

Facade Profile – Mounting Instructions

hansen

Electrical installation

The **Facade Profile** is supplied in individual parts. The LED Tube and the converter are already installed and pre-wired in the lower part (base).

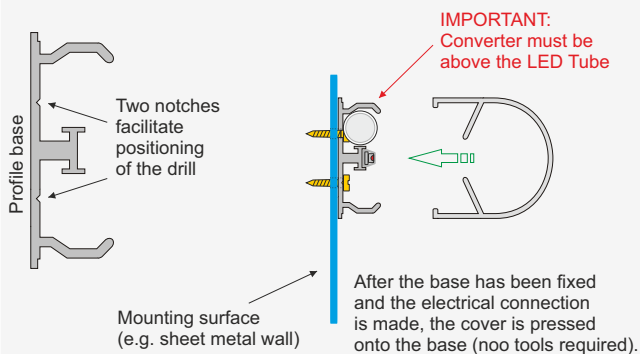
Two cables provided on both ends of the profile (depending on customer specification) allow the profile to be connected to the voltage supply and individual profile elements with each other (through-wiring). The electrical connections are made with screwless WAGO connectors.

Universal installation

The **Facade Profile** can be wall-mounted by fixing the profile base to the wall using standard tapping screws, Spax screws or threaded bolts. When fixing the bases, the correct position of the converter above the LED Tube must be ensured.

Now the electrical connection can be made (see page 2).

Finally, the upper part of the profile (cover) is pressed onto the base. If the profile is to run around corners and at angles, additional mitre cuts may be required.



Mitre cuts for corners and angles

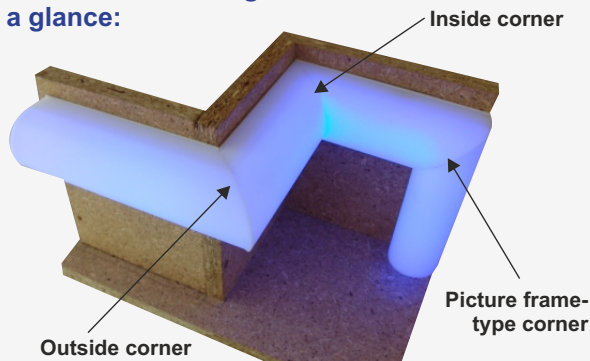
Usually, illuminated lines on buildings do not only consist of straight sections, but also include corners and angles.

With the **Facade Profile**, illuminated lines can easily be “drawn” around building corners by mitre cutting the visible upper part of the profile (cover).

90° corners are most common, but other angles can be produced as well. The photo of our company building on our website shows an example of a 120° corner.

The mitre cuts should be made on site where the exact lengths can be checked. The precision provided by a craftsman's portable electric mitre saw is sufficient for this job.

Possible 90° mitre angles at a glance:



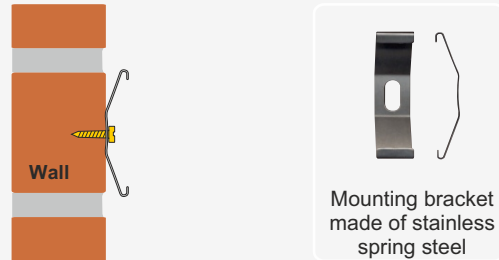
Efficient installation on facades

The **Facade Profile** can easily and efficiently be mounted on building walls and facades.

For this purpose, we have developed a mounting system with special mounting brackets.

The installation is very simple

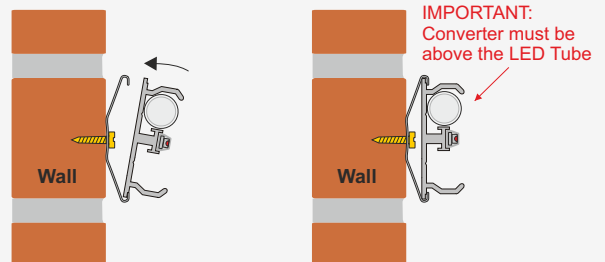
First, the mounting brackets are fixed to the wall along the centre line of the intended illuminated line at intervals of approx. 50 cm using suitable screws and wall plugs/screw anchors. The elongated hole in the brackets can be used to compensate drilling inaccuracies.



Then the profile bases are fixed by simply clicking them into the mounting brackets (screwless mounting).

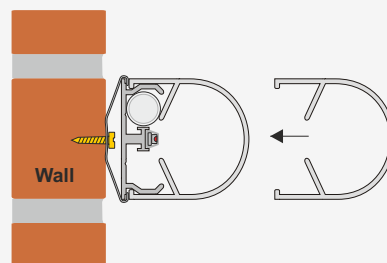
Now the factory-prepared mains cables can be connected using WAGO connectors (looping through the mains voltage).

The LEDs can now be switched on for a functional check.



After the electrical connection is made, the profile covers can be pressed onto the bases.

If the profile is to be routed around corners, the covers need to be mitred accordingly.



Finally, the open ends of the profile are closed with the end caps.

We recommend using **ACRIFIX 1R 0192** adhesive from Evonik (www.evonik.com) to secure the end caps.

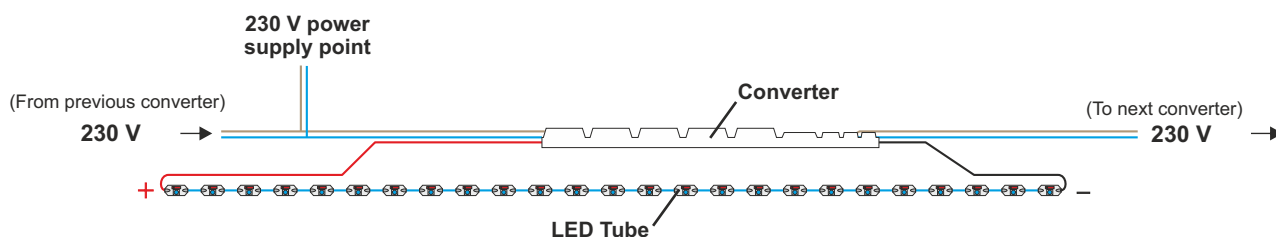
Electrical connection

The LEDs are operated in series connection with a special converter supplying the required voltage and current. The converter converts the 230 V AC mains voltage into a DC voltage of 310 V (max.).

The LEDs and the converter are pre-installed in the lower part of the profile (base) and form a closed electric circuit. The individual profile sections can be connected to form one continuous illuminated line of arbitrary length.

The electrical connection is established by connecting the two mains conductors (L and N), e.g. using screwless WAGO connectors. All the other wiring has already been pre-installed in the factory.

Up to 150 m of Facade Profile can be operated from a single 230 V power supply point.



Additional installation advice

OFFSET: For running lengths of up to **5 m** the joints of the base and cover should be offset by approx. 25 cm. For lengths of **more than 5 m** an expansion joint should be provided between the individual profile sections.

This may be required due to the different coefficients of linear thermal expansion of the **Facade Profile** (cover: acrylic, base: ABS) and the supporting structure (e.g. masonry, concrete, steel or aluminium).

Coefficients of linear thermal expansion (1/K)

ABS	: 0.000 090
Acrylic	: 0.000 070
Steel	: 0.000 013
Aluminium	: 0.000 023
Masonry	: 0.000 005
Concrete	: 0.000 012

Accordingly, the length of the profile cover can vary by up to 5 mm per metre between summer and winter.

The expansion joints should be provided with end caps whose cable feed-throughs can be sealed with silicone. If high precision is required, the profile sections should be cut to the exact length on site to take the ambient temperature influences into account (the profiles are produced at an ambient temperature of 20 °C).

If the profile is installed in any other position than vertically, the correct **position of the converter** in the upper section of the base, i.e. **above the LED Tube**, must be observed.

If the profile base needs to be bent around inside or outside corners, the LED Tube must be released in one direction by removing the holding clips. The holding clips must be re-fitted after installation.

PLEASE NOTE: If the profile is to be installed on uneven surfaces, a properly aligned, distortion-free mounting must be ensured.

The end caps must only be fixed to the profile cover. We recommend using **ACRIFIX 1R 0192** adhesive from Evonik (www.evonik.com) for this purpose.