

NV5 For Trespa TS300 Installation **CE**

Component guide

NVELOPE[®] rainscreen cladding brackets and framework simplify the complexity of installing façades. NVELOPE[®] systems are designed to provide a vertical support for most façade types. NVELOPE[®] purpose-designed brackets allow for final alignment and adjustment.

Brackets

The NVELOPE® bracket range includes single and double variations of each bracket size, the difference being the depth of the bracket (75mm single, 150mm double). A double bracket is capable of supporting higher cladding loads, and is used in the fixed point location for projects that feature more demanding wind or cladding loads.

The substrate slot variations on NVELOPE® brackets are to suit a wide range of substrate materials. For steel and timber substrates 6.5mm slots are used; for brick, block and concrete, the 11mm slots are used. The single bracket includes both slot variations so is suitable for all substrates.

Size	Min system	Max system	Single (6.5/11mm slot)	Double (6.5mm slot)	Double (11mm slot)
40	79	99	1582505	1521239	1521238
60	94	134	1582506	1521247	1521246
90	124	164	1582508	1521255	1521254
120	154	194	1582509	1521263	1521262
150	184	224	1582510	1521273	1521272
180	214	254	1582511	1521282	1521281
210	244	284	1582512	1521291	1521290
240	274	314	1582514	1521300	1521299
270	304	344	1582517	1521309	1521308
300	334	374	1582520	1521317	1521316
270 (+extension)*	390	430	1582517 (+1521188)	1521309 (+1521187)	1521308 (+1521187)
300 (+extension)*	420	460	1582520 (+1521188)	1521317 (+1521187)	1521316 (+1521187)

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

*Example to show largest possible cladding zones. Extension piece is compatible with all bracket sizes, and is available as single (1521188) or double (1521187).

Cavity depths



Component guide

Profiles

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

These are secured to the bracket using a secondary fixing.

SFS are able to offer an optimised solution, minimising wastage on site by cutting profiles to length in our factory and delivering precut ready to install directly to the project.



Main rail

Туре	Dimensions	Material number
L Profile	60 × 40 × 2.2 × 3000	1521357
L Profile	60 × 40 × 2.2 × 3600	1521365
L Profile	60 × 40 × 2.2 × 4850	1521370
L Profile	60 × 40 × 2.2 × 6000	1521375
NV5 Main Rail	3000	1521383
NV5 Main Rail	6000	1521384
NV5 Starter Rail	3000	1521385
NV5 Starter Rail	6000	1521386

Primary fixings



TDA-S-S16-6.5x60 1526326

16-6.5x60 SXR-10-80-FUS-A 1551174



MULTI-MONTI-10x85 1480024



Secondary fixings

SDA5/5.5x22 1507572



Third-level fixings

NV5 Anti-rattle tape 8.5mm x 6mm x 15m 1521558



*fixing images not to scale

Installation guide

1. Secure NVELOPE® brackets to substrate

- **1.1** Position the brackets as per the NVELOPE[®] static calculation.
- **1.2** Secure using the recommended primary fixing.

Note: Recommended primary fixings vary dependent on the wall type. Please contact us for recommendations.

We recommend pull-out tests are carried out for fixings into blockwork and brick. These tests can be arranged with our technical department.



2. Insert profiles into brackets

- **2.1** Once the NVELOPE[®] brackets are aligned in correct positions, fit the cut length profiles into the helping hand of the bracket, following the static calculation.
- **2.2** Push the profile into the bracket's helping hand and adjust for line and level.
- **2.3** Check for line and level, ensuring a 10-12mm gap between the ends of rails to allow for expansion.



3. Fix the profiles to the brackets

3.1 Secure the profiles in the correct location using the SDA5/5.5x22 stainless steel fixing. Observe the correct number and fixing location as advised on the static calculation.

Note: Only one bracket per profile should have fixings in the fixed points (round holes), all subsequent brackets should have fixings in the sliding points (slots). See Figure 1.

Get in touch for a project specific static calculation



Installation guide

Figure 1





loads & expansion

Contact our technical team: 01707 333396

4. Check over

- **4.1** 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 profiles in relation to each other
 - To the number of fixings and their position in each bracket



5. Install NV5 starter profile

- **5.1** Install the NV5 starter profile at the base of the cladding.
- **5.2** Ensure the profile is the correct way up, fix the rail to the vertical L profiles using an SDA5 5.5 x 22 through the slotted holes.
- 5.3 Adjust level before fixing in place.



Installation guide

6. Install NV5 main profile

- **6.1** Install the main intermediate profile, allowing space to be able to slot each panel into place.
- **6.2** Ensure the profile is positioned the correct way up, once adjusted for level and panel spacing.
- **6.3** Use an SDA5 5.5 x 22 through the slotted holes to secure the profile.

Note: 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.



7. Apply anti-rattle tape

- **7.1** Once all intermediate rails have been installed, apply the anti-rattle tape.
- **7.2** Ensure the tape is applied neatly within the channel located on the lower part of the profile.



8. Install panels

- **8.1** 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 anti-rattle tape.
- **8.2** Slide the panel down to locate on the lower main or starter profile.
- **8.3** After initially 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, and to allow expansion of the Trespa panel.

Note: Panels should be fabricated to the Standard Trespa/ NVELOPE[®] designs illustrated on the next page. 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).



Notes



Fixings

Suitable primary anchors are designed to fix the brackets to a pre-determined grid to suit the cladding panel layout. Stainless steel fixings also assist in preventing bimetallic corrosion.

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 get in touch if you need further details.

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.



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