with annular groove shank

FIGURE 11 **TIMBER FRAMING**



Ecko WB75
Weatherboard Nailer
with No Mar Tip

FIGURE 12 **TIMBER FRAMING**



Ecko Round Head Nails
Coil Collated Nails HHSS-50V8R
50 x 2.8 Stainless Steel Flat Head
with annular groove shank

FIGURE 13 **STEEL FRAMING**



Simpson Strong Tie 8g x 32mm C3
Galvanised Collated Square Drive
Screws code WSCBGHLA114SA for
fixing Magnum Board to
steel framing.
Recommended steel thickness
0.55mm-0.75mm

FIGURE 14 **STEEL FRAMING**



Simpson Strong Tie 8g x 32mm C3
Galvanised Wing Tip Collated Square
Drive Screws code CBSDG114SA
for fixing Magnum Board to steel
framing. Recommended steel
Recommended steel thickness
0.8mm-2.4mm

NOTE: We recommend the Simpson Strong-Tie Stainless Steel 316 screws as they meet all application requirements, including high-corrosion environments such as:

- **In areas within 1km of a coastal area.**
- **All external fixings**
- **Wet areas.**
- **Industrial or chemically aggressive environments.**

NOTE: Please avoid C3 screws in these environments. (Use Class 4 or 316 stainless instead) Outside of these environments quality C3 galvanised screws with multi-layer protective finish can be used.

FIGURE 15



Straight Edge
1.8m min

FIGURE 16



Spirit Level
1.8m min

FIGURE 17



Spatula

FIGURE 18



Tape Measure

FIGURE 19



Diamond Pro
Diamond Hole Saw

FIGURE 20

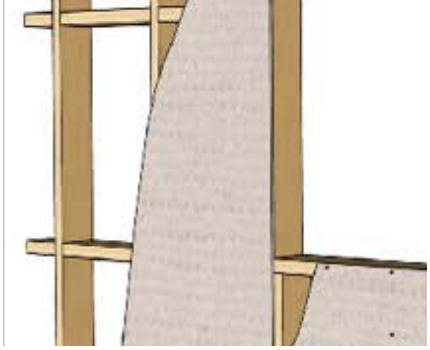


Diamond Pro PCD Fibre Cement
Circular Saw Blade

FIGURE 21



Multi-Material Diamond Blade
for Cut Off Saw





Before You Start

IMPORTANT INFORMATION

FIXING NOTE: We recommend the Simpson Strong-Tie Stainless Steel 316 or class 4 fixings as they meet all application requirements, including high-corrosion environments such as: In areas within 1km of a coastal area, All external fixings, Wet areas, Industrial or chemically aggressive environments. Please avoid C3 screws in the these environments. (Use Class 4 or 316 stainless instead) Outside of these environments quality C3 galvanised screws with multi-layer protective finish can be used.

Magnum Board® Rigid Air Barrier can be installed for use as a bracing element, a non-combustible element, a high impact resistant element and a wet area element.

Magnum Board must not be installed in design solutions that place Magnum Board in direct contact with soil or within designs that place Magnum Board below ground.

Magnum Board® Rigid Air Barrier can be installed to solid timber framing, LVL framing and steel framing in compliance with all NZS3604 and local building codes.

TIMBER FRAMING CONSIDERATIONS

A 45mm minimum stud width is required for timber framing. Stud spacing's not to exceed 600mm centres. Stud spacing's will reduce for use in specific wind classifications.

Timber framing must be kiln dried with a moisture content **18% or Less**. Framing quality must be 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 and establish surface cracking.

STEEL FRAMING CONSIDERATIONS

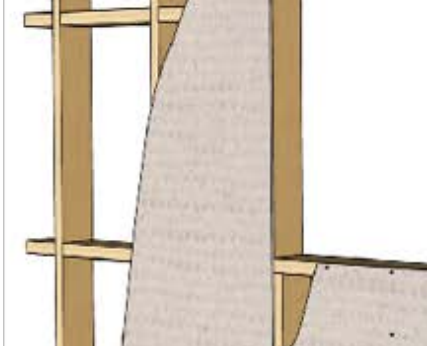
A 35mm minimum stud width is required for steel framing. Stud spacing's not to exceed 600mm centres. Stud spacing's will reduce for use in specific wind classifications.

Steel framing gauge is to be 0.55 - 1.6 based metal thickness. Use GAL 90 light gauge steel for enhanced corrosion resistance and durability.

Steel framing quality must be 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 and establish surface cracking.

To ensure long-term durability and compliance with energy efficiency standards, light gauge steel framing must be protected in all environments, including areas with high humidity, salt air, and other corrosive conditions. This recommendation aligns with the NASH Technical Note NTN 006, which outlines specific requirements for thermal performance and condensation control in steel-framed buildings.

To prevent thermal bridging between Magnum Board and steel framing in buildings, steel framing **must** have the required thermal breaks, especially on the exterior face of framing as required per the National Association of Steel-Framed Housing standard (NASH STD). This helps mitigate conductive thermal bridging and condensation risks.





Before You Start

INSTALLER 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. Refer to Rigid Air Barrier Site Installation Checklist on p22.

WARRANTY

Warranty is valid by completion of the Pre & Post inspection checklist (refer to Pre & Post Inspection Checklist page 22). While every effort has been made to ensure a satisfactory outcome with respect to the use of Magnum Board® RIGID AIR BARRIER - along with all Magnum Board® products - no dialogue or negotiation will be considered if any method or third-part component 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.

MagnumBoardWarrantyDocument.pdf



Before You Start - Continued

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 dry sweep - use wet suppression methods or HEPA vacuum.

It is good construction practice to marshal or stage the materials to be installed as close to the point of installation as possible.

When cutting Magnum Board® ensure the supporting structure is level and preventing distortion. Distortion in Magnum Board® will establish inaccuracy in the edge being cut regardless of correct cutting equipment being involved.

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 flat.

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.

PERIOD OF EXPOSURE TO WEATHER

Maximum exposure of Magnum Board Rigid Air Barrier to the weather is 90days.

USING MAGNUM BOARD® IN RELATION TO OTHER MANUFACTURERS PRODUCTS

In case of an apparent conflict between the Magnum Board® instructions and those of a third party, contact www.healthbasedbuilding.com for clarification.

DESIGN CONSIDERATIONS

All design and construction must comply with appropriate requirements of the current New Zealand Building Code NZS 3604, NASH Standard (Parts 1 & 2), and AS/NZS 4600. and other applicable local regulations and standards.

Installation Procedure - Cutting Magnum Board



CUTTING MAGNUM BOARD RIGID AIR BARRIER GUIDELINES

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

- Magnum Board can be cut with a diamond tipped keyhole saw, saber saw, or power saw equipped with a diamond blade and HEPA vacuum extraction.
- Measure accurately and mark your cutting locations before cutting
- Make circular cuts and irregular angle cuts using a cement board bit, diamond tipped bit keyhole saw or a saber saw.
- To perform cut outs for pipe work penetrations, carefully measure and mark the location of the opening on the face of Magnum Board. Outline the opening in pencil and cut it using a diamond hole saw.
- 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.
- Never dry sweep. Use wet suppression methods or HEPA vacuum.

For more information go to: www.healthbasedbuilding.com

Installation Procedure - Fixing and Bracing

INSTALLATION TOOLS AND FIXINGS

Magnum Board™ Rigid Air Barrier must be installed edge to edge.

Magnum Board® Rigid Air Barrier joints to be sealed using Thermakraft Flashing Tapes

Sealing between pipework or conduit penetrations and the like to the Magnum Board shall be by way of Thermakraft ONESEAL Multi-fit and Cable Seals.

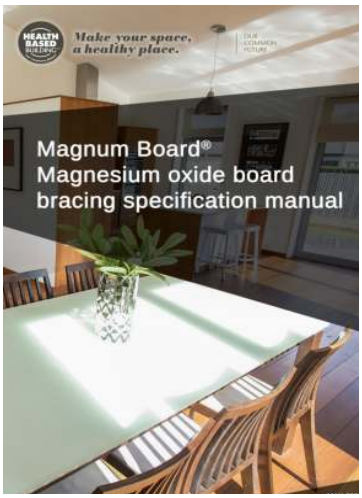
Timber framing fixing - Magnum Board® Rigid Air Barrier is pneumatically nailed to timber framing:

- Nail fixings are SIFCO coil collated Nails, 50 x 2.8mm Stainless Steel Flat head nail with annular groove shank, that can be obtained in collated form for use with the SIFCO FCN90LB-ST Coil Nailer gun. Nails are available in boxes of 3,600. (Cat FRP50V8SS/8) or,
- The ECKO HAMMAHAND Round Head Coil Nails are 50 x 2.8mm Stainless Steel Flat head nails with annular groove shank that can be obtained in collated form for use with the ECKO WB75 Weatherboard Nailer. Nails are available in boxes of 3,000. (Cat HHSS-50V8R)
- Nails to be installed (fired) at right angle to the surface of the board, with the head of the nail flush or slightly proud Magnum Board® RIGID AIR BARRIER surface.

Steel Framing fixing - Magnum Board® Rigid Air Barrier is screwed to steel framing:

- Recommended steel thickness 0.55mm-0.75mm
  Simpson Strong Tie 8g x 32mm C3 Galvanised Collated Square Drive Screws Code WSCBGHLA114SA for fixing Magnum Board to steel framing.
- Recommended steel thickness 0.8mm-2.4mm
  Simpson Strong Tie 8g x 32mm C3 Galvanised Wing Tip Collated Square Drive Screws Code CBSDG114SA for fixing Magnum Board to steel framing.
- Screws to be installed at right angle to the surface of the board, with the head of the screw flush with Magnum Board® RIGID AIR BARRIER.

LINK TO: MAGNUM BOARD BRACING DOCUMENT



For information regarding fixing Magnum Board Rigid Air Barrier to bracing schedule, go to:

Magnum Board Bracing Manual.pdf

Installation Procedure - Fixing Patterns

FIXING SPACING

Fixing distance in from all edges is 15mm.

Where screws are less than our recommended distance from edge of boards (Less than 15mm) the screw positions must be pre-bored with a 5mm Ø drill and countersink prior to screw-fixing, in order to prevent cracking. Care must be taken to ensure that the hole does not continue into the batten or framing beneath.

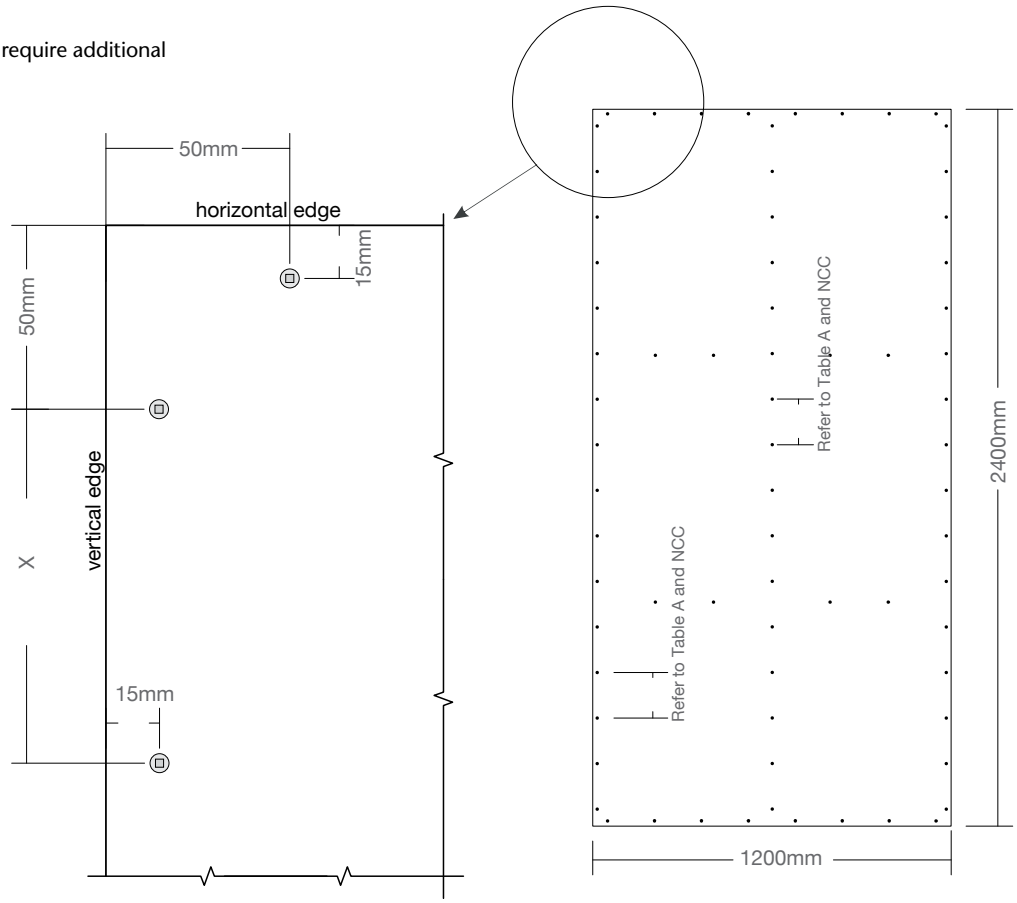
Begin fixing at central fixing position in board to hold in place followed by perimeter fixings

1 - Central fixing to hold sheet in position
2 - 50mm in from corners, vertically & horizontally
3 - Fixings spacing as required (Refer to Table A)
4 - 600mm centres across 1200mm width.
5 - Fixing spacing continued in dwang locations as shown

Please NOTE: that the sheet shown is 2400mm x 1200mm x 9mm and larger sheets (2700mm x 1200mm x 9mm) & (3000mm x 1200mm x 9mm) will require additional fixings at the same pattern.

Spacing of 2.8mm x 50mm Round Head Stainless Steel Nails with Angular Groove Shanks		
ULS Wind Pressure q (kPa)	Fixing Spacing with 600mm Studs	Fixing Spacing with 300mm Studs
1.0	300mm	300mm
1.5	300mm	300mm
2.0	250mm	300mm
2.5	200mm	300mm
3.0	150mm	300mm
3.5	125mm	275mm
4.0	125mm	250mm
4.5	100mm	225mm
5.0	100mm	200mm
5.5	75mm	175mm
6.0	75mm	150mm
6.5	75mm	150mm
7.0	50mm	125mm

Table A. These spacing ensure optimum performance from Magnum Board® Rigid Air barrier.



Screw fixing distances from sheet edge and corners.

For screw fixing centres please refer to Table A above.

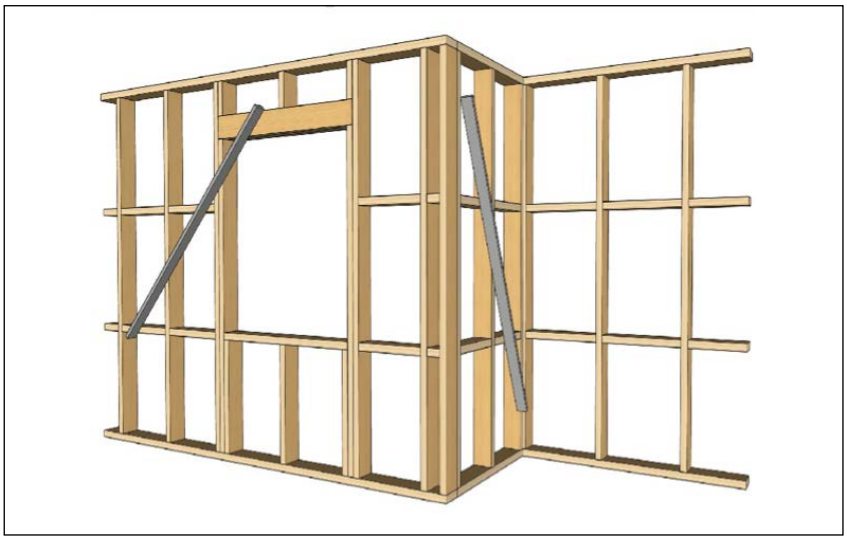
Magnum Board Rigid Air Barrier Framing Preparation & Installation

FRAMING PREPARATION

A 1.8m straight edge is used to ensure framing is level and straight in order to support Magnum Board® to all edges without packing material or distortion.

A framing preparation video is available via the link below.

Metal bracing straps must not protrude past the outside face of framing. Notching into framing must establish a depth that ensures the fixings do not protrude past the outside face of framing and interfere with Rigid Air Barrier installation.



Framing preparation video available at: https://vimeo.com/showcase/4710097

INSTALLATION OF MAGNUM BOARD RIGID AIR BARRIER

Always begin installation of Magnum Board® Rigid Air Barrier to walls at the junction of internal or external corner junctions.

Use a minimum 1.8m spirit level to ensure edges are straight and true. Each sheet to be checked as placing proceeds in order to achieve the correct fixing pattern

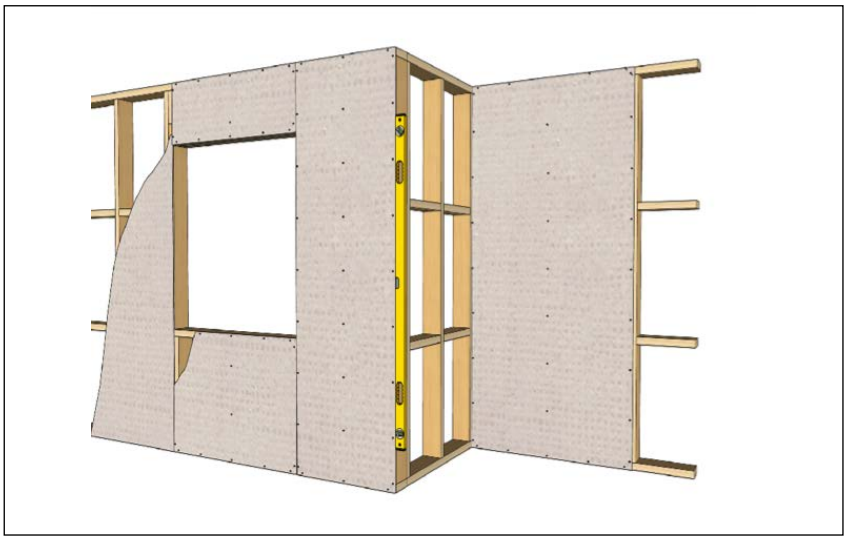
Magnum Board™ Rigid Air Barrier must be installed vertically, square edge to square edge.

Magnum Board Rigid Air Barrier must be fully supported to all edges and sheet surfaces by framing.

Note: Magnum Board must not be installed in design solutions that place Magnum Board in direct contact with soil or within designs that place Magnum Board below ground.

Note: Steel framing must have the appropriate level of durability required to prevent corrosion, particularly in coastal areas.

Refer to the NASH standard or frame manufacturer for more information.



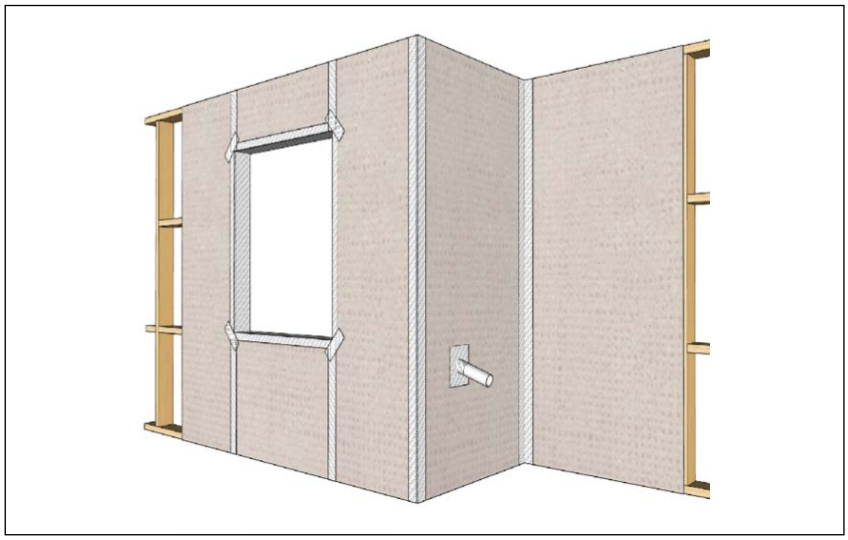
Magnum Board Rigid Air Barrier - Installation of Flashing Tape & Seals

APPLICATION OF THERMAKRAFT FLASHING TAPES

Diagram is showing the typical application of Thermacraft flashing tapes.

Thermacraft Tape is approved for use with Magnum Board Rigid Air Barrier.

Once the sheets of Magnum Board® RIGID AIR BARRIER have been butted together and fixed in place, apply the Premium Jointing Tape (75mm) or Thermaflash Flashing Tape 200mm – whichever is applicable for joints or window / door openings as per the Therma flashing Tape Install Guide



APPLICATION OF THERMAKRAFT ONESEAL MULTI-FIT SEALS

Apply Thermakraft ONESEAL Multi-fit Sealing around pipework or conduit penetrations and the like to the Magnum Board Rigid Air Barrier as required.

See also THERMAFLASH Installation Guide:
Thermaflash Flashing Tape Install Guide.pdf

This page is reproduced from the Thermakraft Installation Guide. For more information, go to:

Thermaflash Flashing Tape Install Guide.pdf



Installation Guide

THERMAFLASH®

High adhesion synthetic window flashing tape

Thermaflash is a high performance self-adhering window flashing tape. The advanced adhesive technology provides a high strength bond to most building surfaces and wall underlays. It is suitable for window and door installation as well as other wall penetrations. Thermaflash can be installed in a wide range of temperatures and can withstand UV exposure for up to 180 days.

Product usage

Thermaflash window flashing tape is installed into and around joinery openings over the wall underlay and exposed frame to cover both the face and edge of the opening as a secondary weather resistant barrier. It can also be installed at joinery heads to seal flashing upstands to the wall underlay.

Smarter products. Better buildings.
thermakraft.co.nz

BRANZ Appraised
Appraisal No.1122 (2020)

9 : MAGNUM BOARD MSDS

SECTION 1 : 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.
- **Systems** : Structural Insulated Panels (SIPS)
  : Exterior Insulated Finish Systems (EIFS)

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

SECTION 2 : COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient	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
Fibreglass Scrim	65997-17-3	None

SECTION 3 : HAZARDS IDENTIFICATION

Emergency Overview :

- Non-toxic, non-explosive, not a fire hazard.

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 MEASURED

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

Notes to Physician or First Aid Providers :

- Treat symptomatically.

SECTION 5 : FIRE-FIGHTING MEASURES

Magnum™ Building Products line of “Magnum Board®” Products are non flammable, non explosive and non combustible.

Fire and Explosion Hazard :

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

Extinguishing Media :

- This material is non combustible.
- Appropriate extinguishing media should be used for surrounding fire.

Fire Fighting :

- Fire fighting 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 minimise 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.)

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 non toxic, 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 :

- 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.
- Use one of the following methods based on the required cutting rate and job site 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.)
        - Fibre-cement 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 cutting operations.

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 :

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

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

Appearance :

  - Various colours depending on application, each with varying dimensions according to product used.
- Odour :
  - Very mild
- Physical State :
  - Solid sheets
- Vapour 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.

Materials to Avoid :

Incompatibility :

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

SECTION 11 : TOXICOLOGICAL INFORMATION

Magnum Board® products are non toxic 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® fibre 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.

Inhalation :

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

SECTION 12 : ECOLOGICAL INFORMATION

Because Magnesium Oxide is a naturally-occurring material, 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

Disposal 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®.

SECTION 15 : REGULATORY INFORMATION

UN No.	None allocated
Dangerous goods class	None allocated
Hazchem code	None allocated
Poisons schedule	None allocated
Packing group	None allocated
Label	Not a DOT hazardous material

DOT hazard classification	None
Placard requirement	Not a DOT hazardous material
Listed substance	No
Unlisted substance	No
Reportable quantity (RQ)	No
Charachteristics	Not applicable
RCRA waste number	Not applicable

SECTION 16 : OTHER INFORMATION

Preparation of Information and Disclaimer :

This form has been prepared to meet current Federal OSHA hazard communication regulations and is offered without any warranty or guarantee of any type. Magnum Building Products cannot control the use of its products, and therefore specifically disclaims liability and responsibility arising from the use, misuse and/ or alteration of its products.

The information contained in this MSDS was produced without independent scientific or medical studies analysing the effects of Magnum Board® dust upon human health. The information contained herein is based upon scientific and other data Magnum Building Products believes is valid and reliable and provides the basis for this MSDS. The information contained herein relates only to specific materials listed in the document. It does not address the effects of Magnum Board® dust when used in combination with other materials or substances, or when used in other processes. Because conditions of use are beyond Magnum Building Products control, the company makes no representations, guarantees or warranties, either express or implied warranties as to the fitness of the product for use, and assume no liability related to the information contained above.

Magnum Building Products requires, as a condition of use of its products, that purchasers comply with all applicable Federal, Provincial, State, and Local health and safety laws, regulations, orders, requirements, and strictly adhere to all instructions and warnings which accompany the product.

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UN No.	None allocated
Dangerous goods class	None allocated
Hazchem code	None allocated
Poisons schedule	None allocated
Packing group	None allocated
Label	Not a DOT hazardous material

DOT hazard classification	None
Placard requirement	Not a DOT hazardous material
Listed substance	No
Unlisted substance	No
Reportable quantity (RQ)	No
Charachteristics	Not applicable
RCRA waste number	Not applicable

Pre-Installation & Post-Installation Checklist

NOTE: Warranty is valid by completion of this Pre-Installation & Post-Installation inspection checklist.

Site address: _____Inspection Date: _____

Owner/Applicant: _____

Head Contractor / Builder: _____ LBP #:_____

Mobile Phone: _____ Email: _____

Designer: _____ Mobile: _____

MAGNUM BOARD® Rigid Air Barrier **PRE-INSTALLATION** CHECK LIST

NOTE: It is the responsibility of the certified installer to inspect their work place prior to beginning the placement, and to ensure that the placed work will meet supplier's requirements. Notify the owner / general contractor of any concerns prior to commencement of work.
NOTE: It is the responsibility of the installer to compile pre- and post- checklists and photographs in accordance with the quality plan.

- ☐ Framing configuration matches with Magnum Board requirements in construction drawings.
- ☐ Framing is constructed to ensure that has Magnum Board fully supported to all edges.
- ☐ All metal bracket protrusions are recessed into framing.
- ☐ Access & heights allowed for.
- ☐ Services identified / noted on the framing - if any.
- ☐ All tools, specified fixings and sealing tapes / gasket items available. Refer pages 3.
- ☐ Health and Safety Plan is in place (toolbox meeting has been held).

MAGNUM BOARD® Rigid Air Barrier **POST-INSTALLATION** CHECK LIST

NOTE: It is the responsibility of the installer to inspect the completion of the placement and to ensure placed work will meet the supplier's requirements. Notify the owner / general contractor of any concerns prior to commencement of work.

- ☐ Fixing details match recommended fixing pattern.
- ☐ Boards are straight and level.
- ☐ Screw heads are to finish flush or slightly below flush to board surface.
- ☐ Correct fixings Class 4 or 316 stainless steel (as per page 3) have been used
- ☐ Waste material is removed or positioned for removal as a non-toxic material.
- ☐ Health and safety plan in place.
- ☐ PPE and dust control in place.

Approved building consent document number : _____

Approval authority : _____

Approval date : _____

MB16210TG Magnum Board Horizontal Shiplap Details

Sheet List	
Page Number	Sheet Name
23	Cover Sheet
24	Concrete Foundation Detail
25	Timber Foundation Detail
26	External Corner Detail
27	Internal Corner Detail
28	Eave - Section Detail
29	Barge - Section Detail
30	Roof - Wall Ridge - Section Detail
31	Canopy Junction - Section Detail
32	Horizontal Control Joint
33	Vertical Control Joint
34	Typical Head and Sill Detail
35	Typical Jamb Detail
36	Deck Threshold Detail
37	Pipe Penetration - Plan & Section Detail
38	Batten Fixing

HEALTH BASED BUILDING™ natural selection

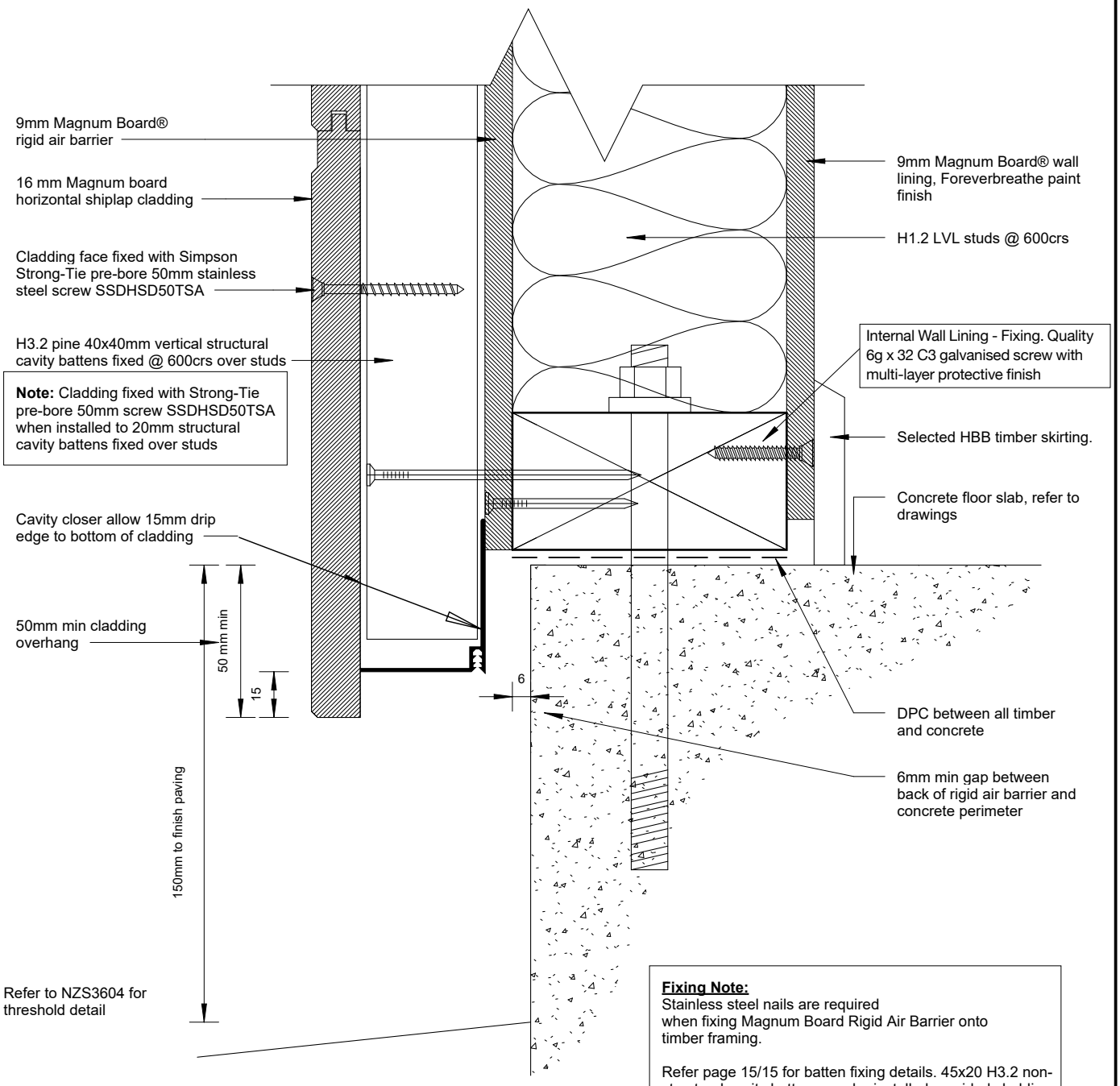
Magnum Board Horizontal Shiplap Details

Cover Sheet

AD design

150mm 100 50 0 10mm

12/08/2024 9:42:15 am



Fixing Note:
Stainless steel nails are required when fixing Magnum Board Rigid Air Barrier onto timber framing.

Refer page 15/15 for batten fixing details. 45x20 H3.2 non-structural cavity battens can be installed provided cladding fixing is guaranteed at a minimum 30mm framing.

Concrete Foundation Detail

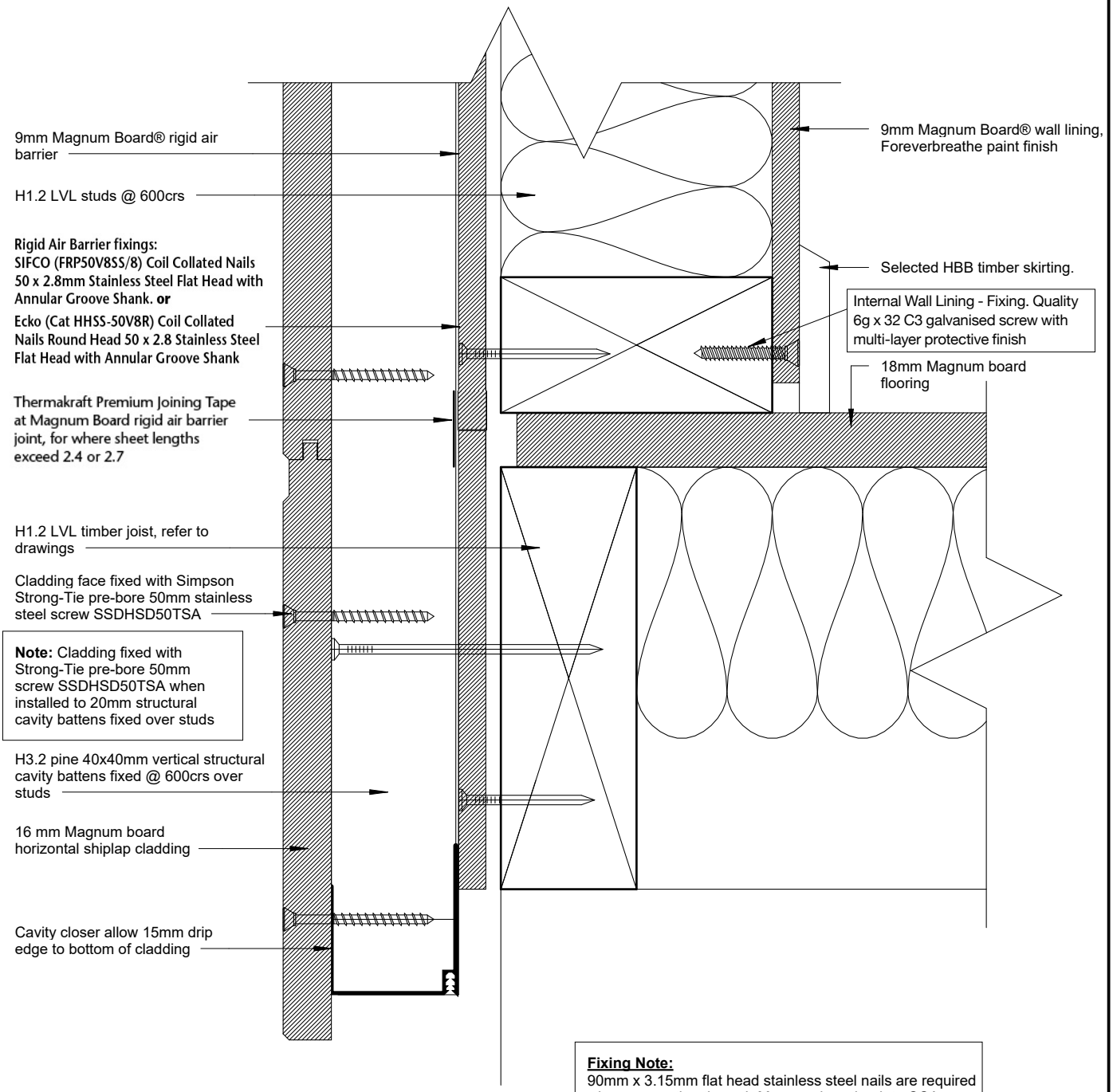
1 : 2

150mm 100 50 0 10mm

12/08/2024 9:42:16 am

Magnum Board Horizontal Shiplap Details

Concrete Foundation Detail



Timber Foundation Detail

1 : 2

Fixing Note:
90mm x 3.15mm flat head stainless steel nails are required when connecting through Magnum board or into CCA treated timber.

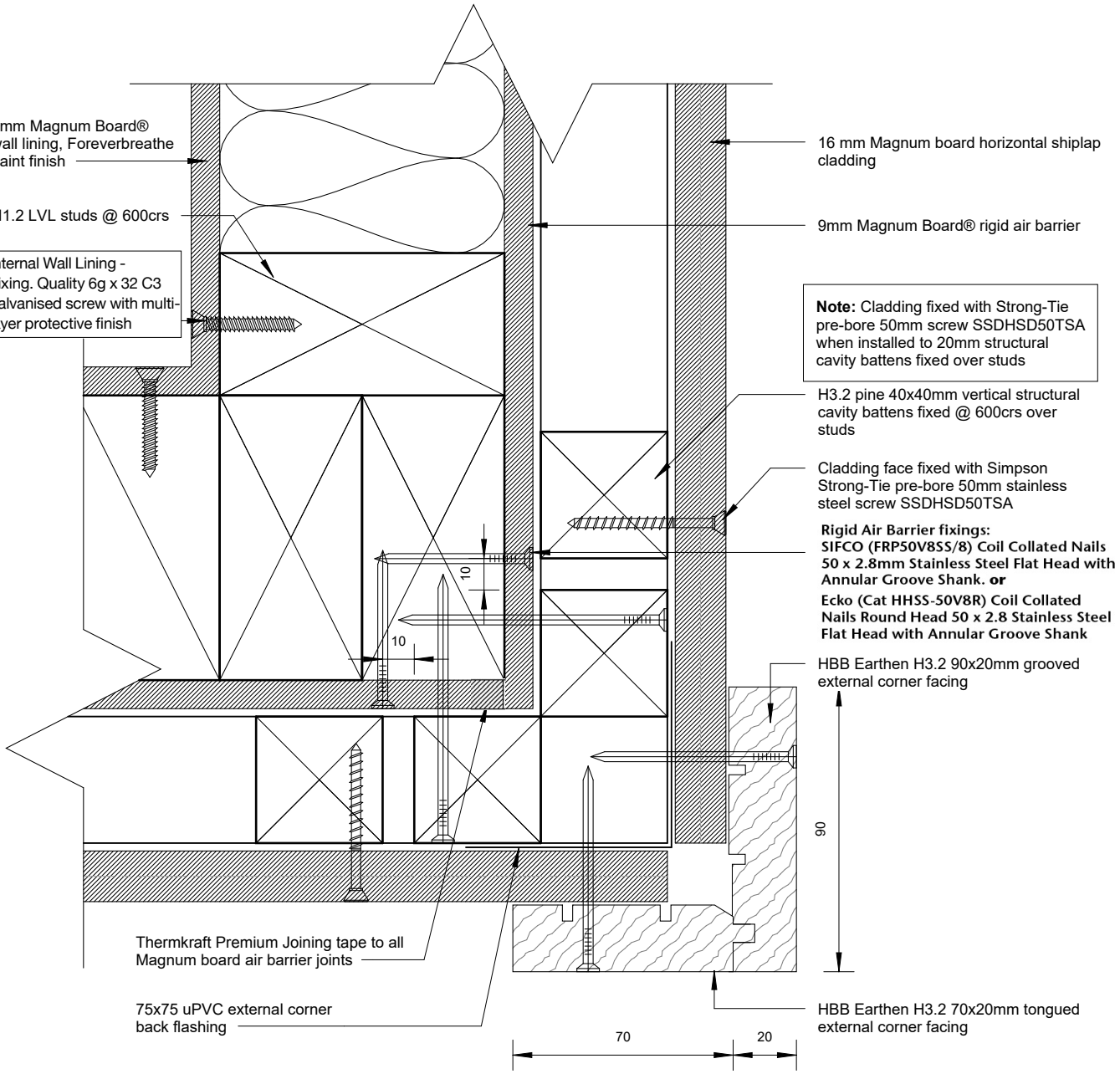
Refer page 15/15 for batten fixing details. 45x20 H3.2 non-structural cavity battens can be installed provided cladding fixing is guaranteed at a minimum 30mm framing.

0 10mm 50 100 150mm

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Magnum Board Horizontal Shiplap Details

Timber Foundation Detail



External Corner Detail

1 : 2

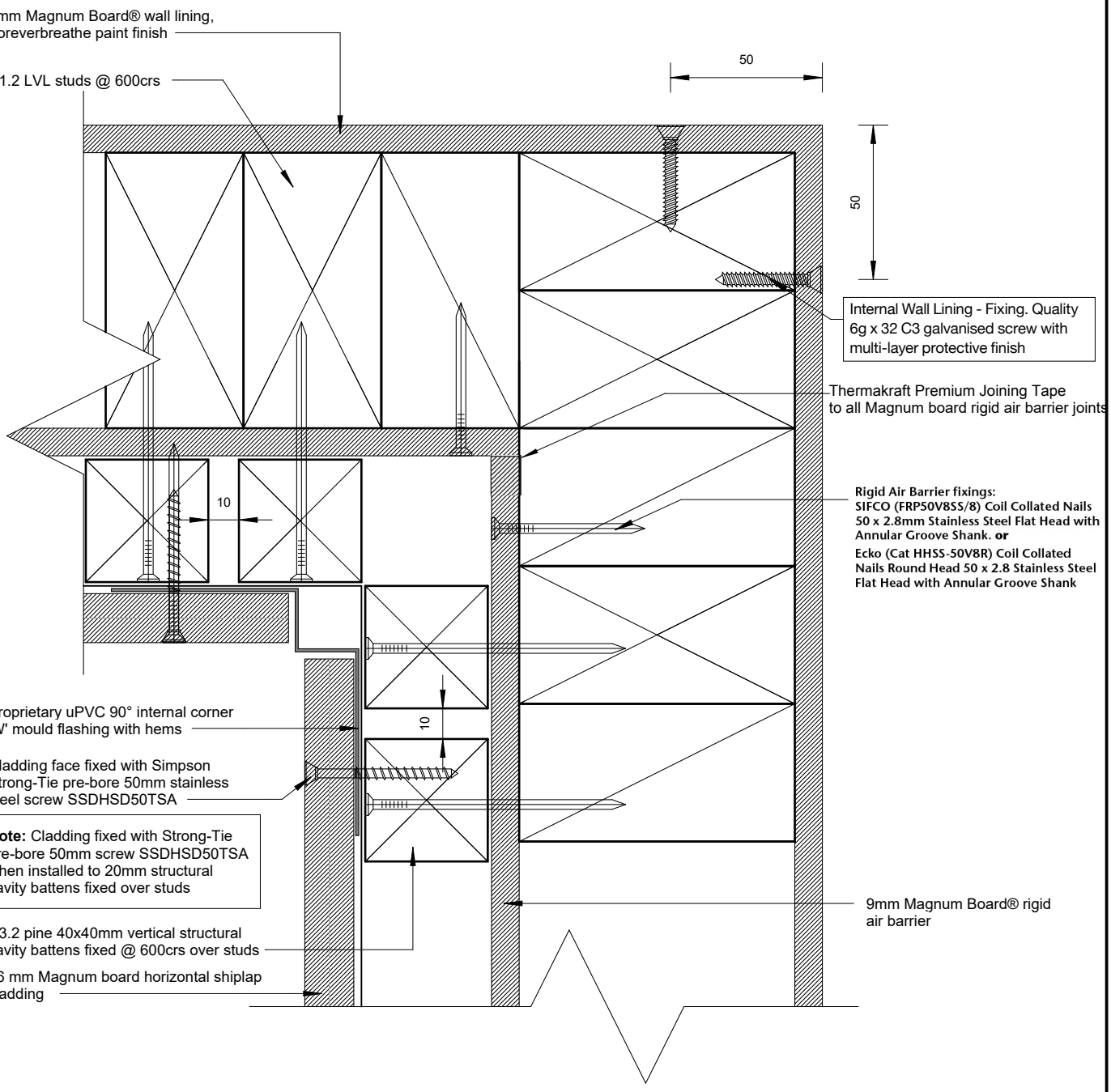
Fixing Note:
90mm x 3.15mm flat head stainless steel nails are required when connecting through Magnum board or into CCA treated timber.

Refer page 15/15 for batten fixing details. 45x20 H3.2 non-structural cavity battens can be installed provided cladding fixing is guaranteed at a minimum 30mm framing.

Magnum Board Horizontal Shiplap Details

External Corner Detail

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Internal Corner Detail

1 : 2

Fixing Note:
90mm x 3.15mm flat head stainless steel nails are required when connecting through Magnum board or into CCA treated timber.

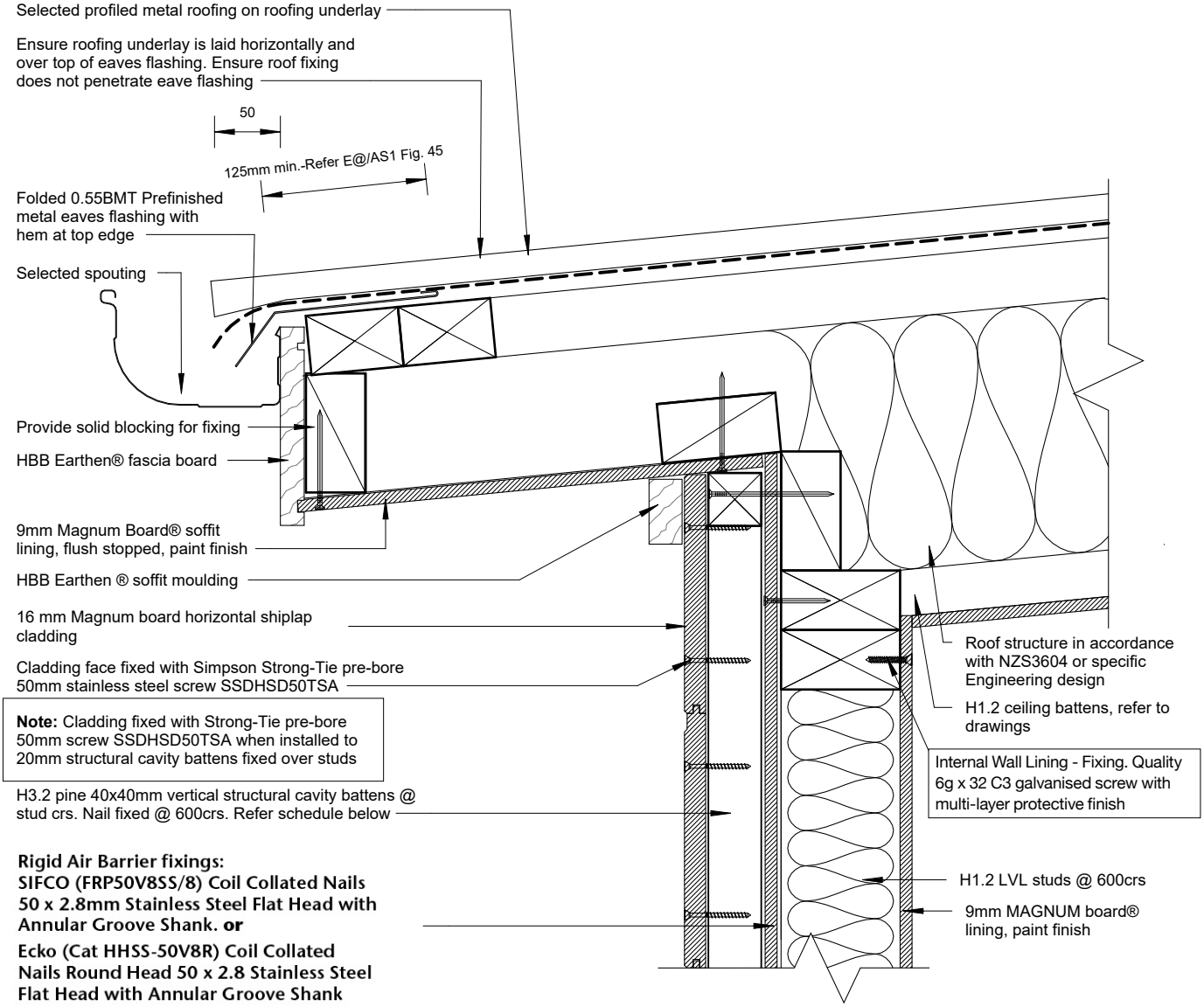
Refer page 15/15 for batten fixing details. 45x20 H3.2 non-structural cavity battens can be installed provided cladding fixing is guaranteed at a minimum 30mm framing.

Magnum Board Horizontal Shiplap Details

Internal Corner Detail

150mm 100 50 0 10mm

12/08/2024 9:42:16 am



Eave - Section Detail

1 : 5

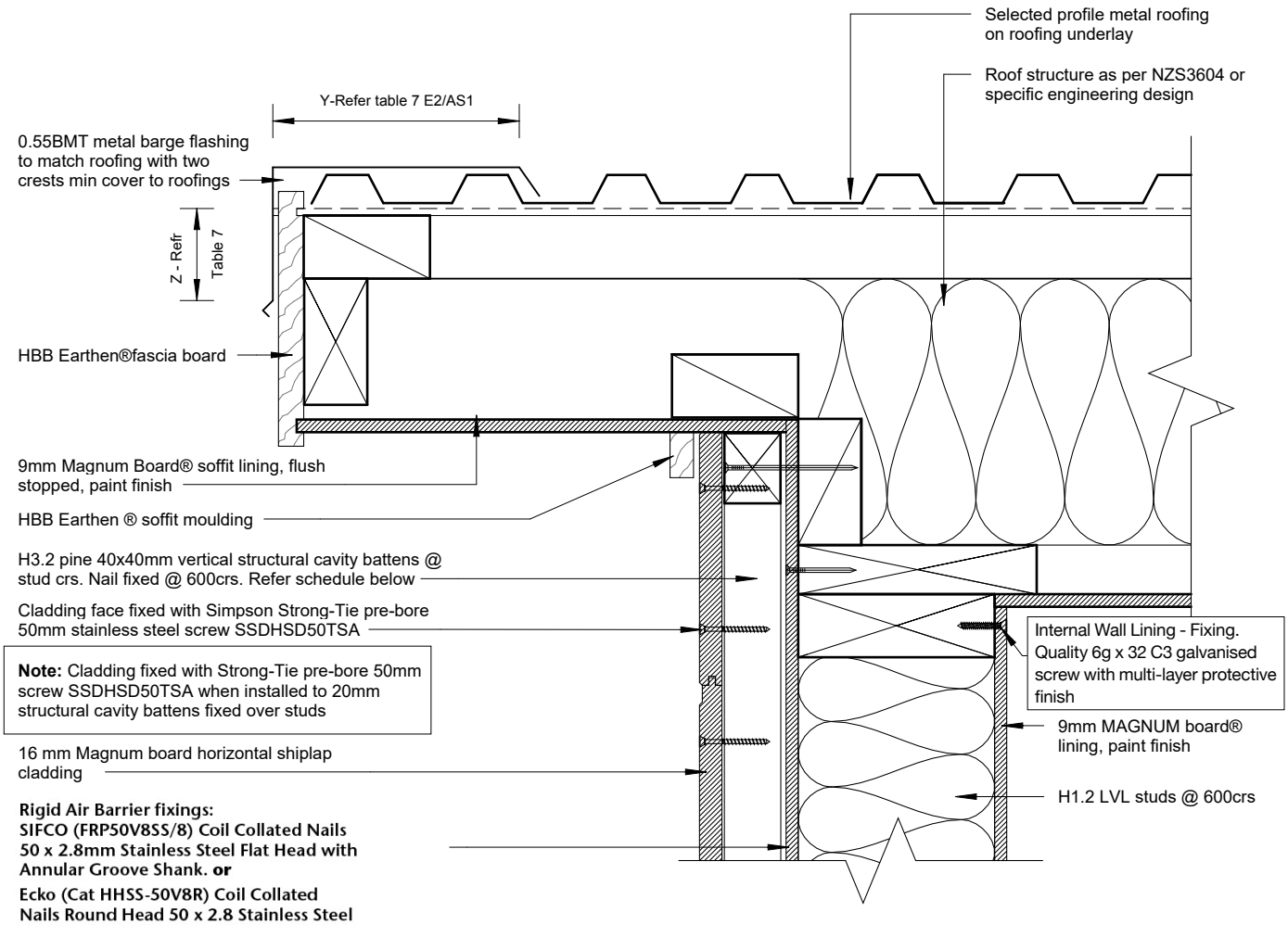
Fixing Note:
90mm x 3.15mm flat head stainless steel nails are required when connecting through Magnum board or into CCA treated timber.

Refer page 15/15 for batten fixing details. 45x20 H3.2 non-structural cavity battens can be installed provided cladding fixing is guaranteed at a minimum 30mm framing.

Magnum Board Horizontal Shiplap Details

Eave - Section Detail

12/08/2024 9:42:16 am



Barge - Sectional Detail

1 : 5

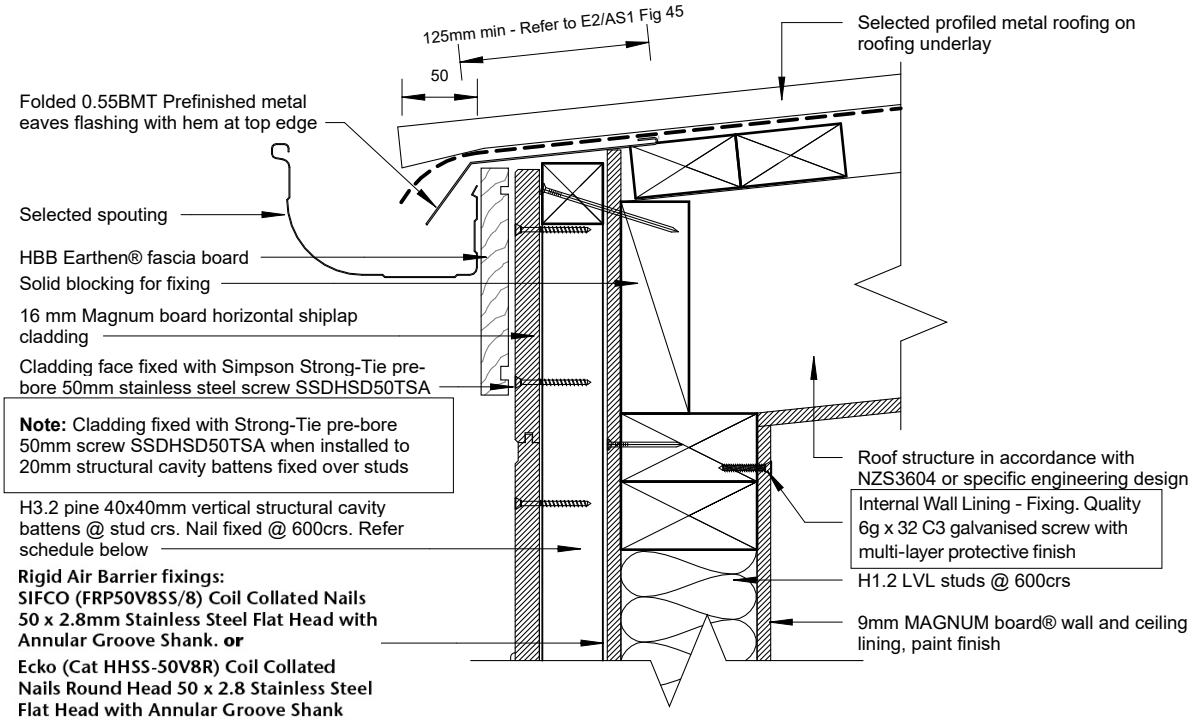
Fixing Note:
90mm x 3.15mm flat head stainless steel nails are required when connecting through Magnum board or into CCA treated timber.

Refer page 15/15 for batten fixing details. 45x20 H3.2 non-structural cavity battens can be installed provided cladding fixing is guaranteed at a minimum 30mm framing.

Magnum Board Horizontal Shiplap Details

Barge - Section Detail

150mm 100 50 0 10mm 12/08/2024 9:42:16 am

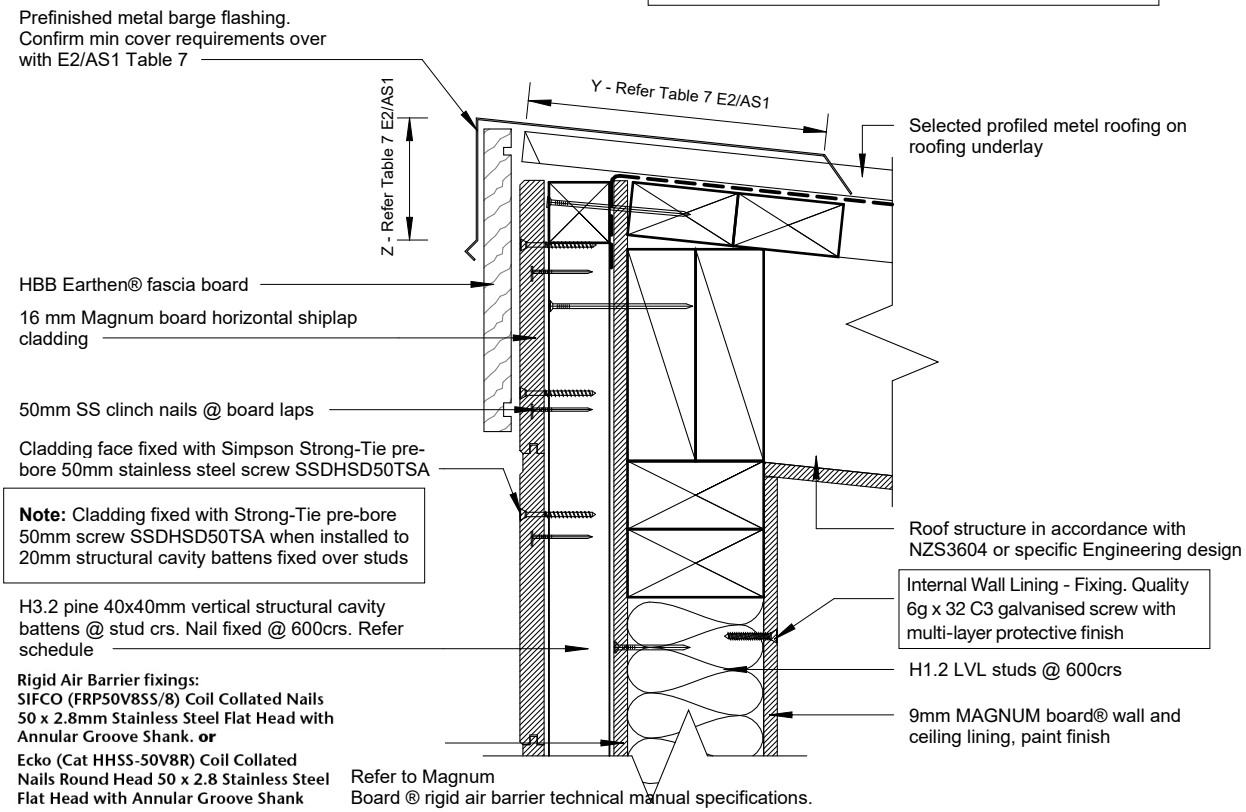


Barge - No Soffit Detail

1 : 5

Fixing Note:
90mm x 3.15mm flat head stainless steel nails are required when connecting through Magnum board or into CCA treated timber.

Refer page 15/15 for batten fixing details. 45x20 H3.2 non-structural cavity battens can be installed provided cladding fixing is guaranteed at a minimum 30mm framing.

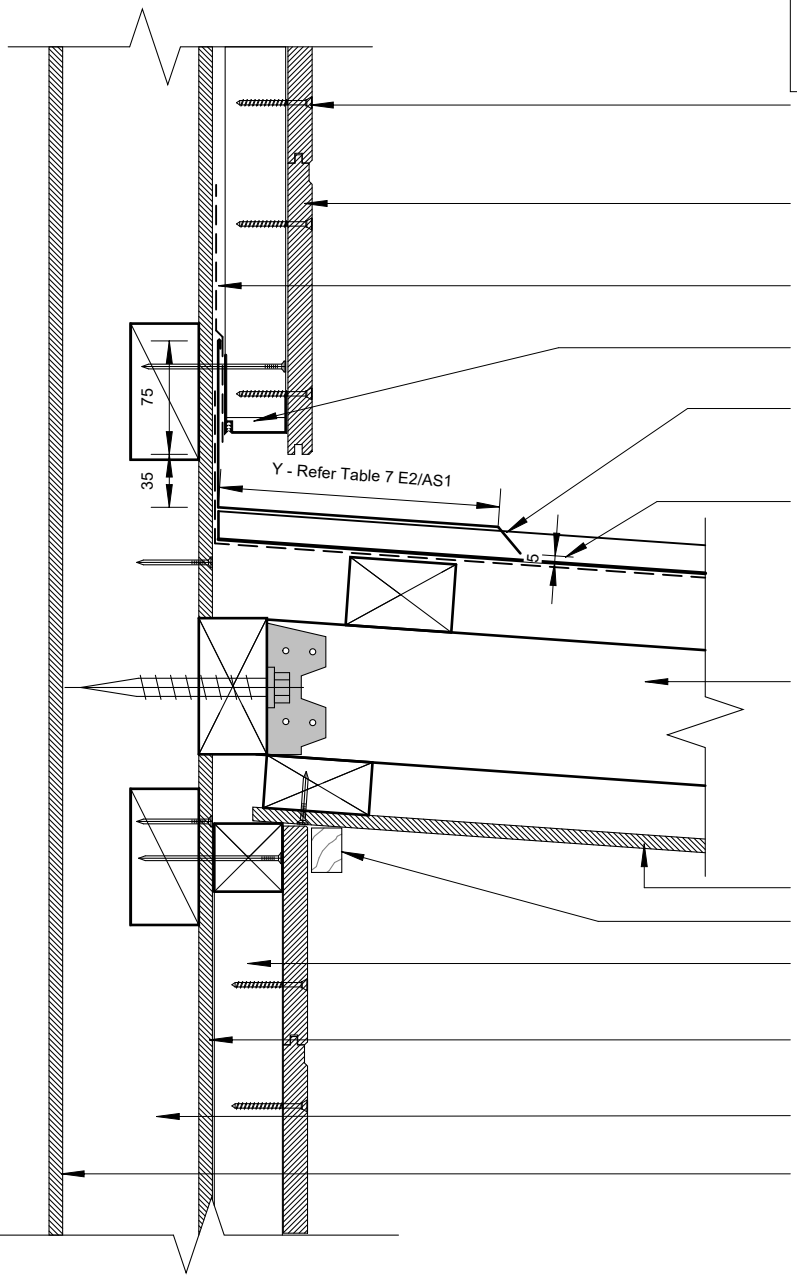


Roof - Wall ridge - Section Detail

1 : 5

Magnum Board Horizontal Shiplap Details

Roof - Wall Ridge - Section Detail



Note: Cladding fixed with Strong-Tie pre-bore 50mm screw SSDHSD50TSA when installed to 20mm structural cavity battens fixed over studs

Cladding face fixed with Simpson Strong-Tie pre-bore 50mm stainless steel screw SSDHSD50TSA

16 mm Magnum board horizontal shiplap cladding

Thermakraft Premium Joining tape dressed over top edge of apron flashing

Cavity closer allow 15mm drip edge to bottom of cladding

Prefinish metal apron flashing. 75mm Cover behind cladding. 35mm min. clearance between cladding and flashing. Refer to E2/AS1 Table 7 for cover over roofing

5mm max. Gap between flashing and roofing

Roof structure in accordance with NZS3504:2011 or specific engineer design

9mm Magnum board® soffit lining

Selected HBB Earthen® soffit moulding

H3.2 pine 40x40mm vertical structural cavity battens @ stud crs. Nail fixed @ 600crs. Refer schedule below

9mm Magnum Board® rigid air barrier

H1.2 LVL studs @ 600crs

9mm MAGNUM board® wall lining, paint finish

Canopy Junction - Section Detail

1 : 5

Fixing Note:
90mm x 3.15mm flat head stainless steel nails are required when connecting through Magnum board or into CCA treated timber.

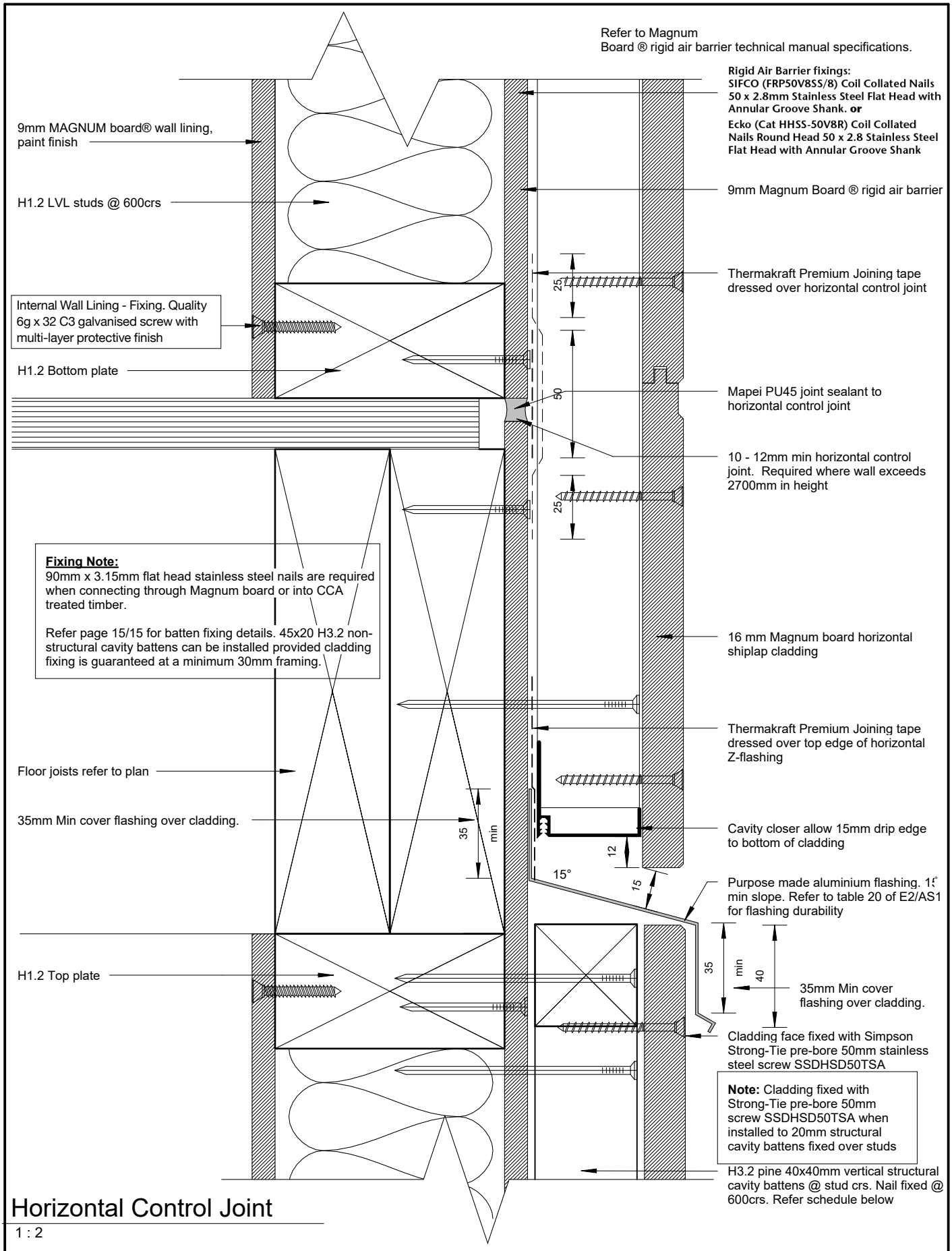
Refer page 15/15 for batten fixing details. 45x20 H3.2 non-structural cavity battens can be installed provided cladding fixing is guaranteed at a minimum 30mm framing.

Magnum Board Horizontal Shiplap Details

Canopy Junction - Section Detail

0 10mm 50 100 150mm

12/08/2024 9:42:17 am



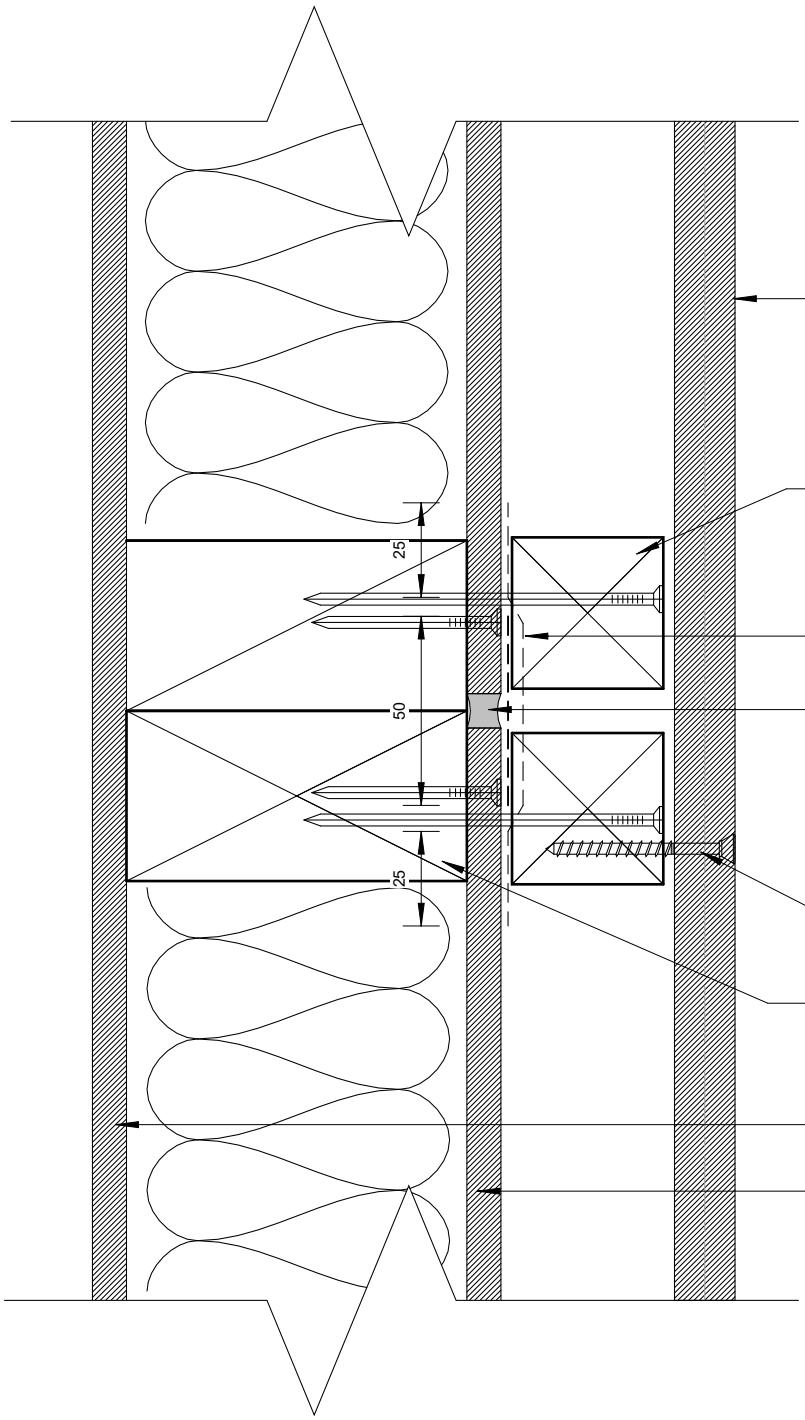
Horizontal Control Joint

1 : 2

Magnum Board Horizontal Shiplap Details

Horizontal Control Joint

12/08/2024 9:42:17 am



16 mm Magnum board horizontal shiplap cladding

H3.2 pine 40x40mm vertical structural cavity battens @ stud crs. Nail fixed @ 600crs. Refer schedule below

Thermakraft Premium Joining tape dressed over Magnum board joints

Mapei PU45 joint sealant to vertical control joint

Note: Cladding fixed with Strong-Tie pre-bore 50mm screw SSDHSD50TSA when installed to 20mm structural cavity battens fixed over studs

Cladding face fixed with Simpson Strong-Tie pre-bore 50mm stainless steel screw SSDHSD50TSA

H1.2 LVL studs @ 600crs

9mm MAGNUM board® wall lining, paint finish

Rigid Air Barrier fixings:
SIFCO (FRP50V8SS/8) Coil Collated Nails 50 x 2.8mm Stainless Steel Flat Head with Annular Groove Shank. or
Ecko (Cat HHSS-50V8R) Coil Collated Nails Round Head 50 x 2.8 Stainless Steel Flat Head with Annular Groove Shank

Vertical Control Joint

1 : 2

Fixing Note:
90mm x 3.15mm flat head stainless steel nails are required when connecting through Magnum board or into CCA treated timber.

Refer page 15/15 for batten fixing details. 45x20 H3.2 non-structural cavity battens can be installed provided cladding fixing is guaranteed at a minimum 30mm framing.

Magnum Board Horizontal Shiplap Details

Vertical Control Joint

0 10mm 50 100 150mm

12/08/2024 9:42:17 am

Note: Cladding fixed with Strong-Tie pre-bore 50mm screw SSDHSD50TSA when installed to 20mm structural cavity battens fixed over studs

H3.2 pine 40x40mm vertical structural cavity battens @ stud crs. Nail fixed @ 600crs. Refer schedule below

Cladding face fixed with Simpson Strong-Tie pre-bore 50mm stainless steel screw SSDHSD50TSA

16 mm Magnum board horizontal shiplap cladding

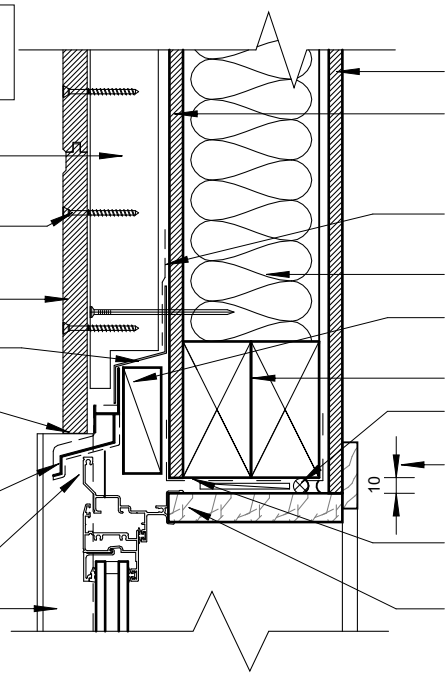
Folded aluminium head flashing supplied and installed by Flashman

Bottom of cladding must be hard down on top of flashman jamb fin

Flashman ® extruded aluminium one piece cavity closer and head flashing with stop end (shown dashed)

35mm min. Flashing upstand behind cladding, and 10mm min. cover over joinery

Flashman extruded aluminium jamb flashing



9mm MAGNUM board® wall lining, paint finish

Rigid Air Barrier fixings:
SIFCO (FRP50V8SS/8) Coil Collated Nails 50 x 2.8mm Stainless Steel Flat Head with Annular Groove Shank. or
Ecko (Cat HHSS-50V8R) Coil Collated Nails Round Head 50 x 2.8 Stainless Steel Flat Head with Annular Groove Shank

Thermakraft Premium Joining tape dressed over top edge of head flashing

H1.2 LVL studs @ 600crs

H3.1 packer supplied and installed by Flashman

H1.2 Lintel refer to plan

Continuous flexible PEF air seal backing rod to perimeter of opening

10mm Gap nominal to allow for head deflection and air seal

Thermaflash flashing tape dressed into opening and 50mm over face of rigid air barrier

Foreverbeech® timber reveal - choose size + code

Typical Head Detail

1 : 5

Fixing Note:
90mm x 3.15mm flat head stainless steel nails are required when connecting through Magnum board or into CCA treated timber.

Refer page 15/15 for batten fixing details. 45x20 H3.2 non-structural cavity battens can be installed provided cladding fixing is guaranteed at a minimum 30mm framing.

Rigid Air Barrier fixings:
SIFCO (FRP50V8SS/8) Coil Collated Nails 50 x 2.8mm Stainless Steel Flat Head with Annular Groove Shank. or
Ecko (Cat HHSS-50V8R) Coil Collated Nails Round Head 50 x 2.8 Stainless Steel Flat Head with Annular Groove Shank

Flashman back plate (Shown dashed)

Flashman® extruded aluminium slimline line

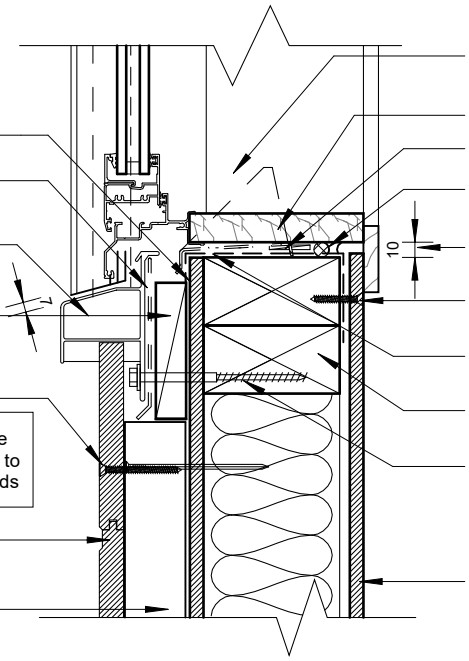
H3.1 Packer supplied and installed by flashman

Cladding face fixed with Simpson Strong-Tie pre-bore 50mm stainless steel screw SSDHSD50TSA

Note: Cladding fixed with Strong-Tie pre-bore 50mm screw SSDHSD50TSA when installed to 20mm structural cavity battens fixed over studs

16 mm Magnum board horizontal shiplap cladding

H3.2 pine 40x40mm vertical structural cavity battens @ stud crs. Nail fixed @ 600crs. Refer schedule



Flashman ® aluminium mitre soaker supplied by flashman

HBB Earthen ® timber reveal

H3.2 timber packer as required

Continuous flexible PEF air seal backing rod to perimeter of opening

10mm nominal gap

Internal Wall Lining - Fixing. Quality 6g x 32 C3 galvanised screw with multi-layer protective finish

Thermaflash flashing tape dressed into opening and 50mm over face of rigid air barrier

H1.2 LVL studs @ 600crs

14 Gauge Hot Dip Galvanised (316 SS Where required) S.T. H.C Screws at 600mm crs with 65mm min. frame penetration. Supplied and installed by flashing ®. Refer to E2/AS for durability requirements

9mm MAGNUM board® wall lining, paint finish

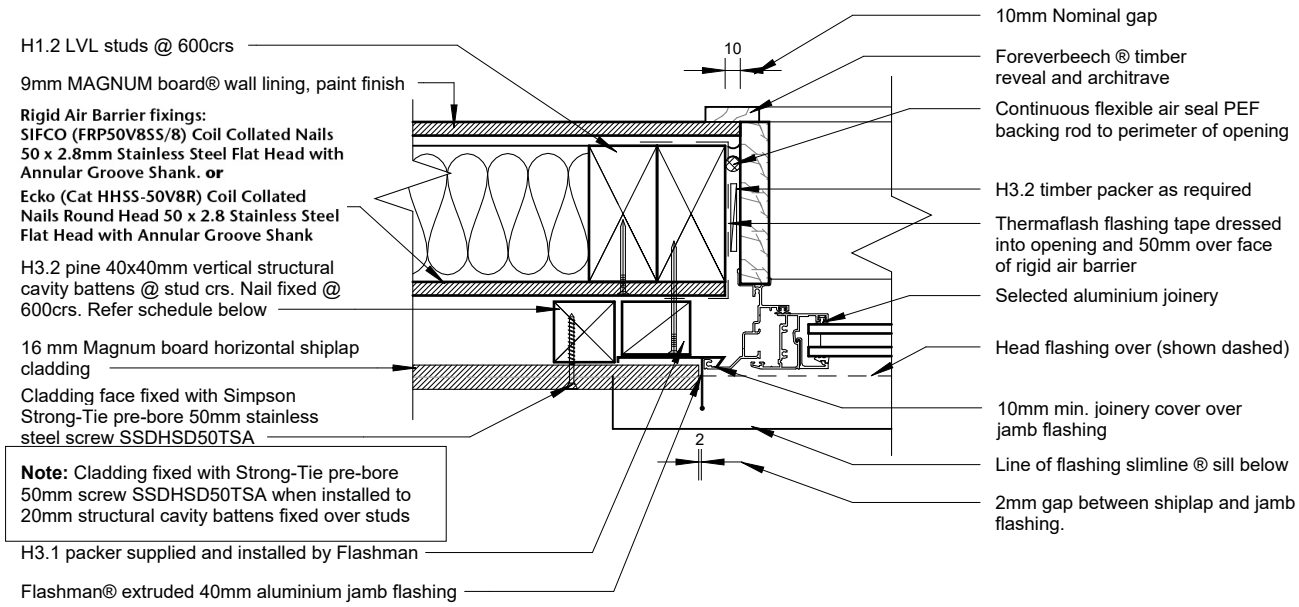
Typical Sill Detail

1 : 5

Magnum Board Horizontal Shiplap Details

Typical Head and Sill Detail

150mm 100 50 0 10mm
12/08/2024 9:42:17 am



Typical Jamb Detail

1 : 5

DO NOT FIX THROUGH JAMB FLASHING

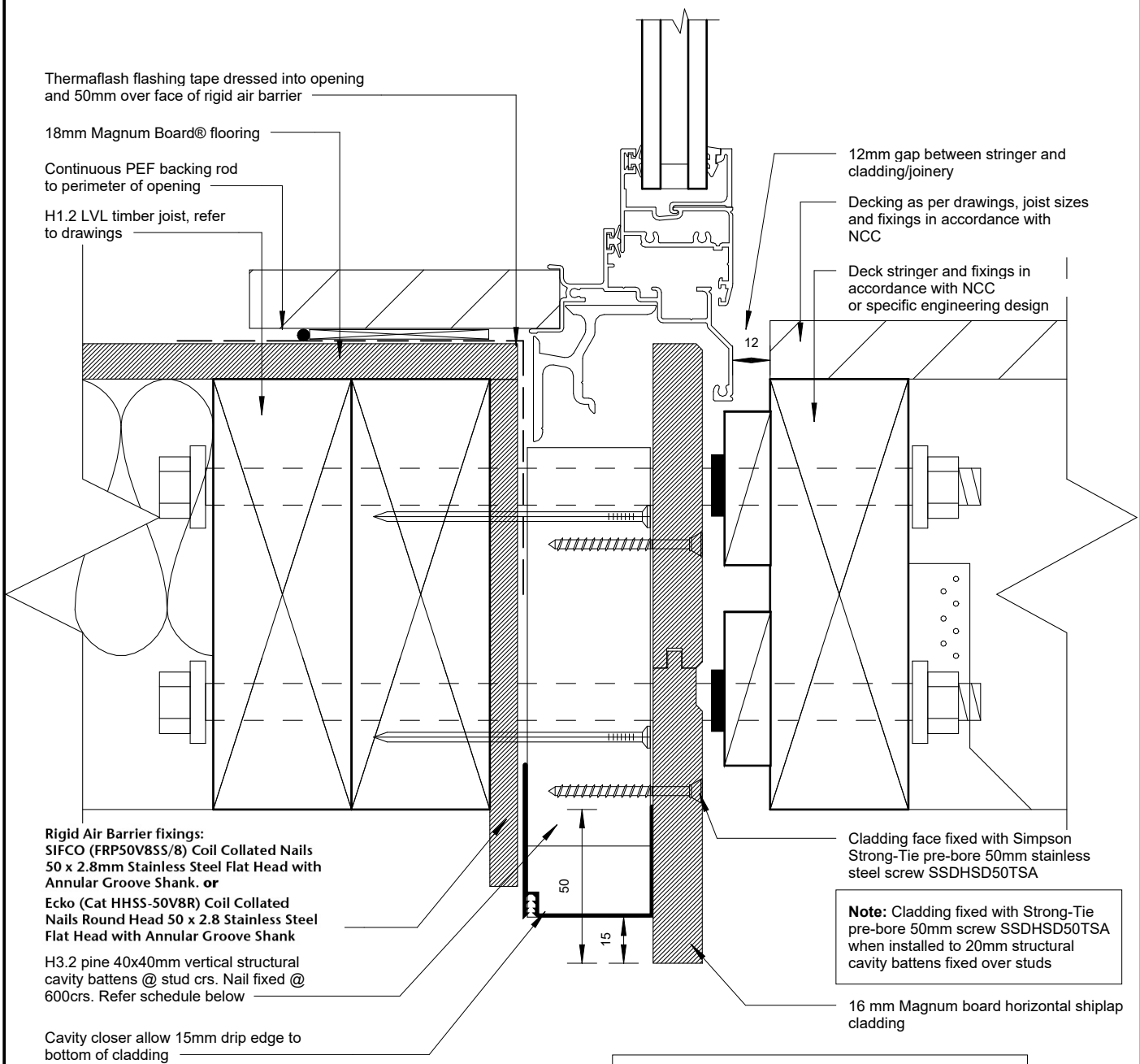
Fixing Note:
90mm x 3.15mm flat head stainless steel nails are required when connecting through Magnum board or into CCA treated timber.

Refer page 15/15 for batten fixing details. 45x20 H3.2 non-structural cavity battens can be installed provided cladding fixing is guaranteed at a minimum 30mm framing.

Magnum Board Horizontal Shiplap Details

Typical Jamb Detail

12/08/2024 9:42:17 am



Deck Threshold Detail

1 : 2

Fixing Note:
90mm x 3.15mm flat head stainless steel nails are required when connecting through Magnum board or into CCA treated timber.

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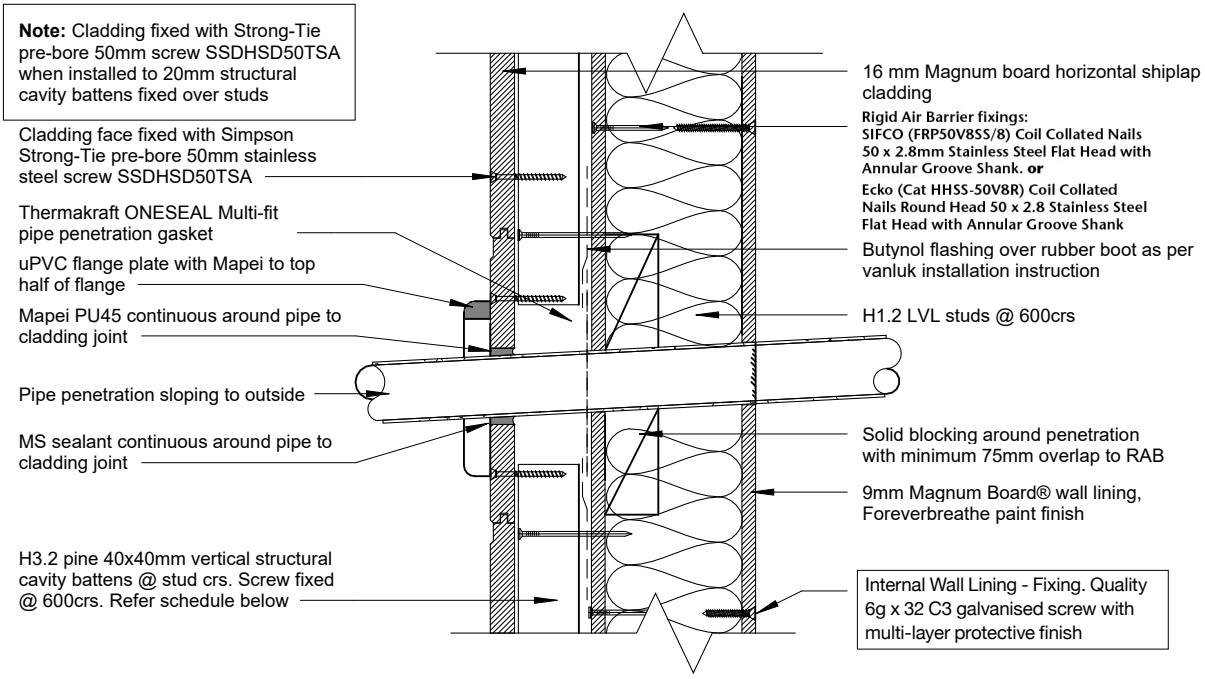
150mm
100
50
0 10mm

12/08/2024 9:42:17 am

Magnum Board Horizontal Shiplap Details

Deck Threshold Detail

Note: Cladding fixed with Strong-Tie pre-bore 50mm screw SSDHSD50TSA when installed to 20mm structural cavity battens fixed over studs

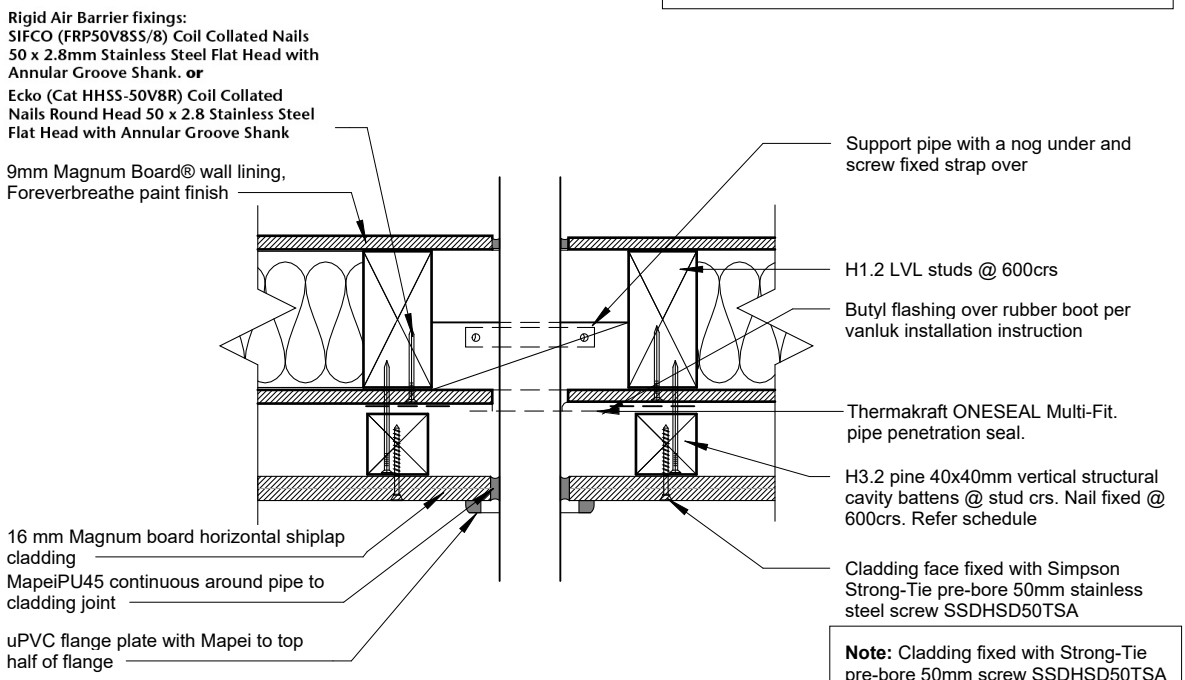


Pipe Penetration Section Detail

1 : 5

Fixing Note:
90mm x 3.15mm flat head stainless steel nails are required when connecting through Magnum board or into CCA treated timber.

Refer page 15/15 for batten fixing details. 45x20 H3.2 non-structural cavity battens can be installed provided cladding fixing is guaranteed at a minimum 30mm framing.



Note: Cladding fixed with Strong-Tie pre-bore 50mm screw SSDHSD50TSA when installed to 20mm structural cavity battens fixed over studs

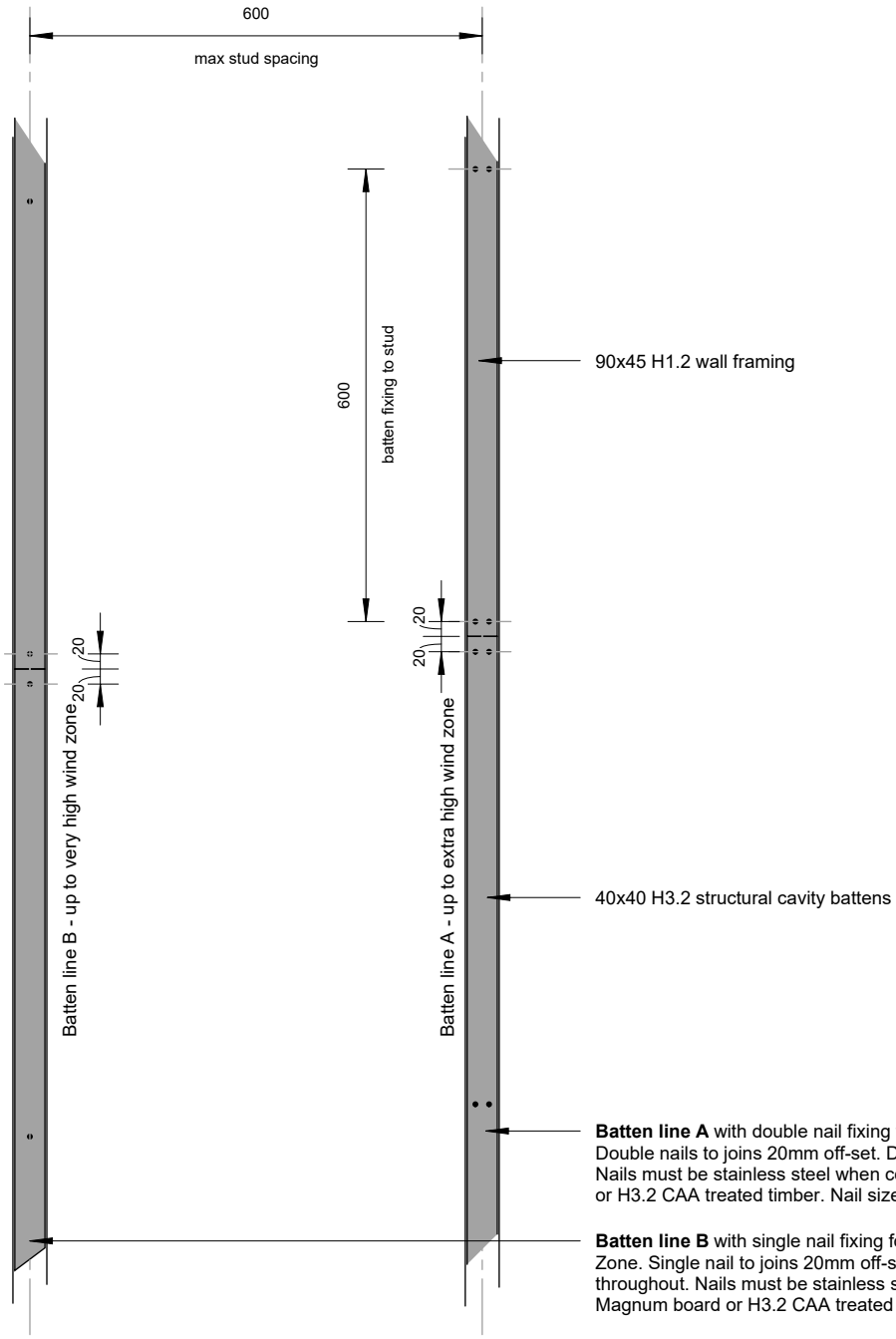
Pipe Penetration Plan Detail

1 : 5

Magnum Board Horizontal Shiplap Details

Pipe Penetration - Plan & Section Detail

12/08/2024 9:42:18 am



Batten Fixing

1 : 10

0 10mm 50 100 150mm

12/08/2024 9:42:18 am

Magnum Board Horizontal Shiplap Details

Batten Fixing