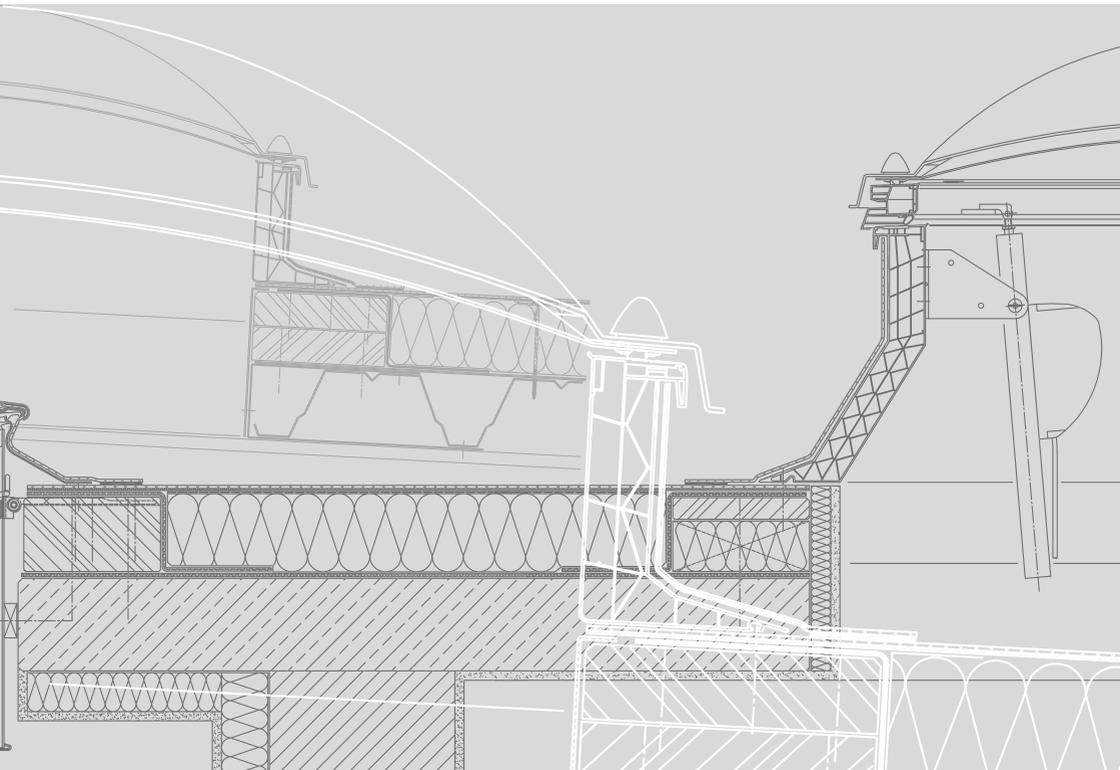


**Installation Manual
Rooflights and Kerbs**



Installation manual for rooflights and kerbs

This installation manual contains basic rules and information on how to transport, package, store, install, maintain and service alwitra rooflights and kerbs. It represents the manufacturer's instructions and guidelines for installers and construction site managers. Furthermore, the installation manual contains maintenance and service information for users. Adherence to the relevant technical rules, as published in standards and regulations, as well as to the workers protection and safety regulations is obligatory.

In addition, when carrying out roofing works with EVALON® or EVALASTIC®, the respective valid review of the corresponding installation manual shall apply.

As of May 2018

Technical changes reserved.

Packaging, transportation, storage and disposal

- Check whether the delivery is complete and the rooflight incl. kerb is undamaged.
- Depending on the size of the kerb or rooflight, it takes two to four people for the transportation and handling on the roof.
- In order to prevent excessive heat (heat accumulation under or in the rooflight), the rooflight must not be put flat on the roof area or the yet not installed kerb without sufficient ventilation.
- Rooflights must be stored in a dry place. In particular, before installing the rooflights, it is extremely important to avoid any moisture (rain, snow, dew, ...) at their lower side (inner side).
- With the aim of construction site waste utilisation, the complete disposal of all packaging for alwitra products is done by the regional INTERSEROH partners (contract no. 25288) at no additional cost. The requirement for this is that the waste materials be sorted on the site.

Kerb installation

General notes

- alwitra rooflights must be installed on alwitra kerbs only.
- When installing alwitra rooflights on an unventilated room, this room has to have a volume of at least 3 m³ to avoid any damaging heat accumulation.
- alwitra kerbs can be installed on roofs with a slope of max. 25°.
- Please note that according to the Technical Rules the height of the kerb above the finished roof surface (incl. e.g. gravel or green roof substrate layer, if applicable) must be **at least 15 cm for roof slopes up to 5° or at least 10 cm for roof slopes over 5°**.
- According to various requirements and regulations (e.g. DIN 4426, ASR A2.1, etc.), rooflights need to have permanent fall-through protection, e.g. in case of walkways on the roof.

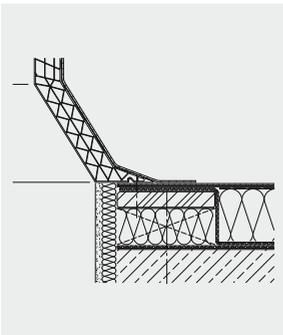


Figure 1

Kerb

- The kerb is installed on a batten frame or similar suitable supporting construction. The batten frame opening size must correspond with the nominal size (= roof opening size) of the kerb. Any batten frame linings on the inner side (normally 2-3 cm on each side) need to be taken into account (see fig. 1).

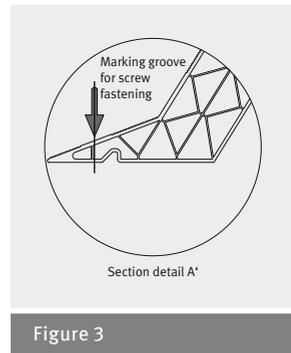
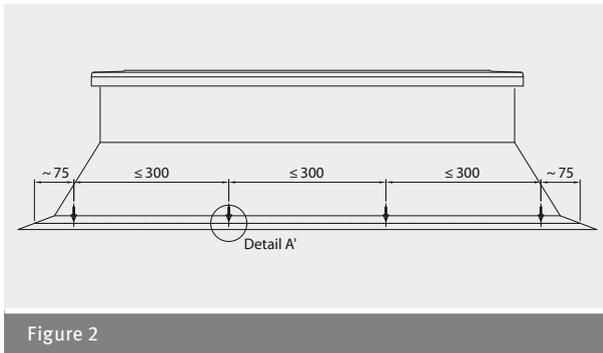
Type 1620 kerbs are additionally equipped with a circumferential groove for inserting up to 12.5 mm thick drywall panels.

No need for butt-joining the drywall panels with the lower side of the kerb.

- Make sure the kerb is installed on a sufficiently plain area.
- If the kerb is installed on an EVALON® or EVALASTIC® waterproofing membrane extending up to the inner edge (opening) of the batten frame, no additional perimeter fixing of the waterproofing (so called measures for taking up horizontal forces) will be required (see fig. 1).

Kerb installation

- Only screws suitable for the substrate (e.g. wood screws 5.0 x 60 mm or metal screws 4.8 x 40 mm) with stainless-steel washers (6.4 x 30 or 5.3 x 30 mm) must be used. The screws are not included in the delivery. Fix the kerb to the supporting construction with screws, starting at a distance of 7.5 cm from the kerb corner. **The spacing between the individual screws must not exceed 30 cm** (see fig. 2). Screw the kerb to the supporting construction through the corresponding marking groove (see fig. 3) at the flange.



Kerbs with flashing collar

Upon request, alwitra kerbs can be equipped with a factory-fitted EVALON® or EVALASTIC® flashing collar, allowing for direct and homogeneous welding of the pre-installed kerb tapes to the roof waterproofing. Prior to welding, the respective areas need to be cleaned (see also the EVALON® or EVALASTIC® installation manuals).

Kerbs without flashing collar

- **Flashing with synthetic or elastomeric membranes**

When flashing with synthetic or elastomeric membranes, the kerbs need to be completely waterproofed to the upper edge and flashed against the roof waterproofing (e.g. with self-adhesive EVALON® VSKA or EVALASTIC® VSKA tapes). At the upper edge the waterproofing membrane flashing must be fixed against sliding off and covered to make it rainproof.

Kerb installation

- **Flashing with polymer bitumen roofing sheets**

When flashing with polymer bitumen roofing sheets, the kerbs need to be completely waterproofed to the upper edge. Preferably, cold self-adhesive sheets with pre-coat should be used in order to avoid damage to the kerb by torch welding. Flashing of polymer bitumen membranes needs to be carried out using the “folding method”. Generally, an appropriate pre-coat is to be applied to the kerb. There must be no direct pointing an open flame towards the kerb. At the upper edge the waterproofing membrane flashing must be fixed against sliding off and covered to make it rainproof.

Rooflight installation

ATTENTION: Do not loosen or remove the black plastic nuts at the mounting points of the rooflight. They are factory-fitted and do not require any further modification.

- Centre the rooflight on the kerb or the vent frame installed on the kerb to ensure a regular projection of the rooflight at all sides.
- Screw the included self-tapping slotted stainless steel screws (5.0 x 60 mm) at the mounting points (black nuts) - in the case of PVC kerb without pre-drilling - into the kerb or vent frame. The screws are included in the delivery and are enclosed in one of the corner protection covers of the rooflight.
- Tighten the screws evenly cross-wise and not too firmly. The screws must not be treated (e.g. greased) before screwing them in.

Installing the click-cap and the removal protection



Figure 4

- After tightening all self-tapping slotted stainless steel screws, the screw heads need to be covered with the included screw protection caps (removal protection, fig. 4 № 2). The protection caps are enclosed with the screws. Press the protection caps into place to see the convex part of the cap (see fig. 4).

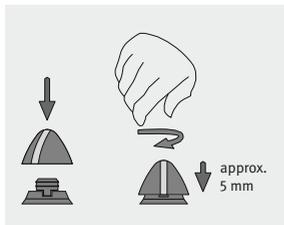


Figure 5

- Then each mounting point needs to be covered with a click-cap. They are also enclosed in one of the corner protection covers of the rooflight. The click-cap is fitted onto the nut and fixed by twisting. As a result, the click-cap will settle approx. 5 mm on the mounting point (see fig. 5).

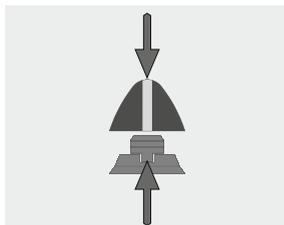


Figure 6

- The correct position is achieved, if the mat line on the cap is aligned parallel with the two notches in the mounting point nut (see fig. 6). In this position, the cap is firmly placed on the nut and waterproof, but still removable.

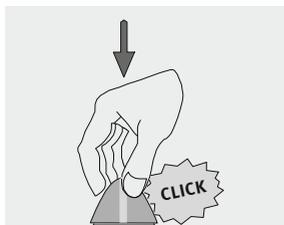


Figure 7

- For final fixing, the cap needs to be locked in place on the mounting point nut by strongly pressing it down (see fig. 7). You will hear a distinct clicking sound. After that, it will not be possible to remove the rooflight without damage.

Attaching parts / opening mechanism

Rooflight systems with opening systems are pre-mounted at the factory to the kerb and vent frame with the necessary fitting components included. If required, the opening instruments (e.g. hand spindle or motor actuator) need to be attached with quick locks. A vent frame is required and to be installed in case of retrofitting of opening systems. Please note that opening systems (spindle opener, motor actuator) can only be fastened to the side of the kerb with inner reinforced metal profile. This side is labelled on the top of the kerb and can be detected using a magnet, if required. Thus, the opening direction is predefined. For further information, please refer to the individual assembly and installation instructions included in the respective installation sets.

Maintenance and service information

- Once a year check the fastening elements (click-caps, fittings, etc.) of the rooflight and the sealing strip (between rooflight dome and kerb, between vent frame and kerb or rooflight dome) for functional reliability.
- Avoid contact of the rooflight dome and kerb with substances not compatible with PVC, acrylate (PMMA) or polycarbonate (PC).
- For cleaning use only water or a mild soap solution and rinse thoroughly with clean water. Do not use any solvents or abrasive detergents (e.g. cream cleaner).
- For cleaning the kerbs you may use special PVC cleaners.

Important information:

Rooflights are made of plastic and thus not completely vapour tight. Therefore, formation of condensate in or at the inner side of the rooflight is possible under certain circumstances. This condensate does not impair the quality or service life of the rooflight and normally evaporates.



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