

# NVELOPE Installation Guide NV5 (TS300).

NV5

## Trespa TS300.

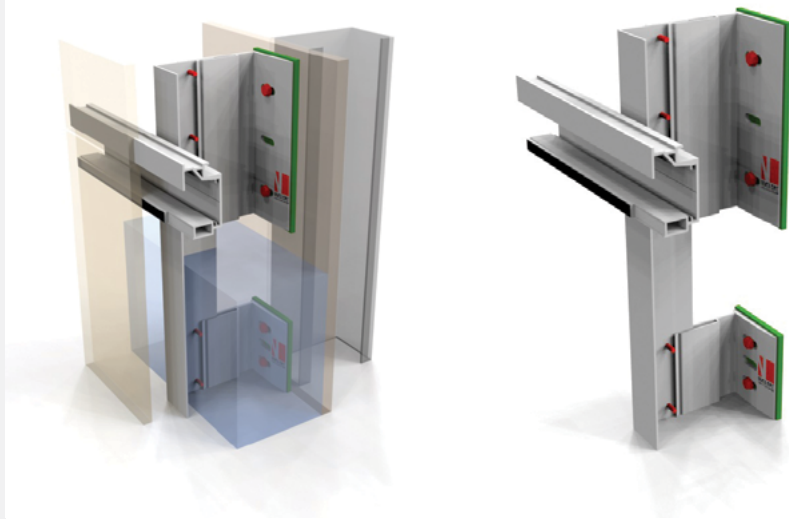
NVELOPE profiles and components are designed to provide a vertical support framework for Trespa Meteon panels, to any suitable building façade. These profiles are anchored to the building using a purpose-designed NVELOPE bracket that allows final alignment and adjustment.

*For further information,  
please see:*

*[www.nvelope.com](http://www.nvelope.com)*

*Also download/refer to:*

NV1



## Components

Two NV5 (TS300) horizontal profiles are supplied:

- 1 A Starter Profile.
- 2 A Main Profile.

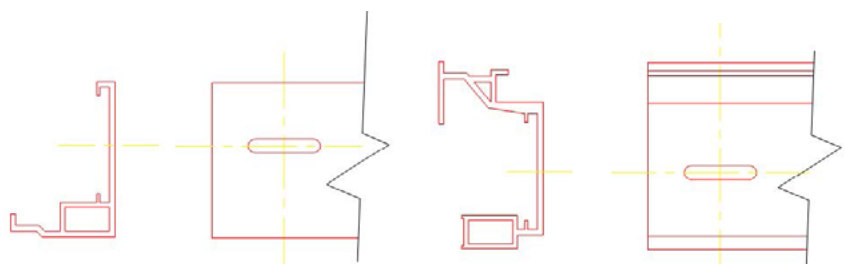
NVELOPE brackets are supplied in different sizes ranging from 40mm – 300mm (see table for cavity depths that can be formed.)

NVELOPE brackets are available with hole-sizes 11mm or 6.5mm depending on the substrate being fixed to/the diameter of the primary anchor required.

Horizontal NV5 (TS300) profiles for the Trespa panels are secured in position with self-drilling self-tapping screws or rivets.

TS300 Starter Rail

TS300 Main Rail



# NVELOPE

## Brackets & Primary Fixings.



### Brackets

Table of bracket Sizes with "min & max" cladding zones with NV5 (TS300) system.

Min – Max Adjustment With Isolator		
Bracket 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	344
NVELOPE 300	334	374

Min – Max Adjustment Without Isolator		
Bracket Size (mm)	Min (mm)	Max (mm)
NVELOPE 40	74	94
NVELOPE 60	89	129
NVELOPE 90	119	159
NVELOPE 120	149	189
NVELOPE 150	179	219
NVELOPE 180	209	249
NVELOPE 210	239	279
NVELOPE 240	269	309
NVELOPE 270	299	339
NVELOPE 300	329	369

NVELOPE system brackets are secured directly to a new or existing substrate of concrete, brickwork or blockwork, steel or timber frames. Suitable primary anchors are employed to position the brackets to a pre-determined grid to suit the Trespa panel layout.

A calculation will show rail and bracket centres to suit your project with given information for building heights, wall condition, wind loads etc. taken into account.

In addition, if there is no sheathing board, the isolation of two different metals must be considered for two reasons; 1: bimetallic corrosion 2: thermal bridging. The use of NVELOPE isolator pad will achieve this.

Please see:  
[www.nvelope.com/documents/Nvelope\\_Isolator\\_M](http://www.nvelope.com/documents/Nvelope_Isolator_M)

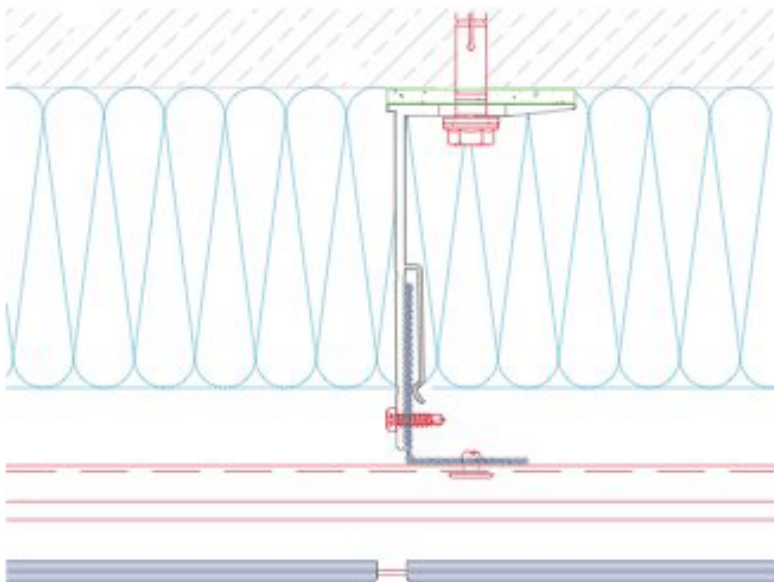
Or please liaise with NVELOPE  
Technical Department:  
[project@nvelope.com](mailto:project@nvelope.com)

# NVELOPE Vertical Rails.



## Vertical Rails

Once a line of vertical brackets is installed, the 60 x 40 x 2.2 'L' profile can be attached using stainless steel fixing screws. It is important that time is taken to align/level the framework to a high standard as the system does not have any adjustment for each individual panel.



- Each profile should be cut to the required length.
- Move the profile into its vertical position – allowing 10mm 'expansion' between profiles.
- Position profiles – ensuring that they are pushed into the helping 'fingers'.
- The profile can then be eased outwards to form the specified cavity depth.
- Secure the profiles using screws in the 'hole' or 'slots'\*\*.

## Important

Generally, 60 x 40 x 2.2mm profiles are cut to lengths that reflect the height of storey-height.

\*\*Fixings through holes is a 'fixed point' and through slots for a 'sliding point'.

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

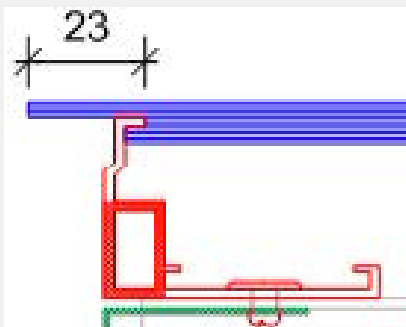
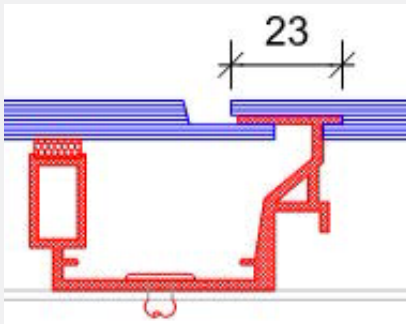
- On the primary anchor torque settings.
- To the line and level of the NVELOPE profiles in relation to each other.
- To the number of screws and their position in each NVELOPE bracket.



# NVELOPE Profiles, Rails & Panels.



Horizontal datum lines should be projected across the elevation and the position of the profiles set out.



## NV5 (TS300) Profiles

The position of the profiles reflects the Trespa Meteon panel sizes up to maximum dimensions as set out by Trespa.

Each panel should be positioned by locating the upper edge of the panel under the upper rail and then pushing the lower panel edge against the resistance of the Foam tape and then sliding the panel down to locate on the lower main or starter profile, after initial checking for fit a 50mm length of adhesive should be placed on the lower profile in the centre of each panel to prevent panel movement to allow expansion of the Trespa panel.

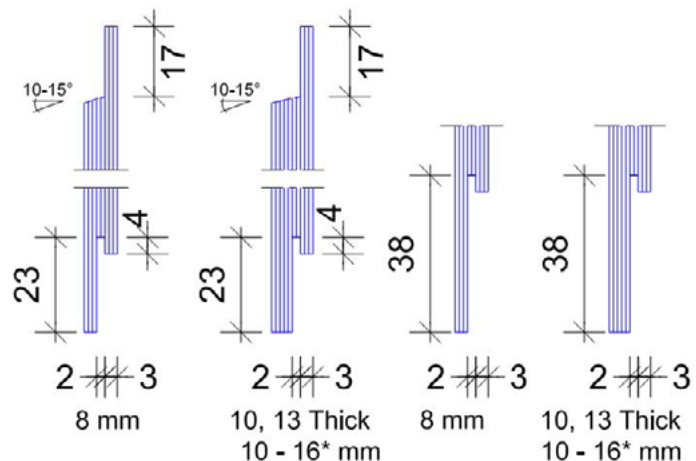
Trespa Meteon Panel Sizes		
Thickness (mm)	Panel Height (mm)	Panel Length (mm)
8	600	3650
10	750	3650
13	900	3650

## Tolerance Of Rail Set Out

The dimension between horizontal rails can be up to a maximum of +/- 2mm on the panel dimension which should be discussed with the panel cutting manufacture. Also to suit the architects building panel layout.

## Trespa Meteon Panels

Panels should be fabricated to the Standard Trespa/NVELOPE designs illustrated below. Importantly the cut-out at the top and bottom are critical to the installation of these panels on to NVELOPE NV5 Trespa TS300 system (\*originals panels).



For further details please refer to:  
[www.trespa.com](http://www.trespa.com)

# NVELOPE

## Trespa & Site Checklist.



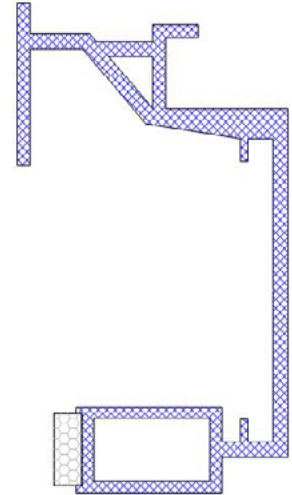
### Insulation

Where insulation is specified, it should be cut and tightly butted around the brackets and secured with the appropriate fixings. Sufficient insulation fixings should be provided to ensure that the insulation cannot block the ventilated cavity.

### TS200 Main Rail

The main rail is delivered with sufficient tape to suit total rail lengths as ordered. Check profile positions in relation to actual panel clips.

- Remove backing paper and Fit Foam Tape in position shown.
- TS300 Main Support Rail ref 05/TS300/MR



### 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:



Has a project specific project builder been completed?

- [www.nvelope.com/project-builder-landing](http://www.nvelope.com/project-builder-landing)



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

- [www.nvelope.com/nvelope-contact-us](http://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](http://www.nvelope.com/nvelope-our-downloads-system-guide)



Has a successful pull out test been completed?

- [www.nvelope.com](http://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](mailto:sitesupport@nvelope.com)
- **01707 333 396**



Also download/refer to NV1

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