RJ Facades

Ventilated Facade Systems for Cladding Materials

Technical brochure

Company history

RJ Facade Systems partner; architects, designers and contractors, providing access to expert advice from RJ engineers and designers. We have designed and supplied support systems for all the facade materials used in ventilated facades, partnered with the market leading facade contractors, and worked on award winning projects.

RJ Fixings founded in 2000 with a focus to support specialist contractors, operating in safety critical applications, with the best fixings and fixing systems available on the market.

In 2010 RJ and introduced a ventilated facade system, an 'off the shelf' system manufactured in one of Europe's market leading extrusion and fabrication facilities. With fully integrated designer and producer of architectural systems and aluminium profiles for construction applications.

Our mission is to listen and promptly respond to our customers' requests and design and manufacture aluminium products and systems, taking into consideration technical and aesthetic requirements.

The EVT II range focuses on sustainable development and has proven its concern about the protection of the natural environment, by making considerable investments in anti-pollution measures and by optimizing production processes, following the applicable standards of the UK and Europe.

Services

RJ Facades supports you with the following:

- Structural facade calculations, design and drawing
- Wind load calculation in accordance to: BS EN 1991-1-4:2005+A1:2010, & EN 1991-1-4:2005 +A1:2010(E)
- Thermal Performance Calculated: Project thermal calculations to confirm insulation thickness available on a project-by-project basis.
- UK and European Certification: Certificate for the UL Mark – Performance of Curtain Walling and Rainscreen Cladding (formerly Winmark approval)
- Professional consultation and technical support: ensured by our engineering team
- Reliable customer care: CAD Support, constant site training, CPD Seminars, technical support and audits on site
- Production of non-standard length profiles and non-standard processing

General Information

Introduction to RJ Facades
Summary of Certified Products
Certificates

Introduction to RJ Facades

RJ Facade Systems supply into the UK market, Facade Support Systems for all the facade materials used in ventilated facades designed and manufactured in partnership with other manufacturers in the UK.

The certified companies head office is situated in Bathgate, West Lothian, with the Facades Division based in Guildford, Surrey. The aluminium EVT brackets and components are manufactured and fabricated in the UK at UL audited manufacturing sites.

All products are dispatched/transported to the RJ UK warehouse in Bathgate prior to distribution to the client.

Summary of Certified Products

- **Helping Hand Wall Brackets**
  - EVT II Aluminium FPH & SPH, for Concrete and SFS Standard L Brackets
  - EVT II Stainless Custom FPH & SPH, for Concrete and SFS Standard L Brackets
  - EVT II U Brackets - Aluminium FPH, SPH, & Combi, slots for Concrete and SFS Performance Brackets
  - EVT II U Brackets - Stainless FPH, SPH, & Combi, slots for Concrete and SFS Performance Brackets
  - EVT II Horizontal Adaptor - Aluminium FPH & SPH
- **Vertical and Horizontal Rail Types**
  - L Profiles for L brackets
  - T Profiles for L brackets
  - Floorspan profiles for U brackets
  - Structural Tophats & C Channels for spanning SFS
  - Tophat & Z Profiles for facade panels

- **Horizontal Carrier Rail Systems**
  - System SF1 & SF2
  - System Kerf
  - System Briklok
- **Suitable fixing types – not UL certified and subject to project approval**
  - Concrete Screws for fixing to concrete and blockwork - ETA approved for cracked and non-cracked concreteapplications
  - Through bolt for fixing to concrete only - ETA approved for cracked and non-cracked concrete applications
  - Self drilling fixings for fixing to aluminium and steel of various thicknesses - ETA approved

Certificates

Manufacturing & system compliance with applicable regulations

- **System Certification**
  Certificate for the UL Mark – Performance of Curtain Walling and Rainscreen Cladding (formerly Winmark approval)
- **Performance characteristics of EVT II systems**
  Ventilated facade systems EVT II were certified by notified laboratories all over the world according to the requirements of different standards:

Building Physics
Dimensioning Formulae Examples

Aluminium as material

Aluminium is a rather newfound metal, extracted for the first time in 1854. Commercially produced as a precious metal from 1886, its industrial production for civil applications only achieved wide use in the 1950's.

Now aluminium plays a key role for the sustainability of new buildings and the renovation of existing ones. Thanks to its performance properties aluminium contributes to the energy performance, safety and comfort of new buildings.

Advantages

- **Design flexibility**
  The extrusion process offers an almost infinite range of forms and sections, allowing designers to integrate numerous functions into profiles.

- **Long service life**
  Aluminium building products are made from alloys that are weatherproof, corrosion- resistant and immune to the harmful effect of UV rays, ensuring optimal performance over a long period of time.

- **High strength-to-weight ratio**
  Thanks to the metal's inherent strength and stiffness, aluminium window and curtain wall frames can be very narrow. The material's light weight makes it easier to transport and handle on-site, reducing the risk of work-related injury.

- **High-reflectivity**
  The characteristic feature makes aluminium a very efficient material for light management. Aluminium shading devices can be used to reduce the need for air condition in summer.

- **Fire safety**
  Aluminium does not burn and therefore is classified as a non-combustible construction material (European Fire Class A1).

  Aluminium alloys will melt at around 6500˚C but without releasing harmful gases.

- **No release of dangerous substances**
  Several studies have proven that aluminium building products do not present a hazard to occupants or the surrounding environment. Aluminium building products have no negative impact, either on indoor air quality or on soil, surface and groundwater.

- **Optimal security**
  Where high security is required, specially designed, strengthened aluminium frames can be used. While the glass for such applications may well be heavy, the overall weight of the structure remains manageable thanks to the light weight of the aluminium frames.

Wind actions

The main influence over the wind action, wind load according to Eurocode.

In instances where a project wind load value is not provided by the project engineer, RJ Facades are able to provide a wind load calculation, relevant to the construction of the ventilated facade.

The calculation considers building dimensions, distances from sea, town boundaries, project location, and potential funneling. Final values represent the wind pressure in different zones of the building; especially in the corners where point loading occurs.

The data is accordance to BS EN 1991-1-4:2005+A1:2010 & EN 1991-1-4:2005+A1:2010(E).

Allowable deflection

- **Allowable deflection of substructure**
  According to the requirements of the CWCT Standard for systemized building envelopes, at both positive and negative applications of the peak test pressure, the maximum deflection of the substructure generally should not exceed:

Allowable deflection of some cladding materials

- **Allowable deflection of brittle materials (e.g. plasterboard):**
  1/360 of the extent of the board, or 10 mm whichever is the lesser;

- **Allowable deflection of natural stone units:**
  1/360 of their length measured along the stone edge, or 3 mm, whichever is the lesser (smaller) deflections may be ap- propriate depending on the size of stone and method of fixing;

- **Allowable deflection of rainscreen panel:**
  At both positive and negative applications of the peak test pressure, the maximum deflection shall not exceed:
  - 1/90 of the span measured between the points of attachement of the panel for aluminium, glass and steel, or
  - 1/360 of the span measured between the points of attachment, or 3 mm whichever is the lesser, for stone and similar brittle materials, or
  - More restrictive limits set by the panel manufacturer.

Greater deflections may also be allowable.

N.B! The deflection limits should be agreed with the material supplier.

Thermal Performance Calculated

Project thermal calculations to confirm insulation thickness available on a project by project basis.

The range of helping hand brackets is available in aluminium and stainless steel; including floor spanning configurations. Our technical team calculate the point loss of the bracket specific to your project, in the project specific design, to provide solutions that will achieve the buildings required U value.

Thermal properties shall be selected in order to reduce the total in-service energy consumption of the building. These limit the levels of carbon emissions resulting from operation of the building.

Carbon emissions will be lower if the following are reduced:

- Heat transfer through the building envelope.
- Air leakage through the building envelope.
- Cooling loads arising from solar gain.

Heat transfer within an aluminum cladding system, mainly affected by three highly correlated factors:

- The external cladding surface material (thermal resistance, solar and heat absorption, etc).
- The characteristics of the air cavity between the external cladding and the main wall element (air movement, air temperature, dimensions).
- The material and characteristics of the brackets that thermally connect the exterior cladding (geometry, material, anchors) with the facade.

Thermal bridging

The thermal bridges, caused by subframe mechanical fixing devices and air spaces, shall be taken into account, using the appropriate calculation methods defined in EN ISO 6946 and EN ISO 10211 standards.

Particular attention shall be given to limiting thermal bridges. Thermal breaks can be used to reduce both U-value and condensation risk. To reduce the risk of condensation, thermal breaks should be placed, so as to form warm fingers and not cold fingers.

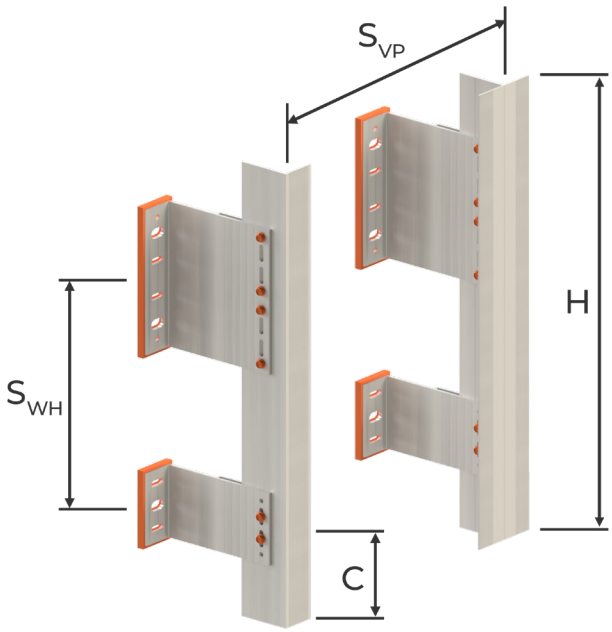
Thermostop elements serve only thermal spacers between consoles and structure.

The use of these elements in the two constructions of metal convincingly reduced heat losses and thus are suitable from the viewpoint of building physics.

RJ Facades proposes designed Thermo pads to separate fixing brackets from the structure. Thus, the losses are reduced, but should not be ignored, as the installed fasteners penetrate the solid wall element.

The characteristics of the bracket are of great importance, since the bracket penetrates the insulation protection and creates a three-dimensional thermal bridge. The contact area between the bracket and the solid wall is a significant factor in thermal losses due to point thermal bridges.

Simply supported beam with one fixed and one movable support - area A



Fixed support

Self weight - dead load
V = g.3h.b

For determining the maximum permissible wind load the following formula apply:

Wind load-presure
Wp = fl . q . cp . h/2 .

Wind load-suction Ws = q . cp . h/2 .b

where:
V - load, kN
g - weight of main vertical profiles and façade material, kN/m^2
Wp - wind pressure, kN Ws - wind suction, kN
κz - correction factor (height)

q - dynamic load, kN/m^2 cp - correction factor (wind pressure)
h - distance between fixing brackets, m
b - distance between main vertical profiles, m
H - building height, m

Movable support

For determining the maximum permissible wind load the following formula apply

Wind load-presure
Wp = fl . q . cp . h/2 . b

Example

Initial data:
H = 0-15 m (middle zone)

g = 0,41 kN/m^2
fl = 1,25

q = 0,5 kN/m^2
cp = 0,8 (wind pressure)
cp = - 0,5 (wind suction)
h = 1,828 m

b = 1,5 m

Own weight - dead load

V = g.h.b = 0,065. 1,828 . 1,5 = = 0.178 kN

Wind load

Wp = fl . q . cp . h/2 . b = 1,25 . 0,41 . 0,8 . 0.914 . 1,5= = 0,562 kN

Ws = q . cp . h/2 . b = 0,41 . (-0,6) . 0,914 . 1,5 = = (-0,337) = 0,337 kN

Wind load
Wp = fl . q . cp . h/2 . b = = 1,25 . 0,41 . 0,8 . 0,914 . 1,5 = = 0,562 kN

Ws = q . cp . h/2 . b = = 0,41 . (-0,6) . 0,914 .1,5 = = (-0,337) = 0,337 kN

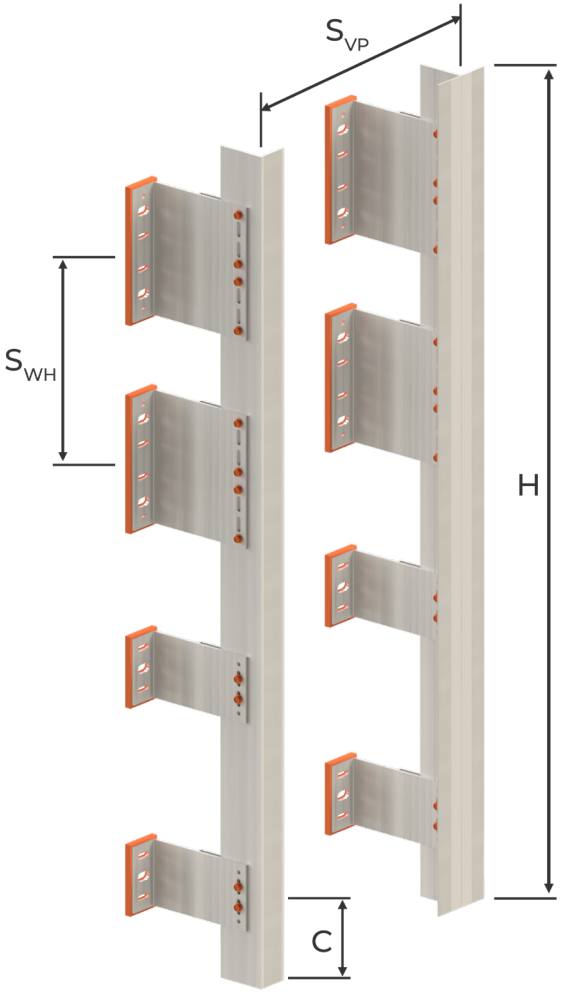
Finally, we choose the appropriate fixing bracket with greater bearing capacity than the calculated value. A fixing bracket for fixed support must bear both calculated values for dead load and wind load.

A fixing bracket for movable support must bear just wind load.

All static calculations must be verified by a responsible structural/facade engineer on site.

Choosing the appropriate fixing bracket

Continuous supported beam with one fixed and three movable supports – area B



Movable support (end)

For determining the maximum permissible wind load the following formula apply:

Wind load-presure
Wp= fl . q . cp . h/2 . b

Wind load-suction
Ws = q . cp . h/2 .b

Wind load

Wp = fl . q . cp . h/2 . b =
= 1 ,25 . 0,41 . 0,8 . 0,808 . 1,5 =
= 0,497 kN

Ws = q . cp . h/2 . b =
= 0,41 . (-0,6) . 0,808 . 1,5 =
= (-0,298) = 0,298 kN

Fixed support

Self weight - dead load
V = g.3h.b

For determining the maximum permissible wind load the following formula apply:

Wind load-presure
Wp = fl . q . cp . h/2 . b

Wind load-suction
Ws= q . cp . h/2 .b

where:
V - load, kN
g - weight of main vertical profiles and façade material, kN/m^2
Wp - wind pressure, kN
Ws - wind suction, kN
$_{K}$z - correction factor (height)
q - dynamic load, kN/m^2
cp - correction factor (wind pressure)
h - distance between fixing brackets, m
b - distance between main vertical profiles, m
H - building height, m

Movable support (middle)

For determining the maximum permissible wind load the following formula apply:

Wind load-presure
Wp = fl . q . cp . h . b

Wind load-suction
W s= q . cp . h .b

Example

Initial data:
H = 0-15 m (middle zone)

g = 0.065 kN/m^2
fl = 1,25

q = 0,41 kN/m^2
cp = 0,8 (wind pressure) cp= -0,6 (wind suction)
h = 1,616 m
h/2 = 0,808 m
b = 1,5 m

Own weight - dead load

V = g.3h.b = 0,065. 4,85 . 1,5= = 0.472 kN

Wind load

Wp = fl . q . cp . h/2 . b =
=1 ,25 . 0,41 . 0,8 . 0,808 . 1.5 = = 0,496 kN

Ws = q . cp . h/2 . b =
= 0,41 . (-0,6) . 0,808 . 1,5 = = 0,298 kN

Wind load
Wp = fl . q . cp . h . b =
= 1,25 . 0,41 . 0,8 . 1,616 . 1,5 = = 0,994 kN

Ws = q . cp . h . b =
= 0,41 . (-0,6) . 1,616 . 1,5=
= (-0,596) = 0,596 kN

Finally, we choose the appropriate fixing bracket with bigger bearing capacity than the calculated value. A fixing bracket for fixed support must bear both calculated values for dead load and wind load.

A fixing bracket for movable support must bear just wind load.

All static calculations must be verified by a responsible structural/facade engineer on site.

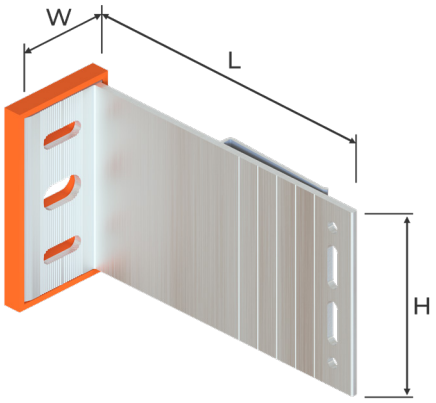
EVT II Brackets

EVT II Aluminium L-Brackets
EVT II Stainless L Brackets
EVT II Al. & Stainless U Brackets
EVT II Horizontal Adaptor
EVT II Aluminium Soffit L Brackets

EVT II - Aluminium FPH & SPH, for Concrete and SFS Standard L Brackets

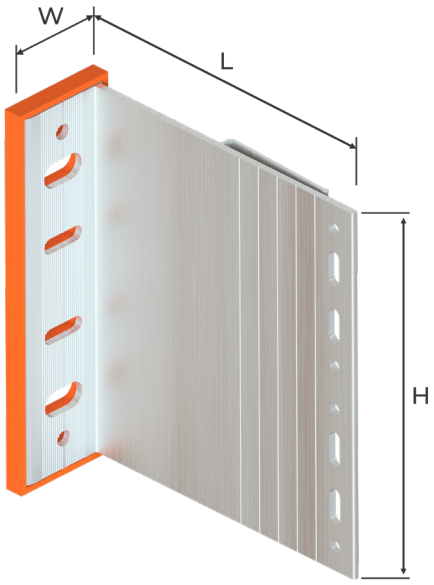
Fixing brackets					Suitable Thermo pads
Code	Type	H (mm)	W (mm)	L (mm)	Type
130170	single	80	42	40	130530 Single
130171	single	80	42	60	
130172	single	80	42	80	
130173	single	80	42	100	
130174	single	80	42	120	
130175	single	80	42	140	
130176	single	80	42	160	
130177	single	80	42	180	
130178	single	80	42	200	
130179	single	80	42	220	
130180	single	80	42	240	
130181	single	80	42	260	
130182	single	80	42	280	
130183	single	80	42	300	
130184	single	80	42	320	

Single Fixing Bracket



Fixing brackets					Suitable Thermo pads
Code	Type	H (mm)	W (mm)	L (mm)	Type
130185	double	160	42	40	130531 Double
130186	double	160	42	60	
130187	double	160	42	80	
130188	double	160	42	100	
130189	double	160	42	120	
130190	double	160	42	140	
130191	double	160	42	160	
130192	double	160	42	180	
130193	double	160	42	200	
130194	double	160	42	220	
130195	double	160	42	240	
130196	double	160	42	260	
130197	double	160	42	280	
130198	double	160	42	300	
130199	double	160	42	320	

Double Fixing Bracket



EVT II fixing brackets allow setting of the distance of the cladding material from the substrate, from a minimum 47mm up to maximum 362mm, when used in conjunction with the 60x40x2 mm L-Profile (including thermopad).

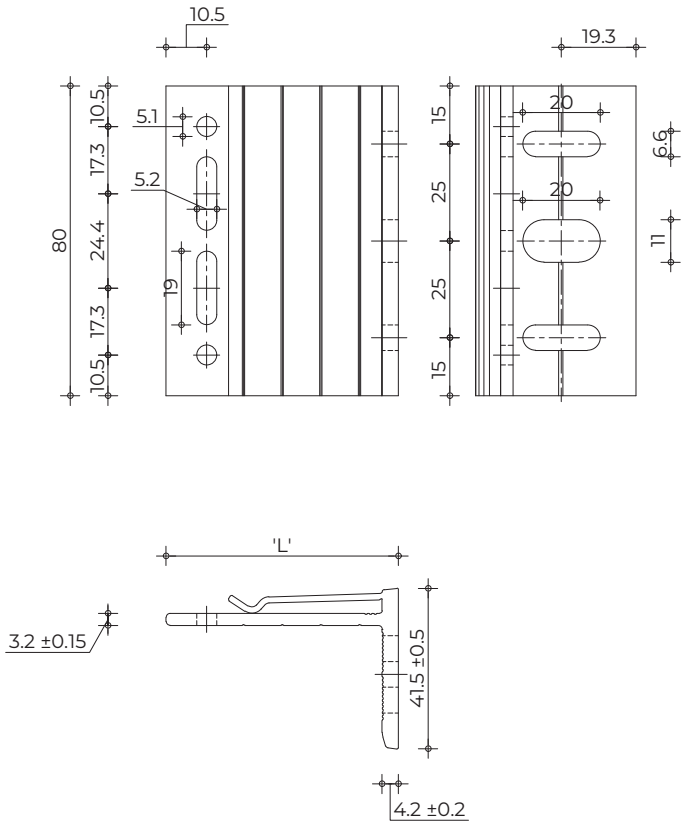
EVT II L-Brackets, Aluminium Performance Table

The performance characteristics of all EVT II fixing brackets are tested in laboratory conditions for the worst-case scenario. The aim of the test is to determine the dead load and wind capacity of the brackets and their fixings to the subframe under tension and shear loads.

Summary of results from testing of EVT II L-brackets, Aluminium

Code	Type	Size(mm)	Material	Base	Design Resistance (kN)	
					Vertical (kN)	Horizontal (kN)
130170	single	42x40x80	aluminium	concrete/sfs	5.06	2.75
130171	single	42x60x80	aluminium	concrete/sfs	3.53	2.75
130172	single	42x80x80	aluminium	concrete/sfs	1.87	1.95
130173	single	42x100x80	aluminium	concrete/sfs	1.69	2.04
130174	single	42x120x80	aluminium	concrete/sfs	1.28	2.09
130175	single	42x140x80	aluminium	concrete/sfs	1.06	2.04
130176	single	42x160x80	aluminium	concrete/sfs	0.96	1.95
130177	single	42x180x80	aluminium	concrete/sfs	1.18	2.00
130178	single	42x200x80	aluminium	concrete/sfs	1.07	2.00
130179	single	42x220x80	aluminium	concrete/sfs	0.85	2.00
130180	single	42x240x80	aluminium	concrete/sfs	0.88	1.95
130181	single	42x260x80	aluminium	concrete/sfs	0.81	2.00
130182	single	42x280x80	aluminium	concrete/sfs	0.66	2.01
130183	single	42x300x80	aluminium	concrete/sfs	0.68	1.94
130184	single	42x320x80	aluminium	concrete/sfs	0.64	1.94
130185	double	42x40x160	aluminium	concrete/sfs	10.12	6.00
130186	double	42x60x160	aluminium	concrete/sfs	9.57	4.54
130187	double	42x80x160	aluminium	concrete/sfs	6.70	3.77
130188	double	42x100x160	aluminium	concrete/sfs	4.91	3.77
130189	double	42x120x160	aluminium	concrete/sfs	4.12	3.77
130190	double	42x140x160	aluminium	concrete/sfs	3.46	3.77
130191	double	42x160x160	aluminium	concrete/sfs	3.00	3.77
130192	double	42x180x160	aluminium	concrete/sfs	2.75	3.81
130193	double	42x200x160	aluminium	concrete/sfs	2.59	3.81
130194	double	42x220x160	aluminium	concrete/sfs	2.39	4.02
130195	double	42x240x160	aluminium	concrete/sfs	2.06	3.81
130195	double	42x260x160	aluminium	concrete/sfs	1.99	3.81
130197	double	42x280x160	aluminium	concrete/sfs	1.75	3.81
130198	double	42x300x160	aluminium	concrete/sfs	1.62	3.81
130199	double	42x320x160	aluminium	concrete/sfs	1.42	3.81

EVT II L-Brackets, Aluminium
Single bracket, Lengths 40-60mm



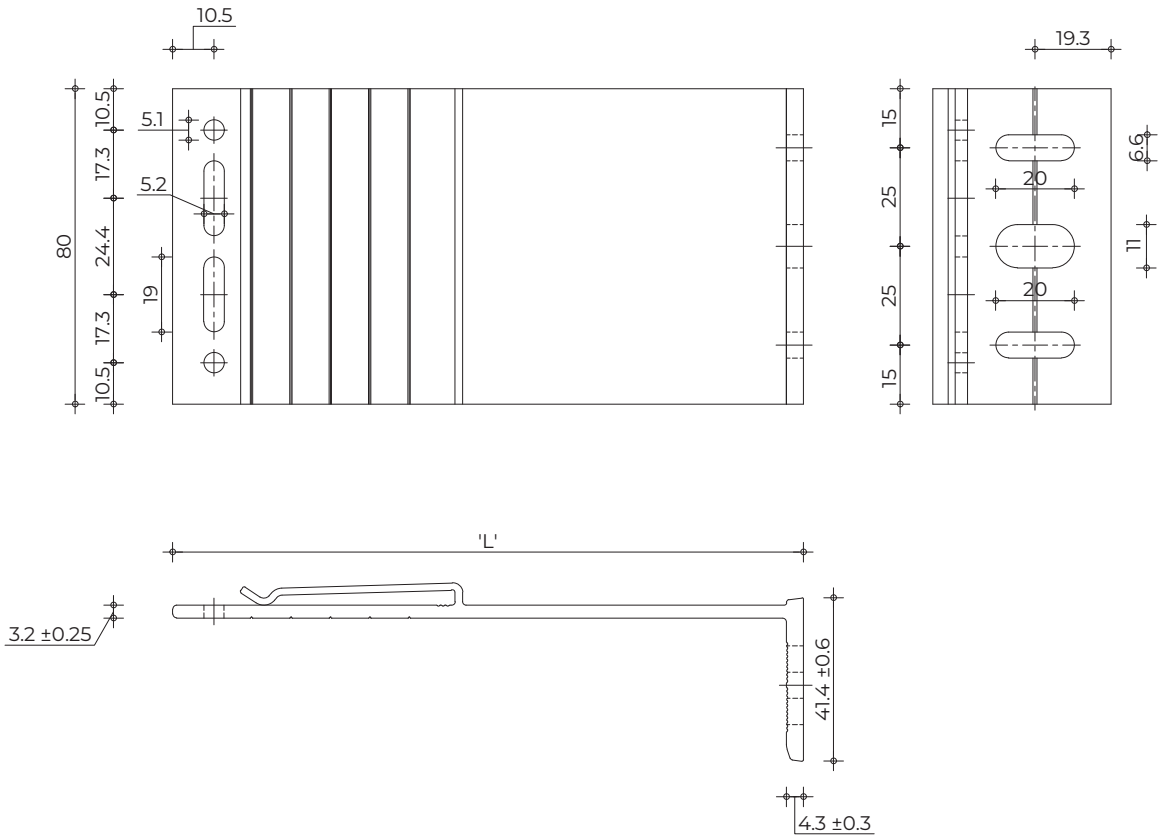
Suitable for concrete, masonry, steel and timber

Item	Material
L-Bracket	Aluminium - EN AW 6063 T6

L =
40mm
60mm

All measurements in mm*

EVT II L-Brackets, Aluminium
Single bracket, Lengths 80-260mm



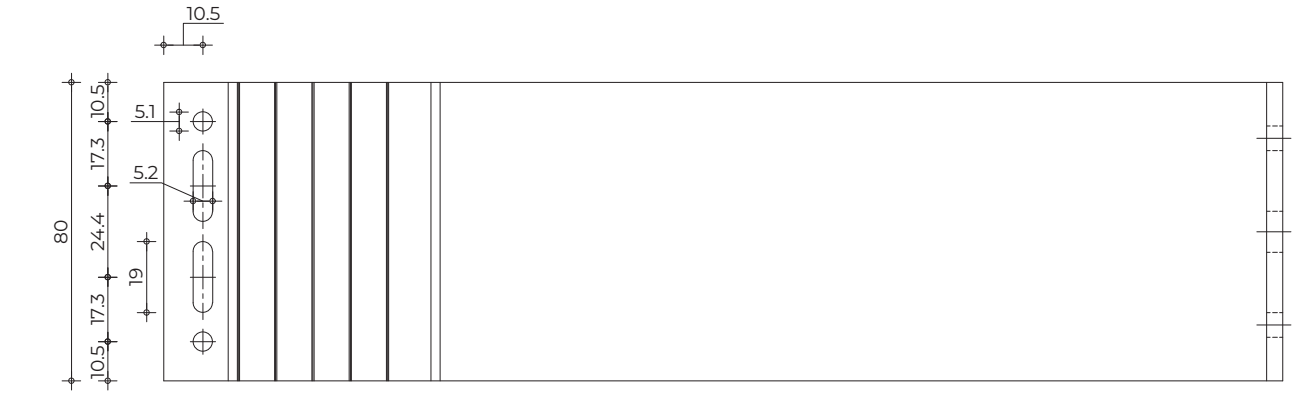
L =
80mm
100mm
120mm
140mm
160mm
180mm
200mm
220mm
240mm
260mm

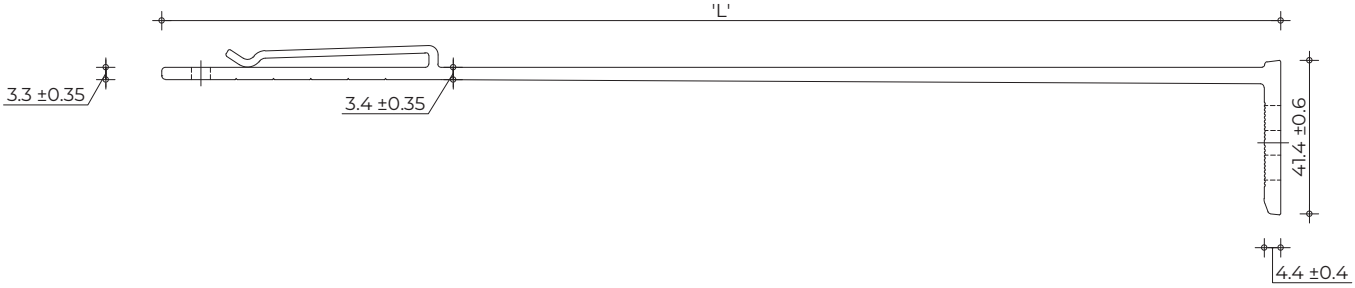
Suitable for concrete, masonry, steel and timber

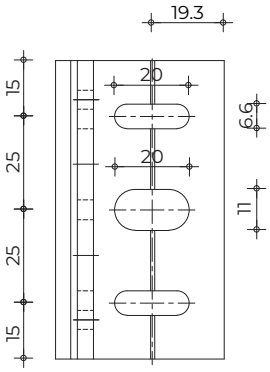
Item	Material
L-Bracket	Aluminium - EN AW 6063 T6

All measurements in mm*

EVT II L-Brackets, Aluminium
Single bracket, Lengths 280-320mm







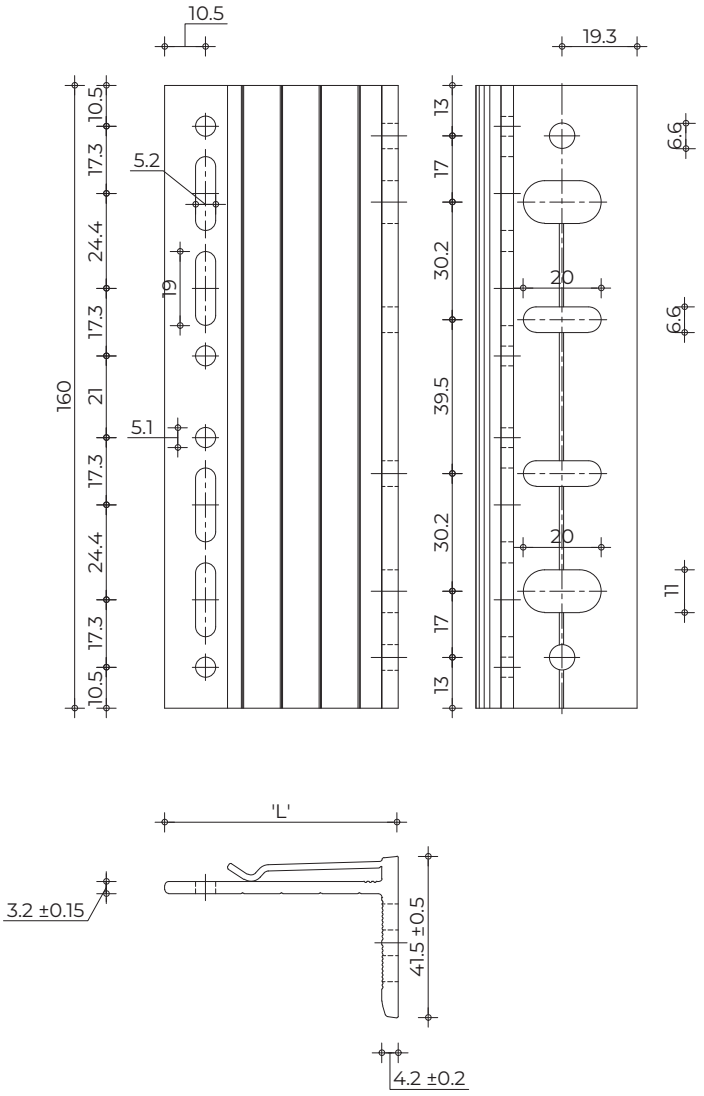
Suitable for concrete, masonry, steel and timber

Item	Material
L-Bracket	Aluminium - EN AW 6063 T6

L =
280mm
300mm
320mm

All measurements in mm*

EVT II L-Brackets, Aluminium
Double bracket, Lengths 40-60mm



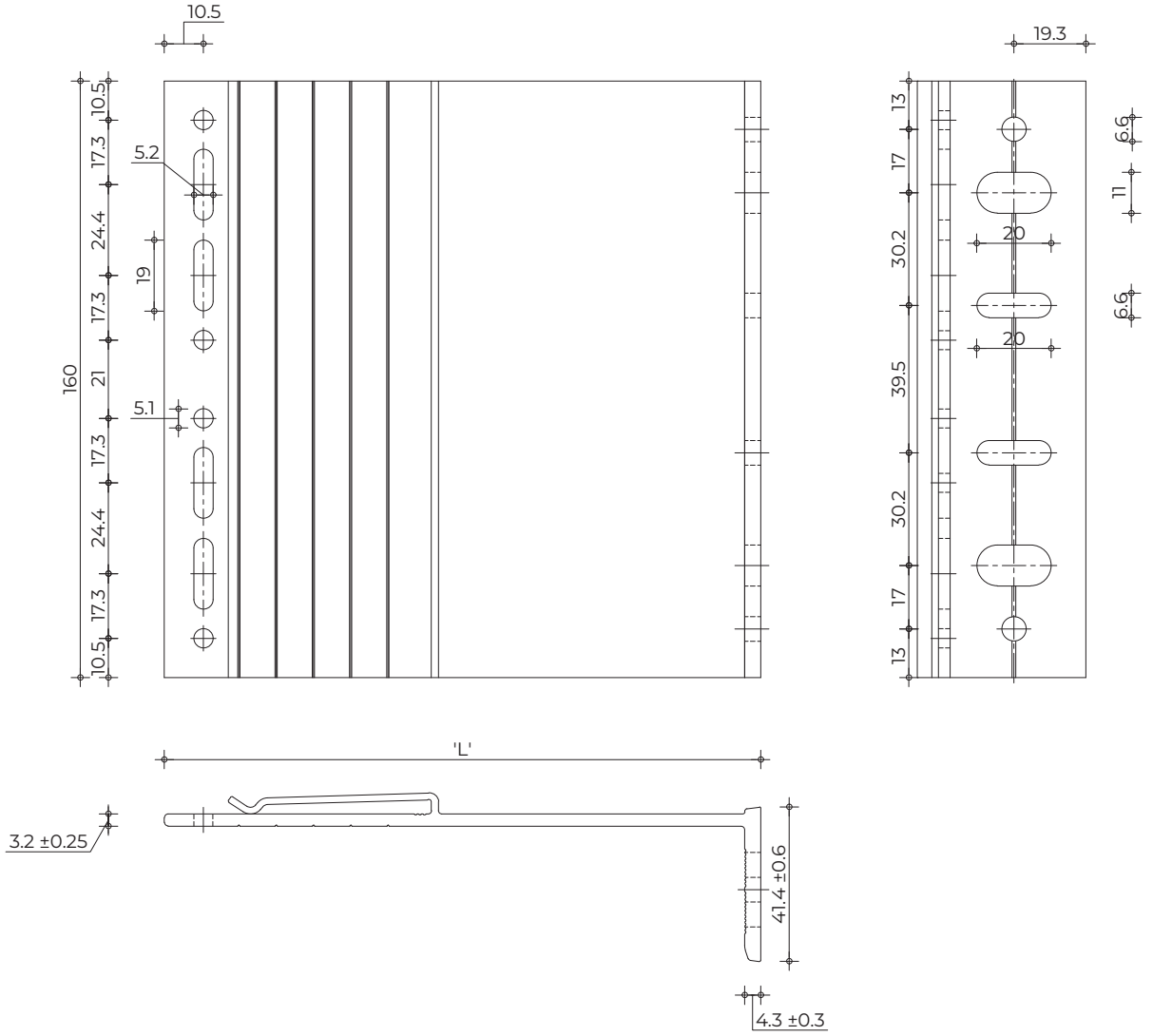
Suitable for concrete, masonry, steel and timber

Item	Material
L-Bracket	Aluminium - EN AW 6063 T6

L =
40mm
60mm

All measurements in mm*

EVT II L-Brackets, Aluminium
Double bracket, Lengths 80-260mm

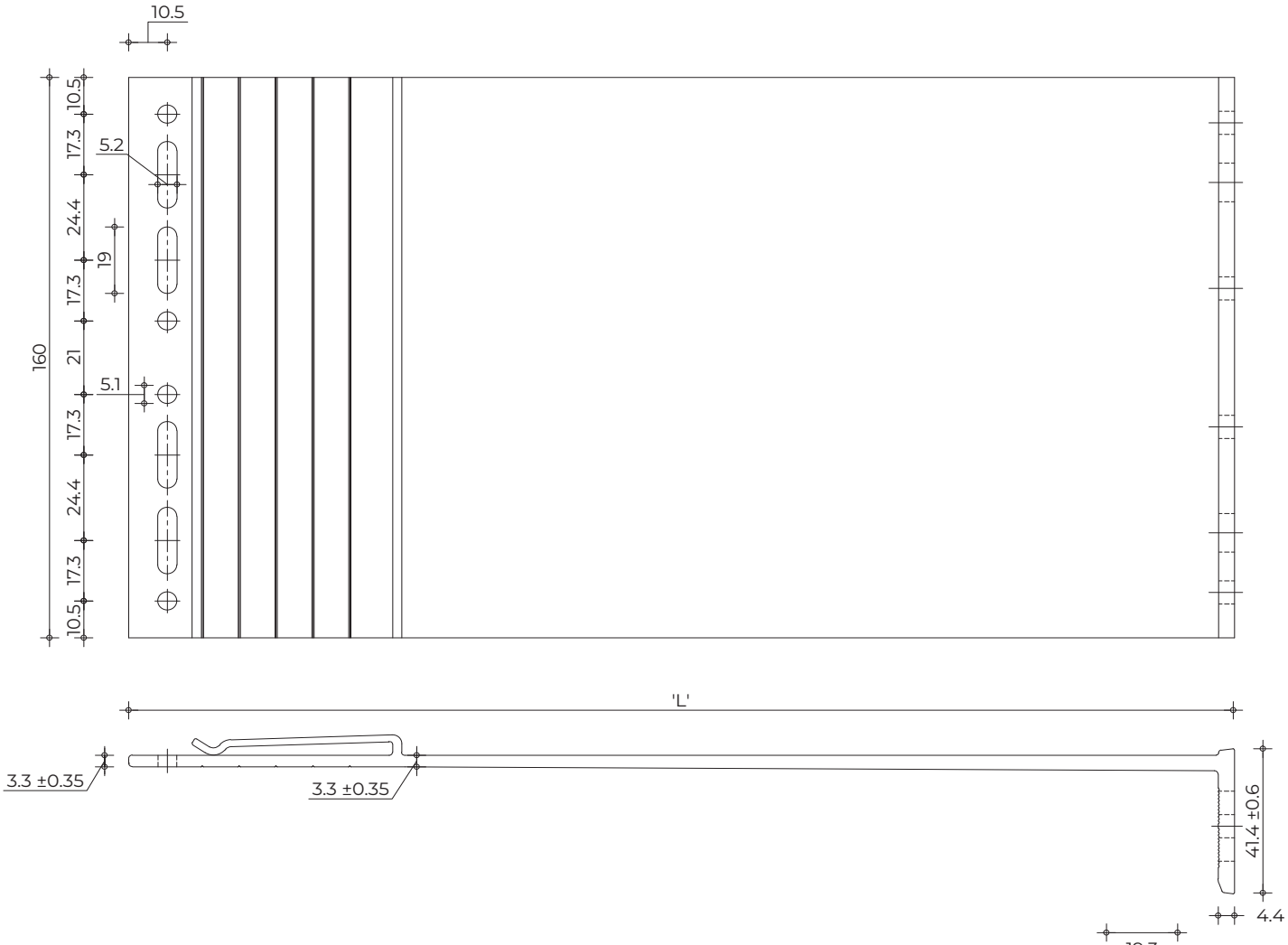


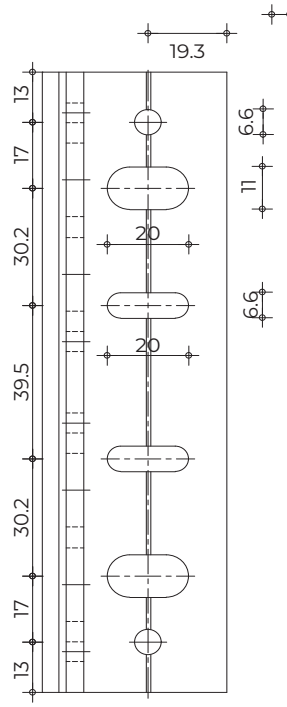
L =
80mm
100mm
120mm
140mm
160mm
180mm
200mm
220mm
240mm
260mm

Suitable for concrete, masonry, steel and timber

Item	Material
L-Bracket	Aluminium - EN AW 6063 T6

EVT II L-Brackets, Aluminium
Double bracket, Lengths 280-320mm





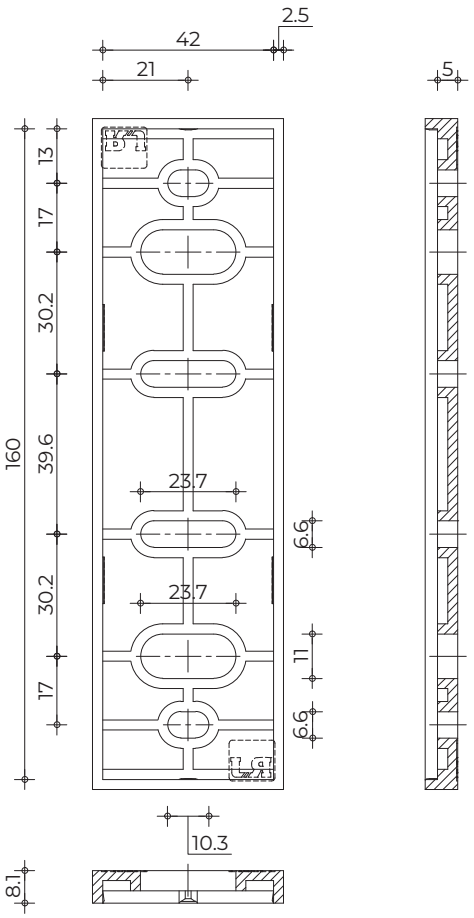
Suitable for concrete, masonry, steel and timber

Item	Material
L-Bracket	Aluminium - EN AW 6063 T6

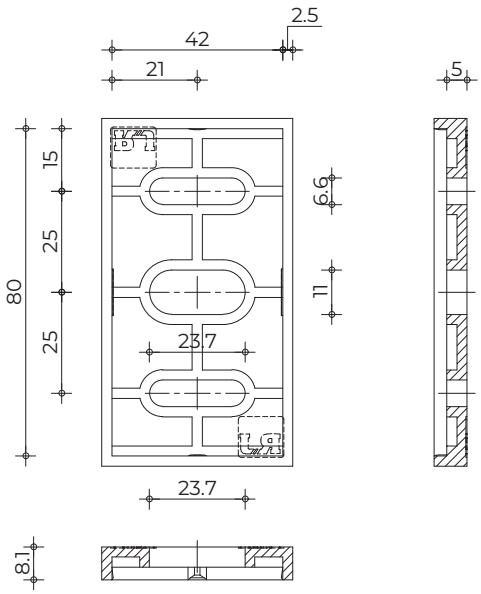
L =
280mm
300mm
320mm

All measurements in mm*

EVT II Thermo Pads, Polypropylene
Single and double for EVT II L-brackets 40-320mm



Double Thermo pad



Single Thermo pad

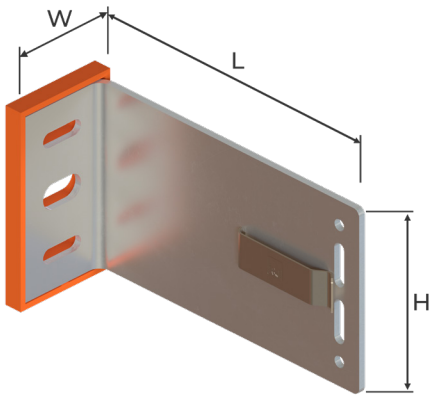
L-Brackets Components
Suitable for Concrete, Steel and timber

All measurements in mm*

EVT II - Stainless FPH & SPH, for Concrete and SFS Standard L Brackets

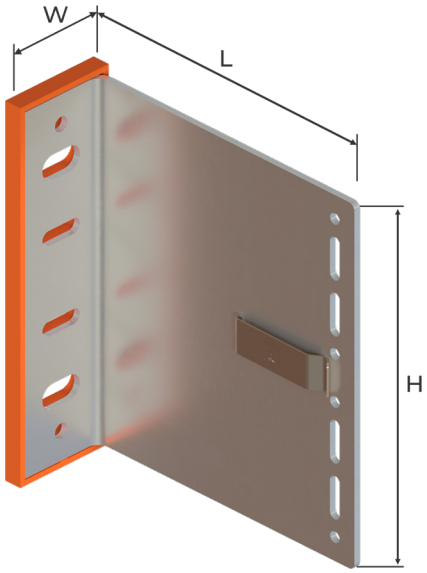
Fixing brackets					Suitable Thermo pads
Code	Type	H (mm)	W (mm)	L (mm)	Type
300409	single	80	42	60	515873 single
300410	single	80	42	80	
300411	single	80	42	100	
300412	single	80	42	120	
300414	single	80	42	140	
300415	single	80	42	160	
300416	single	80	42	180	
300417	single	80	42	200	
300418	single	80	42	220	
300419	single	80	42	240	
300421	single	80	42	260	
300422	single	80	42	280	
300423	single	80	42	300	
300424	single	80	42	320	

Single Fixing Bracket



Fixing brackets					Suitable Thermo pads
Code	Type	H (mm)	W (mm)	L (mm)	Type
300428	double	160	42	60	535529 double
300429	double	160	42	80	
300430	double	160	42	100	
300431	double	160	42	120	
300433	double	160	42	140	
300434	double	160	42	160	
300435	double	160	42	180	
300436	double	160	42	200	
300437	double	160	42	220	
300438	double	160	42	240	
300440	double	160	42	260	
300441	double	160	42	280	
300442	double	160	42	300	
300443	double	160	42	320	

Double Fixing Bracket



EVT II fixing brackets allow to distance the cladding material from the backing wall from min 68mm up to max 312mm, with 60mm T profile. It's possible to adjust the profile up to 33mm (Lmin to Lmax).

EVT II L-Brackets, Stainless Steel Performance Table

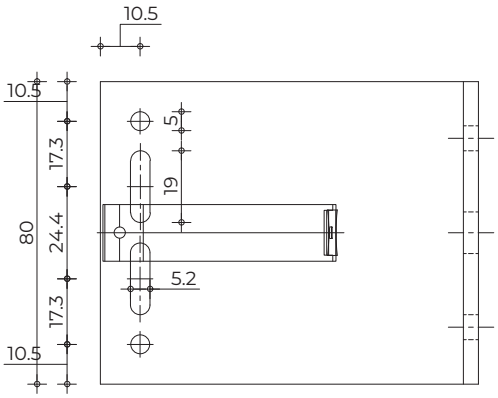
The performance characteristics of all EVT II fixing brackets is tested in laboratory conditions for the worst-case scenario.

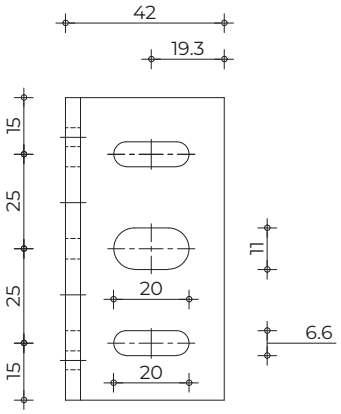
The aim of the test is to determine the load bearing capacity and wind resistance of the brackets and their fixings, to the subframe, under tension and shear loads.

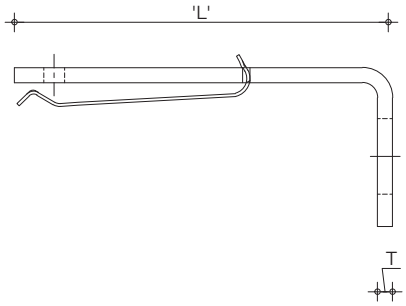
Summary of results from testing of EVT II L-brackets, Stainless Steel

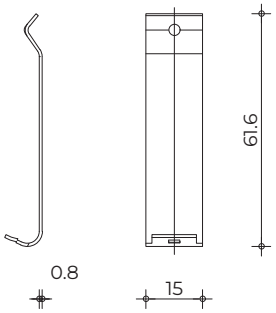
Code	Type	Size(mm)	Material	Base	Design Resistance (kN)	
					Vertical	Horizontal
300409	single	42/60/80	stainless	concrete/sfs	4.74 kN	2.85 kN
300410	single	42/80/80	stainless	concrete/sfs	3.46 kN	2.85 kN
300411	single	42/100/80	stainless	concrete/sfs	2.69 kN	2.66 kN
300412	single	42/120/80	stainless	concrete/sfs	2.23 kN	2.66 kN
300414	single	42/140/80	stainless	concrete/sfs	1.80 kN	2.86 kN
300415	single	42/160/80	stainless	concrete/sfs	1.57 kN	2.86 kN
300416	single	42/180/80	stainless	concrete/sfs	1.37 kN	2.66 kN
300417	single	42/200/80	stainless	concrete/sfs	1.22 kN	2.66 kN
300418	single	42/220/80	stainless	concrete/sfs	1.10 kN	2.66 kN
300419	single	42/240/80	stainless	concrete/sfs	1.00 kN	2.66 kN
300421	single	42/260/80	stainless	concrete/sfs	0.92 kN	2.85 kN
300422	single	42/280/80	stainless	concrete/sfs	0.87 kN	2.85 kN
300423	single	42/300/80	stainless	concrete/sfs	0.79 kN	2.85 kN
300424	single	42/320/80	stainless	concrete/sfs	0.74 kN	2.85 kN
300428	double	42/60/160	stainless	concrete/sfs	11.99 kN	6.44 kN
300429	double	42/80/160	stainless	concrete/sfs	10.55 kN	6.44 kN
300430	double	42/100/160	stainless	concrete/sfs	8.27 kN	6.44 kN
300431	double	42/120/160	stainless	concrete/sfs	6.67 kN	6.44 kN
300433	double	42/140/160	stainless	concrete/sfs	5.56 kN	6.44 kN
300434	double	42/160/160	stainless	concrete/sfs	4.77 kN	6.44 kN
300435	double	42/180/160	stainless	concrete/sfs	4.18 kN	6.44 kN
300436	double	42/200/160	stainless	concrete/sfs	3.60 kN	6.44 kN
300437	double	42/220/160	stainless	concrete/sfs	3.34 kN	6.38 kN
300438	double	42/240/160	stainless	concrete/sfs	3.03 kN	6.38 kN
300440	double	42/260/160	stainless	concrete/sfs	2.76 kN	6.38 kN
300441	double	42/280/160	stainless	concrete/sfs	2.59 kN	6.38 kN
300442	double	42/300/160	stainless	concrete/sfs	2.41 kN	6.38 kN
300443	double	42/320/160	stainless	concrete/sfs	2.23 kN	6.38 kN

EVT II L-Brackets, Stainless Steel
Fixed Point Bracket









Clamping spring

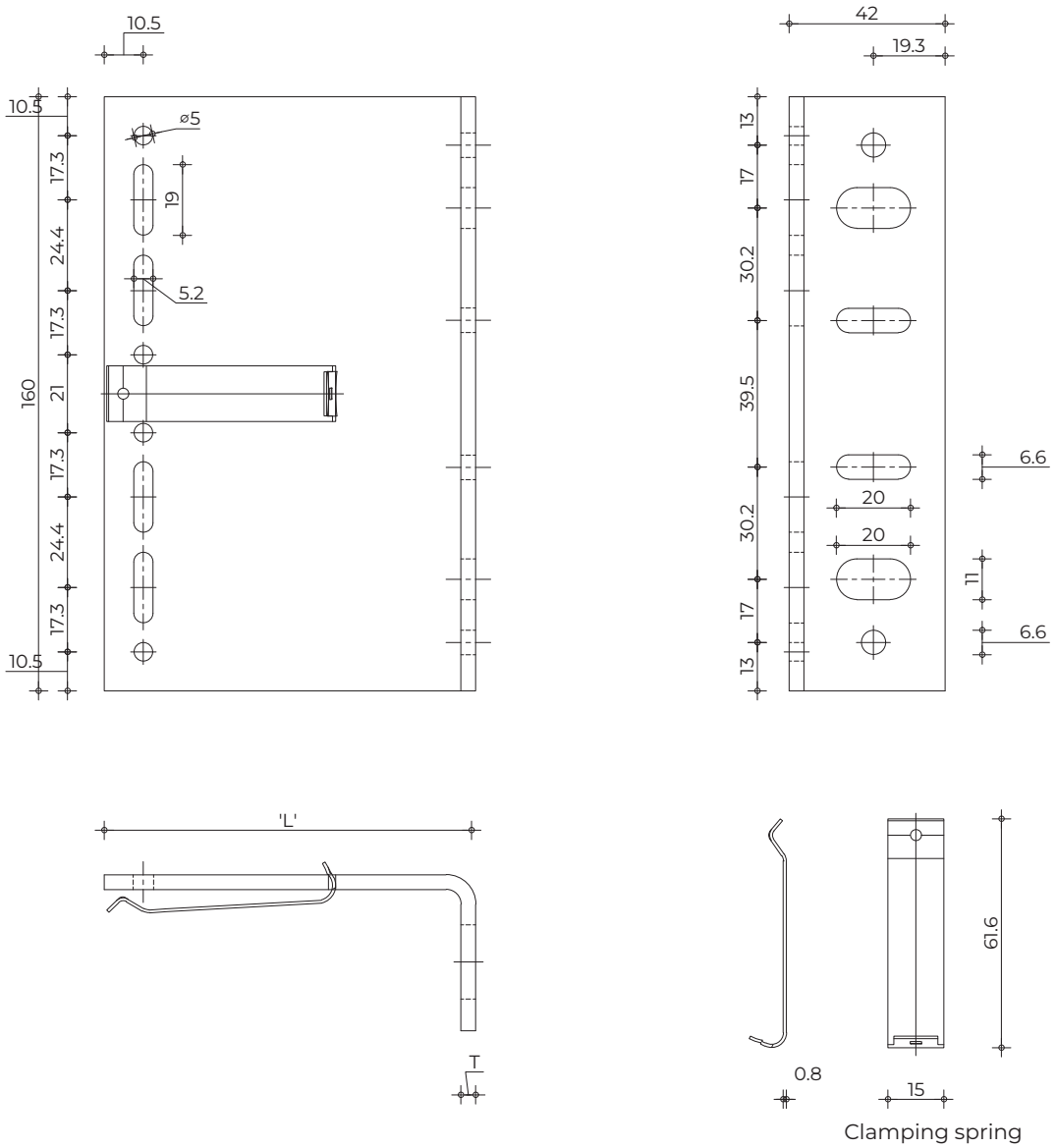
L-Bracket Single
Suitable for Concrete, Masonry, Steel and Timber
*Custom lengths available on demand

Item	Material
L-Bracket	Aluminum - EN AW 5083-'O'-H111/4017-H32
	St. steel 1.4301/1.4401/1.4404
Clip	Stainless steel

L* =		T =
40mm	220mm	3 - 4 mm
60mm	240mm	
80mm	260mm	
100mm	280mm	
120mm	300mm	
160mm	320mm	
180mm	340mm	
200mm	360mm	

All measurements in mm*

EVT II L-Brackets, Stainless Steel
Fixed Point Bracket



Clamping spring

L-Bracket Double,
Suitable for Concrete, Masonry, Steel and Timber
*Custom lengths available on demand

Item	Material
L-Bracket	Aluminum - EN AW 5083-'O'-H111/4017-H32
	St. steel 1.4301/1.4401/1.4404
Clip	Stainless steel

L* =		T =
40mm	220mm	3 - 4 mm
60mm	240mm	
80mm	260mm	
100mm	280mm	
120mm	300mm	
160mm	320mm	
180mm	340mm	
200mm	360mm	

All measurements in mm*

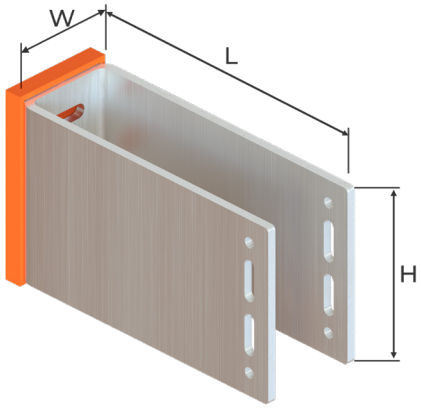
EVT II U Brackets - Aluminium FPH & SPH, slots for Concrete and SFS Brackets

Fixing brackets					Suitable Thermo pads
Code	Type	H (mm)	W (mm)	L (mm)	Type
300496	single	80	44	60	515873 single
300497	single	80	44	80	
300498	single	80	44	100	
300499	single	80	44	120	
300500	single	80	44	140	
300501	single	80	44	160	
300502	single	80	44	180	
300503	single	80	44	200	
300504	single	80	44	220	
300505	single	80	44	240	
300506	single	80	44	260	
300507	single	80	44	280	
300508	single	80	44	300	
300509	single	80	44	320	

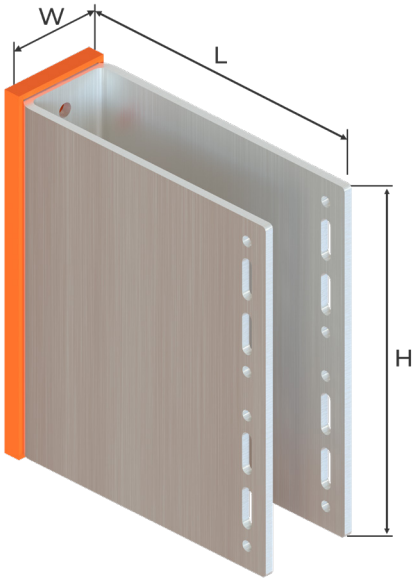
Fixing brackets					Suitable Thermo pads
Code	Type	H (mm)	W (mm)	L (mm)	Type
300479	double	160	44	60	535529 double
300480	double	160	44	80	
300481	double	160	44	100	
300482	double	160	44	120	
300483	double	160	44	140	
300484	double	160	44	160	
300485	double	160	44	180	
300486	double	160	44	200	
300487	double	160	44	220	
300488	double	160	44	240	
300489	double	160	44	260	
300490	double	160	44	280	
300491	double	160	44	300	
300492	double	160	44	320	

Fixing brackets					Suitable Thermo pads
Code	Type	H (mm)	W (mm)	L (mm)	Type
300513	combi	160	44	60	535529 double
300514	combi	160	44	80	
300515	combi	160	44	100	
300516	combi	160	44	120	
300517	combi	160	44	140	
300518	combi	160	44	160	
300519	combi	160	44	180	
300520	combi	160	44	200	
300521	combi	160	44	220	
300522	combi	160	44	240	
300523	combi	160	44	260	
300524	combi	160	44	280	
300525	combi	160	44	300	
300526	combi	160	44	320	

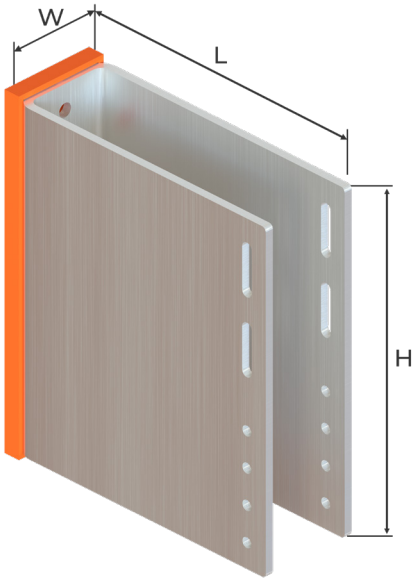
Single fixing bracket



Double fixing bracket



Combi fixing bracket

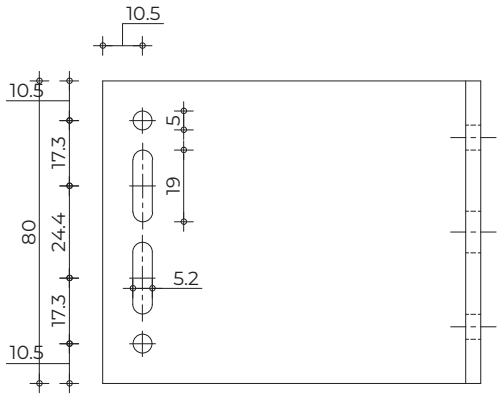


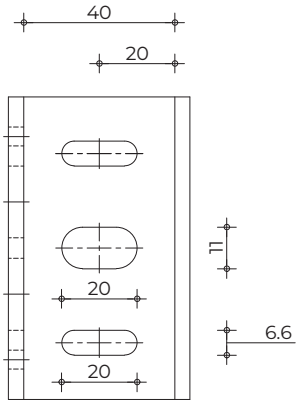
EVT II U-Brackets, Aluminium Performance Table

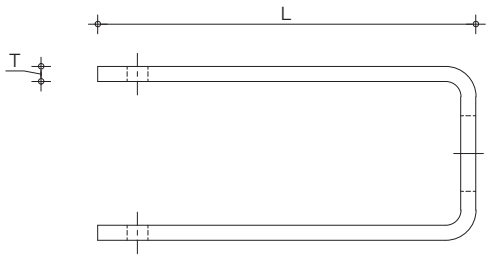
Summary of results from testing of EVT II U-brackets, Aluminium Code

Code	Type	Size(mm)	Material	Base	Design Resistance (kN)	
					Vertical	Horizontal
300496	single	44/60/80	aluminium	concrete/sfs	3.13 kN	2.41 kN
300497	single	44/80/80	aluminium	concrete/sfs	2.24 kN	2.40 kN
300498	single	44/100/80	aluminium	concrete/sfs	1.74 kN	2.40 kN
300499	single	44/120/80	aluminium	concrete/sfs	1.42 kN	2.40 kN
300500	single	44/140/80	aluminium	concrete/sfs	1.20 kN	2.39 kN
300501	single	44/160/80	aluminium	concrete/sfs	1.05 kN	2.40 kN
300502	single	44/180/80	aluminium	concrete/sfs	0.92 kN	2.40 kN
300503	single	44/200/80	aluminium	concrete/sfs	0.82 kN	2.40 kN
300504	single	44/220/80	aluminium	concrete/sfs	0.74 kN	2.41 kN
300505	single	44/240/80	aluminium	concrete/sfs	0.68 kN	2.41 kN
300506	single	44/260/80	aluminium	concrete/sfs	0.62 kN	2.39 kN
300507	single	44/280/80	aluminium	concrete/sfs	0.58 kN	2.39 kN
300508	single	44/300/80	aluminium	concrete/sfs	0.54 kN	2.40 kN
300509	single	44/320/80	aluminium	concrete/sfs	0.50 kN	2.40 kN
300479	double	44/60/160	aluminium	concrete/sfs	13.22 kN	6.97 kN
300480	double	44/80/160	aluminium	concrete/sfs	9.53 kN	6.97 kN
300481	double	44/100/160	aluminium	concrete/sfs	7.49 kN	6.97 kN
300482	double	44/120/160	aluminium	concrete/sfs	6.19 kN	6.97 kN
300483	double	44/140/160	aluminium	concrete/sfs	5.28 kN	6.97 kN
300484	double	44/160/160	aluminium	concrete/sfs	4.62 kN	6.97 kN
300485	double	44/180/160	aluminium	concrete/sfs	4.09 kN	6.97 kN
300486	double	44/200/160	aluminium	concrete/sfs	3.67 kN	6.90 kN
300487	double	44/220/160	aluminium	concrete/sfs	3.32 kN	7.01 kN
300488	double	44/240/160	aluminium	concrete/sfs	3.05 kN	7.01 kN
300489	double	44/260/160	aluminium	concrete/sfs	2.76 kN	7.01 kN
300490	double	44/280/160	aluminium	concrete/sfs	2.55 kN	7.08 kN
300491	double	44/300/160	aluminium	concrete/sfs	2.41 kN	7.04 kN
300492	double	44/320/160	aluminium	concrete/sfs	2.23 kN	7.04 kN
300513	double/combi	44/60/160	aluminium	concrete/sfs	13.22 kN	6.97 kN
300514	double/combi	44/80/160	aluminium	concrete/sfs	9.53 kN	6.97 kN
300515	double/combi	44/100/160	aluminium	concrete/sfs	7.49 kN	6.97 kN
300516	double/combi	44/120/160	aluminium	concrete/sfs	6.19 kN	6.97 kN
300517	double/combi	44/140/160	aluminium	concrete/sfs	5.28 kN	6.97 kN
300518	double/combi	44/160/160	aluminium	concrete/sfs	4.62 kN	6.97 kN
300519	double/combi	44/180/160	aluminium	concrete/sfs	4.09 kN	6.97 kN
300520	double/combi	44/200/160	aluminium	concrete/sfs	3.67 kN	6.90 kN
300521	double/combi	44/220/160	aluminium	concrete/sfs	3.32 kN	7.01 kN
300522	double/combi	44/240/160	aluminium	concrete/sfs	3.05 kN	7.01 kN
300523	double/combi	44/260/160	aluminium	concrete/sfs	2.76 kN	7.01 kN
300524	double/combi	44/280/160	aluminium	concrete/sfs	2.55 kN	7.08 kN
300525	double/combi	44/300/160	aluminium	concrete/sfs	2.41 kN	7.04 kN
300526	double/combi	44/320/160	aluminium	concrete/sfs	2.23 kN	7.04kN

EVT II U-Brackets, Aluminium Sliding Point Bracket







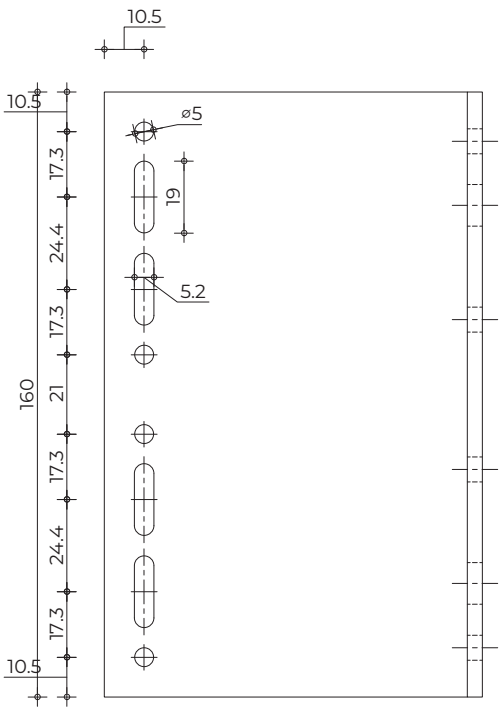
L* =		T =
40mm	220mm	3 - 4 mm
60mm	240mm	
80mm	260mm	
100mm	280mm	
120mm	300mm	
160mm	320mm	
180mm	340mm	
200mm	360mm	

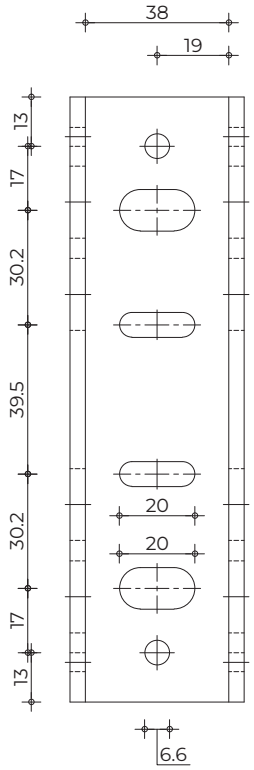
U-Bracket Single
Suitable for Concrete, Masonry, Steel and Timber
*Custom lengths available on demand

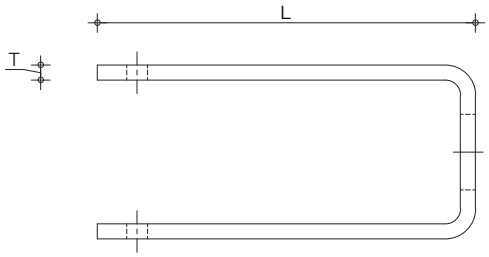
Item	Material
U-Bracket	Aluminum - EN AW 5083-'O'-H111/4017-H32
	St. steel 1.4301/1.4401/1.4404

All measurements in mm*

EVT II U-Brackets, Aluminium
Fixed Point Bracket







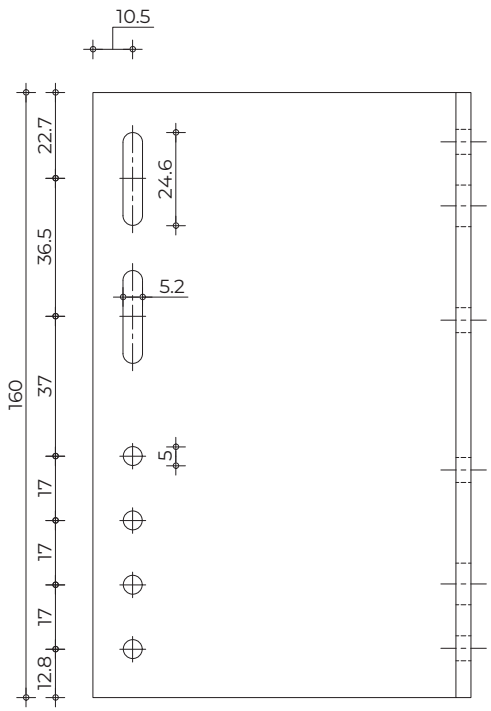
L* =		T =
40mm	220mm	3 - 4 mm
60mm	240mm	
80mm	260mm	
100mm	280mm	
120mm	300mm	
160mm	320mm	
180mm	340mm	
200mm	360mm	

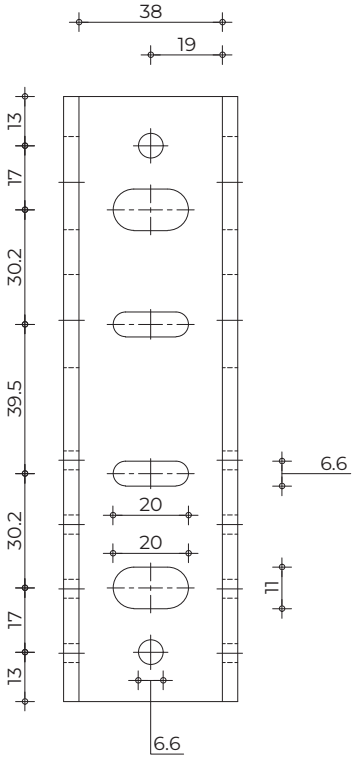
U-Bracket Double
Suitable for Concrete, Masonry, Steel and Timber
*Custom lengths available on demand

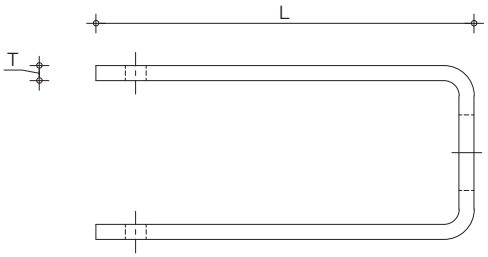
Item	Material
U-Bracket	Aluminum - EN AW 5083-'O'-H111/4017-H32
	St. steel 1.4301/1.4401/1.4404

All measurements in mm*

EVT II Combi U-Brackets, Aluminium
Fixed/ Sliding Point Bracket







L* =		T =
40mm	220mm	3 - 4 mm
60mm	240mm	
80mm	260mm	
100mm	280mm	
120mm	300mm	
160mm	320mm	
180mm	340mm	
200mm	360mm	

Combi U-Bracket Fixed/Single
Suitable for Concrete, Masonry, Steel and Timber
*Custom lengths available on demand

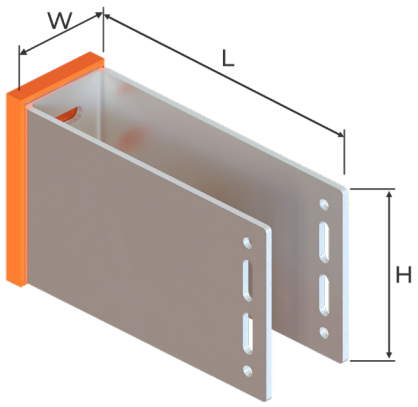
Item	Material
U-Bracket	Aluminum - EN AW 5083-'O'-H111/4017-H32
	St. steel 1.4301/1.4401/1.4404

All measurements in mm*

EVT II U-Brackets - Stainless Steel FPH & SPH, slots for Concrete and Steel

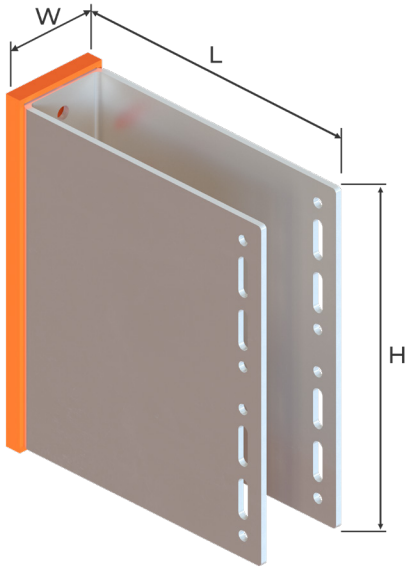
Fixing brackets					Suitable Thermo pads
Code	Type	H (mm)	W (mm)	L (mm)	Type
300530	single	80	44	60	515873 single
300531	single	80	44	80	
300532	single	80	44	100	
300533	single	80	44	120	
300534	single	80	44	140	
300535	single	80	44	160	
300536	single	80	44	180	
300537	single	80	44	200	
300538	single	80	44	220	
300539	single	80	44	240	
300540	single	80	44	260	
300541	single	80	44	280	
300542	single	80	44	300	
300543	single	80	44	320	

Single fixing bracket



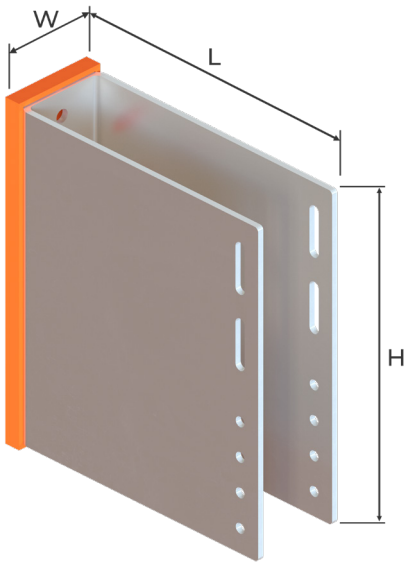
Fixing brackets					Suitable Thermo pads
Code	Type	H (mm)	W (mm)	L (mm)	Type
300547	double	160	44	60	535529 double
300548	double	160	44	80	
300549	double	160	44	100	
300550	double	160	44	120	
300551	double	160	44	140	
300552	double	160	44	160	
300553	double	160	44	180	
300554	double	160	44	200	
300555	double	160	44	220	
300556	double	160	44	240	
300557	double	160	44	260	
300558	double	160	44	280	
300559	double	160	44	300	
300560	double	160	44	320	

Double fixing bracket



Fixing brackets					Suitable Thermo pads
Code	Type	H (mm)	W (mm)	L (mm)	Type
300564	combi	160	44	60	535529 double
300565	combi	160	44	80	
300566	combi	160	44	100	
300567	combi	160	44	120	
300568	combi	160	44	140	
300569	combi	160	44	160	
300570	combi	160	44	180	
300571	combi	160	44	200	
300572	combi	160	44	220	
300573	combi	160	44	240	
300574	combi	160	44	260	
300575	combi	160	44	280	
300576	combi	160	44	300	
300577	combi	160	44	320	

Combi fixing bracket

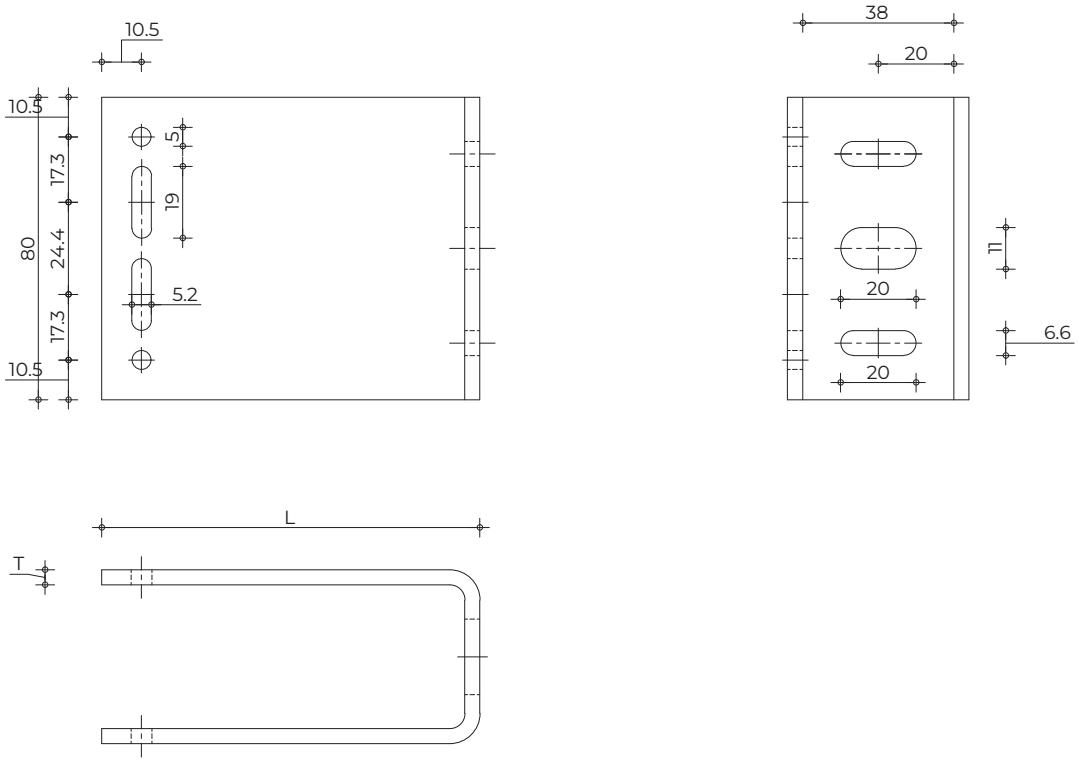


EVT II U-Brackets, Aluminium Performance Table

Summary of results from testing of EVT II U-brackets, Stainless

Code	Type	Size(mm)	Material	Base	Design Resistance (kN)	
					Vertical	Horizontal
300530	single	44/60/80	stainless	concrete/sfs	3.13 kN	2.41 kN
300531	single	44/80/80	stainless	concrete/sfs	2.24 kN	2.40 kN
300532	single	44/100/80	stainless	concrete/sfs	1.74 kN	2.40 kN
300533	single	44/120/80	stainless	concrete/sfs	1.42 kN	2.40 kN
300534	single	44/140/80	stainless	concrete/sfs	1.20 kN	2.39 kN
300535	single	44/160/80	stainless	concrete/sfs	1.05 kN	2.40 kN
300536	single	44/180/80	stainless	concrete/sfs	0.92 kN	2.40 kN
300537	single	44/200/80	stainless	concrete/sfs	0.82 kN	2.40 kN
300538	single	44/220/80	stainless	concrete/sfs	0.74 kN	2.41 kN
300539	single	44/240/80	stainless	concrete/sfs	0.68 kN	2.41 kN
300540	single	44/260/80	stainless	concrete/sfs	0.62 kN	2.39 kN
300541	single	44/280/80	stainless	concrete/sfs	0.58 kN	2.39 kN
300542	single	44/300/80	stainless	concrete/sfs	0.54 kN	2.40 kN
300543	single	44/320/80	stainless	concrete/sfs	0.50 kN	2.40 kN
300547	double	44/60/160	stainless	concrete/sfs	13.22 kN	6.97 kN
300548	double	44/80/160	stainless	concrete/sfs	9.53 kN	6.97 kN
300549	double	44/100/160	stainless	concrete/sfs	7.49 kN	6.97 kN
300550	double	44/120/160	stainless	concrete/sfs	6.19 kN	6.97 kN
300551	double	44/140/160	stainless	concrete/sfs	5.28 kN	6.97 kN
300552	double	44/160/160	stainless	concrete/sfs	4.62 kN	6.97 kN
300553	double	44/180/160	stainless	concrete/sfs	4.09 kN	6.97 kN
300554	double	44/200/160	stainless	concrete/sfs	3.67 kN	6.90 kN
300555	double	44/220/160	stainless	concrete/sfs	3.32 kN	7.01 kN
300556	double	44/240/160	stainless	concrete/sfs	3.05 kN	7.01 kN
300557	double	44/260/160	stainless	concrete/sfs	2.76 kN	7.01 kN
300558	double	44/280/160	stainless	concrete/sfs	2.55 kN	7.08 kN
300559	double	44/300/160	stainless	concrete/sfs	2.41 kN	7.04 kN
300560	double	44/320/160	stainless	concrete/sfs	2.23 kN	7.04 kN
300564	double/combi	44/60/160	stainless	concrete/sfs	13.22 kN	6.97 kN
300565	double/combi	44/80/160	stainless	concrete/sfs	9.53 kN	6.97 kN
300566	double/combi	44/100/160	stainless	concrete/sfs	7.49 kN	6.97 kN
300567	double/combi	44/120/160	stainless	concrete/sfs	6.19 kN	6.97 kN
300568	double/combi	44/140/160	stainless	concrete/sfs	5.28 kN	6.97 kN
300569	double/combi	44/160/160	stainless	concrete/sfs	4.62 kN	6.97 kN
300570	double/combi	44/180/160	stainless	concrete/sfs	4.09 kN	6.97 kN
300571	double/combi	44/200/160	stainless	concrete/sfs	3.67 kN	6.90 kN
300572	double/combi	44/220/160	stainless	concrete/sfs	3.32 kN	7.01 kN
300573	double/combi	44/240/160	stainless	concrete/sfs	3.05 kN	7.01 kN
300574	double/combi	44/260/160	stainless	concrete/sfs	2.76 kN	7.01 kN
300575	double/combi	44/280/160	stainless	concrete/sfs	2.55 kN	7.08 kN
300576	double/combi	44/300/160	stainless	concrete/sfs	2.41 kN	7.04 kN
300577	double/combi	44/320/160	stainless	concrete/sfs	2.23 kN	7.04 kN

EVT II U-Brackets, Stainless Steel
Fixed Point Bracket



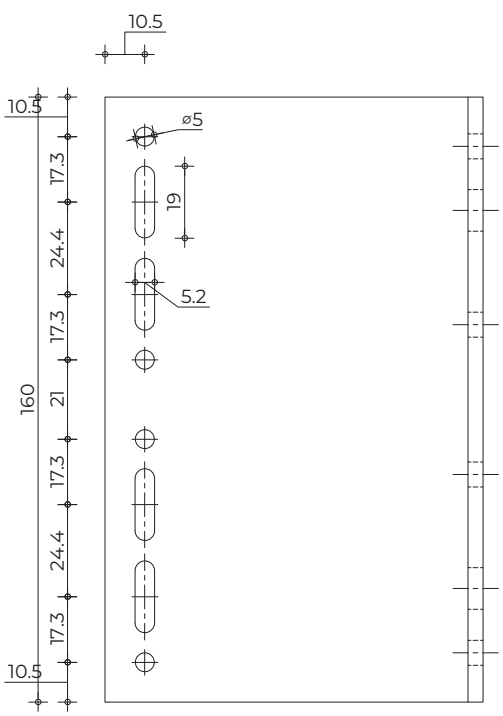
L* =		T =
40mm	220mm	3 - 4 mm
60mm	240mm	
80mm	260mm	
100mm	280mm	
120mm	300mm	
160mm	320mm	
180mm	340mm	
200mm	360mm	

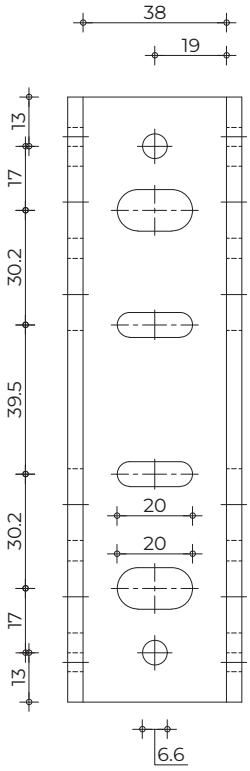
U-Bracket Single
Suitable for Concrete, Masonry, Steel and Timber
*Custom lengths available on demand

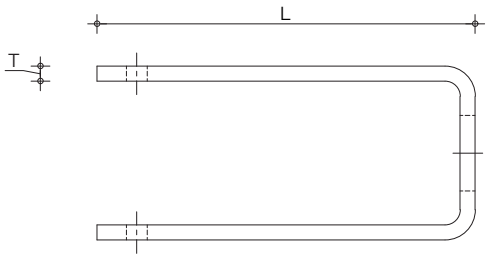
Item	Material
U-Bracket	Aluminum - EN AW 5083-'O'-H111/4017-H32
	St. steel 1.4301/1.4401/1.4404

All measurements in mm*

EVT II U-Brackets, Stainless Steel
Fixed Point Bracket







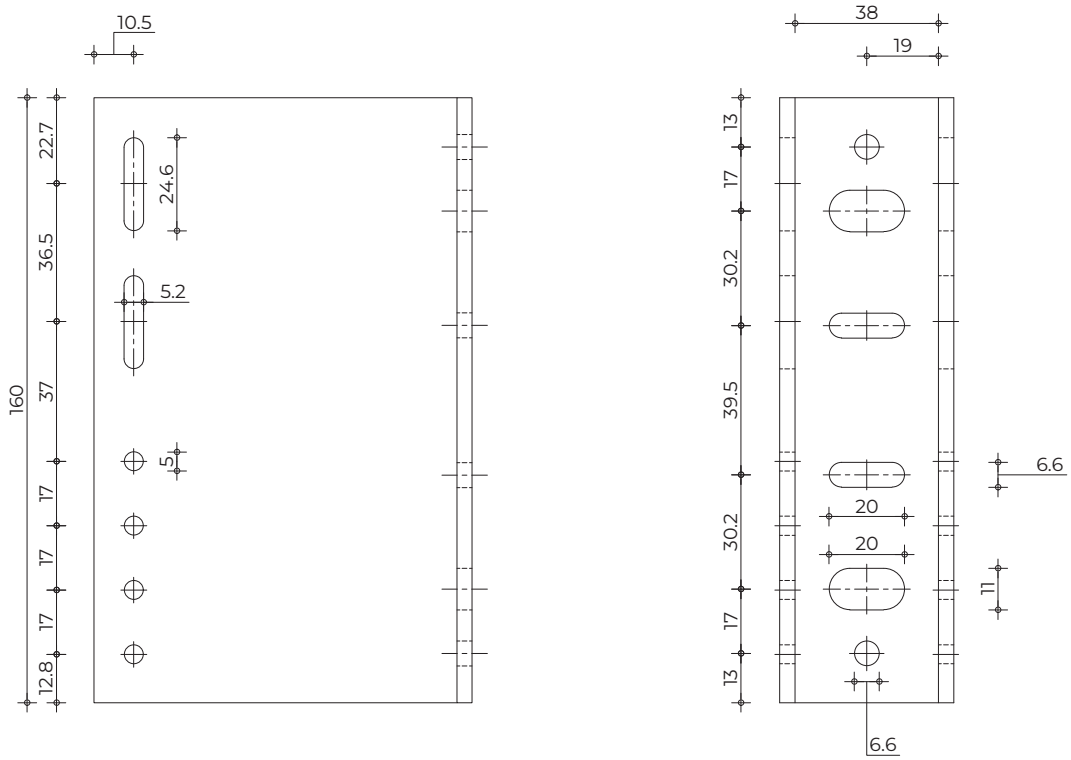
L* =		T =
40mm	220mm	3 - 4 mm
60mm	240mm	
80mm	260mm	
100mm	280mm	
120mm	300mm	
160mm	320mm	
180mm	340mm	
200mm	360mm	

U-Bracket Double
Suitable for Concrete, Masonry, Steel and Timber
*Custom lengths available on demand

Item	Material
U-Bracket	Aluminum - EN AW 5083-'O'-H111/4017-H32
	St. steel 1.4301/1.4401/1.4404

All measurements in mm*

EVT II Combi U-Brackets, Stainless Steel
Fixed/ Sliding Point Bracket



L* =		T =
40mm	220mm	3 - 4 mm
60mm	240mm	
80mm	260mm	
100mm	280mm	
120mm	300mm	
160mm	320mm	
180mm	340mm	
200mm	360mm	

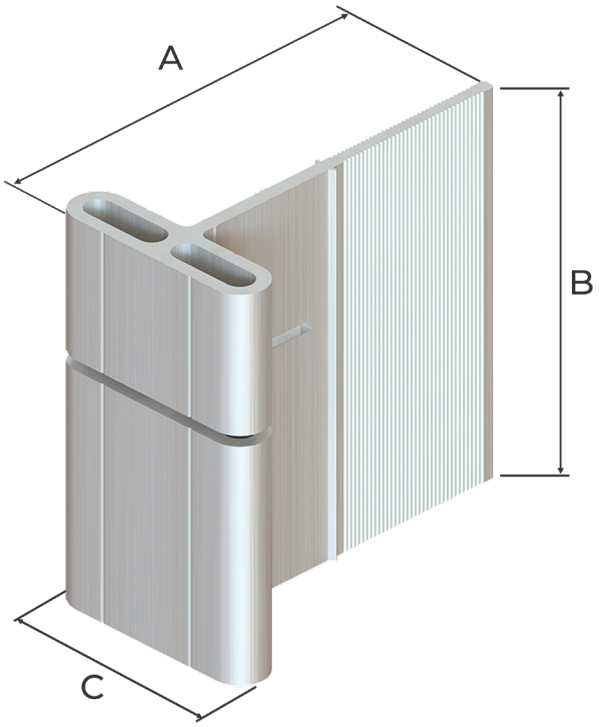
Combi U-Bracket Fixed/Single
Suitable for Concrete, Masonry, Steel and Timber
*Custom lengths available on demand

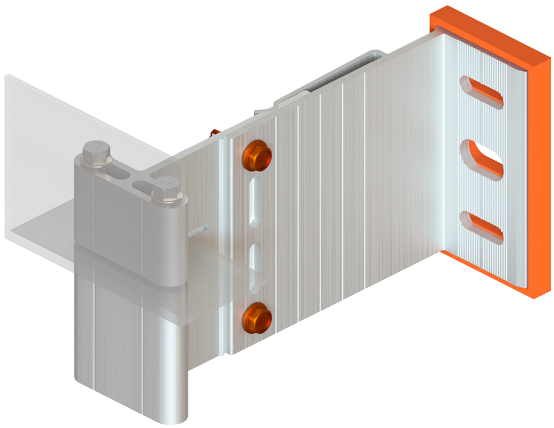
Item	Material
U-Bracket	Aluminum - EN AW 5083-'O'-H111/4017-H32
	St. steel 1.4301/1.4401/1.4404

All measurements in mm*

EVT II Horizontal Adaptor - Aluminium

Horizontal T adaptor			
Code	A (mm)	B (mm)	C (mm)
522161	86	80	47



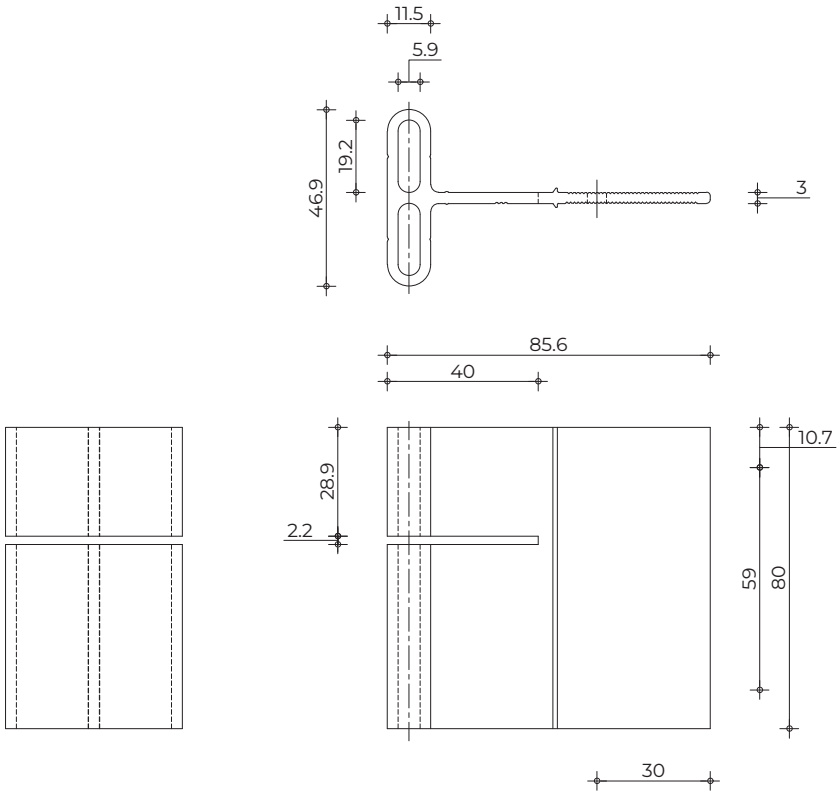


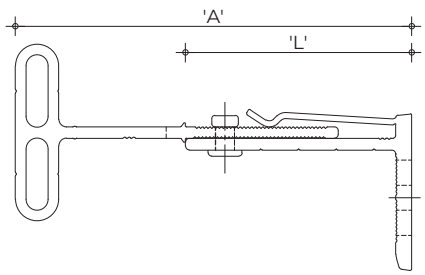
The performance characteristic of the horizontal T adapter has been tested in a laboratory condition for the worst-case scenario. The aim of the test is to determine the wind and dead load capacity of the brackets and their fixings to the subframe under shear and tension loads.

Code	**Size (mm)**	**Material**	**Base**	**Design Resistance (kN) (1)**	
				Vertical (kN)	**Horizontal (kN)**
522161	86x80x47	aluminium	sfs / concrete	1.92	2.81

(1) The adaptor piece is designed to be attached to an EVT II L-Bracket. The design resistance of the helping hand bracket will be the limiting factor when assessing final suitability.

EVT II Horizontal Adaptor, Aluminium





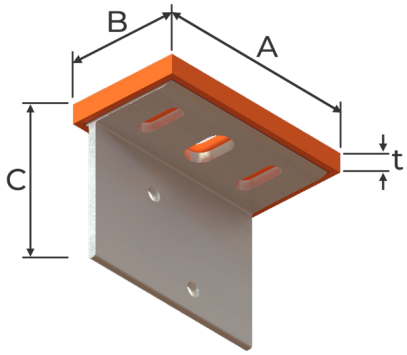
L =	A =
40mm	85mm
60mm	105mm
80mm	125mm
100mm	145mm
120mm	165mm
140mm	185mm
160mm	205mm
180mm	225mm
200mm	245mm
220mm	265mm
240mm	285mm
260mm	305mm
280mm	325mm
300mm	345mm
320mm	365mm

Item	Material
Horizontal T Adaptor Piece	Aluminum - EN AW 6063 T6

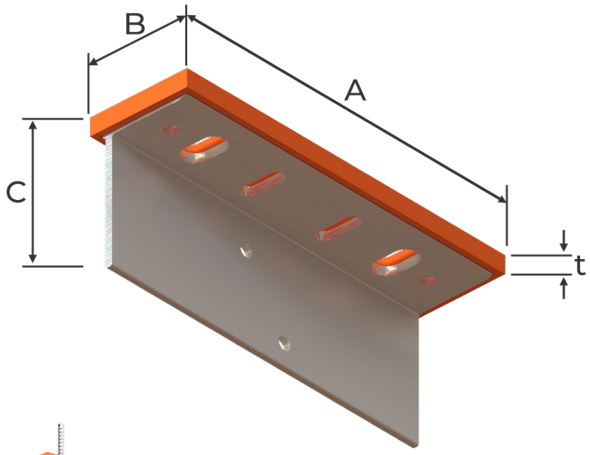
All measurements in mm*

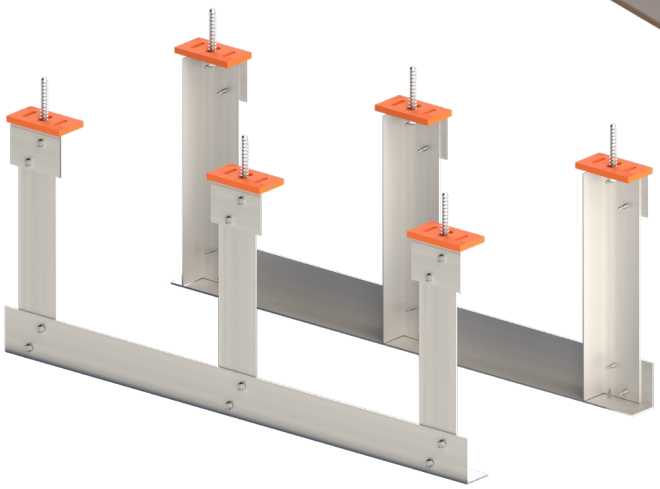
Soffit hanger brackets						Suitable Thermo pads
Code	Type	A (mm)	B (mm)	C (mm)	t (mm)	Type
553336	Double	160	40	60	2	130531
553337	Single	80	40	60	2	130530
553338	Double	160	40	60	3	130531
553339	Single	80	40	60	3	130530

Single fixing bracket



Double fixing bracket





The performance characteristics of the soffit hanger brackets are tested in laboratory conditions for the worst-case scenario. The aim of the test is to determine the dead load capacity of the brackets and their fixings to the subframe under tension loads.

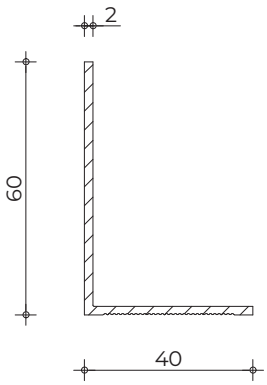
Summary of results from testing of soffit hanger brackets, Aluminium

Code	Type	Size (mm)	Thickness (mm)	Material	Base	Design Resistance (kN)
						Vertical (kN)
553336	Double	160x40x60	2	aluminium	concrete	1.96
553337	Single	80x40x60	2	aluminium	concrete	1.18
553338	Double	160x40x60	3	aluminium	concrete	3.61
553339	Single	80x40x60	3	aluminium	concrete	2.22

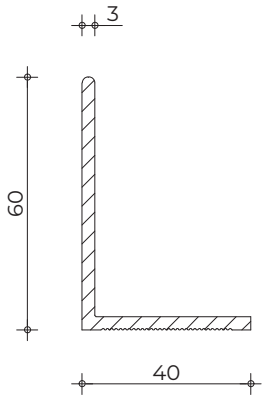
System Profiles & Structural Support Profiles

L, T, Floorspan Profiles
Structural C & Tophat Profiles
Zed & Hat Profiles

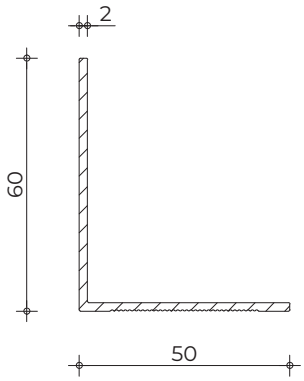
EVT II - L Profiles, Aluminium



L-Profile - 60x40x2



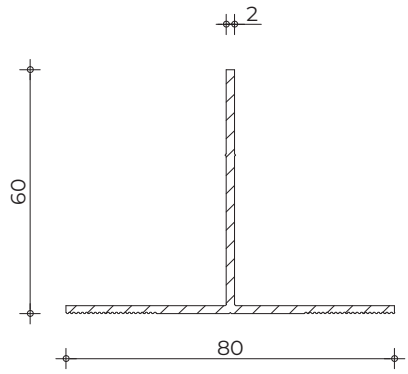
L-Profile - 60x40x3



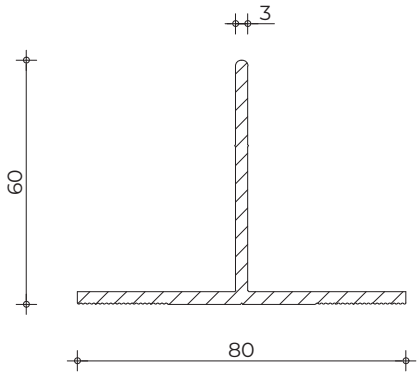
L-Profile - 60x50x2

Item	Material
L-Profile	Aluminum - EN AW 6063 T6

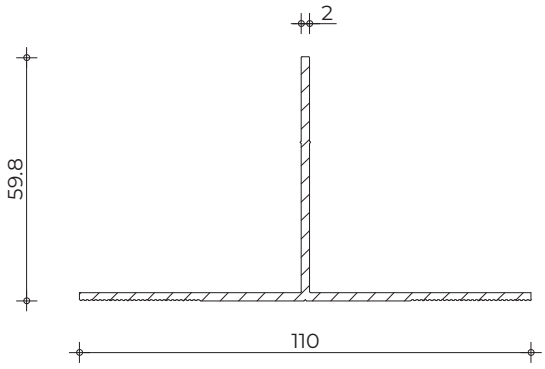
All measurements in mm*



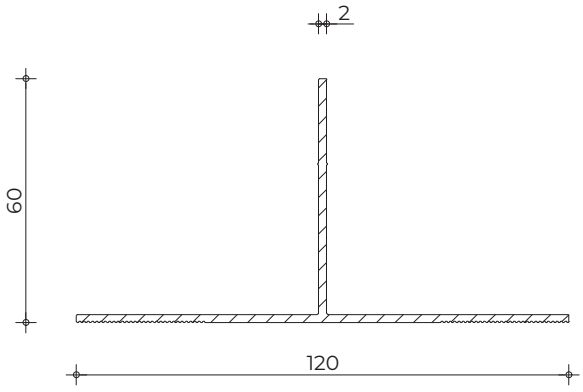
T-Profile - 80x60x2



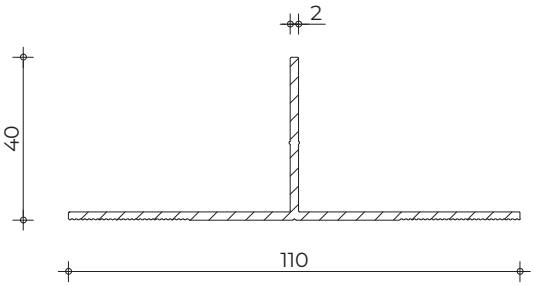
T-Profile - 80x60x3



T-Profile - 110x60x2



T-Profile - 120x60x2

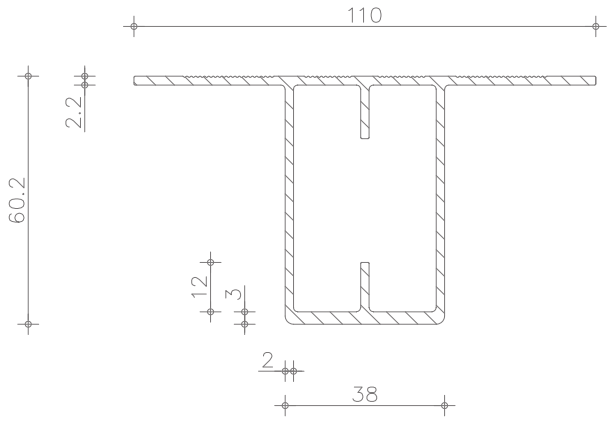


T-Profile - 110x40x2

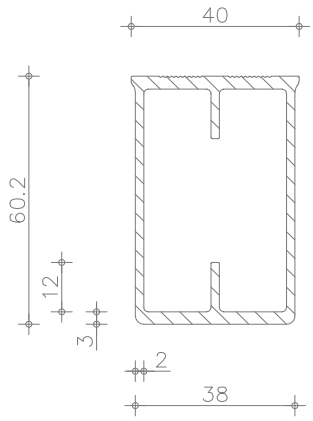
Item	Material
T-Profile	Aluminum - EN AW 6063 T6

All measurements in mm*

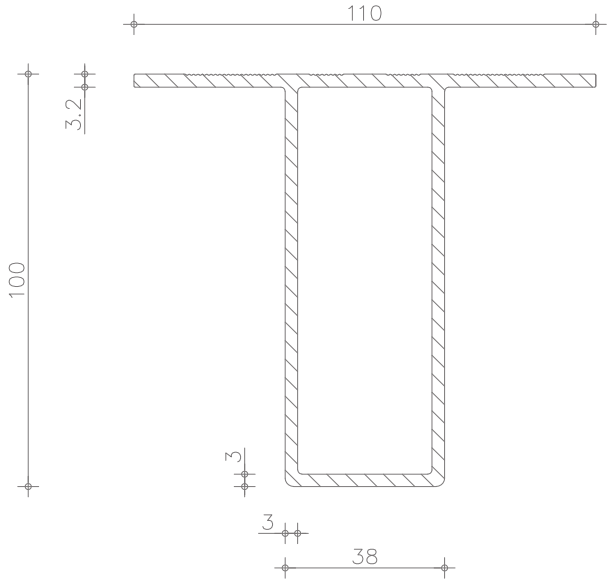
EVT II - Floorspan Profiles, Aluminium



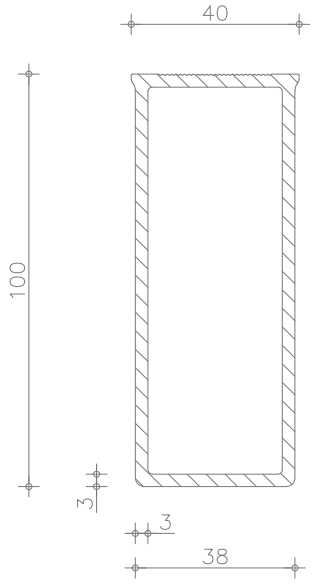
Floorspan T–Profile – 110/38 x 60 x 2/3



Floorspan Profile – 40/38 x 60 x 2/3



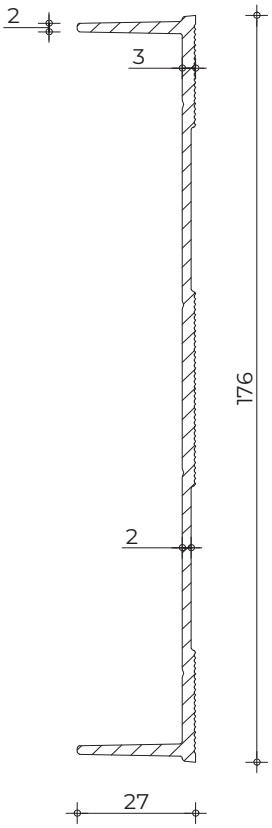
Floorspan T–Profile – 110/38 x 100 x 2/3



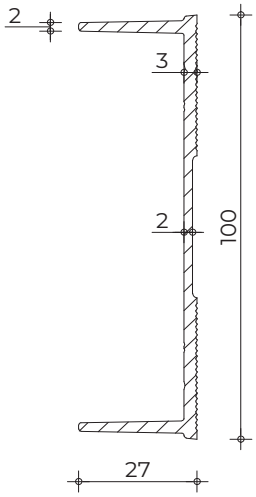
Floorspan Profile – 40/38 x 100 x 2/3

Item	Material
Floorspan Profile	Aluminum - EN AW 6063 T6

All measurements in mm*



C-channel 176x27

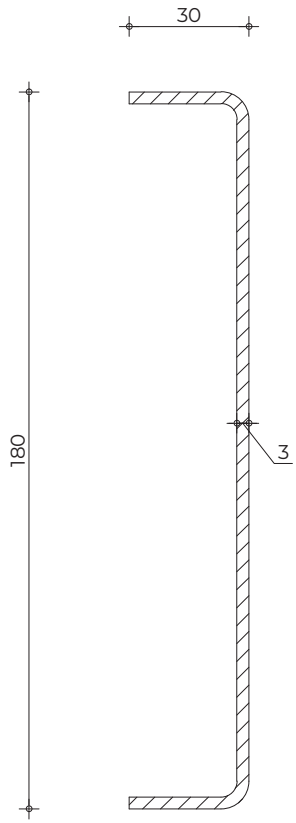


C-channel 100x27

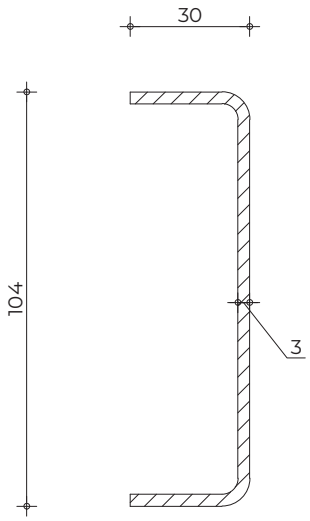
Item	Material
C-Profiles	Aluminum - EN AW 6063 T6

All measurements in mm*

EVT II - Structural C Channels, Stainless Steel



FPH C-Channel 180x30

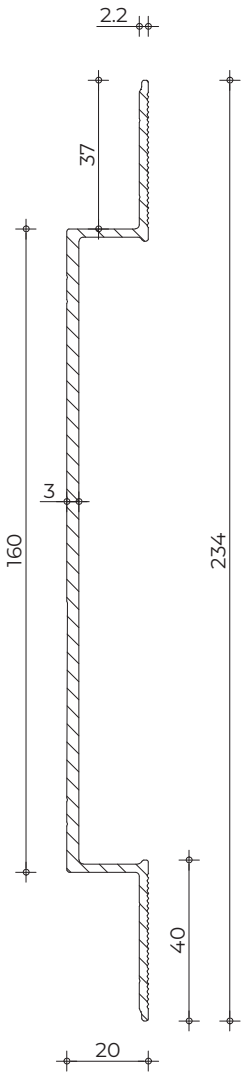


SPH Top Hat 104x30

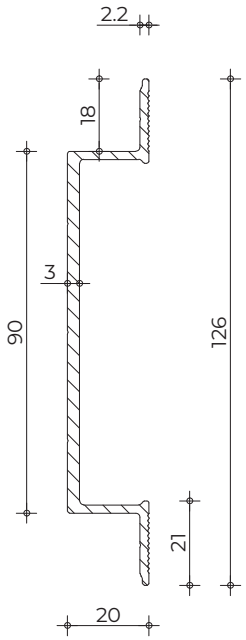
Item	Material
C-Channel	St. steel 1.4301/1.4401/1.4404

All measurements in mm*

EVT II - Structural Top Hat Profiles, Aluminium



FPH Top Hat 234x20x160

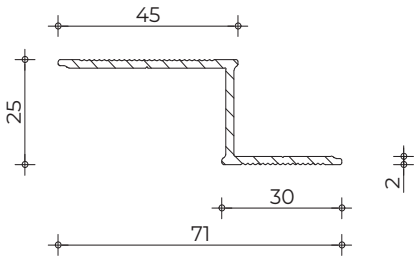


SPH Top Hat 126x20x90

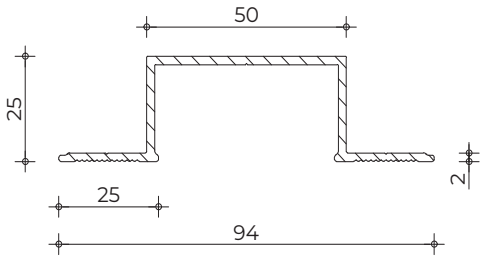
Item	Material
Top Hat	Aluminum - EN AW 6063 T6

All measurements in mm*

EVT II - Zed and Hat Profile, Aluminium



Zed Profile - 45x25x30x2



Hat Profile - 94x25x2

Item	Material
Hat Profile	Aluminum - EN AW 6063 T6
Zed Profile	Aluminum - EN AW 6063 T6

All measurements in mm*

Facade Types

Secret Fix

Secret Fix-1 / Secret Fix-2 /
Kerf Stone / Briklok Brick Slip

Secret Fix

Undercut Anchor System, SF horizontal rail system and SF hanger clasps allow supporting of light to heavy weight facades.

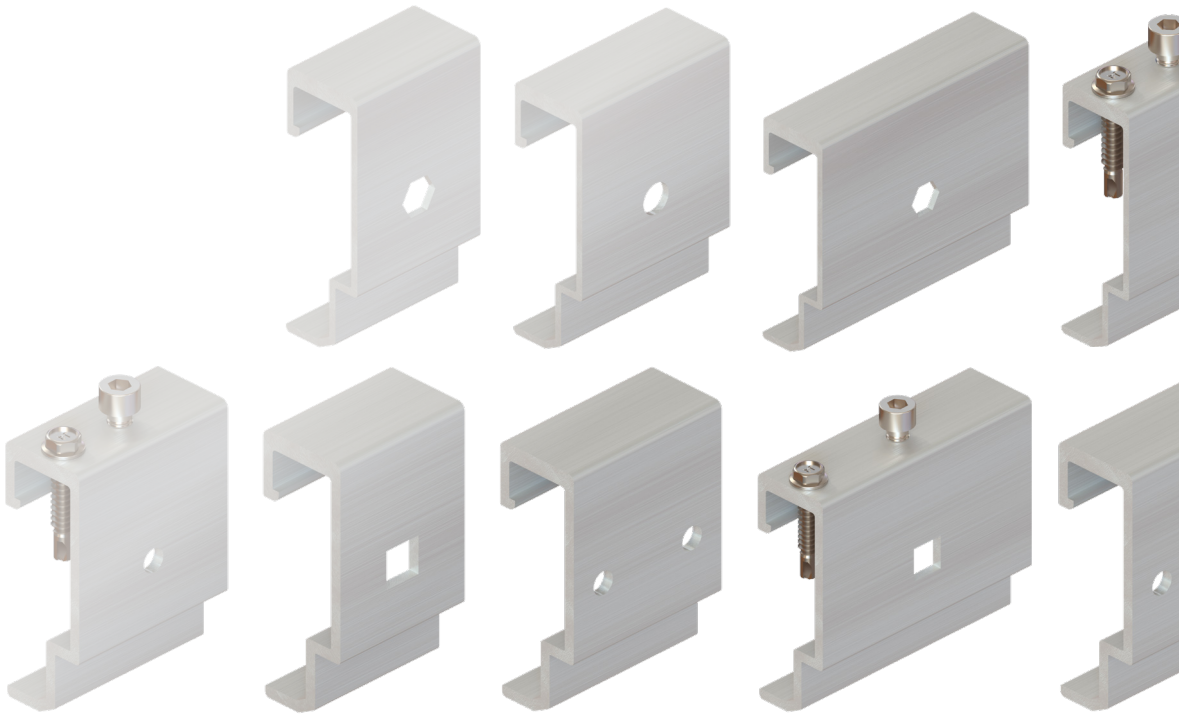
Secret Fix-1 is designed for invisible mounting of facade materials with a thickness of 8mm to 25mm.

Secret Fix-2 is designed for invisible mounting of facade materials with a thickness greater than 25mm.

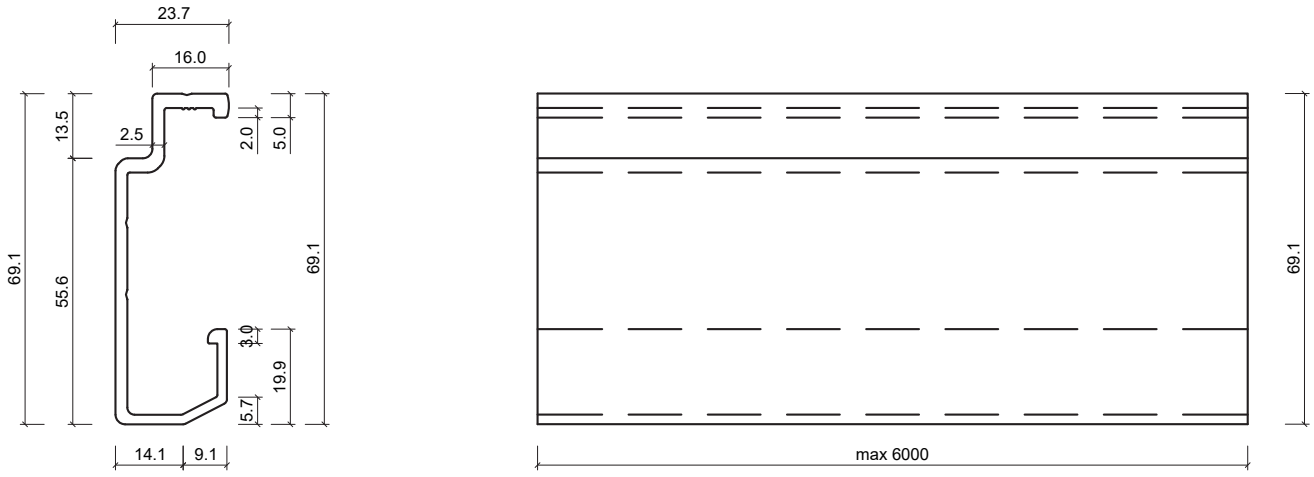
The SF clasps are supplied in 40, 50 & 80mm widths based on loading requirements. RJ Facades technical department will specify the hanger brackets depending on the facade panel size and weight.

Designed for all market leading undercut fixing configurations. SF hangers are available with a variety of hole geometry to suit various methods for secret fixing to different facade types, including Fischer FZP, Keil, SFS and other projecting bolts.

The majority of facades can be designed using 2mm vertical sections, although there structurally required 3mm sections are specified. Bracket and profile configuration is specified by RJ Facades technical department.



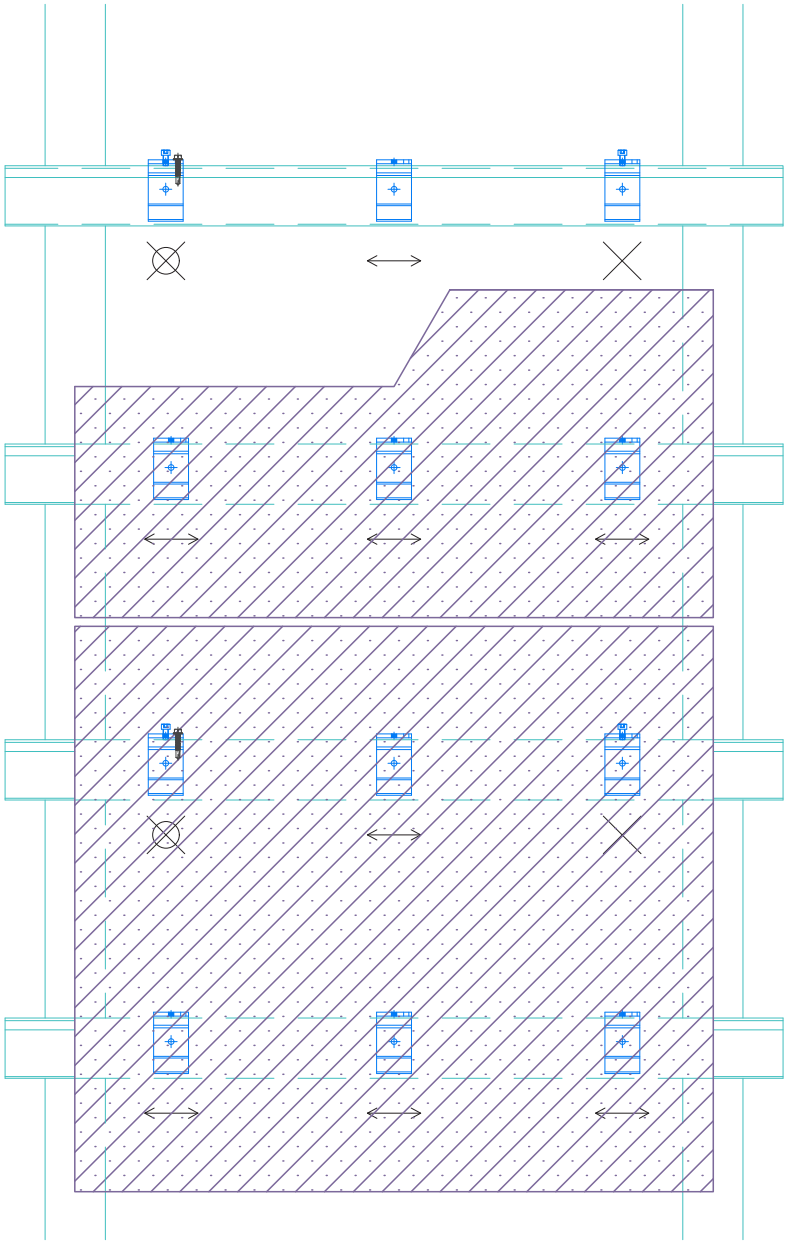
Secret Fix - Aluminium, Horizontal Support Rail



Item	Material
Secret Fix Rail	Aluminum - EN AW 6063 T6

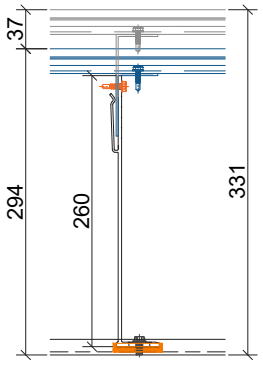
All measurements in mm*

Secret Fix - Clasp Positioning

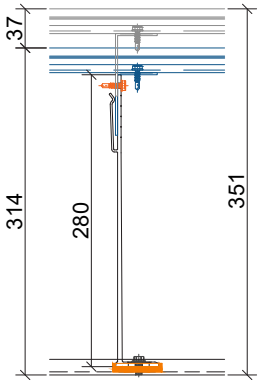


⊗	Secured fixed point (Secured to horizontal profile with JT4-4-4.8 x 19)
×	Fixed point
⟷	Sliding point

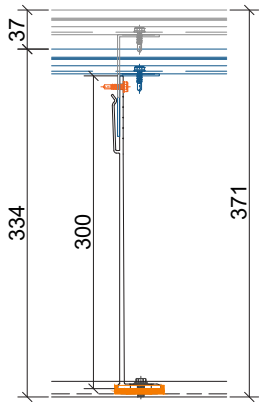
Secret Fix - Cladding Zone



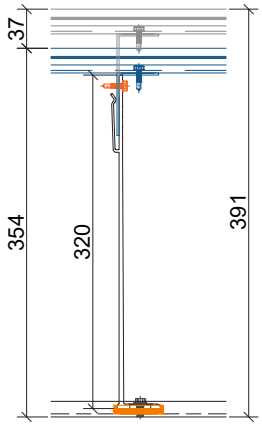
260 Bracket
ADJUSTMENT= +/– 37mm
Clad Zone= 294mm to 331mm



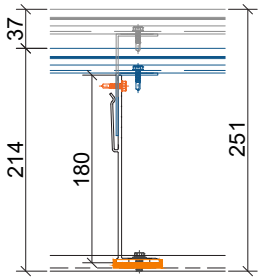
280 Bracket
ADJUSTMENT= +/– 37mm
Clad Zone= 314mm to 351mm



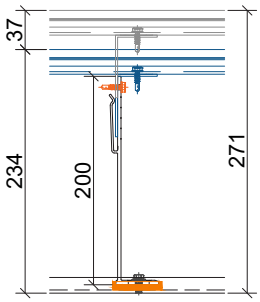
300 Bracket
ADJUSTMENT= +/– 37mm
Clad Zone= 334mm to 371mm



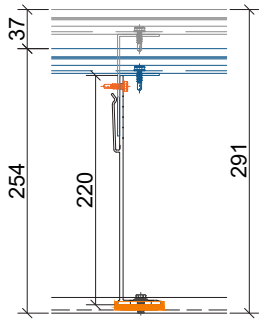
320 Bracket
ADJUSTMENT= +/– 37mm
Clad Zone= 354mm to 391mm



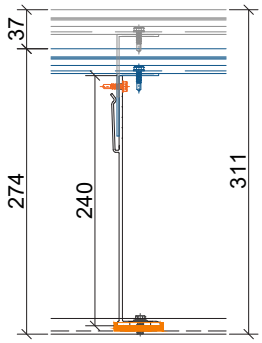
180 Bracket
ADJUSTMENT= +/– 37mm
Clad Zone= 214mm to 251mm



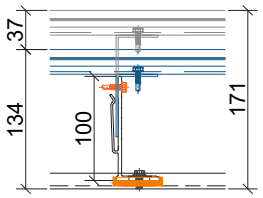
200 Bracket
ADJUSTMENT= +/– 37mm
Clad Zone= 234mm to 271mm



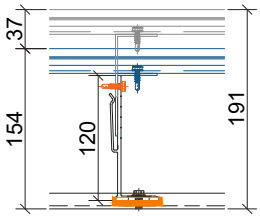
220 Bracket
ADJUSTMENT= +/– 37mm
Clad Zone= 254mm to 291mm



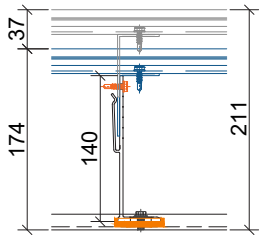
240 Bracket
ADJUSTMENT= +/– 37mm
Clad Zone= 274mm to 311mm



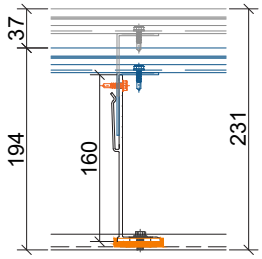
100 Bracket
ADJUSTMENT= +/– 37mm
Clad Zone= 134mm to 171mm



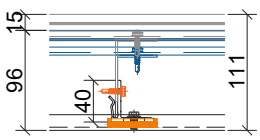
120 Bracket
ADJUSTMENT= +/– 37mm
Clad Zone= 154mm to 191mm



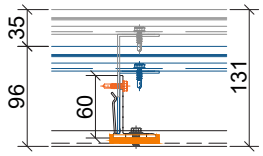
140 Bracket
ADJUSTMENT= +/– 37mm
Clad Zone= 174mm to 211mm



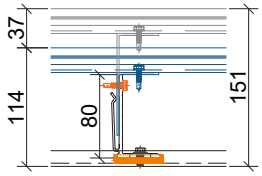
160 Bracket
ADJUSTMENT= +/– 37mm
Clad Zone= 194mm to 231mm



40 Bracket
ADJUSTMENT= +/– 15mm
Clad Zone= 96mm to 111mm



60 Bracket
ADJUSTMENT= +/– 35mm
Clad Zone= 96mm to 131mm



80 Bracket
ADJUSTMENT= +/– 37mm
Clad Zone= 114mm to 151mm

Secret Fix-1

Undercut Anchor System, SF horizontal rail system and SF1 hanger clasps to support light to medium weight facades. Secret Fix-1 is designed for invisible mounting of thin and smooth facade materials.

System accessories and designed profiles allow secure mounting of HP, fibre cement, ceramics, and stone less than 25mm thickness.

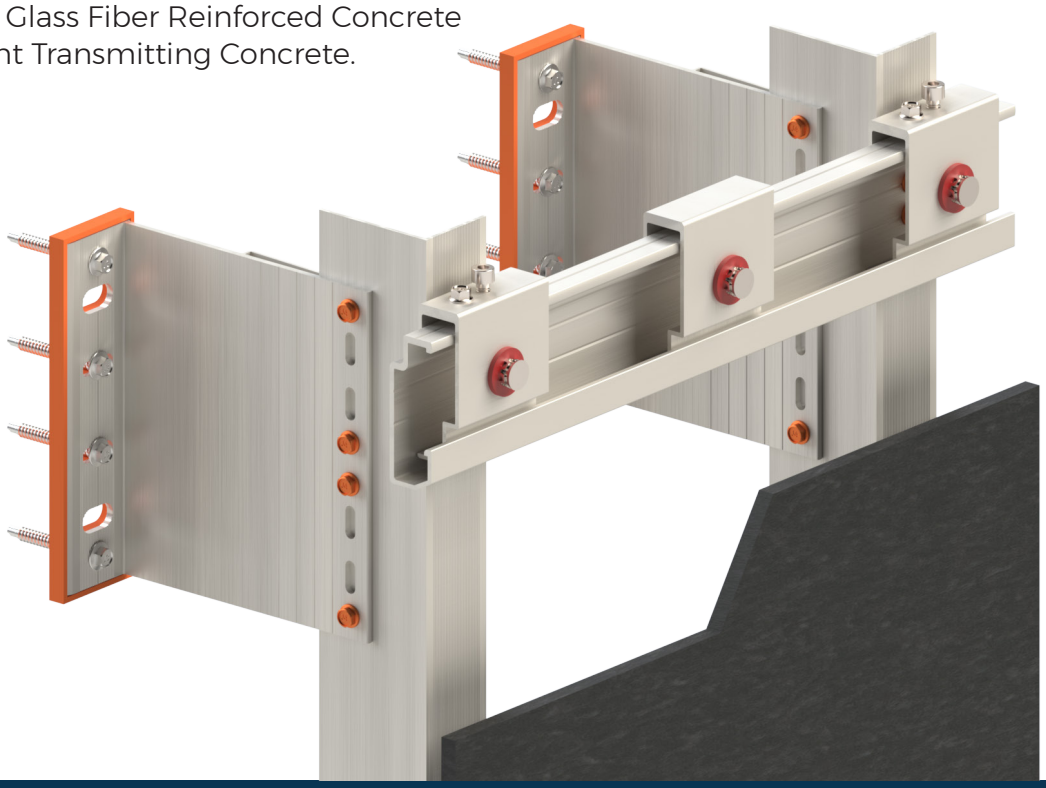
Secret Fix-1 System uses fixing anchors to guarantee the connections between the facade material and the main profiles of the system.

Main advantages:

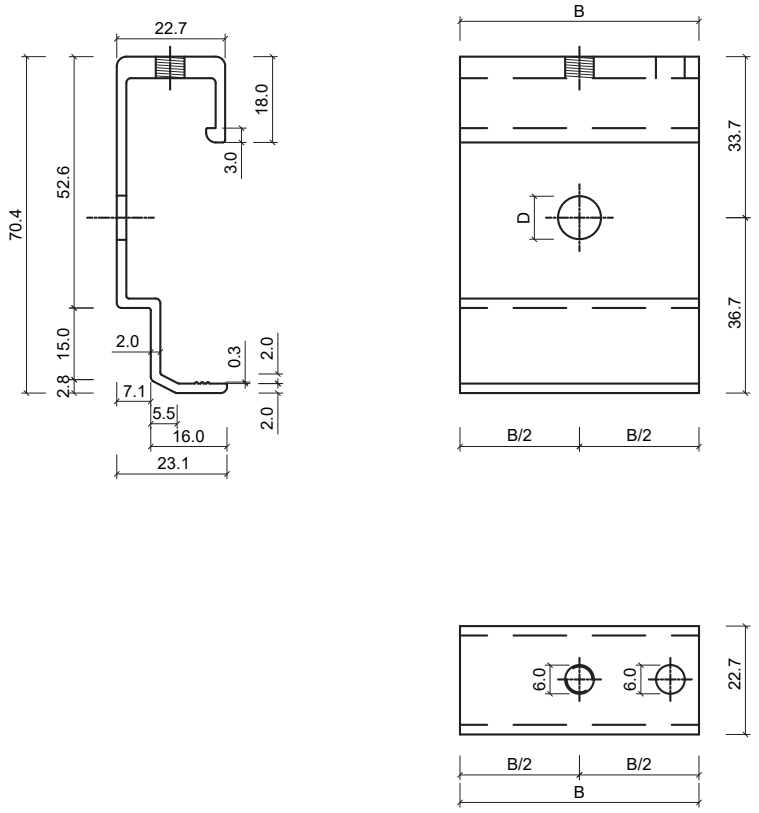
- SF1 clasps designed to 'help' the connection to the SF horizontal profile.
- Perfect vision of the facade with no visible holding elements.
- Large variety of sizes and designs of the facade materials.
- Highest level of security when fixing the tiles, due to the undercut anchors.
- Possibility to use facade materials with thickness ranging from 8mm to 25mm.
- Fast and easy installation compared to other secret fix systems.
- Secure and fully engineered work, which covers the entire project, and guarantees a complete system solution Cladding Materials.

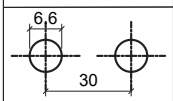
Typical Cladding Materials

- Ceramic Tiles; Glass; High Pressure Laminates (HPL); Fibre Cement; Stone; Technical Stone; Composite Mineral Material; Glass Fiber Reinforced Concrete GFRC; GREP; Light Transmitting Concrete.



Secret Fix-1 - Aluminium, Fixed Point Clasp

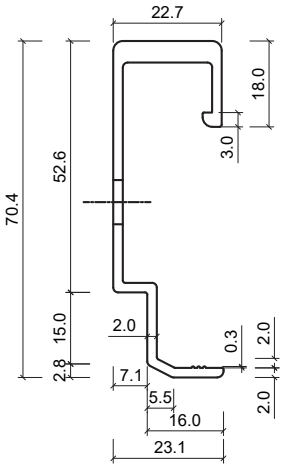


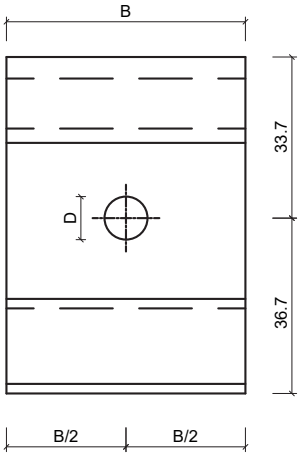
B	D	Fixing Configuration
40 mm		Hex
		Square
50 mm		M6
80 mm		M6 x 2
		M8

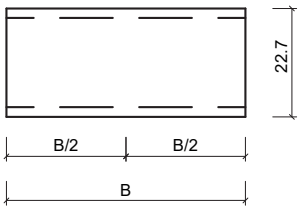
Item	Material
Secret Fix Rail	Aluminum - EN AW 6063 T6

All measurements in mm*

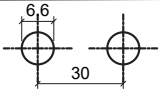
Secret Fix-1 - Aluminium, Sliding Point Clasp



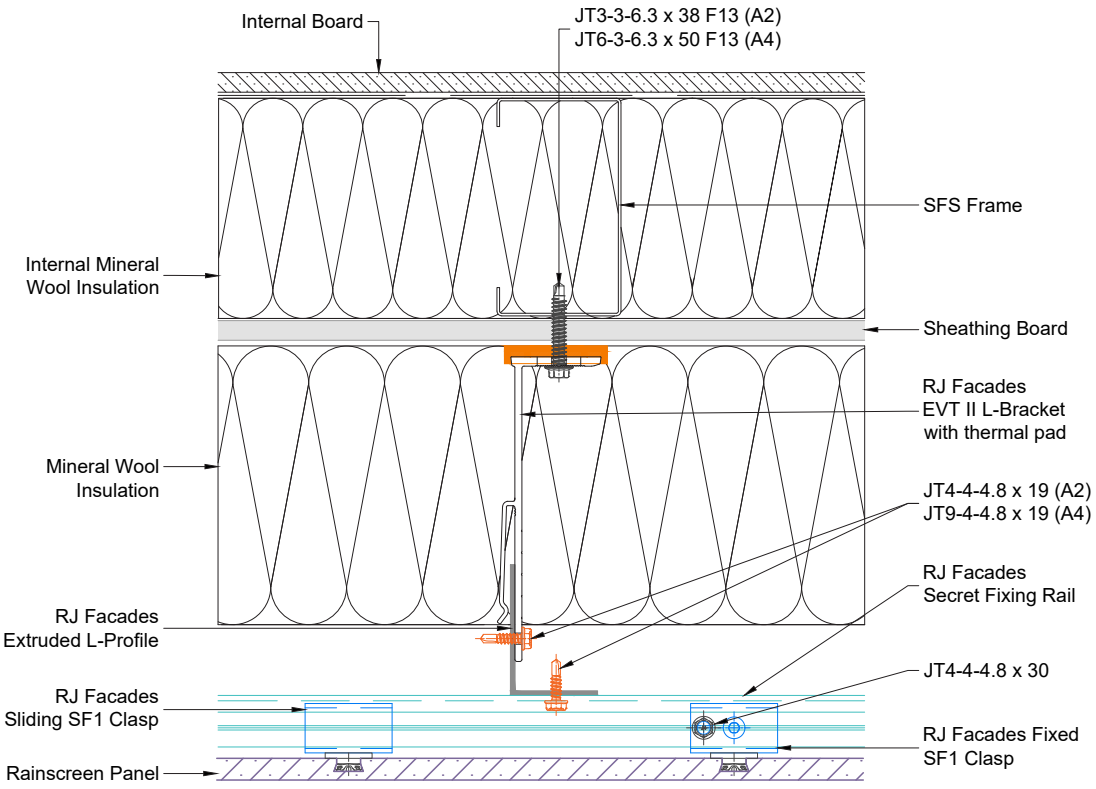




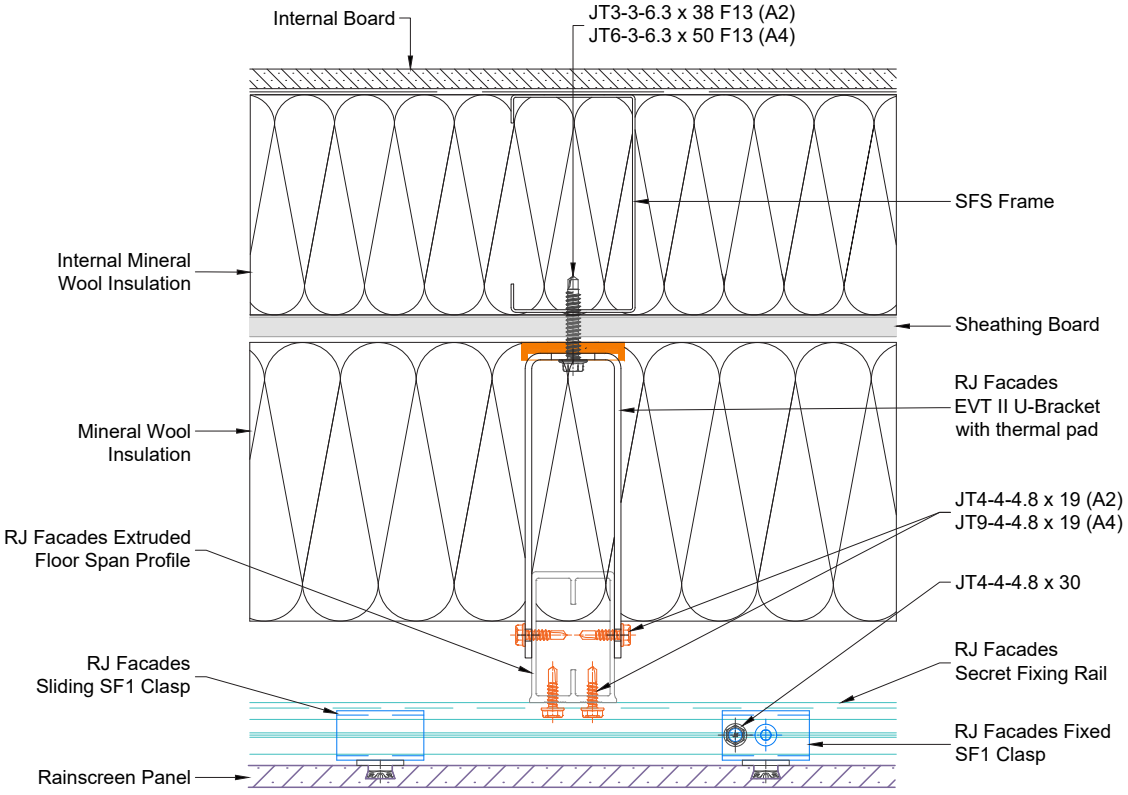
Item	Material
Secret Fix Rail	Aluminum - EN AW 6063 T6

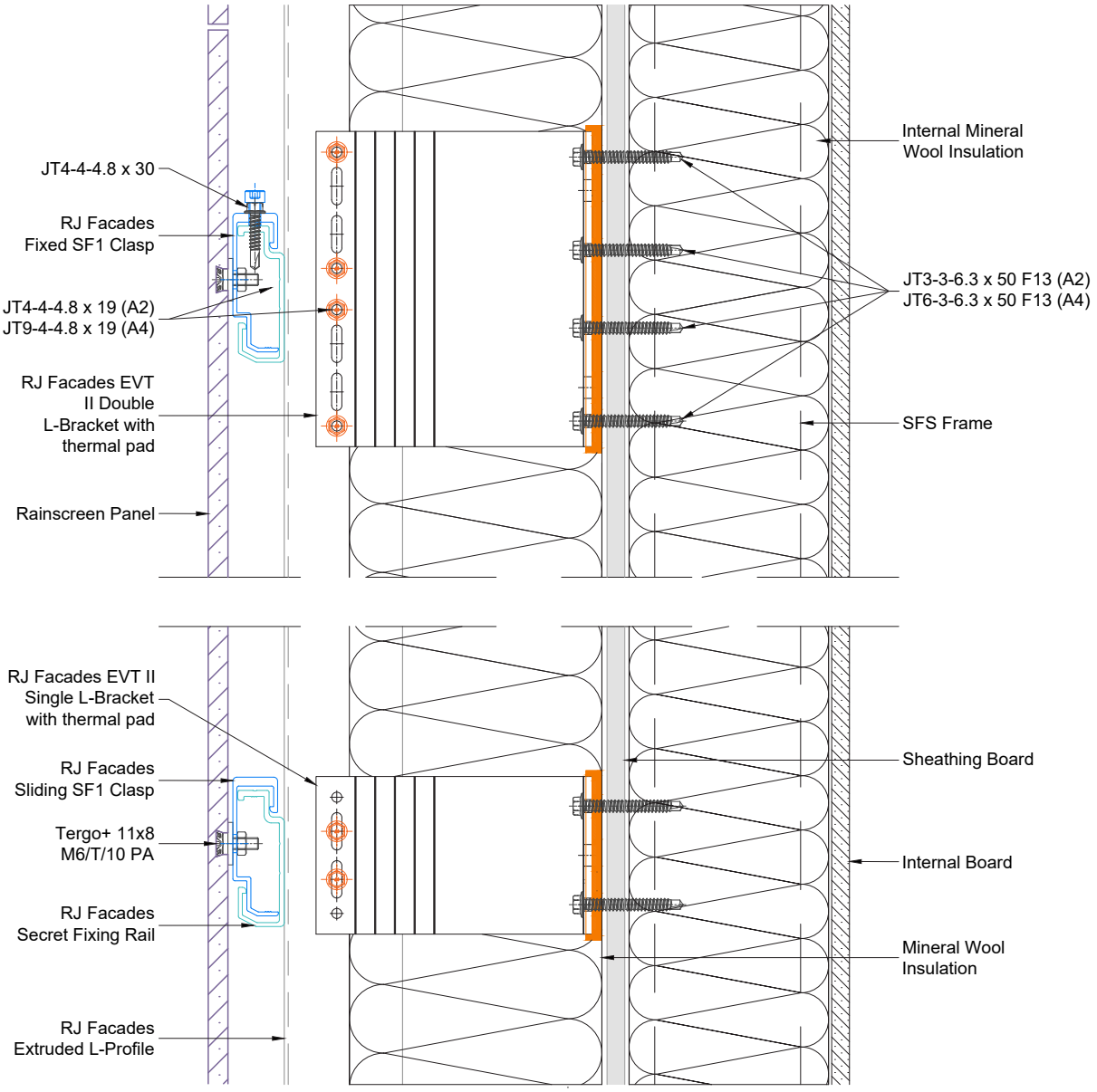
B	D	Fixing Configuration
40 mm		Hex
		Square
50 mm		M6
80 mm		M6 x 2
		M8

All measurements in mm*

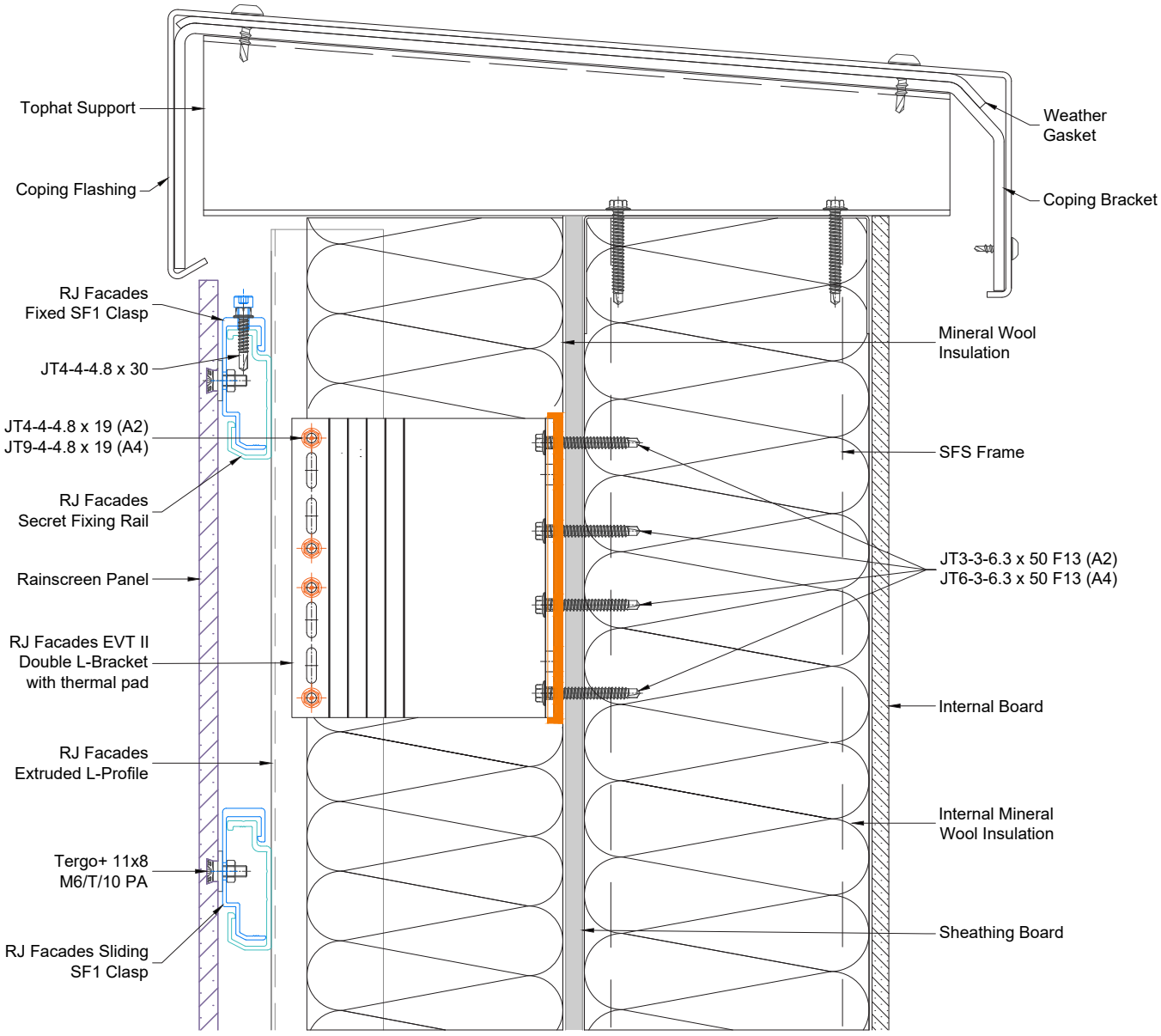

Internal Board
JT3-3-6.3 x 38 F13 (A2)
JT6-3-6.3 x 50 F13 (A4)
SFS Frame
Internal Mineral Wool Insulation
Sheathing Board
RJ Facades EVT II L-Bracket with thermal pad
Mineral Wool Insulation
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
RJ Facades Secret Fixing Rail
RJ Facades Extruded L-Profile
JT4-4-4.8 x 30
RJ Facades Sliding SF1 Clasp
RJ Facades Fixed SF1 Clasp
Rainscreen Panel

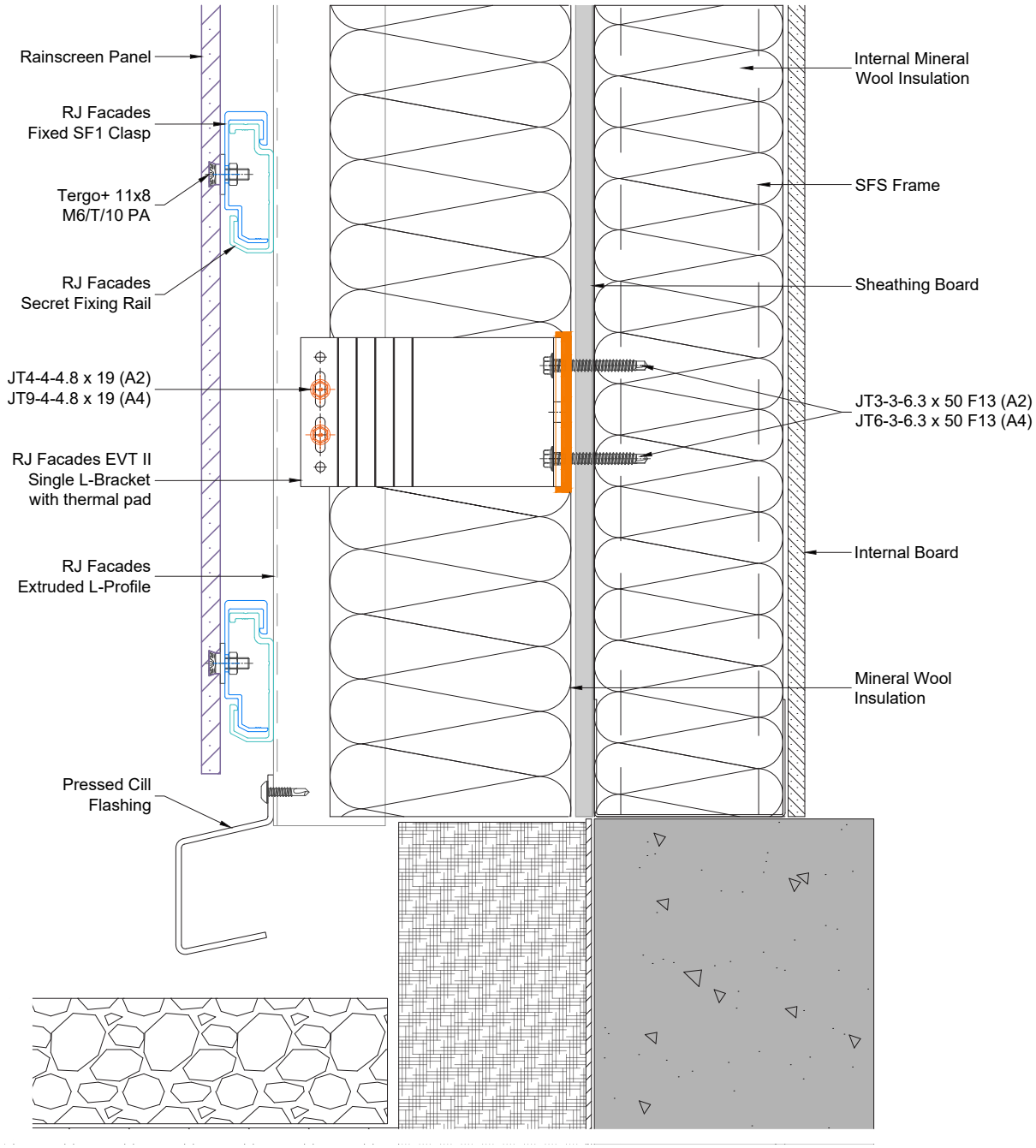
Secret Fix-1


Internal Board
JT3-3-6.3 x 38 F13 (A2)
JT6-3-6.3 x 50 F13 (A4)
SFS Frame
Internal Mineral Wool Insulation
Sheathing Board
RJ Facades EVT II U-Bracket with thermal pad
Mineral Wool Insulation
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
RJ Facades Extruded Floor Span Profile
JT4-4-4.8 x 30
RJ Facades Secret Fixing Rail
RJ Facades Sliding SF1 Clasp
RJ Facades Fixed SF1 Clasp
Rainscreen Panel

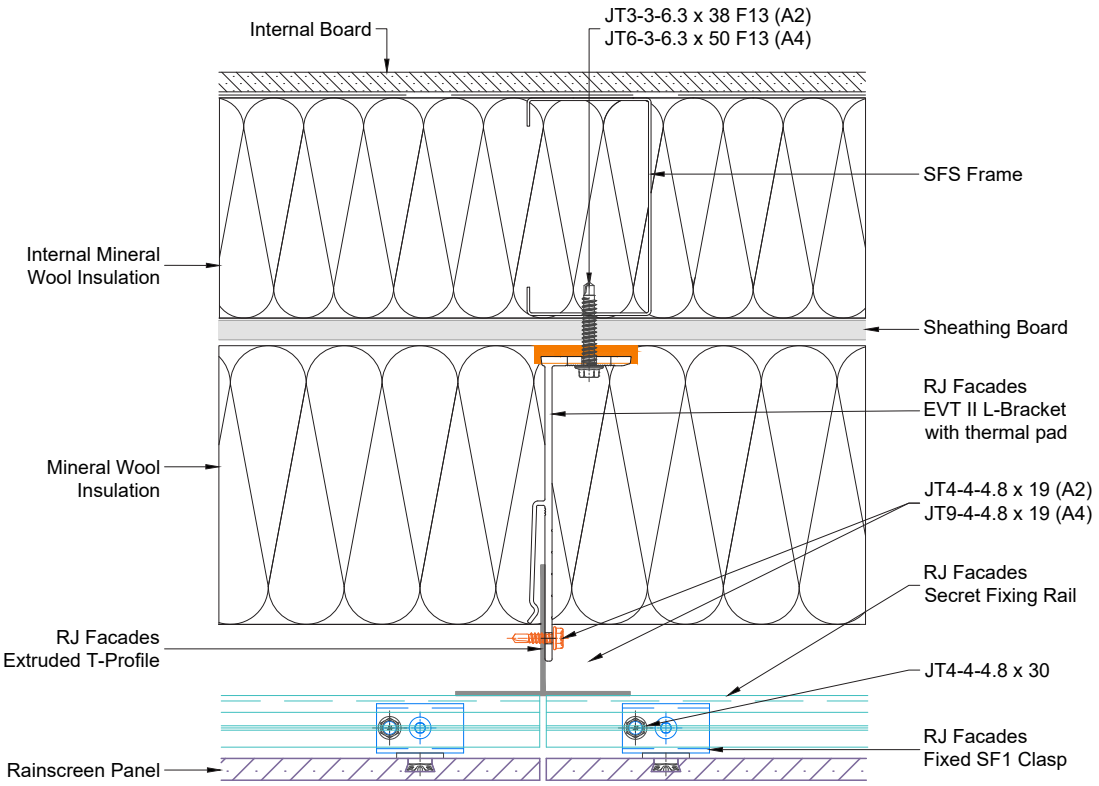

JT4-4-4.8 x 30
RJ Facades
Fixed SF1 Clasp
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
RJ Facades EVT
II Double
L-Bracket with
thermal pad
Rainscreen Panel
Internal Mineral
Wool Insulation
JT3-3-6.3 x 50 F13 (A2)
JT6-3-6.3 x 50 F13 (A4)
SFS Frame
RJ Facades EVT II
Single L-Bracket
with thermal pad
RJ Facades
Sliding SF1 Clasp
Tergo+ 11x8
M6/T/10 PA
RJ Facades
Secret Fixing Rail
RJ Facades
Extruded L-Profile
Sheathing Board
Internal Board
Mineral Wool
Insulation

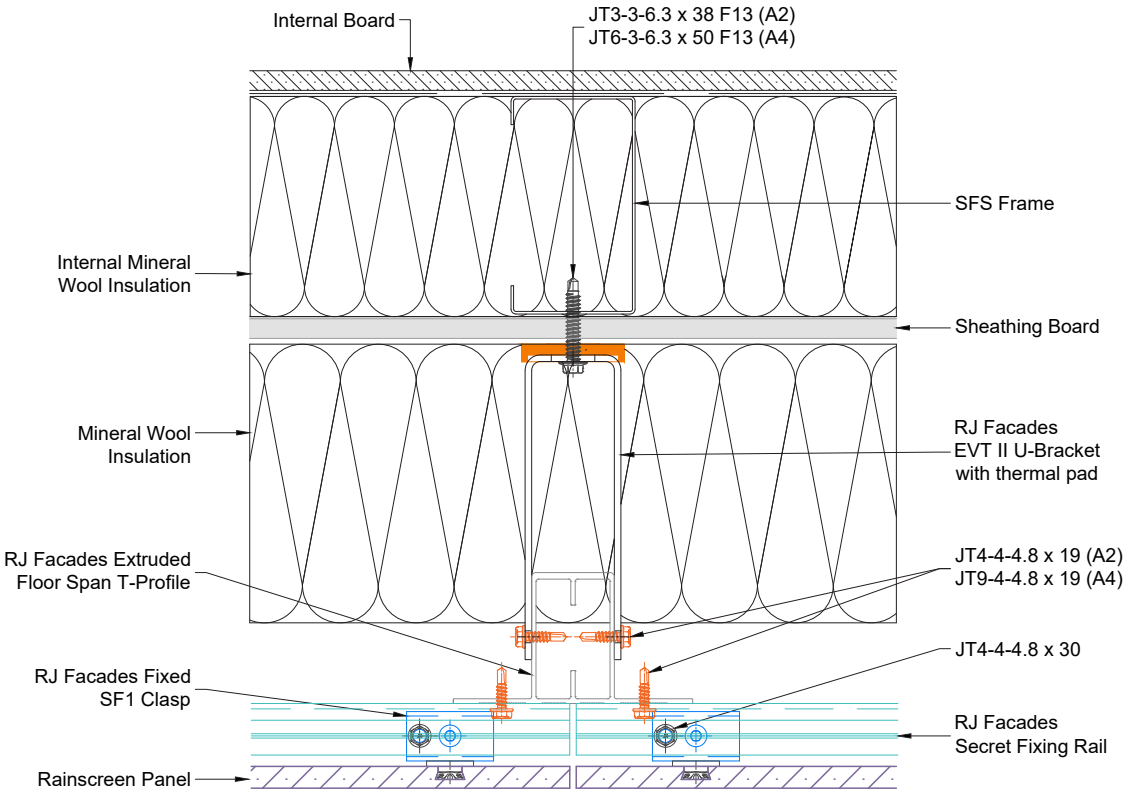
Secret Fix-1


Tophat Support
Coping Flashing
RJ Facades
Fixed SF1 Clasp
JT4-4-4.8 x 30
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
RJ Facades
Secret Fixing Rail
Rainscreen Panel
RJ Facades EVT II
Double L-Bracket
with thermal pad
RJ Facades
Extruded L-Profile
Tergo+ 11x8
M6/T/10 PA
RJ Facades Sliding
SF1 Clasp
Weather
Gasket
Coping Bracket
Mineral Wool
Insulation
SFS Frame
JT3-3-6.3 x 50 F13 (A2)
JT6-3-6.3 x 50 F13 (A4)
Internal Board
Internal Mineral
Wool Insulation
Sheathing Board

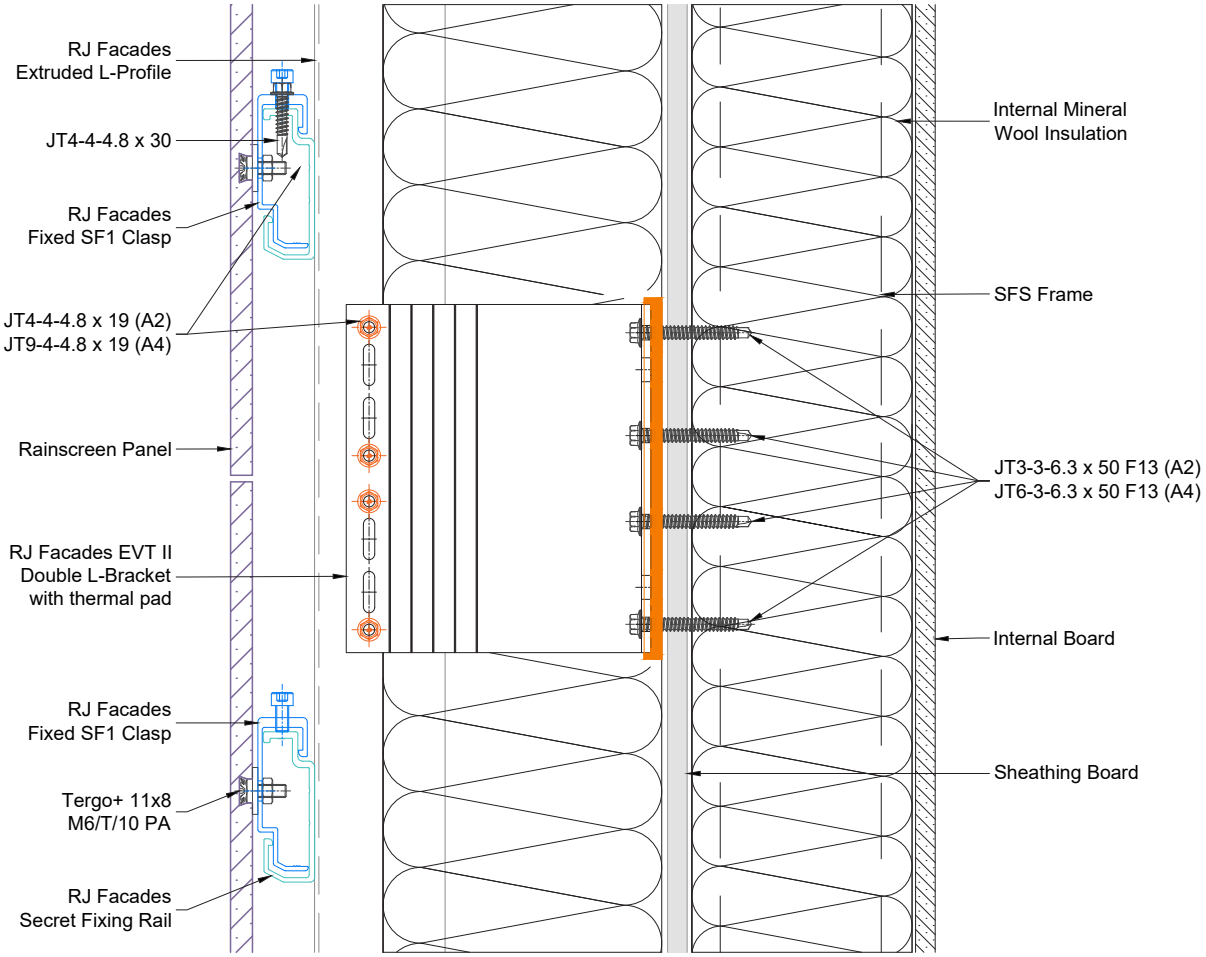

Rainscreen Panel
RJ Facades
Fixed SF1 Clasp
Tergo+ 11x8
M6/T/10 PA
RJ Facades
Secret Fixing Rail
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
RJ Facades EVT II
Single L-Bracket
with thermal pad
RJ Facades
Extruded L-Profile
Pressed Cill
Flashing
Internal Mineral
Wool Insulation
SFS Frame
Sheathing Board
JT3-3-6.3 x 50 F13 (A2)
JT6-3-6.3 x 50 F13 (A4)
Internal Board
Mineral Wool
Insulation

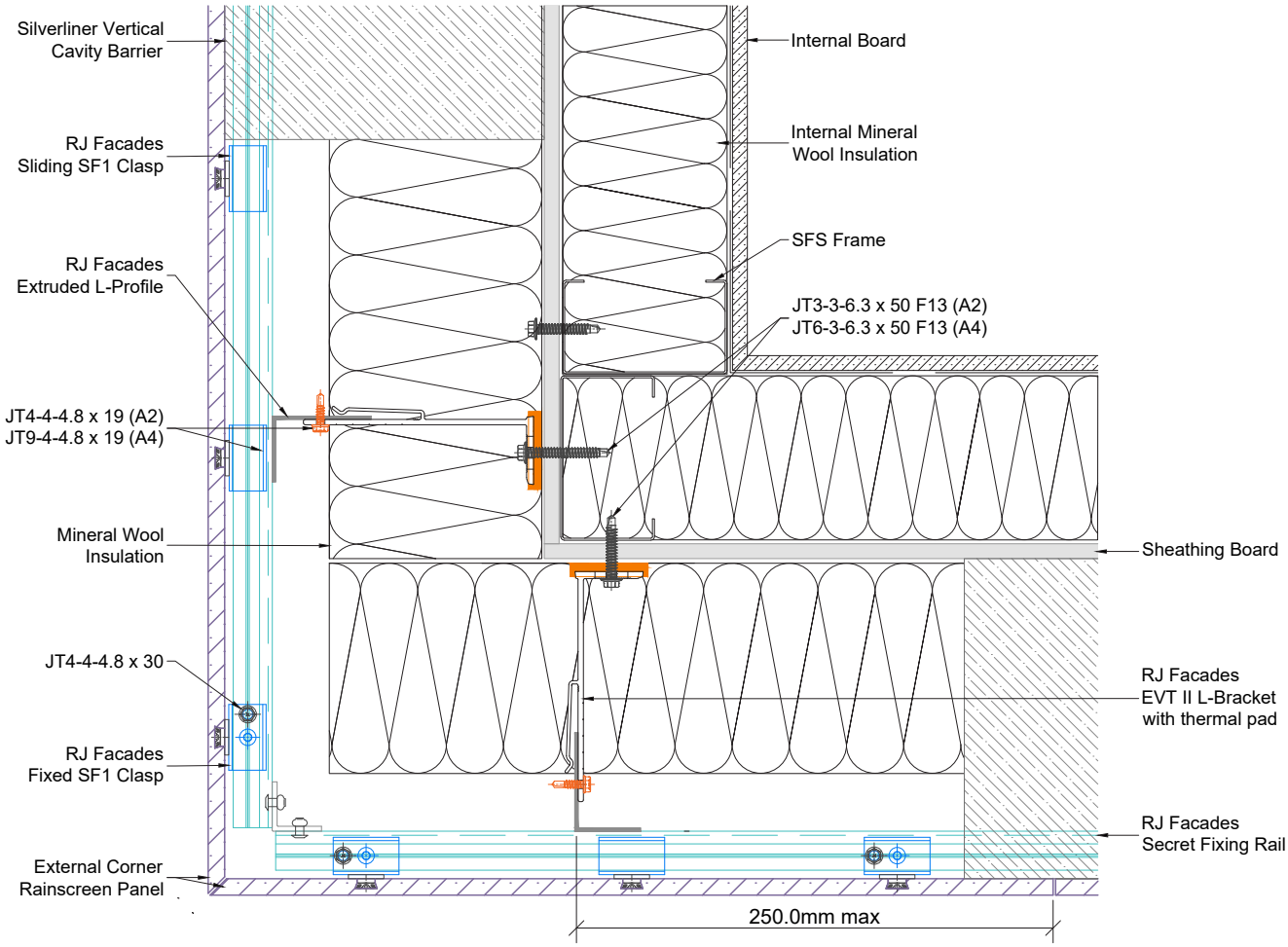
Secret Fix-1


Internal Board
JT3-3-6.3 x 38 F13 (A2)
JT6-3-6.3 x 50 F13 (A4)
SFS Frame
Internal Mineral Wool Insulation
Sheathing Board
RJ Facades EVT II L-Bracket with thermal pad
Mineral Wool Insulation
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
RJ Facades Secret Fixing Rail
RJ Facades Extruded T-Profile
JT4-4-4.8 x 30
RJ Facades Fixed SF1 Clasp
Rainscreen Panel

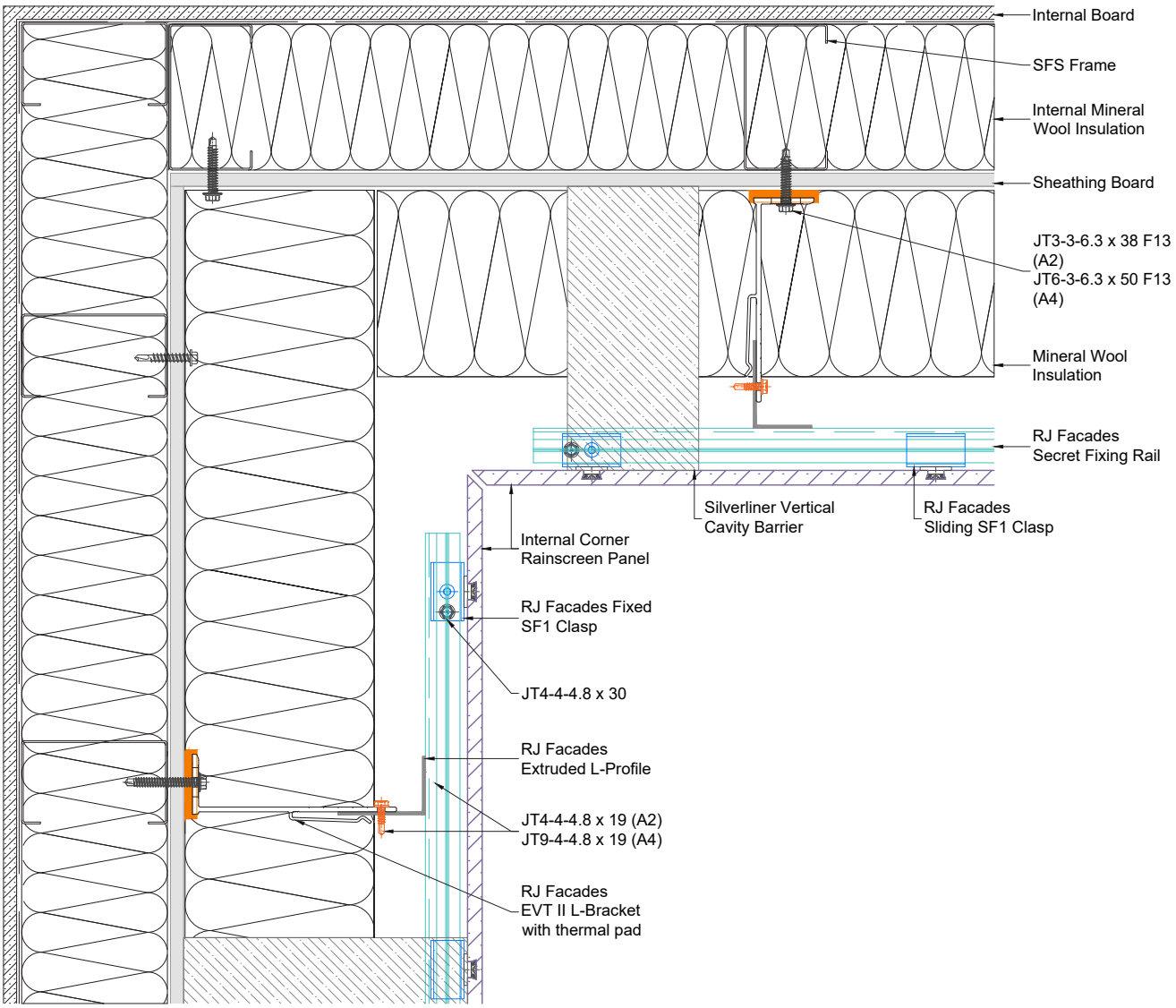

Internal Board
JT3-3-6.3 x 38 F13 (A2)
JT6-3-6.3 x 50 F13 (A4)
SFS Frame
Internal Mineral Wool Insulation
Sheathing Board
Mineral Wool Insulation
RJ Facades EVT II U-Bracket with thermal pad
RJ Facades Extruded Floor Span T-Profile
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
JT4-4-4.8 x 30
RJ Facades Fixed SF1 Clasp
RJ Facades Secret Fixing Rail
Rainscreen Panel

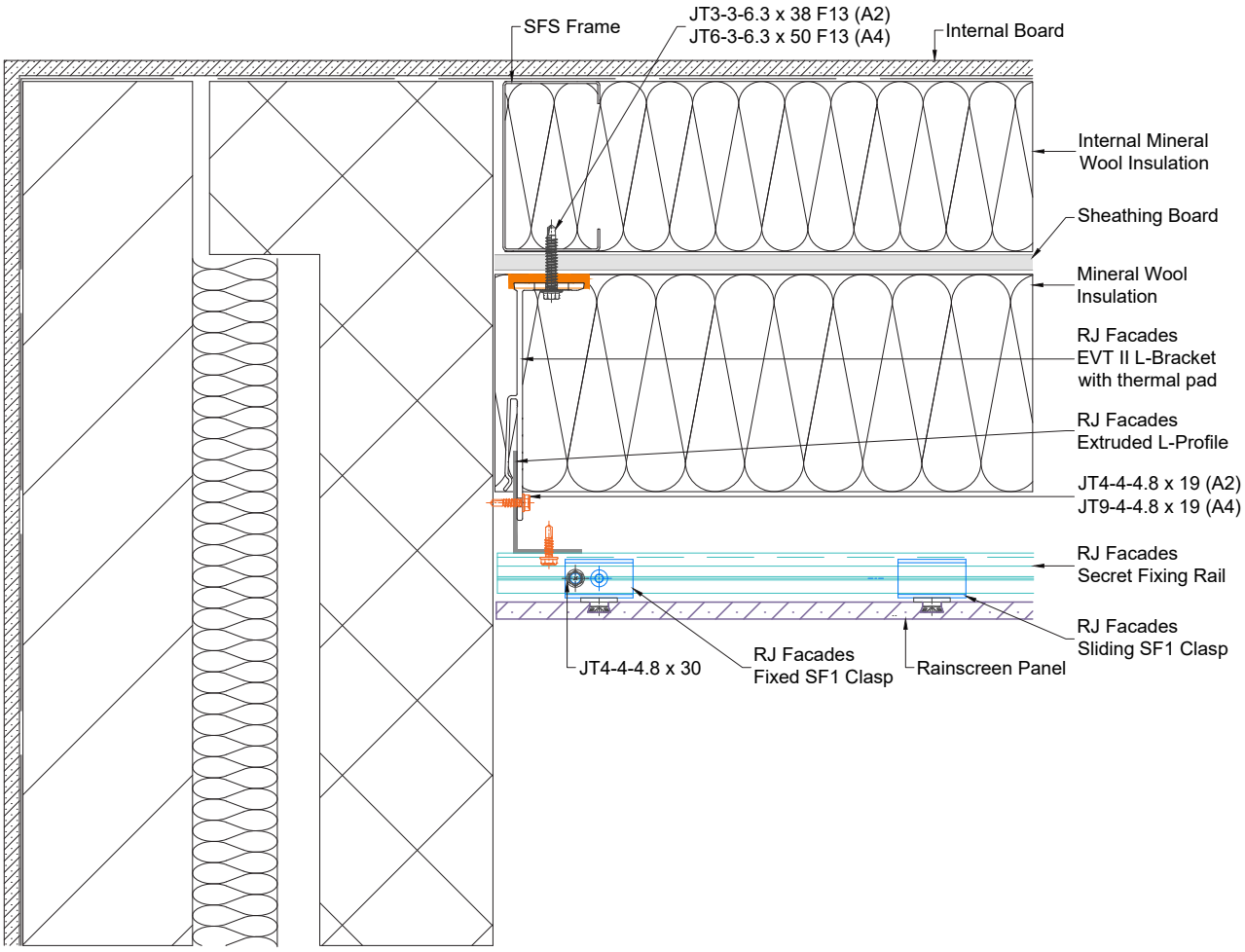
Secret Fix-1


RJ Facades
Extruded L-Profile
JT4-4-4.8 x 30
RJ Facades
Fixed SF1 Clasp
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
Rainscreen Panel
RJ Facades EVT II
Double L-Bracket
with thermal pad
RJ Facades
Fixed SF1 Clasp
Tergo+ 11x8
M6/T/10 PA
RJ Facades
Secret Fixing Rail
Internal Mineral
Wool Insulation
SFS Frame
JT3-3-6.3 x 50 F13 (A2)
JT6-3-6.3 x 50 F13 (A4)
Internal Board
Sheathing Board

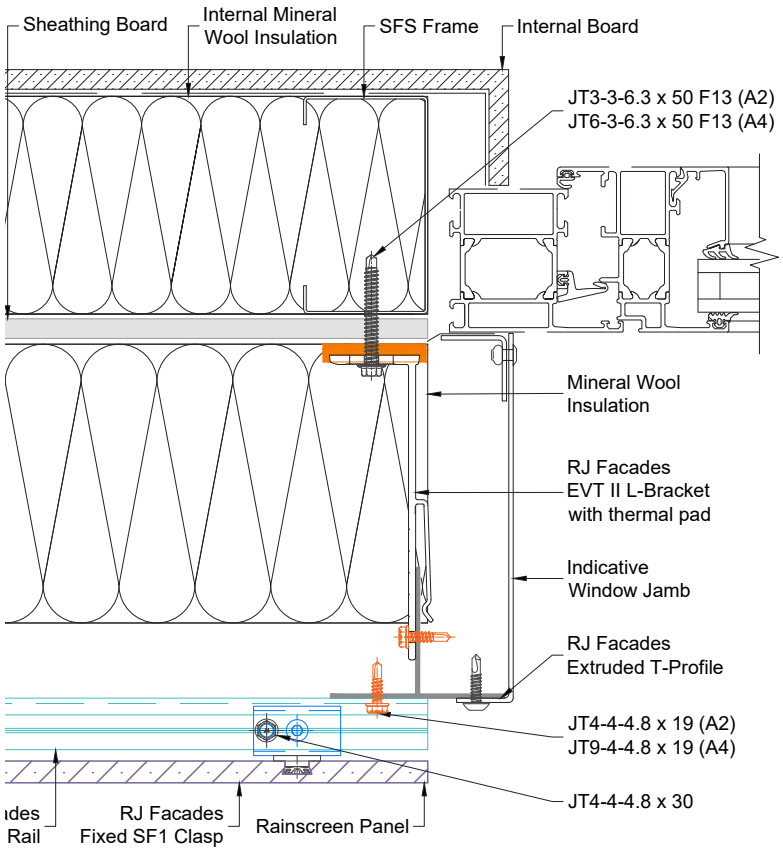

Silverliner Vertical Cavity Barrier
RJ Facades Sliding SF1 Clasp
RJ Facades Extruded L-Profile
JT4-4-4.8 x 19 (A2) JT9-4-4.8 x 19 (A4)
Mineral Wool Insulation
JT4-4-4.8 x 30
RJ Facades Fixed SF1 Clasp
External Corner Rainscreen Panel
Internal Board
Internal Mineral Wool Insulation
SFS Frame
JT3-3-6.3 x 50 F13 (A2) JT6-3-6.3 x 50 F13 (A4)
Sheathing Board
RJ Facades EVT II L-Bracket with thermal pad
RJ Facades Secret Fixing Rail
250.0mm max

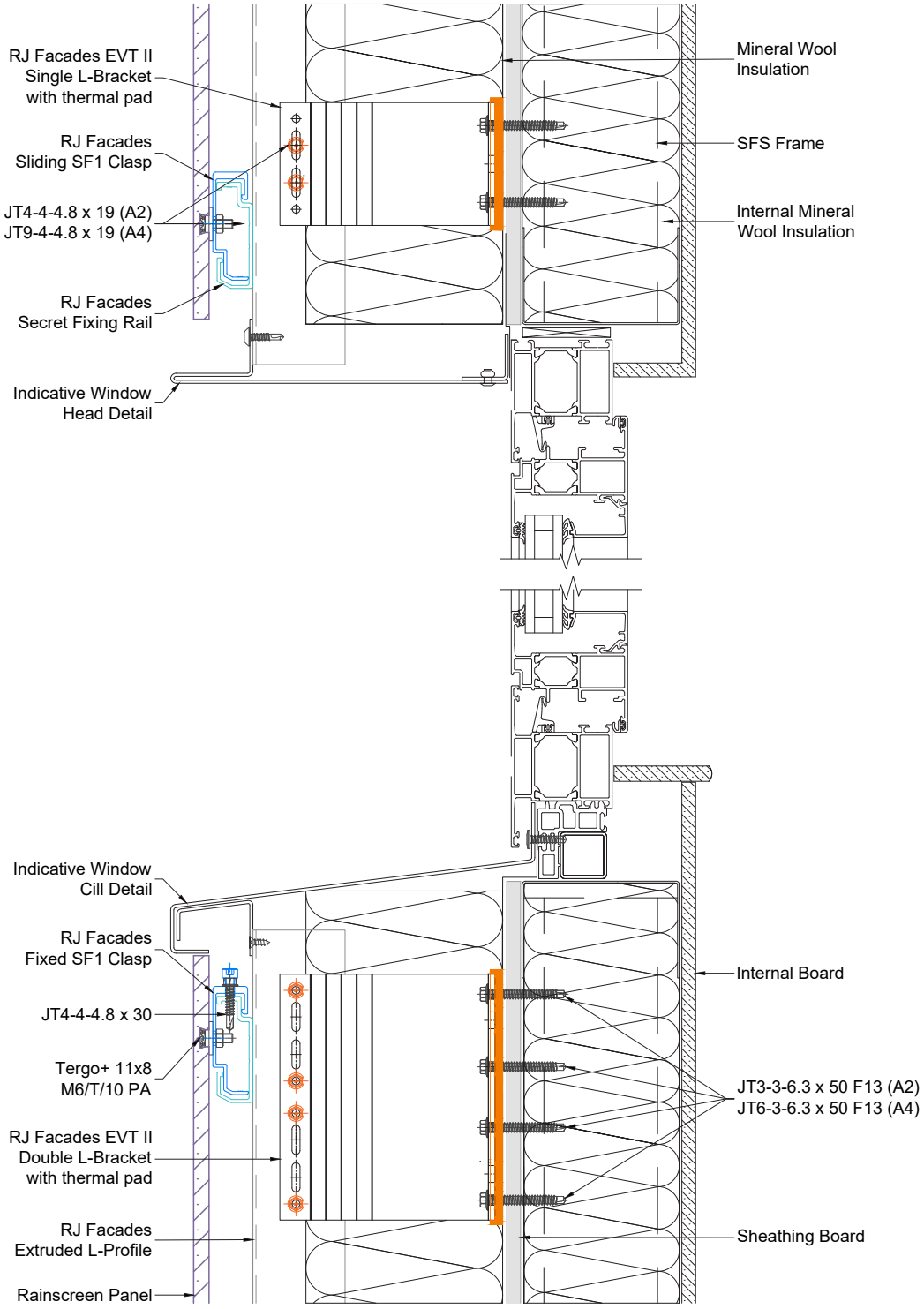
Secret Fix-1


Internal Board
SFS Frame
Internal Mineral Wool Insulation
Sheathing Board
JT3-3-6.3 x 38 F13 (A2)
JT6-3-6.3 x 50 F13 (A4)
Mineral Wool Insulation
RJ Facades Secret Fixing Rail
Silverliner Vertical Cavity Barrier
RJ Facades Sliding SF1 Clasp
Internal Corner Rainscreen Panel
RJ Facades Fixed SF1 Clasp
JT4-4-4.8 x 30
RJ Facades Extruded L-Profile
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
RJ Facades EVT II L-Bracket with thermal pad

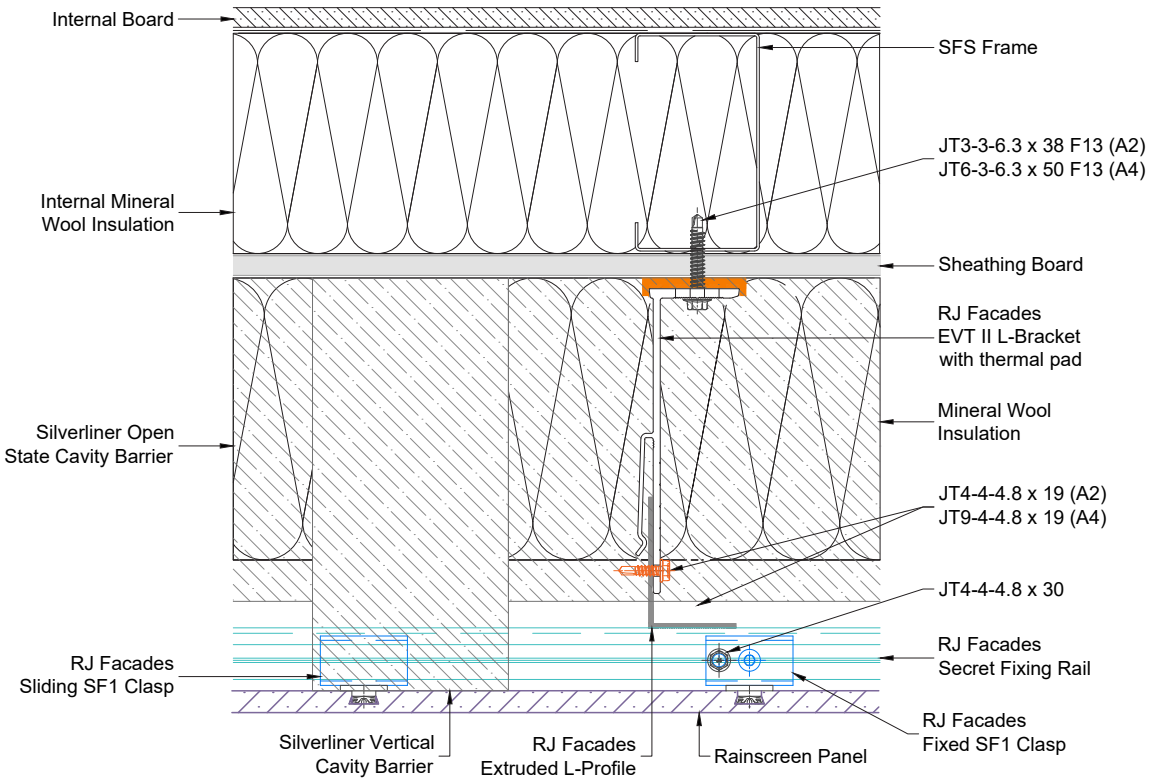

SFS Frame
JT3-3-6.3 x 38 F13 (A2)
JT6-3-6.3 x 50 F13 (A4)
Internal Board
Internal Mineral Wool Insulation
Sheathing Board
Mineral Wool Insulation
RJ Facades EVT II L-Bracket with thermal pad
RJ Facades Extruded L-Profile
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
RJ Facades Secret Fixing Rail
RJ Facades Sliding SF1 Clasp
JT4-4-4.8 x 30
RJ Facades Fixed SF1 Clasp
Rainscreen Panel

Secret Fix-1


Sheathing Board
Internal Mineral Wool Insulation
SFS Frame
Internal Board
JT3-3-6.3 x 50 F13 (A2)
JT6-3-6.3 x 50 F13 (A4)
Mineral Wool Insulation
RJ Facades EVT II L-Bracket with thermal pad
Indicative Window Jamb
RJ Facades Extruded T-Profile
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
JT4-4-4.8 x 30
ıdes Rail
RJ Facades Fixed SF1 Clasp
Rainscreen Panel


RJ Facades EVT II
Single L-Bracket
with thermal pad
RJ Facades
Sliding SF1 Clasp
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
RJ Facades
Secret Fixing Rail
Indicative Window
Head Detail
Mineral Wool
Insulation
SFS Frame
Internal Mineral
Wool Insulation
Indicative Window
Cill Detail
RJ Facades
Fixed SF1 Clasp
JT4-4-4.8 x 30
Tergo+ 11x8
M6/T/10 PA
RJ Facades EVT II
Double L-Bracket
with thermal pad
RJ Facades
Extruded L-Profile
Rainscreen Panel
Internal Board
JT3-3-6.3 x 50 F13 (A2)
JT6-3-6.3 x 50 F13 (A4)
Sheathing Board

Secret Fix-1


Internal Board
SFS Frame
JT3-3-6.3 x 38 F13 (A2)
JT6-3-6.3 x 50 F13 (A4)
Internal Mineral
Wool Insulation
Sheathing Board
RJ Facades
EVT II L-Bracket
with thermal pad
Mineral Wool
Insulation
Silverliner Open
State Cavity Barrier
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
JT4-4-4.8 x 30
RJ Facades
Secret Fixing Rail
RJ Facades
Sliding SF1 Clasp
RJ Facades
Fixed SF1 Clasp
Silverliner Vertical
Cavity Barrier
RJ Facades
Extruded L-Profile
Rainscreen Panel

Secret Fix-2

Undercut Anchor System, SF horizontal rail system and SF2 hanger clasps to support medium to heavy weight facades. Secret Fix-2 is designed for invisible mounting of thin and smooth facade materials.

System accessories and designed profiles allow secure mounting of facades, including stone up to 50mm in thickness.

Secret Fix-2 System uses fixing anchors to guarantee the connections between the facade material and the main profiles of the system.

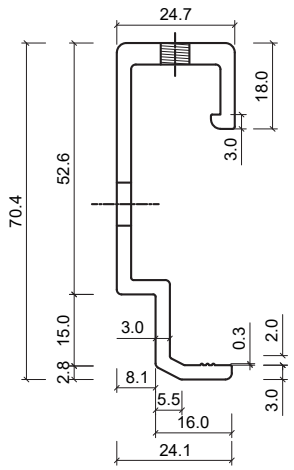
Main advantages:

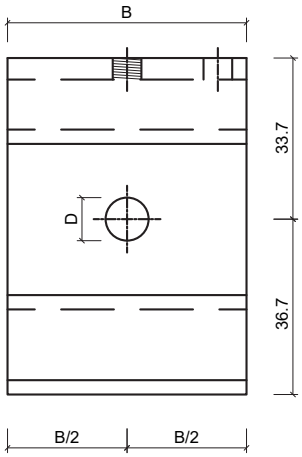
- SF2 clasps designed to 'help' the connection to the SF horizontal profile.
- Perfect vision of the facade with no visible holding elements.
- Large variety of sizes and designs of the facade materials.
- Highest level of security when fixing the tiles, due to the undercut anchors.
- Possibility to use facade materials with thickness ranging from 25mm to over 35mm.
- Fast and easy installation compared to other secret fix systems.
- Secure and fully engineered work, which covers the entire project, and guarantees a complete system solution Cladding Materials.
- Use of stand off fixings with natural stone panels to remove thickness tolerances.

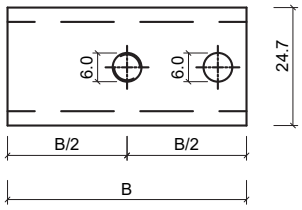
Typical Cladding Materials

- Technical Stone; Ceramic Tiles; Glass; Fibre Cement; Stone; Natural Stone up to 50mm in thickness; Glass Fiber Reinforced Concrete GFRC; GREP; Light Transmitting Concrete.

Secret Fix-2 - Aluminium, Fixed Point Clasp





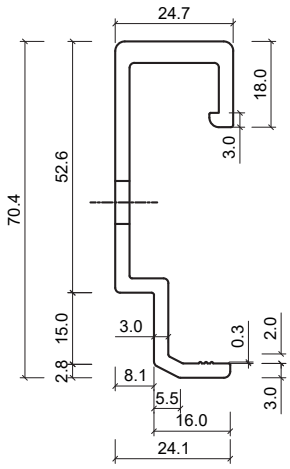


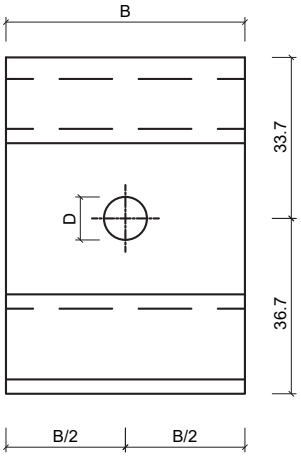
B	D	Fixing Configuration
40 mm	10.7	Hex
	10.3	Square
50 mm	6.6	M6
80 mm	6.6 30	M6 x 2
	9.0	M8

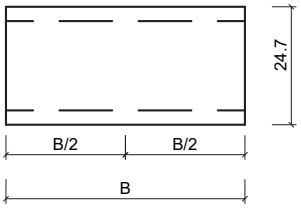
Item	Material
Secret Fix Rail	Aluminum - EN AW 6063 T6

All measurements in mm*

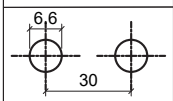
Secret Fix-2 - Aluminium, Sliding Point Clasp





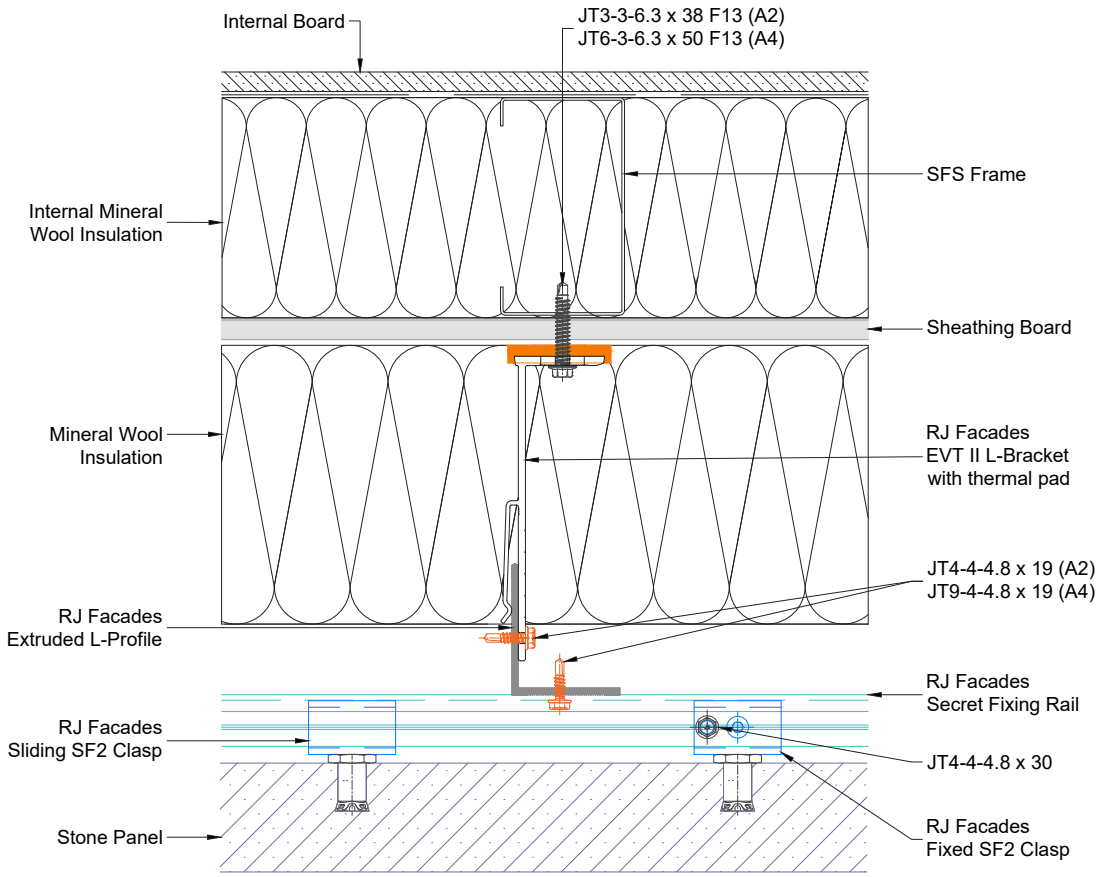


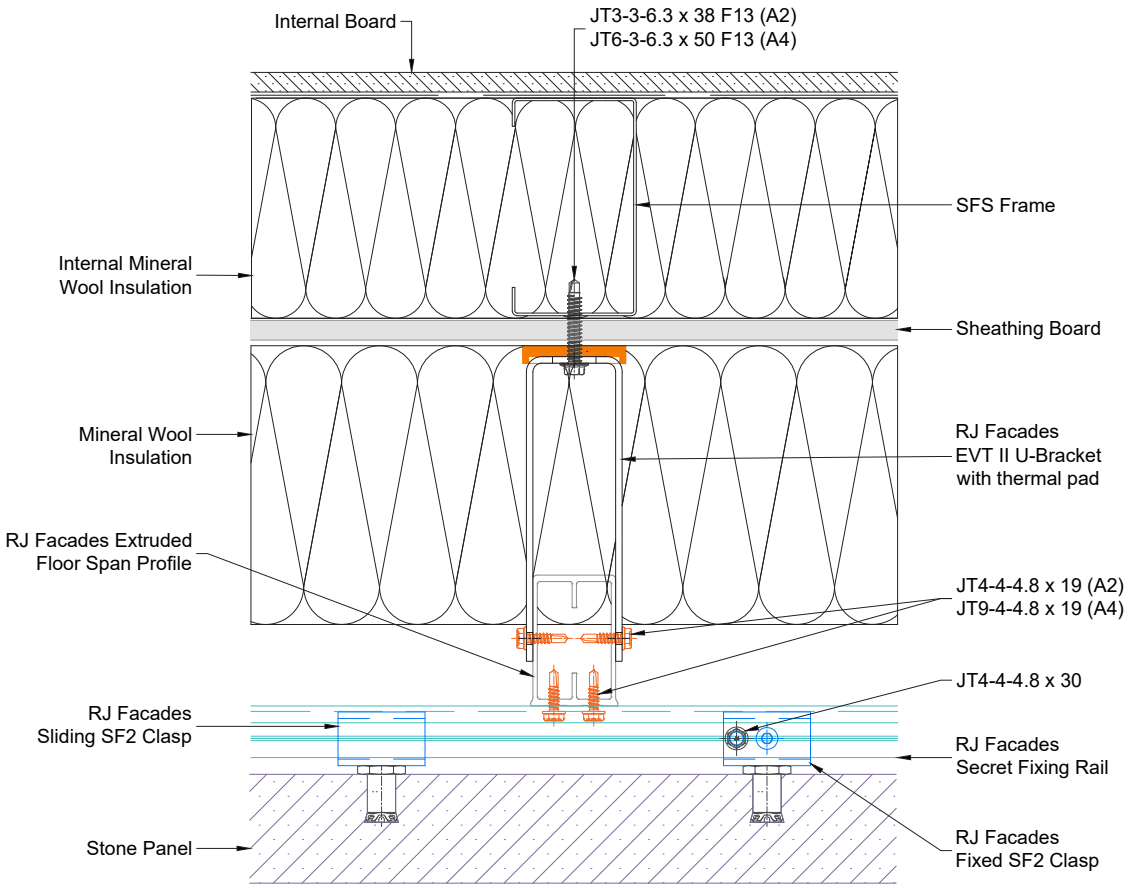
Item	Material
Secret Fix Rail	Aluminum - EN AW 6063 T6

B	D	Fixing Configuration
40 mm		Hex
		Square
50 mm		M6
80 mm		M6 x 2
		M8

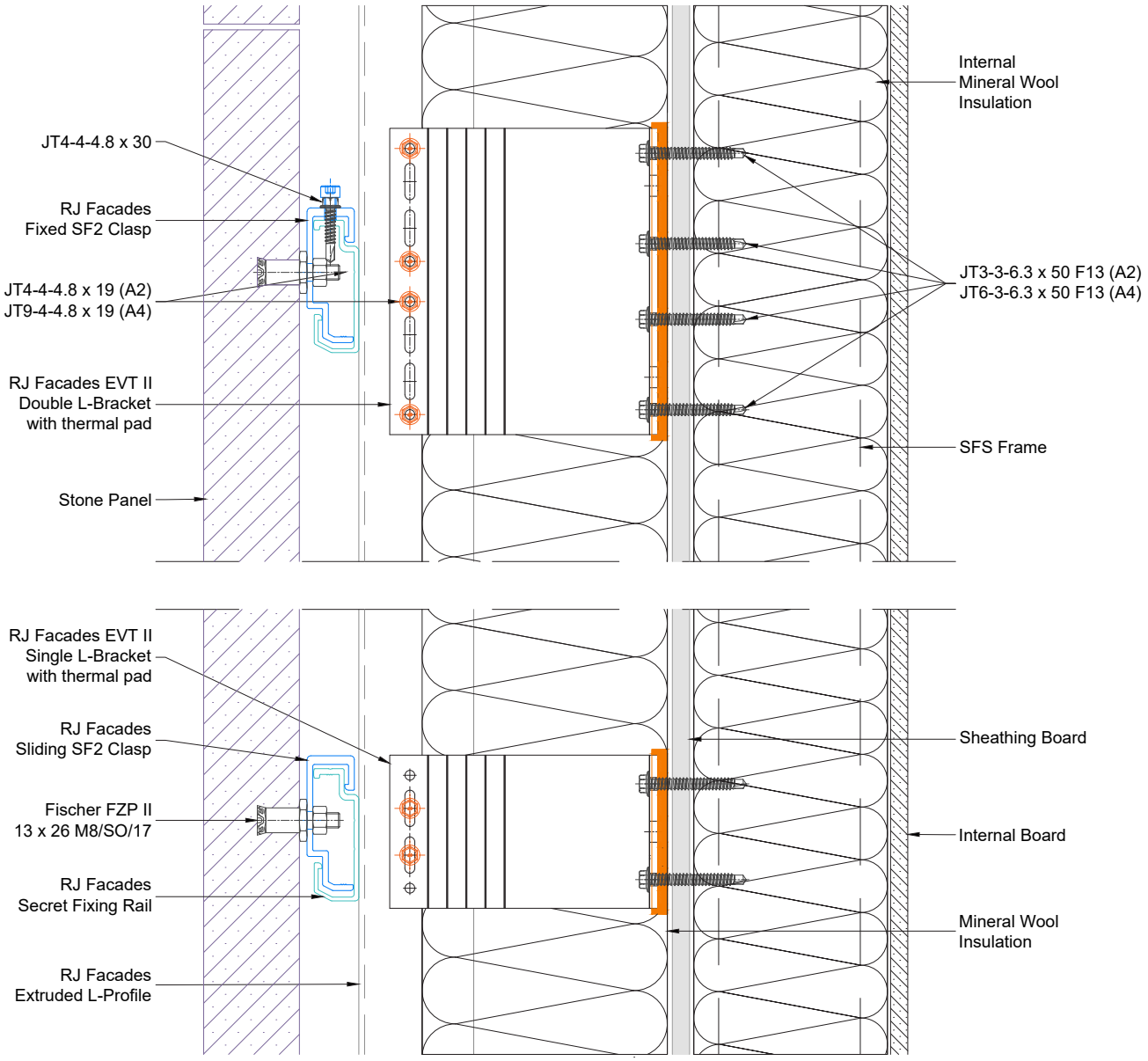
All measurements in mm*

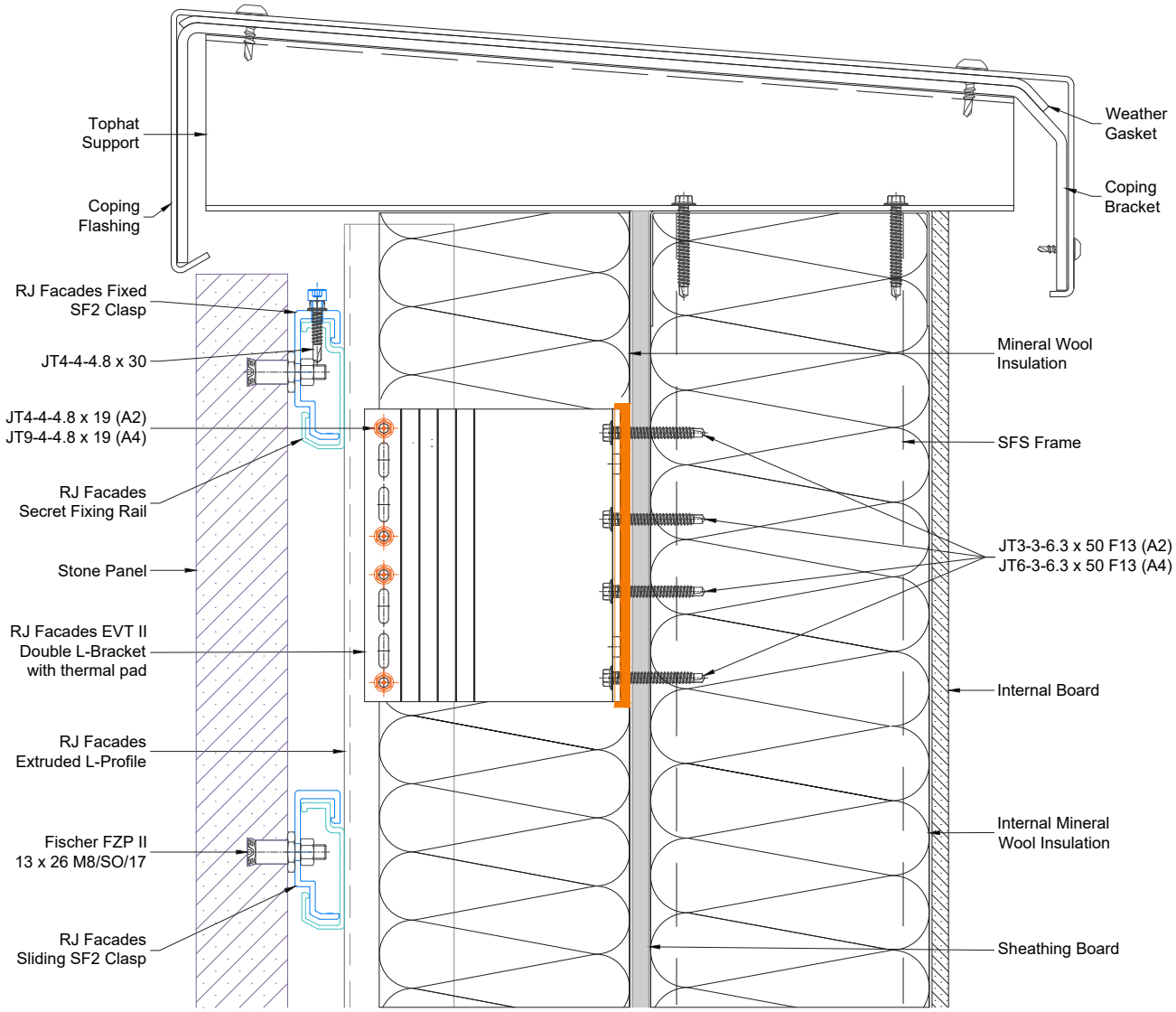
Secret Fix-2


Internal Board
JT3-3-6.3 x 38 F13 (A2)
JT6-3-6.3 x 50 F13 (A4)
SFS Frame
Internal Mineral Wool Insulation
Sheathing Board
Mineral Wool Insulation
RJ Facades EVT II L-Bracket with thermal pad
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
RJ Facades Extruded L-Profile
RJ Facades Secret Fixing Rail
RJ Facades Sliding SF2 Clasp
JT4-4-4.8 x 30
Stone Panel
RJ Facades Fixed SF2 Clasp

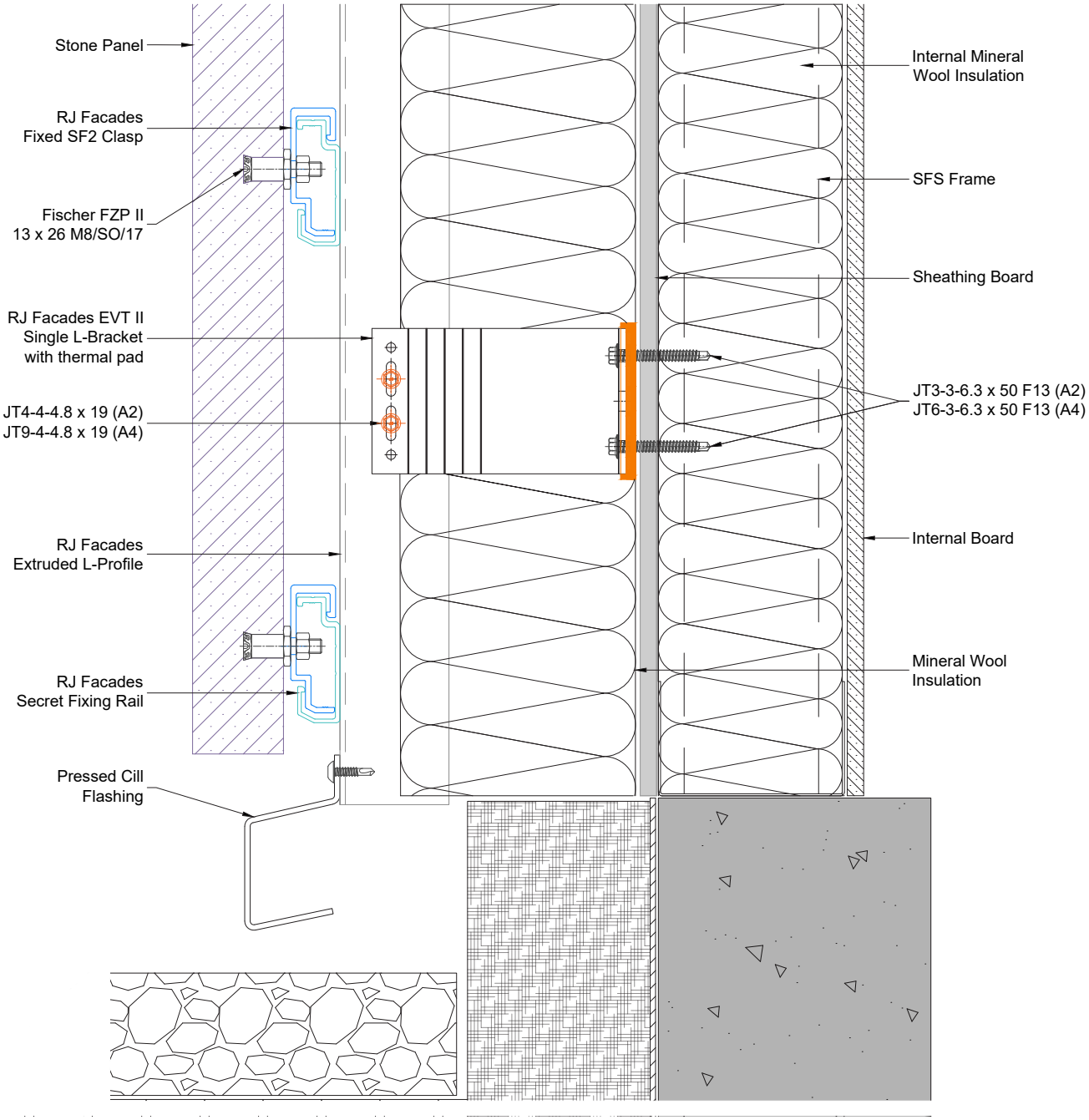

Internal Board
JT3-3-6.3 x 38 F13 (A2)
JT6-3-6.3 x 50 F13 (A4)
SFS Frame
Internal Mineral Wool Insulation
Sheathing Board
Mineral Wool Insulation
RJ Facades EVT II U-Bracket with thermal pad
RJ Facades Extruded Floor Span Profile
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
JT4-4-4.8 x 30
RJ Facades Sliding SF2 Clasp
RJ Facades Secret Fixing Rail
Stone Panel
RJ Facades Fixed SF2 Clasp

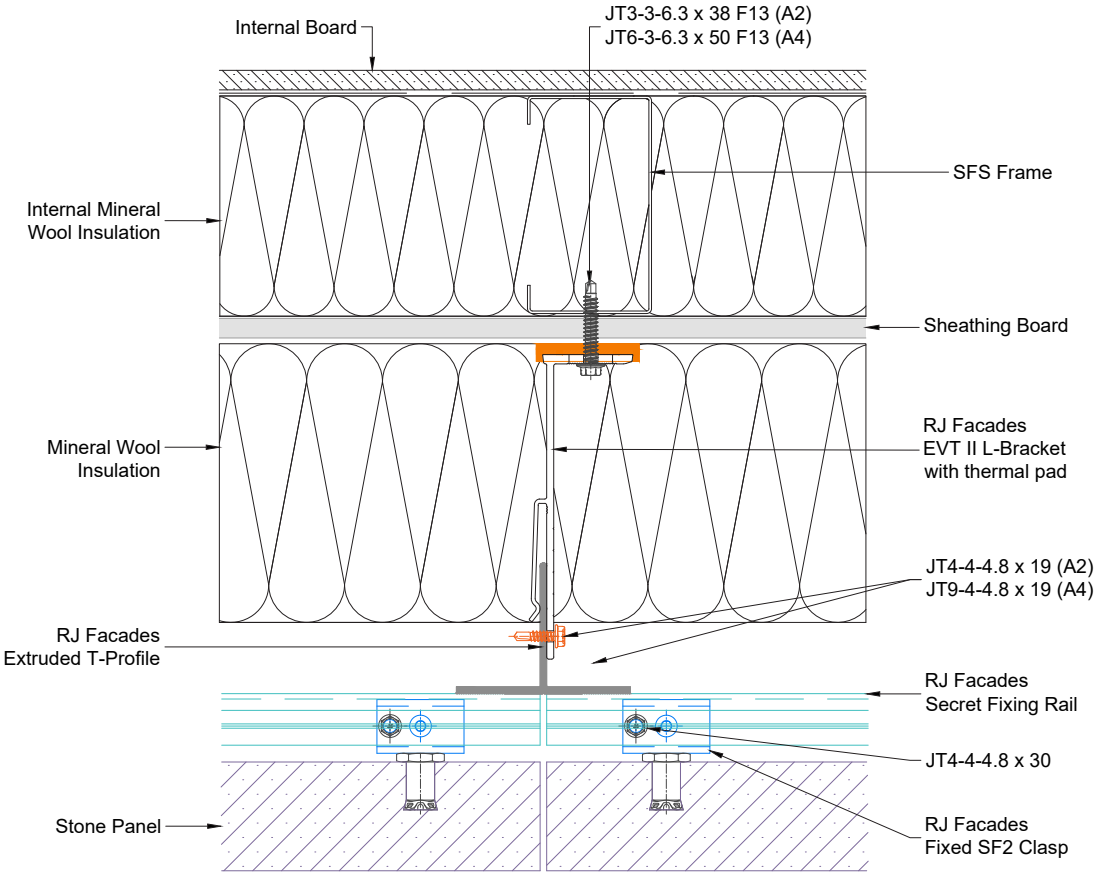
Secret Fix-2


JT4-4-4.8 x 30
RJ Facades
Fixed SF2 Clasp
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
RJ Facades EVT II
Double L-Bracket
with thermal pad
Stone Panel
Internal
Mineral Wool
Insulation
JT3-3-6.3 x 50 F13 (A2)
JT6-3-6.3 x 50 F13 (A4)
SFS Frame
RJ Facades EVT II
Single L-Bracket
with thermal pad
RJ Facades
Sliding SF2 Clasp
Fischer FZP II
13 x 26 M8/SO/17
RJ Facades
Secret Fixing Rail
RJ Facades
Extruded L-Profile
Sheathing Board
Internal Board
Mineral Wool
Insulation

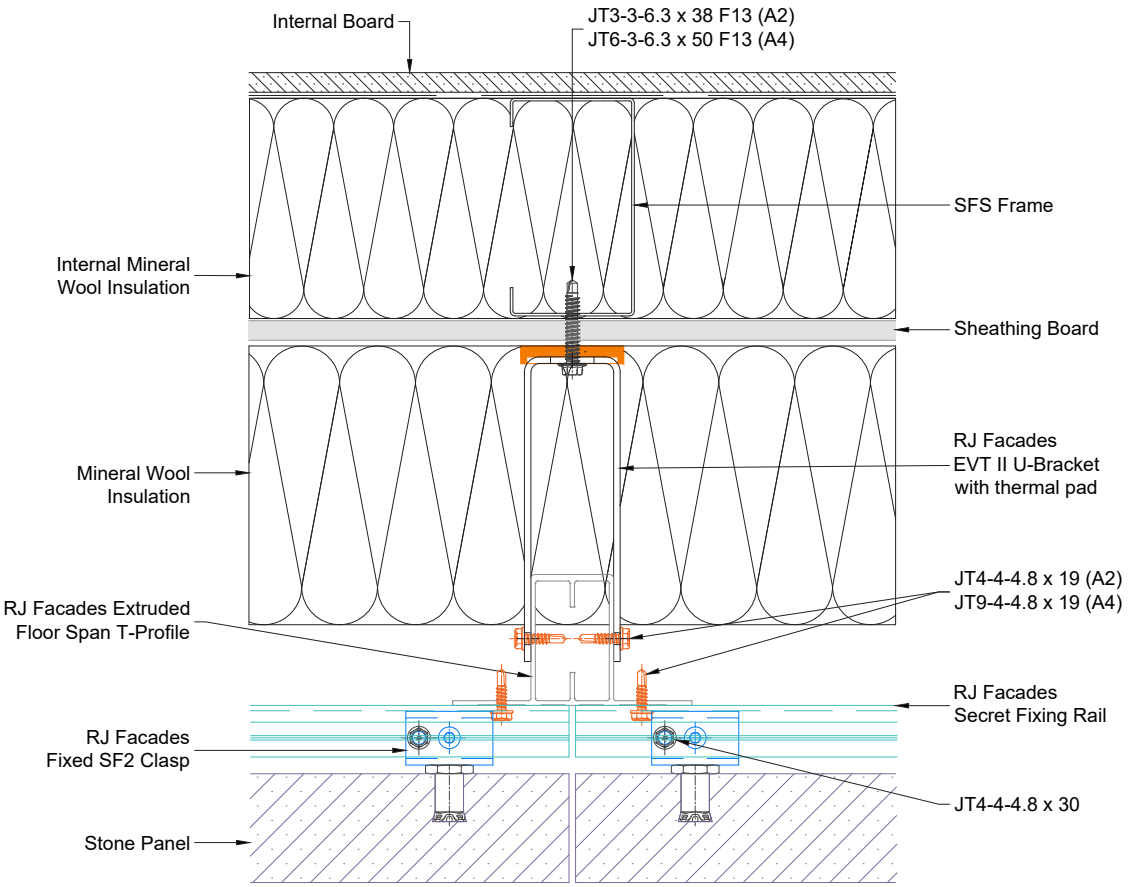

Tophat Support
Coping Flashing
RJ Facades Fixed SF2 Clasp
JT4-4-4.8 x 30
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
RJ Facades Secret Fixing Rail
Stone Panel
RJ Facades EVT II Double L-Bracket with thermal pad
RJ Facades Extruded L-Profile
Fischer FZP II 13 x 26 M8/SO/17
RJ Facades Sliding SF2 Clasp
Weather Gasket
Coping Bracket
Mineral Wool Insulation
SFS Frame
JT3-3-6.3 x 50 F13 (A2)
JT6-3-6.3 x 50 F13 (A4)
Internal Board
Internal Mineral Wool Insulation
Sheathing Board

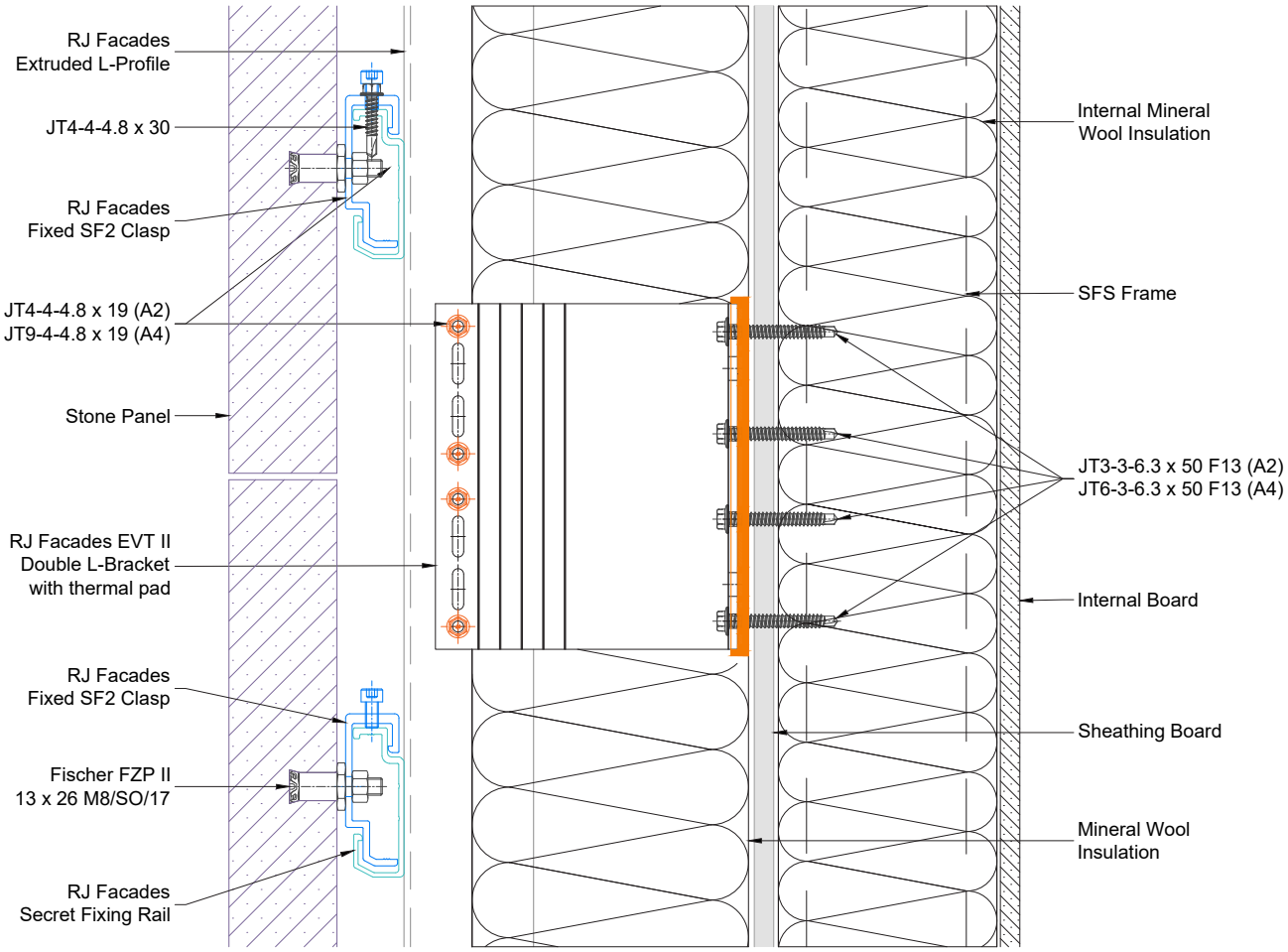
Secret Fix-2


Stone Panel
RJ Facades
Fixed SF2 Clasp
Fischer FZP II
13 x 26 M8/SO/17
RJ Facades EVT II
Single L-Bracket
with thermal pad
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
RJ Facades
Extruded L-Profile
RJ Facades
Secret Fixing Rail
Pressed Cill
Flashing
Internal Mineral
Wool Insulation
SFS Frame
Sheathing Board
JT3-3-6.3 x 50 F13 (A2)
JT6-3-6.3 x 50 F13 (A4)
Internal Board
Mineral Wool
Insulation

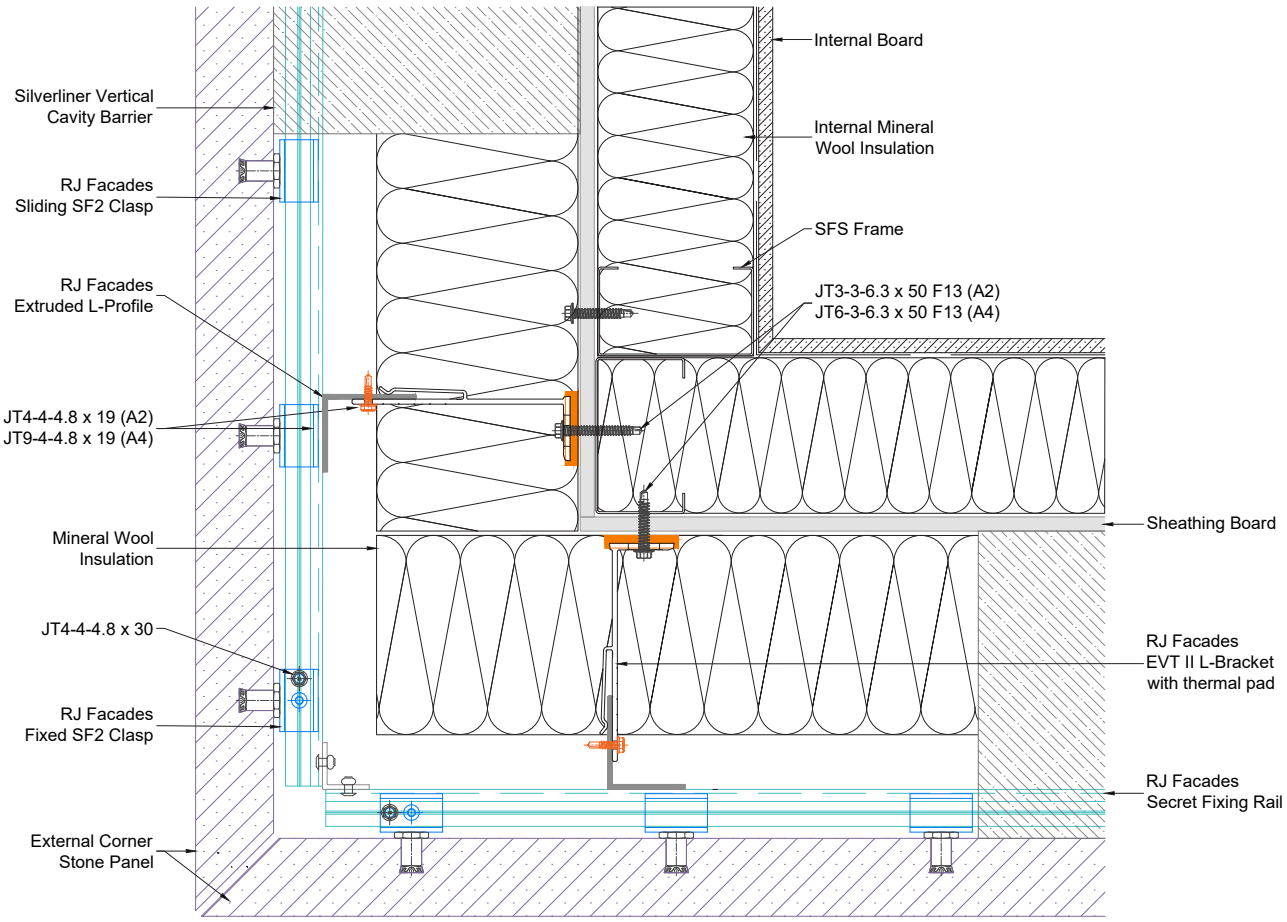

Internal Board
JT3-3-6.3 x 38 F13 (A2)
JT6-3-6.3 x 50 F13 (A4)
SFS Frame
Internal Mineral Wool Insulation
Sheathing Board
Mineral Wool Insulation
RJ Facades EVT II L-Bracket with thermal pad
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
RJ Facades Extruded T-Profile
RJ Facades Secret Fixing Rail
JT4-4-4.8 x 30
Stone Panel
RJ Facades Fixed SF2 Clasp

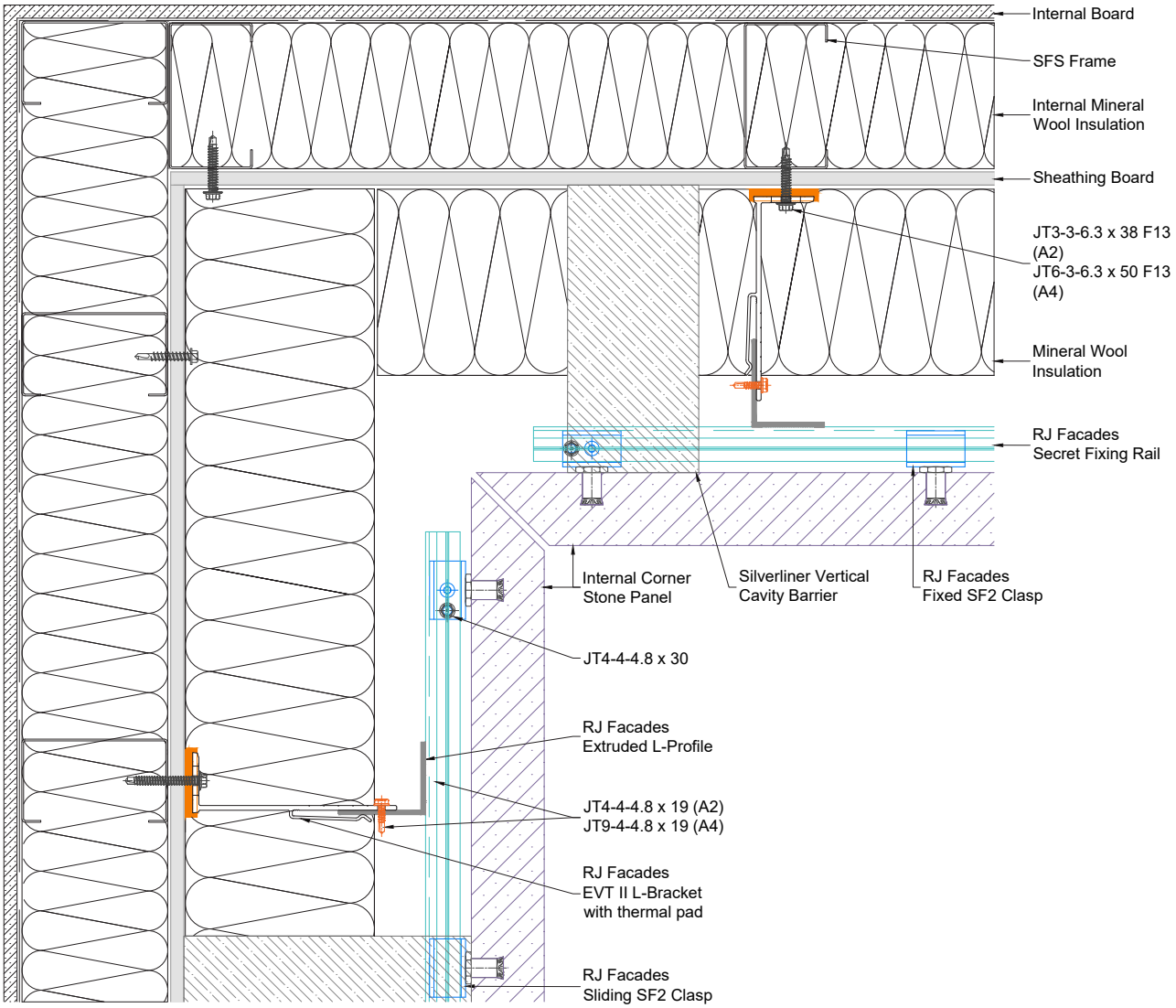
Secret Fix-2


Internal Board
JT3-3-6.3 x 38 F13 (A2)
JT6-3-6.3 x 50 F13 (A4)
SFS Frame
Internal Mineral Wool Insulation
Sheathing Board
RJ Facades EVT II U-Bracket with thermal pad
Mineral Wool Insulation
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
RJ Facades Extruded Floor Span T-Profile
RJ Facades Secret Fixing Rail
RJ Facades Fixed SF2 Clasp
JT4-4-4.8 x 30
Stone Panel

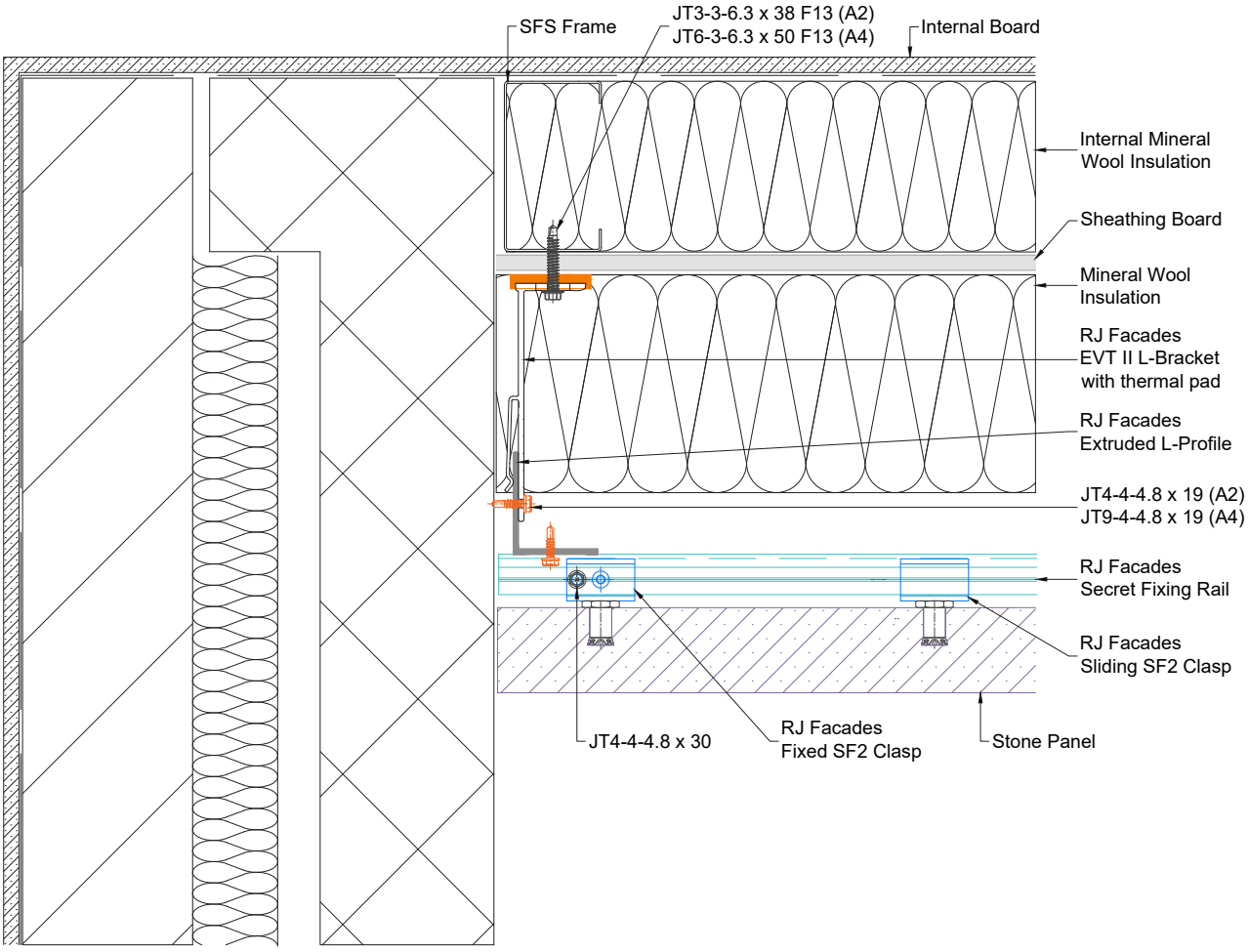

RJ Facades
Extruded L-Profile
JT4-4-4.8 x 30
RJ Facades
Fixed SF2 Clasp
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
Stone Panel
RJ Facades EVT II
Double L-Bracket
with thermal pad
RJ Facades
Fixed SF2 Clasp
Fischer FZP II
13 x 26 M8/SO/17
RJ Facades
Secret Fixing Rail
Internal Mineral
Wool Insulation
SFS Frame
JT3-3-6.3 x 50 F13 (A2)
JT6-3-6.3 x 50 F13 (A4)
Internal Board
Sheathing Board
Mineral Wool
Insulation

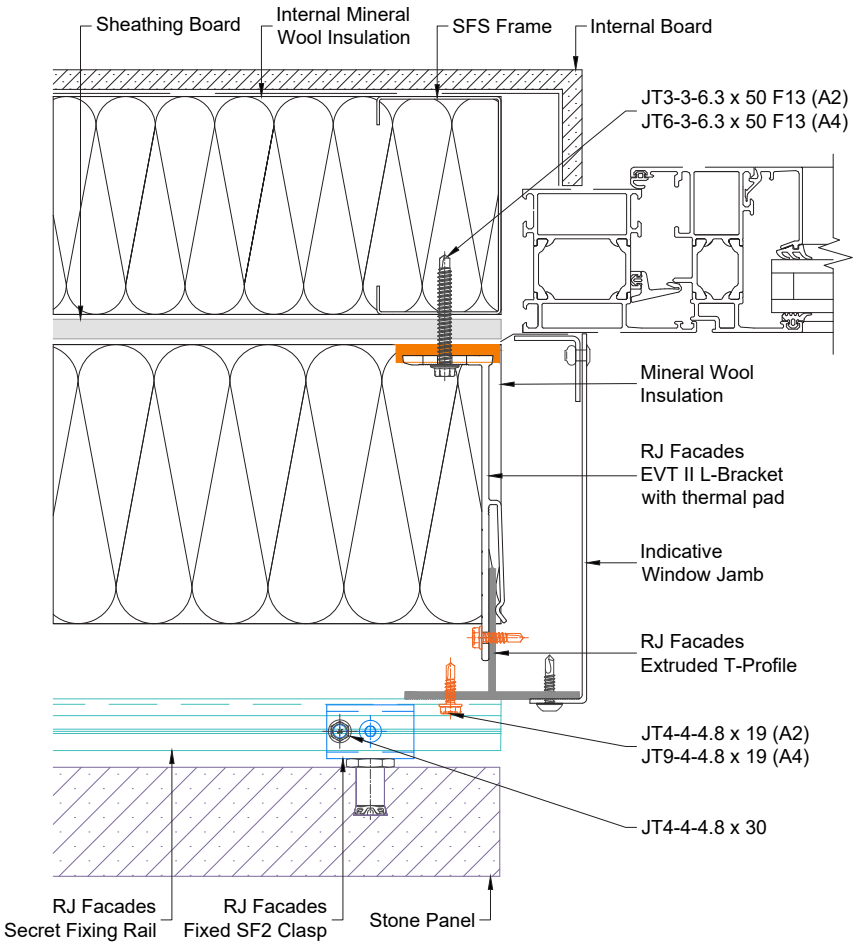
Secret Fix-2


Internal Board
Silverliner Vertical Cavity Barrier
Internal Mineral Wool Insulation
RJ Facades Sliding SF2 Clasp
SFS Frame
RJ Facades Extruded L-Profile
JT3-3-6.3 x 50 F13 (A2)
JT6-3-6.3 x 50 F13 (A4)
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
Sheathing Board
Mineral Wool Insulation
JT4-4-4.8 x 30
RJ Facades EVT II L-Bracket with thermal pad
RJ Facades Fixed SF2 Clasp
RJ Facades Secret Fixing Rail
External Corner Stone Panel

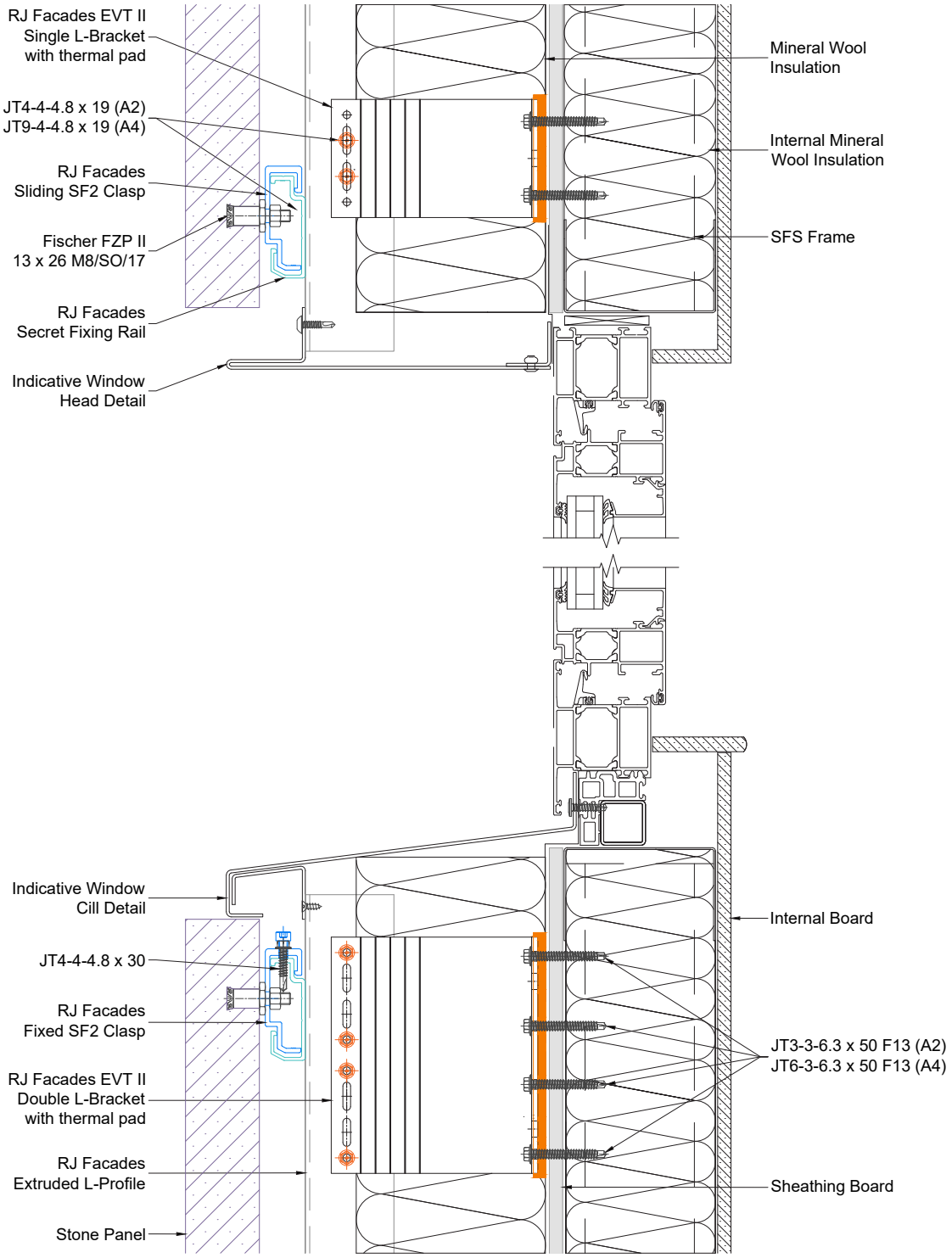

Internal Board
SFS Frame
Internal Mineral Wool Insulation
Sheathing Board
JT3-3-6.3 x 38 F13 (A2)
JT6-3-6.3 x 50 F13 (A4)
Mineral Wool Insulation
RJ Facades Secret Fixing Rail
Internal Corner Stone Panel
Silverliner Vertical Cavity Barrier
RJ Facades Fixed SF2 Clasp
JT4-4-4.8 x 30
RJ Facades Extruded L-Profile
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
RJ Facades EVT II L-Bracket with thermal pad
RJ Facades Sliding SF2 Clasp

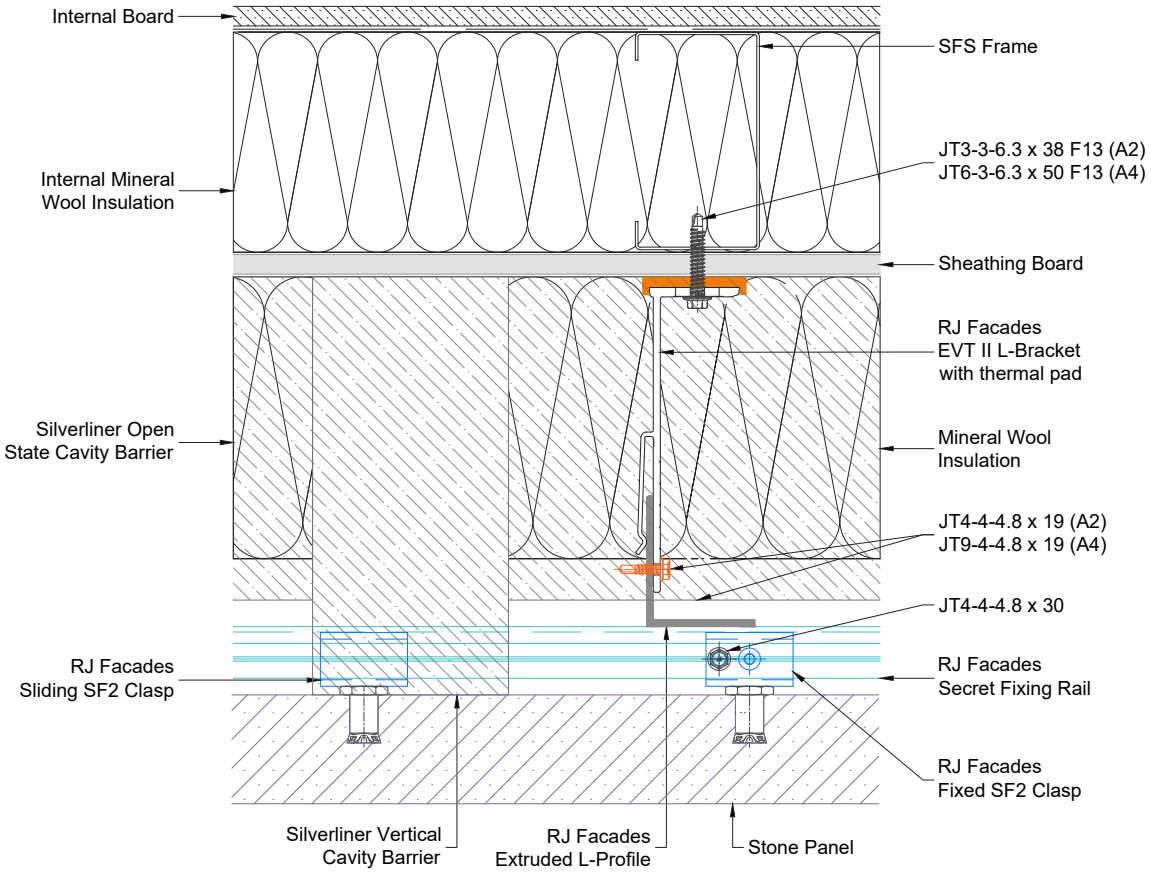
Secret Fix-2


SFS Frame
JT3-3-6.3 x 38 F13 (A2)
JT6-3-6.3 x 50 F13 (A4)
Internal Board
Internal Mineral Wool Insulation
Sheathing Board
Mineral Wool Insulation
RJ Facades EVT II L-Bracket with thermal pad
RJ Facades Extruded L-Profile
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
RJ Facades Secret Fixing Rail
RJ Facades Sliding SF2 Clasp
JT4-4-4.8 x 30
RJ Facades Fixed SF2 Clasp
Stone Panel


Sheathing Board
Internal Mineral Wool Insulation
SFS Frame
Internal Board
JT3-3-6.3 x 50 F13 (A2)
JT6-3-6.3 x 50 F13 (A4)
Mineral Wool Insulation
RJ Facades EVT II L-Bracket with thermal pad
Indicative Window Jamb
RJ Facades Extruded T-Profile
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
JT4-4-4.8 x 30
RJ Facades Secret Fixing Rail
RJ Facades Fixed SF2 Clasp
Stone Panel

Secret Fix-2


RJ Facades EVT II
Single L-Bracket
with thermal pad
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
RJ Facades
Sliding SF2 Clasp
Fischer FZP II
13 x 26 M8/SO/17
RJ Facades
Secret Fixing Rail
Indicative Window
Head Detail
Mineral Wool
Insulation
Internal Mineral
Wool Insulation
SFS Frame
Indicative Window
Cill Detail
JT4-4-4.8 x 30
RJ Facades
Fixed SF2 Clasp
RJ Facades EVT II
Double L-Bracket
with thermal pad
RJ Facades
Extruded L-Profile
Stone Panel
Internal Board
JT3-3-6.3 x 50 F13 (A2)
JT6-3-6.3 x 50 F13 (A4)
Sheathing Board


Internal Board
SFS Frame
JT3-3-6.3 x 38 F13 (A2)
JT6-3-6.3 x 50 F13 (A4)
Internal Mineral
Wool Insulation
Sheathing Board
RJ Facades
EVT II L-Bracket
with thermal pad
Silverliner Open
State Cavity Barrier
Mineral Wool
Insulation
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
JT4-4-4.8 x 30
RJ Facades
Sliding SF2 Clasp
RJ Facades
Secret Fixing Rail
RJ Facades
Fixed SF2 Clasp
Silverliner Vertical
Cavity Barrier
RJ Facades
Extruded L-Profile
Stone Panel

Kerf Stone

The system is an optimal solution for large and flat facades using L-brackets, vertical rails and specially designed horizontal kerf rails. Designed and specified to support ornate and shaped stone facade panels, using a groove in the upper and lower edges of the facade panel.

The system comprises of two different kerf rails, the intermediate kerf rail and the upper/lower kerf rail. The upper/lower kerf rail is typically used at the base detail, window junctions and head details. The intermediate kerf rail is used in-between stone panels, creating a horizontal joint.

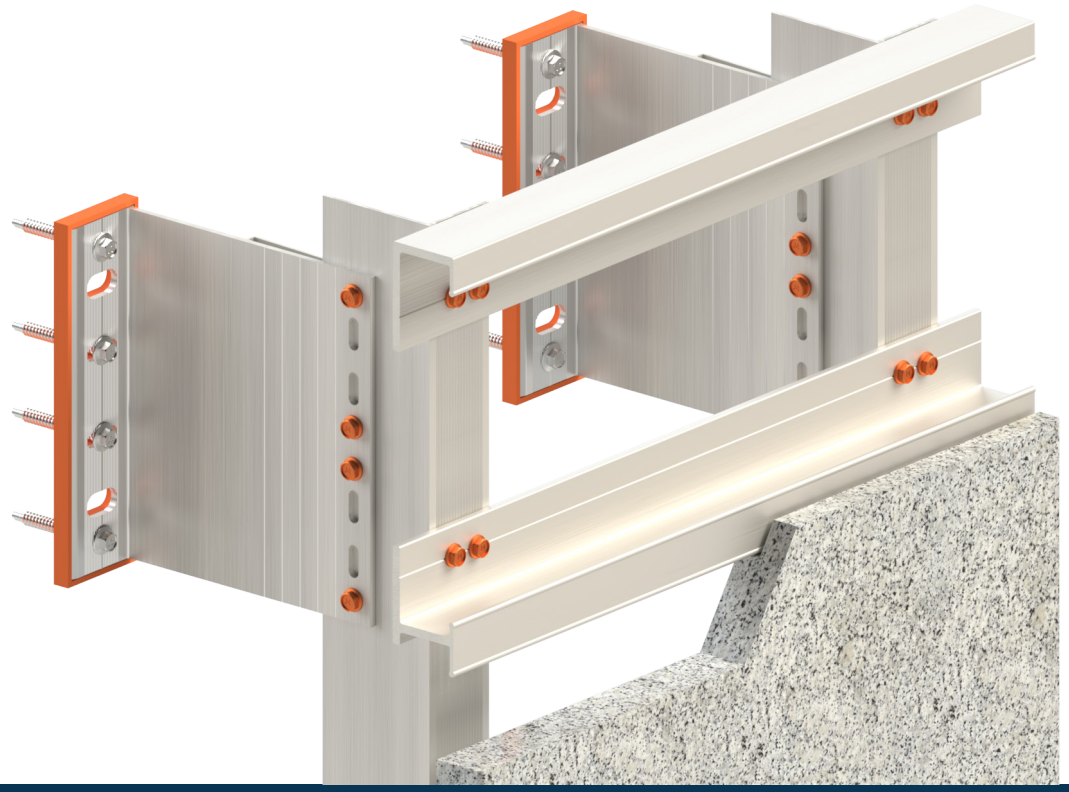
The horizontal rails are designed to span 400-600mm between the vertical support structure.

Main advantages:

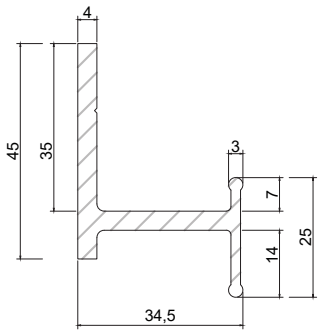
- Fast, easy and secure mounting of ornate and stone facades over 40mm in thi ckness.
- Optimization of the substructure by optimal load distribution to vertical supporting pillars
- Mounting method: horizontal profile connections

Cladding Materials

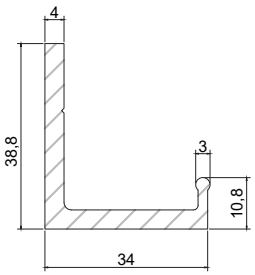
- Stone, Technical Stone, Slate



Kerf Stone Profiles for Stone Panels, Aluminium



Intermediate 34 / 45

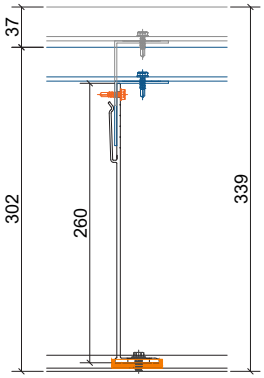


Upper / Lower 34x50

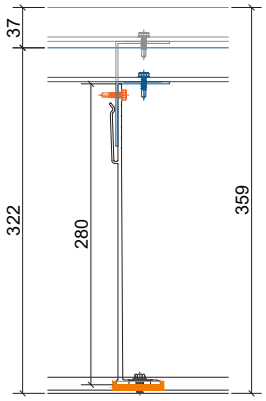
Item	Material
Kerf Profiles	Aluminum - EN AW 6063 T6

All measurements in mm*

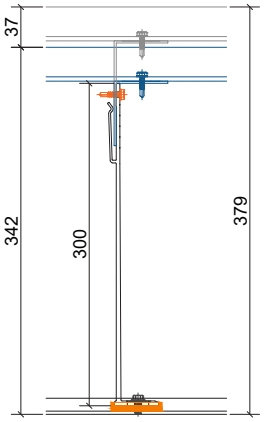
Kerf Stone - Cladding Zone



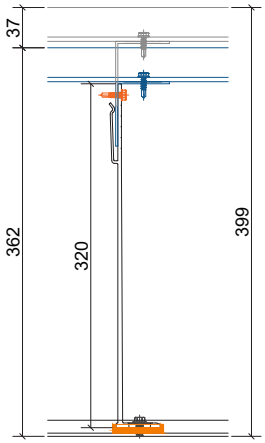
260 Bracket
ADJUSTMENT= +/− 37mm
Clad Zone= 302mm to 339mm



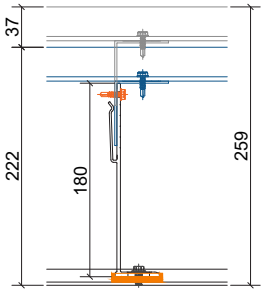
280 Bracket
ADJUSTMENT= +/− 37mm
Clad Zone= 322mm to 359mm



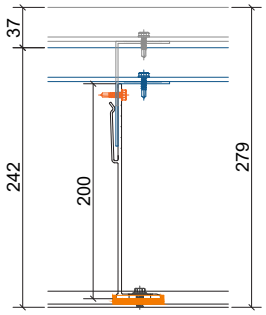
300 Bracket
ADJUSTMENT= +/− 37mm
Clad Zone= 342mm to 379mm



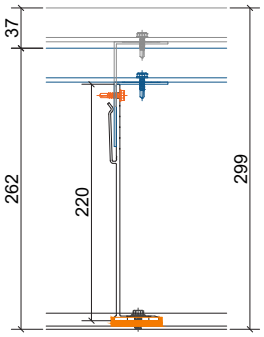
320 Bracket
ADJUSTMENT= +/− 37mm
Clad Zone= 362mm to 399mm



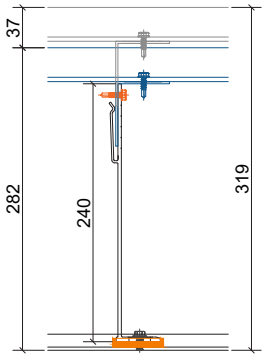
180 Bracket
ADJUSTMENT= +/− 37mm
Clad Zone= 222mm to 259mm



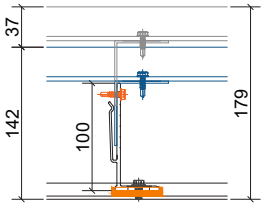
200 Bracket
ADJUSTMENT= +/− 37mm
Clad Zone= 242mm to 279mm



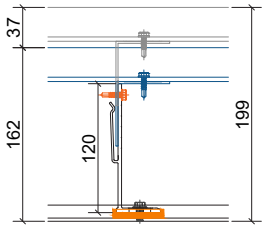
220 Bracket
ADJUSTMENT= +/− 37mm
Clad Zone= 262mm to 299mm



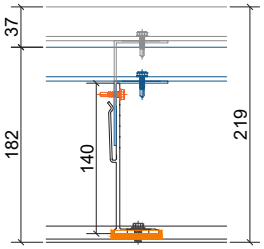
240 Bracket
ADJUSTMENT= +/− 37mm
Clad Zone= 282mm to 319mm



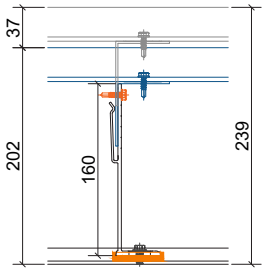
100 Bracket
ADJUSTMENT= +/− 37mm
Clad Zone= 142mm to 179mm



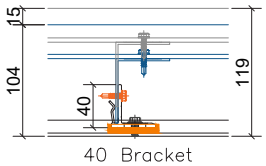
120 Bracket
ADJUSTMENT= +/− 37mm
Clad Zone= 162mm to 199mm



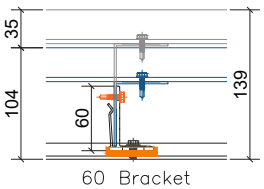
140 Bracket
ADJUSTMENT= +/− 37mm
Clad Zone= 182mm to 219mm



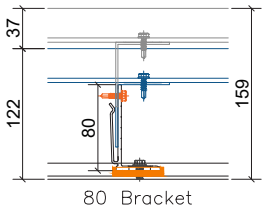
160 Bracket
ADJUSTMENT= +/− 37mm
Clad Zone= 202mm to 239mm



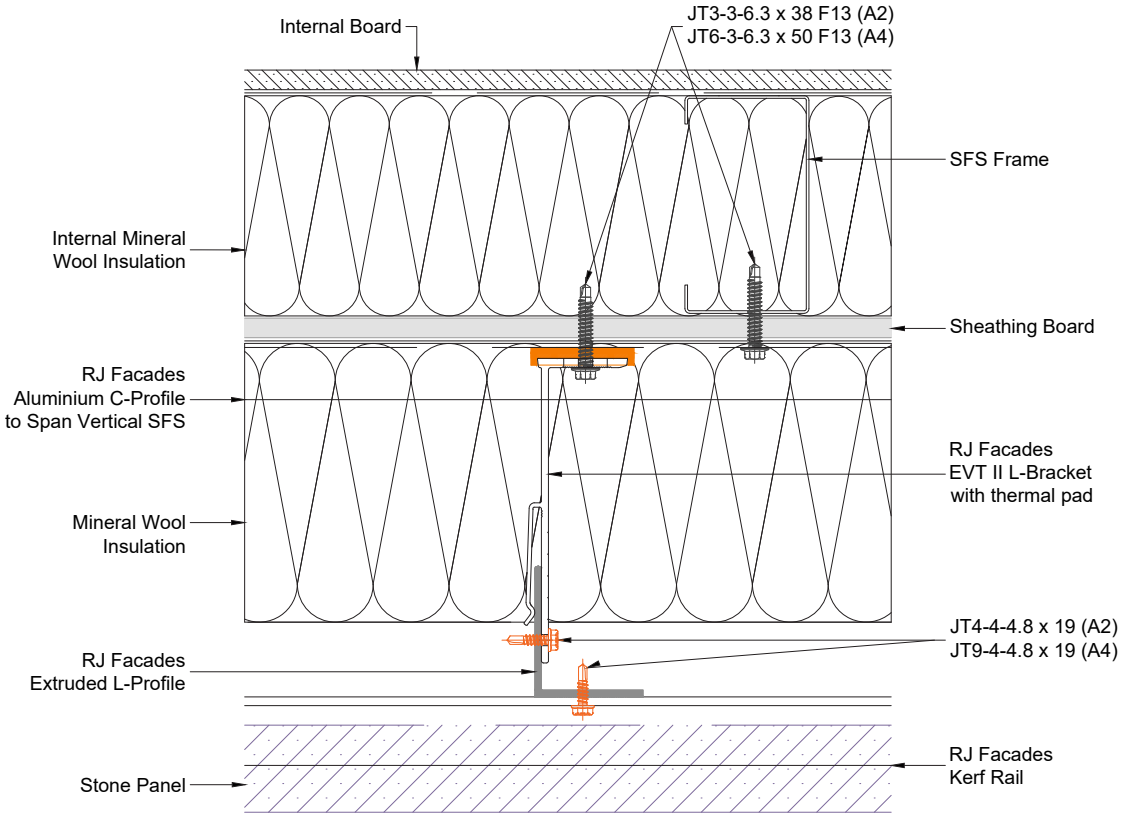
40 Bracket
ADJUSTMENT= +/− 15mm
Clad Zone= 104mm to 119mm



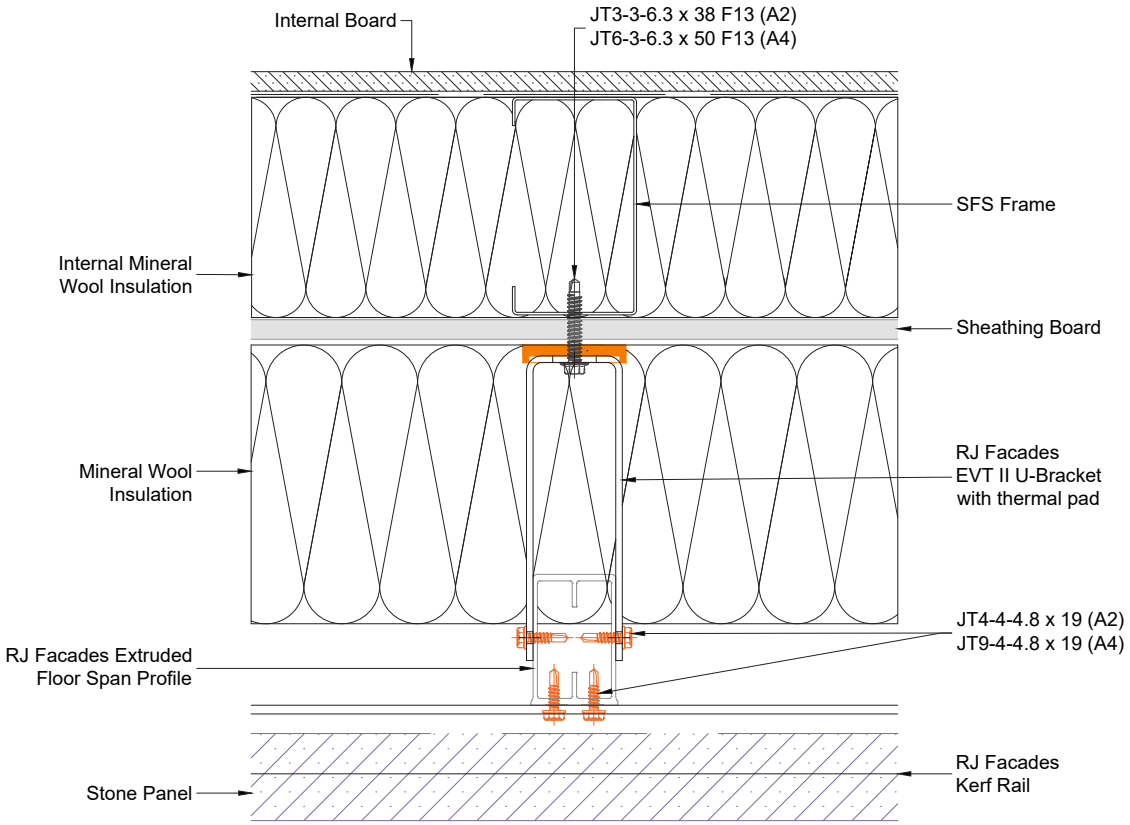
60 Bracket
ADJUSTMENT= +/− 35mm
Clad Zone= 101mm to 139mm

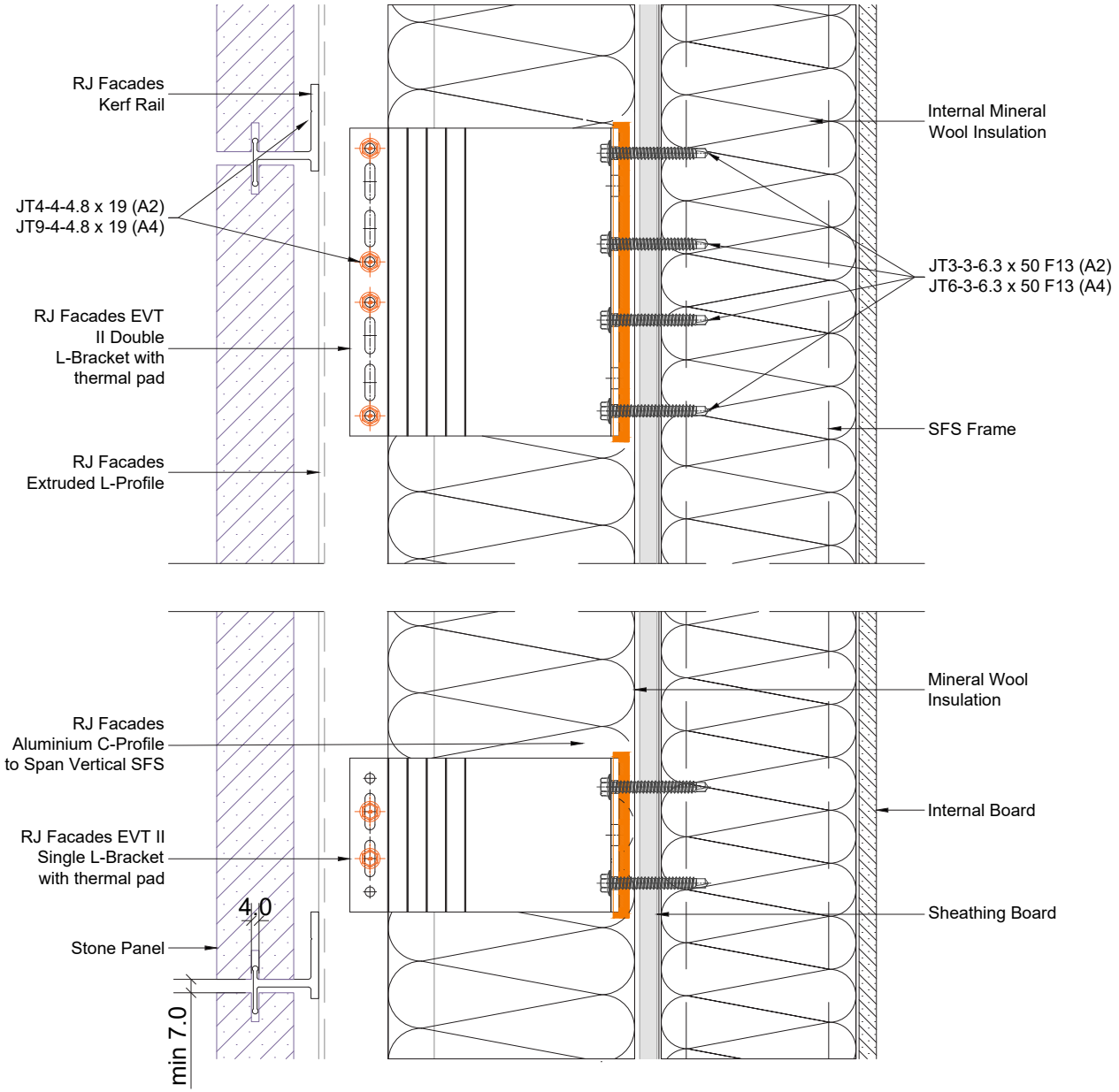


80 Bracket
ADJUSTMENT= +/− 37mm
Clad Zone= 122mm to 159mm

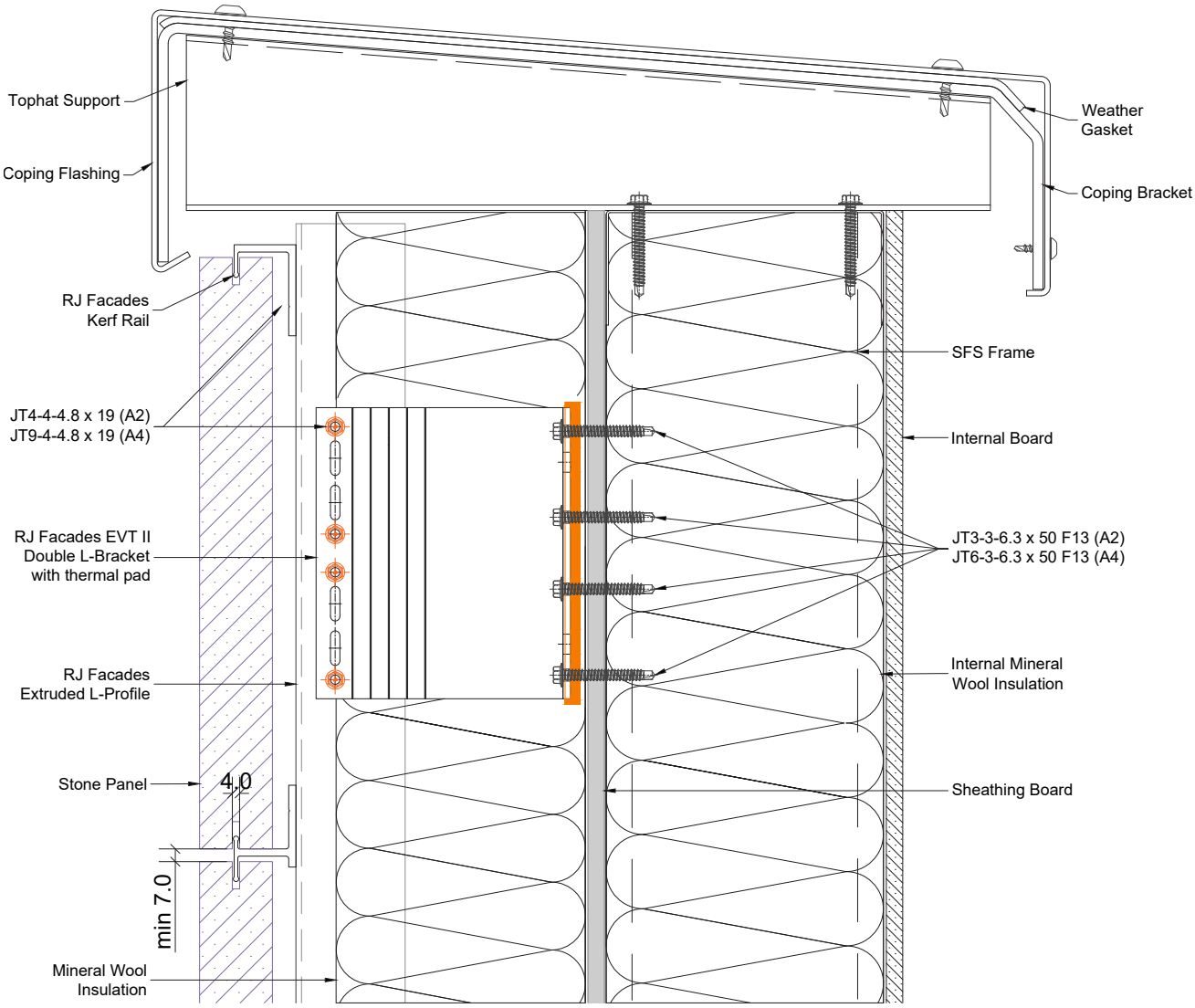

Internal Board
JT3-3-6.3 x 38 F13 (A2)
JT6-3-6.3 x 50 F13 (A4)
SFS Frame
Internal Mineral
Wool Insulation
Sheathing Board
RJ Facades
Aluminium C-Profile
to Span Vertical SFS
RJ Facades
EVT II L-Bracket
with thermal pad
Mineral Wool
Insulation
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
RJ Facades
Extruded L-Profile
RJ Facades
Kerf Rail
Stone Panel

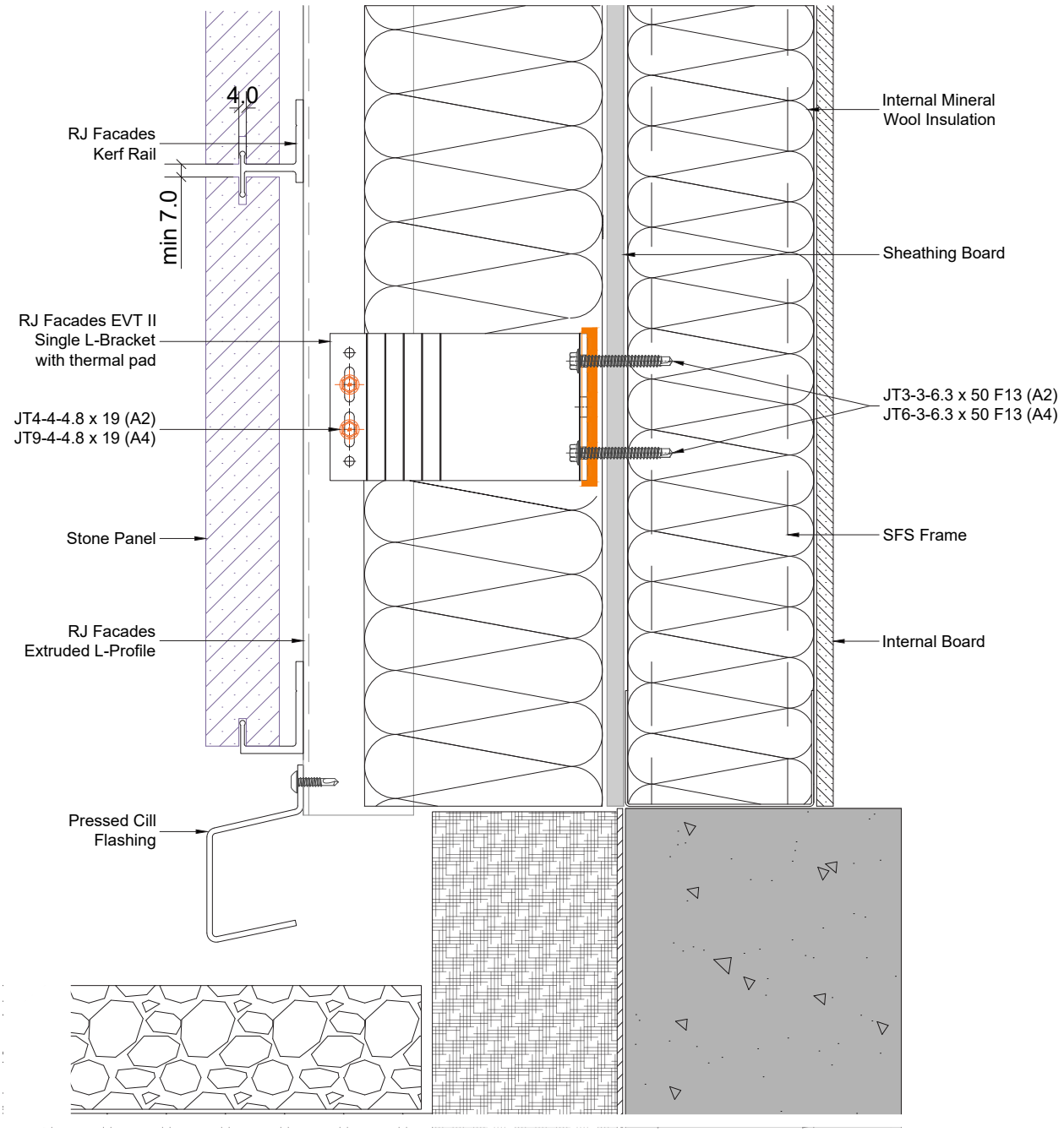
Kerf Stone


Internal Board
JT3-3-6.3 x 38 F13 (A2)
JT6-3-6.3 x 50 F13 (A4)
SFS Frame
Internal Mineral Wool Insulation
Sheathing Board
Mineral Wool Insulation
RJ Facades EVT II U-Bracket with thermal pad
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
RJ Facades Extruded Floor Span Profile
RJ Facades Kerf Rail
Stone Panel

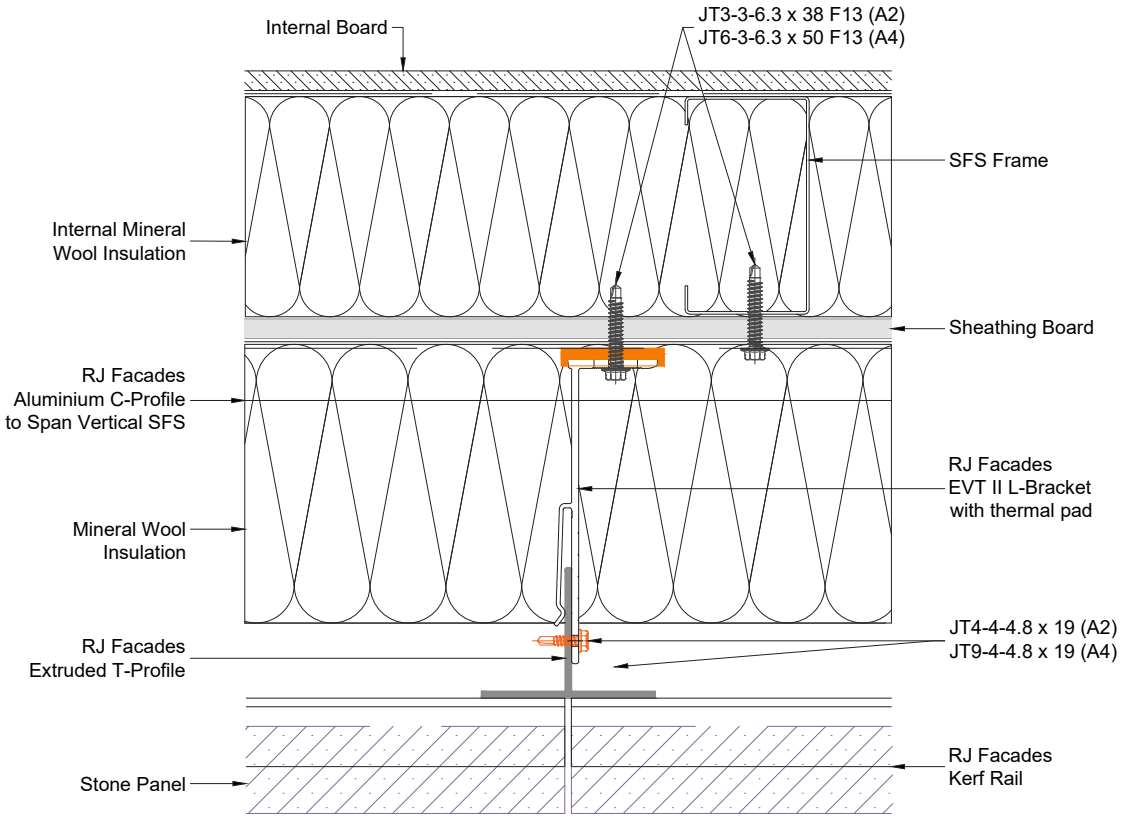

RJ Facades
Kerf Rail
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
RJ Facades EVT
II Double
L-Bracket with
thermal pad
RJ Facades
Extruded L-Profile
Internal Mineral
Wool Insulation
JT3-3-6.3 x 50 F13 (A2)
JT6-3-6.3 x 50 F13 (A4)
SFS Frame
RJ Facades
Aluminium C-Profile
to Span Vertical SFS
RJ Facades EVT II
Single L-Bracket
with thermal pad
Stone Panel
4.0
min 7.0
Mineral Wool
Insulation
Internal Board
Sheathing Board

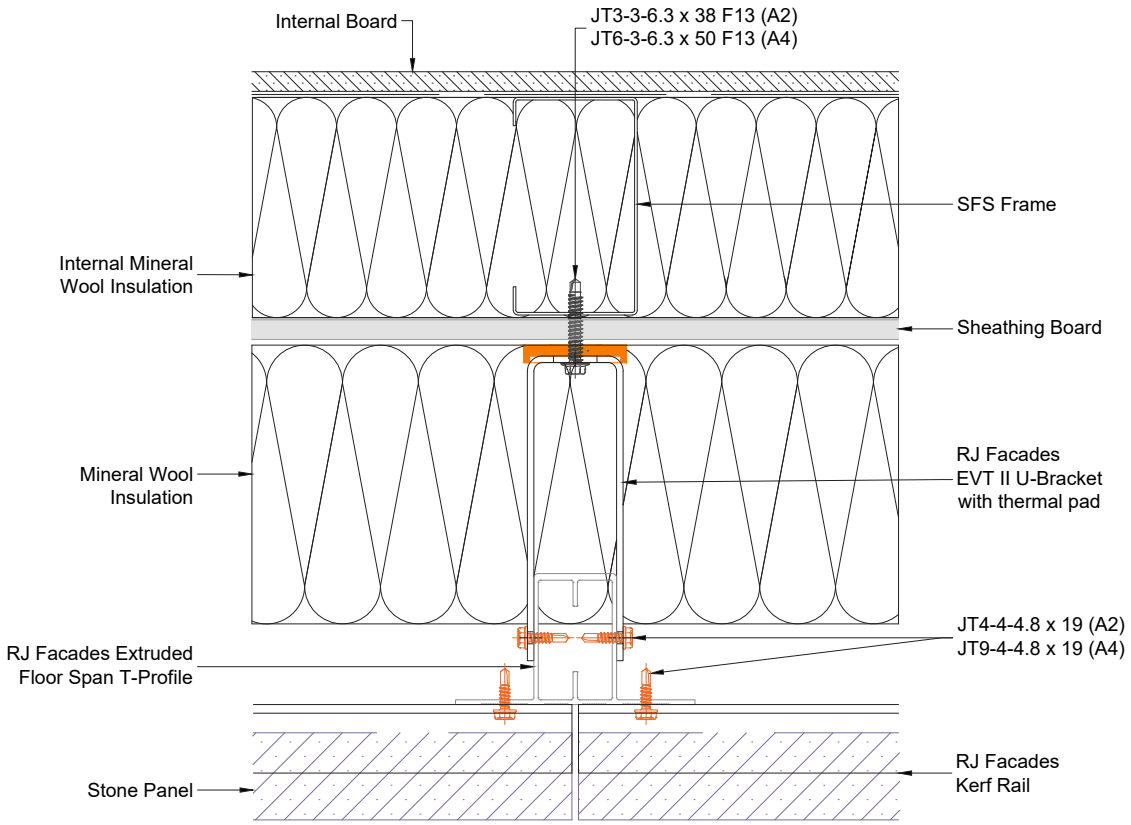
Kerf Stone


Tophat Support
Coping Flashing
Weather Gasket
Coping Bracket
RJ Facades Kerf Rail
SFS Frame
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
Internal Board
RJ Facades EVT II Double L-Bracket with thermal pad
JT3-3-6.3 x 50 F13 (A2)
JT6-3-6.3 x 50 F13 (A4)
RJ Facades Extruded L-Profile
Internal Mineral Wool Insulation
Stone Panel
4.0
Sheathing Board
min 7.0
Mineral Wool Insulation

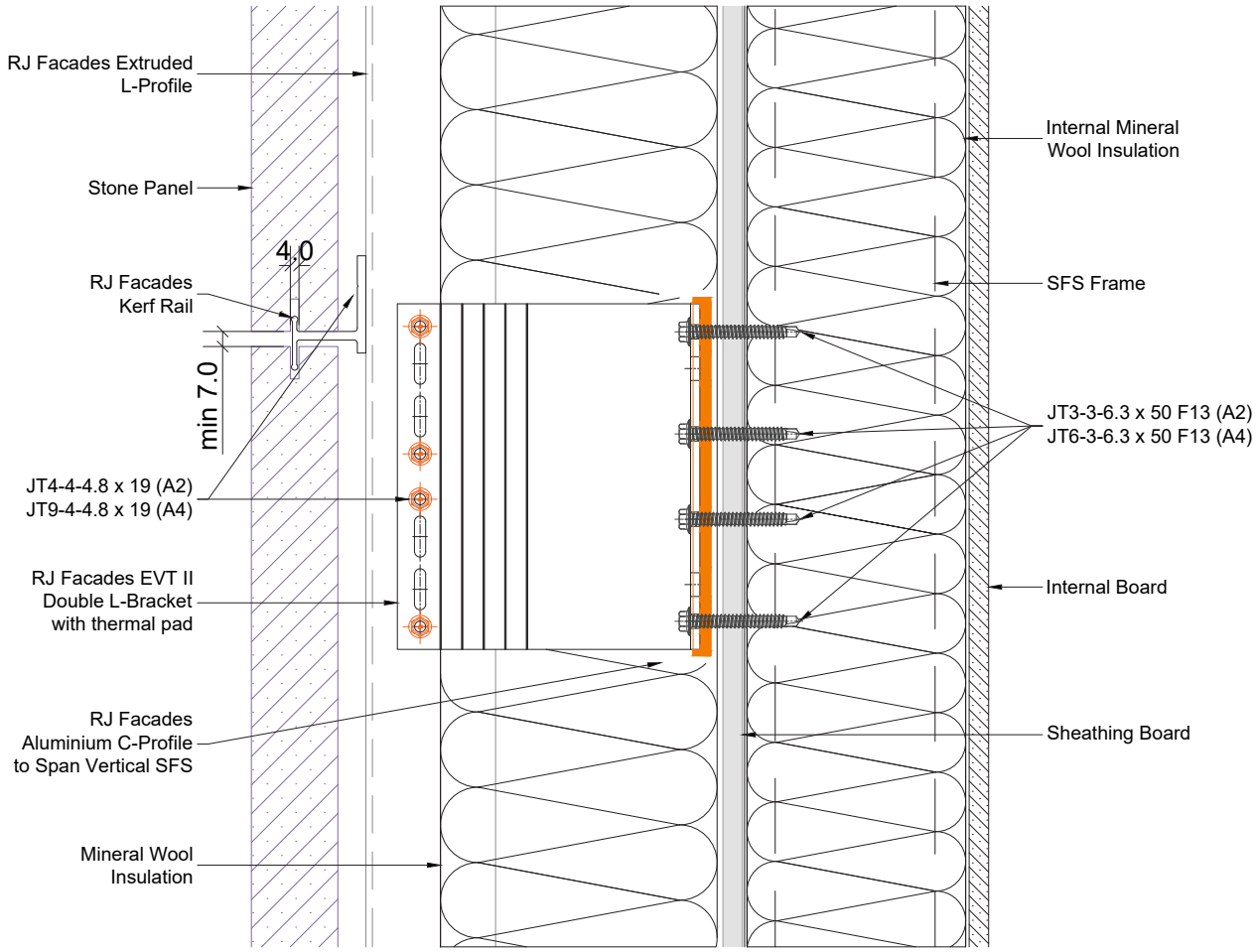

4.0
RJ Facades
Kerf Rail
min 7.0
RJ Facades EVT II
Single L-Bracket
with thermal pad
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
Stone Panel
RJ Facades
Extruded L-Profile
Pressed Cill
Flashing
Internal Mineral
Wool Insulation
Sheathing Board
JT3-3-6.3 x 50 F13 (A2)
JT6-3-6.3 x 50 F13 (A4)
SFS Frame
Internal Board

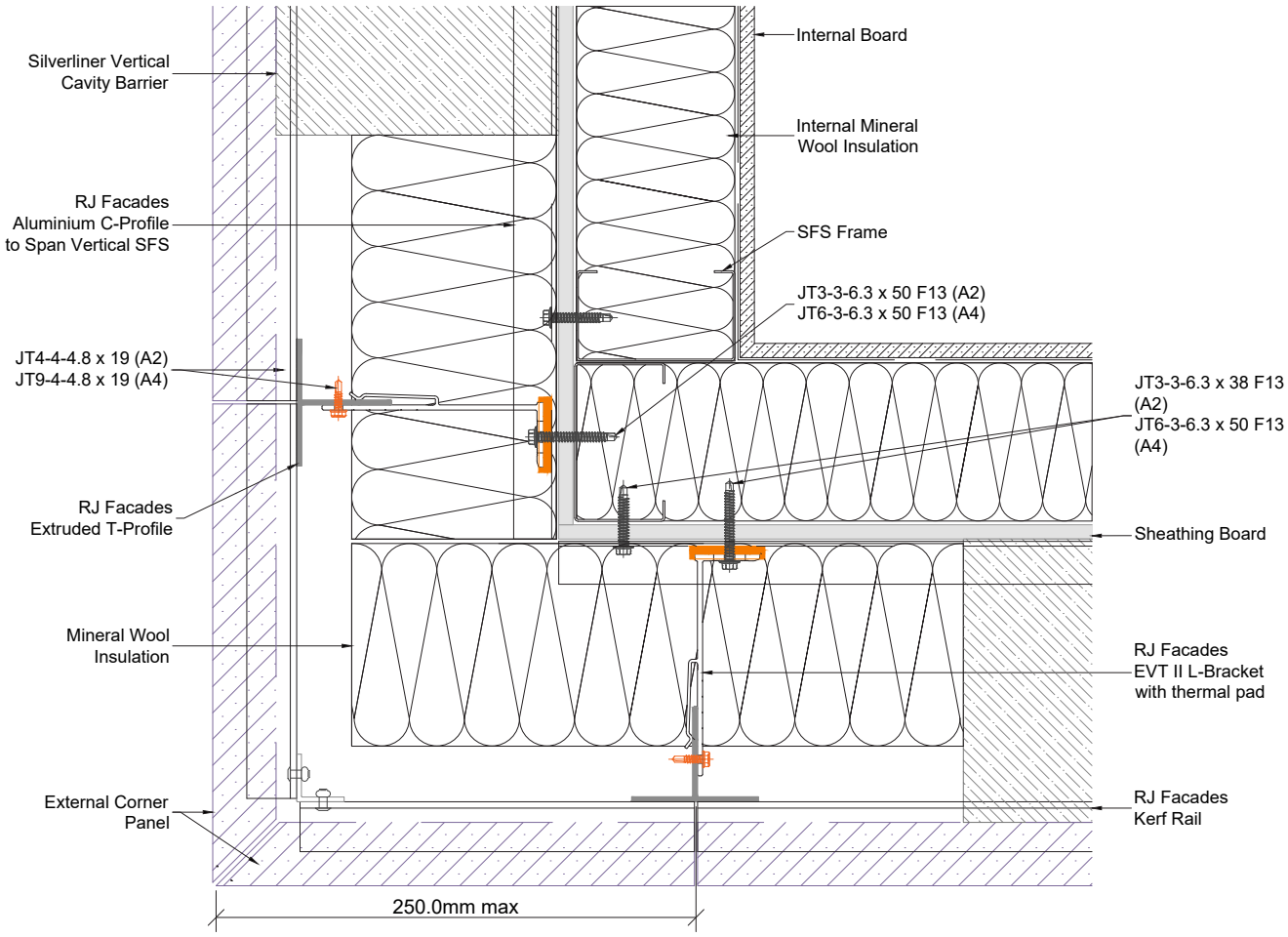
Kerf Stone


Internal Board
JT3-3-6.3 x 38 F13 (A2)
JT6-3-6.3 x 50 F13 (A4)
SFS Frame
Internal Mineral
Wool Insulation
Sheathing Board
RJ Facades
Aluminium C-Profile
to Span Vertical SFS
RJ Facades
EVT II L-Bracket
with thermal pad
Mineral Wool
Insulation
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
RJ Facades
Extruded T-Profile
RJ Facades
Kerf Rail
Stone Panel

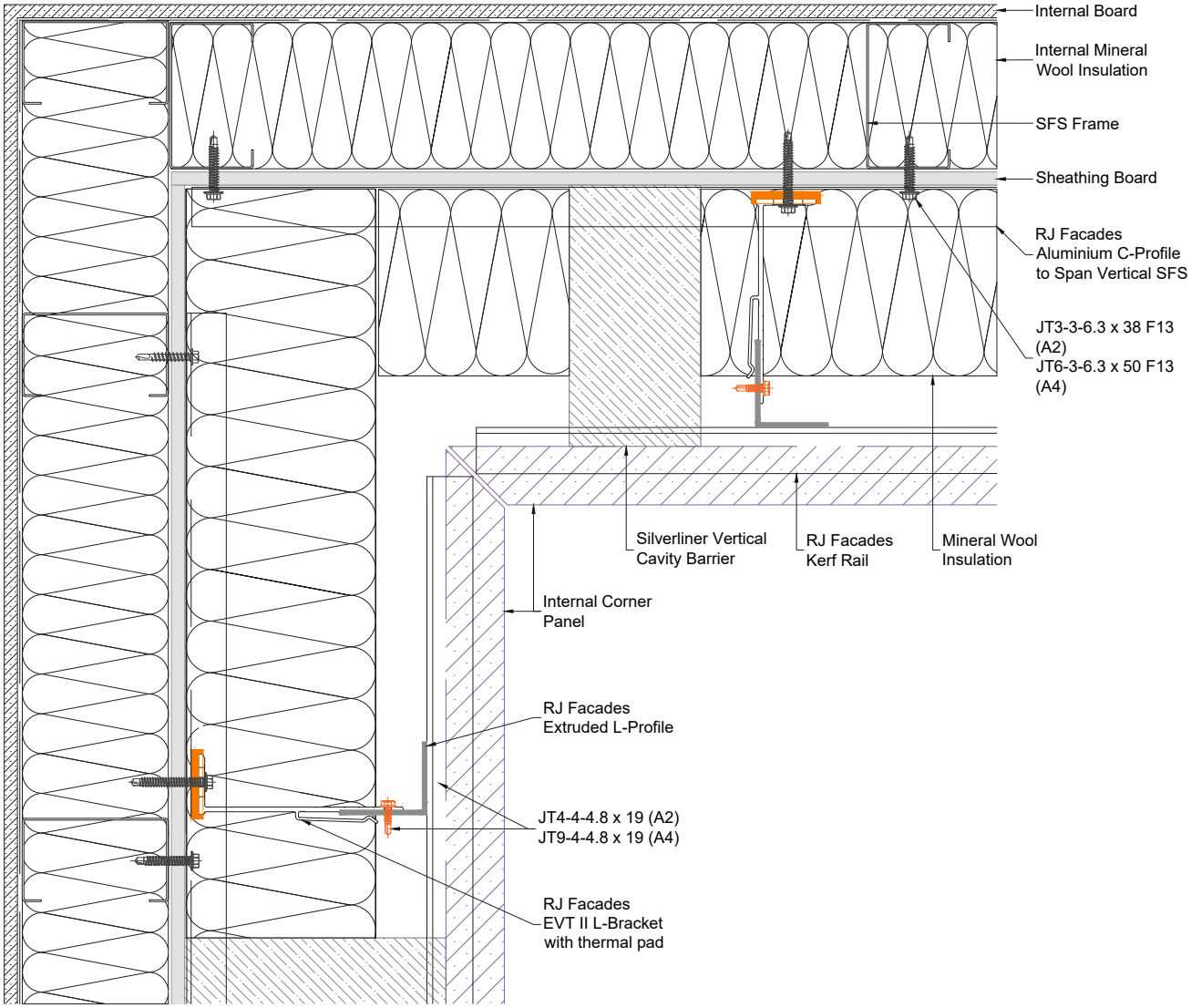

Internal Board
JT3-3-6.3 x 38 F13 (A2)
JT6-3-6.3 x 50 F13 (A4)
SFS Frame
Internal Mineral Wool Insulation
Sheathing Board
Mineral Wool Insulation
RJ Facades EVT II U-Bracket with thermal pad
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
RJ Facades Extruded Floor Span T-Profile
RJ Facades Kerf Rail
Stone Panel

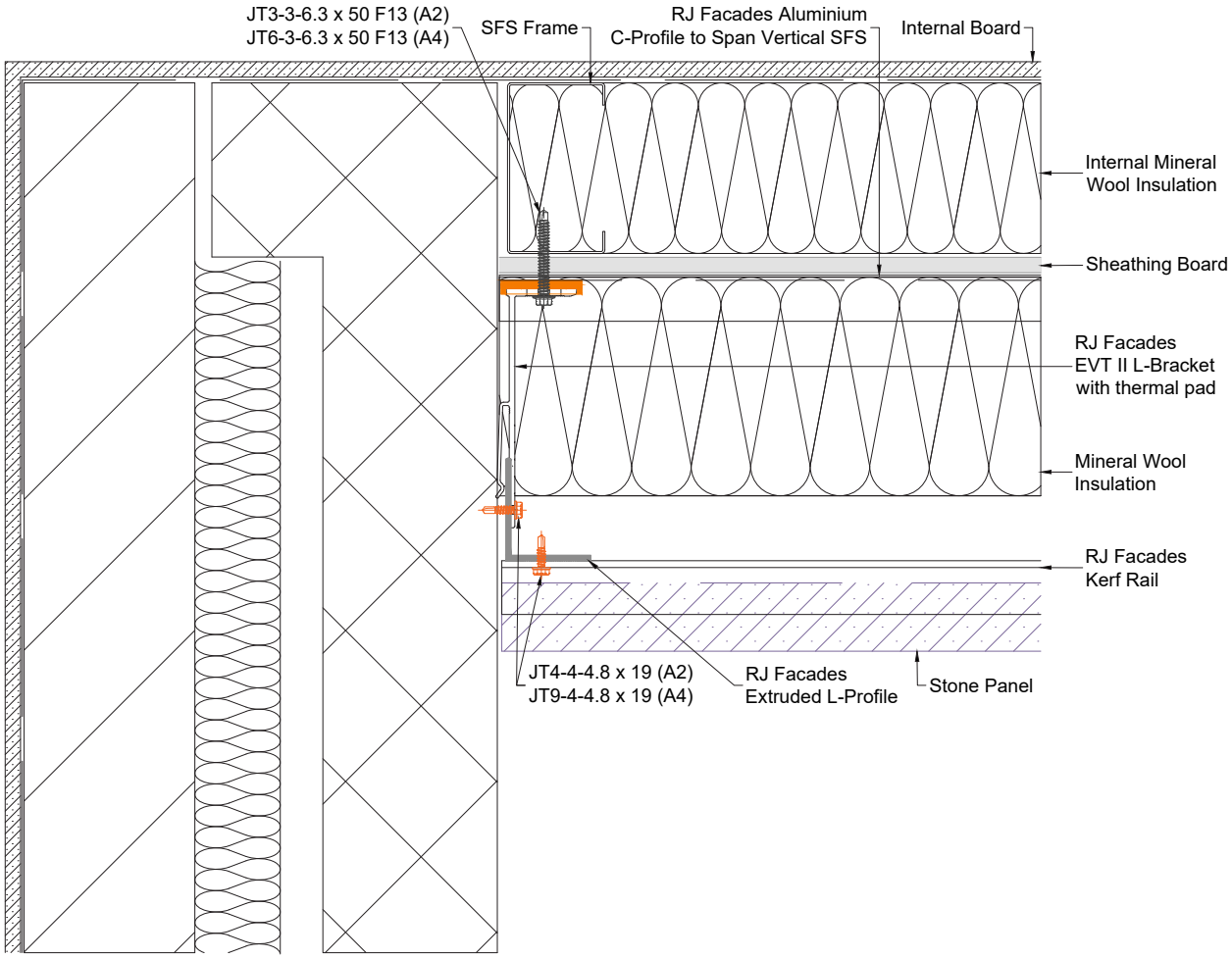
Kerf Stone


RJ Facades Extruded L-Profile
Stone Panel
4.0
RJ Facades Kerf Rail
min 7.0
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
RJ Facades EVT II Double L-Bracket with thermal pad
RJ Facades Aluminium C-Profile to Span Vertical SFS
Mineral Wool Insulation
Internal Mineral Wool Insulation
SFS Frame
JT3-3-6.3 x 50 F13 (A2)
JT6-3-6.3 x 50 F13 (A4)
Internal Board
Sheathing Board

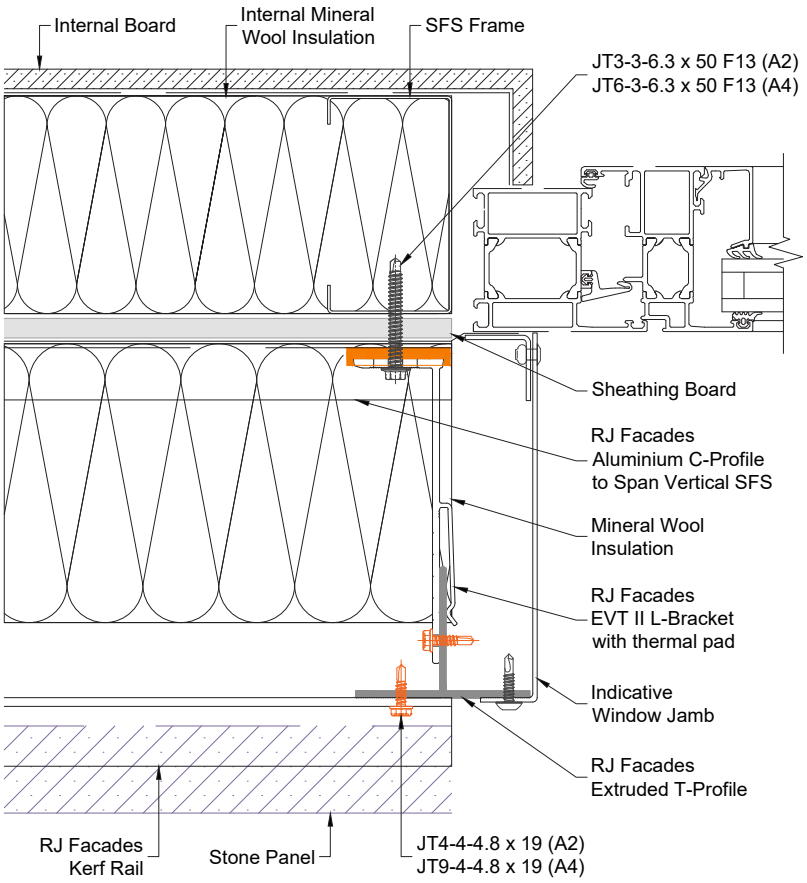

Silverliner Vertical Cavity Barrier
RJ Facades Aluminium C-Profile to Span Vertical SFS
JT4-4-4.8 x 19 (A2) JT9-4-4.8 x 19 (A4)
RJ Facades Extruded T-Profile
Mineral Wool Insulation
External Corner Panel
Internal Board
Internal Mineral Wool Insulation
SFS Frame
JT3-3-6.3 x 50 F13 (A2) JT6-3-6.3 x 50 F13 (A4)
JT3-3-6.3 x 38 F13 (A2) JT6-3-6.3 x 50 F13 (A4)
Sheathing Board
RJ Facades EVT II L-Bracket with thermal pad
RJ Facades Kerf Rail
250.0mm max

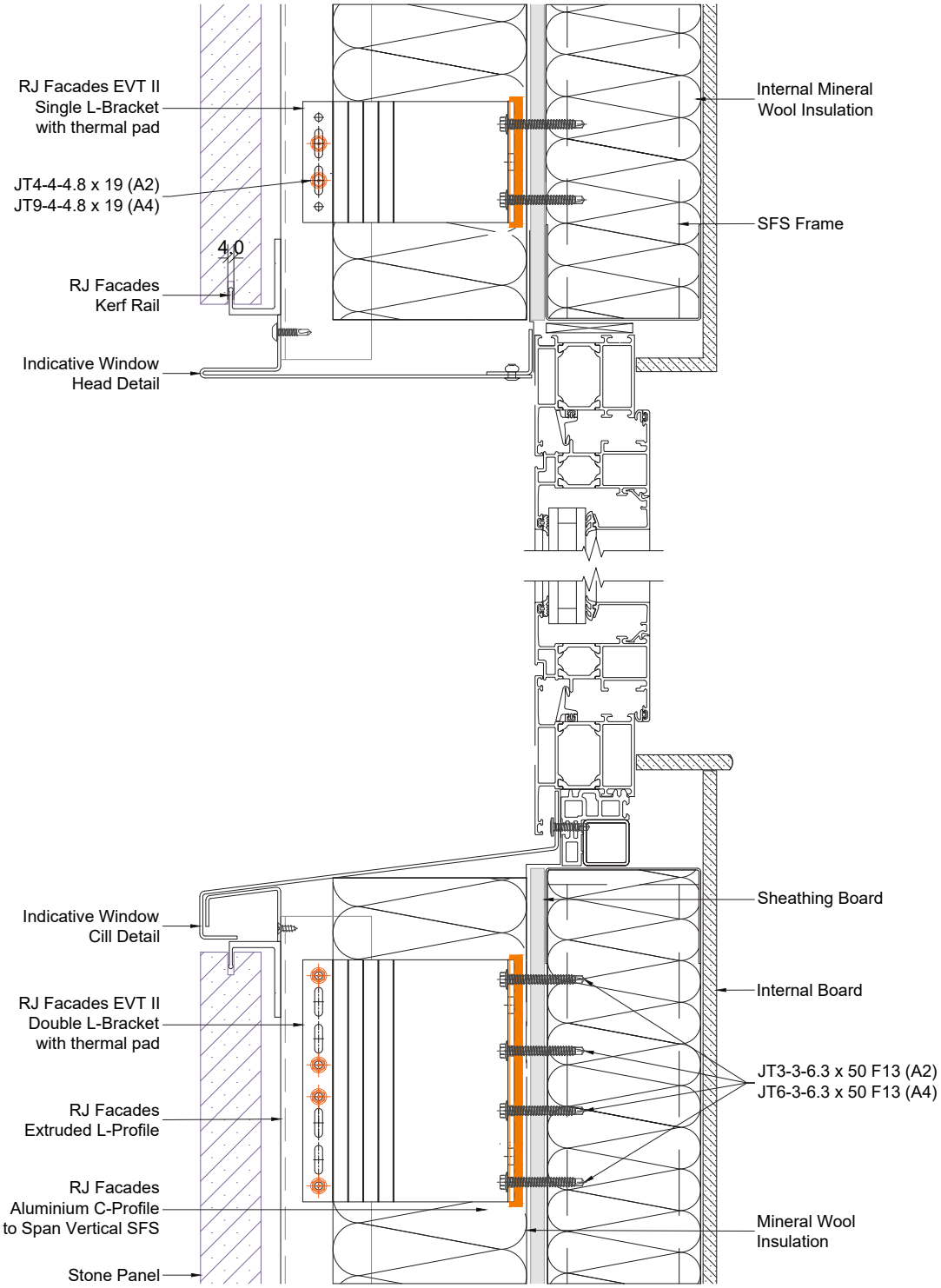
Kerf Stone


Internal Board
Internal Mineral Wool Insulation
SFS Frame
Sheathing Board
RJ Facades Aluminium C-Profile to Span Vertical SFS
JT3-3-6.3 x 38 F13 (A2)
JT6-3-6.3 x 50 F13 (A4)
Silverliner Vertical Cavity Barrier
RJ Facades Kerf Rail
Mineral Wool Insulation
Internal Corner Panel
RJ Facades Extruded L-Profile
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
RJ Facades EVT II L-Bracket with thermal pad

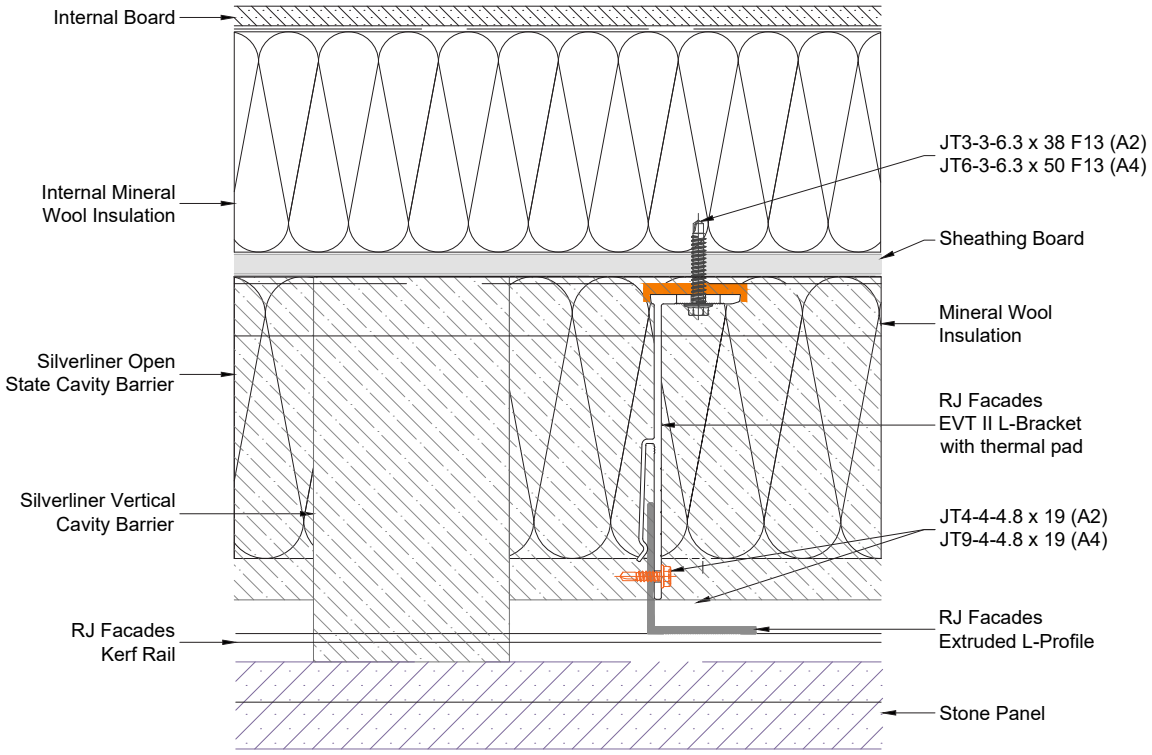

JT3-3-6.3 x 50 F13 (A2)
JT6-3-6.3 x 50 F13 (A4)
SFS Frame
RJ Facades Aluminium
C-Profile to Span Vertical SFS
Internal Board
Internal Mineral
Wool Insulation
Sheathing Board
RJ Facades
EVT II L-Bracket
with thermal pad
Mineral Wool
Insulation
RJ Facades
Kerf Rail
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
RJ Facades
Extruded L-Profile
Stone Panel

Kerf Stone


Internal Board
Internal Mineral Wool Insulation
SFS Frame
JT3-3-6.3 x 50 F13 (A2)
JT6-3-6.3 x 50 F13 (A4)
Sheathing Board
RJ Facades Aluminium C-Profile to Span Vertical SFS
Mineral Wool Insulation
RJ Facades EVT II L-Bracket with thermal pad
Indicative Window Jamb
RJ Facades Extruded T-Profile
RJ Facades Kerf Rail
Stone Panel
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)


RJ Facades EVT II
Single L-Bracket
with thermal pad
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
4.0
RJ Facades
Kerf Rail
Indicative Window
Head Detail
Internal Mineral
Wool Insulation
SFS Frame
Indicative Window
Cill Detail
RJ Facades EVT II
Double L-Bracket
with thermal pad
RJ Facades
Extruded L-Profile
RJ Facades
Aluminium C-Profile
to Span Vertical SFS
Stone Panel
Sheathing Board
Internal Board
JT3-3-6.3 x 50 F13 (A2)
JT6-3-6.3 x 50 F13 (A4)
Mineral Wool
Insulation

Kerf Stone


Internal Board
Internal Mineral Wool Insulation
Silverliner Open State Cavity Barrier
Silverliner Vertical Cavity Barrier
RJ Facades Kerf Rail
JT3-3-6.3 x 38 F13 (A2)
JT6-3-6.3 x 50 F13 (A4)
Sheathing Board
Mineral Wool Insulation
RJ Facades EVT II L-Bracket with thermal pad
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
RJ Facades Extruded L-Profile
Stone Panel

Briklok Brick Slip

The system is designed to combine natural brick finishes with modern methods of construction, using a full-enclosed back aluminium support frame, for natural brick slips. Mid and upper profiles are available in two sizes, to account for the variance that occurs in real bricks. Briklok and Briklok XL.

Briklok 'standard' is designed for a brick with dimensions from 62mm to 65mm which cover most UK manufactured bricks.

Briklok 'XL' is designed for a brick with dimensions from 64mm to 67mm to suit engineering and natural clay bricks, where less shrinkage occurs during manufacture.

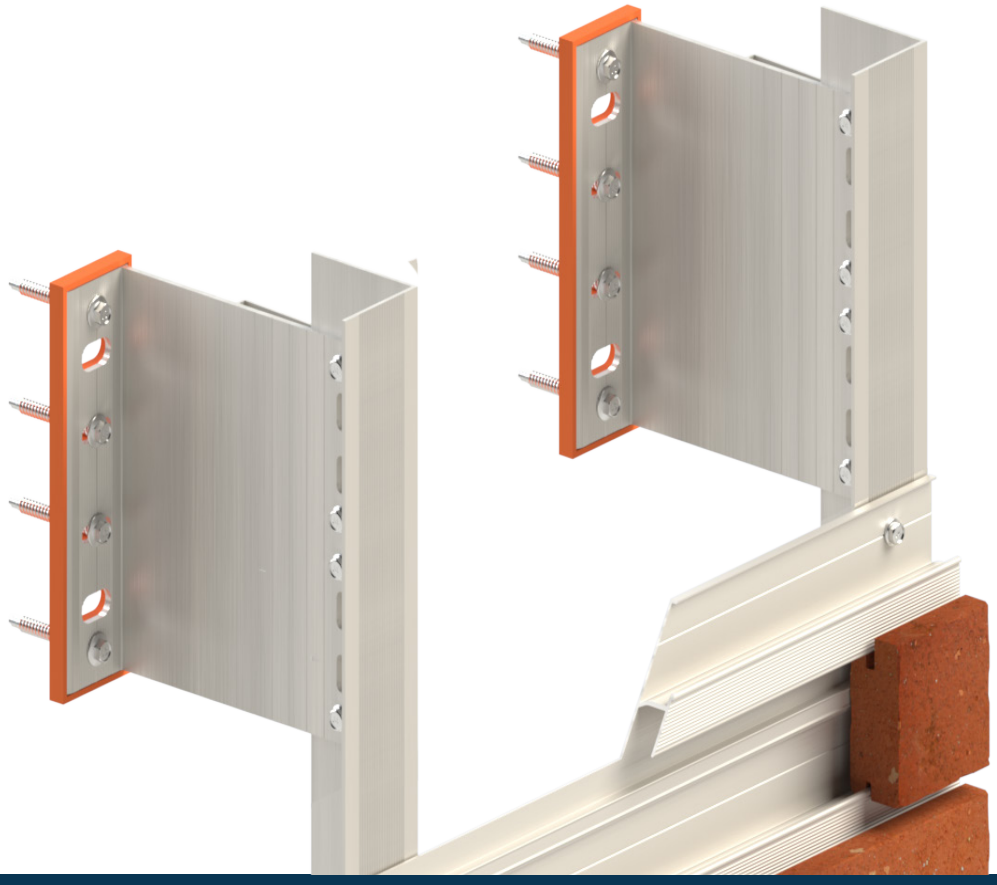
Suitable as a lightweight and cost effective option comparing to the traditional brick build-up. Both systems use vertical T & L profiles combined with BrikLok horizontal profiles to support the brick slips.

Main advantages:

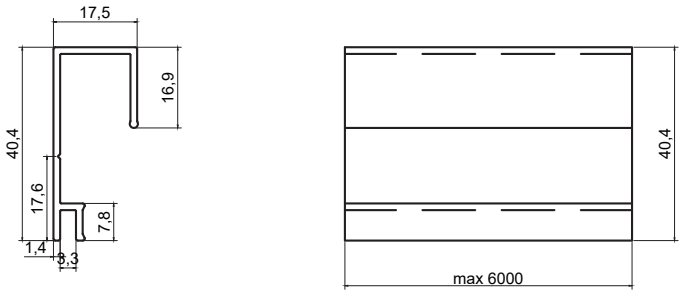
- Fast, easy and secure mounting of Brick slip systems.
- Improved and reduced installation time, with the possibility of off-site fabrication of columns and corner returns.
- Optimization of the substructure by optimal load distribution to vertical supporting pillars.

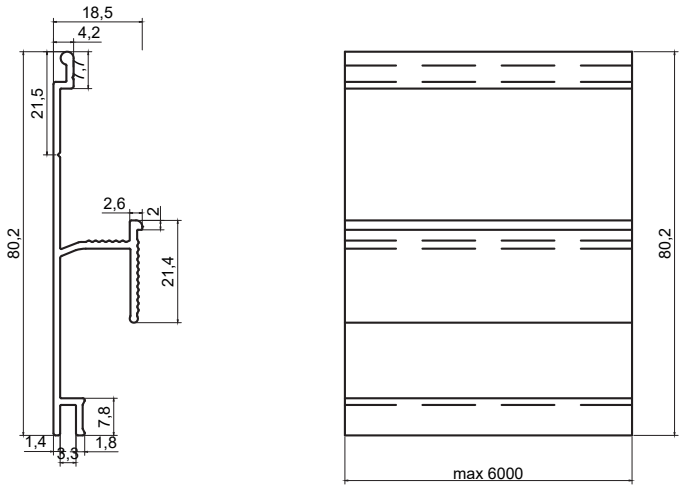
Cladding Materials

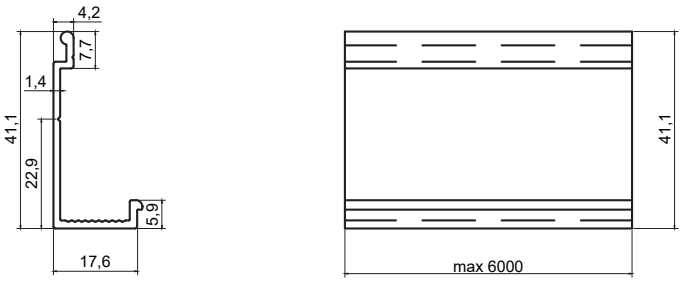
- Natural clay bricks



Briklok Brick Slip Profiles, Aluminium



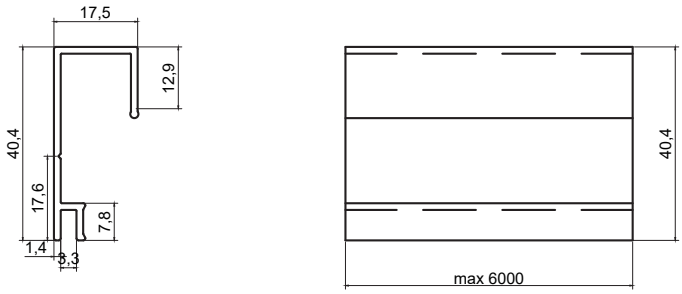


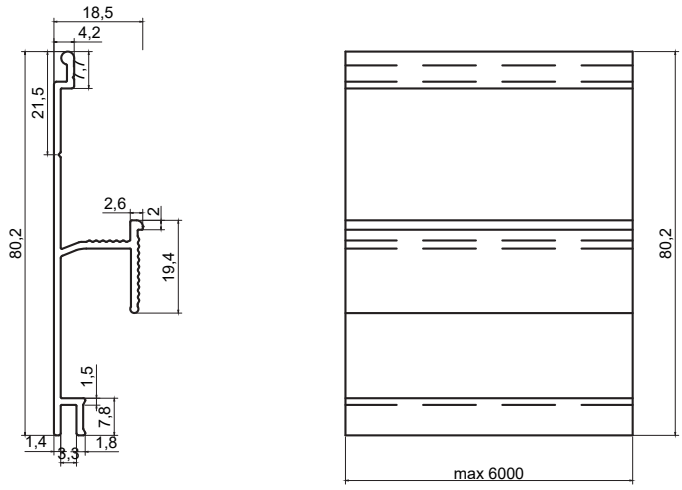


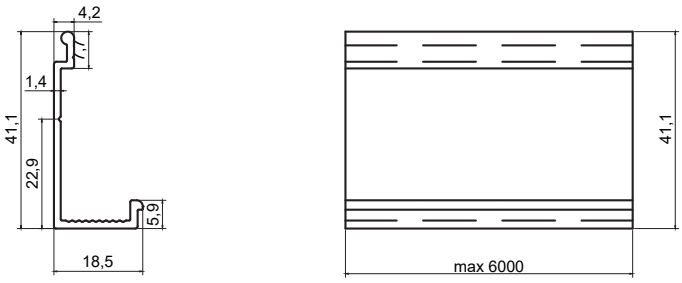
Item	Material
Briklok Profile	Aluminum - EN AW 6063 T6 Anodised

All measurements in mm*

Briklok XL Brick Slip Profiles, Aluminium



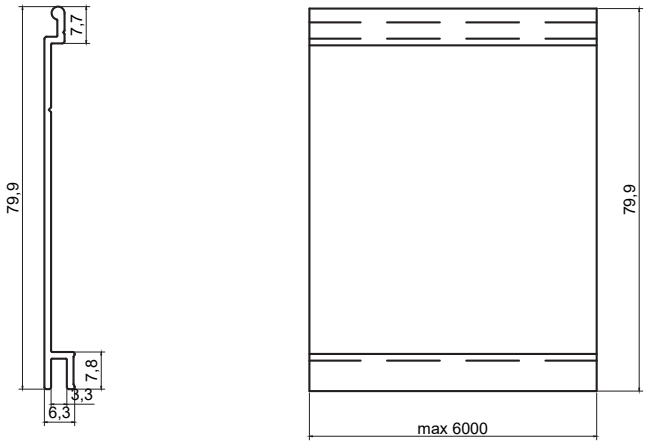




Item	Material
Briklok Profile	Aluminum - EN AW 6063 T6 Anodised

All measurements in mm*

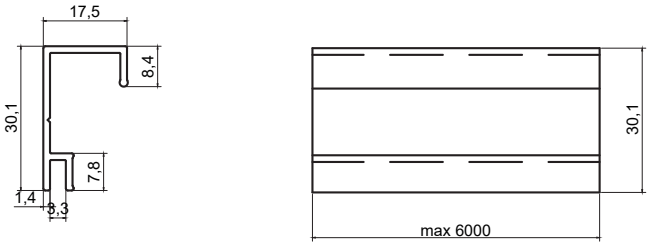
Soldier Spacer Brick Slip Profile, Aluminium



Item	Material
Briklok Profile	Aluminum - EN AW 6063 T6 Anodised

All measurements in mm*

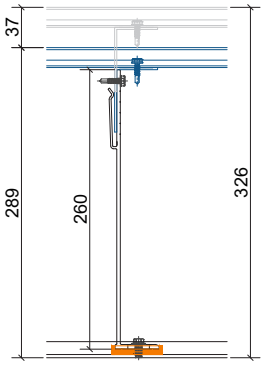
Movement Joint Brick Slip Profile, Aluminium



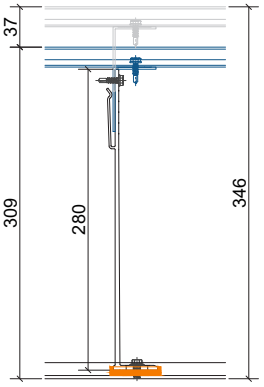
Item	Material
Briklok Profile	Aluminum - EN AW 6063 T6 Anodised

All measurements in mm*

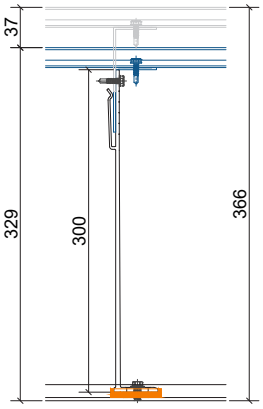
Briklok Brick Slip - Clamping Range



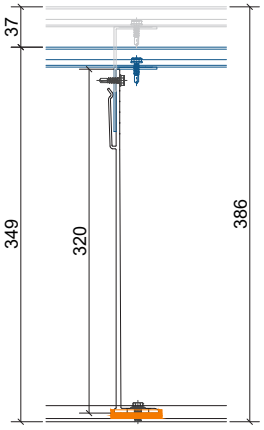
260 Bracket
ADJUSTMENT= +/– 37mm
Clad Zone= 289mm to 326mm



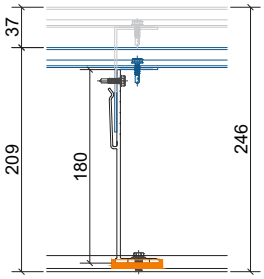
280 Bracket
ADJUSTMENT= +/– 37mm
Clad Zone= 309mm to 346mm



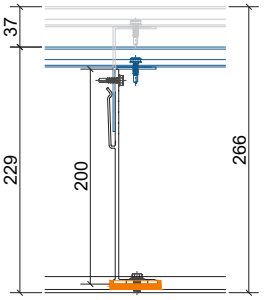
300 Bracket
ADJUSTMENT= +/– 37mm
Clad Zone= 329mm to 366mm



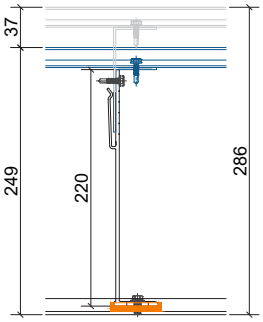
320 Bracket
ADJUSTMENT= +/– 37mm
Clad Zone= 349mm to 386mm



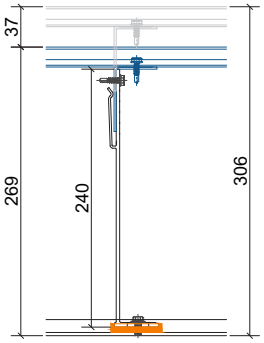
180 Bracket
ADJUSTMENT= +/– 37mm
Clad Zone= 209mm to 246mm



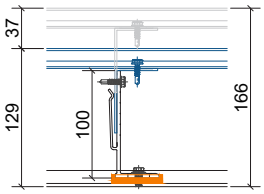
200 Bracket
ADJUSTMENT= +/– 37mm
Clad Zone= 229mm to 266mm



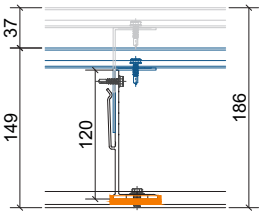
220 Bracket
ADJUSTMENT= +/– 37mm
Clad Zone= 249mm to 286mm



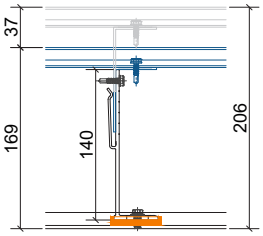
240 Bracket
ADJUSTMENT= +/– 37mm
Clad Zone= 269mm to 306mm



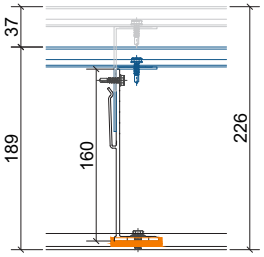
100 Bracket
ADJUSTMENT= +/– 37mm
Clad Zone= 129mm to 166mm



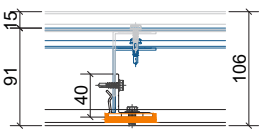
120 Bracket
ADJUSTMENT= +/– 37mm
Clad Zone= 149mm to 186mm



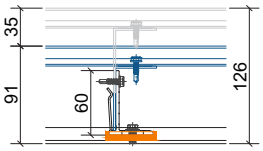
140 Bracket
ADJUSTMENT= +/– 37mm
Clad Zone= 169mm to 206mm



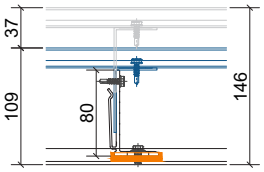
160 Bracket
ADJUSTMENT= +/– 37mm
Clad Zone= 189mm to 226mm



40 Bracket
ADJUSTMENT= +/– 15mm
Clad Zone= 91mm to 106mm

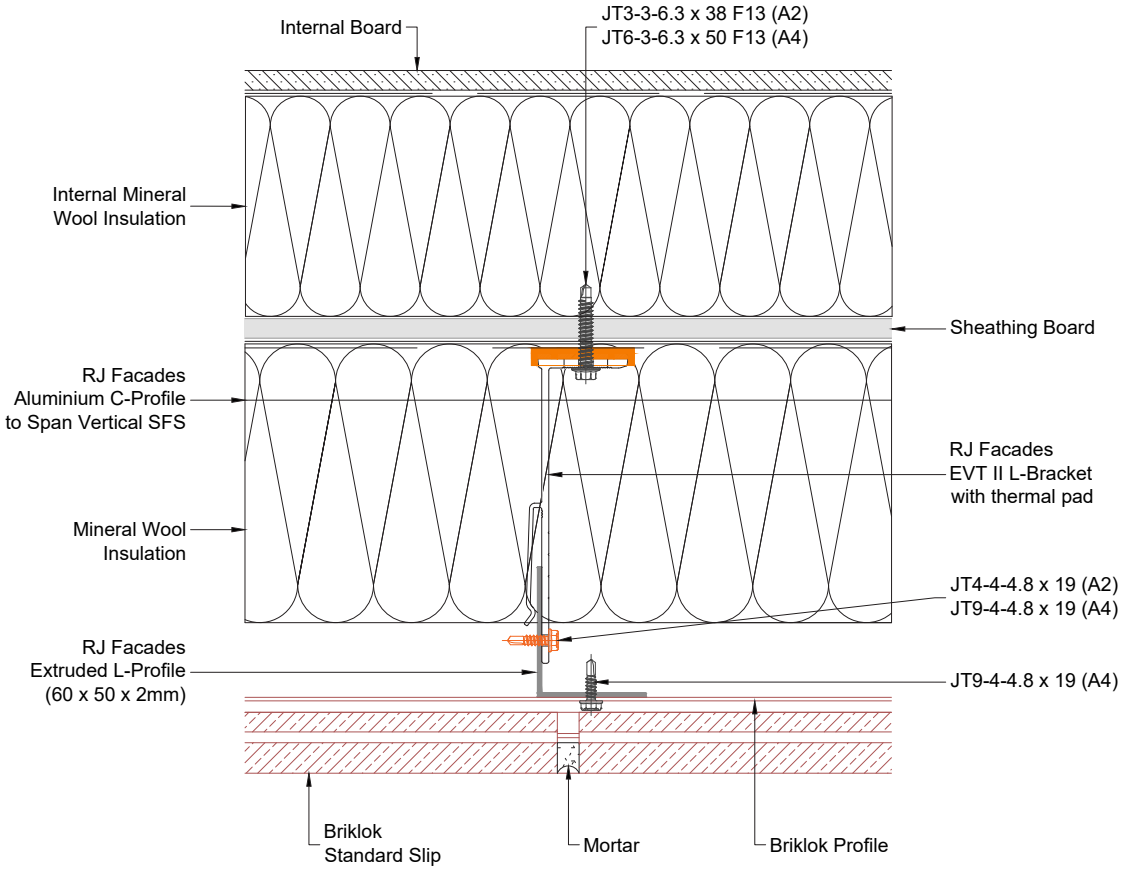


60 Bracket
ADJUSTMENT= +/– 35mm
Clad Zone= 91mm to 126mm

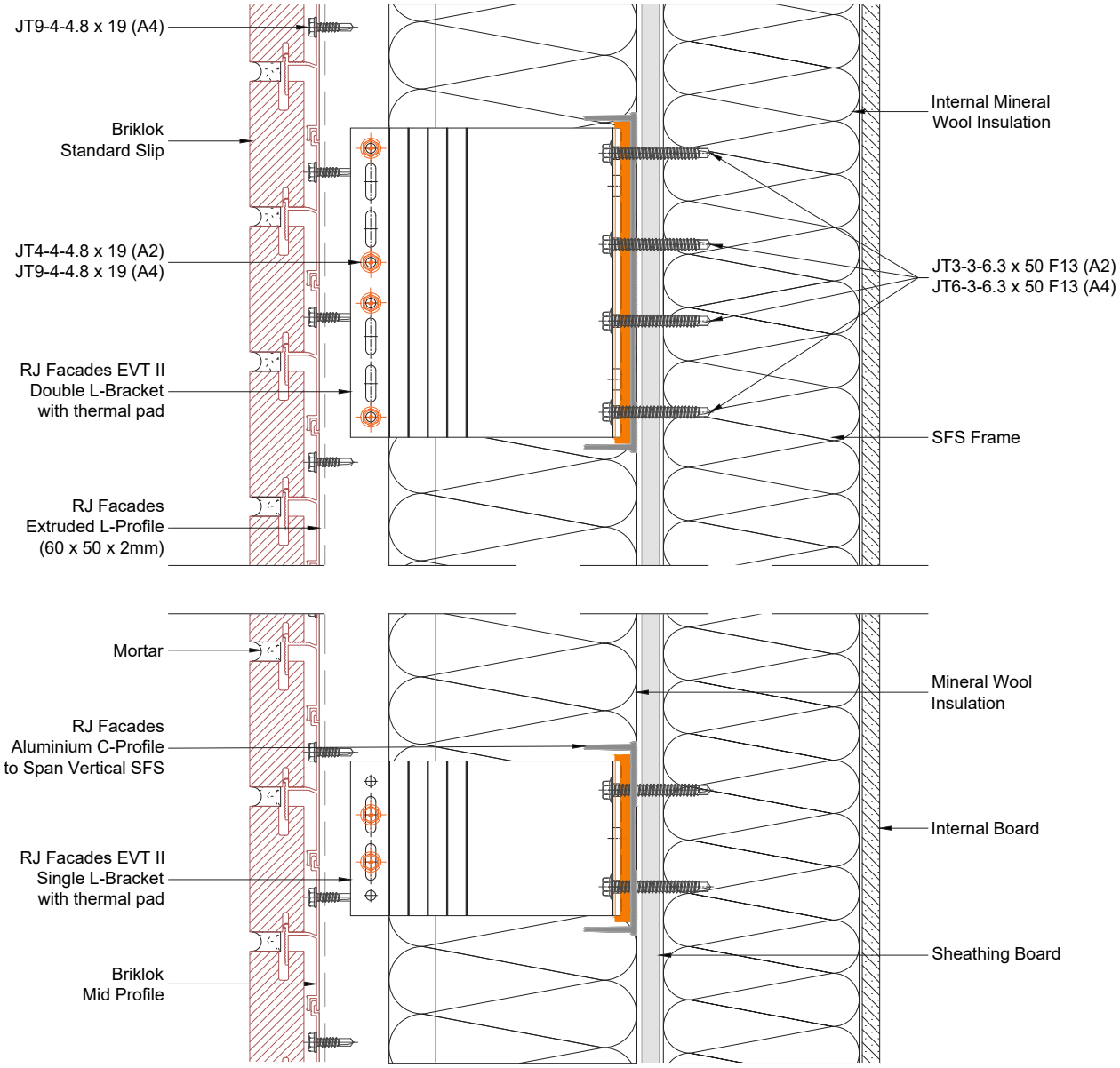


80 Bracket
ADJUSTMENT= +/– 37mm
Clad Zone= 109mm to 146mm

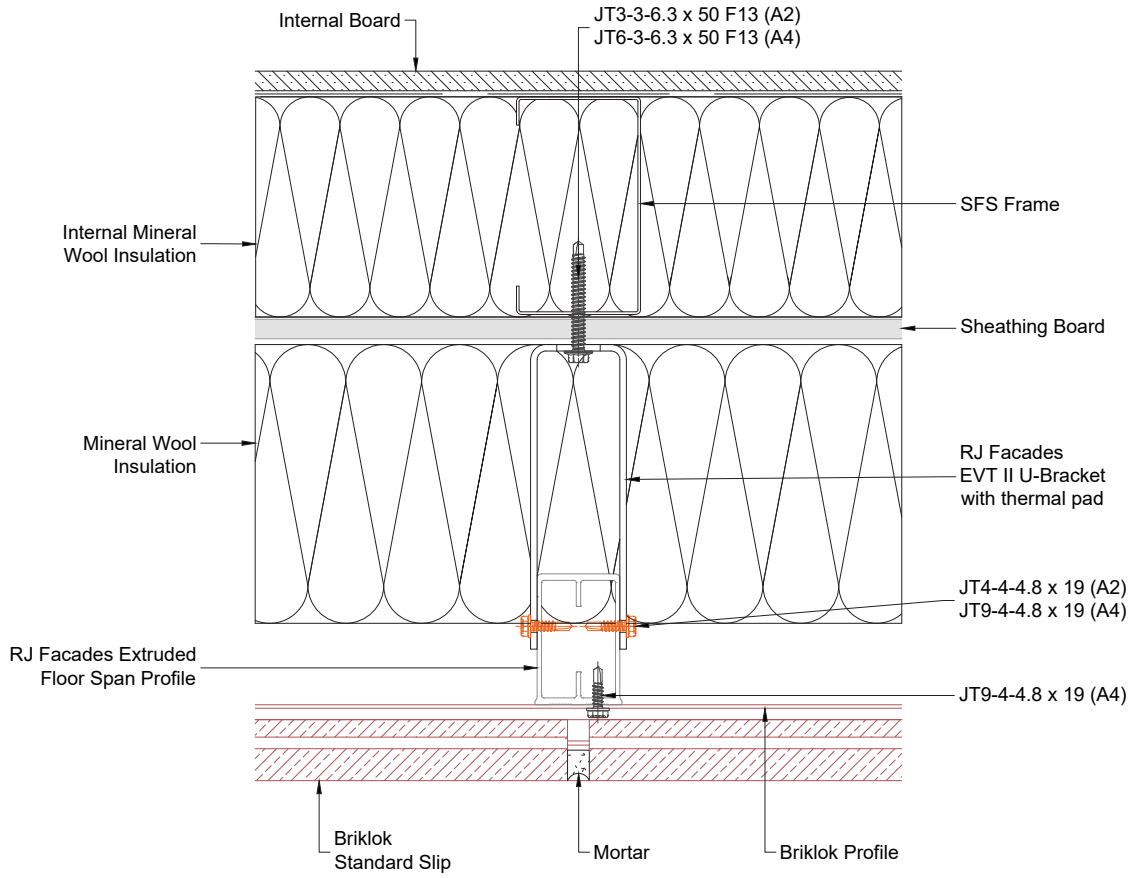
Briklok Brick Slip - Vertical Joint



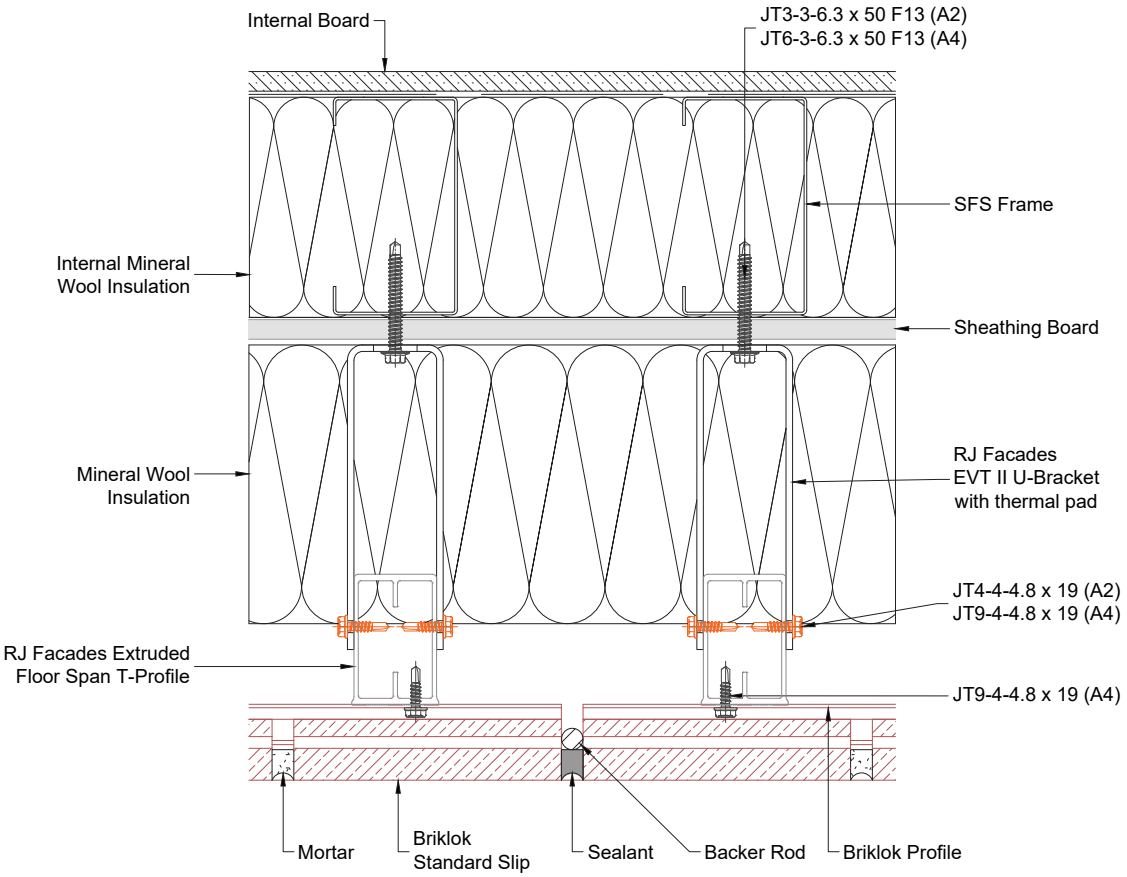
Briklok Brick Slip - Horizontal Joint



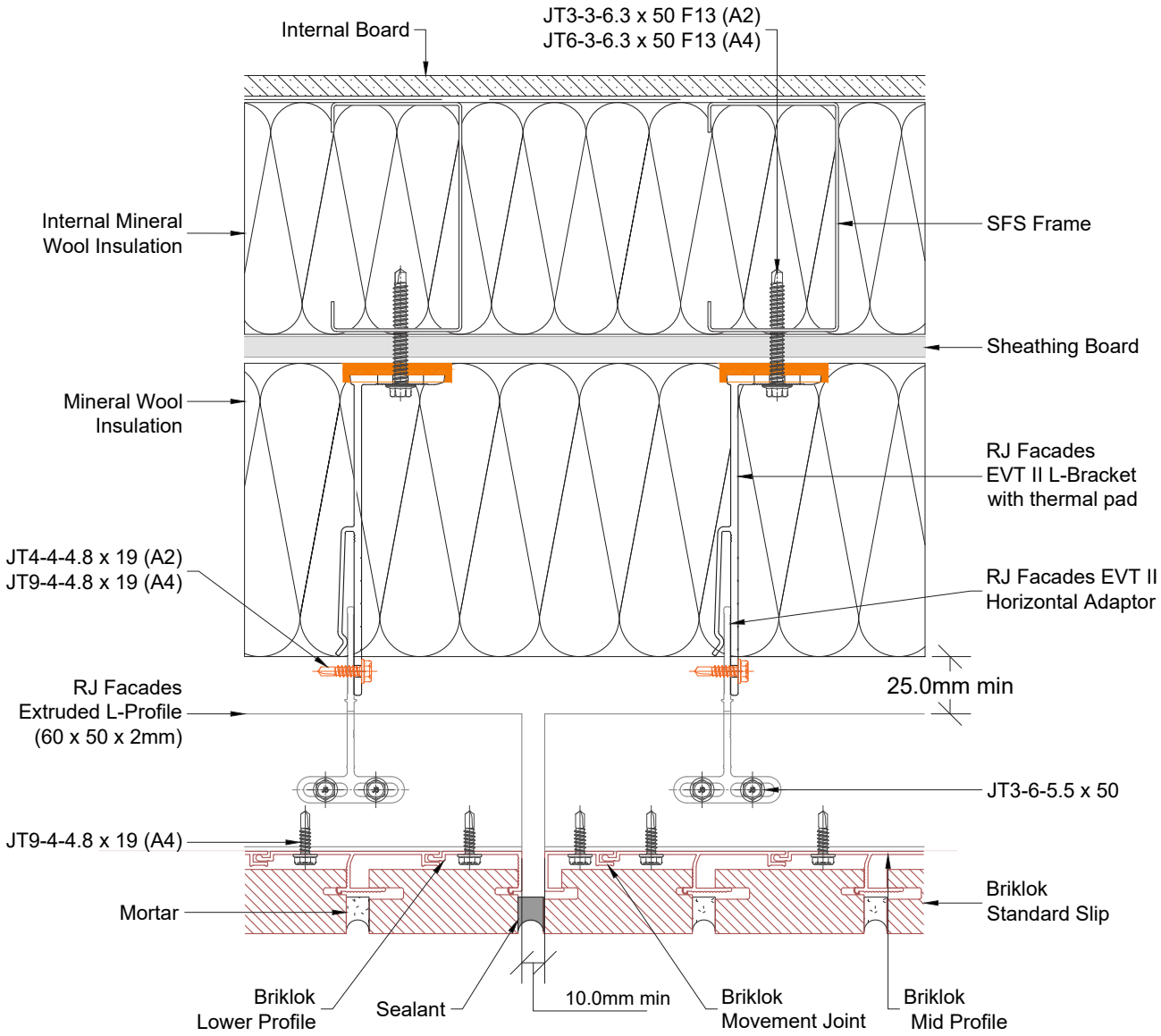
Briklok Brick Slip - Floor Span Vertical Joint



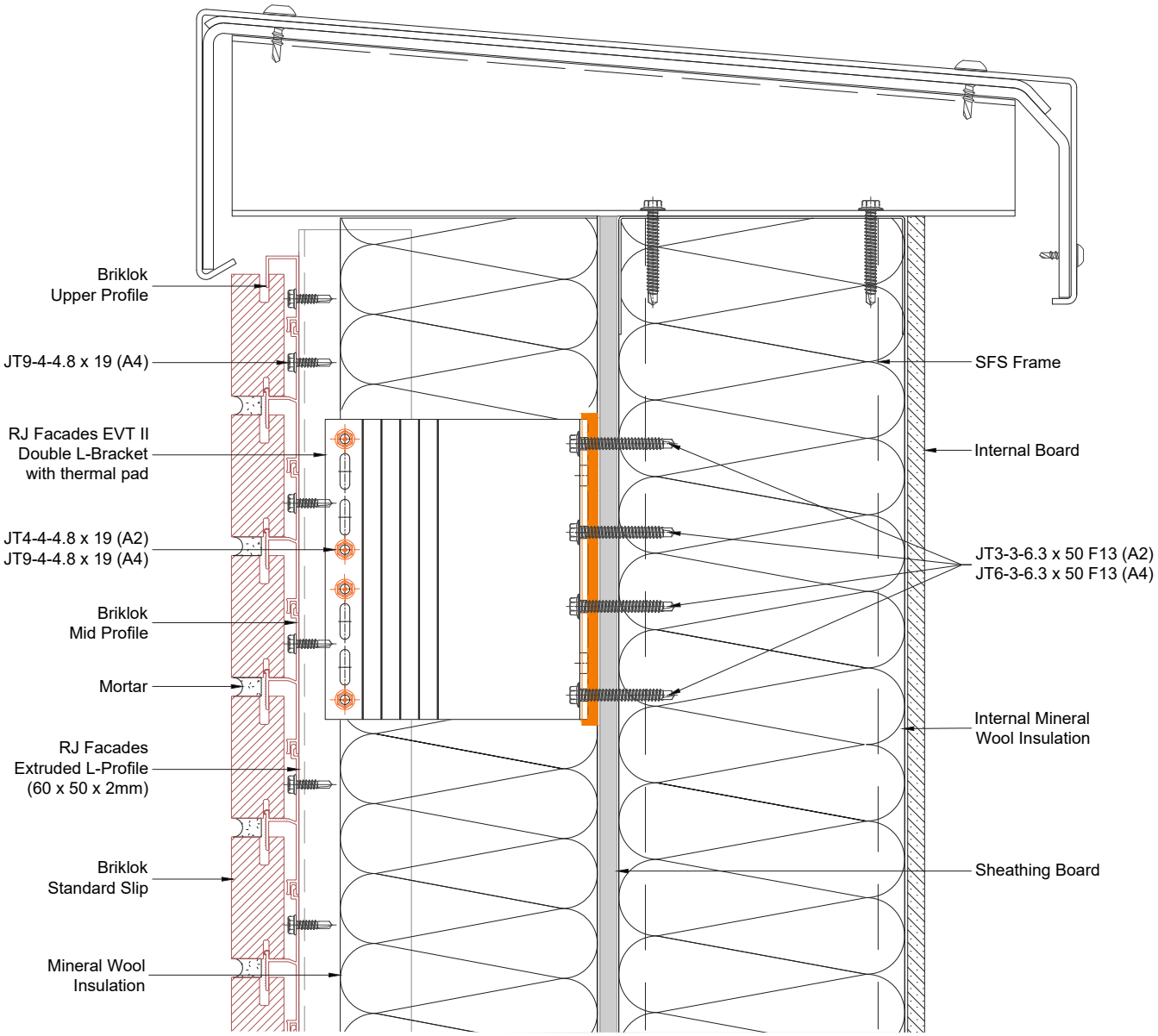
Briklok Brick Slip - Floor Span Vertical Movement Joint



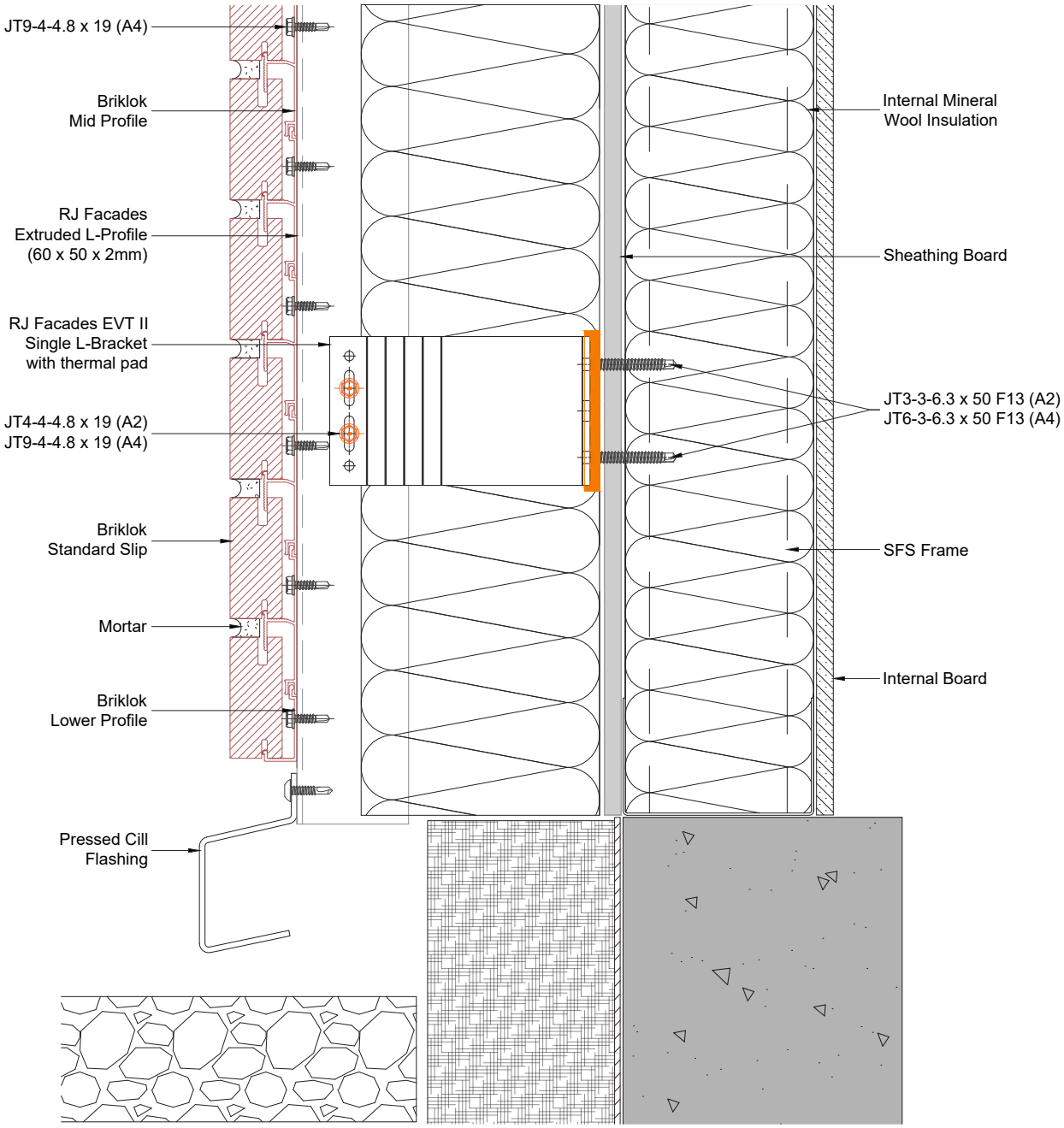
Briklok Brick Slip - Horizontal Adaptor



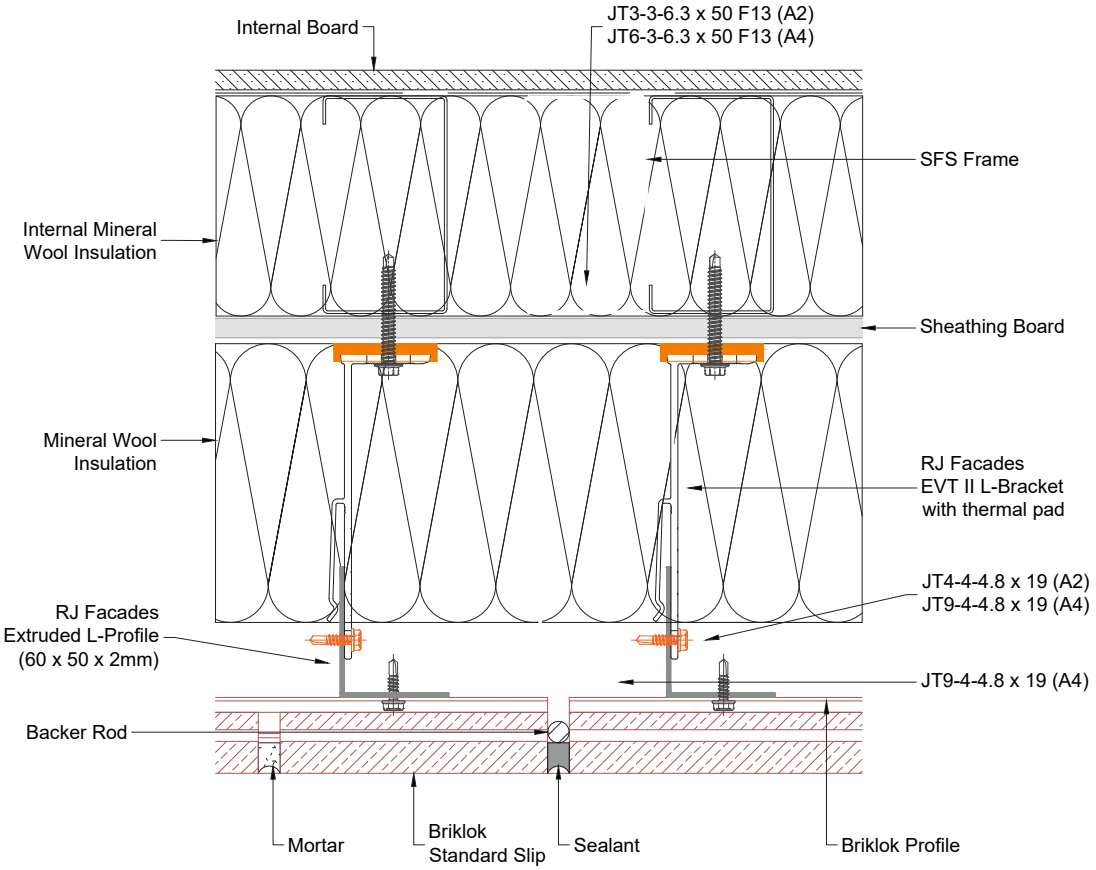
Briklok Brick Slip - Coping Detail



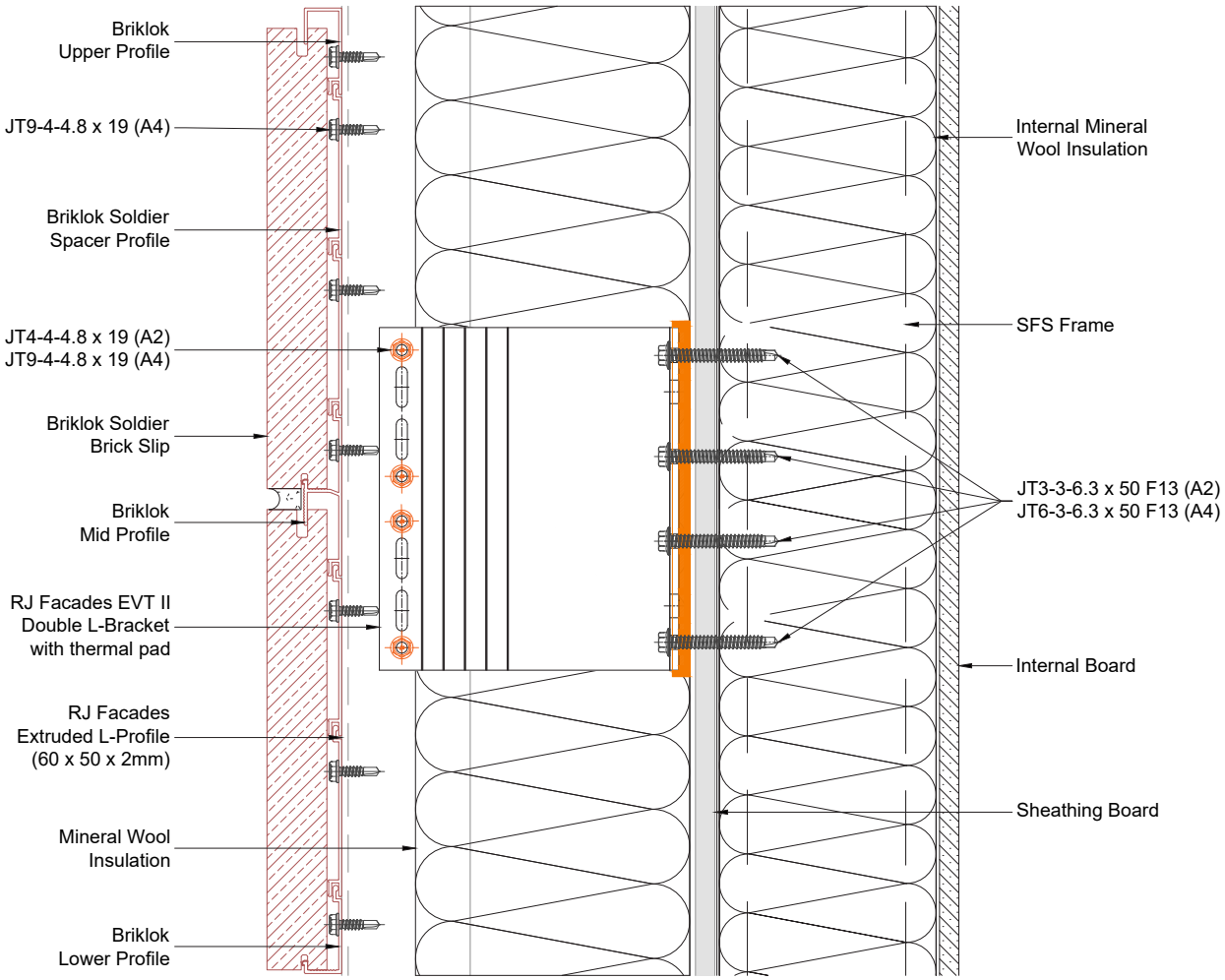
Briklok Brick Slip - Base Detail



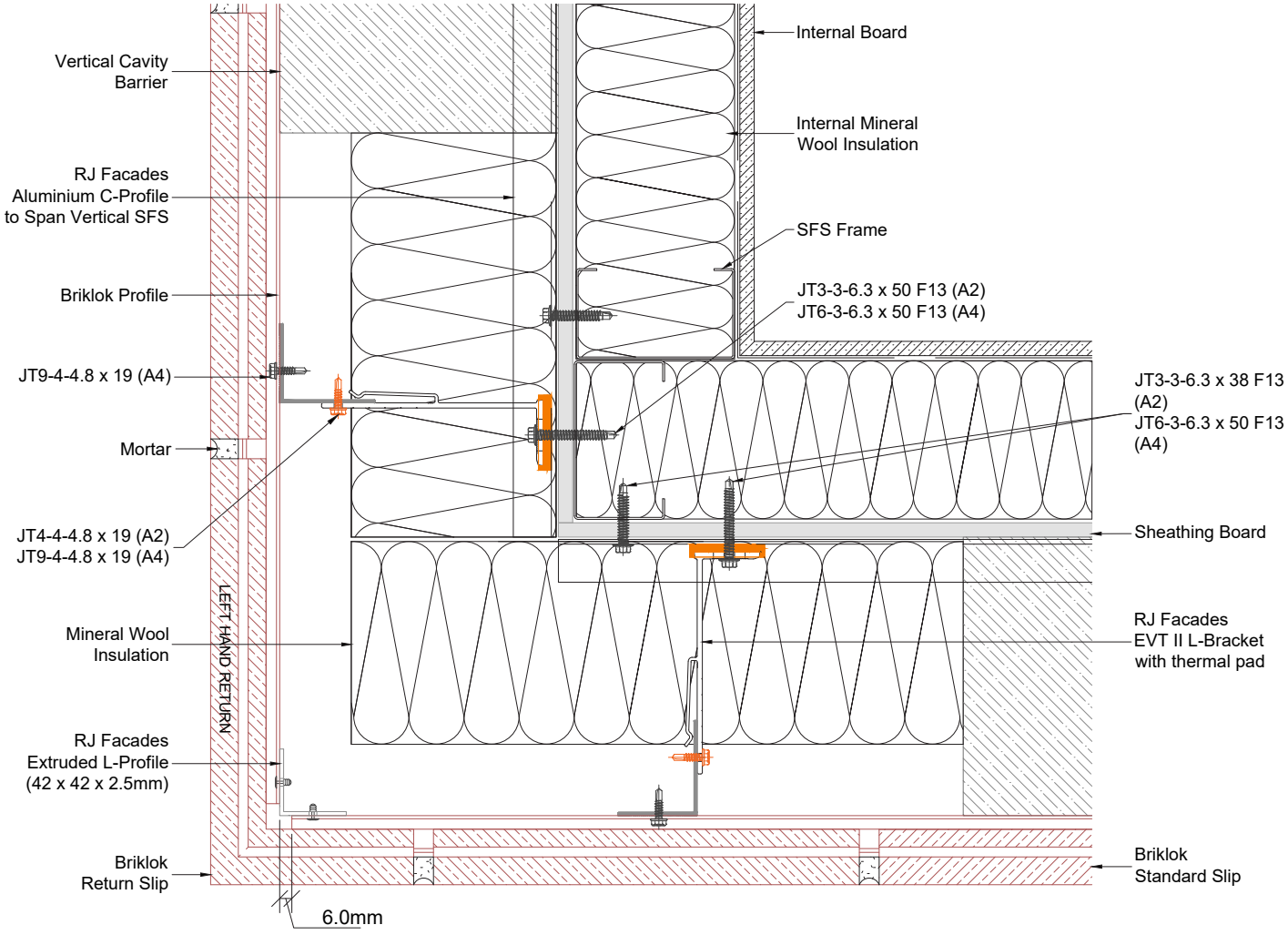
Briklok Brick Slip - Vertical Movement Joint



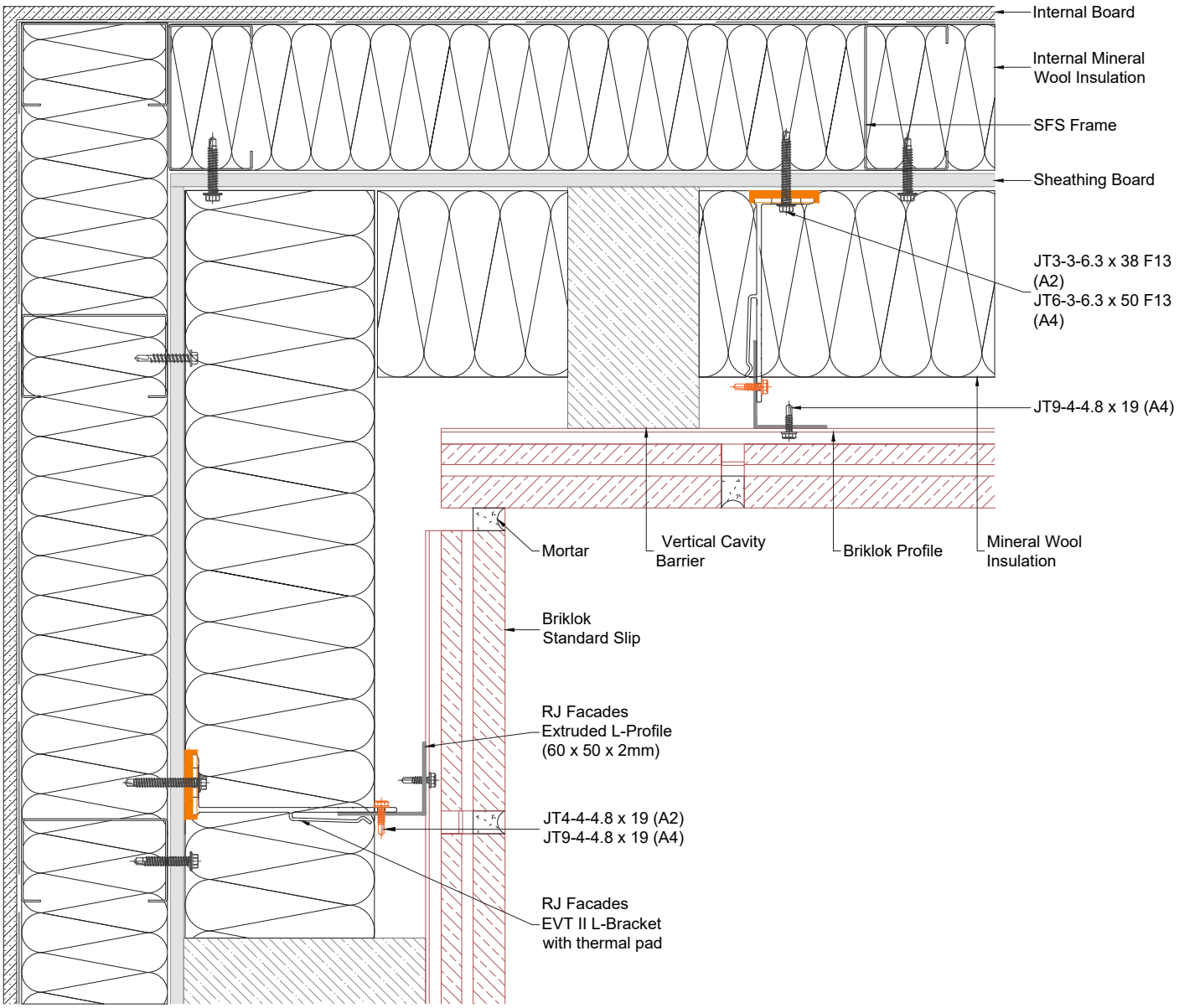
Briklok Brick Slip - Soldier Spacer



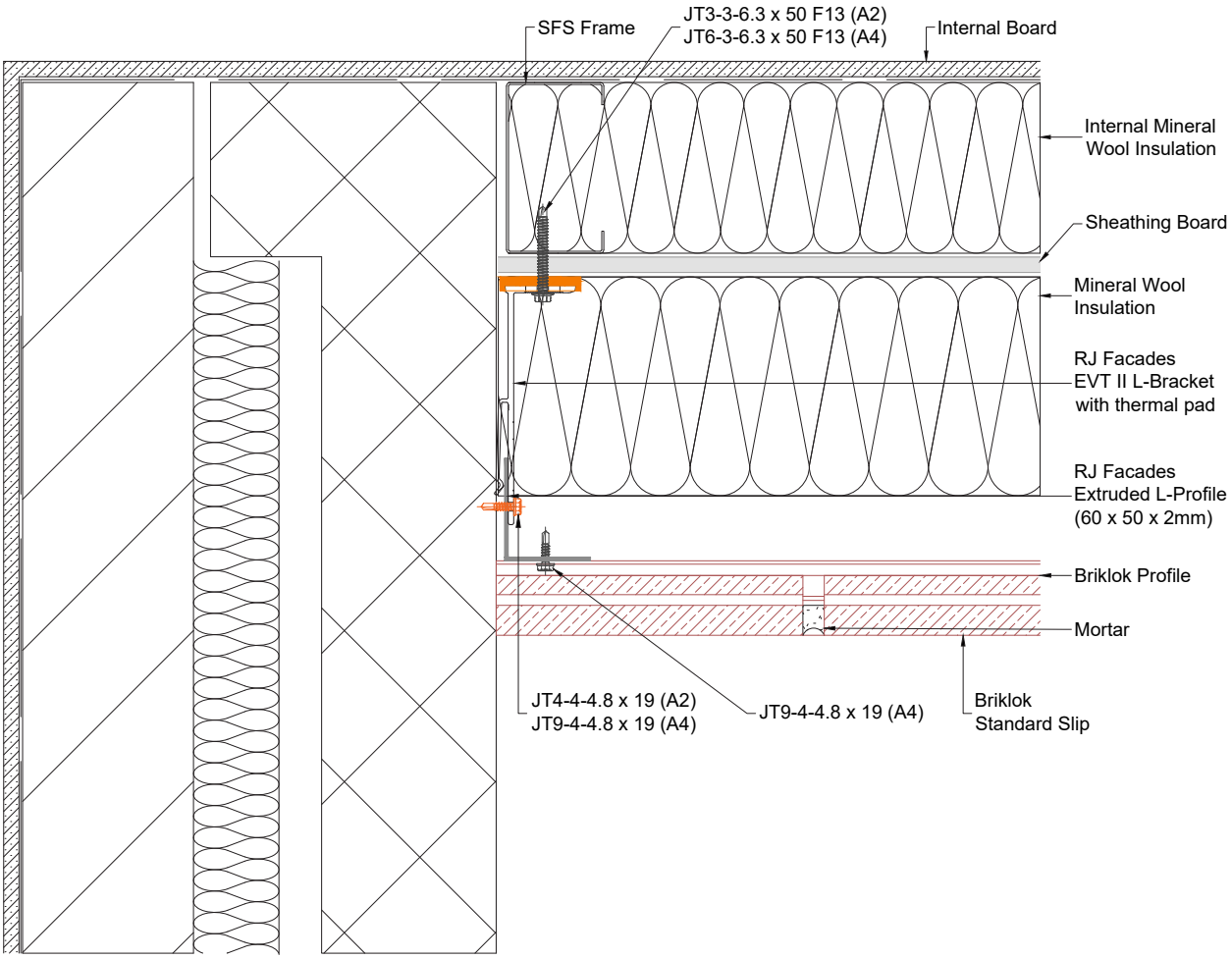
Briklok Brick Slip - External Corner



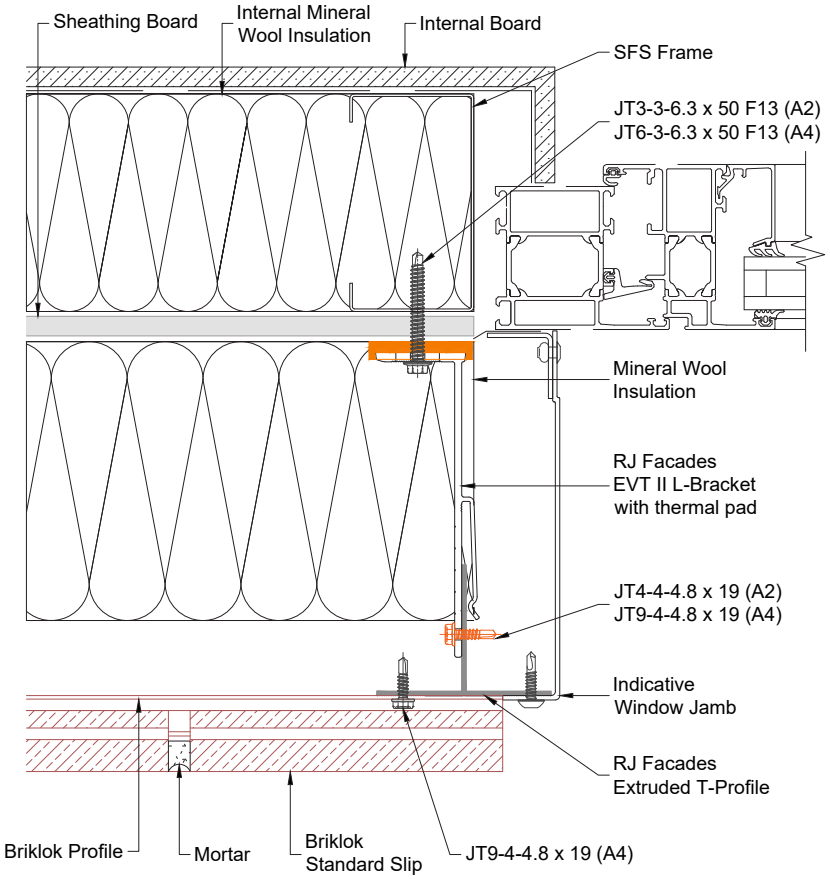
Briklok Brick Slip - Internal Corner



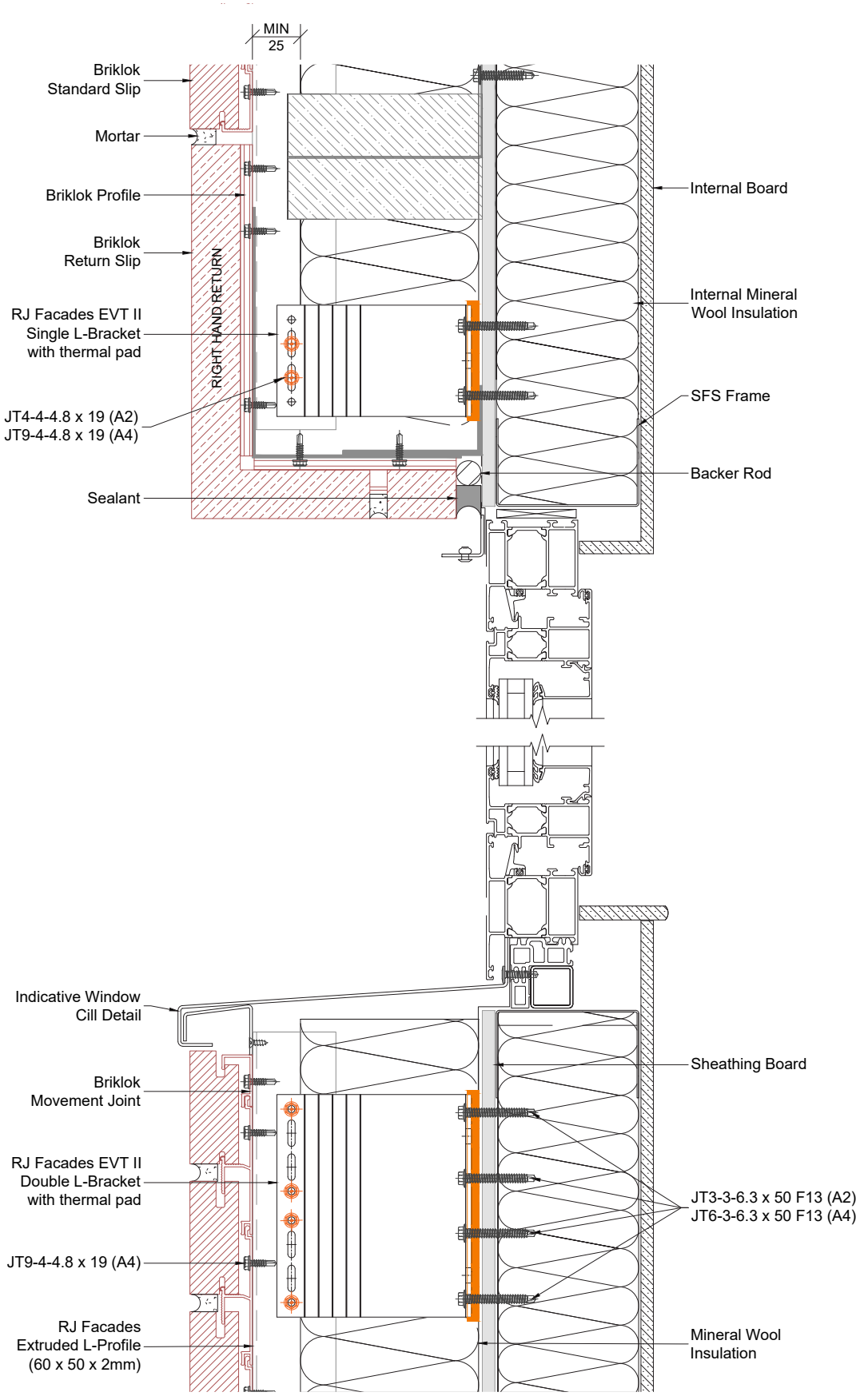
Briklok Brick Slip - Abutment



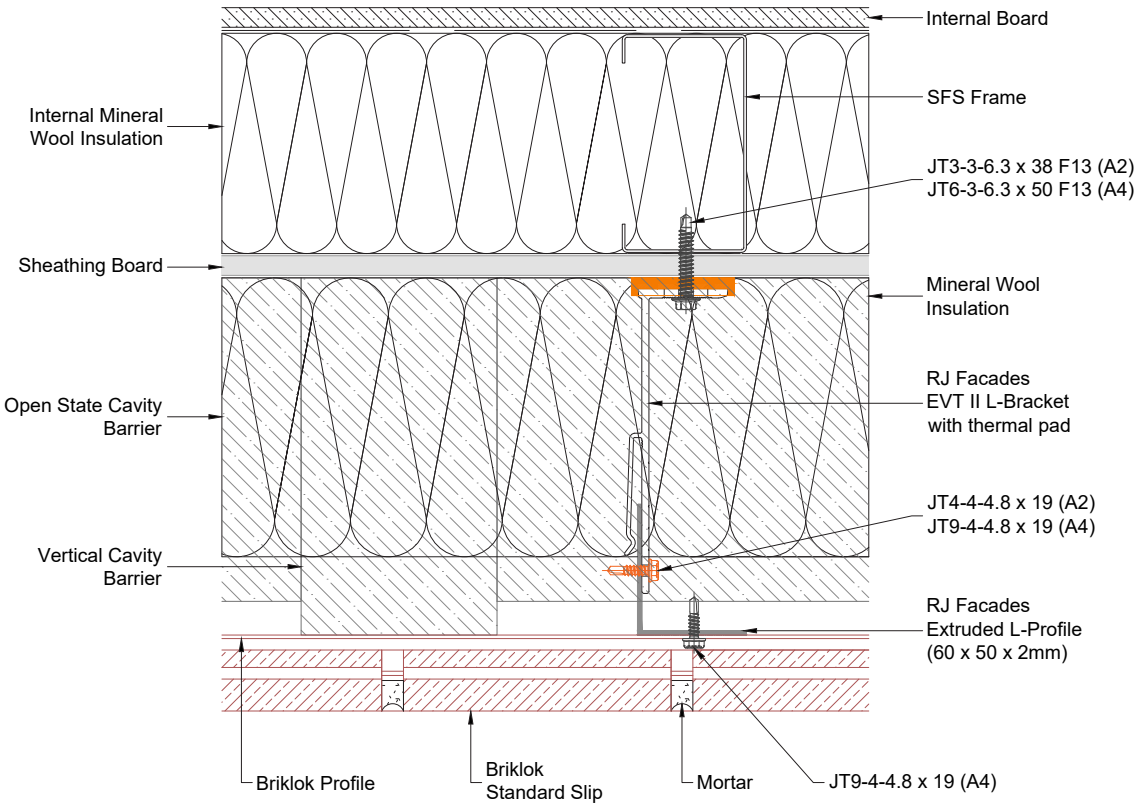
Briklok Brick Slip - Window Jamb



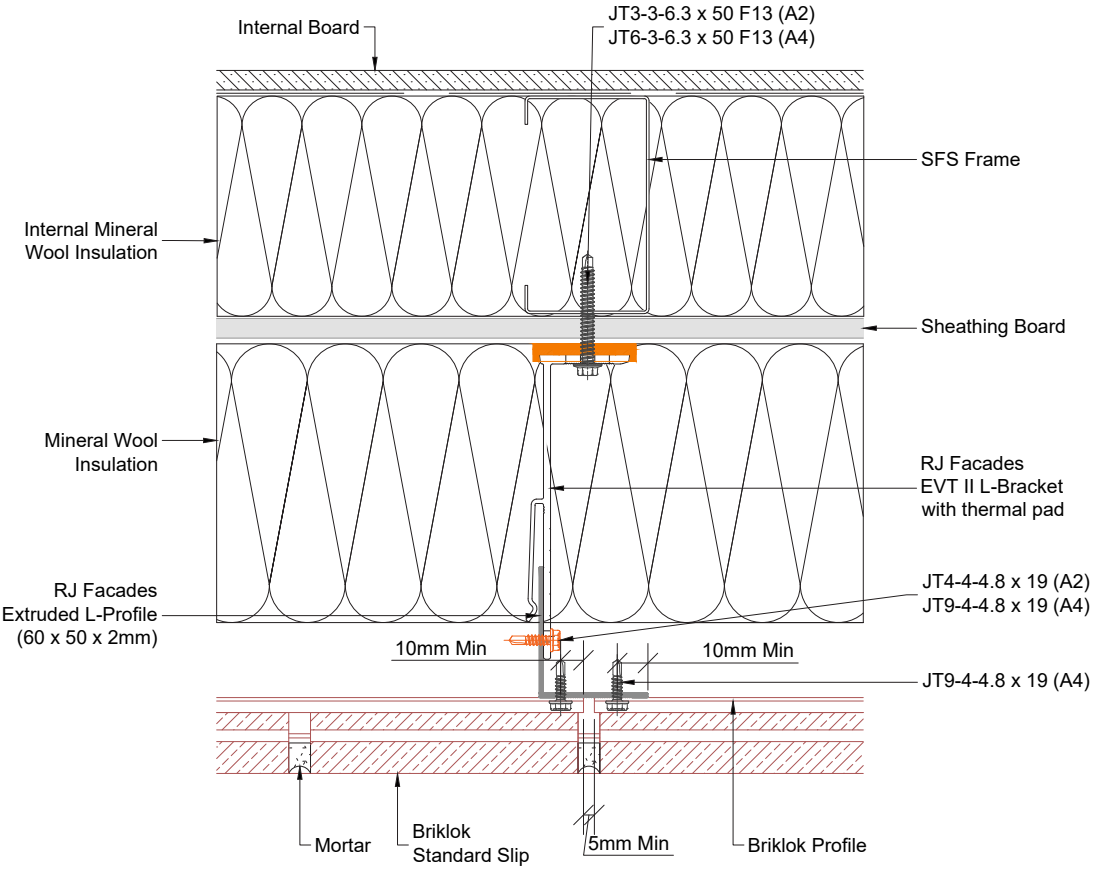
Briklok Brick Slip - Window Head & Cill



Briklok Brick Slip - Vertical Cavity Barrier



Briklok Brick Slip - Profile Joint



Secret Fix Cassette

The Secret Fix Hook-on Cassette system is optimised for invisible mounting of large and flat facades. Ensuring fast and secure installation of cassettes from aluminium composite materials and folded metal sheets.

The system allows the movement of the facade material, due to various thermal expansions, without compromising the secure attachment of the cassettes.

Typical bracket configuration uses the Fixed Point bracket at the highest position on the vertical rail to support the facade vertical dead loads. The Sliding Point bracket is used typically on all other positions on the vertical rail to absorb the project wind loading

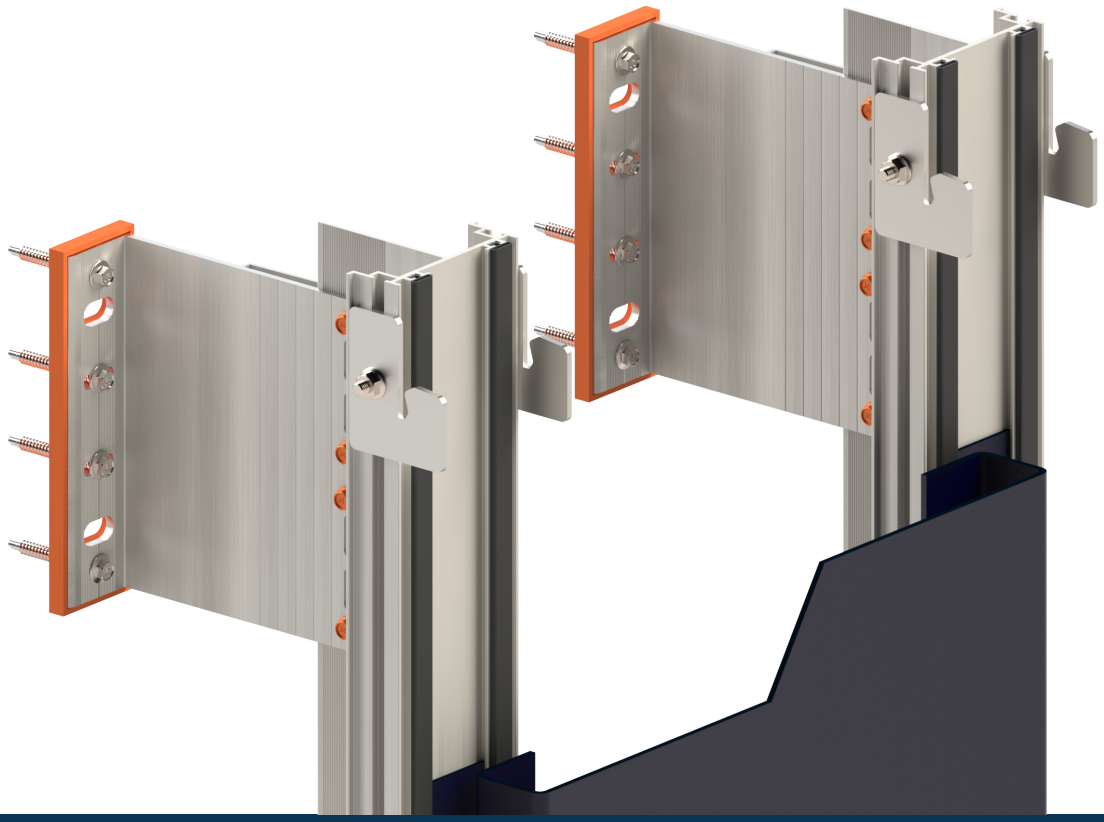
The panel joints can be used with various sizes of T-profile to create the desired shadow joint based on project requirements and can also be powder coated.

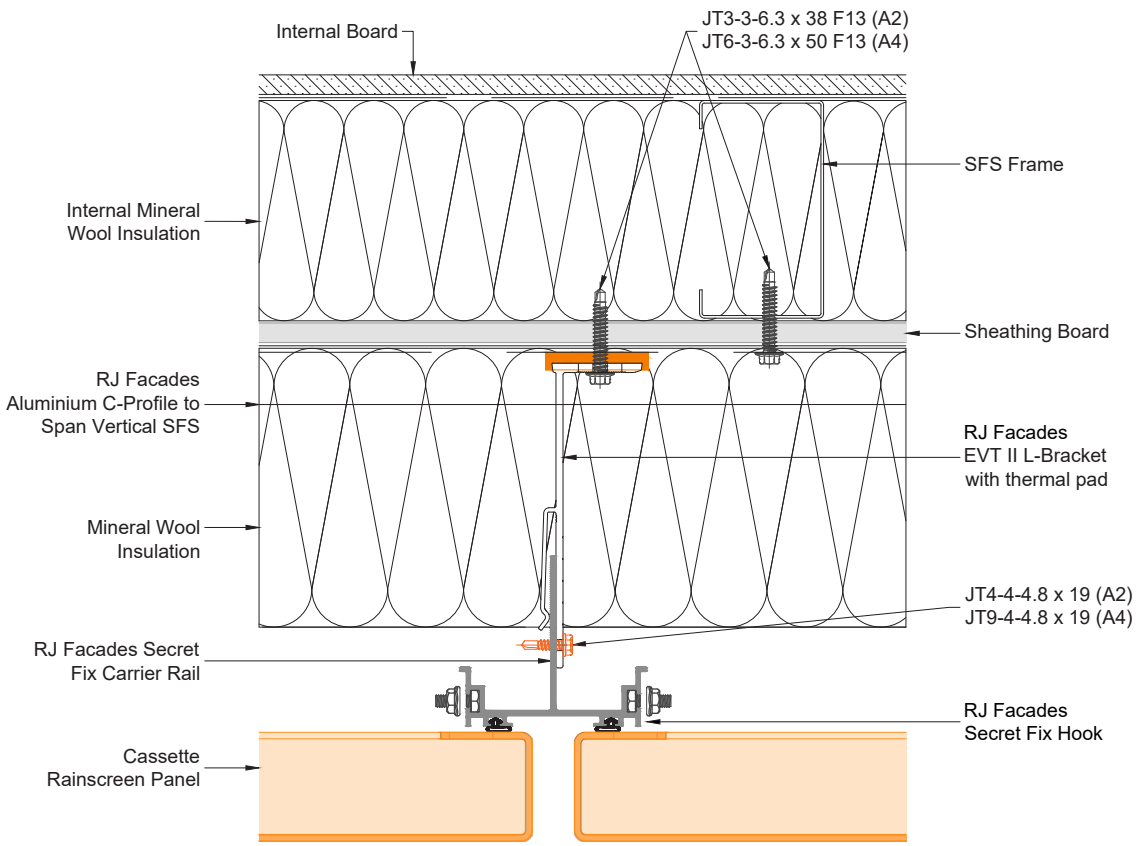
Advantages

- Fast and secure installation
- Hangers, allowing adjustment in three directions to facilitate the installation of the cassettes

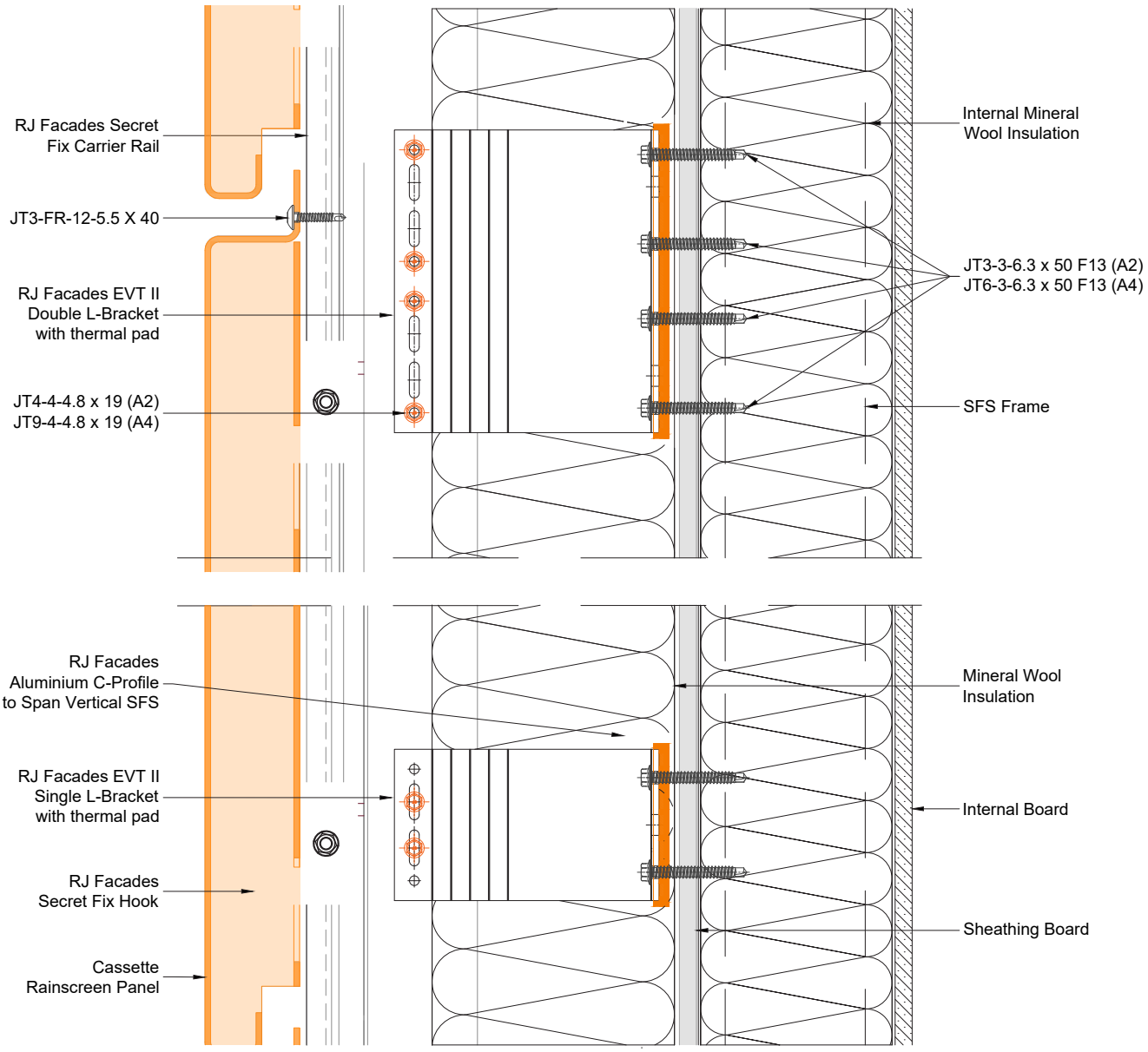
Cladding Materials

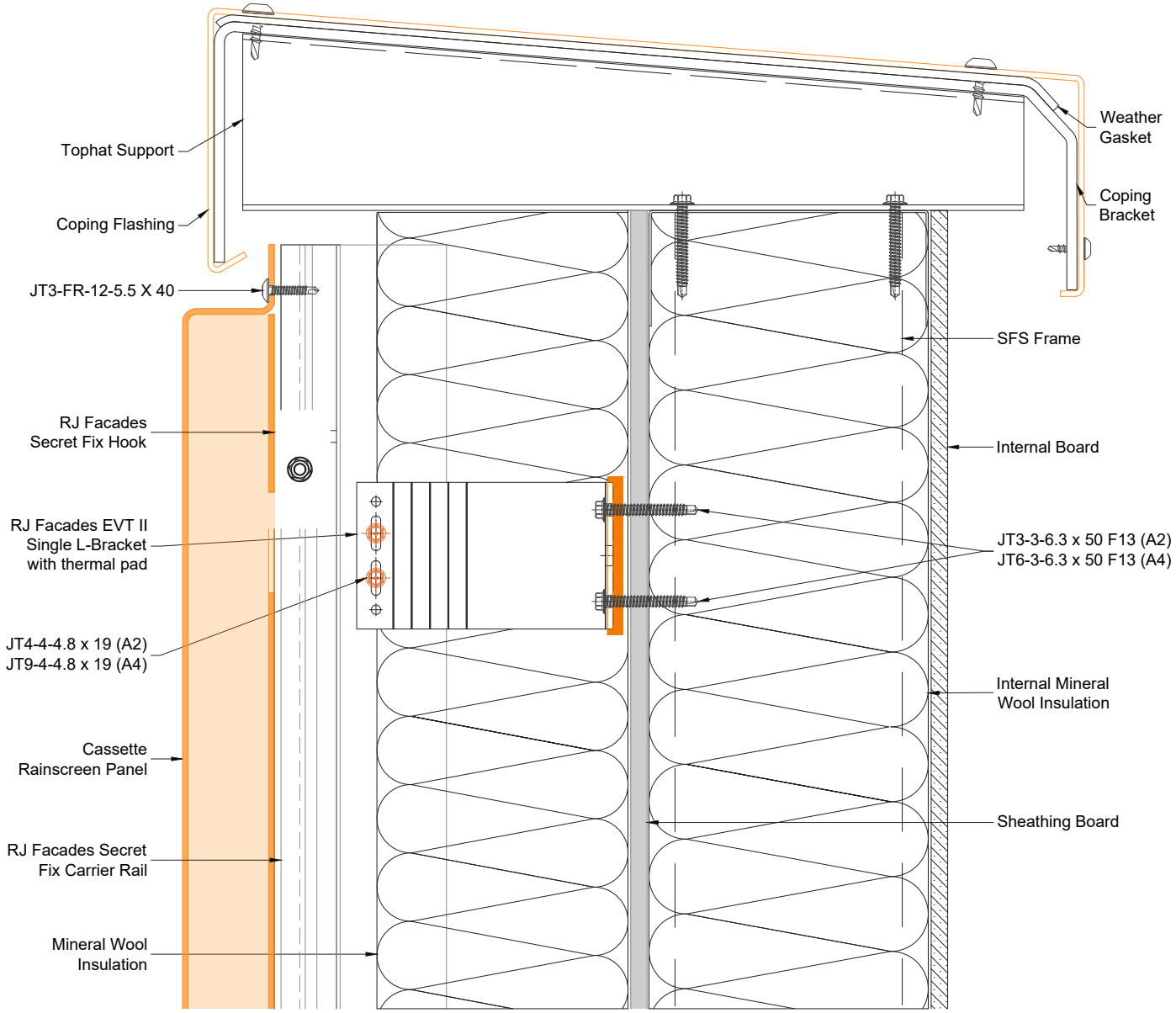
- Aluminium Composite Material; Metal sheet products.



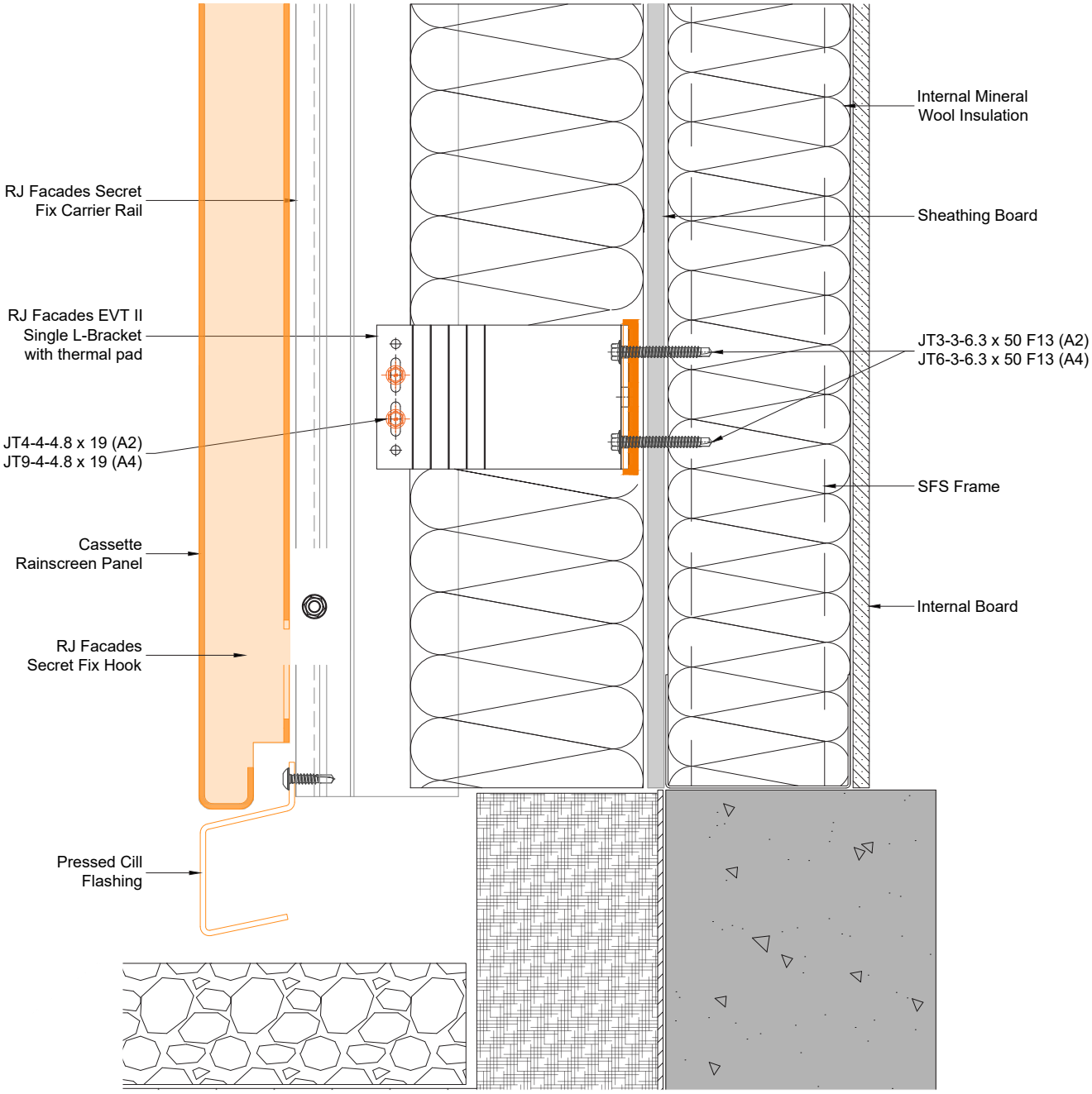

Internal Board
JT3-3-6.3 x 38 F13 (A2)
JT6-3-6.3 x 50 F13 (A4)
SFS Frame
Internal Mineral Wool Insulation
Sheathing Board
RJ Facades Aluminium C-Profile to Span Vertical SFS
RJ Facades EVT II L-Bracket with thermal pad
Mineral Wool Insulation
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
RJ Facades Secret Fix Carrier Rail
RJ Facades Secret Fix Hook
Cassette Rainscreen Panel

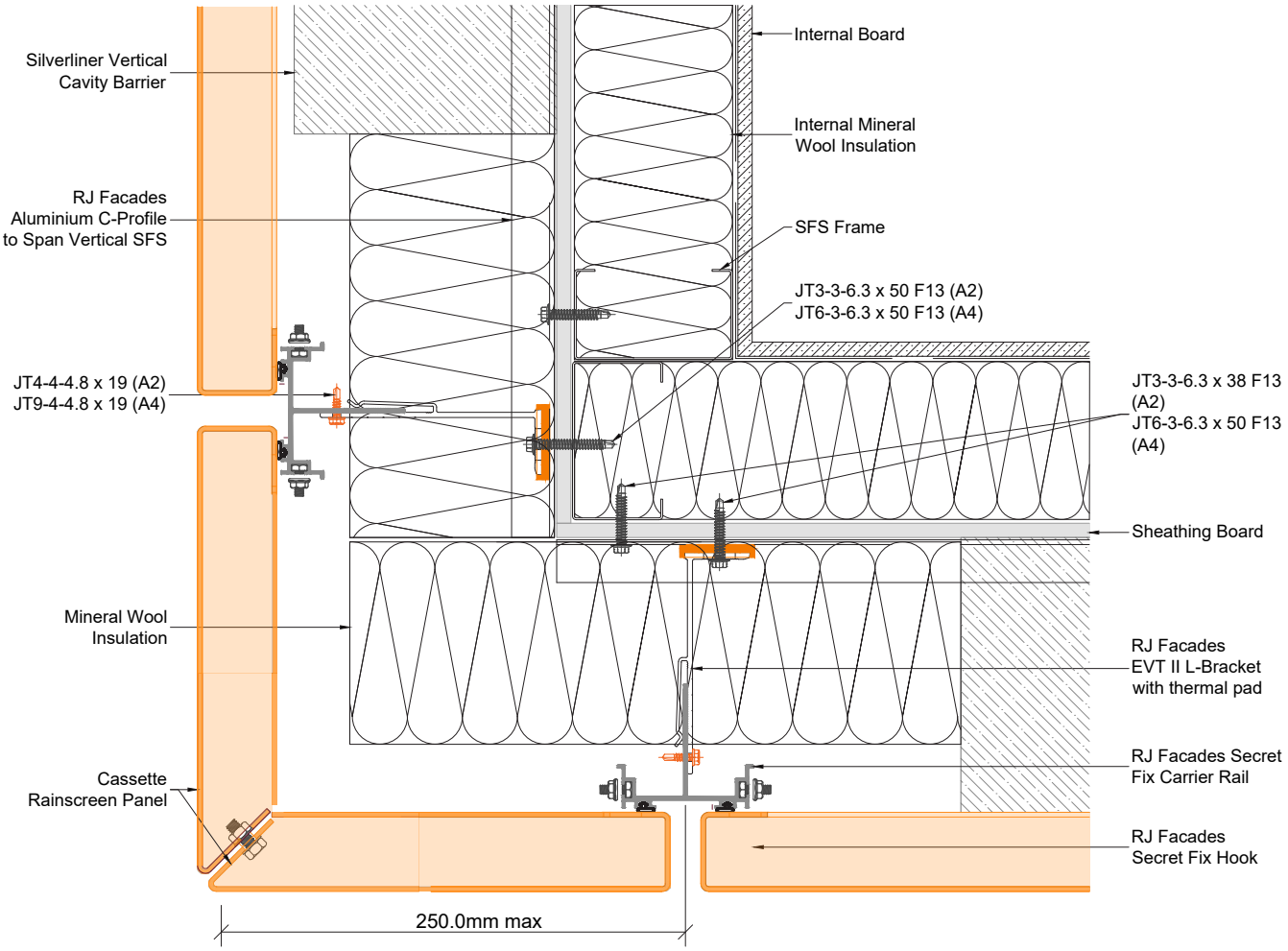
Secret Fix Cassette



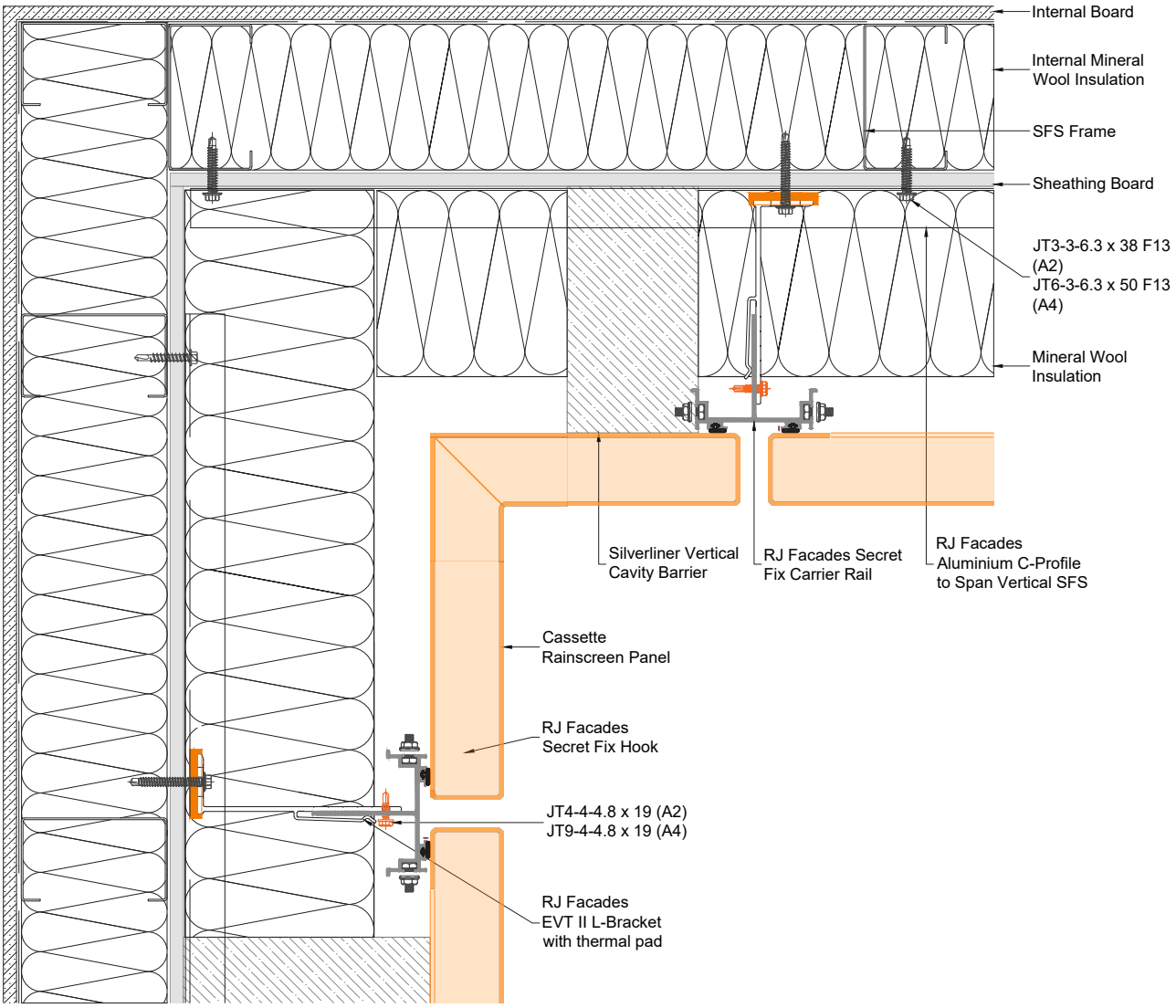

Tophat Support
Coping Flashing
JT3-FR-12-5.5 X 40
RJ Facades
Secret Fix Hook
RJ Facades EVT II
Single L-Bracket
with thermal pad
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
Cassette
Rainscreen Panel
RJ Facades Secret
Fix Carrier Rail
Mineral Wool
Insulation
Weather
Gasket
Coping
Bracket
SFS Frame
Internal Board
JT3-3-6.3 x 50 F13 (A2)
JT6-3-6.3 x 50 F13 (A4)
Internal Mineral
Wool Insulation
Sheathing Board

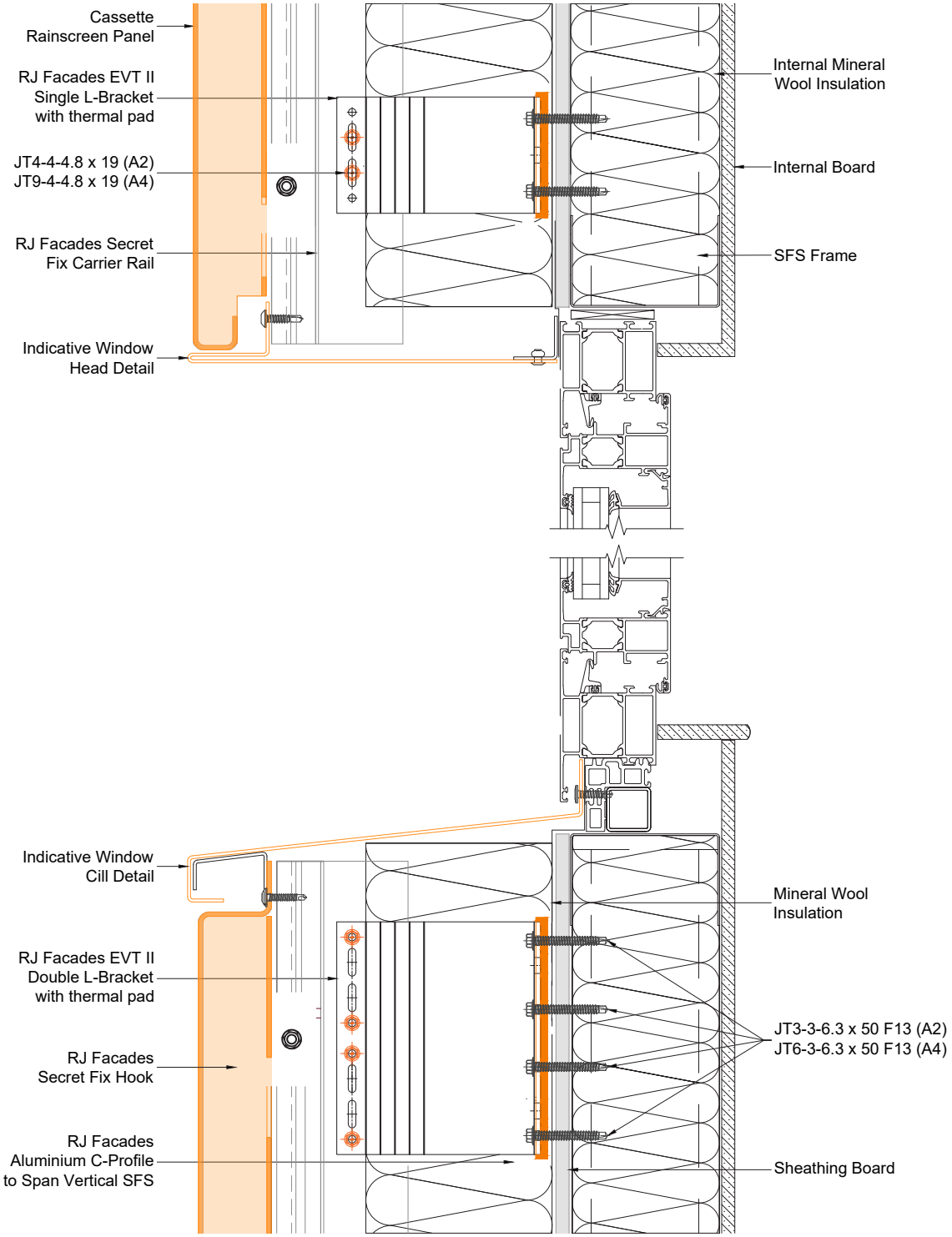
Secret Fix Cassette



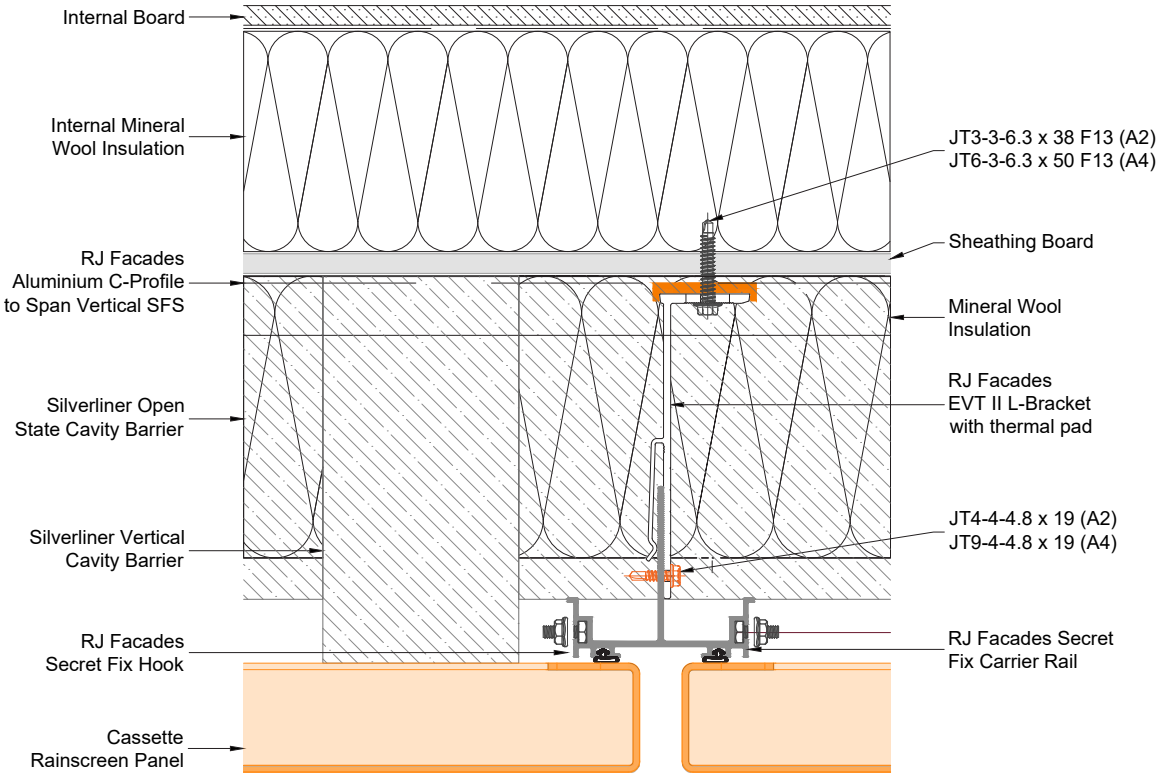

Silverliner Vertical Cavity Barrier
RJ Facades Aluminium C-Profile to Span Vertical SFS
JT4-4-4.8 x 19 (A2) JT9-4-4.8 x 19 (A4)
Mineral Wool Insulation
Cassette Rainscreen Panel
Internal Board
Internal Mineral Wool Insulation
SFS Frame
JT3-3-6.3 x 50 F13 (A2) JT6-3-6.3 x 50 F13 (A4)
JT3-3-6.3 x 38 F13 (A2) JT6-3-6.3 x 50 F13 (A4)
Sheathing Board
RJ Facades EVT II L-Bracket with thermal pad
RJ Facades Secret Fix Carrier Rail
RJ Facades Secret Fix Hook
250.0mm max

Secret Fix Cassette




Cassette
Rainscreen Panel
RJ Facades EVT II
Single L-Bracket
with thermal pad
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
RJ Facades Secret
Fix Carrier Rail
Indicative Window
Head Detail
Internal Mineral
Wool Insulation
Internal Board
SFS Frame
Indicative Window
Cill Detail
RJ Facades EVT II
Double L-Bracket
with thermal pad
RJ Facades
Secret Fix Hook
RJ Facades
Aluminium C-Profile
to Span Vertical SFS
Mineral Wool
Insulation
JT3-3-6.3 x 50 F13 (A2)
JT6-3-6.3 x 50 F13 (A4)
Sheathing Board

Secret Fix Cassette



SK1N Terracotta System

Optimised for the mechanical fixing of SK1N terracotta tiles in both vertical and horizonatal configuration.

The system allows the movement of the facade material, due to various thermal expansions, without compromising the secure attachment of the cassettes.

Typical bracket configuration uses the Fixed Point bracket at the highest position on the vertical rail to support the facade vertical dead loads. The Sliding Point bracket is used typically on all other positions on the vertical rail to absorb the project wind loading

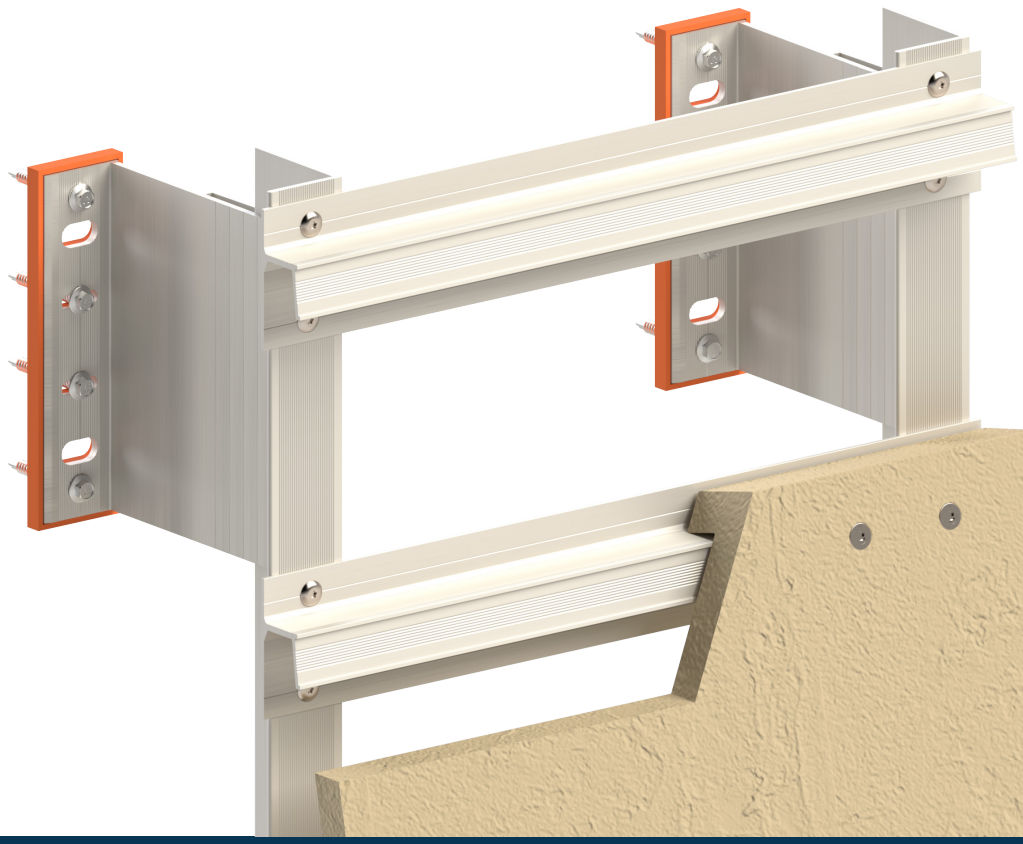
The panel joints can be used with various sizes of T-profile to create the desired shadow joint based on project requirements and can also be powder coated.

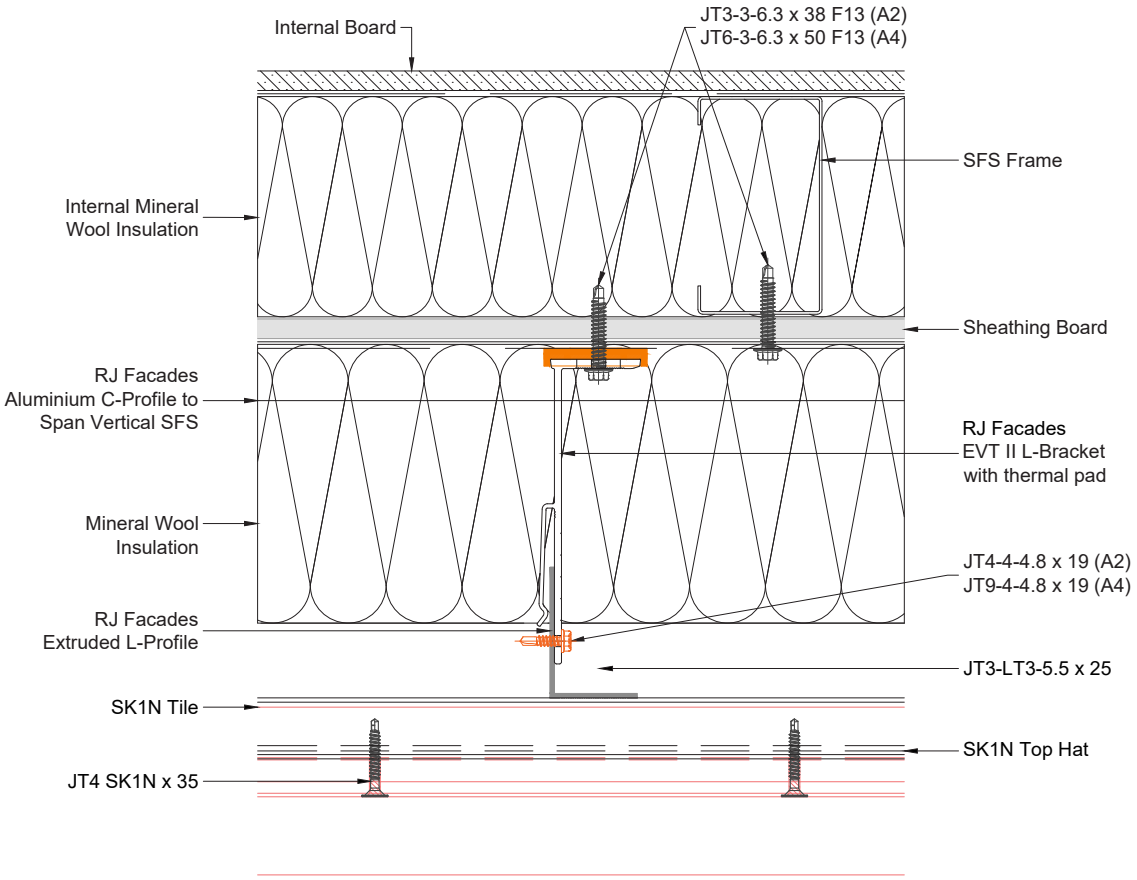
Advantages

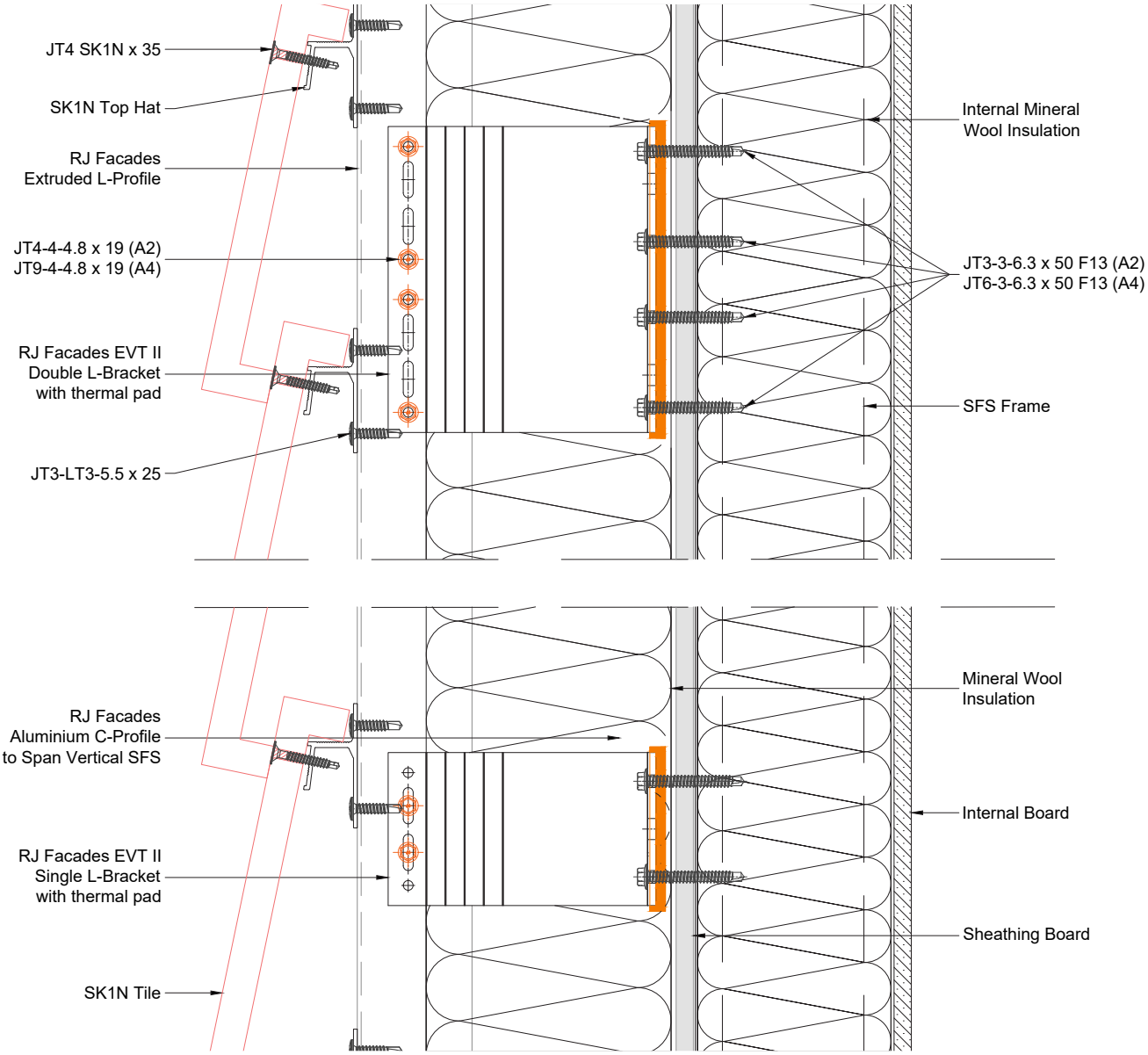
- Fast and secure installation
- Hangers, allowing adjustment in three directions to facilitate the installation of the cassettes

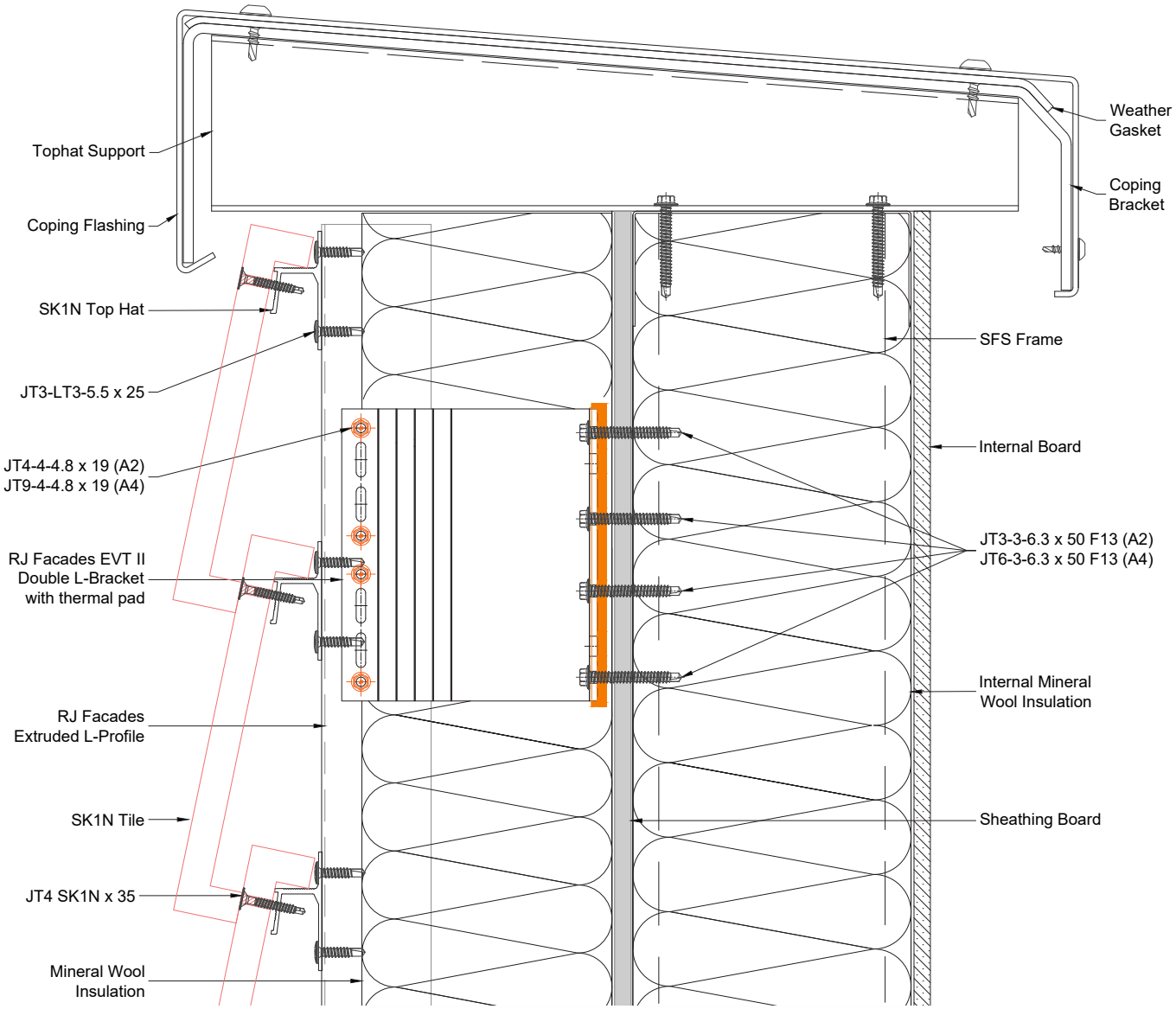
Cladding Materials

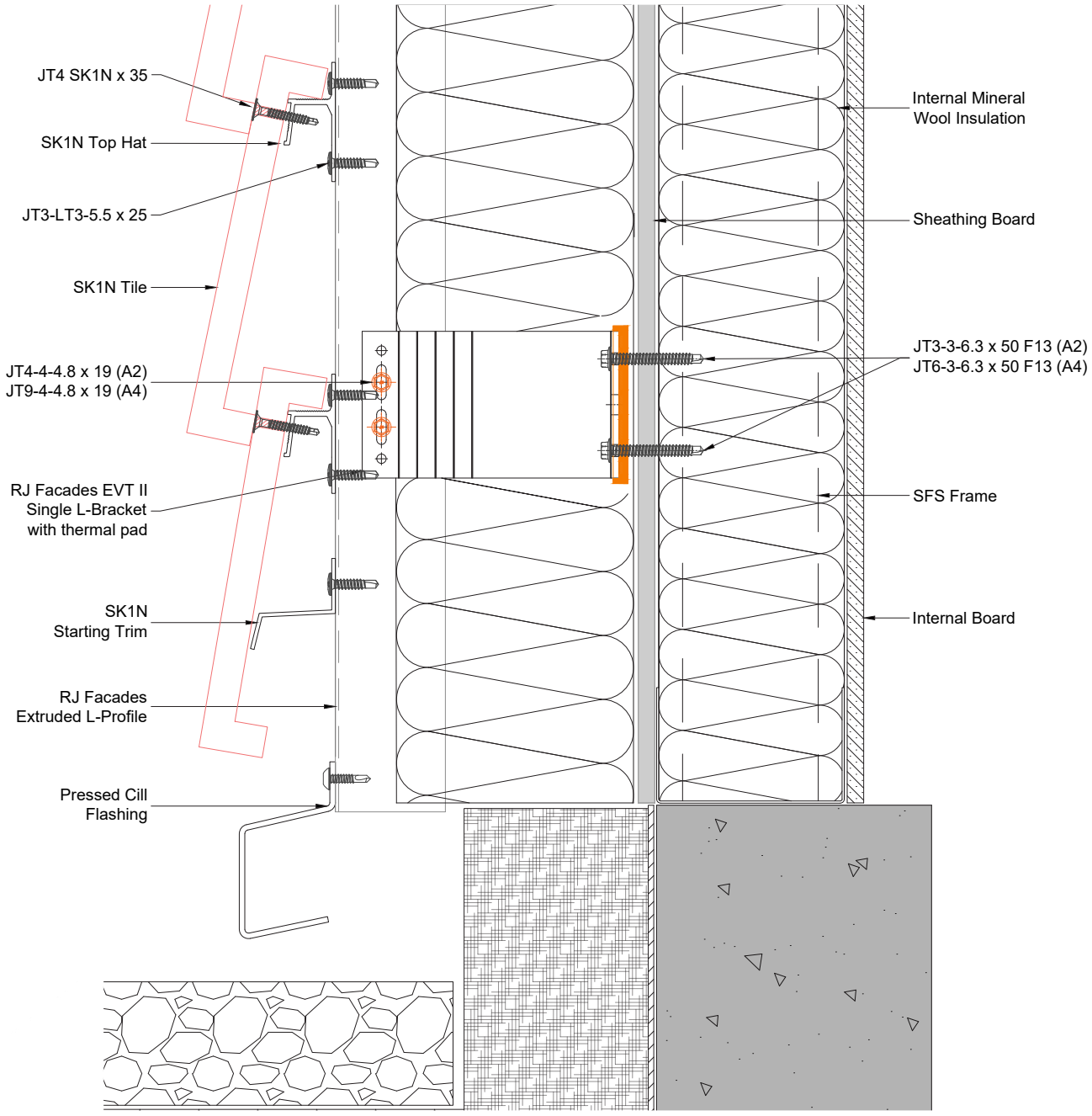
- Aluminium Composite Material; Metal sheet products.

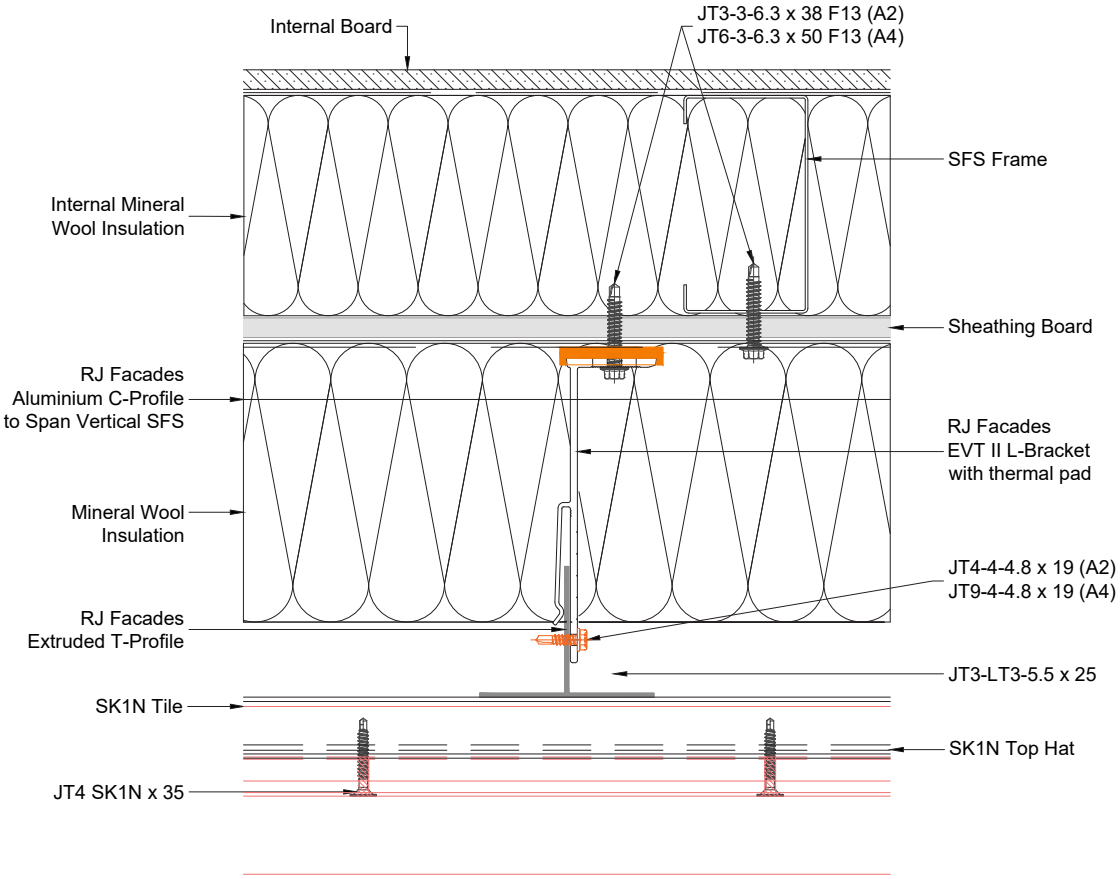


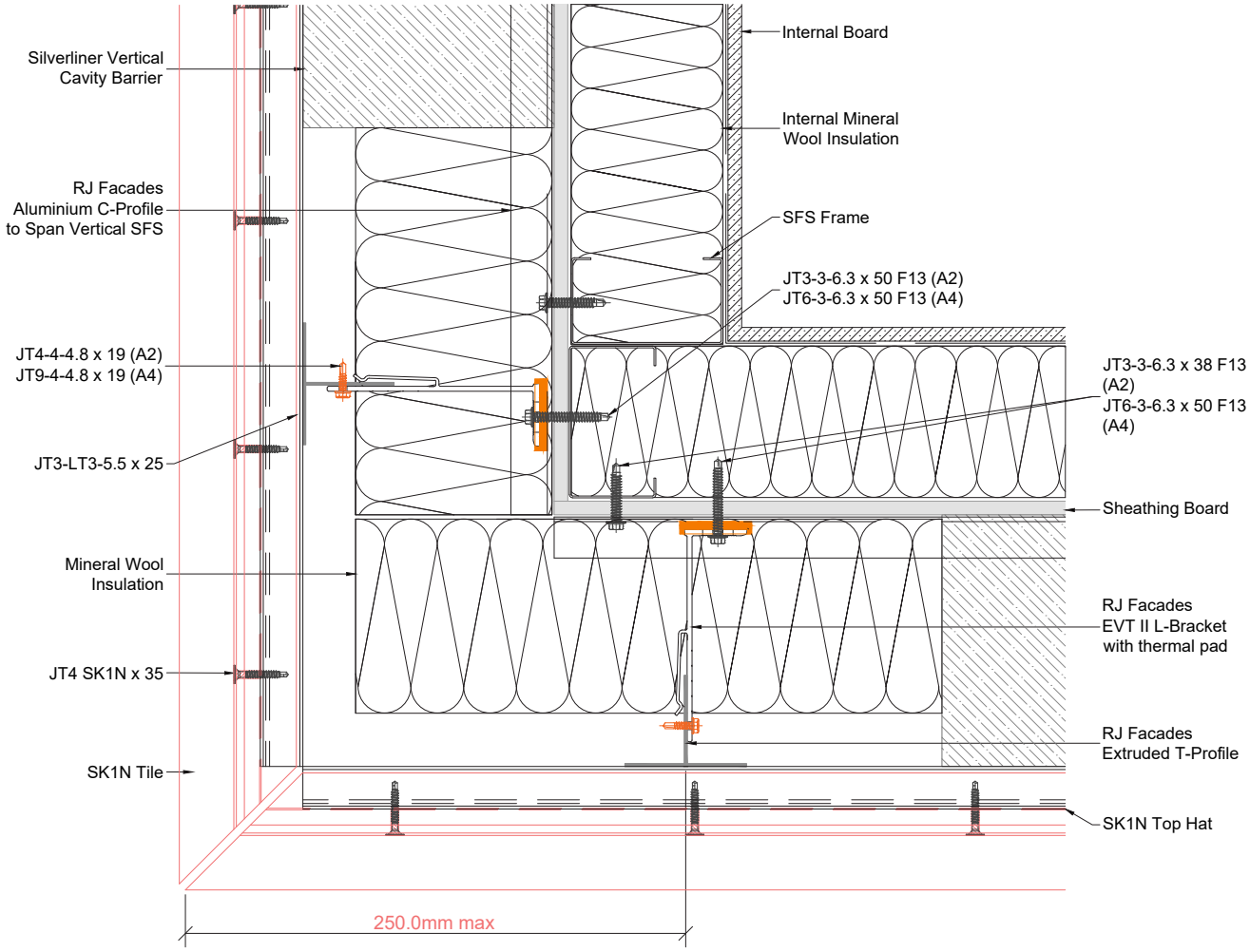

Internal Board
JT3-3-6.3 x 38 F13 (A2)
JT6-3-6.3 x 50 F13 (A4)
SFS Frame
Internal Mineral Wool Insulation
Sheathing Board
RJ Facades Aluminium C-Profile to Span Vertical SFS
RJ Facades EVT II L-Bracket with thermal pad
Mineral Wool Insulation
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
RJ Facades Extruded L-Profile
JT3-LT3-5.5 x 25
SK1N Tile
SK1N Top Hat
JT4 SK1N x 35

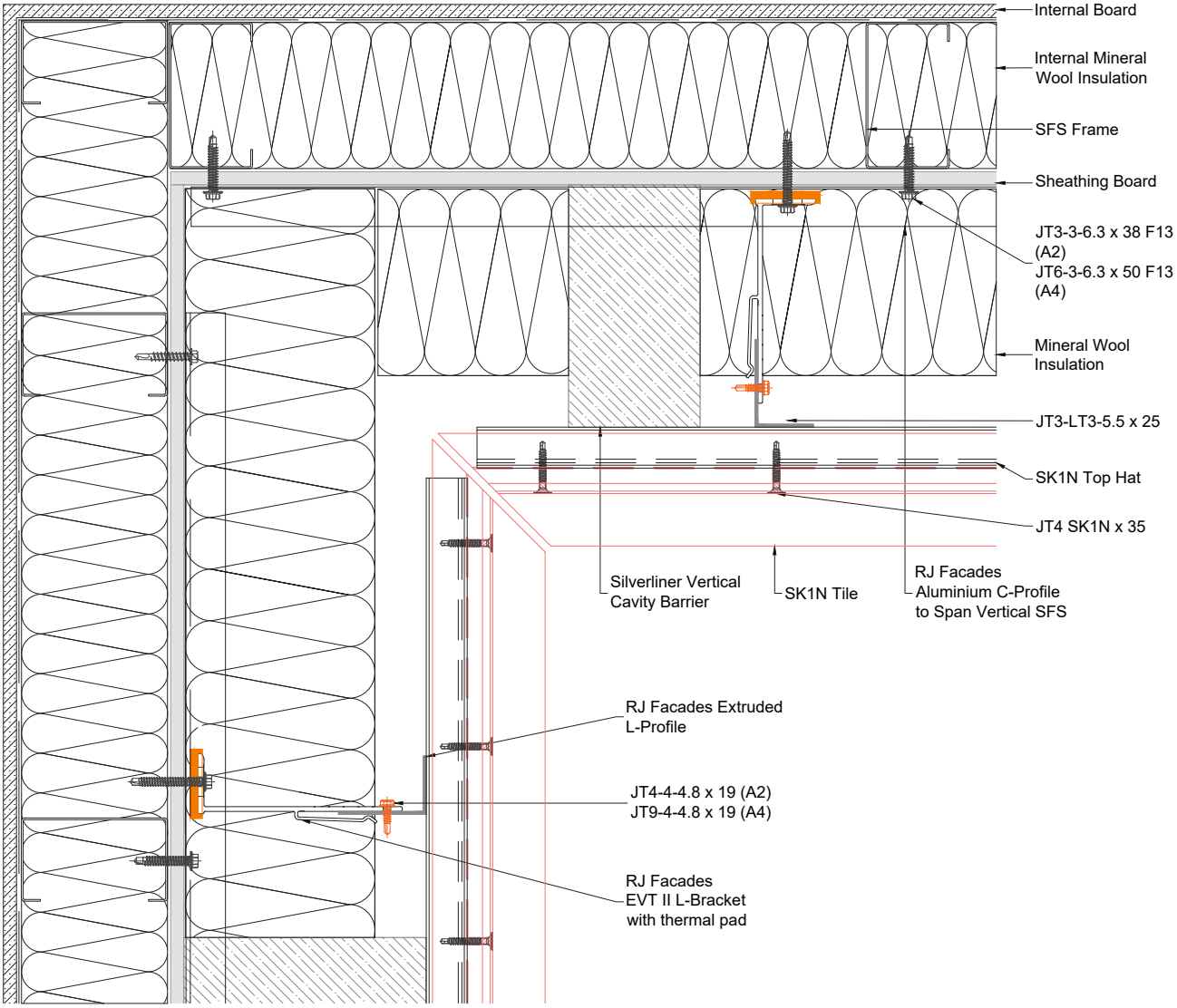

JT4 SK1N x 35
SK1N Top Hat
RJ Facades
Extruded L-Profile
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
RJ Facades EVT II
Double L-Bracket
with thermal pad
JT3-LT3-5.5 x 25
Internal Mineral
Wool Insulation
JT3-3-6.3 x 50 F13 (A2)
JT6-3-6.3 x 50 F13 (A4)
SFS Frame
RJ Facades
Aluminium C-Profile
to Span Vertical SFS
RJ Facades EVT II
Single L-Bracket
with thermal pad
SK1N Tile
Mineral Wool
Insulation
Internal Board
Sheathing Board

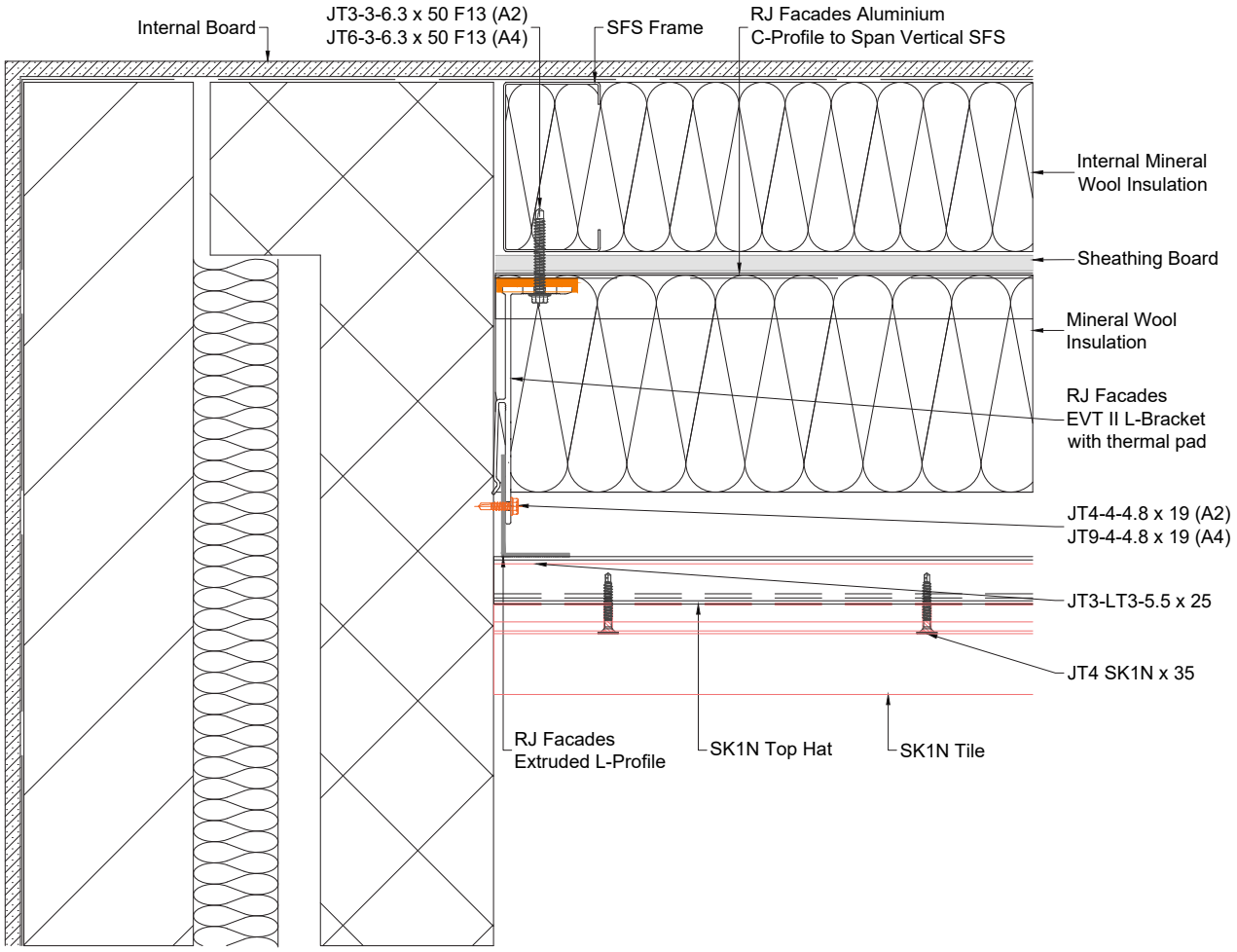

Tophat Support
Coping Flashing
SK1N Top Hat
JT3-LT3-5.5 x 25
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
RJ Facades EVT II
Double L-Bracket
with thermal pad
RJ Facades
Extruded L-Profile
SK1N Tile
JT4 SK1N x 35
Mineral Wool
Insulation
Weather
Gasket
Coping
Bracket
SFS Frame
Internal Board
JT3-3-6.3 x 50 F13 (A2)
JT6-3-6.3 x 50 F13 (A4)
Internal Mineral
Wool Insulation
Sheathing Board

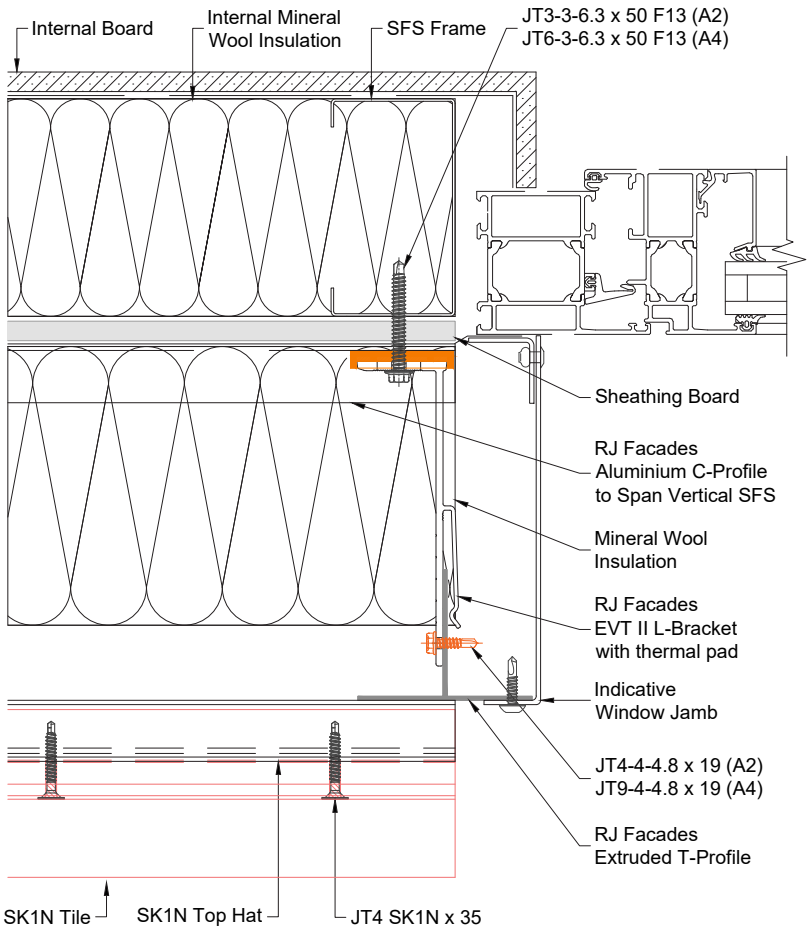

JT4 SK1N x 35
SK1N Top Hat
JT3-LT3-5.5 x 25
SK1N Tile
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
RJ Facades EVT II
Single L-Bracket
with thermal pad
SK1N
Starting Trim
RJ Facades
Extruded L-Profile
Pressed Cill
Flashing
Internal Mineral
Wool Insulation
Sheathing Board
JT3-3-6.3 x 50 F13 (A2)
JT6-3-6.3 x 50 F13 (A4)
SFS Frame
Internal Board

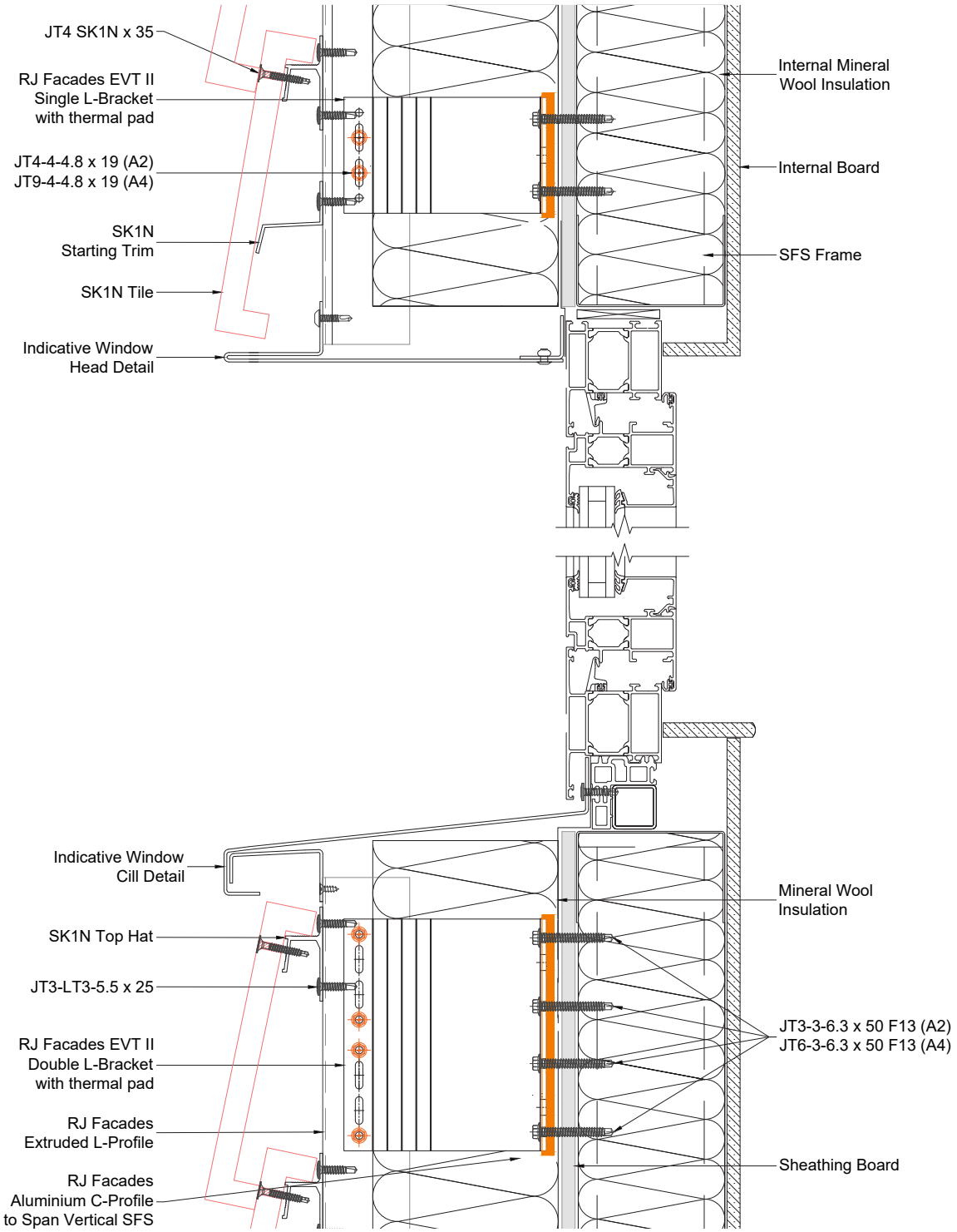

Internal Board
JT3-3-6.3 x 38 F13 (A2)
JT6-3-6.3 x 50 F13 (A4)
SFS Frame
Internal Mineral
Wool Insulation
Sheathing Board
RJ Facades
Aluminium C-Profile
to Span Vertical SFS
RJ Facades
EVT II L-Bracket
with thermal pad
Mineral Wool
Insulation
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
RJ Facades
Extruded T-Profile
JT3-LT3-5.5 x 25
SK1N Tile
SK1N Top Hat
JT4 SK1N x 35

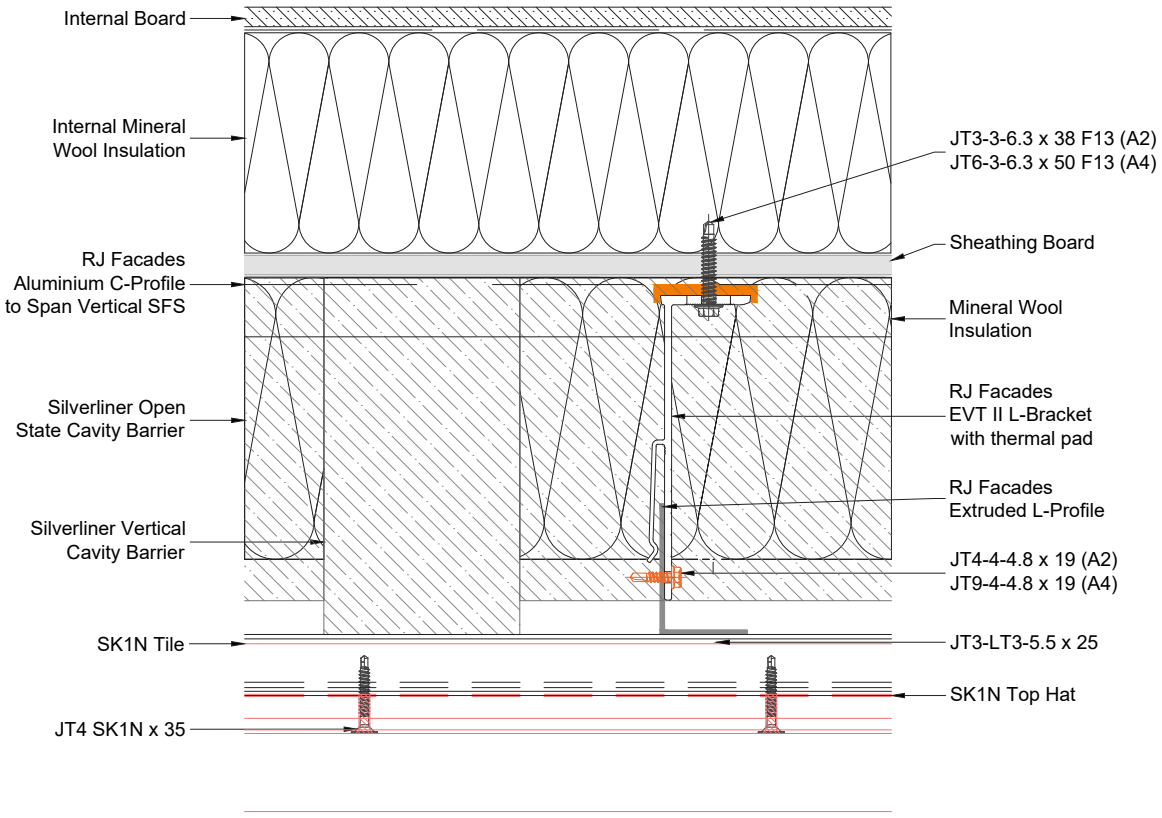

Silverliner Vertical Cavity Barrier
RJ Facades Aluminium C-Profile to Span Vertical SFS
JT4-4-4.8 x 19 (A2) JT9-4-4.8 x 19 (A4)
JT3-LT3-5.5 x 25
Mineral Wool Insulation
JT4 SK1N x 35
SK1N Tile
Internal Board
Internal Mineral Wool Insulation
SFS Frame
JT3-3-6.3 x 50 F13 (A2) JT6-3-6.3 x 50 F13 (A4)
JT3-3-6.3 x 38 F13 (A2) JT6-3-6.3 x 50 F13 (A4)
Sheathing Board
RJ Facades EVT II L-Bracket with thermal pad
RJ Facades Extruded T-Profile
SK1N Top Hat
250.0mm max


Internal Board
Internal Mineral Wool Insulation
SFS Frame
Sheathing Board
JT3-3-6.3 x 38 F13 (A2)
JT6-3-6.3 x 50 F13 (A4)
Mineral Wool Insulation
JT3-LT3-5.5 x 25
SK1N Top Hat
JT4 SK1N x 35
Silverliner Vertical Cavity Barrier
SK1N Tile
RJ Facades Aluminium C-Profile to Span Vertical SFS
RJ Facades Extruded L-Profile
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
RJ Facades EVT II L-Bracket with thermal pad


Internal Board
JT3-3-6.3 x 50 F13 (A2)
JT6-3-6.3 x 50 F13 (A4)
SFS Frame
RJ Facades Aluminium
C-Profile to Span Vertical SFS
Internal Mineral
Wool Insulation
Sheathing Board
Mineral Wool
Insulation
RJ Facades
EVT II L-Bracket
with thermal pad
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
JT3-LT3-5.5 x 25
JT4 SK1N x 35
RJ Facades
Extruded L-Profile
SK1N Top Hat
SK1N Tile


Internal Board
Internal Mineral Wool Insulation
SFS Frame
JT3-3-6.3 x 50 F13 (A2)
JT6-3-6.3 x 50 F13 (A4)
Sheathing Board
RJ Facades Aluminium C-Profile to Span Vertical SFS
Mineral Wool Insulation
RJ Facades EVT II L-Bracket with thermal pad
Indicative Window Jamb
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
RJ Facades Extruded T-Profile
SK1N Tile
SK1N Top Hat
JT4 SK1N x 35


JT4 SK1N x 35
RJ Facades EVT II
Single L-Bracket
with thermal pad
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
SK1N
Starting Trim
SK1N Tile
Indicative Window
Head Detail
Internal Mineral
Wool Insulation
Internal Board
SFS Frame
Indicative Window
Cill Detail
SK1N Top Hat
JT3-LT3-5.5 x 25
RJ Facades EVT II
Double L-Bracket
with thermal pad
RJ Facades
Extruded L-Profile
RJ Facades
Aluminium C-Profile
to Span Vertical SFS
Mineral Wool
Insulation
JT3-3-6.3 x 50 F13 (A2)
JT6-3-6.3 x 50 F13 (A4)
Sheathing Board


Internal Board
Internal Mineral Wool Insulation
RJ Facades Aluminium C-Profile to Span Vertical SFS
Silverliner Open State Cavity Barrier
Silverliner Vertical Cavity Barrier
SK1N Tile
JT4 SK1N x 35
JT3-3-6.3 x 38 F13 (A2)
JT6-3-6.3 x 50 F13 (A4)
Sheathing Board
Mineral Wool Insulation
RJ Facades EVT II L-Bracket with thermal pad
RJ Facades Extruded L-Profile
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
JT3-LT3-5.5 x 25
SK1N Top Hat

Facade Types

Through Fix

Vertical / Horizontal / Cassette / Floor Spanning / Soffit

Through Fix Vertical

This is a common method for facade materials made from HPL, and fibre cement materials. Where the board are joined together, the 110mm and 80mm faced T rails provide the correct dimensions to all the major board manufacturers specification, relating to surface area in contact with the panel, and movement joint between the abutting panels.

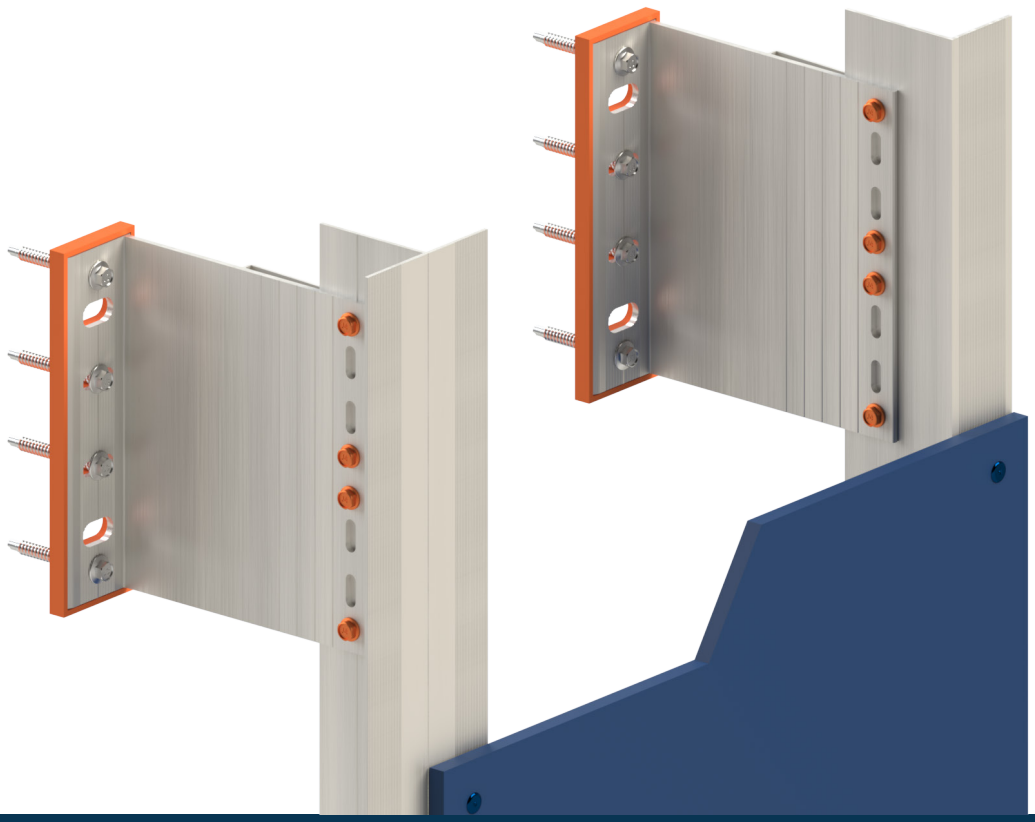
Typical bracket configuration uses the Fixed Point bracket at the highest position on the vertical rail to support the facade vertical dead loads. The Sliding Point bracket is used typically on all other positions on the vertical rail to absorb the project wind loading

The panel joints can be used with various sizes of T-profile to create the desired shadow joint based on project requirements and can also be powder coated.

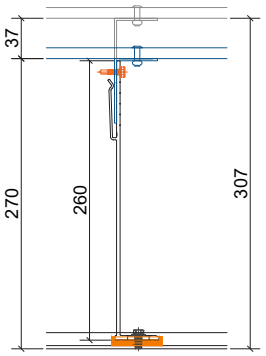
Depending on the material type, HPL / fibre cement panels require vertical support at 500mm to 600mm - for all vertical centre support generally use the 60x40 L-profile.

Cladding Materials

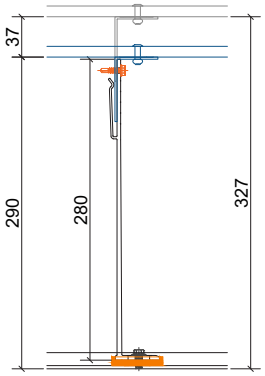
- High Pressure Laminates (HPL); Fibre Cement; Composite Mineral Material.



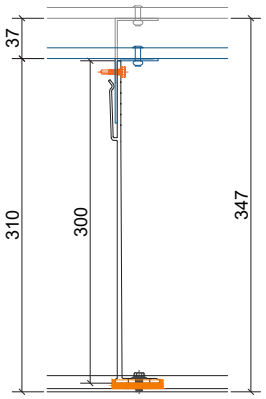
Through Fix Vertical - Cladding Zone



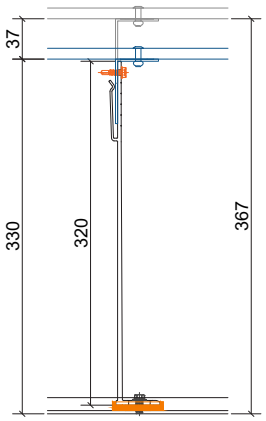
260 Bracket
ADJUSTMENT= +/− 37mm
Clad Zone= 270mm to 307mm



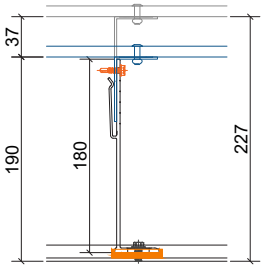
280 Bracket
ADJUSTMENT= +/− 37mm
Clad Zone= 290mm to 327mm



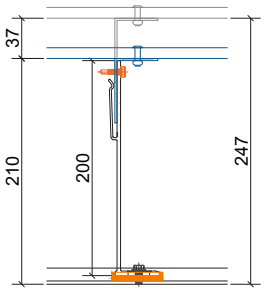
300 Bracket
ADJUSTMENT= +/− 37mm
Clad Zone= 310mm to 347mm



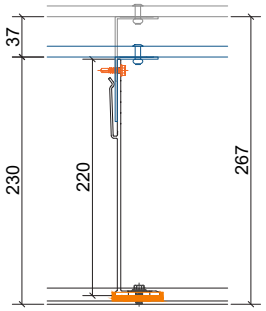
320 Bracket
ADJUSTMENT= +/− 37mm
Clad Zone= 330mm to 367mm



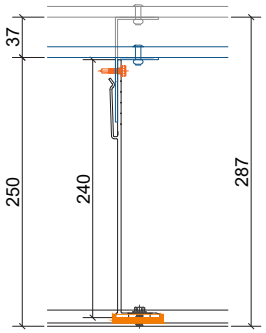
180 Bracket
ADJUSTMENT= +/− 37mm
Clad Zone= 190mm to 227mm



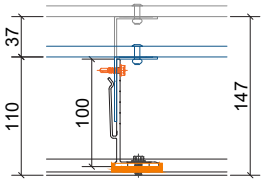
200 Bracket
ADJUSTMENT= +/− 37mm
Clad Zone= 210mm to 247mm



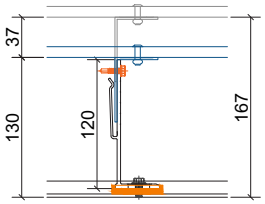
220 Bracket
ADJUSTMENT= +/− 37mm
Clad Zone= 230mm to 267mm



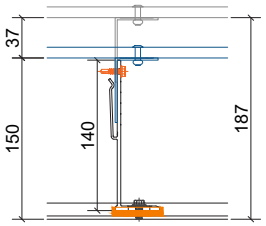
240 Bracket
ADJUSTMENT= +/− 37mm
Clad Zone= 250mm to 287mm



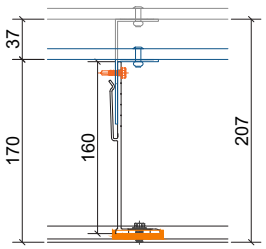
100 Bracket
ADJUSTMENT= +/− 37mm
Clad Zone= 110mm to 147mm



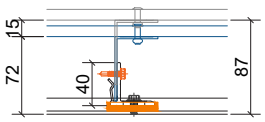
120 Bracket
ADJUSTMENT= +/− 37mm
Clad Zone= 130mm to 167mm



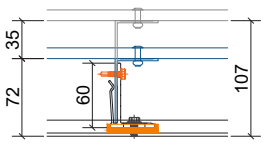
140 Bracket
ADJUSTMENT= +/− 37mm
Clad Zone= 150mm to 187mm



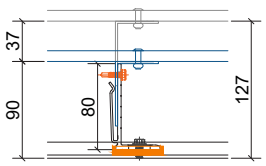
160 Bracket
ADJUSTMENT= +/− 37mm
Clad Zone= 170mm to 207mm



40 Bracket
ADJUSTMENT= +/− 15mm
Clad Zone= 72mm to 87mm

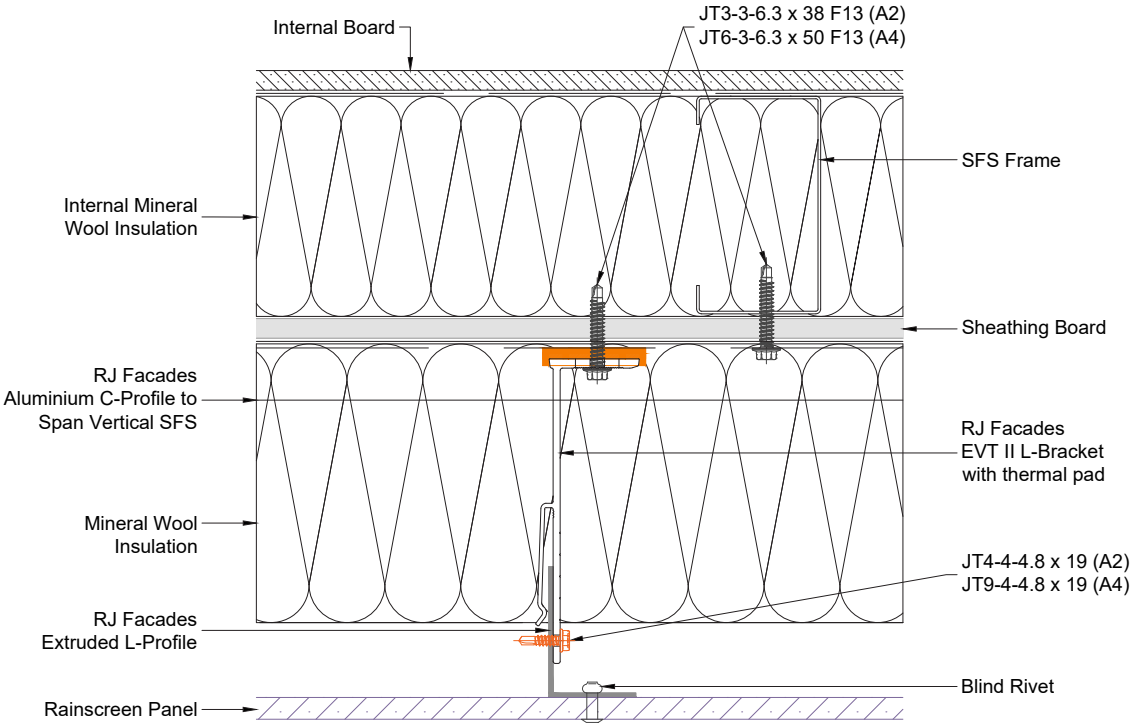


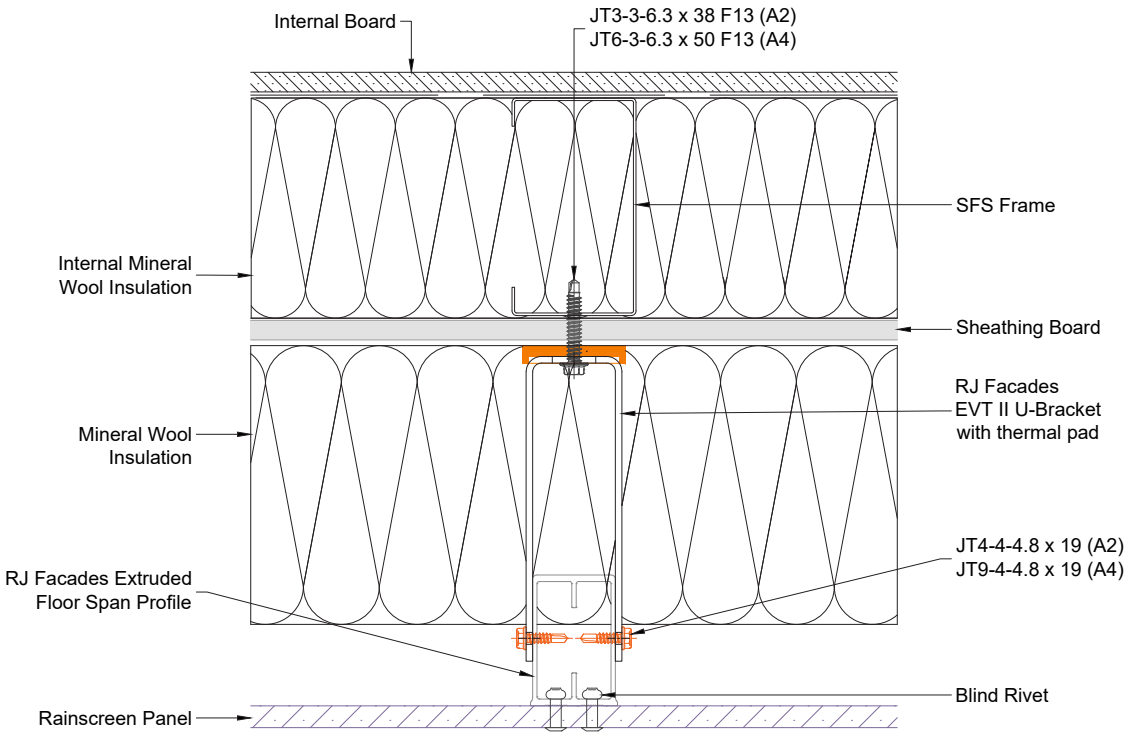
60 Bracket
ADJUSTMENT= +/− 35mm
Clad Zone= 72mm to 107mm



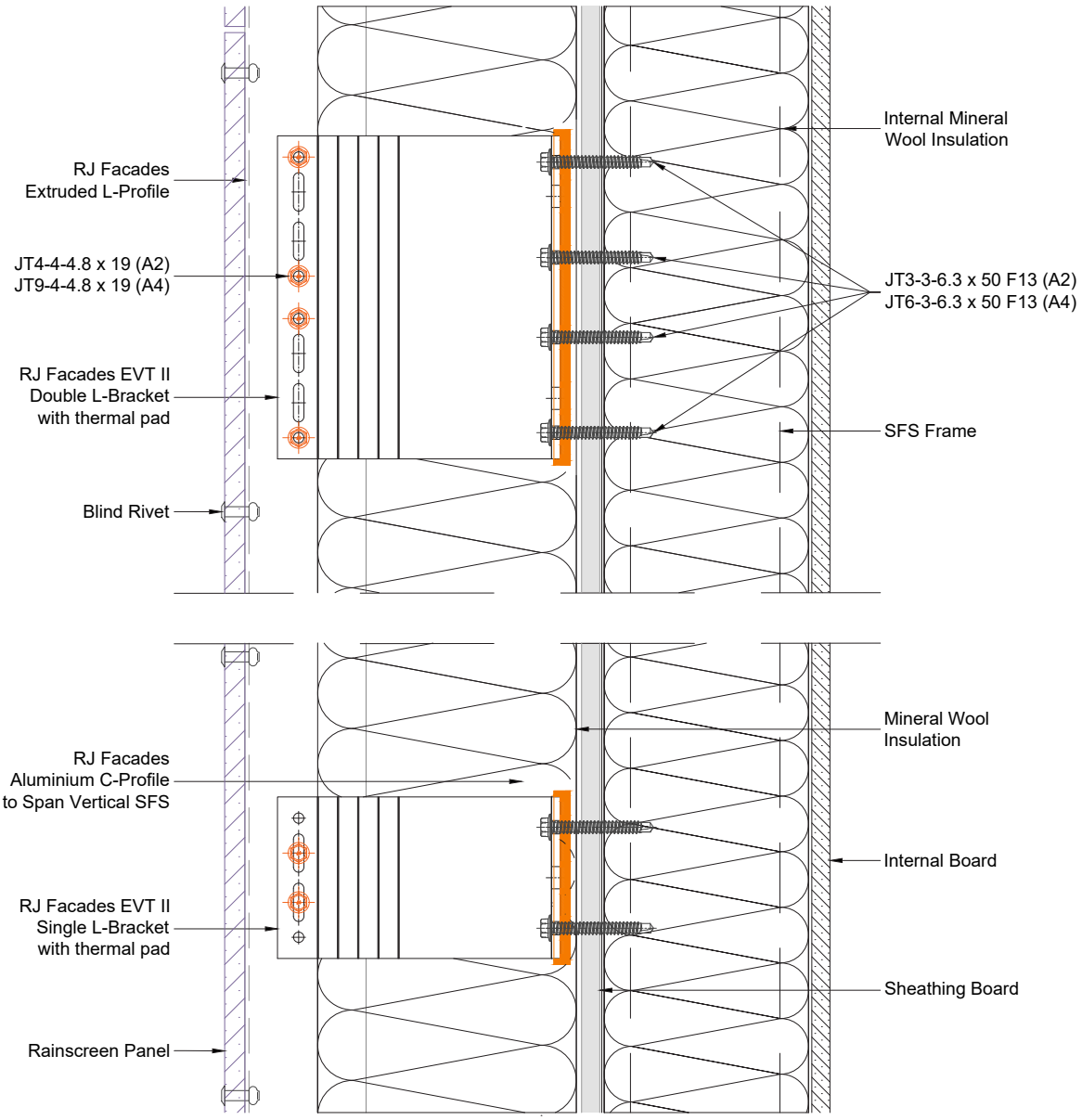
80 Bracket
ADJUSTMENT= +/− 37mm
Clad Zone= 90mm to 127mm

Through Fix Vertical

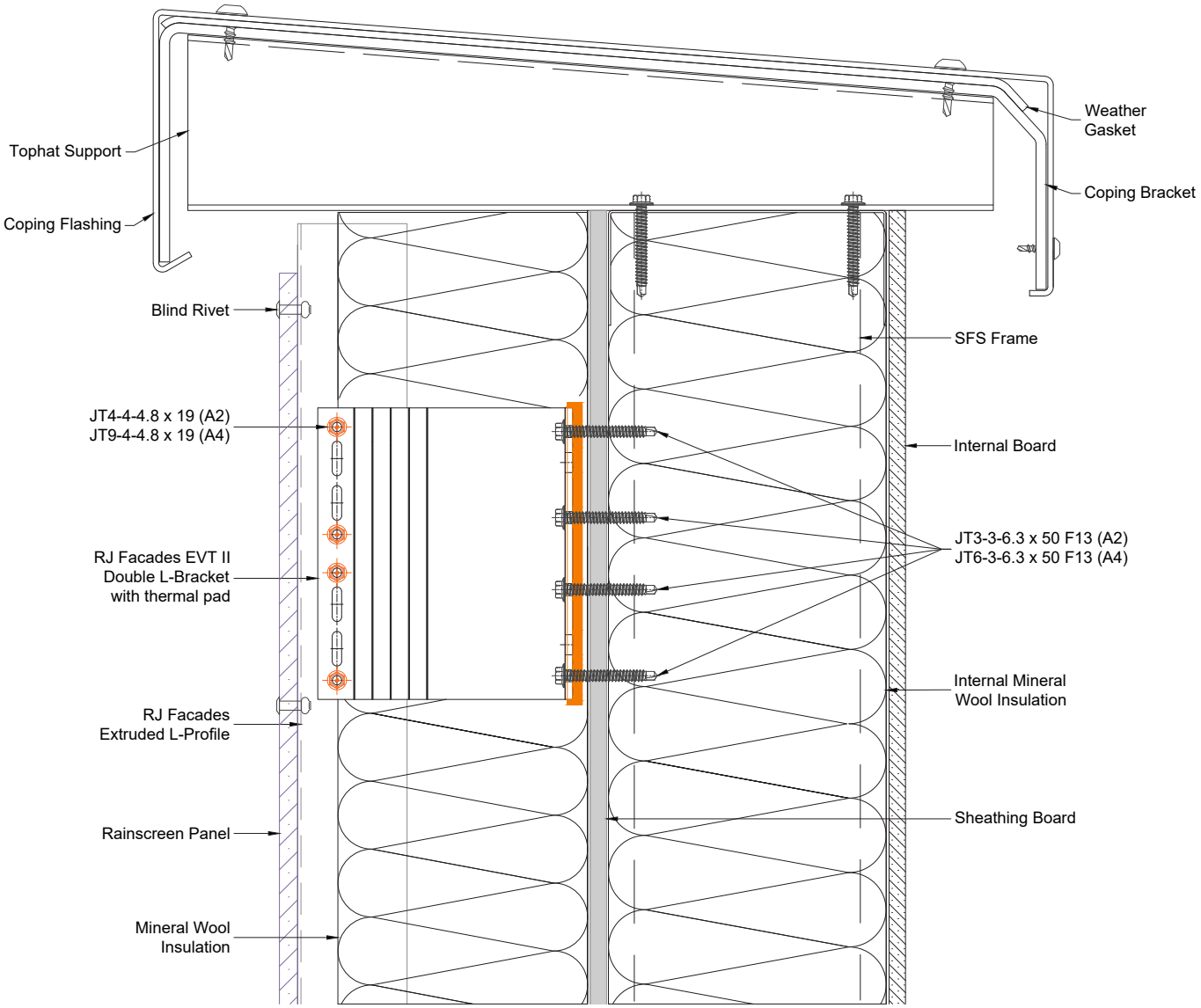



Internal Board
JT3-3-6.3 x 38 F13 (A2)
JT6-3-6.3 x 50 F13 (A4)
SFS Frame
Internal Mineral Wool Insulation
Sheathing Board
RJ Facades EVT II U-Bracket with thermal pad
Mineral Wool Insulation
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
RJ Facades Extruded Floor Span Profile
Blind Rivet
Rainscreen Panel

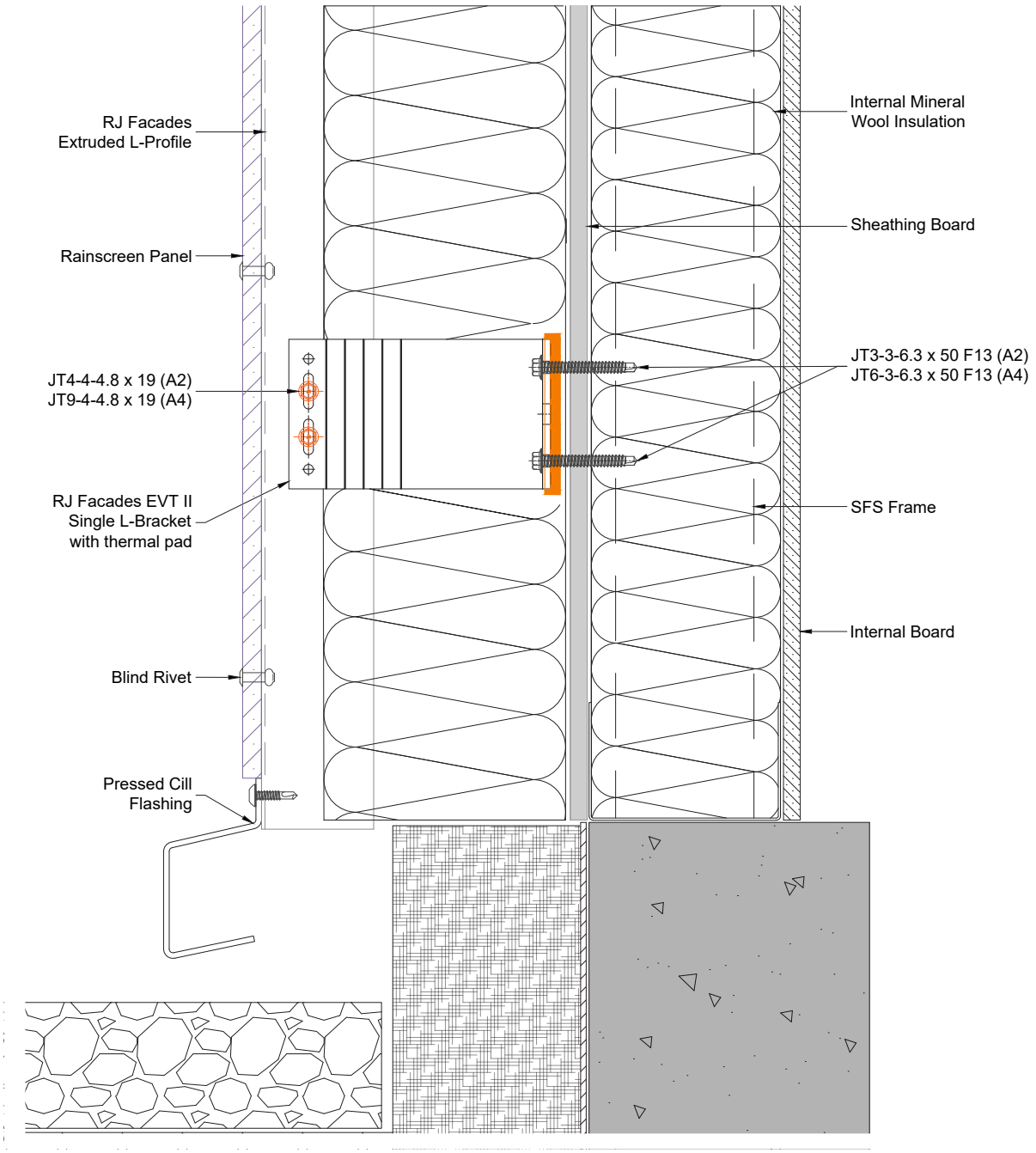
Through Fix Vertical

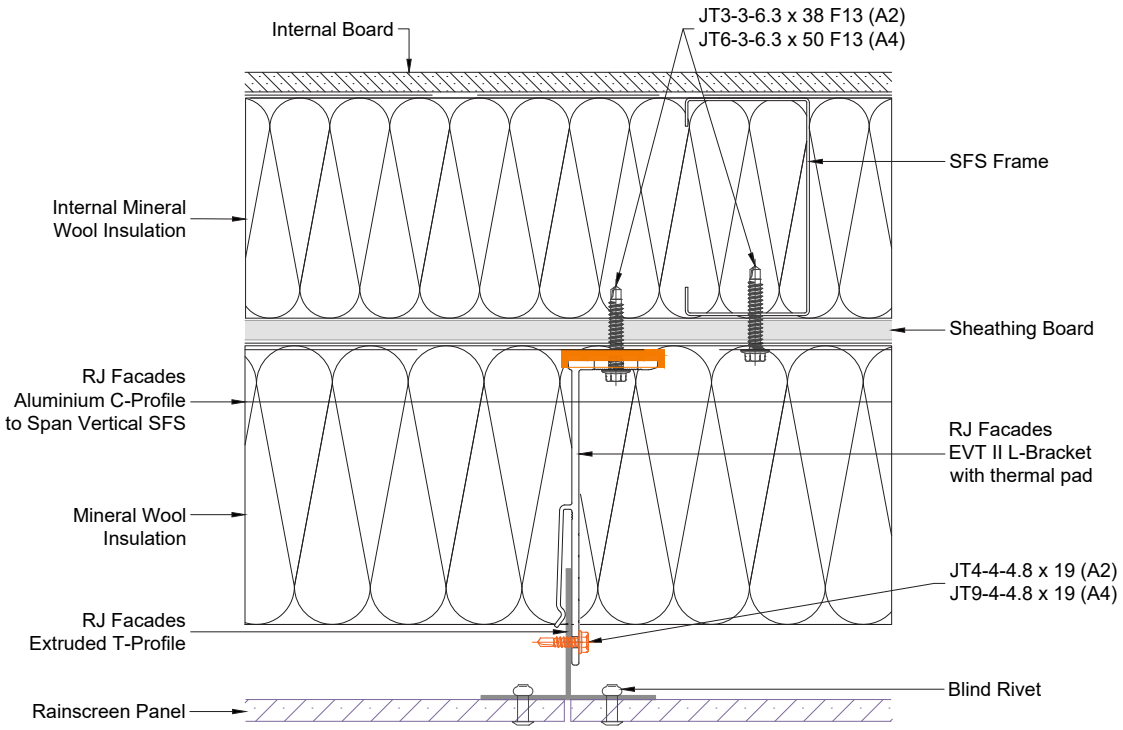


Through Fix Vertical

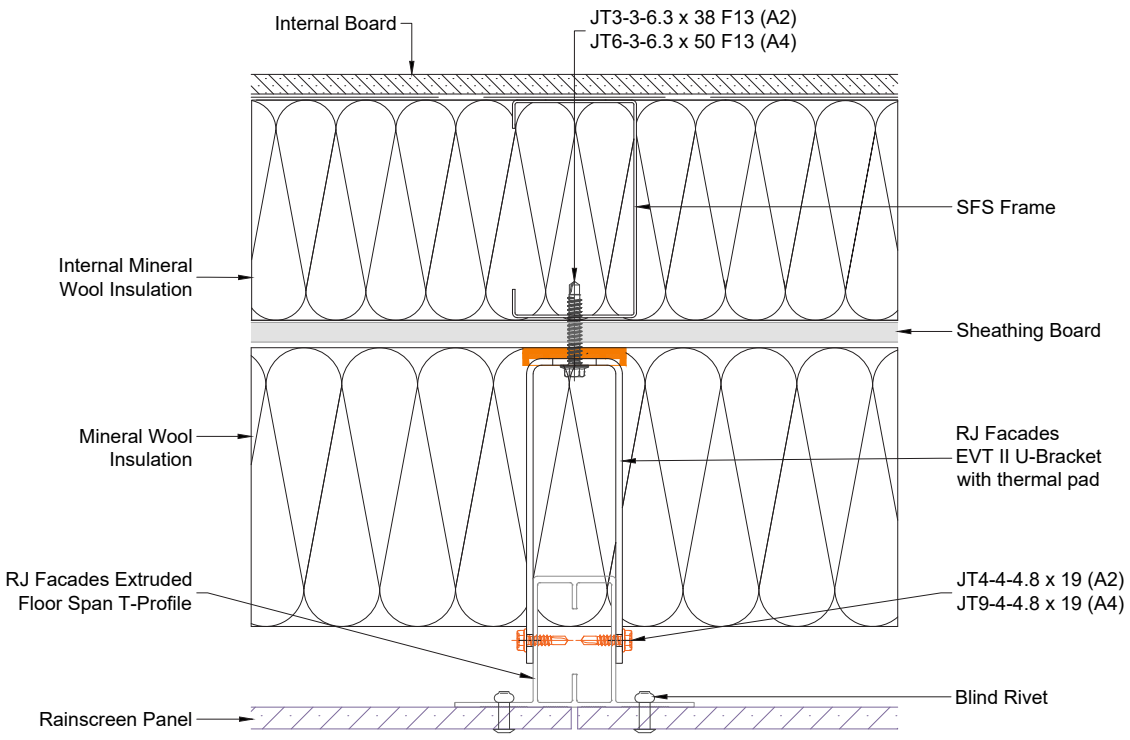


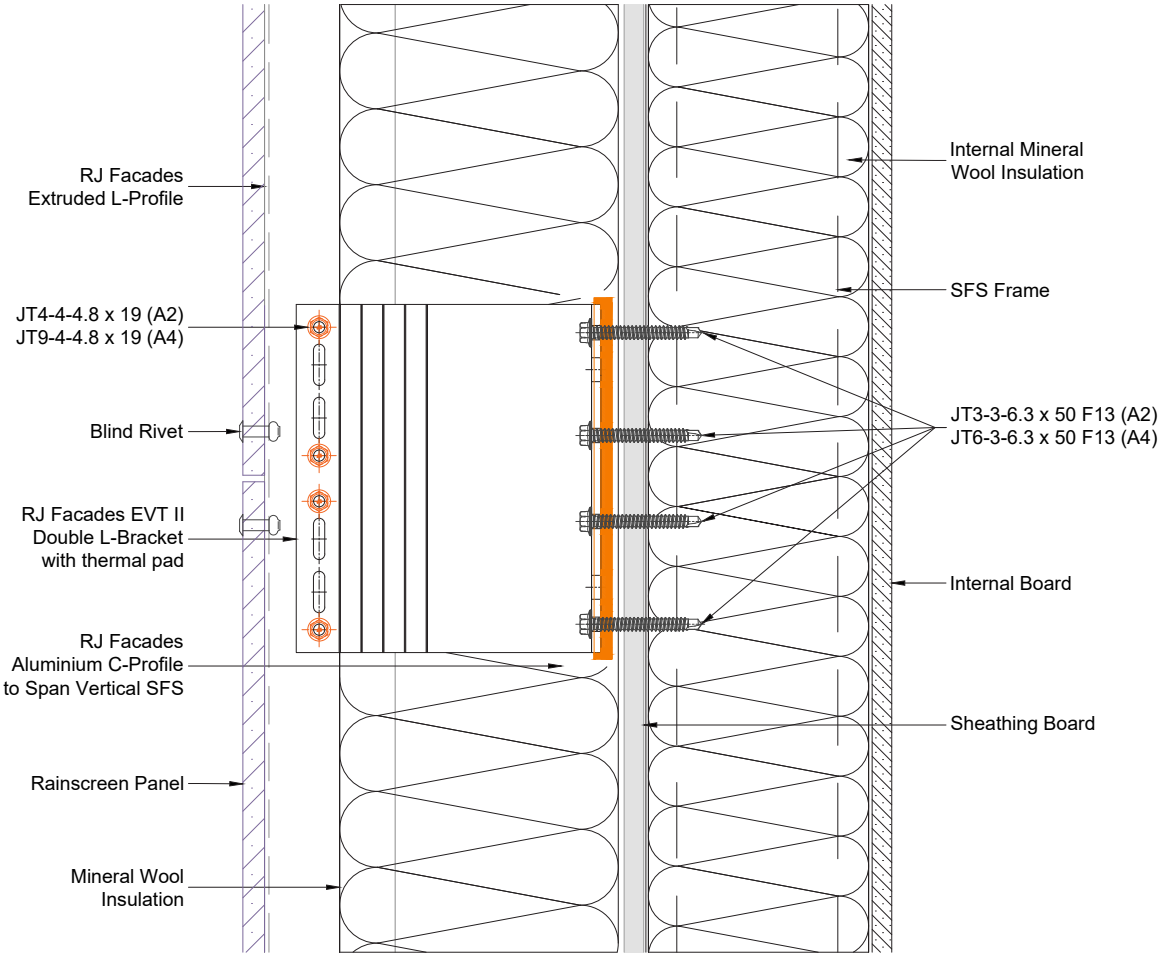
Through Fix Vertical



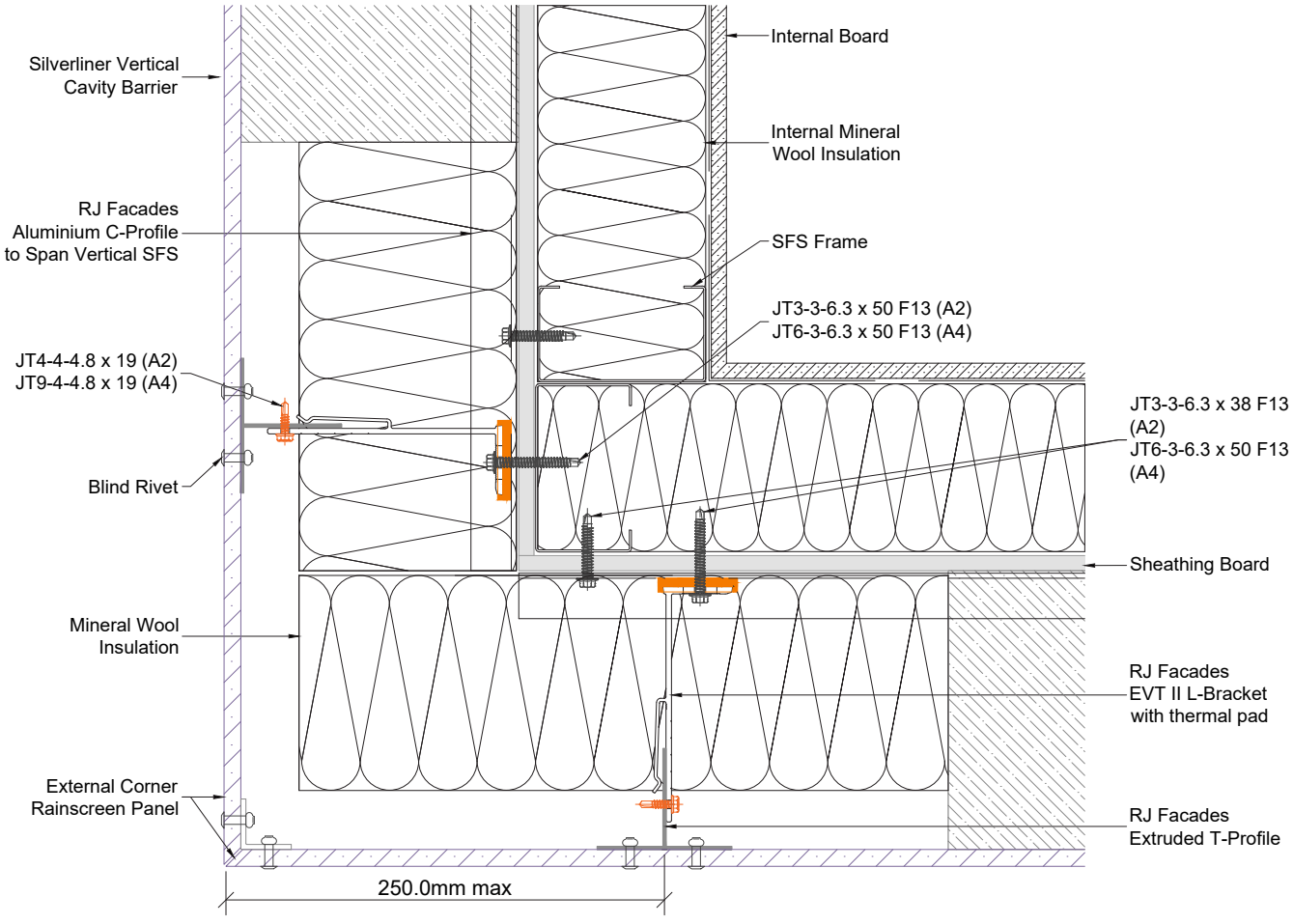

Internal Board
JT3-3-6.3 x 38 F13 (A2)
JT6-3-6.3 x 50 F13 (A4)
SFS Frame
Internal Mineral
Wool Insulation
Sheathing Board
RJ Facades
Aluminium C-Profile
to Span Vertical SFS
RJ Facades
EVT II L-Bracket
with thermal pad
Mineral Wool
Insulation
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
RJ Facades
Extruded T-Profile
Blind Rivet
Rainscreen Panel

Through Fix Vertical

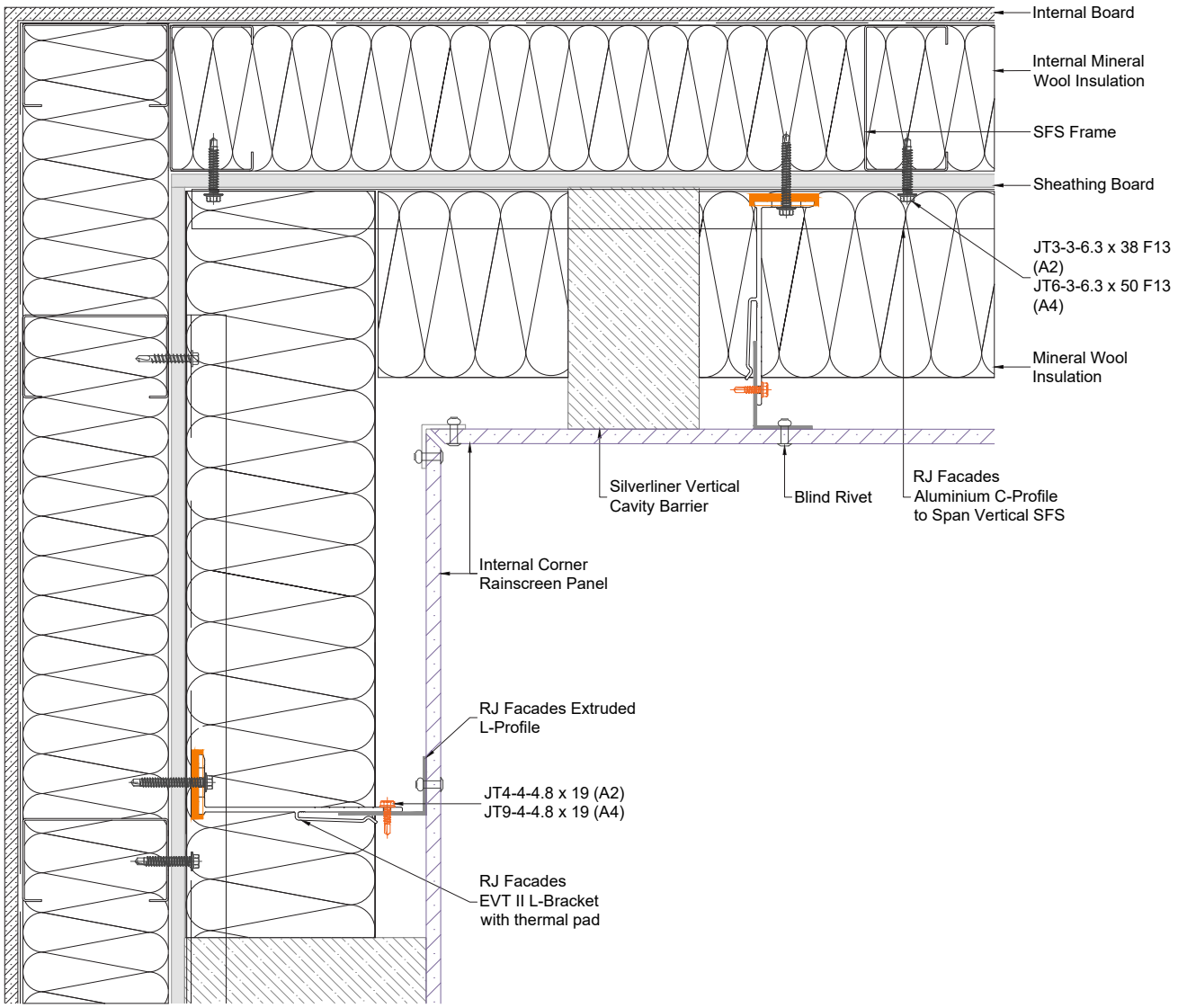



RJ Facades
Extruded L-Profile
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
Blind Rivet
RJ Facades EVT II
Double L-Bracket
with thermal pad
RJ Facades
Aluminium C-Profile
to Span Vertical SFS
Rainscreen Panel
Mineral Wool
Insulation
Internal Mineral
Wool Insulation
SFS Frame
JT3-3-6.3 x 50 F13 (A2)
JT6-3-6.3 x 50 F13 (A4)
Internal Board
Sheathing Board

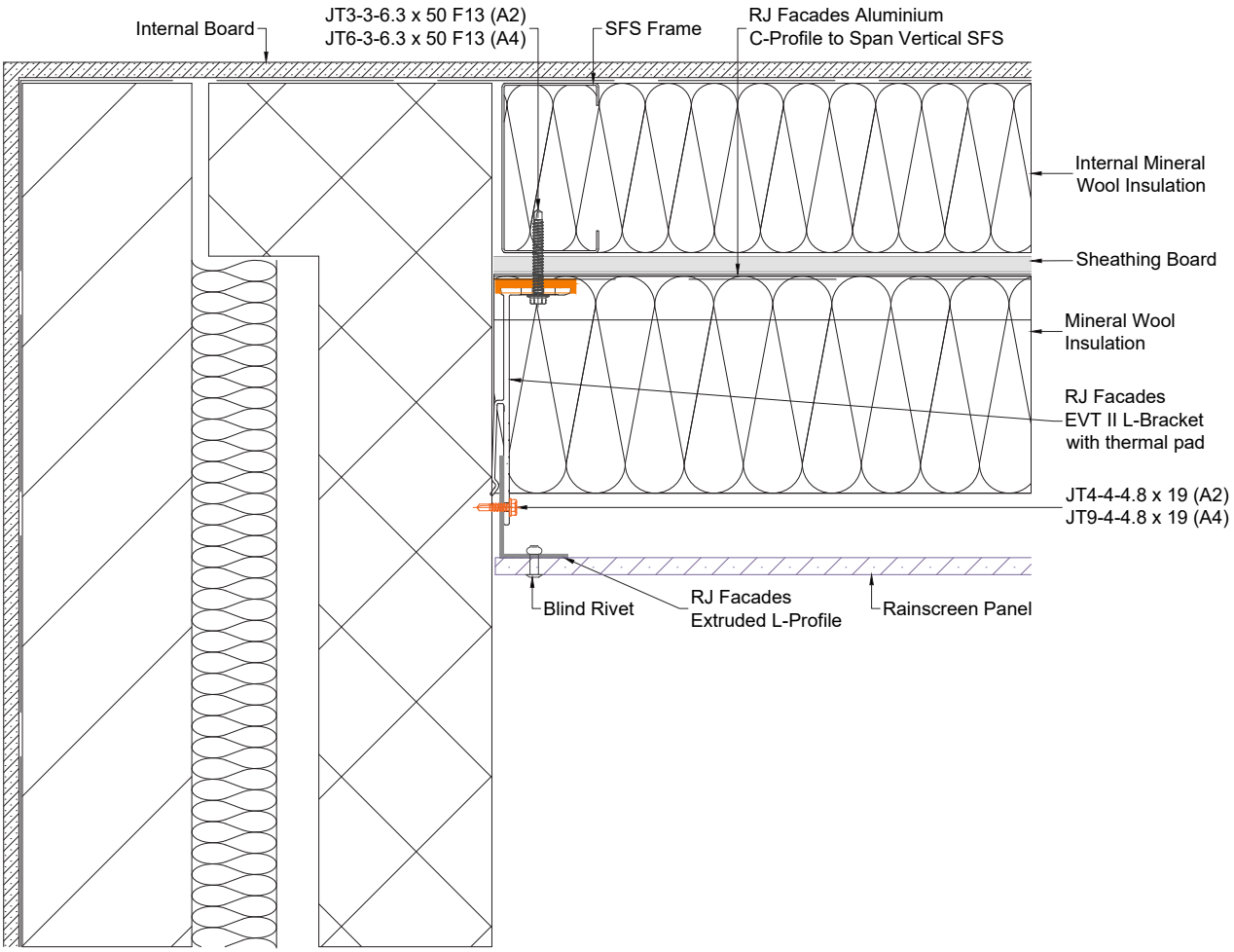
Through Fix Vertical

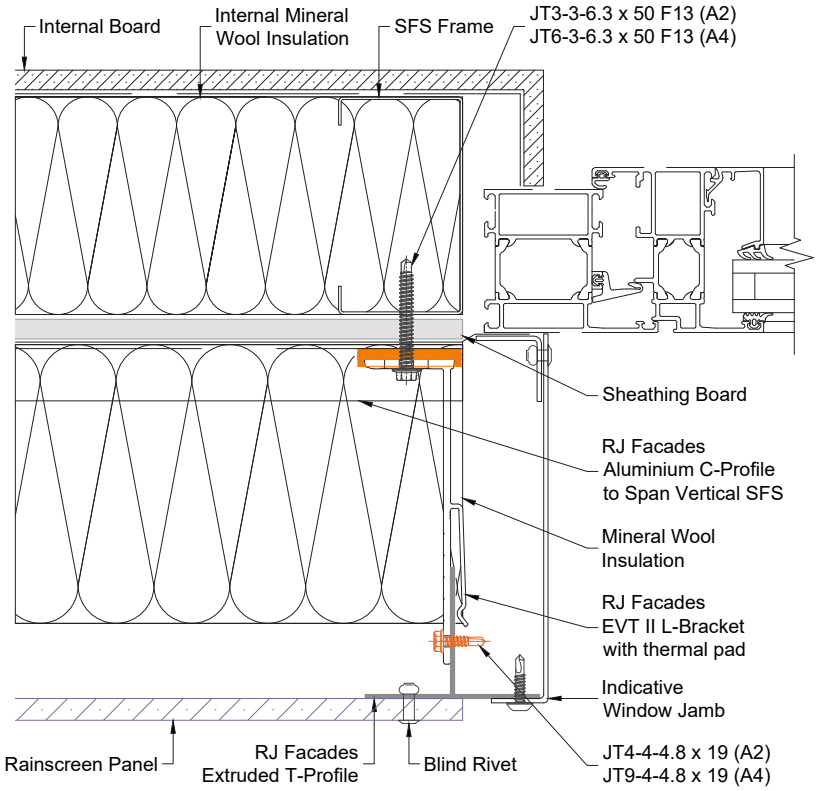


Through Fix Vertical

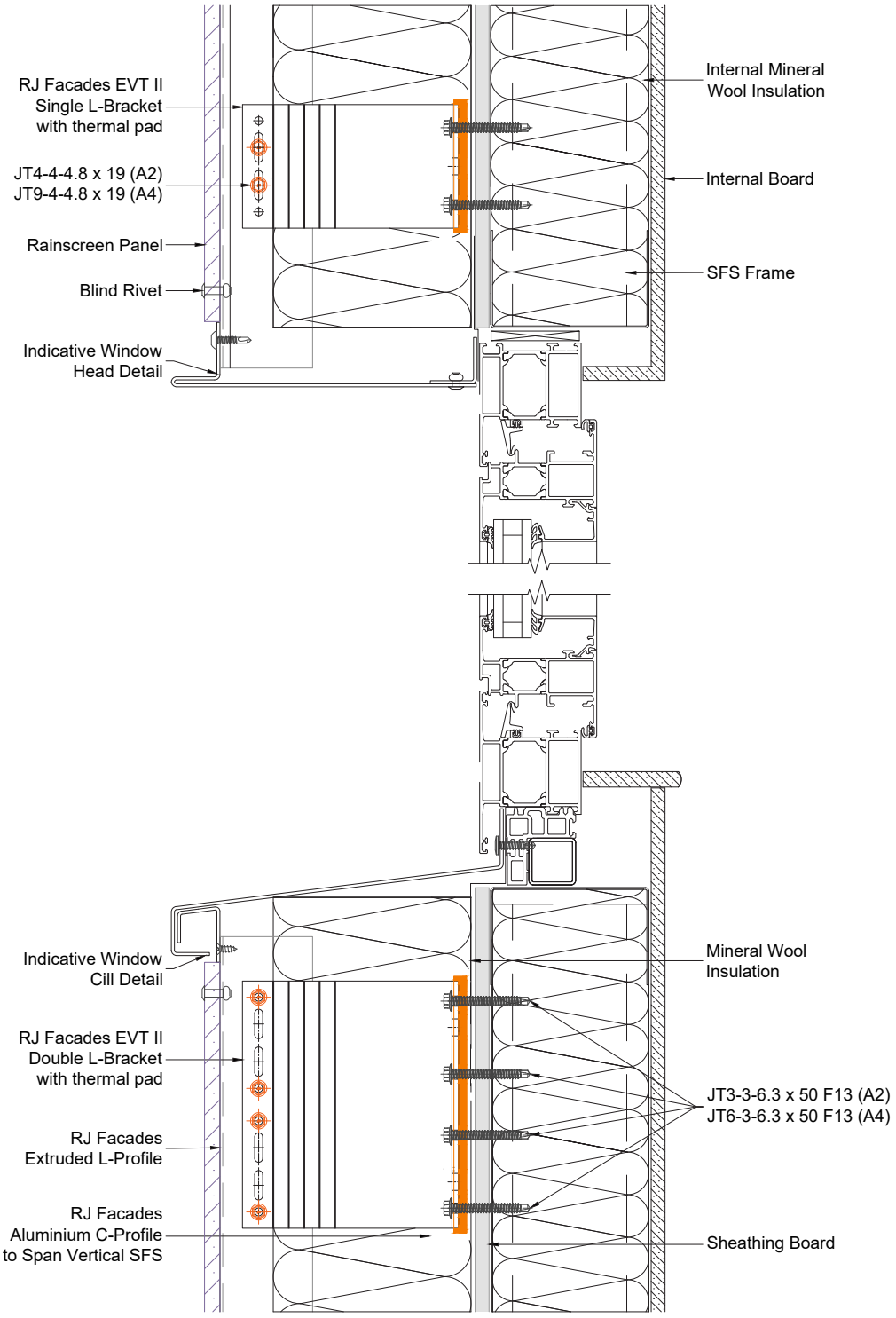


Through Fix Vertical

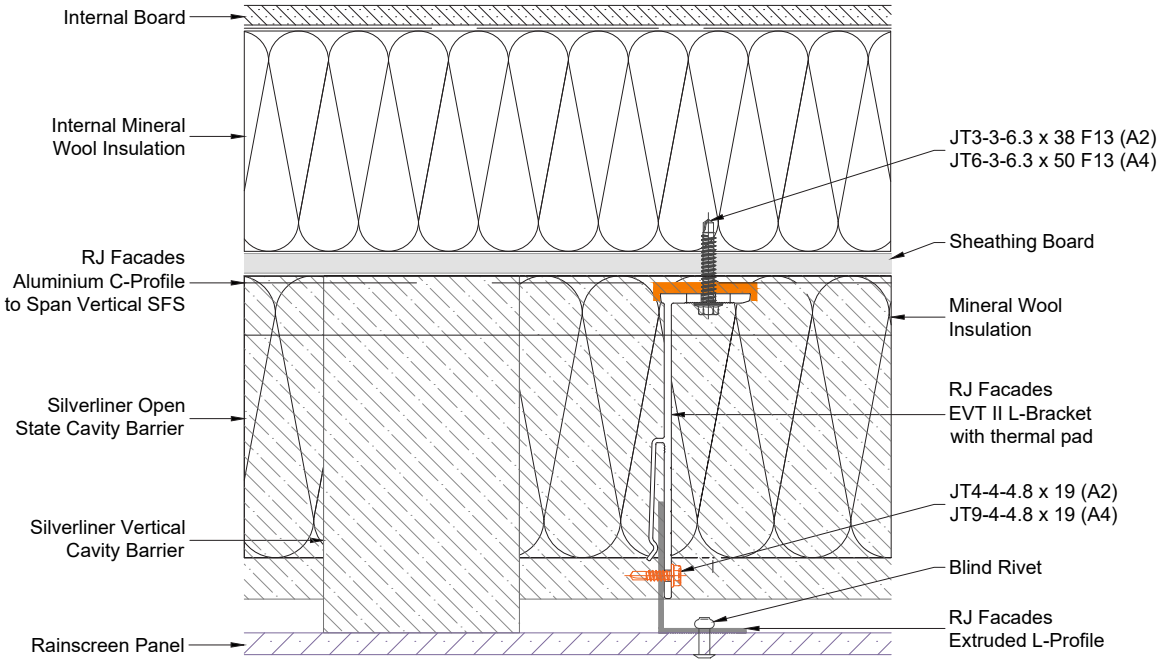



Internal Board
Internal Mineral Wool Insulation
SFS Frame
JT3-3-6.3 x 50 F13 (A2)
JT6-3-6.3 x 50 F13 (A4)
Sheathing Board
RJ Facades Aluminium C-Profile to Span Vertical SFS
Mineral Wool Insulation
RJ Facades EVT II L-Bracket with thermal pad
Indicative Window Jamb
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
Rainscreen Panel
RJ Facades Extruded T-Profile
Blind Rivet

Through Fix Vertical



Through Fix Vertical



Through Fix-Horizontal

This is a common method for facade materials made from HPL, and fibre cement materials.

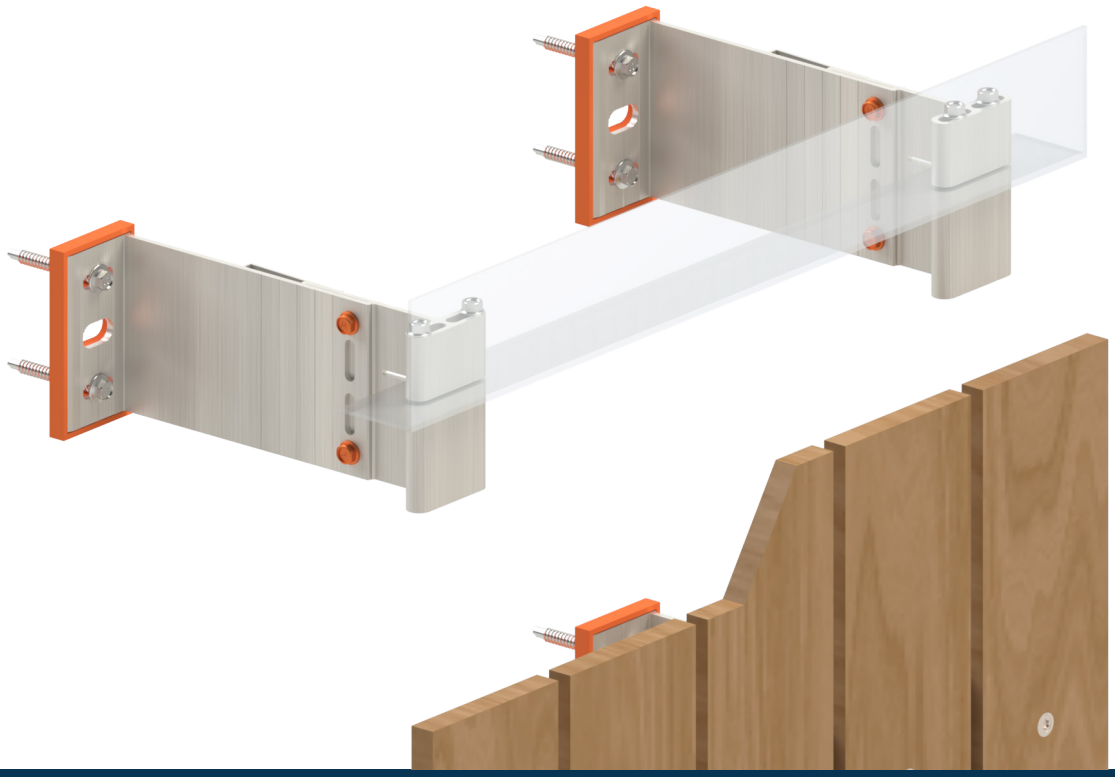
The Single bracket is typically used in all positions on the vertical rail as the EVT II Horizontal Adaptor evenly distributes the dead load across the panel.

The panel joints can be used with various sizes of T-profile to create the desired shadow joint based on project requirements and can also be powder coated.

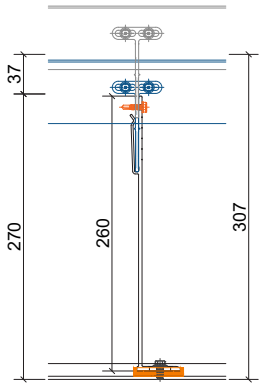
Depending on the material type, HPL / fibre cement panels require vertical support at 500mm to 600mm - for all vertical centre support generally use the 60x40 L-profile.

Cladding Materials

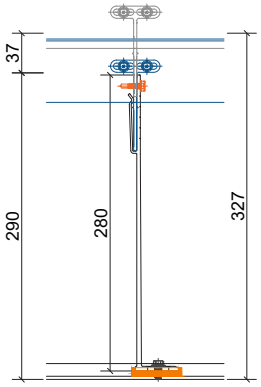
- High Pressure Laminates (HPL); Fibre Cement; Composite Mineral Material. Aluminium cassette panels, decorative feature bands,



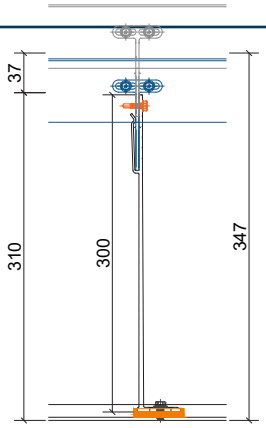
Through Fix-Horizontal - Cladding Zone



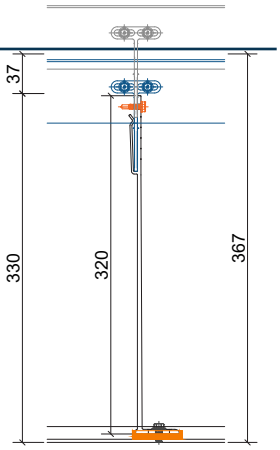
260 Bracket
ADJUSTMENT= +/− 37mm
Clad Zone= 270mm to 307mm



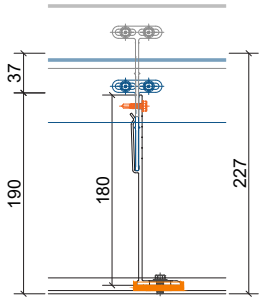
280 Bracket
ADJUSTMENT= +/− 37mm
Clad Zone= 290mm to 327mm



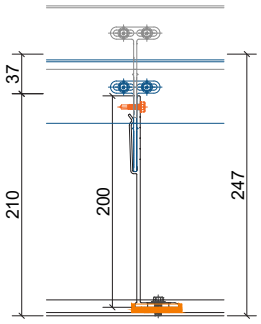
300 Bracket
ADJUSTMENT= +/− 37mm
Clad Zone= 310mm to 347mm



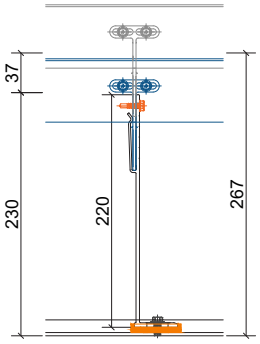
320 Bracket
ADJUSTMENT= +/− 37mm
Clad Zone= 330mm to 367mm



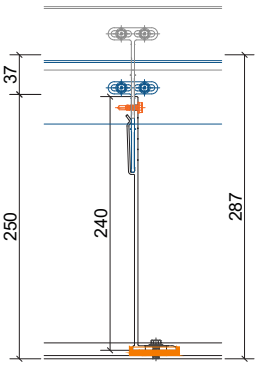
180 Bracket
ADJUSTMENT= +/− 37mm
Clad Zone= 190mm to 227mm



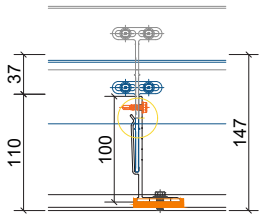
200 Bracket
ADJUSTMENT= +/− 37mm
Clad Zone= 210mm to 247mm



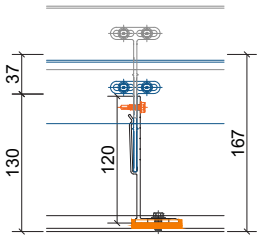
220 Bracket
ADJUSTMENT= +/− 37mm
Clad Zone= 230mm to 267mm



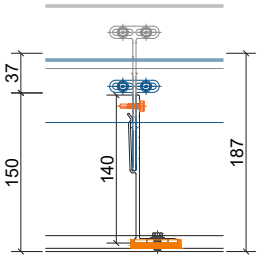
240 Bracket
ADJUSTMENT= +/− 37mm
Clad Zone= 250mm to 287mm



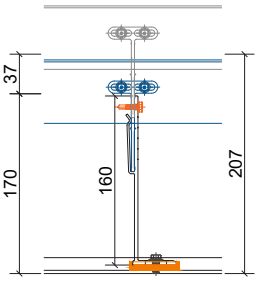
100 Bracket
ADJUSTMENT= +/− 37mm
Clad Zone= 110mm to 147mm



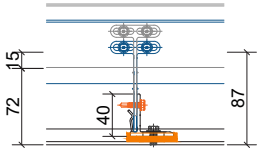
120 Bracket
ADJUSTMENT= +/− 37mm
Clad Zone= 130mm to 167mm



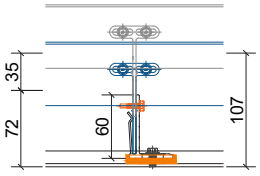
140 Bracket
ADJUSTMENT= +/− 37mm
Clad Zone= 150mm to 187mm



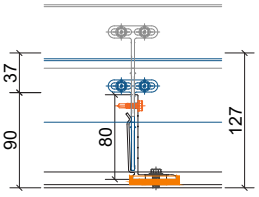
160 Bracket
ADJUSTMENT= +/− 37mm
Clad Zone= 170mm to 207mm



40 Bracket
ADJUSTMENT= +/− 15mm
Clad Zone= 72mm to 87mm

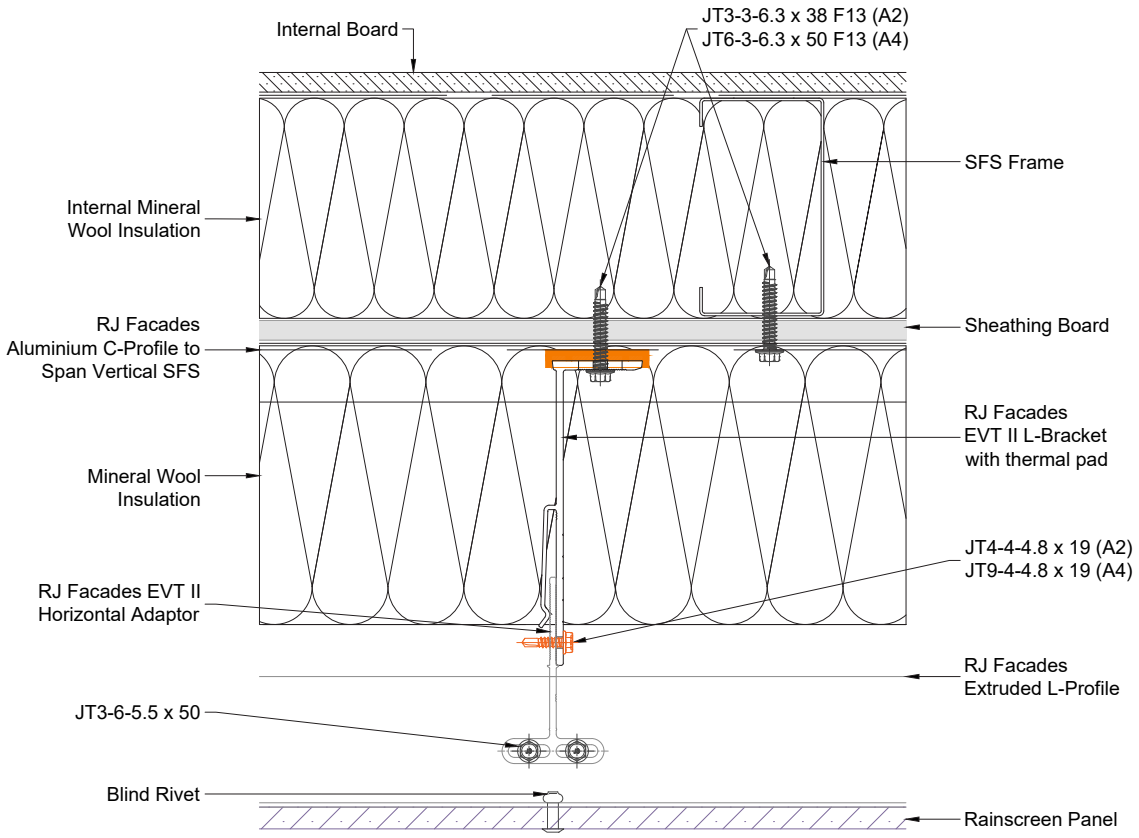


60 Bracket
ADJUSTMENT= +/− 35mm
Clad Zone= 72mm to 107mm

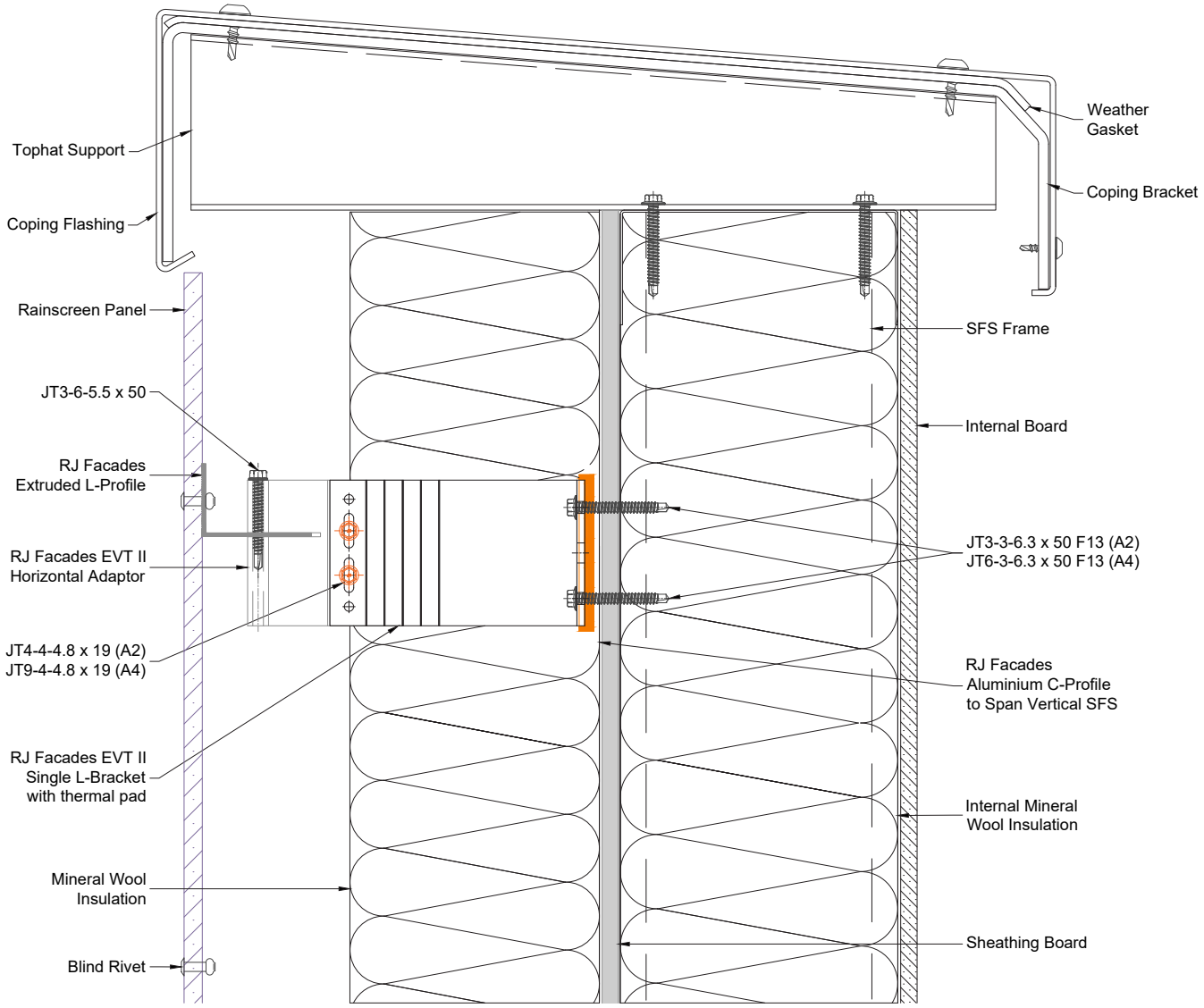


80 Bracket
ADJUSTMENT= +/− 37mm
Clad Zone= 90mm to 127mm

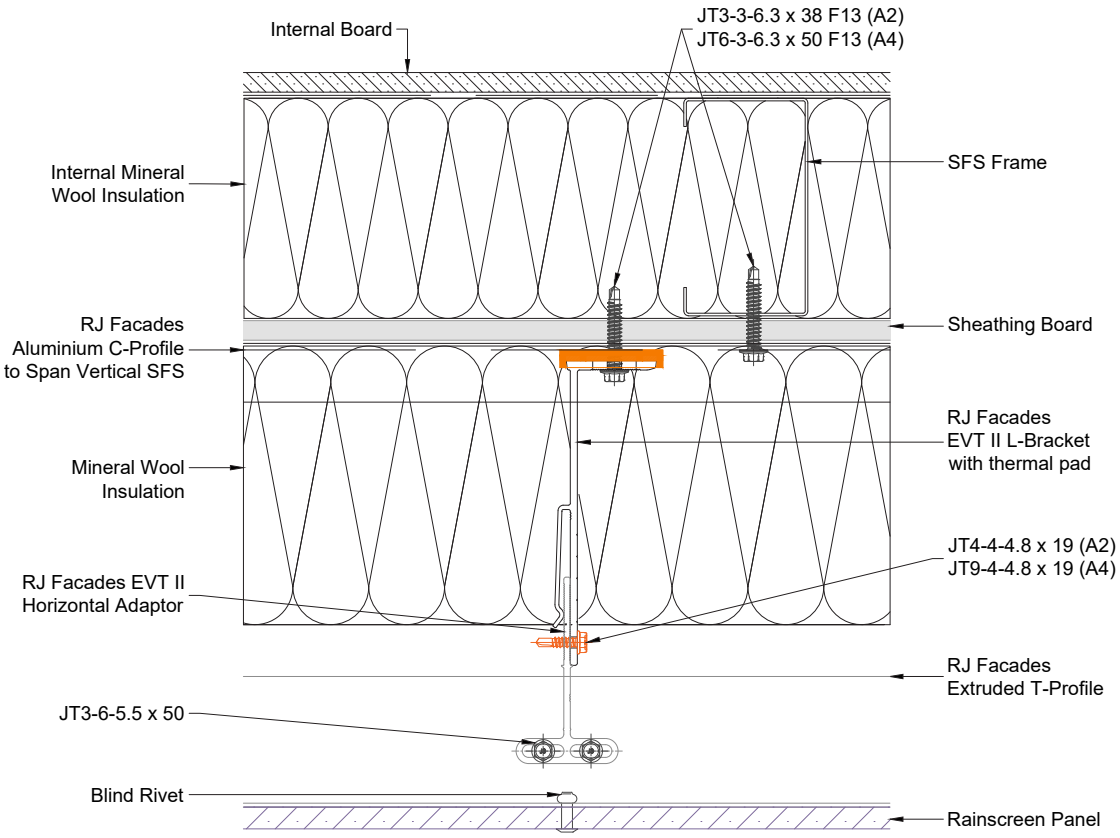
Through Fix-Horizontal

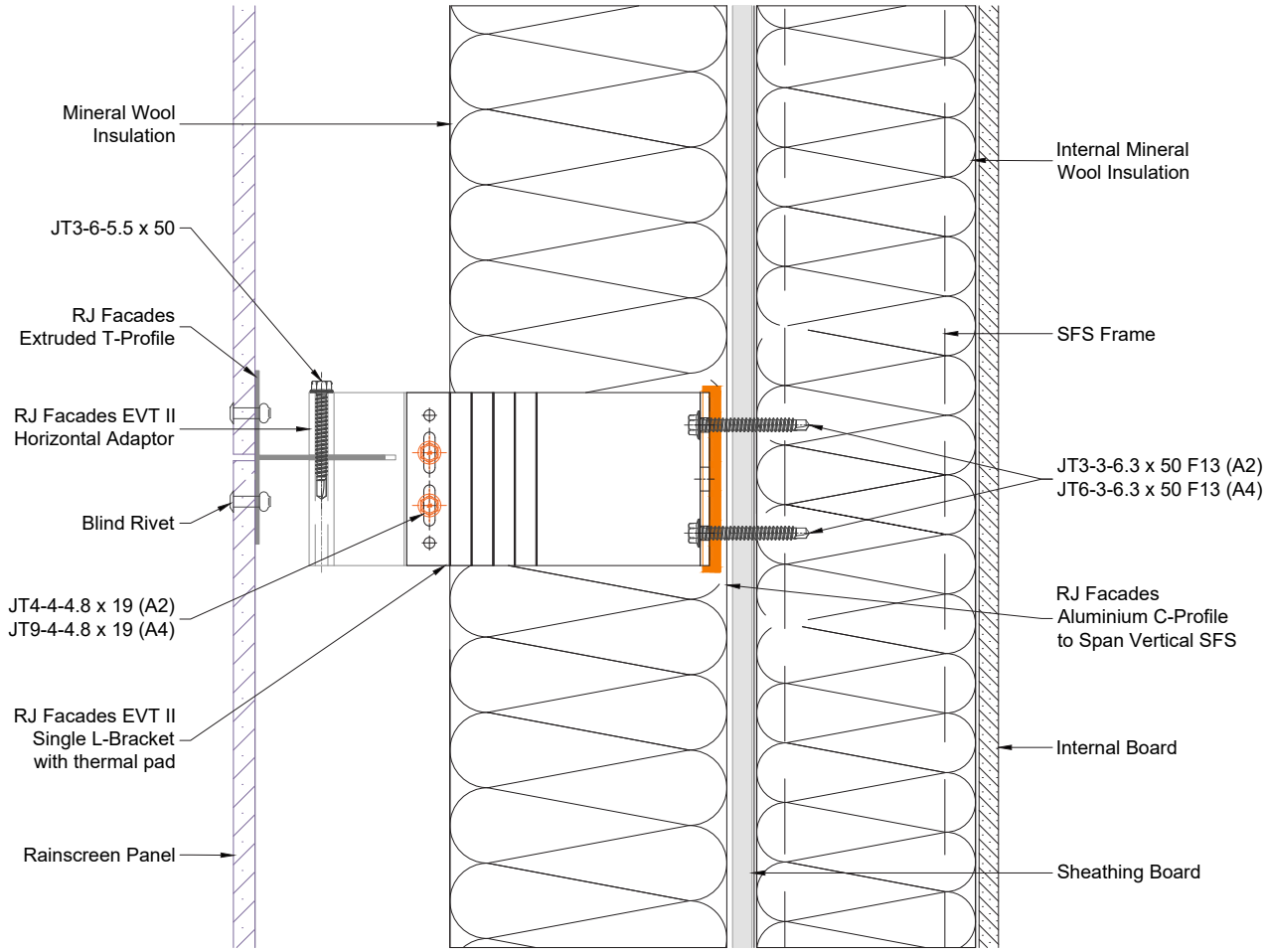


Through Fix-Horizontal

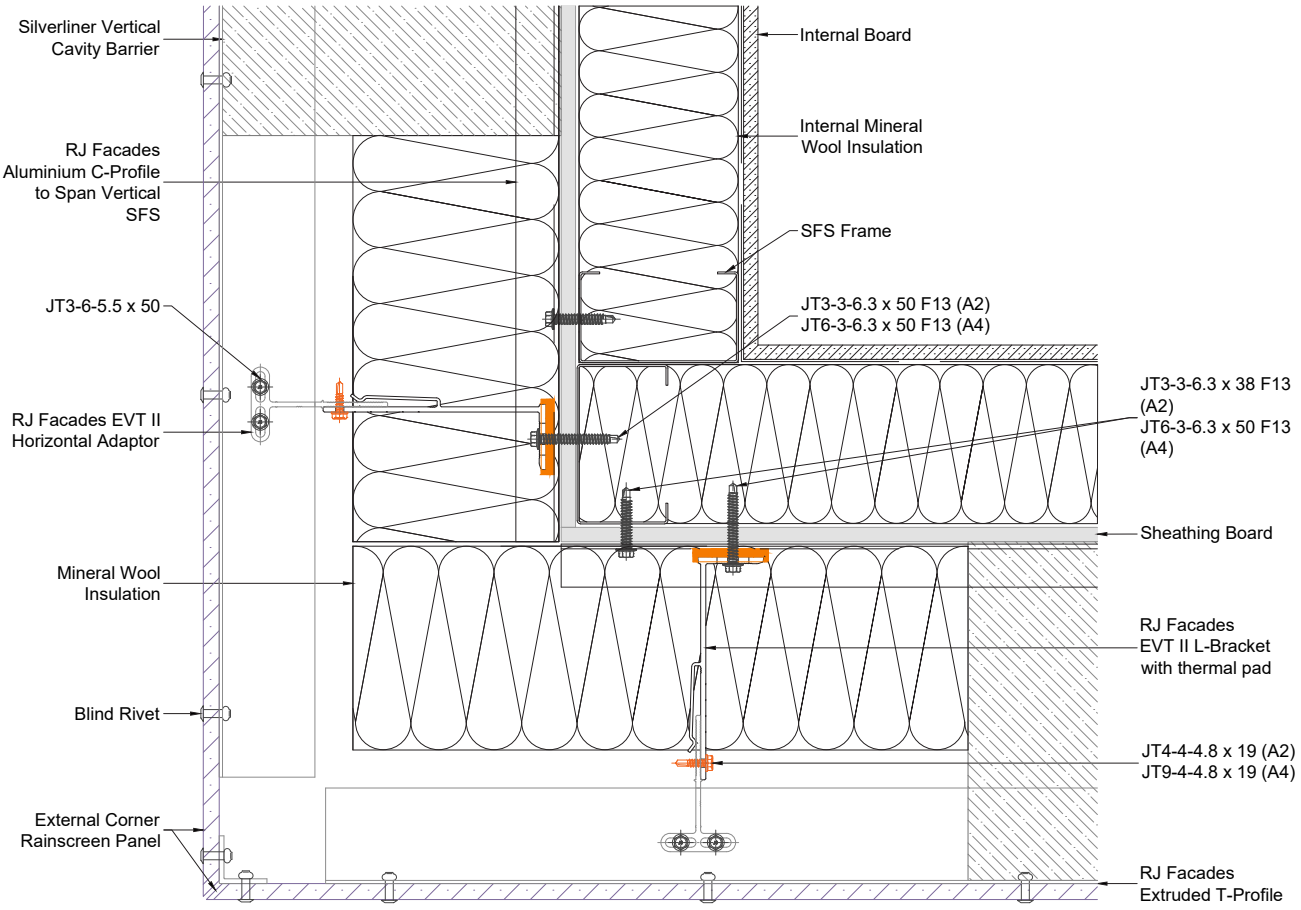


Through Fix-Horizontal

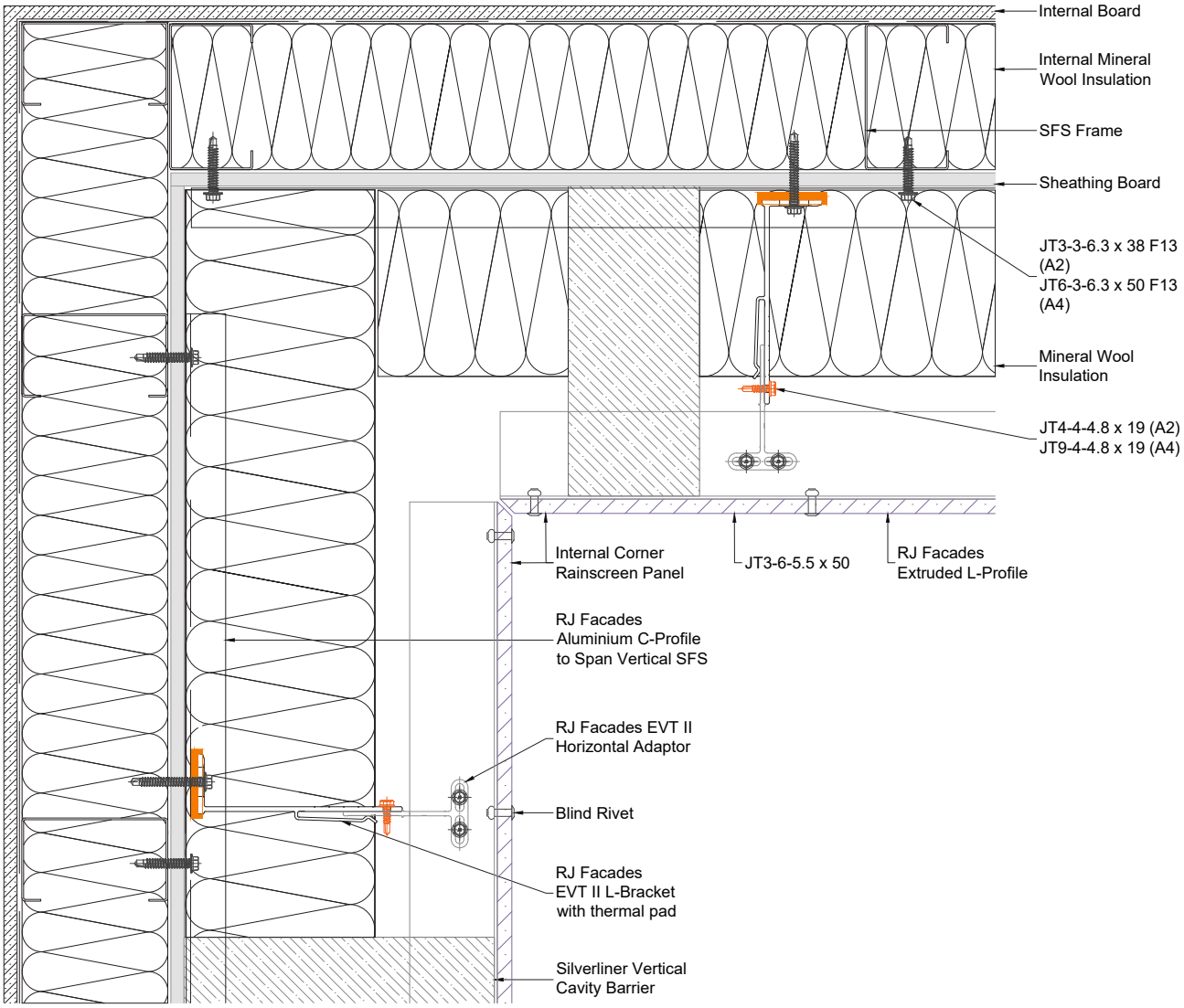



Mineral Wool Insulation
JT3-6-5.5 x 50
RJ Facades Extruded T-Profile
RJ Facades EVT II Horizontal Adaptor
Blind Rivet
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
RJ Facades EVT II Single L-Bracket with thermal pad
Rainscreen Panel
Internal Mineral Wool Insulation
SFS Frame
JT3-3-6.3 x 50 F13 (A2)
JT6-3-6.3 x 50 F13 (A4)
RJ Facades Aluminium C-Profile to Span Vertical SFS
Internal Board
Sheathing Board

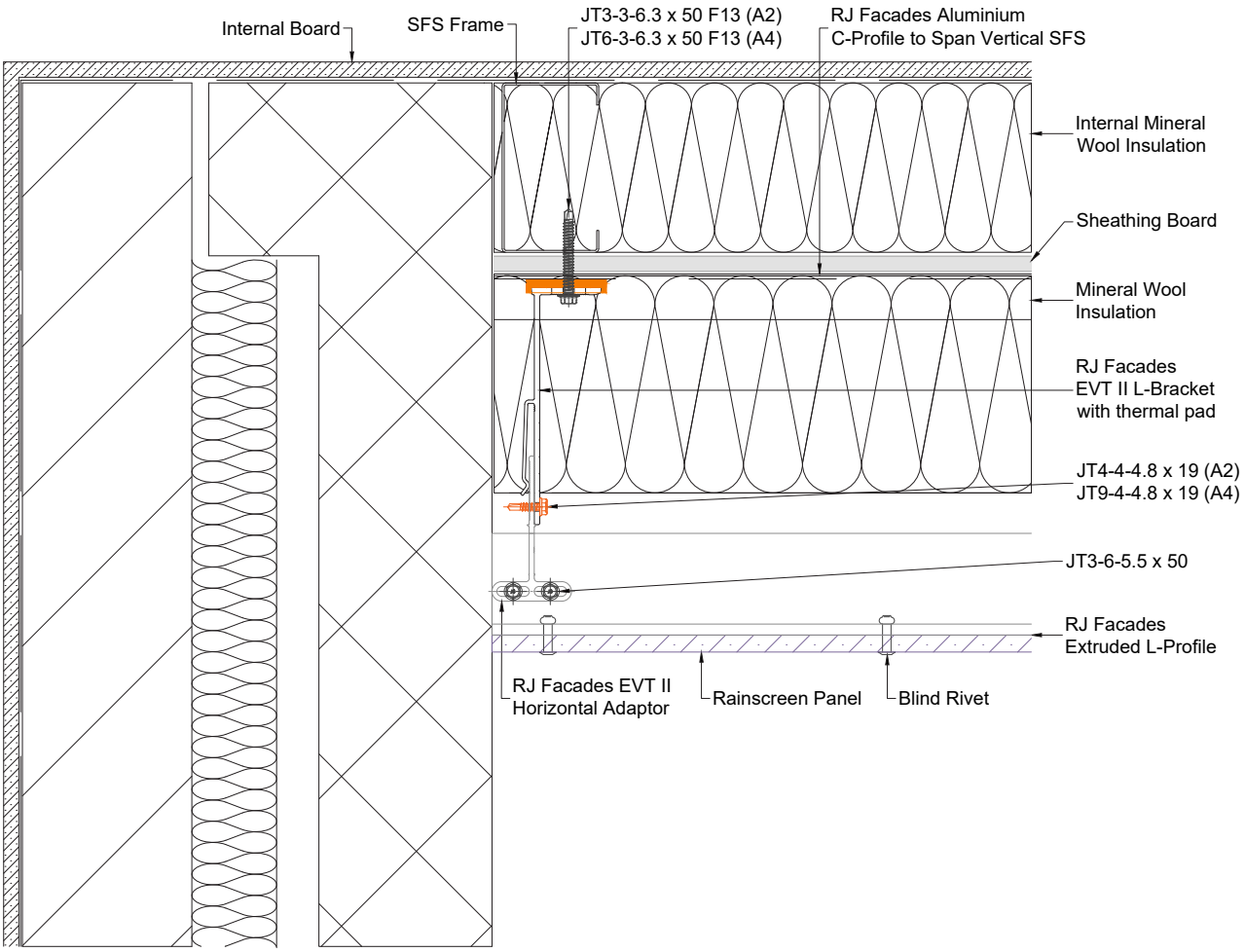
Through Fix-Horizontal

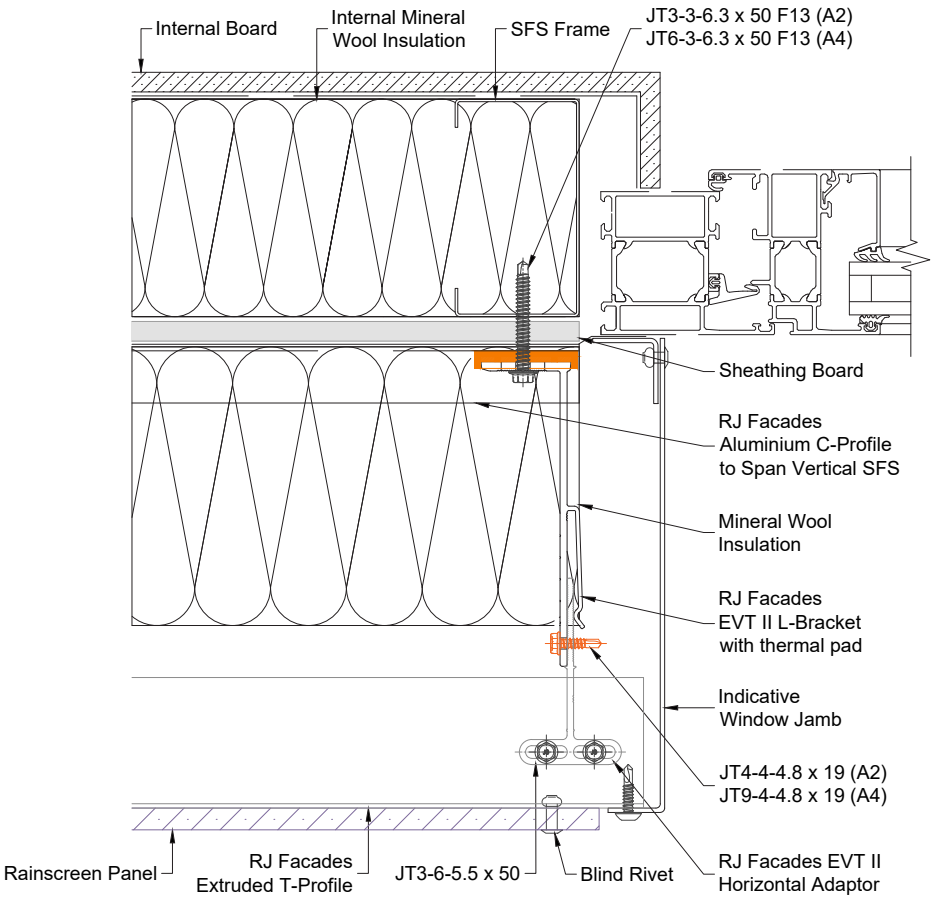


Through Fix-Horizontal

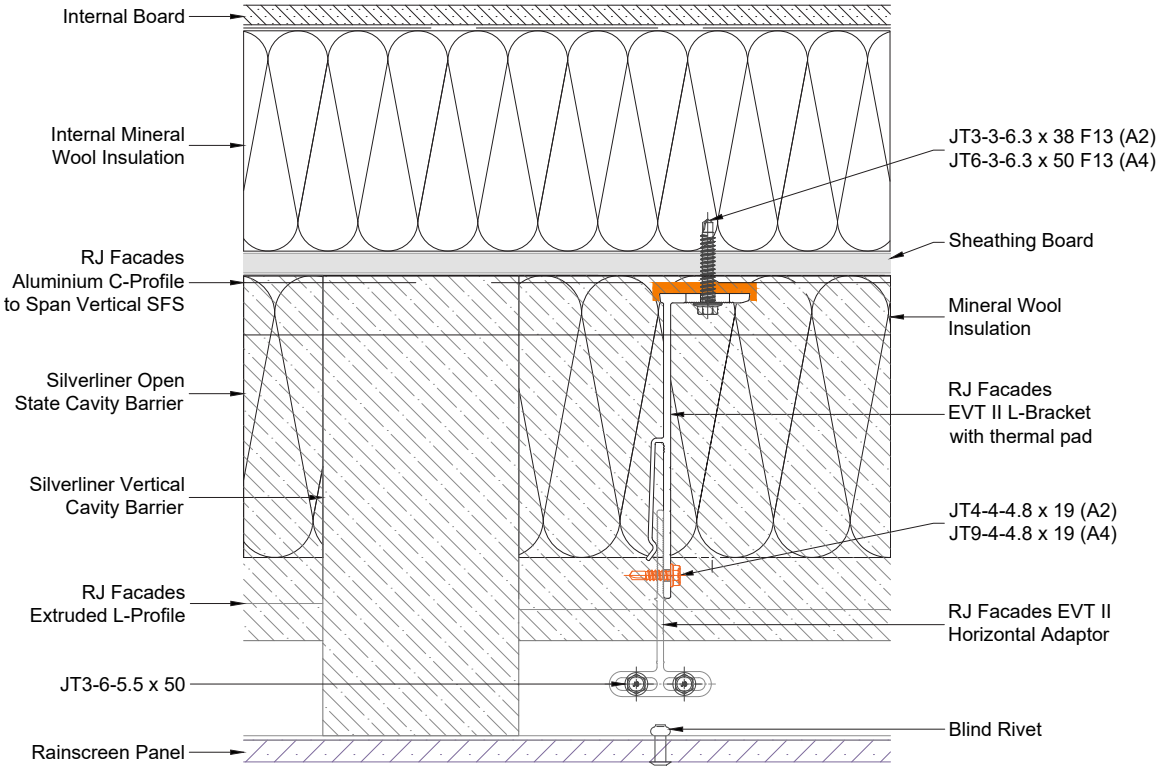


Through Fix-Horizontal




Internal Board
Internal Mineral Wool Insulation
SFS Frame
JT3-3-6.3 x 50 F13 (A2)
JT6-3-6.3 x 50 F13 (A4)
Sheathing Board
RJ Facades Aluminium C-Profile to Span Vertical SFS
Mineral Wool Insulation
RJ Facades EVT II L-Bracket with thermal pad
Indicative Window Jamb
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
Rainscreen Panel
RJ Facades Extruded T-Profile
JT3-6-5.5 x 50
Blind Rivet
RJ Facades EVT II Horizontal Adaptor

Through Fix-Horizontal



Through Fix Cassette

This is the optimal solution for large and flat facades, ensuring fast and secure installation of cassettes from aluminium composite materials and folded metal sheets.

The system allows the movement of the facade material, due to various thermal expansions, without compromising the secure attachment of the cassettes.

Typical bracket configuration uses the Fixed Point bracket at the highest position on the vertical rail to support the facade vertical dead loads. The Sliding Point bracket is used typically on all other positions on the vertical rail to absorb the project wind loading

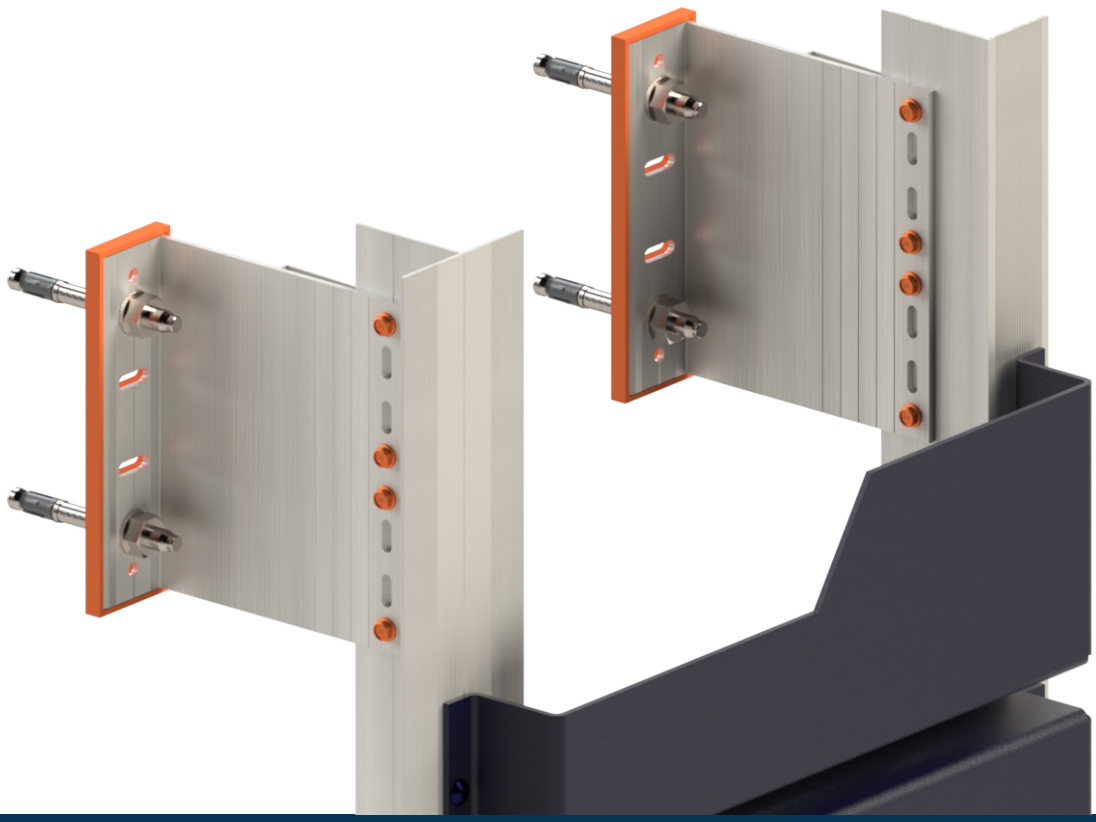
The panel joints can be used with various sizes of T-profile to create the desired shadow joint based on project requirements and can also be powder coated.

Advantages

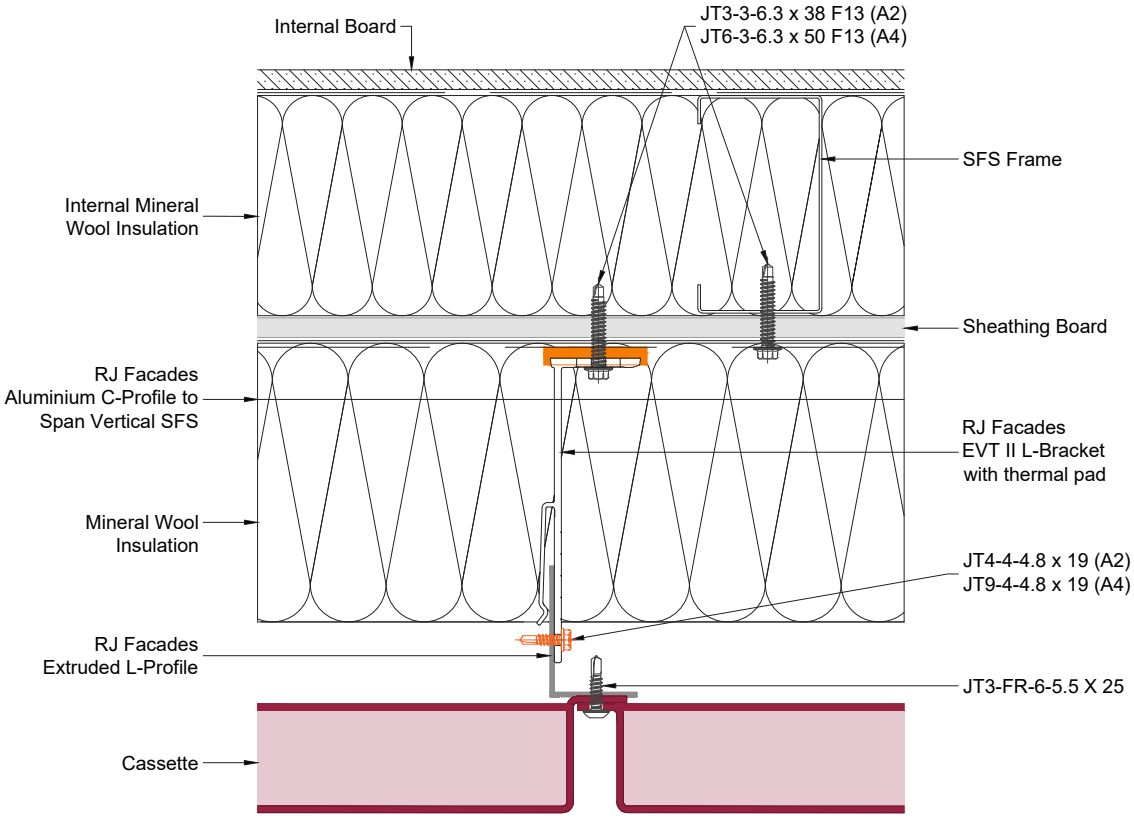
- Fast and secure installation
- Hangers, allowing adjustment in three directions to facilitate the installation of the cassettes

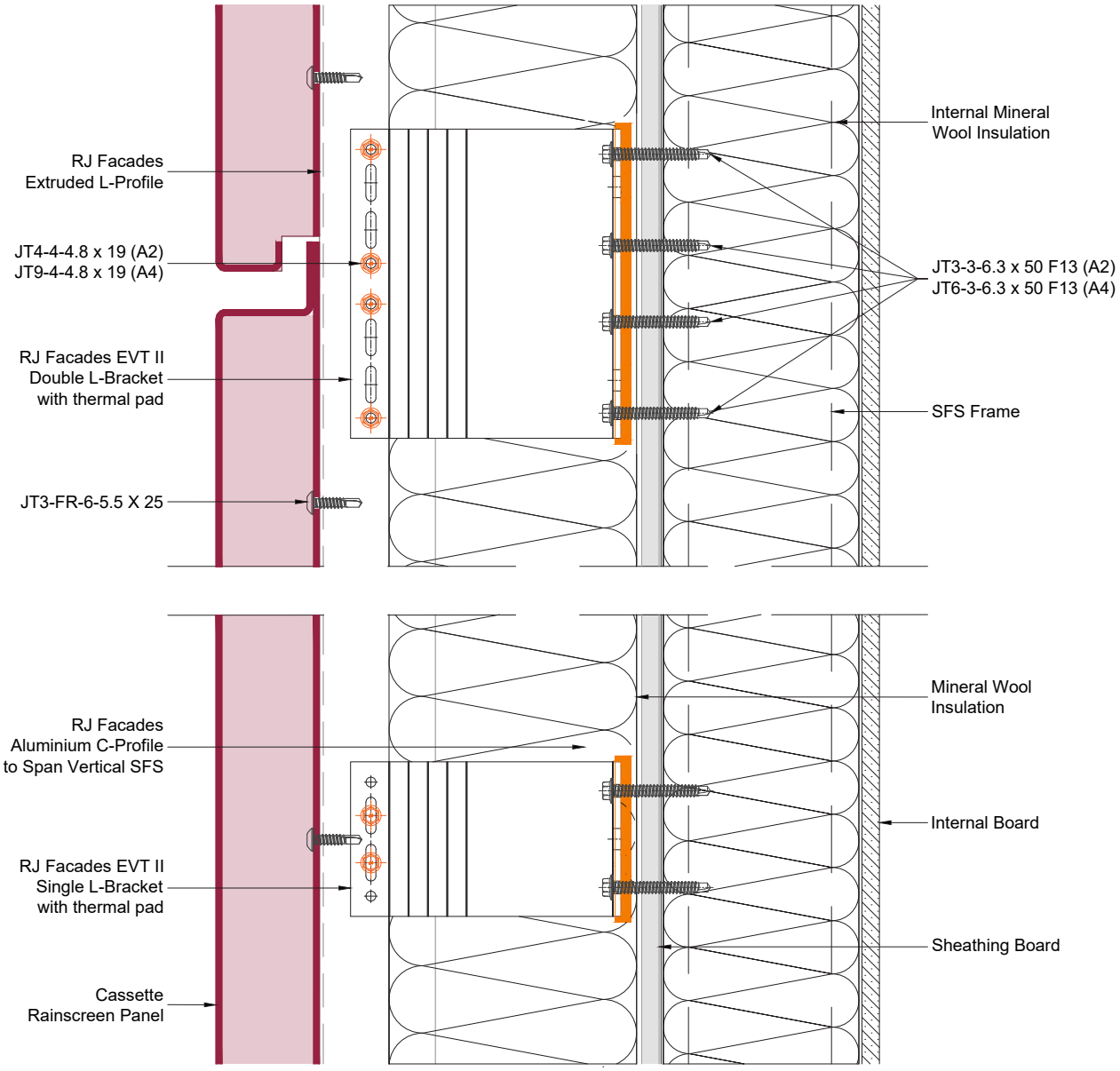
Cladding Materials

- Aluminium Composite Material; Metal sheet products.

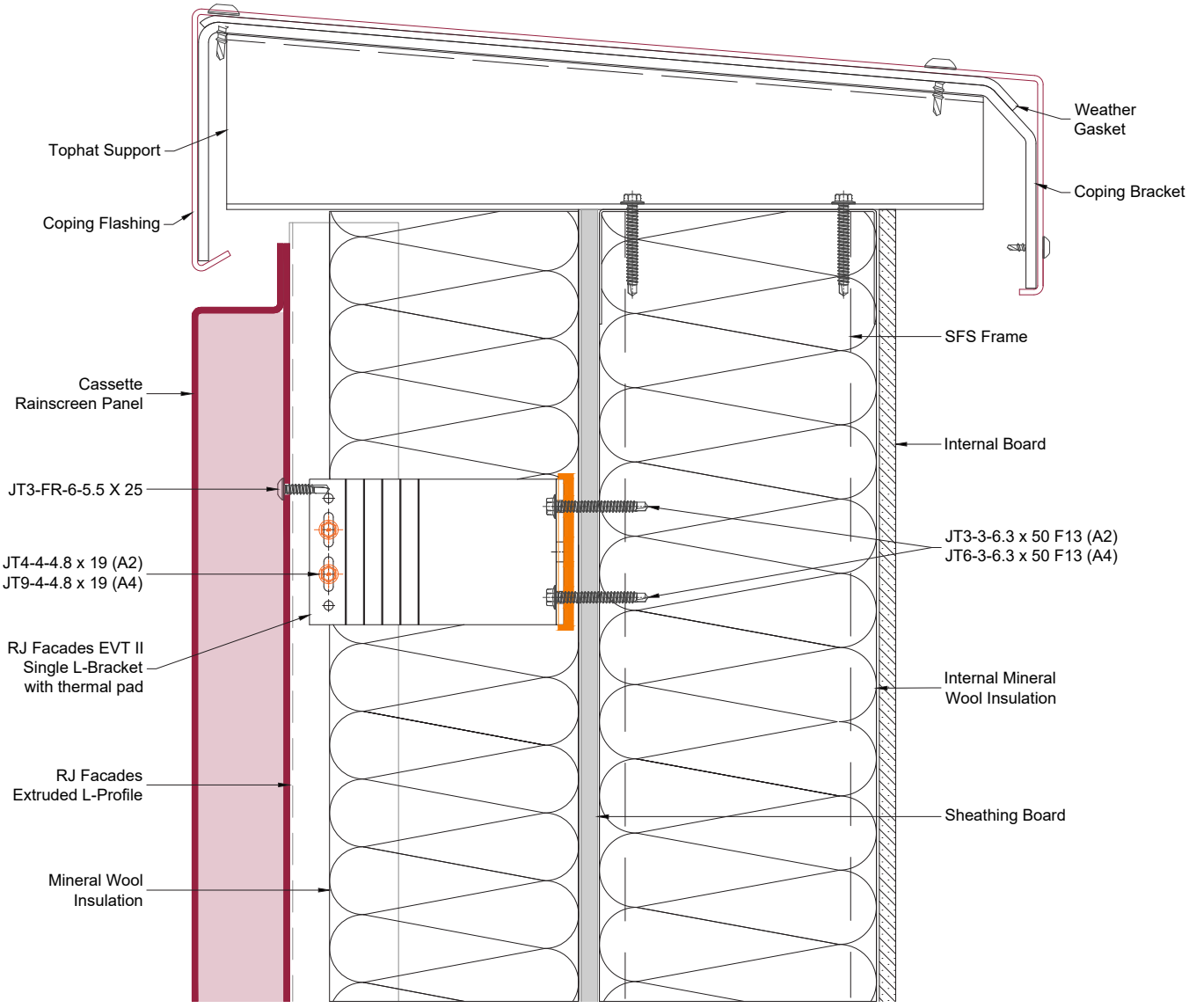


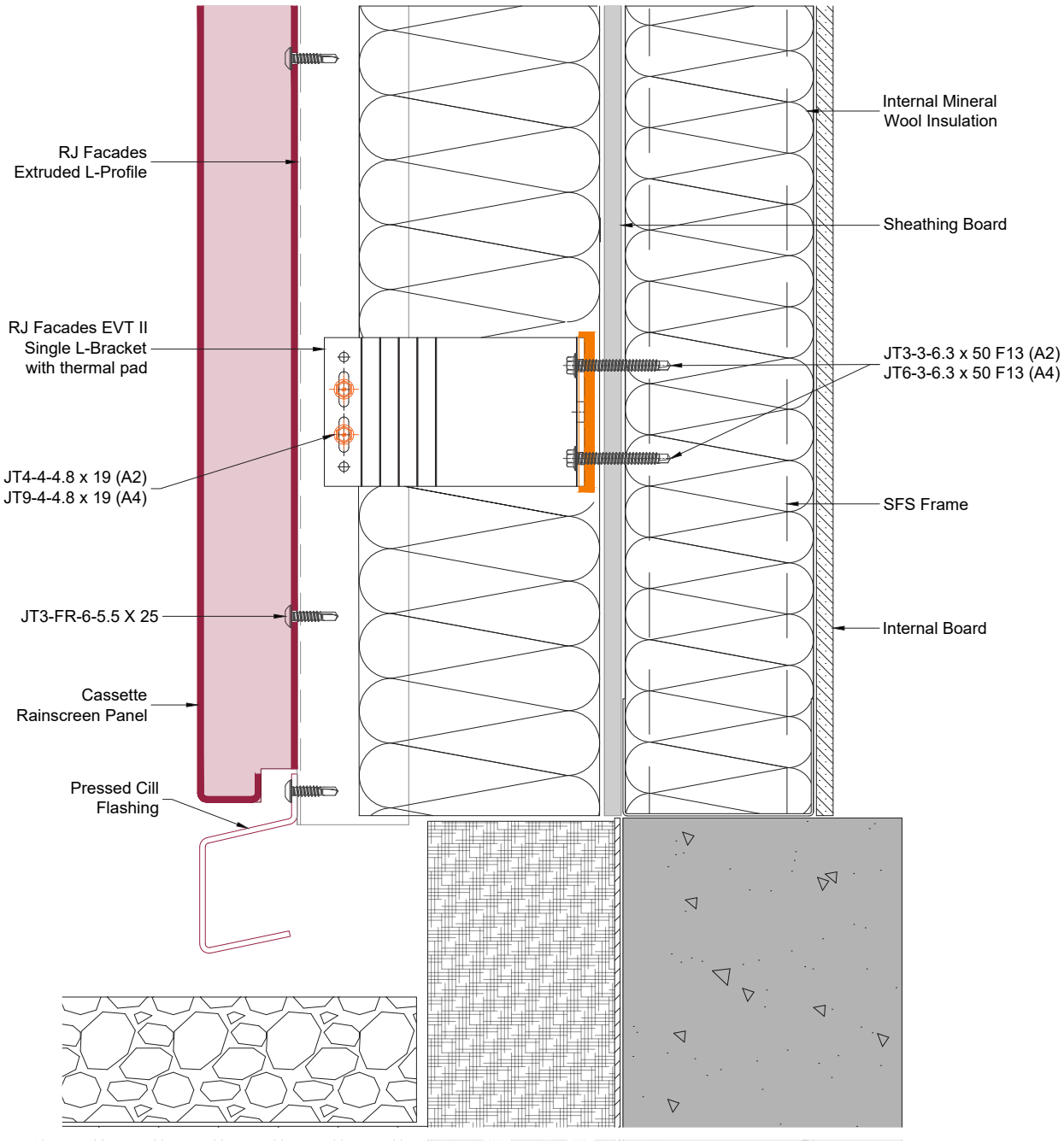
Through Fix Cassette



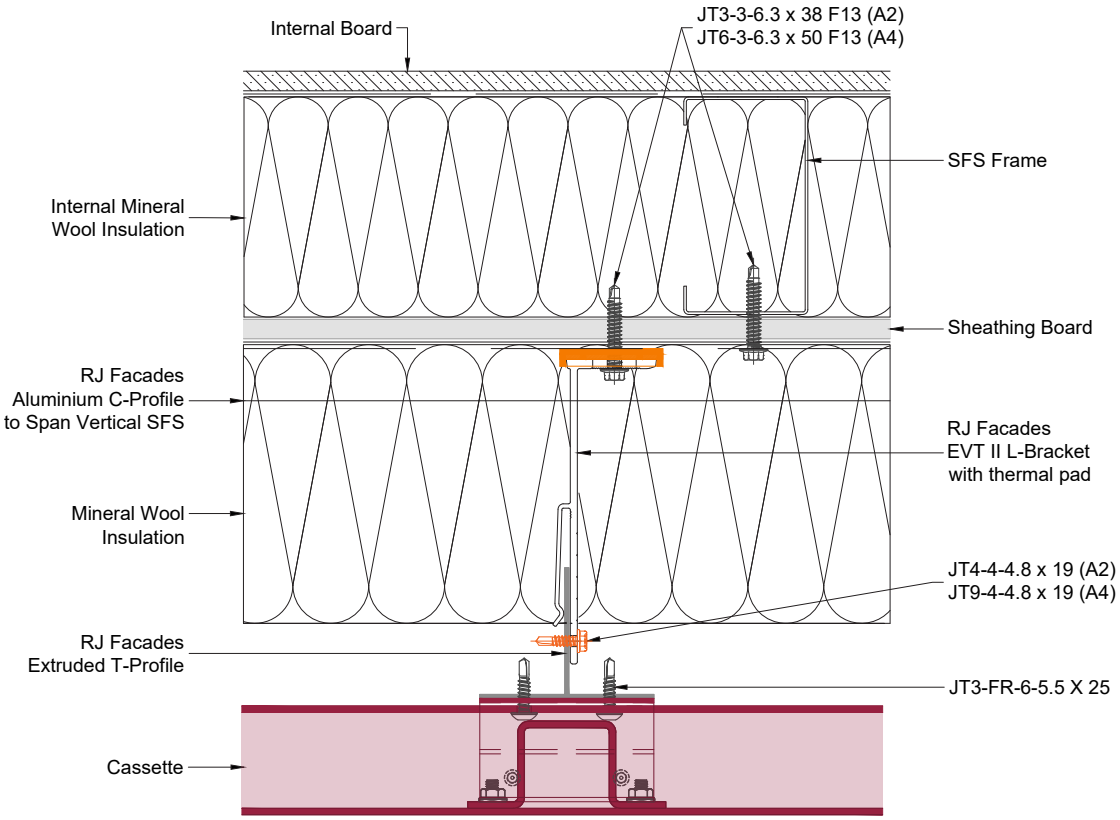

RJ Facades
Extruded L-Profile
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
RJ Facades EVT II
Double L-Bracket
with thermal pad
JT3-FR-6-5.5 X 25
Internal Mineral
Wool Insulation
JT3-3-6.3 x 50 F13 (A2)
JT6-3-6.3 x 50 F13 (A4)
SFS Frame
RJ Facades
Aluminium C-Profile
to Span Vertical SFS
RJ Facades EVT II
Single L-Bracket
with thermal pad
Cassette
Rainscreen Panel
Mineral Wool
Insulation
Internal Board
Sheathing Board

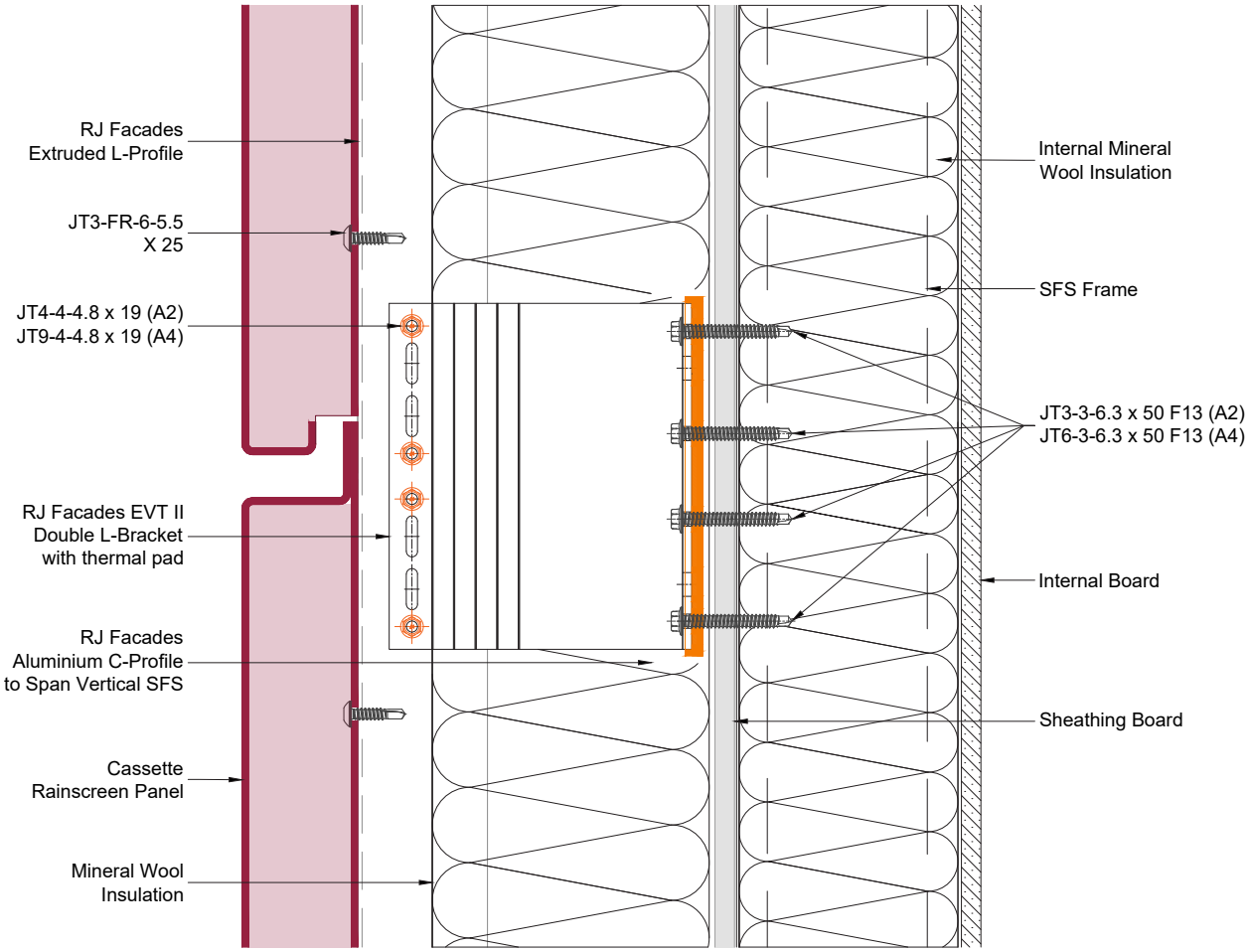
Through Fix Cassette



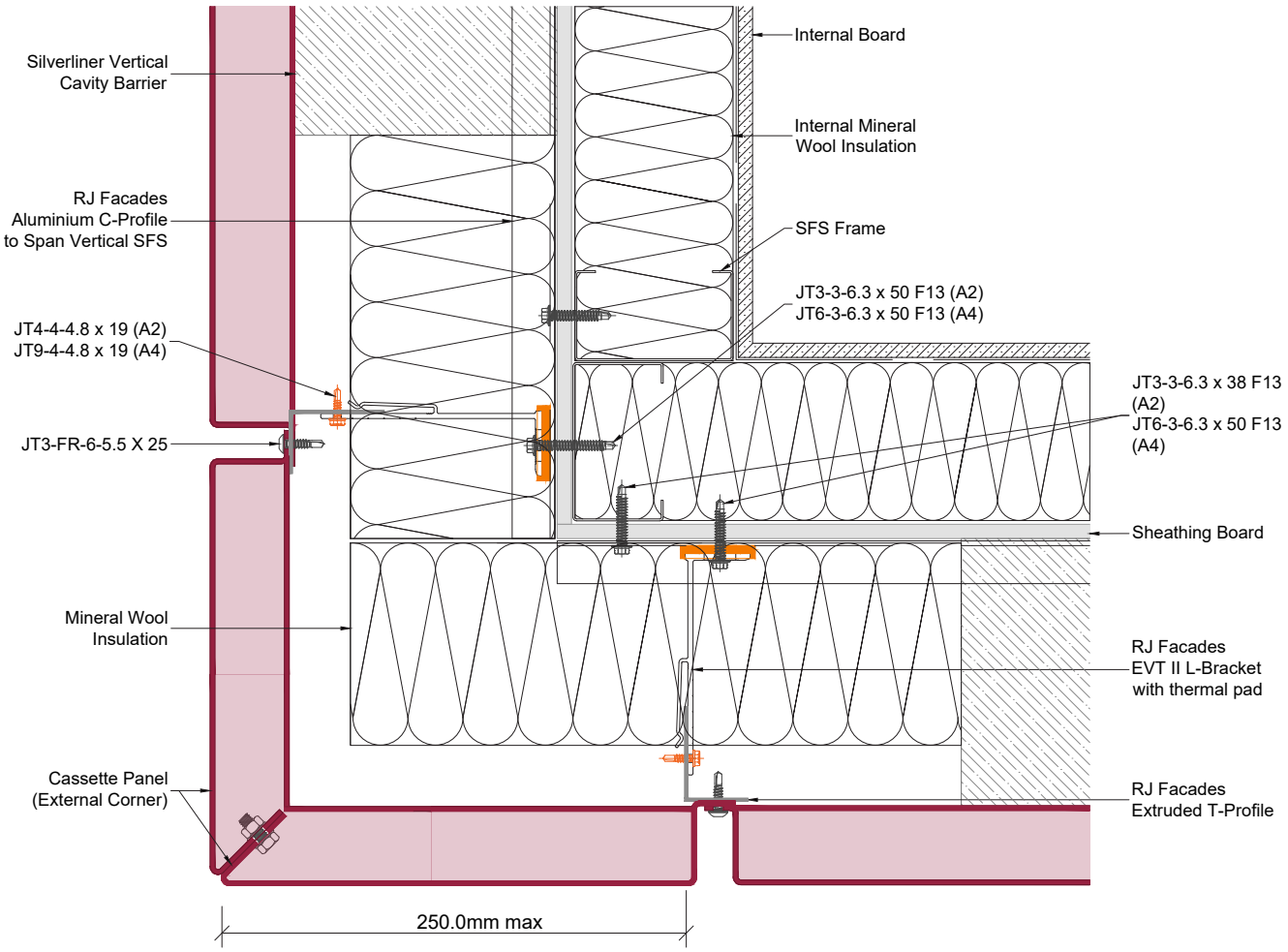

RJ Facades
Extruded L-Profile
RJ Facades EVT II
Single L-Bracket
with thermal pad
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
JT3-FR-6-5.5 X 25
Cassette
Rainscreen Panel
Pressed Cill
Flashing
Internal Mineral
Wool Insulation
Sheathing Board
JT3-3-6.3 x 50 F13 (A2)
JT6-3-6.3 x 50 F13 (A4)
SFS Frame
Internal Board

Through Fix Cassette

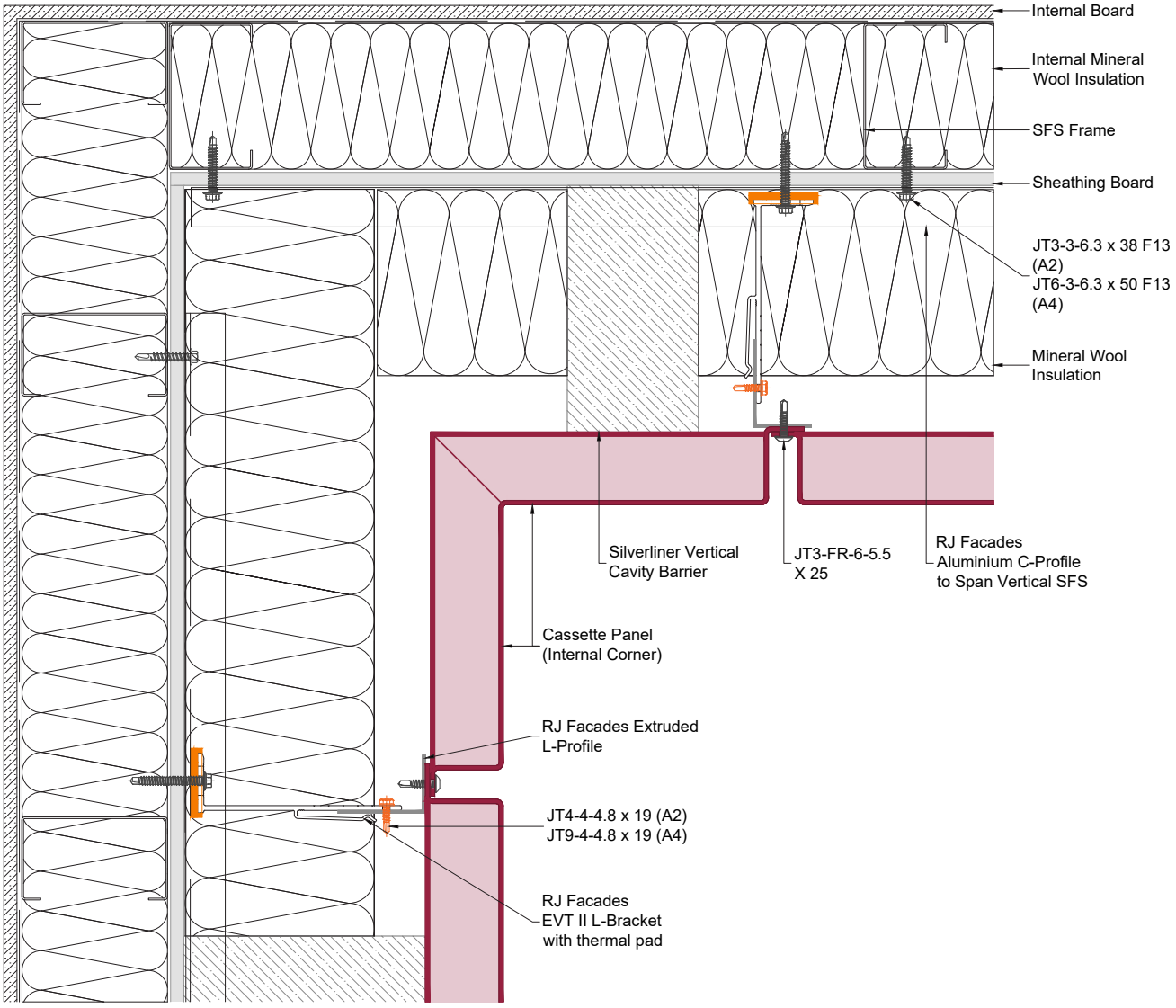



RJ Facades
Extruded L-Profile
JT3-FR-6-5.5
X 25
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
RJ Facades EVT II
Double L-Bracket
with thermal pad
RJ Facades
Aluminium C-Profile
to Span Vertical SFS
Cassette
Rainscreen Panel
Mineral Wool
Insulation
Internal Mineral
Wool Insulation
SFS Frame
JT3-3-6.3 x 50 F13 (A2)
JT6-3-6.3 x 50 F13 (A4)
Internal Board
Sheathing Board

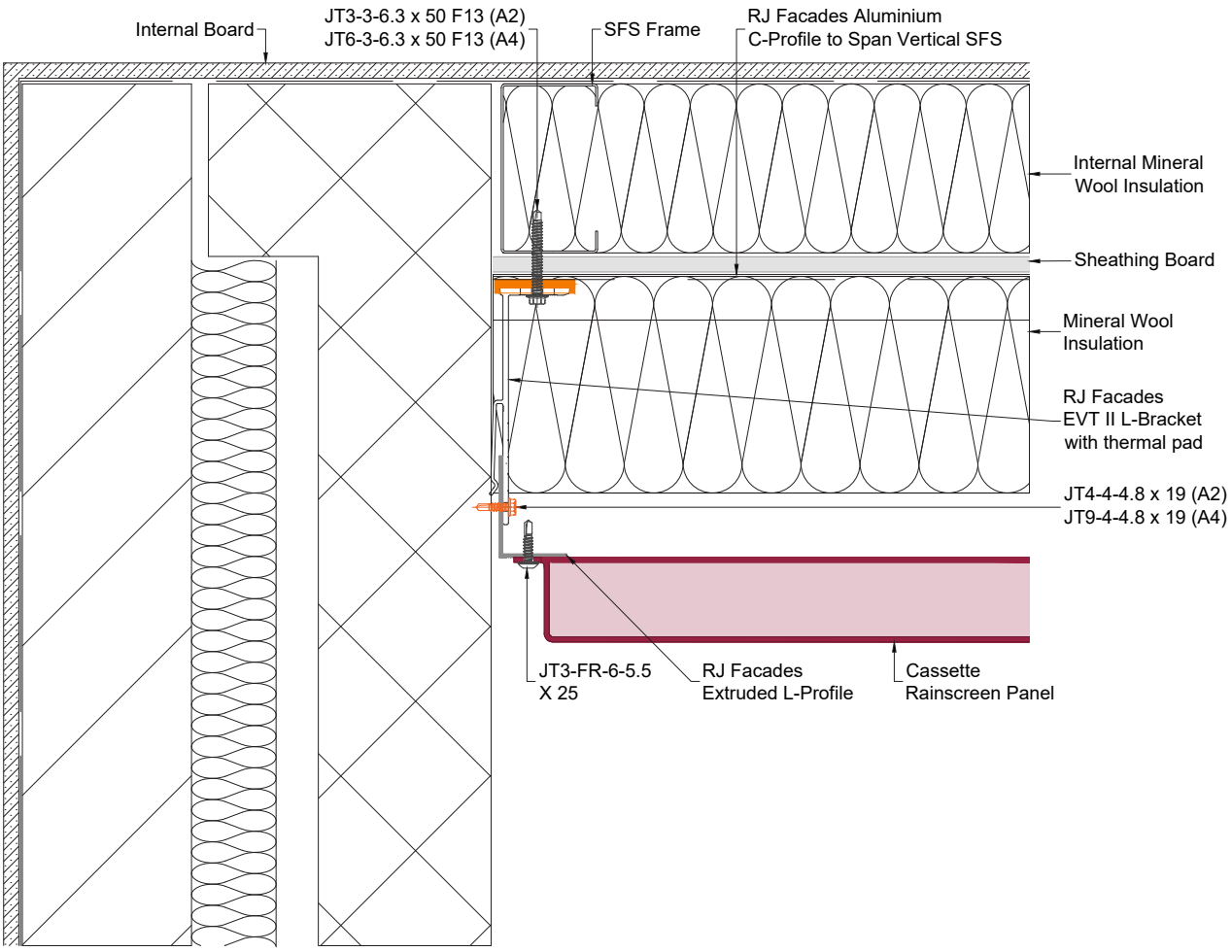
Through Fix Cassette

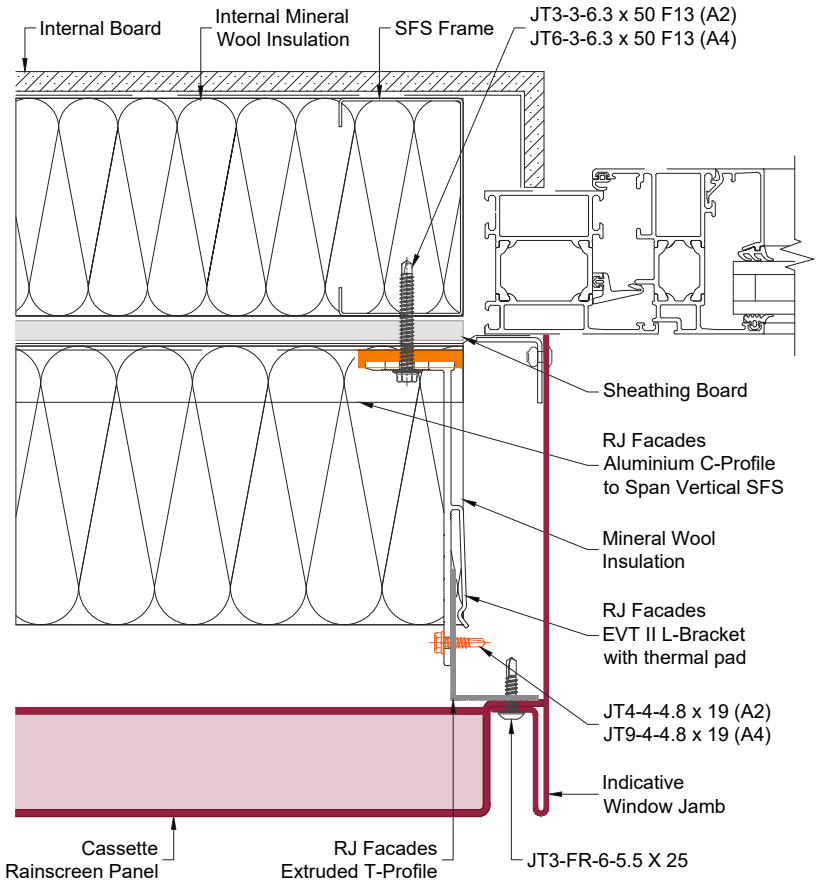


Through Fix Cassette

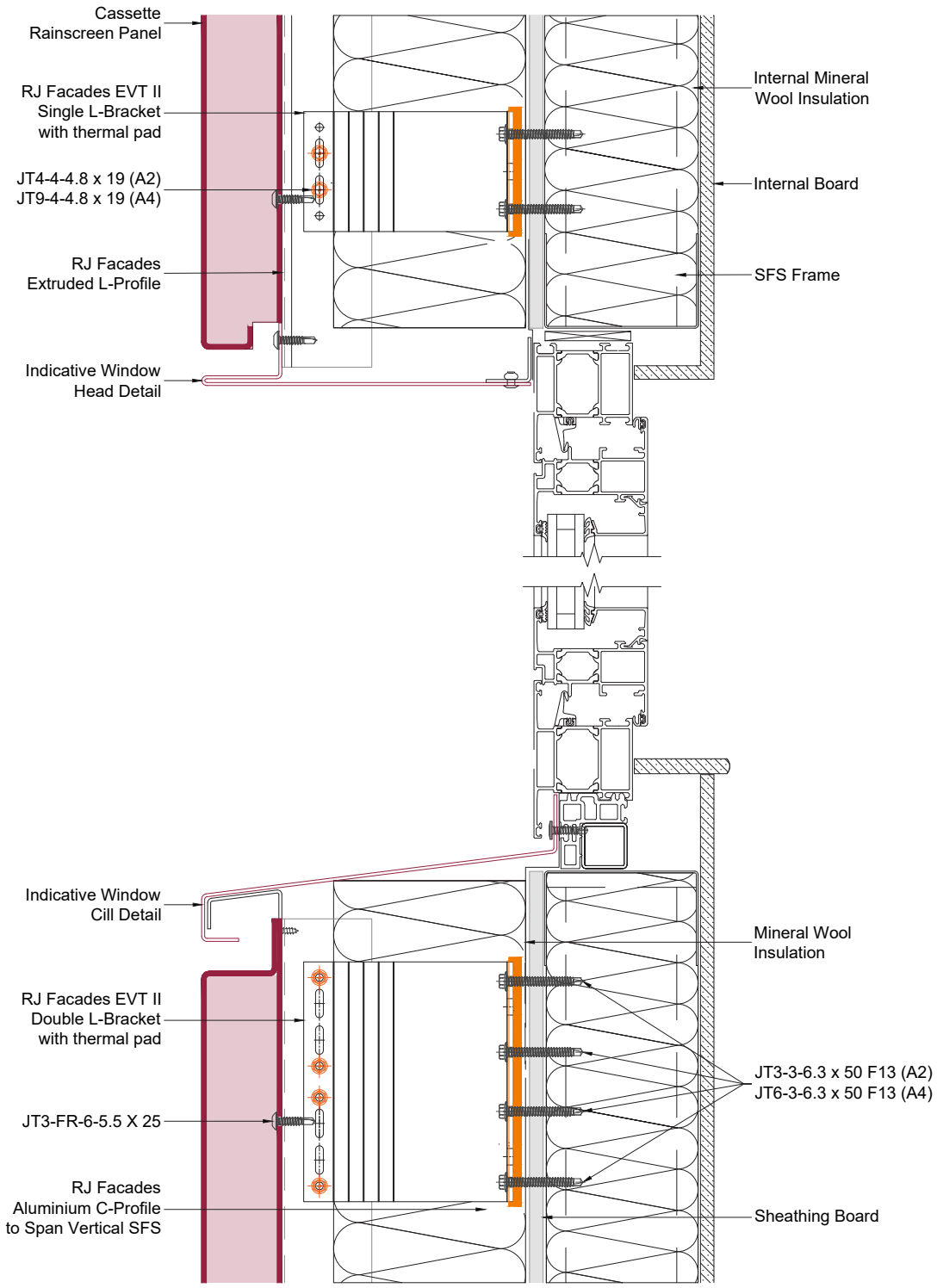


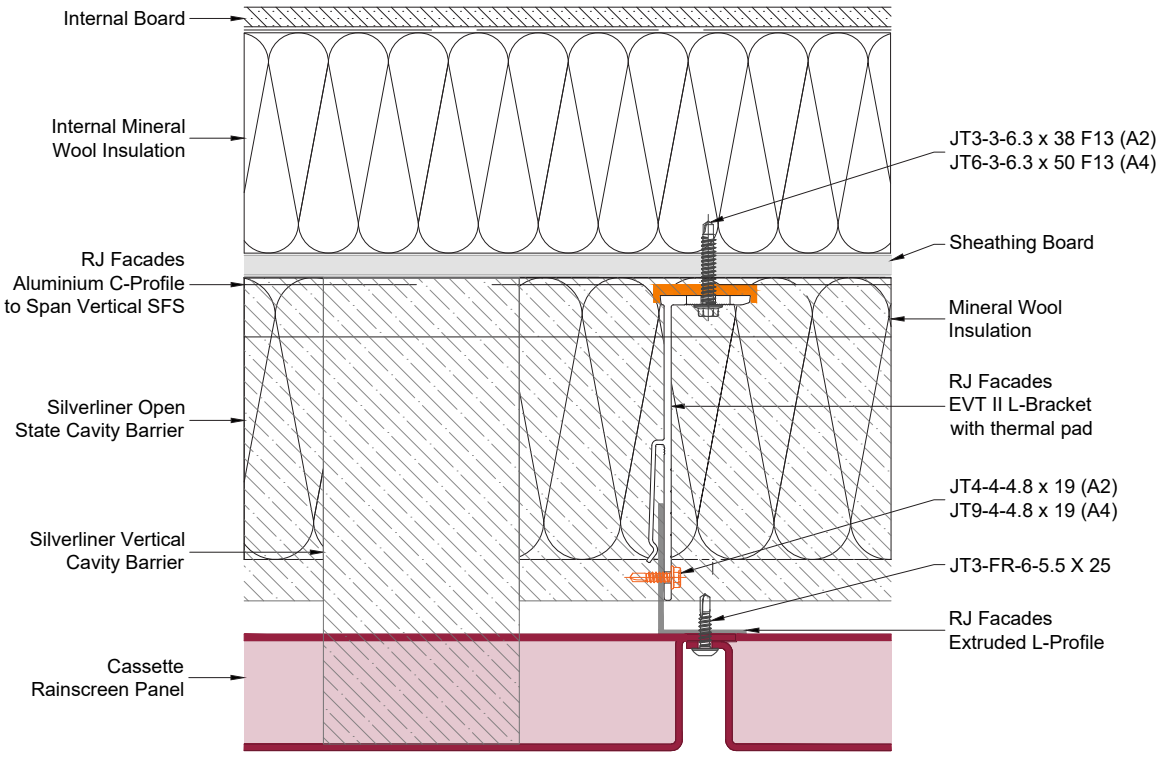
Through Fix Cassette




Internal Board
Internal Mineral Wool Insulation
SFS Frame
JT3-3-6.3 x 50 F13 (A2)
JT6-3-6.3 x 50 F13 (A4)
Sheathing Board
RJ Facades Aluminium C-Profile to Span Vertical SFS
Mineral Wool Insulation
RJ Facades EVT II L-Bracket with thermal pad
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
Indicative Window Jamb
Cassette Rainscreen Panel
RJ Facades Extruded T-Profile
JT3-FR-6-5.5 X 25

Through Fix Cassette




Internal Board
Internal Mineral Wool Insulation
RJ Facades Aluminium C-Profile to Span Vertical SFS
Silverliner Open State Cavity Barrier
Silverliner Vertical Cavity Barrier
Cassette Rainscreen Panel
JT3-3-6.3 x 38 F13 (A2)
JT6-3-6.3 x 50 F13 (A4)
Sheathing Board
Mineral Wool Insulation
RJ Facades EVT II L-Bracket with thermal pad
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
JT3-FR-6-5.5 X 25
RJ Facades Extruded L-Profile

Soffit

The system is an optimal solution for large and flat facades using L-brackets, vertical rails and special designed EVT II Soffit Brackets.

An EVT II Single L-bracket is typically used in all positions on the vertical rail as the EVT II Horizontal Adaptor evenly distributes the dead load across the panel.

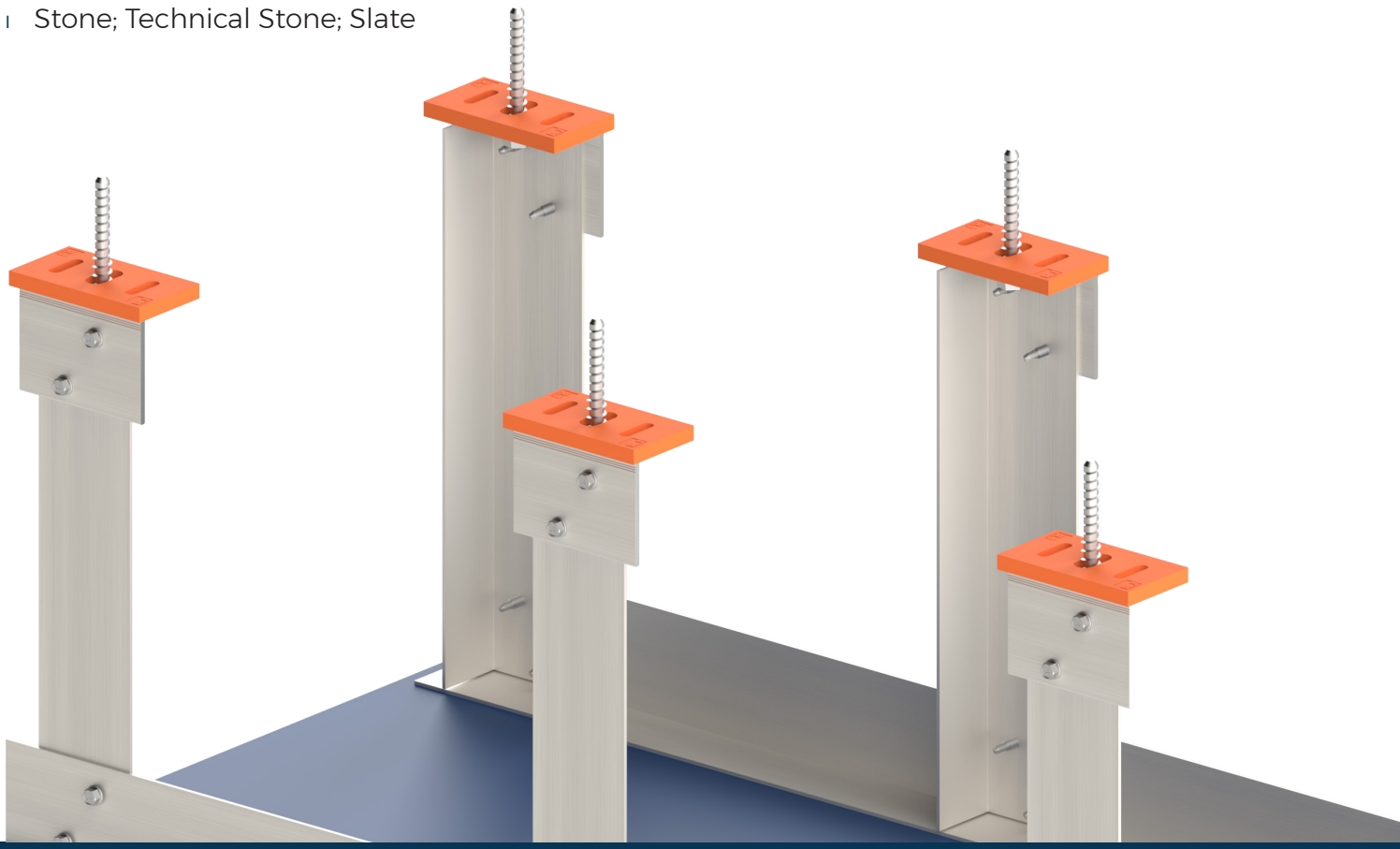
Soffit design is constructed using FEA software to calculate deflection and the bending moments in the components. Through this analysis it is possible to design non-standard soffits up to 800mm in depth.

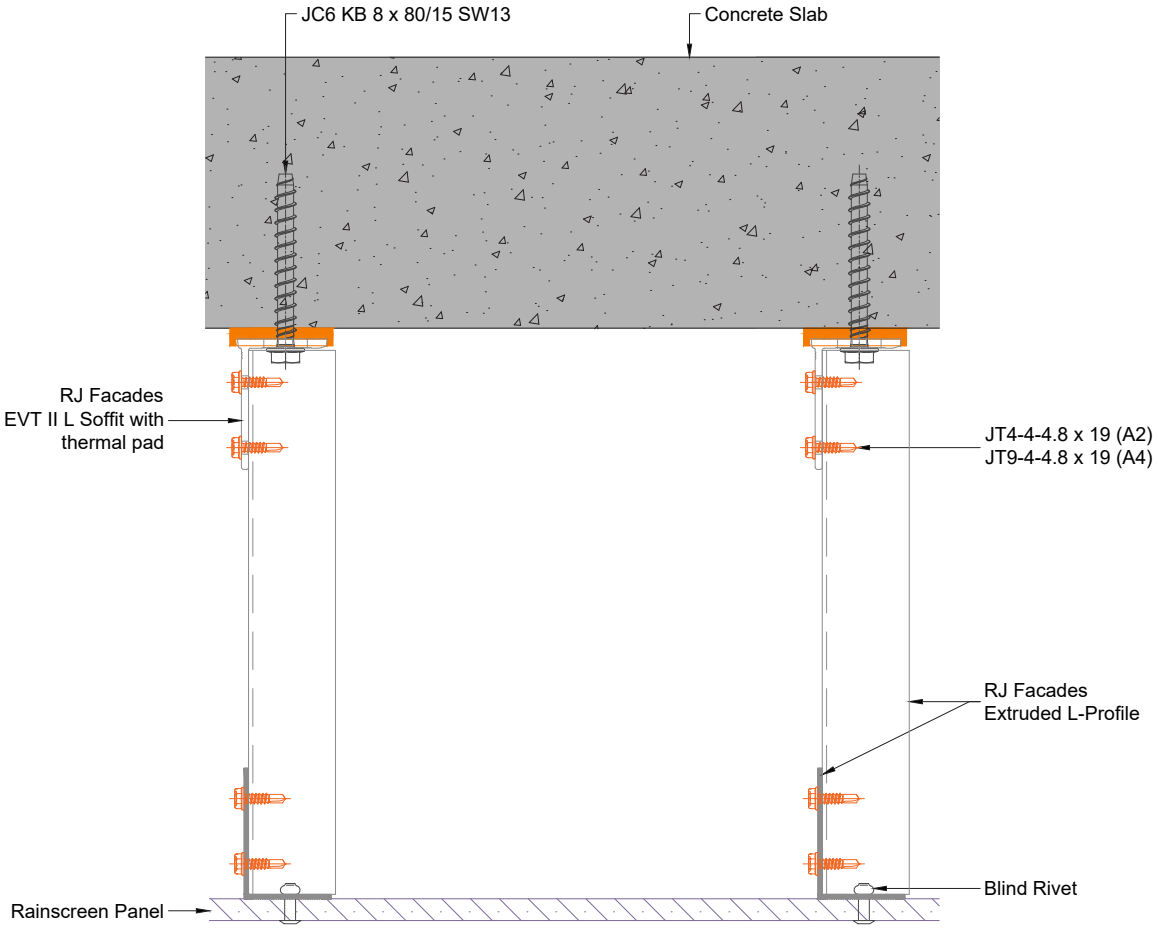
Main advantages:

- Fast, easy and secure mounting of Ornate and stone facades over 40mm in thickness.
- Optimization of the substructure by optimal load distribution to vertical supporting pillars
- Materials suitable for hanging:
  stone
  ornate
- Mounting method: horizontal profile connections

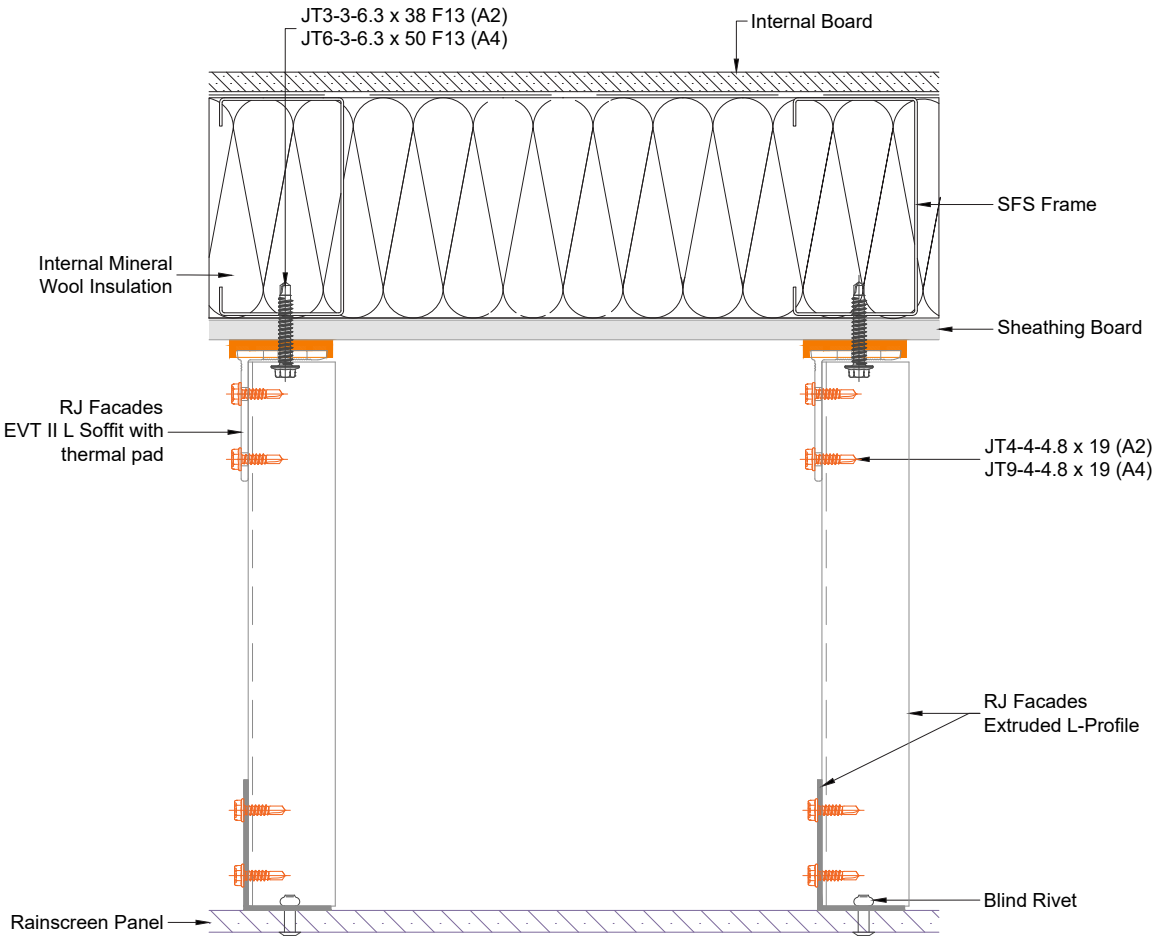
Cladding Materials

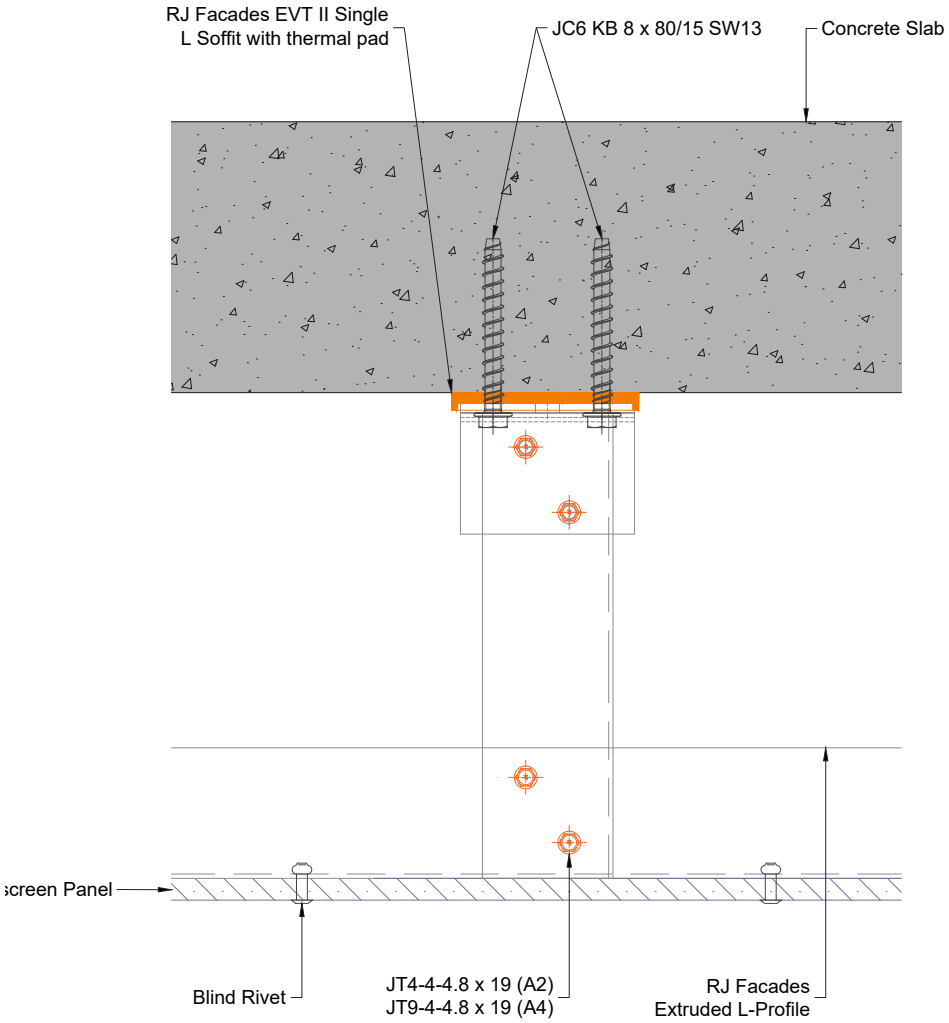
- Stone; Technical Stone; Slate



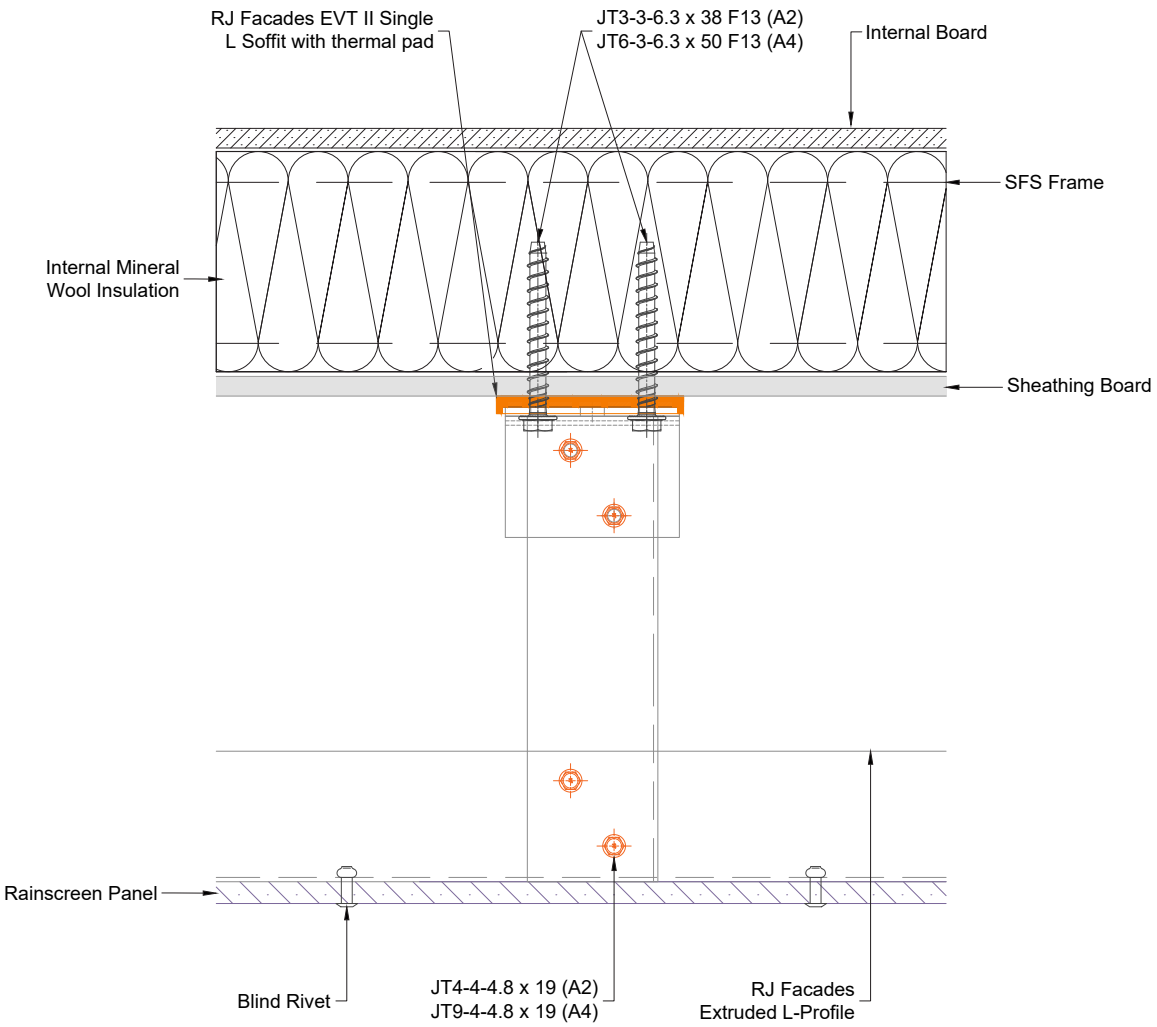

JC6 KB 8 x 80/15 SW13
Concrete Slab
RJ Facades
EVT II L Soffit with
thermal pad
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
RJ Facades
Extruded L-Profile
Blind Rivet
Rainscreen Panel

Soffit


JT3-3-6.3 x 38 F13 (A2)
JT6-3-6.3 x 50 F13 (A4)
Internal Board
SFS Frame
Internal Mineral
Wool Insulation
Sheathing Board
RJ Facades
EVT II L Soffit with
thermal pad
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
RJ Facades
Extruded L-Profile
Blind Rivet
Rainscreen Panel


RJ Facades EVT II Single
L Soffit with thermal pad
JC6 KB 8 x 80/15 SW13
Concrete Slab
screen Panel
Blind Rivet
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
RJ Facades
Extruded L-Profile

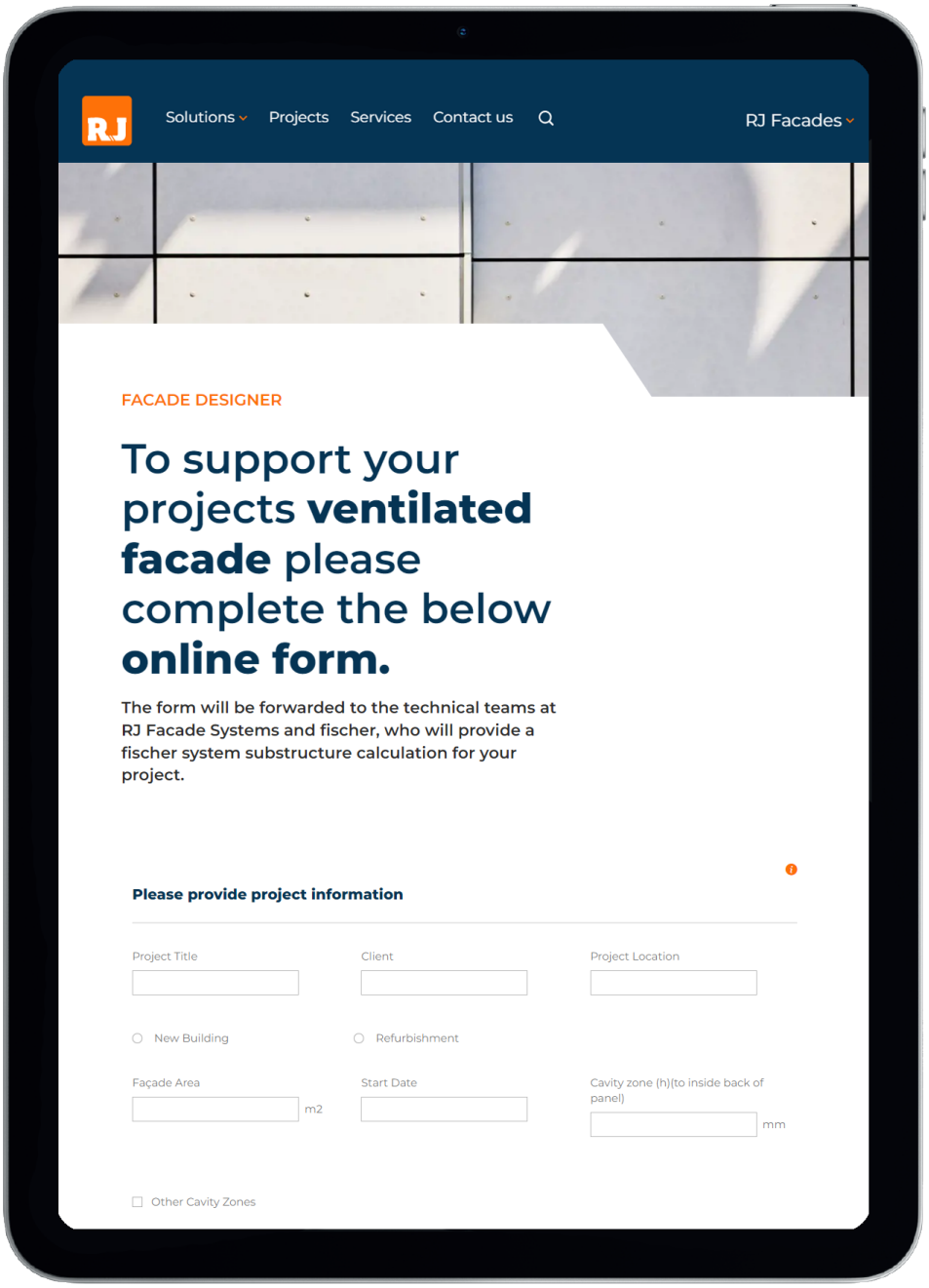
Soffit


RJ Facades EVT II Single
L Soffit with thermal pad
JT3-3-6.3 x 38 F13 (A2)
JT6-3-6.3 x 50 F13 (A4)
Internal Board
SFS Frame
Internal Mineral
Wool Insulation
Sheathing Board
Rainscreen Panel
Blind Rivet
JT4-4-4.8 x 19 (A2)
JT9-4-4.8 x 19 (A4)
RJ Facades
Extruded L-Profile

Facade Designer

RJ Facade Designer

For each calculation of new projects by RJ Facades, it is necessary for a project checklist form to be filled. It includes detailed information, which helps customers to receive the most accurate and precise offer. The offers may vary depending on the cladding/facade material; the dimensions and weight of the material; wind load; floor heights; thickness of thermal insulation; structural base; raster of the facades; fixing methods; and different ventilated facade systems. In order to achieve a qualitative calculation, it is necessary for the drawings to be submitted via email/courier in CAD format. If there are any specific features of the project, these are also taken into consideration.



Structural Calculations Liability

Structural Calculations

RJ Facade Systems carry out structural calculations on components we supply to confirm suitability to support the rainscreen facade panels. The calculations are covered by £5,000,000 PI insurance providing the items have been supplied by RJ Facade Systems.

Standards

The quasi-static calculations for the building structure are carried out according to the following standards:

Eurocode 1 Actions on structures:	BS EN 1991-1-4:2005
Eurocode 3 Design of steel structures:	BS EN 1993-1-4:2005
Eurocode 4 Design of aluminium structures:	BS EN 1999-1-1:2023
National annex to Eurocode 4:	NA to BS EN 1999-1-1:2007+A1:2009

CWCT Systemised Standards for Building Envelopes

Certification

The calculations utilise the structural performance data stated in the following certification:

Certificate for UKAS UL Mark Mechanical Brick Slip System (R41245-1)

Certificate for UKAS UL Mark Cladding Support System (R40530-1 Rev 6)

CWCT Sequence B Test Certificate (R4791092526 Rev 3)

The system also has an A1 reaction to fire certificate issued by Warringtonfire.

Loads on facade

We ask our customers to provide all the necessary information to determine the loads on the facade panel by completing our online facade designer form. The two main loads acting on the facade panels are from wind suction / pressure (variable action) and the weight of the panel (permanent action). Maintenance (Imposed) loads can also be present and must be stated when completing the facade designer form otherwise it will be assumed that they are not acting on the facade.

Calculation process

The required spacing of the vertical profiles is determined. This can be dictated by the SFS substrate and / or the type of the facade panel itself. Once the spacing has been determined the proportion of the loads acting on the vertical profile can be calculated. It assumed the vertical profiles shares the load of half of the panel each side, therefore a whole span. These loads are applied to the profile as a uniformly

distributed load (UDL). A beam analysis is carried out using formulae from the engineers pocket book. For more complex arrangements beam analysis software is used. The supports are assumed to be simply supported. The support reactions, bending moment and deflection are calculated.

The deflection is checked against the allowable deflection for the type of facade material stated in the CWCT standard (Section 3.5.2.9).

Aluminium, Steel:	Span/90
Brickslips:	Span/250
Large brittle panels:	Span/360

The bending moment is assessed according to Eurocode 4 (formula 6.25). The bending moment analysis takes local buckling into account with the incorporation of the shape factor α (table 6.4)

The support reactions from the beam analysis represent the forces acting on the bracket that support the vertical profile back to the wall. Wind load and dead load will be acting on the Fixed Point Holder (FPH) and only wind load on the Sliding Point Holder (SPH). The combination of forces are assessed against the performance data stated UL Mark referenced at the beginning of this document. The performance data in the UL mark is based on the yield strength of the bracket material (f0) reduced by the appropriate safety factor from (γ_{M1}).

As the brackets connected to the vertical profile are considered to be simply supported only the combination of tension and shear are acting on the tek screws connecting the two together. The resultant shear design action (VSd) is checked against the design resistance (VRd) published in the relevant European Technical Assessment (ETA). As there is relevant UK National Annex the material safety factor (γ_{M2}) of 1.25 overrides the value of 1.33 published in the ETA.

The final check in the calculations is on the fixings connecting the bracket back to the substrate. As the deadload is acting at the end of the FPH it generates a bending moment which causes varying actions on each fixing. It is assumed that the bracket pivots around the lower most fixing with each subsequent fixing above it sharing a higher proportion of the bending moment. Therefore the highest tensile load is acting on the uppermost fixing in the bracket. The utilisation of the combined tension and shear is assessed against either the relevant ETA or manufacturers test data. Where the brackets are fixed to concrete the fixing performance is assessed in the manufacturers software e.g. Ejot Anchorfix. If the fixings are installed into blockwork then the performance of the fixing will need to be verified by onsite pull testing. This would be carried out by RJ Engineers according to the Construction Fixings Association Guidance Notes for site testing. All RJ Engineers are certified as advanced level testers.

Liability

The stated data and calculating methods are provided by RJ Facades as a guideline only.

The information given in this catalogue does not substitute all applicable regulations – Eurocodes, harmonized European standard, national or regional building codes.

The specific conditions and technical details of every particular project have to be take in consideration.

The right choice of all elements, as well as any special requirements regarding stability of the structure, must always be considered by the structural/facade engineer responsible for the project.

The solutions presented in these pages are indicative and cannot cover all possible project cases. Because of that, every single project has to be evaluated by the structural/facade engineer in charge, taking into consideration the specific features, such as climate conditions, location, orientation, etc.

RJ Facades is not liable for any calculation and conclusions made on the basis of the stated information. All calculations and specifications must be estimated, endorsed and guaranteed by an architect, engineer, professional or legal entity authorized by law for such activities.

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