

EasyPonton



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The EasyPonton by EasyStairs is applicable and usable for many purposes. Think of working safely from water, guiding hoses during a transfer, more berths in the marina, floating bar or stage, maintenance/repair of a ship, raft for an event, footbridge over the water, cable work or bridge inspection, dock for jet skis, presentation on the water, and much more.

Unieke features:

- **Safe:** Our floating elements are made of certified Lupolen 5261Z material, which is demonstrably rot-resistant and food-safe.
- **Flexible:** Can be used in the industrial, recreational and event sectors.
- **Durable:** By using the best, pure raw materials available on the market and the strictly controlled production, the elements used by EasyStairs are resistant to the strongest weather conditions, sunlight and therefore have the longest lifespan.
- **Efficient:** Due to the high-quality material used, heavy industrial loads, heavy machinery and constant tourist use cannot cause any changes in shape. Numerous tests prove the considerable buoyancy of the systems.
- **Appearance:** The EasyPontoons give a professional appearance to employees, clients and customers

Applications:

- **Industry:** Powerful platforms for bridge inspections, revetments, maintenance, painting and temporary work floors. Suitable for heavy machinery and trucks, aquaculture, mining, floating solar systems and many other purposes.
- **Recreation:** Ideal as a (temporary) jetty for water sports such as marinas or swimming and rowing platforms for private property or hotels, living in tiny houses on the water, triathlons, camping on the water and sailing through the canals, sports and tourist facilities.
- **Events:** Quickly erected temporary stages on the water for concerts, lighting, sports, fashion shows, fireworks islands, beer rafts or advertising objects and all kinds of events on, around or on the water.

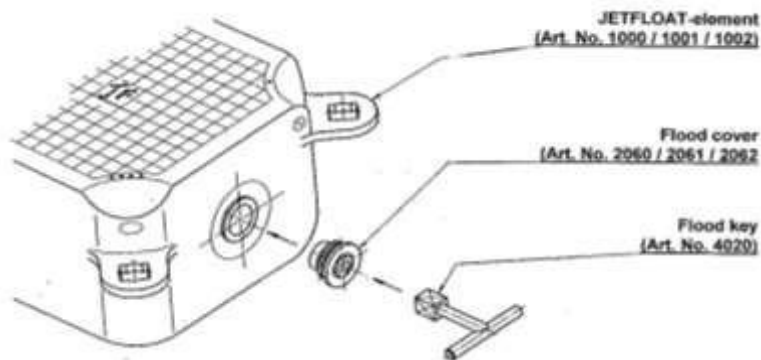
Safety instructions

- All EasyPontons require a minimum water depth of 1.800 mm in accordance to DIN EN 15649-6:2009/A1:2013.
- Do not use in darkness or in water that may contain marine life danger to humans.
- If used in an indoor pool make sure that there is enough space to the ceiling .
- Always inspect the area around and under the platform before each use to ensure that the water is deep enough and free of all rocks, logs, sand bars and underwater obstructions for at least 3.000 mm in all directions.
- Always anchor the bathing platform securely at least at 2 anchor points before use .
- Never use a EasyPonton bathing platform in rough surface water conditions, during high winds or when there is a thunderstorm (e.g. lightning).
- Inspect the platform before each use and replace any worn, defective or missing parts.
- Do not use EasyPonton bathing platforms in strong currents and secure against wind according to anchoring information (fresh breeze = Beaufort 5).

Closing flood covers.

The flood covers of the EasyPonton elements ARE NOT TIGHTLY CLOSED when these are delivered to the customer in order to equalise the pressure during storage and transport (i.e. changes in temperature)!

Please ensure that the flood covers are TIGHTLY closed JUST BEFORE STARTING THE ASSEMBLY with the flooding key (art. no. 4020).

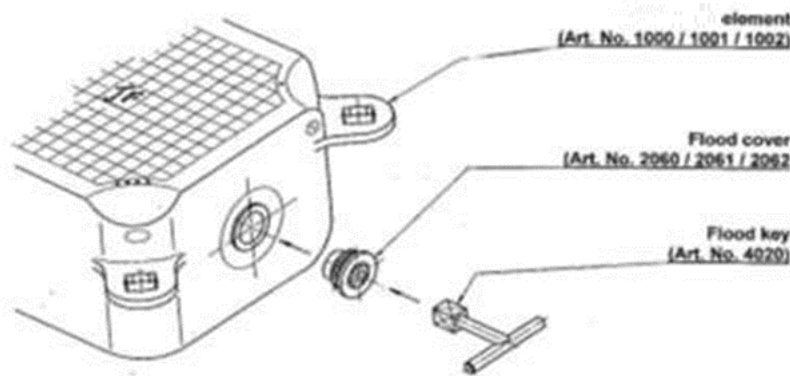


Assembly

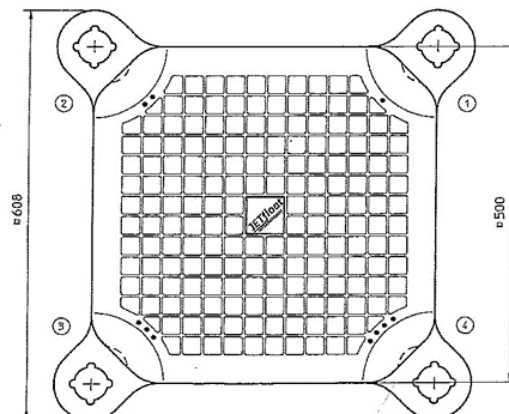
- The assembly site should be large enough to accommodate the installation or the partial segments that will be assembled. It is essential that the site is absolutely even! (Otherwise it will be difficult to lock the connecting pins.)
- The connecting pins should be wetted with water before locking them in order to minimise the friction between the pin and the lugs (use whatever water is available – fresh or salty).
- The assembly of the EasyPontons should be done as close as possible to the installation site.
- If possible, assemble your system at a temperature of approx. 20 degrees or higher, as otherwise more effort will be required during assembly.

Closing flood covers.

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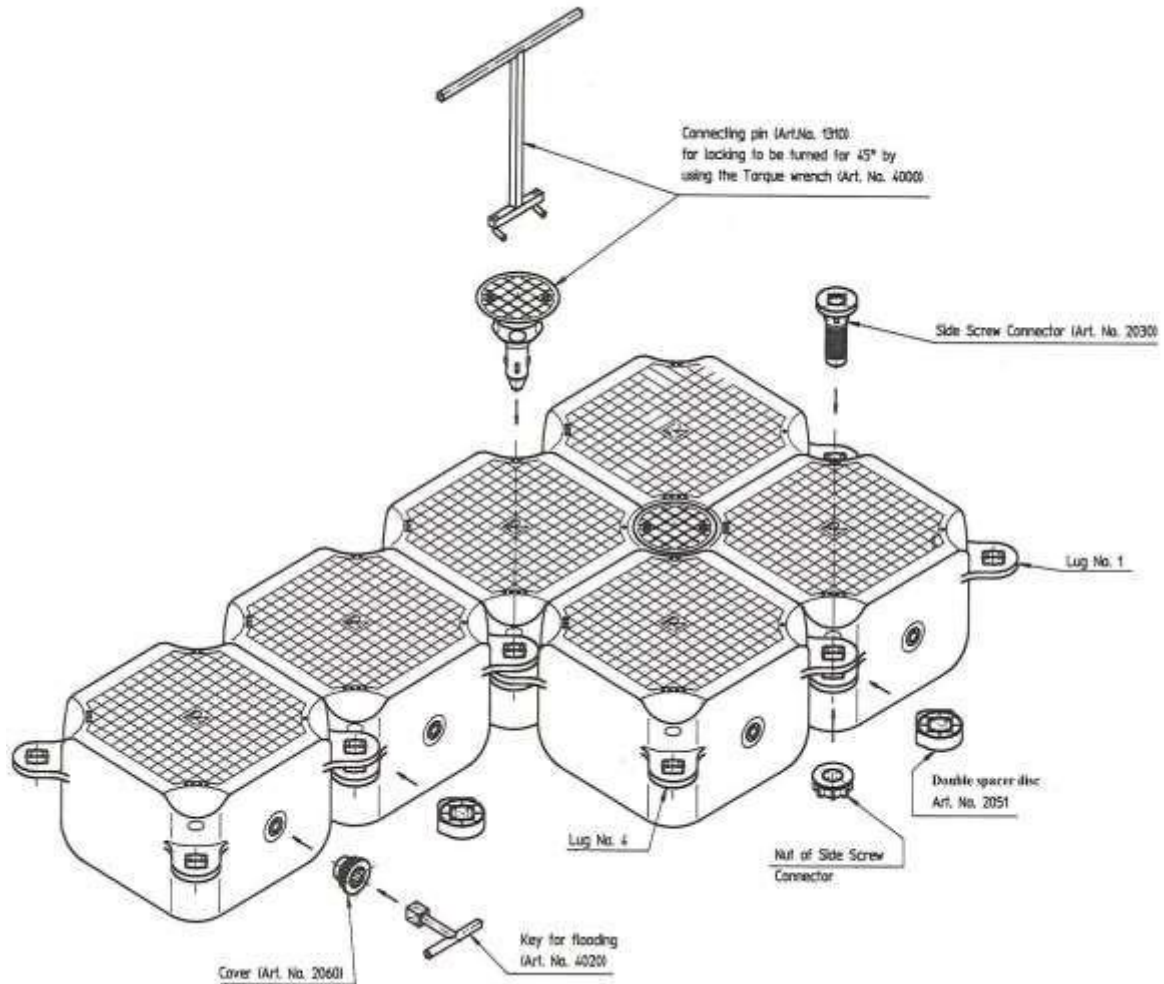


At the assembly site the EasyPonton elements must be fitted together in such a way that the embossed company logo "JETFLOAT" (in the centre of the tread surface) always faces in the same direction on all elements. This is to ensure that the connecting lugs at the corners of the elements will always fit one over the other in the correct sequence. The topmost lug must always be the no. 1, then lug no. 2, lug no. 3 and the bottom most lug is always no. 4. The relevant lug number is embossed on the upper side of the lug. The number of raised dots at each corner of the tread surface of the elements also corresponds to the lug number.



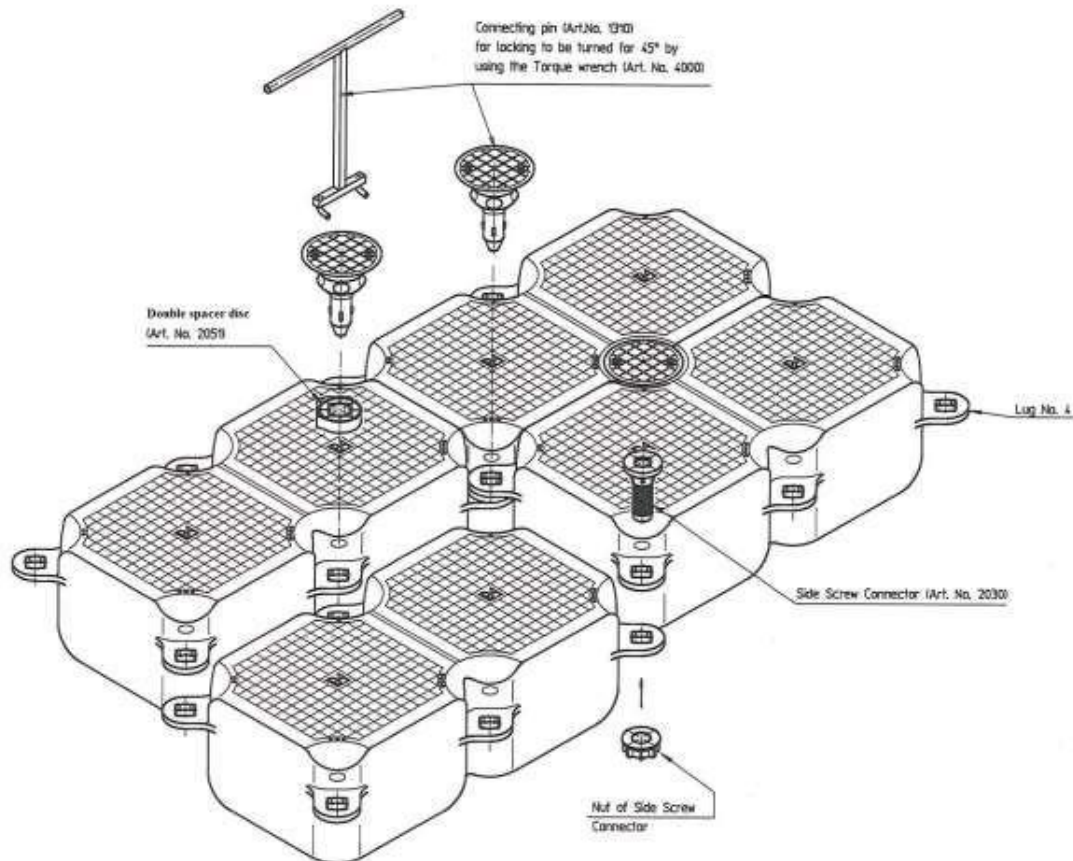
Assembly single elements standard and single elements low profile.

This mode of assembly requires that 4 connecting lugs fitting together where 4 elements intersect are locked with a connecting pin using the torque wrench.



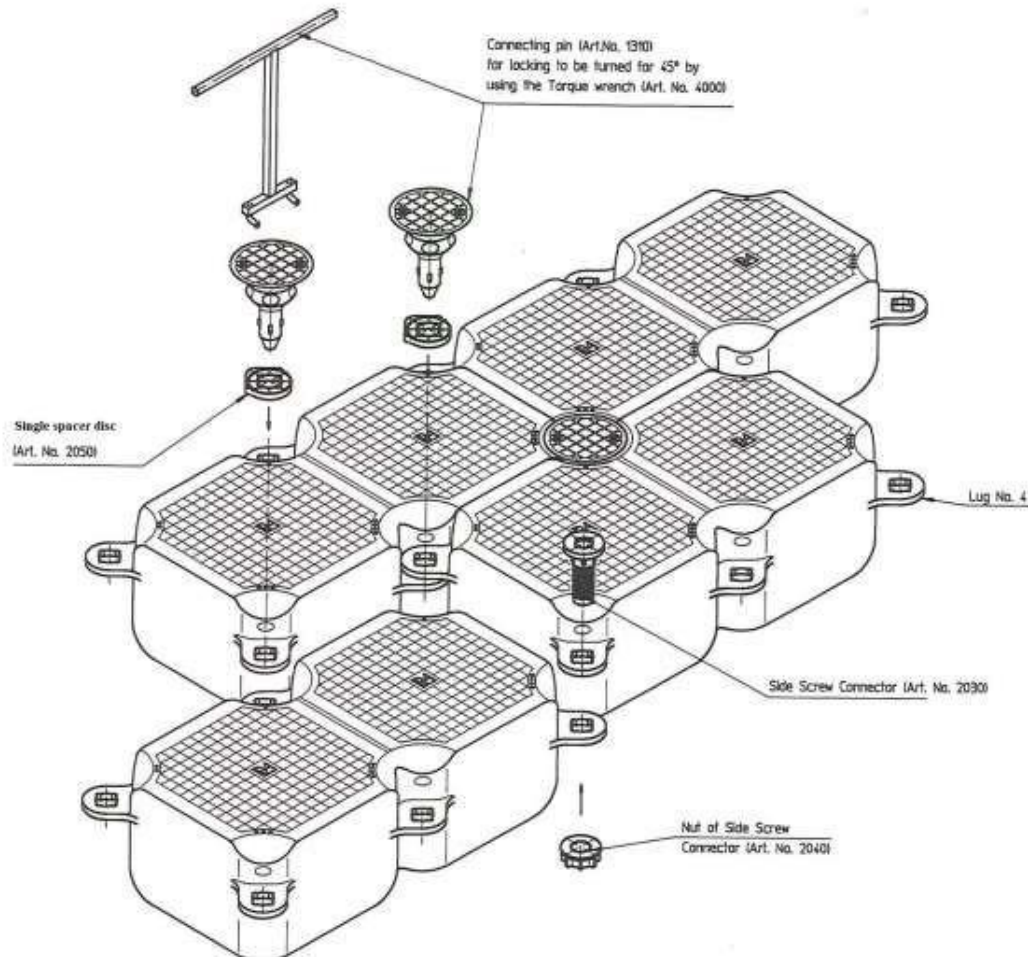
Double elements:

Where two double elements meet, only 2 connecting lugs (no. 1 & no. 4) fit together in the middle, which means that the gap must be filled with a double spacer disc (art. no. 2051). At the intersection where 4 double elements meet, 4 connecting lugs always fit together (as with single elements).



Staggered assembly (bricked):

This method of assembly requires that a single spacer disc (art. no. 2050) is fitted in, because only 3 connecting lugs (no. 1, 2 & 4 or no. 1, 3 & 4) meet.

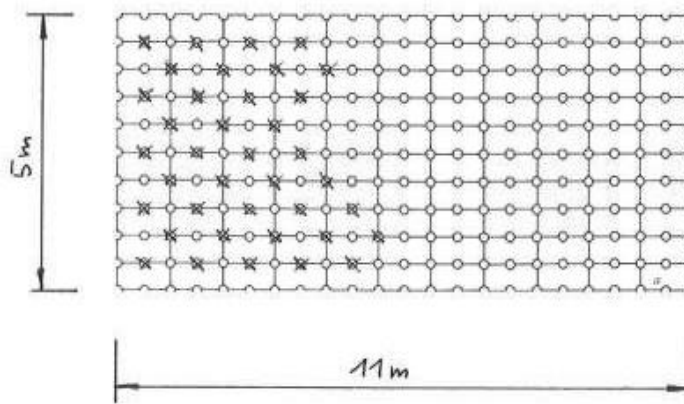


Double-layered assembly.

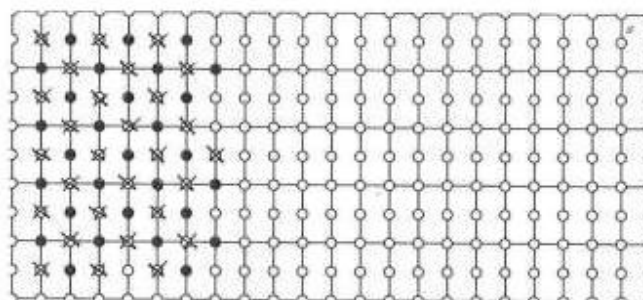
In order to achieve a form-fitting connection of 2 or more EasyPontons layers the following steps must be taken.

- Bottom layer: 1st horizontal row – a connecting pin is fitted into every second position.
- 2nd horizontal row – a connecting pin is fitted into every second position, but staggered to the first row.
- Top layer (e.g. second layer): The short connecting pins are fitted through the same positions as in the bottom layer – i.e. first layer and locked.
- Long connecting pins are now fitted through the remaining open positions of the top and bottom layer and locked (form fit).

Bottom layer:



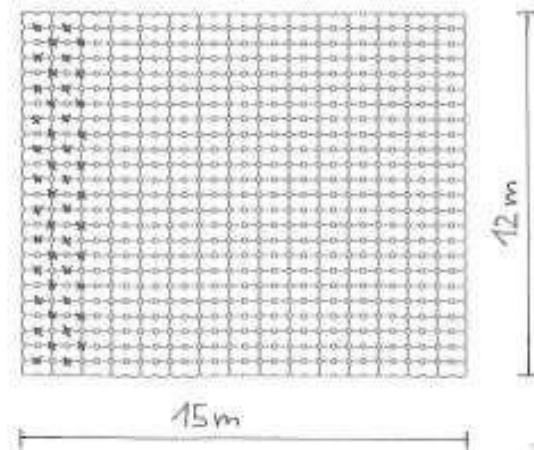
Top Layer:



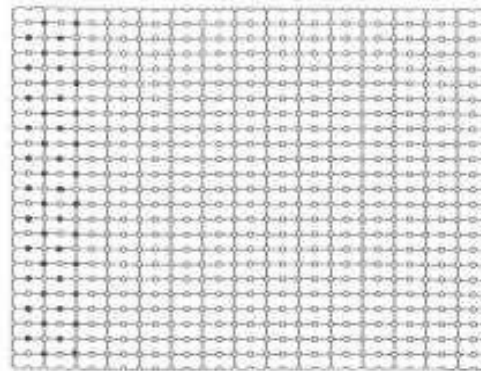
- ⊗ short connecting pins
- long connecting pins

Triple-layered or multi-layered assembly.

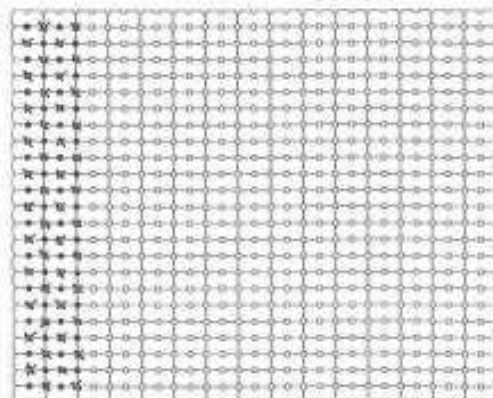
Bottom layer:



Second layer:



Top Layer:



- ⊗ short connecting pins
- long connecting pins

Bathing platforms.

For bathing platforms in the sizes of 3x3 m, 4x4 m, 5x5 m and 8x4 m according to the technical report TÜV 713072352-1.

To install the bathing platform according to standards the following additional assembly steps are required:

- **Finned plug:**
Each opening on the shaft of the connecting pin has to be closed by a finned plug, which can be easily inserted by hand. However to ensure a drain of rain- and/or splash water, a hole with a diameter of 5 mm must be drilled in each finned plug.
- **Cover cap:**
The cover cap has to be stuck into the torque wrench holes of all connecting pins in each outermost row around the bathing platform. The cover cap can be easily inserted by hand.

Connecting elements.

The elements are connected together either with short connecting pins with long connecting pins. These connecting pins are pushed forcefully through the connecting lugs (use the heel of your foot!). The locking holes in the connecting pins are at an angle of 45° to the elements (when locking and unlocking).

The cone of the connecting pin must fit flush with the elements – otherwise the connecting pin cannot be locked! (This is the reason why the assembly site must be even.)

Using the torque wrench its hooks fitting into the two locking holes, the connecting pin is locked with a jerky turn of only 45° (1/8 th turn). It does not matter if the key is turned to the left or to the right, the connecting pin will always lock firmly.

Important hint to make the locking of the connecting pins easier:

Pour water in-between the connecting pins and the lugs. This will lessen the friction between the plastic parts. The connecting pins can be locked with the greatest ease if the hooks of the torque wrench fit into the locking holes in such a way that the torque wrench can be jerked horizontally (to lock).

A general rule to help with the visual control that all connecting pins are actually locked is to make sure that all the locking holes on top of the connecting pins all face in the same direction of a EasyPonton installation.

Important note on temperature during assembly and disassembly:

Temperatures below 20 degrees Celsius cause the elements to become stiffer. This means that the tabs can no longer be moved over each other as easily. The pins can therefore only be dismantled/assembled with a great deal of force. We therefore recommend disassembly/assembly at temperatures above 20 degrees Celsius.

Launching.

Now the EasyPonton installation or the partially assembled segments are placed in the water. Several people can do this or, depending on the size of the segment, a lifting device should be used.

Segments can be fitted together when floating on the water. To make the fitting together of two segments easier, a side screw connector should be fitted through lugs 1 & 2 of the two segments, which will act as a swivel-joint. (Calm conditions should prevail when assembling in the open sea). Ratchet webbings should be used when assembling in rougher conditions in the open sea (swells).

Make sure that enough assembly ropes are available to temporarily moor the partial segments, and also the finished installation, (e.g. floating ropes made of polypropylene – diameter 16 mm).

Anchoring.

The anchoring works can be completed once the EasyPonton installation has been placed into its final position.

Mounting of mooring devices.

The mooring devices with single, double or triple holding fixtures should be mounted where 4 elements meet (4 lugs thus acting as power transmitters). Only the “head” part of the connecting pin is then fitted on top of the mooring device (i.e. the shaft of the connecting pin is sawn off just under the “head”).

Mounting of accessories.

At those points along the outer edges of the EasyPonton installation where connecting lugs no. 1 and no. 4 meet, the gap must be filled with a double distance disc. This is to ensure a form-fit of connecting lugs no. 1 and no. 4 with the side screw connectors as well as with other accessories. All side bars, screw joint units, stanchions and mooring devices made of metal have a mounting height equal to 4 connecting lugs ($4 \times 16 \text{ mm} = 64 \text{ mm}$) so that these can be mounted through the connecting lugs – i.e. that all these parts can be mounted on any of the 4 sides and connecting points of the elements (4 lugs). It is therefore essential that any gap up to 4 connecting lugs high at any of the connecting points must be compensated for with distance discs, either single (16 mm) and/or double (32 mm).

Tightening of plastic nuts on side screw connectors, boat cleats and boat fenders.

In order to screw the nuts firmly we recommend the use of the nut key or simply a plastic hammer. We generally recommend that the nuts are re-tightened approximately 2 to 3 days after installation.

Securing of plastic nuts.

If EasyPonton recreation platforms and jetties are subjected to severe winds and thus constant swells, then we would recommend that a safety screw is driven through the plastic nut and the threaded shaft of the side screw connector in order to avoid that the nut is loosened by the continuous movement of the waves. These screws (e.g. M3, 5 x 16 mm) must be stainless steel, either V4A or AISI 316 quality.

Dismantling of elements.

The torque wrench also used to dismantle elements. The torque wrench is hooked into the two docking holes of the connecting pin and then turned by 45° to the left or to the right (same procedure as during assembly). The bent hooks of the torque wrench make it easy to pull out the connecting pin.

Swimming pool bottom.

In general a EasyPonton swimming pool bottom is installed in the same manner as as platform, as described earlier.

- After closing the flood cover and before installation, drill one or two holes (diameter about 7 mm) into the bottom of each single and/or double element.
- Before flooding the bottom elements, all the necessary side screw connectors and mooring devices (to attach weights) should already be mounted.
- The pool bottom is pulled into position inside the pool enclosure while it is still floating, then the swimming pool/platform is closed.
- The pool net is attached to the platform and to the still floating pool bottom.

Flooding the pool bottom.

In order that the air in the elements can escape and water can flow in from the bottom, a hole (diameter about 7 mm) is drilled into the middle of the tread surface of each element of the pool bottom – in this way the elements are flooded.

Because of the particular molecular density of the plastic, the flooded pool bottom will not sink, but drift on the water surface.

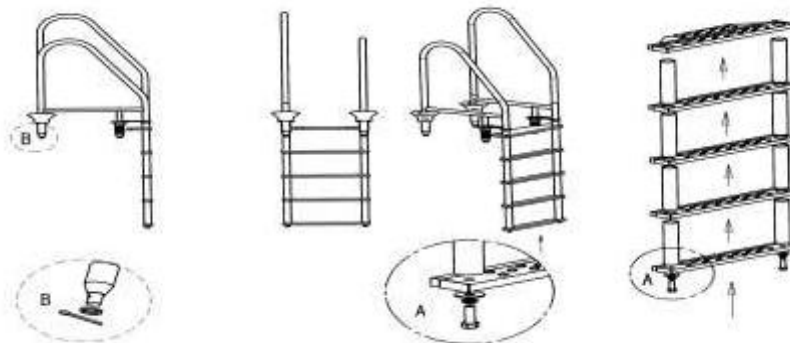
Sinking the pool bottom.

The flooded pool bottom is sunk – this is done by a diver, who will attach, e.g. steel weights or lengths of anchoring chain by means of shackles to the mooring devices.

The sinking weights must be adjusted in such a way that the pool bottom will keep the pool net straight and stretched tightly.

Bathing ladder.

- The bathing ladder is delivered in a flat carton. The accessories consisting of 2 connecting pins, 2 side screw connectors (all specially drilled), 2 steel washers and 2 split pins are packed in a separate plastic bag.
- First of all the security step (with the broad side to the inside) is shifted over the two handrails until it reaches the plastic ring.
- Then the two distance sleeves and instantly the step (with the broadside to the inside) are shifted over the handrails.
- That procedure is repeated with all three steps.
- Finally the last two distance sleeves are shifted over the hand rails and the fourth step with the small holes is tightened properly with the M 16 screws including steel washers and coil spring washers. Thereby all steps and distance sleeves are fixed.
- The 2 drilled connecting pins are pushed over the 2 back tubes to the limit, followed by the 2 steel washers (push right up to connecting pins). Secure with the split pins (stick through cross holes in the tubes). Do not forget to bend back the split pins! If necessary the shaft of the connecting pin must be shortened with a Stanley cutter until the cross hole for the splint is free.
- The 2 drilled side screw connectors are pushed over the 2 front tubes. (Turn the lug interlocking 90°).
- The complete bathing ladder can now be mounted in the desired position by shifting/pushing it through the open lugs. We recommend mounting the bathing ladder on the side with lugs no 2 and 3. Whereon a double distance disc has to be placed onto each lug No 2.(position height lug "zero")
- The 2 connecting pins are now locked with the torque wrench and the 2 side screw connectors are tightened with the nuts.



Extension of the bathing ladder with 1 step.

This article includes 1 step, 2 tubes with a M16 thread bolt and an internal thread M 16 and two distance sleeves.

- Loose both M16 screws from the handrails and remove the last step .
- The two tubes with the M16 internal and external threads are screwed into the M16 internal threads of the handrail and tightened by hand. Then the new step is shifted onto the two extended handrails.
- Both distance sleeves are shifted above the extended handrails.
- Finally the last step with the small holes is fastened again by means of the two M16 screws with washers and spring washers, which are screwed into the tube ends of the handrails and tightened properly.

Bathing ladder in connection with a EasyStairs pool bottom.

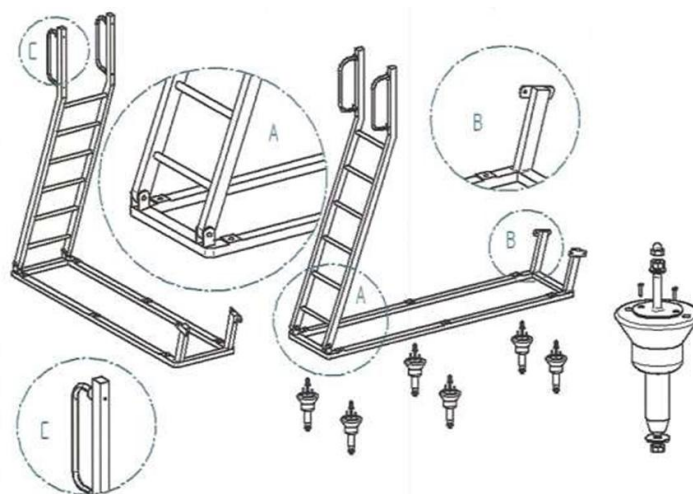
If the pool depth is less than 1.000 mm the bathing ladder tubes must be sawn off and deburred according to the actual pool depth. The number of steps must be adjusted accordingly to the pool depth. Both segregated M16 thread bars must be welded again onto and the lowest step has to be tightened with the remaining steps.

If a pool bottom was installed in the open sea with a pool depth of 1,2m or less, it would be possible that in case of storm waves the pool bottom get damaged by dashing against the tubes of the bathing ladder. Either the bathing ladder must be removed in the case of storm or you shall ensure a sufficient space between the pool bottom and the bathing ladder tubes.

Slide.

- Press the 6 connecting pins with thread bar M16 into the prepared open positions on the platform and lock them with the torque wrench.
- Put the fastening frame with raised ladder onto the thread bars and tighten them with washers and nuts. The hexagon cup nuts serve as a thread protection and must be tightened too. (Wrench size 24).

The slide body is put onto the side rails of the ladder and onto the front support bars. The ladder frame is screwed and tightened with the slide body by means of the 2 handrails. The front part of the slide body is screwed and tightened together with the front support bars (see enclosed photos and drawing).



Storage

Opening of closed flood covers.

The elements, partial segments or even entire installations should never be stored on land in direct sun impact and high temperatures if the flood openings have been tightly closed!

The elements should either be stored in the shade (under cover) or the flood openings must be kept open (as they are when delivered) – i.e. the installation must be dismantled!

The warm air inside the elements causes the inner pressure to rise and the elements can distend/inflate (because of the elasticity of the plastic).

NEVER place distended/inflated elements or installations in the water. The quick cooling effect of the water leads to a rapid under-pressure inside the elements (vacuum), which causes the tread surface, bottom and side surfaces to deform/buckle.

Rectification of deformation.

Should it ever happen that the elements are distended/inflated, open the flood covers (ventilate) and expose the elements for a certain time to the direct sun. During the production process the plastic molecules receive a “MEMORY EFFECT”, i.e. this enables the element to regain its original shape to a certain degree.

Inspection

Routine measures.

If the installations are subjected to constant wave movements, then all connecting pins must be checked to make sure that they have not loosened. If so they must be re-locked.

Monthly inspection checks.

- The screws & nuts on the mooring devices, anchoring girders and pile cages must be retightened every month (this work can be done from the tread surface).
- The screws & nuts on all types of boat cleats, boat fenders, side bars, stanchions, etc. must also be re-tightened every month.
- The nuts on the plastic side screw connectors must be re-tightened every month.
- When bathing platforms and jetties are subjected to wave movements, we suggest that a safety screw is driven through the plastic nuts and the screw joint unit. This will help to avoid the nut to loosen.
- The recommended screws M 3,5 x 16 mm must always be stainless steel of V4A or AISI 316 quality.
- Bathing ladder & water slide: The nuts & screws of all steps and connecting tubes must be re-tightened monthly. The tubes of the bathing ladders should be polished every month – when subjected to salt water, this should be done every week.

Annual inspection checks.

At least once a year a diver must check the wear-and-tear on the mooring devices, shackles & anchoring girders underneath the installation, caused by corrosion and friction on the anchoring chains, shackles and thimbles. (At the same time checking the wear-and-tear on the anchoring chains, anchoring ropes, shackles, steel anchors, attachments hooks and concrete blocks).

When the growth of algae and marine fouling becomes too extensive under the waterline of the elements, this can be removed with a metal blade.

Immediate measures.

A EasyPonton installation must be checked immediately after every storm, heavy sea or out-of-the-ordinary storms for the following reasons:

- Has there been any visible damage to the elements?
- Have any connecting pins become loose?
- Have any nuts & screws become loose on the mooring devices?
- Is the entire anchoring system still in good order (dive to check for any damages)?
- Have the nuts on the side screw connectors become loose?
- Are the pool net and the attachment ropes from the platform to the pool bottom still in good order?

Important notice.

- All defects and damages must be attended to and/or repaired immediately!
- The customer must inform either the responsible EasyStairs representative directly or EasyStairs in writing of any damages to the EasyPonton system that he (the customer) cannot repair himself in order to remedy the damages or to be assisted in doing so. This is important to avoid further ensuing damages.

Safety

Safety information symbols and safety signs:

Bathing platforms:

EN15649-2:2013-07 & EN15649-2:2009 + A2:2013.



Prohibition sign.



Not for children 6 years of age and below.



No diving.



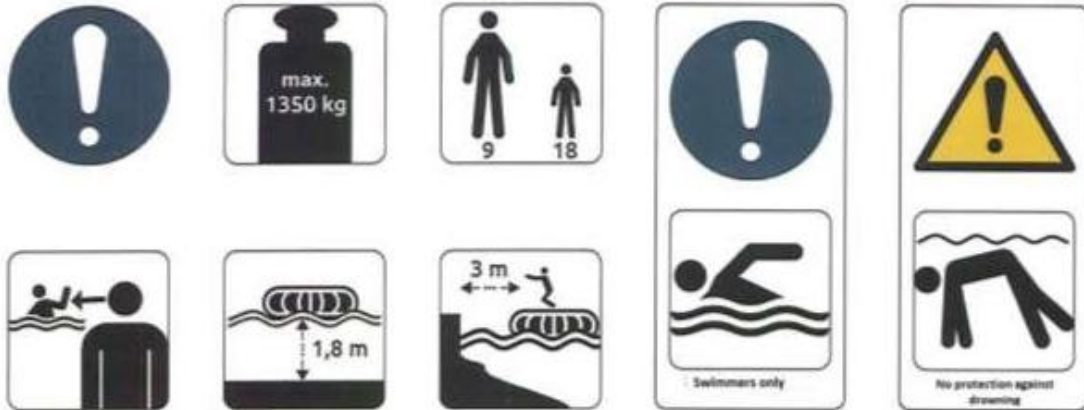
Do not swim underneath the structure.



Do not jump if water is not clear.

Bathing platform 3.000x3.000 mm.

EN15649-2:2013-07 & EN15649-2:2009 + A2:2013.



General mandatory sign



Max. load capacity 1.350 kg



Number of users: Adults 9 / Children 18.



Always supervise children in the water.



Required min. Water depth underneath object 1.800 mm.



Ensure safe distance to dangerous obstacles and spots: 3.000 mm.



Mandatory action sign swimmers only.



Warning action sign. No protection against drowning.

Bathing platform 4.000x4.000 mm:

EN15649-2:2013-07 & EN15649-2:2009 + A2:2013.



General mandatory sign.



Max. load capacity 2.400 kg.



Numbers of users: Adults 16 / Children 32.



Always supervise children in water.



Required min. Water depth underneath object 1.800 mm.



Ensure safe distance to dangerous obstacles and spots: 3.000 mm



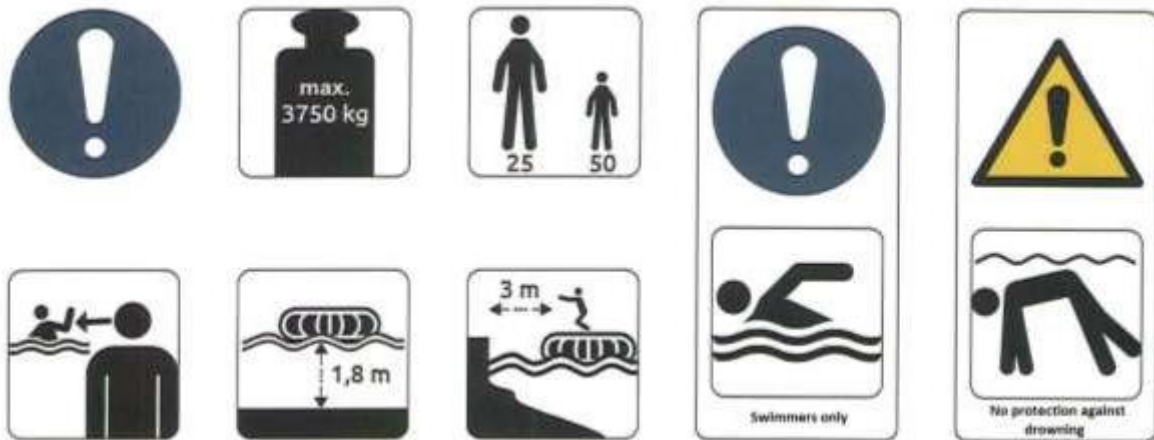
Mandatory action sign swimmers only.



Warning action sign no protection against drowning.

Bathing platform 5.000x5.000 mm:

EN15649-2:2013-07 & EN15649-2:2009 + A2:2013.



General mandatory sign.



Max. load 3.750 kg.



Numbers of users: Adults 25 / Children 50.



Always supervise children in water.



Required min. Water depth underneath object 1.800 mm.



Ensure safe distance to dangerous obstacles and spots: 3.000 mm.



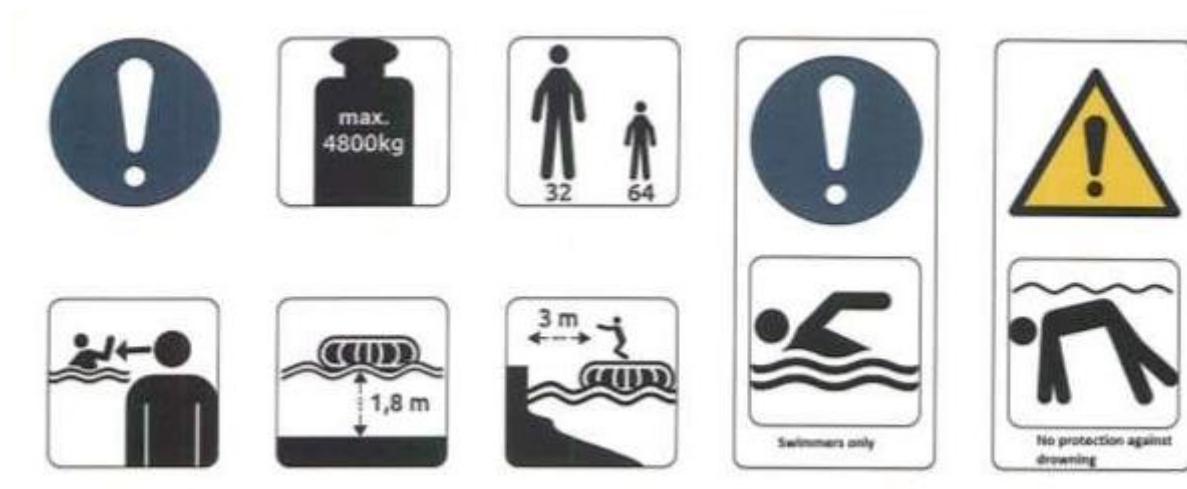
Mandatory action sign swimmers only.



Warning action sign no protection against drowning.

Bathing platform 8.000x4.000 mm:

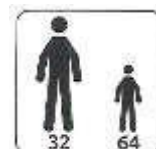
EN15649-2:2013-07 & EN15649-2:2009 + A2:2013.



General mandatory.



Max. load 4.800 kg.



Numbers of users: Adults 32 / Children 64.



Always supervise children in water.



Required min. water depth underneath object: 1.800 mm.



Ensure safe distance to dangerous obstacles and spots: 3.000 mm



Mandatory action sign swimmers only.



Warning action sign no protection against drowning.

Protection against electric shock.

Beat refuelling – electrostatic discharge.

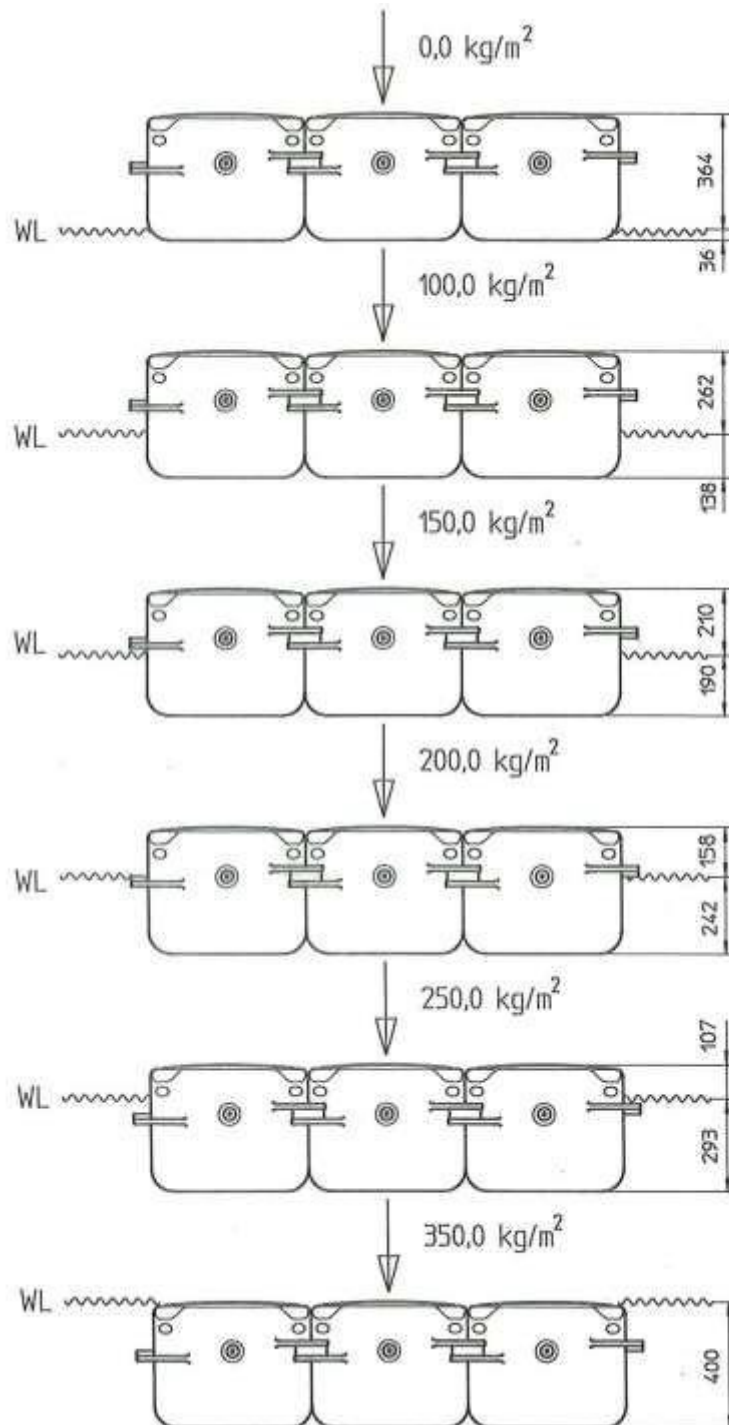
If a EasyStairs jetty is used for refuelling of boats the operator must ensure that either the elements and/or the tread surface (e.g. steel grating or GRP grating) that is installed onto the surface of the elements is safeguarded by means of non-fused earthing.

Electrostatic charge of persons caused by static electricity (Triboelectric effect)

Walking along or across a EasyStairs jetty people can get statically charged up at different levels. An electric shock can be caused by hand contact with an earthed building structure. This electric shock can be differently sensed and in rare cases visible and audible sparks can be caused.



Load/Freeboard:



Parts

Double element:



Single element:



Single element – low profile:



Connection pin short:



Connecting pin long:



Side screw connector:



Single spacer disc:



Double spacer disc:



Torque wrench:



Nut key:



Flooding key:



Boat cleat:



Boat fender:



Bathing ladder:



Side screw connector 275 mm:



Side screw connector 560 mm:



Screw joint unit complete with ring



Side bar steel 2 – 6 L (600 mm – 2.600 mm):



PE Side bar 2 – 7 L (1.000 mm – 3.500 mm):



Boat cleat steel:



Cross bollard:



Mooring device:



PU corner fender:



PU Fender 2L:



Stanchion/corner stanchion:



Wide range of special accessoires:

- Gangways
- Shore beams
- Pile cages, roller gliding systems
- Bathing slide
- Flag poles, umbrella guiding sleeves
- Nets and ropes for hadnrails/platforms with pools
- Achors/chans/steel wire ropes/ropes for mooring
- And a lot more
- Custom-built accesories upon request