MASONS

Designed Smart, Built Tough.

Systems Catalogue

TRADE ISSUE | VOLUME 2

Christchurch Warehouse

Trent Mason,
Director, Masons NZ Ltd

In New Zealand, our rich history is marked by a strong tradition of innovation and accomplishment. Masons embodies this ethos, founded on the principle of elevating the quality of New Zealand's building products through a commitment to innovation and resourceful thinking.

Since being established in 1999, Masons has become a key supplier in the New Zealand building industry, offering a variety of quality systems and products for a whole range of building requirements.

Masons offers an extensive range of exterior building products from the frame out.

THE MASONS PRODUCT RANGE CONSISTS OF:

1. High performance pliable wall and roof underlays, rigid air barrier and a self-adhesive weather resistive barrier.
2. Innovative UNI range of temporary weather protection - Flexible Air Barriers driving building productivity and increased secondary defense from moisture.
3. Enviro cladding, flooring, and Intertenancy Wall Systems based on our Enviro AAC panel.
4. Construction hardware and acessories including the Masons/Redway E2 range of cavity closers and flashings.
5. Masonry veneer ties and reinforcement products.

The Masons full product collection can be found at: **mpb.co.nz**

MASONS
Designed Smart, Built Tough.

UNI™ Flexible Air Barrier System

UNI PLUS & UNI PRO

STAY ON TRACK WITH YOUR BUILD If cladding is delayed

UP TO 150 DAYS

TEMPORARY WEATHER AND UV PROTECTION
For up to 90 days (UNI PLUS) or 150 days (UNI PRO)

QUICK AND EASY TO INSTALL
Full Masons support with videos and training

KEEP CONSTRUCTION MOVING WITH UNI PLUS AND UNI PRO FLEXIBLE AIR BARRIERS

Wasted time on construction schedules, escalating costs, and the impact of inflation are major factors contributing to the rise in project expenses. Therefore, maintaining adherence to timelines has become increasingly crucial for construction projects.

By installing a UNI Flexible Air Barrier, you get at least 90 and up to 150 days of rain and UV protection for unclad framing. Interior and exterior trades can work in parallel to speed up programmes.

Once installed, these heavy-duty Flexible Air Barriers are an excellent second line of defence – they are vapour permeable, allowing moisture vapour to pass out of the building envelope for the life of the building.

No more Hold-ups if Cladding is Delayed

A Secondary Line of Defence Against Moisture

Very Thick, Strong and Tear Resistant

Easy to Install. Full Training Available

A Fraction of the Cost of Rigid Air Barriers

A STRONGER STRUCTURE BRINGS MULTIPLE BENEFITS

UNI PLUS and UNI PRO are nonwoven synthetic wall underlays. Thicker and stronger than conventional building wrap materials, UNI's multiple-ply structure is a barrier to both air and water, while still allowing water vapour to diffuse creating a drier, more comfortable environment inside and a more effective cladding system.

NEW ZEALAND BUILDING CODE STANDARD (NZBC)

If designed, installed and maintained in accordance with our requirements, all UNI Flexible Air Barriers meet or exceed the requirements of the NZBC absorbency performance requirement, as per NZS 2295:2006.

APPLICATIONS

- Suitable for commercial and residential construction, timber or steel framing and can be used with all cladding systems.
- Strong and durable and suitable for all areas of New Zealand including up to 'Extra High' wind zones of NZS 3604 using a specific fixing method. (See UNI Installation Instructions document on our website).
- Suitable as a non rigid backing for stucco plaster.
- Suitable as an air barrier on walls that are not lined, including gable ends.
- UNI PLUS is fire retardant under New Zealand standards for flexible wall underlays and may be used without restrictions.

CHOOSE THE CORRECT FLEXIBLE AIR BARRIER FOR YOUR BUILD

	UNI PLUS	UNI PRO
UV Resistance	90 days	150 days
Fire retardancy	Yes	No
Colour of substrate	Blue external / white internal	Blue external / white internal
Roll Sizes	1.5m x 33.33m = 50m² 2.74m x 18.25m = 50m²	2.74m x 18.25m = 50m²
CodeMark	CMNZ70116	CMNZ70117

UNI PLUS UV PROTECTION

UNI PRO UV PROTECTION

ENHANCE YOUR TECHNICAL UNDERSTANDING OF UNI PLUS AND PRO INSTALLATION – FOR COMPLIANT AND SMOOTH INSTALLS.

Please note: there are different installations for higher wind zones.
Check our Fixings Guide, Installation Guide and Installation Checklists on our website.

PASS (PRODUCT ASSURANCE SUPPLIER STATEMENT)

Visit the TBB website:
thebuildingbusiness.co.nz
for the latest information.

CodeMark

CMNZ70116 (UNI PLUS), CMNZ70117 (UNI PRO)

All UNI Flexible Air Barriers are CodeMarked.

Visit **tepae.building.govt.nz/public-registers** for latest information.

EASY INSTALLATION PLUS ALL ACCESSORIES

Masons is committed to supporting builders with their first time use of UNI Flexible Air Barriers. The following resources are available:

- Training videos in English and with Chinese subtitles
- Detailed printable Installation instructions in both English and Chinese
- Pre-inspection checklists
- On-site training when appropriate

For documentation, visit our website:
mpb.co.nz

For installation videos check out our Masons YouTube Channel
youtube.com/@masonsnz

UNI INSTALLATION ACCESSORIES

CN100 UNI CAP NAILER GUN

MUST HAVE

Best Practice to Fix UNI PLUS to the Frame

This gun shoots plastic caps with a 25mm ring shanked nail, and increases the holding power of the wrap.

Nails available separately as galvanised or stainless steel.

A 90-100 PSI Air Compressor is also required.

UNI® FASTENERS

For Timber Frames

For use with a hammer. Available as a 32mm galvanised or stainless steel nail.

UNI® FASTENERS

MUST HAVE

For Steel Frames

For use with an appropriate driver. 32mm galvanised screw with washer pack.

40 BELOW PLATINUM AND 40 BELOW FLEX FLASHING TAPES

MUST HAVE

Excellent adhesion in all weather conditions from -10˚C to 40˚C.
No primers or heat guns required.
Nail and screw sealable with just one layer.

Use a scraper to assist adhesion.

PENETRATION SEALS

For Pipe Penetrations

Air seal flashings designed for cavity construction where pipes or wires penetrate the air barrier.

Available sizes:
1-75mm and 80-170mm.

MUST HAVE

BRICKTIES

SUGGESTED – OPTIONAL

Heavy Duty Earthquake

Manufactured to comply with AS/NZS2699.1.2000.

Available in 90, 110 and 135mm lengths, galvanised, and stainless steel.

CORNER GUARDS

SUGGESTED – OPTIONAL

For Windows

To use with the installation of all Masons 40 Below Flashing Tapes.

Available in pack of 10 or 50.

PEF BACKING ROD

SUGGESTED – OPTIONAL

Joint Filler

A cylindrical flexible closed cell polyethylene material.

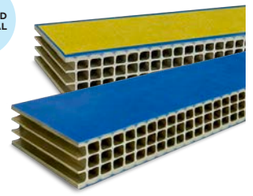
Available in multiple diameters from 6mm to 20mm.

18MM VENTILATED BATTENS

SUGGESTED – OPTIONAL

For walls

Used to form a cavity allowing the free flow of air and moisture, assisting with effective ventilation of a wall (or roof).



Product Description	Masons Code
UNI PLUS 2.74m x 18.25m = 50m²	UNIPLUS2.74X50
UNI PLUS 1.5m x 33.33m = 50m²	UNIPLUS1.5X50
UNI PRO 2.74m x 18.25m = 50m²	UNIPRO2.74X50
UNI Fasteners Galv Nail and Washer 32mm QTY 2500 (for use with hammer)	UNIFASTGN
UNI Fasteners Stainless Steel Nail & Washer 32mm QTY 2500 (for use with hammer)	UNIFASTSS2500
UNI Fasteners. Bucket of collated screws for Stainless Steel frames. QTY 1500	UNIFASTSTLFRAME
UNI Cap Nailer Gun	UNICAPNAILER
UNI Nail Washer Pack for UNI Gun QTY 2000 Galv for use with Gun	UNINAILPACK
UNI Nail Washer Pack for UNI Gun. Stainless Steel 2,000 for use with gun	UNINAILPACKSS

Product Description	Masons Code
40 Below Platinum Flashing Tape 230mm x 20Lm, 150mm x 20Lm, 100mm x 20Lm, 75mm x 20Lm, 60mm x 20Lm	40PLBELOW230x20 40PLBELOW150x20 40PLBELOW100x20 40PLBELOW75x20 40PLBELOW60x20
40 Below Flex Flashing Tape 230mm x 20Lm, 150mm x 20Lm, 75mm x 20Lm	40FLXBELOW230x20 40FLXBELOW150x20 40FLXBELOW75x20
Penetration Seal – 1–75mm Pack of 10 Penetration Seal – 80–170mm Pack of 10	PSEAL75 PSEAL170
BrickTies - various sizes - Galv & Stainless	visit: mpb.co.nz
Corner Guards - 10 pack Corner Guards - 50 pack	HYDROCG10 HYDROCG50
PEF Rod - various sizes from 6mm to 20mm diameter	visit: mpb.co.nz
18mm Ventilated Battens - Box of 25	BATNVENT45x18x1800

Enviro™ AAC Exterior Cladding System

Strong and lightweight with superior noise reduction

Masons Enviro cladding system is comprised of 50mm Enviro AAC panels mortared together and screwed to the building frame over cavity battens. Enviro uPVC flashing weatherproofs the joinery openings and provide air flow and drainage to cavity whilst excluding vermin.

Over this solid and weather proofed substrate, several layers of Masons Enviro plaster - render reinforced with synthetic mesh are applied, before finishing with layers of high build acrylic paint.

The result is a beautiful and timeless look of traditional rendered masonry, combined with the performance of light weight concrete panel, protected by the drained cavity and well proven flashings.

Enviro panels are autoclaved aerated concrete (AAC), with steel reinforcing through the centre. Air cells in the concrete absorb and reduce noise, making interior spaces quieter to live and work in. With its high thermal mass, Enviro helps keep buildings cool in summer and warm in winter.

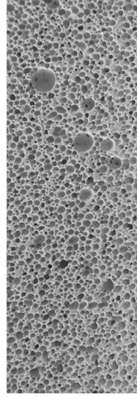
Panel dimensions: 2200mm x 600mm

Thickness: 50mm

CodeMark
CMNZ70092

TYPICAL APPLICATIONS

Residential, multi-unit residential, and light commercial builds.



BENEFITS OF THE ENVIRO PANEL CLADDING SYSTEM

WEIGHT

A strong, lightweight cladding system

With a working density of 650 kg/m³, Enviro panels are about one-fourth the density of concrete, whilst retaining 50% of typical concrete strength. Panels are easy to cut and quick to install for cost-effective cavity-based construction. The Enviro cladding system is suitable for all seismic and wind loadings around New Zealand when installed in accordance with the manufacturer's instructions.

ACOUSTICS

Superior noise reduction

Enviro panels are effective at absorbing noise, attaining an STL of 33dB for 1000Hz. The porous structure, combined with the panel's mass, dampens mechanical vibration energy and sound, assisting with acoustic privacy and quiet spaces inside homes and offices.

THERMAL

Suitable for NZ's climate

The porous structure of Enviro provides an R-value of R .416, superior to that of some other masonry substrates. Although this must be derated by .45 for the cavity air gap, this rating helps the designer achieve a higher wall thermal performance, making the system suitable for New Zealand climate zones from the warm north to the cool south.

CLEAN AIR

Low environmental impact

Enviro panels are extremely energy-efficient in production, with no pollutants created during manufacturing. The inert material is non-hazardous and does not emit harmful gases or vapours. All waste product at point of manufacture is recycled back into the production process. Mineral plaster at a thickness of 1–3mm is applied after panel installation.

WATER MANAGEMENT

Flashing and cavity systems

To prevent water from entering, the Enviro Panel Cladding System comes with a complete flashing system for windows and doors. If water should penetrate, Enviro has a ventilated cavity system to allow moisture to dry out and weep holes for water to drain out.

MATERIAL PROPERTIES

Working density with steel	650kg/m³
Compressive strength	4.0 Mpa
Structural properties	> 800 N – 1750 N as tested
Dry shrinkage value	0.8mm/m
Water absorption (by volume)	Up to 24–35%
Thermal conductivity	0.12 w/mk or R .416 (50mm Enviro), reduce by .45 for ventilated cavity – air gap
Sound transmission loss (STL)	33dB for 1000Hz
Fire	Grade A1 Non-combustible GB 8624-2006

PLASTER FINISHES

MINERAL OR ACRYLIC PLASTER?

Mineral plaster is very traditional, typically 2-3 thin layers is skilfully built up before a texture – finishing plaster coat is applied, polish floated off or sponged up – your choice.

Enviro mineral plasters are always coated with a lime stop sealer coat followed by two high build premium acrylic paint coats*.

Mineral plaster is an affordable and beautiful choice.

Acrylic plasters or renders use modern polymer technology resulting to create flexible and water-resistant plasters.

Masons FLX render is typically applied in 2 coats reinforced with mesh, before a pre tinted finishing or texture coat is applied. Finally, one heavy, or two regular coats of high build premium acrylic paint coat is carefully applied*.

Using **Masons FLX** will cost more, but the superior crack and water resistance of FLX are well worth it. Recommended where regular maintenance is difficult or costly (scaffold).

*Paint colours used should have a light reflective value of 25 or higher (lighter).

All Masons Enviro panel and plaster systems are reinforced with synthetic mesh.

Paint should be premium high build elastomeric acrylic paint.

The Masons Enviro panel and plaster cladding system is applied by skilled LPB plasterers and is covered by a 15 year materials warranty. The applicator covers their workmanship for 5 years.

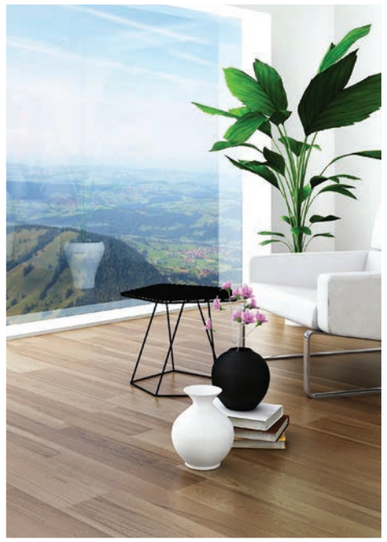
The Masons Enviro cladding system has a CodeMark certificate of conformity.

This demonstrates compliance with the NZ building code and commitment to quality via the MBIE administered CodeMark scheme.

Component	Masons Code
50mm Enviro AAC Panel 2200mm x 600mm	ENVPAN

Enviro™ AAC Floor System

A strong, quiet and thermally comfortable flooring system



A solid yet lightweight floor panel, Enviro provides a solid, premium feeling underfoot. Compared with timber-based flooring products, Enviro helps create quieter and thermally comfortable interiors.

Enviro panels are autoclaved aerated concrete (AAC), with steel reinforcing through the centre. Air cells in the concrete absorb and reduce noise, making interior spaces far quieter to live and work in when compared with timber-based alternatives. With its high thermal mass, Enviro helps balance indoor temperatures, absorbing heat and then releasing it as a building cools down.

Panel dimensions: 2200mm x 600mm

Thickness: 75mm

Working Density: 650kg/m³, about ¼ that of 'standard' concrete*

*'Standard' concrete estimated at 2400 KG per m³ for comparison purposes.

TYPICAL APPLICATIONS

Residential and light commercial builds.

BENEFITS OF THE ENVIRO AAC PANEL FLOOR SYSTEM

WEIGHT

Strong and lightweight

Enviro has many of the features of a solid concrete floor, but without the weight for handling or loads on the structure. With a working density of 650kg/m^3, it's approximately one-fourth of the weight of concrete, while retaining 50% of its strength. Fitted over timber or steel joists, the span tables offer KPA floor load solutions for homes and offices. Self-levelling floor topping may be used to complete the installation or when the floor covering requires it.

EFFICIENT

Simple to install

The Enviro Panel Floor System can be installed quickly and efficiently by screwing and glue-fixing each panel to the floor framing, using galvanised bugle screws for timber framing or dual-grip hex-head screws for steel framing. Panels are then mortared together with Masons Enviro ACC glue mortar or bonded with construction adhesive, creating a continuous lightweight masonry floor. The panel sizes may require a slightly different joist set-out than timber-based products to enjoy the full benefits of the system.

ACOUSTICS

Reducing sound between floors

Enviro panels are effective at absorbing noise and reducing sound transmission between floors, with an STL rating of 35dB for 1000Hz. The porous structure provides sound absorption, along with mechanical vibration energy dampening to reduce sound travel between rooms.

THERMAL

Suitable for the local climate

The porous structure of Enviro ACC panels gives a superior R-value rating compared to some other masonry substrates. This means AAC panels provide a good level of thermal mass, helping to even out temperature fluctuations.

CLEAN

Low environmental impact

The Enviro Panel Floor System is energy-efficient, with no harmful pollutants produced during manufacturing. Its inert material is non-hazardous and does not emit harmful gases or vapours. All waste product at point of manufacture is recycled back into the production process.

MATERIAL PROPERTIES

Working density with steel	>650 kg/m^3
Compressive strength	4.0 Mpa
Structural properties	>1750 N
Dry shrinkage value	0.3-0.5mm/m
Water absorption (by volume)	Up to 24–35%
Thermal conductivity	0.12 w/mk or R .625 (75mm)
Sound transmission loss (STL)	35dB for 1000Hz (see STC chart)
Fire properties	Non-combustible

Note: Masons Enviro Panel Floor System has not been tested or rated as an intertenancy fire solution.

SOUND PERFORMANCE

Estimated performance of 75mm Enviro AAC panel with various mid-floor assemblies

STC	sound transmission class	a minimum of 55 is required by the NZ Building Code
IIC	impact insulation class	a minimum of 55 is required by the NZ Building Code

The designer's material choices and floor section design make a large contribution to a quiet floor between stories or tenancies. It is best to design to exceed the required minimums as acoustic performance can sometimes be derated in situ.

Enviro 75mm panels over 240mm timber joists IIC 73 STC 56
Cut pile carpet (12mm)
Chip foam underlay (8mm)
75mm Enviro AAC Panel
75mm thick absorptive blanket in cavity
240mm timber joists
Resilient mounts (e.g., GIB Rondo with ST001 Acoustic mount) and furring channels10mm thick standard plasterboard

75mm Enviro – 240mm IIC 43 STC 55
Timber joists – no floor covering – now ceiling separation or additional mass.
No floor covering
75mm Enviro AAC Panel
75mm thick absorptive blanket in cavity
240mm timber joists
Resilient mounts (e.g., GIB Rondo with ST001 Acoustic mount) and furring channels
10mm thick standard plasterboard

DESIGN NOTES

Additional material selection is required to achieve IIC. Adding mass and separation to the ceiling such as double layers of Gib or suspending the ceiling using a proprietary ceiling mount system, correct use of acoustic sealant and/or addition of a sound-absorbing insulation in the floor cavity will be required. Selection of an acoustic underlay for hard flooring may also be helpful.

SEE THE MASONS WEBSITE FOR THE FOLLOWING RESOURCES:

- Enviro Floor Design and Installation Guide
- Design and Specification Guidance
- CAD drawings/standard details
- A take-off service
- A PS1

INSTALLATION

The Enviro AAC Panel Floor System may be readily installed by building teams or plaster and panel contractors at the client's discretion. **

** Installation should be supervised by an LPB builder or plasterer

Component	**Masons Code**
75mm Enviro AAC Panel Flooring 2200mm x 600mm	ENVPANFLOOR

Enviro™ AAC Intertenancy Wall System

Acoustic, fire-rated wall system

EXCEEDS CODE
Effective fire and sound separation

SIMPLE
Easy to use, flexible and fast

FAST
Designed for buildability

The Masons Intertenancy Wall System is based on our Enviro AAC (autoclaved aerated concrete) panels – a dense yet lightweight material with proven acoustic and fire-resistant performance.

The system is easy to work with, giving builders workflow flexibility and construction efficiencies. It is fully NZBC compliant for both fire resistance (FRR) and sound transmission (STC).

It is manufactured from cement, sand, lime and water which is aerated with an expanding agent. Soft blocks are moulded from the mixture and then sliced into the required panel size and cured in a steam pressure autoclave for up to 12 hours.

RELIABLE MATERIALS

The Enviro™ AAC panel

The Masons Enviro AAC Intertenancy Wall System is a secondary building element, based on Masons Enviro AAC panel – a 50 mm thick panel.

CodeMark
CMNZ70179

TYPICAL APPLICATIONS

Multi-unit residential, terrace houses, apartments, aged-care facilities and light commercial builds.

Enviro AAC Intertenancy Wall System

FRR 120/120/120 timber frame, -/90/90 for light steel frame.

STC -64Db

OVER ALL DIMENSIONS

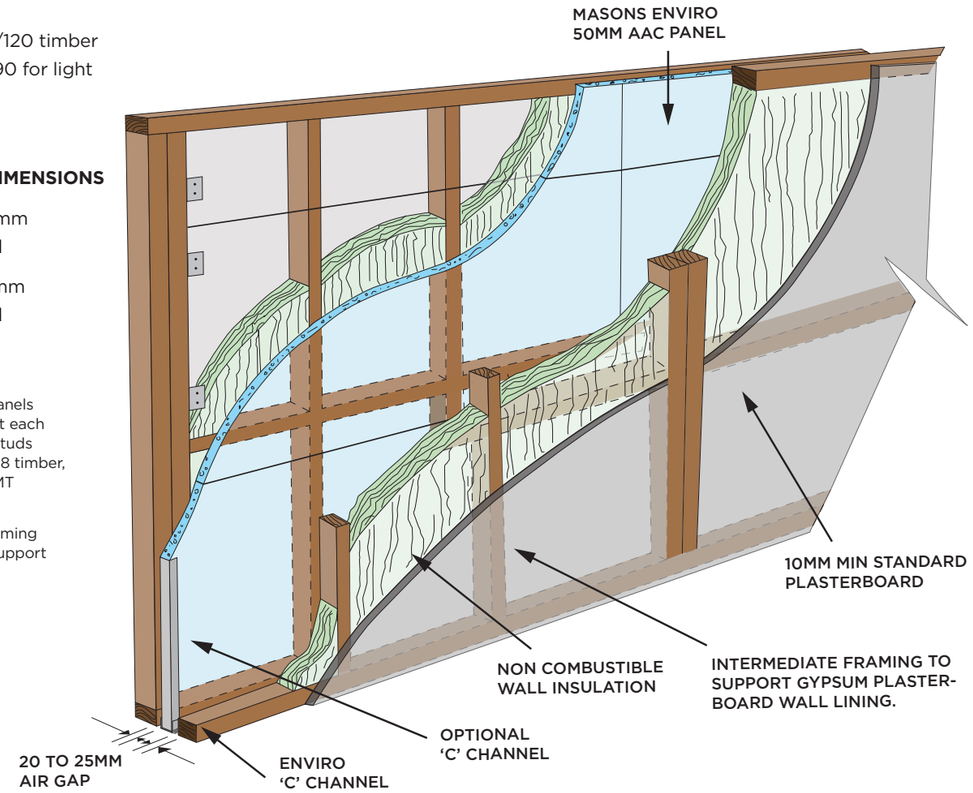
290mm = 10mm Plaster Board

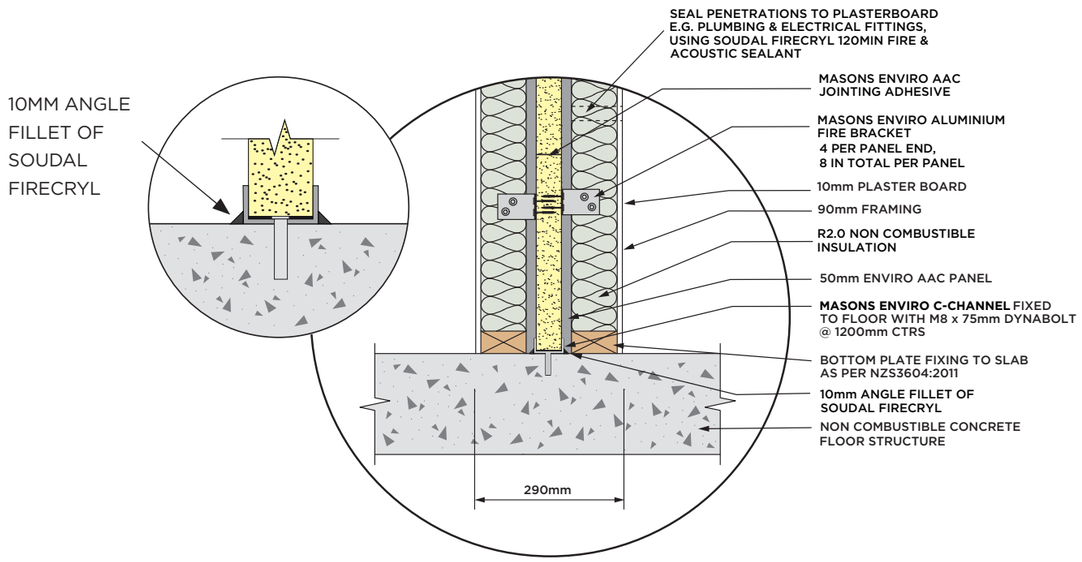
296mm = 13mm Plaster Board

NOTE

50mm Enviro panels are supported at each end by double studs 2/90x45mm SG8 timber, or /76 x 0.75 BMT Galv steel.

Intermediate framing as required to support wall lining.





EXCEEDS MIN REQUIREMENTS

Fully FRR and STC compliant

This system meets and/or exceeds the New Zealand Building Code's minimum requirements for both fire resistance rating and sound transmission class. It scored a rating of 120/120/120* for walls up to 10m high. Acoustic engineers Marshall Day reported a lab performance of 64 dB – higher than the minimum STC requirement of 55 dB for intertenancy walls.

Structures or building elements with a fire resistance rating are intended to separate people in the building from fire and allow time for a safe escape.

SIMPLE

Easy to use, flexible and fast

The Masons system is construction friendly and designed for simplicity and flexibility. As few as two builders can install the system, and installation can be flowed around other work on-site. No weather protection is needed for the AAC panels when work stops, making on-site storage simple. The horizontal stack construction minimises cutting and waste.

Masons Intertenancy Wall has a FRR of 120/120/120* making it suitable for a variety of building uses including where more time is needed for safer fire evacuation.

A higher FRR will more effectively retard fire allowing fire fighters more time to attend and effect less damage to adjacent tenancies.

FAST

Designed for buildability

The system can be installed up to three stories continuously, without interruption, and there is often no need for extra accessories or fiddly work at mid-floors junctions. Services can be run down the framing on either side of the AAC panels, and materials be carried in smaller parts when site access is difficult.** The ACC system is easier for everyone on the job.

* FRR performance for light steel framing is lower FRR -/90/90

**Penetrations to the Masons Intertenancy Wall System: fire and acoustic must be engineered for fire rating and to preserve acoustic performance and installed by suitably qualified persons.

THE 'KIT OF PARTS' MAKING UP THE MASONS INTERTENANCY WALL SYSTEM

COMPONENTS SUPPLIED BY MASONS

Enviro™ 50mm AAC Panel and Enviro™ C Channel and Fire Brackets	
ENVPAN	50mm Enviro AAC Panel 2200mm x 600mm
CCHANNEL	Galvanised Steel C-Channel 3048mm long (35x51x35)
RANGLEBKT	Aluminium Bracket 75mm x 45mm x 50mm
Fixings	
IT-SR17HWF12353 **OR**	11 x 35mm Woodscrew bag 100 (timber framing)
IT-SHWF12353	12g - 11 x 25mm min self-drillers bag 100 (steel framing)
Fire seal void filler	
MINWOOL50	Mineral Wool Insulation 50mm x 1200mm x 600mm
Fire and acoustic sealer	
FIRECRYL310	Firecryl Sealant Acrylic Sealant 310ml White
FIRECRYL310	Firecryl Sealant Acrylic Sealant 600ml Grey
Panel mortar	
PBEJG25kg	Enviro Panel Jointing Glue 25kg

COMPONENTS SUPPLIED BY OTHERS

Wall insulation
Non combustible insulation such as glass fibre batts of equivalent R2.0 minimum
Framing
Structural framing - Double - 2/90 x 45 mm SG8 timber studs at 2.2 m centres or double - 2/76mm x 0.75BMT steel studs
Intermediate framing - as required to support gypsum board wall lining
Cold Galv spray to seal cut ends of steel reinforcing in Enviro panel
C Channel fastener
M8 x 75mm Dyna Bolts

PERFORMANCE

Secondary Building Elements designed to separate and protect people from the effects of fire typically require an FRR of -/30/30 or -/60/60.

Sound Transmission Class (STC) is a measure of permissible sound transmission between adjoining tenancies through a vertical wall. An STC of 55 is the minimum. The higher the STC the less the sound transmission.

The Masons Intertenancy Wall system has a Fire Resistance Rating of 120/120/120 for timber frame and -/90/90 for light steel frame with an estimated laboratory acoustic Sound Transmission Class (STC) performance of 64 dB. Masons Enviro Aluminium fire brackets on both sides of the Enviro 50 mm AAC panel connect to the framing. As the Enviro Fire brackets on the fire attack side melt, the Enviro panel is disconnected from the collapsing structure and is supported by the Fire Brackets and the structure on the side insulated and protected of the Intertenancy wall.

The support framing of the Masons Enviro 50 mm AAC Intertenancywall framing as per the details provided has been reviewed and designed for post fire stability. Refer to Enviro 50 mm AAC Intertenancy wall details

The loads and details for stair wells and mid-floor junctions adjacent to the Enviro Intertenancy wall should be checked and designed by the building designers.

The building designers or structural engineer should also check the Intertennacy wall framing meets the required framing loads and bracing requirements for the building.

COMPLIANCE

If designed, installed and maintained in accordance with all Masons NZ Ltd requirements, the Masons Intertenancy Wall system will comply with or contribute to compliance with the following:

B1 STRUCTURE: Performance Clauses B1.3.1, B1.3.2, B1.3.3 (a, f), B1.3.4

B2 DURABILITY: Performance Clauses B2.3.1(a), B2.3.2

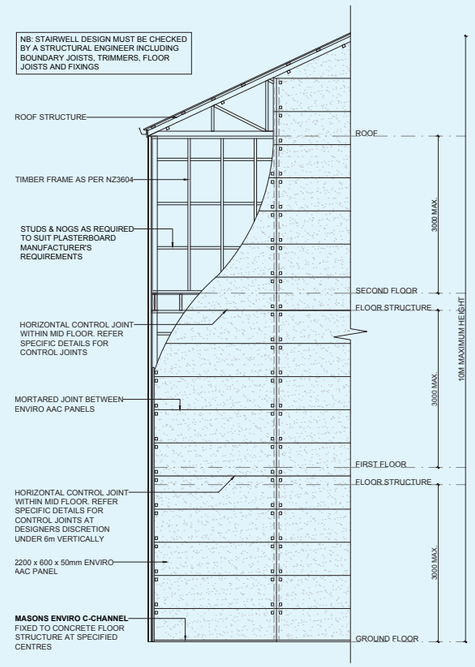
C3 FIRE AFFECTING AREAS BEYOND THE FIRE SOURCE: Performance Clauses C3.4(a), C3.6

C4 MOVEMENT TO PLACE OF SAFETY: Performance Clauses C4.3 (contributes to)

C6 STRUCTURAL STABILITY: Performance Clauses C6.2, C6.4

F2 HAZARDOUS BUILDING MATERIALS: Performance Clauses F2.3.1

G6 AIRBORNE AND IMPACT SOUND: Performance Clauses G6.3.1



Refer to the Enviro 50mm Intertenancy wall details and installation instructions.

Passive Roof Ventilation System

Regulates roof space temperature and reduces condensation

VENTILATION BUILT-IN
Ensures air enters at the eaves and exits at the ridge

HEALTHIER ROOF
A drier, cooler roof space and longer roof life

PREVENTS MOISTURE BUILD UP
and mould growth

VERSATILE
Suits various roof types

The improved weather and air tightness of modern roof cladding and flashings contribute to warm, dry and healthy homes. But, the reduced airflow in the roof attic space can create a hidden problem – excess moisture and condensation in the roof space.

Without adequate ventilation, moisture builds up, creating the perfect conditions for mould growth. Good roof space ventilation is crucial in preventing this.

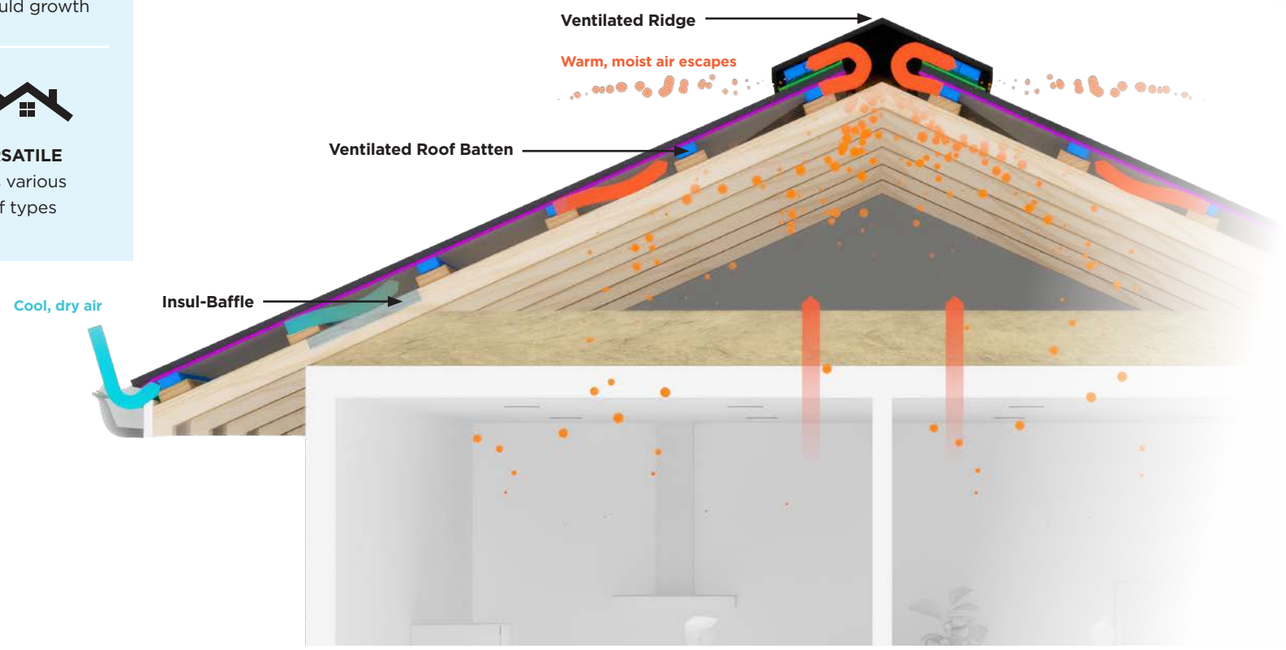
Masons Passive Roof Ventilation System is a complete system for ventilating roof cavities in long run metal roofs. Using the natural stack effect and wind movement, this passive system helps remove warm, moist air and introduces cooler, drier air to protect the roof structure, insulation, and ceiling space from moisture-related damage.

THE SYSTEM HAS THREE COMPONENTS:

INSUL-BAFFLE to preserve a clear air path near the eaves

VENTILATED ROOF BATTENS to create airflow under the roofing

ROOF VENTS at the ridge to let warm air escape



MASONS PRODUCTS MAXIMISE AIRFLOW TO REDUCE CONDENSATION

In some regions condensation risks are higher, such as in areas of cold or high humidity.

Extra care needs to be taken in specifying the correct design and installation practices, as well as building ventilation systems to prevent excessive condensation and moisture in the roof spaces.

Always refer to the latest version of the MRM Code of Practice for the latest best practise in design and installation details. See MRM Code of Practice – Ventilation.

Factors that influence excessive condensation forming in roofing systems:

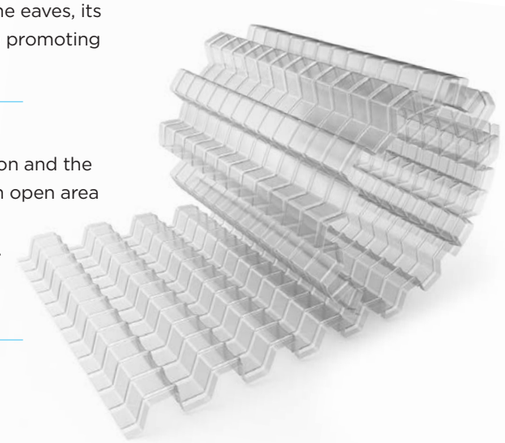
- Humid and/or cold climatic regions
- Warm/skillion roof construction (require attention in design and construction)
- Low roof cavity air volume and restricted air movement
- Lack of a vapour control layer (if applicable)
- Low pitched roof or bulk insulation
- Penetrations in the ceiling or warm air entering the roof space
- Activities within the building which create high moisture loading
- High levels of construction moisture such as concrete slab curing

NB: Masons recommends passive ventilation be included in the buildings design to eliminate excess condensation.

INSUL-BAFFLE

For even better airflow, Masons Insul-Baffle ensures the vital 25mm gap between insulation and roof underlay is maintained.

Made from durable, clear plastic, Insul-Baffle is fitted under the eaves, preventing bulk insulation from pressing up against the roof underlay. Installed along the full length of the eaves, its unique 'Dragon Channels' add rigidity while promoting cross-ventilation.



MAINTAINS AIR GAP

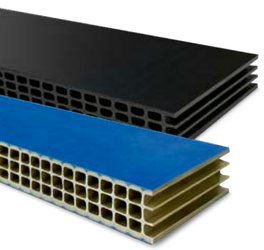
A minimum 25mm air gap between insulation and the roof underlay is required. This equates to an open area of 25,000mm² per Lm.
Masons Insul-Baffle meets this requirement. It prevents insulation from blocking airflow and enhances passive ventilation.

VERSATILE

Suits any roof type, material, or pitch.

Description	Size	Masons Code
Insul-Baffle separator - **2 pack box**	45mm x 650mm x 6Lm	BFFL.5X650x6

VENTILATED ROOF BATTENS



Masons ventilated roof battens create an effective ventilation cavity under roofing to encourage airflow and moisture escape. Made from tough, non-absorbent polypropylene with an easy peel-off adhesive strip, they help keep roof spaces dry and protect insulation and framing.

Available in two sizes: 11mm and 18mm thicknesses.

EASE OF PLACEMENT
With self-adhesive strip.

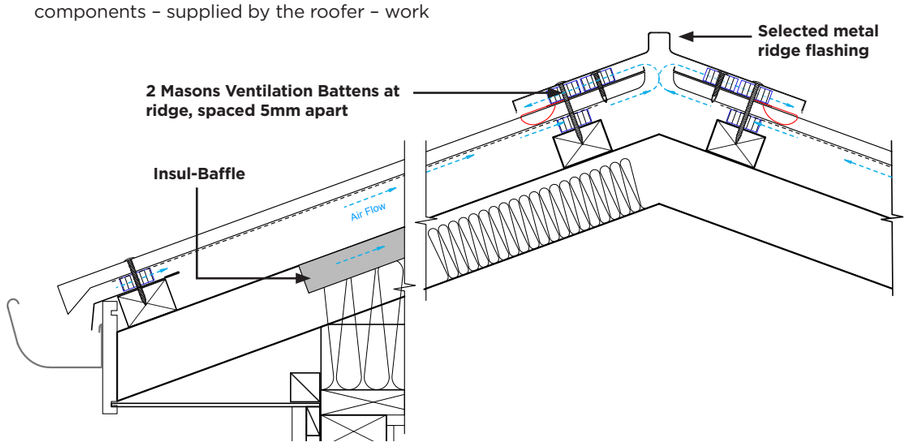
STRONG AND DURABLE
Cellular structure prevents capillary action and thermal bridging. Their high compressive strength makes them effective packers.

Description	Size	Masons Code
Ventilated Roof Battens - Plastic - **50 to a box**	45x11x1800mm	BATNVENTRF45x11x1800
Ventilated Roof and Wall Battens - Plastic - **25 to a box**	45x18x1800mm	BATNVENT45x18x1800

ROOF VENTS

At the ridge, ventilation is achieved by using Masons Ventilated Roof Battens combined with an under-flashing, as detailed in Masons' technical documentation.

The eaves are similarly ventilated, using the same ventilated battens together with an eave flashing sized to suit both the roof pitch and the required airflow gap. These components – supplied by the roofer – work together to establish a continuous natural airflow from eaves to ridge. This ventilation path plays a crucial role in regulating temperature and humidity within the roof space, helping to prevent condensation, reduce heat build-up, and maintain the long-term performance of the roof assembly.



MASONS

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