



MASONS
Designed Smart, Built Tough.

Intertenancy Wall System



The Masons Enviro 50mm AAC Intertenancy Wall System

A simple and flexible acoustic and fire-rated wall system based on tried-and-true materials for faster construction.

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).



EXCEEDS CODE

Effective fire and sound separation



SIMPLE

Easy to use, flexible and fast



FAST

Designed for buildability

TYPICAL APPLICATIONS

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

RELIABLE MATERIALS

The Enviro™ AAC panel

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

Masons Enviro AAC Intertency Wall System

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

STC -64Db

OVER ALL DIMENSIONS

290mm = 10mm

Plaster Board

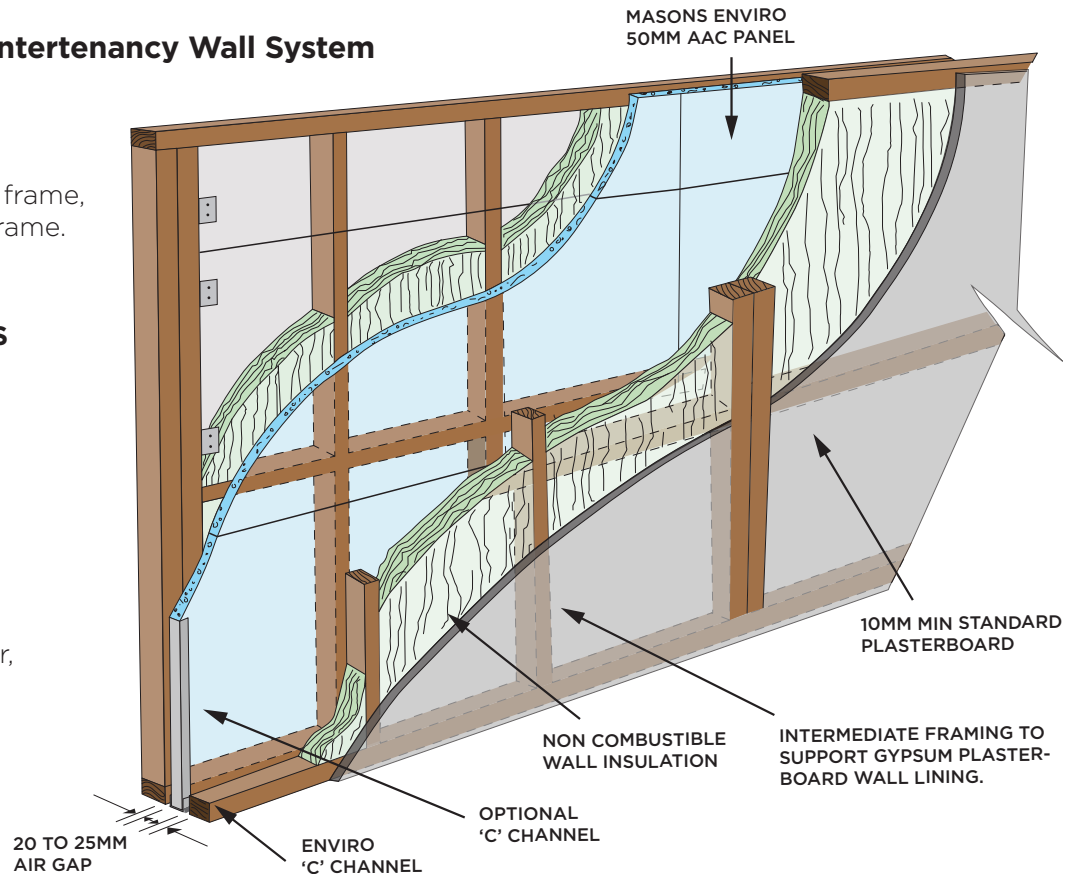
296mm = 13mm

Plaster Board

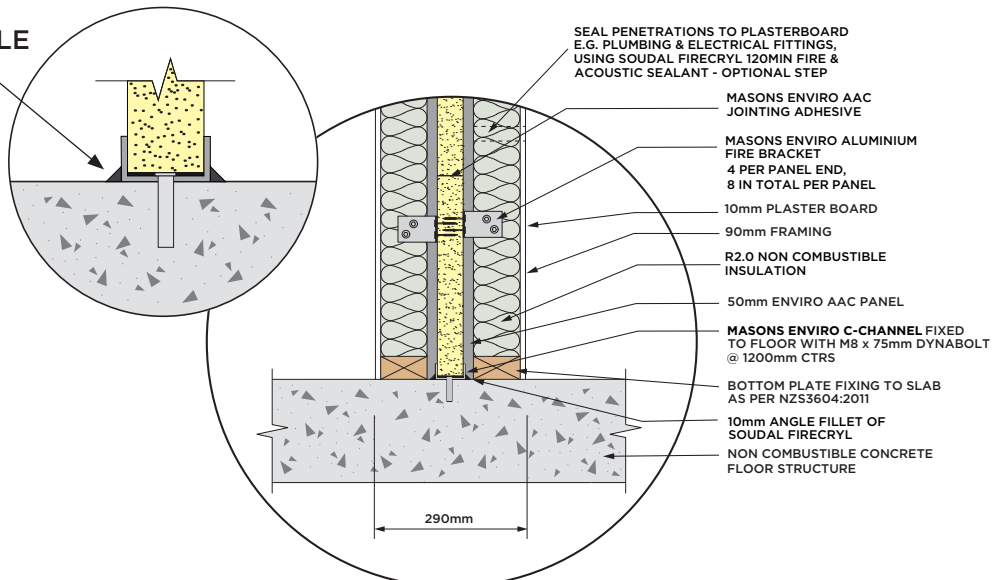
NOTE

50 MM Enviro panels are supported at each end by double studs 2/90x45 mm SG8 timber, or /76 x 0.75 BMT Galv steel.

Intermediate framing as required to support wall lining.



10mm ANGLE FILLET OF SOUDAL FIRECRYL



EXCEEDS MIN REQUIREMENTS

Fully FRR & 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 FRR 120/120/120* timber frame 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 through 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

	10g x 35mm Type 17 Wafer Head Galvanised or SS Screw (timber framing)
	2 x 10g SDM Wafer Head Galvanised or SS Screw (steel framing)

Fire seal void filler

MINWOOL50	Mineral Wool Insulation 50mm x 1200mm x 600mm
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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
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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 - at 600 mm centres
maximum to support gypsum board wall lining

Cold Galv spray to seal cut ends of steel
reinforcing in Enviro panel

M8 x 75mm Dyna Bolts C Channel fastener

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 FRR 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 Intertenancy wall 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 Intertenancy 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

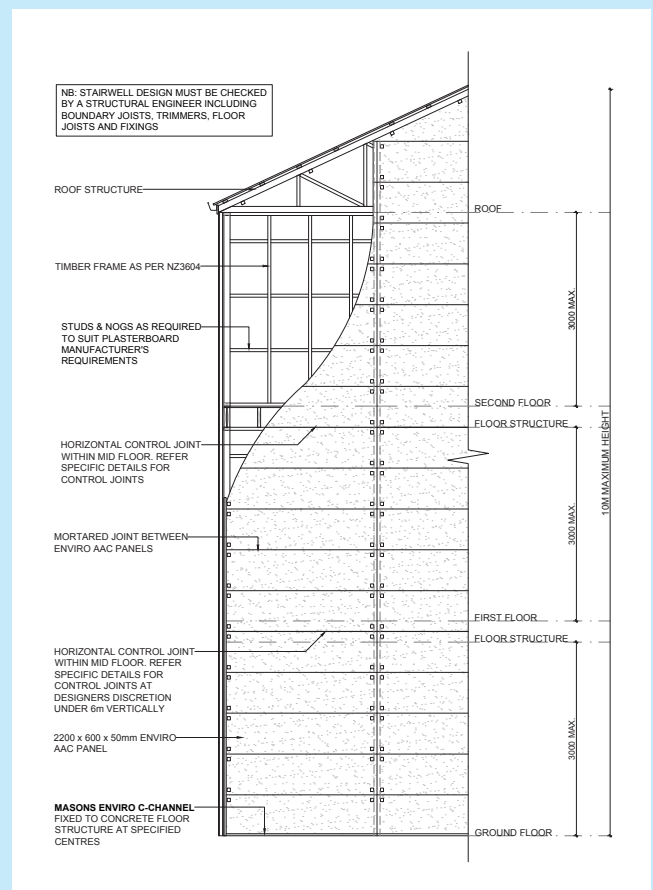
C3 Fire affecting areas beyond the fire source: Performance Clauses C3.4(a), C3.6

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.

TO LEARN MORE

Visit **mpb.co.nz**
or scan the QR code below:



TO ORDER

Call **0800 522 533** to be put in touch with your local Masons Rep.



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