Fireproof Cladding Facades

UltraMgO™-Partition

QuickStart Guide

Product overview

UltraMgO™-Partition is a BCA-compliant Partywall system, which is fire and acoustically rated, thermally insulated, mould-proof, rot-resistant and will not degrade when wet. It is a single-wall partitioning product, which does not require additional plasterboard panels within the wall cavity, or inside the tenancy.

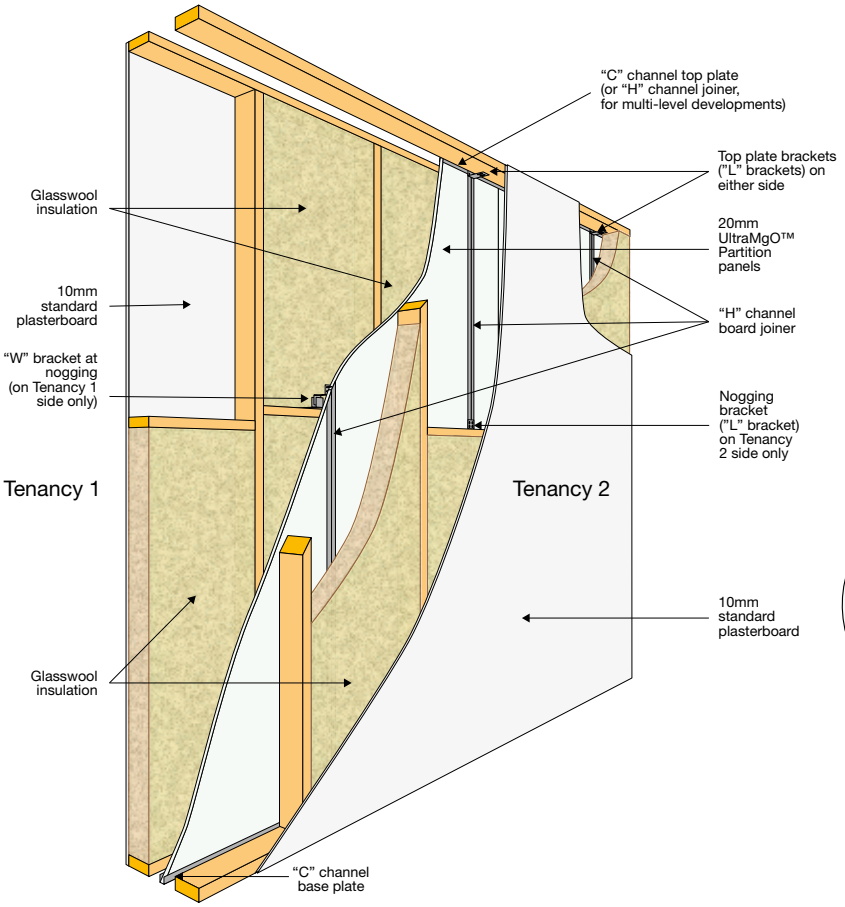
UltraMgO™-Partition is designed to meet, or exceed, the requirements of the BCA (Building Code of Australia) for both fire resistance and acoustic performance (sound insulation).

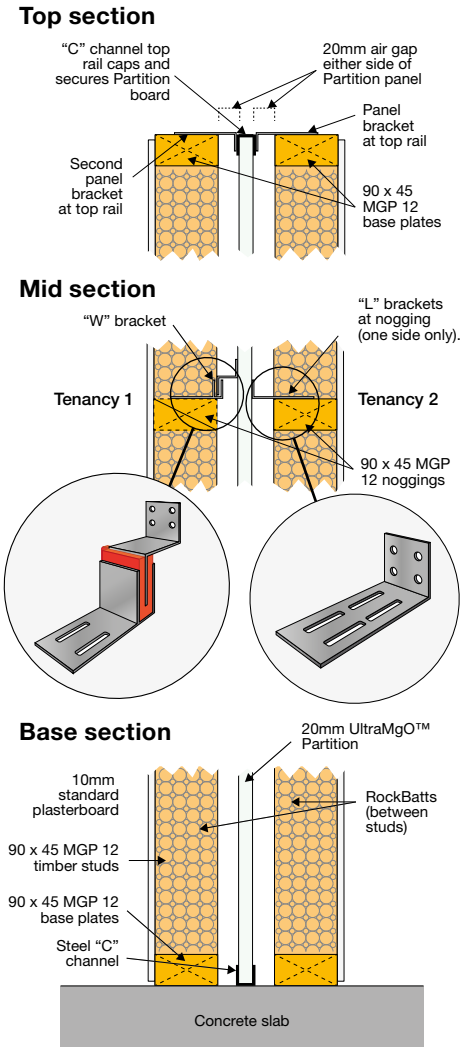
Specifications

Sheet Size	Thickness	Stud Size	Stud Centres	Total Wall Width	Fire Rating*	Acoustic Rating**
2700mm x 610mm 3000mm x 610mm	20mm	90mm	450mm	260mm	FRL 60/60/60	RW+Ctr=53

* Fire resistance: FRL of 60/60/60. Tested against AS1530.4-2014 by Exova Warrington

** Acoustic performance: RW + Ctr = 53. Tested against AS1191-2002 by CSIRO





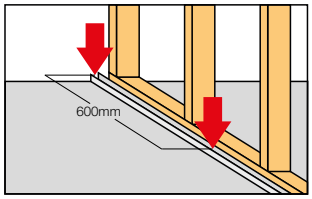
Installation Steps for UltraMgO™-Partition

After the framing on one side has been completed, UltraMgO™-Partition panels are secured to the completed side. When framing on the other side is completed, UltraMgO™-Partition panels are secured to that side. The sequence of construction should be planned to accommodate the progressive erection of UltraMgO™-Partition panels.

Parts list

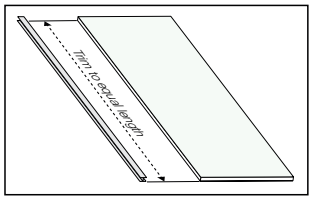
Part	Specification	Detail
UltraMgO-Partition 20	2700/3000 x 610 x 20mm	Magnesium Oxide Wallboard
Timber Wall Frames	450mm stud spacings	90 x 45mm MGP 12
Gypsum Board	10mm non-fire rated	6.8kg /m2
RockBatts	1200 x 410 x 90mm (90kg/m3 density)	Mineral (Rock) Wool batts
C Channel	3200 x 50 x 26mm	Galvanised
H Channel	3200 x 50 x 20mm	Galvanised
L Bracket	110 x 40 x 40mm	Galvanised
W Bracket	Achieves full acoustic decoupling	Galvanised
HB Fuller Firesound	Fire and Acoustic Mastic	Sealing of the MgO board perimeter

Assembly Steps



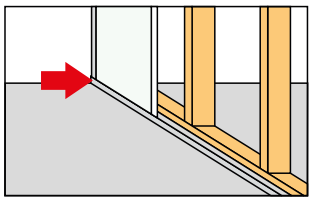
Step 1: Fixing bottom UltraMgO™ “C” channel

- Position the “C” channel at the base level centred in the wall cavity, between the tenancy walls, and attach to foundation with power actuated fasteners at both ends and at 600mm maximum spacing.
- Use full lengths spaced 30mm from the tenancy wall frames.
- Start and end the “C” channel runs level with inside face of external cladding material.
- Apply acoustic sealant along track/floor junction on one side.



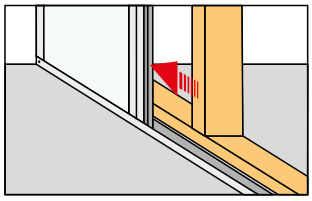
Step 2: Cut UltraMgO™-Partition panels and “H” channel joiners to the same length.

- **NOTE**: UltraMgO™-Partition panels are supplied in either 2700mm or 3000mm lengths. Both lengths are 610mm wide. UltraMgO™ “H” channel must be cut from the supplied lengths.



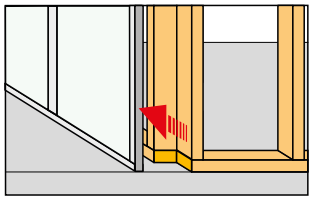
Step 3: First UltraMgO™-Partition panel fitted into base “C” channel track

- To enable later fixing of brackets to “H” channel joiners, trim the first UltraMgO™-Partition panel to 200mm width. This will ensure that following panels are at least 50mm clear of wall frame studs.
- Cut a length of “C” channel (either 2700mm or 3000mm) to match the UltraMgO™-Partition panel.
- House the outside edge of the UltraMgO™-Partition panel at the end of the wall with the “C” channel.
- The “C” channel edge track abuts the “C” channel base track.



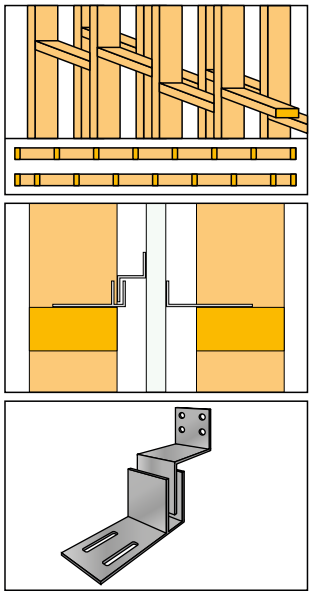
Step 4: First UltraMgO™ “H” channel joiner fits fully down into track

- Move it along the track to house the edge of the first UltraMgO™-Partition panel.
- Lightly tap up the length of the “H” channel joiner to give a snug fit.
- Fit the second UltraMgO™-Partition panel.
- Fix “H” channel to tenancy timber frame with UltraMgO™ “L” brackets at all nogging lines.
  NOTE: “L” brackets are used on one side only of the partition wall. The other side must use “W” brackets - refer Step 6.
  NOTE: No screws are used to connect the “C” and “H” channels.



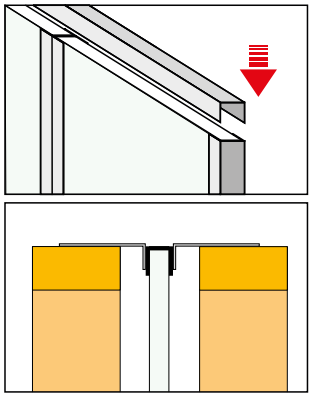
Step 5: Continue fitting UltraMgO™-Partition panels and “H” channel joiners

- Continue to place UltraMgO™-Partition panels and “H” channel joiners progressively until the partition barrier is completed. Trim panels as necessary to provide clearance from wall frame studs.
- Finish the exposed edge of the last UltraMgO™-Partition panel with “C” channel at the end of the wall.
  NOTE: Exposed UltraMgO™-Partition panels may be subjected to high wind forces and so must be adequately braced while exposed to the wind.



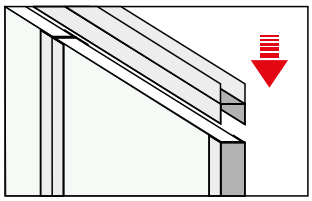
Step 6: Completing the barrier - single floor or top of multi-floor (to 9m max)

- Erect the second tenancy framing wall on the other side of the UltraMgO™-Partition panel barrier.
  NOTE: In line with BCA requirements, studs in this second framing wall must be staggered relative to the studs of the first framing wall. Studs on the second wall must be placed centred between the studs of the first wall. Noggings on the second wall must be vertically staggered in relation to the noggings of the first wall. Please also refer to our CSIRO acoustic test report, available on our website.
- Secure each UltraMgO™ “H” channel with “W” brackets to the nogging lines of the second framing wall. Wherever possible, “W” brackets should be positioned directly opposite “L” brackets on the other side of the “H” channels.
  NOTE: Use of the “W” brackets satisfies Discontinuous Construction requirements, and also achieves full acoustic decoupling.



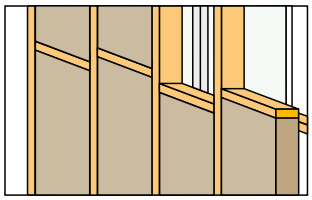
Step 7: Capping the barrier - single floor or top of multi-floor (to 9m max)

- If the construction is single story, cap the exposed top edge of the UltraMgO™-Partition panels with UltraMgO™ “C” channel.
- Secure the UltraMgO™-Partition panels to the framing wall top plates on either side using “L” brackets at the junctions of “H” channel and “C” channel cap.



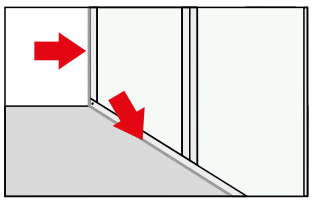
Step 8: Second and subsequent floors (to 9m max)

- For multi-story applications, cap UltraMgO™-Partition panels with “H” channel along the full length of the panel run to provide a base track for the second floor partition panels.
- Fit UltraMgO™-Partition panels into the “H” channel track as per Steps 3, 4 and 5.
- Finish the UltraMgO™-Partition barrier as per Steps 6 and 7.



Step 9: Installation of batts

- Fit FCF RockBatts™ into timber framing walls on both sides of the Partition panels. The batts must NOT be loose within the frames.
- FCF RockBatts™ are precut to 1200mmm x 410mm to fit into stud walls with 450mm stud centres.
- If FCF RockBatts™ have to be trimmed to fit, ensure that the trimmed size is NO GREATER than 5mm OVERALL (either horizontally or vertically) larger than the space into which it must fit.



Step 10: Seal for acoustics

- Install continuous FCF RockBatts™ at roof as specified in the UltraMgO™-Partition Installation Manual..
- Seal bottom and side tracks with a recommended fire rated acoustic sealant, such as HB Fuller Firesound.

Important points to remember:

- Studs on timber frame walls either side of the UltraMgO™-Partition panels be set at 450mm centres.
- UltraMgO™ “L” brackets fasten all UltraMgO™ “H” channels to wall frame on one side only, except at the top of the partition wall, where “L” brackets are fastened either side of the capping “C” channel.
- UltraMgO™ “W” brackets are fastened to “H” channels on the opposite side of the UltraMgO™ board to mirror the placement of “L” brackets.
- Vertical bracket spacing varies depending on total wall height. Refer to the UltraMgO™-Partition Installation Manual for correct spacing.
- Where the construction schedule requires erection of UltraMgO™-Partition panels before construction of the tenancy stud walls, we strongly recommend that exposed UltraMgO™-Partition panels be adequately braced as they may be subjected to high wind forces.

Technical Enquiries 1300 38 38 84

FCF provides technical advice to builders, architects, contractors, engineers, and regulators throughout Australia. Our team can offer both practical and design input for all UltraMgO™ applications. Start your UltraMgO™ project off on the right track by contacting FCF between 8.30am - 4.30pm AEST weekdays on 1300 38 38 84.

Safety instructions - UltraMgO™-Partition Board and RockBatts™

Download product SDS documents from our website for correct handling, usage and disposal advice.