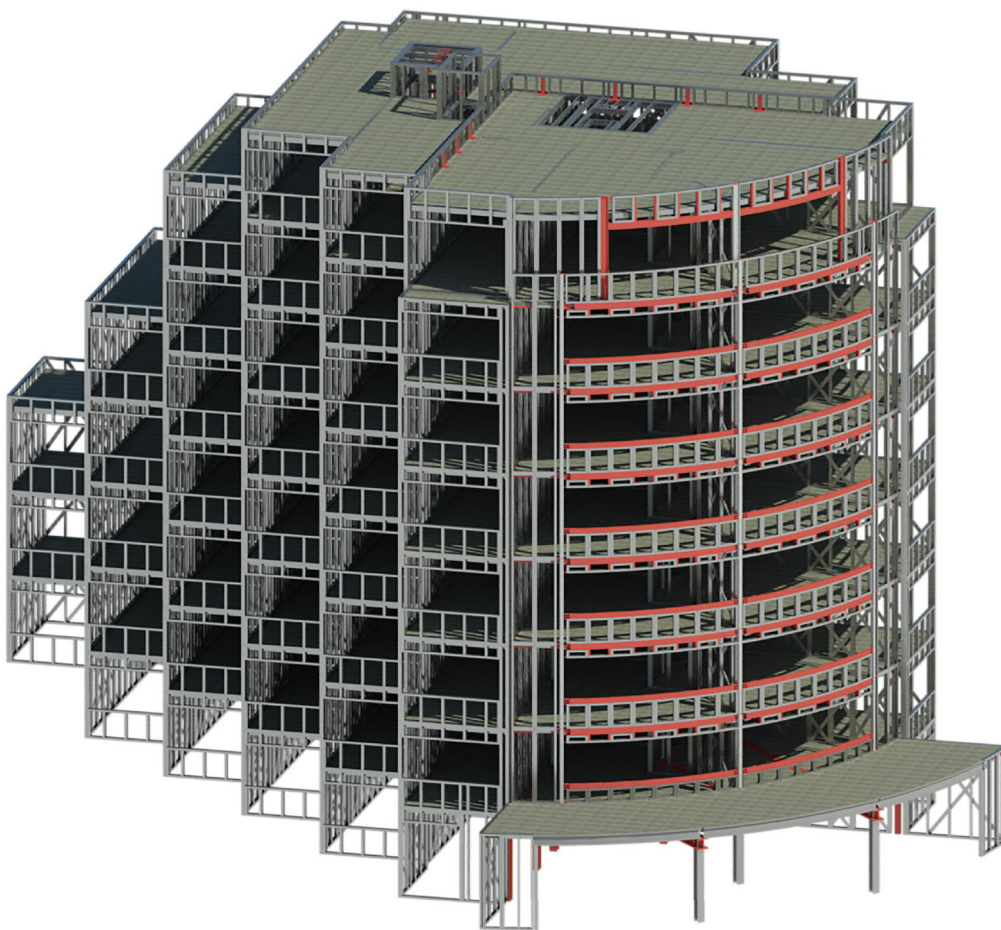




METFRAME ARCHITECTURAL GUIDE



Great care is taken to recreate these details to represent the as built environment but there may be occasions where items have been omitted for clarity.

Items like additional dry lining angles, board joint sealing etc may still be required and should be confirmed on a project by project basis with the design team by the appropriate tendering contractor.

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DETAIL MF001 WINDOW DETAIL WITH BRICKWORK VIEWED EXTERNALLY

Metframe Lintel Member

Location & tolerances to be agreed as per the Metframe standard tolerance sheets prior to project commencement. Adequate fire protection achieved through the internal boarding material.

Metframe Jamb Member

Location & tolerances to be agreed as per the Metframe standard tolerance sheets prior to project commencement. Adequate fire protection achieved through the internal boarding material.

Acoustic Quilt

Provided within Metframe wall cavity to reduce flanking sound. Specification to be confirmed by project design team.

Stainless Steel Brick Tie Channel with Brick Ties

Brick ties to be typically at 600mm horizontal centres & 450mm vertical centres.

Brickwork

Design by project engineer.

Cavity Barrier

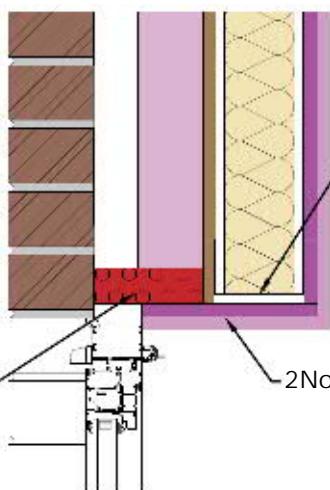
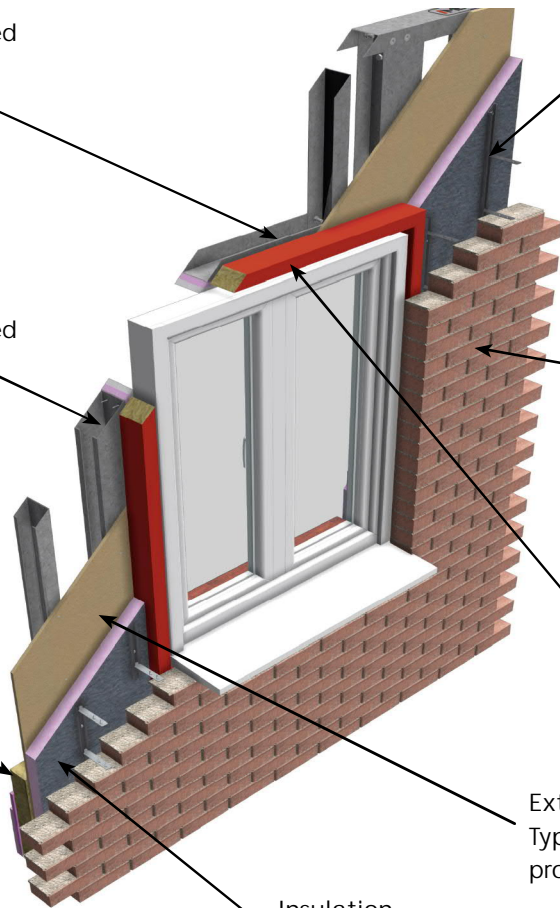
To be installed across the full width of the cavity, fixed around the window opening on the outer face of sheathing board. Exact specification to be confirmed by project design team.

External Sheathing Board

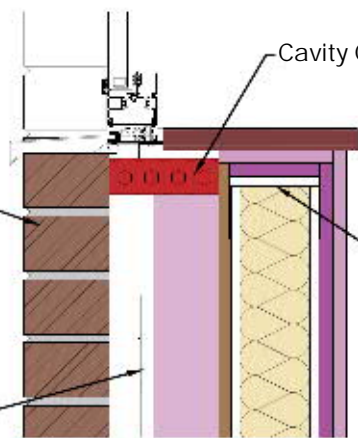
Typically 12mm thick to achieve project specific fire requirements.

Insulation

Specification to be confirmed by the design team to achieve both thermal & fire requirements.

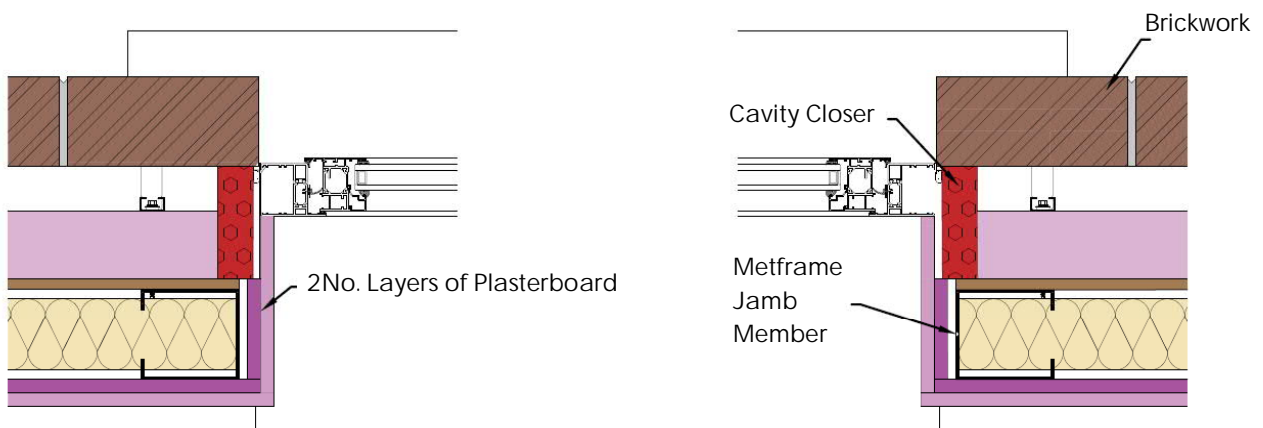
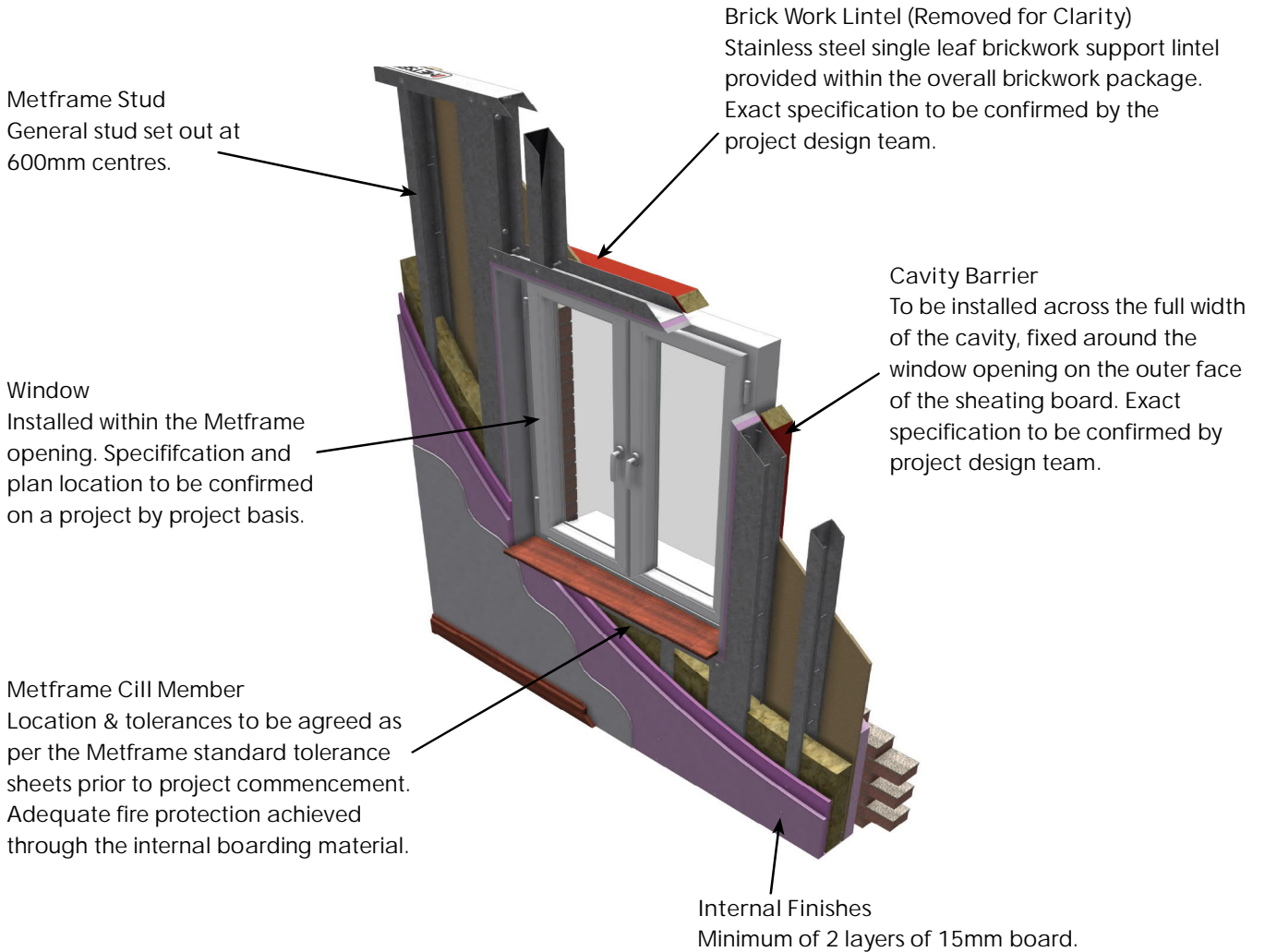


Section on Metframe Lintel



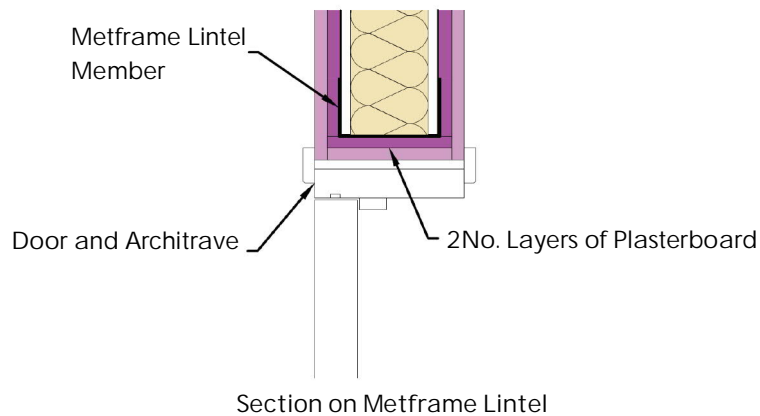
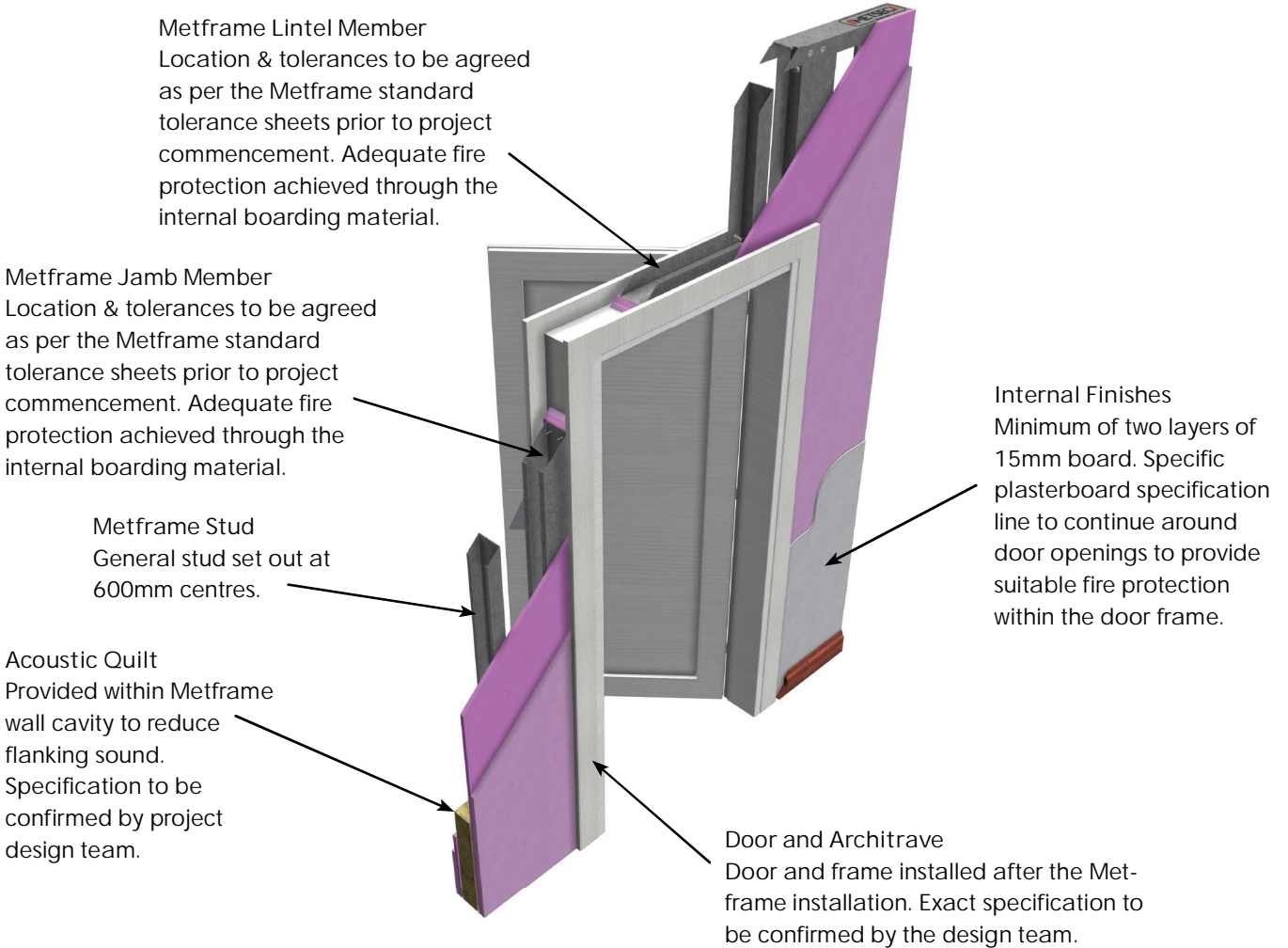
Section on Metframe Cill

DETAIL MF001 WINDOW DETAIL WITH BRICKWORK VIEWED INTERNALLY

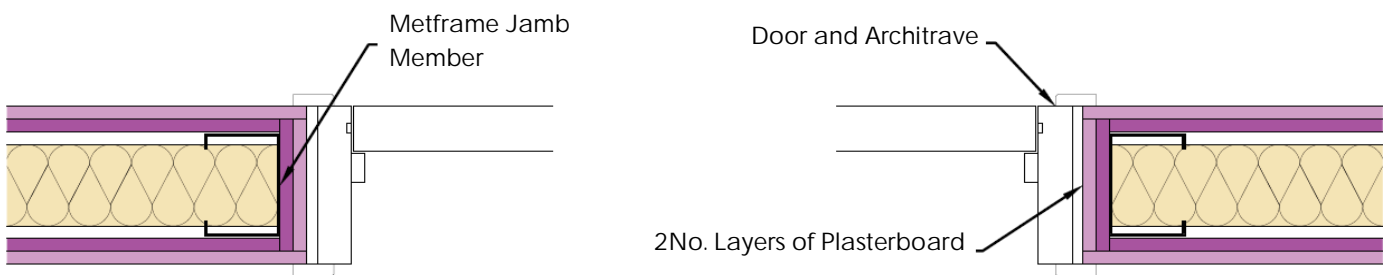
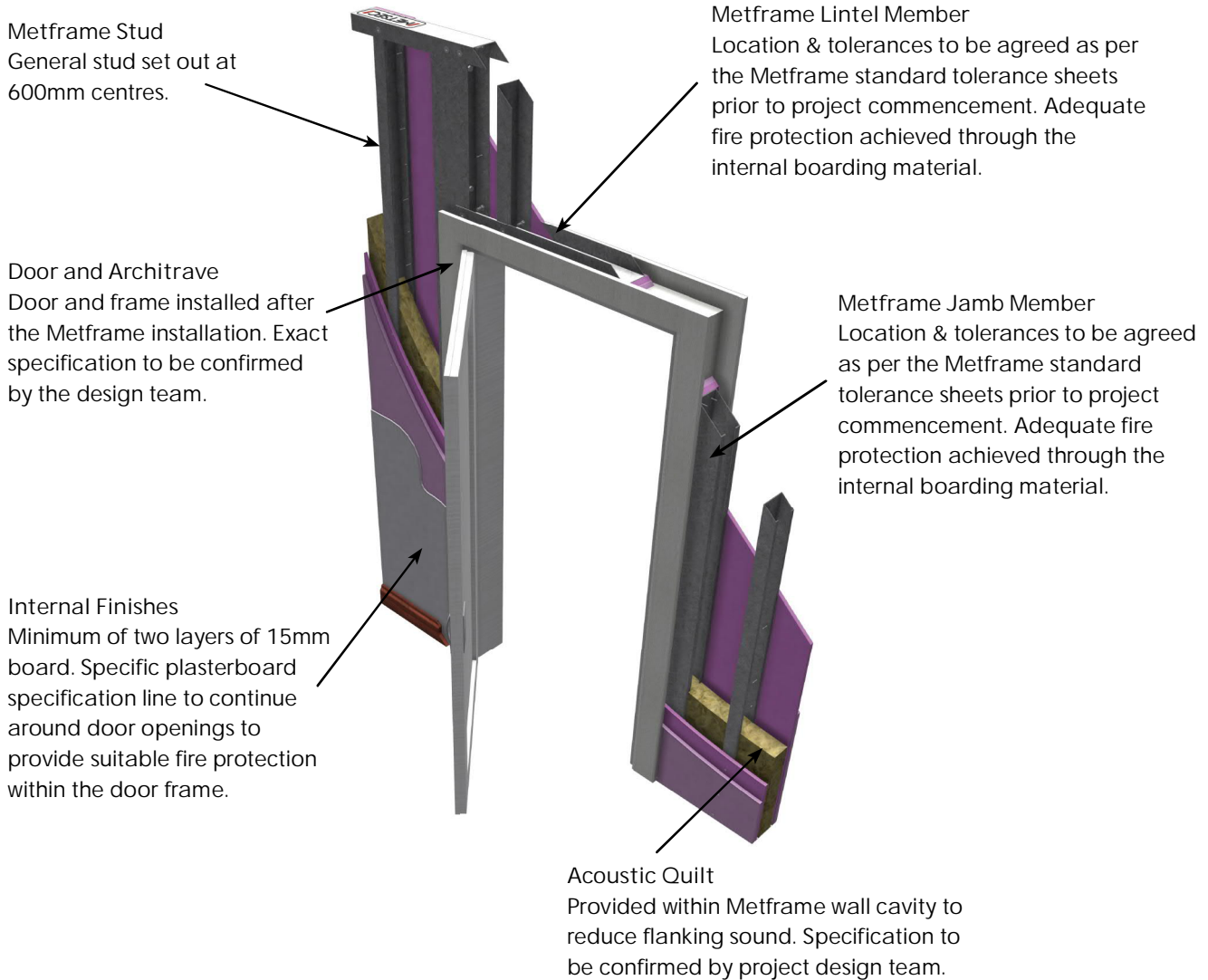


Plan on Metframe Jamb

DETAIL MF002 DOOR DETAIL IN AN INTERNAL PANEL VIEW A

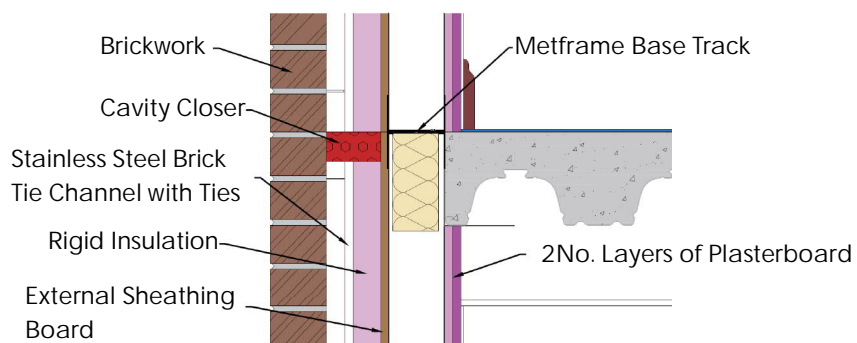
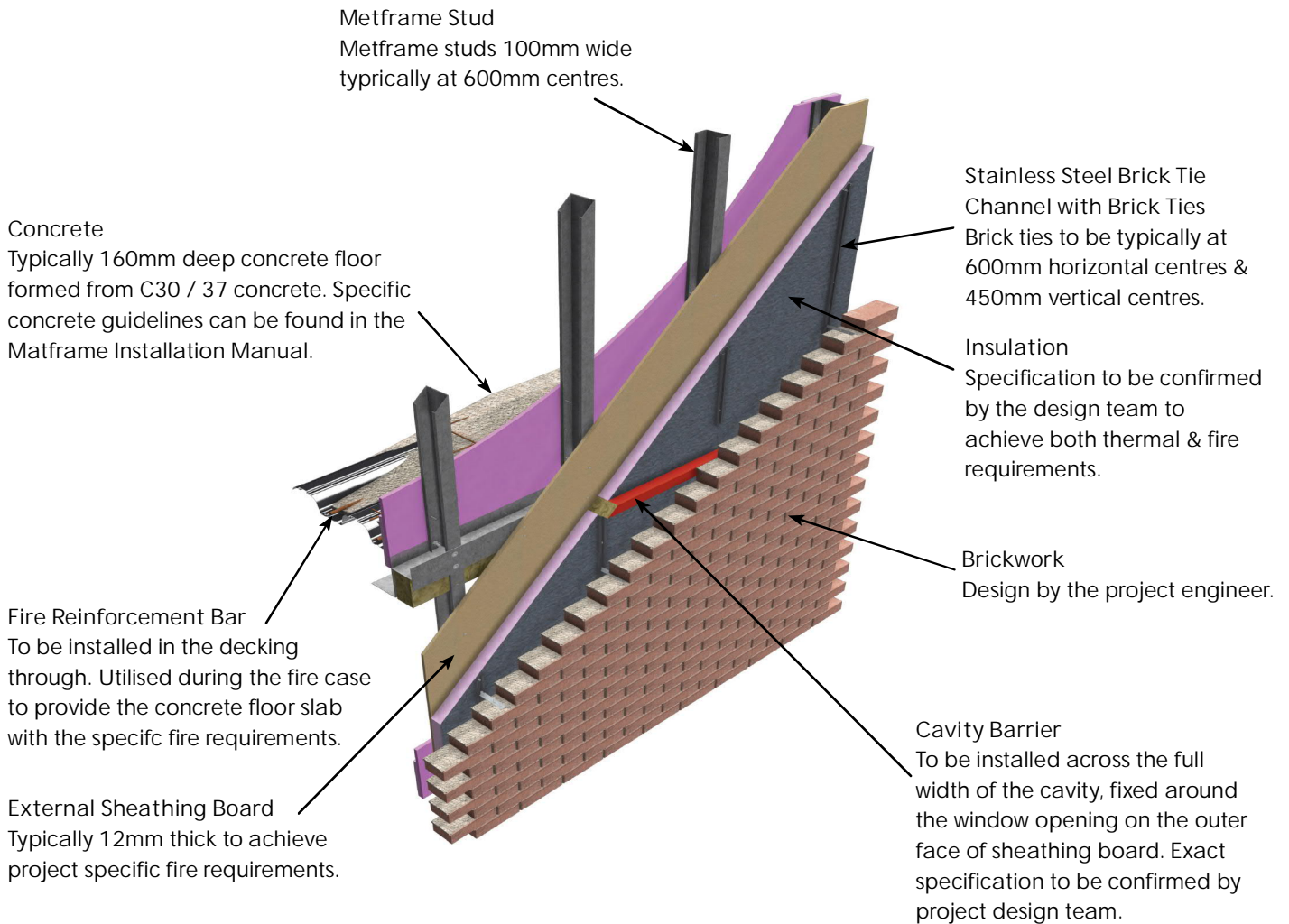


DETAIL MF002 DOOR DETAIL IN AN INTERNAL PANEL VIEW B



Plan on Metframe Jamb

DETAIL MF003 EXTERNAL WALL BRICKWORK & CONCRETE FLOOR VIEWED EXTERNALLY



Section at Floor Level

DETAIL MF003 EXTERNAL WALL BRICKWORK & CONCRETE FLOOR VIEWED INTERNALLY

Internal Finishes

Minimum of two layers of 15mm board. For fire performance of Metframe walls please seek guidance from the Metframe Specification Manual which advises minimum board specifications for the specific fire protection periods.

Crack Control Mesh

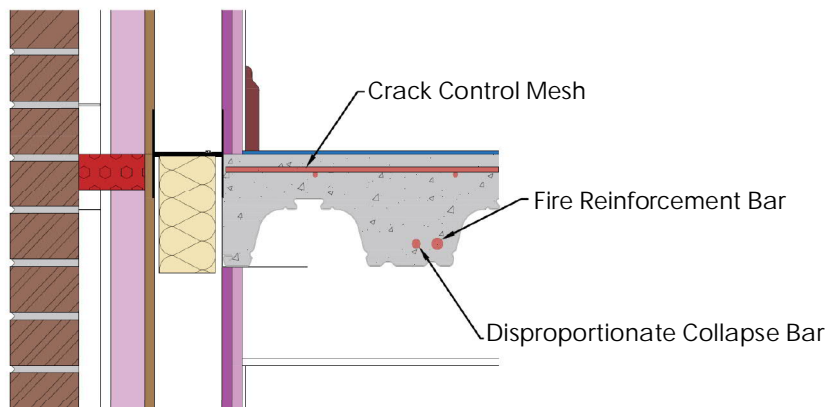
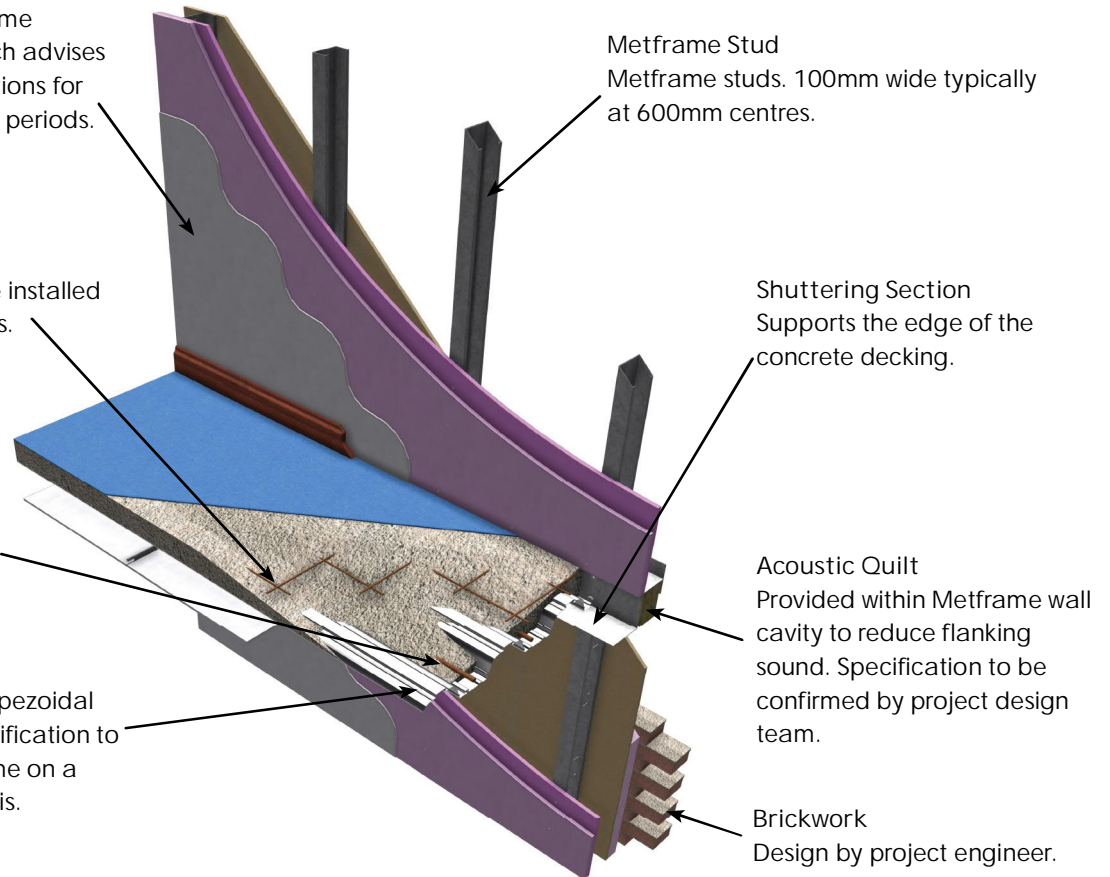
Reinforcement mesh to be installed to control shrinkage cracks.

Fire Reinforcement Bar

To be installed in the decking trough. Utilised during the fire case to provide the concrete floor slab with the specific fire requirements.

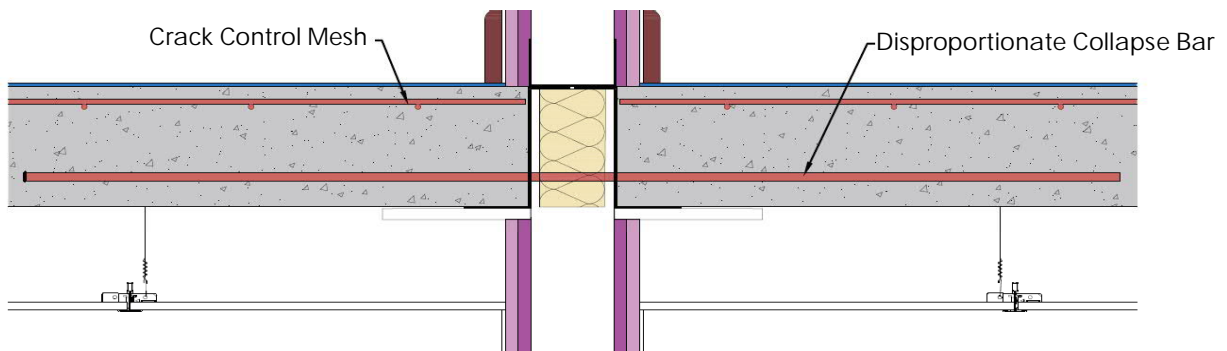
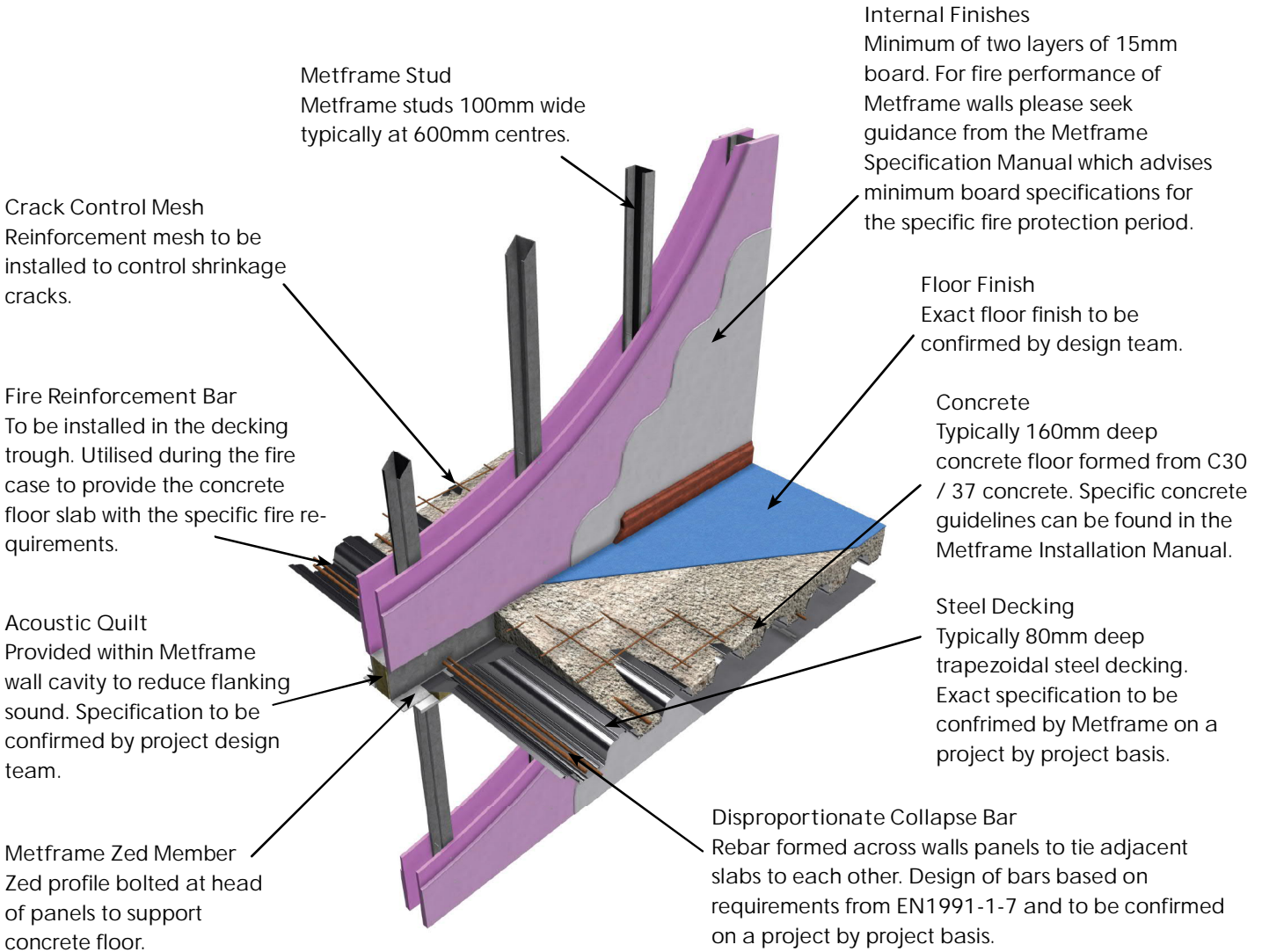
Steel Decking

Typically 80mm deep trapezoidal steel decking. Exact specification to be confirmed by Metframe on a project by project basis.



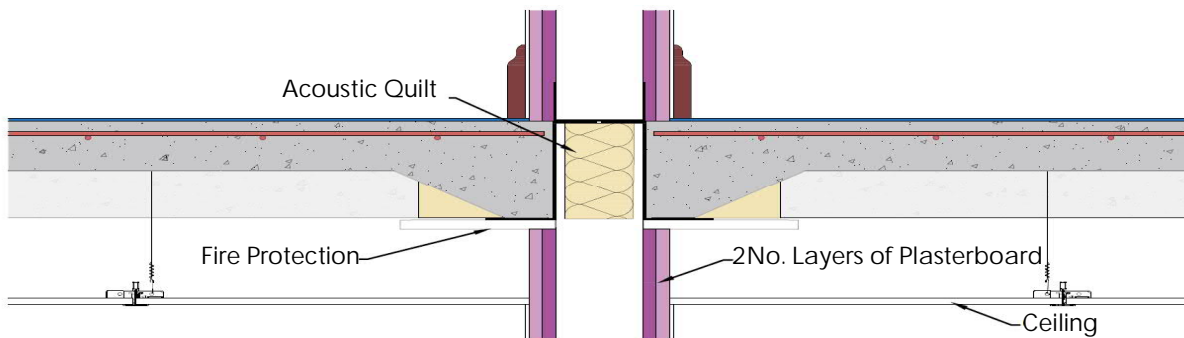
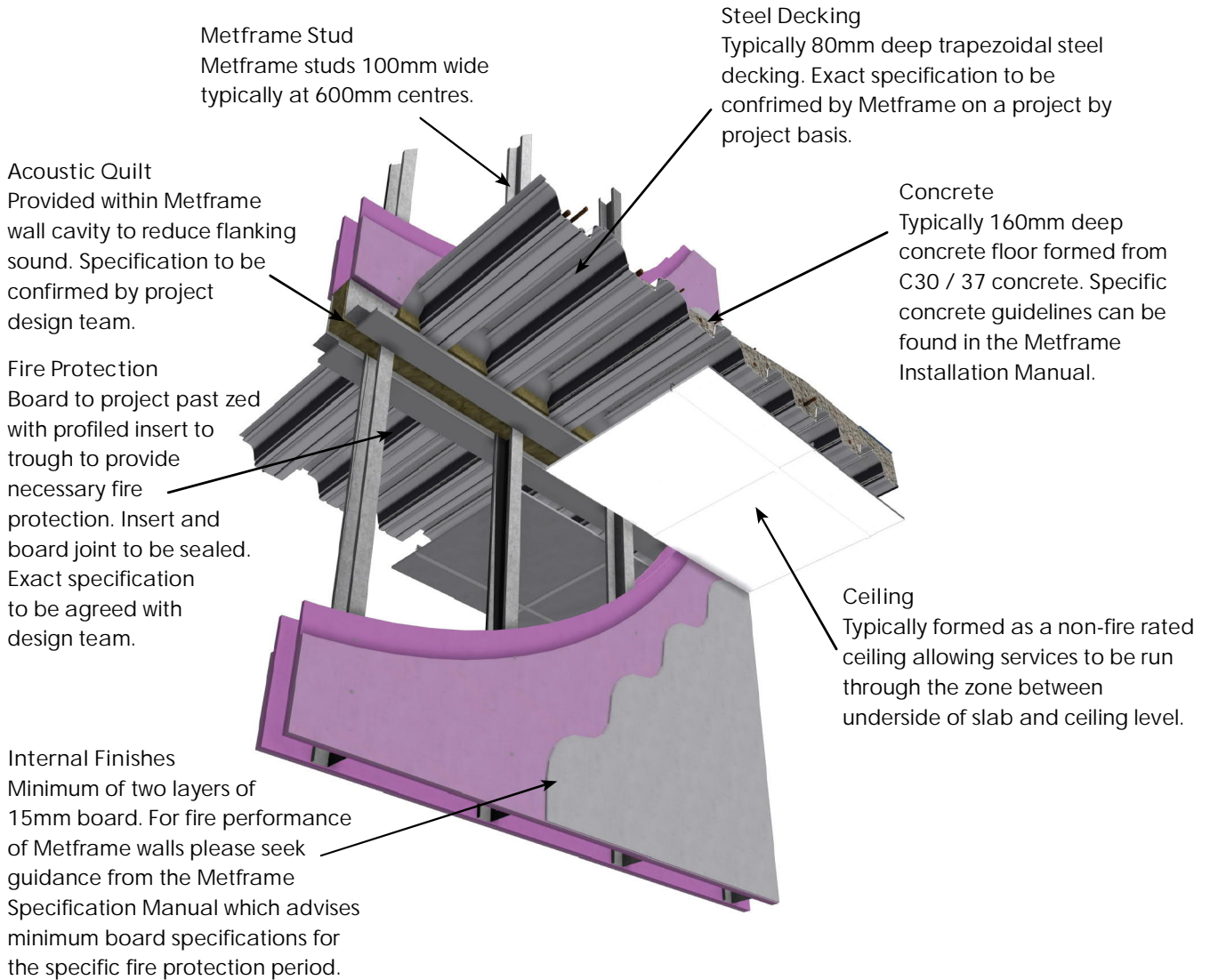
Section at Floor Level with Reinforcement

DETAIL MF004 INTERNAL NON-PARTY WALL WITH CONCRETE FLOOR



Section at Floor Level with Reinforcement

DETAIL MF004 INTERNAL NON-PARTY WALL, CONCRETE FLOOR VIEWED FROM UNDERNEATH



Section at Floor Level

DETAIL MF005 INTERNAL PARTY WALL WITH CONCRETE FLOOR

Resilient Bar

Installed on party walls to form separation of the plasterboard from the Metframe walls giving optimal acoustic performance.

Metframe Stud

Metframe studs 100mm wide typically at 600mm centres.

Acoustic Quilt

Provided within Metframe wall cavity to reduce flanking sound. Specification to be confirmed by project design team.

Metframe Zed Member

Zed profile bolted at head of panels to support concrete floor.

Fire Reinforcement Bar

To be installed in the decking trough. Utilised during the fire case to provide the concrete floor slab with the specific fire requirements.

Steel Decking

Typically 80mm deep trapezoidal steel decking. Exact specification to be confirmed by Metframe on a project by project basis.

Internal Finishes

Minimum of two layers of 15mm board. For fire performance of Metframe walls please seek guidance from the Metframe Specification Manual which advises minimum board specifications for the specific fire protection periods.

Concrete

Typically 160mm deep concrete floor formed from C30 / 37 concrete. Specific concrete guidelines can be found in the Metframe Installation Manual.

Floor Finish

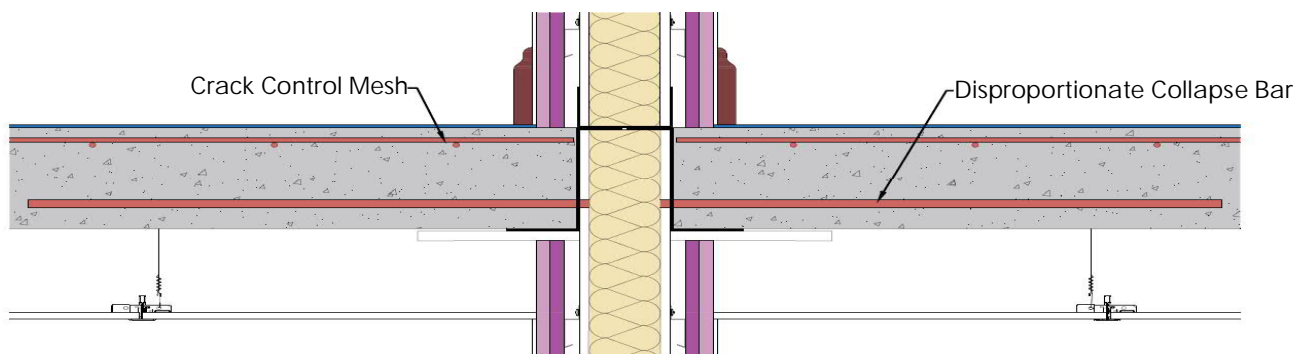
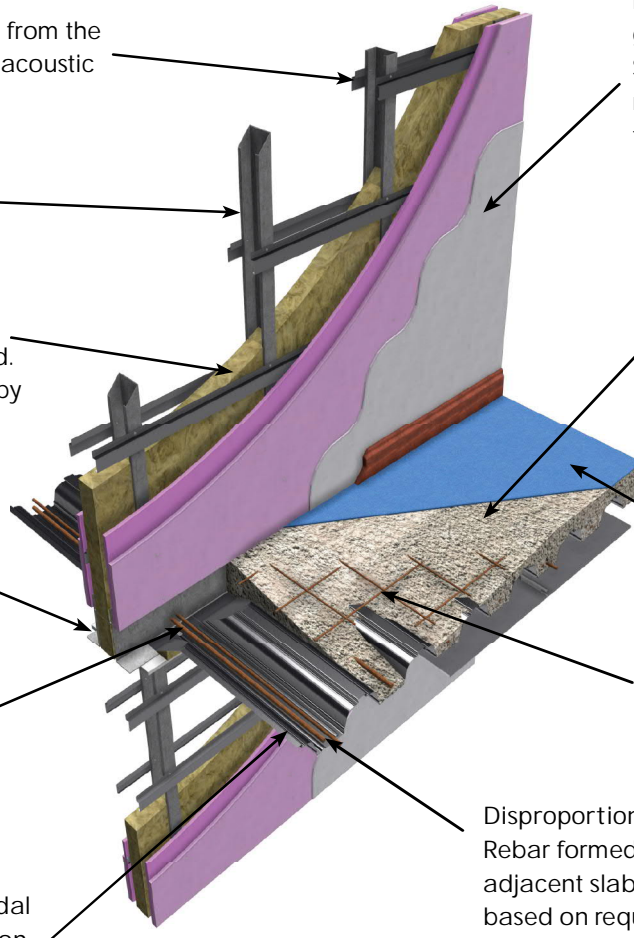
Exact floor finish to be confirmed by design team.

Crack Control Mesh

Reinforcement mesh to be installed to control shrinkage cracks.

Disproportionate Collapse Bar

Rebar formed across walls panels to tie adjacent slabs to each other. Design of bars based on requirements from EN1991-1-7 and to be confirmed on a project by project basis.



Section at Floor Level with Reinforcement

DETAIL MF005 INTERNAL PARTY WALL WITH CONCRETE FLOOR VIEWED FROM UNDERNEATH

Metframe Stud

Metframe studs 100mm wide typically at 600mm centres.

Steel Decking

Typically 80mm deep trapezoidal steel decking. Exact specification to be confirmed by Metframe on a project by project basis.

Acoustic Quilt

Provided within Metframe wall cavity to reduce flanking sound. Specification to be confirmed by project design team.

Internal Finishes

Minimum of two layers of 15mm board. For fire performance of Metframe walls please seek guidance from the Metframe Specification Manual which advises minimum board specifications for the specific fire protection periods.

Resilient Bar

Installed on party walls to form separation of the plasterboard from the Metframe walls giving optimal acoustic performance.

Concrete

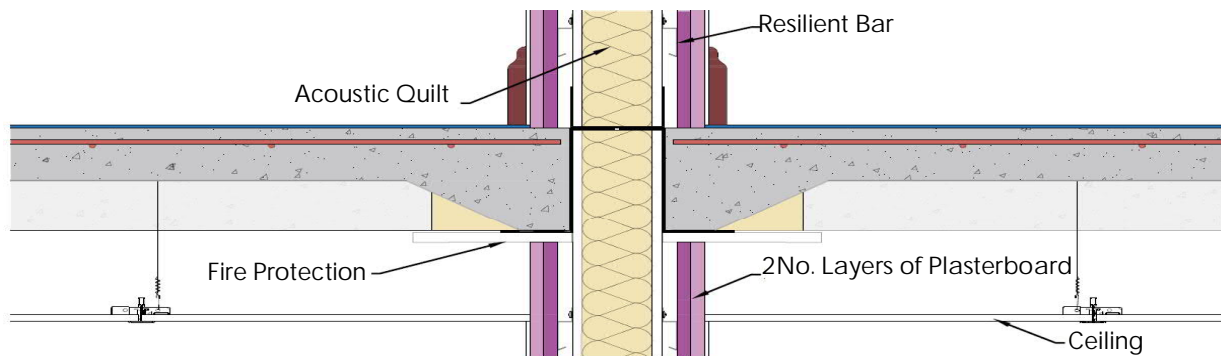
Typically 160mm deep concrete floor formed from C30 / 37 concrete. Specific concrete guidelines can be found in the Metframe Installation Manual.

Ceiling

Typically formed as a non-fire rated ceiling allowing services to be run through the zone between underside of slab and ceiling level.

Fire Protection

Board to project past zed with profiled insert to trough to provide necessary fire protection. Insert and board joint to be sealed. Exact specification to be agreed with design team.



Section at Floor Level

DETAIL MF006 EXTERNAL/INTERNAL WALL JUNCTION FOR NON-PARTY WALL (VIEWED EXTERNALLY)

Fire Reinforcement Bar
To be installed in the decking trough. Utilised during the fire case to provide the concrete floor slab with the specific fire requirements.

Concrete
Typically 160mm deep concrete floor formed from C30 / 37 concrete. Specific concrete guidelines can be found in the Metframe Installation Manual.

Disproportionate Collapse Bar
Rebar formed across walls panels to tie adjacent slabs to each other. Design of bars based on requirements from EN1991-1-7 and to be confirmed on a project by project basis.

Metframe Stud
Metframe studs 100mm wide typically at 600mm centres.

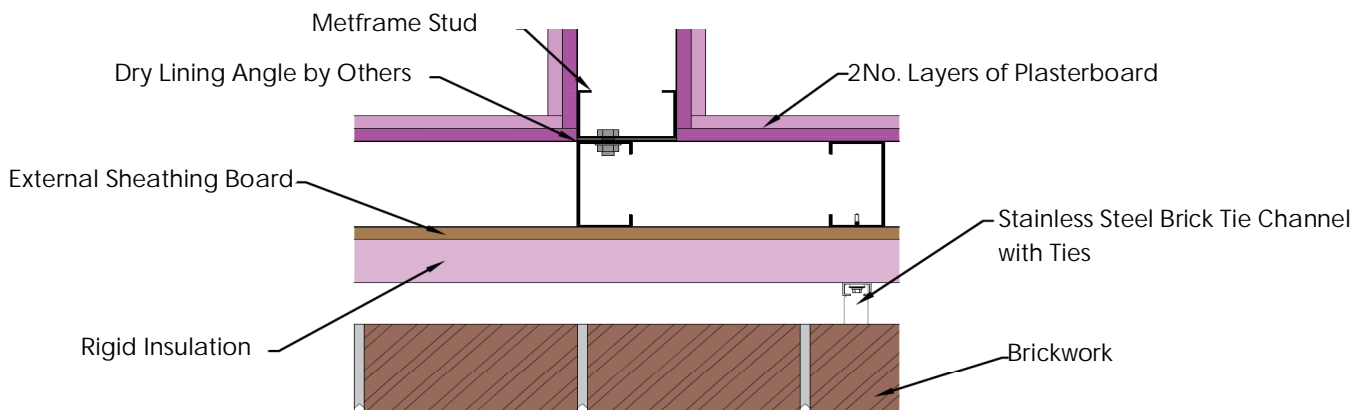
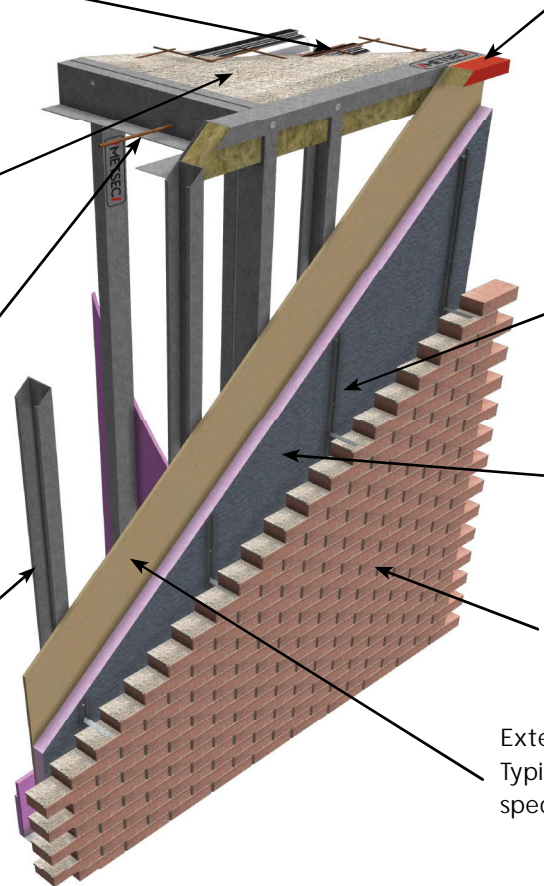
Cavity Barrier
To be installed across the full width of the cavity, fixed around the window opening on the outer face of sheathing board. Exact specification to be confirmed by project design team.

Stainless Steel Brick Tie Channel with Ties
Ties to be typically at 600mm horizontal centres & 450mm vertical centres.

Insulation
Specification to be confirmed by the design team to achieve both thermal & fire requirements.

Brickwork
Design by project engineer.

External Sheathing Board
Typically 12mm thick achieve project specific fire requirements.



Plan on Junction

DETAIL MF006

EXTERNAL/INTERNAL WALL JUNCTION

FOR NON-PARTY WALL (VIEWED INTERNALLY)

Fire Reinforcement Bar

To be installed in the decking trough. Utilised during the fire case to provide the concrete floor slab with the specific fire requirements.

Steel Decking

Typically 80mm deep trapezoidal steel decking. Exact specification to be confirmed by Metframe on a project by project basis.

Disproportionate Collapse Bar

Rebar formed across walls panels to tie adjacent slabs to each other. Design of bars based on requirements from EN1991-1-7 and to be confirmed on a project by project basis.

Metframe Stud

Metframe studs 100mm wide typically at 600mm centres.

Crack Control Mesh

Reinforcement mesh to be installed to control shrinkage cracks.

Acoustic Quilt

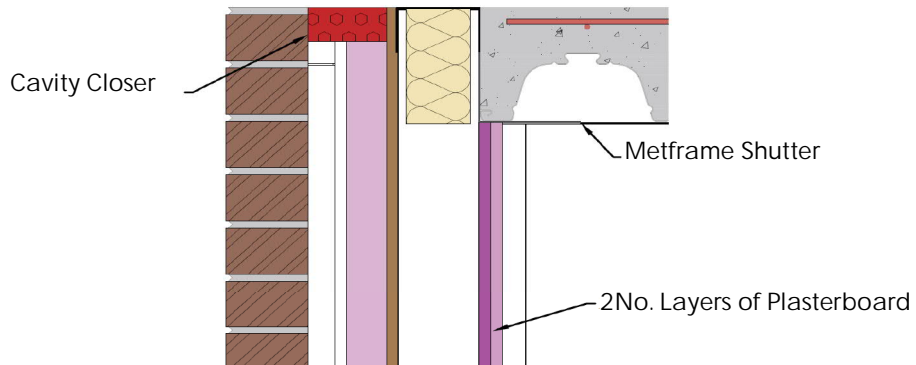
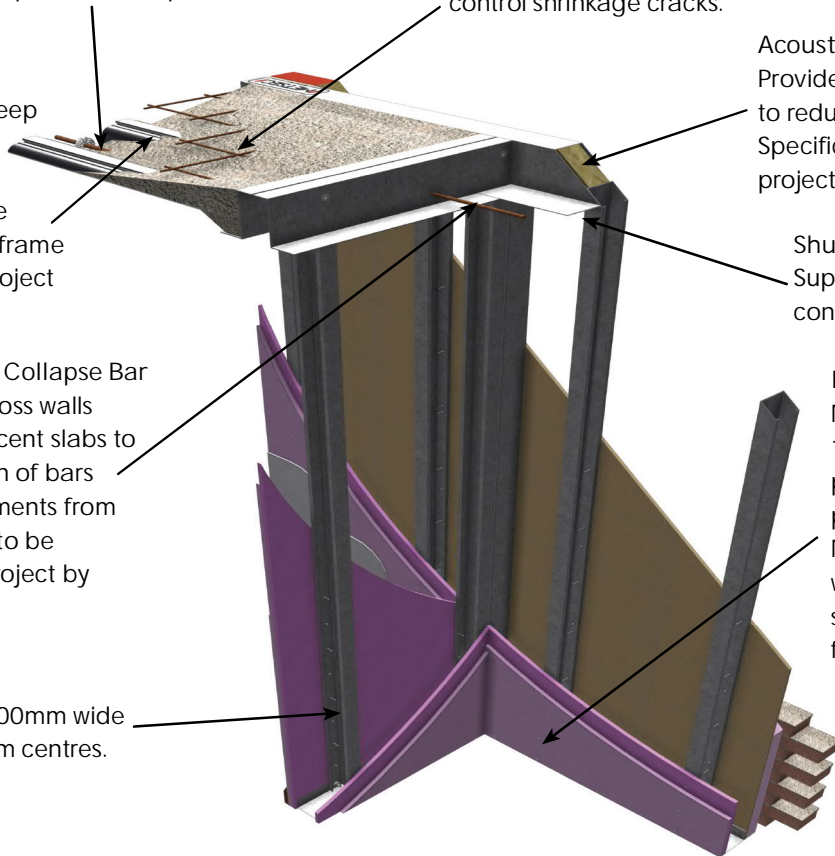
Provided within Metframe wall cavity to reduce flanking sound. Specification to be confirmed by project design team.

Shuttering Section

Supports the edge of the concrete decking.

Internal Finishes

Minimum of two layers of 15mm board. For fire performance of Metframe walls please seek guidance from the Metframe Specification Manual which advises minimum board specifications for the specific fire protection periods.



Section at Panel Head

DETAIL MF007 EXTERNAL/INTERNAL WALL JUNCTION FOR PARTY WALL (VIEWED EXTERNALLY)

Fire Reinforcement Bar

To be installed in the decking trough. Utilised during the fire case to provide the concrete floor slab with the specific fire requirements.

Disproportionate Collapse Bar
Rebar formed across walls panels to tie adjacent slabs to each other. Design of bars based on requirements from EN1991-1-7 and to be confirmed on a project by project basis.

Resilient Bar
Installed on part walls to form separation of the plasterboard from the Metframe walls giving optimal acoustic performance.

Metframe Stud
Metframe studs 100mm wide typically at 600mm centres.

Brickwork
Design by project engineer.

Concrete

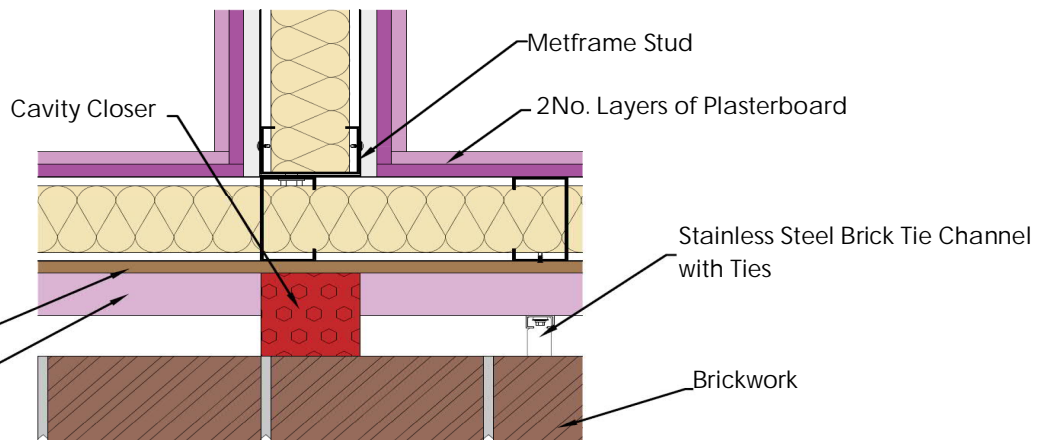
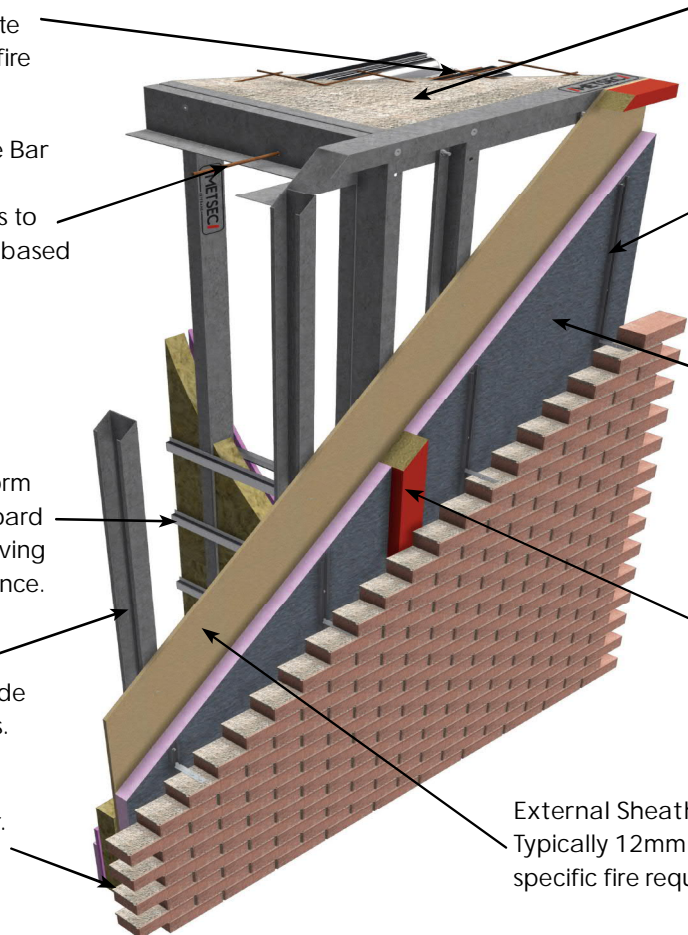
Typically 160mm deep concrete floor formed from C30 / 37 concrete. Specific concrete guidelines can be found in the Metframe Installation Manual.

Stainless Steel Brick Tie Channel with Ties
Ties to be typically at 600mm horizontal centres & 450mm vertical centres.

Insulation
Specification to be confirmed by the design team to achieve both thermal & fire requirements.

Cavity Barrier
To be installed across the full width of the cavity, fixed around the window opening on the outer face of sheathing board. Exact specification to be confirmed by project design team.

External Sheathing Board
Typically 12mm thick achieve project specific fire requirements.



Plan at Junction

DETAIL MF007 EXTERNAL/INTERNAL WALL JUNCTION FOR PARTY WALL (VIEWED INTERNALLY)

Crack Control Mesh

Reinforcement mesh to be installed to control shrinkage cracks.

Cavity Barrier

To be installed across the full width of the cavity, fixed around the window opening on the outer face of sheathing board. Exact specification to be confirmed by project design team.

Fire Reinforcement Bar

To be installed in the decking trough. Utilised during the fire case to provide the concrete floor slab with the specific fire requirement.

Shuttering Section

Supports the edge of the concrete decking.

Disproportionate Collapse Bar

Rebar formed across walls panels to tie adjacent slabs to each other. Design of bars based on requirements from EN1991-1-7 and to be confirmed on a project by project basis.

Steel Decking

Typically 80mm deep trapezoidal steel decking. Exact specification to be confirmed by Metframe on a project by project basis.

Resilient Bar

Installed on part walls to form separation of the plasterboard from the Metframe walls giving optimal acoustic performance.

Metframe Stud

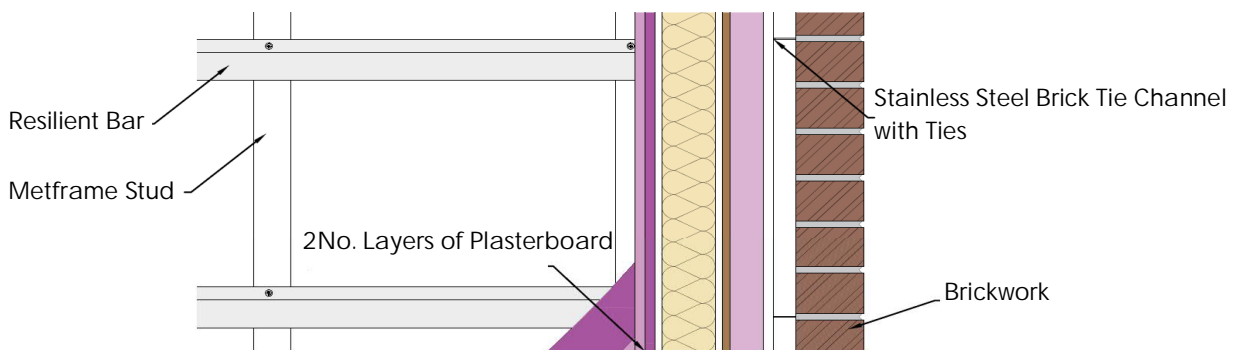
Metframe studs 100mm wide typically at 600mm centres.

Acoustic Quilt

Provided within Metframe wall cavity to reduce flanking sound. Specification to be confirmed by project design team.

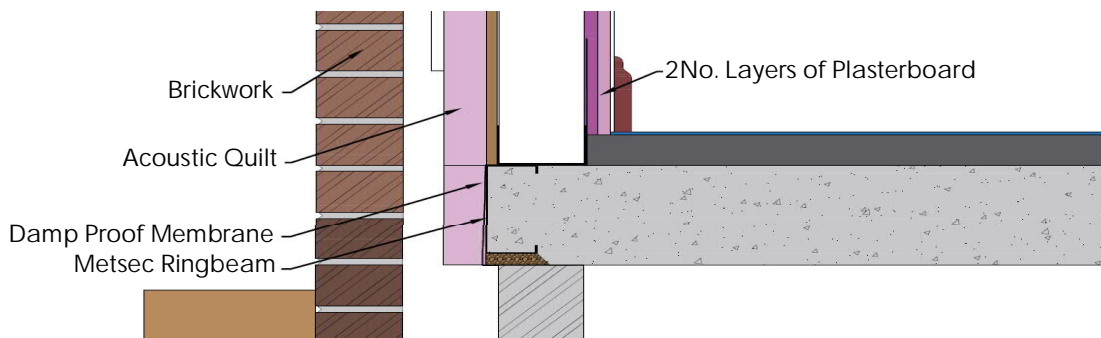
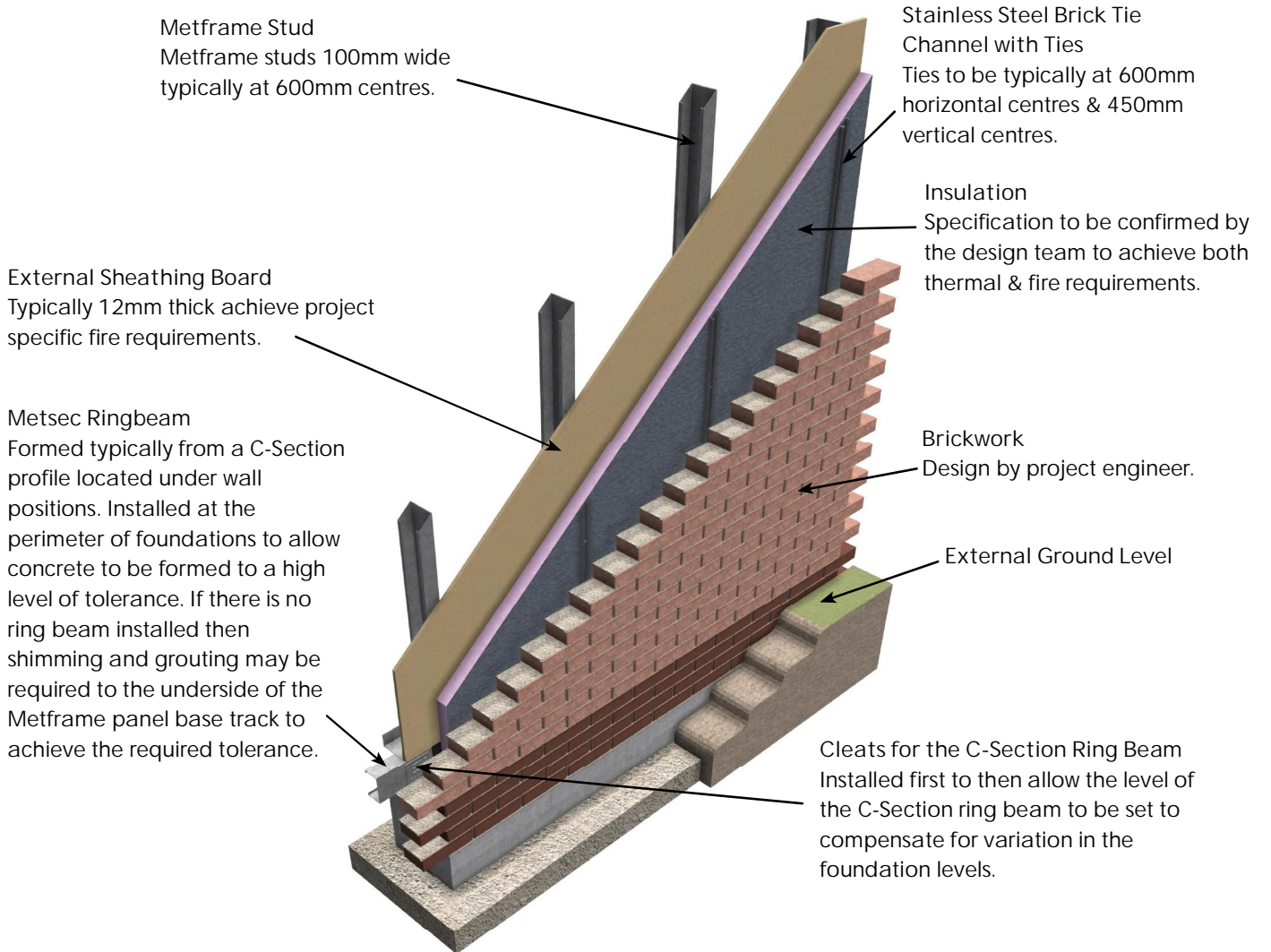
Internal Finishes

Minimum of two layers of 15mm board. For fire performance of Metframe walls please seek guidance from the Metframe Specification Manual which advises minimum board specifications for the specific fire protection periods.



Elevation on Resilient Bar

DETAIL MF008 METFRAME PANEL & FOUNDATION INTERFACE VIEWED EXTERNALLY



Section on Ring Beam & Panel Interface

DETAIL MF008 METFRAME PANEL & FOUNDATION INTERFACE VIEWED INTERNALLY

Internal Finishes

Minimum of two layers of 15mm board. For fire performance of Metframe walls please seek guidance from the Metframe Specification Manual which advises minimum board specifications for the specific fire protection periods.

Vapour Control Layer

Installed under timer floor finish or alternatively a screed can be utilised.

Damp Proof Membrane

To be installed under floor slab level.

Metframe Base Track

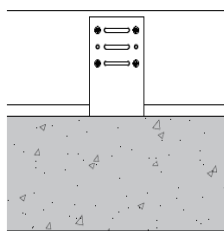
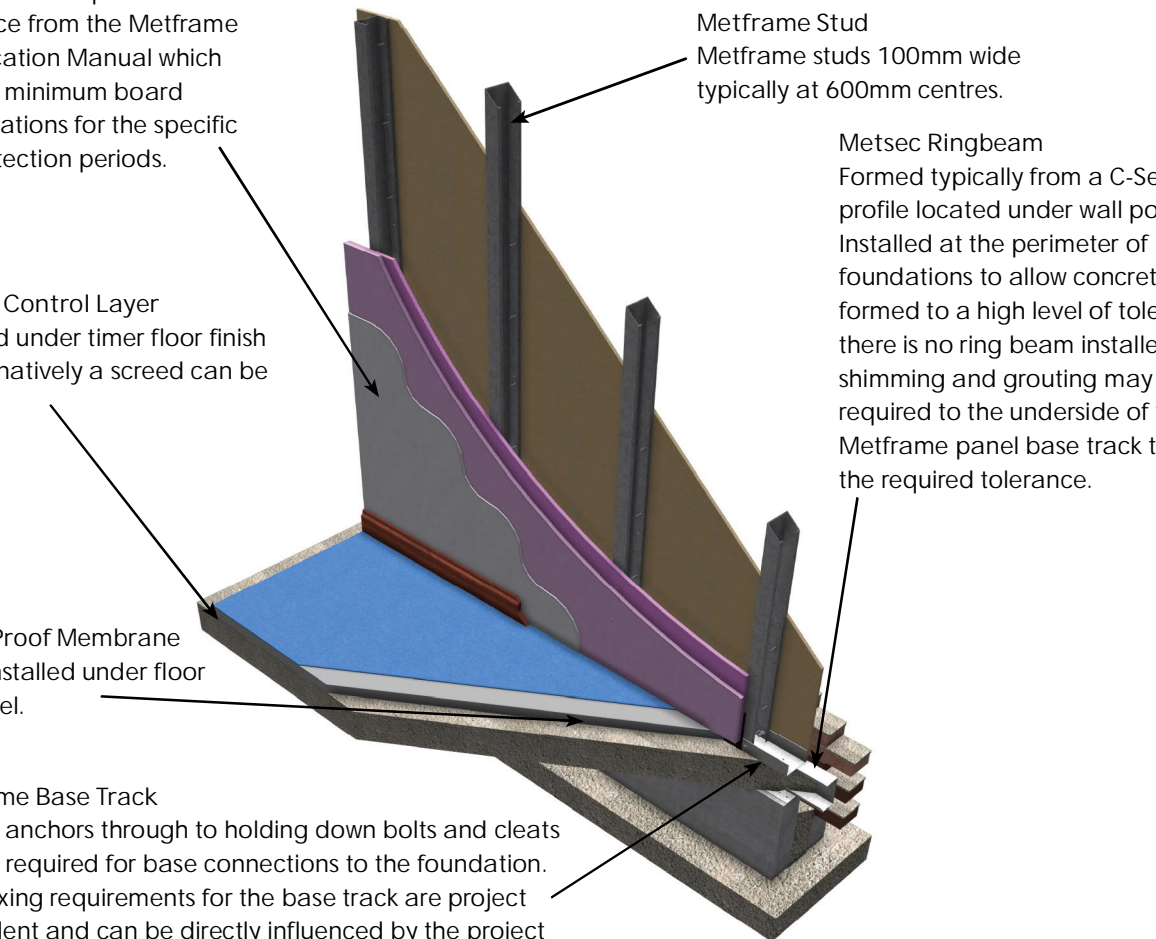
Tapcon anchors through to holding down bolts and cleats may be required for base connections to the foundation. Exact fixing requirements for the base track are project dependent and can be directly influenced by the project location, number of storeys, building height and location and frequency of Metframe walls.

Metframe Stud

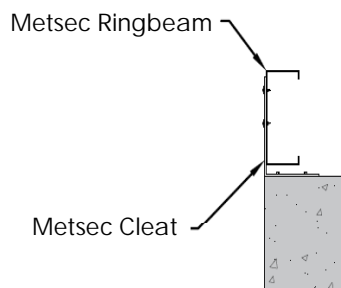
Metframe studs 100mm wide typically at 600mm centres.

Metsec Ringbeam

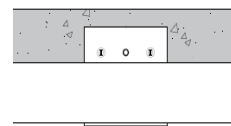
Formed typically from a C-Section profile located under wall positions. Installed at the perimeter of foundations to allow concrete to be formed to a high level of tolerance. If there is no ring beam installed then shimming and grouting may be required to the underside of the Metframe panel base track to achieve the required tolerance.



Front View on Ringbeam Cleat

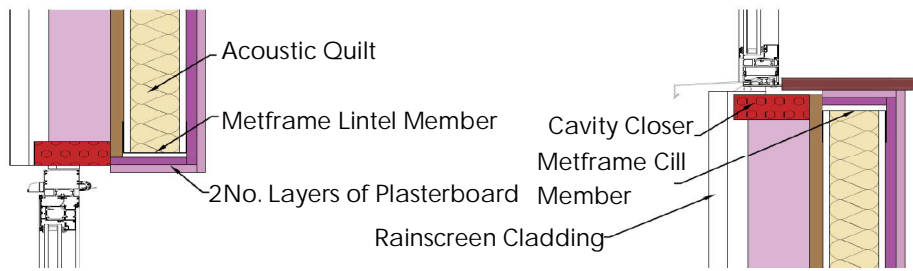
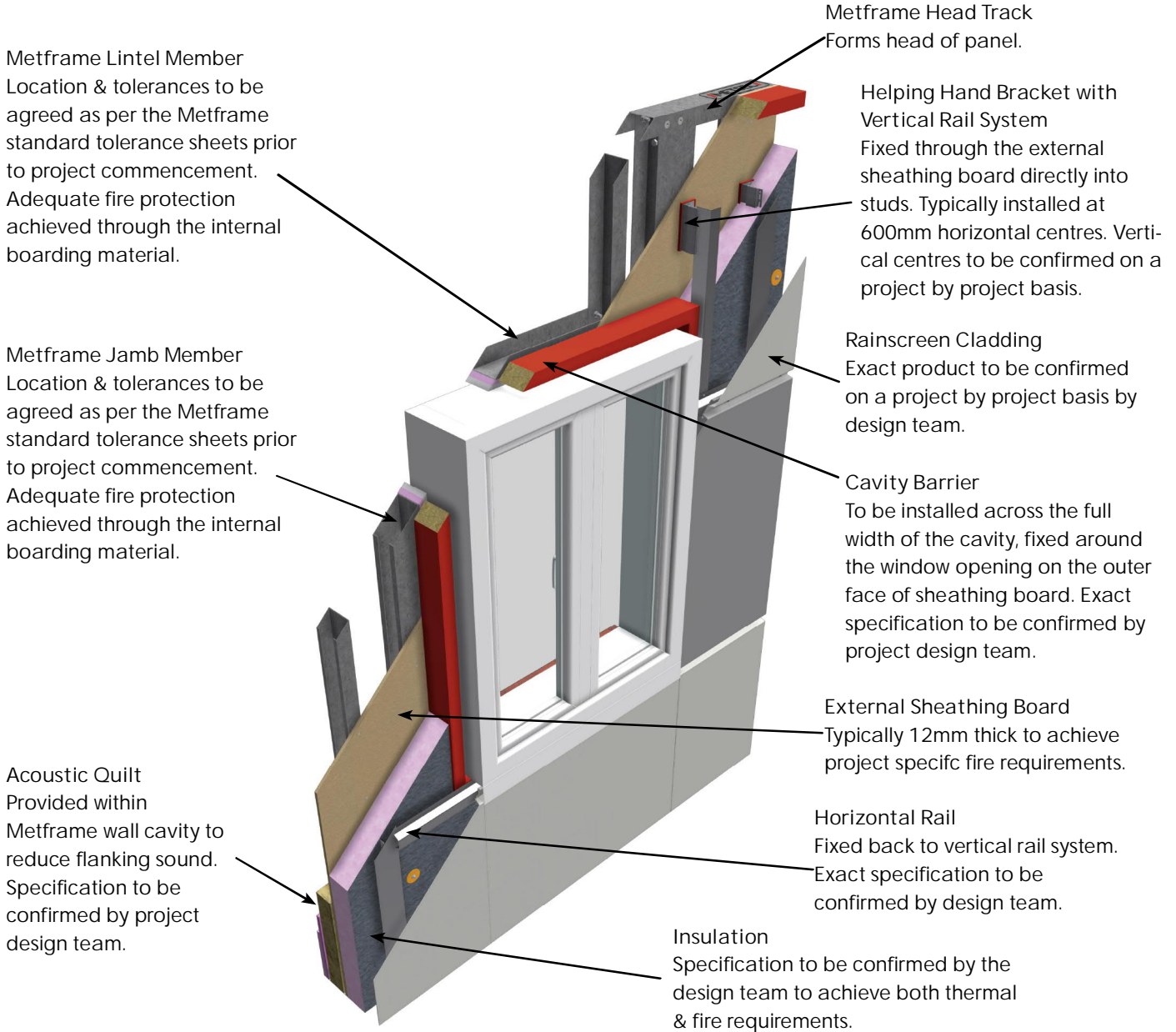


Section of Ringbeam Cleat



Plan on Ringbeam Cleat

DETAIL MF009 WINDOW DETAIL WITH RAINSCREEN CLADDING VIEWED EXTERNALLY



Section on Metframe Lintel

Section on Metframe Cill

DETAIL MF009 WINDOW DETAIL WITH RAINSCREEN CLADDING VIEWED INTERNALLY

Metframe Head Track
Forms head of panel.

Metframe Stud
General stud set out at
600mm centres.

Metframe Cill Member
Location & tolerances to be
agreed as per the Metframe
standard tolerance sheets prior
to project commencement.
Adequate fire protection
achieved through the internal
boarding material.

Internal Finishes
Minimum of two layers of 15mm board.

Cavity Barrier

To be installed across the full width of the cavity, fixed
around the window opening on the outer face of
sheathing board. Exact specification to be confirmed
by project design team.

Brick Work Lintel (Removed for Clarity)

Stainless steel single leaf brickwork support lintel
provided within the overall brickwork package.
Exact specification to be confirmed by the project
design team.

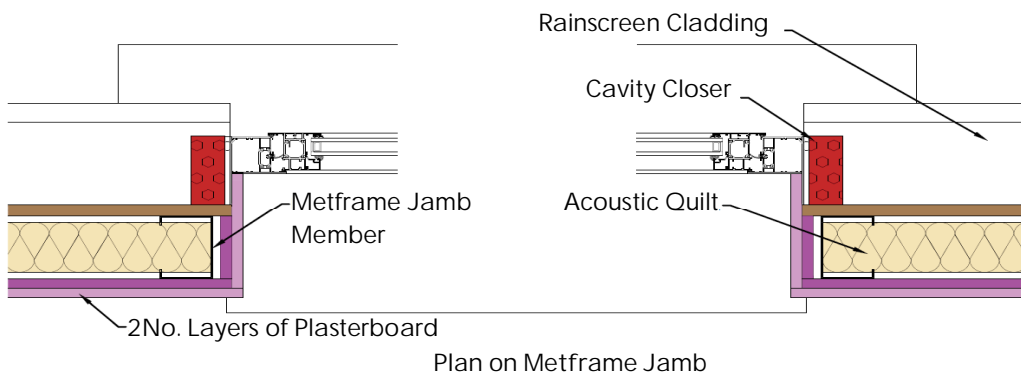
Window

Installed within the Metframe opening.
Specification and plan location to be
confirmed on a project by project basis.

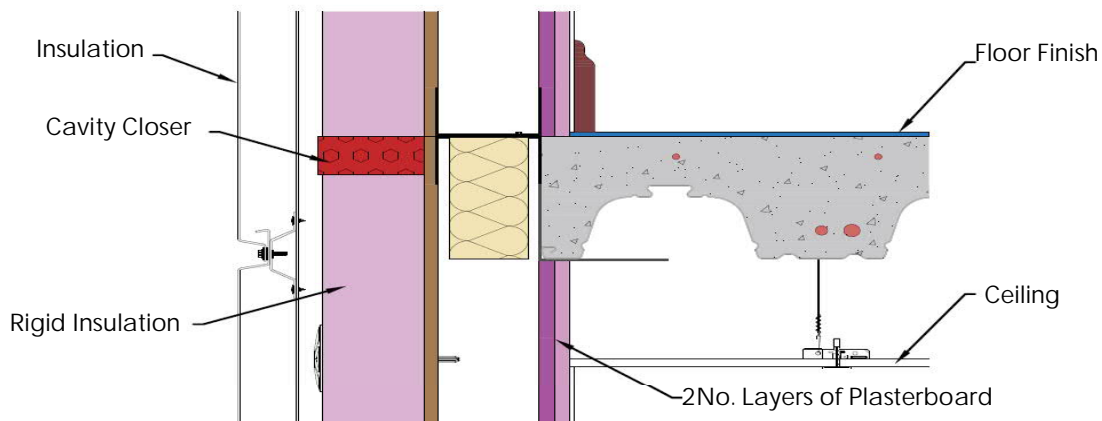
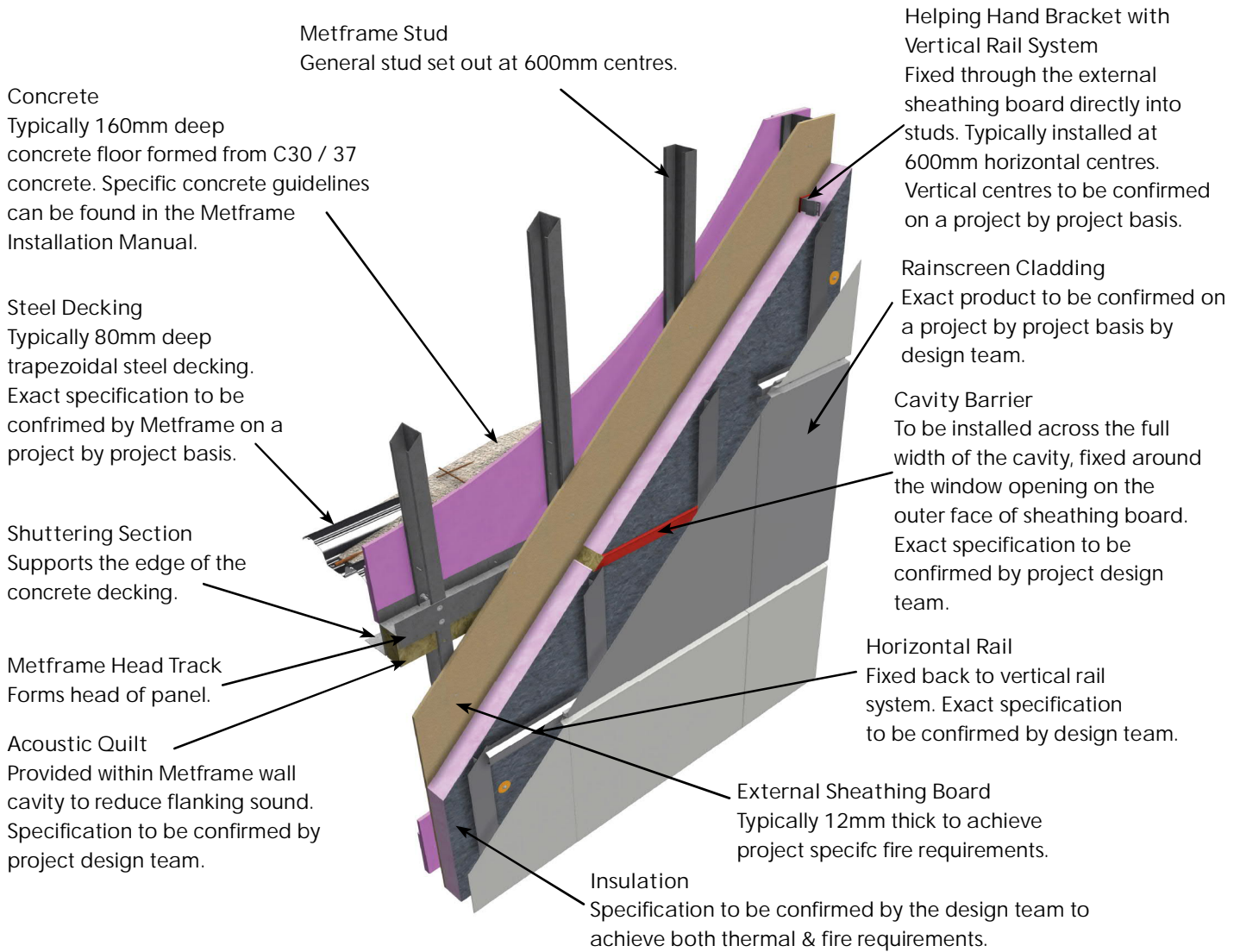
Cavity Barrier

To be installed across the full width of
the cavity, fixed around the window
opening on the outer face of sheathing
board. Exact specification to be
confirmed by project design team.

Metframe Base Track
Forms base of panel.

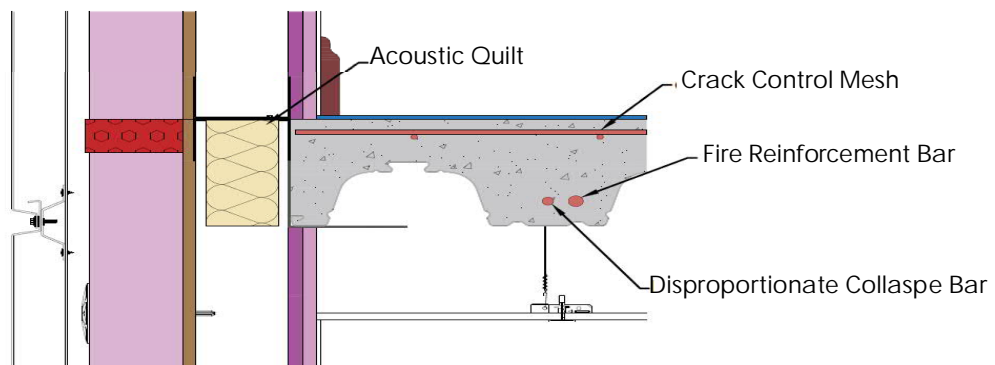
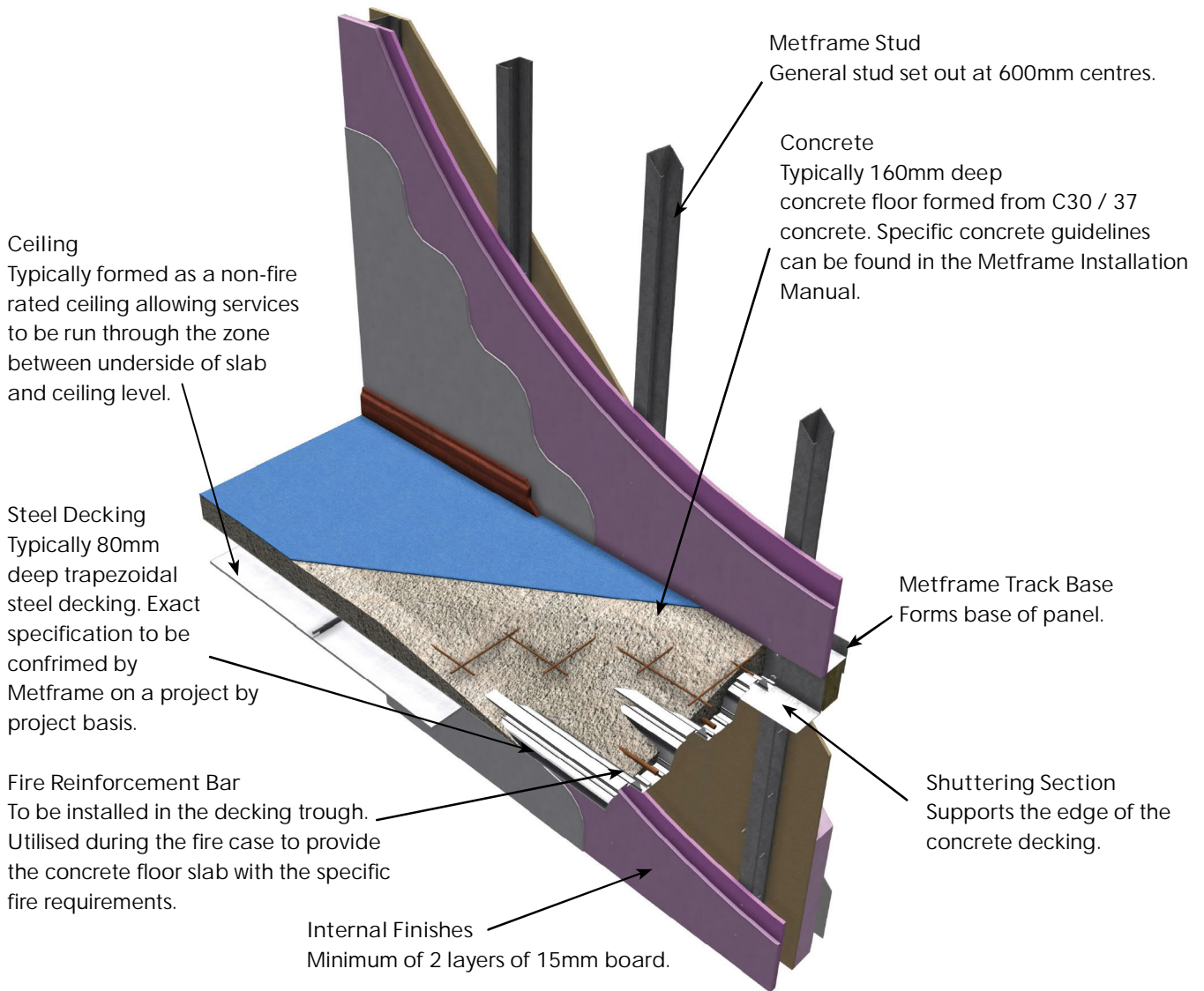


DETAIL MF010 EXTERNAL WALL WITH CONCRETE FLOOR & RAINSCREEN (VIEWED EXTERNALLY)



Section at Floor Level

DETAIL MF010 EXTERNAL WALL WITH CONCRETE FLOOR & RAINSCREEN (VIEWED INTERNALLY)



Section at Floor Level with Reinforcement

DETAIL MF011

EXTERNAL WALL WITH INTERNAL PARTY WALL

WITH RAINSCREEN (VIEWED EXTERNALLY)

Fire Reinforcement Bar

To be installed in the decking trough. Utilised during the fire case to provide the concrete floor slab with the specific fire requirements.

Disproportionate Collapse Bar

Rebar formed across wall panels to tie adjacent slabs to each other. Design of bars based on requirements from EN1991-1-7 and to be confirmed on a project by project basis.

Resilient Bar

Installed on party walls to form separation of the plasterboard from the Metframe walls giving optimal acoustic performance.

Metframe Stud

Metframe studs 100mm wide typically at 600mm centres.

Rainscreen Cladding

Exact product to be confirmed on a project by project basis by design team.

Concrete

Typically 160mm deep concrete floor formed from C30 / 37 concrete. Specific concrete guidelines can be found in the Metframe Installation Manual.

Helping Hand Bracket with Vertical Rail System

Fixed through the external sheathing board directly into studs. Typically installed at 600mm horizontal centres. Vertical centres to be confirmed on a project by project basis.

Horizontal Rail

Fixed back to vertical rail system. Exact specification to be confirmed by design team.

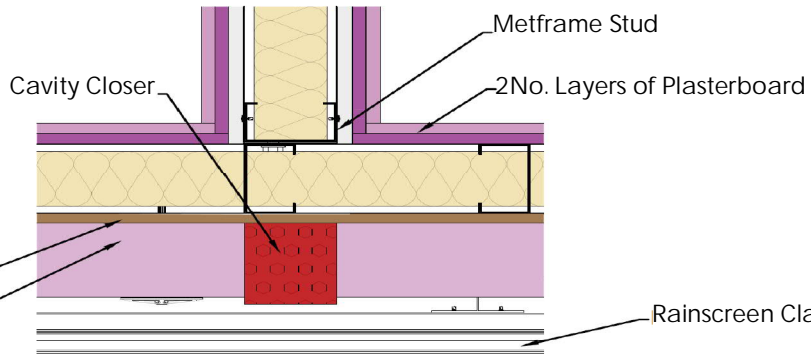
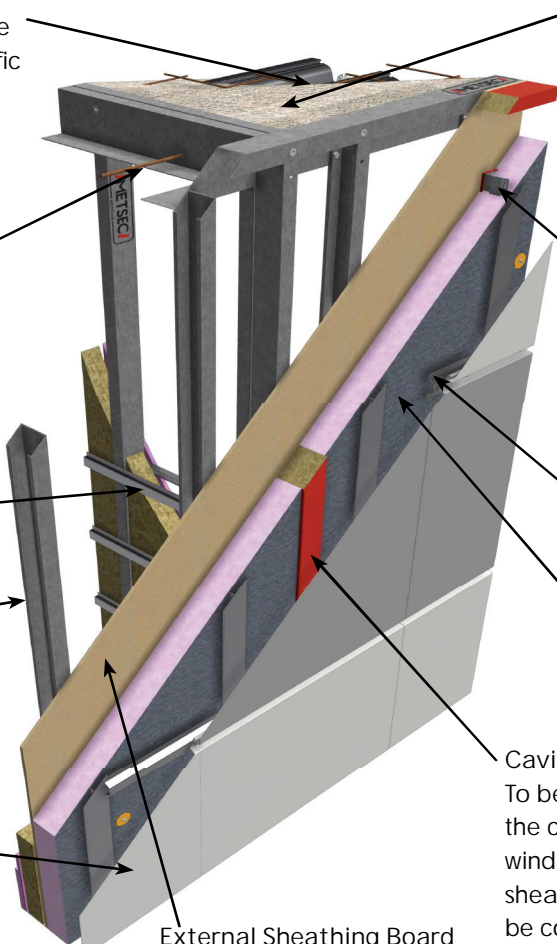
Insulation

Specification to be confirmed by the design team to achieve both thermal & fire requirements.

Cavity Barrier

To be installed across the full width of the cavity, fixed around the window opening on the outer face of sheathing board. Exact specification to be confirmed by project design team.

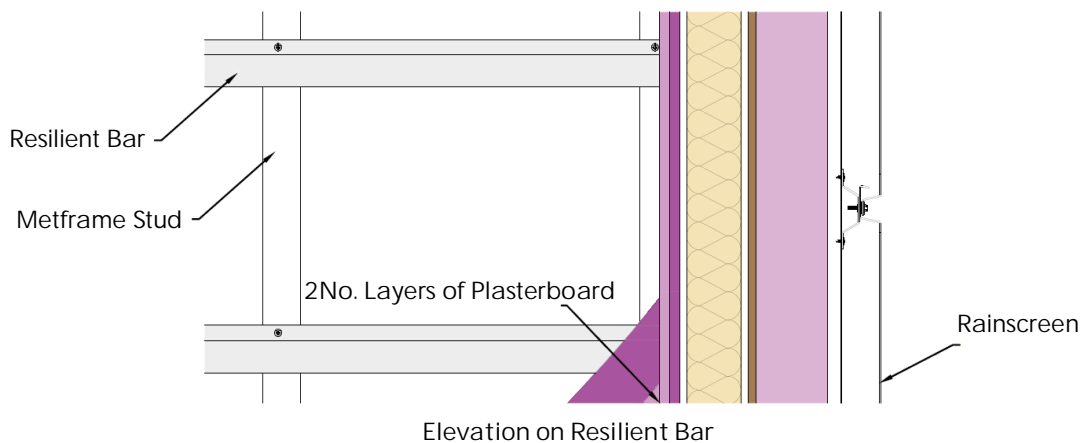
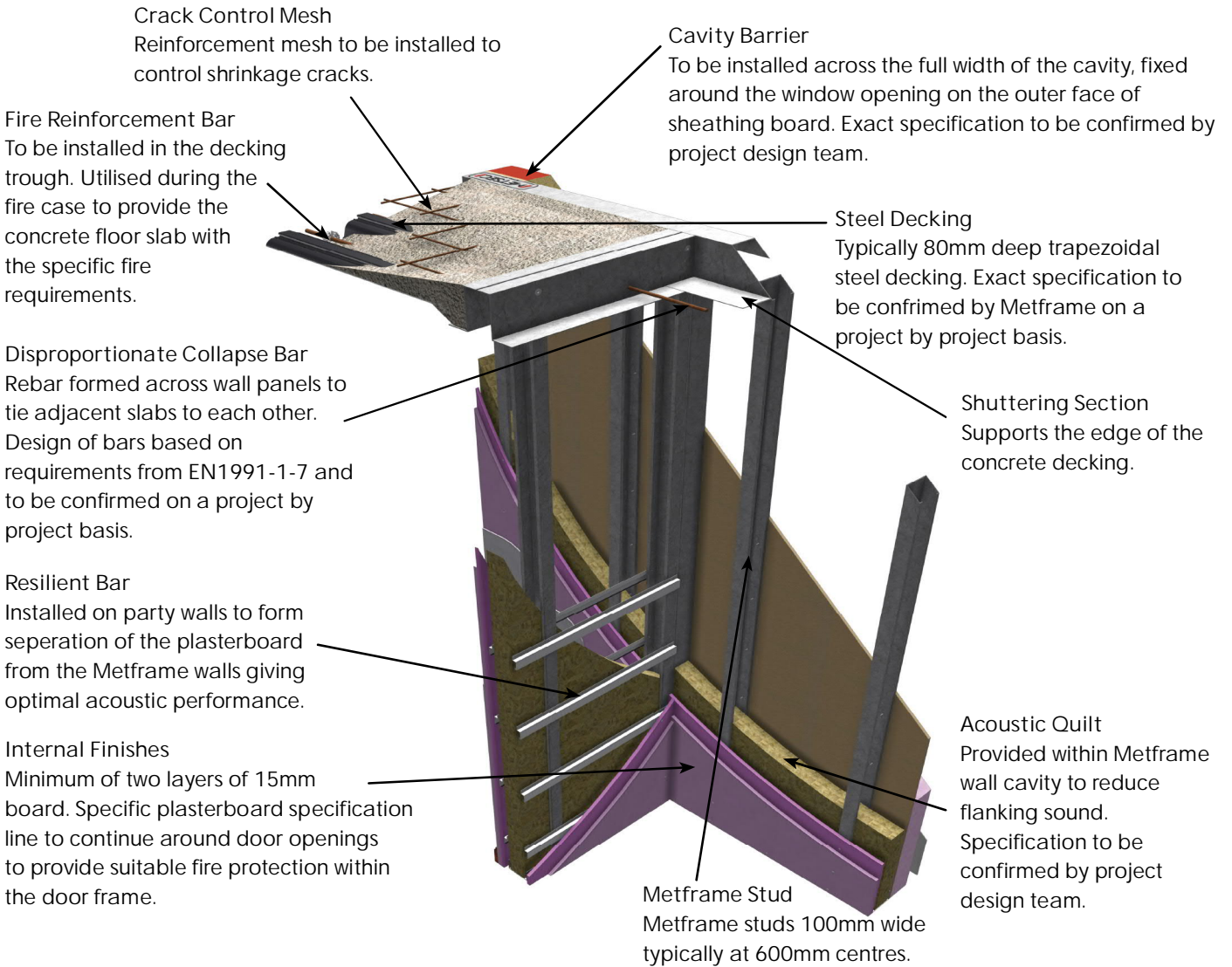
External Sheathing Board
Typically 12mm thick to achieve project specific fire requirements.



Plan on Junction

DETAIL MF011

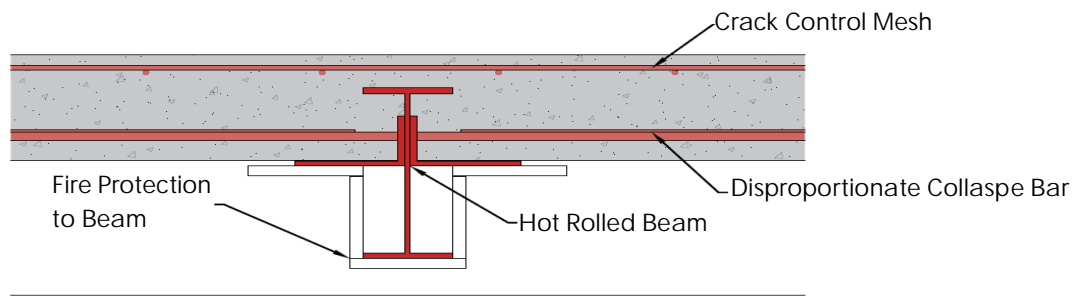
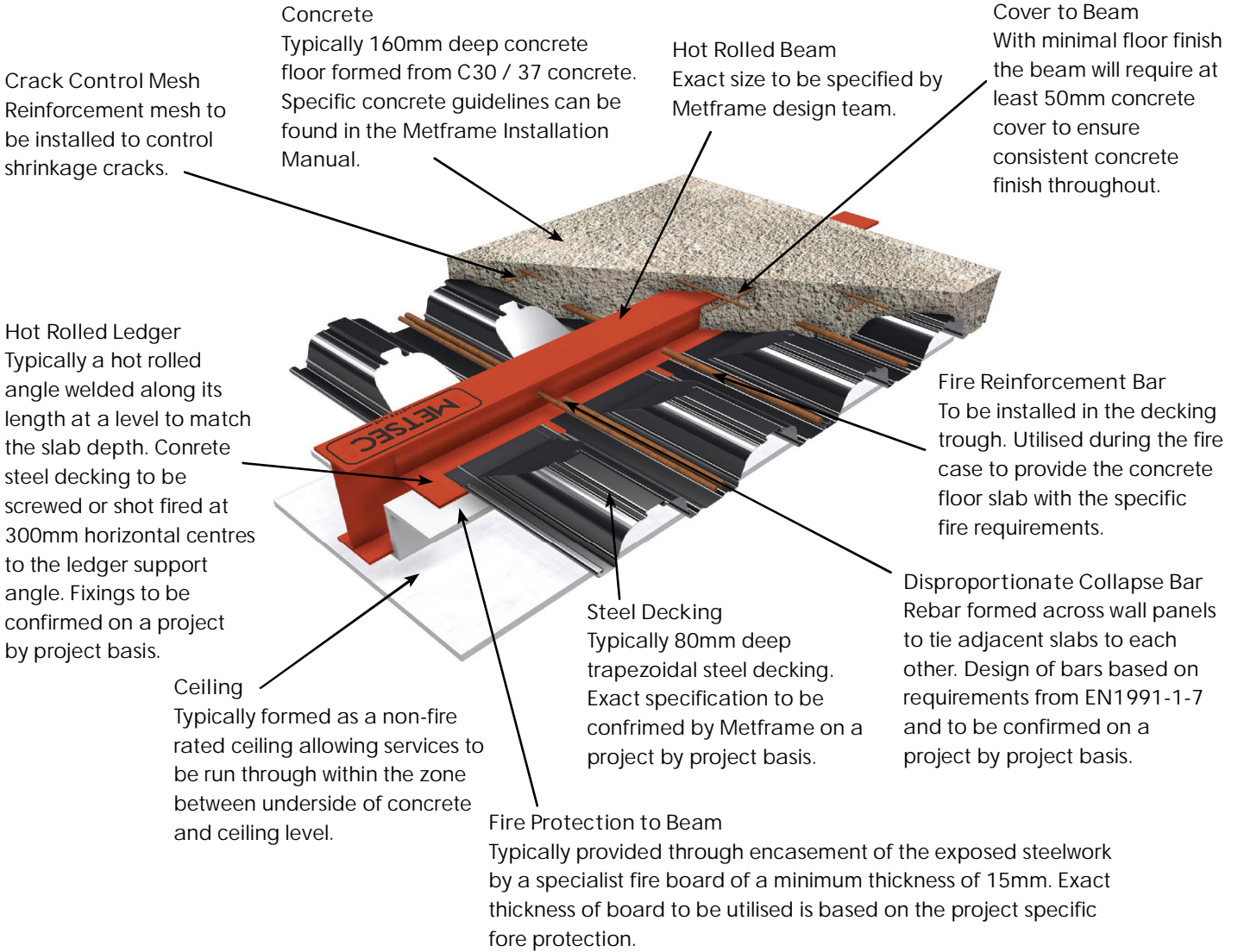
EXTERNAL WALL WITH INTERNAL PARTY WALL WITH RAINSCREEN (VIEWED INTERNALLY)



DETAIL MF012

EXPOSED BEAM FIRE PROTECT WITH 50MM COVER

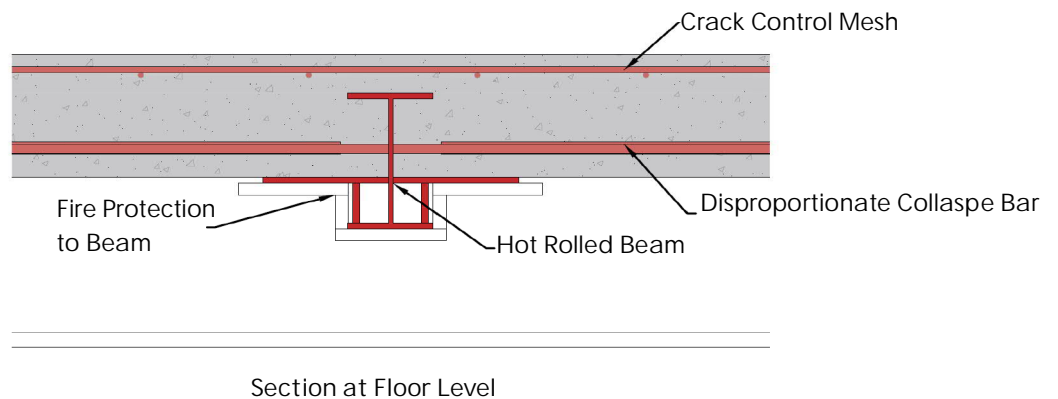
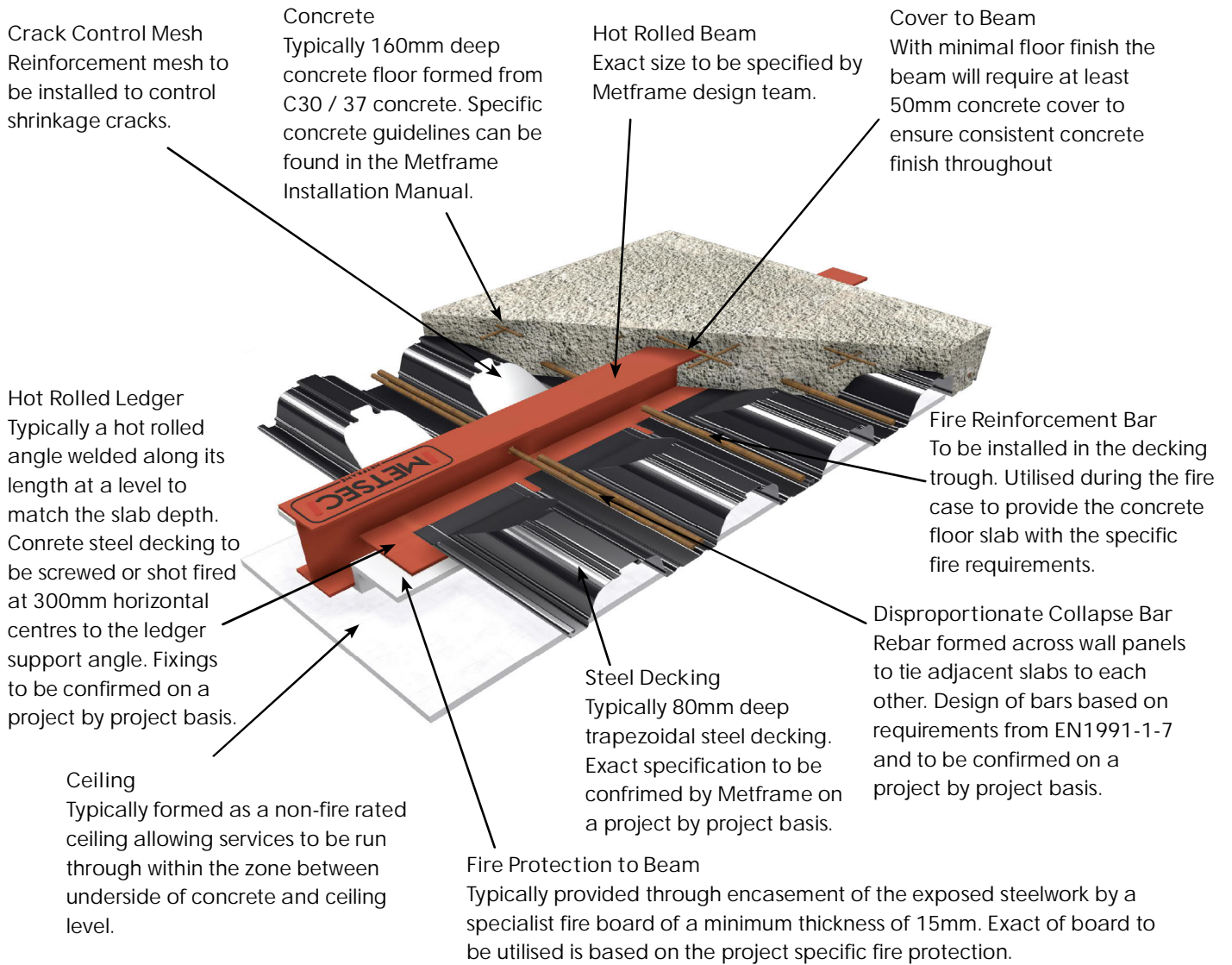
ANGLES USED TO SUPPORT DECKING



Section at Floor Level

DETAIL MF012

EXPOSED BEAM FIRE PROTECT WITH 50MM COVER PLATES USED TO SUPPORT DECKING



DETAIL MF013 FIRE PROTECTION FOR AN EXPOSED BEAM WITH NO CONCRETE COVER (ANGLES USED TO SUPPORT DECKING)

Concrete
Typically 160mm deep concrete floor formed from C30 / 37 concrete. Specific concrete guidelines can be found in the Metframe Installation Manual.

Crack Control Mesh
Reinforcement mesh to be installed to control shrinkage cracks.

Disproportionate Collapse Bar
Rebar formed across wall panels to tie adjacent slabs to each other. Design of bars based on requirements from EN1991-1-7 and to be confirmed on a project by project basis.

Fire Protection to Beam
Typically provided through encasement of the exposed steelwork by a specialist fire board of a minimum thickness of 15mm. Exact of board to be utilised is based on the project specific fire protection.

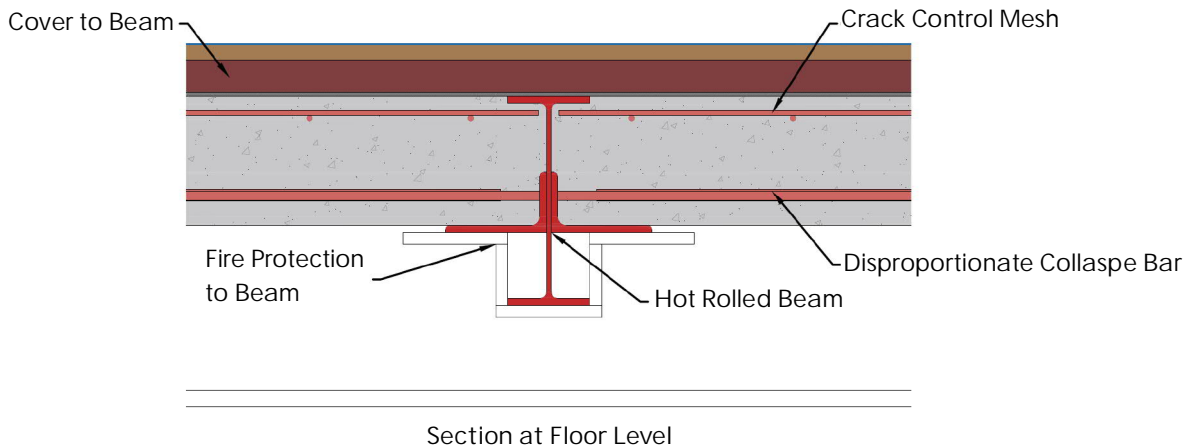
Cover to Beam
With a significant floor finish on top of the concrete the top of the beam can be set level with the top of concrete floor.

Hot Rolled Beam
Exact size to be specified by Metframe design team.

Fire Reinforcement Bar
To be installed in the decking trough. Utilised during the fire case to provide the concrete floor slab with the specific fire requirements.

Steel Decking
Typically 80mm deep trapezoidal steel decking. Exact specification to be confirmed by Metframe on a project by project basis.

Hot Rolled Ledger
Typically a hot rolled angle welded along its length at a level to match the slab depth. Concrete steel decking to be screwed or shot fired at 300mm horizontal centres to the ledger support angle. Fixings to be confirmed on a project by project basis.



DETAIL MF013

FIRE PROTECTION FOR AN EXPOSED BEAM WITH NO CONCRETE COVER (PLATES USED TO SUPPORT DECKING)

Concrete

Typically 160mm deep concrete floor formed from C30 / 37 concrete. Specific concrete guidelines can be found in the Metframe Installation Manual.

Crack Control Mesh

Reinforcement mesh to be installed to control shrinkage cracks.

Hot Rolled Beam

Exact size to be specified by Metframe design team.

Cover to Beam

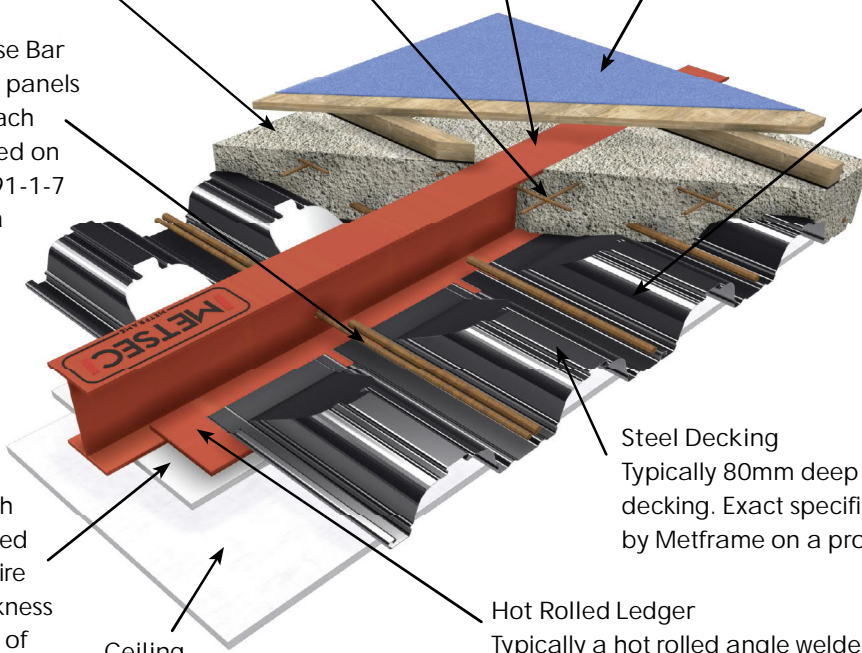
With a significant floor finish on top of the concrete the top of the beam can be set level with the top of concrete floor.

Disproportionate Collapse Bar

Rebar formed across wall panels to tie adjacent slabs to each other. Design of bars based on requirements from EN1991-1-7 and to be confirmed on a project by project basis.

Fire Reinforcement Bar

To be installed in the decking trough. Utilised during the fire case to provide the concrete floor slab with the specific fire requirements.



Fire Protection to Beam

Typically provided through encasement of the exposed steelwork by a specialist fire board of a minimum thickness of 15mm. Exact thickness of board to be utilised is based on the project specific fire protection.

Steel Decking

Typically 80mm deep trapezoidal steel decking. Exact specification to be confirmed by Metframe on a project by project basis.

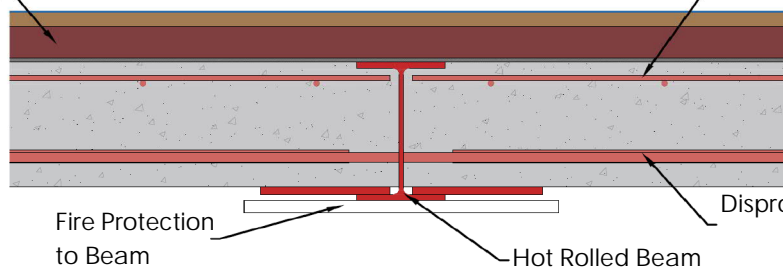
Hot Rolled Ledger

Typically a hot rolled angle welded along its length at a level to match the slab depth. Concrete steel decking to be screwed or shot fired at 300mm horizontal centres to the ledger support angle. Fixings to be confirmed on a project by project basis.

Ceiling

Typically formed as a non-fire rated ceiling allowing services to be run through within the zone between underside of concrete and ceiling level.

Cover to Beam



Crack Control Mesh

Fire Protection to Beam

Hot Rolled Beam

Disproportionate Collapse Bar

Section at Floor Level

DETAIL MF014

METFRAME JOISTED ROOF & EXTERNAL WALL WITH BRICKWORK & RAINSCREEN FINISHES (VIEWED EXTERNALLY)

Metframe Roof Joists
 Formed at 600mm centres.
 Typically formed either flat with any falls formed within insulation layer or 1:60 slope minimum.
 Greater roof slopes can be incorporated to match the project specific specification if required.

External Sheathing Board
 Typical 12mm thick to achieve project specific fire requirements.

Metframe Stud
 Metframe studs 100mm wide typically at 600mm centres.

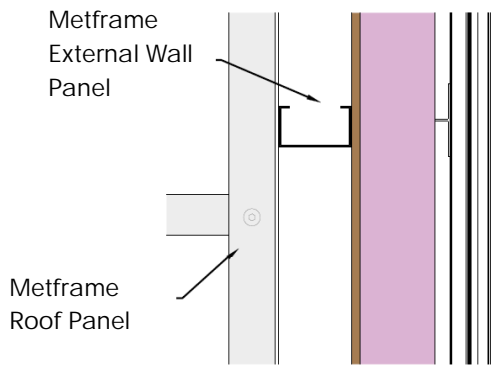
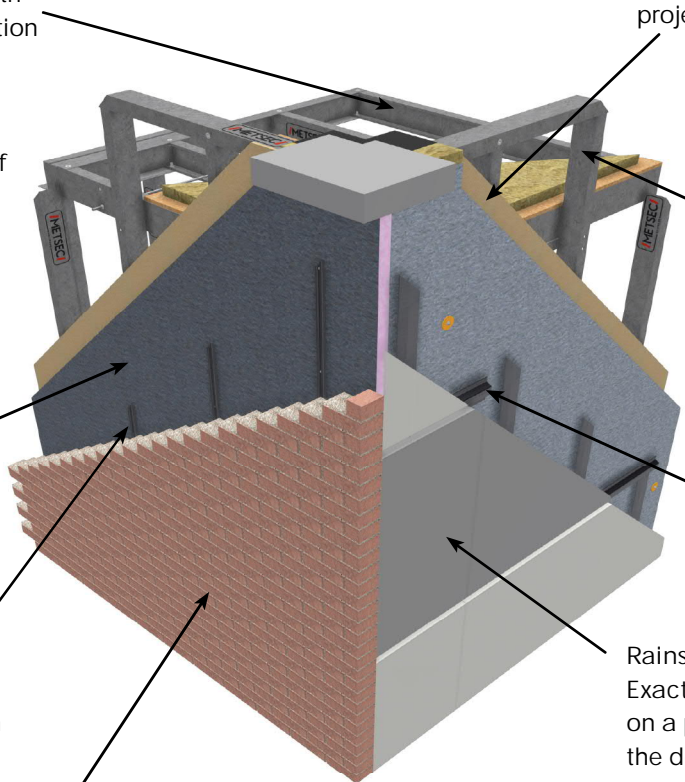
Insulation
 Specification to be confirmed by the design team to achieve both thermal & fire requirements.

Horizontal Rail
 Fixed back to vertical rail system. Exact specification to be confirmed by design team.

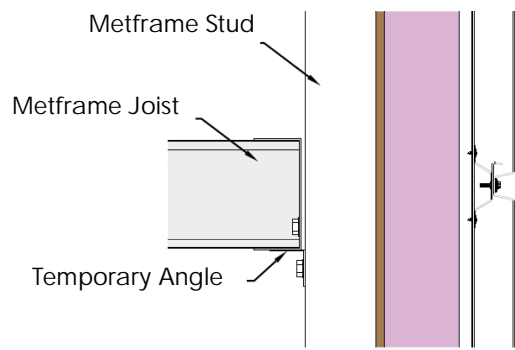
Stainless Steel Brick Tie Channel with Ties
 Ties to be typically at 600mm horizontal centres & 450mm vertical centres.

Rainscreen Cladding
 Exact product to be confirmed on a project by project basis by the design team.

Brickwork
 Design by project engineer.



Plan on External Wall



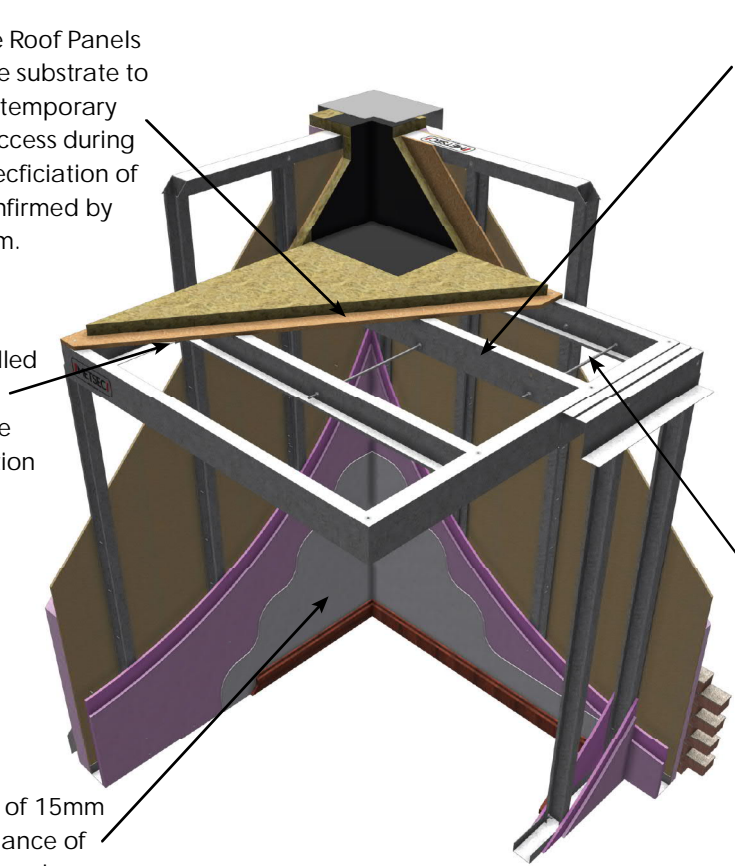
Section at External Wall

DETAIL MF014 METFRAME JOISTED ROOF & EXTERNAL WALL WITH BRICKWORK & RAINSCREEN FINISHES (VIEWED INTERNALLY)

Boarding to Metframe Roof Panels
Boarded out to provide substrate to finishes and provide a temporary working platform for access during construction. Exact specification of roof build-up to be confirmed by the project design team.

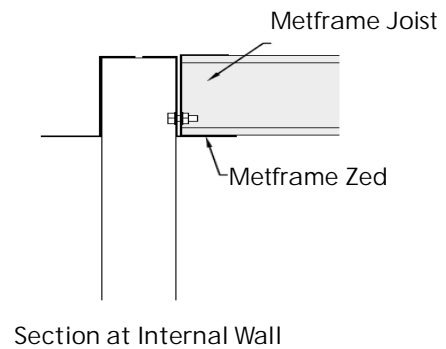
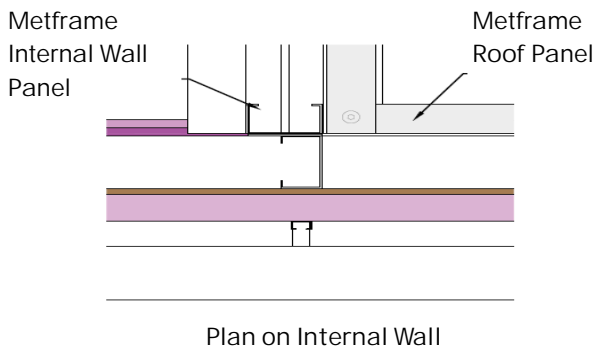
Angle Support
Temporary angle installed to support roof panel during erection. Can be removed after installation of the roof panels is complete.

Internal Finishes
Minimum of two layers of 15mm board. For fire performance of Metframe walls please seek guidance from the Metframe Specification Manual which advises minimum board specifications for the specific fire protection periods.

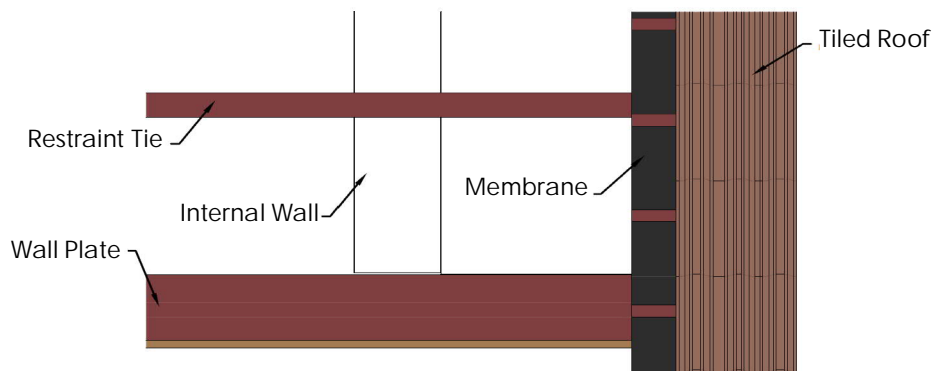
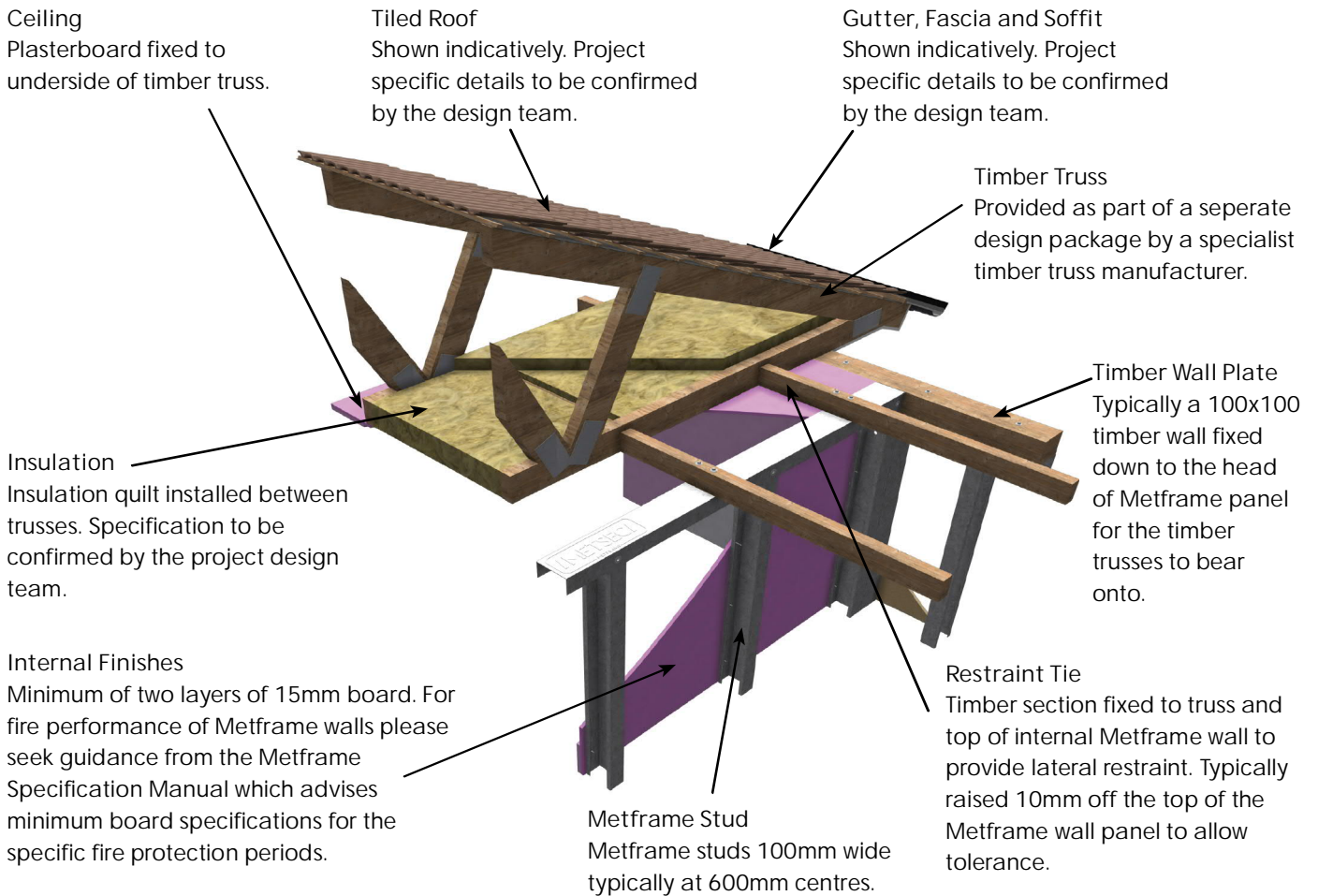


Ceiling
Typically formed as a non-fire rated ceiling allowing services to be run within the ceiling void between the underside of the roof joists and the ceiling level. If the roof is utilised as a means of escape fire protection to the underside of the joists will be required as per the specific project building fire requirements.

Disproportionate Collapse Bar
Rebar formed across wall panels to tie adjacent roof panels to each other. Design of bars based on requirements from EN1991-1-7 and to be confirmed on a project by project basis.

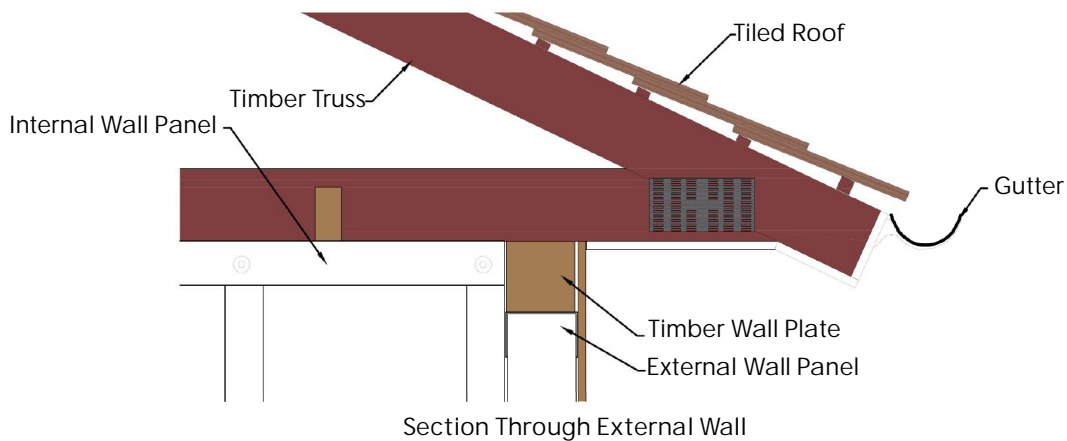
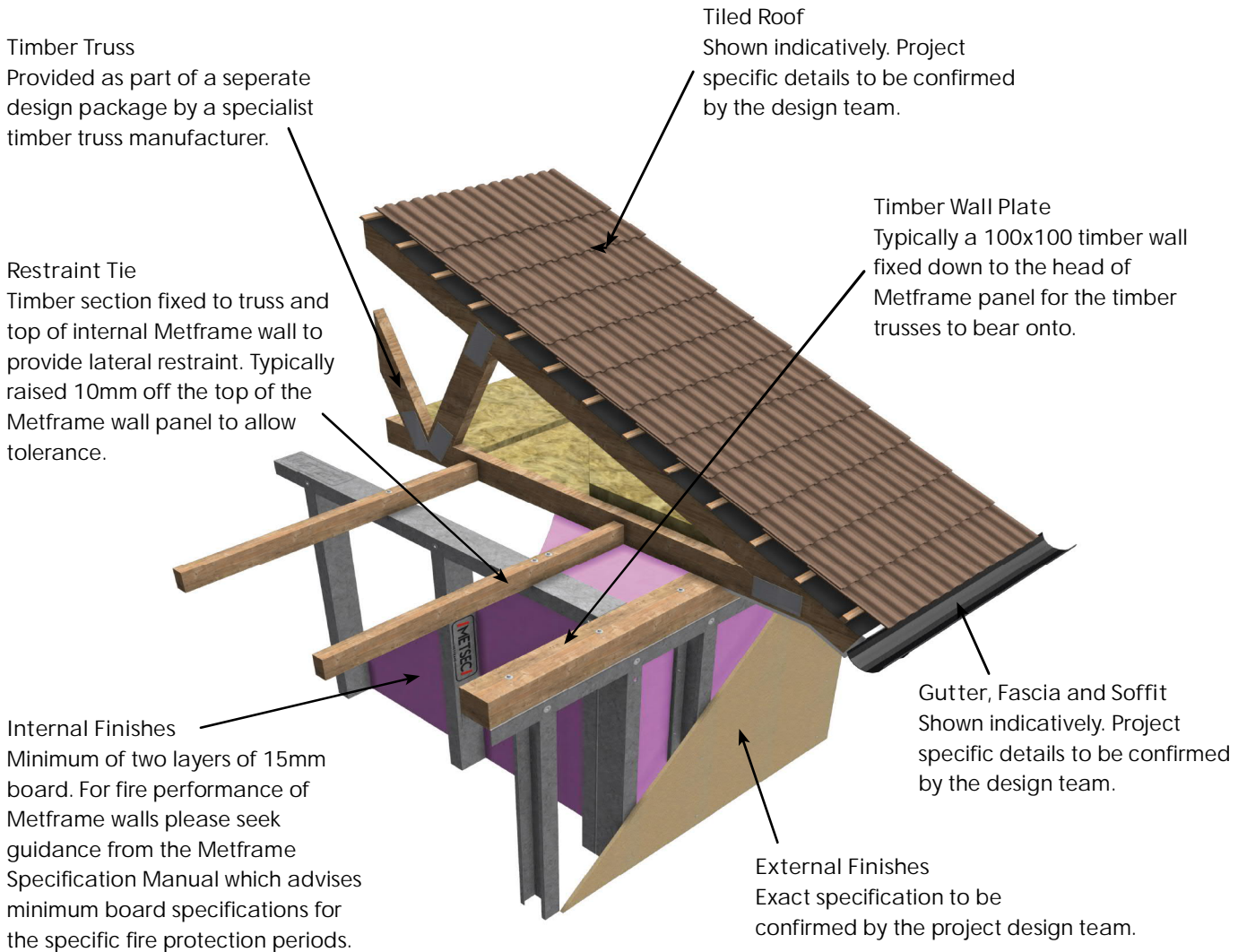


DETAIL MF015 TIMBER TRUSS ROOF DETAIL VIEWED INTERNALLY



Plan on Internal Wall

DETAIL MF015 TIMBER TRUSS ROOF DETAIL VIEWED EXTERNALLY



DETAIL MF016

LIFT PIT BASE DETAIL

3D VIEW

Beam at Door Lintel Level
Installed at head of door level to enable the door bracketry to be installed.

Metframe Slab Support
Zed profile bolted at head of wall panels to support concrete floors.

Plasterboard on Metframe Walls
Minimum of 2 layers of 15mm board except where the Versafire board is located. For fire performance of Metframe walls please seek guidance from the Metframe Specification Manual which advises minimum board specifications for specific fire protection periods. For internal lift shaft faces the plasterboard for the side walls where Metstrut channels are installed will need to be boarded horizontally.

Metframe Metstrut Channels
Formed from 3 welded member sections to allow connection of the lift bracketry via a spring nut. Backing of Metstrut channels to the Metframe wall typically onto 12mm of Versafire boarding. Vertical set out of channels is both project and lift supplier dependent.

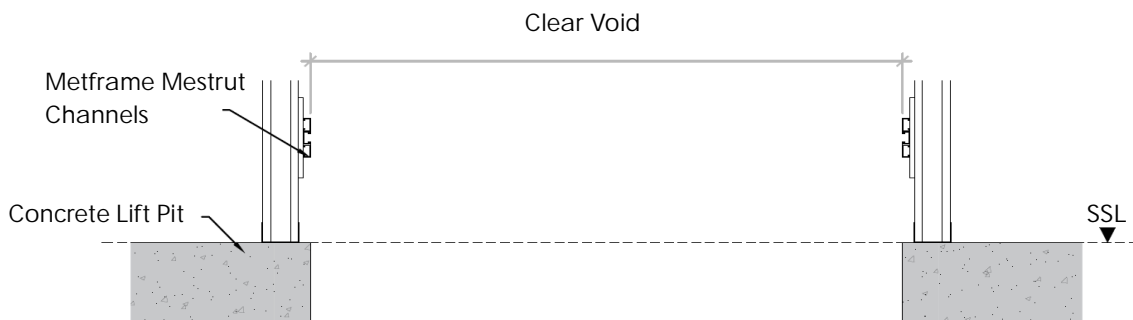
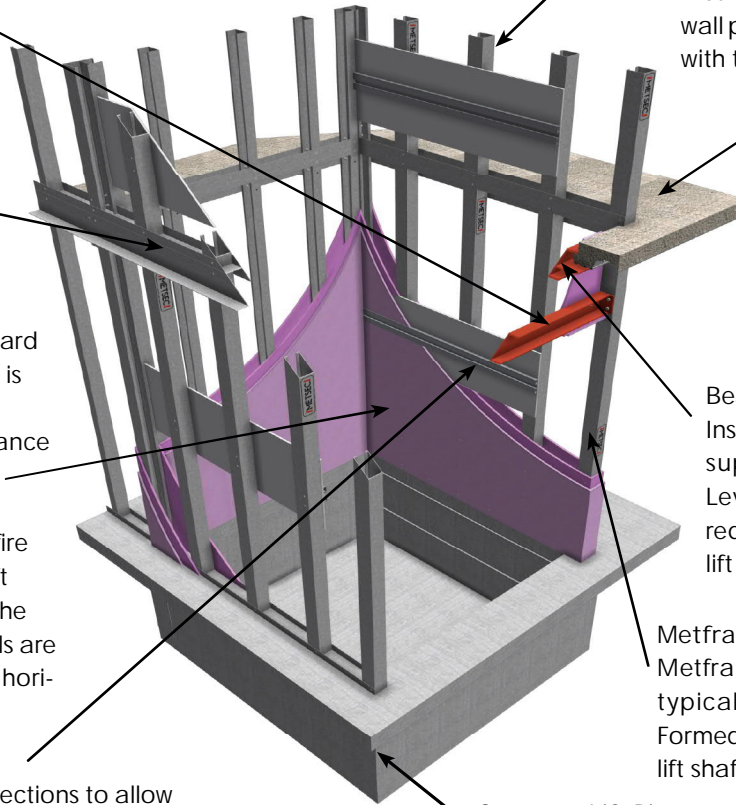
Metframe Wall Set Out
Set out of Metframe lift shaft walls to provide consistent finishing set out between the Metframe walls and lift pit. Exact wall positions to be coordinated with the project design team.

Concrete
Typically 160mm deep concrete floor formed from C30 / 37 concrete. Specific concrete guidelines can be found in the Metframe Installation Manual.

Beam at Floor Threshold
Installed at floor level to provide support to the door runner. Level of beam dependent on requirements for a fire fighting lift shaft within the building.

Metframe Wall Stud
Metframe studs 100mm wide typically at 600mm centres. Formed in panels offsite to form lift shaft wall.

Concrete Lift Pit
Set out to be confirmed by the project design team. Typically Metstrut or equivalent channels fixed into pit faces to accommodate lift buckets as required.

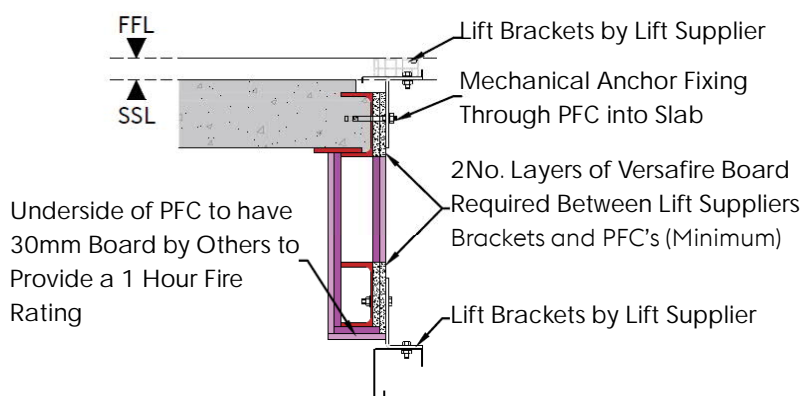
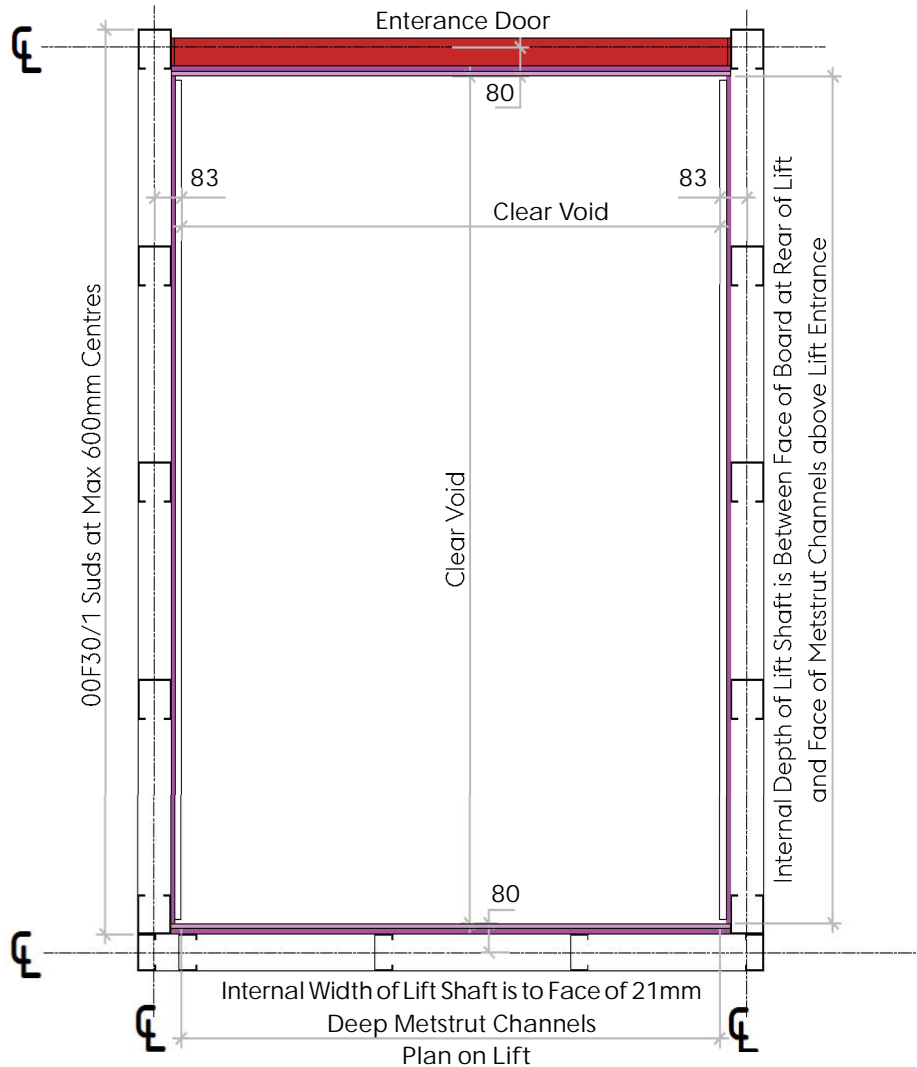


Section on Base of Lift

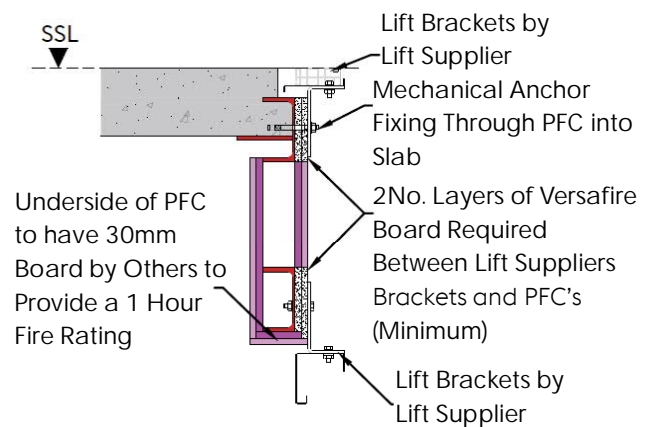
DETAIL MF016

LIFT PIT DETAILS

SECTIONAL & PLAN DETAILS



Detail A - Section Through the Front of a Lift Allowing for a Floor Build-Up



Detail B - Section Through the Front of a Lift Allowing for a Floor Build-Up

DETAIL MF017

LIFT SHAFT WITH DOOR & CAP DETAIL

3D VIEW

Metframe Wall Sud

Metframe studs 100mm wide typically at 600mm centres.
Formed in panels offsite to form lift shaft wall.

Lift Cap

Typically formed from roof joists at 600mm centres formed in panels offsite.

Plasterboard on Metframe Walls

Minimum of 2 layers of 15mm board except where the Versafire board is located. For fire performance of Metframe walls please seek guidance from the Metframe Specification manual which advises minimum board specifications for specific fire protection periods. For internal lift shaft faces the plasterboard for the side walls where Mestrut channels are installed will need to be boarded horizontally.

Metframe Slab Support

Zed profile bolted at head of wall panels to support concrete floors.

Metframe Metstrut Channels

Formed from welded 3 member sections to allow connection of the lift bracketry via a spring nut. Backing of Metstrut channels to the Metframe wall typically onto 12mm of Versafire boarding. Vertical set out of channels is both project and lift supplier dependent.

Lift Beam

Utilised to support the lift cart during both the initial installation and also later maintenance. Typically set down from the underside of the roof joists to provide at least 50mm clear zone above. Lifting eyes shown indicatively.

Lift Eye

Shown indicatively. Supplied and installed by others.

Metframe Wall Set Out

Set out of Metframe lift shaft walls to provide consistent finishing set out between the Metframe walls and lift pit. Exact wall positions to be coordinated with the project design team.

Concrete

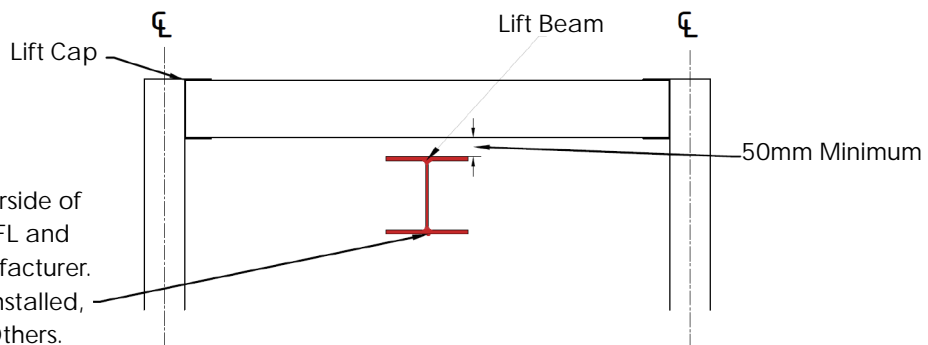
Typically 160mm deep concrete floor formed from C30 / 37 concrete. Specific concrete guidelines can be found in the Metframe Installation Manual.

Beam at Door Lintel Level

Installed at head of door level to enable the door bracketry to be installed.

Beam at Floor Threshold

Installed at floor level to provide support to the door runner. Level of beam dependent on requirements for a fire fighting lift shaft within the building.



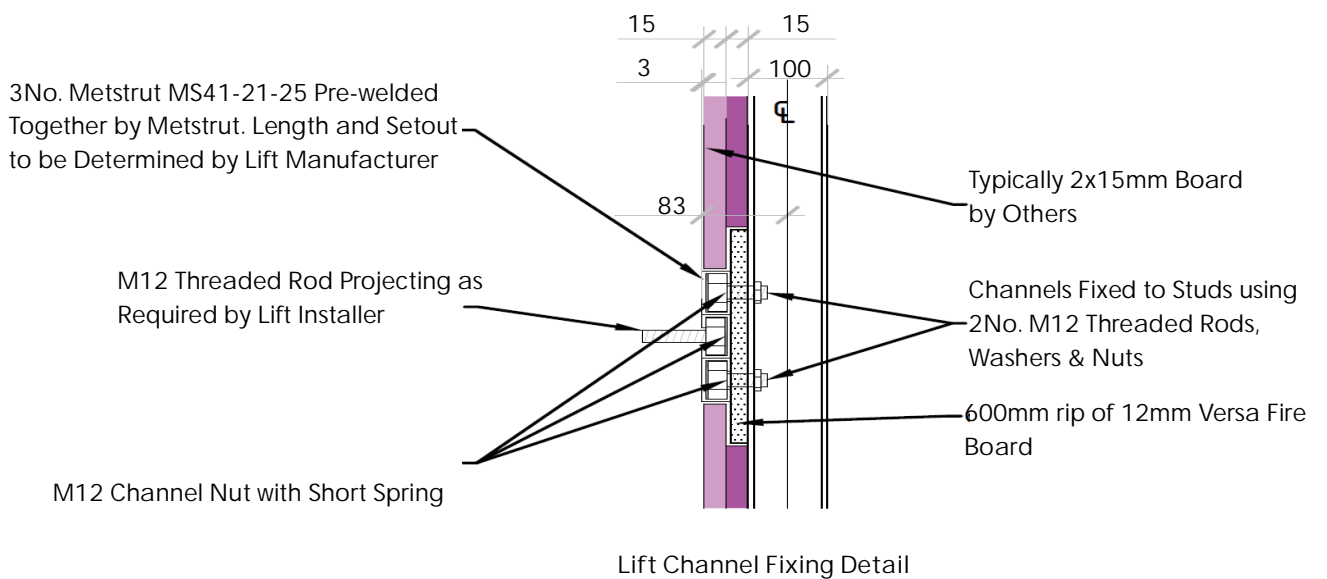
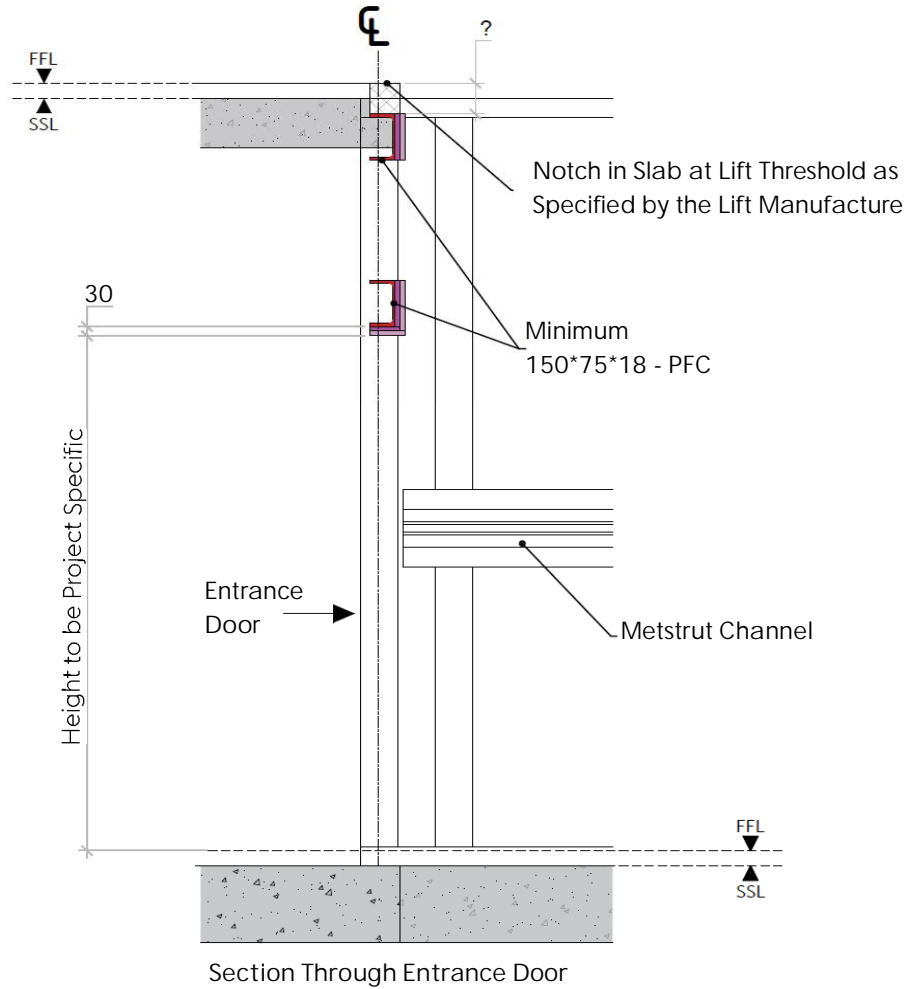
Headroom to Underside of Beam Taken from FFL and Stated by Lift Manufacturer. Lifting Eye can be Installed, to be Supplied by Others.

Section on Head of Lift

DETAIL MF017

LIFT SHAFT WITH DOOR & CAP DETAIL

SECTIONAL DETAILS



DETAIL MF018

STAIRWELL WITH A CONCRETE HALF LANDING

3D VIEW

Stair Flight

Formed from steel stringers and pans with concrete infill. Exact set out and arrangement as per the specific project requirements. Typically Installed to match the building floor erection sequence to provide early access into the structure.

Metframe Stud

Metframe studs 100mm wide typically at 600mm centres.

Fire Protection

Board to project past zed with profiled insert to trough to provide necessary fire protection. Insert and board joint to be sealed. Exact specification to be agreed with design team.

Internal Finishes

Minimum of two layers of 15mm board. For fire performance of Metframe walls please seek guidance from the Metframe Specification Manual which advises minimum board specifications for the specific fire protection periods.

Handrail & Ballustrading

Designed and supplied by others and specified by the project design team. Perimeter hand rails typically fixed to wall through the plasterboard into timber substrate with in the wall cavity.

Hot Rolled Beam at Top of Landing Level

Designed to support the stair flight units. Connection of stair unit to beam to conform to disproportionate collapse requirements from EN1991-1-7. Requirements to be confirmed on a project by project basis.

Metframe Shuttering Angle

Supports the edge of the concrete steel decking. Bolted to the face of the Metframe wall panel with 1No. M12 bolt at 600mm centres.

Floor Finish

Exact floor finish to be confirmed by design team.

Metframe Asymmetric Section

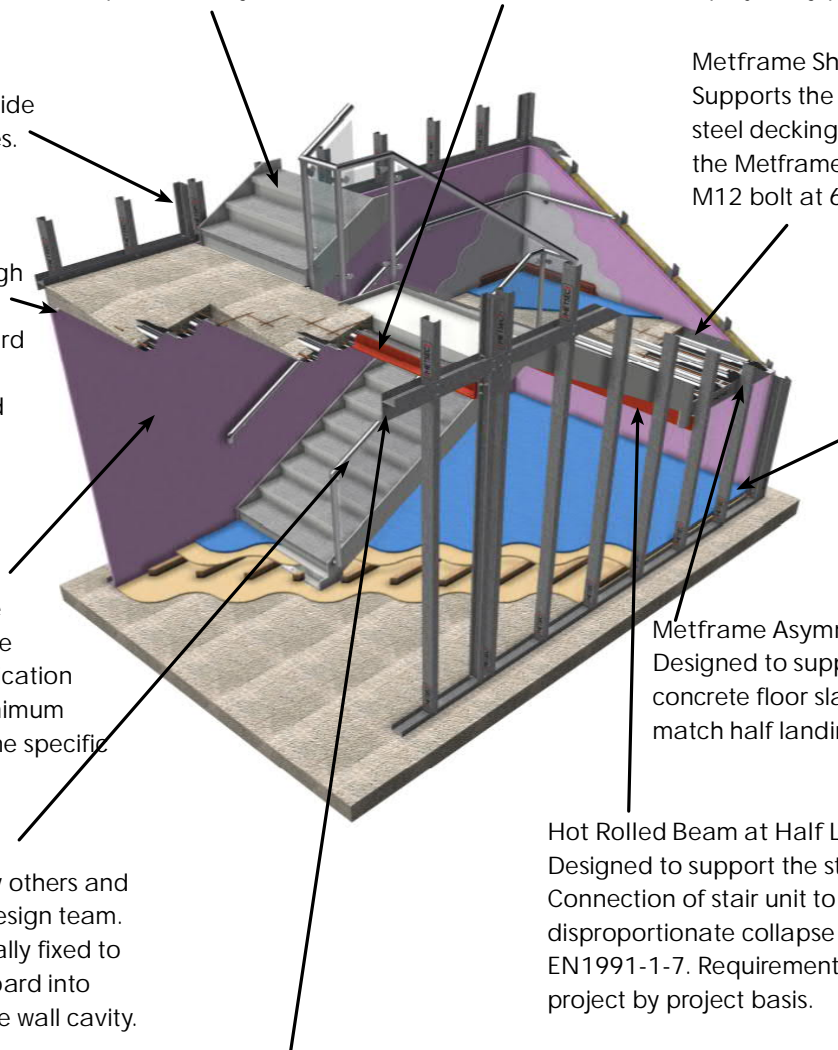
Designed to support the concrete floor slab. Level to match half landing level.

Hot Rolled Beam at Half Landing Level

Designed to support the stair flight units. Connection of stair unit to beam to conform to disproportionate collapse requirements from EN1991-1-7. Requirements to be confirmed on a project by project basis.

Metframe Slab Support

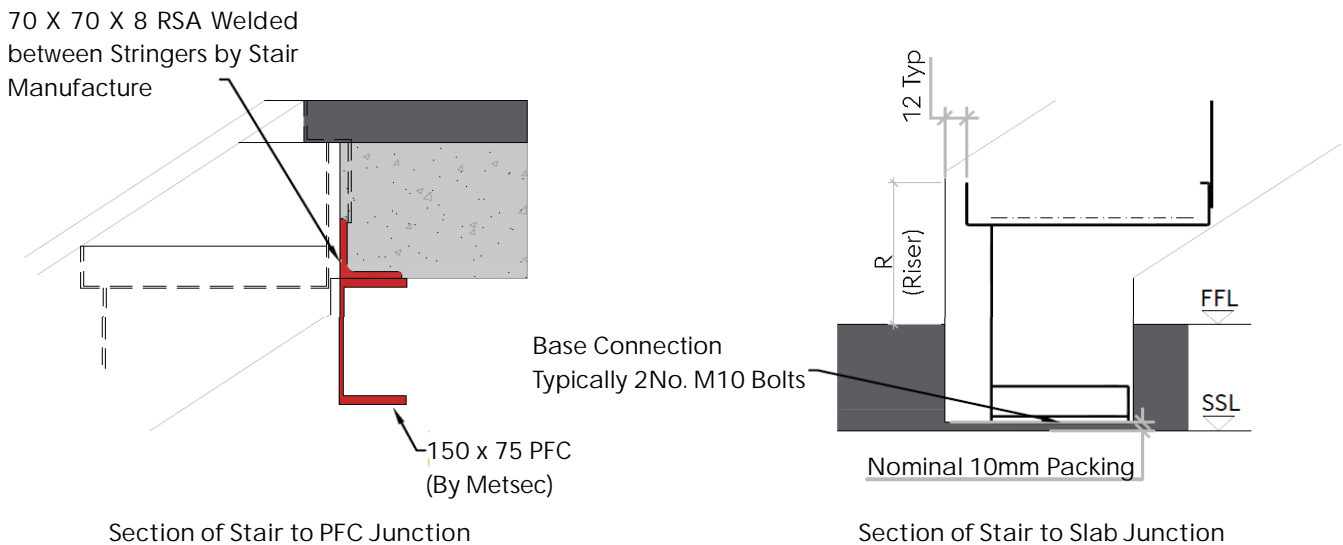
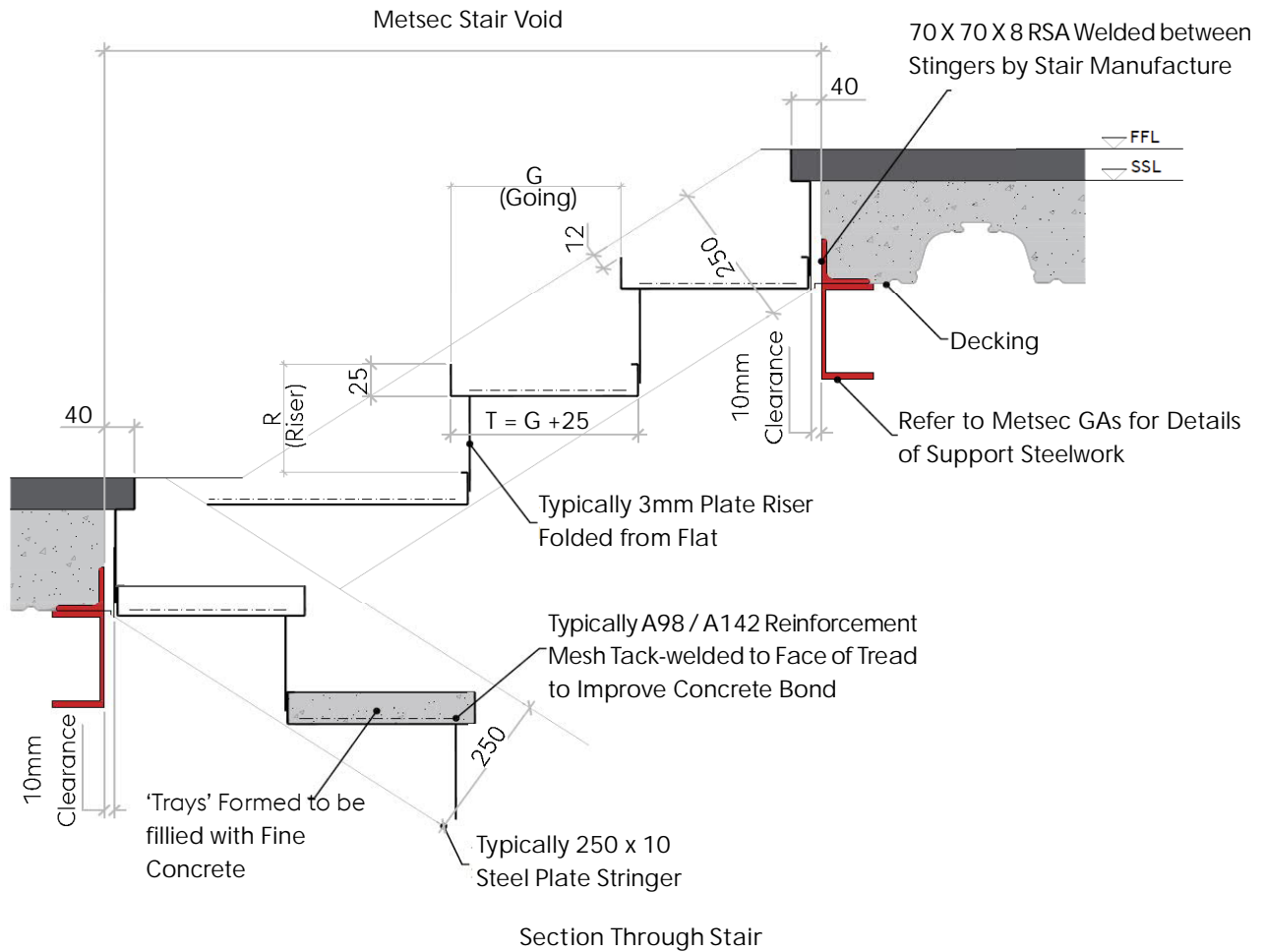
Zed profile bolted at head of wall panels to support concrete floors.



DETAIL MF018

STAIRWELL WITH A CONCRETE HALF LANDING

SECTIONAL DETAILS



DETAIL MF019

STAIRWELL WITH A CONCRETE QUARTER LANDINGS

3D VIEW

Stair Flight

Formed from steel stringers and pans with concrete infill. Exact set out and arrangement as per the specific project requirements. Typically Installed to match the building floor erection sequence to provide early access into the structure.

Hot Rolled Beam at Top of Landing Level

Designed to support the stair flight units. Connection of stair unit to beam to conform to disproportionate collapse requirements from EN1991-1-7. Requirements to be confirmed on a project by project basis.

Metframe Stud
Metframe studs 100mm wide typically at 600mm centres.

Hot Rolled Angles
Designed to support the stair flight. Level to match specific quarter landing levels.

Fire Protection
Board to project past zed with profiled insert to trough to provide necessary fire protection. Insert and board joint to be sealed. Exact specification to be agreed with design team.

Internal Finishes
Minimum of two layers of 15mm board. For fire performance of Metframe walls please seek guidance from the Metframe Specification Manual which advises minimum board specifications for the specific fire protection periods.

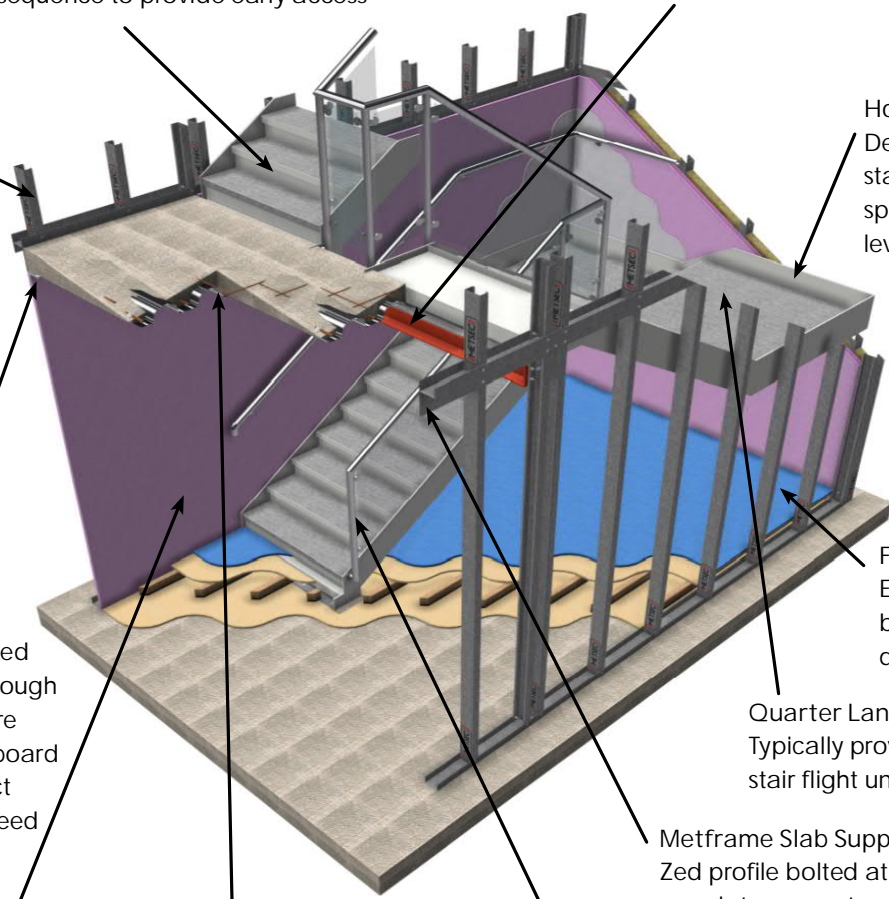
Floor Finish
Exact floor finish to be confirmed by design team.

Quarter Landing
Typically provided as part of the stair flight unit.

Metframe Slab Support
Zed profile bolted at head of wall panels to support concrete floors.

Handrail & Ballustrading
Designed and supplied by others and specified by the project design team. Perimeter hand rails typically fixed to wall through the plasterboard into timber substrate within the wall cavity.

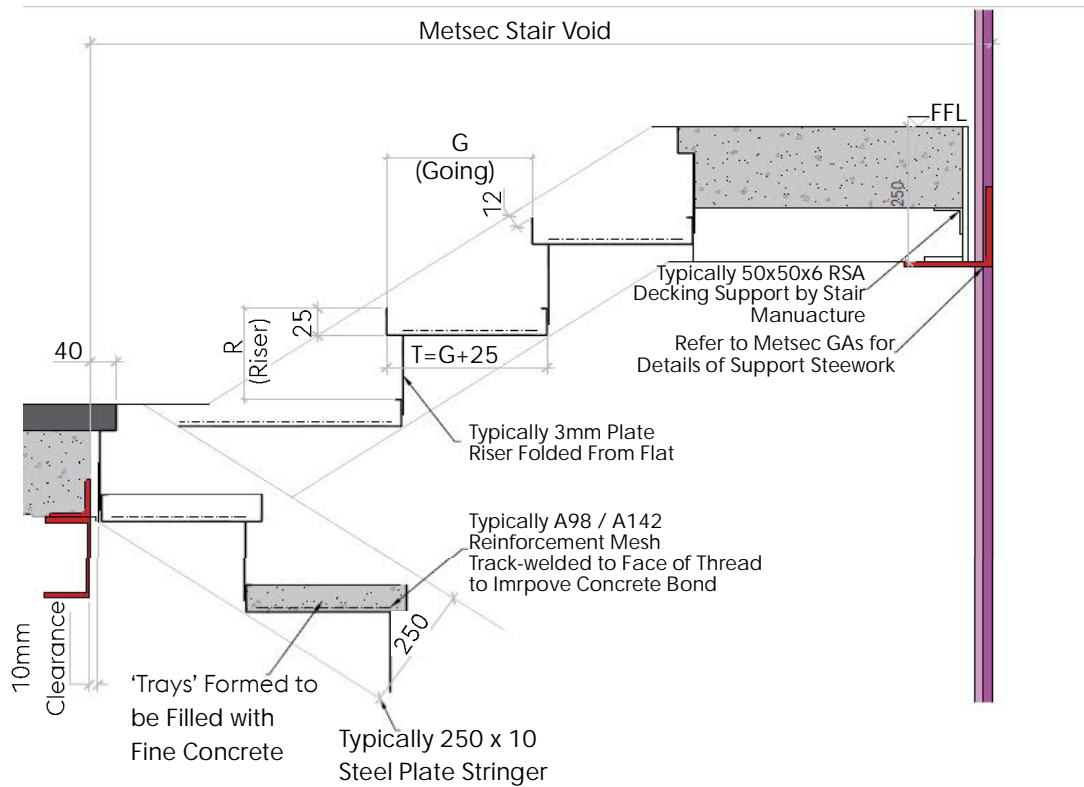
Steel Decking
Typically 80mm deep trapezoidal steel decking. Exact specification to be confirmed by Metframe on a project by project basis.



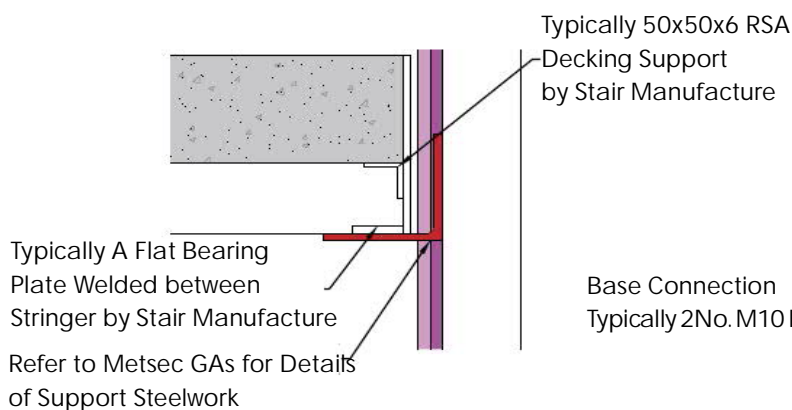
DETAIL MF019

STAIRWELL WITH A CONCRETE QUARTER LANDINGS

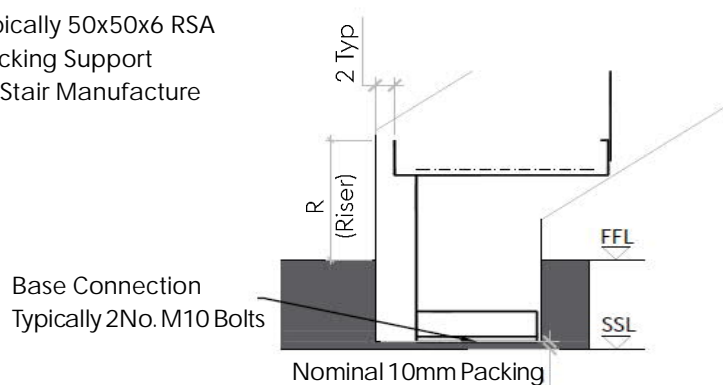
SECTIONAL DETAILS



Section Through Stair



Section of Stair to RSA Junction



Section of Stair to Slab Junction

DETAIL MF020 EXTERNAL WALL WITH JOISTED FLOOR & BRICKWORK VIEWED EXTERNALLY

Metframe Stud
Metframe studs 100mm wide typically at 600mm centres.

Metsec Joisted Floor
Typically formed from floor joists at 400mm centres. Exact floor finish to be confirmed on a project basis. Please see Metframe Specification Manual for further details.

Acoustic Quilt
Provided within Metframe wall cavity to reduce flanking sound. Specification to be confirmed by project design team.

Stainless Steel Brick Tie Channel with Ties
Ties to be typically at 600mm horizontal centres & 450mm vertical centres.

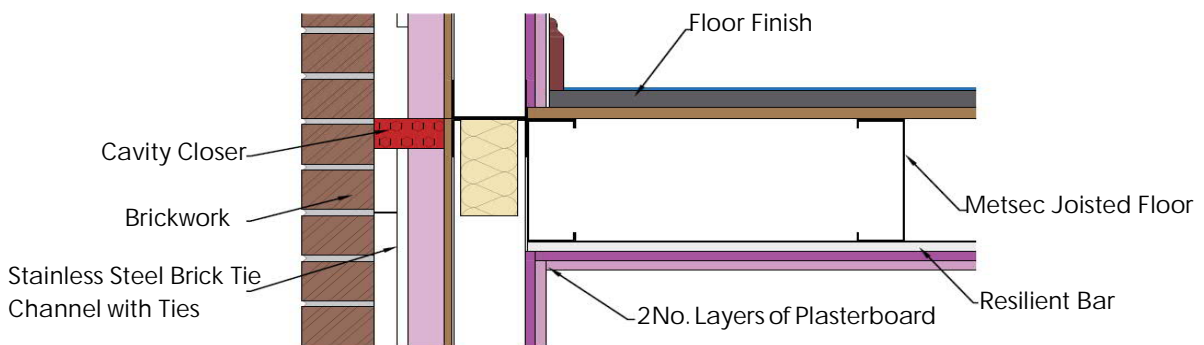
Insulation
Specification to be confirmed by the design team to achieve both thermal & fire requirements.

Cavity Barrier
To be installed across the full width of the cavity, fixed around the window opening on the outer face of sheathing board. Exact specification to be confirmed by project design team.

Brickwork
Design by project engineer.

Screw Fixings on Base/Head Tracks
Installed to fix panel to floor below. Exact number and spacing's to be determined by project specific calculations.

External Sheathing Board
Typically 12mm thick to achieve project specific fire requirements.



Section at Floor Level

DETAIL MF020

EXTERNAL WALL WITH JOISTED FLOOR & BRICKWORK VIEWED INTERNALLY

Internal Finishes
 Minimum of two layers of 15mm board. For fire performance of Metframe walls please seek guidance from the Metframe Specification Manual which advises minimum board specifications for the specific fire protection periods.

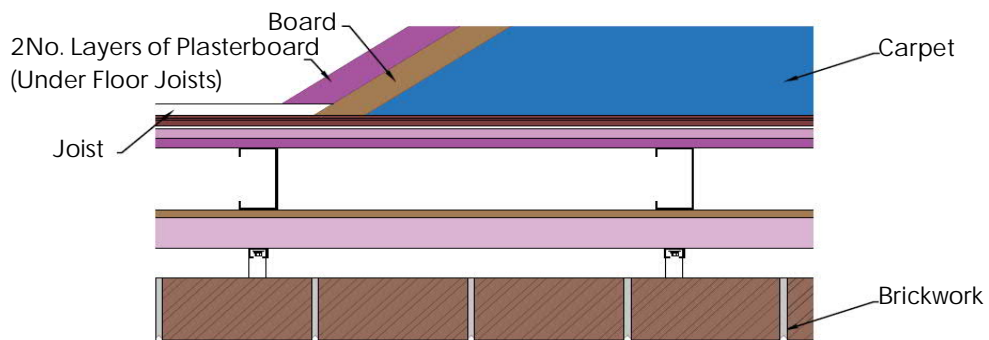
Metframe Stud
 Metframe studs 100mm wide typically at 600mm centres.

Acoustic Quilt
 Provided within Metframe wall cavity to reduce flanking sound. Specification to be confirmed by project design team.

Bolts
 M12 Grade 8.8 Bolt.

Metsec Joisted Floor
 Typically formed from floor joists at 400mm centres. Exact floor finish to be confirmed on a project by project basis. Please see Metframe Specification Manual for further details.

Fire Protection
 Board fixed to joisted panels to provide fire protection. Please see the Metframe Specification Manual for specific fire protection. Exact specification to be agreed with design team.



Plan in Floor Build Up

DETAIL MF021 INTERNAL PARTY WALL WITH JOISTED FLOOR VIEW 1

Internal Finishes
Minimum of two layers of 15mm board. For fire performance of Metframe walls please seek guidance from the Metframe Specification Manual which advises minimum board specifications for the specific fire protection periods.

Metframe Zed Member
Zed profile bolted at head of panels to support joisted floor.

Acoustic Quilt
Provided within Metframe wall cavity to reduce flanking sound. Specification to be confirmed by project design team.

Service Slots
Can be added into floor to allow small passage of service runs.

Metframe Stud
Metframe studs 100mm wide typically at 600mm centres.

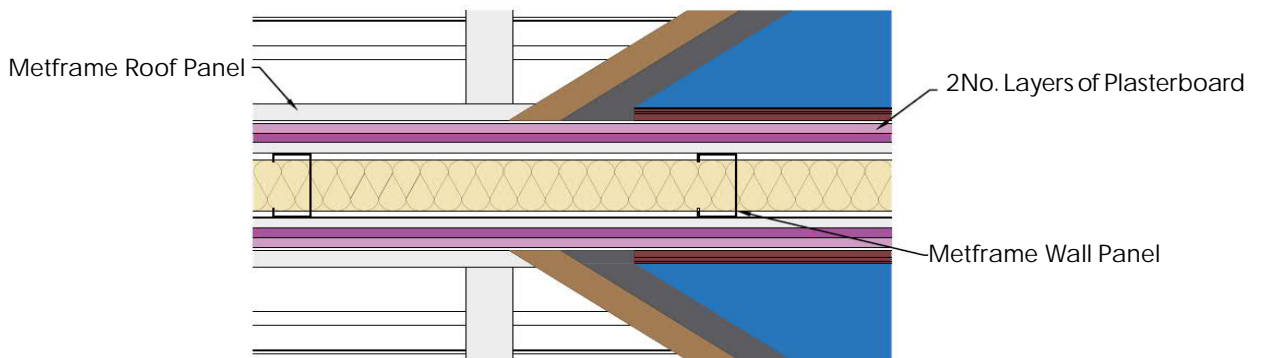
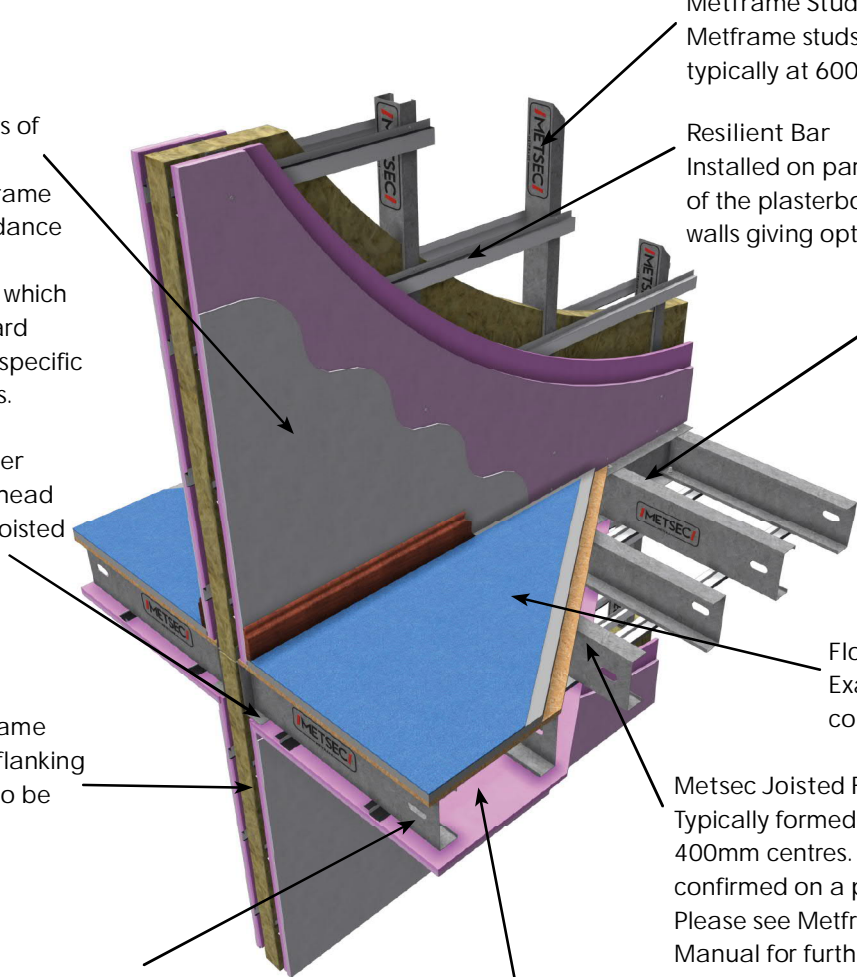
Resilient Bar
Installed on party walls to form separation of the plasterboard from the Metframe walls giving optimal acoustic performance.

Disproportionate Collapse Bar
Rebar formed across wall panels to tie adjacent floor panels to each other. Design of bars based on requirements from EN1991-1-7 and to be confirmed on a project by project basis.

Floor Finish
Exact floor finish to be confirmed by design team.

Metsec Joisted Floor
Typically formed from floor joists at 400mm centres. Exact floor finish to be confirmed on a project by project basis. Please see Metframe Specification Manual for further details.

Fire Protection to Joists
Please see the Metframe Specification Manual for specific fire protection. Exact specification to be agreed with design team.



Section at Floor Level

DETAIL MF021

INTERNAL PARTY WALL WITH JOISTED FLOOR

VIEW 2

Resilient Bar

Installed on party walls to form separation of the plasterboard from the Metframe walls giving optimal acoustic performance.

Internal Finishes

Minimum of two layers of 15mm board. For fire performance of Metframe walls please seek guidance from the Metframe Specification Manual which advises minimum board specifications for the specific fire protection periods.

Floor Finish

Exact floor finish to be confirmed by design team.

Service Slots

Can be added into floor to allow small passage of service runs.

Metsec Joisted Floor

Typically formed from floor joists at 400mm centres. Exact floor finish to be confirmed on a project by project basis. Please see Metframe Specification Manual for further details.

Metframe Stud

Metframe studs 100mm wide typically at 600mm centres.

Acoustic Quilt

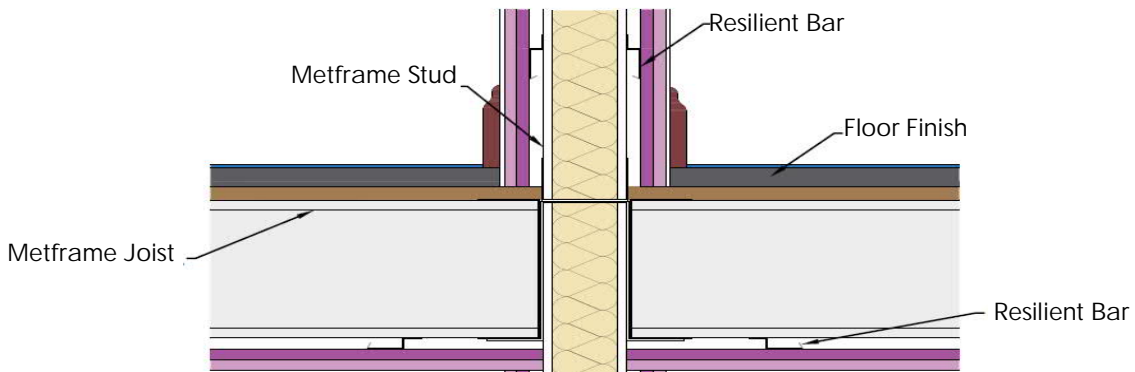
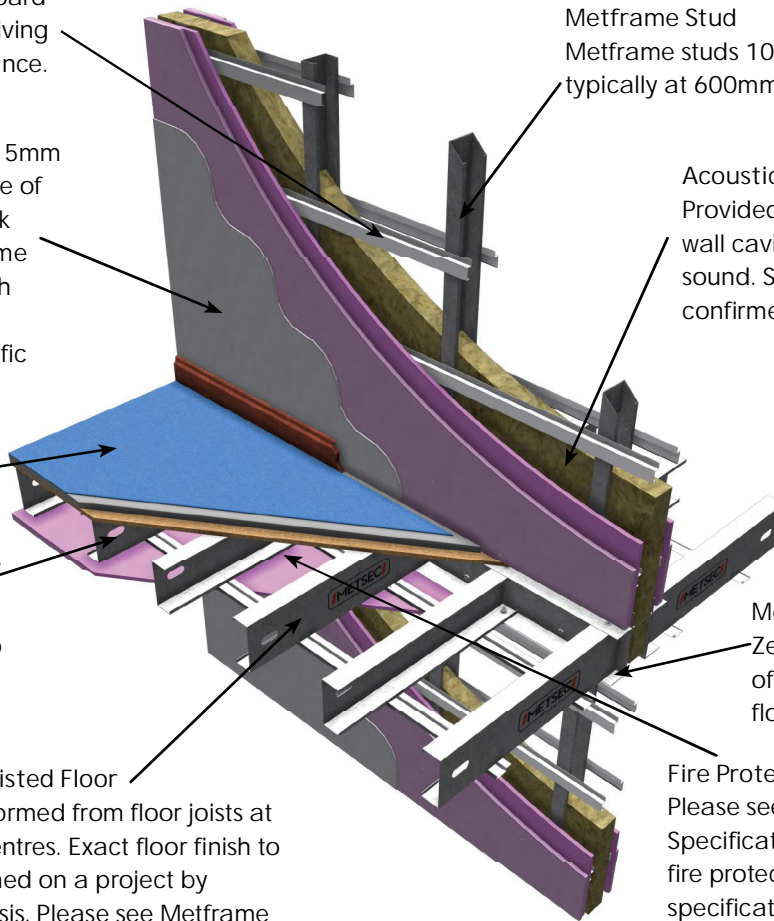
Provided within Metframe wall cavity to reduce flanking sound. Specification to be confirmed by project design team.

Metframe Zed Member

Zed profile bolted at head of panels to support joisted floor.

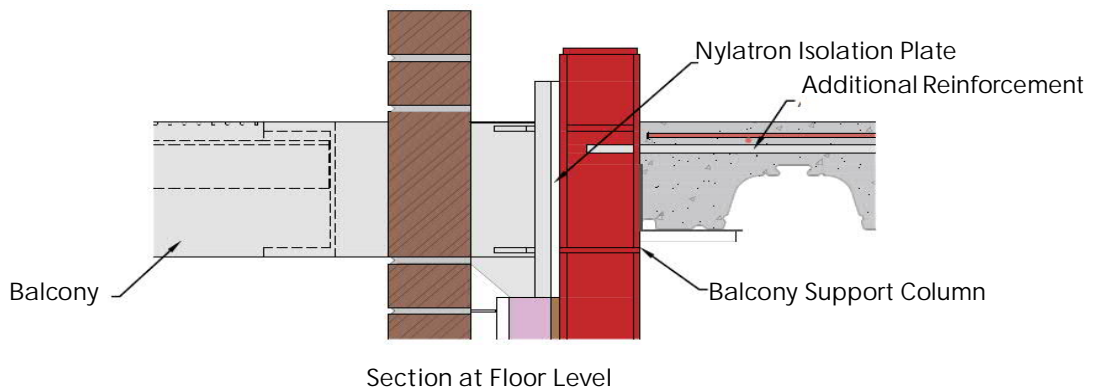
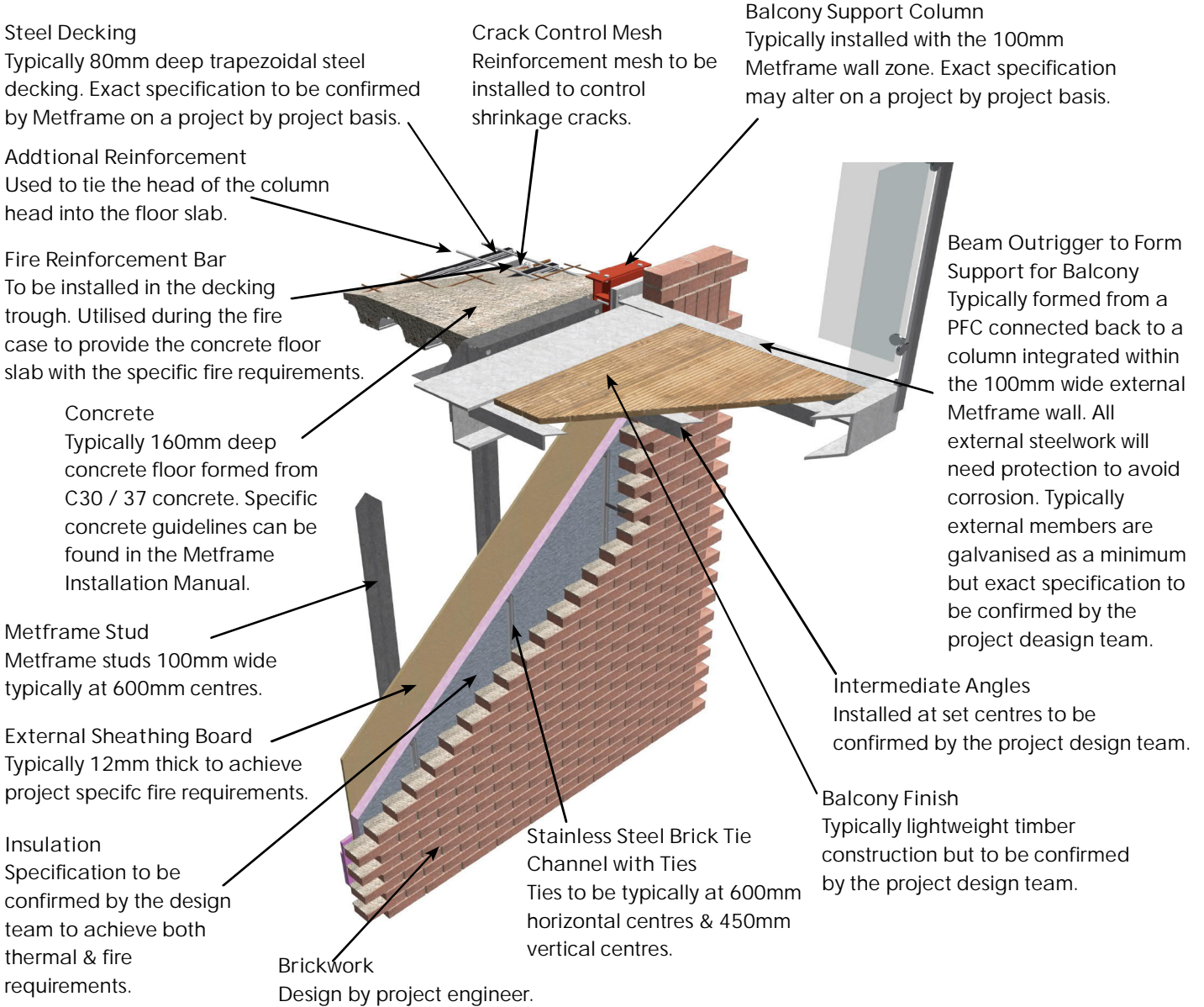
Fire Protection to Joists

Please see the Metframe Specification Manual for specific fire protection. Exact specification to be agreed with design team.



Section at Floor Level

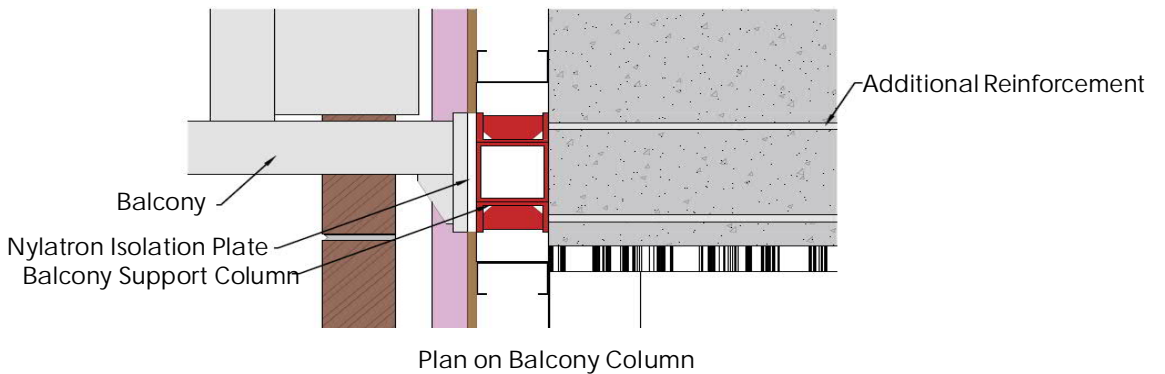
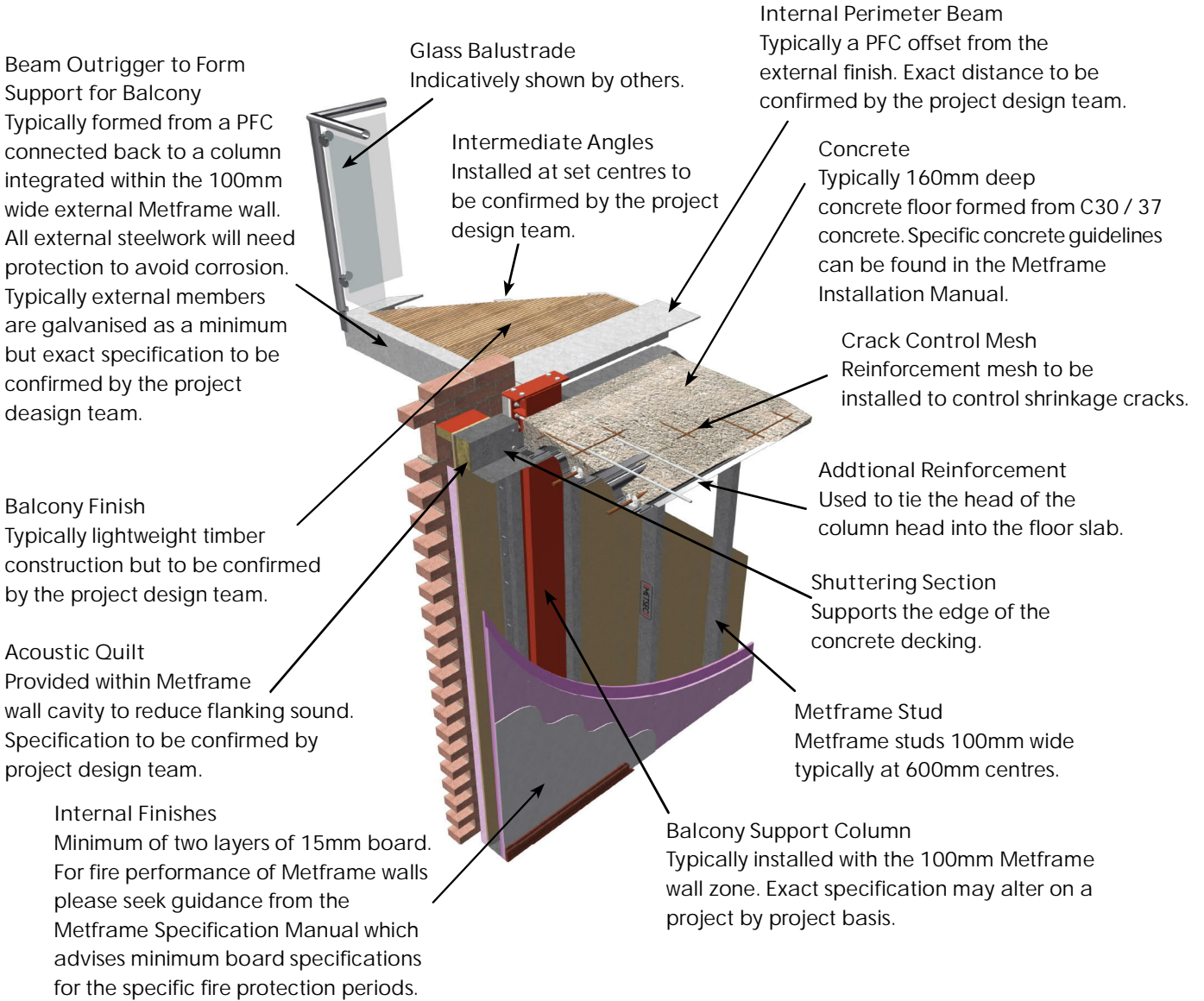
DETAIL MF022 EXTERNAL WALL WITH CANTILEVER BALCONY VIEWED EXTERNALLY



DETAIL MF022

EXTERNAL WALL WITH CANTILEVER BALCONY

VIEWED INTERNALLY



DETAIL MF023

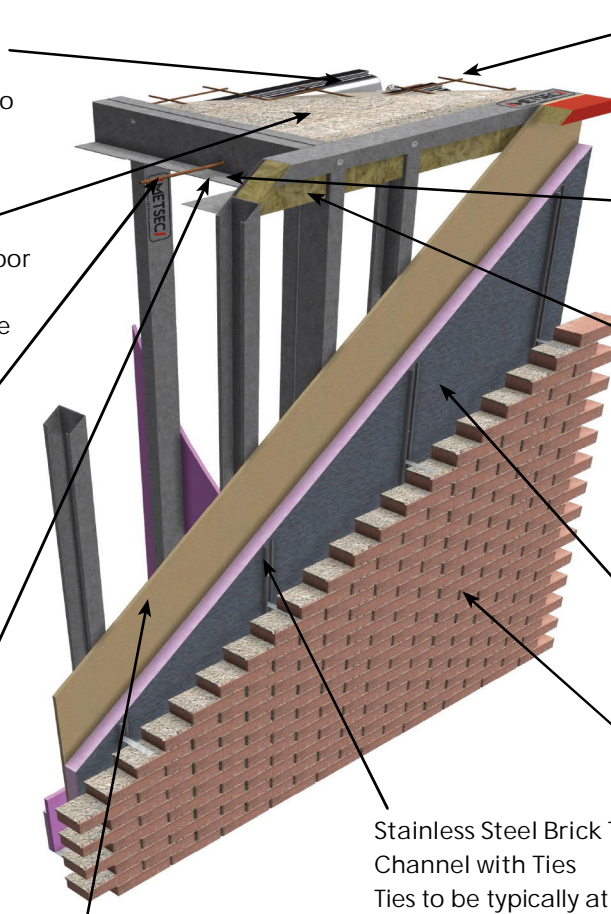
INTERNAL NON-PARTY WALL WITH CONCRETE FLOOR UTILISING NON-CRUSHED END DECKING VIEWED EXTERNALLY

Non Crushed End Steel Decking
Typically 80mm deep trapezoidal steel decking. Exact specification to be confirmed by Metframe on a project or project basis.

Concrete
Typically 160mm deep concrete floor formed from C30 / 37 concrete. Specific concrete guidelines can be found in the Metframe Installation Manual.

Disproportionate Collapse Rebar
formed across wall panels to tie adjacent slabs to each other. Design of bars based on requirements from EN1991-1-7 and to be confirmed on a project by project basis.

Fire Protection
Board fixed to underside of zed section to provide fire protection. Board to project past zed with profiled insert to trough to provide necessary fire protection. Insert and board joint to be sealed. Exact specification to be agreed with design team. Omitted for clarity.



Crack Control Mesh
Reinforcement mesh to be installed to control shrinkage cracks.

Metframe Zed Member
Zed profile bolted at head of panels to support concrete floor.

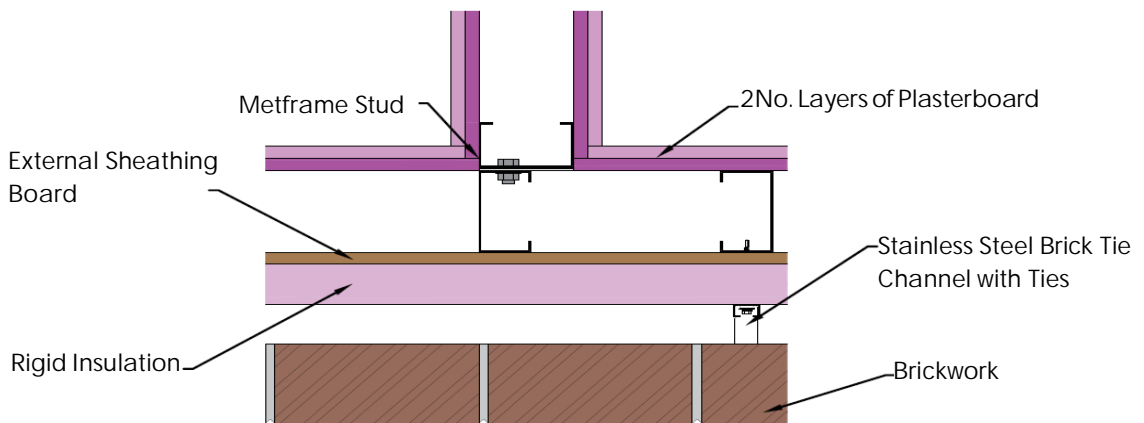
Acoustic Quilt
Provided within Metframe wall cavity to reduce flanking sound. Specification to be confirmed by project design team.

Insulation
Specification to be confirmed by the design team to achieve both thermal & fire requirements.

Brickwork
Design by project engineer.

Stainless Steel Brick Tie Channel with Ties
Ties to be typically at 600mm horizontal centres & 450mm vertical centres.

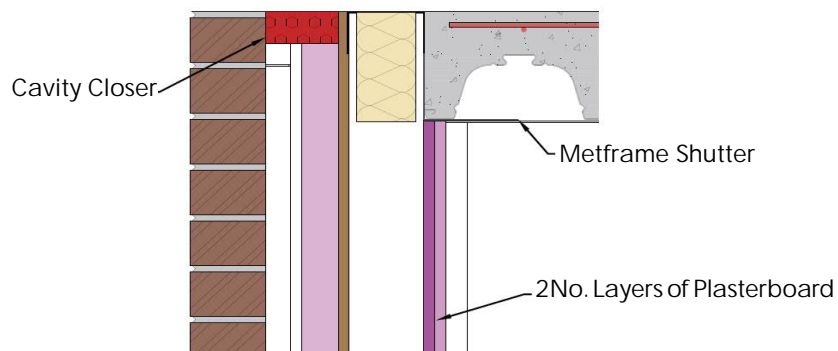
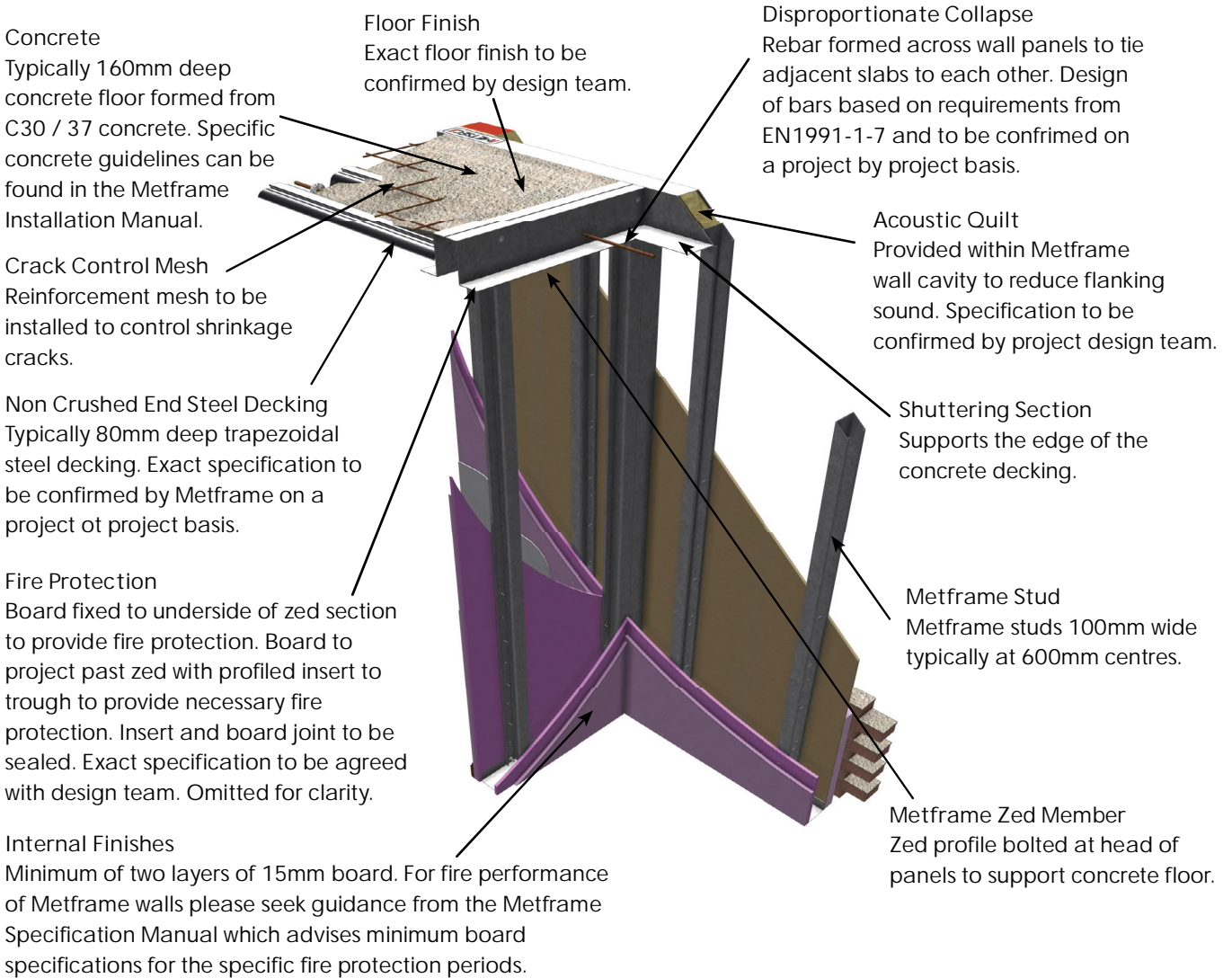
External Sheathing Board
Typically 12mm thick to achieve project specific fire requirements.



Plan on Junction

DETAIL MF023

INTERNAL NON-PARTY WALL WITH CONCRETE FLOOR UTILISING NON-CRUSHED END DECKING VIEWED INTERNALLY



Section at Panel Head

DETAIL MF024

INTERNAL NON-PARTY WALL WITH FLOOR UTILISING NON-CRUSHED END DECKING VIEWED INTERNALLY

Non Crushed End Steel Decking
Typically 80mm deep trapezoidal steel decking. Exact specification to be confirmed by Metframe on a project by project basis.

Metframe Stud
Metframe studs 100mm wide typically at 600mm centres.

Internal Finishes
Minimum of two layers of 15mm board. For fire performance of Metframe walls please seek guidance from the Metframe Specification Manual which advises minimum board specifications for the specific fire protection periods.

Disproportionate Collapse
Rebar formed across wall panels to tie adjacent slabs to each other. Design of bars based on requirements from EN1991-1-7 and to be confirmed on a project by project basis.

Concrete
Typically 160mm deep concrete floor formed from C30 / 37 concrete. Specific concrete guidelines can be found in the Metframe Installation Manual.

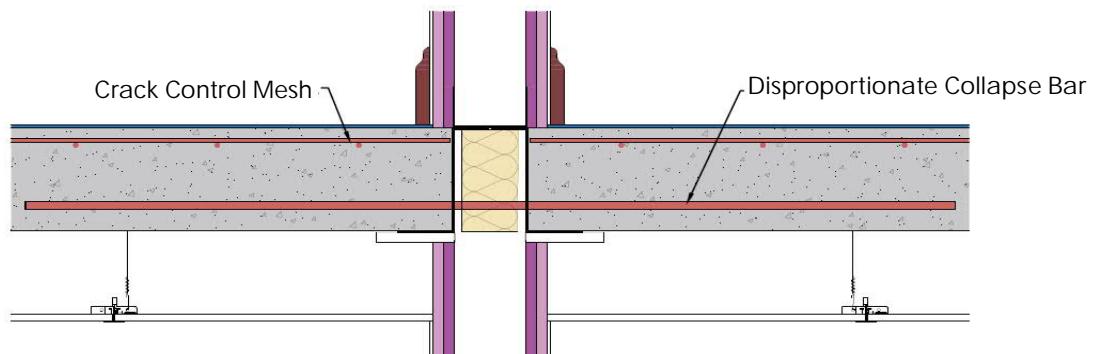
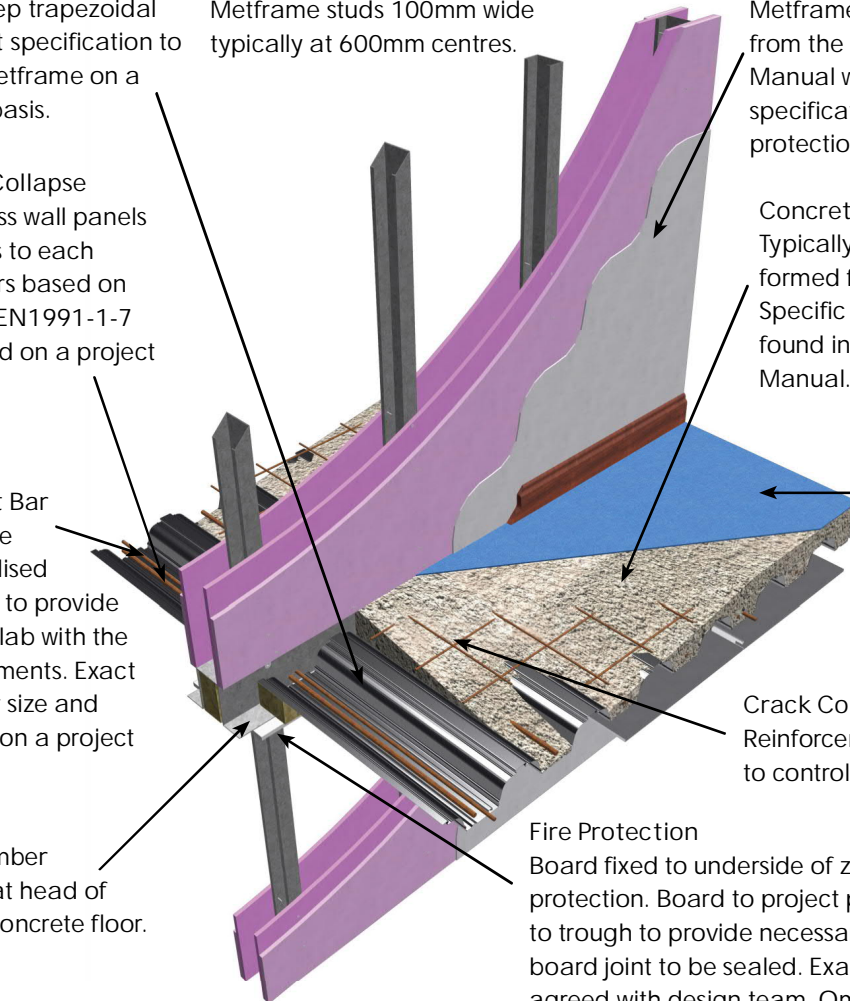
Fire Reinforcement Bar
To be installed in the decking trough. Utilised during the fire case to provide the concrete floor slab with the specific fire requirements. Exact specification of bar size and spacing confirmed on a project by project basis.

Floor Finish
Exact floor finish to be confirmed by design team. See the Metframe Specification Manual for further details. Options like screed can be adopted.

Metframe Zed Member
Zed profile bolted at head of panels to support concrete floor.

Crack Control Mesh
Reinforcement mesh to be installed to control shrinkage cracks.

Fire Protection
Board fixed to underside of zed section to provide fire protection. Board to project past zed with profiled insert to trough to provide necessary fire protection. Insert and board joint to be sealed. Exact specification to be agreed with design team. Omitted for clarity.

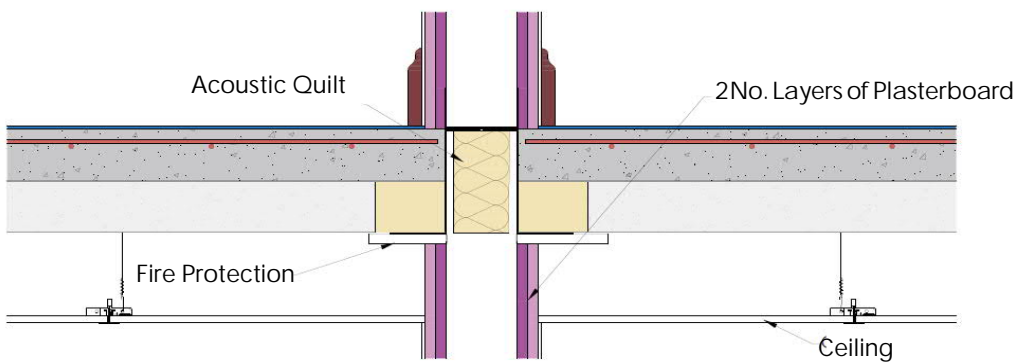
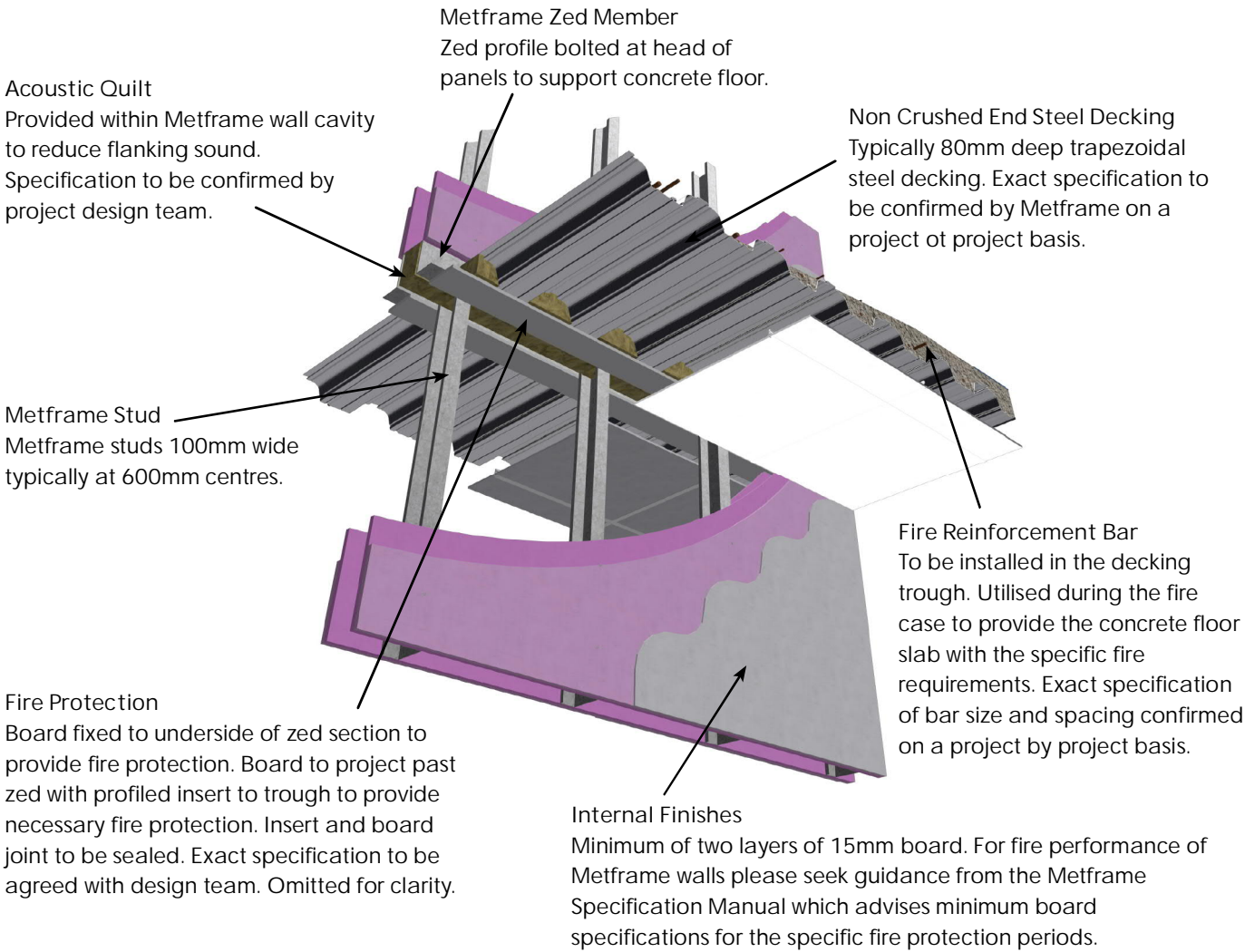


Section Through of Slab with Reinforcement

DETAIL MF024

INTERNAL NON-PARTY WALL WITH FLOOR UTILISING NON-CRUSHED END DECKING

VIEWED FROM UNDERNEATH



Section Between Through



- » FRAMING
- » PURLINS
- » DRY LINING
- » CABLE MANAGEMENT
- » CUSTOM ROLL FORMING

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In the interests of a policy of continuous research and development, voestalpine Metsec plc reserve the right to change the specifications in this publication without prior notice.

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