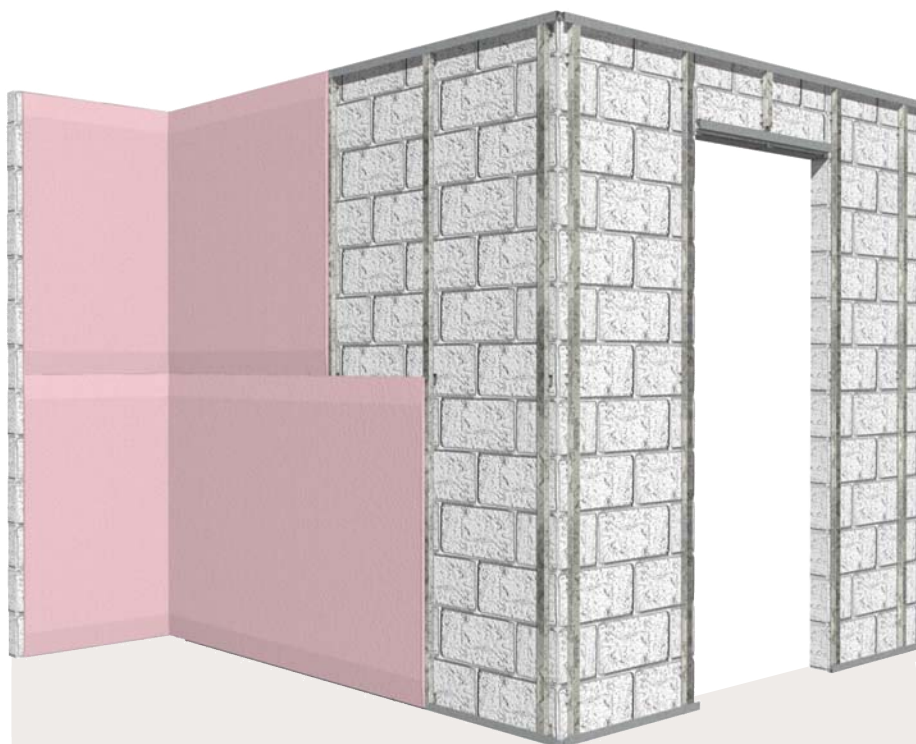


MASONRY WALLS WITH PLASTERBOARD

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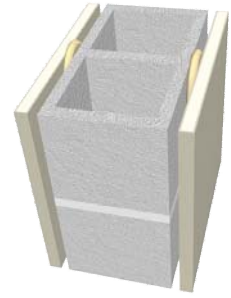


Plasterboard may be installed over masonry walls to create a decorative finish. It removes the need for rendering and may also upgrade the fire and acoustic performance of a wall. Services may be installed in the cavity between the masonry and plasterboard, thus avoiding the need for chasing of masonry walls.

'Masonry' includes concrete, bricks, blocks and autoclaved aerated concrete.

LMW15-1B - LMW60-1E

WALL LINING: [SIDE 1] Plasterboard as specified in table adhered with **MastaBond** Masonry Adhesive
 [SIDE 2] Plasterboard as specified in table adhered with **MastaBond** Masonry Adhesive
 MASONRY: Masonry wall as specified in table. [Refer to masonry manufacturer for FRL]

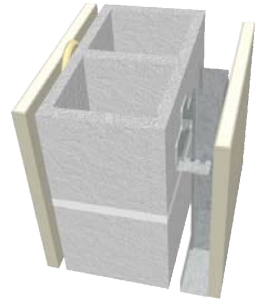


[13mm **MastaShield** can be substituted with 10mm **SoundShield** or any other Lafarge 13mm plasterboard]
 [13mm **ImpactShield** can be substituted with 13mm **QuadShield**]
 [13mm **FireShield** can be substituted with 13mm **MultiShield** or 13mm **ImpactShield** or 13mm **QuadShield**]
 [13mm **MastaShield** adhered with **MastaBond** Masonry Adhesive can be substituted with 13mm render on one side only]
 [140mm core-filled concrete block can be substituted with minimum 125mm solid concrete]

MASONRY TYPE	SYSTEM	PLASTERBOARD LINING	ACOUSTICS Rw (Rw + Ctr)
			No Insulation
Minimum Double 110mm Brick with minimum 50mm air-gap Minimum laid weight 320 kg/m ²	LMW15-1B	[SIDE 1]: 1 layer of 13mm MastaShield [SIDE 2]: 1 layer of 13mm MastaShield	55 (49)
	LMW25-1B	[SIDE 1]: 1 layer of 13mm SoundShield [SIDE 2]: 1 layer of 13mm SoundShield	56 (50)
	LMW60-1B	[SIDE 1]: 1 layer of 13mm FireShield [SIDE 2]: 1 layer of 13mm FireShield	56 (49)
	LMW60I-1B	[SIDE 1]: 1 layer of 13mm ImpactShield [SIDE 2]: 1 layer of 13mm ImpactShield	56 (50)
Minimum 140mm unfilled Concrete Block Minimum laid weight 180 kg/m ²	LMW15-1C	[SIDE 1]: 1 layer of 13mm MastaShield [SIDE 2]: 1 layer of 13mm MastaShield	46 (40)
	LMW25-1C	[SIDE 1]: 1 layer of 13mm SoundShield [SIDE 2]: 1 layer of 13mm SoundShield	46 (40)
	LMW60-1C	[SIDE 1]: 1 layer of 13mm FireShield [SIDE 2]: 1 layer of 13mm FireShield	46 (40)
Minimum 140mm core-filled Concrete Block Minimum laid weight 280 kg/m ²	LMW15-1D	[SIDE 1]: 1 layer of 13mm MastaShield [SIDE 2]: 1 layer of 13mm MastaShield	51 (43)
	LMW25-1D	[SIDE 1]: 1 layer of 13mm SoundShield [SIDE 2]: 1 layer of 13mm SoundShield	51 (44)
	LMW60-1D	[SIDE 1]: 1 layer of 13mm FireShield [SIDE 2]: 1 layer of 13mm FireShield	51 (44)
Minimum 190mm unfilled Concrete Block Minimum laid weight 220 kg/m ²	LMW15-1E	[SIDE 1]: 1 layer of 13mm MastaShield [SIDE 2]: 1 layer of 13mm MastaShield	49 (42)
	LMW25-1E	[SIDE 1]: 1 layer of 13mm SoundShield [SIDE 2]: 1 layer of 13mm SoundShield	49 (42)
	LMW60-1E	[SIDE 1]: 1 layer of 13mm FireShield [SIDE 2]: 1 layer of 13mm FireShield	49 (42)

Day Design
3094-55

LMW15-2C - LMW68-2F



WALL LINING: [SIDE 1] 13mm **MastaShield** adhered with **MastaBond** Masonry Adhesive
[SIDE 2] Plasterboard as specified in table fixed to furring channels at maximum 600mm centres on wall clip assembly

MASONRY: Masonry wall as specified in table. [Refer to masonry manufacturer for FRL]

[13mm **MastaShield** can be substituted with 13mm **WaterShield** on the furring channel side]

[13mm **MastaShield** can be substituted with 10mm **SoundShield**]

[13mm **FireShield** can be substituted with 13mm **MultiShield** or 13mm **ImpactShield** or 13mm **QuadShield**]

[13mm **MastaShield** adhered with **MastaBond** Masonry Adhesive can be substituted with 13mm render]

[140mm core-filled concrete block can be substituted with minimum 125mm solid concrete]

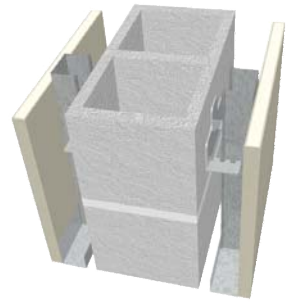
[Insulation thickness must not be greater than cavity size]

MASONRY TYPE	SYSTEM	PLASTERBOARD LINING	ACOUSTICS Rw (Rw + Ctr)		
			Minimum 30mm cavity with no insulation	Minimum 30mm cavity with insulation	Minimum 50mm cavity with insulation
Minimum 140mm unfilled Concrete Block Minimum laid weight 180 kg/m ²	LMW15-2C	[SIDE 2]: 1 layer of 13mm MastaShield	51 (44)	55 (46)	58 (48)
	LMW16-2C	[SIDE 2]: 2 layers of 13mm MastaShield	54 (47)	58 (49)	61 (51)
	LMW28-2C	[SIDE 2]: 1 layer of 13mm SoundShield	53 (45)	57 (48)	60 (50)
	LMW29-2C	[SIDE 2]: 2 layers of 13mm SoundShield	55 (48)	59 (52)	62 (53)
	LMW68-2C	[SIDE 2]: 1 layer of 13mm FireShield	52 (44)	56 (47)	59 (49)
	LMW69-2C	[SIDE 2]: 2 layers of 13mm FireShield	55 (47)	59 (50)	62 (52)
Minimum 140mm core-filled Concrete Block Minimum laid weight 280 kg/m ²	LMW15-2D	[SIDE 2]: 1 layer of 13mm MastaShield	53 (45)	57 (48)	60 (50)
	LMW16-2D	[SIDE 2]: 2 layers of 13mm MastaShield	56 (48)	60 (51)	63 (53)
	LMW28-2D	[SIDE 2]: 1 layer of 13mm SoundShield	55 (46)	59 (50)	62 (52)
	LMW68-2D	[SIDE 2]: 1 layer of 13mm FireShield	54 (46)	58 (49)	61 (51)
	LMW69-2D	[SIDE 2]: 2 layers of 13mm FireShield	57 (49)	61 (52)	64 (54)
Minimum 190mm unfilled Concrete Block Minimum laid weight 220 kg/m ²	LMW15-2E	[SIDE 2]: 1 layer of 13mm MastaShield	52 (44)	56 (47)	59 (49)
	LMW16-2E	[SIDE 2]: 2 layers of 13mm MastaShield	55 (46)	59 (50)	62 (52)
	LMW28-2E	[SIDE 2]: 1 layer of 13mm SoundShield	54 (45)	58 (49)	61 (51)
	LMW68-2E	[SIDE 2]: 1 layer of 13mm FireShield	53 (45)	57 (48)	60 (50)
	LMW69-2E	[SIDE 2]: 2 layers of 13mm FireShield	56 (47)	60 (51)	63 (53)
Minimum 190mm core-filled Concrete Block Minimum laid weight 380 kg/m ²	LMW15-2F	[SIDE 2]: 1 layer of 13mm MastaShield	55 (46)	59 (50)	62 (52)
	LMW28-2F	[SIDE 2]: 1 layer of 13mm SoundShield	57 (47)	61 (52)	64 (54)
	LMW68-2F	[SIDE 2]: 1 layer of 13mm FireShield	56 (46)	60 (51)	63 (53)

Day Design
3094-55

¹ For cavity size information refer to Furring Channel Cavity Size Table in the Framing section.

LMW15-3B - LMW60-3F



WALL LINING: [SIDE 1] Plasterboard as specified in table fixed to furring channels at maximum 600mm centres on wall clip assembly
 [SIDE 2] Plasterboard as specified in table fixed to furring channels at maximum 600mm centres on wall clip assembly

MASONRY: Masonry wall as specified in table. [Refer to masonry manufacturer for FRL]

[13mm **MastaShield** can be substituted with 10mm **SoundShield** or 13mm **WaterShield**]
 [13mm **FireShield** can be substituted with 13mm **MultiShield** or 13mm **ImpactShield** or 13mm **QuadShield**]
 [140mm core-filled concrete block can be substituted with minimum 125mm solid concrete]
 [Insulation thickness must not be greater than cavity size]

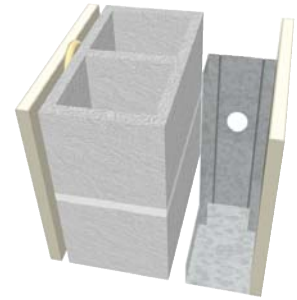
MASONRY TYPE	SYSTEM	PLASTERBOARD LINING	ACOUSTICS Rw (Rw + Ctr)	
			Minimum 30mm cavities with insulation in one cavity only 25mm Glasswool min 22 kg/m ³ or 30mm Polyester min 14kg/m ³	Minimum 50mm cavities with insulation in one cavity only 50mm Glasswool min 11 kg/m ³ or 50mm Polyester min 11 kg/m ³
Minimum Double 110mm Brick with minimum 50mm air-gap Minimum laid weight 320 kg/m ²	LMW15-3B	[SIDE 1]: 1 layer of 13mm MastaShield [SIDE 2]: 1 layer of 13mm MastaShield	62 (52)	64 (54)
	LMW25-3B	[SIDE 1]: 1 layer of 13mm SoundShield [SIDE 2]: 1 layer of 13mm SoundShield	64 (54)	66 (56)
	LMW60-3B	[SIDE 1]: 1 layer of 13mm FireShield [SIDE 2]: 1 layer of 13mm FireShield	63 (53)	65 (55)
Minimum 140mm unfilled Concrete Block Minimum laid weight 180 kg/m ²	LMW15-3C	[SIDE 1]: 1 layer of 13mm MastaShield [SIDE 2]: 1 layer of 13mm MastaShield	54 (45)	57 (47)
	LMW16-3C	[SIDE 1]: 1 layer of 13mm MastaShield [SIDE 2]: 2 layers of 13mm MastaShield	57 (48)	60 (50)
	LMW25-3C	[SIDE 1]: 1 layer of 13mm SoundShield [SIDE 2]: 1 layer of 13mm SoundShield	56 (47)	59 (49)
	LMW60-3C	[SIDE 1]: 1 layer of 13mm FireShield [SIDE 2]: 1 layer of 13mm FireShield	55 (46)	58 (48)
	LMW61-3C	[SIDE 1]: 1 layer of 13mm FireShield [SIDE 2]: 2 layers of 13mm FireShield	58 (49)	61 (51)
Minimum 140mm core-filled Concrete Block Minimum laid weight 280 kg/m ²	LMW15-3D	[SIDE 1]: 1 layer of 13mm MastaShield [SIDE 2]: 1 layer of 13mm MastaShield	56 (47)	59 (49)
	LMW16-3D	[SIDE 1]: 1 layer of 13mm MastaShield [SIDE 2]: 2 layers of 13mm MastaShield	59 (50)	62 (52)
	LMW25-3D	[SIDE 1]: 1 layer of 13mm SoundShield [SIDE 2]: 1 layer of 13mm SoundShield	58 (49)	61 (51)
	LMW26-3D	[SIDE 1]: 1 layer of 13mm SoundShield [SIDE 2]: 2 layers of 13mm SoundShield	60 (52)	63 (54)
	LMW60-3D	[SIDE 1]: 1 layer of 13mm FireShield [SIDE 2]: 1 layer of 13mm FireShield	57 (48)	60 (50)
	LMW61-3D	[SIDE 1]: 1 layer of 13mm FireShield [SIDE 2]: 2 layers of 13mm FireShield	60 (51)	63 (53)
Minimum 190mm unfilled Concrete Block Minimum laid weight 220 kg/m ²	LMW15-3E	[SIDE 1]: 1 layer of 13mm MastaShield [SIDE 2]: 1 layer of 13mm MastaShield	55 (46)	58 (48)
	LMW16-3E	[SIDE 1]: 1 layer of 13mm MastaShield [SIDE 2]: 2 layers of 13mm MastaShield	58 (49)	61 (51)
	LMW25-3E	[SIDE 1]: 1 layer of 13mm SoundShield [SIDE 2]: 1 layer of 13mm SoundShield	57 (48)	60 (50)
	LMW60-3E	[SIDE 1]: 1 layer of 13mm FireShield [SIDE 2]: 1 layer of 13mm FireShield	56 (47)	59 (49)
	LMW61-3E	[SIDE 1]: 1 layer of 13mm FireShield [SIDE 2]: 2 layers of 13mm FireShield	59 (49)	62 (52)
Minimum 190mm core-filled Concrete Block Minimum laid weight 380 kg/m ²	LMW15-3F	[SIDE 1]: 1 layer of 13mm MastaShield [SIDE 2]: 1 layer of 13mm MastaShield	58 (49)	61 (51)
	LMW25-3F	[SIDE 1]: 1 layer of 13mm SoundShield [SIDE 2]: 1 layer of 13mm SoundShield	60 (51)	63 (53)
	LMW60-3F	[SIDE 1]: 1 layer of 13mm FireShield [SIDE 2]: 1 layer of 13mm FireShield	59 (50)	62 (52)

Day Design
3094-55










1 For cavity size information refer to Furring Channel Cavity Size Table in the Framing section.

LMW15-4A - LMW68-4D

- WALL LINING: [SIDE 1] 13mm **MastaShield** adhered with **MastaBond** Masonry Adhesive
[SIDE 2] Plasterboard as specified in table fixed to minimum 64mm steel studs or minimum 70mm timber studs at maximum 600mm centres with minimum 20mm air gap
- MASONRY: Masonry wall as specified in table. [Refer to masonry manufacturer for FRL]



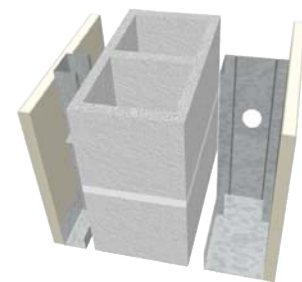
- [13mm **MastaShield** can be substituted with 13mm **WaterShield** on the steel stud side]
[13mm **MastaShield** can be substituted with 10mm **SoundShield**]
[13mm **FireShield** can be substituted with 13mm **MultiShield** or 13mm **ImpactShield** or 13mm **QuadShield**]
[13mm **MastaShield** adhered with **MastaBond** Masonry Adhesive can be substituted with 13mm render]
[140mm core-filled concrete block can be substituted with minimum 125mm solid concrete]

MASONRY TYPE	SYSTEM	PLASTERBOARD LINING	ACOUSTICS Rw (Rw + Ctr)
			Insulation in stud cavity only 50mm Glasswool, min 11 kg/m ³ or 50mm Polyester, min 11 kg/m ³ or 75mm Polyester, TSB4/ASB4
Minimum 110mm Brick Minimum laid weight 160 kg/m ²	LMW15-4A	[SIDE 2]: 1 layer of 13mm MastaShield	58 (50)
	LMW28-4A	[SIDE 2]: 1 layer of 13mm SoundShield 	60 (51)
	LMW68-4A	[SIDE 2]: 1 layer of 13mm FireShield  	59 (50)
Minimum 140mm unfilled Concrete Block Minimum laid weight 180 kg/m ²	LMW15-4C	[SIDE 2]: 1 layer of 13mm MastaShield	59 (51)
	LMW28-4C	[SIDE 2]: 1 layer of 13mm SoundShield 	61 (53)
	LMW68-4C	[SIDE 2]: 1 layer of 13mm FireShield  	60 (52)
Minimum 140mm core-filled Concrete Block Minimum laid weight 280 kg/m ²	LMW15-4D	[SIDE 2]: 1 layer of 13mm MastaShield	61 (52)
	LMW28-4D	[SIDE 2]: 1 layer of 13mm SoundShield 	63 (54)
	LMW68-4D	[SIDE 2]: 1 layer of 13mm FireShield  	62 (53)

Day Design
3094-55

Note:
Impact Sound
Resistant -
Discontinuous
Construction

LMW15-5A - LMW60-5D



WALL LINING: [SIDE 1] Plasterboard as specified in table fixed to furring channels at maximum 600mm centres on wall clip assembly with minimum 21mm cavity
 [SIDE 2] Plasterboard as specified in table fixed to minimum 64mm steel studs or minimum 70mm timber studs at maximum 600mm centres with minimum 20mm air gap

MASONRY: Masonry wall as specified in table. [Refer to masonry manufacturer for FRL]

[13mm **MastaShield** can be substituted with 10mm **SoundShield** or 13mm **WaterShield**]
 [13mm **FireShield** can be substituted with 13mm **MultiShield** or 13mm **ImpactShield** or 13mm **QuadShield**]
 [140mm core-filled concrete block can be substituted with minimum 125mm solid concrete]
 [21mm cavity is suitable for minimum 16mm furring channel and wall clip assembly]

MASONRY TYPE	SYSTEM	PLASTERBOARD LINING	ACOUSTICS Rw (Rw + Ctr)
			Insulation in stud cavity only 50mm Glasswool, min 11 kg/m ³ or 50mm Polyester, min 11 kg/m ³ or 75mm Polyester, TSB4/ASB4
Minimum 110mm Brick Minimum laid weight 160 kg/m ²	LMW15-5A	[SIDE 1]: 1 layer of 13mm MastaShield [SIDE 2]: 1 layer of 13mm MastaShield	59 (51)
	LMW25-5A	[SIDE 1]: 1 layer of 13mm SoundShield [SIDE 2]: 1 layer of 13mm SoundShield	60 (52)
	LMW60-5A	[SIDE 1]: 1 layer of 13mm FireShield [SIDE 2]: 1 layer of 13mm FireShield	60 (51)
Minimum 140mm unfilled Concrete Block Minimum laid weight 180 kg/m ²	LMW15-5C	[SIDE 1]: 1 layer of 13mm MastaShield [SIDE 2]: 1 layer of 13mm MastaShield	60 (51)
	LMW16-5C	[SIDE 1]: 1 layer of 13mm MastaShield [SIDE 2]: 2 layers of 13mm MastaShield	62 (53)
	LMW25-5C	[SIDE 1]: 1 layer of 13mm SoundShield [SIDE 2]: 1 layer of 13mm SoundShield	61 (52)
	LMW60-5C	[SIDE 1]: 1 layer of 13mm FireShield [SIDE 2]: 1 layer of 13mm FireShield	61 (51)
Minimum 140mm core-filled Concrete Block Minimum laid weight 280 kg/m ²	LMW15-5D	[SIDE 1]: 1 layer of 13mm MastaShield [SIDE 2]: 1 layer of 13mm MastaShield	61 (52)
	LMW25-5D	[SIDE 1]: 1 layer of 13mm SoundShield [SIDE 2]: 1 layer of 13mm SoundShield	63 (54)
	LMW60-5D	[SIDE 1]: 1 layer of 13mm FireShield [SIDE 2]: 1 layer of 13mm FireShield	62 (53)

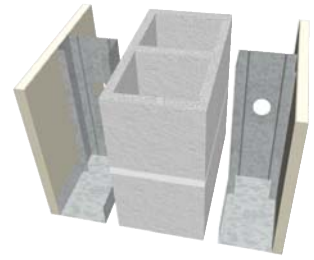
Day Design
3094-55

Note:
Impact Sound
Resistant -
Discontinuous
Construction

1 For cavity size information refer to Furring Channel Cavity Size Table in the Framing section.

LMW15-6A - LMW60-6G

- WALL LINING: [SIDE 1] Plasterboard as specified in table fixed to minimum 64mm steel studs or minimum 70mm timber studs at maximum 600mm centres with minimum 20mm air gap
[SIDE 2] Plasterboard as specified in table fixed to minimum 64mm steel studs or minimum 70mm timber studs at maximum 600mm centres with minimum 20mm air gap
- MASONRY: Masonry wall as specified in table. [Refer to masonry manufacturer for FRL]



- [13mm **MastaShield** can be substituted with 10mm **SoundShield** or 13mm **WaterShield**
[13mm **FireShield** can be substituted with 13mm **MultiShield** or 13mm **ImpactShield** or 13mm **QuadShield**]

MASONRY TYPE	SYSTEM	PLASTERBOARD LINING	ACOUSTICS Rw (Rw + Ctr)	
			Insulation in one stud cavity only	Insulation in both stud cavities
			50mm Glasswool min 11 kg/m ³ or 65mm Polyester TSB3/ASB3	50mm Glasswool min 11 kg/m ³ or 65mm Polyester TSB3/ASB3
Minimum 110mm Brick Minimum laid weight 160 kg/m ²	LMW15-6A	[SIDE 1]: 1 layer of 13mm MastaShield [SIDE 2]: 1 layer of 13mm MastaShield	60 (50)	-
	LMW25-6A	[SIDE 1]: 1 layer of 13mm SoundShield [SIDE 2]: 1 layer of 13mm SoundShield	64 (54)	-
	LMW60-6A	[SIDE 1]: 1 layer of 13mm FireShield [SIDE 2]: 1 layer of 13mm FireShield	63 (53)	-
Minimum 140mm unfilled Concrete Block Minimum laid weight 180 kg/m ²	LMW15-6C	[SIDE 1]: 1 layer of 13mm MastaShield [SIDE 2]: 1 layer of 13mm MastaShield	64 (54)	-
	LMW25-6C	[SIDE 1]: 1 layer of 13mm SoundShield [SIDE 2]: 1 layer of 13mm SoundShield	67 (55)	-
	LMW60-6C	[SIDE 1]: 1 layer of 13mm FireShield [SIDE 2]: 1 layer of 13mm FireShield	67 (55)	-
Minimum 90mm Brick Minimum laid weight 130 kg/m ²	LMW15-6G	[SIDE 1]: 1 layer of 13mm MastaShield [SIDE 2]: 1 layer of 13mm MastaShield	59 (46)	65 (57)
	LMW25-6G	[SIDE 1]: 1 layer of 13mm SoundShield [SIDE 2]: 1 layer of 13mm SoundShield	63 (50)	69 (61)
	LMW60-6G	[SIDE 1]: 1 layer of 13mm FireShield [SIDE 2]: 1 layer of 13mm FireShield	62 (49)	68 (60)

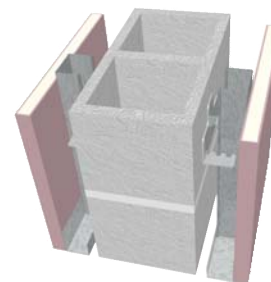
Day Design
3094-55

Note:
Impact Sound
Resistant -
Discontinuous
Construction

LMW70

- WALL LINING: [SIDE 1] 1 layer of 16mm **FireShield**  
 [SIDE 2] 1 layer of 16mm **FireShield**  
 FRAME: Existing masonry wall with furring channels at maximum 600mm centres
 [Refer to masonry manufacturer for FRL]

[16mm **FireShield** can be substituted with 16mm **MultiShield**]
 [This system is designed to upgrade the FRL of the Masonry Wall]
 [Total Integrity and total Insulation cannot be greater than total Structural Adequacy]



ADDITIONAL FRL TO MASONRY (minutes)

MASONRY STRUCTURAL ADEQUACY + 30 / MASONRY INTEGRITY + 60 / MASONRY INSULATION + 60

Rated from both sides

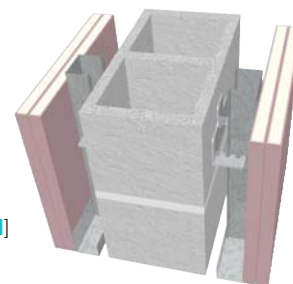
FAR 2221

¹ For cavity size information refer to Furring Channel Cavity Size Table in the Framing section.

LMW62

- WALL LINING: [SIDE 1] 2 layers of 13mm **FireShield**  
 [SIDE 2] 2 layers of 13mm **FireShield**  
 FRAME: Existing masonry wall with furring channels at maximum 600mm centres
 [Refer to masonry manufacturer for FRL]

[13mm **FireShield** can be substituted with 13mm **MultiShield** or 13mm **ImpactShield** or 13mm **QuadShield**]
 [This system is designed to upgrade the FRL of the Masonry Wall]
 [Total Integrity and total Insulation cannot be greater than total Structural Adequacy]



ADDITIONAL FRL TO MASONRY (minutes)

MASONRY STRUCTURAL ADEQUACY + 60 / MASONRY INTEGRITY + 120 / MASONRY INSULATION + 120

Rated from both sides

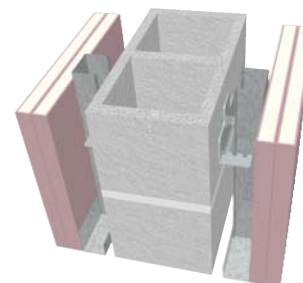
FAR 2221

¹ For cavity size information refer to Furring Channel Cavity Size Table in the Framing section.

LMW72

- WALL LINING: [SIDE 1] 2 layers of 16mm **FireShield**  
 [SIDE 2] 2 layers of 16mm **FireShield**  
 FRAME: Existing masonry wall with furring channels at maximum 600mm centres
 [Refer to masonry manufacturer for FRL]

[16mm **FireShield** can be substituted with 16mm **MultiShield**]
 [This system is designed to upgrade the FRL of the Masonry Wall]
 [Total Integrity and total Insulation cannot be greater than total Structural Adequacy]



ADDITIONAL FRL TO MASONRY (minutes)



MASONRY STRUCTURAL ADEQUACY + 90 / MASONRY INTEGRITY + 180 / MASONRY INSULATION + 180

Rated from both sides

FAR 2221

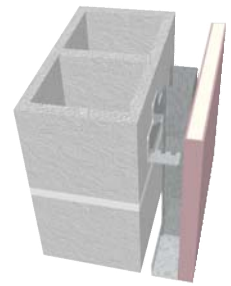
¹ For cavity size information refer to Furring Channel Cavity Size Table in the Framing section.

LMW75

WALL LINING: [SIDE 1] 1 layer of 16mm **FireShield**  
[SIDE 2] Optional wall lining

FRAME: Existing masonry wall with furring channels at maximum 600mm centres
[Refer to masonry manufacturer for FRL]

[16mm **FireShield** can be substituted with 16mm **MultiShield**]
[This system is designed to upgrade the FRL of the Masonry Wall]
[Total Integrity and total Insulation cannot be greater than total Structural Adequacy]



ADDITIONAL FRL TO MASONRY (minutes)

FireShield on the EXPOSED side to the fire

MASONRY STRUCTURAL ADEQUACY + 30 / MASONRY INTEGRITY + 30 / MASONRY INSULATION + 30
FAR 2464

FireShield on the UNEXPOSED side to the fire

MASONRY STRUCTURAL ADEQUACY + 0 / MASONRY INTEGRITY + 30 / MASONRY INSULATION + 30
FAR 2464

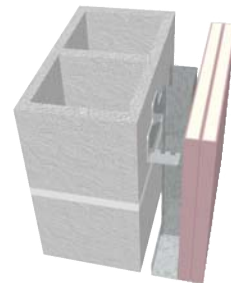
¹ For cavity size information refer to Furring Channel Cavity Size Table in the Framing section.

LMW66

WALL LINING: [SIDE 1] 2 layers of 13mm **FireShield**  
[SIDE 2] Optional wall lining

FRAME: Existing masonry wall with furring channels at maximum 600mm centres
[Refer to masonry manufacturer for FRL]

[13mm **FireShield** can be substituted with 13mm **MultiShield** or 13mm **ImpactShield** or 13mm **QuadShield**]
[This system is designed to upgrade the FRL of the Masonry Wall]
[Total Integrity and total Insulation cannot be greater than total Structural Adequacy]



ADDITIONAL FRL TO MASONRY (minutes)

FireShield on the EXPOSED side to the fire

MASONRY STRUCTURAL ADEQUACY + 60 / MASONRY INTEGRITY + 60 / MASONRY INSULATION + 60
FAR 2464

FireShield on the UNEXPOSED side to the fire

MASONRY STRUCTURAL ADEQUACY + 0 / MASONRY INTEGRITY + 60 / MASONRY INSULATION + 60
FAR 2464

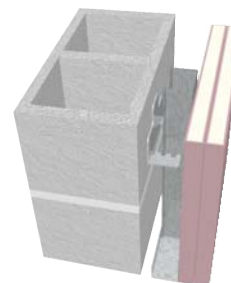
¹ For cavity size information refer to Furring Channel Cavity Size Table in the Framing section.

LMW76

WALL LINING: [SIDE 1] 2 layers of 16mm **FireShield**  
[SIDE 2] Optional wall lining

FRAME: Existing masonry wall with furring channels at maximum 600mm centres
[Refer to masonry manufacturer for FRL]

[16mm **FireShield** can be substituted with 16mm **MultiShield**]
[This system is designed to upgrade the FRL of the Masonry Wall]
[Total Integrity and total Insulation cannot be greater than total Structural Adequacy]



ADDITIONAL FRL TO MASONRY (minutes)

FireShield on the EXPOSED side to the fire


MASONRY STRUCTURAL ADEQUACY + 90 / MASONRY INTEGRITY + 90 / MASONRY INSULATION + 90
FAR 2464


FireShield on the UNEXPOSED side to the fire

MASONRY STRUCTURAL ADEQUACY + 0 / MASONRY INTEGRITY + 90 / MASONRY INSULATION + 90
FAR 2464


¹ For cavity size information refer to Furring Channel Cavity Size Table in the Framing section.

GENERAL REQUIREMENTS

	NON-FIRE RATED	FIRE RATED 
Install control joints in plasterboard walls: <ul style="list-style-type: none"> › At 12m maximum intervals › At all control joints in the structure › At any change in the substrate material. 	✓	✓
Only joint the face layer. As a minimum to achieve the FRL, only use paper tape and: <ul style="list-style-type: none"> › Two coats of MastaBase / MastaLongset, or › Three coats of MastaLite. Never joint sheets with fire sealant. [REFER TO SECTION 5]		✓
Use approved fire rated penetration details. Fire penetrations may require fire collars or other devices to maintain fire performance.		✓
Pack any gaps between the top of the wall and the underside of the roof covering with mineral fibre or other suitable fire resisting material. This maintains the fire rating of the system. [REFER TO MINERAL FIBRE MANUFACTURERS SPECIFICATIONS FOR MINIMUM WIDTHS REQUIRED].		✓
Use fire sealant on all gaps and around perimeter, vermiculite plaster is not permitted.		✓

 For acceptable modifications or variations to fire rated systems [REFER TO SECTION 3.3 FIRE RESISTANCE].

FRAMING

	NON-FIRE RATED	FIRE RATED 
Fix the furring channel/timber battens at 600mm maximum centres horizontally or vertically. [REFER TO FIGURE 2 OR 3].	✓	✓

- i**
- › Plumbing and electrical services must not protrude beyond the face of the stud.
 - › Nylon anchors are not permitted in fire rated systems.
 - › Resilient mounts or direct fix clips with furring channel do not meet the requirements of 'discontinuous construction' for walls. Resilient mounts only meet the requirements of 'impact sound resistance'.

FURRING CHANNEL / TIMBER BATTEN ANCHOR SPACING

FRAMING MEMBER	MAXIMUM ANCHOR SPACING
13mm Recessed Furring Channel (Rondo No.333)	900mm
16mm Furring Channel (Rondo No.308)	900mm
28mm Furring Channel (Rondo No.129)	1200mm
Timber Battens	1200mm


Anchors for Furring channel or Timber battens must also be fixed 100mm max from ends.

FURRING CHANNEL CAVITY SIZE TABLE

FRAMING MEMBER	LEG POSITION	CAVITY SIZE WITH 28mm FURRING CHANNEL	CAVITY SIZE WITH 16mm FURRING CHANNEL
Beta Fix Clip (Rondo No. BETAFIX)	4	48mm	36mm
	3	41mm	31mm
	2	35mm	-
	1	30mm	-
Beta Fix Clip - Long Leg (Rondo No. LGBETAFIX)	4	69mm	57mm
	3	64mm	52mm
	2	59mm	-
	1	49mm	-
Sliding Adjustable Furring Channel Clip (Rondo No. FCINFIN030)	Maximum	50mm	38mm
	Minimum	34mm	-
Direct Fix Furring Channel Clip (Rondo No. 237)	-	32mm	21mm
Direct Fix Furring Channel Clip for Membrane Insulation (Rondo No. 282)	-	56mm	45mm
Resilient Mount Clip (Rondo No. STWC)	Completely wound in	45mm	32mm


Cavity sizes listed above are intended as a guide only.

PLASTERBOARD LAYOUT

	NON-FIRE RATED	FIRE RATED 
Stagger butt joints by 600mm minimum on adjoining sheets and between layers.	✓	✓
Stagger recessed edges by 300mm minimum between layers.	✓	✓
First layer butt joints must be backed by furring channel/timber batten.	✓	✓
Locate vertical joints 200mm minimum from the edge of any opening such as windows and doorways to minimise cracking at the joints.	✓	✓

- i**
- › Install plasterboard sheets horizontally when practical to reduce the effect of glancing light.
 - › Minimise butt joints by using long sheets.

PLASTERBOARD FIXING

	NON-FIRE RATED	FIRE RATED 
Drive fasteners to just below the sheet surface, taking care not to break the paper linerboard.		
Do not fix plasterboard to steel more than 2mm BMT.	✓	✓
Laminating screws can be used to fix butt joints in the second and third layer.	✓	✓
MASONRY ADHESIVE METHOD		
Use MastaBond Masonry Adhesive Method	✓	
FASTENER AND ADHESIVE METHOD TO FURRING CHANNEL / TIMBER BATTEN		
Apply MastaGrip Stud Adhesive after the frame is clean, dry, and free from grease, dust and other contaminants.	✓	
Apply MastaGrip daubs 200mm minimum from screws and plasterboard edges.	✓	
FASTENER ONLY METHOD TO FURRING CHANNEL/TIMBER BATTEN		
Use the Fastener Only Method in tiled or fire rated areas. Stud adhesive is not permitted.	✓	✓
LAMINATING SCREW ONLY METHOD		
Use 50mm – 10g laminating screws for Autoclaved Aerated Concrete.	✓	

Do not use the Masonry Adhesive method for:

- › Fire rated systems
- › Multi-layer systems
- › Walls over three metres high
- › Pre-cast concrete panels that have a release agent on the surface reducing the effectiveness of the adhesive
- › Walls where the surface deviation is above 25mm
- › Autoclaved Aerated Concrete
- › Walls that may become damp during service
- › Walls that will have tiles fixed to plasterboard.

PLASTERBOARD FIXING



The Fastener and Adhesive Method is recommended for non-fire rated applications.

MastaGrip will:

- › Minimise fastener popping
- › Reduce the number of fastener heads that may show in glancing light
- › Assist in compensating for frame irregularities.

SCREW TYPE AND MINIMUM SIZE FOR THE INSTALLATION OF PLASTERBOARD TO STEEL FURRING CHANNEL

PLASTERBOARD THICKNESS	1ST LAYER	2ND LAYER	3RD LAYER
6.5mm	25mm – 6g S screw	25mm – 6g S screw	-
10mm	25mm – 6g S screw	40mm – 6g S screw *	-
13mm	25mm – 6g S screw	40mm – 6g S screw *	60mm – 6g S screw *
16mm	30mm – 6g S screw	45mm – 6g S screw *	65mm – 6g S screw *

For steel up to 0.8mm BMT use Type 'S' fine thread needle point screws.

For steel 0.8mm to 2.0mm BMT use Type 'S' fine thread drill point screws.

* 40mm - 10g Laminating screws may be used as detailed in installation diagrams.

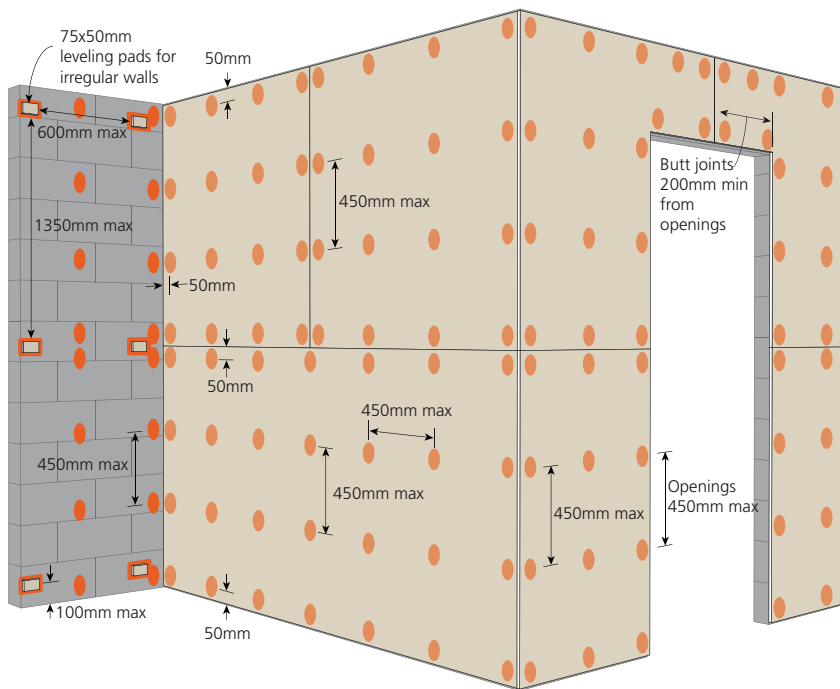
FASTENER TYPE AND MINIMUM SIZE FOR THE INSTALLATION OF PLASTERBOARD TO SOFTWOOD TIMBER BATTENS

PLASTERBOARD THICKNESS	1ST LAYER	2ND LAYER	3RD LAYER
6.5mm	30mm x 2.8 Nail or 25mm x 2.8 ring shank nail or 25mm - 6g W screw	40mm x 2.8 galvanised nail or 30mm x 2.8 ring shank nail or 30mm - 6g W screw	-
10mm	40mm x 2.8 galvanised nail or 30mm x 2.8 ring shank nail or 25mm - 6g W screw for walls or 30mm - 6g W screw for ceilings	50mm x 2.8 galvanised nail or 40mm - 6g W screw *	-
13mm	40mm x 2.8 galvanised nail or 30mm x 2.8 ring shank nail or 30mm – 6g Type W screw	50mm x 2.8 galvanised nail or 45mm - 6g W screw *	75mm x 3.75 galvanised nail or 65mm - 8g W screw *
16mm	50mm x 2.8 galvanised nail or 45mm - 6g W screw	65mm x 3.15 galvanised nail or 50mm - 6g W screw *	75mm x 3.75 galvanised nail or 65mm - 8g W screw *

For timber use Type 'W' coarse thread needle point screws.

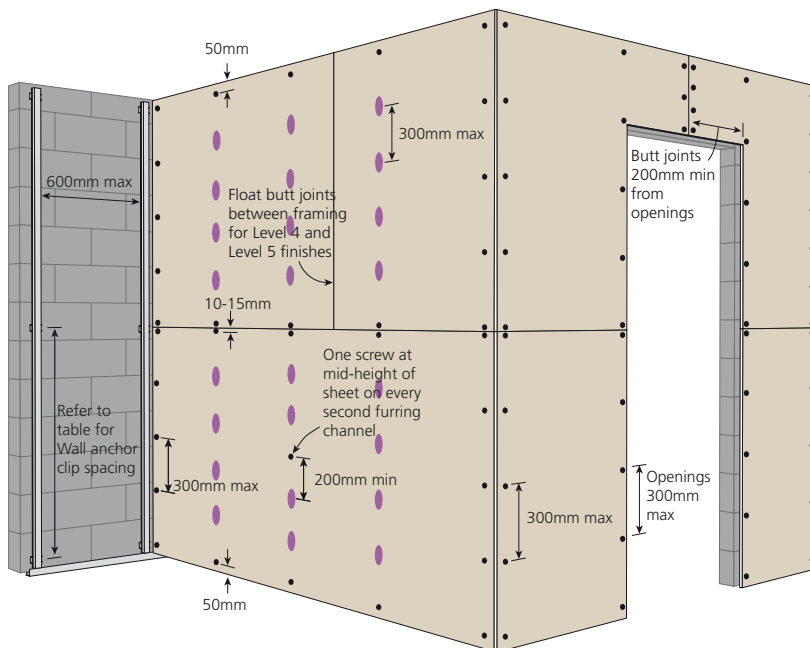
* 40mm - 10g Laminating screws may be used as detailed in installation diagrams.

FIGURE 1
Non-fire rated 1 layer - Horizontal
 Masonry Adhesive Method



Fixing	MASONRY ADHESIVE METHOD
Sheet layout	Horizontal (or Vertical)
Masonry adhesive	MastaBond daubs 75mm diameter and 25mm high and 50mm max from sheet edges. Use temporary supports to hold sheets in place until adhesive sets.
Levelling pads	Use MastaBond masonry adhesive with 75x50mm plasterboard levelling pads for irregular walls up to 25mm max deviation.
Field	Adhered at 450mm max centres.
Recessed edges	Adhered at 450mm max centres.
Butt joints	Adhered at 450mm max centres. Stagger butt joints by 600mm min on adjoining sheets.
Internal and External corners	Adhered at 450mm max centres.
Openings	Adhered at 450mm max centres. Use extra daubs around doors and windows for support.
Sealant	Use sealant on all gaps and around perimeter to maintain acoustic integrity. [REFER TO CONSTRUCTION DETAILS]
Ventilation	Allow ventilation gap at top and bottom of wall for external walls and other areas where moisture may be an issue.
Wet areas	Do not use this method in wet areas or when wall is above 3m in height. Furring channel must be used.

FIGURE 2
Non-fire rated 1 layer - Horizontal
 Screw and Adhesive Method on furring channel or battens



Fixing	SCREW AND ADHESIVE METHOD
Sheet layout	Horizontal (or Vertical)
Wall anchor clips	Use direct fix clips or resilient mounts. [REFER TO FURRING CHANNEL/ TIMBER BATTEN ANCHOR SPACING TABLE].
Perimeter	Perimeter screws 10-15mm from sheet edges except at top and bottom of wall. Plasterboard must not be fixed to bottom track.
Field	Adhesive daubs 25mm diameter and 15mm high, spaced at 300mm max centres and 200mm min from screw points and plasterboard edges. Fix one screw at mid-height of sheet on every second furring channel/batten.
Recessed edges	Fix on each furring channel/batten.
Butt joints	Float butt joints between furring channel/battens and back-block for Level 4 and Level 5 Finishes. Butt joints permitted on furring channel for a Level 3 Finish. Stagger butt joints by 600mm on adjoining sheets and on opposite sides of the wall.
Internal and External corners	Fix at 300mm max centres.
Openings	Fix at 300mm max centres.
Sealant	Use sealant on all gaps and around perimeter to maintain acoustic integrity. [REFER TO CONSTRUCTION DETAILS]

FIGURE 3

Fire rated 2 layers - Vertical + Horizontal
Screw Only Method on furring channel

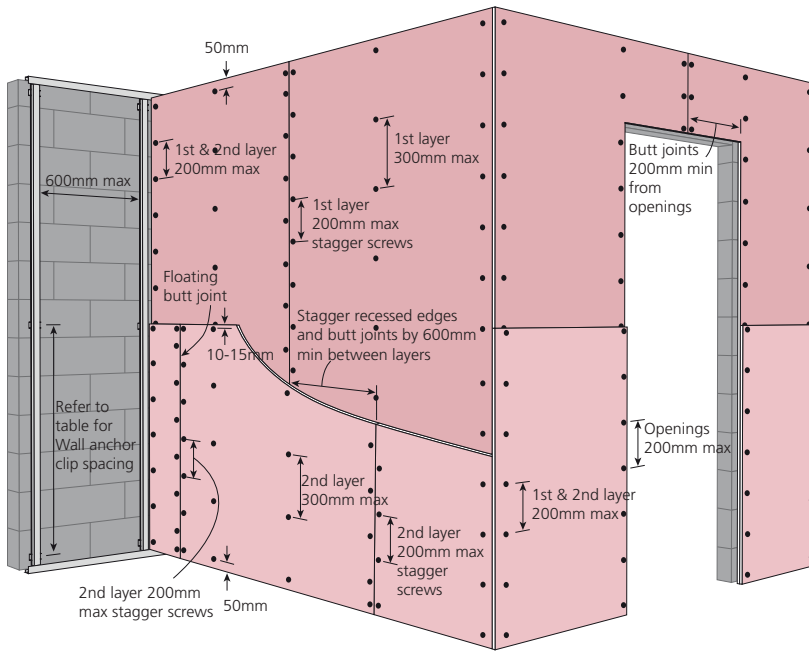
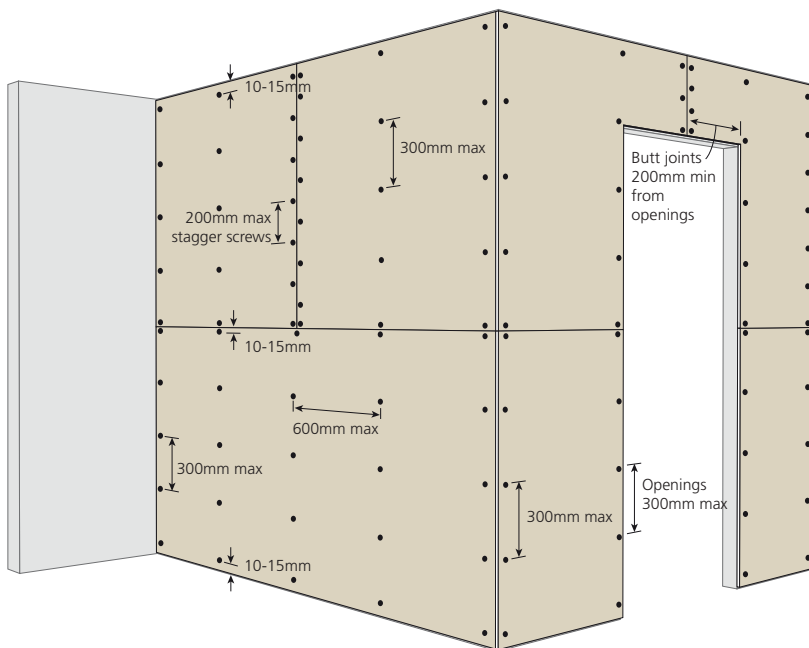


FIGURE 4

Non-fire rated 1 layer - Horizontal
Laminating Screw Method to autoclaved aerated concrete



Fixing	SCREW ONLY METHOD
Sheet layout	1st layer: Vertical 2nd layer: Horizontal
Wall anchor clips	Use direct fix clips or resilient mounts. [REFER TO FURRING CHANNEL/ TIMBER BATTEN ANCHOR SPACING TABLE].
Perimeter	Perimeter screws 10-15mm from sheet edges except at top and bottom of wall. Plasterboard must not be fixed top and bottom tracks.
Field	1st layer: Fix at 300mm max centres. 2nd layer: Fix at 300mm max centres.
Recessed edges	1st layer: Fix at 200mm max centres and stagger screws. Recessed edges must be backed by furring channel. 2nd layer: Fix on each furring channel.
Butt joints	1st layer: Fix at 200mm max centres and stagger screws. Stagger butt joints by 600mm min on adjoining sheets and between layers. 1st layer butt joints must be backed by furring channel. 2nd layer: Fix at 200mm max centres and stagger screws. Alternatively, float butt joints and laminate to 1st layer using laminating screws at 200mm max centres and stagger screws.
Internal and External corners	1st layer: Fix at 200mm max centres. 2nd layer: Fix at 200mm max centres.
Openings	Fix at 200mm max centres.
Fire Sealant	Use fire sealant on all gaps and around perimeter to maintain fire and acoustic integrity. [REFER TO CONSTRUCTION DETAILS]
Jointing face layer	As a minimum, only use paper tape with either two coats of MastaBase/ MastaLongset or three coats of MastaRapid/MastaLite. [REFER TO SECTION 5]

Fixing	LAMINATING SCREW METHOD
Sheet layout	Horizontal (or Vertical)
Perimeter	Screws must be within 10-15mm of sheet edges and from recess joints and butt joints.
Field	Fix at 300mm max centres.
Recessed edges	Fix at 600mm max centres.
Butt joints	Fix at 200mm max centres and stagger screws. Stagger butt joints by 600mm min on adjoining sheets.
Internal and External corners	Fix at 300mm max centres.
Openings	Fix at 300mm max centres.
Sealant	Use sealant on all gaps and around perimeter to maintain acoustic integrity. [REFER TO CONSTRUCTION DETAILS]

FIRE RATED AND NON-FIRE RATED WALL HEAD AND BASE FOR MASONRY WALLS - ELEVATION

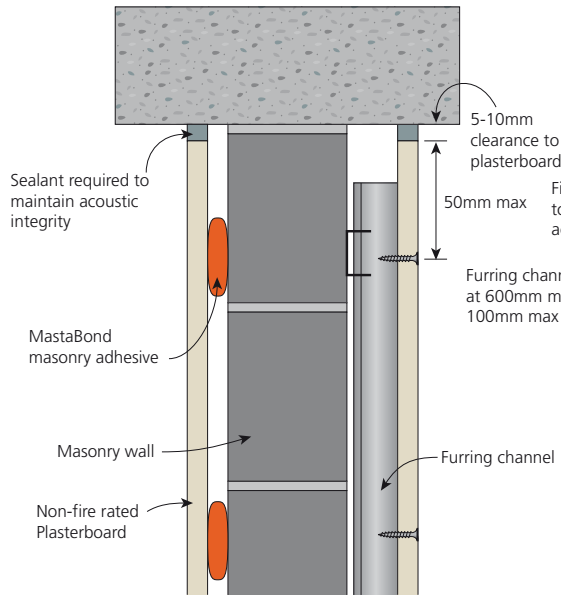


FIGURE 5
Wall head to slab

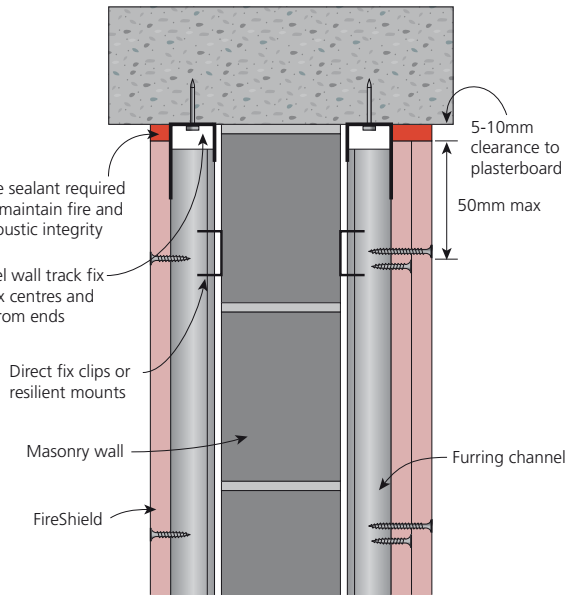


FIGURE 6
Wall head to slab

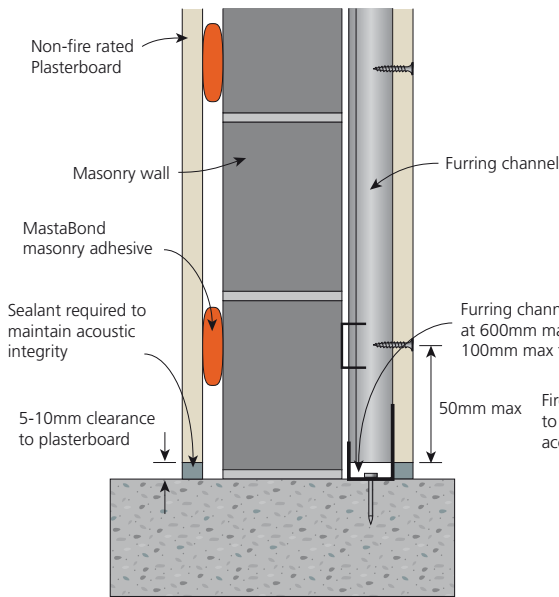


FIGURE 7
Wall base to slab

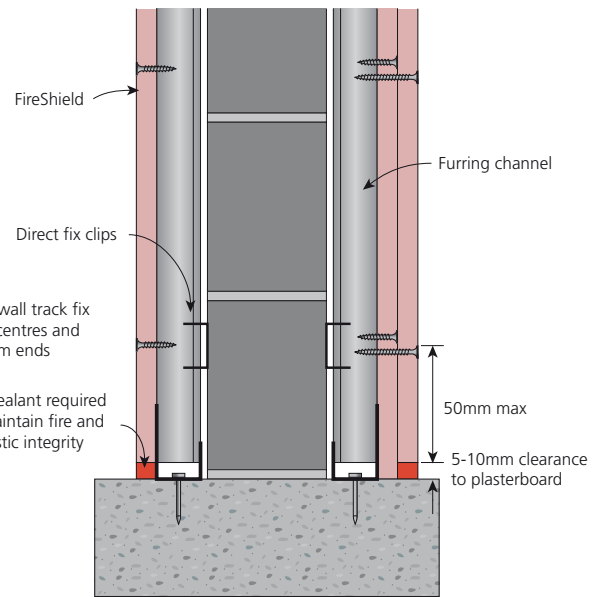


FIGURE 8
Wall base to slab

FIRE RATED AND NON-FIRE RATED WALL JUNCTIONS MASONRY WALLS - PLAN VIEW

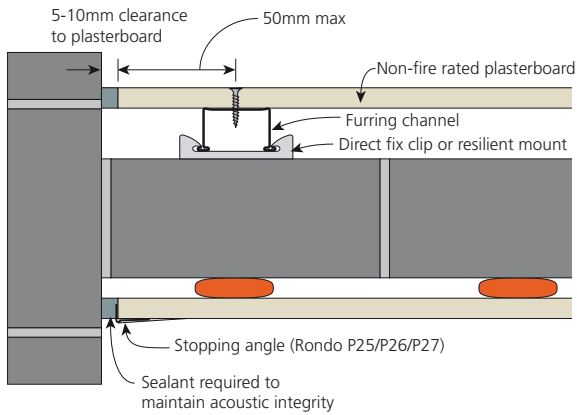


FIGURE 9
Plasterboard to Masonry
Intersection wall

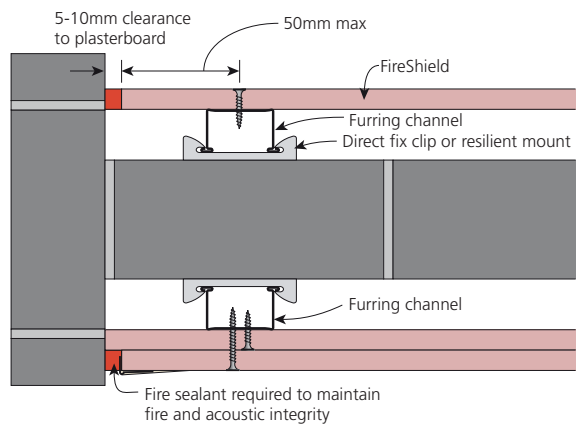


FIGURE 10
Plasterboard to Masonry
Intersection wall

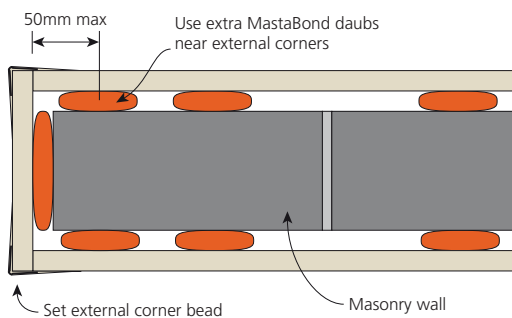


FIGURE 11
Wall End

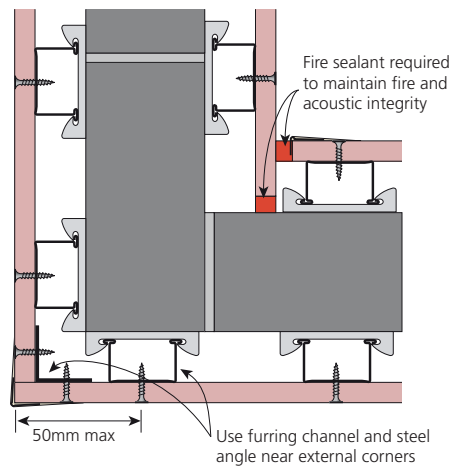


FIGURE 12
Corner

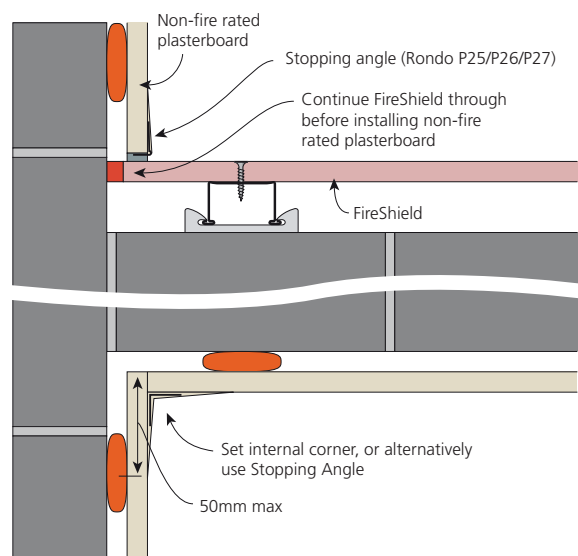


FIGURE 13
Plasterboard to Masonry
Intersection wall

FIRE RATED AND NON-FIRE RATED WALL CONTROL JOINTS FOR MASONRY WALLS - PLAN VIEW

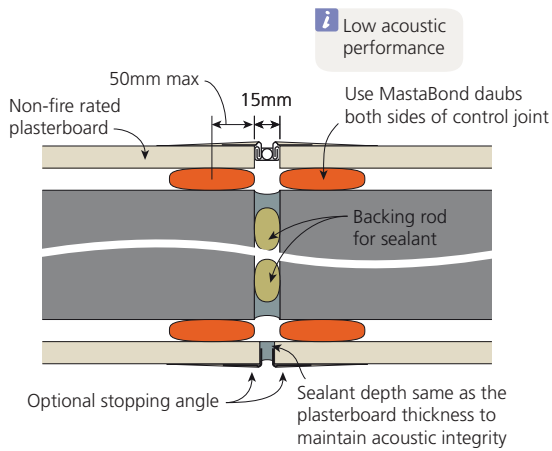


FIGURE 14
Control Joint

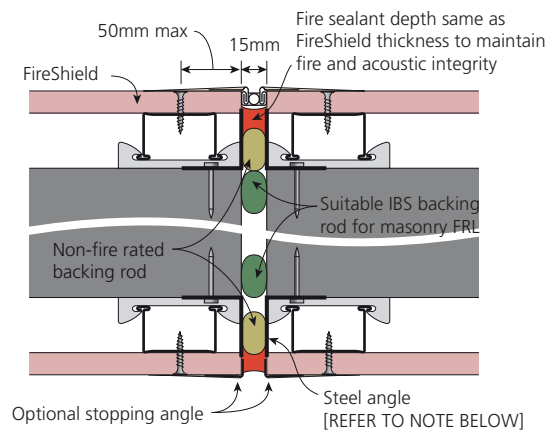


FIGURE 15
Control Joint

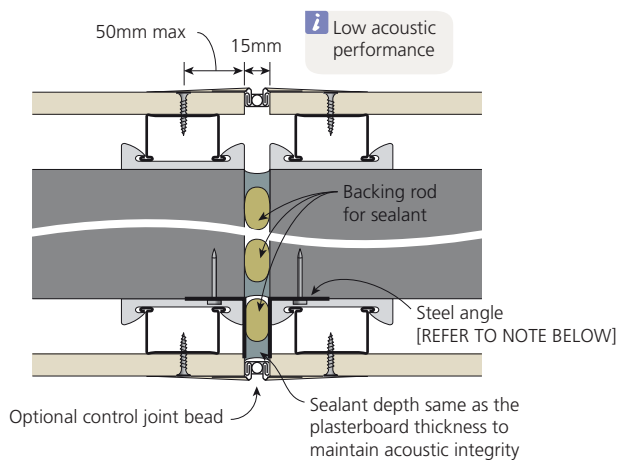


FIGURE 16
Control Joint

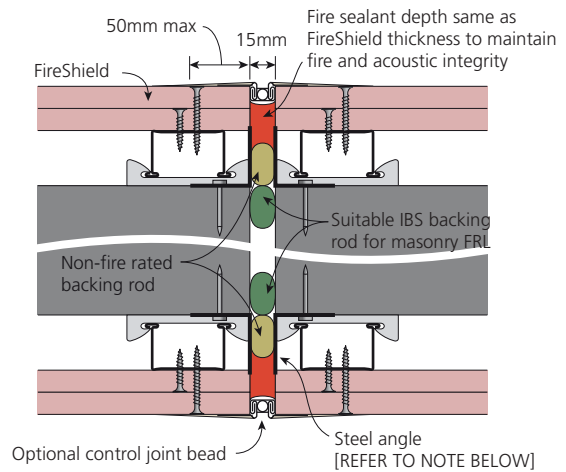


FIGURE 17
Control Joint

- i** > For control joint using either 13mm recessed furring channel, or beta fix clips and furring channel, or direct fix clips and furring channel, or resilient mounts and furring channel then galvanised steel angle must be used to support backing rod and sealant/fire sealant.
- > For 13mm recessed furring channel use 25x25mm angle.
- > For Direct fix clip and 16mm furring channel use 25x25mm angle.
- > For Direct fix clip and 28mm furring channel use 35x35mm angle.

FIRE RATED AND NON-FIRE RATED DOORS FOR MASONRY WALLS - PLAN VIEW

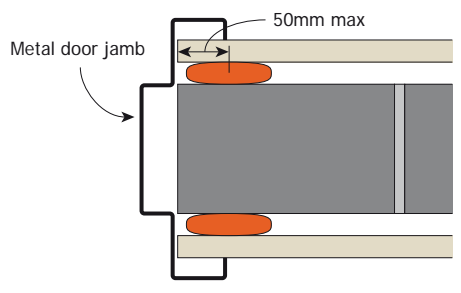


FIGURE 18
Typical metal door jamb

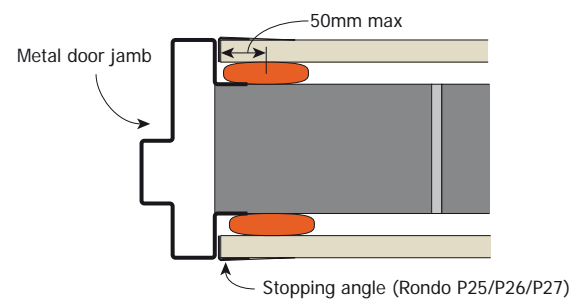


FIGURE 19
Typical metal door jamb
With stopping angle

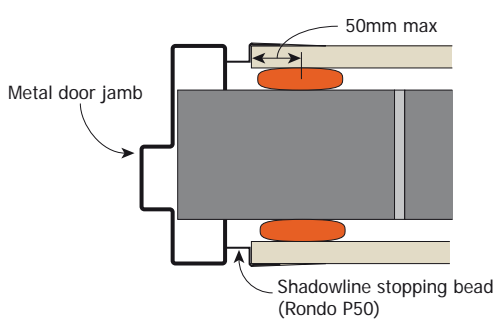


FIGURE 20
Typical metal door jamb
With shadowline stopping bead

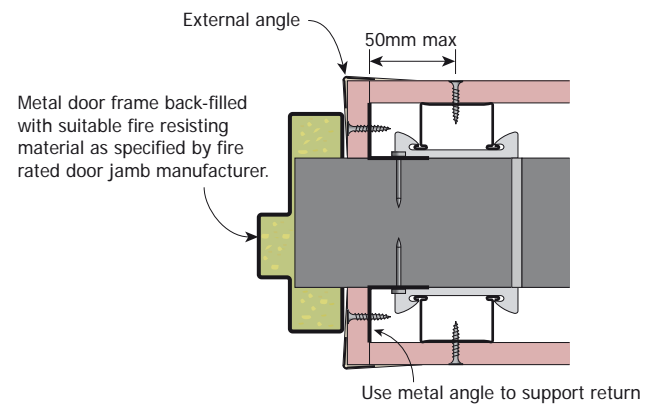


FIGURE 21
Fire rated metal door jamb
Example only