

DCT NVELOPE
**Thermally
broken cladding
support systems**



Essential to architects and installers

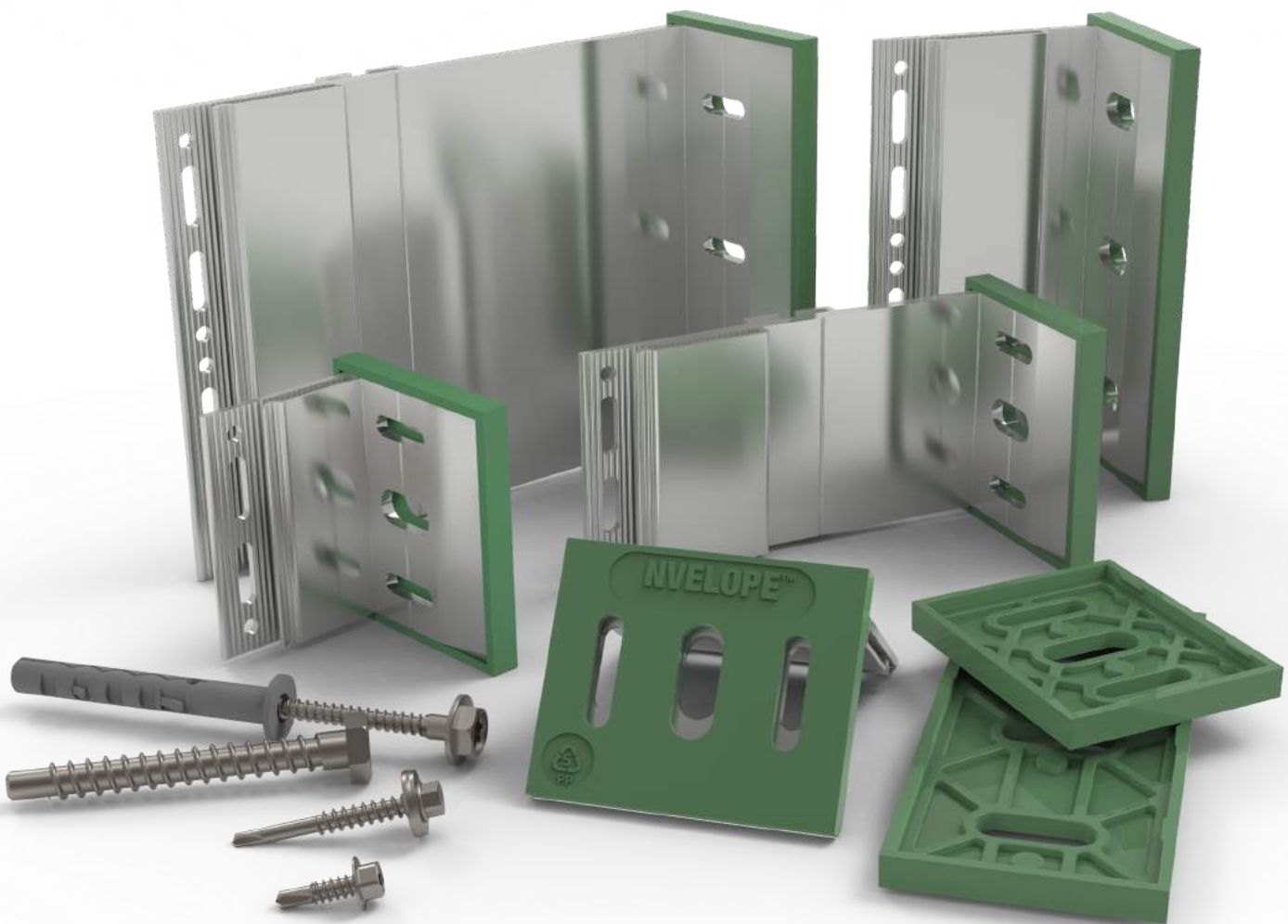
NVELOPE®

Thermally broken cladding support systems

There are many characteristics that any cladding support system must have to meet today's building requirements. Demanding energy standards and building codes that need to be met create design problems to overcome.

With Nvelope thermally broken cladding support systems:

- Structurally sound
- Thermally predictable
- Safe in a fire
- Suitable for most cladding types
- Easy to install / adjust
- Cost effective
- Wide range of cavity depths



Sustainability

Our green credentials

Bridging the thermal gap

Emphasis on the performance of the building details and additional losses through linear thermal bridging is paramount. Thermal bridging is the coupling of wall elements that work to transfer valuable energy into and out of the system. Since the attachment of ventilated cladding must go through the thermal insulation into the substrate, this cannot be avoided. Nvelope NV and NH brackets provide for the thermal decoupling of the substructure from the ventilated facade through thermal separation layers. The brackets are pre-assembled with thermal isolators which help reduce thermal bridging. In addition, Nvelope isolators prevent a chemical reaction from occurring between the aluminum brackets and the lime in the concrete frame as well as bimetallic corrosion between steel and aluminum.

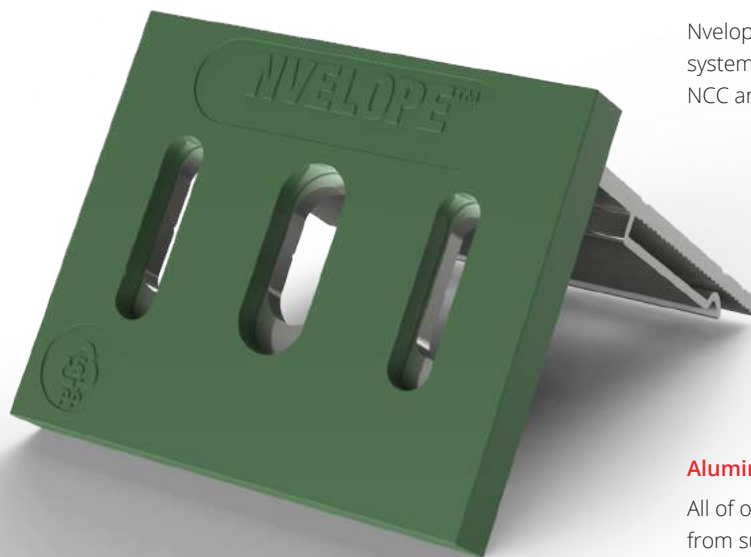
Nvelope Isolator

- Featured as standard on all Nvelope brackets
- Pre-fastened isolators enable quick bracket assembly
- Flame retardant polypropylene copolymer
- Recyclable/ecologically friendly
- Low thermal conductivity passive house application

Performance in fire

Nvelope cladding support brackets and rails are made of non-combustible, sustainable aluminum, which does not burn.

Nvelope cladding attachment systems comply to all relevant NCC and AS/NZS standards.



Aluminum

All of our brackets are produced from sustainable aluminum and are fully traceable.



Red List Free

Nvelope thermally broken cladding support system is Red List Free. Visit the International Living Future Institute (ILFI), for the complete Nvelope Declare label details.

NVELOPE® systems

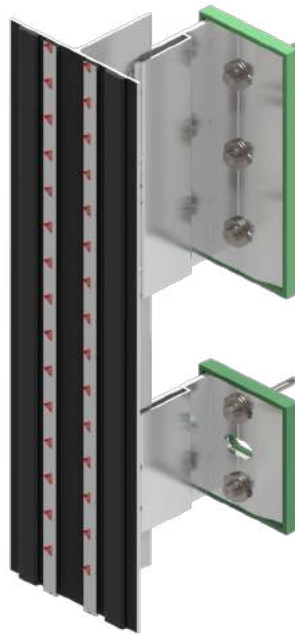
NV1

Helping hand sub-framing system, suitable for face fixing, screw / rivet fix cladding elements.



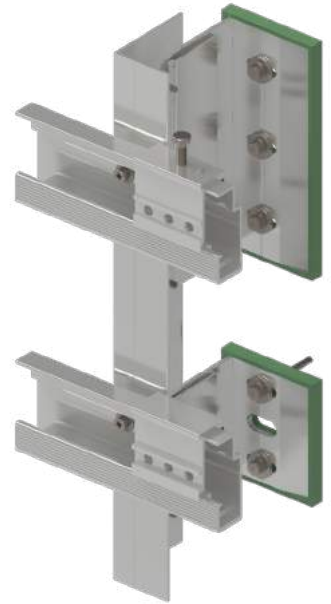
NV2

Helping hand sub-framing system, suitable for concealed chemical structural bond fix cladding applications (Sika sikatack panel system).



NV3

Helping hand sub-framing system, suitable for concealed mechanical fix cladding applications.



NV9

Top hat system, suitable for face fixing / rivet fixing cladding elements & rainscreens that require a shallow cladding zone.



NV93

Top hat system, suitable for concealed mechanical fix cladding elements & rainscreens that require a shallow cladding zone.



NVF2F

Heavy duty helping hand sub-framing system, suitable for vertical floor to floor applications, where no intermediate support is available



NV6

Helping hand sub-framing system, suitable for supporting vertical or horizontal timber or cement weatherboarding and panels.



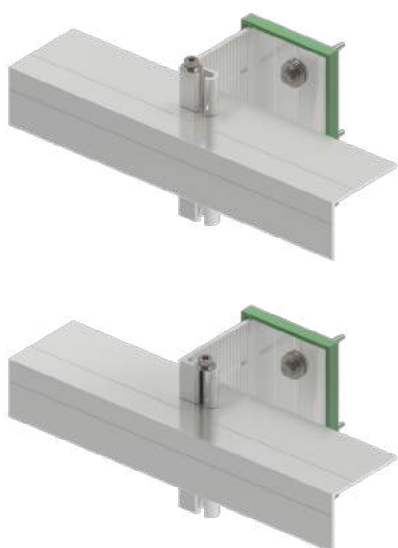
NV7

Helping hand sub-framing system, suitable for concealed fix cassette, ACM, zinc, & solid aluminium cladding panels.



NH3

Helping hand horizontal rail system, suited for face fixed narrow vertical panels.



NS1

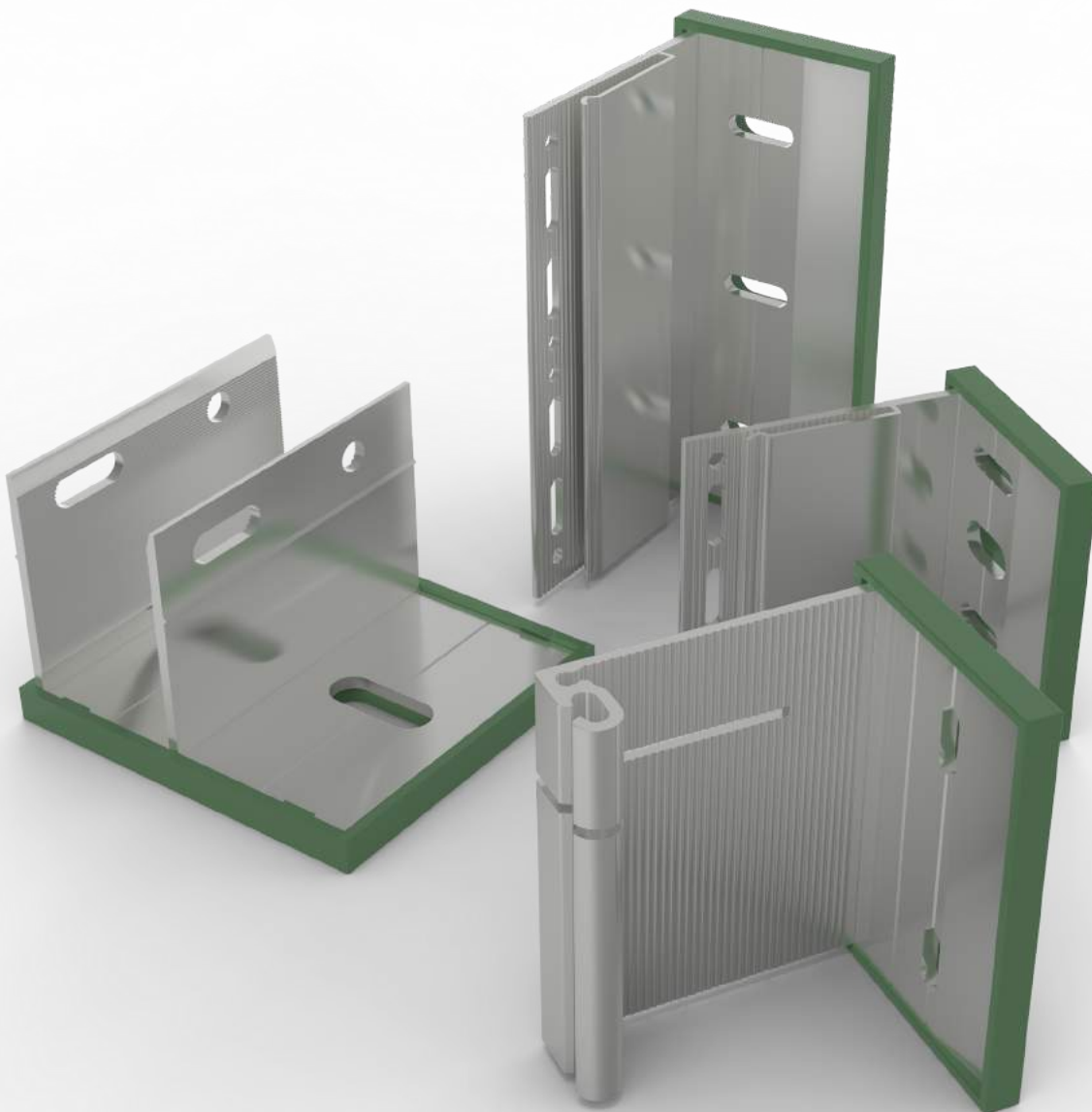
Soffit system, suitable for face fixed applications, with a maximum panel weight of 75kg/m² and max drop of 1000mm



Brackets

the system's backbone

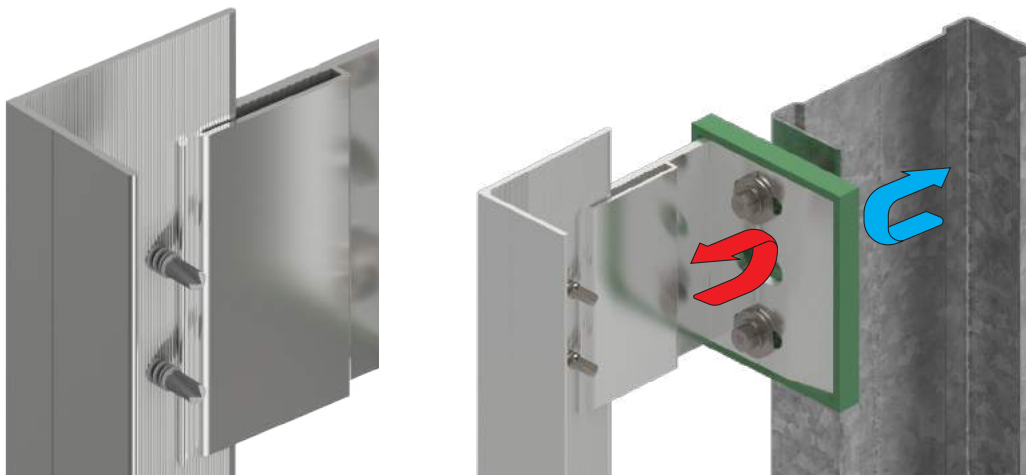
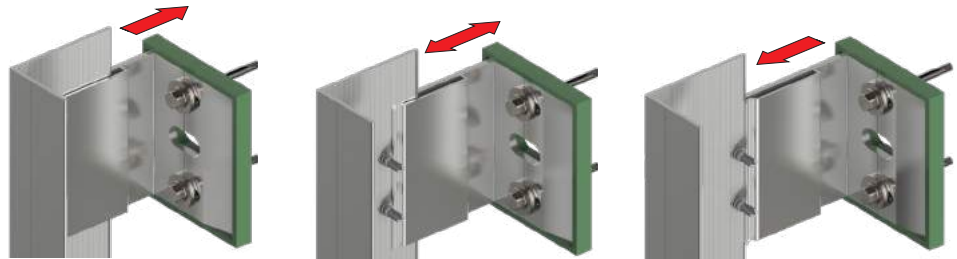
Nvelope® vertical brackets are the backbone of all Nvelope® cladding systems. Available in standard height dimensions of 40 - 300mm, there are two size categories single and double. Single brackets allow the facade to “float” on the subconstruction by absorbing wind load and allowing for expansion and contraction. Double brackets support both vertical weight loads and horizontal wind loads. Brackets are specifically designed for attachment to steel, masonry or timber substructures.



Bracket Features

Adjustability

Bracket “helping hand” allows for rail insertion depth up to 40mm max, which ensures that facade panels are plumb and true, thus eliminating the need for shims.



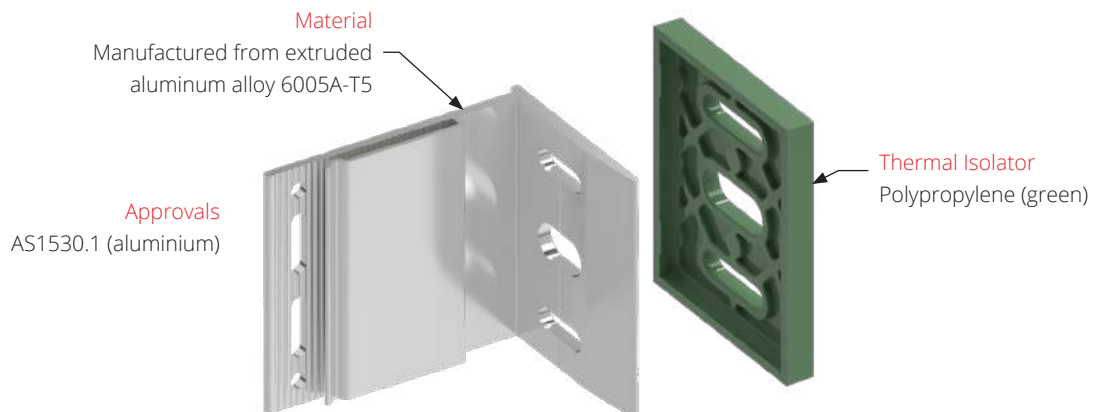
Fast & Easy to Install

The “helping hand” bracket holds the rail in place to allow up to 50% faster install.

Thermal Efficient

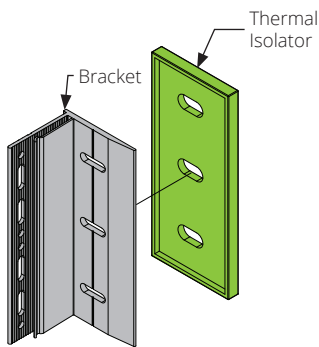
Thermal isolator provides thermal break to reduce energy loss through wall assembly.

Basic Specs

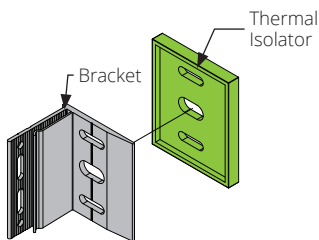


NVELOPE® Vertical Bracket Range

The base sub-framing for the Nvelope® NV1, NV2 and NV3 systems. Nvelope® 'T' and 'L' profiles are fixed using the support brackets, fixed through a series of fixed and sliding points.



Fixed point double bracket

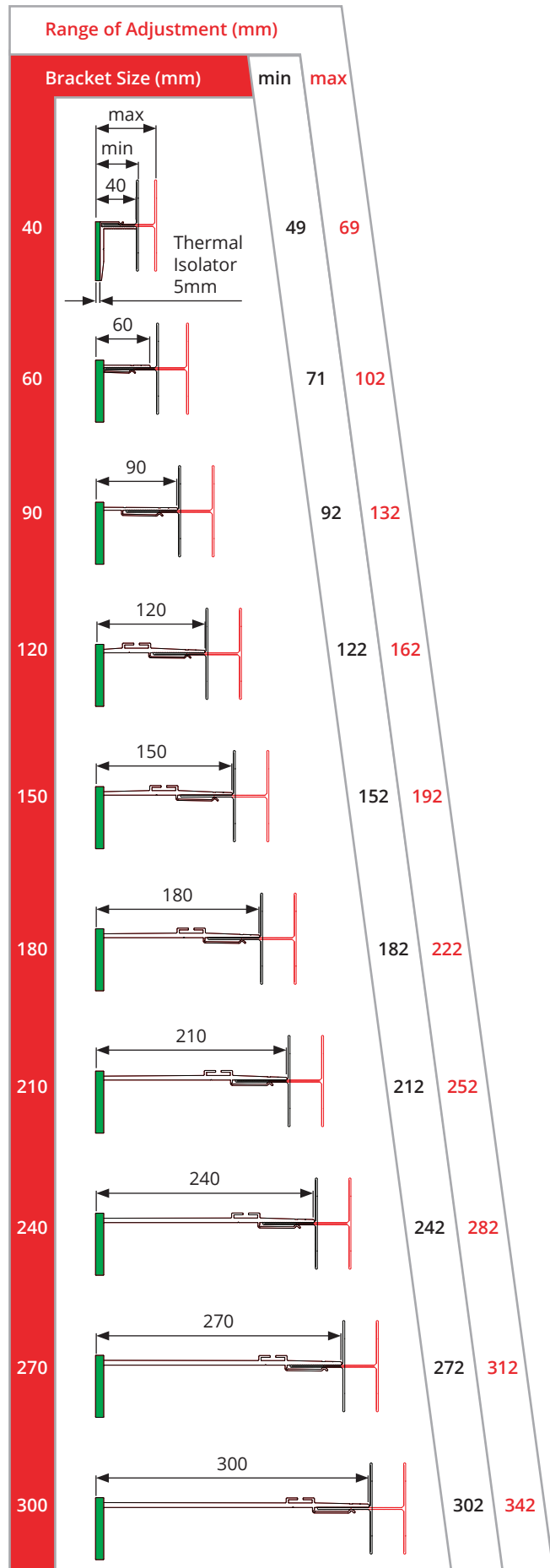


Sliding point single bracket

Note

Isolators are included as standard. If isolators are not required, reduce dimensions by 5mm

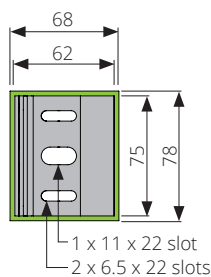
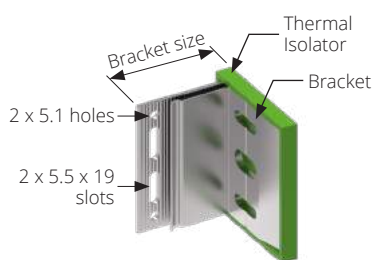
For the NV3 system add 25mm to account for the NV3 carrier profile and hangers



Single Bracket - Universal

For steel, timber, concrete or filled CMU substrate
2 x 6.5 mm slot, 1 x 11mm slot

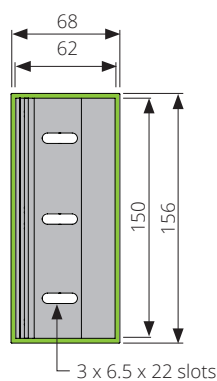
Product Code	Size
	(mm)
01/VB040S-11/6.5	40
01/VB060S-11/6.5	60
01/VB090S-11/6.5	90
01/VB120S-11/6.5	120
*01/VB150S/11-6.5	150
*01/VB180S/11-6.5	180
*01/VB210S/11-6.5	210
*01/VB240S/11-6.5	240
*01/VB270S/11-6.5	270
*01/VB300S/11-6.5	300



Double Bracket - 6.5

For steel and timber substrates
3 x 6.5 mm slot

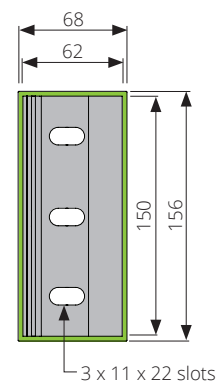
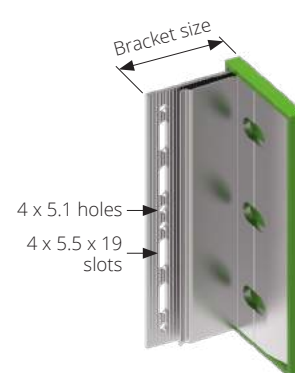
Product Code	Size
	(mm)
01/VB040D-6.5	40
01/VB060D-6.5	60
01/VB090D-6.5	90
01/VB120D-6.5	120
*01/VB150S-6.5	150
*01/VB180D-6.5	180
*01/VB210D-6.5	210
*01/VB240D-6.5	240
*01/VB270D-6.5	270
*01/VB300D-6.5	300



Double Bracket - 11

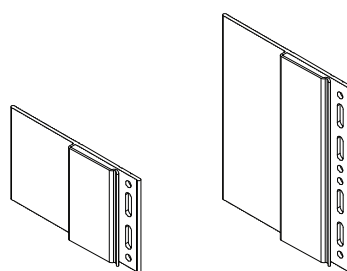
For concrete or filled CMU substrate
3 x 11mm slot

Product Code	Size
	(mm)
01/VB040D-11	40
01/VB060D-11	60
01/VB090D-11	90
01/VB120D-11	120
*01/VB150D-11	150
*01/VB180D-11	180
*01/VB210D-11	210
*01/VB240D-11	240
*01/VB270D-11	270
*01/VB300D-11	300



Bracket Extensions

Product Code	Description
01/EX-PC-75	Bracket Extension piece single
01/EX-PC-150	Bracket Extension piece double



01/EX-PC-75

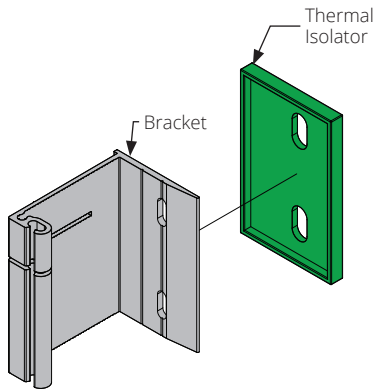
01/EX-PC-150

Bracket overall size (mm)	Range of Adjustment	
	Min	Max
270 + extension	384	424
300 + extension	414	454

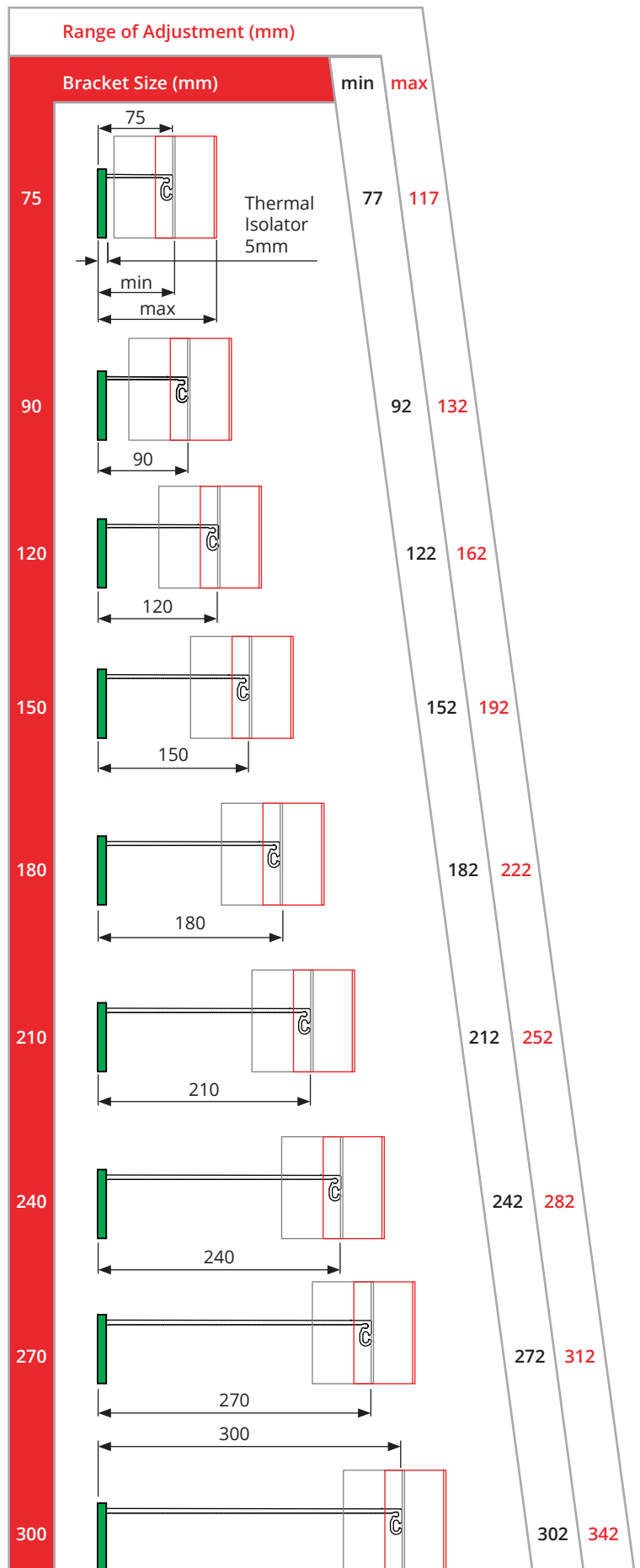
* Brackets subject to availability. Contact DC Tech for further details

NVELOPE® Horizontal Bracket Range

NH3 is the Nvelope® horizontal bracket system suited for face fixed narrow vertical panels.



Note
Isolators are included as standard.
If isolators are not required, reduce dimensions by 5mm



Bracket - 6.5

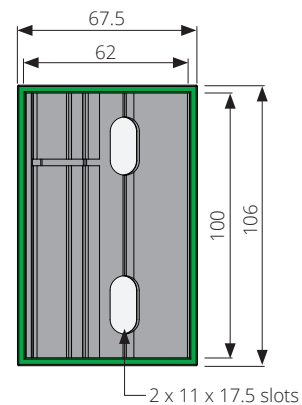
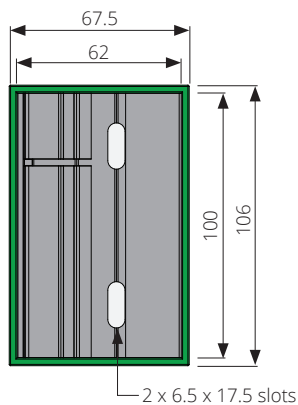
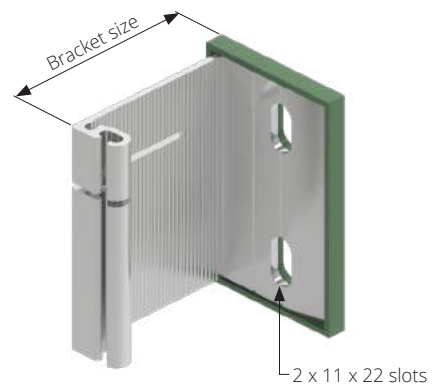
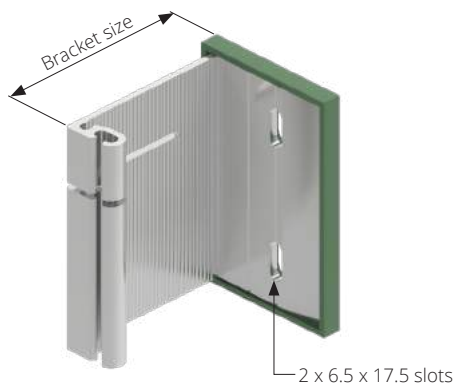
For steel and timber substrates
2 x 6.5 mm slot

Product Code	Size
	(mm)
*01/NH3-075-6.5	75
*01/NH3-090-6.5	90
*01/NH3-120-6.5	120
*01/NH3-150-6.5	150
*01/NH3-180-6.5	180
*01/NH3-210-6.5	210
*01/NH3-240-6.5	240
*01/NH3-270-6.5	270
*01/NH3-300-6.5	300

Bracket - 11

For concrete or filled CMU substrate
2 x 11mm slot

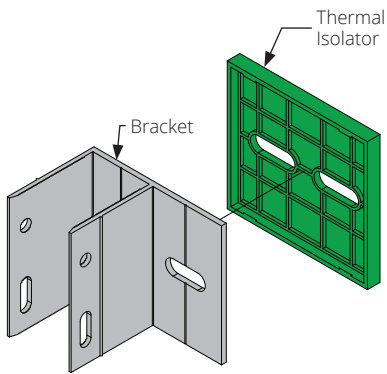
Product Code	Size
	(mm)
*01/NH3-075-11	75
*01/NH3-090-11	90
*01/NH3-120-11	120
*01/NH3-150-11	150
*01/NH3-180-11	180
*01/NH3-210-11	210
*01/NH3-240-11	240
*01/NH3-270-11	270
*01/NH3-300-11	300



* Brackets subject to availability. Contact DC Tech for further details

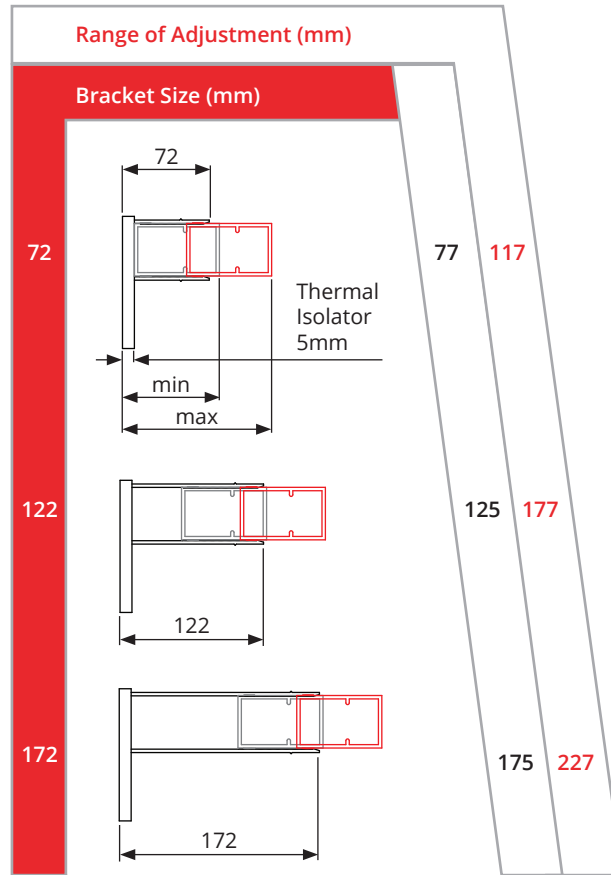
NVELOPE® Floor2 Floor Bracket Range

NVF2F is the subframe system suitable for vertical floor to floor cladding applications. NVF2F can support the NV3 system.



Note

Isolators are included as standard. If isolators are not required, reduce dimensions by 5mm

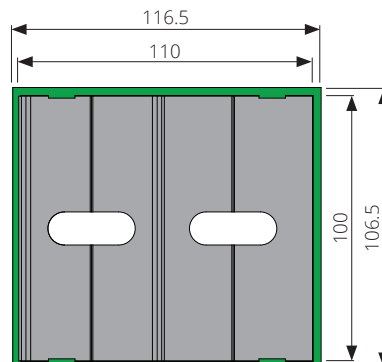
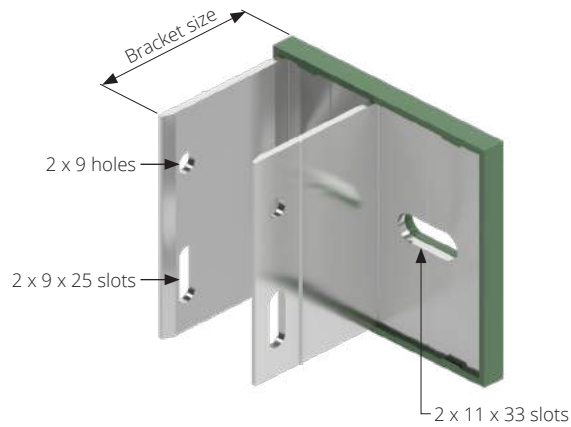


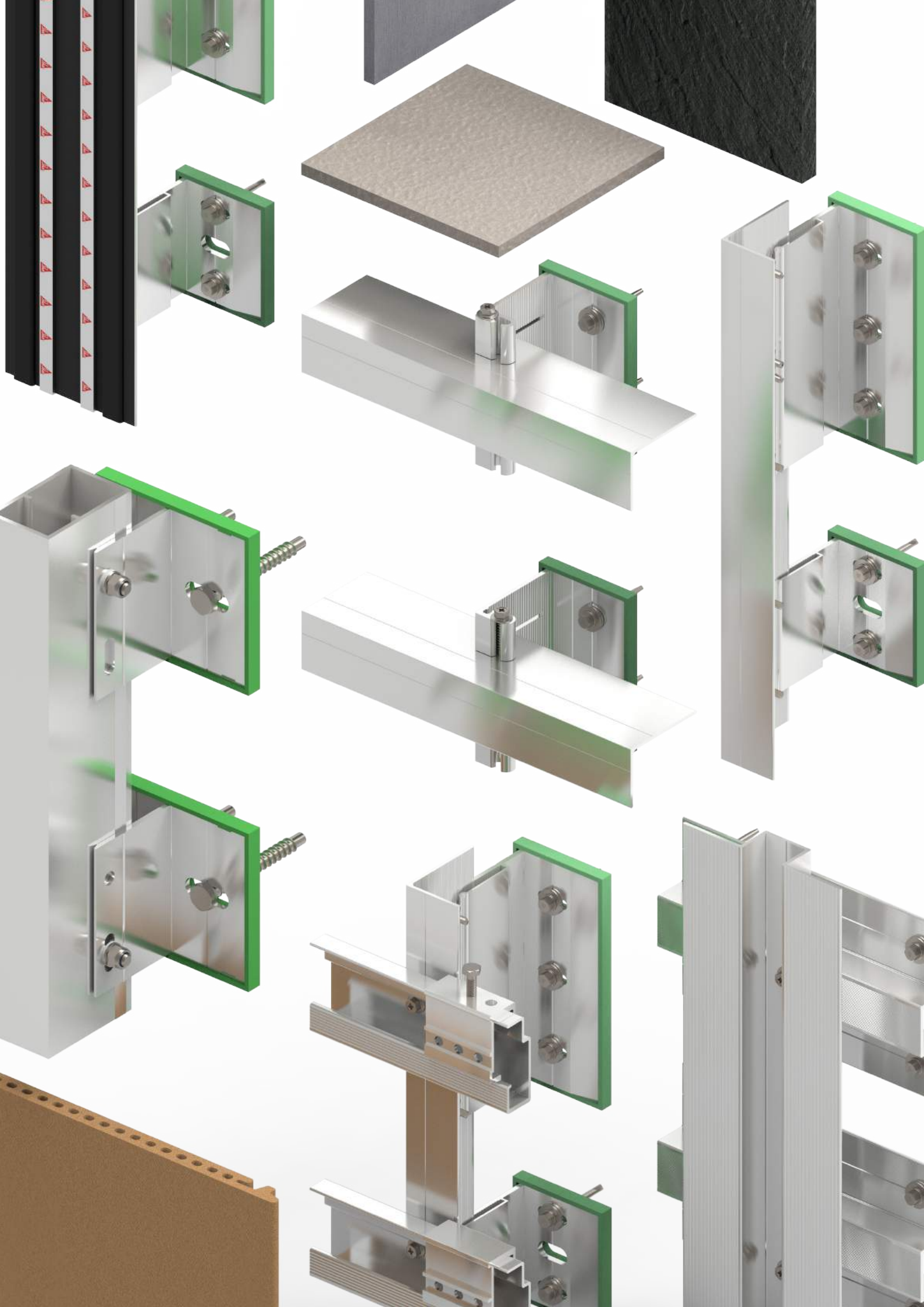
Bracket - 11

For concrete or filled CMU substrate
2 x 11mm slot

Product Code	Size
	(mm)
*01/NVF2F-072	72
*01/NVF2F-122	122
*01/NVF2F-172	172

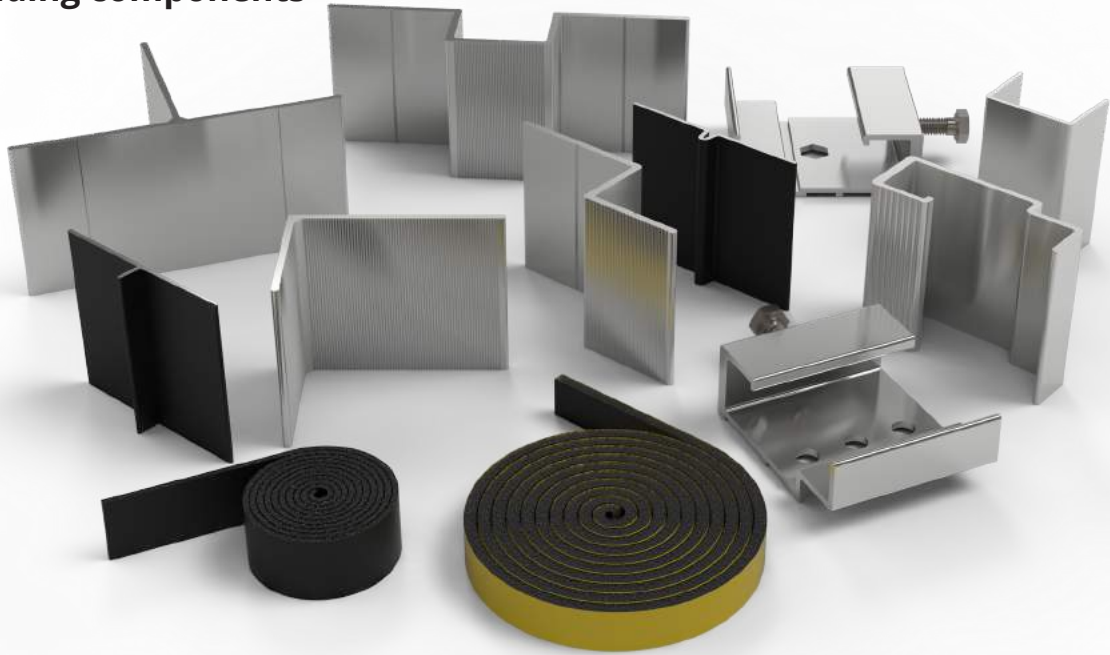
* Brackets subject to availability. Contact DC Tech for further details





Extrusions

and cladding components

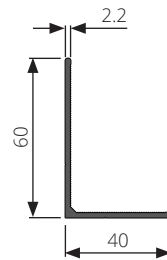


Generally, extrusions are cut to lengths that reflect the height of the panels that are going to be fixed to them. Typically storey-height profiles are cut so that the panels are located on one set of vertical profiles and do not 'bridge' the expansion gap between two profiles. These are secured to the bracket using a secondary fixing.

L Rails

Product Code	Description
*02/L60-40-2.2-3000	L Profile 60 x 40 x 2.2 x 3000
02/L60-40-2.2-6000	L Profile 60 x 40 x 2.2 x 6000

Powder coating or anodising available upon request
 *Available upon request, lead time applies

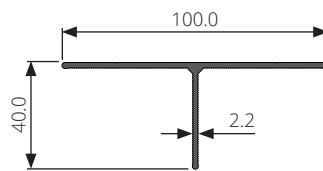


L60-40-2.2

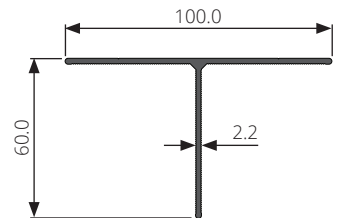
T Rails

Product Code	Description
*02/T40-100-2.2-3000	T Profile 40 x 100 x 2.2 x 3000
02/T40-100-2.2-6000	T Profile 40 x 100 x 2.2 x 6000
*02/T60-100-2.2-3000	T Profile 60 x 100 x 2.2 x 3000
02/T60-100-2.2-6000	T Profile 60 x 100 x 2.2 x 6000
*02/T40-120-2.2-3000	T Profile 40 x 120 x 2.2 x 6000
*02/T40-120-2.2-6000	T Profile 40 x 120 x 2.2 x 6000
*02/T60-120-2.2-3000	T Profile 60 x 120 x 2.2 x 3000
*02/T60-120-2.2-6000	T Profile 60 x 120 x 2.2 x 6000

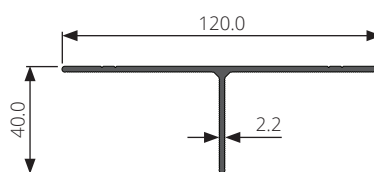
Powder coating or anodising available upon request
 *Available upon request, lead time applies



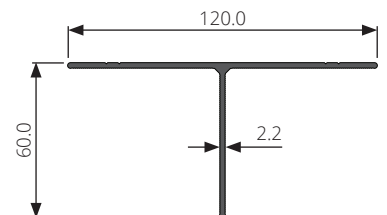
T40-100-2.2



T60-100-2.2



T40-120-2.2



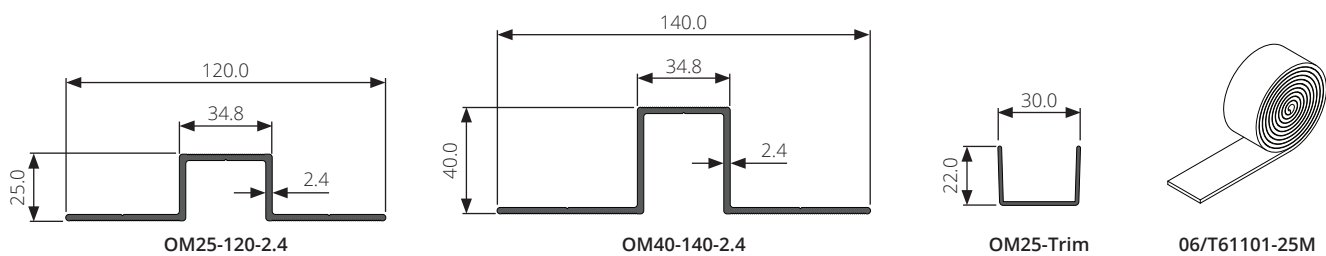
T60-120-2.2

Omega Rails & Trim

Product Code	Description
02/OM25-120-2.4-6000	25mm Omega - Mill Finish 6000
*02/OM25-120-2.4-6000-PC	25mm Omega - Powder Coat Finish 6000
*02/OM40-140-2.4-6000	40mm Omega - Mill Finish 6000
*02/OM40-140-2.4-6000-PC	40mm Omega - Powder Coat Finish 6000
02/OM25-Trim-3000	Omega 25 Centre Trim - Mill Finish 30 x 22 x 3000
*02/OM25-Trim-3000-PCBK	Omega 25 Centre Trim - Black Powder Coat Finish 30 x 22 x 3000
06/T61101-25M	24mm x 1.6mm thick single sided EPDM tape - 25m roll

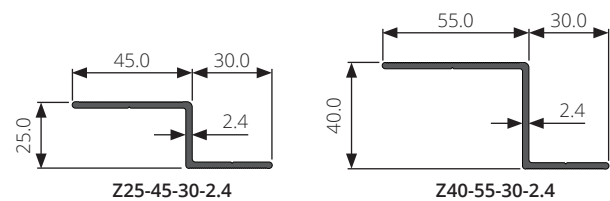
Powder coating or anodising available upon request

*Available upon request, lead time applies



Z Rails

Product Code	Description
02/Z25-45-30-2.4-6000	25mm Z - Mill Finish x 6000
*02/Z25-45-30-2.4-6000-PC	25mm Z - Powder Coat Finish x 6000
*02/Z40-55-30-2.4-6000	40mm Z - Mill Finish x 6000
*02/Z40-55-30-2.4-6000-PC	40mm Z - Powder Coat Finish x 6000



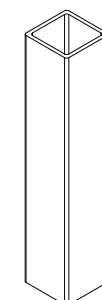
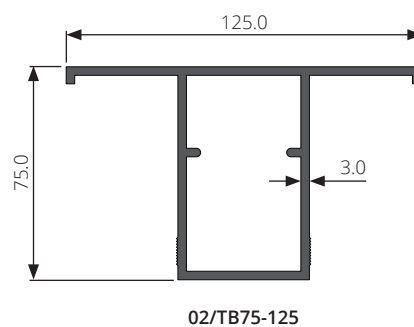
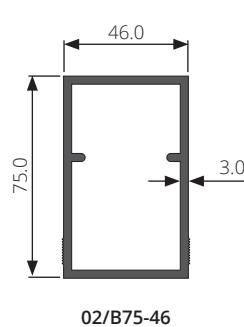
Powder coating or anodising available upon request

*Available upon request, lead time applies

Box Rails

Product Code	Description
02/B75-46-6000	NVF2F Box Profile 46 x 75 x 3.0 x 6000
02/TB75-125-6000	NVF2F T Box Profile 125 x 75 x 3.0 x 6000

Powder coating or anodising available upon request



Spigot

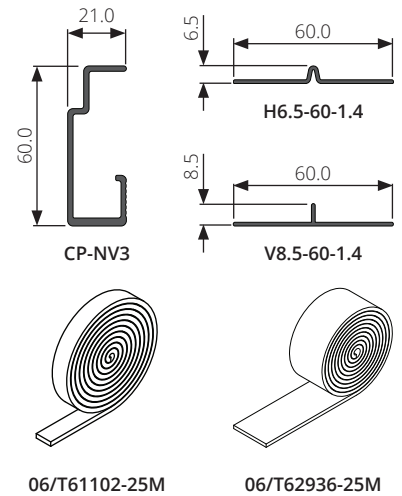
Product Code	Description
01/NVF2F-SGT	NVF2F Joining spigot

NV3 Rails, Trim

Product Code	Description
02/CP-NV3-3000	Carrier Profile NV3 System x 3000
02/CP-NV3-6000	Carrier Profile NV3 System x 6000
02/V8.5-60-1.4-3000-PCBK	Vertical Express Joint Backing Trim - Black Powder Coat 8.5 x 60 x 3000
02/H6.5-60-1.4-3000-PCBK	Horizontal Express Joint Backing Trim - Black Powder Coat 6.5 x 60 x 3000
06/T61102-25M	12mm x 3.2mm thick single sided EPDM tape - 25m roll
06/T62936-25M	18mm x 1.6mm thick double sided PE foam tape - 25m roll

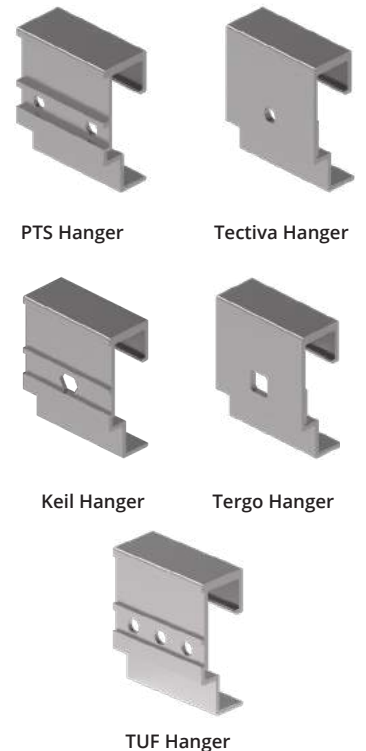
Powder coating or anodising available upon request

*Available upon request, lead time applies



NV3 Hangers

Product Code	Description
Keil	
03/NV3-KEIL-ADJF	NV3 (MLZ) Fixed/ Levelling Hanger to suit Keil Anchor
03/NV3-KEIL-STAT	NV3 (MLZ) Static Hanger to suit Keil Anchor
PTS	
03/NV3-PTS-ADJF	NV3 (MLZ) Fixed/ Levelling Hanger HPL 2 x 6.5 PTS
03/NV3-PTS-STAT	NV3 (MLZ) Static Hanger HPL 2 x 6.5 PTS
Tergo	
03/NV3-TER-ADJF	NV3 Fixed/ Levelling Hanger 1 x Tergo (Square Keil)
03/NV3-TER-STAT	NV3 Static Hanger 1 x Tergo (Square Keil)
Tergo Plus	
03/NV3-TER-TEC-ADJF	NV3 Fixed/ Levelling Hanger 1 x Tergo plus (Tectiva Round Hole)
03/NV3-TER-TEC-STAT	NV3 Static Hanger 1 x Tergo plus (Tectiva Round Hole)
TUF-S	
03/NV3-TUF-S-ADJ-3.5-M6	NV3 Levelling Hanger 3.5mm thick for TUF - Inc adjust screw (3 holes)
03/NV3-TUF-S-STAT-3.5	NV3 Static Hanger 3.5mm thick for TUF - (3 holes)
03/NV3-TUF-S-ADJ-5-M6	NV3 Levelling Hanger 5mm thick for TUF - Inc adjust screw (3 holes)
03/NV3-TUF-S-STAT-5	NV3 Static Hanger 5mm thick for TUF - (3 holes)




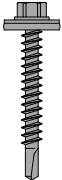
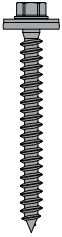
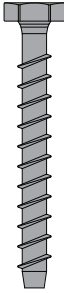
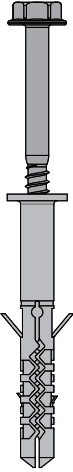
NV2 Adhesives

Product Code	Description
06/STA-205-1LTR	Sika® Aktivator - 100 - 1 Litre
06/STPP-1LTR	Sika® Primer-206 G+P - 1 Litre
06/STS-600	SikaTack® Panel - 10 - 600ml sausage
06/STT-33M	SikaTack® Panel Fixing Tape - 33 metre roll



Fasteners

for NVELOPE® support systems

04/SDA5/5,5x20	04/SX3/28-S16-6X48-A4	04/TDA-S-S16-6,5X60	04/MULTI-MONTI-S-10X85	04/SXR-10X80-FUS
Bracket to Vertical Rail & Carrier profile to Vertical Rail Fixing	Bracket to Steel Stud fixing A4 (316) stainless steel self drilling fasteners	6,5mm x 60mm Timber Fixing with 16mm Washer	Stainless steel Primary Concrete Structural Anchor	10x80 A4 (316) Anchor with polyamide sleeve Bracket to Concrete/ Brick fixing
				
Fastener material A4 Stainless Steel with carbon drill tip	Fastener material A4 Stainless Steel with carbon drill tip	Fastener material A4 Stainless Steel with carbon drill tip	Fastener material A4 Stainless Steel bi-metallic	Fastener material A4 Stainless Steel with polyamide sleeve
Diameter 5.5mm	Diameter 6mm	Diameter 6mm	Diameter 10mm	Diameter 10mm
Length 19mm	Length 48mm	Length 64mm	Length 85mm	Length 80mm
Max grip range 8mm	Max grip range 28mm	Max grip range N/A	Max grip range N/A	Max grip range N/A
Drill capacity 8mm	Drill capacity 3mm	Drill capacity N/A	Drill capacity N/A	Drill capacity N/A
Material Aluminium	Material Steel	Material Timber	Material Masonry	Material Masonry

Note

Fixings for other applications available upon request. Contact DC Tech for further details

Fasteners

for cladding attachment

Face fixing - Rivet



AP16 Aluminium Rivet

Ideal for cladding panels (HPL, fibre cement, others) to aluminium



SSO-D15 Stainless 316 Rivet

Ideal for cladding panels (HPL, fibre cement, others) to aluminium, metal or stainless steel

Face fixing - Screw



SX3-D12 Stainless Steel Self Drill

Ideal for cladding panels (HPL, fibre cement, others) to aluminium or steel



TW-S D12 Stainless Self-Tapping

Ideal for cladding panels (HPL, fibre cement, others) to timber



irus® SX3-L 12 Stainless Self-Drill

Ideal for cladding panels (HPL, fibre cement, others) to aluminium or steel



SDA4 D15 Stainless Steel Self Drill

Ideal for cladding panels (HPL, fibre cement, others) to aluminium



SX4 D15 Stainless Steel Self Drill

Ideal for cladding panels (HPL, fibre cement, others) to aluminium or steel

Concealed fixing - anchors



TUF/TUC Concealed Fastener

Fastener for HPL, fibre cement, or fibre concrete panels



Keil Concealed Fastener

Ideal for cladding panels (GRC, Dekton)



Karl Concealed Fastener

Ideal for cladding panels (HPL, fibre cement, fibre concrete)



Tergo+ Concealed Fastener

Fastener for fibre cement



Fischer Concealed Fastener

Ideal for cladding panels (HPL, fibre cement, GRC or ceramic)



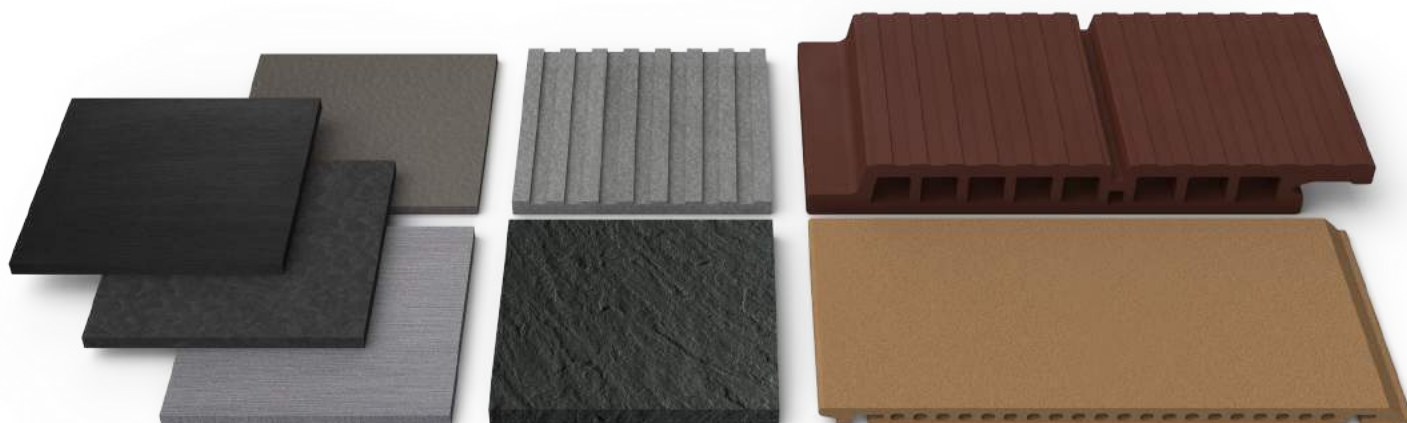
Fischer Concealed Fastener

Ideal for cladding panels (natural stone)

Cladding guide

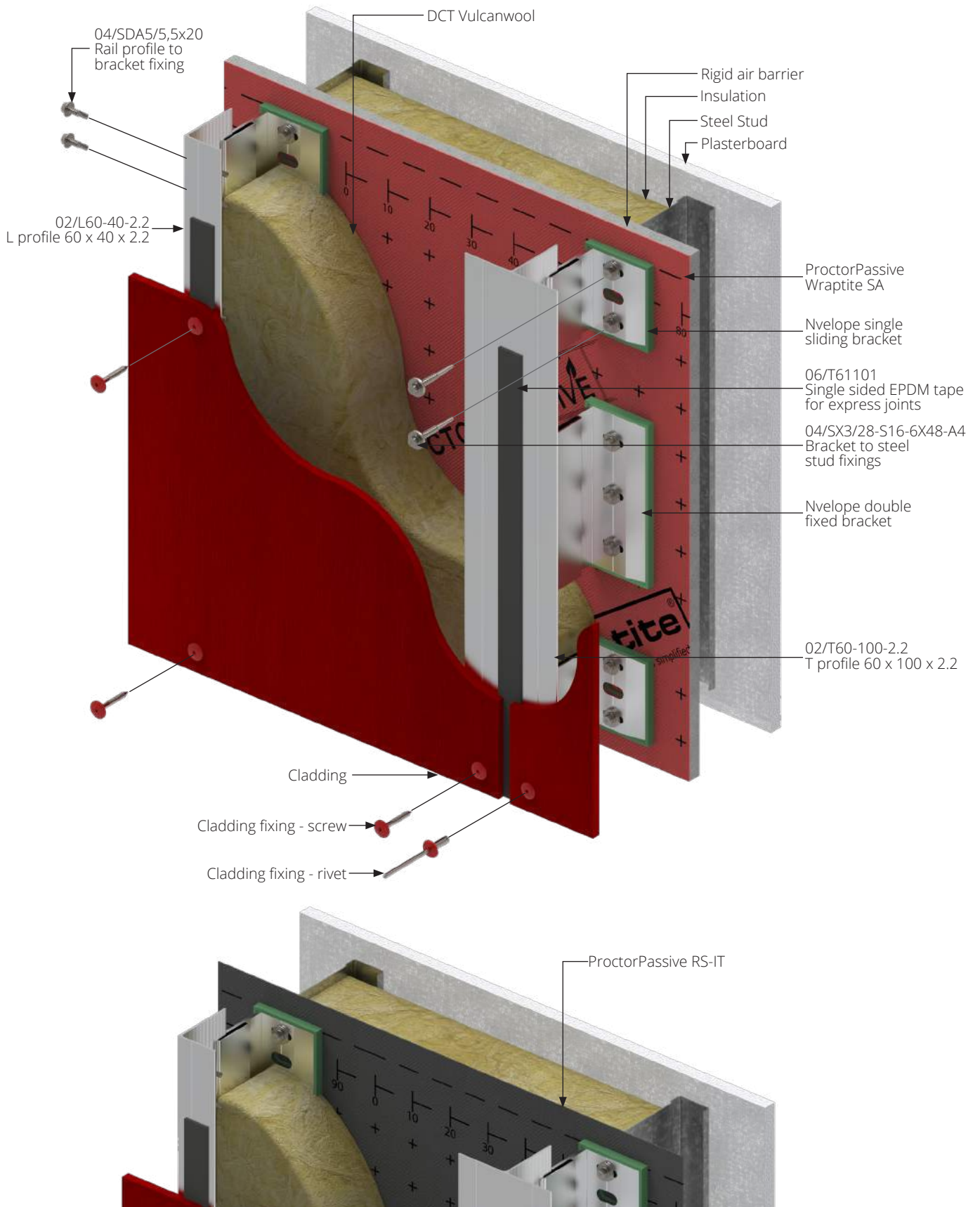
for NVELOPE® systems

Cladding Type	NVELOPE® System								
	NV1	NV2	NV3	NV6	NV7	NV9	NVF2F	NH3	NS1
ACM (Aluminium composite material)	•	•				•	•	•	•
Aluminium	•	•				•	•	•	•
Brick slip	•						•	•	•
Ceramic	•	•	•				•	•	•
Copper	•	•					•	•	•
Fibre cement	•	•	•				•	•	•
Fibre concrete	•	•	•				•	•	•
GRC (Glass reinforced concrete)	•	•	•				•	•	•
GRP (Glass reinforced plastic)	•	•	•				•	•	•
Glass	•	•	•				•	•	•
HPL (High pressure laminate)	•	•	•				•	•	•
Photo-voltaic	•		•				•	•	•
Render	•							•	•
Stainless steel	•	•	•		•	•	•	•	•
Terracotta	•						•	•	•
Timber	•		•	•		•	•	•	•
Timber laminate	•		•	•		•	•	•	•
Thin stone	•	•	•				•	•	•
Weather board	•						•	•	•
Zinc	•	•		•			•	•	•

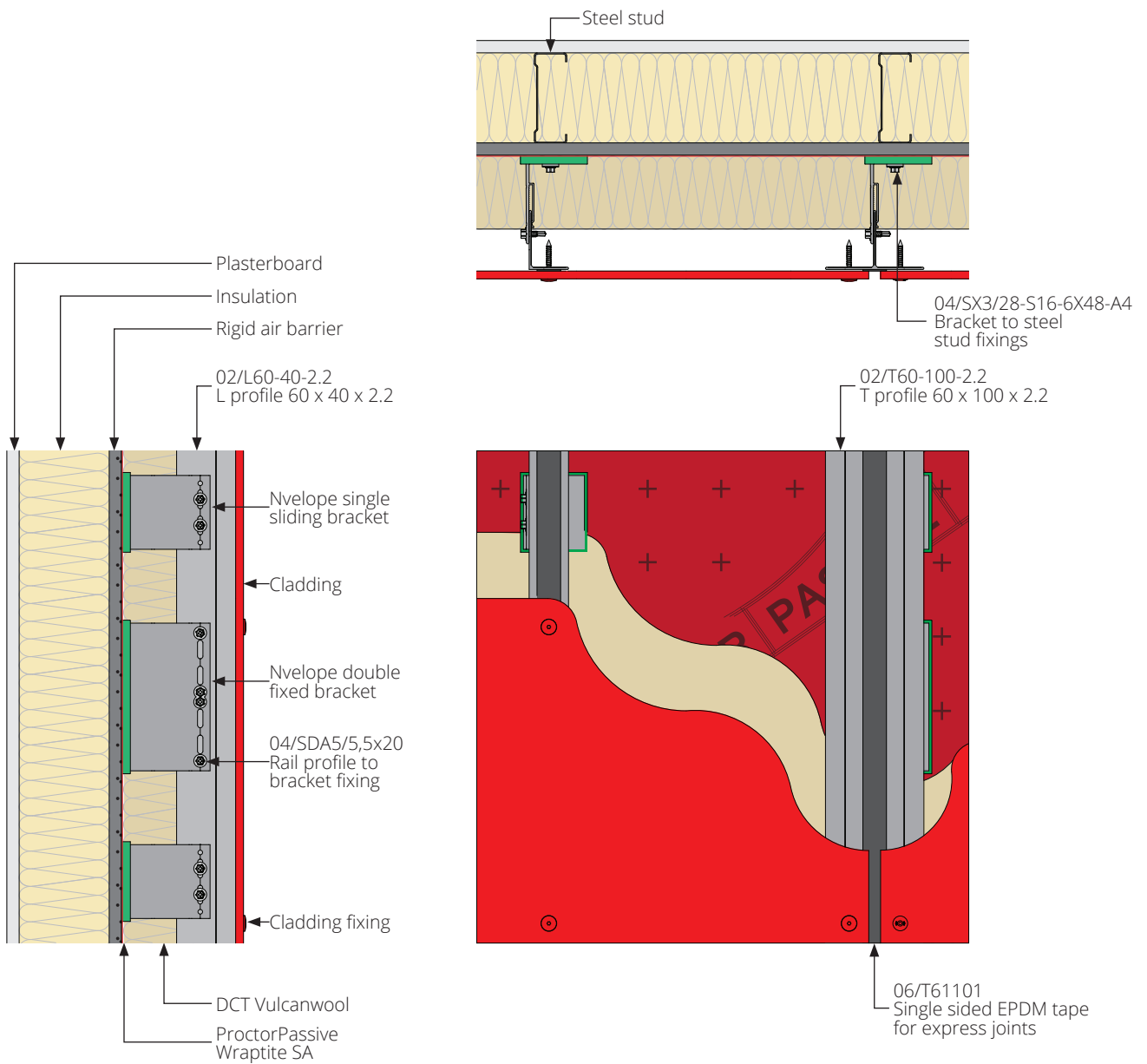


NVELOPE® NV1 System

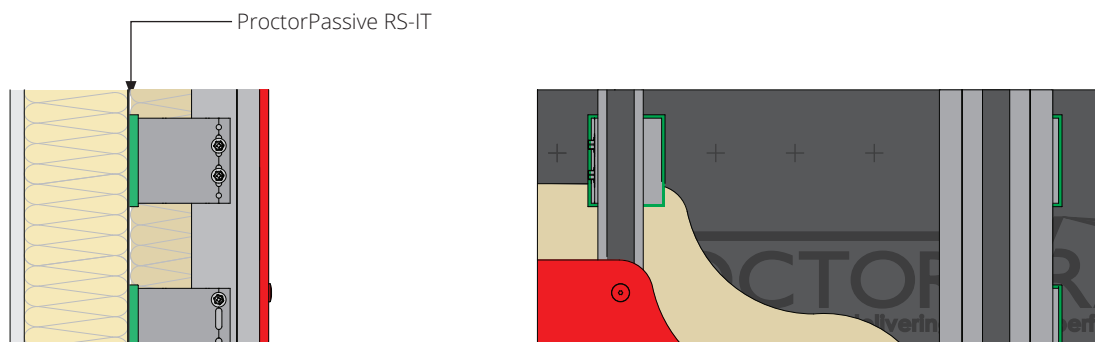
Steel stud construction



NVELOPE® NV1 system with Rigid air barrier with ProctorPassive Wraptite SA

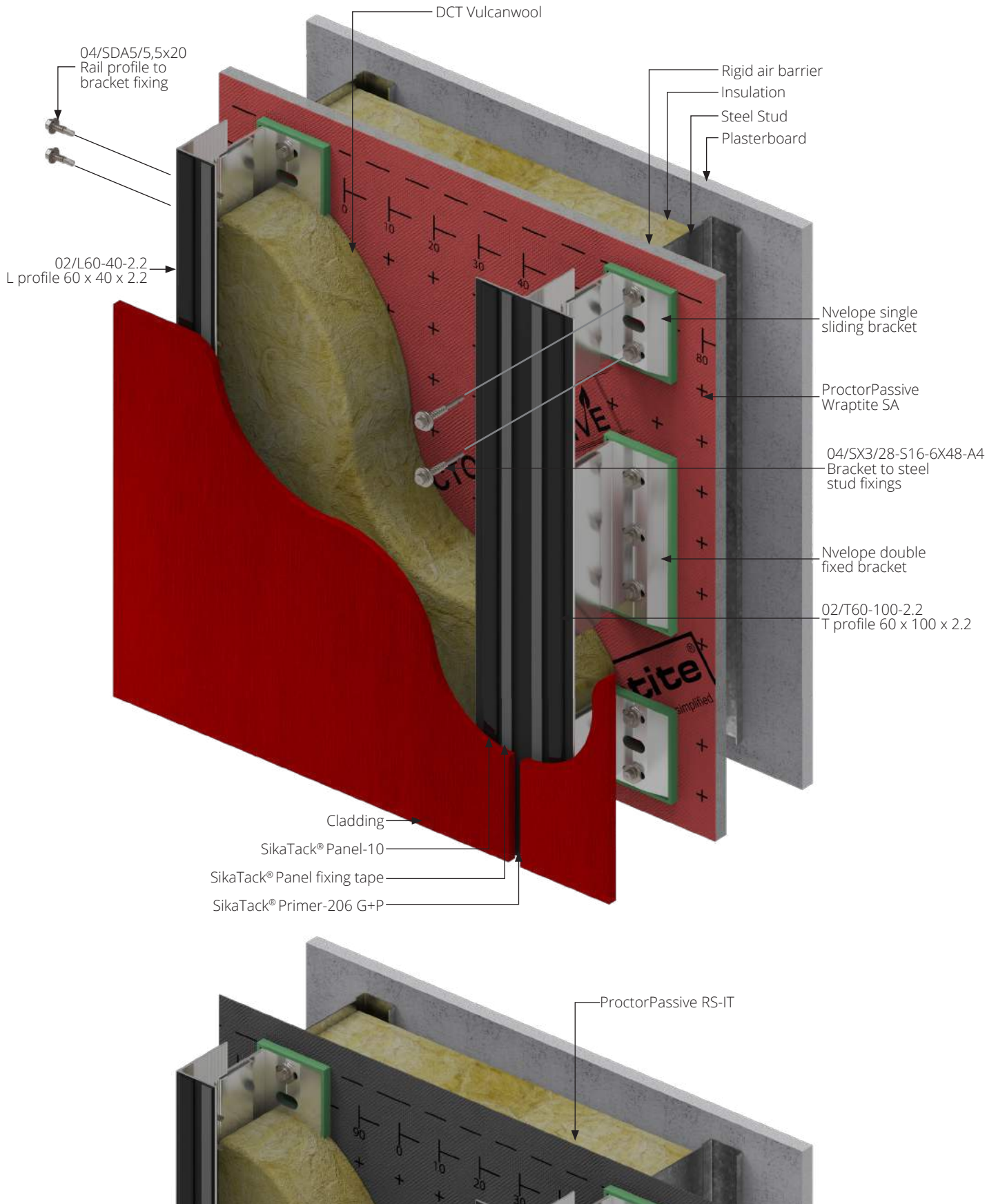


NVELOPE® NV1 system with ProctorPassive RS-IT

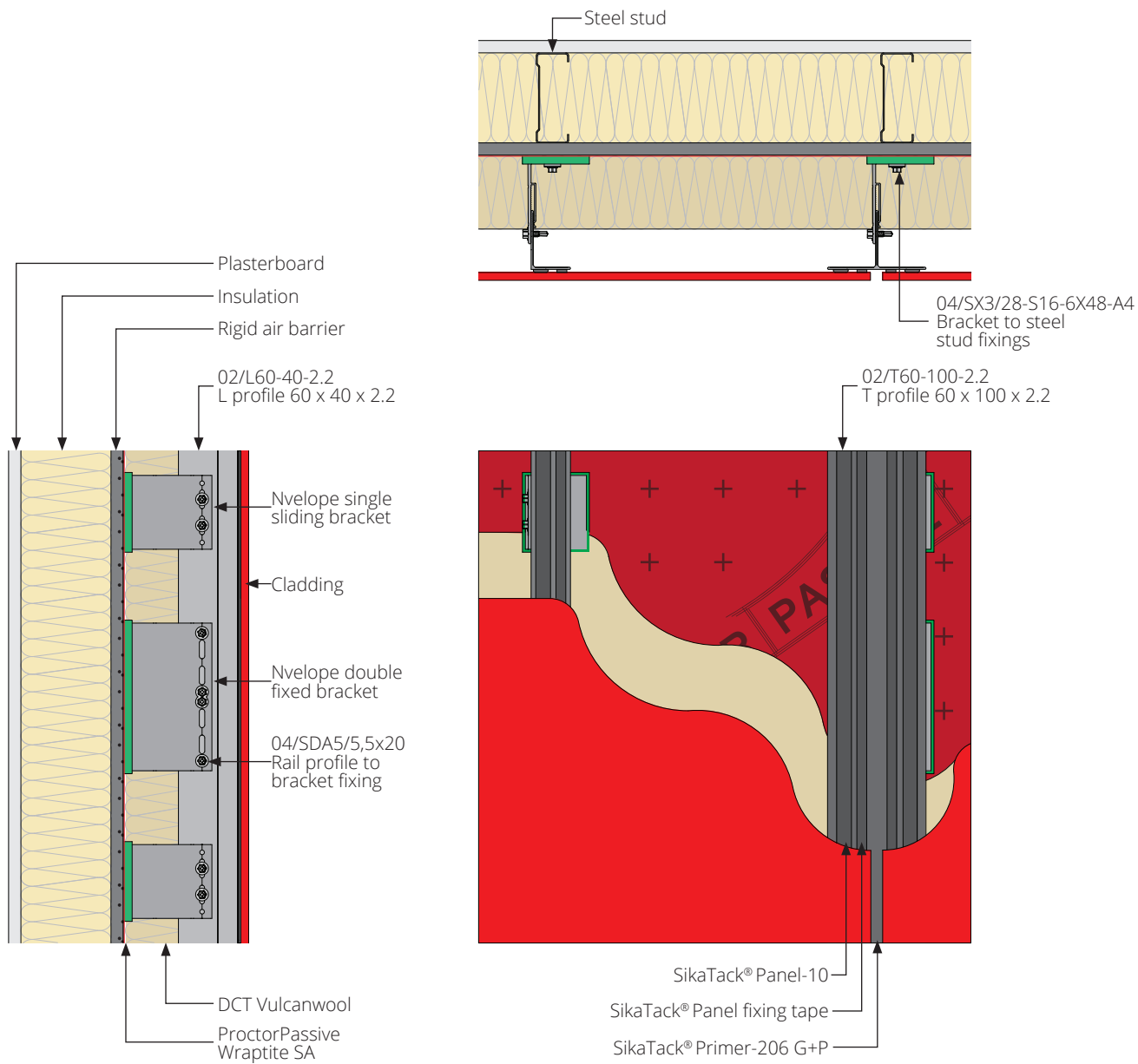


NVELOPE® NV2 System

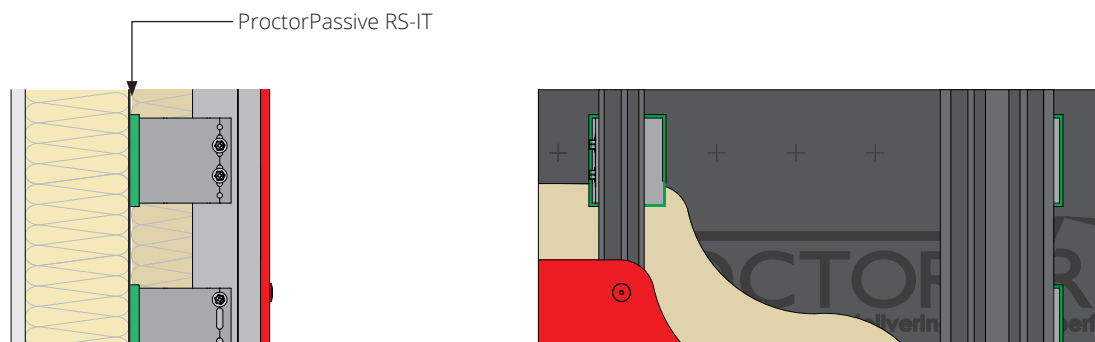
Steel stud construction



NVELOPE® NV2 system with Rigid air barrier with ProctorPassive Wraptite SA

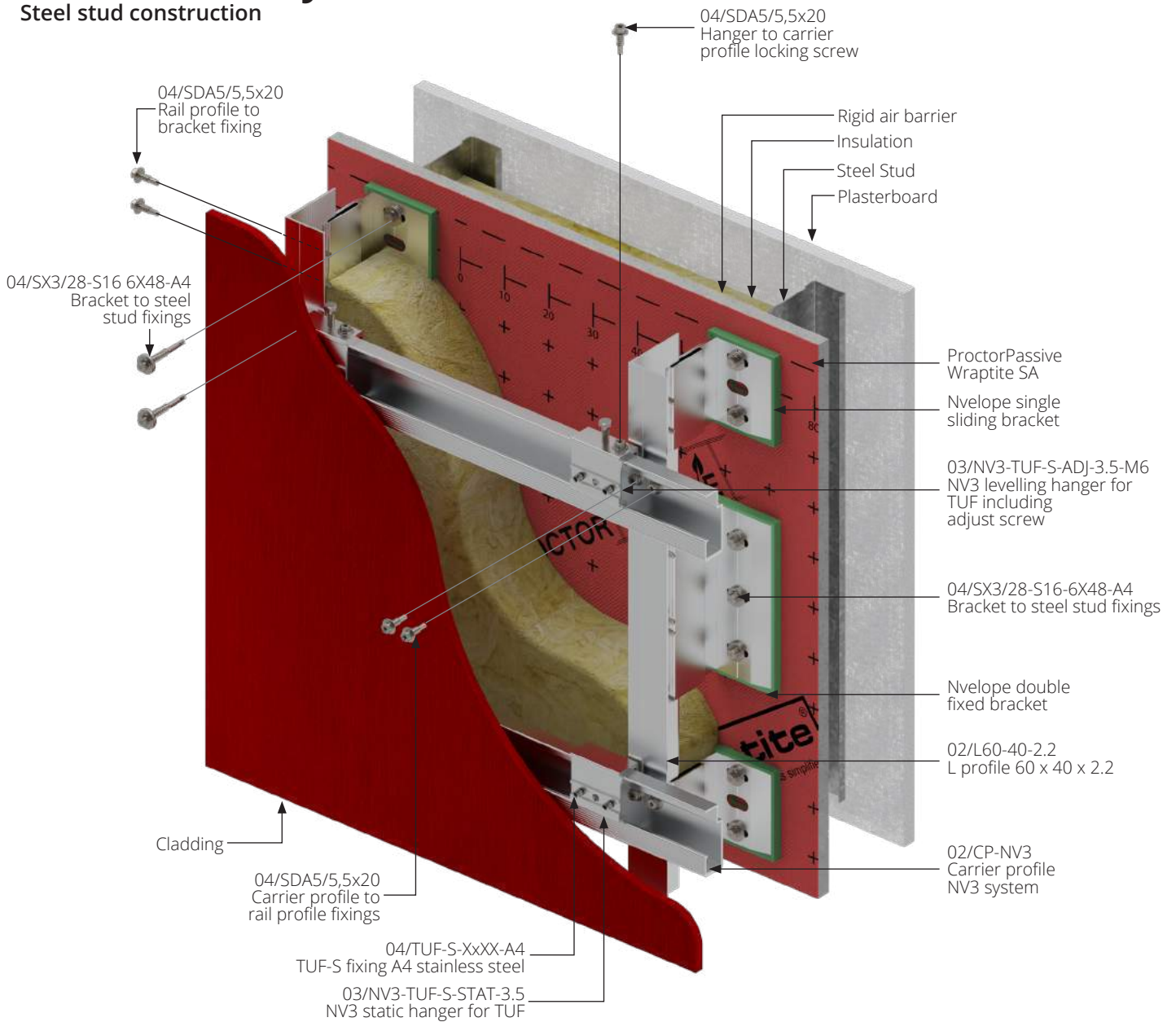


NVELOPE® NV2 system with ProctorPassive RS-IT



NVELOPE® NV3 System

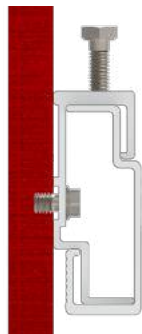
Steel stud construction



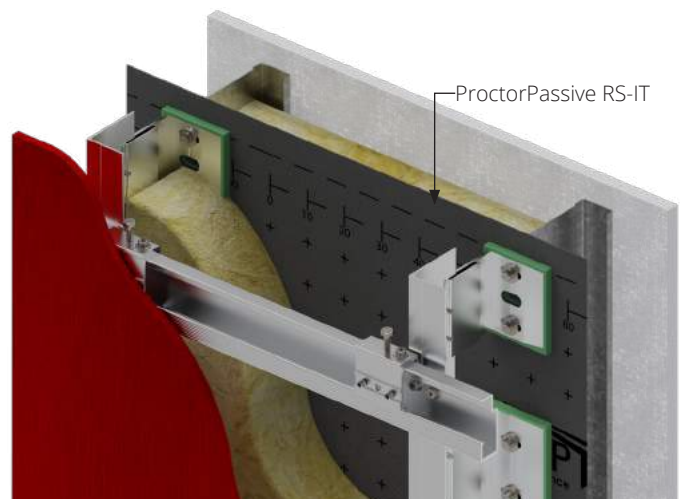
Concealed fixings into cladding



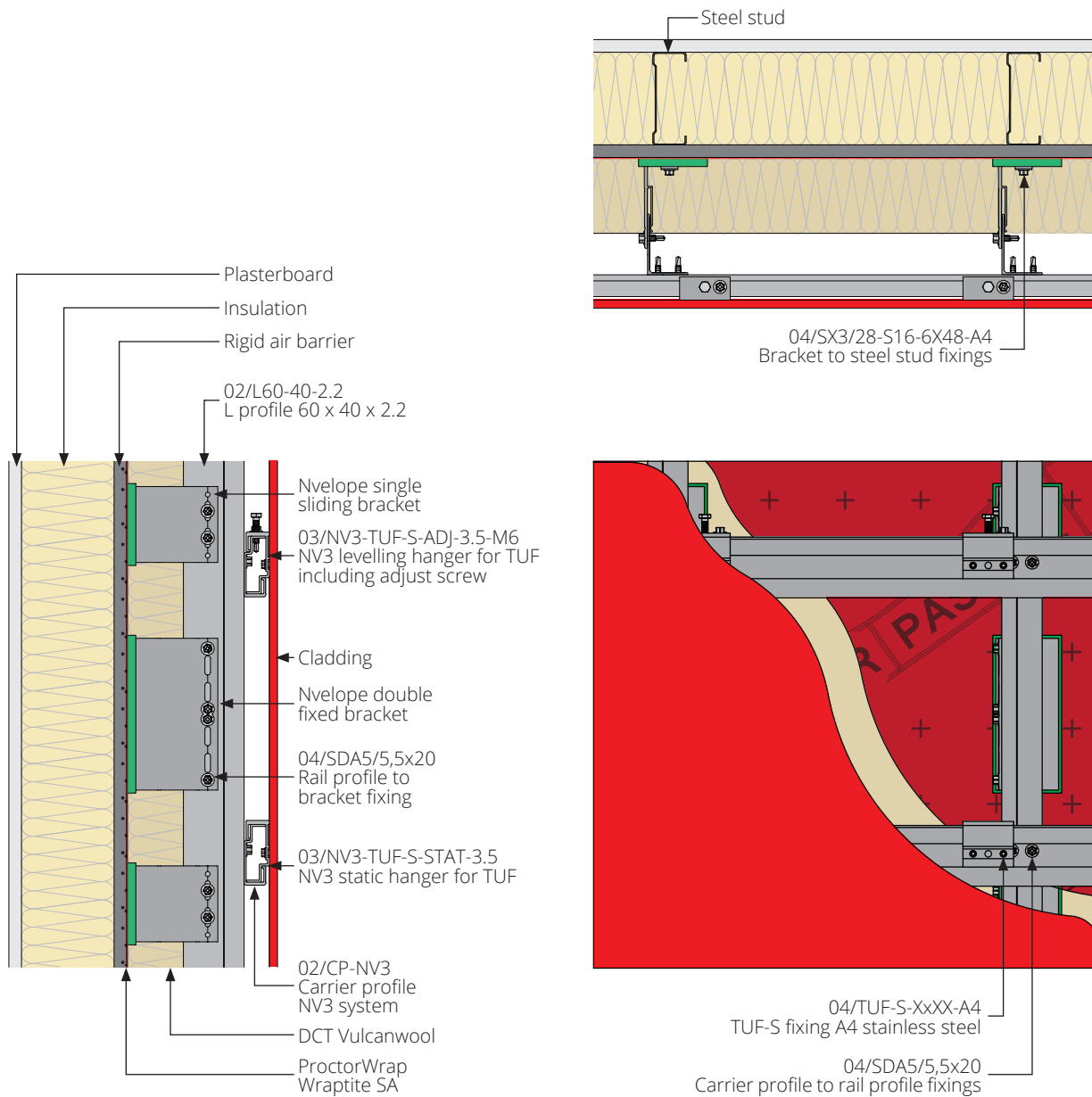
03/NV3-TUF-S-ADJ-3.5-M6
 NV3 levelling hanger for
 TUF including adjust screw



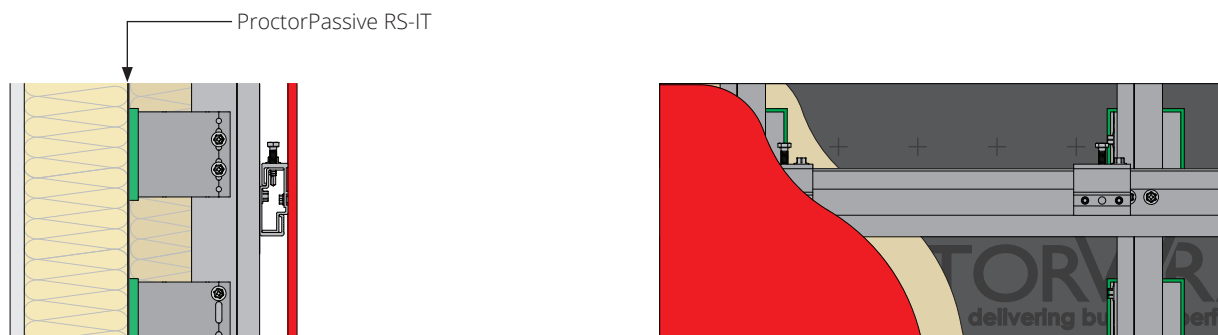
04/TUF-S-Xxxx-A4
 TUF-S fixing A4 stainless steel



NVELOPE® NV3 system with Rigid air barrier with ProctorPassive Wraptite SA

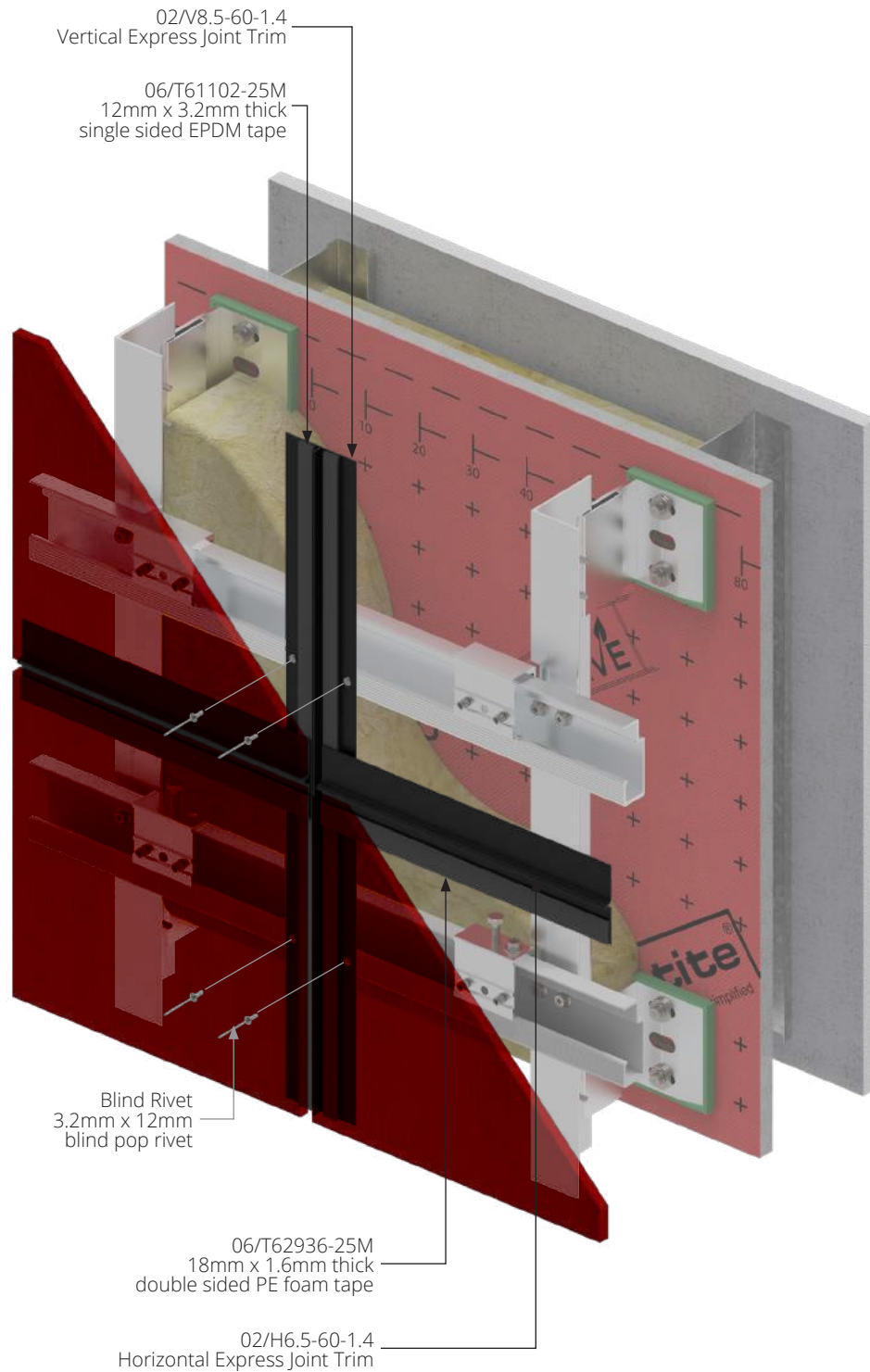


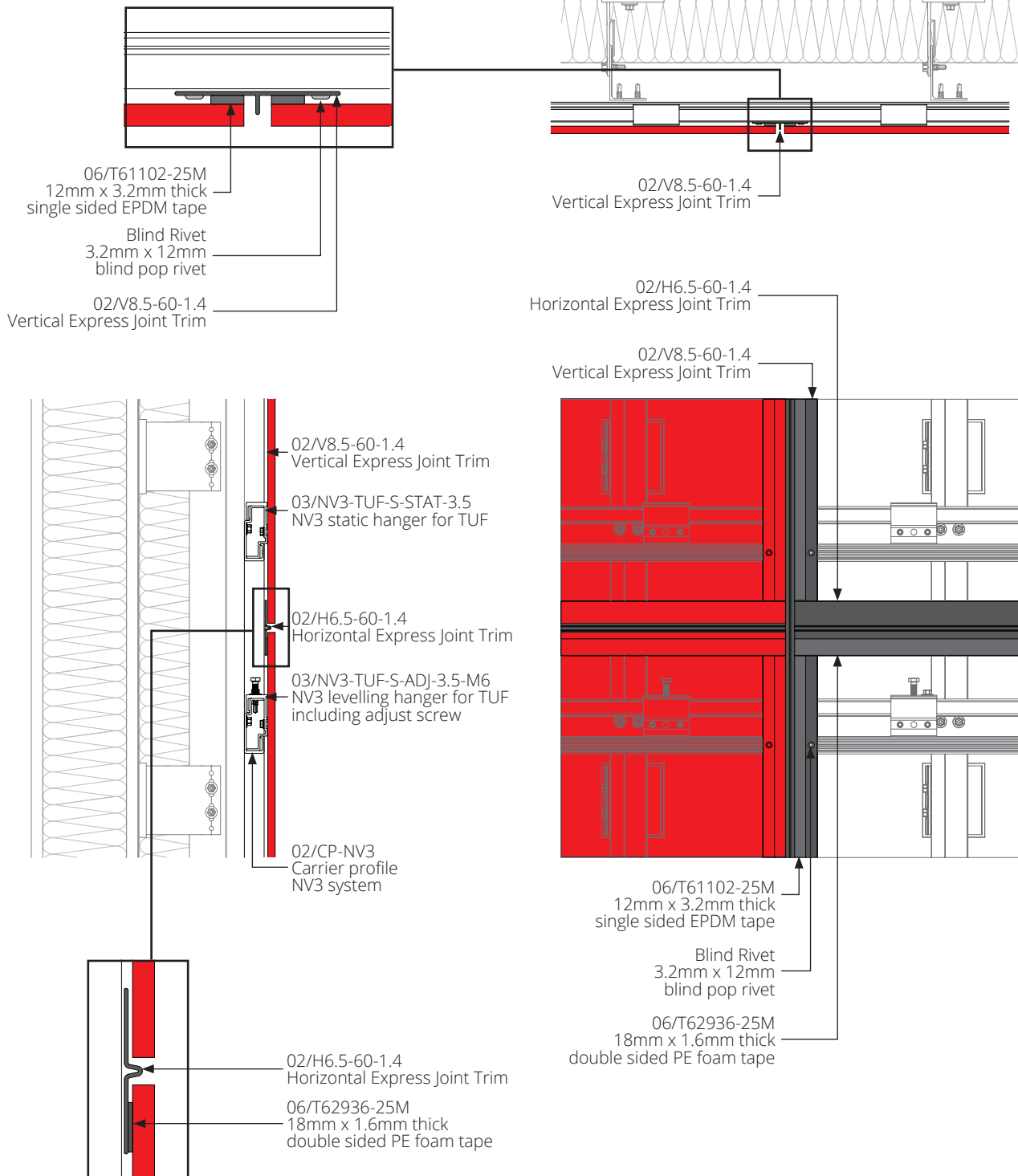
NVELOPE® NV3 system with ProctorPassive RS-IT



NVELOPE® NV3 System

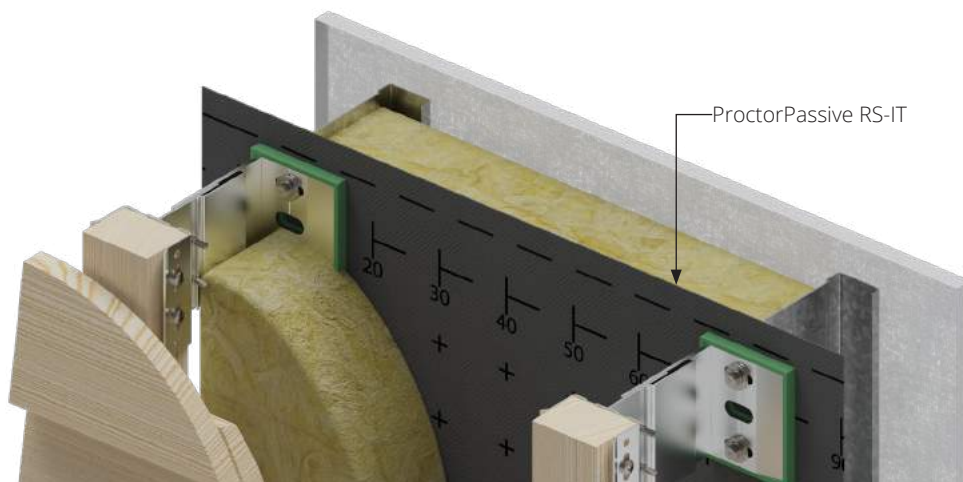
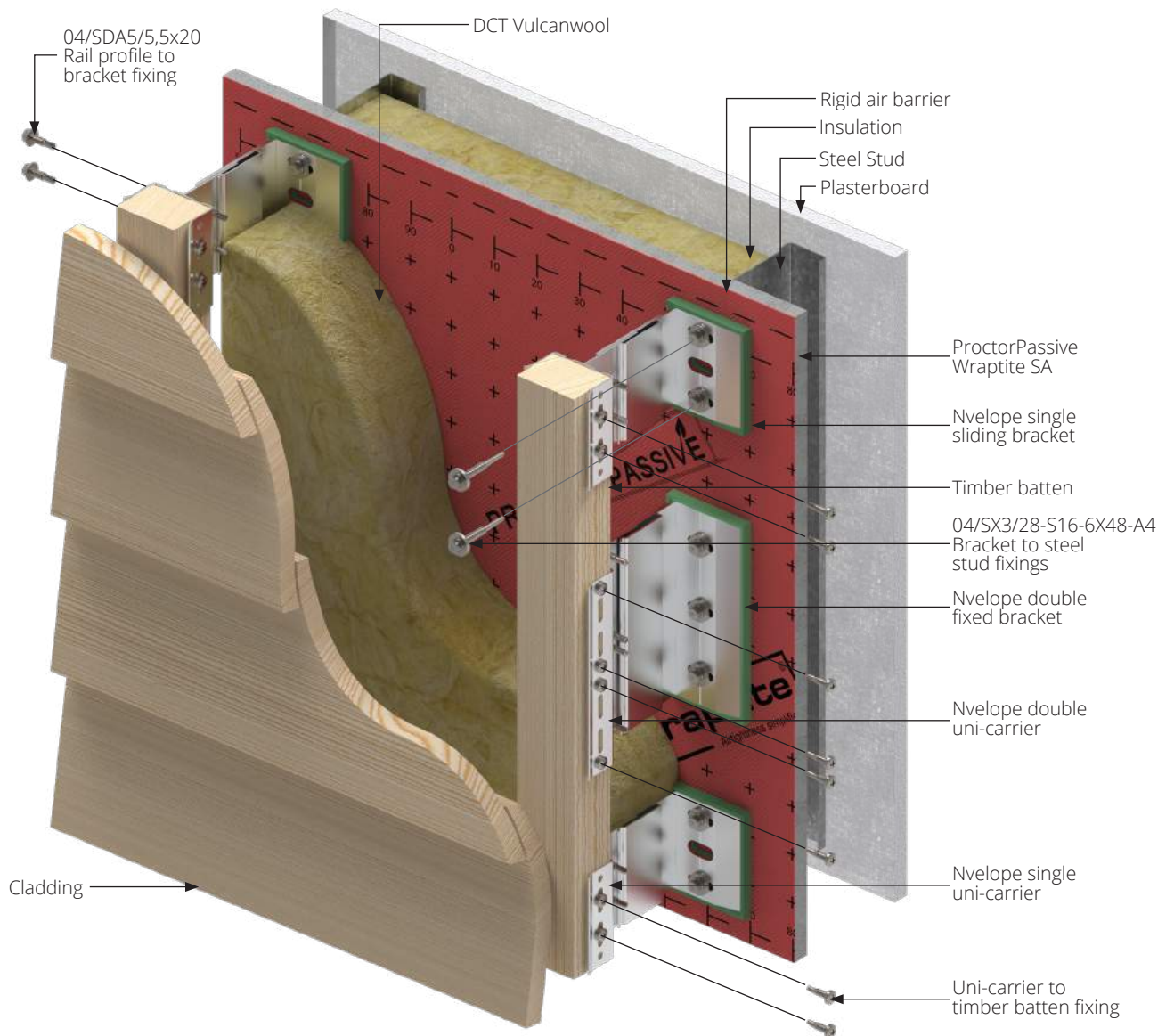
Express Joint Closer



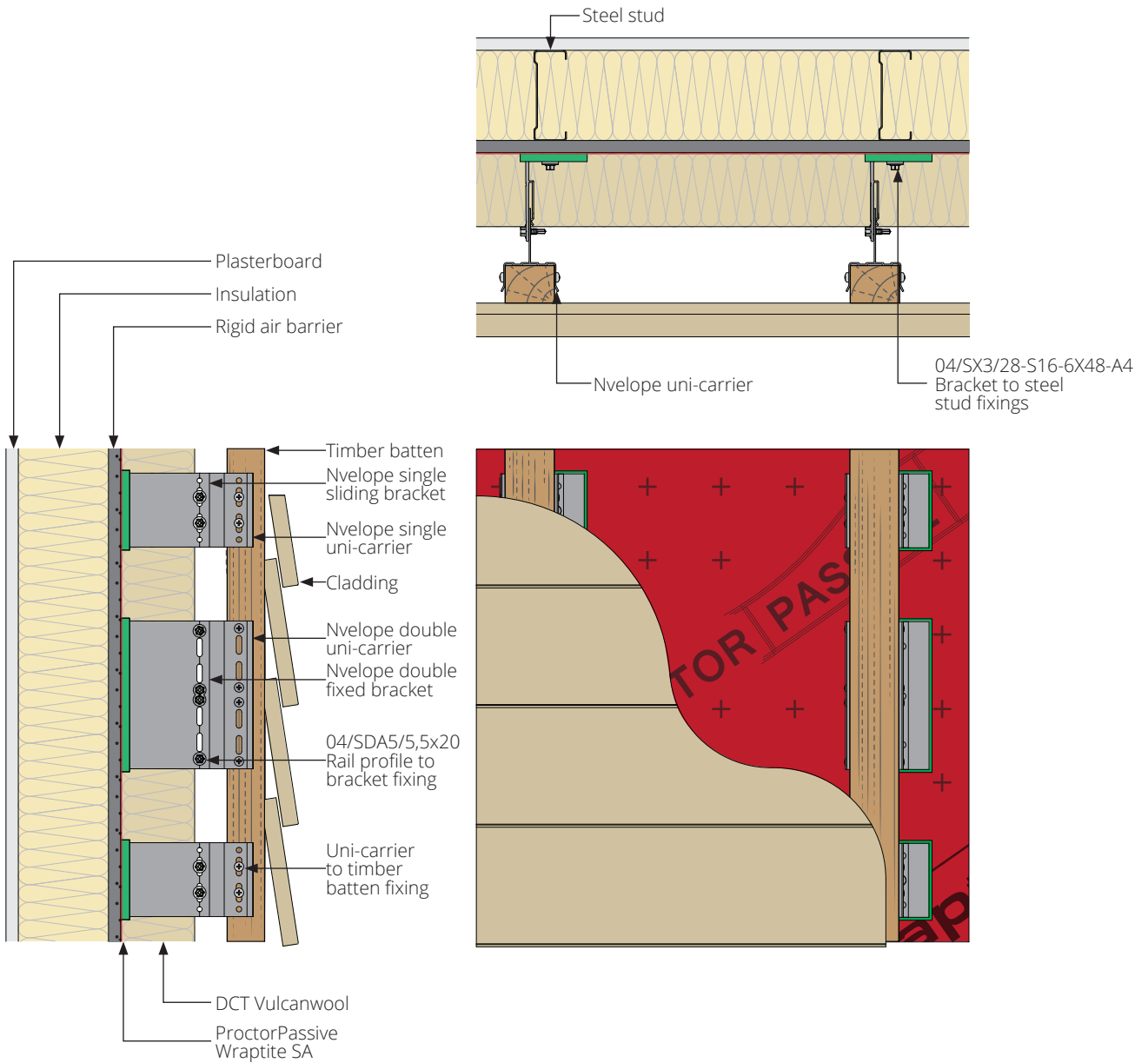


NVELOPE® NV6 System

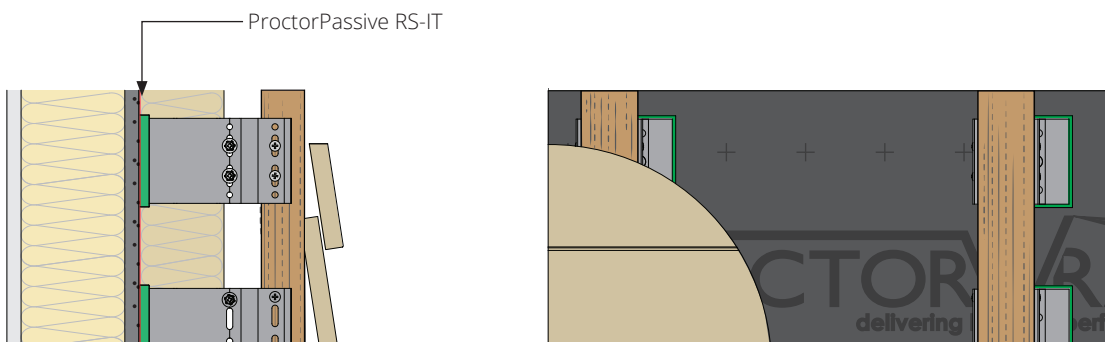
Steel stud construction



NVELOPE® NV6 system with Rigid air barrier with ProctorPassive Wraptite SA

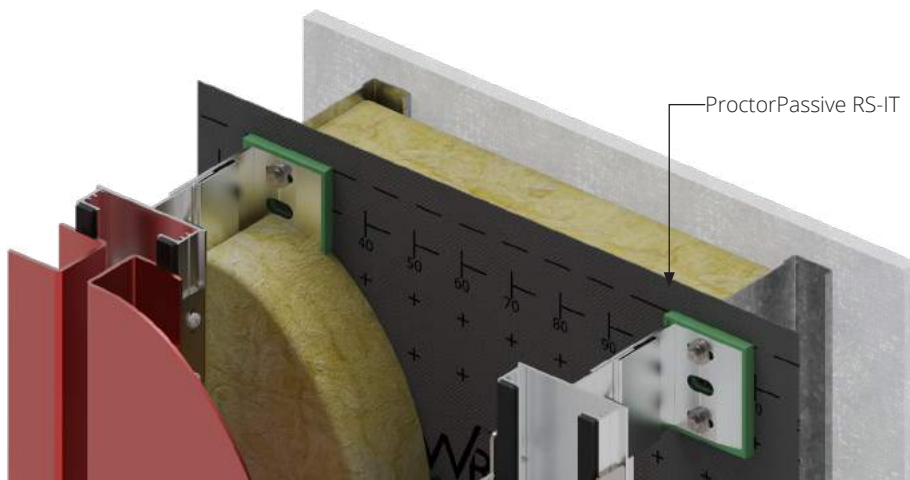
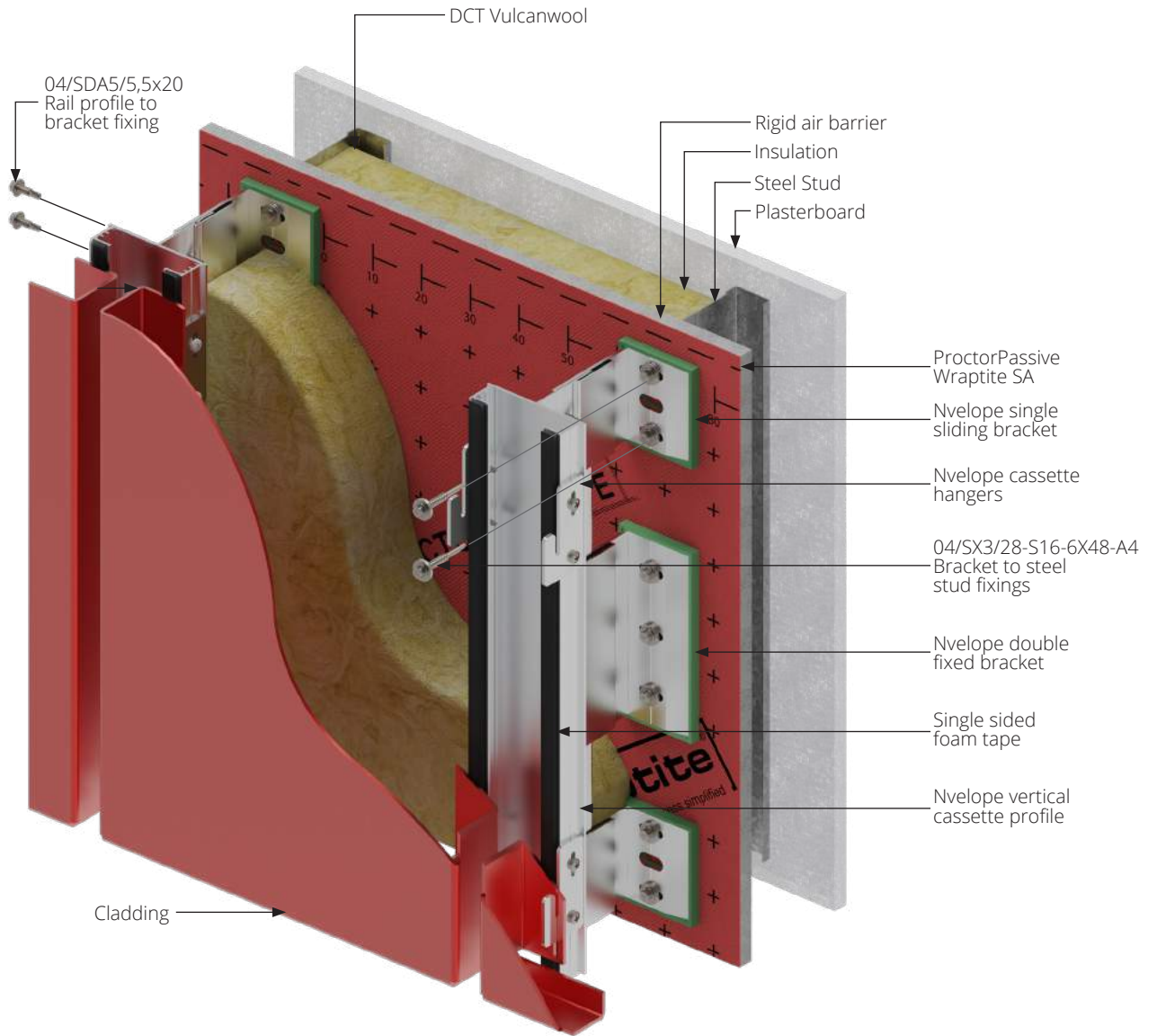


NVELOPE® NV6 system with ProctorPassive RS-IT

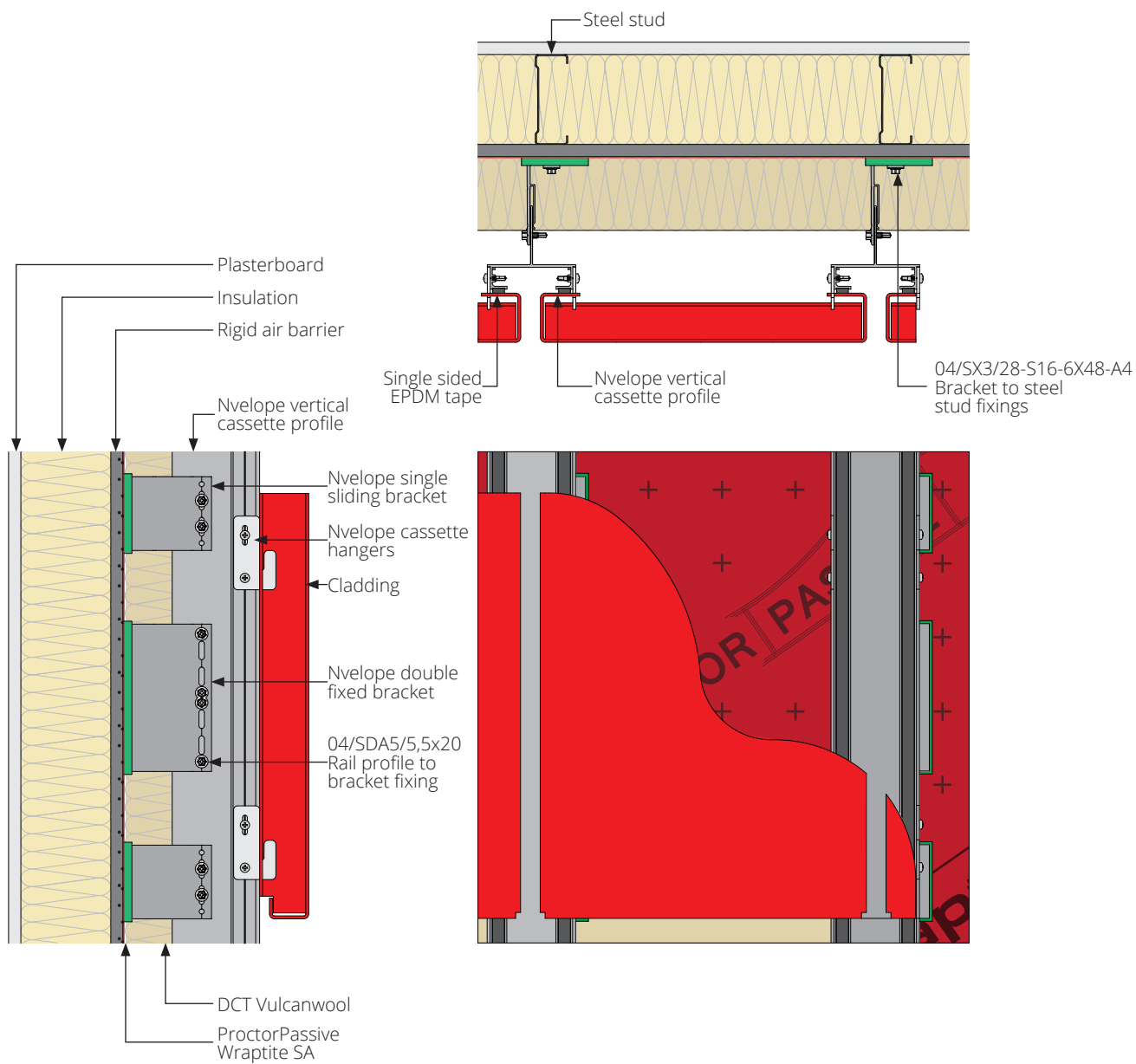


NVELOPE® NV7 System

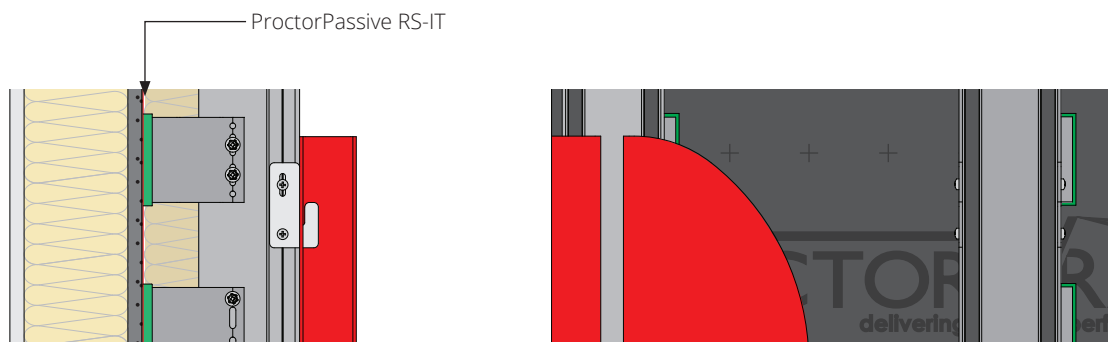
Steel stud construction



NVELOPE® NV7 system with Rigid air barrier with ProctorPassive Wraptite SA

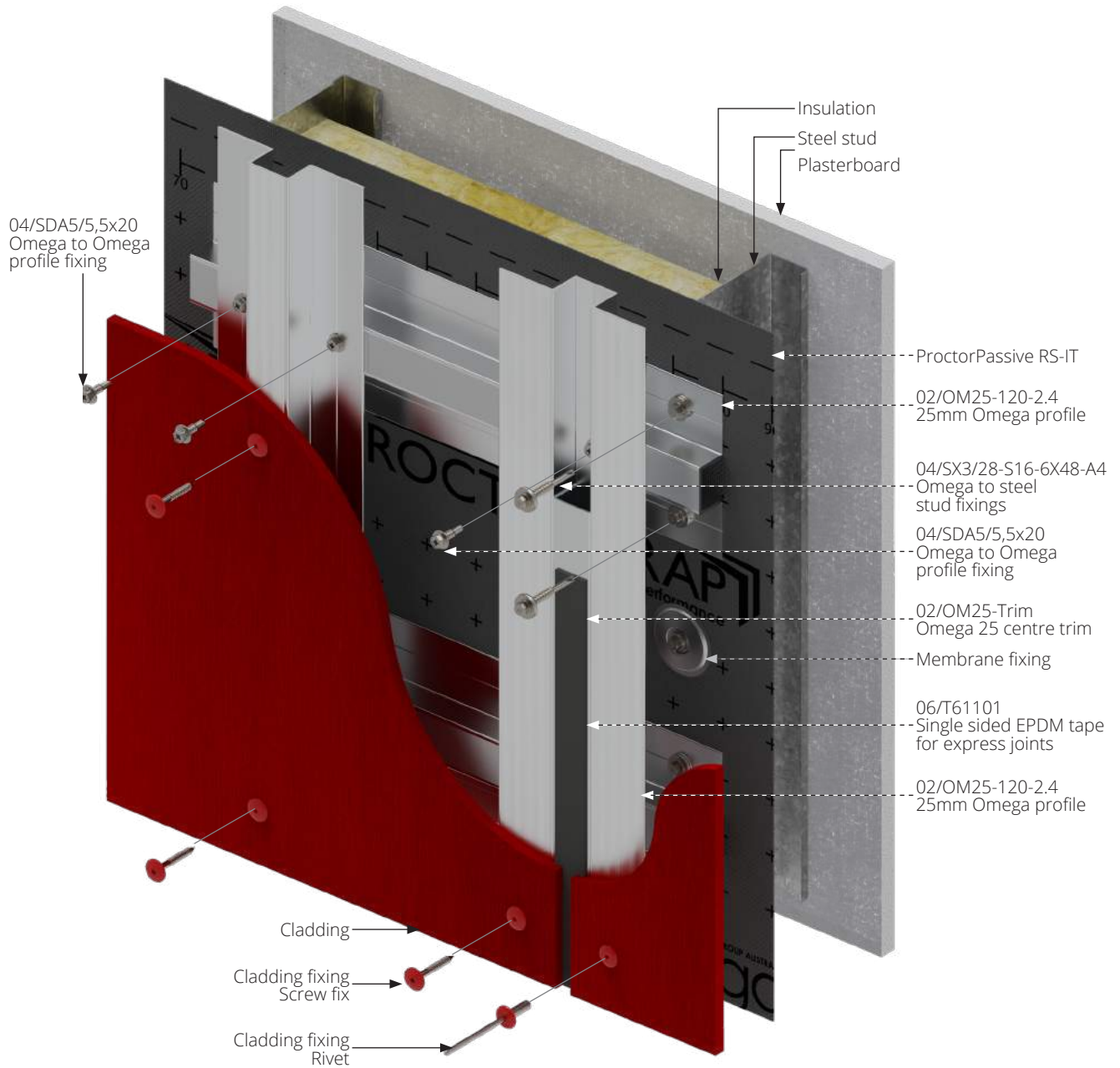


NVELOPE® NV7 system with ProctorPassive RS-IT

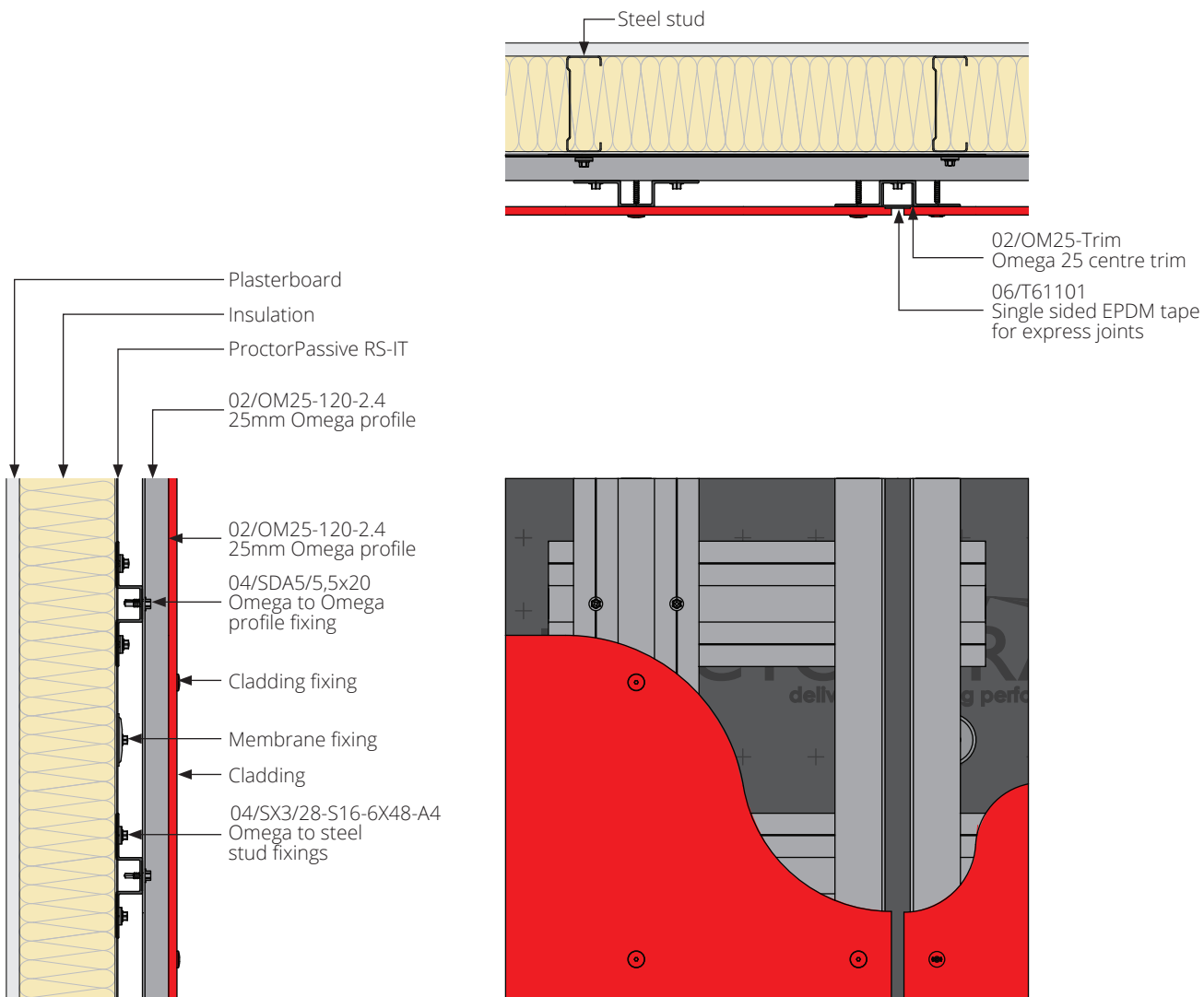


NVELOPE® NV9 System

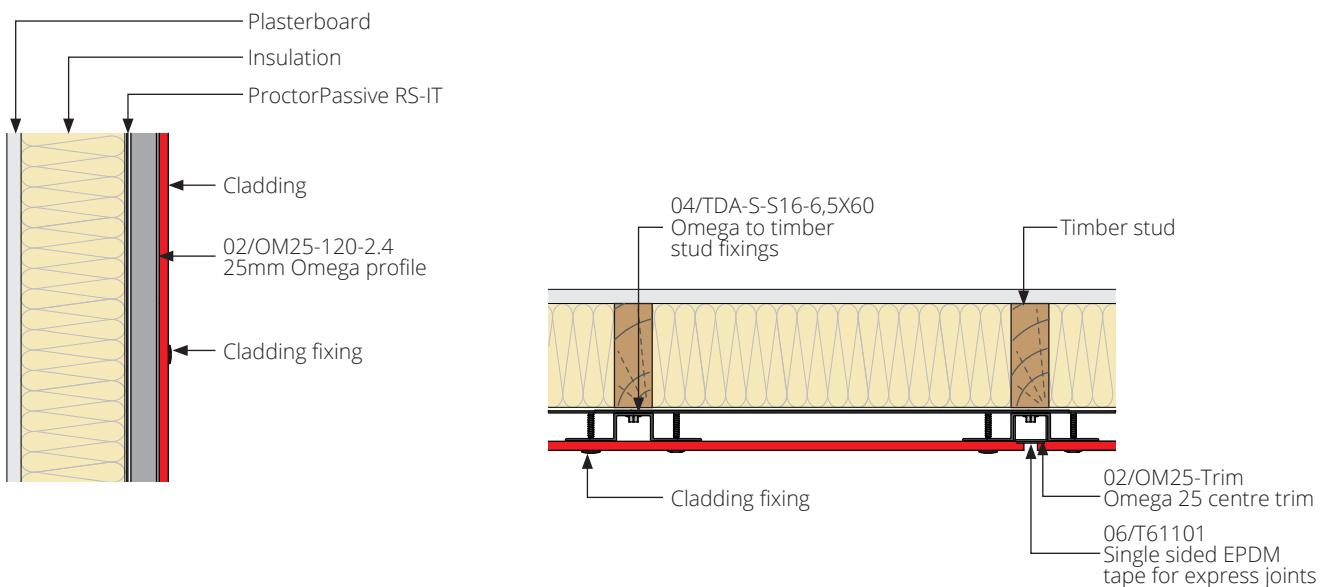
Steel stud construction



NVELOPE® NV9 (Dual Layer - Omega to Omega) system with ProctorPassive RS-IT

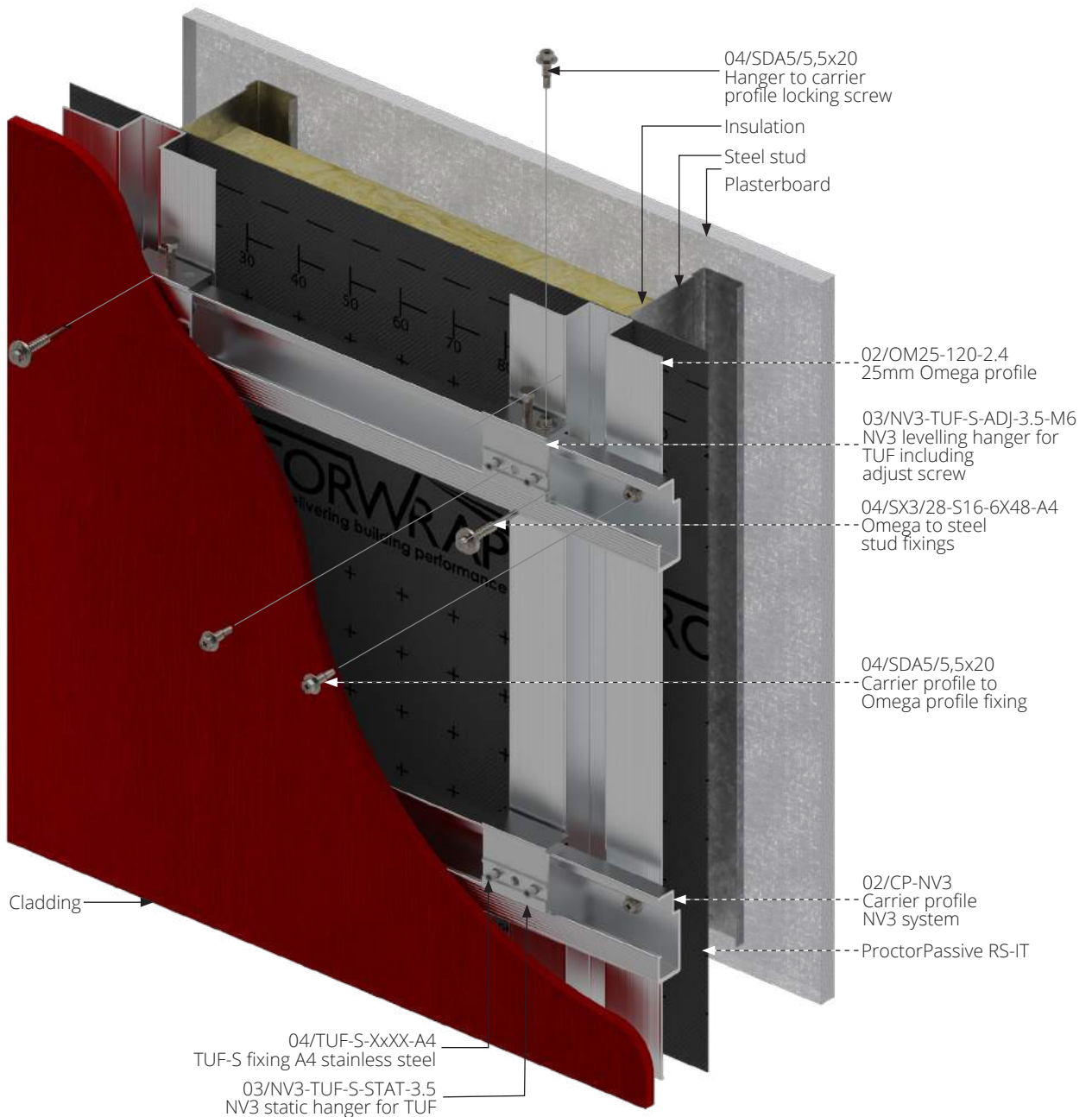


NVELOPE® NV9 (Single Layer - Omega) system

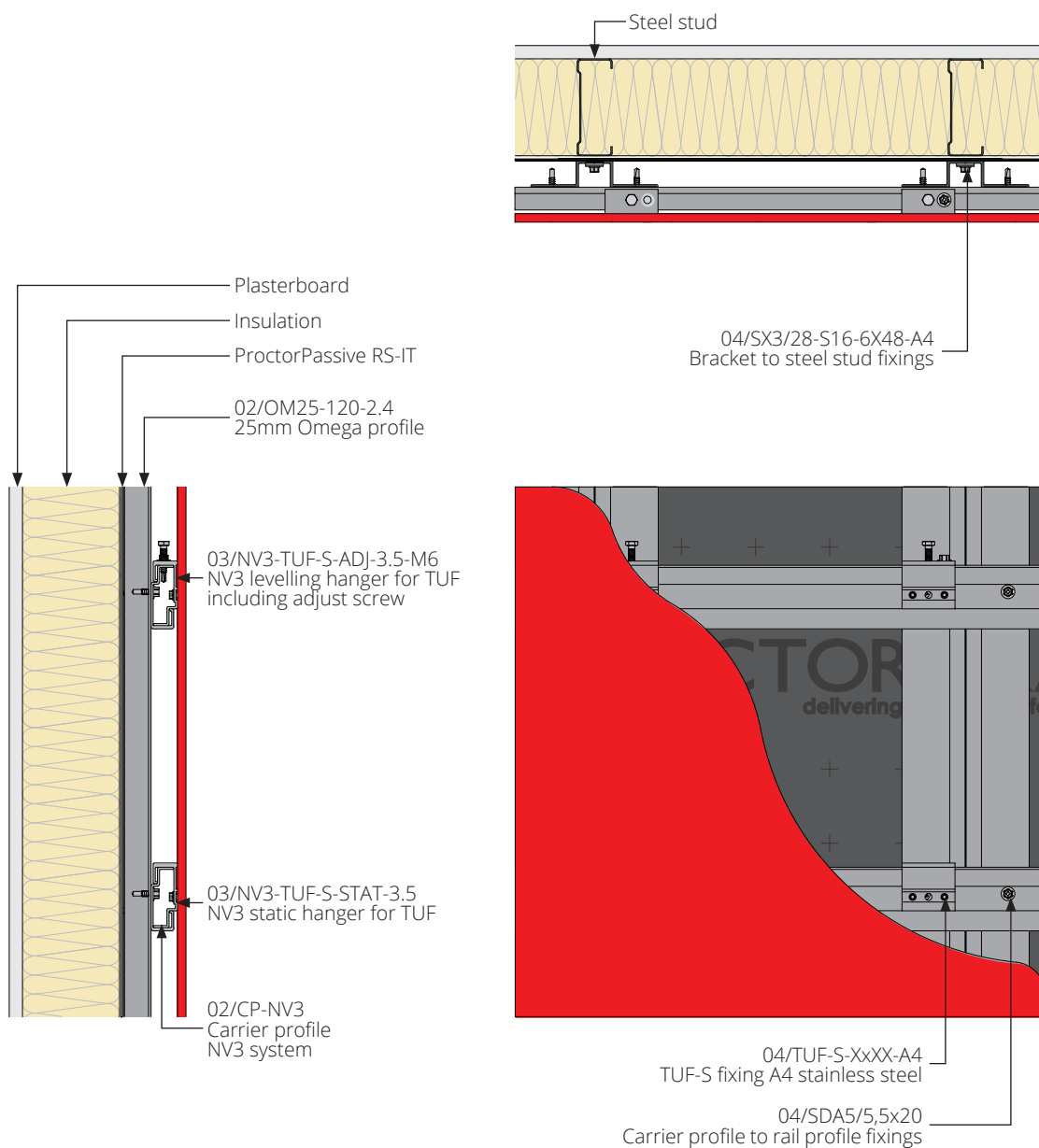


NVELOPE® NV93 System

Steel stud construction

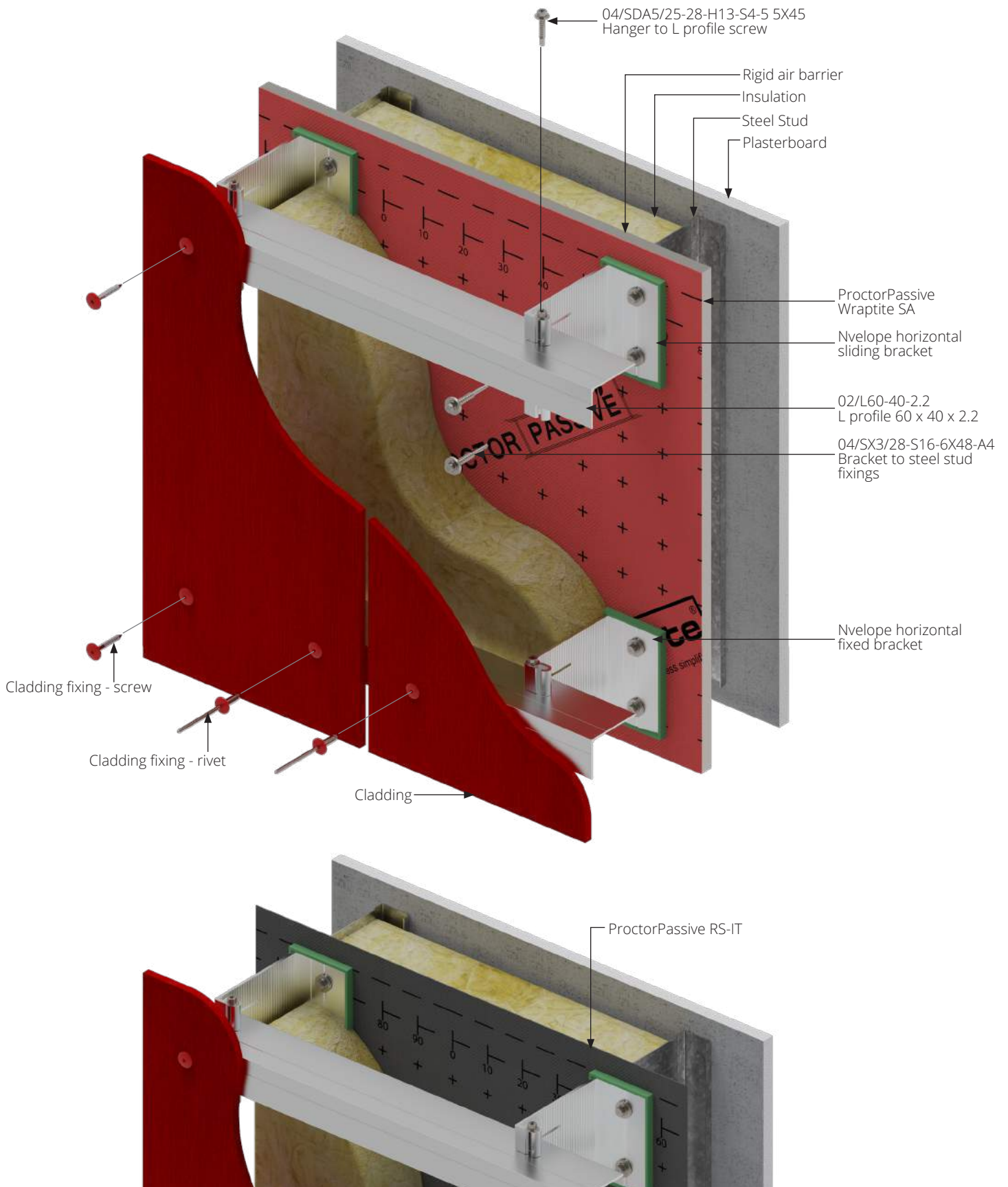


NVELOPE® NV93 system with ProctorPassive RS-IT

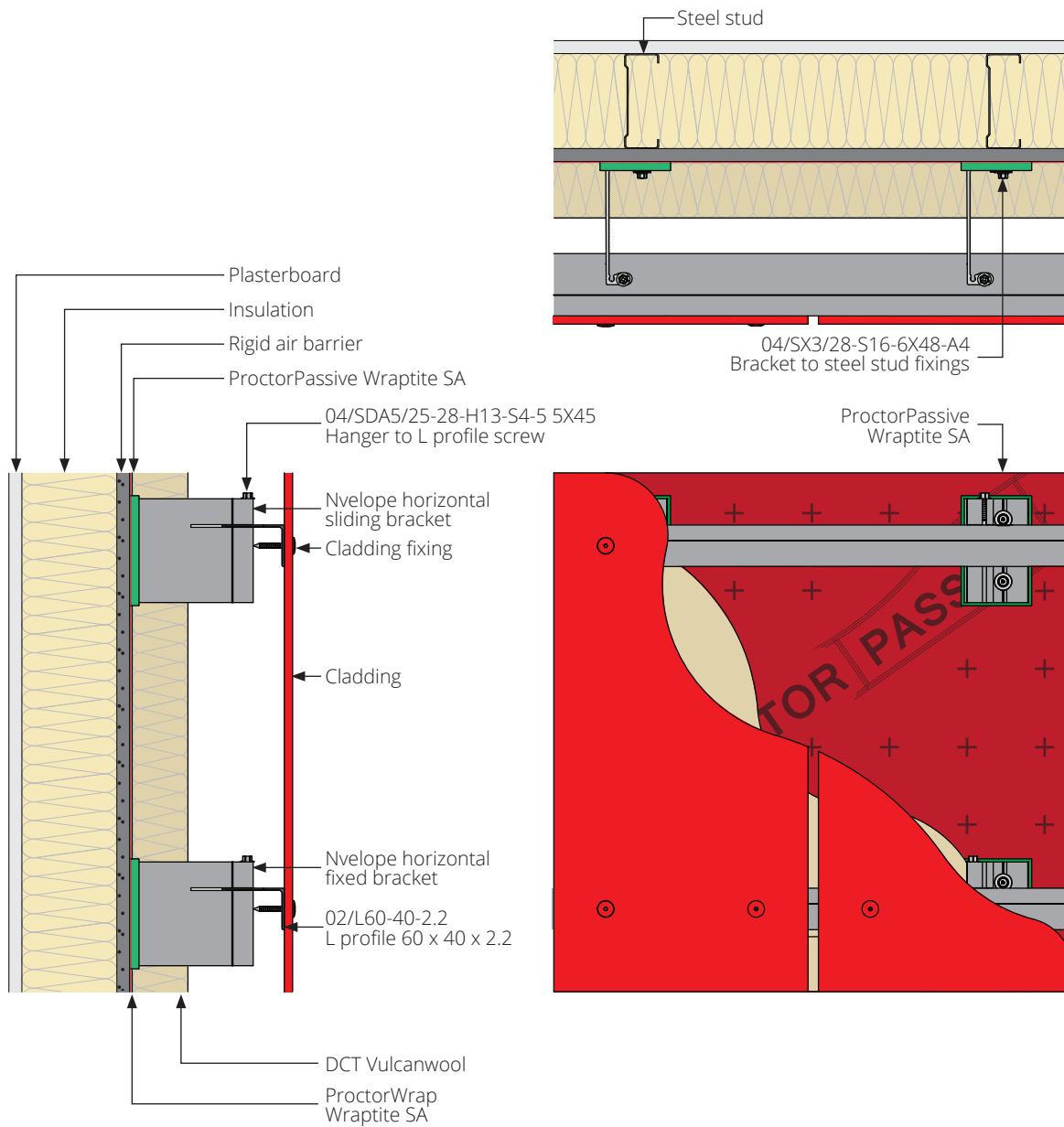


NVELOPE® NH3 System

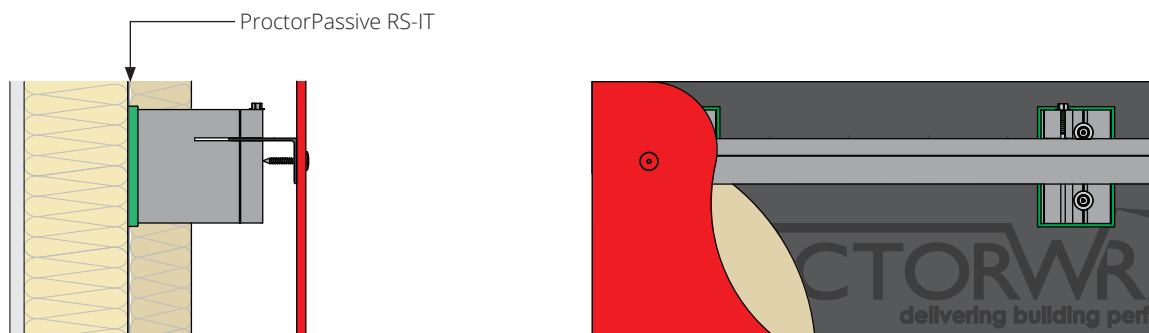
Steel stud construction



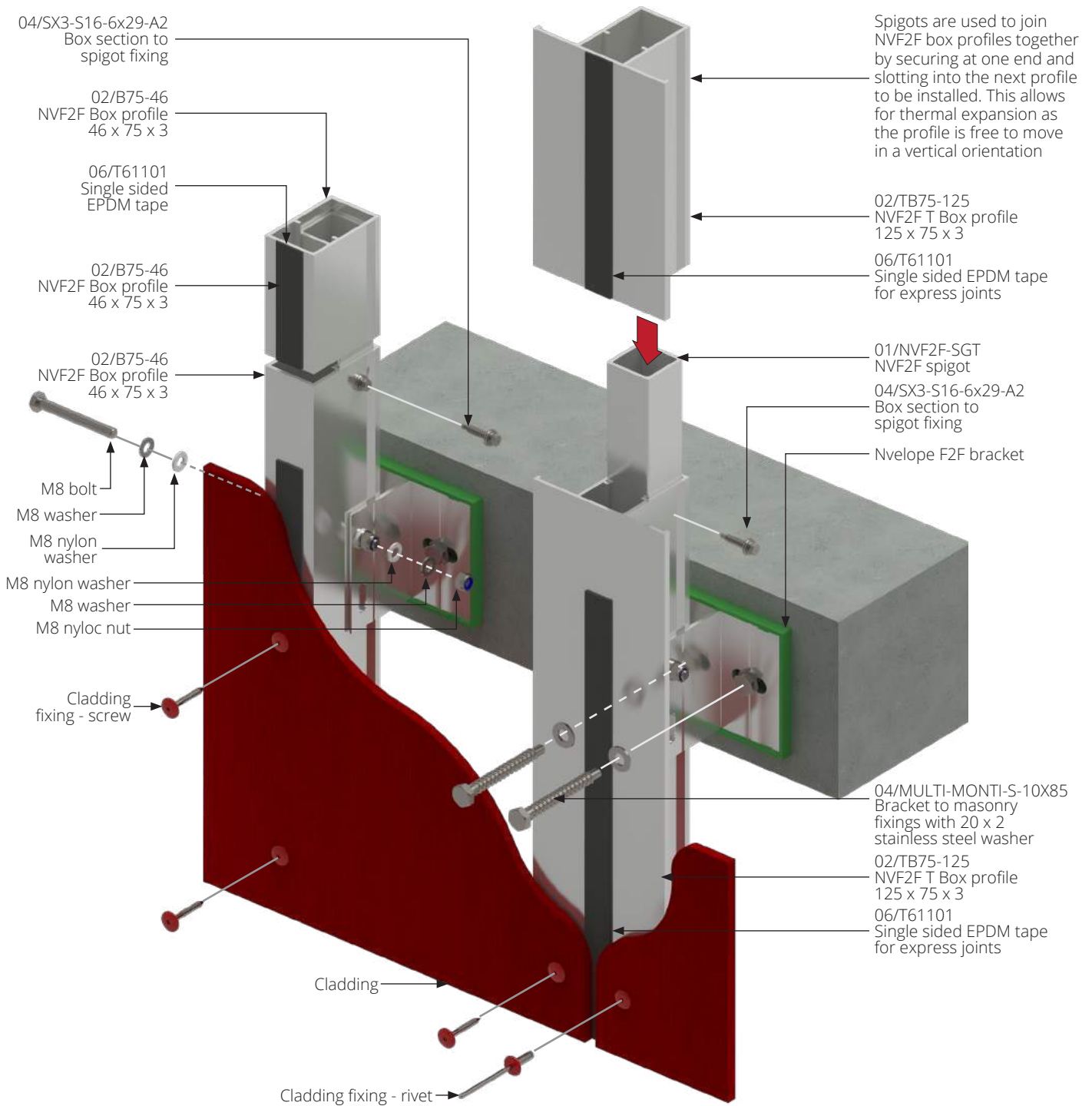
NVELOPE® NH3 system with Rigid air barrier with ProctorPassive Wraptite SA

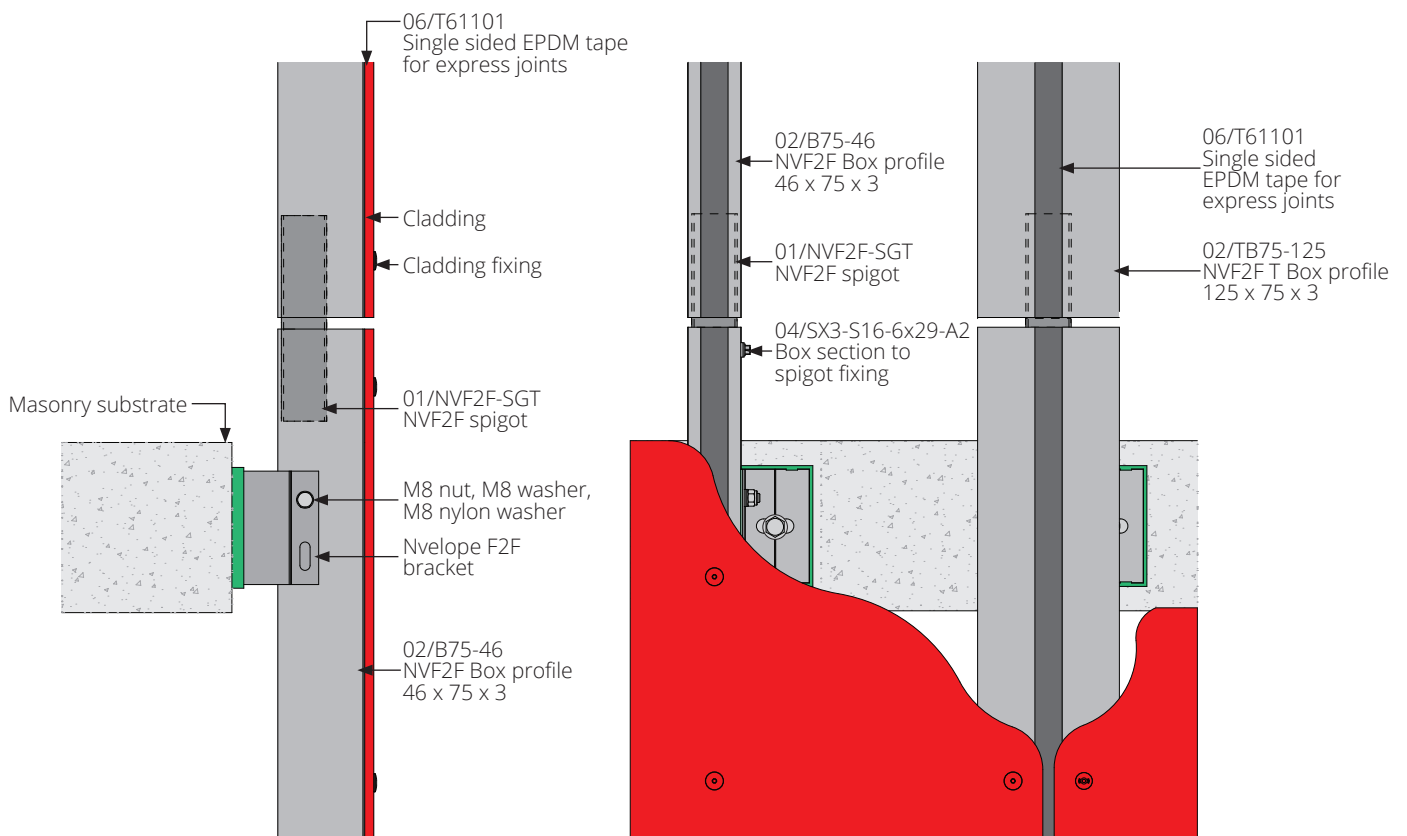
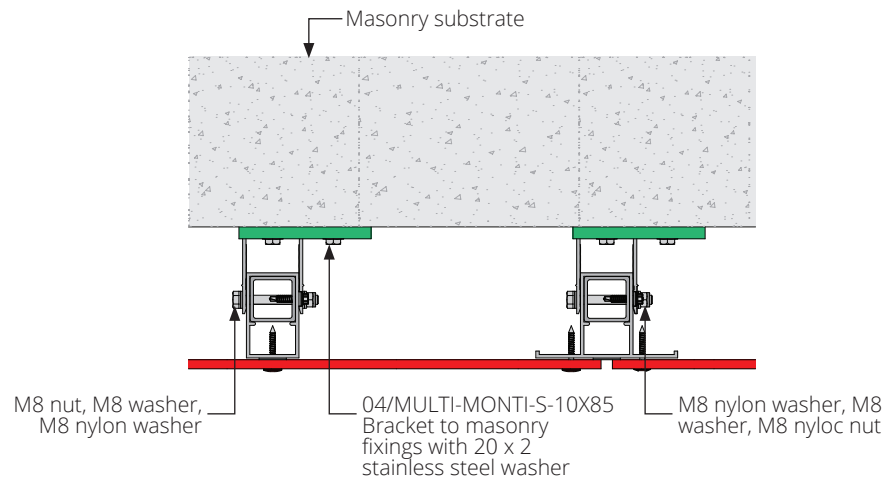


NVELOPE® NH3 system with ProctorPassive RS-IT

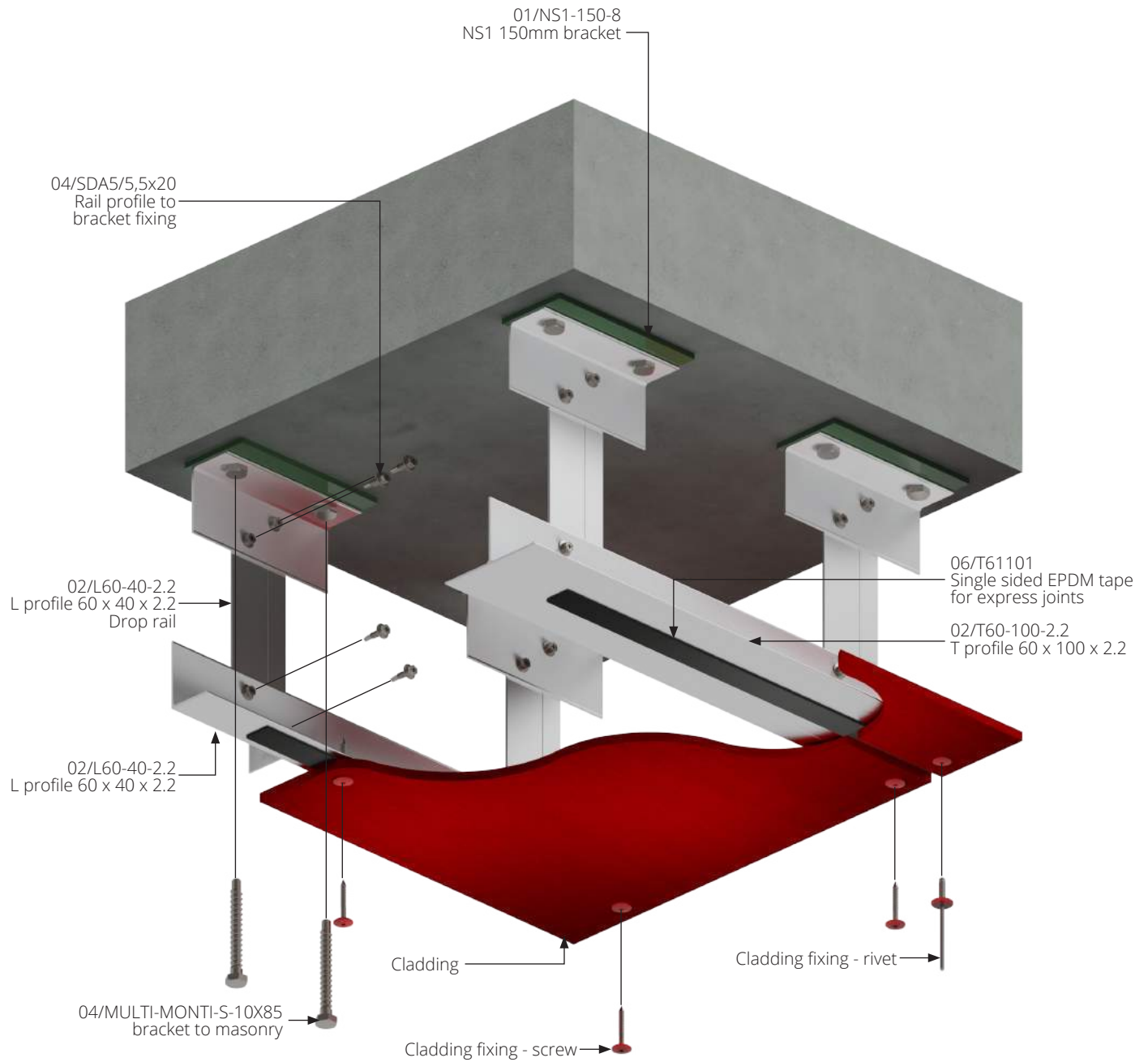


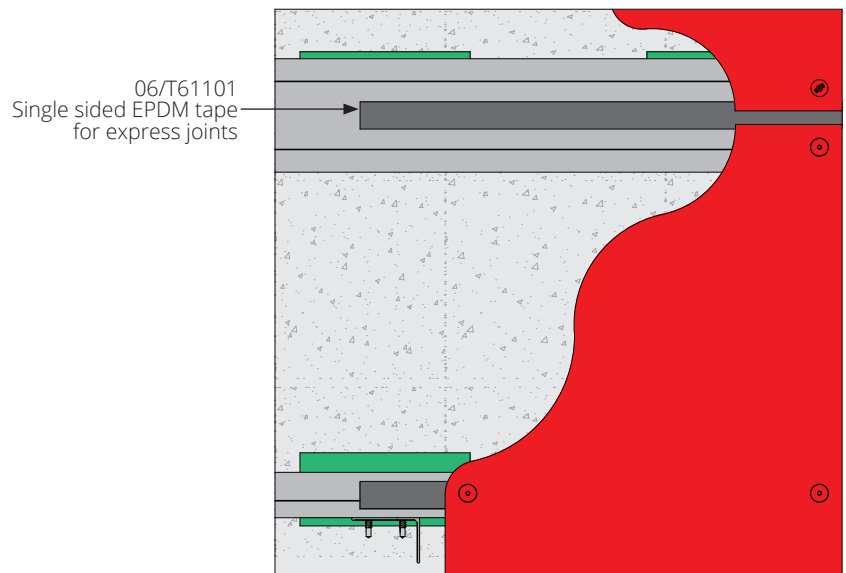
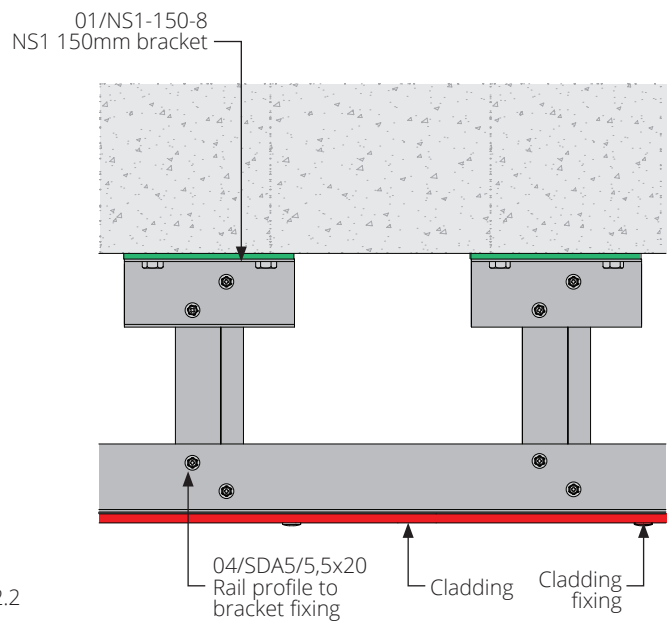
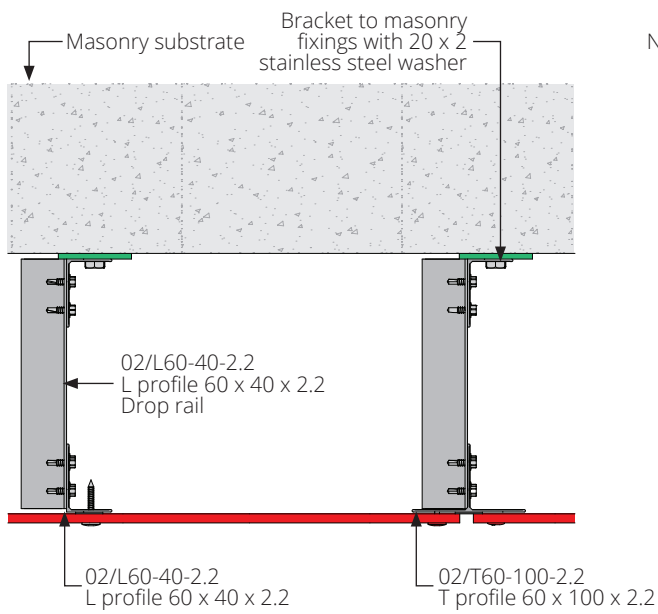
NVELOPE® NVF2F System





NVELOPE® NS1 System











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