NVELOPE
MAKING CLADDING HAPPEN

Designed for architects. Built for installers
Realisation of architectural expression

Rainscreen Support Systems that are safe, economic and effective.

Essential to architects and installers. We ensure that our rainscreen support solutions make the life of the architect and the installer easier and more time efficient. We have been involved in rainscreen support systems for more than twenty years. We are focused on staying ahead of the curve and invest in anticipating 'what next'. We listen to our architectural and installation customers.

page / 04 NVELOPE

page / 07 For Installers

page / 08 For Architects

page / 10 Project Builder

page / 11 Our Brackets - Vertical

page / 13 Our Brackets - Horizontal

page / 14 Rails and Fixings

page / 16 NV1 - The Back Frame

page / 18 NV2 - Fix / Structural Bonding

page / 20 NV3 - Fix / Mechanically

page / 22 NV4 - Fix / Mechanically

page / 24 NV5 - Fix / Mechanically

page / 26 NV6 - Batten / Hybrid

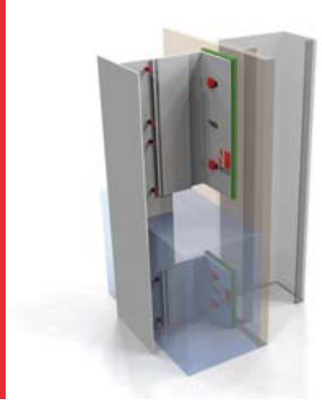
page / 28 NV7 - Aluminium Cassettes

page / 30 NV8 - Fix / Mechanical / Structural Bond

page / 32 NVF2F - Floor to Floor

page / 34 NH2 - Vertical to Horizontal Adapter

NVELOPE Brackets, Rails and Systems.



35 YEARS DURABILITY

BBA APPROVAL INSPECTION TESTING CERTIFICATION
CERTIFICATE 09/4678

Structurally developed from high specification alloys - suitable for supporting even the most demanding façade materials.

- HPL
- Timber / Weatherboard
- Terracotta / Brickslip
- Fibre cement
- Fibre concrete
- Metals - Copper, Zinc, Steel
- ACM
- Render
- Ceramic / Thin stone
- Photovolatic

We hold extensive stocks of our standard façade support systems including brackets, components, extrusions and accessories in all configurations. In-stock items are available for immediate delivery. Project specific, cut profile lengths and bespoke systems solutions are available to order. We turn things around super-fast.

Design

We ensure that our rainscreen brackets and grid systems are safe and optimised with our design support service. We add to the design process with an almost infinite range of façade appearance and layout options.

Our pedigree

NVELOPE support sytems have British Board of Agrément (BBA) certification and are manufactured to ISO 9001 quality management standards. We simplify the complexity of façades. Our systems are able to support almost any type of façade. Concealed fix (mechanical and structural bonding) and visible fix solutions are available. The systems selector will assist in matching the NVELOPE system to the chosen façade materials for your scheme.

System object and static analysis

The structural requirements of the system can be calculated to ensure the integrity of the installation. Project material quantities can be accurately estimated and potential cost savings identified with straightforward access provided via completion of our Project Builder.

Eurocode 9

Implemented to national annex BS EN1999

NVELOPE Rainscreen Cladding bracket support systems and associated fixings have been designed in accordance with the new Eurocode 9 (EC9) and are implemented to National Annex BS EN1999.

Some of the aims and benefits of the Eurocode are to:

- Provide common design criteria and methods
- Provide a common understanding of construction products
- Facilitate the exchange of construction services
- Be a common basis for research and development
- Allow the preparation of common design aids and software
- Increase the competitiveness of European civil engineering firms, contractors, designers and product manufacturers in their world-wide activities

The EC9 provides common structural design rules, so meeting the compliance requirements of the EU. Plus Eurocodes have been recognised as the leading structural codes. Their flexibility enables use internationally, as evidenced by their adoption by several countries outside Europe.

The Eurocode 9 (BS EN 1999-1-1 : 2007+A1 : 2009) applies to the design of structural works in aluminium and complies with the principles and requirements for the resistance, durability, serviceability and safety of aluminium structures.

NV1	NV1 is the NVELOPE back frame – vertical cladding applications.
NV2	NV2 is suitable for concealed fix cladding applications – structural bond (Sika sikatack panel system).
NV3	NV3 is the NVELOPE system for concealed fix / mechanically fixed applications.
NV4	NV4 (ts200) is the NVELOPE system for concealed fix / mechanically fixed applications – vertical cladding applications.
NV5	NV5 (ts300) is the NVELOPE system for concealed fix applications – vertical cladding applications (trespa meteon HPL only).
NV6	NV6 is the NVELOPE system for supporting a timber batten – vertical cladding applications (to support vertical and / or horizontal cladding elements).
NV7	NV7 is the NVELOPE system for secret fix cassette (ACM / zinc / aluminium) – vertical cladding applications.
NV8	NV8 is the NVELOPE system for concealed fix / mechanically fixed and structurally bonded applications.
NVF2F	NVF2F is the NVELOPE back frame – vertical floor to floor cladding applications.
NH1	NH1 is the NVELOPE system used to support vertical elements.

Generic - Cladding types	NV1	NV2	NV3	NV4 (ts200)	NV5 (ts300)	NV6	NV7	NV8	NVF2F	NH1
ACM	Ok	Ok					Ok	Ok	Ok	Ok
Aluminium	Ok	Ok					Ok	Ok	Ok	Ok
Brick slip	Ok								Ok	Ok
Ceramic	Ok	Ok	Ok					Ok	Ok	Ok
Copper						Ok				
Fibre cement	Ok	Ok	Ok					Ok	Ok	Ok
Fibre concrete	Ok	Ok	Ok					Ok	Ok	Ok
GRC	Ok	Ok	Ok					Ok	Ok	Ok
GRP	Ok	Ok	Ok					Ok	Ok	Ok
Glass (non-vision)	Ok	Ok						Ok	Ok	Ok
HPL - high pressure laminate	Ok	Ok	Ok	Trespa	Trespa			Ok	Ok	Ok
Photovoltaic	Ok						Ok	Ok	Ok	Ok
Render	Ok					Ok		Ok	Ok	Ok
Stainless steel	Ok	Ok				Ok	Ok	Ok	Ok	Ok
Terracotta	Ok								Ok	Ok
Timber	Ok					Ok			Ok	Ok
Timber laminate	Ok	Ok						Ok	Ok	Ok
Thin stone	Ok	Ok	Ok					Ok	Ok	Ok
Weatherboarding	Ok					Ok			Ok	Ok
Zinc	Ok					Ok	Ok		Ok	Ok

NVELOPE Brackets, Rails and Systems.

We believe cladding is a serious business. We offer a full support service. Identifying potential cost savings. Providing you with project specific static calculations, thermal values, setting out information and budget rates.

Rainscreen Cladding Systems

We develop systems for the ever changing face of façade design. We listen. We develop products which cope with your demands for more flexible and economical cladding solutions. New build, renovation, steel, concrete, timber SIPS substructure, to any height. Advanced vertical and horizontal support systems. Utilising mechanical fix and structural adhesive techniques. For visible and concealed construction.

Our pedigree

- Static calculations
- Thermal values
- Specification writing assistance – NBS + specification clauses
- AutoCAD
- Layout advice
- Method statements
- BBA certified
- Made in the UK

Maintaining quality, offering technical excellence.

Providing cladding systems that are safe, economic and effective

We ensure that our rainscreen support solutions make the life of the architect and the installer easier and more time effective. We have been involved in rainscreen systems for over ten years (some NVELOPE team members have been in the industry for over twenty years).

We are focused on staying ahead of the curve and invest in anticipating 'what next?'. We listen to our architectural and installer customers. Alive. Modern. Fresh. Confident. Experienced. We are a pragmatic business which provides industry solutions that work. We get the job done. Simple to commission, simple to install and simple to manage. We are a serious, modern business with a true sense of professionalism. We make the best systems for façades – full stop. ■

For Installers. Delivering a Complete Cladding Systems Service.

The NVELOPE helping hand ethos

Service. Fast. Experience. Price

We understand and empathise with the modern installer of cladding systems and the building envelope.

Knowledge acquired from our years of service have enabled us to establish a full support program specifically for rainscreen cladding installers using our products. Our support staff are always available and able to assist with current stock availability, price and technical information.

'Buildable', installer-friendly cladding systems – designed by installers for installers – are functional and designed to facilitate fast-track construction. We are experienced in supporting most key façade manufacturers' cladding materials.

Ex-stock – we always aim to hold extensive stocks of our brackets, rails and accessories – which means stock allocation is always available to get a project underway at short notice.

We offer a prompt, efficient delivery service and our product is always accurately picked and packed. Each delivery is clearly identified to aid the process.

Our technical service package includes static analysis, installation advice and installer team training. Our commercial service package includes M^2 budget pricing and estimates, prompt efficient delivery service – accurately picked, and clearly identified. Optimised system and rail layouts with specialist engineered solutions.

Bespoke product solutions through specialist high quality extruding and cutting services.

Our experience allows us to 'flag' potential issues early and before a scheme goes onto site.

NVELOPE Project Builder

Latest specialist software

Our experienced in-house engineers use the latest specialist software to calculate various aspects of the façade construction.

Preliminary calculations are available for estimates / offers as well as the static and thermal analysis of ventilated façade elements by NVELOPE. The basis for every calculation is our NVELOPE systems Project Builder and relevant UK and European standards.

Looking for a systems installer?

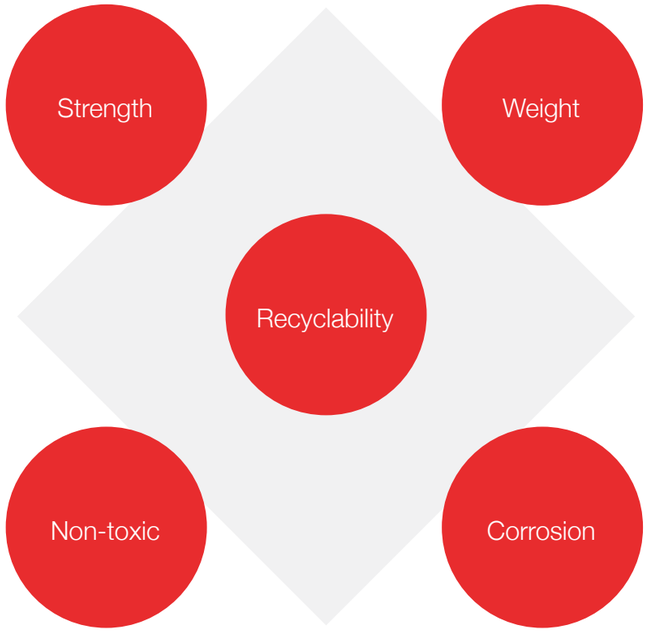
Installation training

We work with the best. If you need assistance in selecting and / or making contact with an installer talk to us – we can advise based on location, size and scope of scheme.

We offer full training for the installation team of all NVELOPE Rainscreen Cladding Systems. ■

For more: www.nvelope.com/for-installers-service-fast-experience-price.html

For Architects.
Quality and Innovation.



Architects

Quality. Safety. Economy. Choice

NVELOPE Rainscreen Systems understand and empathise with the modern architect. Our technical department is always here to help. Your quality guarantee – our cladding systems and products carry British Board of Agrément (BBA) certification. Easy to specify – our Rainscreen Cladding Systems are available as NBS Plus specification clauses and with AutoCAD files. Optimised system and rail layouts with specialist engineered solutions. Project vision and transparency provided through our support service (static calculations, thermal values and M² budget pricing). We are versed in supporting most key façade manufacturers' materials. We always aim to hold extensive stocks of our brackets, rails and accessories – which means stock allocation is always available to get a project underway. www.nvelope.com

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

Sustainability - our green credentials

Bridging the thermal gap

The 2010 revision to part 'L' places specific emphasis on the performance of the building details and the additional losses through linear thermal bridging.

Thermal bridges cause increased flow of heat and should be taken into consideration when designing a façade / façade system. Since the fixing of ventilated cladding must go through the thermal insulation into the substrate, it cannot be avoided.

Thermal decoupling of the substructure from the ventilated façade is achieved through thermal separation layers.

NVELOPE NV and NH brackets are pre-assembled with thermal isolators – isolators help reduce thermal bridging. In addition, NVELOPE isolators prevent a chemical reaction occurring between aluminium brackets and lime in concrete frames and bimetallic corrosion between steel and aluminium.

The thermal value of NVELOPE brackets / isolators has been calculated – you then go to our Project Builder.

The additional heat loss for each M² is known as the PSI value and this additional heat loss is dependant upon the type of detail, the thermal conductivity of the cladding materials and the quality of the detail design and installation.

Aluminium

Our sustainable brackets

NVELOPE brackets (and profiles) are manufactured in the UK to EN7559 production and EN12020-2 alloy and quality standards. ■

For more: www.nvelope.com/for-architects-quality-safety-economy-choice.html

Project Builder.
Each façade is different.

Our Project Builder. Specify a project specific exterior cladding solution.

The requirements for each façade and cladding system are always different and depend on factors such as local wind loads, height of the façade, substrate being fixed to, selected cladding material and the cladding zone. All NVELOPE cladding systems can be engineered to project specific requirements.

An NVELOPE cladding solution

Unlock your cladding scheme by completing and submitting the NVELOPE Project Builder (ideally accompanied with elevation and plan AutoCAD drawings) indicating your proposed cladding requirements.

This will allow us to prepare a project specific NVELOPE cladding solution that includes indicative M² rates, static calculations and setting out information for the support system.

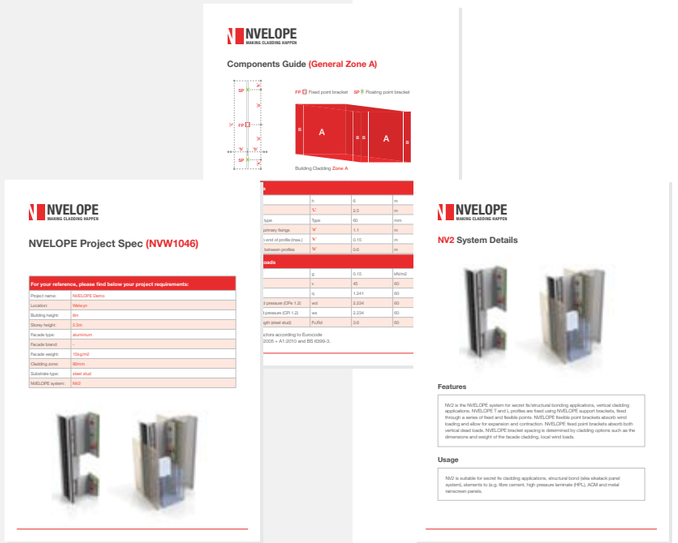
Static Calculations

Supporting the load

A static calculation assesses dynamic forces e.g. wind load and dead loads (weight of the cladding) under project circumstances.

In engineering, static systems do not move or change state – therefore a static calculation ensures that under a given set of circumstances the system (mix of brackets and components) will not move and it will support the load that it's intended to support. ■

For more: www.nvelope.com/cladding-project-checklist-static-thermal-calculations.html



Our Brackets.
Vertical.

It all starts with a bracket

NVELOPE vertical cladding brackets come in standard dimensions of 40-300mm and in two sizes (single anddouble).

Each bracket (60-300) has 40mm of adjustment. The 40mm bracket has 20mm of adjustment.

A simple cladding support system typically consists of 'helping hand' brackets which are fixed to the substrate at set vertical and horizontal separations.

There are vertical brackets (these will be used in the majority of cases) and horizontal brackets.

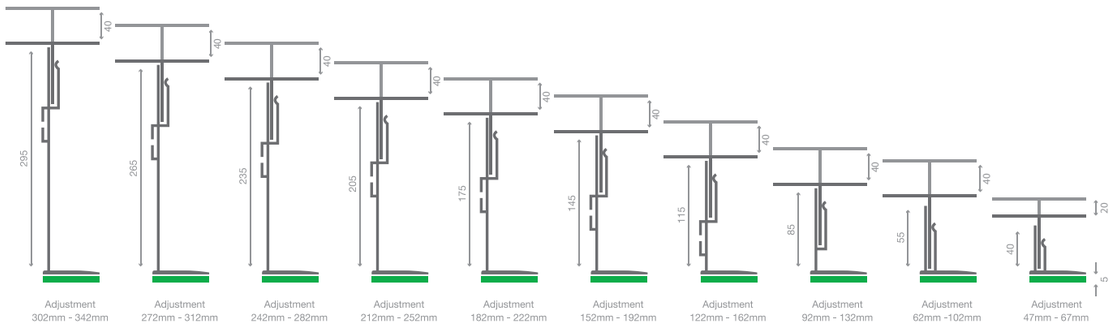
Profiles are then fixed into brackets.

NVELOPE cladding brackets are made of aluminium 6005A T6 former designation AlMgSi 0,5 F25) and comply with BS EN 755 as well as the common regulations for ventilated façades in Europe.

VB Single Vertical Bracket	Size (mm)	6.5mm For steel / timber frame	11mm For concrete block
	40	VB40S-6.5	VB40S-11
	60	VB60S-6.5	VB60S-11
	90	VB90S-6.5	VB90S-11
	120	VB120S-6.5	VB120S-11
	150	VB150S-6.5	VB150S-11
	180	VB180S-6.5	VB180S-11
	210	VB210S-6.5	VB210S-11
	240	VB240S-6.5	VB240S-11
	270	VB270S-6.5	VB270S-11
	300	VB300S-6.5	VB300S-11

VB Double Vertical Bracket	Size (mm)	6.5mm For steel / timber frame	11mm For concrete block
	40	VB40D-6.5	VB40D-11
	60	VB60D-6.5	VB60D-11
	90	VB90D-6.5	VB90D-11
	120	VB120D-6.5	VB120D-11
	150	VB150D-6.5	VB150D-11
	180	VB180D-6.5	VB180D-11
	210	VB210D-6.5	VB210D-11
	240	VB240D-6.5	VB240D-11
	270	VB270D-6.5	VB270D-11
	300	VB300D-6.5	VB300D-11

Single and Double Folded Brackets	Size (mm)	6.5mm	11mm
	330	VBEX325S-6.5 / VBEX325D-6.5	VBEX325S-11 / VBEX325D-11
	360	VBEX355S-6.5 / VBEX355D-6.5	VBEX355S-11 / VBEX355D-11
	390	VBEX385S-6.5 / VBEX385D-6.5	VBEX385S-11 / VBEX385D-11
	420	VBEX415S-6.5 / VBEX415D-6.5	VBEX415S-11 / VBEX415D-11



Range of Adjustment (Single / Double - 6.5mm / 11mm)		
Size (mm)	**Min (mm)**	**Max (mm)**
NVELOPE 40	47	67
NVELOPE 60	62	102
NVELOPE 90	92	132
NVELOPE 120	122	162
NVELOPE 150	152	192
NVELOPE 180	182	222
NVELOPE 210	212	252
NVELOPE 240	242	282
NVELOPE 270	272	312
NVELOPE 300	302	342

6.5mm holes (suitable for steel and / or timber substrates) / 11mm holes (suitable for block / concrete substrates)
NVELOPE isolators: Included as standard - if isolator not required reduce dimensions by 5mm

Adjustability Folded Brackets	Size (mm)	Without isolator (mm)	With isolator (mm)
	330	327 to 367	332 to 372
	360	357 to 397	362 to 402
	390	387 to 427	392 to 432
	420	417 to 457	422 to 462

Vertical profiles attach to brackets by a combination of fixed and flexible points to allow for dead and dynamic loads. Flexible points are vital due to the differing thermal performances of the materials being combined.

Dead and dynamic loads plus expansion and contraction must be taken into account. The façade has to be able to 'float' on the sub-construction. Every element of the façade construction must have only one fixed point. All other fixing points must be executed as floating or moving points.

Fixed point brackets and profiles are connected by round holes in the bracket. The fixed point absorbs both vertical weight loads and horizontal wind loads.

Flexible point bracket and profiles are connected at the elongated holes in the brackets. Their primary function is to absorb dynamic horizontal wind loads.

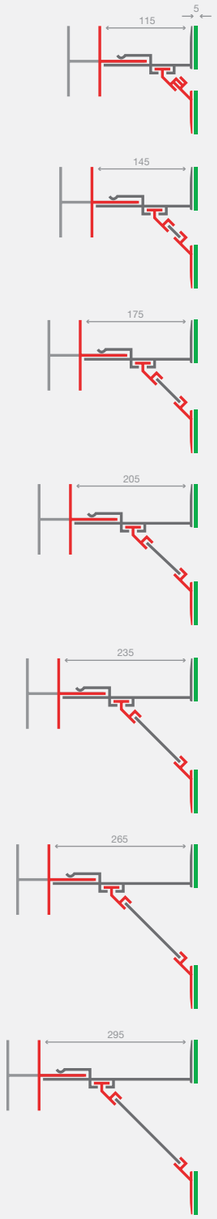
The length of profiles in vertical cladding systems depends on the storey height.

Due to possible expansion, the relationship between the façade material and the cladding support system must be considered.

Using a preliminary survey of the wall and architectural / structural design, a grid layout for the sub-frame is prepared. Brackets (with insulating pad) are fixed to the substrate wall using stainless steel fixings of appropriate size for the design. The pull-out value of the securing fixings should be determined on site from the pull-out strength and appropriate safety factor as given in BS 5427-1: 1996.

The rails are friction held into the brackets by the 'helping hand' and, after adjustment for line and level, are fixed using self-drilling stainless steel screws. ■

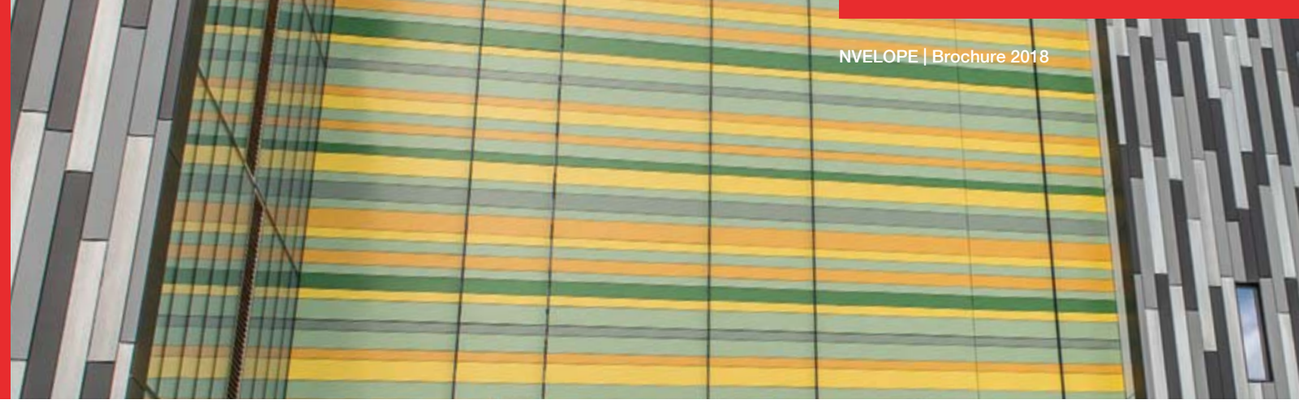
Our Brackets. Horizontal.



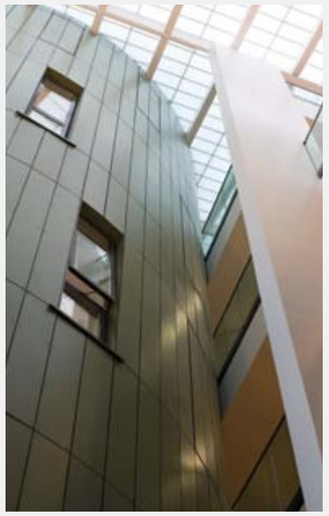
HB Single Horizonal Bracket		
Size (mm)	**6.5mm (slots / widget) For steel / timber frame**	**11mm For concrete block**
120	VB120S-6.5 + HB-BB120S	VB120S-11 + HB-BB120S
150	VB150S-6.5 + HB-BB150S	VB150S-11 + HB-BB150S
180	VB180S-6.5 + HB-BB180S	VB180S-11 + HB-BB180S
210	VB210S-6.5 + HB-BB210S	VB210S-11 + HB-BB210S
240	VB240S-6.5 + HB-BB240S	VB240S-11 + HB-BB240S
270	VB270S-6.5 + HB-BB270S	VB270S-11 + HB-BB270S
300	VB300S-6.5 + HB-BB300S	VB300S-11 + HB-BB300S

Range of Adjustment (Single / Double - 6.5mm / 11mm)		
Size (mm)	**Min (mm)**	**Max (mm)**
NVELOPE 120	122	162
NVELOPE 150	152	192
NVELOPE 180	182	222
NVELOPE 210	212	252
NVELOPE 240	242	282
NVELOPE 270	272	312
NVELOPE 300	302	342

6.5mm holes (suitable for steel and / or timber substrates) / 11mm holes (suitable for block / concrete substrates) NVELOPE isolators: Included as standard - if isolator not required reduce dimensions by 5mm



Rails and Fixings.



Nvelope Isolator

Standard for NV and NH

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

Add NVELOPE rail/s and fixings

The relationship between the façade material and the cladding support system in the context of expansion must be considered.

The rails are clipped into the brackets and, after adjustment for line and level, are fixed to them using self-drilling stainless steel screws.

We hold extensive stocks of our standard cladding support systems rails in all configurations, available for immediate delivery. Project specific, cut profile lengths and bespoke systems solutions are also available. We turn things around super-fast.

Fixings

Fixing	Reference	Detail
SR2 4.2 x 16	4.2-16	Rail to bracket
SR2 4.2 x 19	4.8-19	Rail to rail
JT3 6.3 x 25	JT3-3-6.3x25S16	Metsec steel frame with no cement board or omega
JT3 6.3 x 38	JT3-3-6.3x38S16	Metsec steel frame with up to 12mm cement board
JT3 6.3 x 50	JT3-3-6.3x50S16	Metsec steel frame with up to 18mm cement board
JA3 6.5 x 50	JA3-6.5x50S16	Timber substrate
SDF 10 x 60	SDF-KB-10-60	To block / concrete dependent on block strength thickness
SDF 10 x 80	SDF-KB-10-80	To block / concrete dependent on block strength thickness
SDF 10 x 100	SDF-KB-10-100	To block / concrete dependent on block strength thickness

NVELOPE Rails

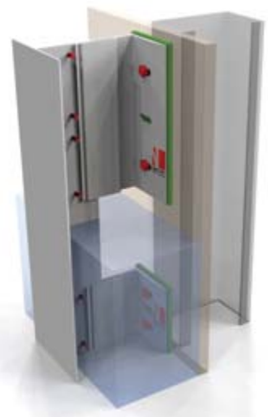
L60-40-2.2-3000		60 x 40 x 2.2mm L 3000 = 3 metre length (also comes in 6 metre and 4.85 metre)
T60-80-2.2-3000		60 x 80 x 2.2mm T 3000 = 3 metre length (also comes in 6 metre)
T60-100-2.2-3000		60 x 100 x 2.2mm T 3000 = 3 metre length (also comes in 6 metre and 4.85 metre)
T40-100-2.2-3000		40 x 100 x 2.2mm T 3000 = 3 metre length (also comes in 6 metre and 4.85 metre)
T60-120-2.2-3000		60 x 120 x 2.2mm T 3000 = 3 metre length (also comes in 6 metre and 4.85 metre)
T60-140-2.2-3000		60 x 140 x 2.2mm T 3000 = 3 metre length (also comes in 6 metre)
HBL60-40-2.5		60 x 40 x 2.5mm L 3000 = 3 metre length for horizontal use
Omega and Zed profiles		
OM25-120-2.4-3000		25mm Omega 3000 = 3 metre length (also comes in 6 metre)
OM25-140-2.4-3000		40mm Omega 3000 = 3 metre length (also comes in 6 metre)
Z25-45-30-2.4-3000		25mm Zed 3000 = 3 metre length (also comes in 6 metre)
Z40-45-55-2.4-3000		40mm Zed 3000 = 3 metre length (also comes in 6 metre)

NV1.
The Back Frame.

NV1 is the NVELOPE back frame – vertical cladding applications.

Suitable as a back frame system – NV1 is suitable for face fixing / rivet fixing cladding elements to e.g. fibre cement, high-pressure laminate (HPL), ACM and metal rainscreen panels.

NV1 is the basis of all NVELOPE support systems.



Features

NV1 is the NVELOPE back frame – vertical cladding applications.

NVELOPE 'T' and 'L' profiles are fixed using NVELOPE support brackets, fixed through a series of fixed and flexible points.

NVELOPE flexible point brackets absorb wind loading and allow for expansion and contraction.

NVELOPE fixed point brackets absorb both vertical dead loads.

NVELOPE Bracket spacing is determined by cladding options such as the dimensions and weight of the façade cladding, local wind loads and cladding zone.

More about NV1

Material:

Manufactured from extruded aluminium alloys conforming to EN 573-3 (material) and EN 755 production standards.

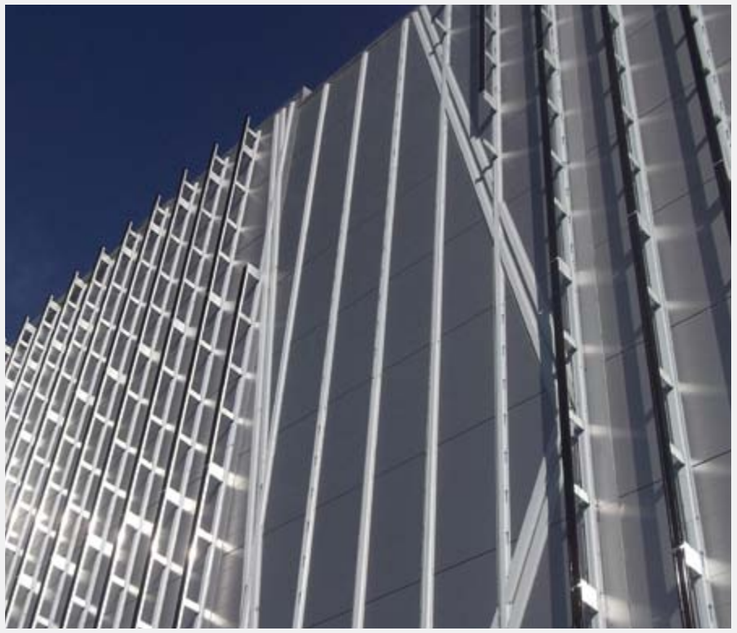
Approvals:

British Board of Agrément (BBA) - 09 / 4678

Options:

NVELOPE brackets (V): allows adjustment between the face of the primary support to outer face of vertical profile. Thermal isolators: hard PVC isolator assembled as standard (located between the NVELOPE bracket and the primary structural support system).

For more visit: www.nvelope.com/cladding-systems -NV1-vertical-cladding.html



NV2.
Fix / Structural Bonding.

NV2 is the NVELOPE system for concealed fix / structural bonding applications.

NV2 is suitable for concealed fix cladding applications – structural bond (Sika sikatack panel system).

Features

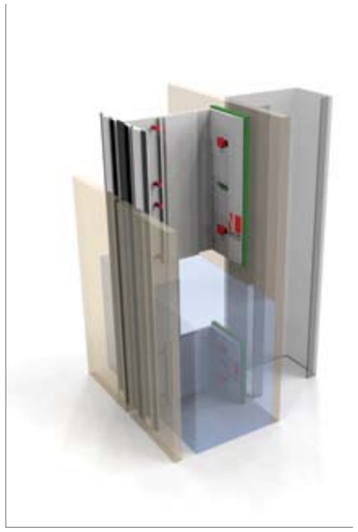
NV2 is the NVELOPE system for secret fix / structural bonding applications – vertical cladding applications.

NVELOPE 'T' and 'L' profiles are fixed using NVELOPE support brackets, fixed through a series of fixed and flexible points.

NVELOPE flexible point brackets absorb wind loading and allow for expansion and contraction.

NVELOPE fixed point brackets absorb both vertical dead loads.

NVELOPE bracket spacing is determined by cladding options such as the dimensions and weight of the facade cladding and local wind loads.



More about NV2

Material:
Manufactured from extruded aluminium alloys conforming to EN 573-3 (material) and EN 755 production standards.

Approvals:
British Board of Agrément (BBA) - 09 / 4678

Options:
NVELOPE brackets (V): allows adjustment between the face of the primary support to outer face of vertical profile. Thermal isolators: hard PVC isolator assembled as standard (located between the NVELOPE bracket and the primary structural support system).

For more visit: www.nvelope.com/cladding-systems-NV2-vertical-cladding.html ■

NV2	NV2 = NV1 + Structural adhesive		
	Select NV1 components (bracket and rail) - then - select NV2 structural adhesive requirements		
	Component	Reference	Detail
	Sika		
	Adhesive - 600cc 'sausage'	STS-600	600cc = 13 metre coverage
	Adhesive - 600cc 'sausage' (Tectiva Only)	STP-50-600	600cc = 13 metre coverage
	Adhesive - 300cc 'cartridge'	STC-300	300cc = 6 metre coverage
	Tape (33m)	STT-33M	33m coverage
	Activator 205	STA-205-1LTR	285m coverage (50mm wide)
	Primer 1ltr	STPP-1LTR	125m coverage (50mm wide)
	Primer 1ltr (Tectiva board only)	STPP-210-1LTR	125m coverage (50mm wide)

Range of Adjustment (Single / Double - 6.5mm / 11mm)		
Size (mm)	Min (mm)	Max (mm)
NVELOPE 40	50	70
NVELOPE 60	65	105
NVELOPE 90	95	135
NVELOPE 120	125	165
NVELOPE 150	155	195
NVELOPE 180	185	225
NVELOPE 210	215	255
NVELOPE 240	245	285
NVELOPE 270	275	315
NVELOPE 300	305	345

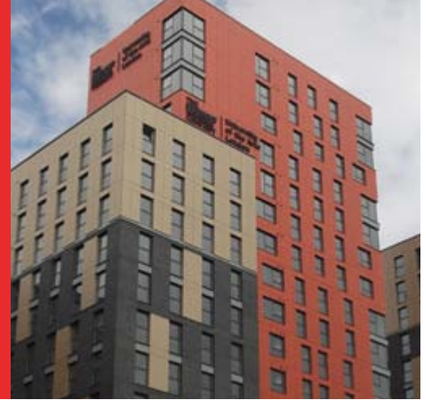
6.5mm holes (suitable for steel and / or timber substrates) / 11mm holes (suitable for block / concrete substrates)
NVELOPE isolators: Included as standard - if isolator not required reduce dimensions by 5mm

Range of Adjustment (Single / Double - 6.5mm / 11mm)

(L) 60 x 40mm

(T) 40 x 100 / 60 x 80 / 60 x 100 / 60 x 120 / 60 x 140mm

NV3.
Fix / Mechanically.



NV3 is the NVELOPE system for concealed fix / mechanically fixed applications.

NV3 elements – fibre cement, high-pressure laminate (HPL), ceramic, thin stone etc. Horizontal NVELOPE channel profiles are fixed to the vertical profiles. Rainscreen panels are hung from and secured with hangers.

Features

NV3 is the NVELOPE system for secret fix / mechanically fixed applications – vertical cladding applications.

Secured using hangers and undercut stud anchors or screws to provide a concealed fixing.

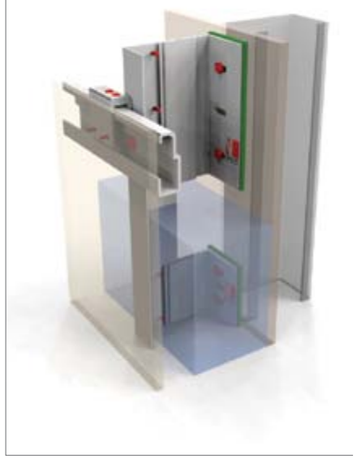
Horizontal NVELOPE channel profiles are fixed to the vertical profiles. Rainscreen panels are hung from and secured to the horizontal profiles with hangers and adjustable hangers.

NVELOPE 'T' and 'L' profiles are fixed using NVELOPE support brackets, fixed through a series of fixed and flexible points.

NVELOPE fixed point brackets absorb both vertical dead loads.

NVELOPE bracket spacing is determined by cladding options such as the dimensions and weight of the façade cladding, local wind loads.

NVELOPE flexible point brackets absorb wind loading and allow for expansion and contraction.



More about NV3

Material:
Manufactured from extruded aluminium alloys conforming to EN 573-3 (material) and EN 755 production standards.

Approvals:
British Board of Agrément (BBA) - 09 / 4678

Options:
NVELOPE brackets (V): allows adjustment between the face of the primary support to outer face of vertical profile. Thermal isolators: hard PVC isolator assembled as standard (located between the NVELOPE bracket and the primary structural support system).

For more visit: www.nvelope.com/cladding-systems-NV3-vertical-cladding.html ■

NV3	NV3 = NV1 + NV3 Components (mechanical concealed fix)		
	Select NV1 components (bracket and rail) - then - select NV3 components		
	Component	Reference	Detail
	Main NV3 horizontal rail	CP-NV3-3000	3000 = 3 metre length (can be 6m)
	Adjustable hangers	NV3-PTS-ADJF / NV3-KEIL-ADJF	Either / or PTS or KEIL Supplied with an adjusting screw
	Fixed hangers	NV3-PTS-STAT / NV3-KEIL-STAT	
	Fixings		
	SR2 4.2 x 16	4.2-16	Rail to bracket
	SR2 4.8 x 19	4.2-19	Main horizontal rail to 50 x 50 2.2 L rail
	Hanger securing screw	JT3-3-5.5X50S16	5.5mm x 50mm securing screw
	PTS screws 11.5	PTS-60 / 11.5	HPL / board (10mm)
	PTS screws 14.5	PTS-60 / 14.5	HPL / board (13mm)
	Keil anchors	On request	Thin stone / ceramic / fibre cement

Range of Adjustment (Single / Double - 6.5mm / 11mm)

Size (mm)	Min (mm)	Max (mm)
NVELOPE 40	73	93
NVELOPE 60	88	128
NVELOPE 90	118	158
NVELOPE 120	148	188
NVELOPE 150	178	218
NVELOPE 180	208	248
NVELOPE 210	238	278
NVELOPE 240	268	308
NVELOPE 270	298	338
NVELOPE 300	328	368

6.5mm holes (suitable for steel and / or timber substrates) / 11mm holes (suitable for block / concrete substrates)
Includes NV3 rail and hanger (26mm). NVELOPE isolators: Included as standard - if isolator not required reduce dimensions by 5mm

Profiles

(L) 60 x 40mm

NV4 (ts200).
Fix / Mechanically.

NV4 is the NVELOPE suitable system for concealed fix / mechanically fixed applications.

NV4 elements –Trespa Meteon HPL. Horizontal NVELOPE channel profiles are fixed to the vertical profiles. Rainscreen panels are hung from and secured with hangers.

Features

NV4 (ts200) is the NVELOPE system for concealed fix / mechanically fixed applications – vertical cladding applications – Trespa.

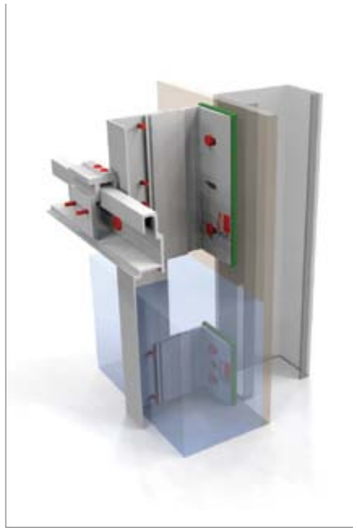
Horizontal NVELOPE channel profiles are fixed to the vertical profiles. Rainscreen panels are hung from and secured to the horizontal profiles with hangers and adjustable hangers.

NVELOPE 'T' and 'L' profiles are fixed using NVELOPE helping hand support brackets, fixed through a series of fixed and flexible points.

NVELOPE flexible point brackets absorb wind loading and allow for expansion and contraction.

NVELOPE fixed point brackets absorb both vertical dead loads.

NVELOPE bracket spacing is determined by cladding options such as the dimensions and weight of the façade cladding, local wind loads.



More about NV4 (ts200)

Material:
Manufactured from extruded aluminium alloys conforming to EN 573-3 (material) and EN 755 production standards.

Approvals:
British Board of Agrément (BBA) - 09 / 4678

Options:
NVELOPE brackets (V): allows adjustment between the face of the primary support to outer face of vertical profile. Thermal isolators: hard PVC isolator assembled as standard (located between the NVELOPE bracket and the primary structural support system).

For more visit: www.nvelope.com/cladding-systems-NV4-vertical-cladding.html ■

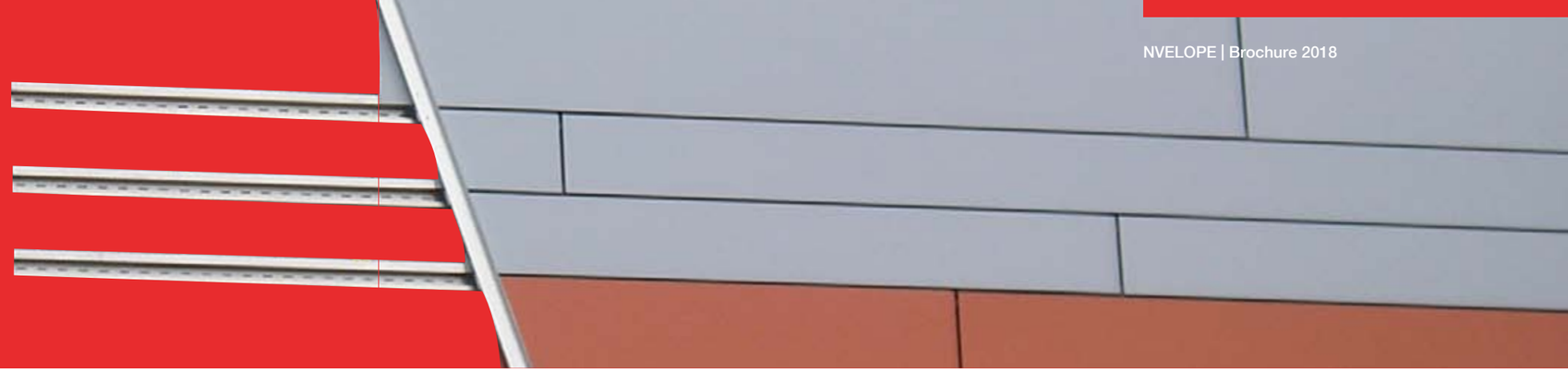
NV4	NV4 = NV1 + NV4 Components (mechanical concealed fix)		
	Select NV1 components (bracket and rail) - then - select NV4 components		
	Component	Reference	Detail
	Main NV4 (ts200) horizontal rail	CP-NV4-3000	3000 = 3 metre length (can be 6m)
	Adjustable hangers	NV4-ADFG	Supplied with an adjusting screw
	Fixed hangers	NV4-STAT	
	Fixings		
	Hanger securing screw	JT3-3-5.5X50S16	5.5mm x 50mm securing screw
	PTS screws 11.5	PTS-60 / 11.5	HPL / board (10mm)
	PTS screws 14.5	PTS-60 / 14.5	HPL / board (13mm)

Range of Adjustment (Single / Double - 6.5mm / 11mm)		
Size (mm)	Min (mm)	Max (mm)
NVELOPE 40	79	99
NVELOPE 60	94	134
NVELOPE 90	124	164
NVELOPE 120	154	194
NVELOPE 150	184	224
NVELOPE 180	214	254
NVELOPE 210	244	284
NVELOPE 240	274	314
NVELOPE 270	304	342
NVELOPE 300	334	374

6.5mm holes (suitable for steel and / or timber substrates) / 11mm holes (suitable for block / concrete substrates)
Includes NV4 (ts200) rail and hanger (32mm). NVELOPE isolators: Included as standard - if isolator not required reduce dimensions by 5mm

Profiles

(L) 60 x 40mm



NV5 (ts300).
Fix / Mechanically.

NV5 is the NVELOPE system for concealed fix applications.

NV5 elements – Trespa Meteon HPL only. Panels are supported at the bottom by the horizontal NV5 channel profile which provides restraint to panel tops. Vertical joints can be open, baffled or formed by half laps with appropriately designed panel edges providing a concealed fixing.

Features

NV5 (ts300) is the NVELOPE system for concealed fix applications – vertical cladding applications (Trespa meteon HPL only).

The panels are supported at the bottom by the horizontal NVELOPE NV5 (ts300) channel profile which provides restraint to panel edges.

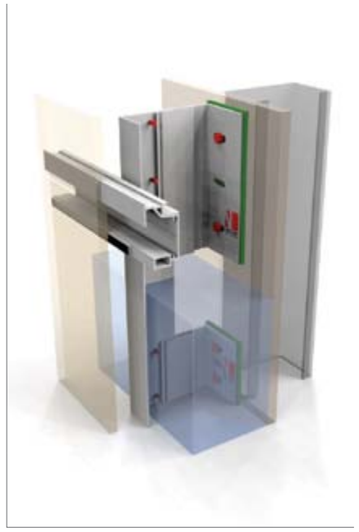
Vertical joints can be open, baffled or formed by half laps with appropriately designed panel edges providing a concealed fixing.

Individual panels can be removed for maintenance or replacement.

NVELOPE 'T' and 'L' profiles are fixed using NVELOPE support brackets, fixed through a series of fixed and flexible points.

NVELOPE flexible point brackets absorb wind loading and allow for expansion and contraction. NVELOPE fixed point brackets absorb both vertical and dead loads.

NVELOPE bracket spacing is determined by cladding options such as the dimensions and weight of the façade cladding, local wind loads.



More about NV5 (ts300)

Material:
Manufactured from extruded aluminium alloys conforming to EN 573-3 (material) and EN 755 production standards.

Approvals:
British Board of Agrément (BBA) - 09 / 4678

Options:
NVELOPE brackets (V): allows adjustment between the face of the primary support to outer face of vertical profile. Thermal isolators: hard PVC isolator assembled as standard (located between the NVELOPE bracket and the primary structural support system).

For more visit: www.nvelope.com/cladding-systems-NV5-vertical-cladding.html ■

NV5	NV5 = NV1 + NV5 Components (mechanical concealed fix)		
	Select NV1 components (bracket and rail) - then - select NV5 components		
	Component	Reference	Detail
	Main NV5 (TS300) horizontal rail	NV5-MR-3000	3000 = 3 metre length (can be 6 m)
	NV5 horizontal starter rail	NV5-SR-3000	Applied to all main horizontal rails
	NVELOPE foam tape	8.5-6-15	
	Fixings		
	SR2 4.2 x 16	4.2-16	Rail to bracket
	SR2 4.8 x 19	4.8-19	Main horizontal rail to 60x40 2.2 L rail

Range of Adjustment (Single / Double - 6.5mm / 11mm)		
Size (mm)	Min (mm)	Max (mm)
NVELOPE 40	79	99
NVELOPE 60	94	134
NVELOPE 90	124	164
NVELOPE 120	154	194
NVELOPE 150	184	224
NVELOPE 180	214	254
NVELOPE 210	244	284
NVELOPE 240	274	314
NVELOPE 270	304	342
NVELOPE 300	334	374
6.5mm holes (suitable for steel and / or timber substrates) / 11mm holes (suitable for block / concrete substrates) NVELOPE isolators: Included as standard - if isolator not required reduce dimensions by 5mm		

Profiles

(L) 60 x 40mm

NV6.
Timber Batten / Hybrid.

NV6 is the NVELOPE system for supporting a timber batten.

Suitable for supporting vertical or horizontal timber or cement weatherboarding. Panels may then be attached to support other materials, e.g. copper, zinc, etc.

Supporting timber cladding / weatherboarding and ply.

Features

NV6 is the NVELOPE system for supporting a timber batten – vertical cladding applications (to support vertical and / or horizontal cladding elements).

Timber batten can be used to support timber cladding / weatherboarding and ply (used as a substrate for other materials e.g metal).

Concealed fix system, utilising NVELOPE brackets plus NVELOPE carrier.

NVELOPE flexible point brackets absorb wind loading and allow for expansion and contraction.

NVELOPE fixed point brackets absorb both vertical dead loads.

NVELOPE bracket spacing is determined by cladding options such as the dimensions and weight of the facade cladding, local wind loads.

Support

Vertical timber cladding: vertical timber bearers are supported with NVELOPE carriers brackets fixed back to NVELOPE support brackets.

Horizontal timber cladding: vertical timber bearers are supported with NVELOPE carriers fixed back to NVELOPE support brackets, then counter battened.

More about NV6

Material:
Manufactured from extruded aluminium alloys conforming to EN 573-3 (material) and EN 755 production standards.

Approvals:
British Board of Agrément (BBA) - 09 / 4678

Options:
NVELOPE brackets (V): allows adjustment between the face of the primary support to outer face of vertical profile. Thermal isolators: hard PVC isolator assembled as standard (located between the NVELOPE bracket and the primary structural support system).

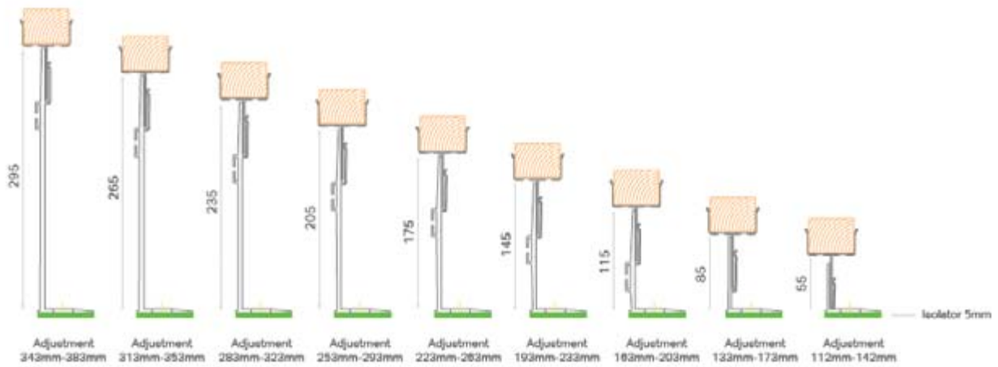
For more visit: www.nvelope.com/cladding-systems-NV6-vertical-cladding.html ■

NV6	NV6 = NV1 + NV6 Components (mechanical concealed fix)		
	Select NV1 components (bracket) - then - select NV6 components		
	Component	Reference	Detail
	NV6 50 wide single	UC50S	For a 50 x 38 timber batten
	NV6 50 wide double	UC50D	For a 50 x 38 timber batten
	NV6 100 wide single	UC100S	For a 100 x 38 timber batten
	NV6 100 wide double	UC100D	For a 100 x 38 timber batten
	Fixings		
	SR2 4.2 x 16	4.2-16	NV6 carrier to bracket
	Timber fixing screws	4.8T-25	Batten to NV6 carrier

Range of Adjustment (Single / Double - 6.5mm / 11mm)		
Size (mm)	Min (mm)	Max (mm)
NVELOPE 60	112	142
NVELOPE 90	133	173
NVELOPE 120	163	203
NVELOPE 150	193	233
NVELOPE 180	223	263
NVELOPE 210	253	293
NVELOPE 240	283	323
NVELOPE 270	313	353
NVELOPE 300	343	383

6.5mm holes (suitable for steel and / or timber substrates) / 11mm holes (suitable for block / concrete substrates)
NVELOPE isolators: Included as standard - if isolator not required reduce dimensions by 5mm
For use only in the vertical plane - use counter battens for vertical cladding.

Bracket range:

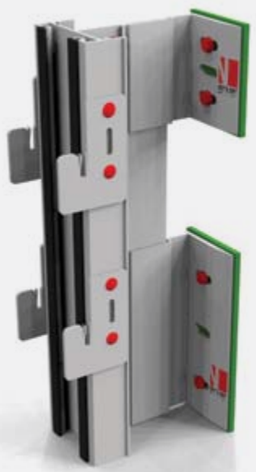


NV7.
Aluminium cassettes.

NV7 is the NVELOPE system for supporting cassettes.

Suitable for supporting ACM / ZCM / Aluminium cassettes.

Speak to our technical team.



Features

NV7 is the NVELOPE system for concealed fix cassette (ACM / zinc / aluminium) – vertical cladding applications.

Secured using cassette hangers to provide a concealed fixing.

NVELOPE 'T' and 'L' profiles are fixed using NVELOPE support brackets, fixed through a series of fixed and flexible points.

NVELOPE fixed point brackets absorb both vertical and dead loads.

NVELOPE bracket spacing is determined by cladding options such as the dimensions and weight of the facade cladding, local wind loads, cladding zone and substrate.

NVELOPE flexible point brackets absorb wind loading and allow for expansion and contraction.

More about NV7

Material:
Manufactured from extruded aluminium alloys conforming to EN 573-3 (material) and EN 755 production standards.

Approvals:
British Board of Agrément (BBA) - 09 / 4678 (Brackets)

Options:
NVELOPE brackets (V): allows adjustment between the face of the primary support to outer face of vertical profile. Thermal isolators: hard PVC isolator assembled as standard (located between the NVELOPE bracket and the primary structural support system).

For more visit: www.nvelope.com/cladding-systems-NV7-vertical-cladding.html ■

NV7	NV7 = NV1 + NV7 Components (brackets) + NVELOPE cassette profile		
	Select NV1 components (bracket) - then - select NV7 components		
	Rail / Component	Reference	Detail
	NV7 Cassette rail	NV7-CR-3000	3000 = 3 metre length
	NV7 Anti rattle tape	12-6-15	To be applied to all cassette rails (x2)
	NV7 Hanger plate	NV7-H-PLATE	
	Fixings		
	SR2 4.2 x 16	4.2-16	NV7 rail to bracket

Range of Adjustment (Single / Double - 6.5mm / 11mm)		
Size (mm)	Min (mm)	Max (mm)
NVELOPE 60	140	180
NVELOPE 90	170	210
NVELOPE 120	200	240
NVELOPE 150	230	270
NVELOPE 180	260	300
NVELOPE 210	290	330
NVELOPE 240	320	360
NVELOPE 270	350	390
NVELOPE 300	380	420
6.5mm holes (suitable for steel and / or timber substrates) / 11mm holes (suitable for block / concrete substrates) Incorporates a cassette depth of 50mm NVELOPE isolators: Included as standard - if isolator not required reduce dimensions by 5mm		

Profiles

(L) Cassette 'T' - 72mm wide x 92mm front to back (78mm 'leg')

NV8.
Fix / Mechanically / Structural bond.

NV8 is the NVELOPE system for concealed fix / mechanically fixed and structurally bonded applications.

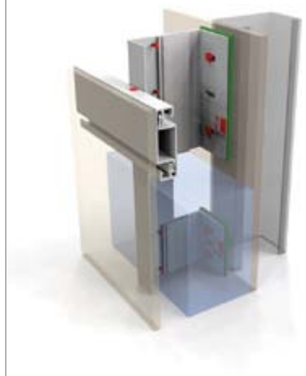
Features

NV8 is an alternative NVELOPE system for secret fix / mechanically fixed / structurally bonded applications. On site or off site secured using hangers and undercut stud anchors, screws or structural adhesive (Sika) to provide a concealed fixing.

Horizontal NVELOPE channel profiles are fixed to the vertical profiles. Rainscreen panels are hung from and secured to the horizontal profiles with hangers and adjustable hangers.

NVELOPE 'T' and 'L' profiles are fixed using NVELOPE support brackets, fixed through a series of fixed and flexible points. NVELOPE fixed point brackets absorb both vertical dead loads.

NVELOPE bracket spacing is determined by cladding options such as the dimensions and weight of the façade cladding, local wind loads. NVELOPE flexible point brackets absorb wind loading and allow for expansion and contraction.



More about NV8

Material:
Manufactured from extruded aluminium alloys conforming to EN 573-3 (material) and EN 755 production standards.

Approvals:
British Board of Agrément (BBA) - 09 / 4678 (Brackets).

Options:
NVELOPE brackets (V): allows adjustment between the face of the primary support to outer face of vertical profile. Thermal isolators: hard PVC isolator assembled as standard (located between the NVELOPE bracket and the primary structural support system).

For more visit: www.nvelope.com/cladding-systems-NV8-vertical-cladding.html ■

NV8	NV8 = NV1 + NV8 Components (mechanical concealed fix)		
	Select NV1 components (bracket and rail) - then - select NV8 components		
	Component	Reference	Detail
	Main NV8 horizontal rail	CP-NV8-3000	3000 = 3 metre length (can be 6m)

Range of Adjustment (Single / Double - 6.5mm / 11mm)		
Size (mm)	Min (mm)	Max (mm)
NVELOPE 40	73	93
NVELOPE 60	88	128
NVELOPE 90	118	158
NVELOPE 120	148	188
NVELOPE 150	178	218
NVELOPE 180	208	248
NVELOPE 210	238	278
NVELOPE 240	268	308
NVELOPE 270	298	338
NVELOPE 300	328	368

6.5mm holes (suitable for steel and / or timber substrates) / 11mm holes (suitable for block / concrete substrates)
Includes NV8 rail and hanger (26mm). NVELOPE isolators: Included as standard - if isolator not required reduce dimensions by 5mm

NVF2F.
Floor to Floor.

NVF2F is the NVELOPE back frame – vertical floor to floor cladding applications.

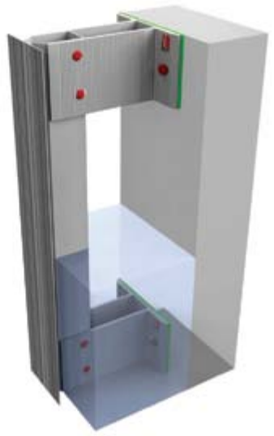
Suitable as a back frame system – NVF2F is suitable for face fixing / rivet fixing cladding – elements to e.g. fibre cement, high-pressure laminate (HPL), ACM and metal rainscreen panels. NVF2F can support NV3 / 4 / 5 / 6 / 7 and 8.

Features

NVF2F is the NVELOPE back frame – vertical floor to floor cladding applications.

NVELOPE floor to floor (mullion) box 'T' profiles are fixed using NVELOPE support brackets. NVELOPE brackets absorb wind loading and allow for expansion and contraction and both vertical dead loads.

NVELOPE Bracket spacing is determined by cladding options such as the dimensions and weight of the façade cladding, local wind loads and cladding zone.



More about NVF2F

Material:
Manufactured from extruded aluminium alloys conforming to EN 573-3 (material) and EN 755 production standards.

Options:
NVELOPE brackets (V): allows adjustment between the face of the primary support to outer face of vertical profile. Thermal isolators: hard PVC isolator assembled as standard (located between the NVELOPE bracket and the primary structural support system) are available.

For more visit: www.nvelope.com/cladding-systems-NVF2F-vertical-cladding.html ■

NVF2F	Component	Bracket height (mm)	Bracket width (mm)	Reference
	Bracket - Floor to Floor	100	100	01/BF2F100
	Bracket - Floor to Floor	120	100	01/BF2F120
	Bracket - Floor to Floor	200	100	01/BF2F200
	Off set bracket - Floor to Floor	100	100	01/OSBF2F100
	Off set bracket - Floor to Floor	120	100	01/OSBF2F120
	Off set bracket - Floor to Floor	200	100	01/OSBF2F200
	Floor to Floor (Mullion) box 'T' Rail - 120 x 90mm			02/T120F2F-3100
	Box (Transom) Rail - 60 x 47mm			02/B60-47-300
	Transom hanger			03/F2Fhanger
	Spigot 200mm - 60 x 47mm			02/B60-47-200

Range of Adjustment (Single / Double - 6.5mm / 11mm)		
Size (mm)	Min (mm)	Max (mm)
100	105	150
120	125	170
200	205	250

NH2.
Vertical to Horizontal Adapter.

NH2 is the NVELOPE system used to support vertical elements.

Allowing for varied façade design options.

Features

The vertical bracket is secured to the substrate; either steel frame, block work, or timber. The adaptor is then slotted upright into the vertical brackets helping hand, with the adaptor's helping hands orientated over the top of the vertical bracket, this is then fixed into place. The helping hands of the adaptor are then ready to receive an L or T rail.

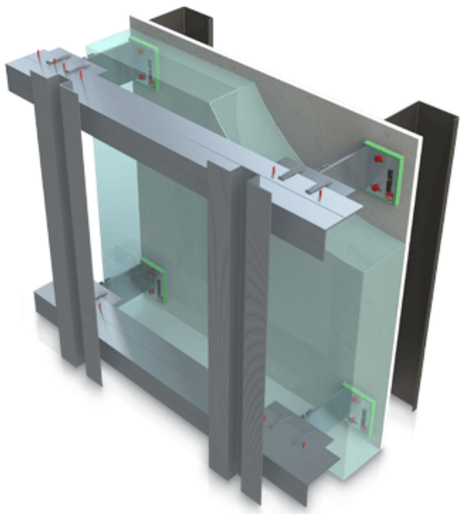
The L and T rail can be adjusted for line and level and secured using fixed and floating points to allow for expansion and contraction.

This system is suitable for face fixed and sika fixing applications.

More about NH2

Material:
Manufactured from extruded aluminium alloys conforming to EN 573-3 (material) and EN 755 production standards.

Approvals:
British Board of Agrément (BBA) - 09 / 4678



Range of Adjustment (Single / Double - 6.5mm / 11mm)		
Size (mm)	Min (mm)	Max (mm)
NVELOPE 60	83	113
NVELOPE 90	105	135
NVELOPE 120	135	165
NVELOPE 150	165	195
NVELOPE 180	195	225
NVELOPE 210	225	255
NVELOPE 240	255	285
NVELOPE 270	285	315
NVELOPE 300	315	345

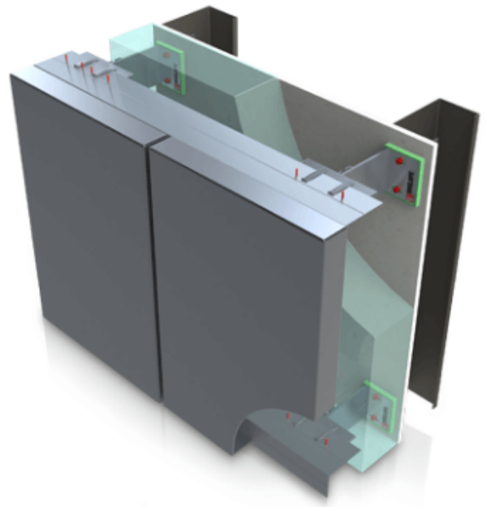
6.5mm holes (suitable for steel and / or timber substrates) / 11mm holes (suitable for block / concrete substrates)
NVELOPE isolators: Included as standard - if isolator not required reduce dimensions by 5mm

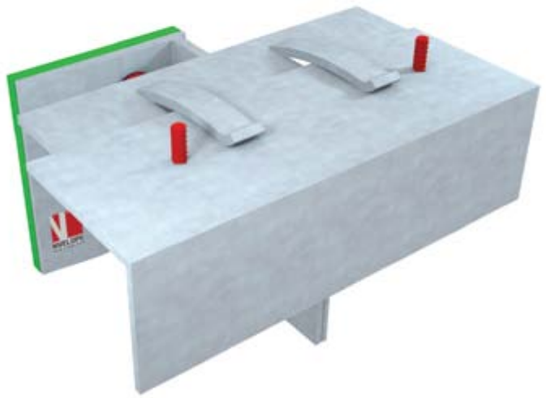
This product allows vertical brackets to receive horizontal L & T rails.

More about NH2

This new adaptor is suitable for projects that have a shallow cladding zone, being compatible with our 60mm vertical brackets. This product also helps create a lesser U-value for the building as there are fewer fixings to the substrate creating less thermal bridging.

For more visit: www.nvelope.com/cladding-systems-NH2.html ■





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