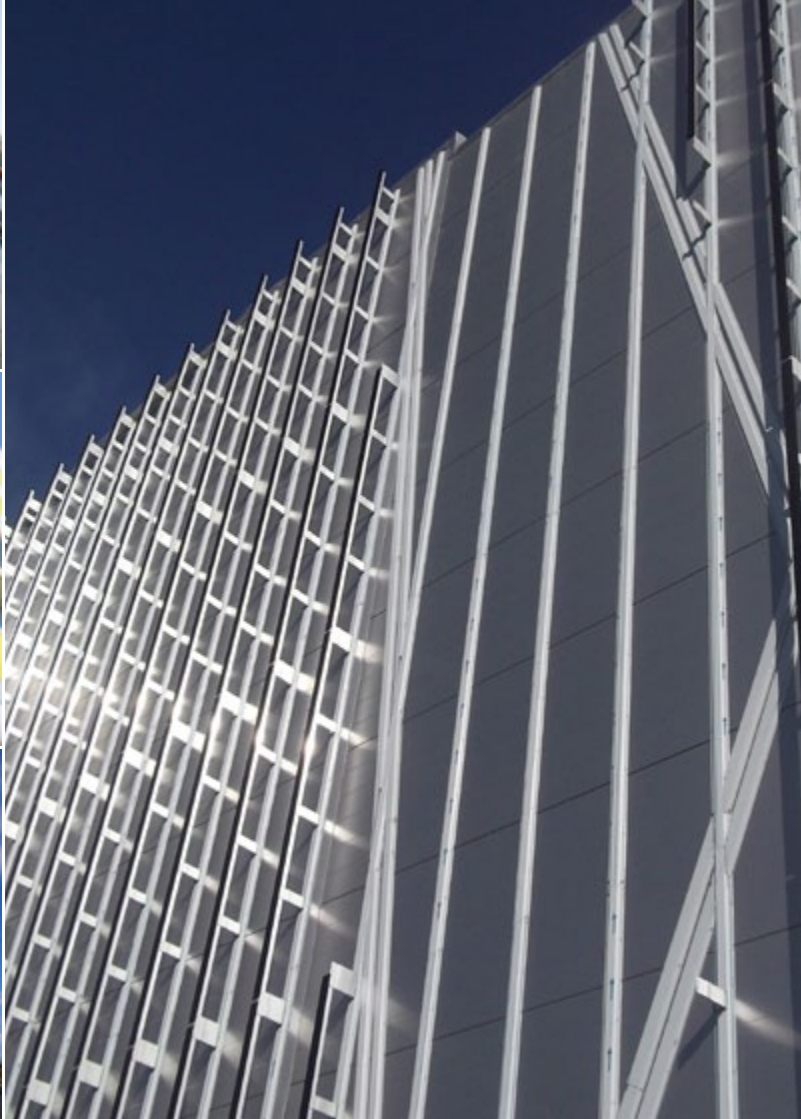


RAINSCREEN CLADDING SYSTEMS



DESIGNED FOR ARCHITECTS. BUILT FOR INSTALLERS
BRACKETS, RAILS AND SYSTEMS

2013



CONTENTS

- 04 NVELOPE BRACKETS, RAILS AND SYSTEMS
- 06 NVELOPE BRACKETS, RAILS AND SYSTEMS
- 08 FOR ARCHITECT
- 10 FOR INSTALLER
- 12 PROJECT CHECKLIST
- 14 BRACKETS AND RAILS
- 19 NVELOPE ISOLATOR
- 21 'T' & 'L' PROFILES
- 24 NV1
- 28 NV2
- 32 NV3
- 36 NV4 (ts 200)
- 40 NV5 (ts 300)
- 44 NV6
- 50 NH1 (horizontal)



n5Plus

AUTOCAD

NVELOPE BRACKETS, RAILS AND SYSTEMS

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
- ACM
- render
- ceramic/thin stone
- glass
- photovoltaic

you name it - we make it happen.

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 systems have british board of agreement (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 checklist.



GENERIC - CLADDING TYPES	NV1	NV2	NV3	NV4 (ts200)	NV5 (ts300)	NV6	NH1
ACM	OK	OK					OK
ALUMINIUM	OK	OK					OK
BRICK SLIP	OK						OK
CERAMIC	OK	OK	OK				OK
COPPER	OK	OK				OK	OK
FIBRE CEMENT	OK	OK	OK				OK
FIBRE CONCRETE	OK	OK	OK				OK
GRC	OK	OK	OK				OK
GRP	OK	OK	OK				OK
GLASS	OK	OK					OK
HPL - HIGH PRESSURE LAMINATE	OK	OK	OK	TRESPA	TRESPA		OK
PHOTOVOLTAIC	OK						OK
RENDER	OK					OK	OK
STAINLESS STEEL	OK	OK				OK	OK
TERRACOTA	OK						OK
TIMBER	OK					OK	OK
TIMBER LAMINATE	OK	OK					OK
THIN STONE	OK	OK	OK				OK
WEATHER BOARDING	OK					OK	OK
ZINC	OK					OK	OK



- NV1** NVELOPE vertical back frame/bracket + 'T' and 'L' & face fix (rivet) applications
- NV2** NVELOPE back frame/bracket + 'T' and 'L' – structural bond (SikaTack) – concealed fix
- NV3** NVELOPE back frame/bracket + 'T' and 'L' + horizontal rail & cleats – concealed fix/mechanical
- NV4** NVELOPE back frame/bracket + 'T' and 'L' + horizontal Trespa branded (ts200) rail & cleats – concealed fix (HPL)
- NV5** NVELOPE back frame/bracket + 'T' and 'L' + horizontal Trespa branded (ts300) rail & cleats – concealed fix (HPL)
- NV6** NVELOPE bracket and carrier – hybrid framing system (alu/timber) – timber cladding + ply carrier for metal faced facades
- NH1** NVELOPE horizontal back frame/bracket + 'L'

NVELOPE

BRACKETS RAILS AND SYSTEMS

the facade industry is evolving and so are we. we have retained the strong elements of our original proposition - quality and service (technical, administration, logistics) - and we have enhanced our offer with new improved products and systems.

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.

maintaining quality, offering technical excellence.

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.

DESIGN MATTERS

- static calculations
- thermal values
- specification writing assistance – NBS + specification clauses
- autoCAD
- layout advice
- method statements
- BBA certified
- made in the UK



OUR PEDIGREE

A BIT ABOUT US

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 that 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 ARCHITECT

**OUR UNDERSTANDING. OUR VALUE. OUR OPINIONS.
ALL WITH YOU - THE ARCHITECT - IN MIND**

QUALITY. SAFETY. ECONOMY. CHOICE

we understand and empathise with the modern architect.

our technical department is always here to help.

your quality guarantee – our products carry british board of agreement (BBA) certification.

easy to specify – our 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) - see 'project checklist'.

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.



ALUMINIUM

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

weight – aluminium density is 2.7kg/m³, or approximately one third that of steel.

the low weight and high strength, malleability, simplicity of fabrication, corrosion resistance and good ability to conduct heat and electricity are some of the most important characteristics of aluminium.

recyclability – aluminium is very easy to recycle, needing only 5% of the energy required for primary production.

strength – aluminium alloys have tensile strengths of between 70 and 700n/mm². in contrast to most steel alloys, at low temperatures, the strength of aluminium increases, without any embrittlement of the metal. at high temperatures the strength decreases. at constant temperatures over 100°C consideration must be given to the effect on the structural strength of the material.

non-toxic – aluminium is nature's most common metal with no less than 8% of the earth's crust consisting of many different forms of aluminium compounds, which also naturally occur in our food.

corrosion – as with most other metals, aluminium reacts with the oxygen in the air. the oxide layer, which is created on the surface of the material, is very thin and provides a natural high level of corrosion protection. if this oxide layer is damaged it spontaneously reforms itself.

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



FOR INSTALLER

OUR GUIDES AND SERVICE TO MAKE INSTALLATION CLEAR, SUCCINCT AND EFFICIENT

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 has enabled us to establish a full support programme specifically for installers of our products.

our support staff are always available and able to assist with current stock availability, price and technical information.

'buildable' installer friendly systems – designed by installers for installers and architects – are functional and designed to facilitate fast track construction.

we are experienced in supporting most key façade manufacturers' cladding materials.

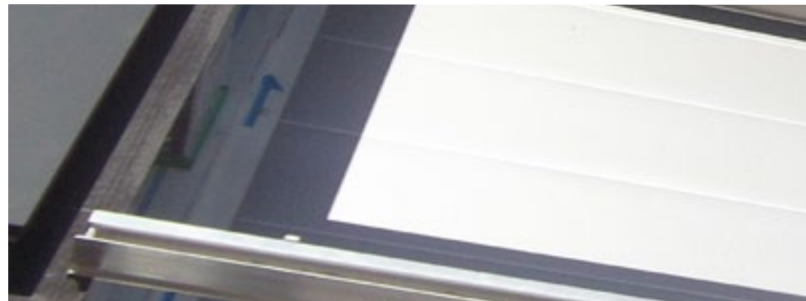
ex-stock - we always aim to hold extensive stocks of our brackets, rails and accessories – which means stock allocation is always available to get a project underway at short notice.

we offer a prompt, efficient delivery service. 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. optimised systems and rail layouts.

our commercial service package includes m2 budget pricing and estimates, 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.



LOOKING FOR A SYSTEMS INSTALLER?

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.

INSTALLATION TRAINING

we offer full training for the installation team of all NVELOPE systems.



PROJECT CHECKLIST

EACH FAÇADE IS DIFFERENT



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

unlock your scheme by completing and submitting the NVELOPE project checklist (ideally accompanied with elevation and plan autoCAD drawings, indicating your proposed cladding requirements).

this will allow us to prepare a project specific cladding solution that includes static calculations, setting out information and thermal calculations for the support system.

please don't hesitate to contact our technical department for specific advice.

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 brackets are pre-assembled with thermal isolators – isolators help reduce thermal bridging – in addition NVELOPE isolators prevent a chemical reaction occurring between an aluminium bracket and lime in a concrete frame.

the thermal value of NVELOPE brackets/isolators have been calculated.

the additional heat loss for each m² of a detail 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.

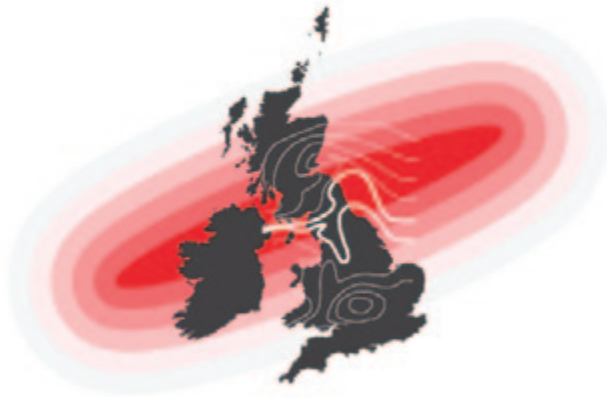


PROJECT CHECKLIST

EACH FACADE IS DIFFERENT

INDICATIVE M2 PRICING

resultant setting-out information allows for guide m2 price rates to be determined.



STATIC CALCULATIONS

NVELOPE statics conform to eurocode 9: design of aluminium structures. 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 will support the load it is intended to support.



BRACKETS AND RAILS

A 'HELPING HAND'

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

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

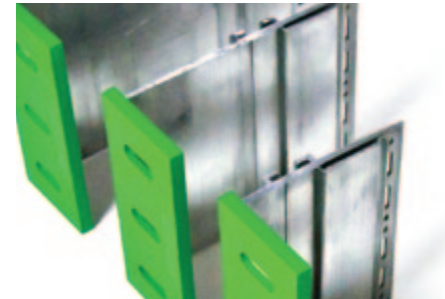
profiles are then fixed into brackets. profiles are usually vertical - 'L' rails (normally used at intermediate locations) and 'T' rails (normally used at panel joints).

brackets are compatible with substrates - concrete/block/ lightweight steel/timber/SIPS - check with NVELOPE technical department.

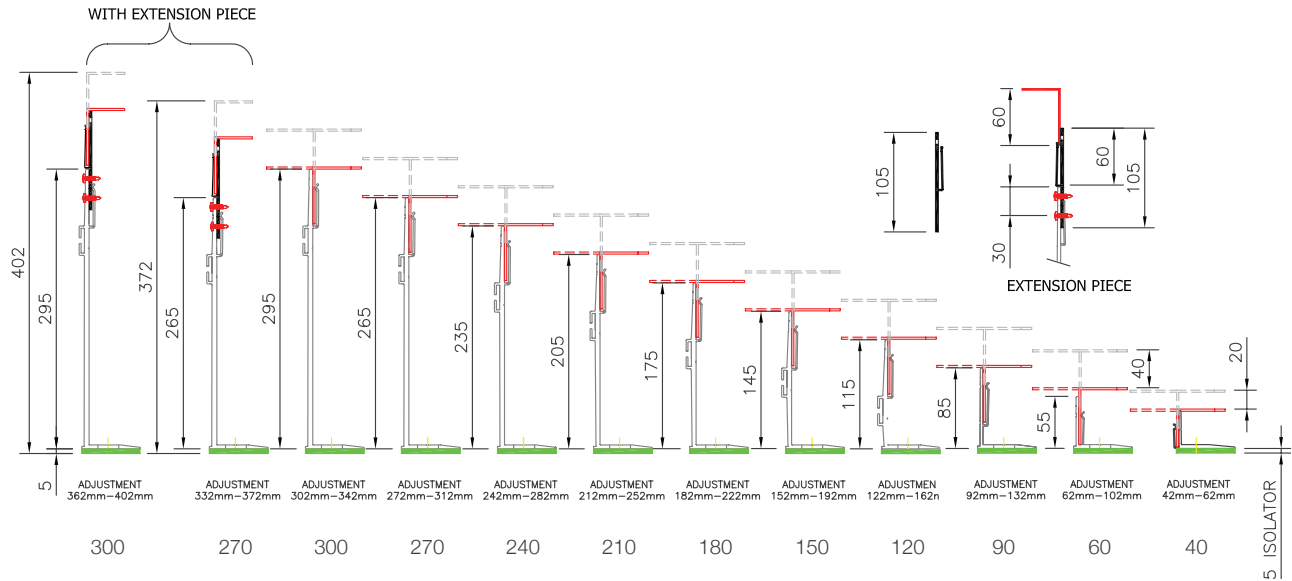
NVELOPE brackets and profiles are manufactured in the UK to EN755 production and EN12020-2 alloy and quality standards.

NVELOPE brackets are available in standard dimensions of 60mm - 300mm. NVELOPE brackets are available in two 'footprint' sizes - single (75mm) and double (150mm).

The 'pocket' in each NVELOPE bracket allows up to 40mm of outward adjustment of a 60mm leg profile inserted into the 'pocket'. note our 40mm bracket has 20mm of adjustment only.



NV VERTICAL BRACKETS



NVELOPE BRACKETS

FUNCTIONALITY AND VERSATILITY

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

dead loads, dynamic loads, expansion and contraction must all be taken into account. the façade has to, in effect, be able to 'float' on the sub-construction. this means that elements of the façade construction have only 1 x fixed point while all the other fixing points must be executed as floating points (sometimes referred to as flexible points).

profiles which are assembled to a fixed point, are connected through the round holes in the bracket. the fixed point absorbs both vertical weight loads and horizontal wind loads.

profiles which are assembled to a flexible point, are connected by the elongated holes in the brackets. the primary function of the flexible point bracket being to absorb dynamic horizontal wind loads.

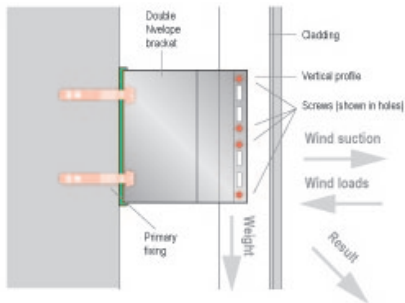
with vertical systems the length of the profiles normally depends on the storey height. with horizontal systems it depends on panel separation.

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

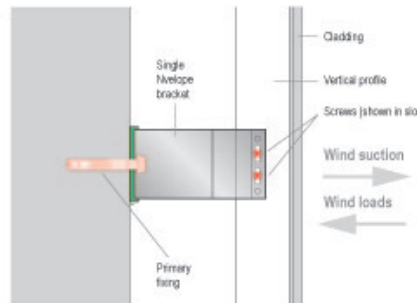
based on a preliminary survey of the wall and architectural/ structural design, a grid layout for the sub-frame is first prepared. the brackets with integrated isolation pads, are fixed to the substrate wall using stainless steel fixings of appropriate size as determined by design. the pull-out value of the fixings for securing the brackets to the wall should be determined on site from the characteristic pull-out strength, tension and shear and appropriate safety factor as given in BS 5427-1 : 1996.

the rails are clipped into the brackets and, after adjustment for line and level, are fixed using self-drilling stainless steel screws (or rivets).

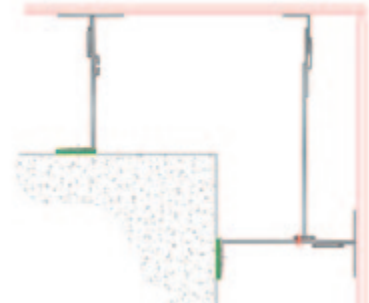
VERTICAL FIXED POINT



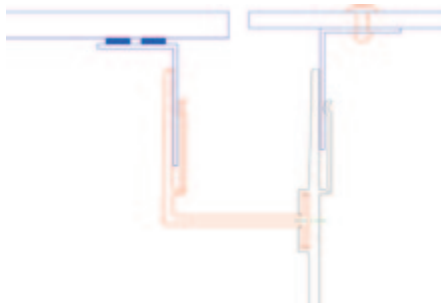
VERTICAL FLEXIBLE POINT



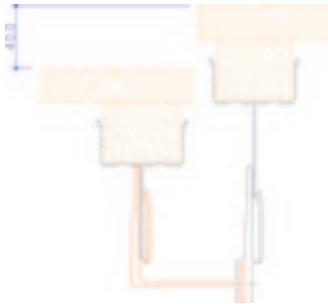
BRACKET ACCESSORIES



DISIMILAR CLADDING



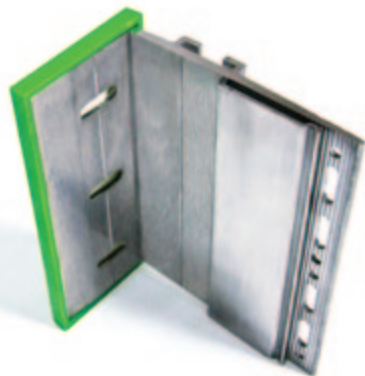
STEPPED CLADDING



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



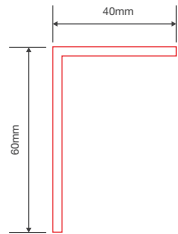
VERTICAL BRACKETS

BRACKETS FOR STEEL / TIMBER FRAME				BRACKETS FOR CONCRETE / BLOCK			
VB60S-6.5	SINGLE	VB60D-6.5	DOUBLE	VB60S-11	SINGLE	VB60D-11	DOUBLE
VB90S-6.5		VB90D-6.5		VB90S-11		VB90D-11	
VB120S-6.5		VB120D-6.5		VB120S-11		VB120D-11	
VB150S-6.5		VB150D-6.5		VB150S-11		VB150D-11	
VB180S-6.5		VB180D-6.5		VB180S-11		VB180D-11	
VB210S-6.5		VB210D-6.5		VB210S-11		VB210D-11	
VB240S-6.5		VB240D-6.5		VB240S-11		VB240D-11	
VB270S-6.5		VB270D-6.5		VB270S-11		VB270D-11	
VB300S-6.5		VB300D-6.5		VB300S-11		VB300D-11	

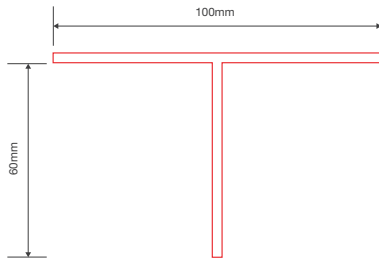


STANDARD 'T' & 'L' PROFILES

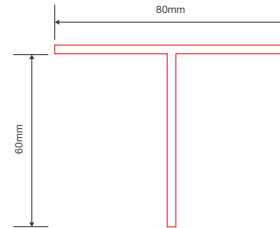
60mm x 40mm x 2.2mm **L**
 standard 3,000mm - 4,850mm - 6,000mm



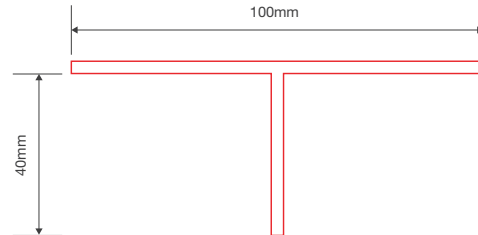
60mm x 100mm x 2.2mm **T**
 standard 3,000mm - 4,850mm - 6,000mm



60mm x 80mm x 2.2mm **T**
 standard 3,000mm - 6,000mm

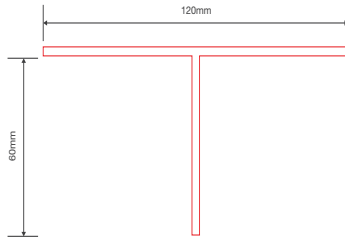


40mm x 100mm x 2.2mm **T**
 standard 3,000mm - 6,000mm

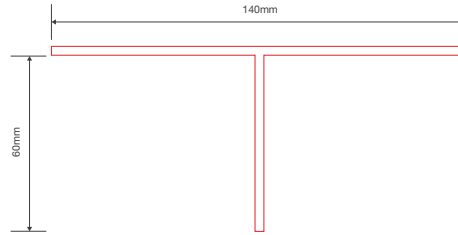


STANDARD 'T' & 'L' PROFILES

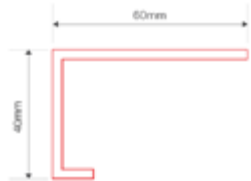
60mm x 120mm x 2.2mm T
standard 3,000mm - 4,850mm - 6,000mm



60mm x 140mm x 2.2mm T
standard 3,000mm - 4,850mm - 6,000mm

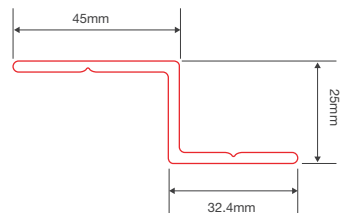
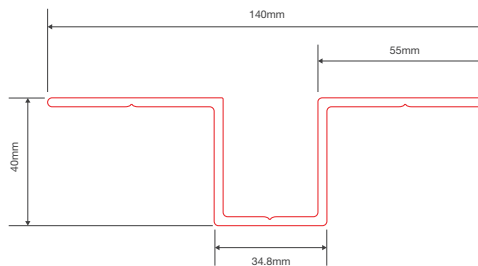
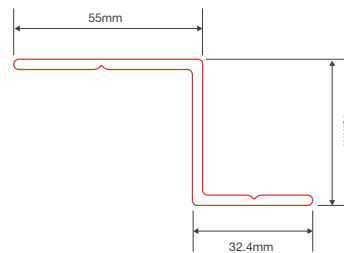
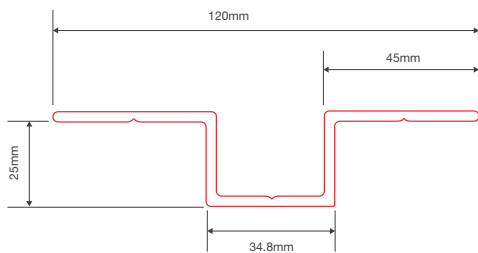


60mm x 40mm x 2.5mm horizontal L
standard 3000mm - 6000mm

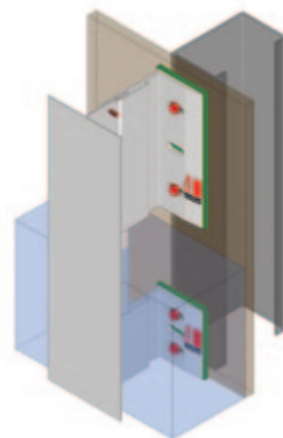
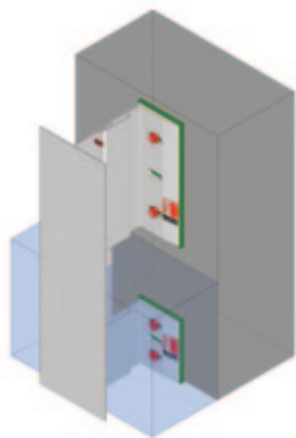


STANDARD OMEGA AND ZED PROFILES

standard 3000mm and 6000mm length



NV1



FEATURES

NV1 is the NVELOPE back frame – vertical cladding applications.

NVELOPE 'T' and 'L' profiles are fixed using NVELOPE 'helping hand' support brackets, fixed through a series of pre-punched fixed and flexible point holes.

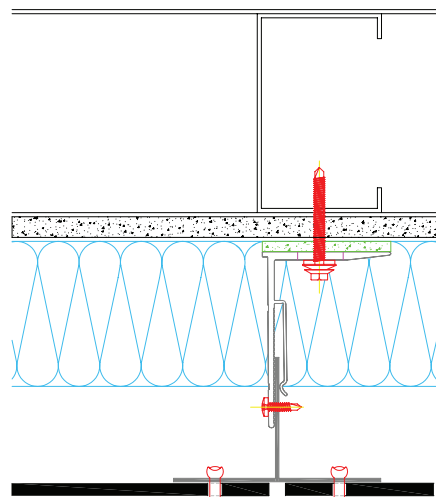
NVELOPE flexible point brackets absorb wind loading and allow for expansion and contraction.

NVELOPE fixed point brackets absorb vertical dead loads.

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

USAGE

suitable as a back frame system (NV1 is the basis of all NVELOPE rainscreen systems) – NV1 is suitable for face fixing/rivet fixing cladding - elements to which it can be fixed are: fibre cement, high pressure laminate (HPL), ACM and metal rainscreen panels, etc.



MORE ABOUT NV1

AS STANDARD

material:

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

APPROVALS

british board of agreement (BBA) - 09/4678

TECHNICAL SPEC.

download NV1 technical spec from nvelope.com



OPTIONS

NVELOPE brackets (V):

allows adjustment between face of primary support to outer face of vertical profile. (assuming 60mm profile leg).

[60].	adjustment from 62mm min to 102mm max	single/double - 6.5mm holes/11.0mm holes*
[90].	adjustment from 92mm min to 132mm max	single/double - 6.5mm holes/11.0mm holes*
[120].	adjustment from 122mm min to 162mm max	single/double - 6.5mm holes/11.0mm holes*
[150].	adjustment from 152mm min to 192mm max	single/double - 6.5mm holes/11.0mm holes*
[180].	adjustment from 182mm min to 222mm max	single/double - 6.5mm holes/11.0mm holes*
[210].	adjustment from 212mm min to 252mm max	single/double - 6.5mm holes/11.0mm holes*
[240].	adjustment from 242mm min to 282mm max	single/double - 6.5mm holes/11.0mm holes*
[270].	adjustment from 272mm min to 312mm max	single/double - 6.5mm holes/11.0mm holes*
[300].	adjustment from 302mm min to 342mm max	single/double - 6.5mm holes/11.0mm holes*

* 6.5mm holes (suitable for steel and/or timber substrates)/11.0mm holes (suitable for block/concrete substrates)

* Nvelope isolators are 5.0 mm thick - if you don't require isolators - reduce dims in table (min / max) by 5.0 mm

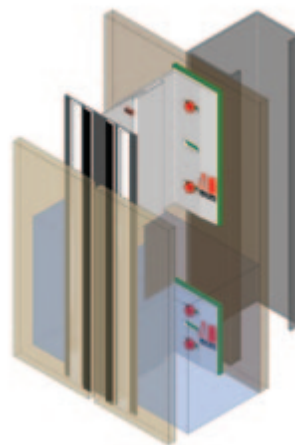
profiles:

[L]. 60 x 40mm

[T]. 40 x 100 / 60 x 80 / 60 x 120 / 60 x 140mm

NVELOPE isolators: included as standard

NV2





FEATURES

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

NVELOPE ‘T’ and ‘L’ profiles are fixed using NVELOPE ‘helping hand’ support brackets, fixed through a series of pre-punched, fixed and flexible point holes.

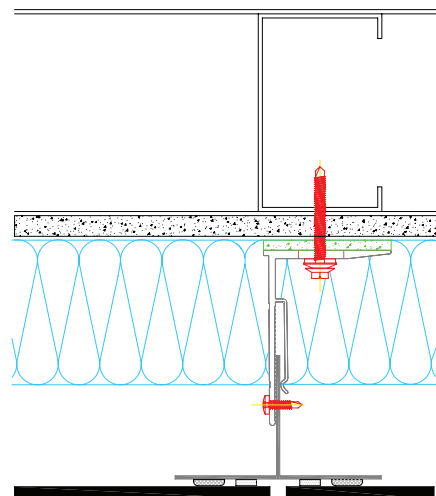
NVELOPE flexible point brackets absorb wind loading and allow for expansion and contraction.

NVELOPE fixed point brackets absorb vertical dead loads.

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

USAGE

NV2 is suitable for secret fix cladding applications – structural bond (Sika SikaTack panel system) – elements to fibre cement, high pressure laminate (HPL), ACM and metal rainscreen panels, etc.



MORE ABOUT NV2

AS STANDARD

material:

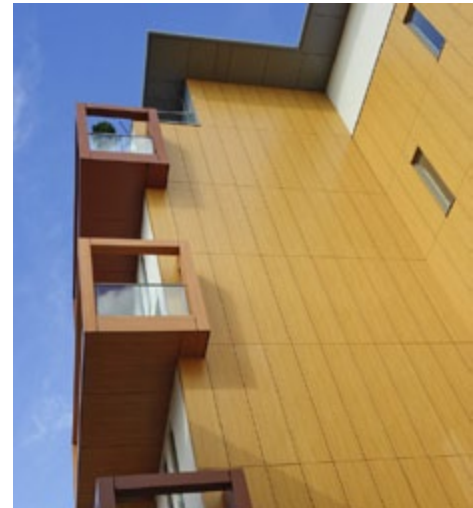
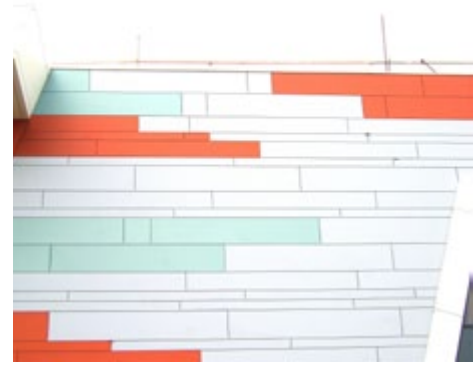
manufactured from extruded aluminium alloys conforming to EN 573-3 (material) and EN 755 standards.

APPROVALS

british board of agreement (BBA) - 09/4678

TECHNICAL SPEC.

download NV2 technical spec from nvelope.com



OPTIONS

NVELOPE brackets (V):

allows adjustment between face of primary support to outer face of vertical profile. (assuming 60mm profile leg).

[60].	adjustment from 65mm min to 105mm max	single/double - 6.5mm holes/11.0mm holes*
[90].	adjustment from 95mm min to 135mm max	single/double - 6.5mm holes/11.0mm holes*
[120].	adjustment from 125mm min to 165mm max	single/double - 6.5mm holes/11.0mm holes*
[150].	adjustment from 155mm min to 195mm max	single/double - 6.5mm holes/11.0mm holes*
[180].	adjustment from 185mm min to 225mm max	single/double - 6.5mm holes/11.0mm holes*
[210].	adjustment from 215mm min to 255mm max	single/double - 6.5mm holes/11.0mm holes*
[240].	adjustment from 245mm min to 285mm max	single/double - 6.5mm holes/11.0mm holes*
[270].	adjustment from 275mm min to 315mm max	single/double - 6.5mm holes/11.0mm holes*
[300].	adjustment from 305mm min to 345mm max	single/double - 6.5mm holes/11.0mm holes*

* 6.5mm holes (suitable for steel and/or timber substrates)/11.0mm holes (suitable for block/concrete substrates)

* Nvelope isolators are 5.0 mm thick - if you don't require isolators - reduce dims in table (min / max) by 5.0 mm

* includes SikaTack (tape/adhesive)

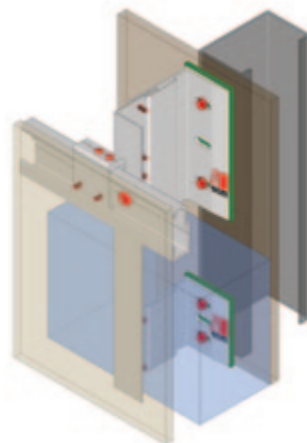
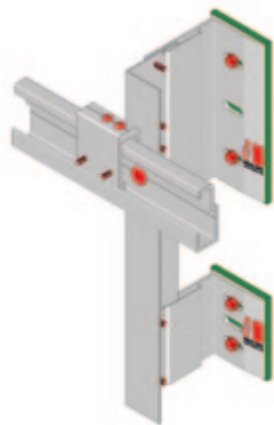
profiles:

[L]. 60 x 40mm

[T]. 40 x 100 / 60 x 80 / 60 x 120 / 60 x 140mm

NVELOPE isolators: included as standard

NV3



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 profiles are fixed to the vertical profiles. rainscreen panels are hung from and secured to the horizontal profiles with cleats, adjustable cleats, or hangers.

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

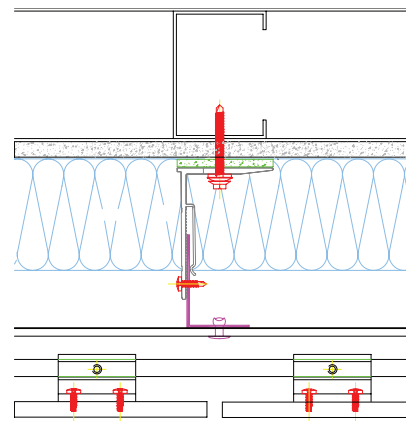
NVELOPE fixed point brackets absorb both vertical and dead loads.

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.

USAGE

NV3 is suitable for secret fix cladding applications – mechanical elements fix to the following substrates to fibre cement, high pressure laminate (HPL), ceramic, thin stone, etc.



MORE ABOUT NV3

AS STANDARD

material:

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

APPROVALS

british board of agreement (BBA) - 09/4678

TECHNICAL SPEC.

download NV3 technical spec from nvelope.com



OPTIONS

NVELOPE brackets (V):

allows adjustment between face of primary support to outer face of vertical profile. (assuming 60mm profile leg).

[60].	adjustment from 88mm min to 128mm max	single/double - 6.5mm holes/11.0mm holes*
[90].	adjustment from 118mm min to 158mm max	single/double - 6.5mm holes/11.0mm holes*
[120].	adjustment from 148mm min to 188mm max	single/double - 6.5mm holes/11.0mm holes*
[150].	adjustment from 178mm min to 218mm max	single/double - 6.5mm holes/11.0mm holes*
[180].	adjustment from 208mm min to 248mm max	single/double - 6.5mm holes/11.0mm holes*
[210].	adjustment from 238mm min to 278mm max	single/double - 6.5mm holes/11.0mm holes*
[240].	adjustment from 268mm min to 308mm max	single/double - 6.5mm holes/11.0mm holes*
[270].	adjustment from 298mm min to 338mm max	single/double - 6.5mm holes/11.0mm holes*
[300].	adjustment from 328mm min to 368mm max	single/double - 6.5mm holes/11.0mm holes*

* 6.5mm holes (suitable for steel and/or timber substrates)/11.0mm holes (suitable for block/concrete substrates)

* Nvelope isolators are 5.0 mm thick - if you don't require isolators - reduce dims in table (min / max) by 5.0 mm

* includes NVELOPE NV3 rail and cleat (26mm)

profiles:

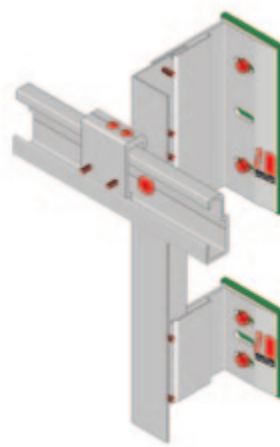
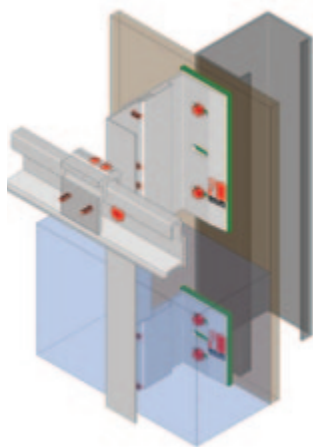
[L]. 60 x 40mm

[T]. 40 x 100 / 60 x 80 / 60 x 120 / 60 x 140mm

horizontal – NVELOPE 3 rail

NVELOPE isolators: included as standard

NV4 (ts200)



FEATURES

NV4 (ts200) is the NVELOPE system for secret fix/mechanically fixed applications – vertical cladding applications - Trespa meteon HPL only.

secured using hangers and screws to provide a concealed fixing.

horizontal profiles are fixed to the vertical profiles. rainscreen panels are hung from and secured to the horizontal profiles with cleats, adjustable cleats, or hangers.

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

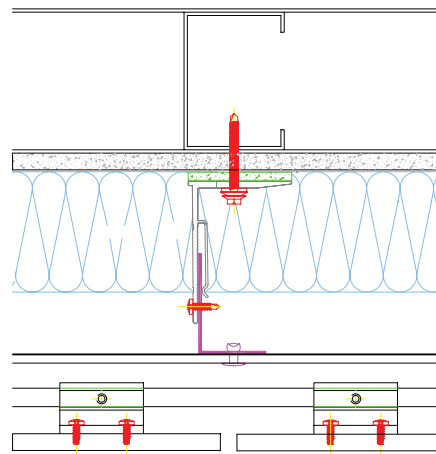
NVELOPE flexible point brackets absorb wind loading and allow for expansion and contraction.

NVELOPE fixed point brackets absorb both vertical and dead loads.

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

USAGE

NV4 (ts200) is suitable for secret fix cladding applications – mechanical elements to Trespa meteon HPL.



MORE ABOUT NV4 (ts200)

AS STANDARD

material:

manufactured from extruded aluminium alloys conforming to EN 573-3 (material) and EN 755 standard.

APPROVALS

british board of agreement (BBA) - 09/4678

TECHNICAL SPEC.

download NV4 (ts200) technical spec from nvelope.com



OPTIONS

NVELOPE brackets (V):

allows adjustment between face of primary support to outer face of vertical profile. (assuming 60mm profile leg).

[60].	adjustment from 94mm min to 134mm max	single/double - 6.5mm holes/11.0mm holes*
[90].	adjustment from 124mm min to 164mm max	single/double - 6.5mm holes/11.0mm holes*
[120].	adjustment from 154mm min to 194mm max	single/double - 6.5mm holes/11.0mm holes*
[150].	adjustment from 184mm min to 224mm max	single/double - 6.5mm holes/11.0mm holes*
[180].	adjustment from 214mm min to 254mm max	single/double - 6.5mm holes/11.0mm holes*
[210].	adjustment from 244mm min to 284mm max	single/double - 6.5mm holes/11.0mm holes*
[240].	adjustment from 274mm min to 314mm max	single/double - 6.5mm holes/11.0mm holes*
[270].	adjustment from 304mm min to 344mm max	single/double - 6.5mm holes/11.0mm holes*
[300].	adjustment from 334mm min to 374mm max	single/double - 6.5mm holes/11.0mm holes*

* 6.5mm holes (suitable for steel and/or timber substrates)/11.0mm holes (suitable for block/concrete substrates).

* Nvelope isolators are 5.0 mm thick - if you don't require isolators - reduce dims in table (min / max) by 5.0 mm

* includes NVELOPE NV4 (ts200) rail and cleat (32mm).

profiles:

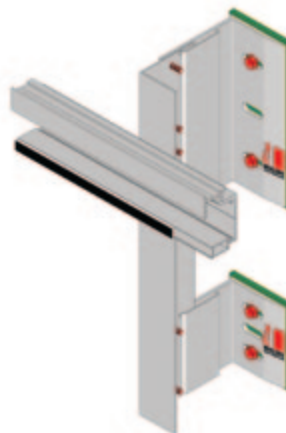
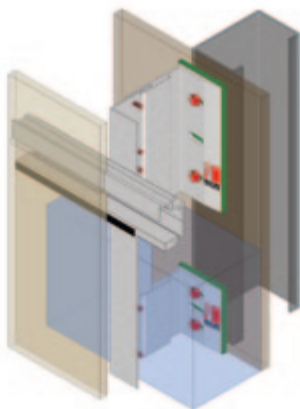
[L]. 60 x 40mm

[T]. 40 x 100 / 60 x 80 / 60 x 120 / 60 x 140mm

horizontal – NV4 (ts200) rail

NVELOPE isolators: included as standard

NV5 (ts300)



FEATURES

NV5 (ts300) is the NVELOPE system for secret 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 provide restraint to panel tops.

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 'helping hand' support brackets, fixed through a series of fixed and flexible points.

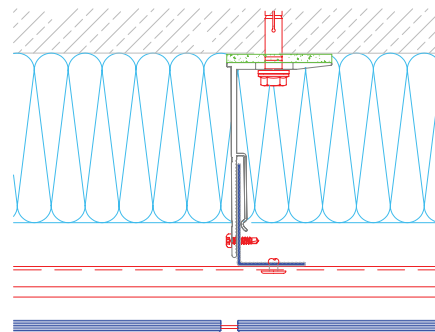
NVELOPE flexible point brackets absorb wind loading and allow for expansion and contraction.

NVELOPE fixed point brackets absorb both vertical and dead loads.

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

USAGE

NV5 (ts300) is suitable for secret fix cladding applications – Trespa meteon HPL only.



MORE ABOUT NV5 (ts300)

AS STANDARD

material:

manufactured from extruded aluminium alloys conforming to EN 573-3 (material) and EN 755 standard.

APPROVALS

british board of agreement (BBA) - 09/4678

TECHNICAL SPEC.

download NV5 (ts300) technical spec from nvelope.com



OPTIONS

NVELOPE brackets (V):

allows adjustment between face of primary support to outer face of vertical profile. (assuming 60mm profile leg).

[60].	adjustment from 94mm min to 134mm max	single/double - 6.5mm holes/11.0mm holes*
[90].	adjustment from 124mm min to 164mm max	single/double - 6.5mm holes/11.0mm holes*
[120].	adjustment from 154mm min to 194mm max	single/double - 6.5mm holes/11.0mm holes*
[150].	adjustment from 184mm min to 224mm max	single/double - 6.5mm holes/11.0mm holes*
[180].	adjustment from 214mm min to 254mm max	single/double - 6.5mm holes/11.0mm holes*
[210].	adjustment from 244mm min to 284mm max	single/double - 6.5mm holes/11.0mm holes*
[240].	adjustment from 274mm min to 314mm max	single/double - 6.5mm holes/11.0mm holes*
[270].	adjustment from 304mm min to 344mm max	single/double - 6.5mm holes/11.0mm holes*
[300].	adjustment from 334mm min to 374mm max	single/double - 6.5mm holes/11.0mm holes*

* 6.5mm holes (suitable for steel and/or timber substrates)/11.0mm holes (suitable for block/concrete substrates).

* Nvelope isolators are 5.0 mm thick - if you don't require isolators - reduce dims in table (min / max) by 5.0 mm

* includes NVELOPE horizontal NV5 (ts300 rail)

profiles:

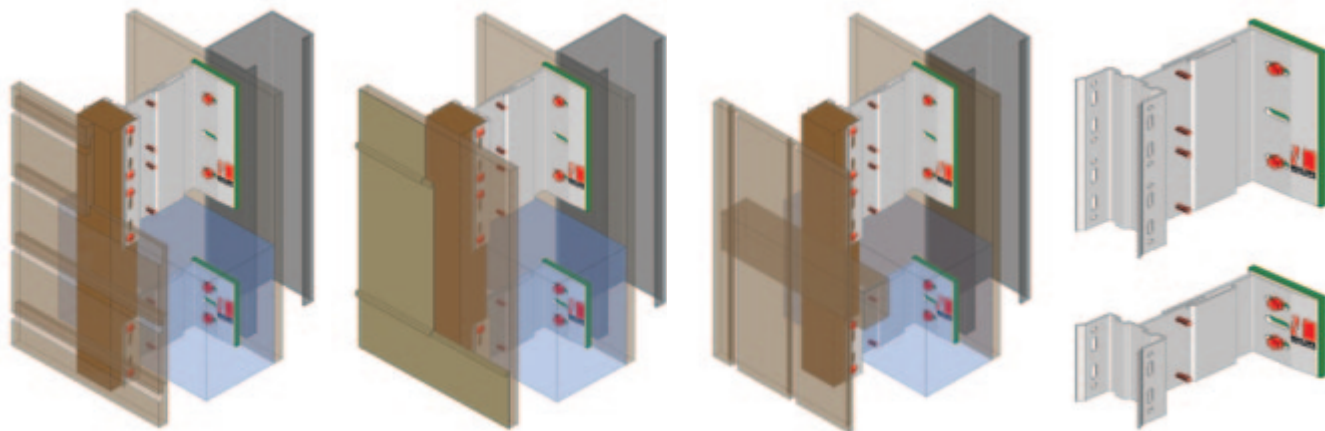
[L]. 60 x 40mm

[T]. 40 x 100 / 60 x 80 / 60 x 120 / 60 x 140mm

NV5 (ts300) horizontal rail and cleat

NVELOPE isolators: included as standard

NV6



FEATURES

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

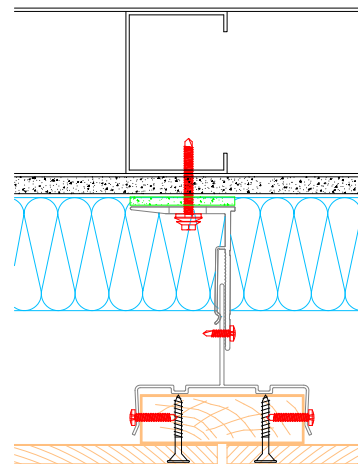
timber batten can be used to support timber cladding/ weatherboarding and ply (used as a substrate for other materials, e.g metal).

concealed fix system, utilising NVELOPE ‘helping hand’ brackets plus NVELOPE carrier.

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, cladding zone and substrate.



MORE ABOUT NV6

SUPPORT

vertical timber cladding: vertical timber bearers are supported with NVELOPE carriers 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.

USAGE

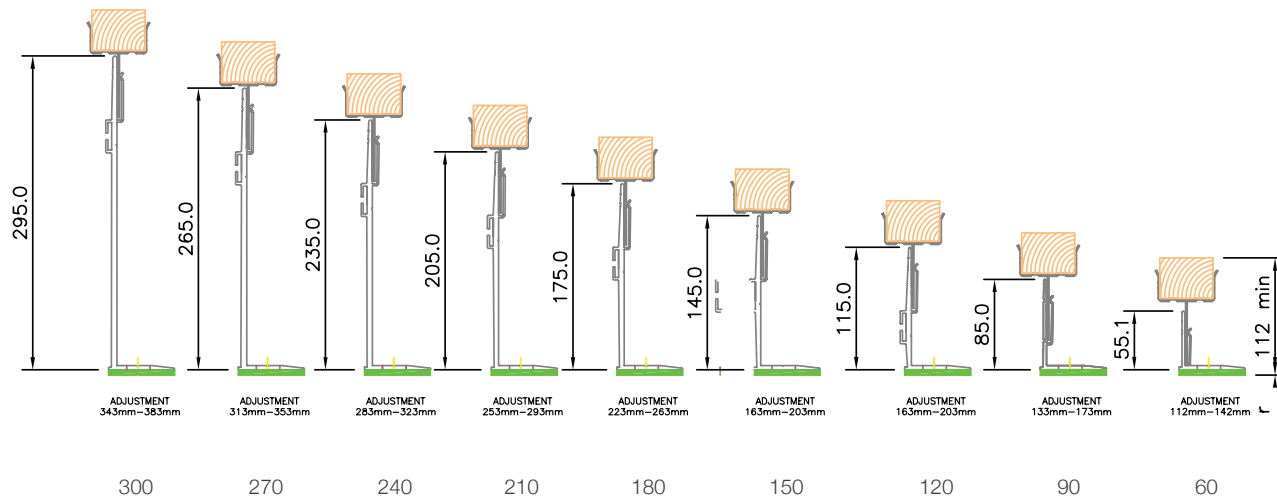
suitable for the support of vertical or horizontal timber rails or timber boarding, to which timber cladding, weatherboard panels, boards, or panels made to support other materials, e.g. copper, zinc, etc. may be attached.

the bracket assembly provides a suitable element for the fixing of timber bearers or battens where medium to large cladding zones are required.

NVELOPE carriers are available in these sizes - 50mm and 80mm and 100mm.

NVELOPE carriers also available in single (S) and double (D) version.





* stand off assuming 'typical' 38mm depth timber battens.

AS STANDARD

material:

manufactured from extruded aluminium alloys conforming to EN 573-3 (material) and EN 755 standard.

APPROVALS

british board of agreement (BBA) - 09/4678

TECHNICAL SPEC.

download NV6 technical spec from nvelope.com



OPTIONS

NVELOPE brackets (V):

allows adjustment between face of primary support to outer face of vertical profile. (assuming 60mm profile leg).

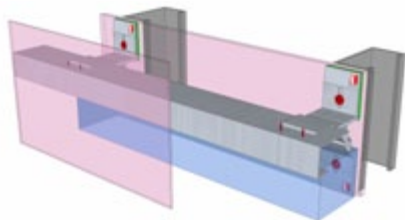
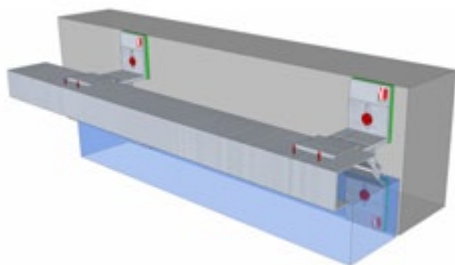
[60].	adjustment from 105mm min to 145mm max	single/double - 6.5mm holes/11.0mm holes*
[90].	adjustment from 135mm min to 175mm max	single/double - 6.5mm holes/11.0mm holes*
[120].	adjustment from 165mm min to 205mm max	single/double - 6.5mm holes/11.0mm holes*
[150].	adjustment from 195mm min to 235mm max	single/double - 6.5mm holes/11.0mm holes*
[180].	adjustment from 225mm min to 265mm max	single/double - 6.5mm holes/11.0mm holes*
[210].	adjustment from 255mm min to 295mm max	single/double - 6.5mm holes/11.0mm holes*
[240].	adjustment from 285mm min to 325mm max	single/double - 6.5mm holes/11.0mm holes*
[270].	adjustment from 315mm min to 355mm max	single/double - 6.5mm holes/11.0mm holes*
[300].	adjustment from 345mm min to 385mm max	single/double - 6.5mm holes/11.0mm holes*

* 6.5mm holes (suitable for steel and/or timber substrates)/11.0mm holes (suitable for block/concrete substrates).

* Nvelope isolators are 5.0 mm thick - if you don't require isolators - reduce dims in table (min / max) by 5.0 mm

NVELOPE isolators: included as standard

NH1



FEATURES

NH brackets are orientated horizontally.

an Nvelope NH brace bar can be inserted into the bracket pocket in the underside of the NV bracket to create a horizontal NH bracket.

NH1 is the NVELOPE back frame – horizontally orientated system.

NVELOPE horizontal 'L' is fixed into the 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 dead loads.

USAGE

can be used to support vertical elements – allowing for varied façade design options.

HORIZONTAL BRACKETS

BRACKETS FOR STEEL timber frame (6,5mm slots)/widget	BRACKETS FOR CONCRETE BLOCK (11,0mm slots)
VB120-6.5 + HB-BB120	VB120-11 + HB-BB120
VB150-6.5 + HB-BB150	VB150-11 + HB-BB150
VB180-6.5 + HB-BB180	VB180-11 + HB-BB180
VB210-6.5 + HB-BB210	VB210-11 + HB-BB210
VB240-6.5 + HB-BB240	VB240-11 + HB-BB240
VB270-6.5 + HB-BB270	VB270-11 + HB-BB270
VB300-6.5 + HB-BB300	VB300-11 + HB-BB300

MORE ABOUT NH1

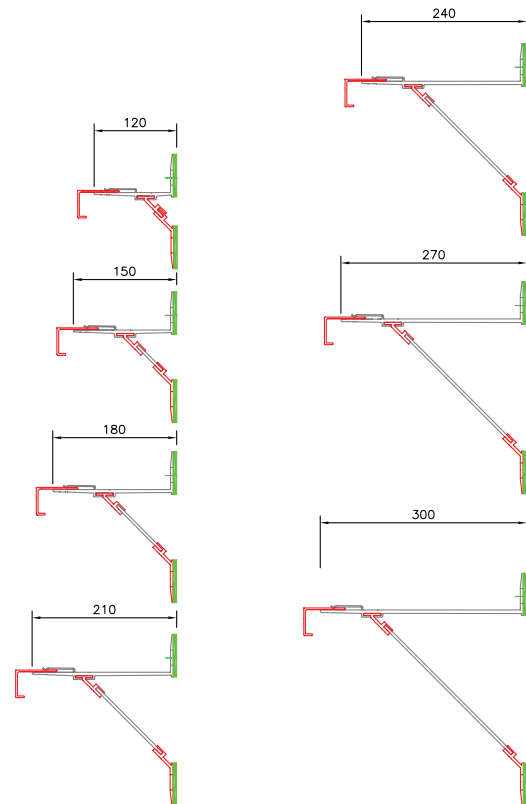
AS STANDARD

material:

manufactured from extruded aluminium alloys conforming to EN 573-3 (material) and EN 755 standard.

TECHNICAL SPEC.

Download NH1 technical spec from nvelope.com



OPTIONS

NVELOPE brackets (H):

[120] – adjustment from 122 mm min to 162 mm max – single – 6.5 mm holes / 11.0 mm hole

[150] – adjustment from 152 mm min to 192 mm max – single – 6.5 mm holes / 11.0 mm hole

[180] – adjustment from 182 mm min to 222 mm max – single – 6.5 mm holes / 11.0 mm hole

[210] – adjustment from 212 mm min to 252 mm max – single – 6.5 mm holes / 11.0 mm hole

[240] – adjustment from 242 mm min to 282 mm max – single – 6.5 mm holes / 11.0 mm hole

[270] – adjustment from 272 mm min to 312 mm max – single – 6.5 mm holes / 11.0 mm hole

[300] – adjustment from 302 mm min to 342 mm max – single – 6.5 mm holes / 11.0 mm hole

* 6.5 mm holes (suitable for steel and / or timber substrates) / 11.0 mm holes (suitable for block / concrete substrates)

* Nvelope isolators are 5.0 mm thick - if you don't require isolators - reduce dims in table (min / max) by 5.0 mm



WE ARE HIGHLY EXPERIENCED AND UNDERSTAND THE REQUIREMENTS OF OUR CLIENTS. WE CONTINUALLY PUSH BOUNDARIES TO OFFER UNPARALLELED PRODUCT, SERVICE AND PRICE. WE DON'T STOP THERE THOUGH - WE ENHANCE OUR PROPOSITION WITH INITIATIVES AND SOLUTIONS THAT SAVE OUR CLIENTS TIME, EFFORT AND HASSLE. WE ARE A TOTAL CLADDING SUPPORT SYSTEM - WITH EMPATHY AND UNDERSTANDING OF OUR CLIENTS' NEEDS.

subject to technical change - always check with NVELOPE rainscreen systems ltd.

CONTACT US

NVELOPE
rainscreen systems ltd.

unit 10 blenheim court
brownfields
welwyn garden city
herts
AL7 1AD

t: +44 (0) 1707 333 396
f: +44 (0) 1707 333 343

place an order
orders@nvelope.com

technical enquiries
project@nvelope.com

general enquiries, find an installer, marketing, NPD
info@nvelope.com

www.nvelope.com

