

Installation basics

Profiles and preformed details are to be checked upon receipt, noticeable transport damages are to be reported immediately or stated on the consignment note upon receipt.

Aluminium profiles must be stored in a weather-protected place. Dry storage is especially required to prevent irreparable corrosion damage of visible mill and plate finish surfaces. If the packaging has become moist, the material needs to be dried or processed the same day. For drying, keep the profiles separately to ensure sufficient air circulation.

During installation, make sure not to damage the visible profile surfaces. Aluminium profiles must be protected against adverse impacts of both other metals and acids and alkaline substances (e.g. cement plaster, chalk).

Natural aluminium

When working with mill-finished profiles it is recommended to wear gloves to avoid fingerprints on the visible surface while handling.

As regards preformed details and corners made of natural aluminium (without secondary surface treatment), handling marks cannot be completely excluded and are not considered defects.

Remove the protective film (if any) from profiles directly after installation!

After installation of the profiles, natural aluminium will generate a protective oxide coating. This greyish patina with different patterns does not always meet aesthetic requirements.

Installation basics

The colour coating provides the aluminium profiles with a permanently decorative smooth surface.

Colour-coated and surface-treated products

If colour-coated profiles need to be cut to size on site, first **carefully mask** the surface in order to avoid scratches, then use e.g. a jigsaw, circular saw (saw blade for NF metals) or angle grinder (! **thin !** cut-off wheel approx. 1 mm for **thin-gauge** NF metals < 3 mm). Please note that excessive heat impact may damage the colour coating! Subsequently deburr the raw edge using a flat fine file and coat with supplied lacquer (brush or piece of fleece fabric).

With anodised surfaces and special effect coating (metallic, pearlescent finish), visually noticeable irregularities cannot be excluded.

Fasteners and substrate

Generally, delivery does not include any fastening materials. Suitable fastening materials (screws / plugs / washers) are to be selected according to the substrate. Responsibility lies with the installer.

The installer or the site manager is responsible for checking the load-bearing capacity of the substrate.

Joint width

When installing aluminium edge trim profiles, wall capping profiles and wall flashing profiles, possible temperature-induced changes of the profile length must be considered; connections and fixings must be carried out so as to allow the details to expand, to contract or to shift as the temperature changes, without causing any damage. In this case, a temperature difference of 100 K – at a range of -20 °C to +80 °C – shall be assumed.

Joint width between alwitra roof edge trim profiles or top caps as well as wall flashing profiles depending on the profile temperature at the time of installation:

Profile temperature at the time of installation	+5 °C	+10 °C	+20 °C	+30 °C
Minimum joint width per linear metre of profile length ¹	1.8 mm/lin. m	1.6 mm/lin. m	1.4 mm/lin. m	1.2 mm/lin. m
Recommended joint width at 5.00 m profile length	9 mm	8 mm	7 mm	6 mm
Recommended joint width at 2.50 m profile length	4.5 mm	4 mm	3.5 mm	3 mm

Table 1: Joint width depending on profile length and installation temperature

¹ based on linear thermal expansion $\alpha = 23.8 \cdot 10^{-6} [1/^\circ\text{C}]$

Installation plans

Installation plans will be drawn up for the client / installer by the alwitra Technical Department following a quantity survey for ordering profiles. Material requirements will be determined and optimised in the process of plan development, fixing bracket centres will be indicated in accordance with the individual object.

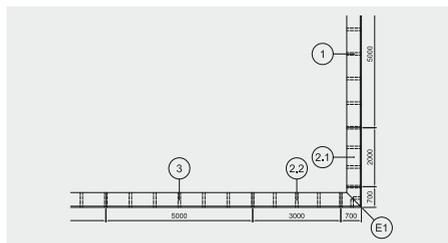
Installation plans may include the following information:

- positioning and distribution of profile sections,
- execution and positioning of corners, preformed details and end sections,
- layout of fixing brackets / joint connections,
- profile cross-sections including description,
- the specified material requirements,
- information on the surface as well as further notes on fabrication and installation.

Drawing up of installation plans is a free-of-charge service from alwitra. However, control responsibility lies with the client / installer. In case of any queries, the consecutive plan number in the text field provides for unmistakable identification. A weatherproof installation plan for the site will be included in the delivery.

In general, profile sections will be supplied in corresponding standard lengths. They are to be installed on site according to the installation plan. Standard length profile sections, which need to be cut to length on site, will be marked with an additional part number separated by a dot, e. g. 2.1, 2.2, following the section number ...

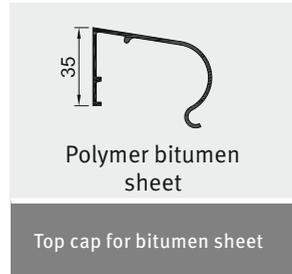
In the example, the 5.00 m standard length profiles pos. ① and pos. ③ are installed as full-length sections, whereas the profiles pos. ②.1 and ②.2 must be cut to length from a standard length profile pos. ② and then installed.



Installation instructions for roof edge trim profiles

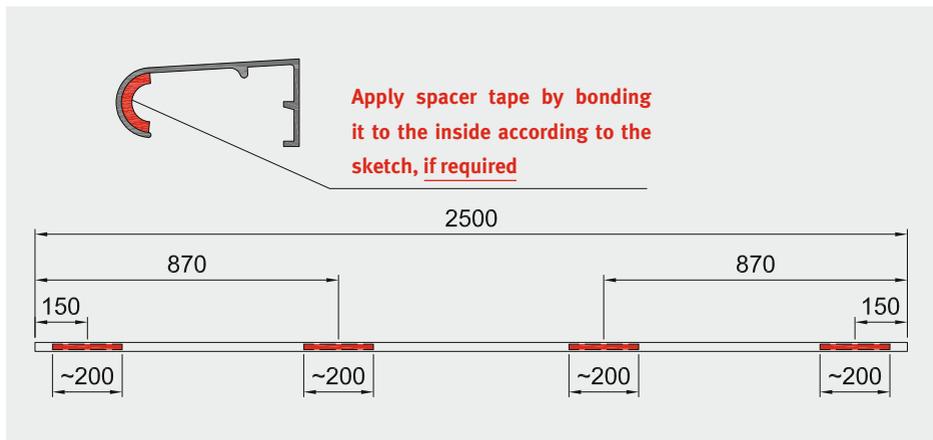
Top caps

In the case of roof edge trim profiles, top caps must be used according to the tape thickness.



Large top cap

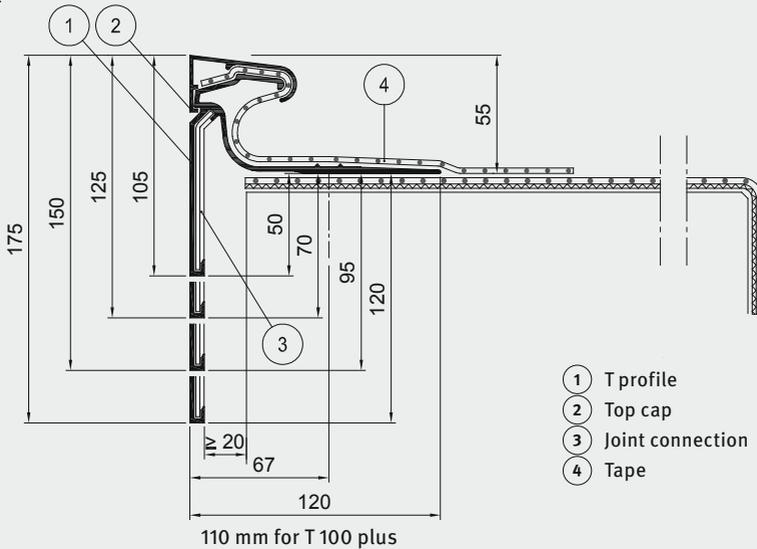
The large top cap can be used with waterproofing membranes with a material thickness up to 2.5 mm. For thinner waterproofing membranes (e.g. membrane thickness 1.8 mm) the included spacer tape needs to be applied by bonding it to the inside according to the sketch, if required.





Roof edge trim profile T plus

- two-piece extruded aluminium profile
- front face height: 105 - 175 mm
- time-saving and easy installation
- for roof slopes > 5° or with parapet



Scope of delivery

- 5.00 m long T profile sections with punched holes $e = 25$ cm
- 2.50 m long top cap sections
- Joint connections
- Welded corners and end caps

Installation instructions for roof edge trim profiles T plus

Installation and flashing against the waterproofing

- Align and fasten the T edge trim profile, starting from the corners
- Position the tape (25 cm) and snap over the top cap
- Adjust the tape to the profile in an S-shape and weld it to the waterproofing membrane

Installation description

Installation on the waterproofing installed right to the outer edge starts at one corner and is done all along the perimeter.

- Connect the T profile corner and section by inserting joint connections, place them on the roof edge and align them at a distance of at least 2 cm to the dripping edge.
- Fasten the horizontal leg in the pre-punched holes (25 cm spacing) using corrosion-resistant countersunk screws (\varnothing 5 mm) through the waterproofing membrane at the roof perimeter. The horizontal leg provides in-line fastening of the waterproofing for taking up horizontal forces originating from the waterproofing membrane.
- Connect the following T profile section by inserting a joint connection, position, align and fasten it, observing sufficient joint width (see page 4, table 1).
- If necessary, cut to length the last T profile section before a corner (observe sufficient joint width) and fasten it as described above.
- Place the tape including preformed corner details made of membrane material right to the outer edge on the T profile. Starting from one corner, snap over the top cap from the inside to the outside. Joints of edge trim profiles and top caps must be installed in a staggered pattern.
- The flashing tape is then homogeneously welded to the waterproofing membrane.