

# SYSTEM MANUAL

## LGSF



[www.sigmat.co.uk](http://www.sigmat.co.uk)  
01756 701522

Edition 3.2

# sigmat

LIGHT GAUGE STEEL FRAMING

# STEEL FRAMING PRECISION TECHNOLOGY

## ABOUT SIGMAT

Sigmat, UK leader in light gauge steel framing, offer a cost-efficient and faster alternative to traditional building methods.

Your one-stop-shop for your next offsite construction project. We design, manufacture, and assemble all under one roof, and install load-bearing light gauge steel framing solutions of the highest quality at your site. With over 18 years of extensive experience and industry knowledge.

Combining engineering excellence, design expertise, and unrivalled manufacturing capabilities we offer light gauge steel framing solutions up to 15 storeys. From design through to installation, all our employees are in-house and highly skilled, delivering quality results.

## FRAME INNOVATION

Specialising in the development of advanced pre-panelised light gauge steel structural framing systems and the delivery of a complete structural solution for bespoke projects.

Our innovative profiles offer improved structural performance by providing greater frame strength and buildability benefits.

We offer a wide scope of works including:

- Light Gauge Steel Superstructures
- Podium Transfer Structures
- Volumetric Panels
- Flooring Systems
- Roofs
- Stairs
- Balconies
- SigSafe Scaffoldless Erection

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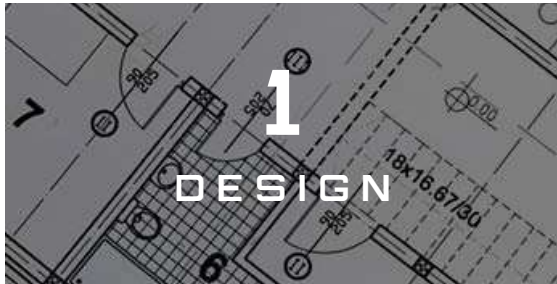
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# SOURCE TO SITE SOLUTION





## OUR LOCATIONS



# SYSTEM SUMMARY



## PODIUM TRANSFER STRUCTURE

- INCLUDING STEEL STAIRS
- TRANSFER FLOOR SLAB 180MM
- SPS NON LOAD BEARING



## INTERNAL WALLS

- UNCLAD BRACED INTERNAL WALLS
- ★ SOLE PLATES (WHERE REQUIRED)
- ENGINEERED COLD ROLLED GALVANISED STEEL PANELS



## EXTERNAL WALLS

- ENGINEERED COLD ROLLED GALVANISED STEEL PANELS
- BRICK TIE CHANNELS
- CALCIUM SILICATE BOARD
- VISQUEEN SHEETING TO STRUCTURAL OPENINGS
- ★ MASONRY SUPPORT
- ★ SOLE PLATES



## VOLUMETRIC PANELS

- WINDOWS & PATIO DOORS
- INSULATION
- BRICK TIE CHANNELS OR SIMILAR
- EXTERNAL FASCIA FIXING
- ELECTRICAL WIRING TO BACK BOX
- EXTERNAL CALCIUM SILICATE BOARD
- INTERNAL BOARDING



## FLOORS

- 180MM SLAB
- CONCRETE ON COMPOSITE METAL DECKING
- PRE-BOARDED FLOOR CASSETTES



## ROOFS

- 35MM TRAPEZOIDAL PROFILE ROOF DECK
- COLD ROLLED PURLINS
- CONCRETE ROOF



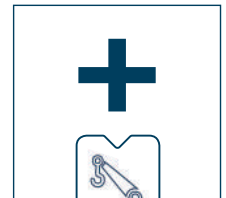
## STAIRS

- OPTION 1
- STANDARD STEEL TREAD STAIRS
- STEEL HALF LANDING
- OR
- OPTION 2
- 24MM CP BOARD INSERT STAIRS
- 24MM CP BOARD INSERT HALF LANDING CASSETTES
- OR
- OPTION 3
- 50MM STEEL PAN TREAD TO ALLOW FOR SCREED
- 180MM CONCRETE HALF LANDING



## BALCONIES

- ★ HOT ROLLED GALVANISED STEEL FRAME
- ★ 24MM CP BOARD INSERT



## ADDITIONAL ITEMS

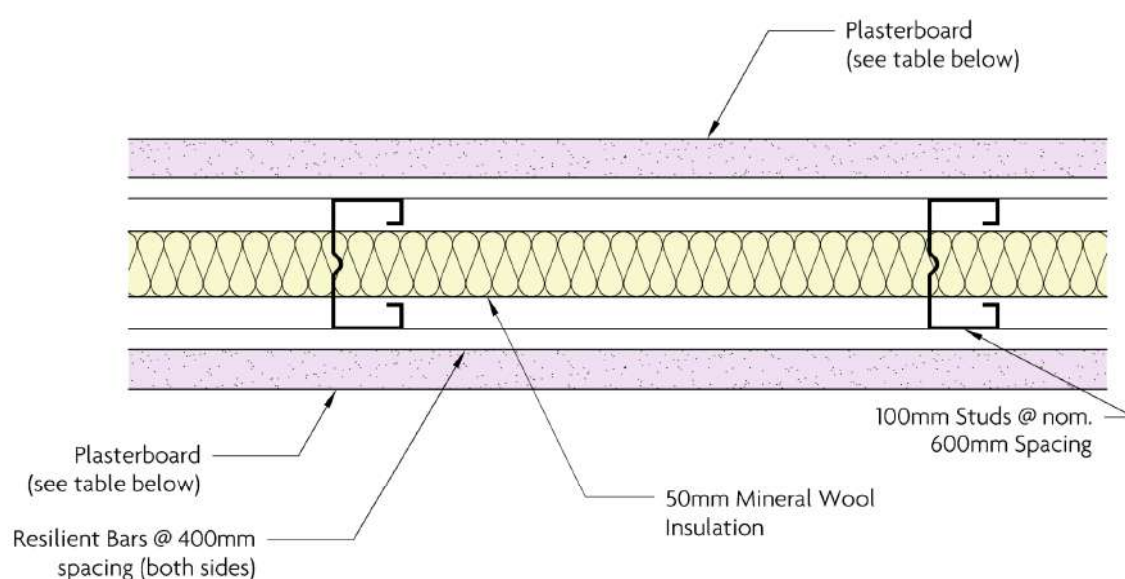
- SGSAFE SCAFFOLDLESS ERECTION SYSTEM
- LIFT SHAFT WALLS
- LIFTING BATHROOM PODS
- LIFTING OF PLASTER BOARD PACKS
- CRANAGE
- SCAFFOLD/MAST CLIMBER TIES

★ Typically optional extras

# LOAD BEARING SEPARATING WALLS

## INDICATIVE FIRE & ACOUSTIC PERFORMANCE

Refer to Technical Data Sheets for details of Tested Constructions



Plasterboard Layers, Thickness & Type (each side)	Indicative Acoustic Performance (Rw + Ctr) dB	Indicative Fire Rating (minutes)
2 x 15mm Sound Board	54	60
2 x 15mm Fire + Sound Board	52	90
1 x 15mm + 2 x 12.5mm Fire Board	58	120

Examples:

Fire Board - BG Fireline; Knauf Fire Panel

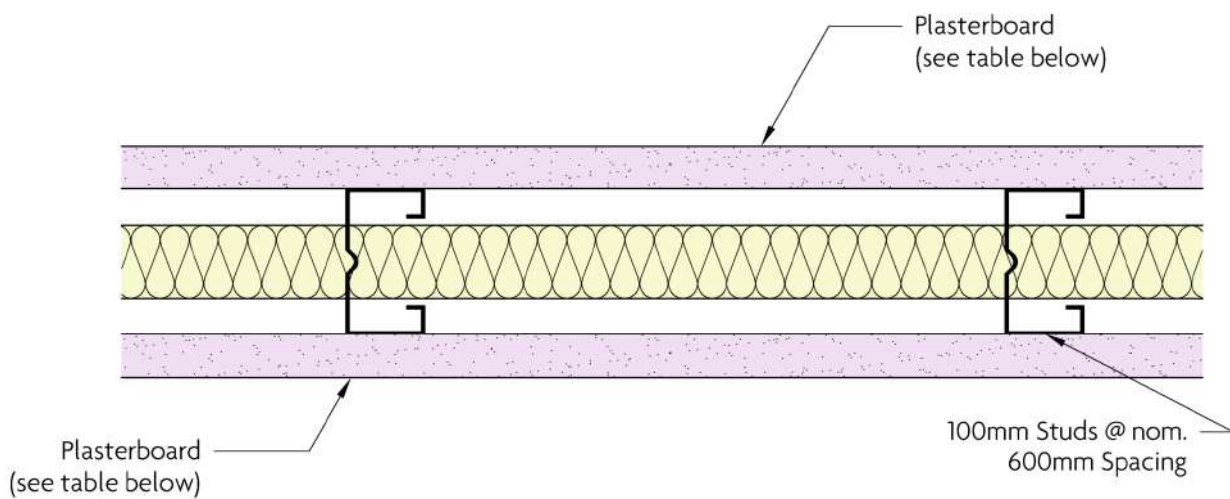
Sound Board - BG Soundbloc; Knauf Sounshield Plus

Fire + Sound Board - BG Soundbloc F; Knauf Performance Plus

## LOAD-BEARING INTERNAL WALLS

### INDICATIVE FIRE & ACOUSTIC PERFORMANCE

Refer to Technical Data Sheets for details of Tested Constructions



Plasterboard Layers, Thickness & Type (each side)	Indicative Acoustic Performance (Rw) dB	Indicative Fire Rating (minutes)
2 x 12.5mm Fire Board	46	90
2 x 15mm Fire Board	46	120

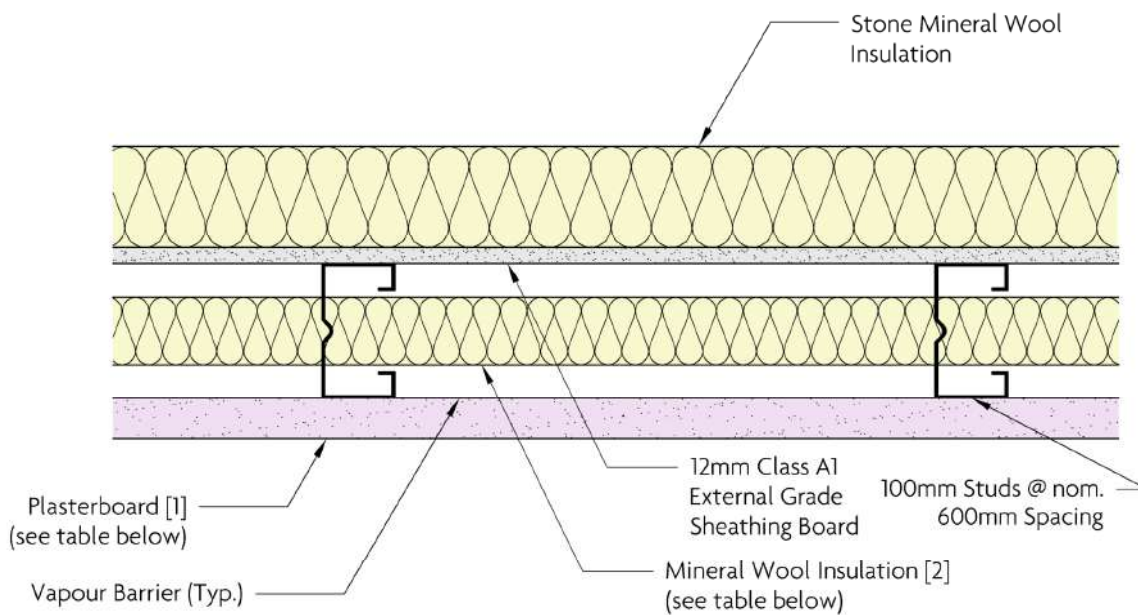
Examples:  
Fire Board - BG Fireline; Knauf Fire Panel



# INNER LEAF OF EXTERNAL WALL - FIRE FROM INSIDE

## INDICATIVE FIRE & ACOUSTIC PERFORMANCE

Refer to Technical Data Sheets for details of Tested Constructions

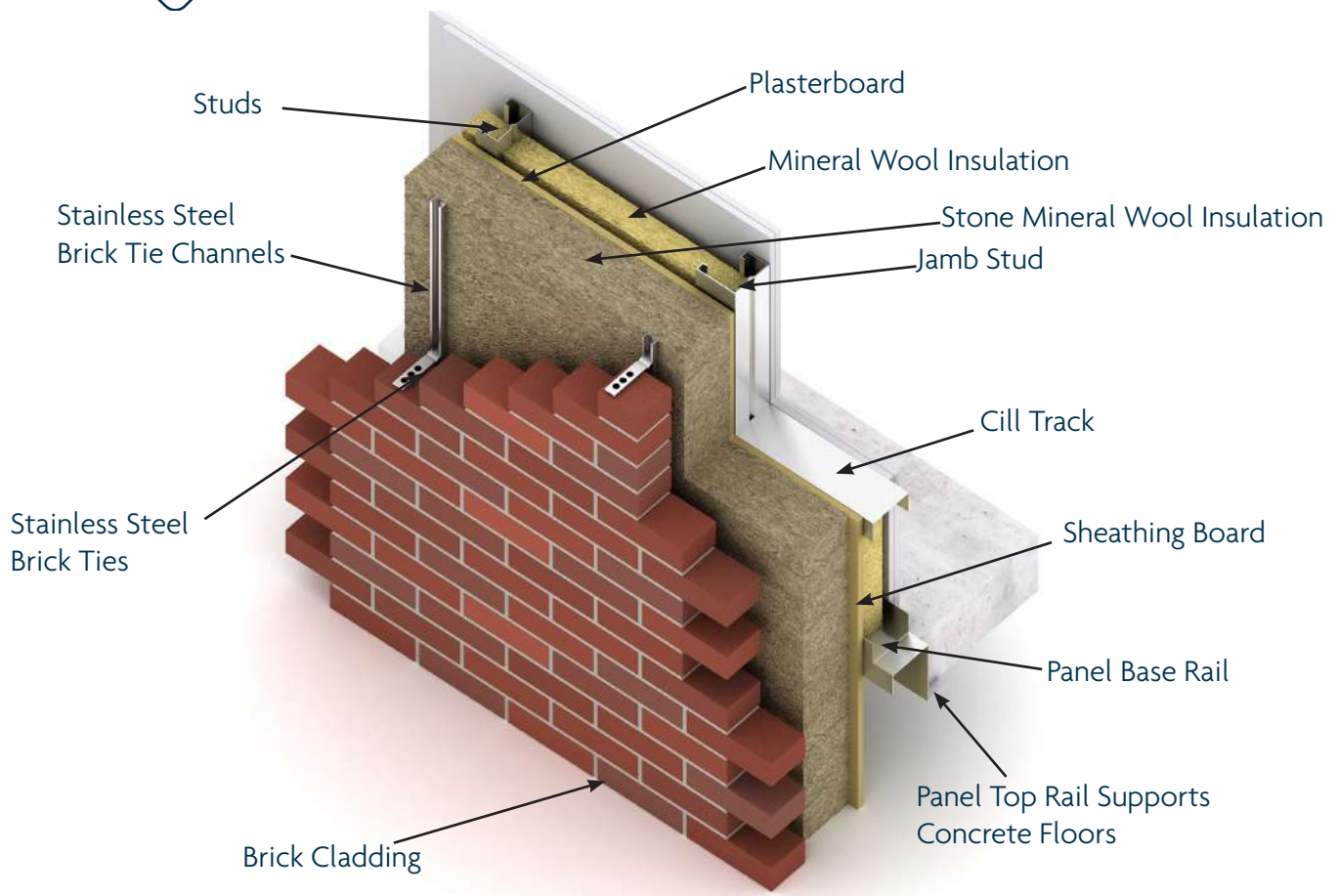


Plasterboard [1] Layers, Thickness & Type	Insulation [2] Mineral Wool Thickness (mm)	Indicative Fire Rating (minutes)
2 x 12.5mm Fire Board	100	60
2 x 12.5mm Fire Board	50	60
1 x 15mm + 2 x 12.5mm Fire Board	100	90
1 x 15mm + 2 x 12.5mm Fire Board	50	120

Examples:  
Fire Board - BG Fireline; Knauf Fire Panel

# EXTERNAL WALL FINISHES

## BRICK CLAD



### BRICK CLAD

The Sigmat pre-panelised loadbearing wall forms part of an installation-ready cavity wall system prior to the addition of a single outer leaf of brickwork. The walls are supplied with class A1 sheathing board, typically 12mm thick. It is pre-assembled off-site in our factory to enhance quality, speed and safety.

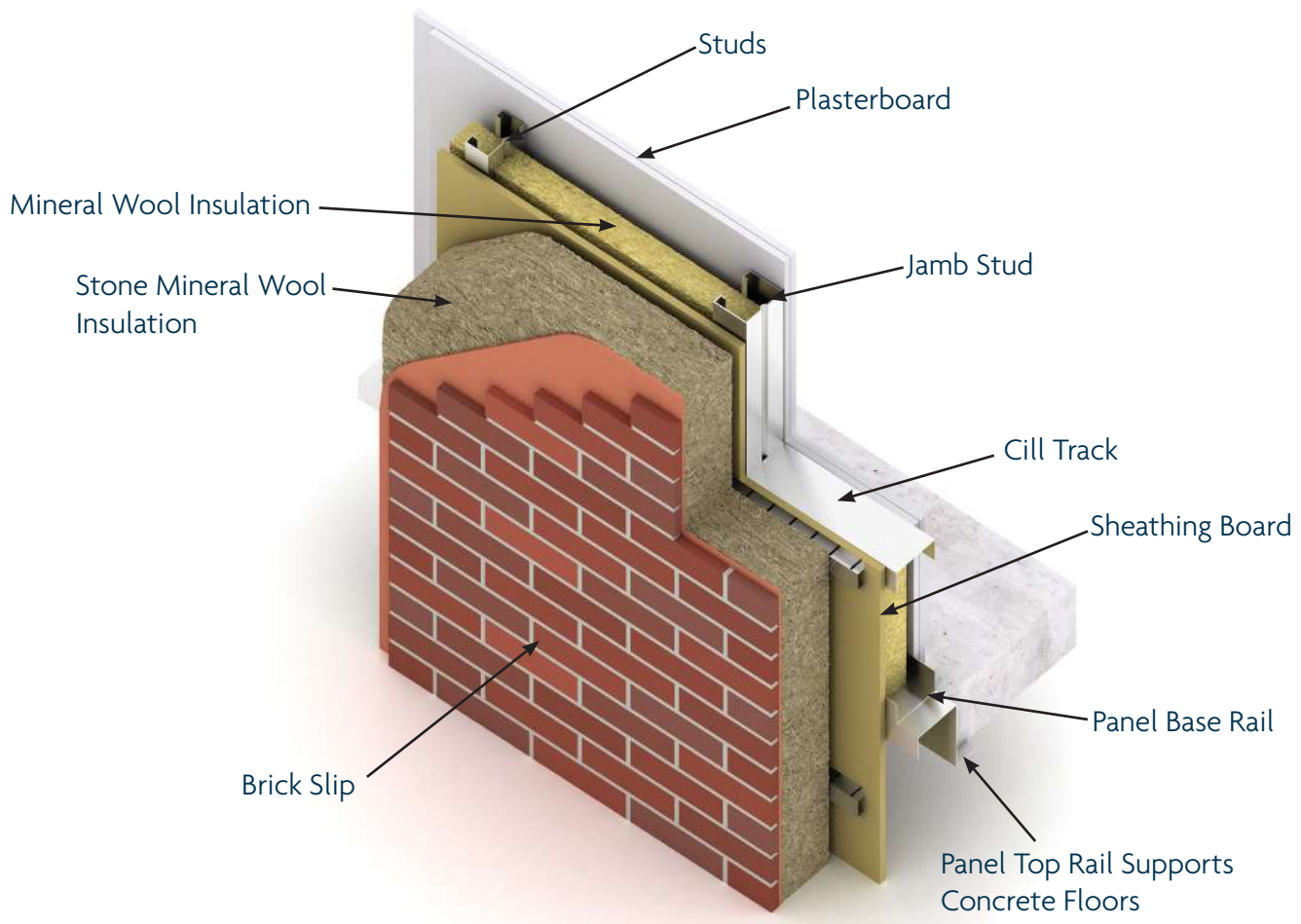
All Sigmat panels are designed to include pre-formed door and window openings and inner face is ready for the direct application of plasterboard lining finishes.



Component layers

# EXTERNAL WALL FINISHES

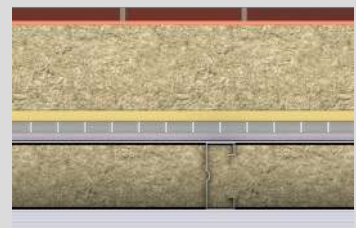
## BRICK SLIP



### BRICK SLIP

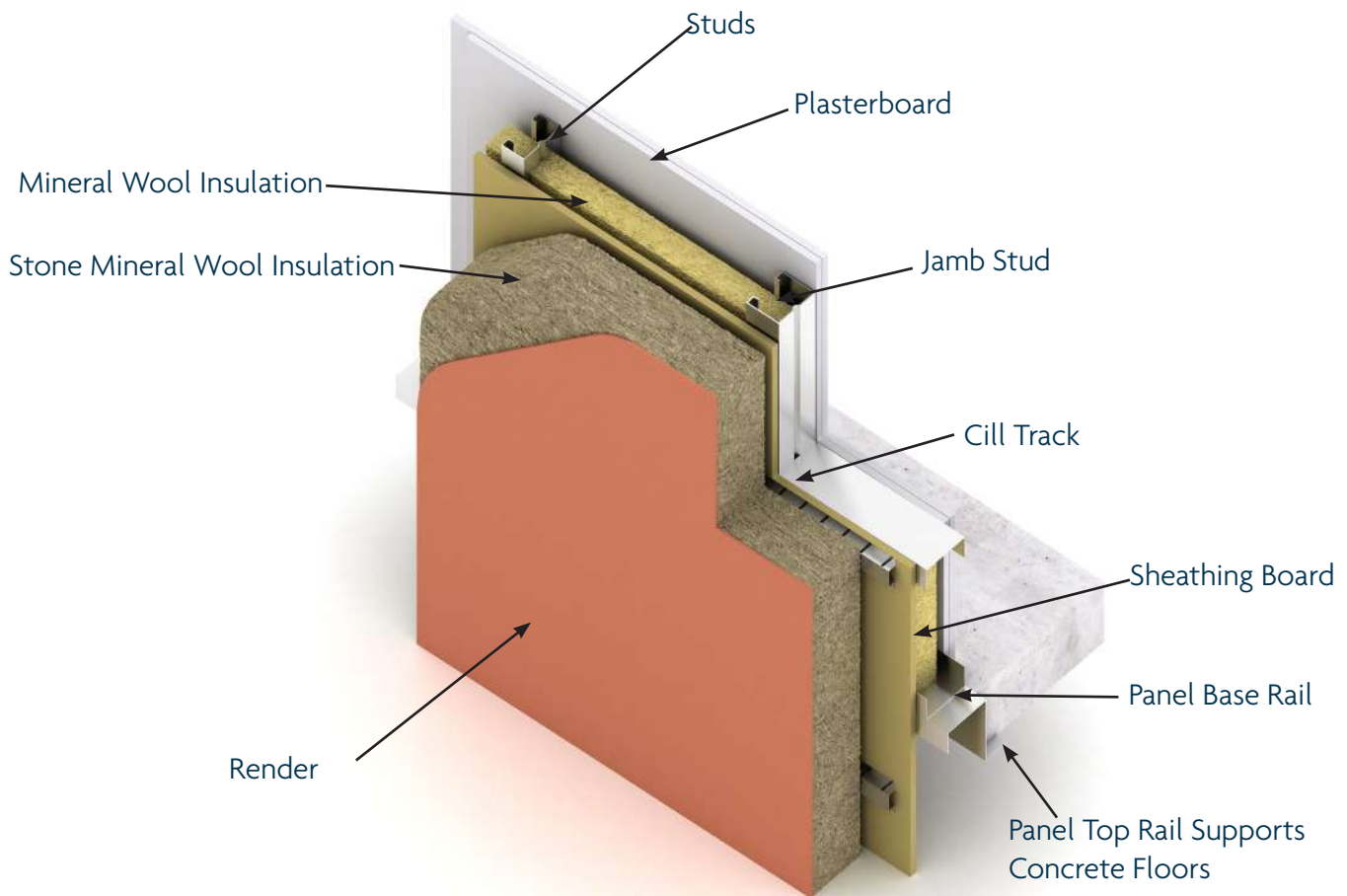
The Sigmat pre-panelised loadbearing wall forms part of an installation-ready cavity wall system prior to the addition of a outer leaf of brick slip system. The walls are supplied with class A1 sheathing board, typically 12mm thick. It is pre-assembled off-site in our factory to enhance quality, speed and safety.

All Sigmat panels are designed to include pre-formed door and window openings and inner face is ready for the direct application of plasterboard lining finishes.



Component layers

# EXTERNAL WALL FINISHES INSULATED RENDER



## INSULATED RENDER

Sigmat pre-panelised loadbearing wall forms part of an installation ready cavity wall system prior to the addition of a single outer leaf brickwork. The system is supplied with vertical stainless steel brick tie channels and rigid foil-faced urethane insulation, with variable thickness to suit the building's required U-value. It is pre-assembled offsite in our factory to enhance quality, speed, safety.

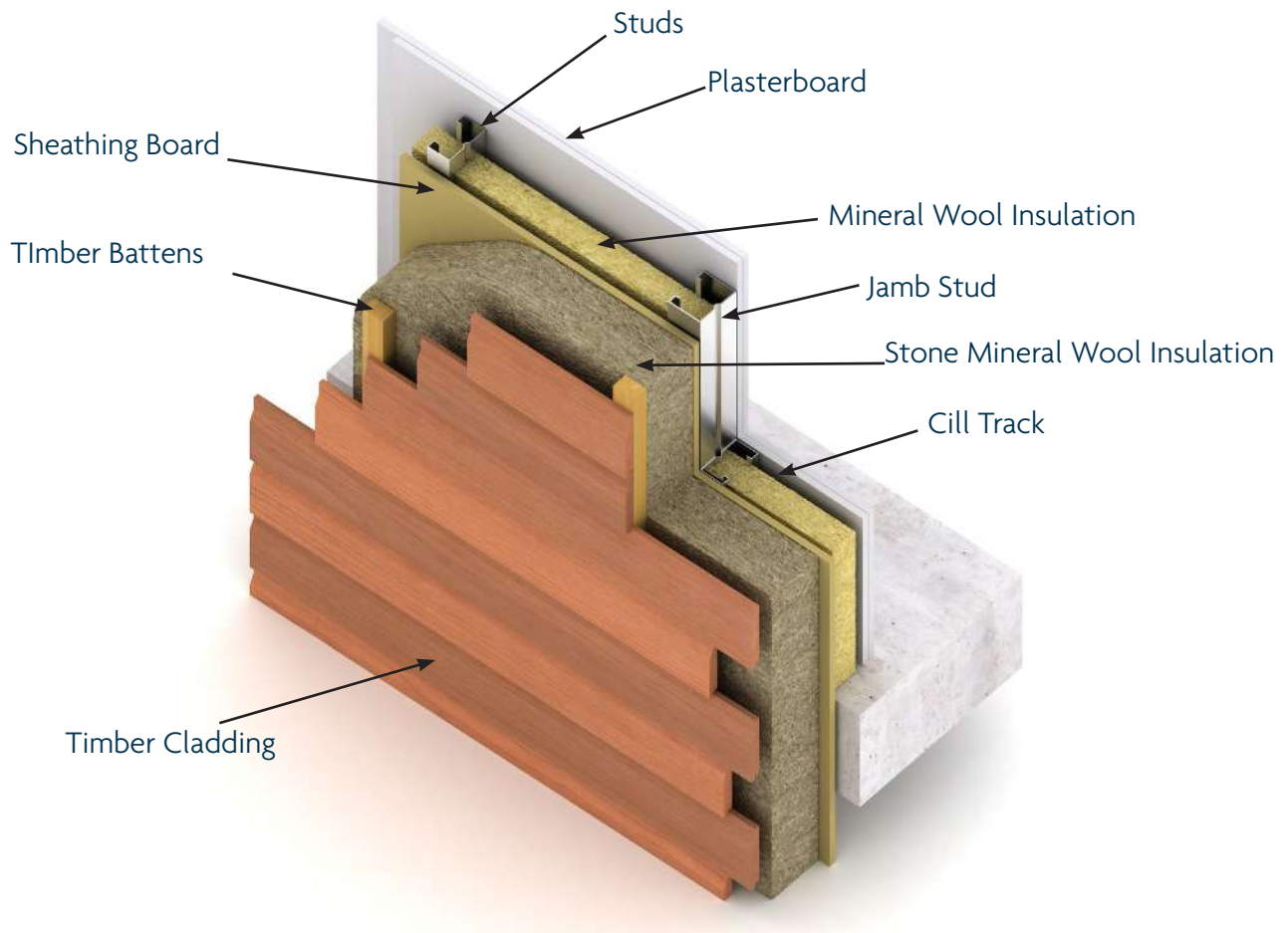
All panels are designed to include pre-formed door and window openings and the inner face is ready for the direct application of plasterboard linings and finishes.



Component layers

# EXTERNAL WALL FINISHES

## TIMBER CLADDING



### TIMBER CLADDING

Sigmat pre-panelised loadbearing external wall panels are clad on the outer face with class A1 sheathing board, typically 12mm thick, to receive insulation, sub-grid and timber cladding supplied and installed by the cladding specialist.

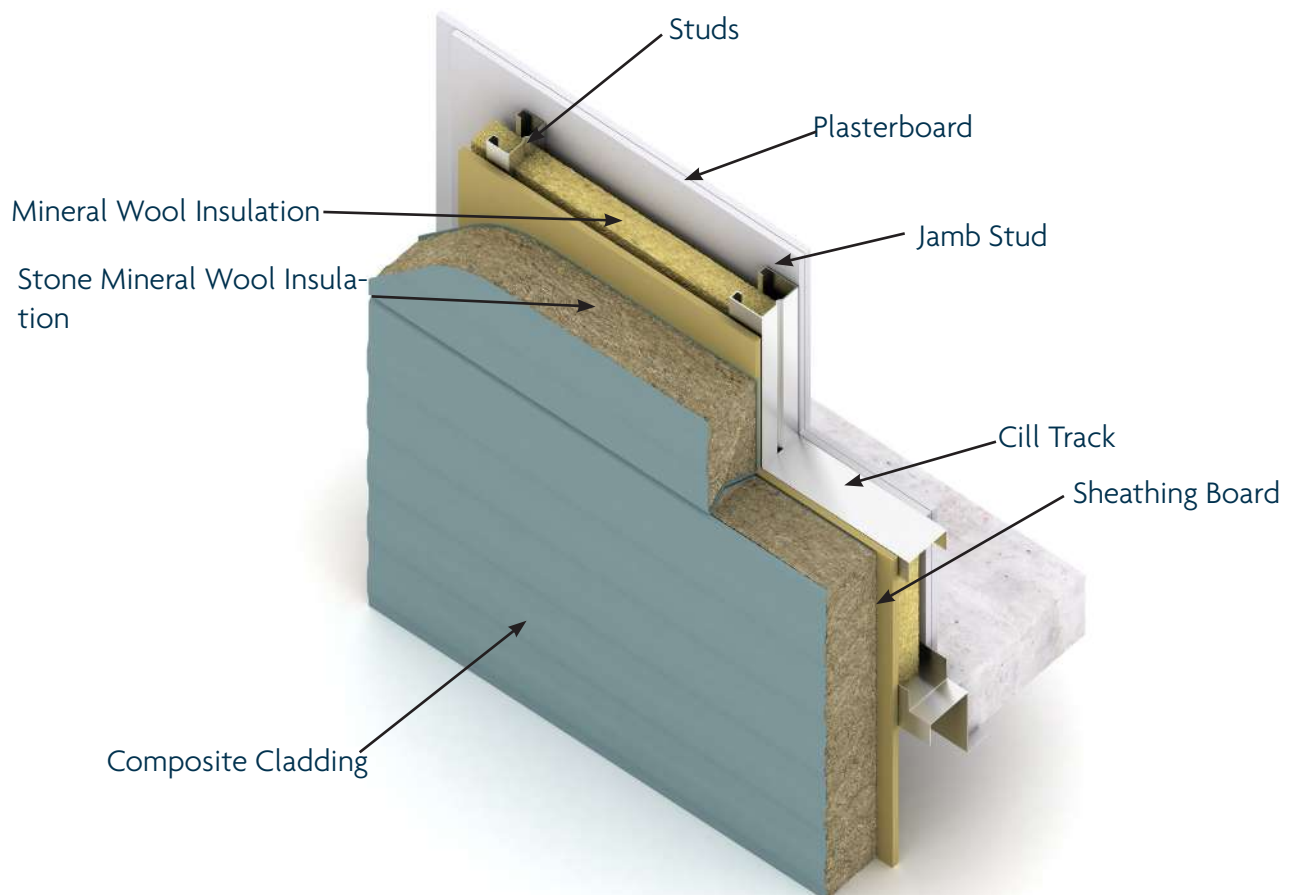
All Sigmat panels include pre-formed door and window openings and the inner face is ready for the direct application of plasterboard linings and finishes. This system can also be adopted for specialist zinc or copper cladding systems.



Component layers



# EXTERNAL WALL FINISHES COMPOSITE PANEL



## COMPOSITE PANEL

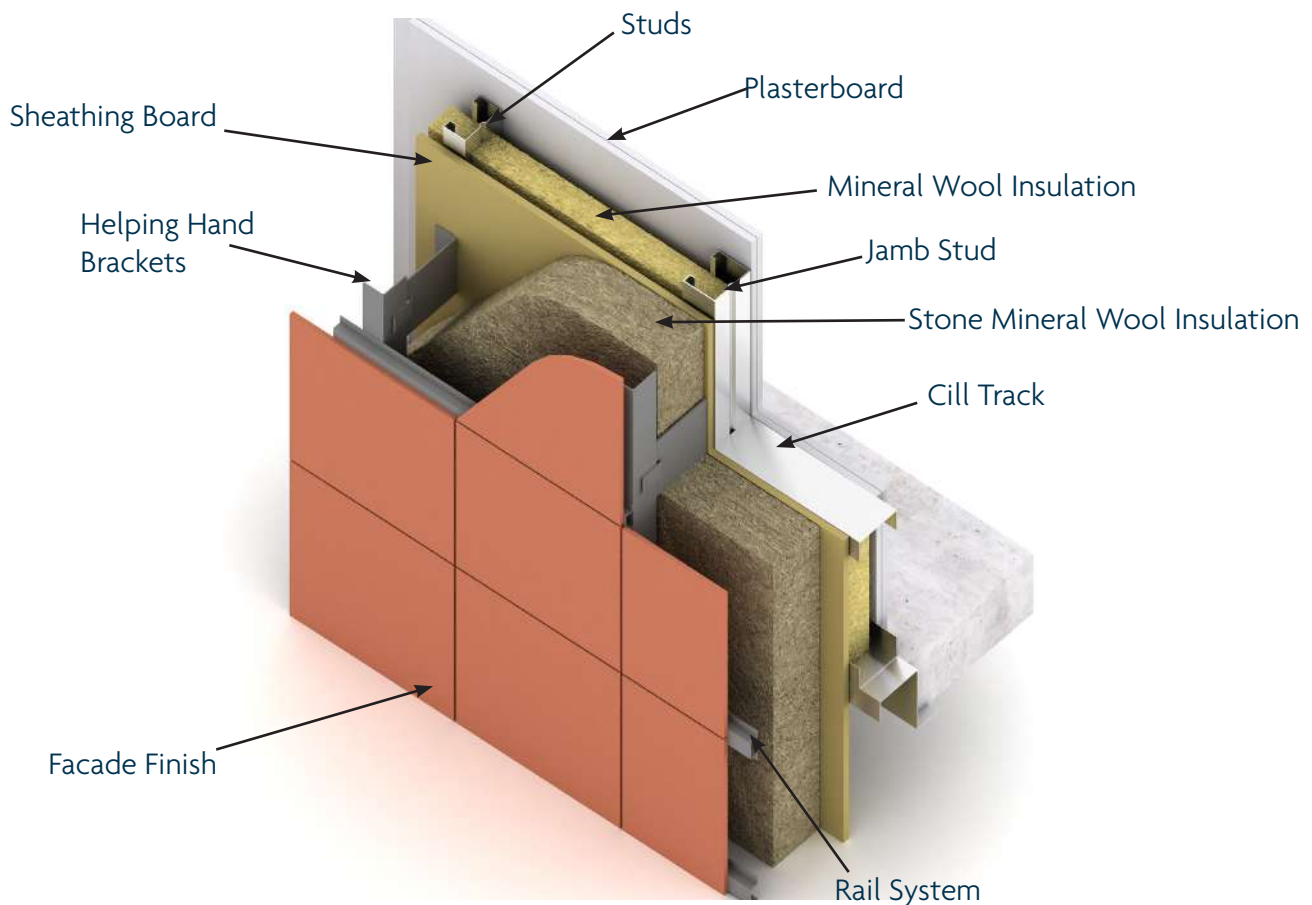
Sigmat pre-panelised loadbearing wall are clad on the outer face with a 12mm thick calcium silicate carrier board to receive the composite metal cladding panels. All are supplied and installed by cladding specialists.

The composite panel insulation core thickness can be varied to suit the building's required U-value. All Sigmat panels include pre-formed door and window openings and the inner face is ready for the direct approach.



Component layers

# EXTERNAL WALL FINISHES VENTILATED RAINSCREEN



## VENTILATED RAINSCREEN

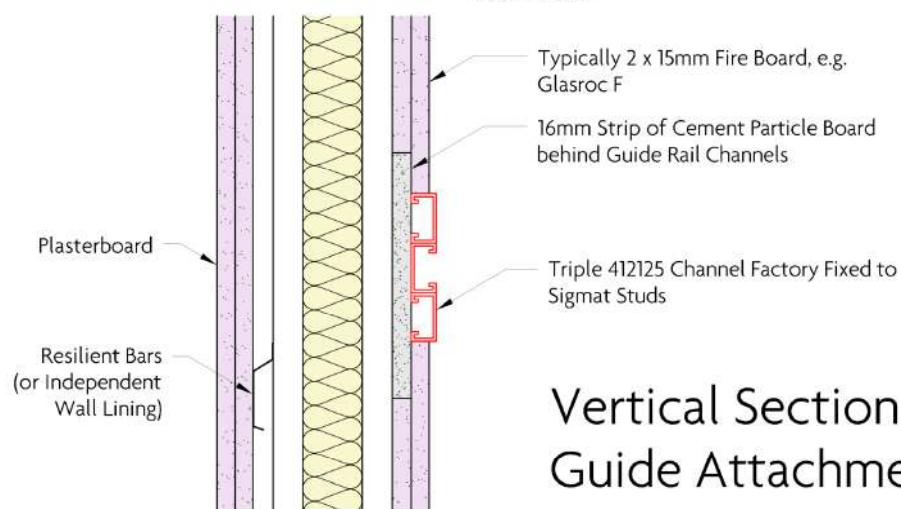
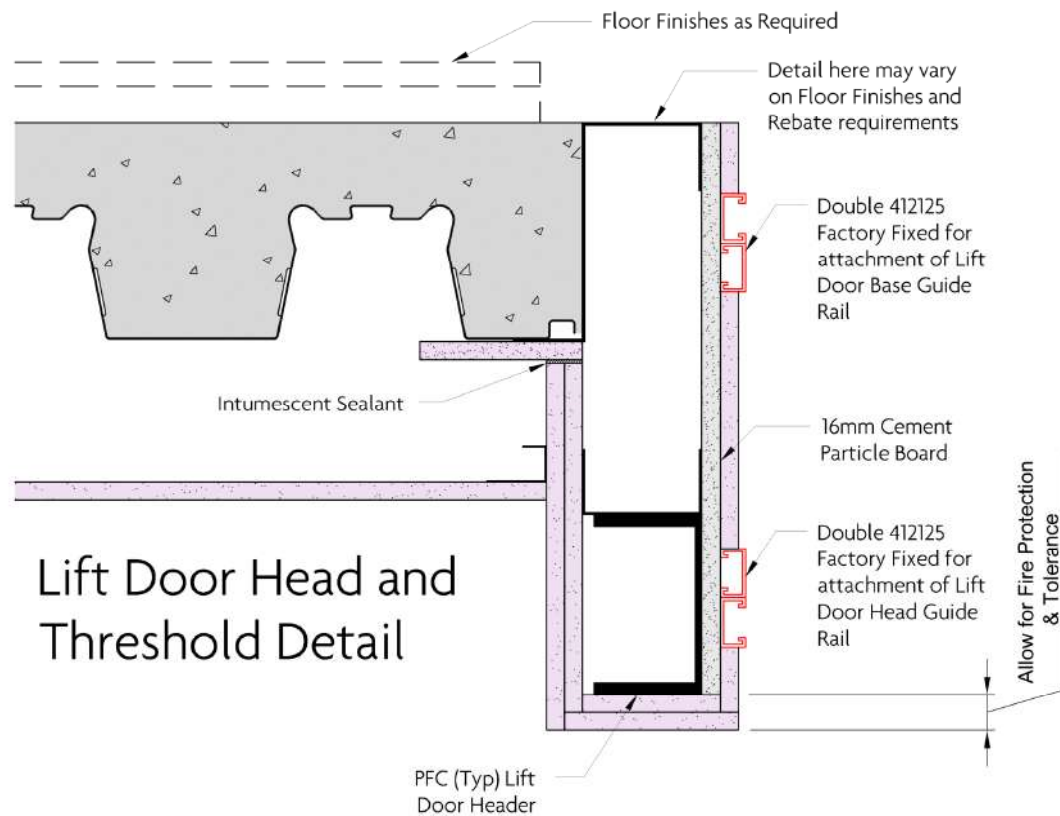
Sigmat pre-panelised loadbearing wall forms part of an installation ready cavity wall system prior to the addition of a single outer leaf brickwork. The system is supplied with vertical stainless steel brick tie channels and rigid foil-faced urethane insulation, with variable thickness to suit the building's required U-value. It is pre-assembled offsite in our factory to enhance quality, speed, safety.

All panels are designed to include pre-formed door and window openings and the inner face is ready for the direct application of plasterboard linings and finishes.

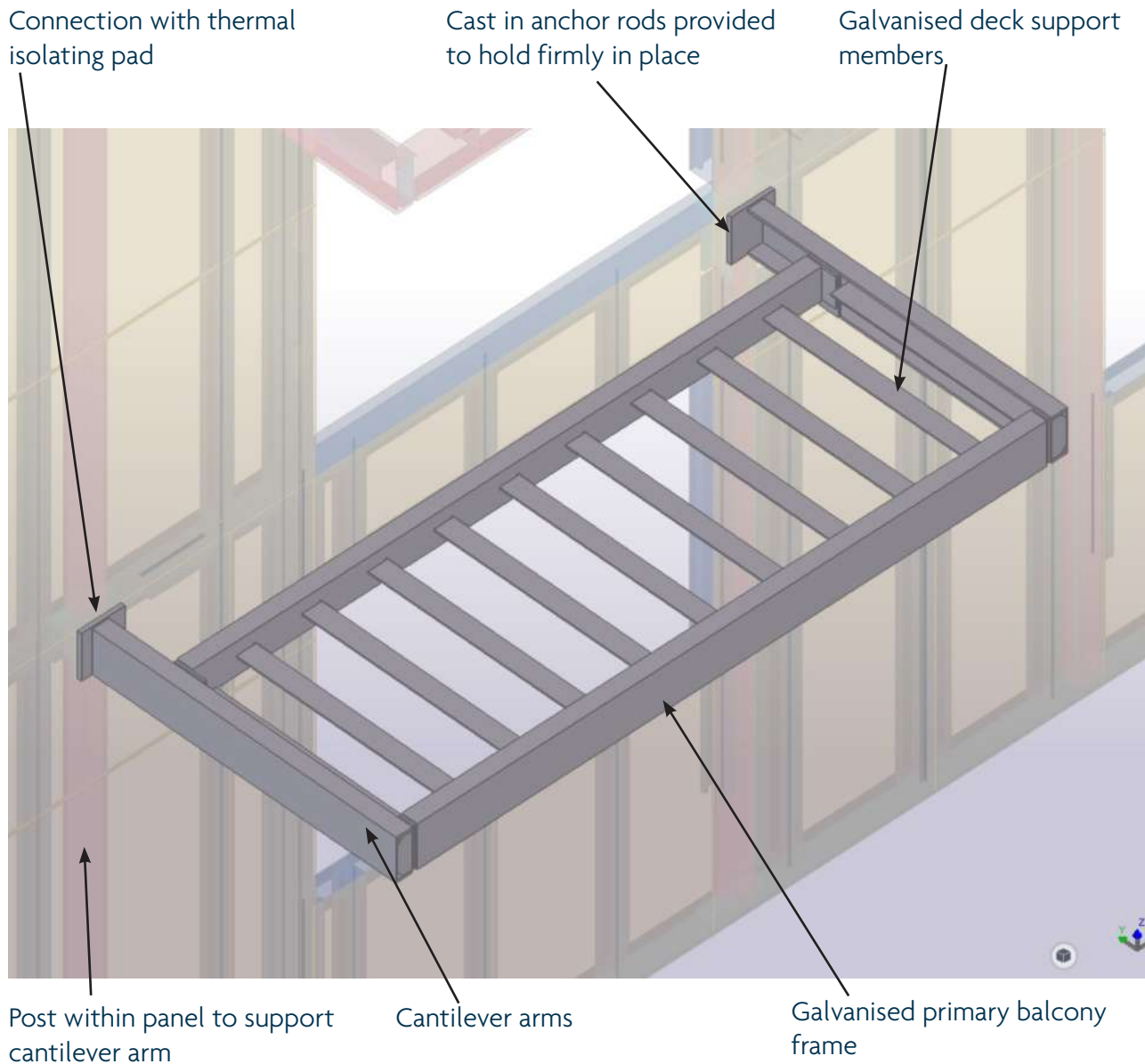


Component layers

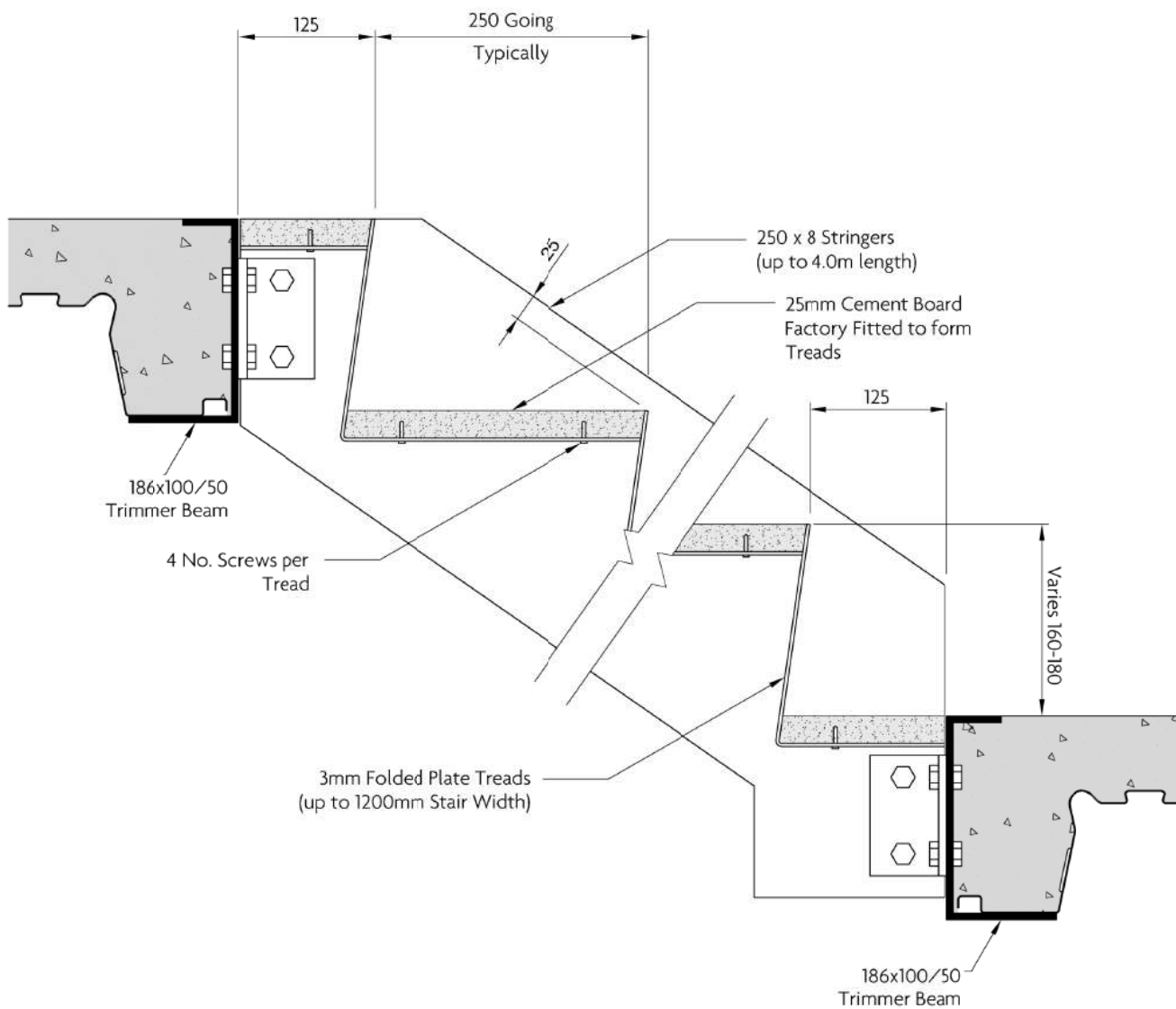
# LIFT SHAFT



# BALCONIES



# STAIRS

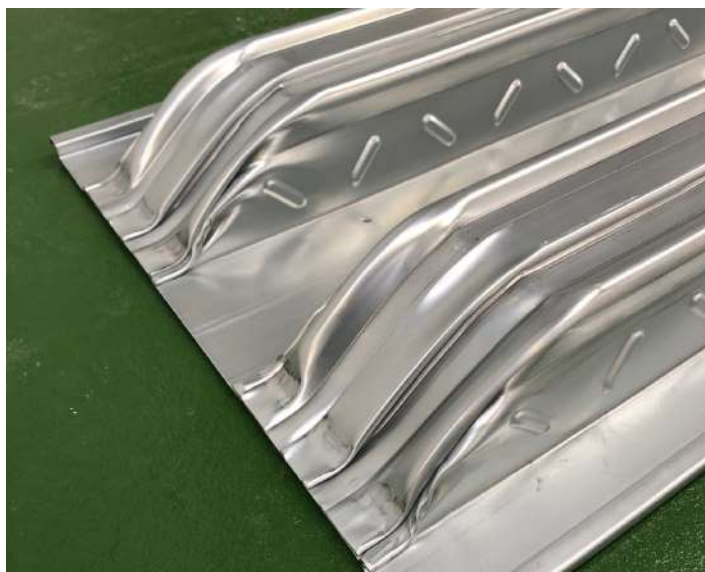




# SIGDECK 100 TRAPEZOIDAL DECKING TECHNICAL DATA

SigDeck is the new floor deck profile in Sigmat's product range (2019). The S450 crushed end trapezoidal deck in 110mm deep and available in 0.8mm, 1.1mm and 1.4mm gauges.

The new range has an outstanding unpropped capacity to 5m spans and uses a 180mm deep slab, which gives much more flexibility in build for other trades below the deck. SigDeck can achieve up to 2hr fire rating with varying load types.



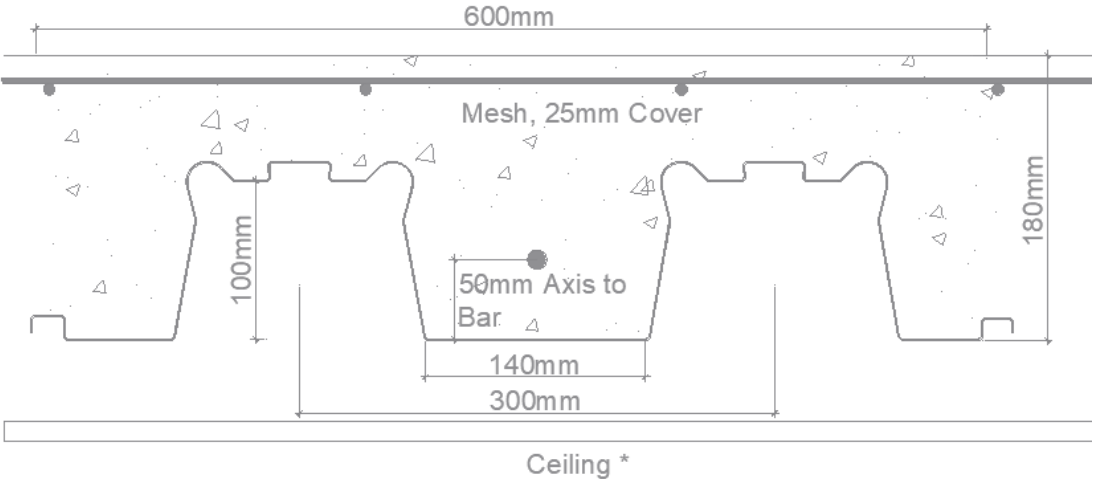
Slab Depth (mm)	Volume of Concrete (m <sup>3</sup> /m <sup>2</sup> )	Weight of concrete (normal weight)		Weight of Decking and reinforcement (kN/m <sup>2</sup> )
		Wet (kN/m <sup>2</sup> )	Dry (kN/m <sup>2</sup> )	
180 (excluding ponding)	0.127	3.23	3.1	0.185-0.239
180 (max span including ponding)	0.142	3.63	3.49	0.185-0.239

# SIGDECK 100 TRAPEZOIDAL DECKING

## TECHNICAL DATA

### Profile Properties

Profile Weight
----------------



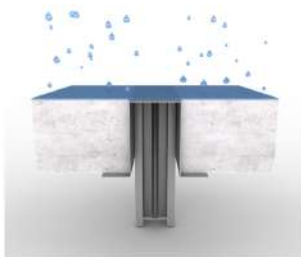
Construction stage	deflection mm)
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# SIGMAT SYSTEM ADVANTAGES

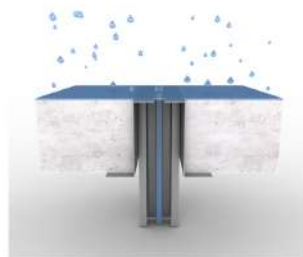
## PANEL HEAD TRACK

### BENEFIT

Single piece 'Top Hat' panel head track reduces 'in-build' water ingress from floor-to-floor reducing programme build.



*Sigmat Solution*

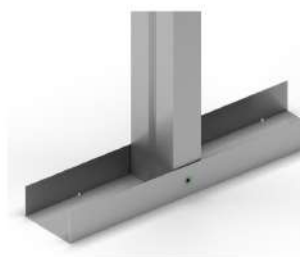


*Alternative Solution*

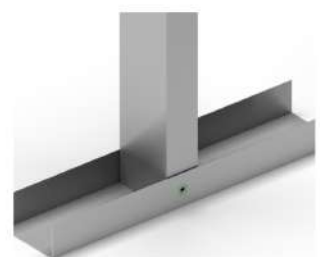
## BOTTOM TRACK DRAIN HOLES

### BENEFIT

Drain holes every 300mm prevents water build up in the bottom track avoiding the need to vacuum the bottom track prior to dry lining.



*Sigmat Solution*



*Alternative Solution*

## SHEATHING BOARD TO EXTERNAL WALLS

### BENEFIT

Improved 'racking strength' and durability meaning it doesn't crack as easily.



*Sigmat Solution*  
12mm Calcium Silicate Board



*Alternative Solution*  
12mm Cement Particle Board

## PANEL TO PANEL GASKET

### BENEFIT

As part of our drive to control storey to storey water movement during the 'in-build' period we fit a 1mm neoprene gasket on our internal panels.



*Sigmat Solution*



*Alternative Solution*

# SIGMAT SYSTEM ADVANTAGES

## SIGMAT STUD

### BENEFIT

The unique Sigmat load-bearing stud profile uses a double lip configuration, which together with a web stiffener rib, significantly increases the axial load capacity over that of a conventional 'C' section with a similar weight per metre.



*Sigmat Solution*



*Alternative Solution*

## MAIN CONNECTION BOLT

### BENEFIT

Patented SigBolt sits flat and level in embossed connection hole, assisting towards a flush finish for plasterboard.



*Sigmat Solution*



*Alternative Solution*



*Sigmat 'Flush Finish'*



*Alternative 'Uneven Finish'*

# SIGMAT SYSTEM ADVANTAGES

## SHEATHING BOARD RETAINING SCREW

### BENEFIT

Retaining screws use a large flat head to improve 'racking strength', particularly important when using heavy facade such as full brickwork.



*Sigmat Solution*



*Alternative Solution*

## PANEL BOTTOM TRACK TO PANEL HEAD RETAINING SCREW

### BENEFIT

Sigmat screws are fitted with neoprene washer reducing likelihood of water ingress along the screen threads.



*Sigmat Solution*



*Alternative Solution*

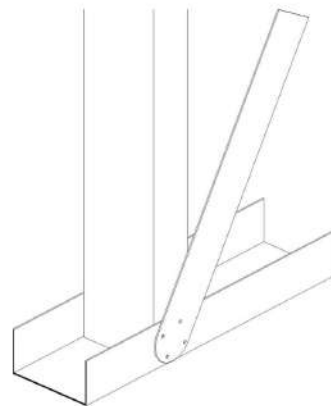
## SIGMAT HIGH CAPACITY CROSS-BRACING

### BENEFIT

Sigmat high capacity cross-bracing offers a heavy duty 'in-panel' for greater strength whilst reducing problems experienced with some follow-on trades (dry liners, electricians).



*Sigmat Solution*



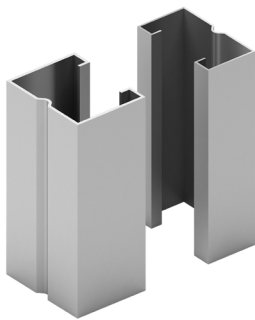
*Alternative Solution*



# SIGMAT PROFILE SHAPES

All unique patented light gauge steel framing sections and profiles.

Sigmat profile sections are manufactured using hot dipped galvanised steel to (BSEN 10143:2006) in grades from S280 and S450, as required. They have a Z275 coating and are supplied self-finished.



## Sigmat Wall Stud

The unique Sigmat wall stud is the principal load-bearing stud and is produced in a narrow and wide flange version in various material thicknesses between 1.2mm and 3mm.

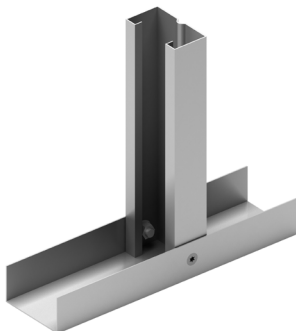
The enhanced features of the stud are the additional return lips and web rib stiffener which combine to provide the significant increase in capacity compared to a traditional 'C' section.



## Sigmat Asymmetrical Jamb Stud

An optimised version of the wall stud, the jamb stud is produced with a wide outer flange to receive a vertical brick tie channel, or other external features. It has a narrower inner flange in various material thicknesses between 1.2mm and 3mm.

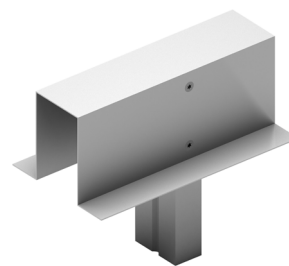
The jamb stud uses a reduced profile girth and has the same additional features as the wall stud.



## Sigmat Head & Base Track

The wall head & base track is a simple channel profile into which the vertical wall studs fit. They are connected using recess boss and boss bolt details to provide a flush connection.

The profile has an internal corner radius of 1.5mm and is produced as a slightly over-bent section to allow the vertical studs to achieve a full contact end bearing. The tracks are produced in various material thicknesses between 1.6mm and 3mm.



## Sigmat Internal Wall Head Top Hat

The internal wall head is a single member top hat section produced in various depths between 160mm and 200mm. It is designed to support a composite metal deck reinforced-concrete floor, or a steel joisted floor cassette on the ledger flanges. The top hats are produced in 2mm and 3mm thicknesses.

# SIGMAT PROFILE SHAPES

All Unique patented light gauge steel framing sections and profiles.

Sigmat profile sections are manufactured using hot dipped galvanised steel to (BS EN 10143:2006) in grades from S280 and S450, as required. They have a Z275 coating and are supplied self-finished.



## End Wall Top Hat Track

The profile is formed by combining the required functions of a traditional head track section with an internal top hat to form a single-piece profile. Used where an external end wall is required to support the floor slab. The end wall top hat tracks are products in varying depths between 160mm and 200mm and in 2mm and 3mm thicknesses.

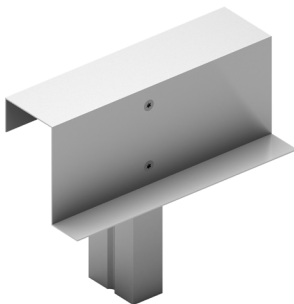
The metal decking is supported on the ledger flanges and the vertical face of the profile provides a shutter trim for concreting works.



## Side Closure Angle

The side closure angles are produced for use in conjunction with a traditional head track as an alternative to the single-piece side wall top hat track.

The side closure angles are fixed to the wall panels on-site. The angles are provided pre-punched in varying depths between 160mm and 200mm in 2mm thickness.



## Side Wall Top Hat Track

Similar to the end wall top hat track, the top side wall top hat track is used to form the panel head on external wall panels where the composite metal decking is laid parallel to the wall and a side edge support / closure is required for the decking.

Produced in varying depths between 160mm and 200mm in 1.6mm and 2mm thicknesses.



## Diagonal Bracing

SIGMAT Diagonal Structural Bracing is produced from 19mm round bar and is used in a series of crossed pairs to provide a tension bracing system for lateral structural stability. The bracing is contained within the structural zone of the wall panels, clear of lining boards and normal service penetrations through the linings.

The diagonal bars are bolted through the track/top hat at the connection with the vertical studs.

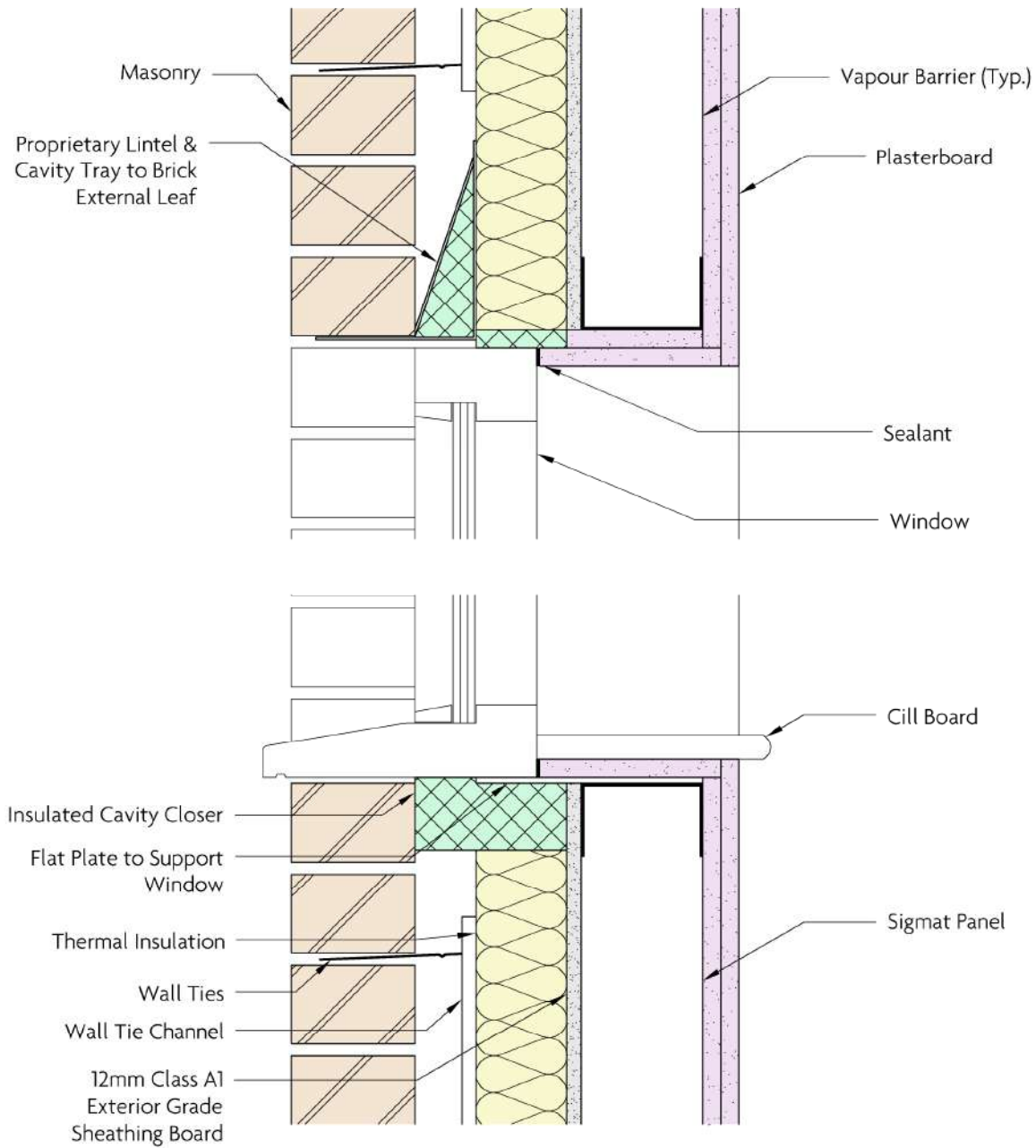
# TECHNICAL DETAILS

The following drawings give information for concise information, detail drawings.

Reference	Page	Building Zone	Title
SIG-01-1	27	Window	Window Head & Cill - Masonry Clad
SIG-01-2	28	Window	Window Jamb Detail - Masonry Clad
SIG-01-3	29	Wall	Wall Junction Plan - Masonry Clad
SIG-01-4	30	Wall	Wall Base Detail - Masonry Clad
SIG-01-5	31	Floor	Floor Junction Detail - Masonry Clad
SIG-01-6	32	Podium	Sigmat Podium - Masonry Clad Wall
SIG-01-7	33	Podium	RC (by others) Podium - Masonry Clad
SIG-01-8	34	Floor	Floor Junction Detail - Masonry Clad
SIG-02-1	35	Floor-Wall	Separating Floor - Wall Junction
SIG-02-2	36	Floor-Wall	Separating Floor - Wall Junction
SIG-02-3	37	Floor-Wall	Separating Floor - Wall Junction
SIG-02-4	38	Floor-Wall	RC (by others) Podium - Wall Junction
SIG-02-5	39	Floor -Wall	Separating Floor - Wall Junction
SIG-02-6	40	Door	Internal Door Head & Jamb Details
SIG-03-1	41	Floor	Floor Edge Detail - Masonry Support
SIG-04-1	42	Roofs	Pitched Roof - Masonry Clad Eaves Detail
SIG-04-2	43	Roofs	Purlin Roof
SIG-04-3	44	Roofs	Terrace Perimeter - Masonry Clad
SIG-04-4	45	Roofs	Purlin Roof - Wall Junction

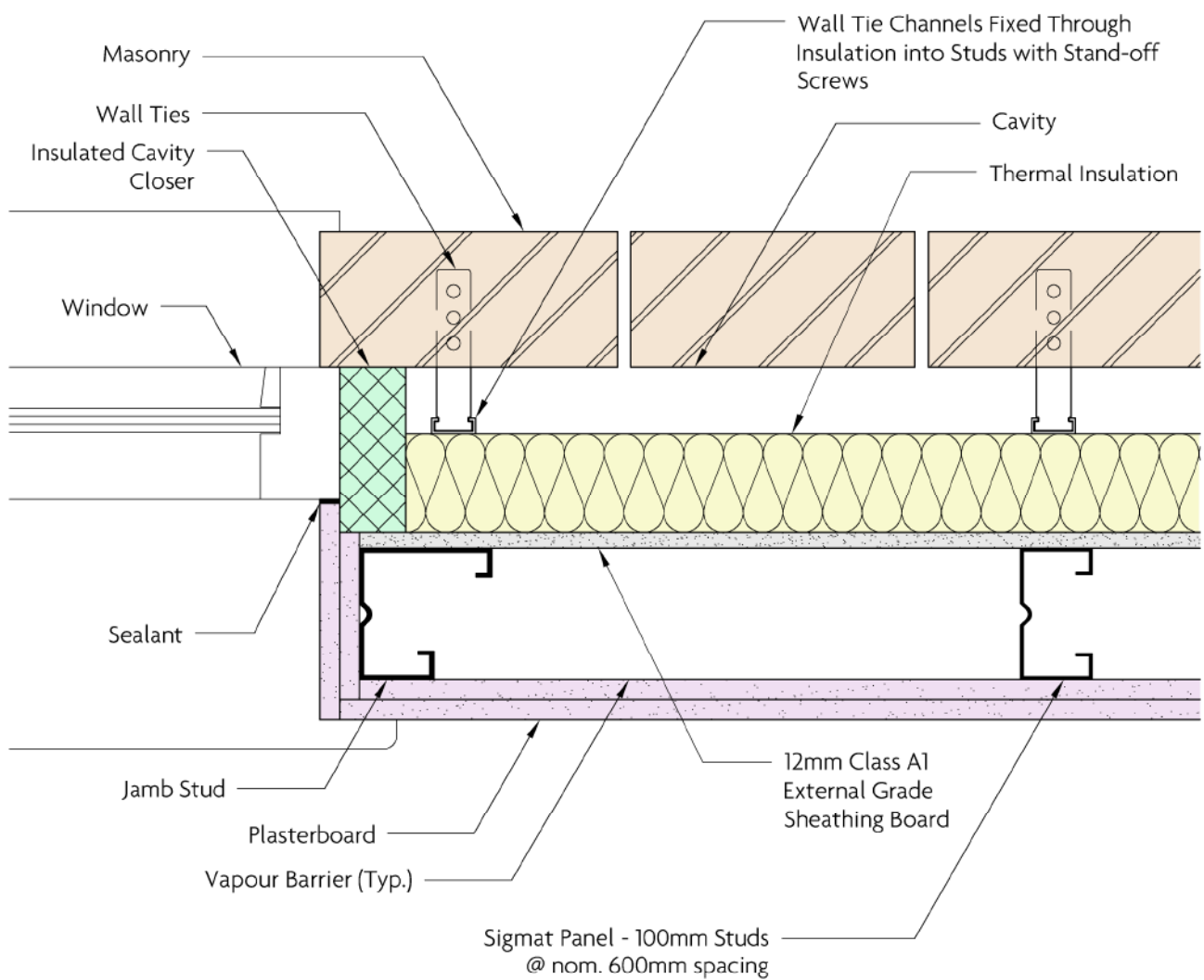
## SIG-01-1

### WINDOW HEAD & CILL - MASONRY CLAD



## SIG-01-2

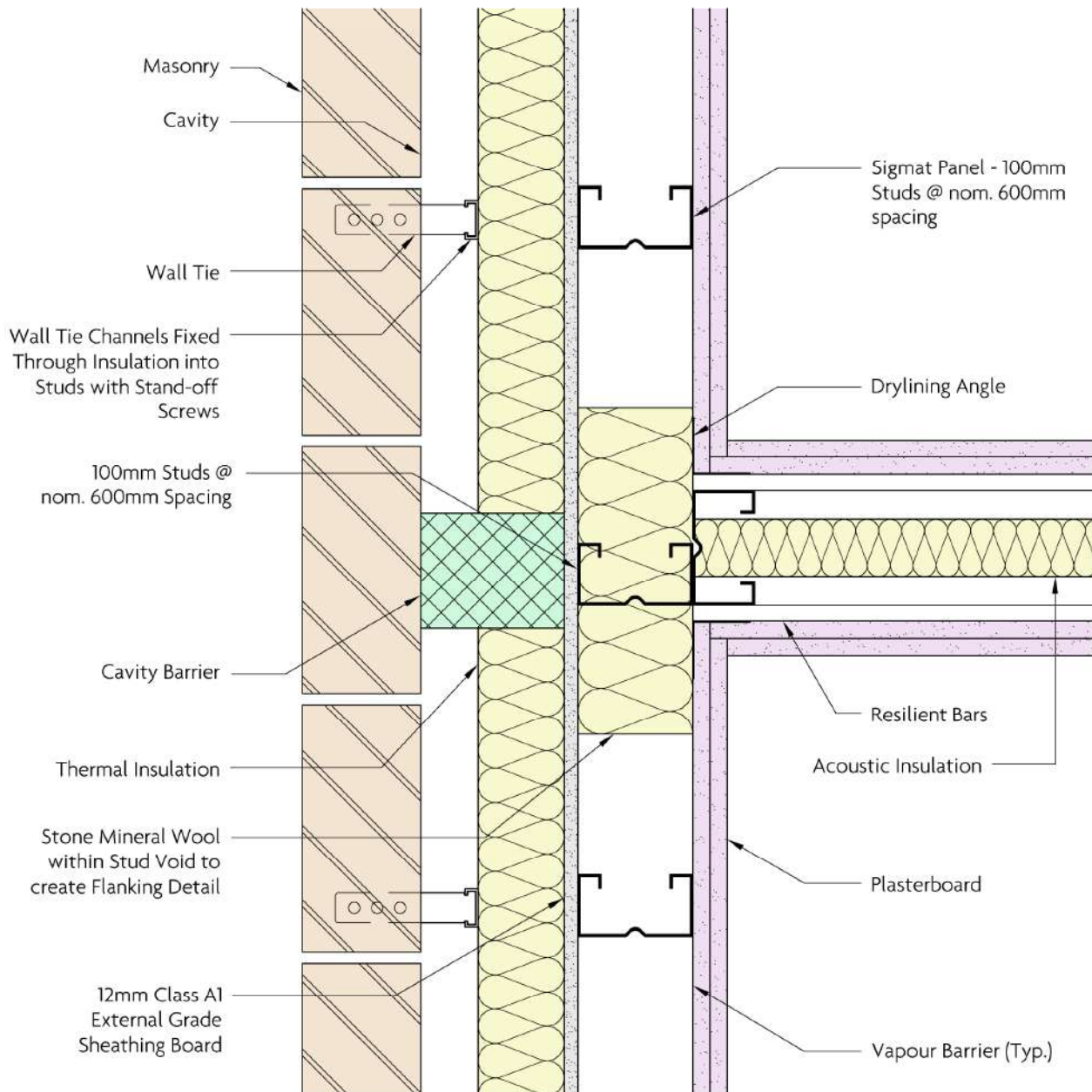
### WINDOW JAMB DETAIL - MASONRY CLAD





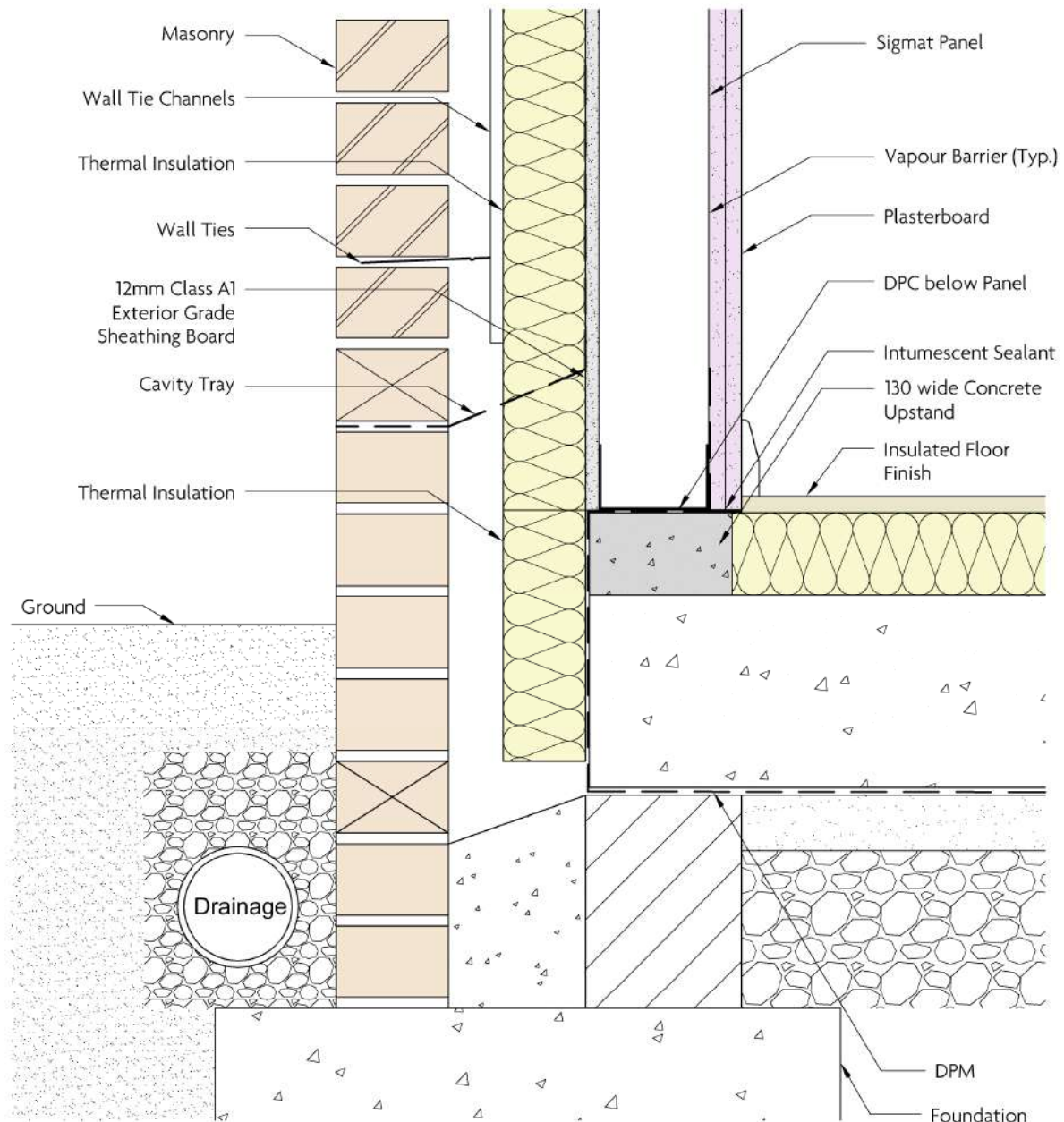
## SIG-01-3

### WALL JUNCTION PLAN - MASONRY CLAD



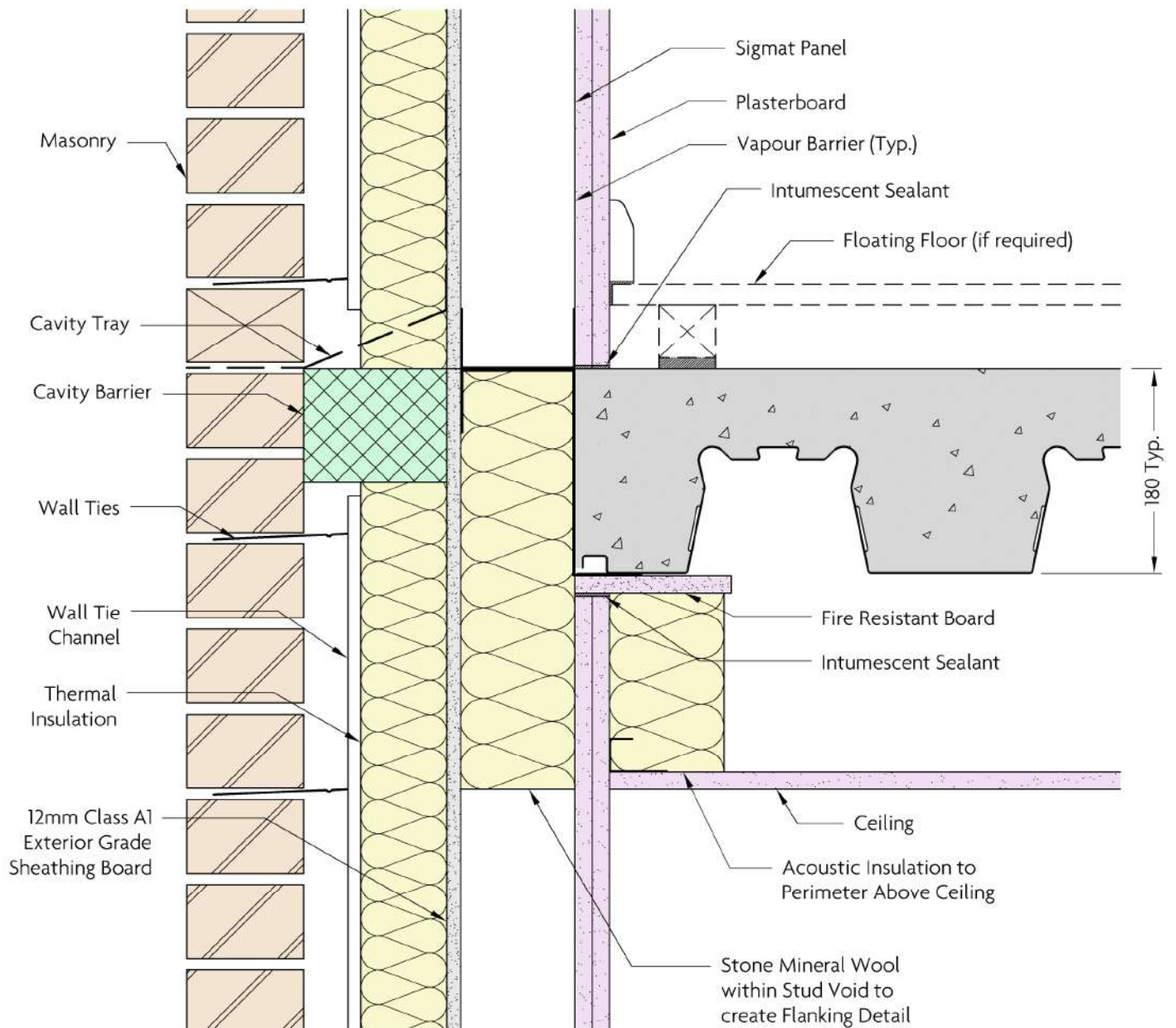
# SIG-01-4

## WALL BASE DETAIL - MASONRY CLAD

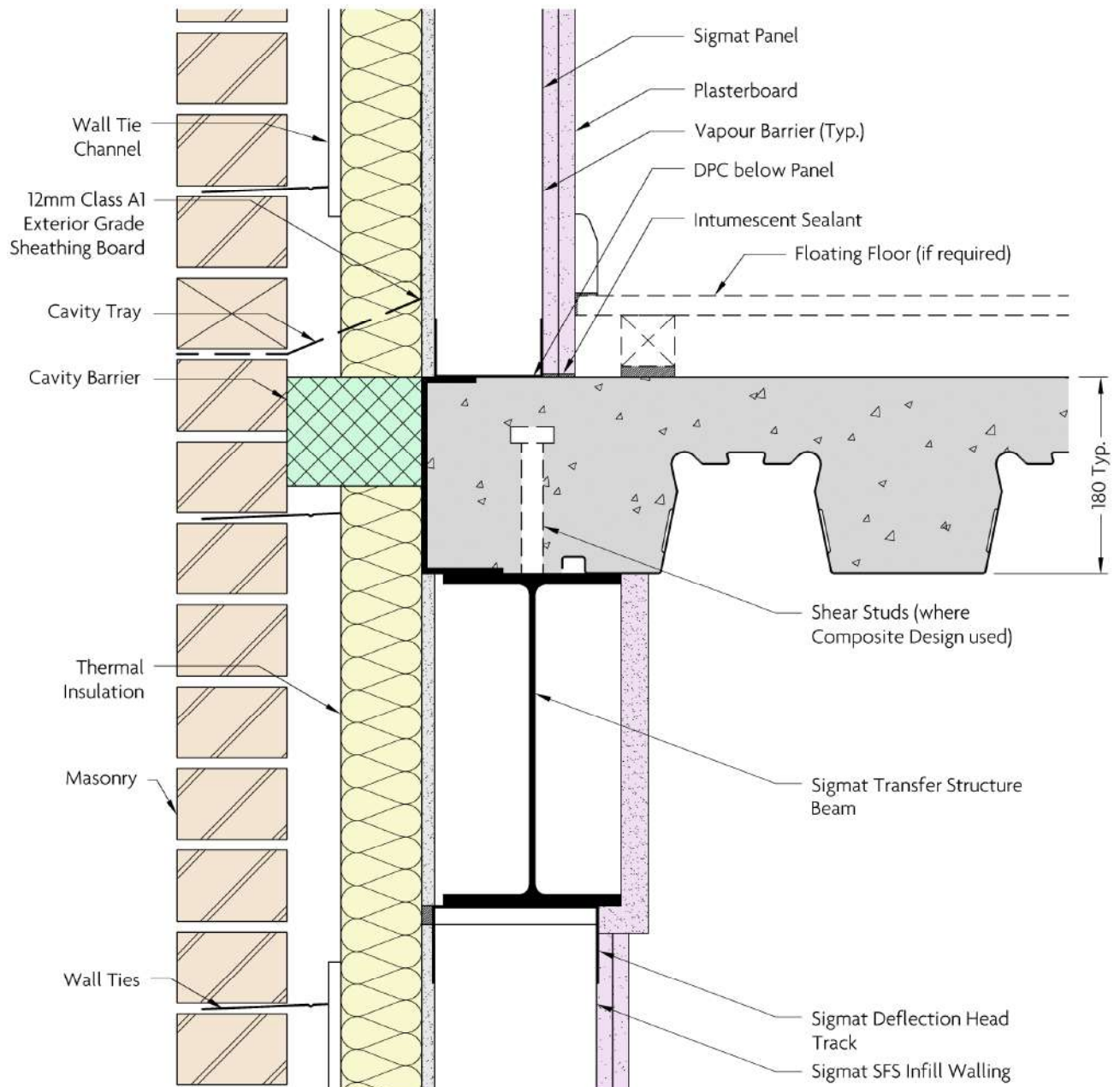


## SIG-01-5

### FLOOR JUNCTION DETAIL - MASONRY CLAD



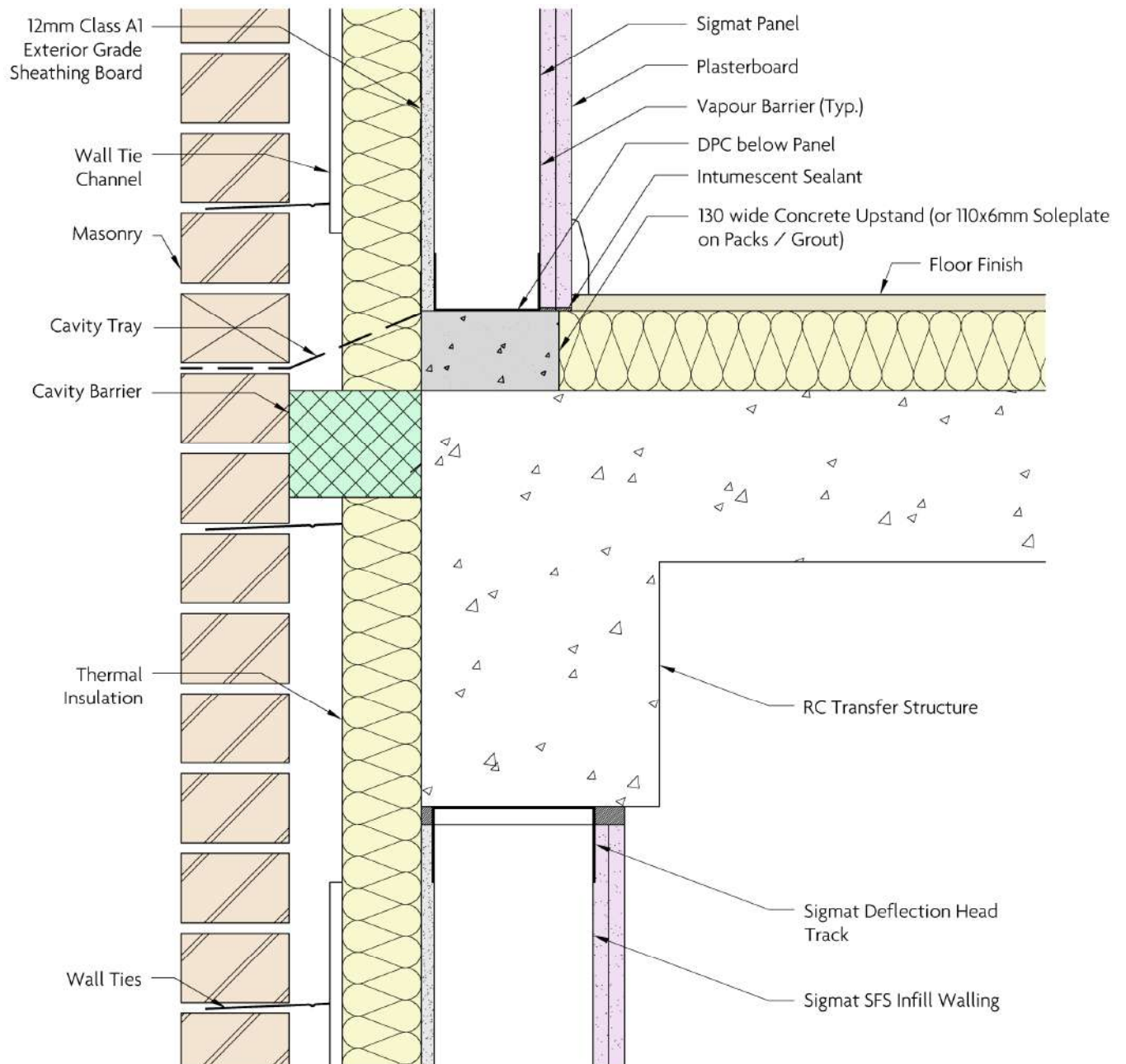
## SIG-01-6 SIGMAT PODIUM - MASONRY CLAD WALL





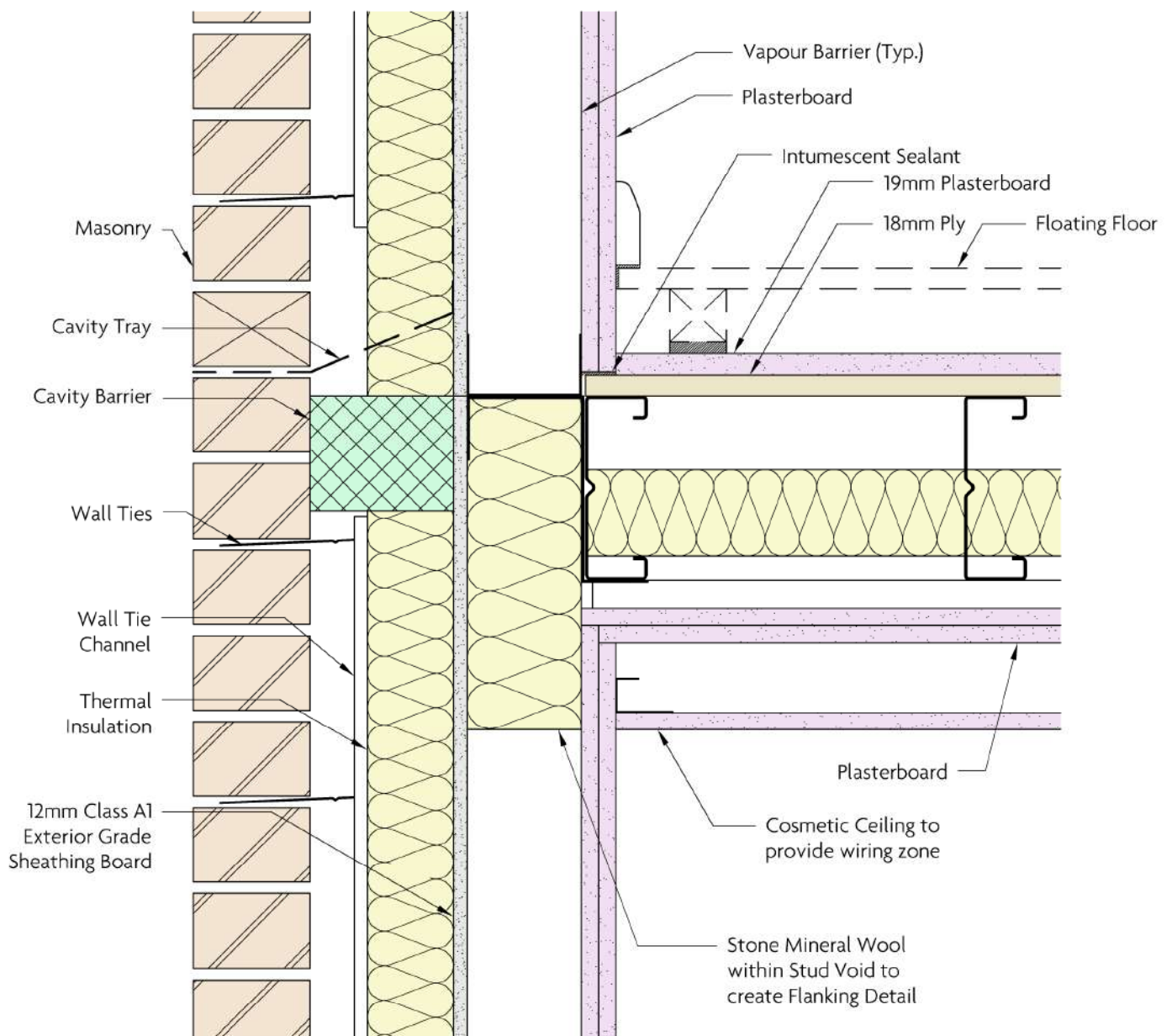
## SIG-01-7

### RC (BY OTHERS) PODIUM - MASONRY CLAD



## SIG-01-8

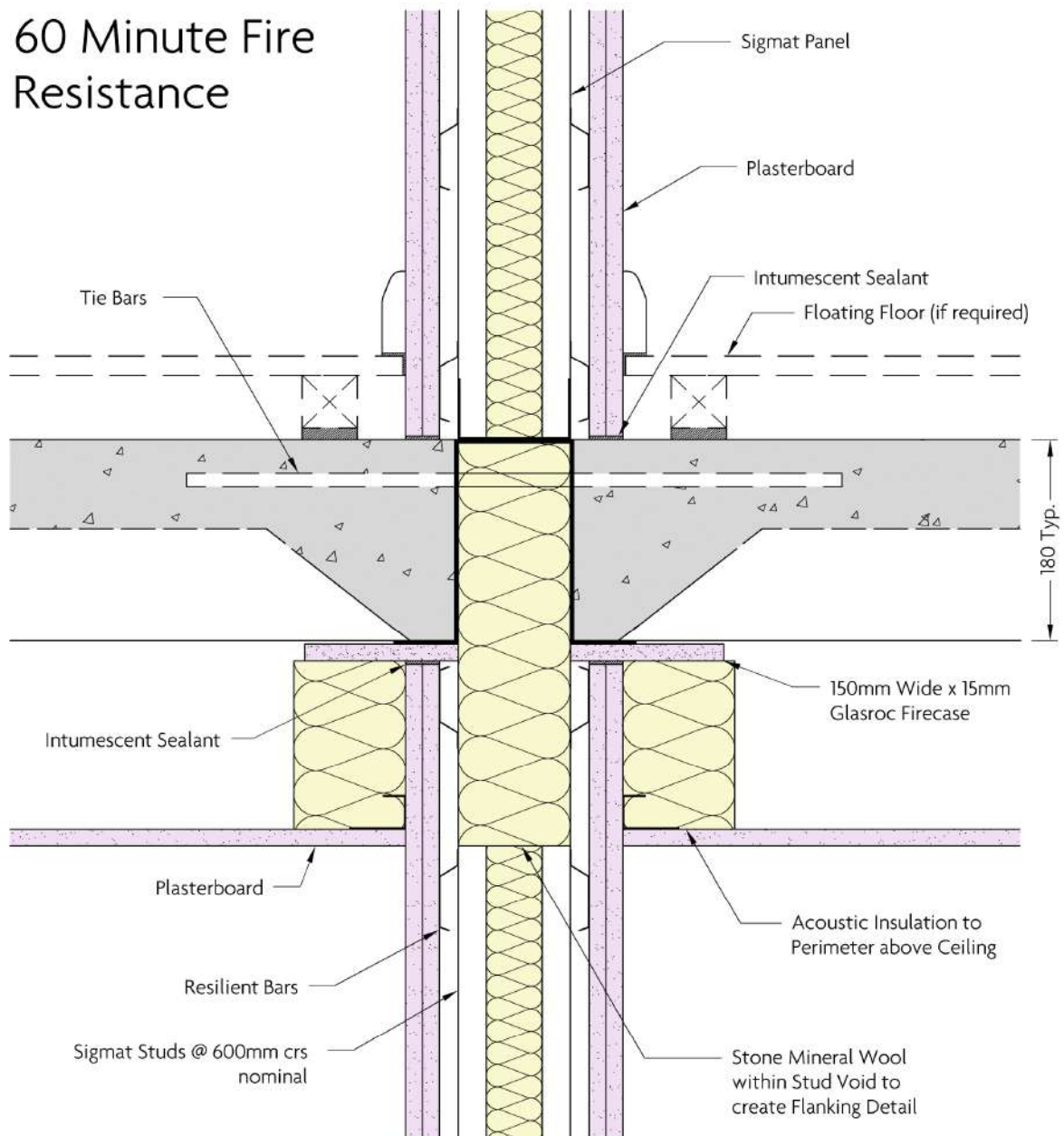
### FLOOR JUNCTION DETAIL - MASONRY CLAD





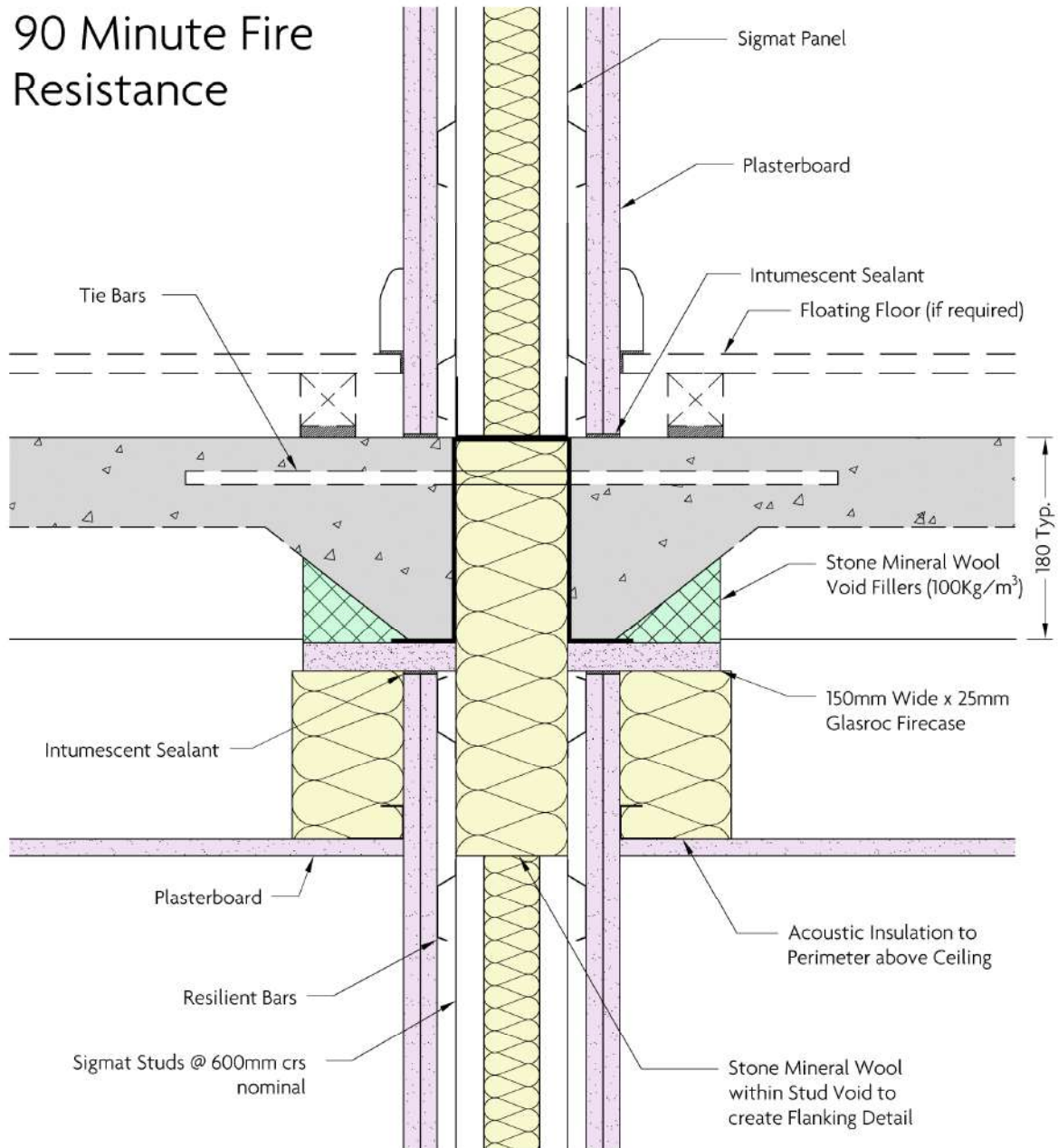
## SIG-02-1 SEPARATING FLOOR - WALL JUNCTION

60 Minute Fire  
Resistance



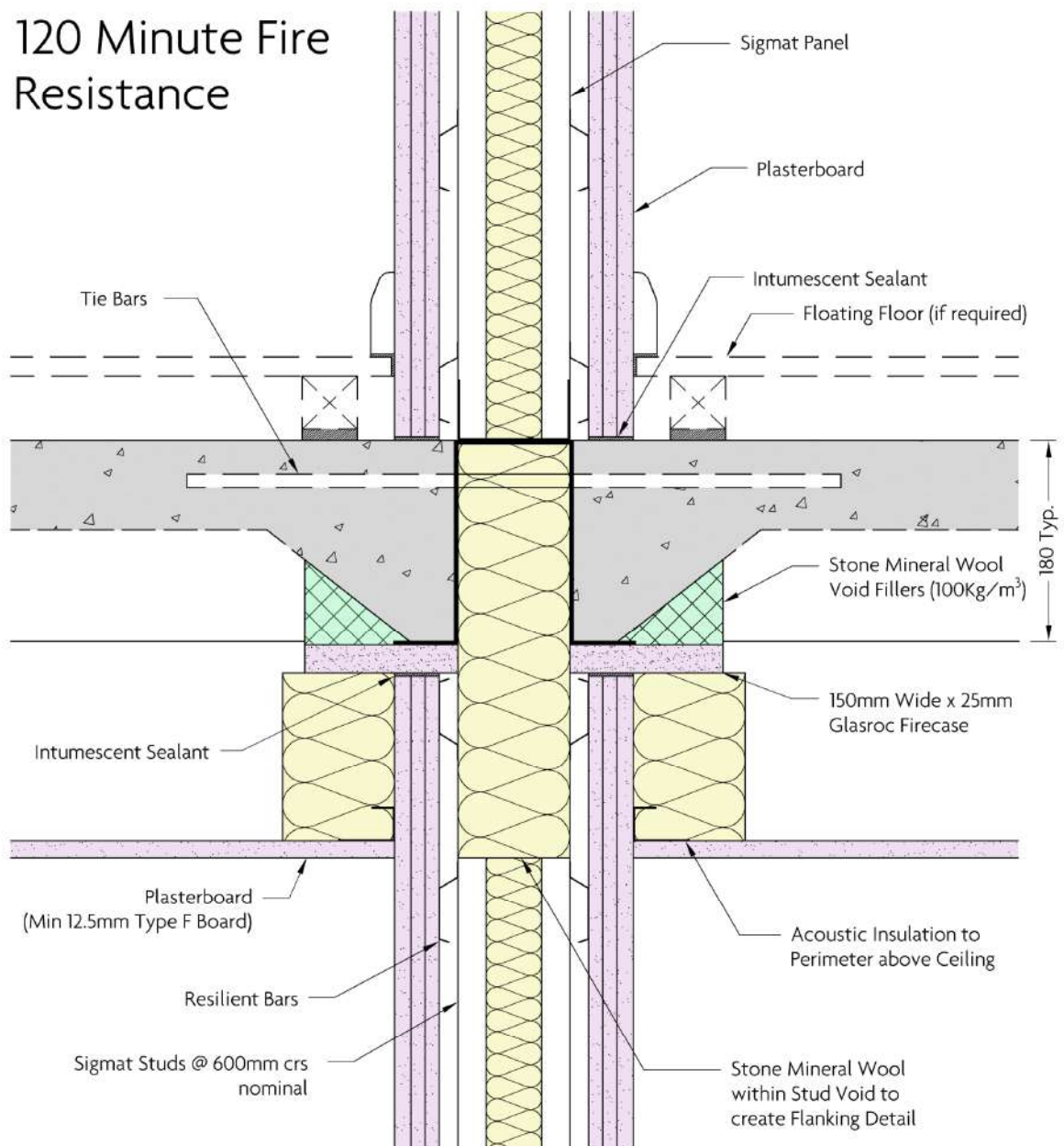
## SIG-02-2 SEPARATING FLOOR - WALL JUNCTION

90 Minute Fire  
Resistance

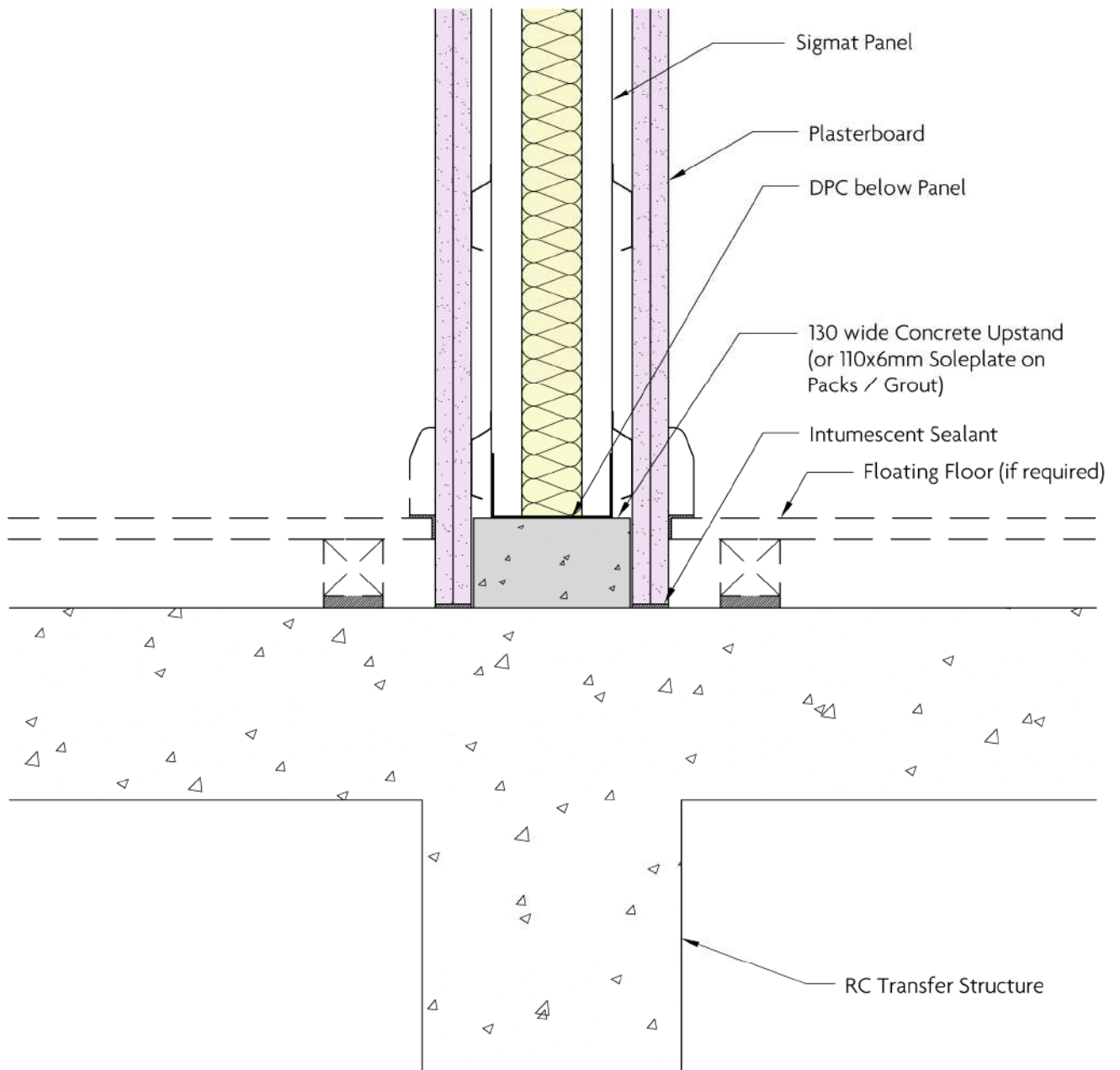


## SIG-02-3

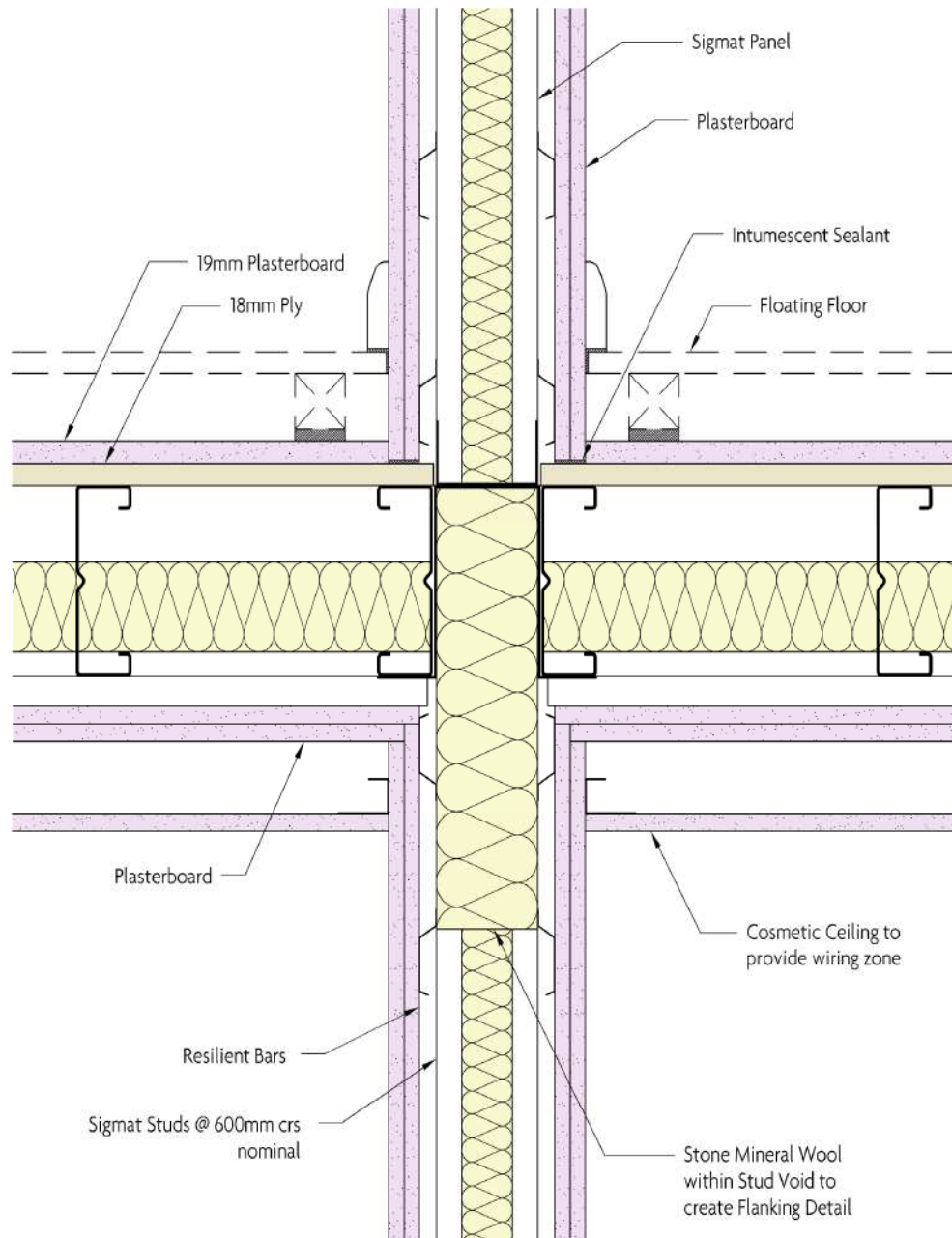
### SEPARATING FLOOR - WALL JUNCTION



## SIG-02-4 RC (BY OTHERS) PODIUM - WALL JUNCTION

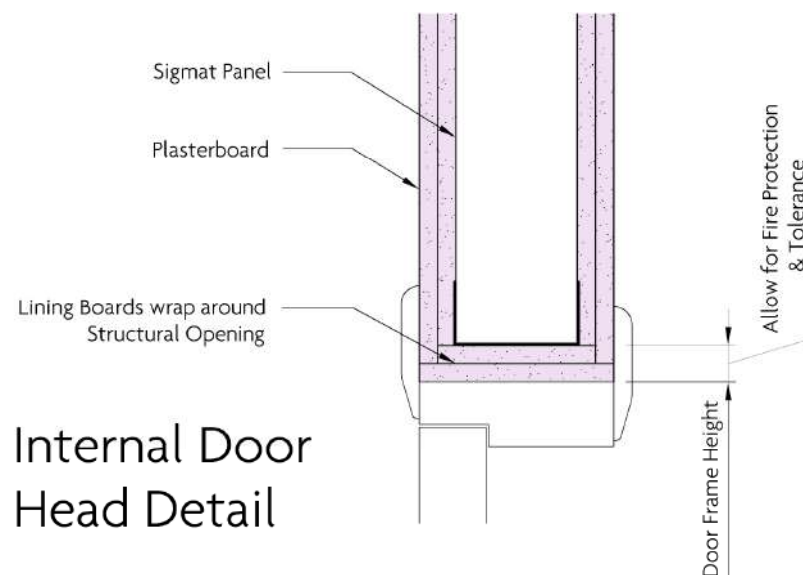
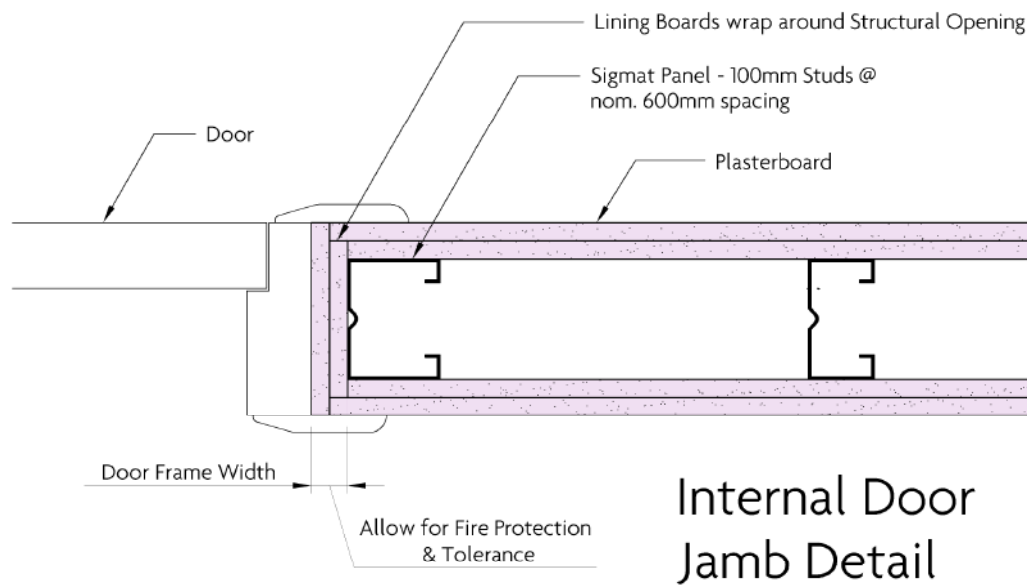


## SIG-02-5 SEPARATING FLOOR - WALL JUNCTION



## SIG-02-6

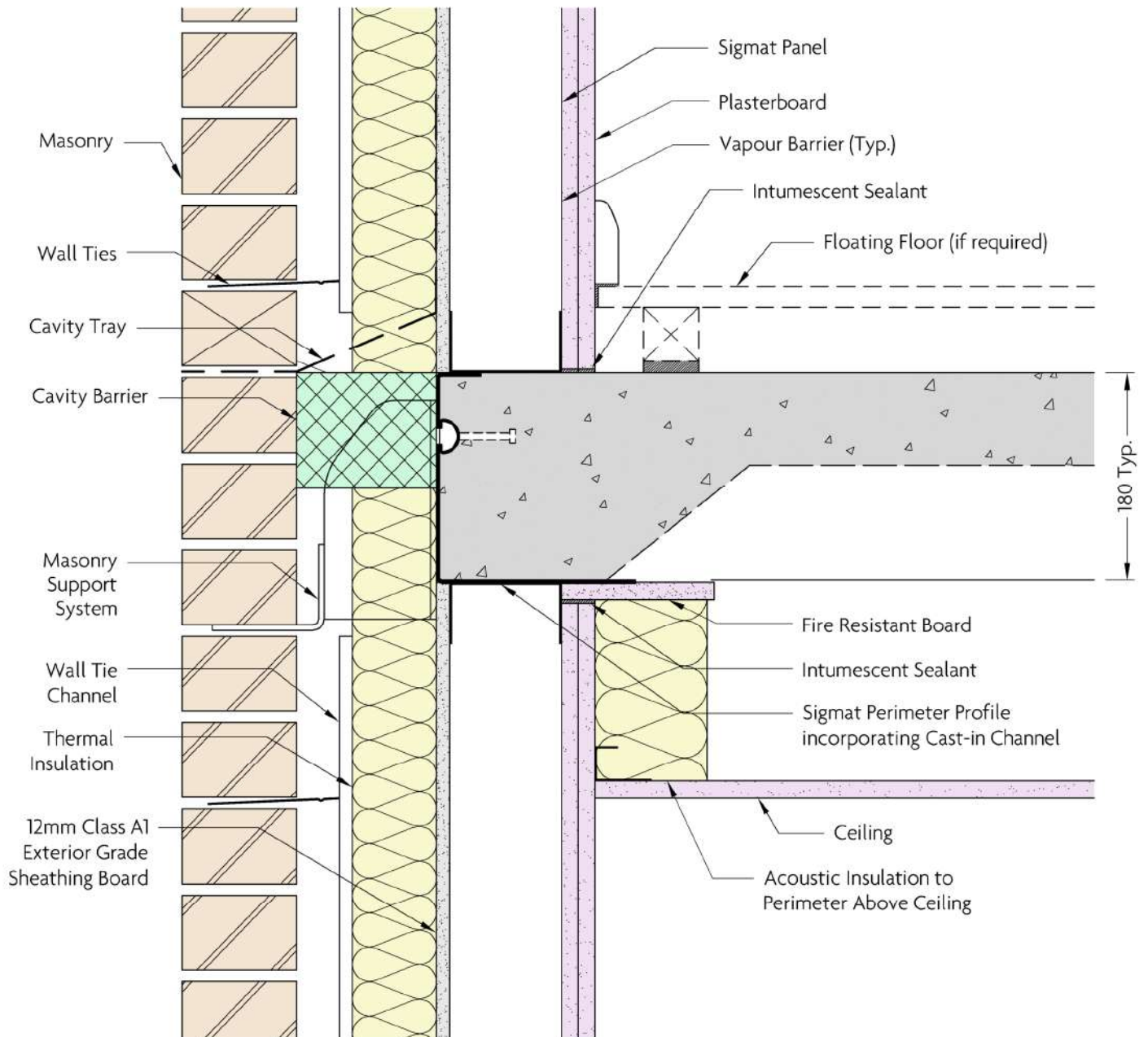
### INTERNAL DOOR HEAD & JAMB DETAILS





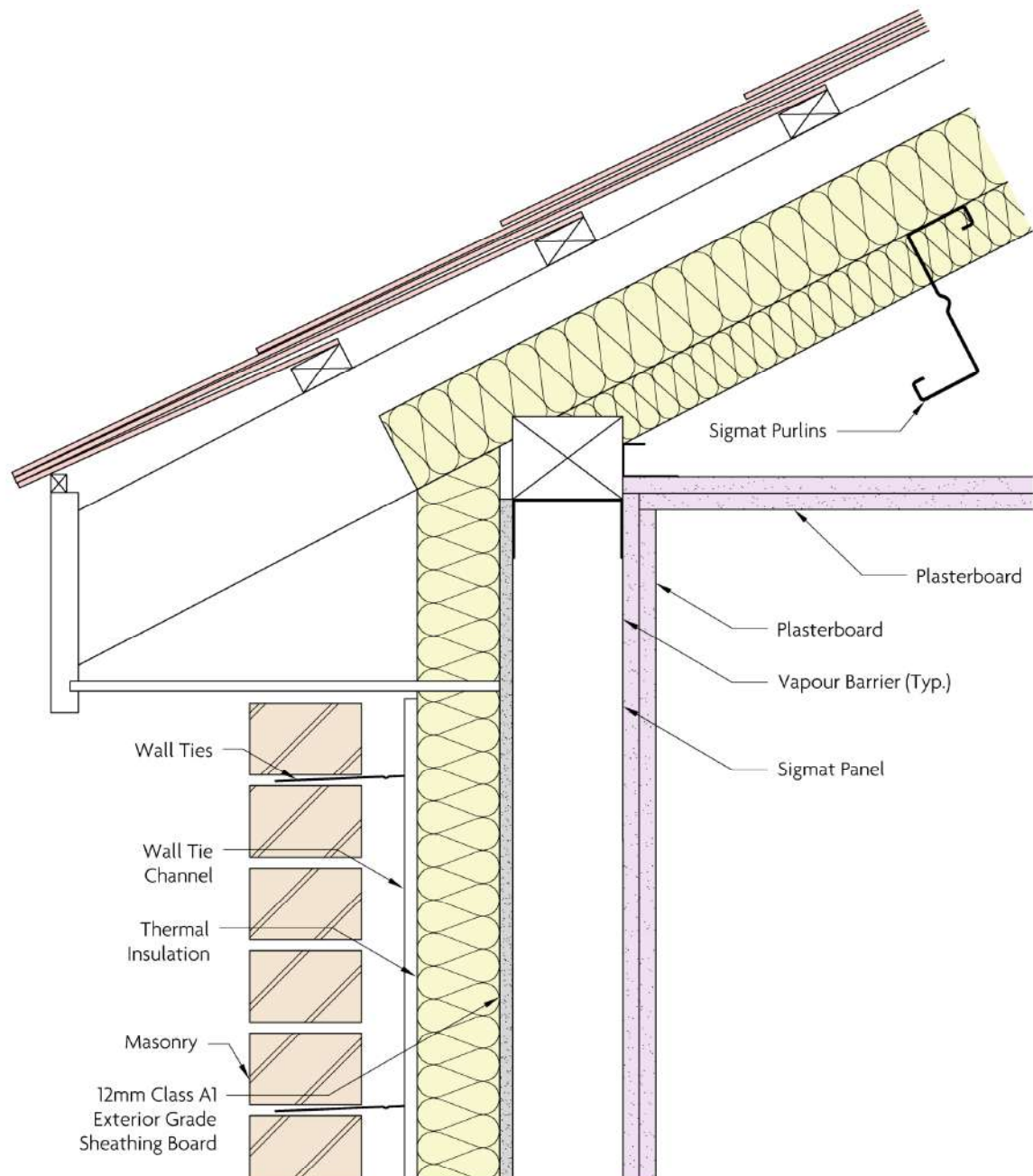
## SIG-03-1

### FLOOR EDGE DETAIL - MASONRY SUPPORT

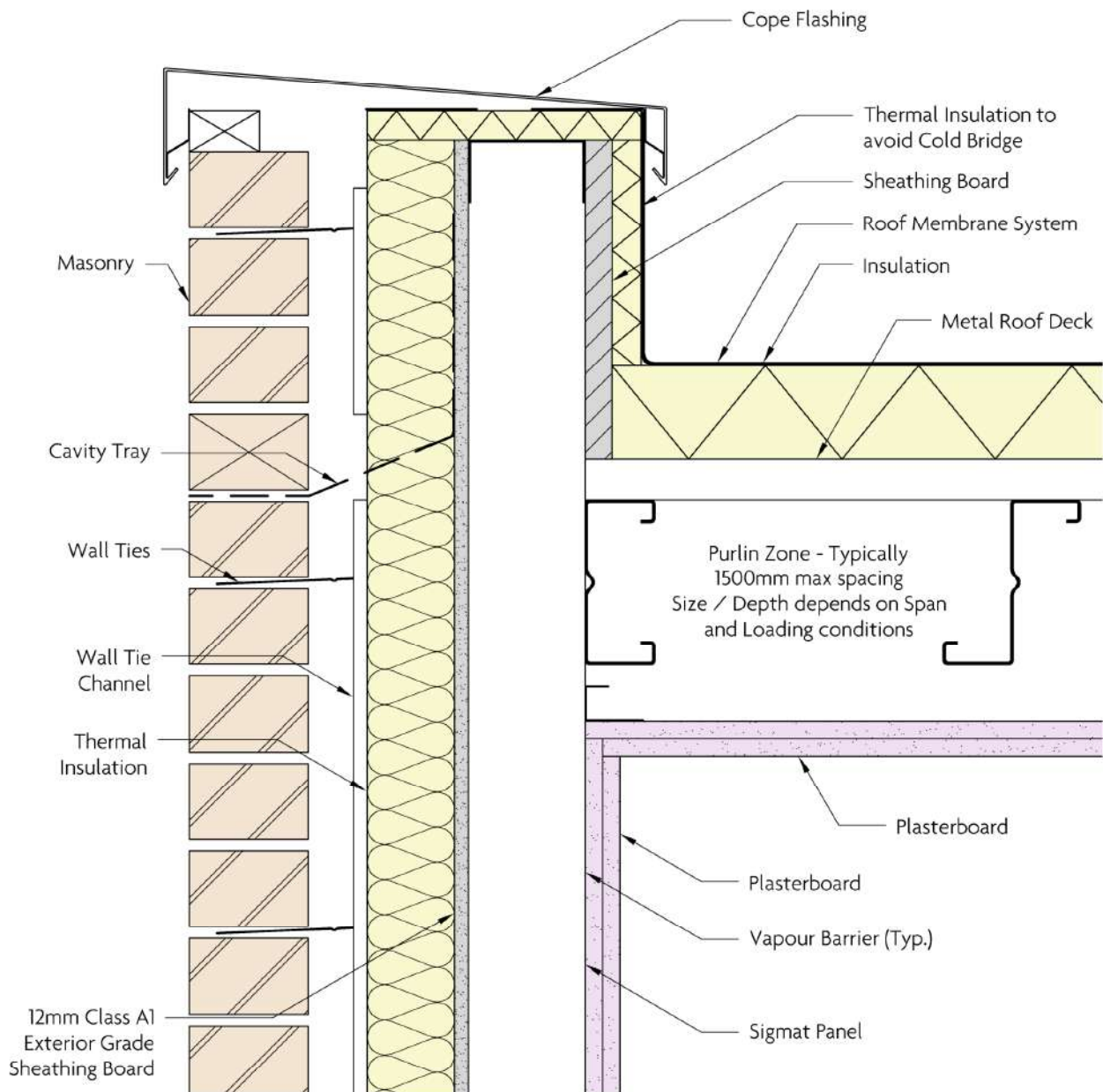


## SIG-04-1

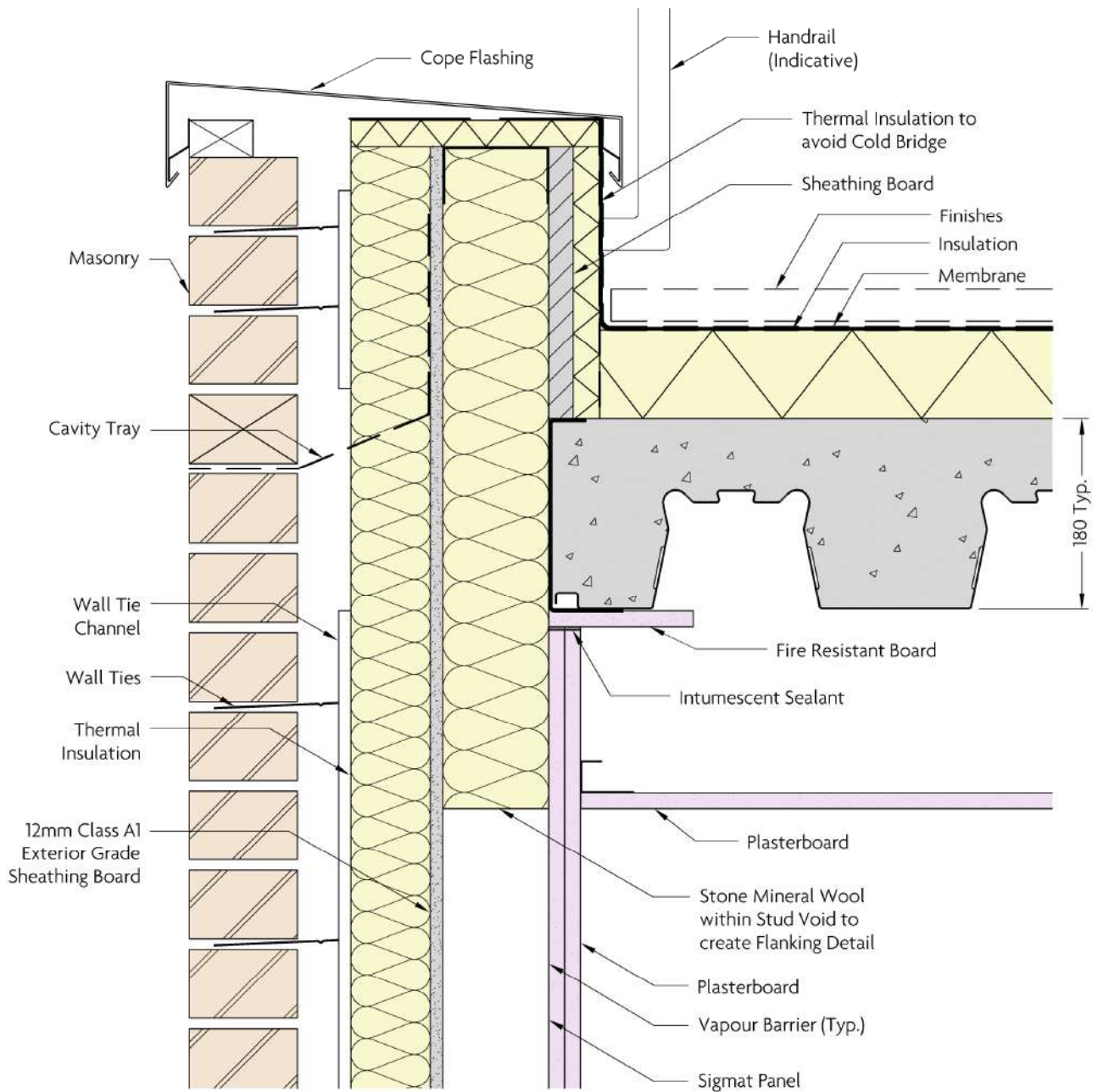
### PITCHED ROOF - MASONRY CLAD EAVES DETAIL



## SIG-04-2 PURLIN ROOF

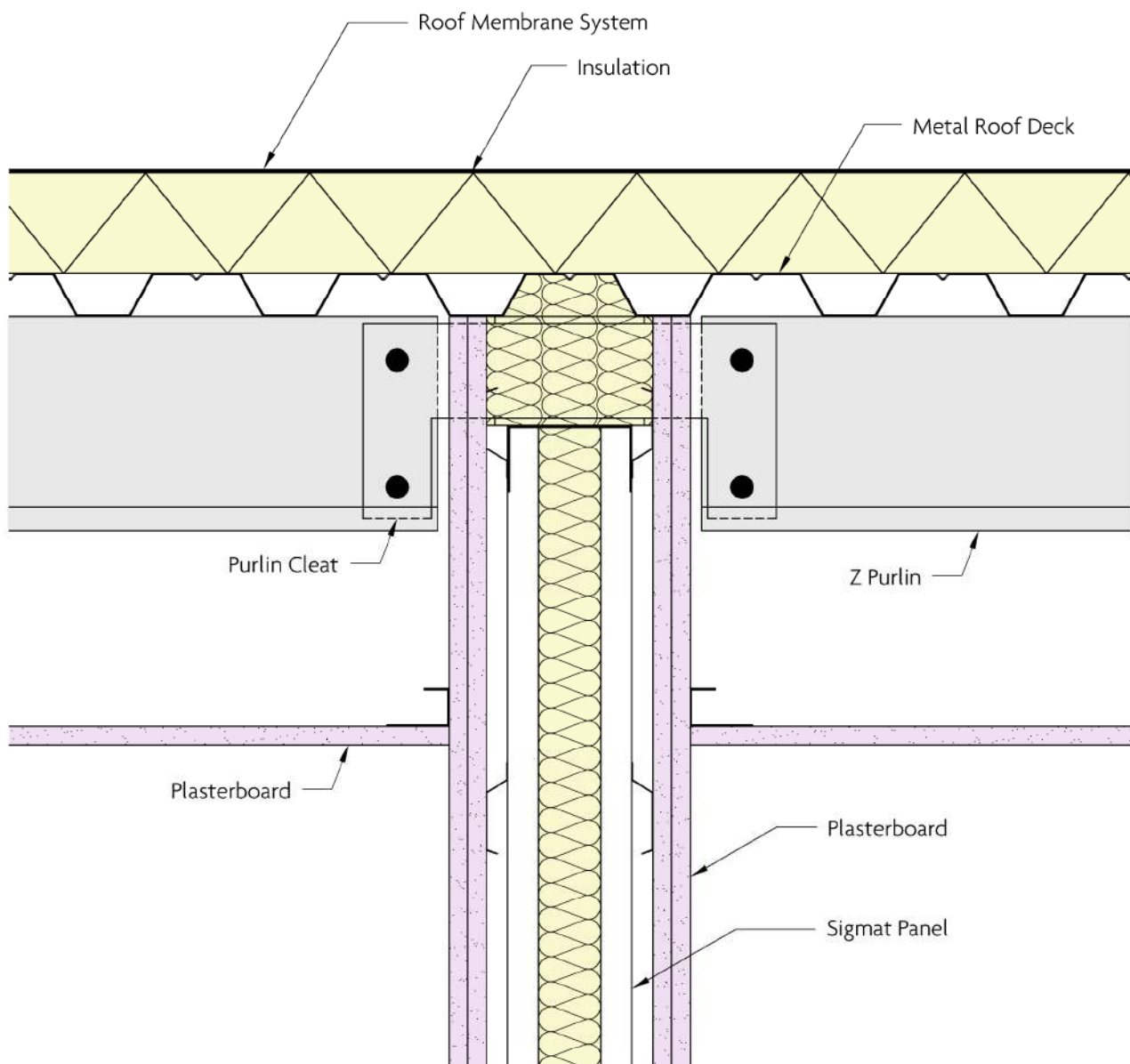


## SIG-04-3 TERRACE PERIMETER - MASONRY CLAD



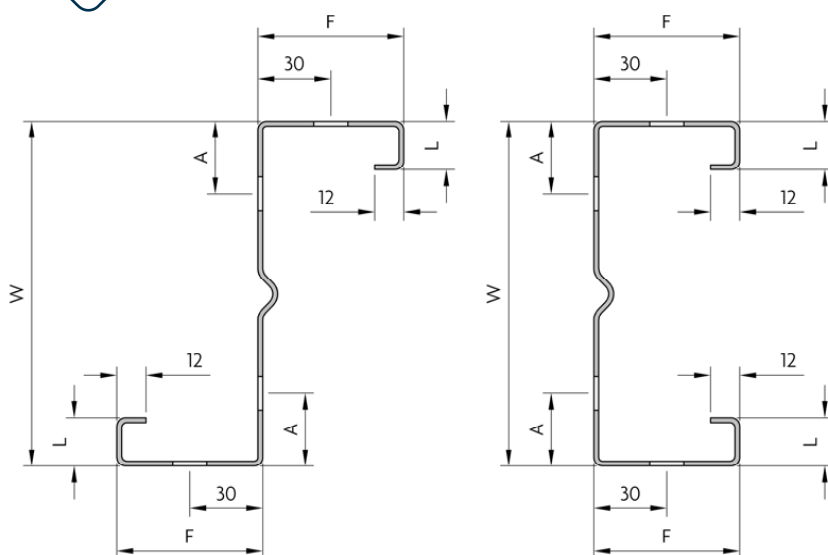
## SIG-04-4

### PURLIN ROOF - WALL JUNCTION





# PURLINS DATASHEET MODEL



Sigmat Zed and Cee Building Shell Profiles are all manufactured from pre-hot dipped Galvanised Steel Grade S450GD+Z G275 conforming to BS EN 10346

Holes can be formed at positions indicated in the profile, & at any position along the length.

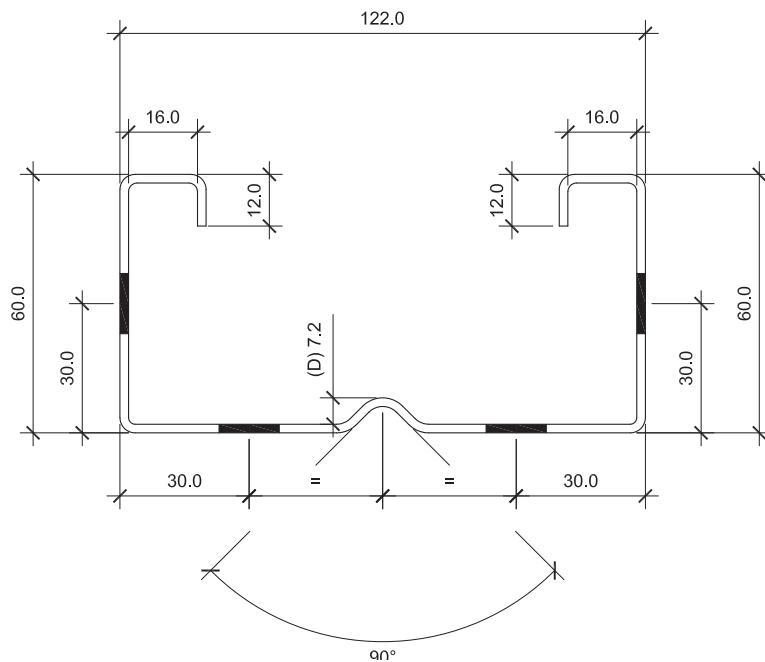
Standard hole size 13.4mm.  
15mm & 22mm holes also available.

Section Zed	Reference Cee	Weight Kg/m	Area cm <sup>2</sup>	W mm	F mm	L mm	A mm	Gauge mm
122SZ13	122SC13	3.00	3.70	122	60	18.6	30	1.3
122SZ16	122SC16	3.65	4.54	122	60	19.2	30	1.6
122SZ20	122SC20	4.54	5.66	122	60	20.0	30	2.0
142SZ13	142SC13	3.20	3.96	142	60	18.6	30	1.3
142SZ16	142SC16	3.91	4.85	142	60	19.2	30	1.6
142SZ20	142SC20	4.85	6.06	142	60	20.0	30	2.0
172SZ13	172SC13	3.51	4.33	172	60	18.6	40	1.3
172SZ16	172SC16	4.78	5.32	172	60	19.2	40	1.6
172SZ20	172SC20	5.32	6.64	172	60	20.0	40	2.0
202SZ16	202SC16	4.66	5.79	202	60	19.2	40	1.6
202SZ20	202SC20	5.79	7.23	202	60	20.0	40	2.0
202SZ23	202SC23	6.63	8.29	202	60	20.6	40	2.3
232SZ16	232SC16	5.04	6.26	232	60	19.2	40	1.6
232SZ20	232SC20	6.26	7.82	232	60	20.0	40	2.0
232SZ23	232SC23	7.17	8.97	232	60	20.6	40	2.3
262SZ20	262SC20	7.21	9.00	262	75	20.0	50	2.0
262SZ23	262SC23	8.25	10.33	262	75	20.6	50	2.3
262SZ29	262SC29	10.29	12.93	262	75	21.8	50	2.9
302SZ20	302SC20	7.83	9.78	302	75	20.0	50	2.0
302SZ23	302SC23	8.97	11.23	302	75	20.6	50	2.3
302SZ29	302SC29	11.20	14.07	302	75	21.8	50	2.9
342SZ23	342SC23	9.67	12.14	342	75	20.6	50	2.3
342SZ29	342SC29	12.11	15.22	342	75	21.8	50	2.9
382SZ23	382SC23	10.42	13.04	382	75	20.6	50	2.3
382SZ29	382SC29	13.02	16.36	382	75	21.8	50	2.9
432SZ23	432SC23	14.16	17.79	432	75	21.8	50	2.9



# 'C' SECTIONS - STEEL PROFILES

## 122mm



### MATERIAL & TOLERANCES

Gauge to Conform to BS EN 10143 - 'Special tolerances'

Material to Conform to BS EN 10346

SECTION	GAUGE	STRIP WIDTH	GRADE	COATING
122SC13	1.3	294	S450GD+Z	G275
122SC16	1.6	291	S450GD+Z	G275
122SC20	2.0	289	S450GD+Z	G275

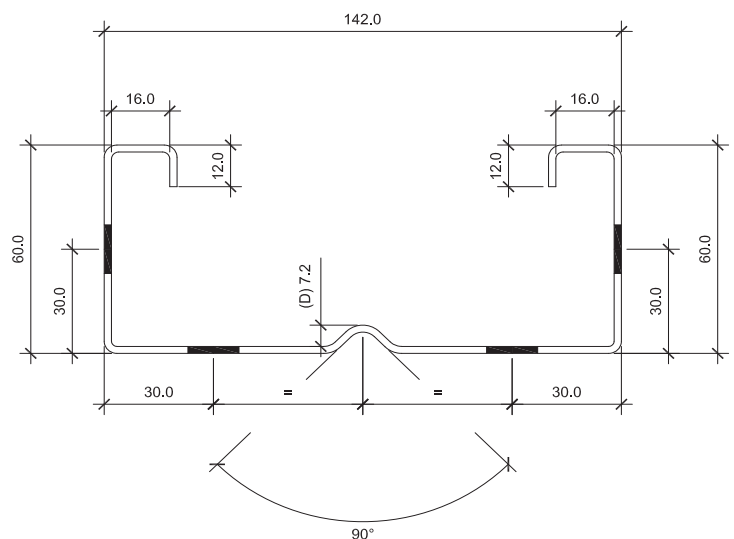
## 142mm

### MATERIAL & TOLERANCES

Gauge to Conform to BS EN 10143 - 'Special tolerances'

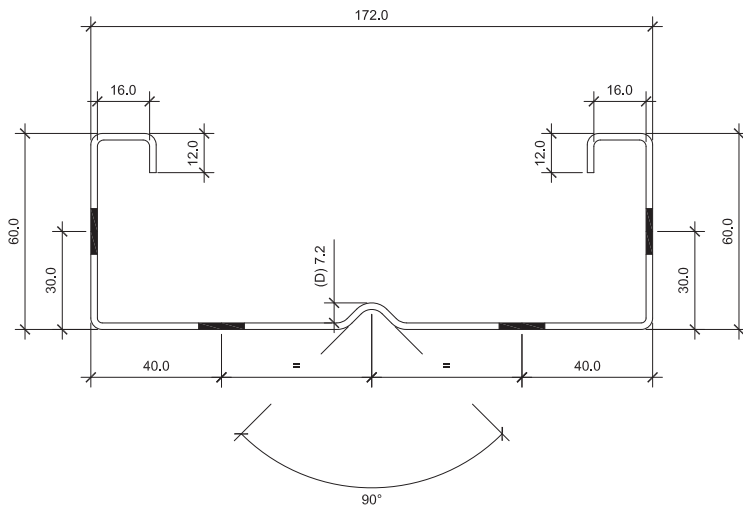
Material to Conform to BS EN 10346

SECTION	GAUGE	STRIP WIDTH	GRADE	COATING
142SC13	1.3	314	S450GD+Z	G275
142SC16	1.6	311	S450GD+Z	G275
142SC20	2.0	309	S450GD+Z	G275



# 'C' SECTIONS - STEEL PROFILES

## 172mm



### MATERIAL & TOLERANCES

Gauge to Conform to BS EN 10143 - 'Special tolerances'

Material to Conform to BS EN 10346

SECTION	GAUGE	STRIP WIDTH	GRADE	COATING
172SC13	1.3	344	S450GD+Z	G275
172SC16	1.6	341	S450GD+Z	G275
172SC20	2.0	339	S450GD+Z	G275

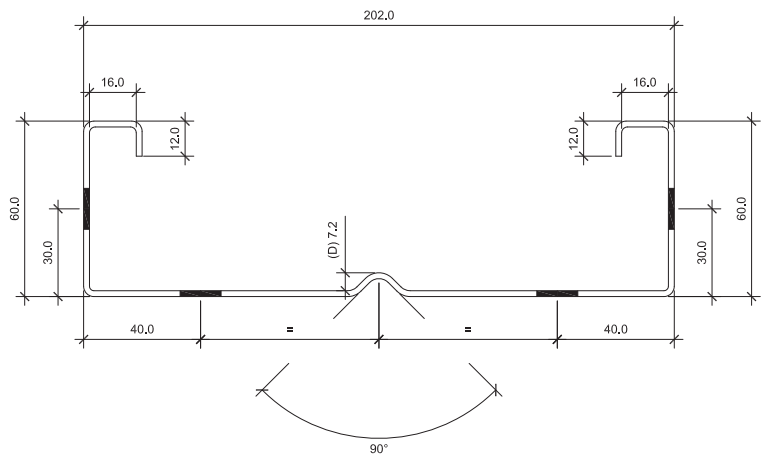
## 202mm

### MATERIAL & TOLERANCES

Gauge to Conform to BS EN 10143 - 'Special tolerances'

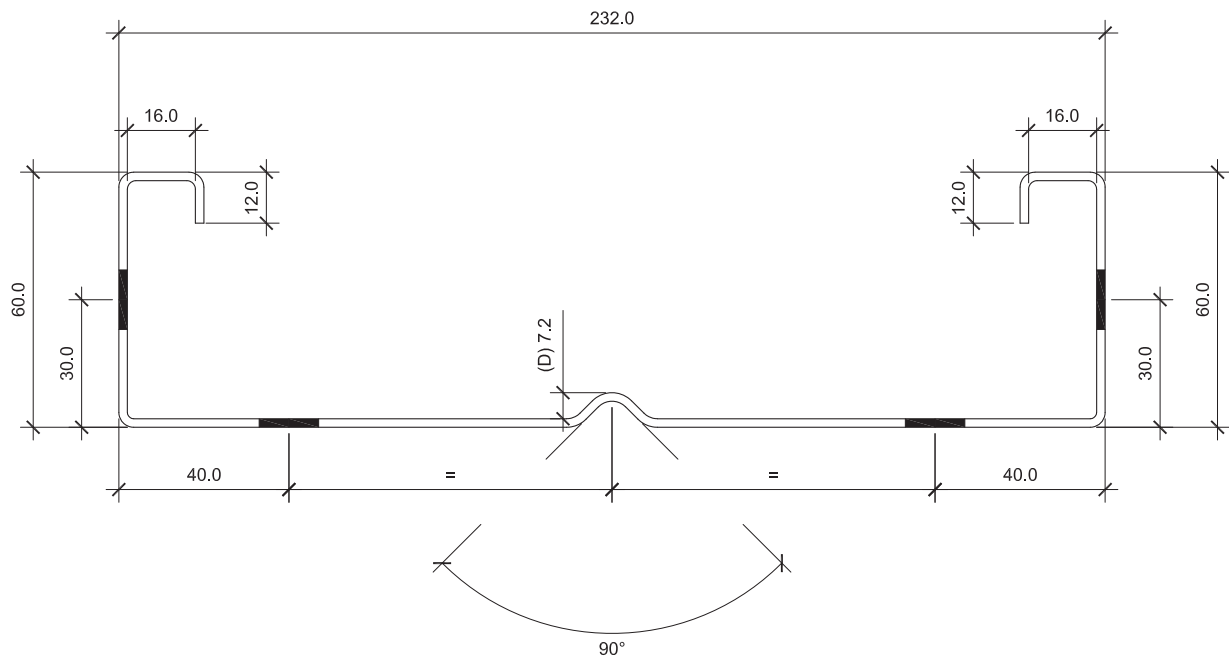
Material to Conform to BS EN 10346

SECTION	GAUGE	STRIP WIDTH	GRADE	COATING
202SC20	1.6	371	S450GD+Z	G275
202SC20	2.0	369	S450GD+Z	G275
202SC23	2.3	367	S450GD+Z	G275



# 'C' SECTIONS - STEEL PROFILES

232mm



## MATERIAL & TOLERANCES

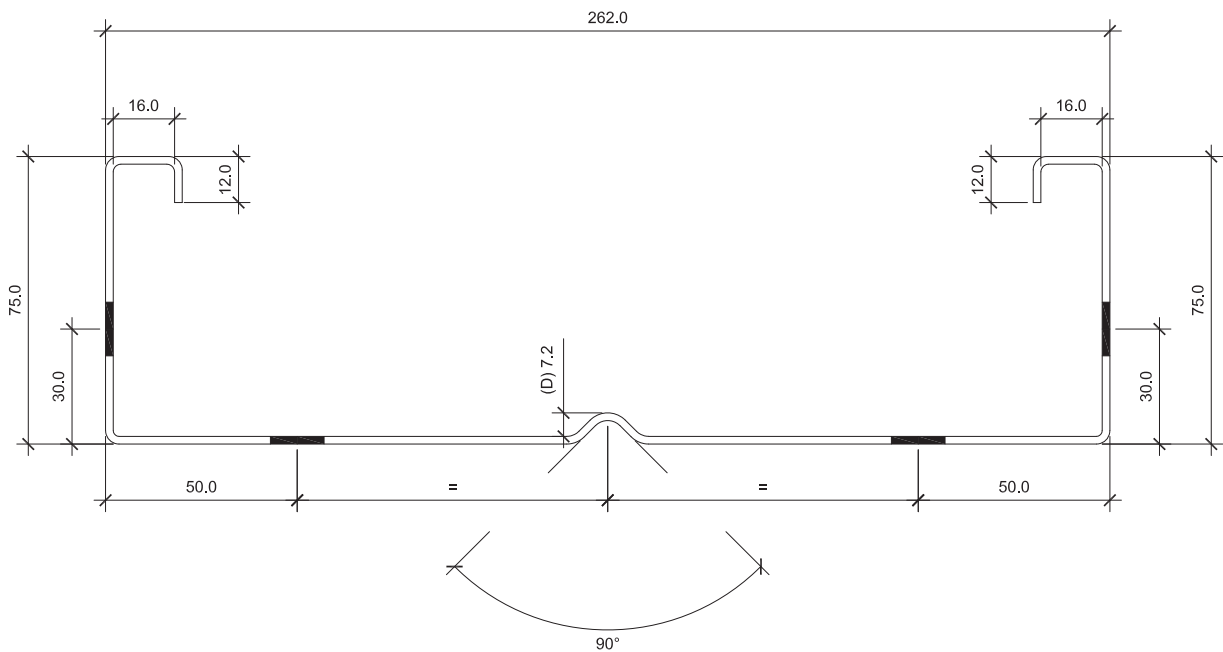
Gauge to Conform to BS EN 10143 - 'Special tolerances'

Material to Conform to BS EN 10346

SECTION	GAUGE	STRIP WIDTH	GRADE	COATING
232SC20	1.6	401	S450GD+Z	G275
232SC20	2.0	399	S450GD+Z	G275
232SC23	2.3	397	S450GD+Z	G275

## 'C' SECTIONS - STEEL PROFILES

262mm



## MATERIAL & TOLERANCES

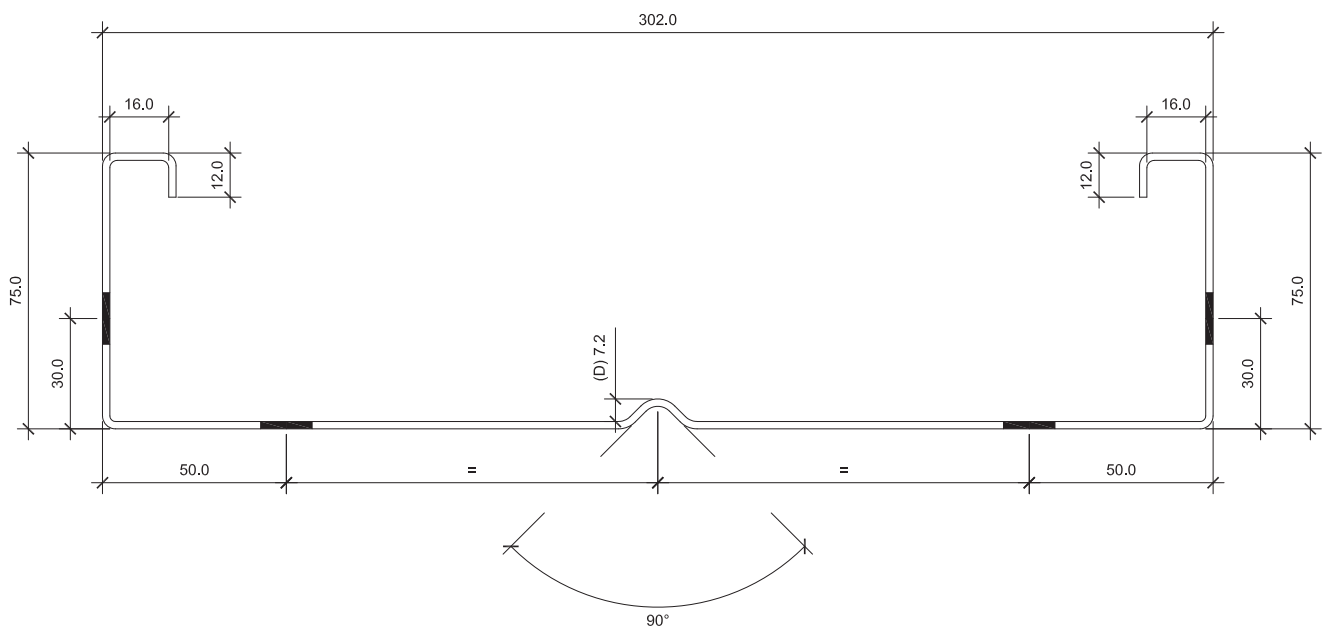
### Gauge to Conform to BS EN 10143 - 'Special tolerances'

Material to Conform to BS EN 10346

SECTION	GAUGE	STRIP WIDTH	GRADE	COATING
262SC23	2.0	459	S450GD+Z	G275
262SC23	2.3	457	S450GD+Z	G275
262SC29	2.9	452	S450GD+Z	G275

# 'C' SECTIONS - STEEL PROFILES

302mm



## MATERIAL & TOLERANCES

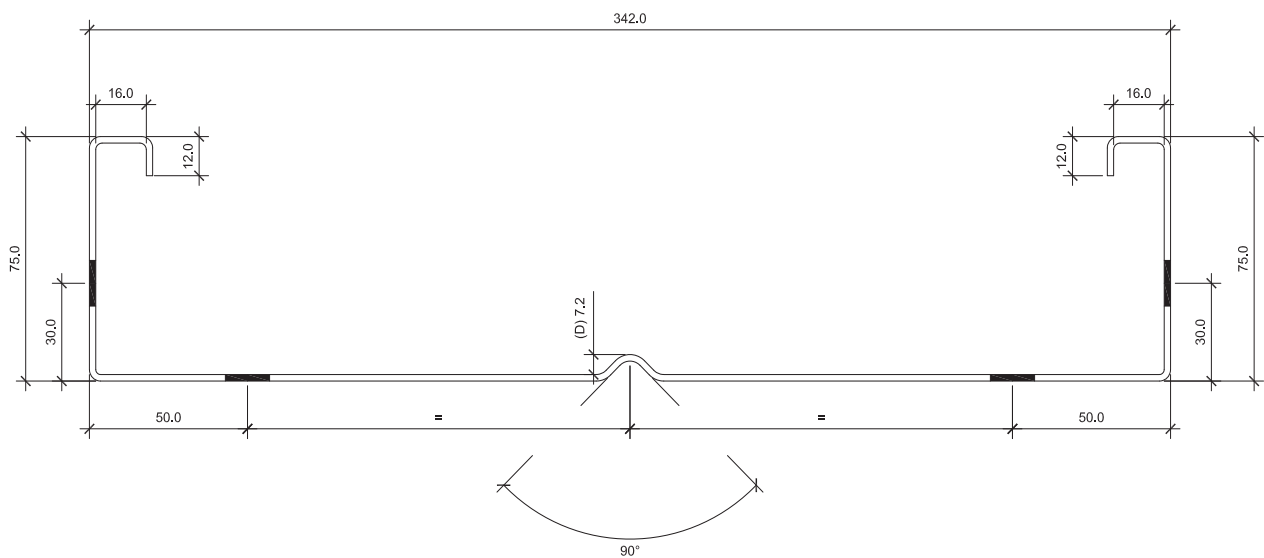
Gauge to Conform to BS EN 10143 - 'Special tolerances'

Material to Conform to BS EN 10346

SECTION	GAUGE	STRIP WIDTH	GRADE	COATING
302SC23	2.0	499	S450GD+Z	G275
302SC23	2.3	497	S450GD+Z	G275
302SC29	2.9	492	S450GD+Z	G275

## 'C' SECTIONS - STEEL PROFILES

342mm



## MATERIAL & TOLERANCES

## Gauge to Conform to BS EN 10143 - 'Special tolerances'

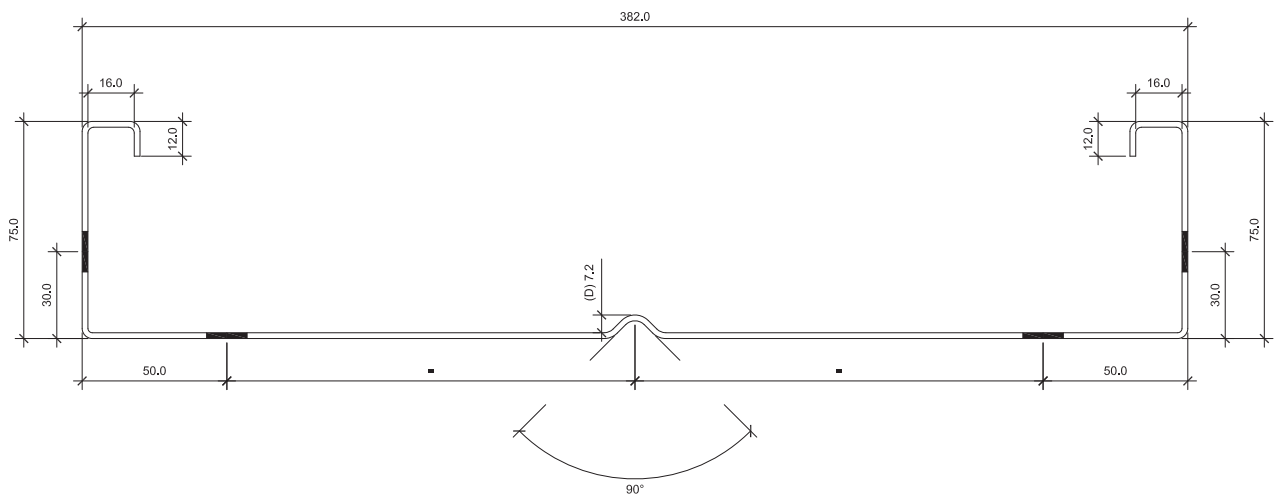
Material to Conform to BS EN 10346

SECTION	GAUGE	STRIP WIDTH	GRADE	COATING
342SC23	2.3	537	S450GD+Z	G275
342SC29	2.9	532	S450GD+Z	G275



# 'C' SECTIONS - STEEL PROFILES

## 382mm



### MATERIAL & TOLERANCES

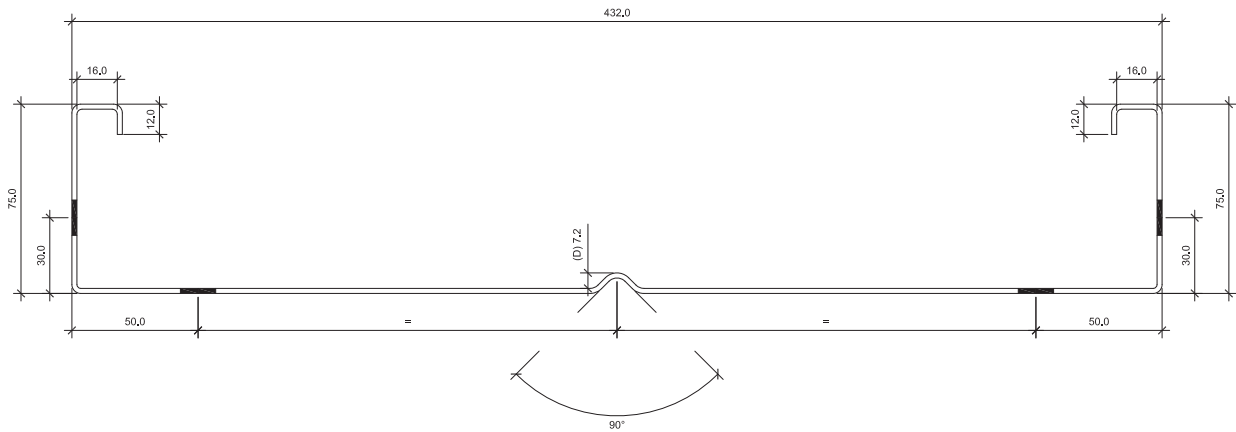
Gauge to Conform to BS EN 10143 - 'Special tolerances'

Material to Conform to BS EN 10346

SECTION	GAUGE	STRIP WIDTH	GRADE	COATING
382SC23	2.3	577	S450GD+Z	G275
382SC29	2.9	572	S450GD+Z	G275

# 'C' SECTIONS - STEEL PROFILES

432mm



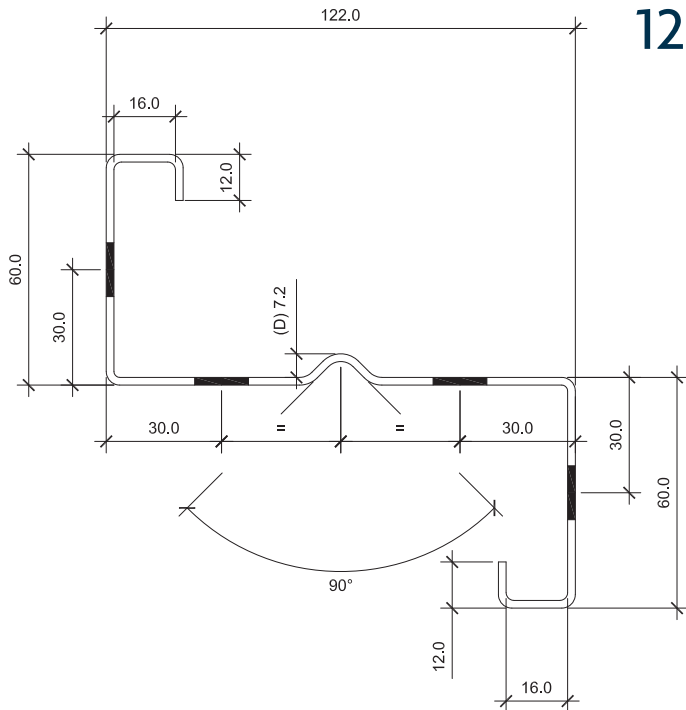
## MATERIAL & TOLERANCES

Gauge to Conform to BS EN 10143 - 'Special tolerances'

Material to Conform to BS EN 10346

SECTION	GAUGE	STRIP WIDTH	GRADE	COATING
432SC29	2.9	622	S450GD+Z	G275

# 'Z' SECTIONS - STEEL PROFILES



122mm

## MATERIAL & TOLERANCES

Gauge to Conform to BS EN 10143 - 'Special tolerances'

Material to Conform to BS EN 10346

SECTION	GAUGE	STRIP WIDTH	GRADE	COATING
122SZ13	1.3	294	S450GD+Z	G275
122SZ16	1.6	291	S450GD+Z	G275
122SZ20	2.0	289	S450GD+Z	G275

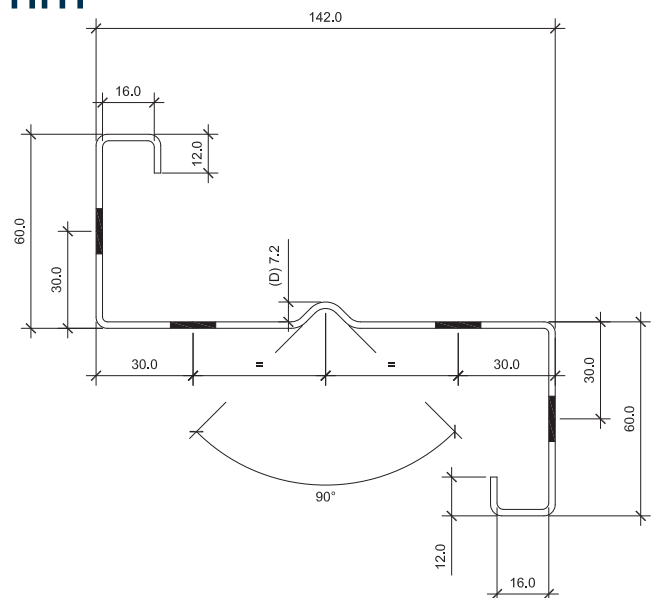
## MATERIAL & TOLERANCES

Gauge to Conform to BS EN 10143 - 'Special tolerances'

Material to Conform to BS EN 10346

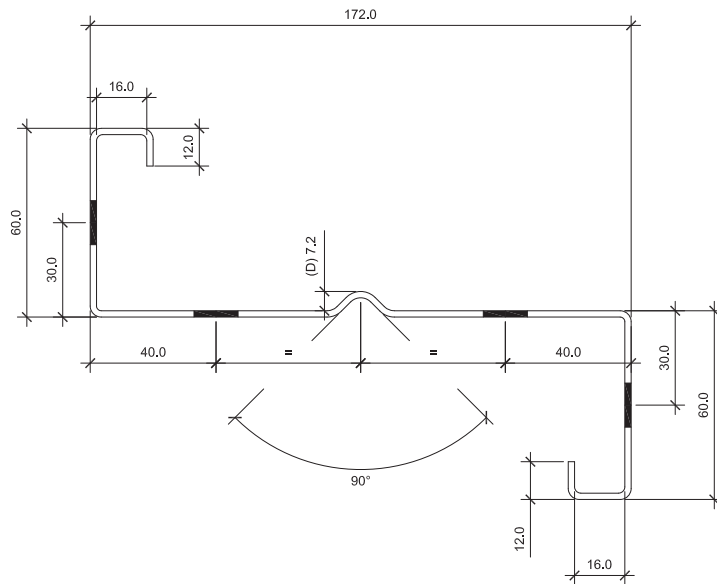
SECTION	GAUGE	STRIP WIDTH	GRADE	COATING
142SZ13	1.3	314	S450GD+Z	G275
142SZ16	1.6	311	S450GD+Z	G275
142SZ20	2.0	309	S450GD+Z	G275

142mm



# 'Z' SECTIONS - STEEL PROFILES

## 172mm



### MATERIAL & TOLERANCES

Gauge to Conform to BS EN 10143 - 'Special tolerances'

Material to Conform to BS EN 10346

SECTION	GAUGE	STRIP WIDTH	GRADE	COATING
172SZ13	1.3	344	S450GD+Z	G275
172SZ16	1.6	341	S450GD+Z	G275
172SZ20	2.0	339	S450GD+Z	G275

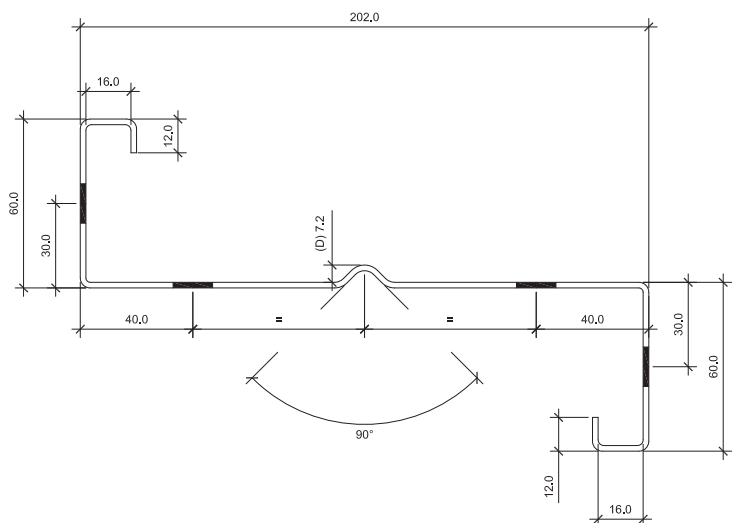
## 202mm

### MATERIAL & TOLERANCES

Gauge to Conform to BS EN 10143 - 'Special tolerances'

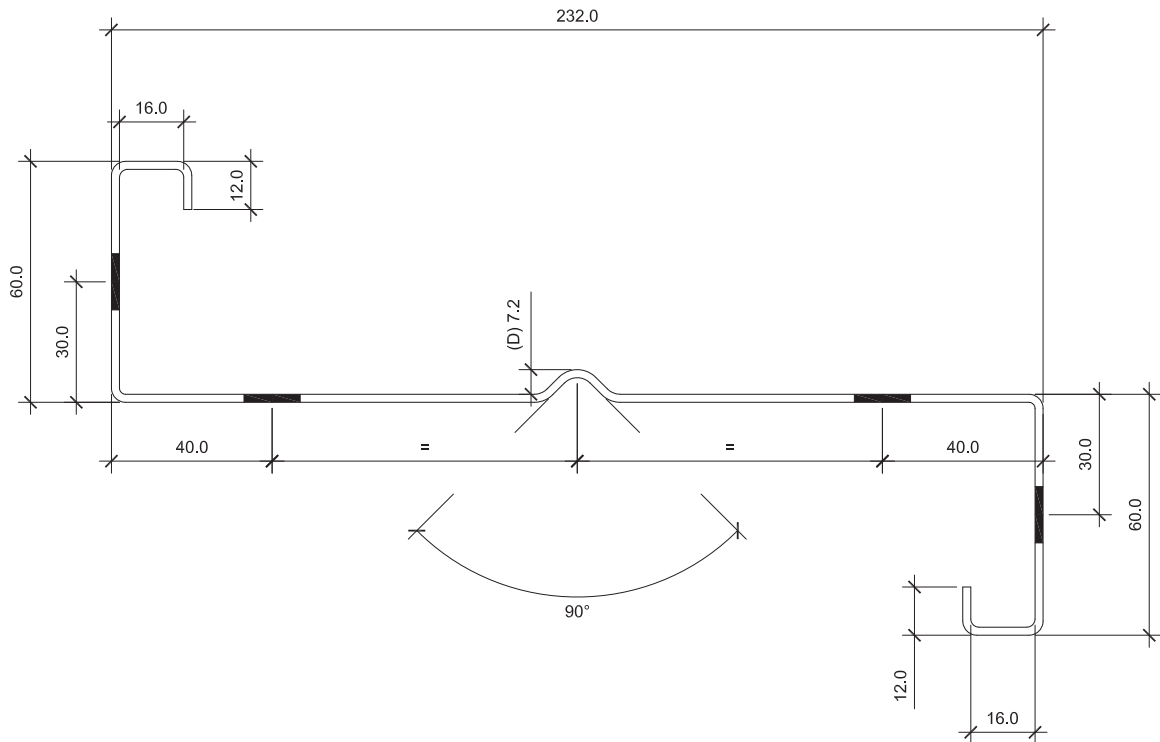
Material to Conform to BS EN 10346

SECTION	GAUGE	STRIP WIDTH	GRADE	COATING
202SZ16	1.6	371	S450GD+Z	G275
202SZ20	2.0	369	S450GD+Z	G275
202SZ23	2.3	367	S450GD+Z	G275



## 'Z' SECTIONS - STEEL PROFILES

232mm



## MATERIAL & TOLERANCES

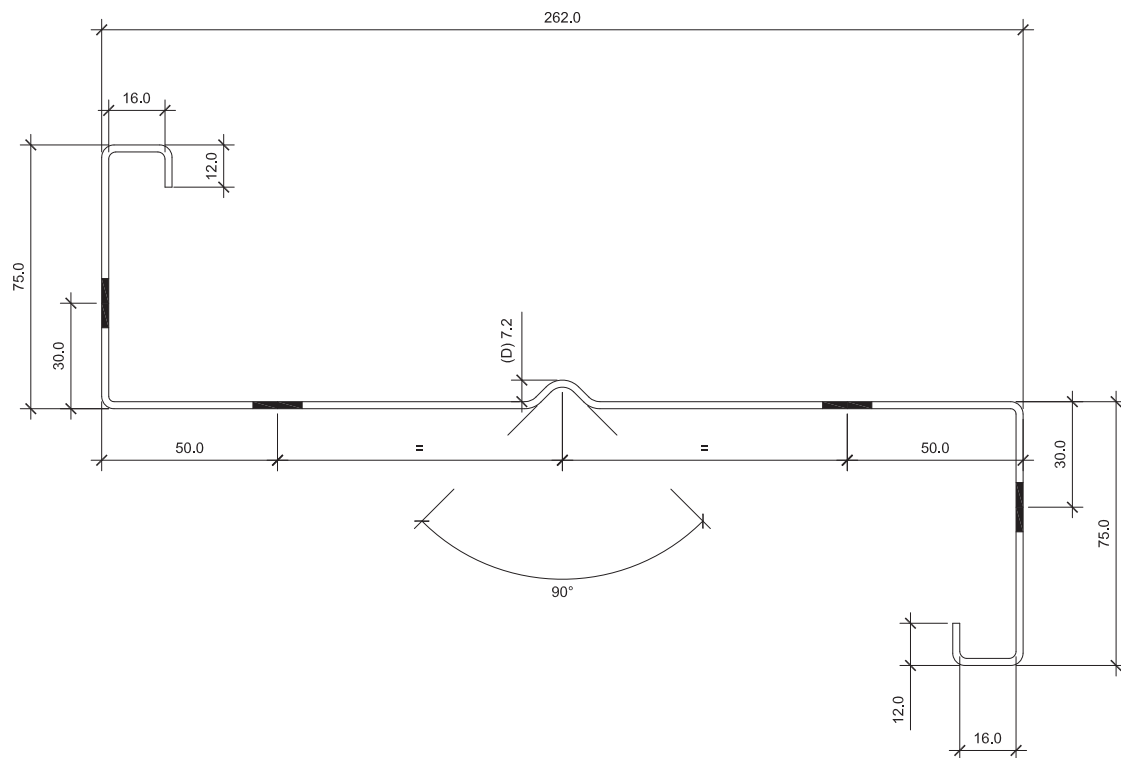
### Gauge to Conform to BS EN 10143 - 'Special tolerances'

Material to Conform to BS EN 10346

SECTION	GAUGE	STRIP WIDTH	GRADE	COATING
232SZ16	1.6	401	S450GD+Z	G275
232SZ20	2.0	399	S450GD+Z	G275
232SZ23	2.3	397	S450GD+Z	G275

# 'Z' SECTIONS - STEEL PROFILES

262mm



## MATERIAL & TOLERANCES

Gauge to Conform to BS EN 10143 - 'Special tolerances'

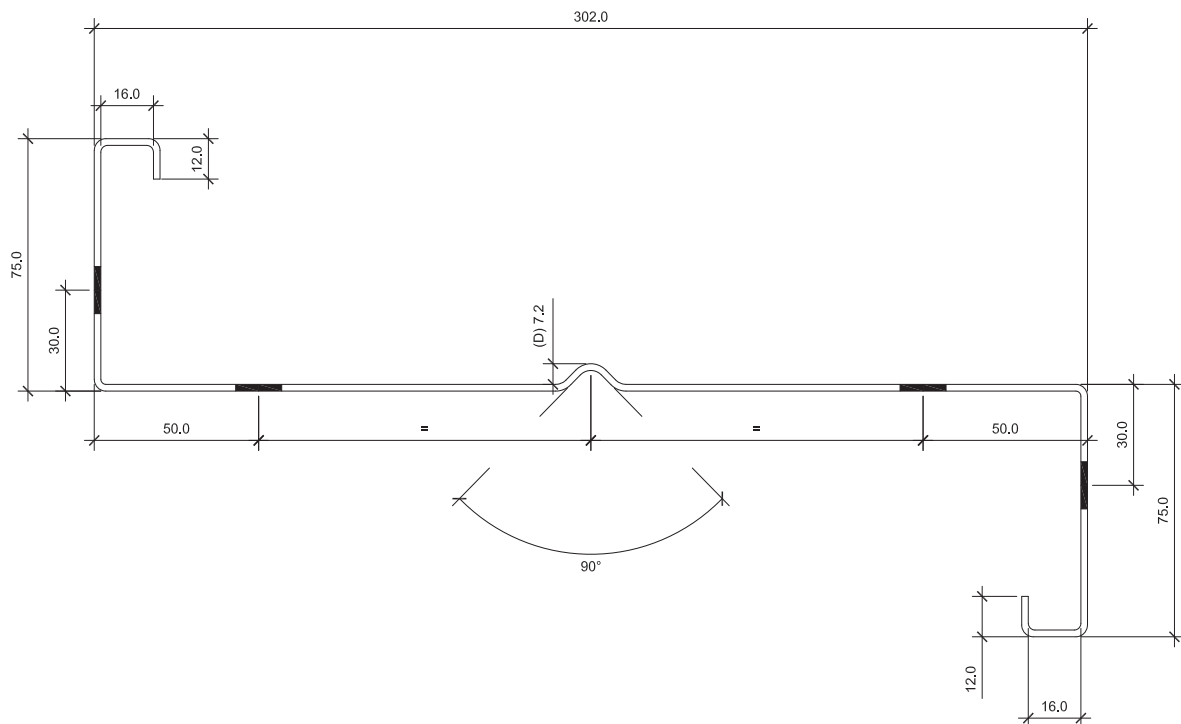
Material to Conform to BS EN 10346

SECTION	GAUGE	STRIP WIDTH	GRADE	COATING
262SZ20	2.0	459	S450GD+Z	G275
262SZ23	2.3	457	S450GD+Z	G275
262SZ29	2.9	452	S450GD+Z	G275



# 'Z' SECTIONS - STEEL PROFILES

302mm



## MATERIAL & TOLERANCES

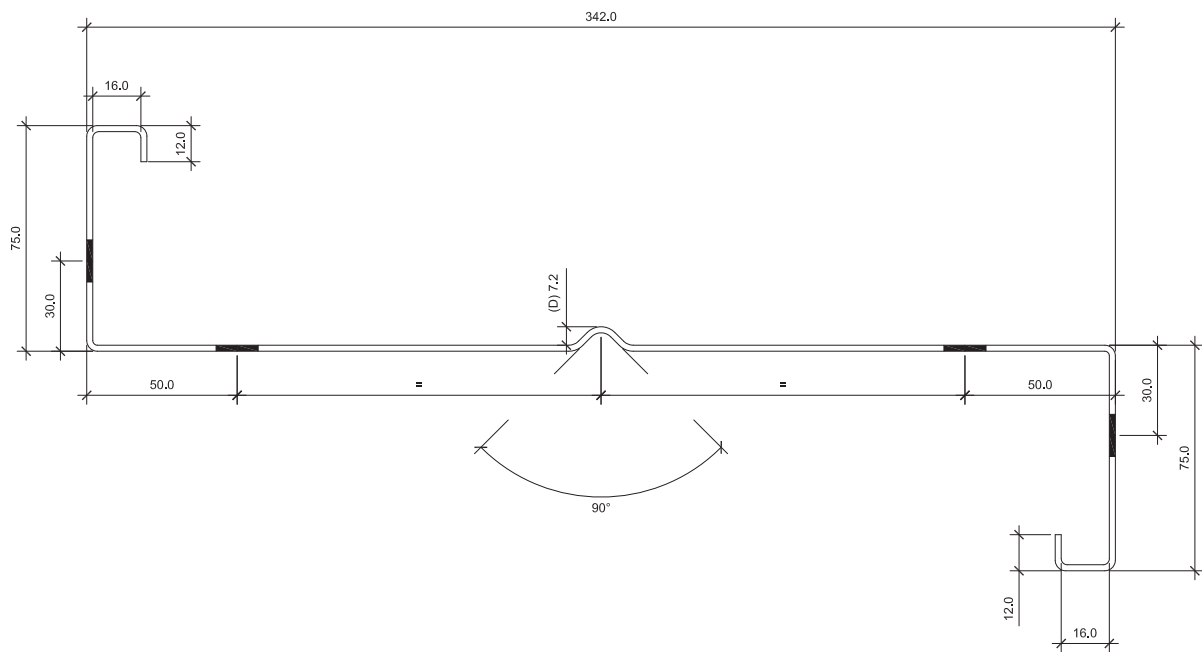
Gauge to Conform to BS EN 10143 - 'Special tolerances'

Material to Conform to BS EN 10346

SECTION	GAUGE	STRIP WIDTH	GRADE	COATING
302SZ20	2.0	499	S450GD+Z	G275
302SZ23	2.3	497	S450GD+Z	G275
302SZ29	2.9	492	S450GD+Z	G275

# 'Z' SECTIONS - STEEL PROFILES

342mm



## MATERIAL & TOLERANCES

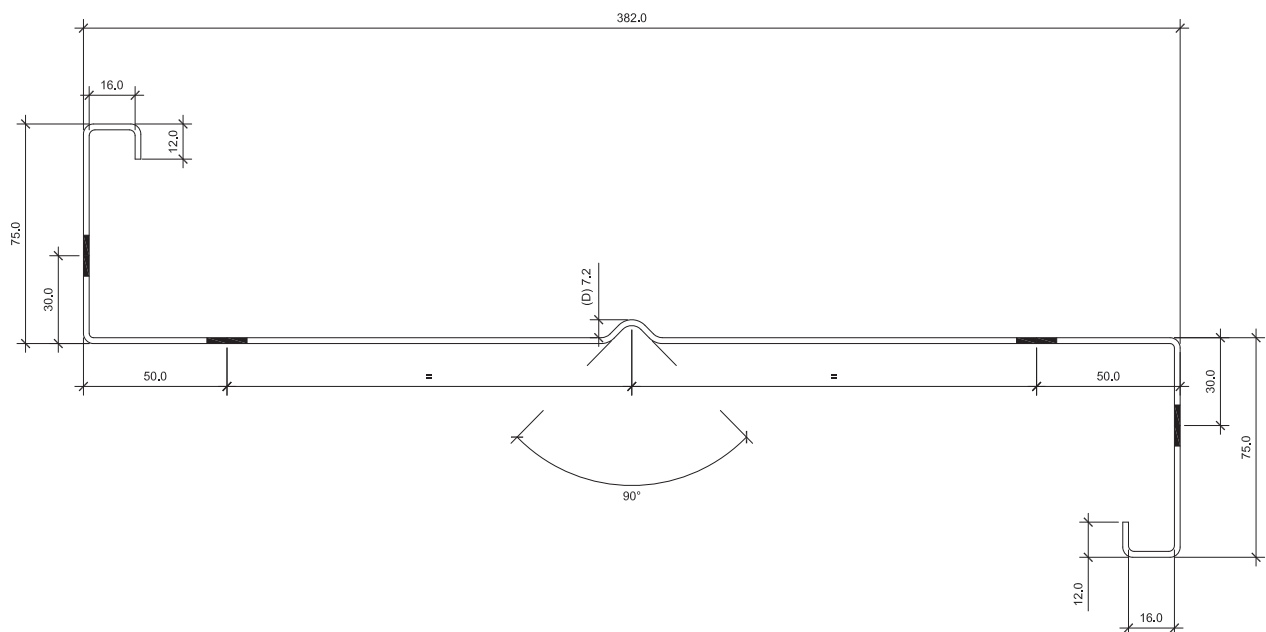
Gauge to Conform to BS EN 10143 - 'Special tolerances'

Material to Conform to BS EN 10346

SECTION	GAUGE	STRIP WIDTH	GRADE	COATING
342SZ23	2.3	537	S450GD+Z	G275
342SZ29	2.9	532	S450GD+Z	G275

# 'Z' SECTIONS - STEEL PROFILES

382mm



## MATERIAL & TOLERANCES

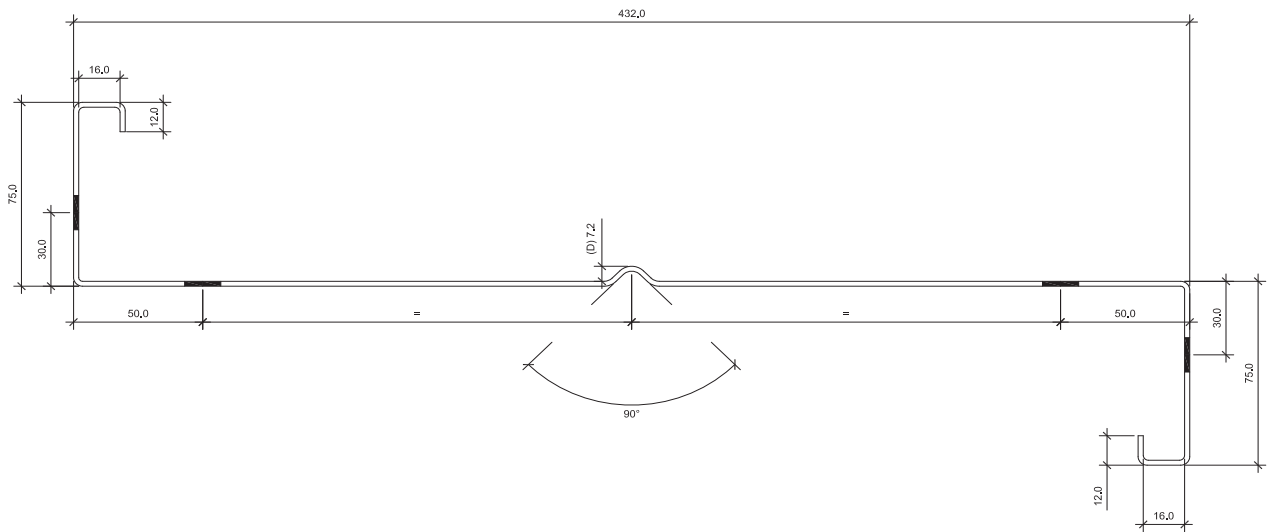
Gauge to Conform to BS EN 10143 - 'Special tolerances'

Material to Conform to BS EN 10346

SECTION	GAUGE	STRIP WIDTH	GRADE	COATING
382SZ23	2.3	577	S450GD+Z	G275
382SZ29	2.9	572	S450GD+Z	G275

# 'Z' SECTIONS - STEEL PROFILES

432mm



## MATERIAL & TOLERANCES

Gauge to Conform to BS EN 10143 - 'Special tolerances'

Material to Conform to BS EN 10346

SECTION	GAUGE	STRIP WIDTH	GRADE	COATING
432SZ29	2.9	622	S450GD+Z	G275

# SUSTAINABILITY

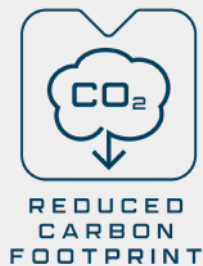
## SUSTAINABILITY

We are committed to sustainability and recognise its significance to our on-going success.

Concern for the environment and promoting a broader sustainability agenda are integral to our core values. We are committed to creating and maintaining good sustainable practises which reduce environmental impact to our activities and of each project.

It is well known that steel is one of the world's most recycled materials with a potential recovery and re-use factor in excess of 90%. Steel framed structures are also the predominant form of construction for multi-storey buildings.

Light gauge framed steel structures are substantially lighter than traditional steel framed buildings allowing significant reduction in the weight of steel used. This offers a substantial reduction in the overall carbon footprint of a building.



## GET IN TOUCH

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E: [enquiries@sigmat.co.uk](mailto:enquiries@sigmat.co.uk)  
[www.sigmat.co.uk](http://www.sigmat.co.uk)

## WHERE TO FIND US

### HEAD OFFICE

Birkbecks  
Water Street  
Skipton  
North Yorkshire  
BD23 1PB

### MANUFACTURING FACILITY

Unit A  
Cross Green Close  
Leeds  
West Yorkshire  
LS9 0RY

### CONTRACT SUPPORT CENTRE

1 Crossland Park  
Cross Green Way  
Leeds  
West Yorkshire  
LS9 0SE

### R&D CENTRE

Nicholas House  
Heath Park  
Crophorne  
Worcestershire  
WR10 3NE

### GLASGOW REGIONAL OFFICE

Suite 1.01  
Innovation Centre  
1 Ainslie Road  
Glasgow  
G52 4RU

### ELLAND REGIONAL OFFICE

Gannex House  
Gannex Park  
Dewsbury Road  
Elland  
HX5 9AF

### TEESSIDE REGIONAL OFFICE

Wynyard Park House  
Wynyard Business Park  
Wynyard Avenue  
Billingham  
TS22 5TB

### BIRMINGHAM REGIONAL OFFICE

Opening Soon  
NEC / Birmingham  
Airport

# sigmat

LIGHT GAUGE STEEL FRAMING