

Installation of ZENITH pool enclosures

General information

Before starting the detailed description of the installation, we would like to give you some general information about pool enclosures.

1. AQUACOMET pool enclosures are delivered in completely pre-assembled, manually movable structural units. This means that the installation on the site consists only of rail installation, pulling the segments onto the rails, fixing the plastic longitudinal positioning elements and installing the ready-made end-walls. During installation, step by step, taking the technical logic and practice into consideration, check the functions of the structure to make sure that any incidental mistakes can be corrected as soon as possible. During the manufacturing process we simulate the installation site and at the end we adjust the functions and try the enclosures.

2. AQUACOMET pool enclosures are manufactured according to the ISO 9001/2000 standard, which among other things, prescribes the use of continuously controlled and calibrated measuring tools. Important! The installation of pool enclosures must be carried out with good quality, controlled tools which meet the requirements of manufacturing precision.

3. Before starting assembly please check that the pavement provides a good foundation for the rails, and is suitable for the reliable installation of an enclosure. The receiving surface must fulfill three requirements: it is important that the surface is even, waviness or height differences more than 0,5cm within 1m are not acceptable. The surface must be horizontal, with a maximum allowance of 2cm within 1m. The pavement should be sufficiently solid and minimum 10cm deep drillable and anchorable.

All structural elements with individual functions, - doors, end wall openings, door locks and safety equipment, segment locks, sealings, profile closing parts, handles - that are not covered in the manual are delivered ready-mounted and functioning. The small parts needed for installation listed in the manual – screws, anchors, rivets, structural plastic elements, keys – can be found in a box that comes with the enclosure along with the list of materials, a drawing with measurements necessary for installation and with this installation manual.

Pool enclosures are manufactured using AW 6060 T6 quality custom-made aluminium profiles. The surface treatment can be anodised or powder coated (in many colours). Fasteners and other metal sheet components are made of A2 quality stainless steel. Profile closing caps, handles and other plastic parts are made of polyamide (PE). The glazing material is polycarbonate and the rubber profiles used for fastening the panels are EPDM. The rubber seals between the segments and groove covers are silicone rubber.

I. Rail installation

1.1 Measure the width of the pool at its front and back.

1.2. Subtract the width of the pool (front: W_f , back: W_b) from the outside width of the rails (R_o), and halve the results, so you get the distances between the pool edge and the outside of the rails (front: D_f , back: D_b). Mark the points with a line. (Fig.1.)

1.3 Connect the points on the right and left side with a string, and mark the location of the rail's outer edge side of the rail.

R_o = Rail's outer edge

W_b = Width of the outer pool edge in the back

D_f = Distance between the outer edge of the pool and the outer edge of the rails in the front

D_b = Distance between the outer edge of the pool and outer edge of the rails in the back

W_f = Width of the outer pool edge in the front

L = Length of rails

D = Diagonals

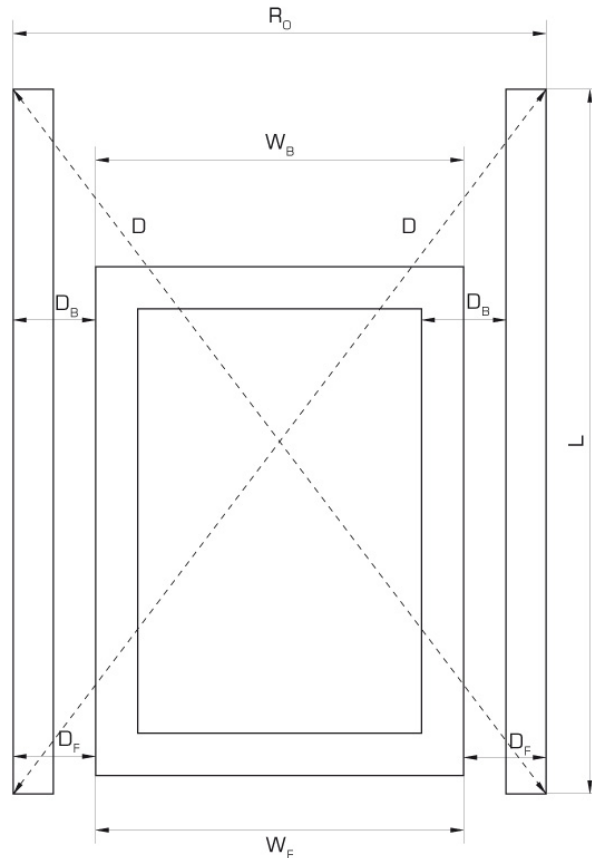


Fig.1.

1.4. Assemble the rail sections with the extending pins (Fig.2). Place the pins into the end of the rails and fixate them lightly with a hammer (Fig.3). Push the rail sections together without any gap (Fig.4).

1.5. Place the rails on both sides of the pool, and fit the outer edge of the rail to the marked line.

1.6. Adjust the rail sections with the help of the diagonals (D) (both diagonals should be equal). (Fig.1)

1.7. Adjust the rails lengthwise, sliding them to the right position. Take care that the diagonal adjustment remains correct!

1.8. Starting with one side of the pool, fix the adjusted rails at the pre-drilled holes with dowels (Fig.5) and screws (Fig.6).

1.9. Before fixing the rails permanently, adjust the rails horizontally (with a wedge, string or with a level). Take care, that the whole running surface is on the same level, to ensure that the segments can be moved without problems!



Fig.2.

Fig.3.

Fig.4.

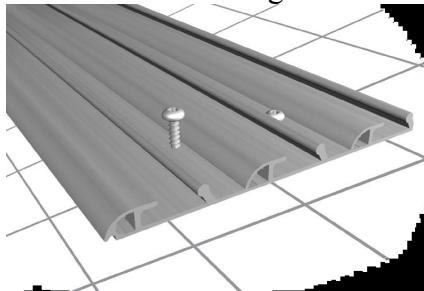


Fig.5.

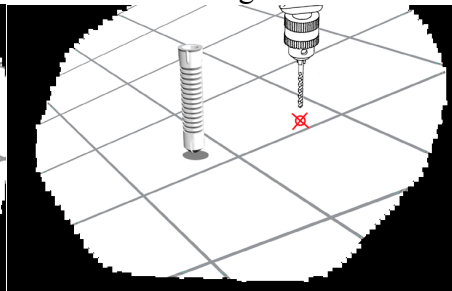
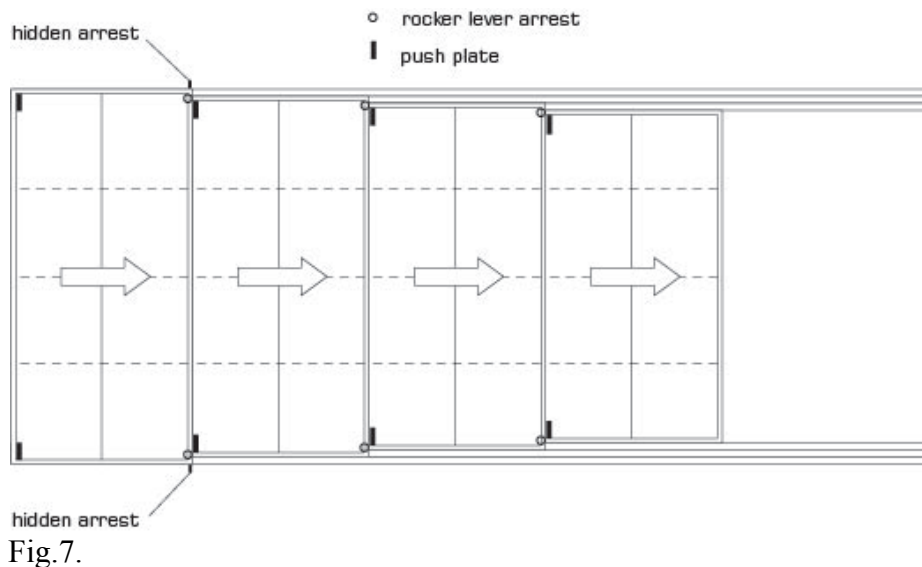


Fig.6.

II. Threading the segments onto the rails and checking wind protection

2.1 Correct position of the segments with their arrest systems.



2.2. Put the first segment down in front of the rails on a plastic foam underlay.

2.3. Lift the segment on the side where the rails are and remove the two front underlays. Pull the segment carefully toward the rails and pull it onto the rails (by taking care that the underlay on the back remains under the segment!).

2.4. Roll the segment onto the rails, and check the storm hook by lifting the segment. The segment must not be able to be lifted up from the rails!

2.5. Check if the segment can be slid along the full length of the rail without friction. If there is some friction, adjust the storm hook vertically with an Allen key, and fix it again (Fig.8).



2.6. Repeat steps 2.1-2.4 with the other segments as well.

III. Installing the longitudinal positioning elements

The arrest system only works if the largest segment is pushed toward the smallest segment. It cannot be used in the other direction! When all the arrests are opened, then we can push the segments together toward the front!

On the largest segment, the longitudinal positioning is provided by the so-called „hidden” arrest, and on all the other segments by rocker lever arrest.



Fig.9.



Fig.10.

3.1 Install the push plates (bent metal plates) of the rocker lever arrest on the segments. There is no push plate on the smallest segment.



Fig.11.

3.2. Slide the segment to be positioned (starting with the largest segment) into the proper position.

3.3 Bring the spring-loaded fastening pin into closed position, place the arrest wedge underneath and mark the positions of the drill-holes on the rails.



Fig.12.



Fig.13.

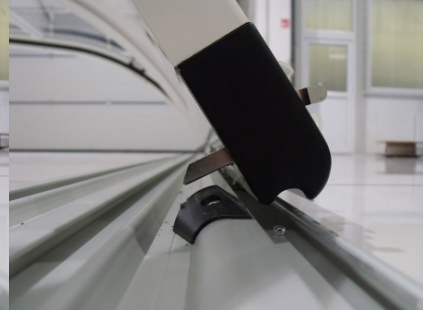


Fig.14.

3.4. Drill the rails where marked and fix the positioning element (arrest wedge) with the supplied pop rivets. Repeat the step on the opposite rail too. Please take care to install the fixing elements in the same longitudinal position on both rails!

3.5. Inspect if the fixing pin goes deep enough into the wedge's groove, and if it touches the bottom of the groove. If the closing is not proper, please contact the reseller immediately.

Safety key of the biggest segment



3.6 The arrest wedge fixing the first segment will also be used to fix the second segment.

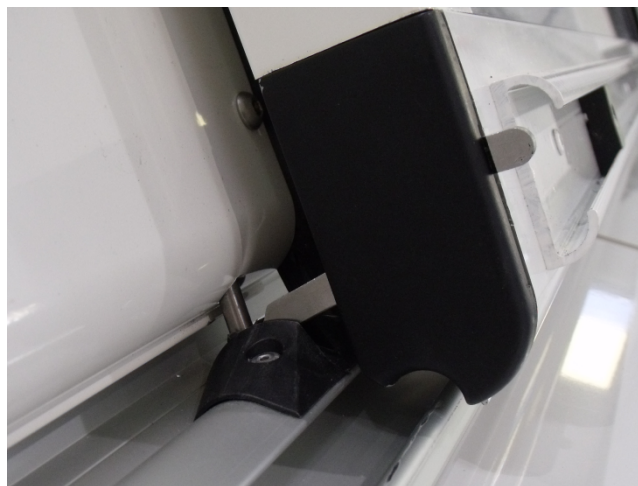


Fig.15.

3.7. Slide the next segment under the already arrested first segment so that the silicone rubber of the smaller segment seals properly to the arched profile above it. Please pay attention to the side arched profiles of the segments, they should be in the longitudinal position according to the assembly diagram. In any other case the overall length of the enclosure at the end of the

assembly might be different from the original length.

Carry out the above step for the other segments!

3.8. Thanks to the rocker lever arrest system, after opening the first segment's arrest all the segments can be pushed back because all the other segments open each other automatically.

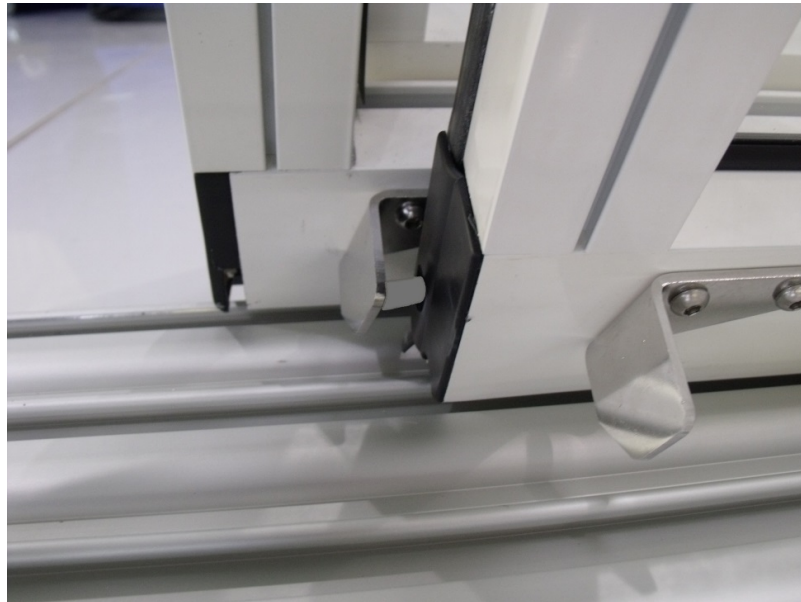


Fig.16.

3.9. After installing the longitudinal securing elements, install the safety stoppers to the rails according to figure 17-19. When installing the stoppers take into consideration that it's the storm hook that gets stuck on the stopper. If we want to position the enclosure so that it never slides beyond the end of the rails, then slide the segment to the end of the rails, mark the position of the storm hook on the rails from inside and drill the screw-holes accordingly.

If for some reason the goal is that the segment can be slid somewhat beyond the rails, (we would like to leave more space in front of the retracted enclosure) then the end stopper can be fixed to the end of the rails minding that we have to leave enough space for the rail end caps!

3.10. Glue the plastic end caps into the rails with silicone or other technical adhesive. (Fig. Fig.19.)

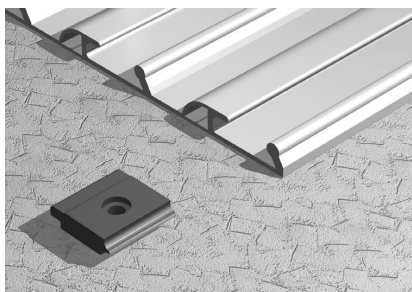


Fig.17.



Fig.18.



Fig.19.

IV. Installing the front and back walls on the side profiles of the segments.

4.1. Fix the frame profile of the end wall with self-tapping screws to the arched profile. The screw-holes on the frame and on the arched profile are pre-drilled. Do not tighten the screws fully yet!

4.2. The full tightening of the screws on the frame profile must be carried out gradually and tension free, so that the frame fits precisely to the arched profile. (Fig. 20-21)

4.3. If the above action becomes difficult, check the rails installation width again.

4.4. The properly installed end wall frame profiles fit tightly to the segment arched profiles.

4.5 If there is an opening on the front/back wall with hinges (horizontally divided wall with flap or a vertically opening french door), check if they close properly and if the safety locks work easily. It is possible that the hinges move slightly during transportation from their factory set position. In case of improper operation loosen the fastening screws of the hinges and adjust the door/flap again. Tighten the screws again once the door/flap works faultlessly.

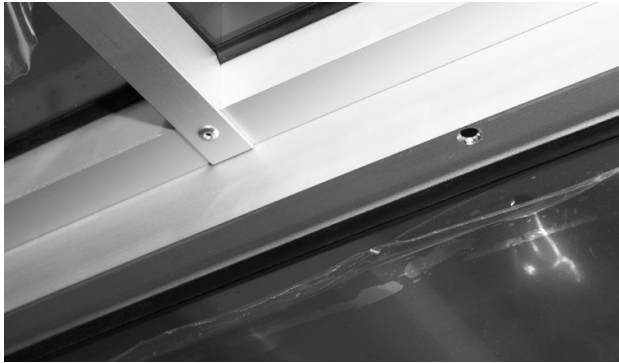


Fig.20.



Fig.21.

IV. Front and back wall fixing

4.6. In case of a removable front wall in 1 piece, fix the wall to the threaded pins to be found on the segment's side arched profile. (Fig. 22.)



Fig.22.

4.7. In case of a removable front wall in 3 pieces equipped with a hinged door without threshold, first fix the end wall parts as described in step 4.6. Fasten the segment to the rails with the spring loaded arrest pin.



Fig.23.

Fit the hinged door into it's place, check the closure and the proper functioning. (Fig.24.)

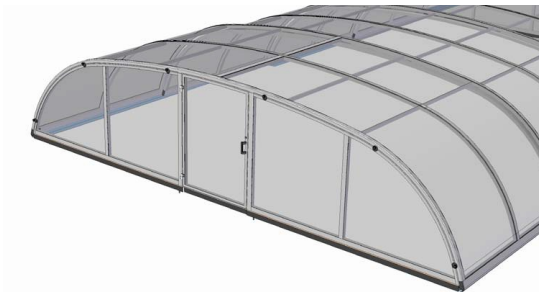


Fig.24.

Mark the supporting pins of the removable wall on the ground and drill down the supplied sleeve in the given position. (Fig.25.) Check the height of the support pin. Repeat the action on the opposite side too. Check the closure of the door.

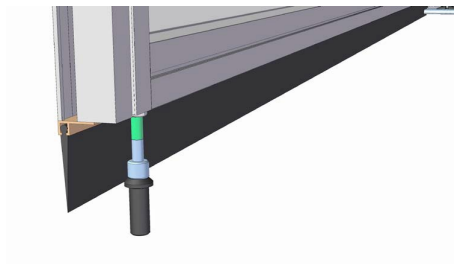


Fig.25.

V. Final inspection of the pool enclosure

5.1. Check the safety components on the enclosure, end wall locks, arresting elements and segment locks to see if they are complete and work properly!

5.2. Open and close the doors and flaps on the end walls and on the side of the enclosure, and check that they work faultlessly!

5.3. Open and close the pool enclosure, check if the segments slide correctly and if all the safety stoppers are installed!

5.4. Check if the rubber seals between the segments and under the end walls close properly!

5.5. Check the surface of the glazing panels and the condition of the rubber seals used for fitting the panels.

5.6. Clean up the waste and debris resulting from assembly!

5.7. Demonstrate the safe and proper use of the enclosure to the customer!

5.8. Hand-over the user's manual and the warranty.