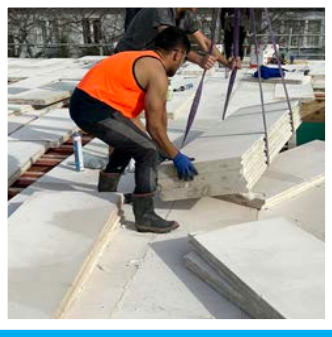
MASONS

Designed Smart, Built Tough.

Systems Catalogue

TRADE ISSUE | VOLUME 1.2



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 Size	1.5m x 33.33m = 50m² 2.74m x 18.25m = 50m²	2.74m x 18.25m = 50m²
CodeMark	CMNZ70116	CMNZ70117

UNI® PLUS

UNI® PRO

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 and Installation Guide 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 the MBIE website: **building.govt.nz**
for the 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

UNI INSTALLATION ACCESSORIES

CN100 UNI CAP NAILER GUN

Best Practice to Fix UNI 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

For Steel Frames

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

40 BELOW PLATINUM AND 40 BELOW FLEX Flashing Tapes

Excellent adhesion in all weather conditions from -10˚C to 40˚C. No primers or heat guns required.

40 BELOW PLATINUM: Superb adhesion. Aggressive and dependable. Silver facer for water resistance. Ultra thin - no build-up in corners.

40 BELOW FLEX: Our most advanced flashing tape. Cutting edge adhesive. Ultra thin - no build-up in corners. Nail and screw sealable with just **one** layer.

Use a scraper to assist adhesion.

BRICKTIES

Heavy Duty Earthquake

Manufactured to comply with AS/NZS2699.1.2000.

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

Medium Duty Brickties also available.

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.

CORNER GUARDS

For Windows

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

Available in pack of 10 or 50.

PEF BACKING ROD

Joint Filler

A cylindrical flexible closed cell polyethylene material.

Available in multiple diameters from 6mm to 20mm.

Product Description	Masons Code
UNI PRO 2.74m x 18.25m = 50m²	UNIPRO2.74X50
UNI PLUS 2.74m x 18.25m = 50m²	UNIPLUS2.74X50
UNI PLUS 1.5m x 33.33m = 50m²	UNIPLUS1.5X50
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 150mm x 20Lm, 75mm x 20Lm, 60mm x 20Lm	40PLBELOW150x20 40PLBELOW75x20 40PLBELOW60x20
40 Below Flex Flashing Tape 150mm x 20Lm, 75mm x 20Lm	40FLXBELOW150x20 40FLXBELOW75x20
Penetration Seal – 1–75mm Pack of 10	PSEAL75
Penetration Seal – 80–170mm Pack of 10	PSEAL170
BrickTies - various sizes - Galv & Stainless	visit: mpb.co.nz
PEF Rod - various sizes from 6mm to 20mm diameter	visit: mpb.co.nz
Corner Guards - 50 pack	HYDROCG50

Barricade Weather Defense System

A weather-resistive rigid air barrier system

STAY ON TRACK WITH YOUR BUILD
If cladding is delayed

UP TO 150 DAYS

TEMPORARY WEATHER PROTECTION
For up to 150 days

STRONG
Suitable for all wind zones*

ROBUST AND SECURE
Plus EQ and wind bracing units

* Check with your structural engineer re SED wind zones

A premium weather-resistive rigid air barrier system for residential and commercial buildings.

Masons Barricade Weather Defense is a three-part system, comprising Masons' 6mm and 9mm fibre cement panels, Barricade Weather Defense self-adhesive weather-resistive barrier wrap, and flashing tapes for openings.

The rigid underlay, covered with our water, air and UV resistant self-adhesive wrap, allows construction work to get started inside the building. Interior and exterior trades can work in parallel to speed up programmes, while protecting the building from weather whilst there is no cladding in place.

Masons Barricade Weather Defense contributes to the building moisture management design. It provides a substantial secondary defense against intrusion of moisture and air for the life of the building.

CodeMark
CMNZ70128

pass
PRODUCT ASSURANCE SUPPLIER STATEMENT
thebuildingbusiness.co.nz/pass

TYPICAL APPLICATIONS

Residential homes, terrace houses, apartments, aged-care facilities, commercial buildings.

All the benefits of a modern synthetic wall underlay – highly water, air and UV resistant – with all the best attributes of rigid wall underlay – wind and earthquake bracing units and 30-minute fire resistance rating for walls within a metre of the boundary, as tested by BRANZ.

STRENGTH

Wind and earthquake bracing units

The Barricade Weather Defense system is suitable for all wind zones in New Zealand*, depending on wall heights. When nailed according to installation instructions, fibre cement contributes bracing units to the structure and stiffens the framing for reduced strain and damage to plasterboard linings.

ROBUST

Masons Barricade Weather Defense brings the techniques and benefits of commercial construction to residential projects. It gives specifiers and builders a hybrid system – with the benefits of a rigid air barrier for site security and lockup, and a modern synthetic weather-resistive barrier wrap for construction continuity and long-term envelope performance.

CONTINUITY

Multiple teams can work in parallel

With a UV rating of up to 150 days, the interior teams can start even when there is a delay on cladding. Programme and sequencing flexibility means interior trades can carry on their work inside the weather-protected building before cladding is installed. And the project can be locked up securely every night to help prevent theft and vandalism.

COHESIVE

Barricade Weather Defense is a two-layer system – the 6 and 9 mm fibre cement board is fastened to the building framing, then a heavy, self-adhesive building wrap is applied, providing full coverage of all fixings and panel joints. This forms a weather-resistive barrier that does not require Z flashings or tape at joints. A single layer of Masons 40 Below Flex flashing tape is used around frame openings. Use Masons Penetration Seals and self-adhesive PVC foam or Butyl sealing tapes for any penetrations to complete the assembly.

EXTRA RESOURCES

To understand the system and its installation, please find CAD files, 3D animated models, a bracing calculator, and other support information on our Barricade Weather Defense System page on our website: **mpb.co.nz.** Or scan this QR Code to take you there.

BARRICADE WD SELF-ADHESIVE WRAP

UP TO 150 DAYS **UV & WEATHER PROTECTION**
Pre-Cladding

BREATHABLE
Passes Water Vapour Out

HIGHLY WATER RESISTANT

ADVANCED POLY-ACRYLIC ADHESIVE

STRONG
Suitable for all Wind Zones

AIR BARRIER
To Cold Air and Moisture

Barricade WD may be used separately as a self-adhesive, weather resistive barrier over various rigid substrates or underlays.

It may be applied to dry, clean substrates in temperatures from -10 to +50°C.

See our Barricade WD Technical Data Sheet for details: **mpb.co.nz.** Or scan this QR Code to take you there.

THE BARRICADE WEATHER DEFENSE SYSTEM COMPONENTS

FIBRE CEMENT SHEETS

Autoclaved, asbestos free, 6mm and 9mm fibre cement boards. The sheets are installed as a non-combustible rigid wall underlay.

BARRICADE WD SELF-ADHESIVE WRAP

A three-layer polypropylene self-adhesive flexible wall underlay. Thermally bonded outer spunbonded layers to an inner layer of microporous poly propylene film. Then coated with pressure sensitive pure poly-acrylic adhesive to give superior adhesion to a variety of typical materials.

PENETRATION SEALS

Air seal flashings designed for cavity construction where pipes or wires penetrate building cladding.

40 BELOW FLEX FLASHING TAPE

Self-adhesive flashing tape to seal around windows, doors, and other joinery openings.

Use a scraper to assist adhesion.

SEALANTS AND FOAMS

Fire rated wall sections use HILTI CP 606 - As per BRANZ testing. Soudall Sealants and Expanding Foams as tested by Soudall*.

TAPES

PVC foam tape, or Butyl self adhesive 3.2 or 4.8mm thick sealing tape.

CLOUTS

40mm x 2.8 gauge Stainless Steel.

PRIMER

Barricade WD porous surface primer.

FIXINGS

Masons Barricade Weather Defense Fibre Cement Sheets may be fixed using an Ecko Hammahand Pneumatic weatherboard coil-nailer WB75, firing Ecko Hammahand 60, or 65mm ring shanked round head nails, in either Stainless Steel or HD Galvanised.

Component	Masons Code
Fibre Cement Sheet 2.4m x 1.2m x 6mm	BWD6MMx2.4x1.2
Fibre Cement Sheet 3m x 1.2m x 6mm	BWD6MMx3.0x1.2
Fibre Cement Sheet 2.4m x 1.2m x 9mm	BWD9mm2.4x1.2
Fibre Cement Sheet 3m x 1.2m x 9mm	BWD9mm3.0x1.2
Barricade WD Self-Adhesive Wrap 1.46m x 34.1m = 50m2	BWDSA
40 Below Flex Flashing Tape 75mm, 100mm, 150mm or 230mm x 20Lm	40FLXBELOW75x20 /100x20 /150x20 /230x20
Stainless Steel Clout 40mm x 2.8 Guage	EX FASTENING SUPPLIER
Penetration Seal 1-75mm or 80-170mm	PSEAL75w/PSEAL170
PVC foam tape	EX TAPE SPEC NZ
Butyl Self-Adhesive tape	EX TAPE SPEC NZ
HILTI CP 606 Fire Stop Acrylic Sealant	EX HILTI NZ
Soudal Expanding Foams	EX MASONS
Soudal Sealants**	SOUDAL OUTLETS NZ WIDE
Barricade WD Porous surface primer 1L	PRIMER1LTR
Barricade WD Porous surface primer 5L	PRIMER5LTR

* See list of compatible Soudal Sealants and Foams - **mpb.co.nz**

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.

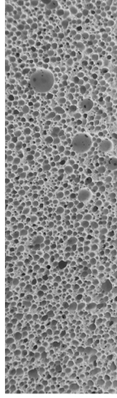
Panel dimensions: 2200mm x 600mm

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.

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/m³, 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/m³
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.

INSTALLATION

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

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 should be supervised by an LPB builder or plasterer

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.

COMING SOON

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

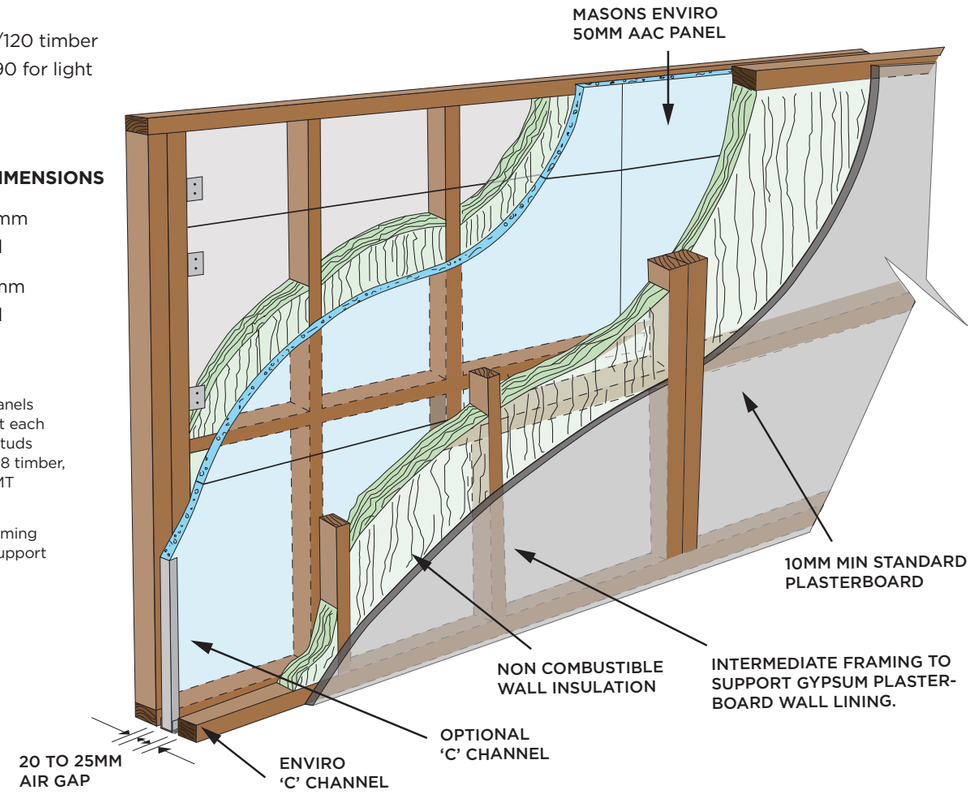
290mm = 10mm Plaster Board

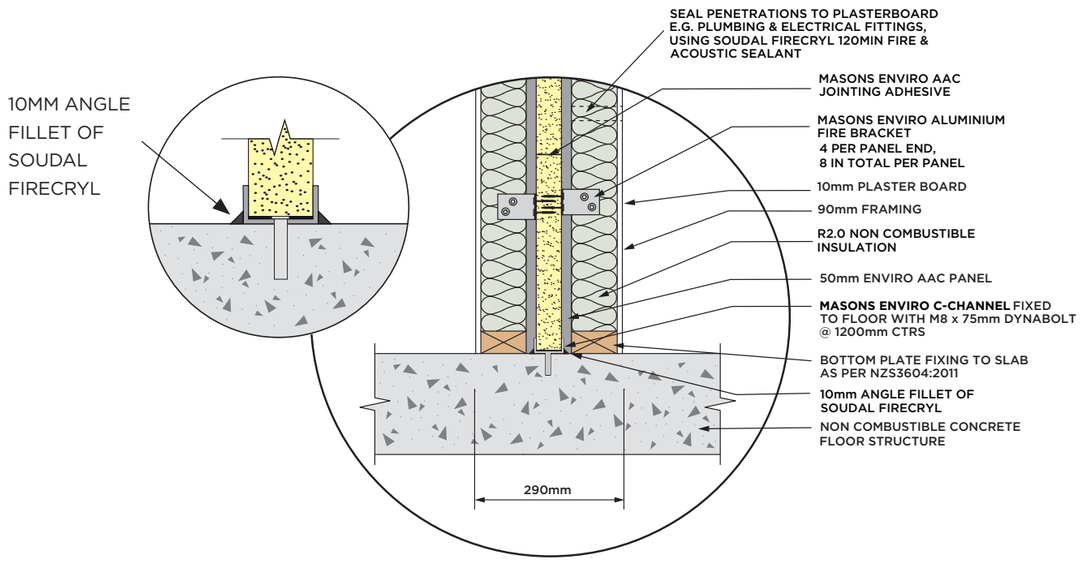
296mm = 13mm Plaster Board

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

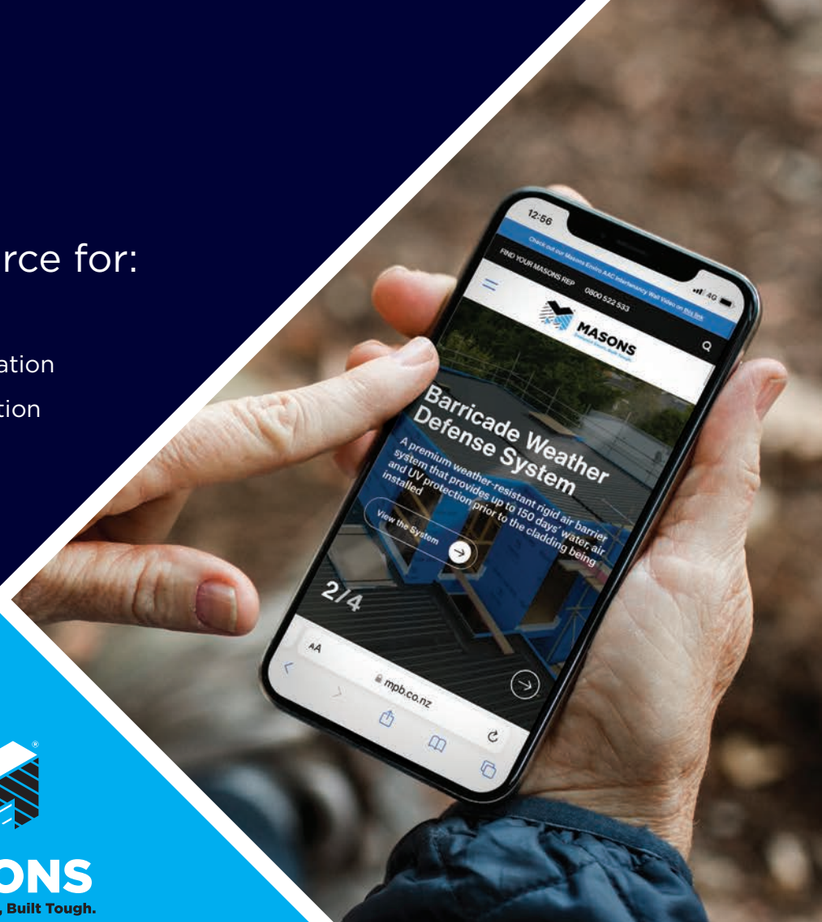
Refer to the Enviro 50mm Intertenancy wall details and installation instructions.

Notes

mpb.co.nz

Your 24/7 resource for:

- Installation Guides
- Specification Documentation
- Compliance Documentation
- Data Sheets
- Brochures
- CAD Drawings



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Since its establishment in 1999, Masons have a long and proud history of 'knuckling down and getting stuff done'. Masons NZ Ltd is a company founded on that very approach - raising the quality of building products through innovation and clever thinking.

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