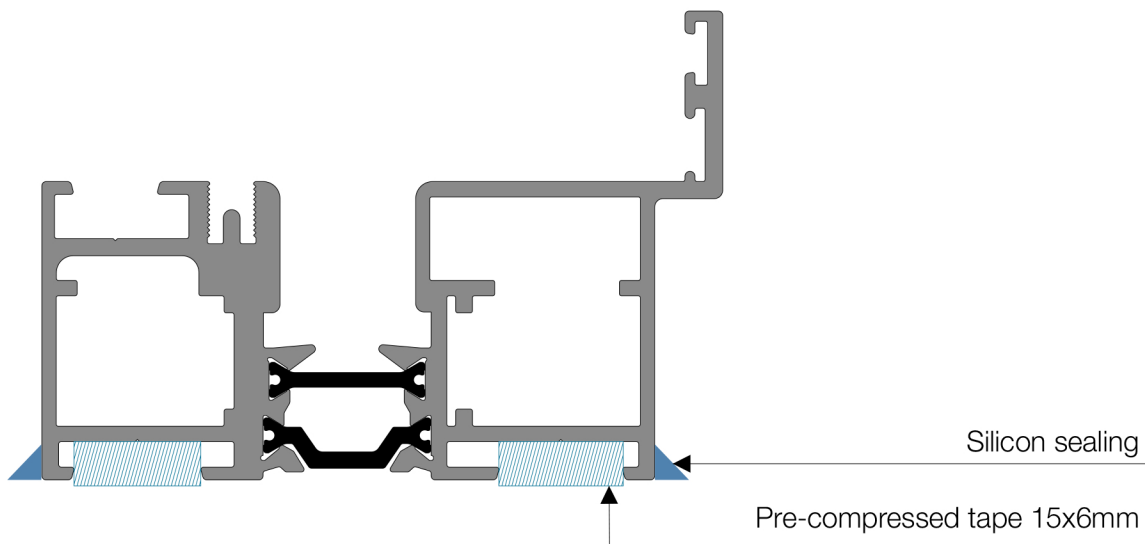


BI-FOLD ALUMINUM PATIO OPENING



The Bi-Fold Star system is a high-performance aluminum-framed stackable bi-folding door system. It is designed for comfort and quality, durability, energy performance and security.

- The applied installation is not possible for this type of pieces.
- The recommended installation is the one with installation flanges.
- The installation can also be done by using the installation flanges 373888. In this case, their placement is done following the same rules as in the case of classic carpentry: 150 mm from the inner corner of the frame and then, successively on the profile, without exceeding 700 mm between 2 consecutive flanges. The installation flanges are fixed on the frame with stainless steel self-drilling screws, Φ 3.9x19 mm, two screws per flange. The flanges are installed on the sides and upper part, not on the bottom, so that the frame is placed on the floor.
- At the bottom part, put pre-compressed tape of 15x6 mm and seal with silicone both inside and outside.



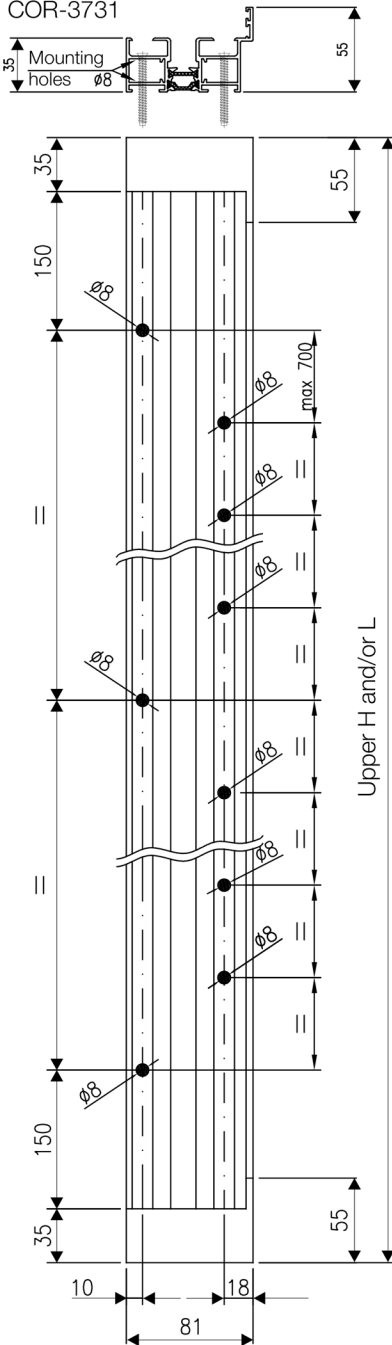
- If the bifold is designed with threshold, irrespective of its type, the threshold is not fixed at the bottom, instead, the outline is sealed with silicone, according to the below instructions.



Installation flange 373888

- If, by various reasons, it is not wanted or it is not possible the installation by using flanges, the bifold can be installed using installation screws, but the procedure is more complicated.
- In the following page there are presented the details necessary when installing the bifold system using installation screws as well as the way of placing and sealing the bifold threshold, with applied or embedded threshold.

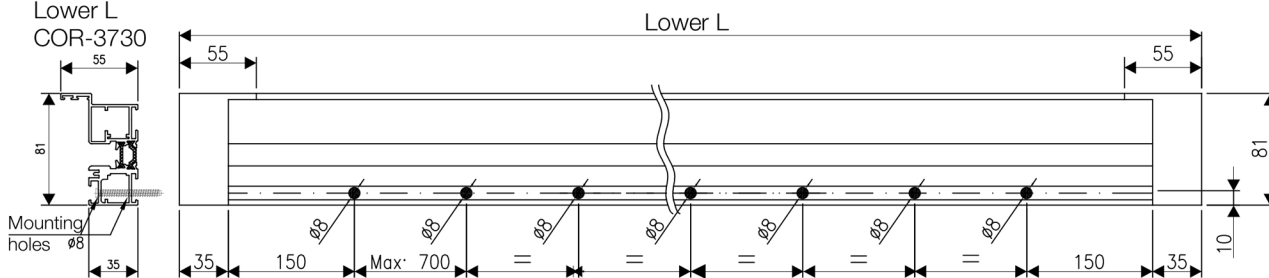
Upper H or L
COR-3731



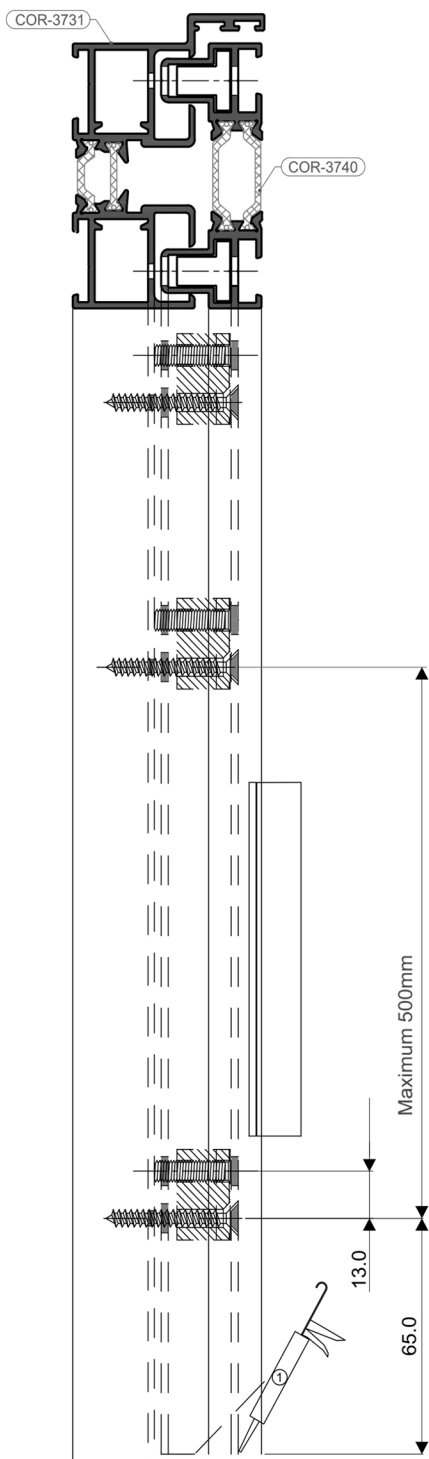
1. Installation of the aluminium bifold system, with full frame

- The frame of the bifold systems with full frame is designed with profile 3730 on the lower side and profile 3731 on the other three sides.
- For tunnel installation, with installation screws $\Phi 7.5\text{mm}$, proceed the following way:
 - Dismantle the sash assembly from the hinge adjustment profile 3740;
 - Dismantle the hinge adjustment profiles;
 - Drill the installation holes $\Phi 8$ in the frame, at 150mm from the inner corners and then, at equal distances one from another, without exceeding 700mm between two successive holes.
 - On the left, right and upper side, the end holes and the one in the middle are drilled through the inner semi-profile and the others are drilled in the outer semi profile; on the lower side, the holes are drilled only through the inner semi-profile.
 - The lower side is installed to the finished floor, in this case, it is mandatorily sealed with pre-compressed tape and silicon on its length, both inside and outside (see the above instructions).
 - In this case, the frame cannot be embedded in the floor outside, in order not to obturate the drainage. Inside, it can be embedded maximum 30 mm.
 - The bottom side can also be installed on the semifinished floor (concrete screed), in this case it is used an additional profile for the frame of 20mm or 38mm, which also provides the thermal break of the floor. It is embedded completely in the floor. Regarding the floors position as against the frame, the above mentioned remain valid (zero outside and max. 30 mm inside).
- The lower side of the bifold, as it takes over the entire weight of the profile can only be installed on finished or semi-finished surface.

Lower L
COR-3730



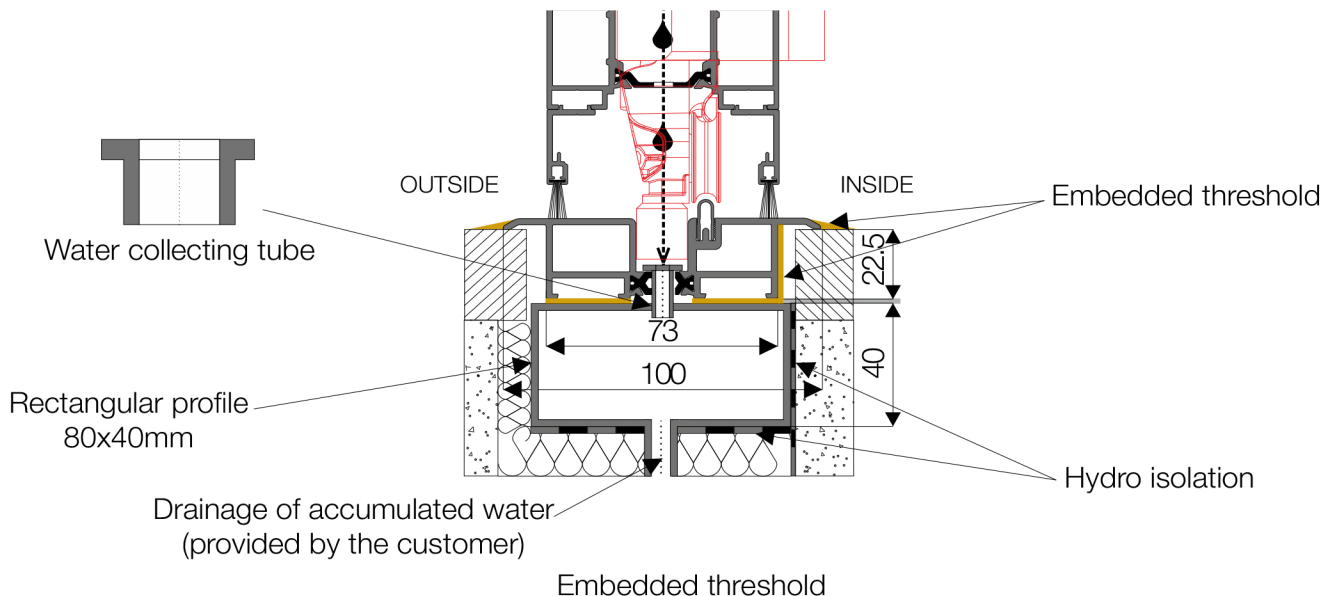
- The frame is fixed with wooden wedges and there must be maintained both the horizontality/verticality of the frame sides and the frame diagonals, which must be equal. The holes are drilled, the installation screws are inserted and carefully fastened so as not to distort the frame side. To this purpose, there can be used wooden wedges around the installation screws (which also must be inserted carefully, not to distort the frame in opposite direction. After fastening the installation screws, it is recommended to unscrew them with a quarter of a turn, so that the frame is not tensioned locally in the screws area.



- After installing the frame, there are fixed the hinges adjustment profiles. Their installation is not done definitively, this operation is to be done after installing the sashes assembly, as the left-right adjustment of the sashes assembly can only be done from these profiles.
- The installation of the hinges adjustment profiles 3740 on the frame 3731 it is done through the plates 353763, which are provided with an adjustment pin through which it is adjusted the position of the hinges adjustment profile against the frame profile. These plates are installed and pre-adjusted in the factory and their adjustment is done only if necessary.
- After adjusting the profile position, fasten the self tapping screws next to the adjustment pins and therefore it is fixed the hinges adjustment profile on the frame.

2. Installation of the aluminium bifold system, with embedded threshold

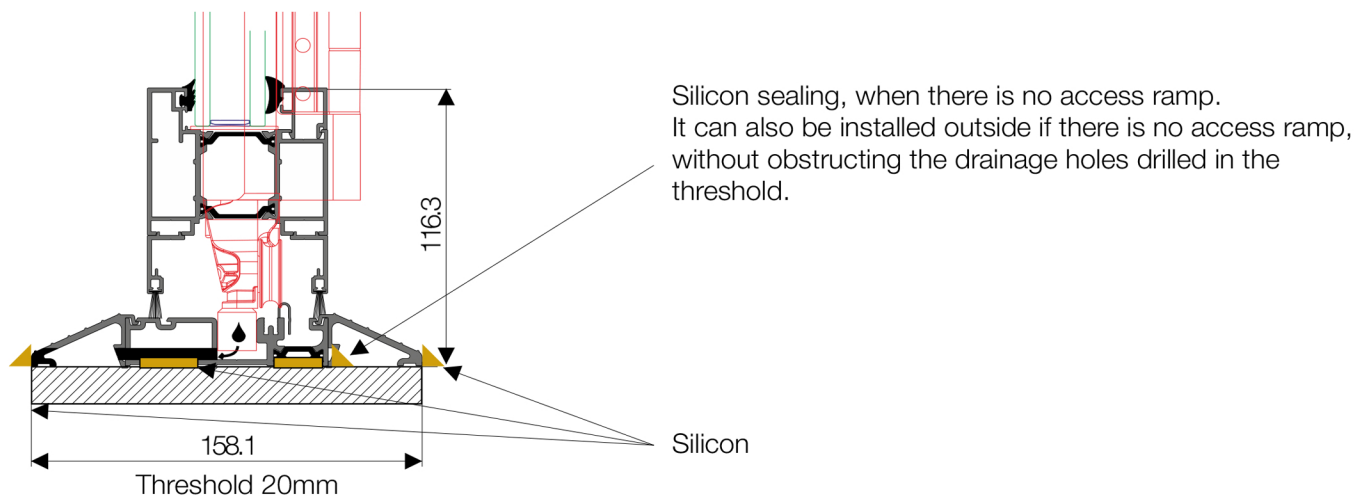
- In the case of the bifold system with embedded threshold, the installation is identical with that of the bifold system with full frame on the left, right and upper side. The difference is given by the lower side, which is an embedded threshold and it is provided with a rectangular profile 80x40 mm, necessary for taking the water from the threshold drainage.
- This profile which is provided with covers at the ends (mandatorily treated with silicon before installation) must be connected to a drainage system or stormwater collection (provided by the owner). The connection to the water evacuation system is done at the base of the rectangular profile in order to ensure the complete evacuation of the water.



- To prevent water infiltrations, the floor area where the drainage rectangular profile and threshold are embedded, must be protected with a hydro isolation made by membranes or other specific methods. The waterproofing must be provided by the customer.
- The contact area between the lateral sides of the threshold and floor are sealed with silicon, both inside and outside.
- If the bifold system represents a division of the inner space (at the beneficiary's request), the drainage profile and hydro isolation are no longer necessary.

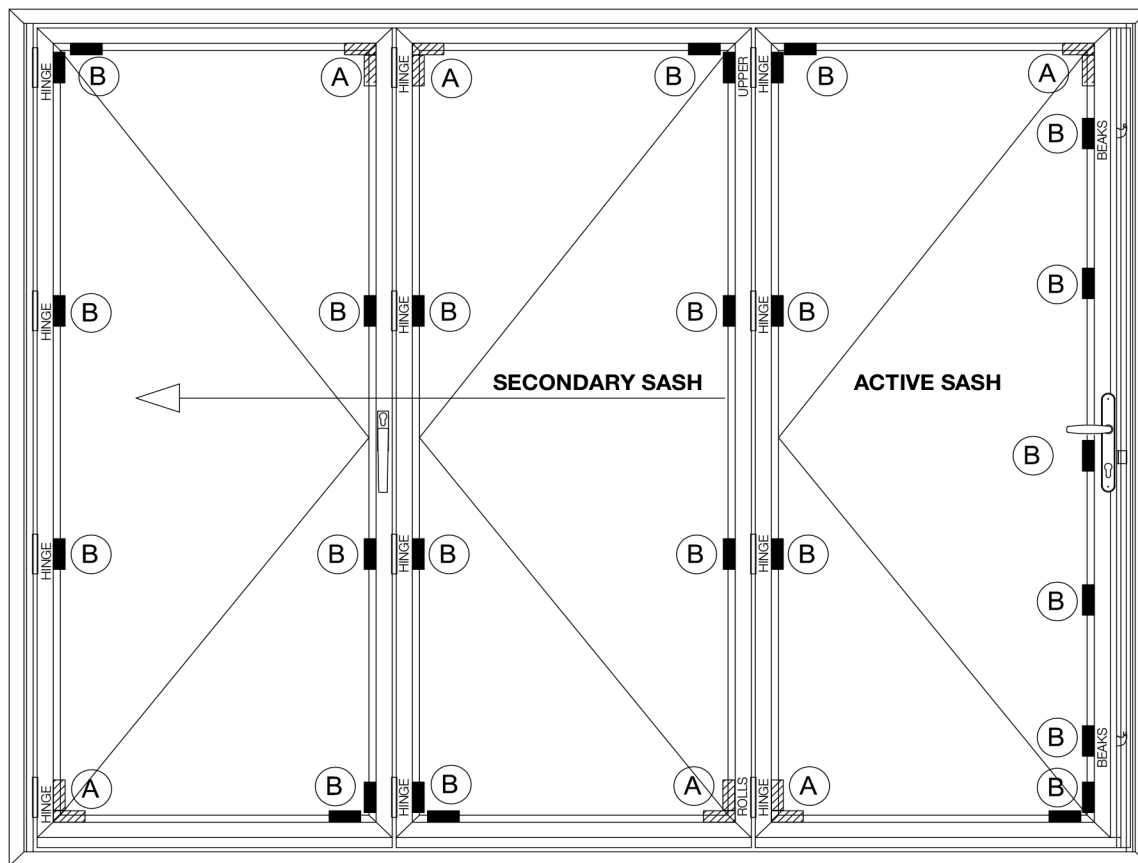
3. Installation of the aluminium bifold system, with applied threshold

- The bifold system with threshold is similar to the full frame version.
- But, in this case, the threshold is applied to the finished surface, placed on silicon cord and is sealed with silicon, both inside and outside. The applied threshold is not fixed in the floor.
- It can be provided with access ramp both inside and outside. When applying the silicone sealant outside, take care not to obstruct the drainage holes drilled in the threshold/access ramp.



Fitting the insulating windows

- The fitting of the insulating windows is done classically, with the support devices placed on the bottom corner on the side with the roller hinges and in the opposite corner.
- In the next figure, there is presented the fitting of a bifold system with three sashes, layout 3:3:0.



A = main support devices.

B = support device – installed near each hinge and locker, as well as the upper and lower part of the sash, in order to help fitting the glazing.