

SET UP AND USE INSTRUCTIONS MANUAL

ABOVE-GROUND CIRCULAR SWIMMING POOL

model 300A, 300B, 301, 302

TABLE OF CONTENTS:

PART 1	INTRODUCTION	2
PART 2	PREPARATION OF THE SITE	3
STEP A	SELECTION OF THE SITE FOR THE ERECTION THE SWIMMING POOL	3
STEP B	PREPARATION OF THE SWIMMING POOL BASE	4
PART 3	SETTING UP THE SWIMMING POOL	6
STEP A	ASSEMBLY OF THE FOUNDATION OF THE SWIMMING POOL	6
STEP B	ASSEMBLY OF THE WALL OF THE SWIMMING POOL	7
STEP C	INSTALLATION OF THE POOL LINER	9
STEP D	INSTALLATION OF TOP RAILS AND VERTICALS	10
STEP E	FILLING THE SWIMMING POOL WITH WATER	11
PART 4	SAFETY RULES	11
PART 5	SWIMMING POOL MAINTENANCE	12
PART 6	WINTERTIME MAINTENANCE OF THE SWIMMING POOL	13
PART 7	ANNEXES	14
A)	INSTRUCTION FOR THE ASSEMBLY OF SWIMMING POOLS LADDER	14
B)	INSTRUCTION FOR THE ASSEMBLY AND USE OF THE SKIMMER	16
C)	INSTRUCTION FOR THE USE THE SWIMMING FELT UNDERLAY	18
D)	SWIMMING POOL WATER MAINTENANCE	19

1. INTRODUCTION

1. READ THE INSTRUCTION MANUAL

Before you start, read all parts of the instruction manual till its end.

The instructions explain how to install the swimming pool. Simply proceed according to the instruction manual step by step. Start with the Part 1 and proceed according to the Parts 2 to Part 3 when setting up your swimming pool. The Part 4 contains Safety Rules and the Parts 5 and 6 contain instructions that will help you to keep your swimming pool clean and in a good condition for years. Be sure to read the Safety Rules and make everybody who uses the swimming pool to read and understand the Safety Rules.

Note: Any figures shown in this manual may slightly differ from your swimming pool. The figures are provided first of all for a better understanding of the text. The manufacturer reserves the right to alter the manual without a previous notice.

2. GET NECESSARY EQUIPMENT READY

Before you start the installation of the swimming pool ("SP"), get necessary tools and equipment ready. You will need the following:

- spade, mattock, shovel and a handcart for the removal of excavated soil and sand handling.
- wooden prism approx. 5 x 5 cm, its length should be longer than one half of the diameter of the SP, wooden pin, package of flour or fine sand etc., clue of cord, knife, water level, measuring band, hammer and nails for the preparation of the flat base
- sand for the levelling of the base
- sand for the levelling of the fill in corners
- Flat-head screwdriver and Gross-head screwdriver, combined pliers, textile (carpet) sticking tape, knife, pool-assembling clothes-pegs

Prior to the assembly of the SP, we recommend to set up the ladder. You may need them during the assembly of the SP when you have to step in and out from the SP over the set up wall. For the ladder assembly instruction see the Annex A..

3. SELECT A PROPER SITE FOR THE ERECTION OF THE SP

Wait for a sunny calm day for the assembly of the SP. Don't try to set up the SP when exposed to wind. Invite at least one adult person to help you.

4. SPARE PART AND SERVICE

Should you need an advice, service or spare parts, contact your vendor. Use only original spare parts for the maintenance and repairs.

5. WARRANTY TERMS

For the warranty terms see the Warranty Certificate issued by the vendor.

PART 2 – PREPARATION OF THE SITE

STEP A – SELECTION OF THE SITE FOR THE ERECTION OF THE SWIMMING POOL

1. GROUND

- Pay special attention to the selection of a proper site for your SP.
- Select a large area as flat and horizontal as possible.
- Select a place on a dry and solid earth. So not erect the SP on asphalt, tarpaper, gravel, peat swamp, wood or over any underground premises such as water reservoirs, sumps, sewers etc.
- Check whether there are any plants on such an area that could grow through the liner of your SP. Consult an expert how to treat the site.
- Any sloppy areas have to be levelled by digging upper positions away. Do not fill depressions. If necessary, hire a system for the removal of soil.

The SP has not been designed for embedding to the ground.

2. CONDITIONS TO BE AVOIDED

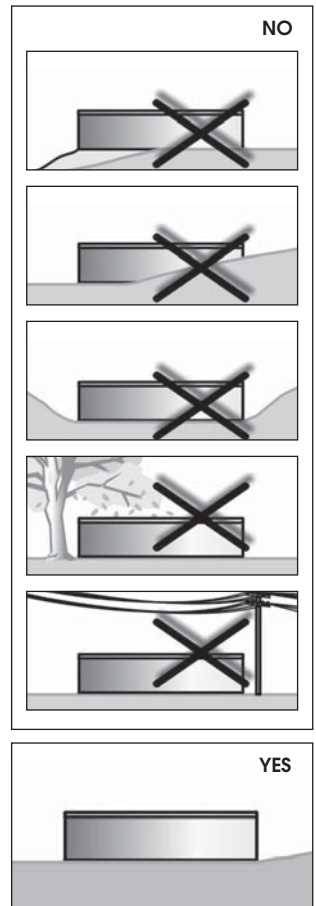
Do not place the SP in the proximity of or immediately in any of the following places:

- In the vicinity of areas and objects available to children and animals that could make the access to the SP easier for them.
- Grass, stones, roots. Grass will get rotten below the pool liner and stones and roots will damage the liner of the SP.
- Branches of trees hanging over the SP.
- Suspended electrical lines and laundry ropes.
- Places with a poor natural water drainage capacity as the environs of the SP may get flooded.
- Any areas recently treated with oil-based pesticides, chemicals or fertilisers. In such a case use a felt underlay below your SP made of geo-textile material.

3. PLAN IN ADVANCE

Do you wish to add an adjacent platform later on? Allow some space for it.

Will you use the accessories to the SP or some other system that need to be connected to a power supply? Position your SP in a way allowing for the installation of such systems in compliance with safety regulations (see the Instruction manual to this product). Any possible installation of an electrical socket must be carried out by a qualified electrician.



STEP B – PREPARATION OF THE SWIMMING POOL BASE

1. MARK OUT THE AREA

- Pitch a pin to the ground in the intended centre of the SP (see the fig. 2-1)
- Tie up the rope at its one end to the peg. Secure a can with sand or lime, flour, etc. to its other end with which you will then mark a circle on the ground.

For the length of the rope see the table for the respective diameter. Base radius shall exceed the pool radius by 15 cm (see Fig. 2-2)

SP	Diameter	Length of rope	Length of prism (balk)
300A, 300B	3,6m	200 cm	200 cm
301, 302	4,6m	250 cm	250 cm

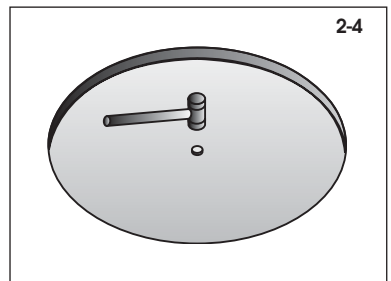
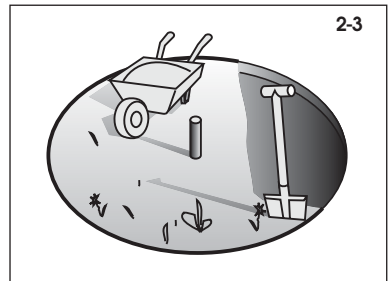
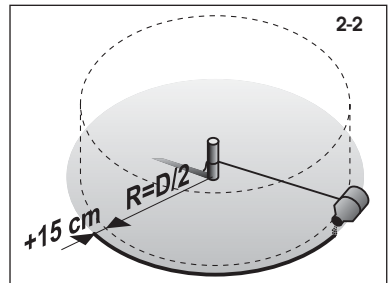
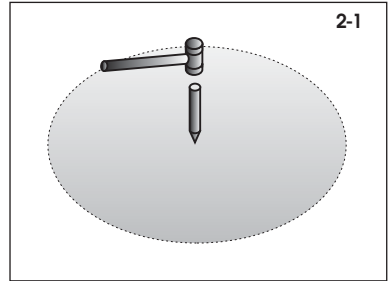
2. REMOVE TURF

- Carefully remove all turf and plants from the encircled area (see the fig. 2-3).
- Remove all branches, stones and roots from the encircled area.

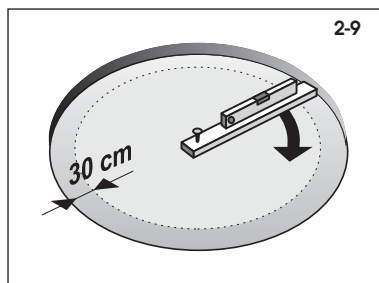
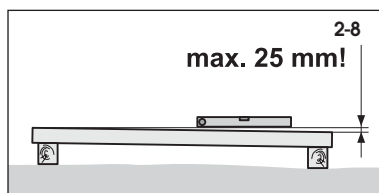
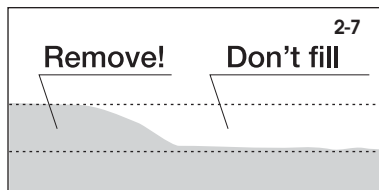
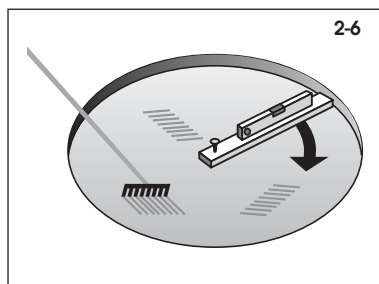
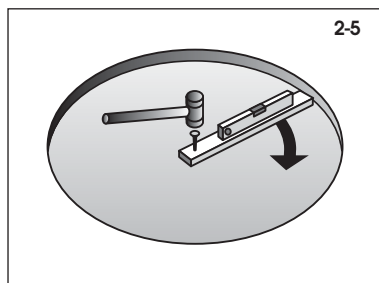
3. ADAPT THE MARKED OUT AREA IN A WAY TO HAVE IT HORIZONTAL, FLAT AND COMPACTED

Remember: Your SP must be positioned horizontally. Take your time to make the base perfectly horizontal. Any deviation from the horizontal plane must not be more than 25 mm (see the fig. 2-4).

Replace the pin with a pole with a flat upper end, cross section approx. 25 x 25 cm, length approx. 15 cm. Pitch the pole to the earth so that its upper surface was at the same level as the ground.



- b. Take a balk sized 5 cm x 10 cm in its cross-section. Its length shall depend on the pool size (see the table above). Nail one end of the balk to the post top. Use a nail which is long enough to be able to hold the balk end on the post while you are moving the balk round to make a circle (see Fig. 2-5).
- c. Place a level on the timber and circle around the post to find out raised points and depressions.
- d. Remove all the raised points with shovel, hoe or rake. Remember, your pool must be in level with allowed tolerance 25 mm across the pool, see picture 2-8.
- e. Do not fill up the depressions, see fig. 2-7. Filling up will not create a safe base for your pool. Small holes may be filled but in such a case, the filling soil must be well trodden with a rammer.
- f. To make sure the pool will remain stable in the future, firm the pool's base with the rammer. Non-compacted base could set lower under pressure of filled pool and cause brake down of the pool. Fill up the newly emerging depressions and tread with the rammer.



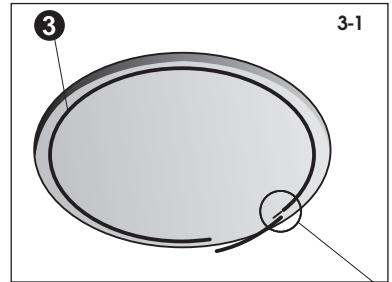
Remember: A strip of 30 cm of width around the circle must be in perfect level, see fig. 2-9. The bottom edge of the pool's side must be in level and must not lie on top of a depression. Pay attention to make sure the area is absolutely plane and in perfect level.

PART 3 - SETTING UP THE SWIMMING POOL

STEP A - ASSEMBLY OF THE FOUNDATION OF THE SWIMMING POOL

1. SET UP THE BOTTOM FRAME OF THE SP

- Space the coupling connectors evenly along the circumference of the pool. While doing so, place each time an arched lower bar (3) between every two coupling connectors (2) (see Fig. 3-1).
- Insert the ends of the lower bars into the coupling connectors all the way down. You will thus make lower frame of the pool.
- Make sure that the bottom frame actually forms a circle by measuring the distance from the central pin.



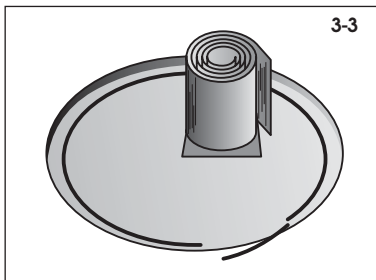
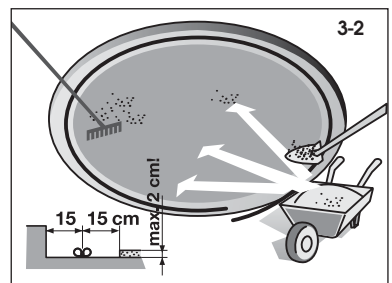
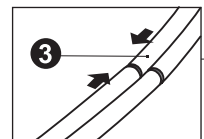
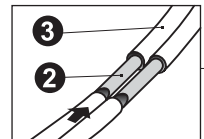
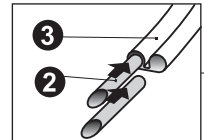
2. SPREAD FINE SAND

- Spread a layer of no more than 2 cm of fine sand (optimally for stucco mortar) throughout the areas of the SP (except for the outer 30 cm of the circle) for an easier levelling of small unevenness places on the ground (see the fig. 3 -2). Do not spread the sand close to the bottom rails as it could get to the guiding groove and make the erection of the wall impossible. A circular strip, width 15 cm, along the side of the bottom rails should be left free of sand. Level the area with a rake so that the surface was flat and smooth.

Note: A thicker layer of sand may have adverse impacts upon the stability of the SP in future.

- Supply approx. 0.2 to 0.3 cubic metre of sieved sand or soil to the surface of the base of the SP. You will need to form the corner fill (see the chapter Form the corner fill).

Note: During the sand handling, take care to avoid any damage to the bottom frame or its coverage with sand.



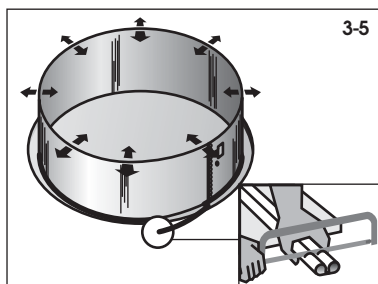
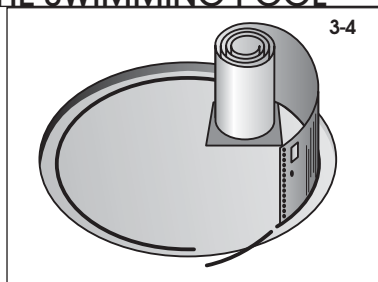
STEP B – ASSEMBLY OF THE WALL OF THE SWIMMING POOL

1. ERECT THE SP WALL

- a. Wait for a calm sunny day. Do not try to erect the wall of the SP when windy. Invite at least one adult person to help you.
- a. Unroll the rolled wall of the SP and put on the area of the base of the SP on a piece of plywood (see the fig. 3-3). Openings made for the skimmer have always be positioned at the top of the wall.

Important: Before unrolling the wall make sure what is the direction the wall is to be rolled in. Depending on it, unroll the wall either to the left or to the right.

- c. Start unfolding the wall (1) while directing its bottom edge into the lower frame. The beginning of the wall must be above one of the coupling connectors (see Fig. 3-4) and the opening for the dirt collector and return nozzle must be close to where the filtering equipment will be installed.

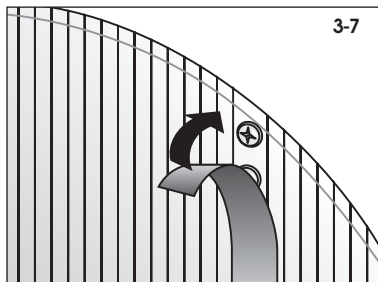
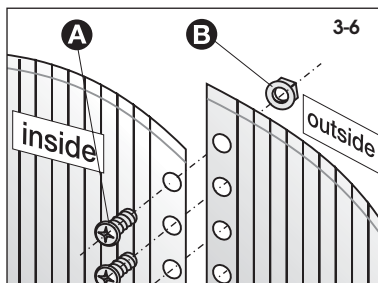


2. FIX THE ENDS OF THE WALL OF THE SP TOGETHER

- a. Align opening in two ends of the wall against each other.

Aid: Put your screwdriver through two opposite openings in order to align the ends of the wall.

- b. To bring the opening against each other, enlarge or diminish the circle of the wall of the SP by pushing with your leg the bottom frame out or to the centre of the circle (see the fig. 3-5).
- c. Join the ends of the wall of the SP (see the figure 3-6) from the inner and outer side of the wall and attach the reinforcements (5) to the openings in the ends of the wall and then insert the screw (A) to every matching four openings from the inside of the pool and fix the corresponding nut (B). Heads of the crews are inside the SP and their nuts are outside the SP.
- d. Cover the front ends of the wall and heads of the screws on the inner side of the SP with the adhesive textile tape (see the figure 3-7).
- e. First tighten the joints by hand. Finally, when all screws are in place, tighten them with tools.
- f. Mask the overlapping sections of the wall ends and screw heads on the inner side of the pool wall with the textile sticking tape, 50 mm wide if possible (see Fig. 3-7).



3. CHECK WHETHER THE WALL OF THE SP IS HORIZONTAL AND FORMS A CIRCLE

- a. Use a long straight prism or profile to check whether the opposite upper edges of the SP are levelled) see the fig. 3-8). Check the wall in several various directions. The wall must rest on the horizontal plane. Should the deviation from the horizontal plane over the diameter of the SP exceeds 25 mm (see the fig. 3-9), remove the wall and re-level the plane below the SP.
- a. Using a rope, check whether the wall of the SP actually forms a circle. Measure distance between opposite connectors.

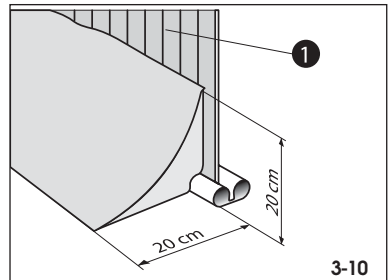
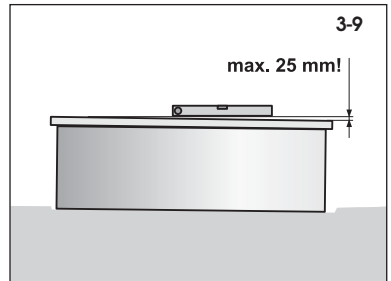
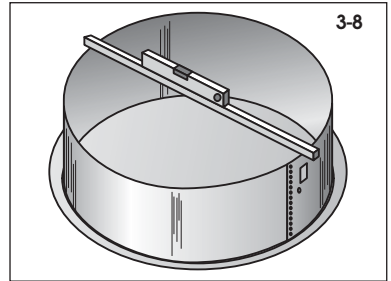
Warning: A swimming pool not properly levelled may be dangerous as it can collapse.

4. FORM UP THE CORNER FILL

- a. We recommend to separate the corner fill and the connection of the bottom rails with the wall by a protective foil in order to prevent entering of material of the corner fill to the groves of the bottom rails. What can be used is any plastic foil forming a strip of approx. 40 cm. Place it on the connection of the bottom bar and the SP wall.
- b. Use sieved sand or soil to form an arched fill approx. 20 cm wide and 20 cm high at the bottom of the wall along the entire perimeter inside the SP (see the fig. 3-10). Form the arched part and compact it.
- c. No level the surface with a rake.
- d. Place a geo-textile felt underlay on the bottom of the SP and the corner fill as a protection of the SP liner against a mechanical damage. For the instruction see the Annex C.

Note: The SP felt underlay of geo-textile is not included to the package of the SP. Contact your vendor.

Aid: We recommend to use assembled ladder to enter and leave the SP. For the assembly instructions see the Annex A.

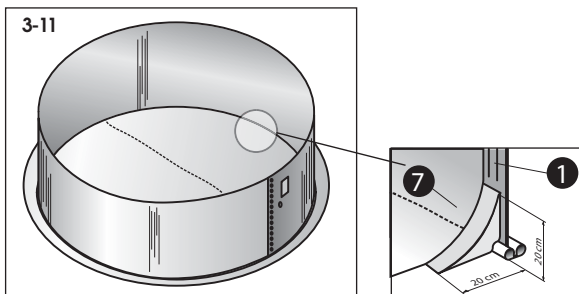


STEP C – INSTALLATION OF THE POOL LINER

Poznámka: If you plan to operate a filtration system for the SP, you have to carry out a part of the installation of the skimmer prior to the fixing of the pool liner. Read the respective instruction for the installation of the skimmer and follow it. For the instruction see the Annex B.

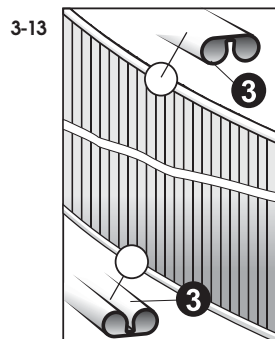
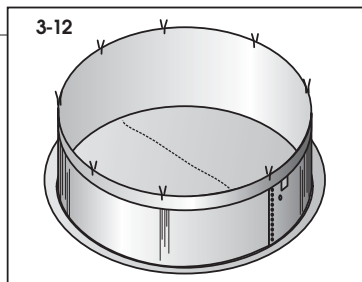
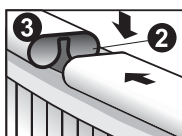
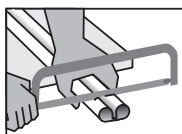
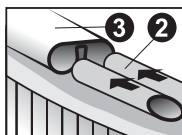
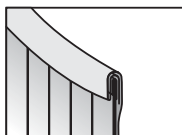
1. SETTLE THE POOL LINER IN PLACE

- Open the box containing the pool liner. Do not use any sharp objects to open the box.
- Unroll and spread the pool liner on the sun, allow for a warm up. Check the surface of the liner and all seams for openings.
- Spread the liner (7) in the SP (see fig.3-11) so that the faces of the seams were oriented upwards. The arched seam should be in the centre of the corner fill. Other seams will form lines across the bottom of the swimming pool.
- Smoothen all wrinkles of the pool liner on the bottom of the SP.



2. FIX THE POOL LINER TO THE WALL

- Pull the pool liner (7) over the edge of the wall (1) and fix it temporarily at the place by several laundry pegs. For the time being, let the pool liner as it is. Do not tighten the pool liner too much.
- Start filling water to the SP. As the SP gets filled up, smoothen all wrinkles and smoothen the pool liner towards the wall. Proceed quickly as just few centimetres of water can squeeze the pool liner to the bottom that you cannot move anymore without damaging it. Keep the arched seam approximately in the centre of the corner fill.



- Having smoothed the bottom, keep on adding water and smoothen the liner on the wall.
- Having smoothened the pool liner, pull it over (not more than 4 cm over the edge). Keep the edge of the pool liner and fix with the plastic bar (3). Follow up this way all along the perimeter of the SP:
- Having first pressed down the liner to remove all wrinkles from it, cut off the protruding part of the plastic bar (6) so that its end rest just next to the following bar (see Fig. 3-12).

STEP D – INSTALLATION OF TOP RAILS AND VERTICALS

1. KEEP FILLING UP YOUR SWIMMING POOL

- a. Keep filling up your swimming pool with water while installing the top rail and verticals.

2. FIX THE UPRIGHT VERTICALS AND TOP RAILS

Note: The painted top rails and verticals can be wrapped in a protective foil. Strip it off before starting the installation..

- a. Place the bottom of one of the verticals (8) and align it the flap of one of the lower coupling connectors (2). The connector's flap must be outside the verticals (see Fig. 3-14).
- a. Place the screw hole in the verticals against its counterpart in the connector's flap and secure the verticals with a self-tapping screw (C).

Place the upper coupling connector (2) onto the upper edge of the pool wall (1) (see Fig. 3-14) so that the flap of the upper coupling connector is outside the pool. Align mutually the screw hole in the flap and its counter hole in the verticals. The connector's flap must be outside the verticals. The verticals must take its upright position.

Slide the upper arched bar (4) with its one end into the coupling connector (2).

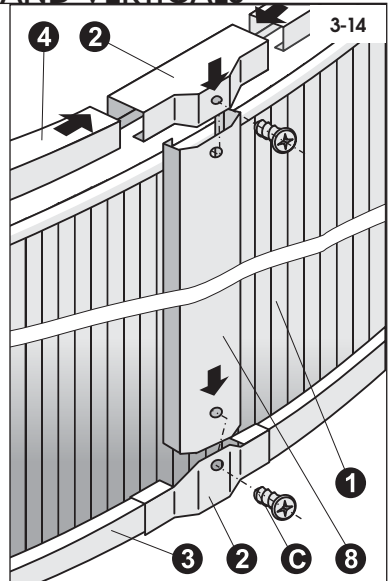
Fasten the upper coupling connector to the verticals with a self-tapping screw (C).

Repeat the steps a. – e. for every verticals along the circumference of the pool wall.

Aid: Use the grooving on the pool wall to check the upright positioning of the stanchions.

3. FIX THE SELF-ADHESIVE WARNING LABEL

Next to point of entry to and exit from the SP, fix the self-adhesive warning label. Keep in mind that the SP is not deep enough for safe jumping. There is a risk of injury.



STEP E – FILLING THE SWIMMING POOL WITH WATER

1. COMPLETE THE FILLING OF THE SWIMMING POOL WITH WATER

- a. Fill water to the SP up to the height of 5 cm below the lowest opening in the wall of the SP. Thereafter proceed according to the instruction for the installation of the skimmer.

Important: The walls of the SP may experience some outward bulging or the SP may get shifted aside. It is normal.

- b. Connect the filtration system to the installed skimmer according to the respective instruction.
- c. Add water up to the level of the centre of the inlet flange of the skimmer and carry out the first sanitation of water (see the Annex D). Now, your SP is ready for use.

Warning: Before anyone starts to use the SP, he/she has to read and comply with the Safety Rules as contained in the Part 4.

PART 4 - SAFETY RULES

Your SP contains a substantial quantity of water and it is deep enough to be a serious danger for life and health provided you do not adhere to the following safety rules. Those who use the SP for the first time, are exposed to the highest risk of injury. Make sure that everyone reads the safety rules prior to entering the SP.



1. Don't jump to the SP headlong

The top rail of your SP is not a walking bridge and it cannot be used for jumping to the SP or jumping headlong. Don't allow anyone to jump to the SP headlong or from the ladder or from the top rail. The headlong jumping to the SP may result into a serious injury or death by drowning.



2. Never use the SP alone

Don't allow anyone to use the SP unattended at least by one person outside the SP. There must be some to help in the event of an emergency anytime.



3. Don't leave children unattended anytime

Don't leave children unattended in the SP or next to it for a single second.



4. No rampage

Don't allow anyone to rampage in the SP or in the environs of it. Surfaces may be slippery and dangerous if wet.



5. Illuminate the SP in the night

If you use the SP after the dusk, you have to provide an adequate lighting. The SP area lighting has to be sufficient to estimate the depth of the SP and to make all elements SP and around it visible. Consult the lighting with an expert.



6. Restrict the access to the SP

Don't leave any chairs or any other furniture next to SP as a child could use it get in the SP. The ladder has to be removed whenever the SP is left unattended. We strongly recommend to erect a fence around the SP with a lockable gate. Some legal regulations may require it.



7. No alcohol or drugs

Any use of alcohol and drugs is not compatible with the use of the SP. Any person who has drunk any alcohol or used any drug whatsoever must not be allowed to enter the SP and he/she has to be checked for their presence in the proximity of the SP.



8. Keep the SP clean and maintained

Water in the SP must be filtered and chemically treated on a regular basis to be free of any health risk. Use a proper filtration unit to remove suspended solids and proper swimming pool chemistry products in compliance with respective use instruction to eliminate harmful bacteria and preventing the formation of algae. Remember that harmful water is a serious health risk.

Warning: Do not adapt the SP, do not intervene with the construction of the set up and filled up SP. It could result into the collapse of the SP and possible serious injuries.

PART 5 - SWIMMING POOL MAINTENANCE

After you complete the assembly of your SP, follow the bellow instructions in order to keep the SP clean and in a good condition.

1. POOL LINER

- a. Check the pool liner on a regular basis for perforation. If perforated, the liner may cause a drop in the water level. It may damage the SP or filtration unit.
- a. Some minor pool liner repairs may be done using the pool liner repair kit. Any larger damage should be solved by the replacement of the pool liner.

2. POOL WALL AND VERTICALS.

- a. Keep clean the pool wall and verticals.
- b. Immediately wash any spilled SP chemicals.

Warning: Concentrated chlorine may damage the SP liner and metallic parts of the SP. Immediately wash away any spill.

- c. Apply colourless outdoor varnish on all exposed heads and nuts of screws.
- d. On a regular basis, check all metallic parts for corrosion, at least once in season. All scratches and rusted surfaces of metallic parts treat with a suitable anti-corrosion paint – follow the instruction on the product container.

Remember: All corroded surfaces on the wall of the SP must immediately repainted with an anti-corrosion paint. A heavily corroded SP may collapse.

- e. Pay special attention to all leaks around the skimmer and return nozzle. They have to be sealed immediately.

3. LADDER TO THE SWIMMING POOL

- a. A proper maintenance of the water in the SP is one of the most important preconditions for the maintenance of the healthy condition of the SP.
- a. For the principles governing the operation of the SP and important instructions for the use of chemical preparations see the Annex D.

PART 6 - WINTERTIME MAINTENANCE OF THE SWIMMING POOL

At the end of the season proceed according to the following instructions in order to keep your SP ready for winter. It is vital to maintain the water in the SP including filtering until the closure of the SP for winter.

Note: A SP properly prepared for the wintertime means an easy putting of the SP to the operation in the spring.

1. LOWER THE LEVEL OF WATER IN THE SP

- a. First treat the water in the SP with a proper chemical preparation before wintertime.
- b. Remove any impurity from the bottom.
- c. Lower the level of water in the SP to 10 cm below the return nozzle.
- d. Any deposits on the wall of the SP at the original level of water have to be removed prior to getting dry. Use a suitable detergent.

Warning: Do not release all water from the SP before winter and do not take out the liner. An empty SP could collapse in wintertime.

2. CHECK ALL JOINTS AND SCREWS

- a. Make sure all joints of the structure fit together well. Make sure that the wall of the SP has not left the bottom rail.
- b. Make sure that all screw joints are tight.

3. CHECK FOR RUST

- a. Paint all scratched points and rusty places with an anti-corrosion paint.

4. CHECK THE POOL LINER

- a. Make sure the top of the pool liner is still fixed to the wall with the plastic rails. Do not take out the foil from the SP. Taking it out would make the guarantee void. Do not release all water from the SP before winter.

5. CHECK FOR LEAKS

- a. Make sure that the pool liner is not perforated. In the wintertime, a leak of water may cause a serious damage to your SP.

6. ACCESSORIES IN THE SP

- a. Remove from the SP all accessories including the ladder.
- b. Disconnect the filtration system from the SP. When storing the filtration system for winter, respect the respective instructions. In winter, store the components of the filtration system and hose at a place protected against frost (in a building) but not outdoors. The skimmer and the return nozzle should be left assembled in the wall of the SP.

7. COVERING THE SP WITH A DEBRIS COVER

- a. If you have a debris cover put it on the SP. You will protect the inner parts of the SP against foreign objects (leaves, seeds etc) during winter.

8. VERY COLD WINTERS

- a. If your SP is located in a very cold area where temperatures fall to - 35 to - 40 °C, you have to take the following measure prior to the beginning of winter. Lower the level of water in the SP to max. 45 cm. Do not empty the SP fully. An empty SP may collapse in winter.

Remember: Improper preparation for winter will make the warranty void. Carefully respect all instruction for the winter preparation.

PART 7 – ANNEXES

A) INSTRUCTION FOR THE ASSEMBLY OF SWIMMING POOL LADDER

Before the assembly of the ladder, read kindly the following instructions:

- Before the assembly of the ladder, read kindly the following instructions:
- Read carefully the instruction for use.
- Define the place for the entry to and exit from the SP.
- The ladder has to rest on a smooth and hard surface for the sake of their stability.
- The ladder must not be used by more than one person at once. The load carrying capacity of the ladder is 90 kg.
- When entering or leaving the SP using the ladder, have your face always turned to the ladder, do not rock.
- Never dive directly from the ladder, do not jump from the ladder to the SP.
- Never swim underneath the ladder or to the area as between the ladder and the SP wall. You could get drowned.
- Should the ladder be not used, remove them from the SP. However, never let the ladder in the reach of children.
- During periods when the SP is not used, we recommend to clean, dry and store the ladder.
- Don't use the ladder for any other but intended purpose.
- Any persons suffering from a limited mobility and small children may use the ladder only being accompanied by other people without any physical handicap.



STEP 1: FIX THE HANDRAILS OF THE LADDER TO THE LEGS

Pull the handrails of the ladder (1) to the narrowed ends of the legs (2). The openings in the handrails have to be aligned with the openings in the legs.

STEP 2: FIX THE PLASTIC STEPS TO THE LEGS

Screw one tube nut (5) to one end of the bar of the step (4). Insert the bar from one end to the opening in the leg (2) and openings in the bottom of the step (3).

Note: When the inserted end of the bar of the step gets to the end of the length of the step, you have to push the bar slightly inside the step in order to get through the other opening in the step.

Push the bar of the step of the ladder through the opening in the opposite leg. Put the bar through the opening in the opposite leg and screw the tube nut on this end of the bar. During this phase of the assembly tighten the tube nuts only by hand. Don't use a screwdriver until the ladder is assembled. The remaining steps of the ladder are to be assembled in the same way as the first step.

Finally, tighten all tube nuts with a screwdriver. Don't tighten the nuts too much in order to avoid the breaking of the plastic step.

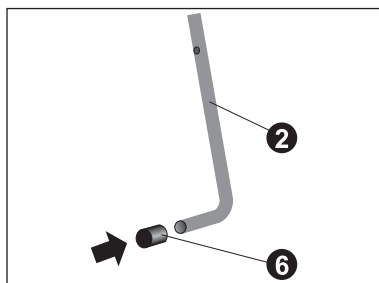
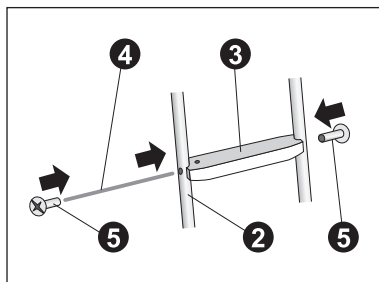
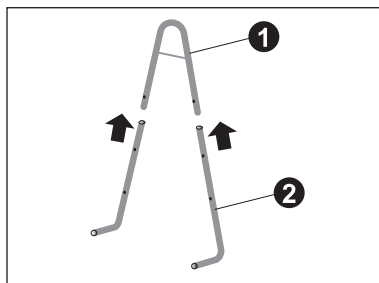
STEP 3: FIT ON THE TUBE PACKING

Fit on tube packing on the bottom ends of the legs unless already fitted.

Now, the ladder is ready for use.

Warning: The ladder are manufactured of stainless steel material and, therefore, their exposure to chemicals may cause corrosion. For safety and practical reasons, do not leave the ladder in the SP without a reason. Use them for an inevitable period of time when you swim.

THE WARRANTY DOES NOT COVER A CONTINGENT CORROSION OF STEEL TUBES.



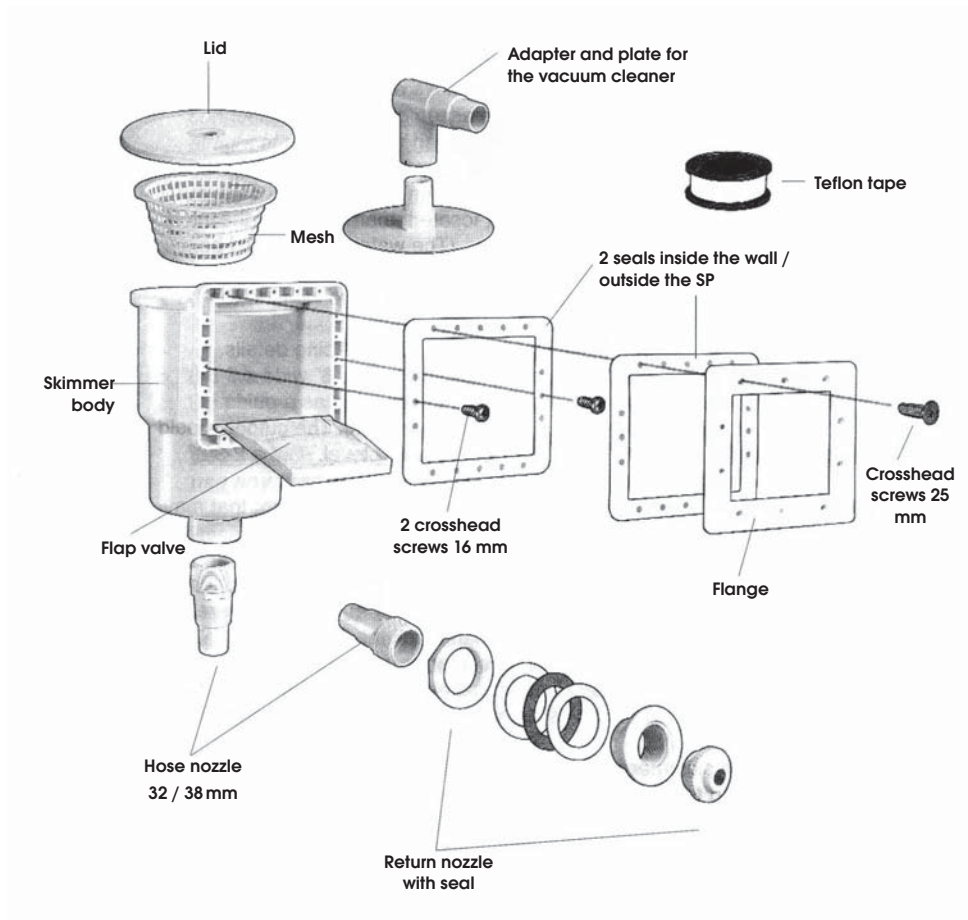
LIST OF COMPONENTS OF THE STAIRS

POSITION	NAME OF THE PART	125 cm	137 cm
1	Handrail	2	2
2	Leg	4	4
3	Plastic step	4	6
4	Step bar	4	6
5	Tube nut	8	12
6	Tube packing	4	4

B) INSTRUCTION FOR THE ASSEMBLY AND USE OF THE SKIMMER

1. USE

The skimmer is used for the suction of water from the surface of the water in the SP by a filtration system. Insects, leaves and other floating impurities are sucked to the collector and trapped in the impurity mesh. What can be connected to the skimmer is a reinforced hose 5/4" (32 mm) or 6/4" (38 mm).



2. ASSEMBLY

Instruction for the assembly of the body of the skimmer to the wall of the above-ground swimming pool.

Note: What you will need for the assembly is a cross screwdriver and a knife with a sharp prong.

- a. Grind sharp edges of the openings provided for the skimmer and return nozzle in the wall, this should be performed prior to the installation of the pool liner to the SP.
- b. Take one hose nozzle and screw it to the body of the skimmer. Use the Teflon tape as a seal (don't use glues or sealing cements)
- c. Before you start the installation itself, you have to have the body of the skimmer partly screwed to the wall of the SP. On the outer part of the SP, attach one seal and the body of the skimmer to the marked openings. Fix it in the position by a pair of shorter screws in the central openings on the sides of the skimmer. Before that, check the correct fixing of the flap valve in the inlet flange of the skimmer body. The flap valve has to move freely.
- d. Now, install the SP liner and fill water to the SP so that the level of water reached approx. 5 cm below the level of the connecting opening of the return nozzle.
- e. Punch the liner from outside with a sharp nail in all openings for the connection of the skimmer body. From outside of the SP attach the other seal and flange. Insert the remaining 10 longer screws to the openings in the flange and tighten them gradually using a cross screwdriver.
- f. Cut out the liner from the flange with a sharp knife.
- g. Now install the return nozzle.

Instructions for the installation of the return nozzle

- a. Take a sharp knife and cut out from outside of the SP the liner from the circular opening for the connection of the return nozzle. Cut the opening in the liner by approx. 5 – 10 mm smaller than the opening in the wall.
- b. Take the other hose nozzle and screw it to the body of the return nozzle. Seal it with Teflon tape (don't use any glue or sealing cements).
- c. Insert the return nozzle to the circular opening in the wall from inside the SP so that one rubber seal was inside the SP and the other cork and rubber seal outside the SP. Tighten the return nozzle well.
- d. Screw the direction end piece to the opening of the return nozzle and turn in a way so that it was oriented towards the opening of the skimmer.
- e. The skimmer and the return nozzles should be interconnected with the filtration system with hoses. Fix the joints with hose couplers.

3. INSTRUCTIONS FOR OPERATION

- a. An optimal level of water is in the centre of the overfall of the skimmer.
- b. Clean the skimmer mesh everyday.
- c. Skimmer filled with water must not be exposed to freezing. Before the beginning of winter, prepare you SP for winter.
- d. The skimmer may be operated connected with a SP vacuum cleaner, too – see the Annex D – Swimming Pool Water Maintenance.

Setting the return nozzle

The direction of the flow of water coming out from the nozzle may be set. Turn the inner ball of the nozzle to the desired position. The flow should be directed from the opening of the overfall of the skimmer. In order to achieve an optimum effect of the skimming of surface impurities to the skimmer, it is necessary for the water in the SP to circulate.

4. PREPARATION FOR WINTER

Before the freezing temperature start, take measures specified in the instruction for the use of the SP.

C) INSTRUCTION FOR THE USE OF THE SWIMMING POOL FELT UNDERLAY

Note: The SP felt underlay is not included to the SP package. Contact your vendor.

Unwoven textile NETEX S (i.e. the material of the SP felt underlay) is manufactured of 100 % polypropylene staple of white colour. It is used as filtration, drainage and separation geo-textile in the building industry for the development of roads, railroads, landfills, storage and parking areas etc. As well, it is used as a protection of SP liner and their separation from the soil base.

Properties of the SP felt underlay

Fibres used for the manufacture of the felt underlay are subject to ageing after some time if exposed to light (so called photo-degradation). Therefore, it is not good to store the felt underlay out of the package. It should be kept in the cardboard box or foil stabilised against the UV radiation.

The unwoven textile is resistant against the petrol, perchloro-compounds, oil and other chemicals of similar nature, against mildews and other micro-organisms.

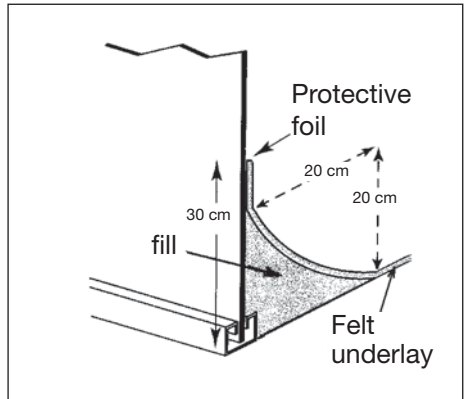
It does not have harmful properties.

Installation of the felt underlay for a SP with fill

The SP felt underlay is to be installed at the moment when we have set up the SP wall and provided the internal fill of sieved sandy soil. Unroll the felt underlay and spread it over the bottom inside the SP, centre and smoothen any possible wrinkles. Cut off the felt underlay several centimetres above the fill.

Take care to prevent any small stone or other similar sharp objects from entering the upper side of the felt underlay.

Note: As apparent in the figure in the side, we recommend to separate the fill and the connection of the bottom frame with the SP wall with a protective liner. Such a liner will stop any material that could enter the groove of the frame and damage the structure of the SP. What can be used as the liner is any plastic foil forming a strip of approx. 40 cm.



D) SWIMMING POOL WATER MAINTENANCE

Water in the pool is not polluted by visible impurities, only (dust, leaves, sand etc.) but micro-organisms (bacteria, algae, fungi and viruses), too. Even if thoroughly washed, every person will bring an incredible quantity of impurities, sweat, skin oil, residues of cosmetic preparations and sun bathing creams. Anyone who has not passed through the shower, will bring to the water an incredible quantity of 600 million to 3.5 billion of bacteria, germs and viruses. These are an ideal environment for the development of other bacteria, algae, fungi a viruses. Therefore, it is necessary to treat the water on a regular basis in order to keep it safe in terms of bacteriology and general health.

MAIN PRINCIPLE OF THE SWIMMING POOL OPERATION

Filling the SP with water – launching the operation

Prior to every new filling and in particular after the wintertime, you have to clean the SP thoroughly and eliminate any impurities (calcareous sediments, dust, organic residues). A careful cleaning of the SP will simplify the future maintenance of water.

The SP is to be filled with water, the circulation filtration system is started and left running at least overnight. Any larger impurities are to be removed by a mesh and sediment on the bottom are to be removed by a vacuum cleaner. Immediately after the filling, execute the inception treatment with chlorine preparations including the chlorine stabilisation agent. This will kill any bacteria, algae, viruses and organic impurities contained in the water. Should the filling take several days, you have to treat the water at the end of the first day of filling. Should the water turn brownish, it means that the water contains some iron and manganese (typically for water pumped out from wells). Such elements react with chlorine and the product of the reaction precipitates in a suspended form and most of it is trapped by the filter. In the first days after the filling, you don't need to control the pH value of water. However, at the end of the first week after the filling of the SP, you should establish the pH value (use the testing kit or contact an expert laboratory) and control this value by adding respective pH control preparations. As long as the SP is used on a regular basis, you should check and control the pH of water at least once a week. The regular checking and control of the pH value, sanitation and algae development prevention will keep your water clean and safe.

Source of water

We recommend to check the source of water prior to the filling of the SP (soft water may have some corrosive effects and damage the whirlpool system, on the other hand, water from wells may contain minerals that form stains or sediments).

A natural property of water is the tendency to dissolve minerals (hardness) – soft water in the SP tries to satisfy this tendency from available sources – from the pumps, ladder etc. Never use soft water, only as the source of water for your SP. Always prepare a mixture with water richer in minerals. In order to prevent formation of stains caused by trace elements in water, we recommend to add a preparation for the stabilisation of the water hardness.

Filtration and mechanical cleaning of the SP

A regular filtration will remove floating impurities. The filtration should be performed only when no one is in the SP.

An excessive formation of impurities in the swimming pool (including leaves, insects, sand and algae etc.) may be prevented by regular covering with the debris cover when not used. The quantity of such impurities may be limited by adapting the environs of the SP or by entering the SP via a tank with clean water. Such mechanical impurities are to be removed either by a hand operated mesh, provide they are floating, or a vacuum cleaner, if they settle on the bottom. In the event of a major pollution of the bottom, we recommend to place the outlet from the vacuum cleaner output of the SP and to make up clean water to the SP to replace the loss of water.

Working with the vacuum cleaner

Note: The SP vacuum cleaner is not included to the SP package. Contact your vendor.

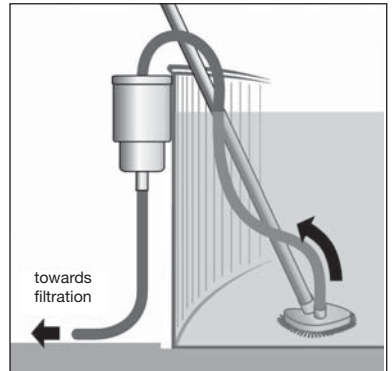
The vacuum cleaner is used to remove impurities settled on the bottom with a filtration system. The vacuum cleaner sucks with a hose a flow of water driven by a pump to the filter where the impurities are trapped.

- A. Remove the lid of the skimmer. Switch over the valve of the filtration unit to the filtration position and switch on the unit.
- B. Fill the vacuum cleaner hose with water (for instance by water from the return nozzle).
- C. Keep the free end of the hose below the level of water and connect the plate. Wait until water starts to flow from the plate and then insert the plate to the body of the skimmer and seat it firmly above the mesh of the skimmer. When seating the plate to the skimmer take care and don't cut off the column of water in the hose and keep the first end of the hose below the level of water.

Note: If you wish to use the vacuum cleaner adapter, you have proceed subject to the following alteration of the procedure:

1. Remove the lid and take of the flap valve of the overfall (carefully to avoid a damage to the flap valve). Insert the plate to the body of the skimmer with the adapter seated (the neck of the adapter has be kept under the level of water so that the filtration unit could suck water) and direct the adapter towards the SP. Switch on the filtration unit.
 2. Fill the vacuum cleaner hose with water (for instance from the return nozzle). Set the other end on the adapter inside the skimmer. Keep both ends of the hose always below water.
- D. Connect the SP vacuum cleaner to the other end of the hose (it must be always below the level of water).
 - E. Now you can start cleaning with the vacuum cleaner. Make sure the head of the cleaner gets not out from water during the cleaning as it could take some air in the suction. Slowly remove impurities from the bottom, any quick movement of the cleaner could disturb the settled impurities.
 - F. After the completion of the cleaning, disconnect the hose from the plate and take the plate out from the body of the skimmer.

We recommend to check the condition of the filtration at the end of cleaning and to find out whether it is necessary to clean the filter.



Measuring and controlling pH value

The pH value affects the proper function of the system, efficiency of other preparation and the service life of the swimming pool. The pH check must be executed at least once or twice a week (using the measuring kit) and any deviations from the ideal value have to be controlled. A solution with the value of pH 7 is considered neutral, any value below 7 means an acid solution and any value exceeding 7 is an alkaline solution. The pH of water for swimming should be 7.2 to 7.6. Within this range, the efficiency of chlorine is the best and it shows no side effects. Any pH value exceeding 7.6 may result in the formation of milkiness (precipitation of calcium, iron, manganese in the form of hydroxides), clogging of the filter, impairing the efficiency of chlorine preparations, chlorine odour, eyes and skin irritation, lower sanitation efficiency and formation of bacteria and algae. Should the value of pH be less than 6.8, an increase in corrosion of metals may occur as well as discolouring of plastic parts of the SP and paints and irritation of eyes and skin, too.

Water disinfection

Disinfection is the most important part of the maintenance of water as only the elimination of micro-organisms will keep the water clean and free of any harmful effects. The concentration of chlorine is to be measured once a week, given a busy operation of the SP and in hot weather periods the frequency should be somewhat higher. An ideal concentration of chlorine is 0.5 mg/l. Prior to the measurement of the concentration of chlorine, check and, if necessary, control the pH value. Should the operation of the SP be stabilised, we use slowly dissolving tablets or granulate. Using the chlorine stabilisation preparation, you can lower the consumption of chlorine preparation. In the event of an extremely operational conditions such as high temperatures, heavy load because of a high number of swimming people) or should the water have a non-standard quality (colour, odour etc.), we recommend to apply a shock disinfection treatment.

Algae formation prevention

Algae are slimy deposits of various colours on the walls and bottom of the SP and they are good environment for the breeding of bacteria. Algae formation is most imminent after several days of very high temperatures, frequent rains and storms. The spores of algae are brought to the SP by wind and their development is facilitated by their exposure to the UV radiation and warm water. The easiest and best way how to fight them are regular preventive doses of a preparation inhibiting the formation of algae. An often used preparation is copper sulphate pentahydrate but it is classified as a toxic substance. The application of this substance cannot be recommended first of all for its effect upon the human health as it has an adverse effect upon the blood count. Additional activities include for instance flocculation, SP cleaning etc.

Water flocculation (clarification, coagulation)

Sometimes, despite pH value and chlorine concentration are convenient, water may get turbid. Such a turbidity may be caused by microscopic particles the filtration system cannot trap. In such a case, water has to be cleaned by flocculation when microscopic particles get coagulated and form larger units - flakes that can be removed by the vacuum cleaner or, if their quantity is not excessive, they may be filtered.

Swimming pool cleaning

Impurities, such as skin oil, cosmetic preparations, sunbathing preparations, sweat, dust, insects, leaves, seeds, leaves of grass, impurities from the air and environs of the SP, precipitated minerals, form deposits on the walls of the SP. Even such impurities are an environment for the breeding of algae and bacteria. Therefore, we should thoroughly clean the SP liner at least once a year, the best time is the spring before we fill water to the SP.

During your holidays

If we leave for holidays in summer and we wish to use the SP after we come back home without a need for cleaning and fill water to it again, we should control the pH value to 7.2 to 7.6 before we leave. Add a triple dose of chlorine in slow dissolving tablets to the dosing device or the floating pool dispenser and cover the SP with the debris cover. Moreover, the filtration system has to be activated for at least 8 hours in the day. After your return, first activate the filtration system in the continuous regime, check pH value and chlorine concentration.

IMPORTANT INSTRUCTION FOR THE APPLICATION OF CHEMICAL PREPARATIONS

Important instruction for the application of chemical preparations

1. When choosing chemical preparations, consider the purpose of the preparation and possibility of its application.
2. Makes sure the SP chemical preparations you buy are not dangerous materials. Keep them out of reach of children in a cold, dry and dark room.
3. Immediately read the first aid principles for every preparation. Respect safety instructions and warnings given on containers.
4. When applying chemical preparations, follow instructions of the manufacturer.
5. When handling chemical preparations, adhere to personal hygiene principles. Use rubber gloves. Carefully wash your hand after work.
6. Do not put any chemical preparations to the mesh of the skimmer. We recommend to use a specially designed floating pool dispenser or another dosing device for the application of chlorine based preparations. If you have a floating pool dispenser, put the respective number of tablets to the pool dispenser and let it float. Switching on the filtration system will accelerate the dispersion of chlorine throughout the SP. After the chlorine preparation has dissolved, take out the floating pool dispenser and store it at a safe place. Should you wish to use the SP before the chlorine tablets have dissolved, take out the floating pool dispenser and store it at a place where the chlorine cannot cause any damage or injury. Pay special attention to keep it out of reach of children.

7. Don't use the SP during the application of any chemicals.

The water treatment with chemicals cannot be subject to a generally valid dosing instruction and treatment regime. Conditions of every SP differ depending on the nature, number of visitors, environment, climatic conditions etc. The dosage must be subject to actual measured values. Therefore, it is purposeful to purchase a pH and free chlorine concentration measuring kit. The doses of chemical preparations may be defined based on exact measurement of such values. This way, we can reduce the risk of the useless exposure of our organism to chemical substances.

WHAT TO DO IF...:

	Cause:	Correction measure:
Water is turbid	<ul style="list-style-type: none"> • excessive formation of bacteria thanks to a high frequency of the use of the SP, high temperatures, heavy rains, accumulation of impurities • lowered efficiency of the filter 	<ul style="list-style-type: none"> • control pH value to 7.2 – 7.6 • apply the shock disinfection, • clean the filter • add flocculation agent and keep filtration continuously on,
Water shows a greenish turbidity, wall and bottom of the SP are slimy	<ul style="list-style-type: none"> • excessive formation of algae 	<ul style="list-style-type: none"> • control pH value to 7.2 – 7.6, • apply the shock disinfection, • apply the solution inhibiting the formation of algae, keep filtration continuously on
Water is brown	<ul style="list-style-type: none"> • the concentration of iron or manganese in water is high 	<ul style="list-style-type: none"> • control pH value to 7.2 – 7.6 • apply the shock disinfection • apply the flocculation agent, keep filtration continuously on
Strong nasty odour of chlorine	<ul style="list-style-type: none"> • high pH value 	<ul style="list-style-type: none"> • control pH value to 7.2 – 7.6 • check and possibly control the chlorine concentration
Eyes or skin irritation	<ul style="list-style-type: none"> • incorrect pH value 	<ul style="list-style-type: none"> • control pH value to 7.2 – 7.6