NVELOPE Installation Guide NS1

NS1

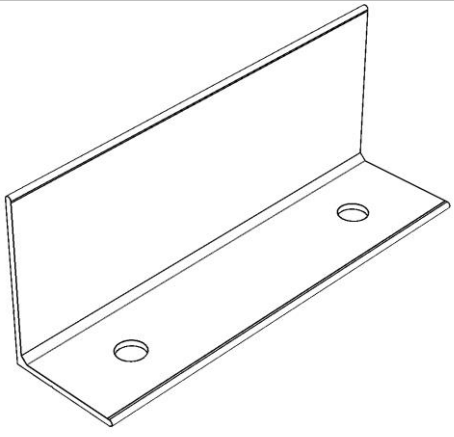
The NS1 system uses Nvelope components to provide a framework for face fix soffit applications. The system is capable of a drop zone up to 1m, and suitable for timber, concrete and steel applications, capable of supporting a maximum panel weight of up to 75kg/m².

For more information please see: www.nvelope.com/soffits.html

NS1 Brackets

NS1 brackets are produced from Nvelope L profile and when secured to the substrate allow the drop rail to be fixed directly to the bracket. The NS1 system is prominently composed of Nvelope's L60-40-2.2 Rail, this is available in 3, 4.85 and 6 metre lengths but is cut to bespoke size depending on the soffit zone and design. The length of the down standing L rail absorbs the expansion and contraction of the soffit panel. Depending on the drop zone, wind load and panel weight some soffits will need a brace bar intermittently within the cladding support system. This brace-bar can be cut out of L rail. (Please seek advice from our technical team).

Bracket Depth	60mm
Minimum Drop Rail Length	120mm
Maximum Drop Rail Length	1000mm



Issue 2019

NVELOPE Installation Primary Fixings

NS1

Nvelope brackets are secured directly to a new or existing substrate of concrete, timber or steel frames. Suitable primary anchors are employed to position the brackets to a pre-determined grid to suit the panel layout - please liaise directly with preferred Nvelope primary fixing supplier regarding pull-out data.

In addition, if there is no sheathing board the isolation of two different materials must be considered for two reasons, bimetallic corrosion and thermal bridging, the NS1 system is compatible with the Nvelope flat 5mm Isolator.

Please liaise with Nvelope Technical Department: project@nvelope.com

If lightweight steel framing systems like Purlins or a Track/Stud framework is employed for this system, then it is important that this framework is erected to the same grid as the finished panel layout and that an engineered fixing device is used to fix the brackets.

Important: The size and type of primary fixing for the connectors will always be determined by the dynamic and dead loads they have to resist - please liaise with Primary Fixing supplier.

Primary Fixings

1. **TDA** or equivalent Timber Substrates

2. **SX5** or equivalent Steel Substrates

3. **Multi-Monti** or equivalent Concrete/Masonry Substrates

Suitable primary anchors are designed to fix the brackets to a pre-determined grid to suit the cladding panel layout. A4 Stainless Steel fixings also assist in preventing bimetallic corrosion. Please liaise directly with preferred primary fixing supplier and/or panel manufacturer regarding pull-out. Nvelope can assist here.

NVELOPE
MAKING CLADDING HAPPEN
A member of SFS

NVELOPE Installation Rails & Other Components

NS1

- Obtain suitable bracket and rail spacing dimensions for your NS1 project installation, Nvelope's technical team can assist here.
- Secure NS1 brackets and isolators to substrate observing the correct bracket spacing and use of primary fixings.
- Cut suitable drop rail lengths (up to 1m) and secure the rail to the NS1 bracket using two SX3 6 x 29mm fixings.
- Locate and cut horizontal L/T profile to suit where panel edges occur ready for panel installation, secure horizontal rail to each drop rail using two SX3 6 x 29mm fixings.

Compatible Rail Profiles

Nvelope can provide pre-cut rails to site, for more advice on selecting the correct rail profile for your project please contact Nvelope's technical team:

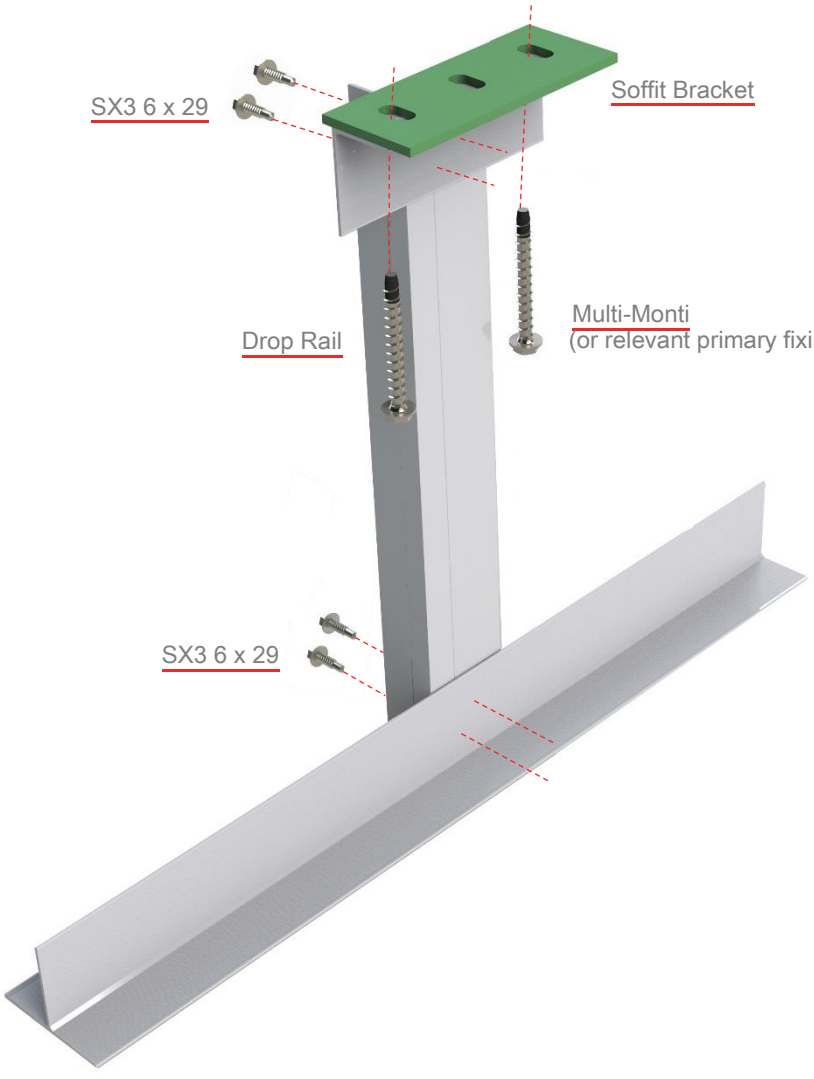
- 60 x 40 x 2.2 L
- 60 x 80 x 2.2 T
- 60 x 100 x 2.2 T
- 60 x 120 x 2.2 T
- 60 x 140 x 2.2 T

Drop Rails

Once the NS1 brackets have been installed using the correct primary fixings into the substrate, the drop rails can be cut and fixed in place. The system is capable of supporting drop rails up to 1m.

This 60 x 40mm L profile is then secured to the NS1 brackets ready to install the horizontal L or T profile to match where panel joints occur, ready for the face fix panel installation.

Important: For NS1 projects with larger drop zones, higher wind loads or cladding weights please contact Nvelope's technical team for assistance



NVELOPE MAKING CLADDING HAPPEN
A member of SFS

NVELOPE Installation Installation Checks

NS1

Once all brackets and profiles are installed to an area of cladding, final checks should be carried out:

- On the primary anchor torque settings.
- To the line and level of the Nvelope profiles in relation to each other.
- To the position of screws in each Nvelope bracket.

Panel Installation (General)

- Check profile positions in relation to actual panel positions and joints.
- Raise the panel and support in position ready for panel fixings.
- Adjust position of panel before fitting next panel.
- Repeated on next panels.
- Panel joints should follow the manufacturer's recommendations regarding joint gaps, horizontal and vertical.

Site Checklist

To help with a smooth installation of our rainscreen support systems there are a few things to be taken into account.
Please see check list below:

If you or colleagues are new to our system, have you requested a tool box talk?

➤ www.nvelope.com/nvelope-contact-us

Have you referred to our data sheets and installation guides available on our website?

➤ www.nvelope.com/nvelope-our-downloads-system-guide

Has a successful pull out test been completed?

➤ www.nvelope.com

Once these tasks have been completed and installation starts you can send our team a photo of a selection of brackets for technical to sign off or advise.

➤ sitesupport@nvelope.com
➤ 01707 333 396

Nvelope Rainscreen Systems Ltd
Unit A
City Park
Watchmead
Welwyn Garden City
Hertfordshire
T: +44 (0)1707 333 396
www.nvelope.com