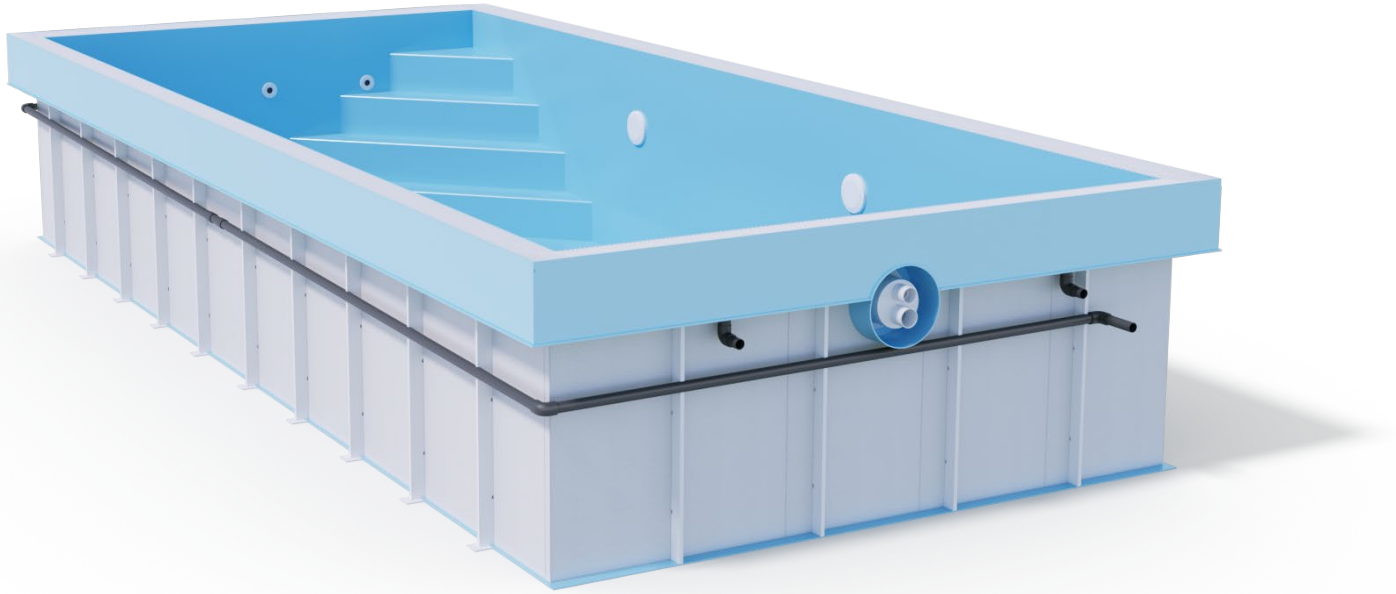
Preparation for construction



Overflow Pools
ALBISTONE®
G1 BENEFIT

Version: 12/10/2020 / Update: 31 July 2021
L. V.

ALBIXON

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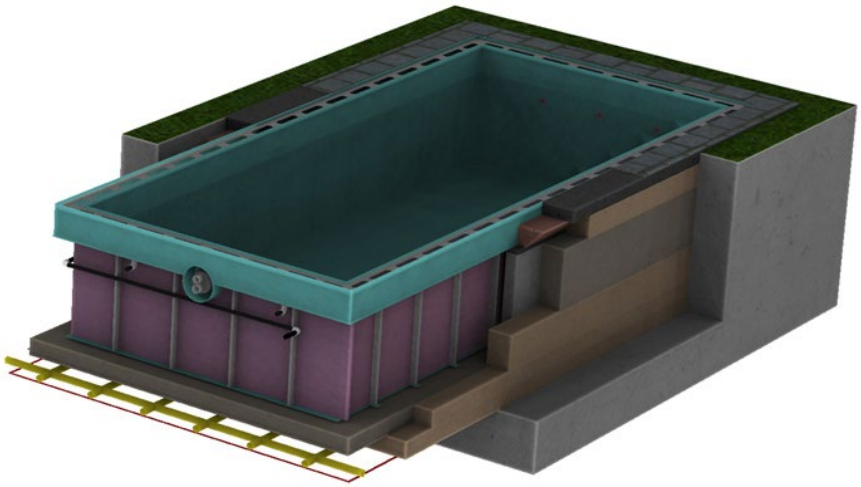
1.



If you require any additional information, please do not hesitate to contact our customer helpline. We are here for you.

Customer helpline: 477 07 07 11
www.ALBIXON.cz

Surveying and excavation

2.

1. **Layout of the Shape of the Pool.**
2. **Excavation Depth.**
3. **Preparations for Placement of Miscellaneous Technology.**

For the correct dimensions of the excavation, always refer to the diagrammatic drawing that is part of the contract for work. Have a construction expert confirm in writing that placement at the intended location is feasible from a constructional point of view and that it does not conflict with already installed utility lines. The location of the pool must be in accordance with ČSN 33 2000-7-702.

1. Layout of the Pool

Excavation Width and Length for the Pool

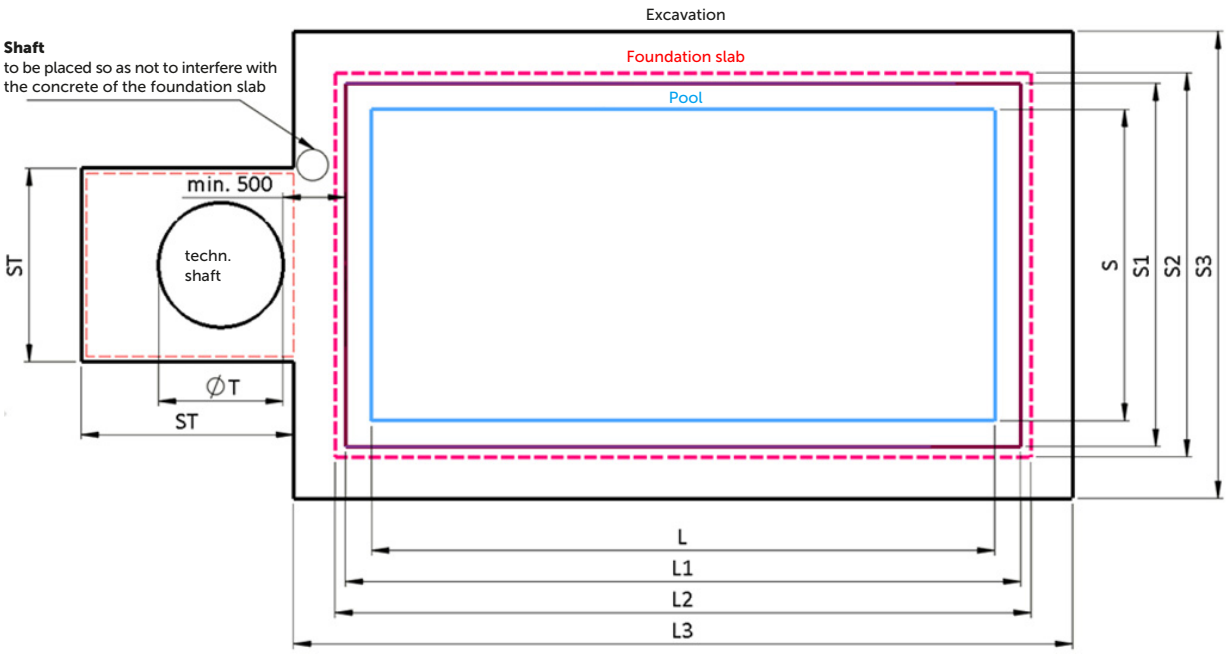
The width and length of the excavation for the pool, for the pool placed by a crane = +500 mm on each side counted from the outer dimension of the pool. These dimensions are shown as points S1 and L1 in the images below.

Excavation Width and Length for Technology Shafts

Width and length of excavation for technology shafts = +600 mm from the outer diameter of the shaft, or its outer width and length.

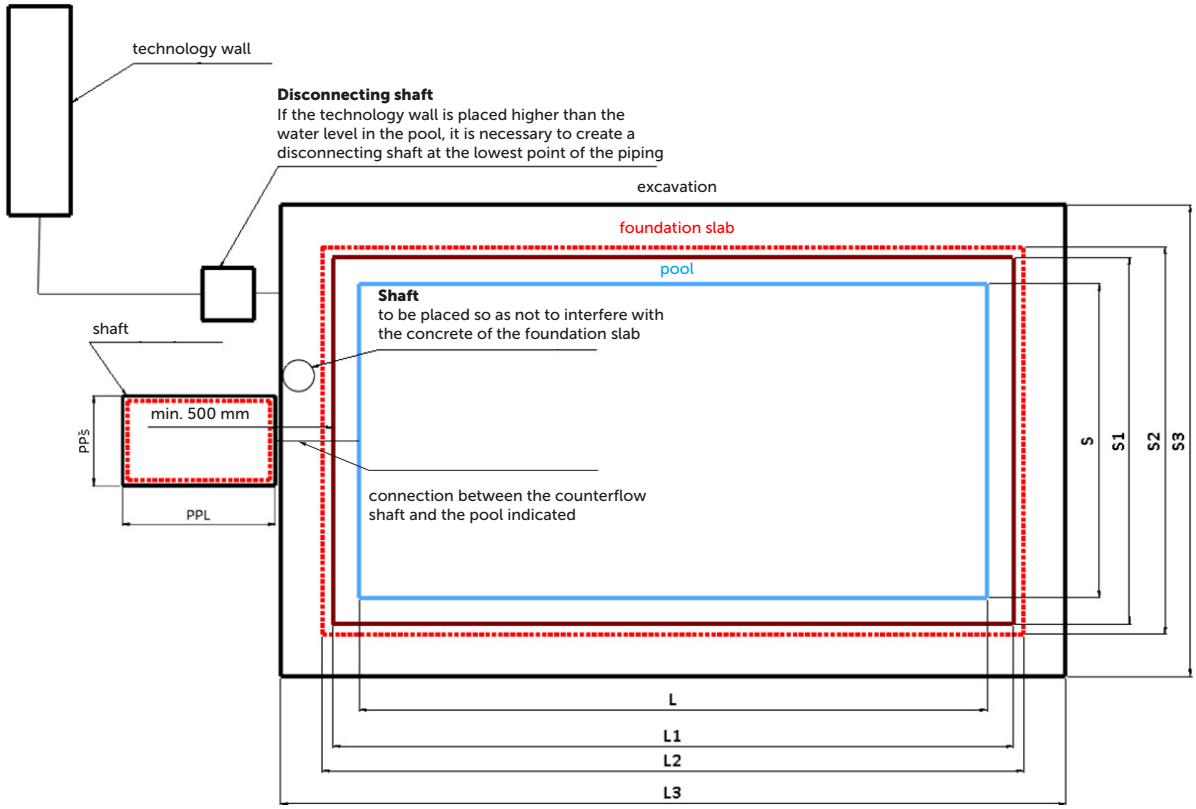
Example:	Outer shaft diameter	1265 mm
	Excavation dimensions	1865 x 1865 mm

Plan view of excavation for the pool and technology shaft (in mm)



2. Surveying and excavation

Plan view of the excavation for a pool with a counterflow shaft



L	pool length	5000 mm	6000 mm	7000 mm	8000 mm
L1	outer length of the overflow channel	5416 mm	6416 mm	7416 mm	8416 mm
L2	foundation slab length	5900 mm	6900 mm	7900 mm	8900 mm
L3	excavation length	6440 mm	7440 mm	8440 mm	9440 mm

S	pool width	3000 mm	3500 mm	4000 mm
S1	outer width of the overflow channel	3416 mm	3916 mm	4416 mm
S2	foundation slab width	3900 mm	4400 mm	4900 mm
S3	excavation width	4440 mm	4940 mm	5440 mm

CSD	dimensions of the excavation for the counterflow shaft	1050 mm
PPL		1650 mm

ST	dimensions of the excavation for the technology shaft	for shaft diameter 1200 mm ST = 1 865 mm
		for shaft diameter 1500 mm ST = 2 165 mm

layout of the pool shape

Subject to the type and size of the pool, mark (with sand, lime) the space for the pool. All measurements and determination of the location of the pool should be carried out with the greatest care and with regard to finishing works on the pool (paving etc.).

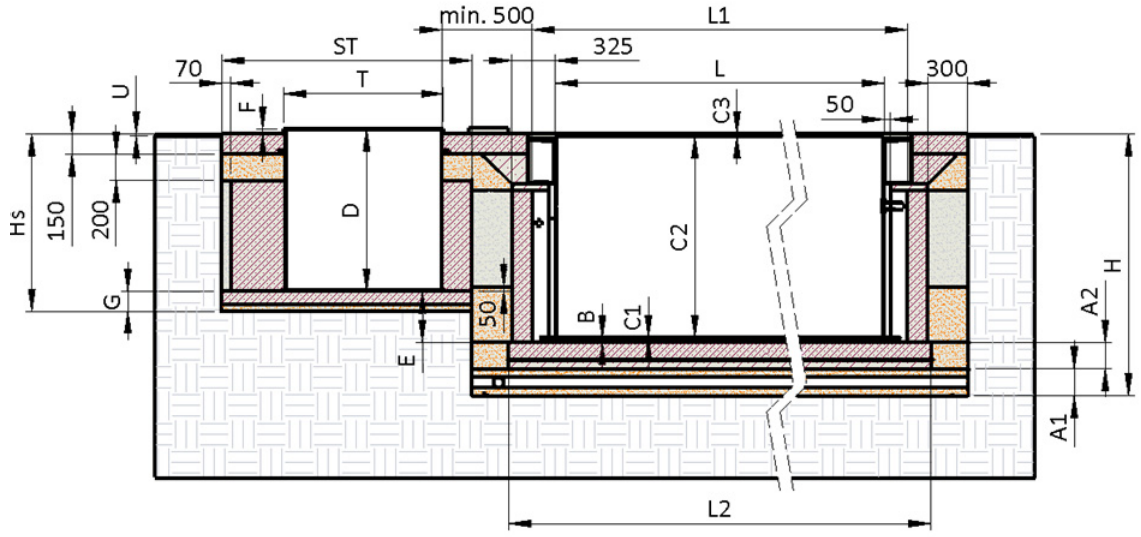
Surveying and excavation

2.

2. Excavation Depth – Calculation

Determine the depth of the pool excavation and of the excavation for placing the technology shaft according to the calculations below. First determine the total depth of the pool excavation. The depth of the excavation for the technology shaft (counterflow shaft) should be determined afterwards. The height of the step (E) for the correct placement of the technology shaft should be determined at the end. Please remember to account for the difference from the raised terrain (U). The value "U" directly addresses the final height of the complete construction of the pool; therefore it is necessary to take into account all the construction steps performed subsequently (raised paving, recessing or raising the pool, etc.).

The upper edge of the technology shaft should be set to at least 40 mm (F) above the planned final surface around the pool (make sure it does not collide with the travelling front of the roof). This is due to the need to protect the shaft from rainwater. If you do not want to have the shaft elevated above the final surface level, adequate drainage of rainwater must be provided around the shaft. The shaft must not be located where the future rails for the roof will be installed. The bottom of the shaft is intentionally kept without thermal insulation so that the shaft is naturally 'heated' in the winter from the soil below.



A1	gravel bed with drain pipes	200 mm
A2	concrete foundation slab with a rebar mesh	200 mm
B	bottom insulation (extruded polystyrene)	30 mm
C1	pool bottom thickness	8 mm or 6 mm
C2	pool depth	subject to the pool type
C3	difference in elevation of overflow channel	18 mm
D	total depth of the technology shaft/counterflow shaft	technology shaft = 1213 mm
		counterflow shaft = 796 mm
E	difference in elevation between the pool foundation slab and the shaft foundation slab	(H + F) - (A1 + A2 + D)
F	elevation of the technology shaft specified by the manufacturer	40 mm
G	concrete plus gravel (gravel 50 mm; concrete 100 mm)	150 mm
H	pool excavation depth	A1 + A2 + B + C1 + C2 + C3 + (±U)
SD	shaft excavation depth	(D - F) + G + (±U)
U	thickness of paving/stone carpet/pool recess	subject to the type

2. Surveying and excavation

Excavation and Securing the Perimeter Walls.

Excavation and securing of the perimeter walls of the pit (if necessary because of the geological conditions) should be carried out exclusively by a specialized company. The excavated soil can be used for landscaping around the pool; you can count on the majority of the soil being used this way. This means there is no need to dump the soil. Landscaping around the pool refers to the pool as a new structure; not always necessary.

Important notice:
The contractor is responsible for securing the excavation walls.

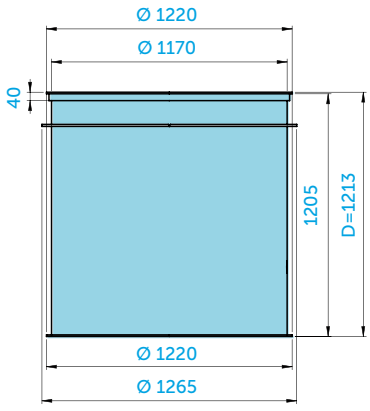
The aforementioned data and calculations apply to the standard location of the technology shaft – see plan view of excavation.

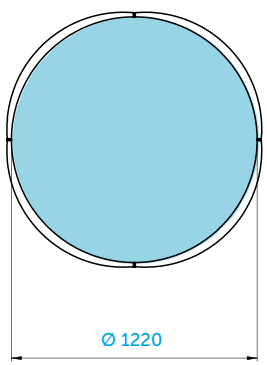
Note:
Along with the earthworks and excavation, consider connecting the pool to the sewage and rainwater system on the premises. This will enable the drainage pump and pool technology to be connected directly to the drainage, which gives you more comfort in pool maintenance, for example, when draining water from the filter, etc.

The following types of technology shafts may be included in the scope of the contract for work:

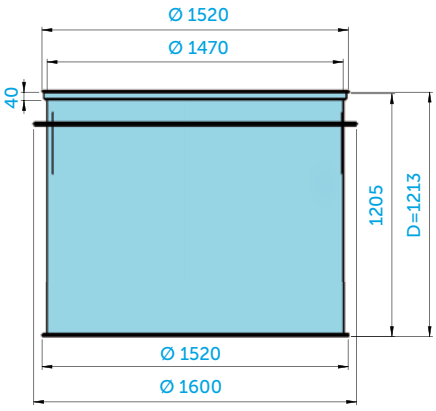
- Technology shaft with cover for installation of filtration (Ø 1200, height 1200 mm)
- Technology shaft with cover for installation of filtration and counterflow (Ø 1500, height 1200 mm)
- Technology shaft with cover for counterflow installation (1200 x 600 x 800 mm) = L/W/H

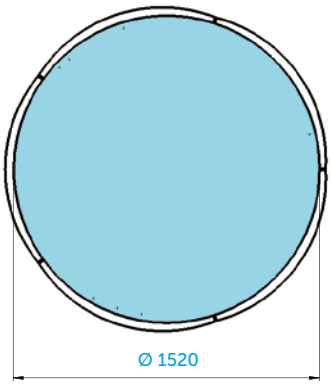
TECHNOLOGY SHAFT FOR FILTER INSTALLATION



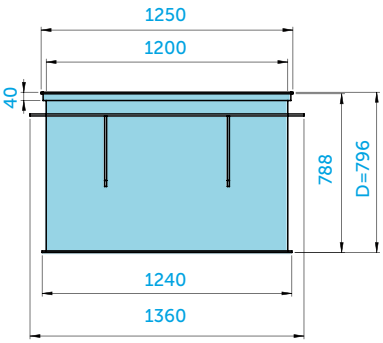


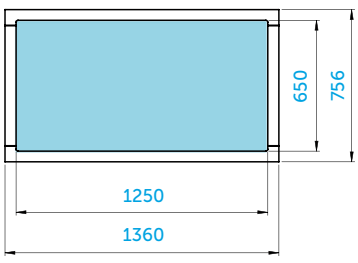
TECHNOLOGY SHAFT FOR FILTER AND COUNTERFLOW INSTALLATION





TECHNOLOGY SHAFT FOR COUNTERFLOW INSTALLATION



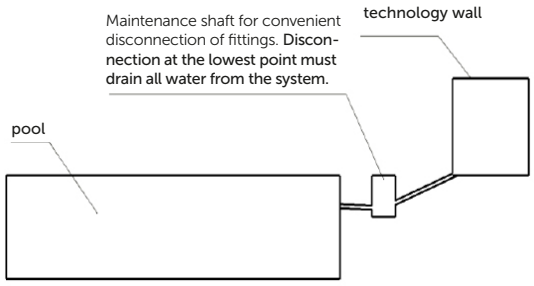


Surveying and excavation

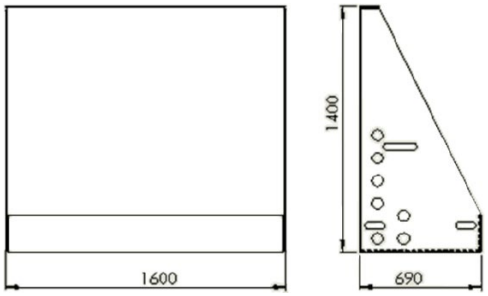
2.

Preparations for Placement of Miscellaneous Pool Technology

Another possible location of the technology is offered by using the ALBIXON technology wall, in its own dedicated shaft or in any other place (service room, garden house...). **The pool technology should be placed in a room with limited access (protected against unauthorized persons or children), where the ambient temperature does not exceed 40 °C and where the ambient humidity is suitable for the needs of electrical components.**

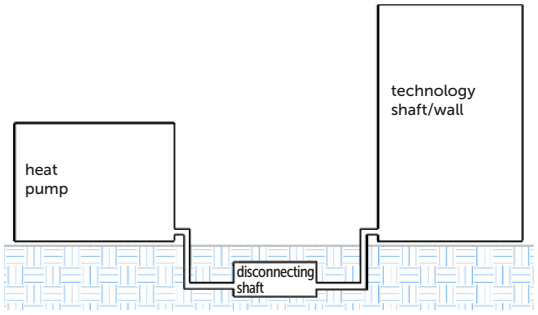


Where the technology is placed above the water level in the pool, a maintenance (disconnecting) drain shaft should be created, allowing for the draining of water from the piping during the winter period. The dimensions of the maintenance shaft should be of at least 500 x 500 mm (subject to the depth) and the depth should be adequate to the pipe route, however always allowing for the convenient disconnection of the pipes and discharge of water. For the location of the disconnect fitting, see the figure. The disconnection must be placed at the lowest point of the piping.



Technology wall (left, right) – a technological unit designed to be placed in a service room or in other suitable garden structure. The wall must be placed on a horizontal and sufficiently rigid base. On the side of the outlets (left or right), it is necessary to leave at least 500 mm of space for connections and further handling. To connect the pool technology and the pool and – if applicable – external heating, make sure to prepare pipeline routes and penetrations of the appropriate size (pipe Ø + insulation) into the technology installation space. This also applies to technology installed atypically.

Install the counterflow device separately in the counterflow shaft or in the technology shaft. The counterflow shaft should be positioned so that the counterflow pipe from the shaft is aligned with the pool axis and runs towards the outlets of the counterflow body placed on the pool shell. This is to achieve the lowest power losses. The maximum distance from the exterior contour of the pool shell is 2000 mm. If the counterflow is not aligned with the axis of the pool shell, its performance will be diminished.

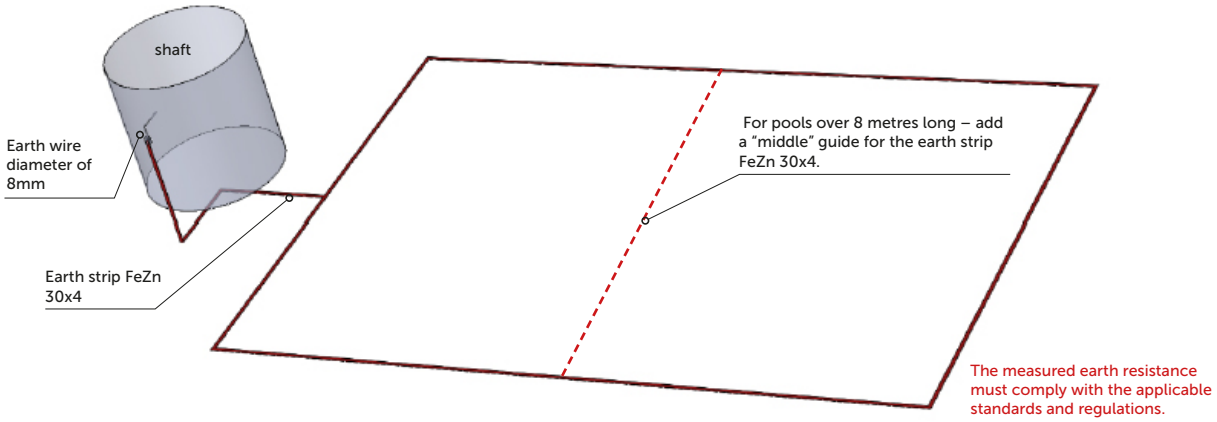


Heat pump – to connect the pool technology and the heat pump, it is necessary to create routes for laying the connecting pipe (excavation width 200 mm at minimum, pipe slope 1.5 ° along its entire length towards the shaft). To connect the heat pump and the technology wall, it is necessary to place the disconnectors for water discharge in the maintenance drain shaft at the lowest point of the pipe. The heat pump foundation slab must be sufficiently firm and level (a concrete foundation 150 mm high with floor plan dimensions that exceed those of the heat pump by at least 40 mm on each side). Install the heat pump in a spacious and sunny location with good ventilation. Its position must allow for smooth air circulation; see the instructions for the respective heat pump. During its operation the heat pump may also produce a considerable amount of water condensate, which effect needs to be accounted for and drainage provided. Ensure that after installation the device is in an upright position without any tilt. Do not install the device in places with the presence of contamination or corrosive gases, or where dirt or fallen leaves collect. The place where it is installed must not be near flammable or explosive environments with usual fire hazards. Observe distances from obstacles, always in accordance with the respective heat pump manual. **Install the heat pump at least 3500 mm from the edge of the pool (according to ČSN 33 2000-7-702) and up to 7500 mm from the pool technology and with a vertical difference of up to 1000 mm between the water level in the pool and the bottom edge of the heat pump.** This installation does not result in an excessive decrease in the performance of the circulation pump and does not cause heat loss in the longer piping.

3. Levelling the Bottom of the Excavation and Drainage of the Foundation Slab

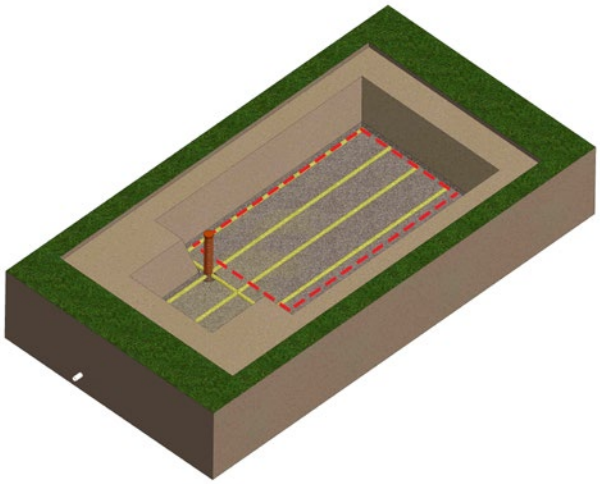
1. Installation of earth strip and drainage set – 1st Stage.

An earth strip in accordance with the applicable standards must be installed at the bottom of the excavation. For more details on electrical wiring, see the Electrical Wiring section.



The foundation slab must be permanently drained. For proper drainage of the foundation slab, it is necessary to install drainage piping under the foundation; the piping should be connected to a drainage set (for drainage pump shaft + drainage pump permanently connected to a power supply, see the following paragraph). Ask your construction company for the ideal design of draining the pool foundation slab and any shafts, according to the local geological conditions. Be sure, though, to account not only for groundwater but also for rainwater, which may have equally negative effects on the pool shell as a whole, such as groundwater.

Drainage pump shaft – a pipe with a diameter of approx. 300 mm placed vertically next to the foundation slab. Pour gravel with an 8-to-16-mm grain size onto the bottom of this pipe. There must be a height difference of at least 500 mm between the gravel and the final level of the pool foundation slab. The drainage pump shaft serves as a sump for collecting groundwater and rainwater. It must be provided with a submersible pump. This pump must trigger automatically when the water level in the shaft rises and must be permanently connected to the power supply via an underground cable. The supply cable must run from the house switchboard, and yet it must not be connected through the switchboard in the technology shaft. The pumped water must flow out of the pool area and must not return under the pool (see note on page 6 regarding the sewage and rainwater system).



2. Backfilling with Gravel and Drainage Piping Installation, 2nd Stage.

Spread gravel with an 8–16mm grain size to form a layer about 100 mm thick the bottom of the excavation. The 80-mm drainage piping is to be laid in the gravel layer, sloped down towards the water outlet point (drainage pump shaft). The drainage pipe must be laid with a minimum slope of 1%. In the layout, the mutual distances between the drainage pipes must not be greater than 800 mm.

All drainage pipes must be covered with a special geotextile before being overlaid with gravel and concrete

Levelling the Bottom of the Excavation and Drainage of the Foundation Slab

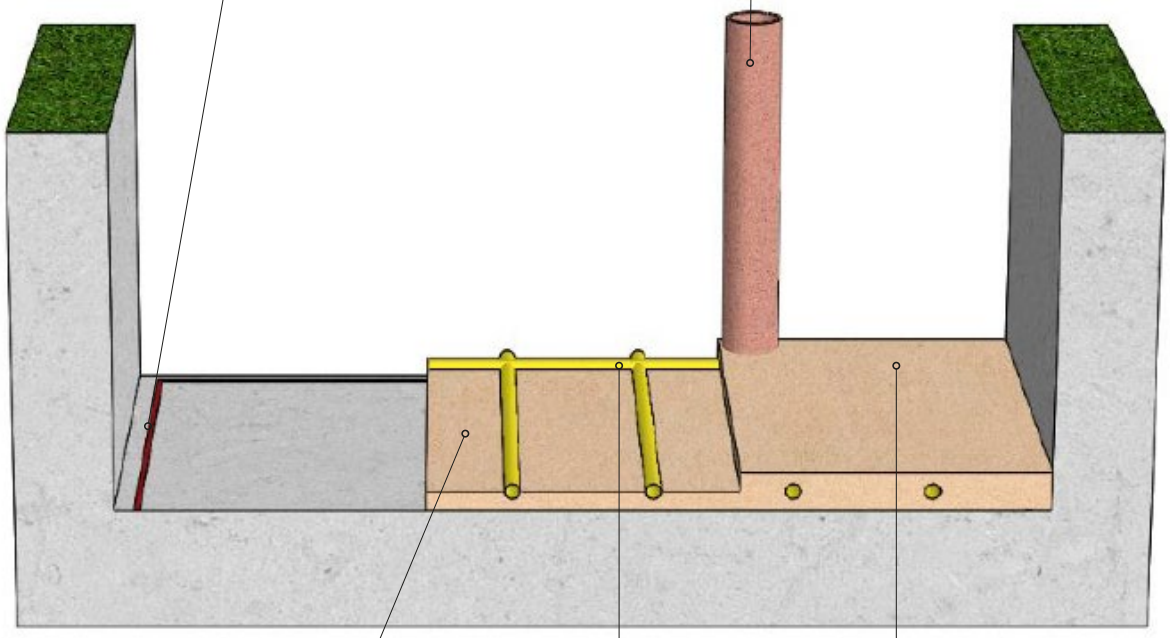
3.

3. Final Covering with Gravel, 3rd Stage.

Lay another approx. 100-mm-thick layer of gravel (grain size 8–16 mm) on top of the first layer of gravel with the laid drainage pipes covered with geotextile. The gravel needs to be adequately compacted, but be careful not to damage the drainage pipes.

1. Stage
earth strip FeZn 30x4
(around the pool excavation perimeter)

1. Stage
drainage shaft for pump
(located 500 mm below the excavation)



2. Stage
gravel backfill
(approx. half from a total height of 200 mm)

2. Stage
Drainage pipes (placed after the first gravel backfill; about half-way through the total layer of 200 mm, covered with geotextile)

3. Stage
Adding another gravel layer (up to the total thickness of 200 mm)

Important notice:
Drainage of the foundation slabs is an essential part of the construction preparation. Rainwater and/or groundwater can cause quite extensive deformations of the pool shell; therefore the foundation slab of the pool must always be properly drained. If the place for installing the pool is in sloping terrain, or, after beginning the earthworks, it is found that it has a clay subsoil (which means a higher probability of groundwater and its exercising of pressure on the pool body), we recommend that you have a geological survey conducted for foundation engineering. As a follow-up to its result, we recommend that you take extended construction and drainage measures in relation to the target site, which will be implemented outside the actual pool drainage system.

Damage to the pool caused by insufficient or inadequate preparation for construction is not covered by the right arising from defective performance. Therefore, it is important to monitor the construction company and its procedures continuously. We recommend regular photo documentation of all the construction steps.

4. Concreting of the Foundation Slab

1. Preparation of formwork for concreting.

Place the formwork on the compacted layer according to the floor plan dimensions on page 4. The formwork height of 200 mm needs to be adjusted to the other height parameters – page 5. The formwork must be level. (The specified flatness of the formwork is +/- 2 mm along the entire perimeter. Final inspection of the backfilled excavation.

2. First Layer of Concrete.

Spread the first layer of concrete into the prepared formwork up to one-third of its height. The reinforcement will be placed on this layer.

Use C16/20 grade concrete for concreting the foundation slab.

3. Installation of rebar meshes

Reinforce the foundation slab using a rebar mesh with the dimensions of 100 x 100 x 6 mm. It is not necessary to reinforce the foundation slab under the technology shaft.

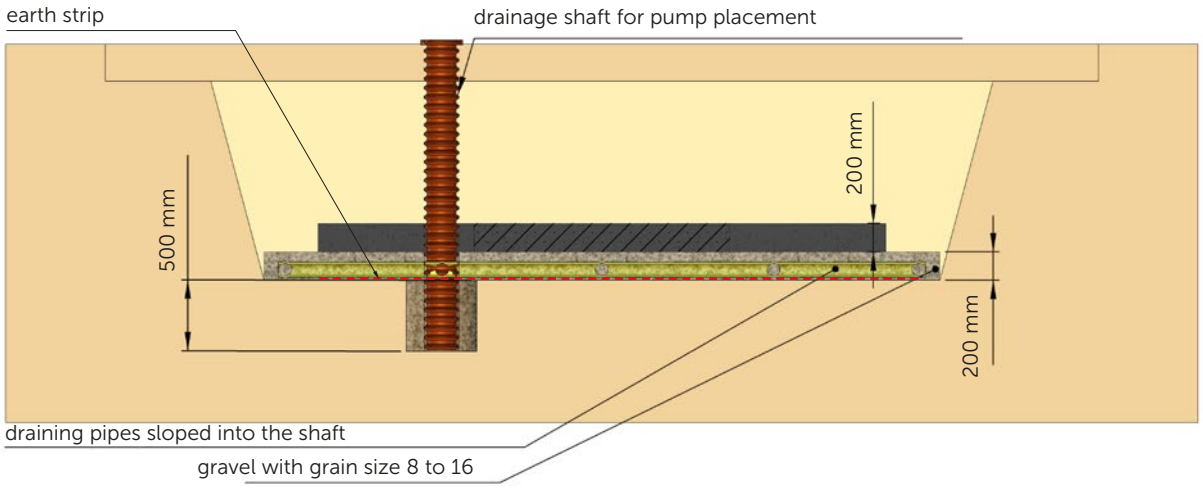
4. Second Layer of Concrete (Preparation for Final Layer).

Now, pour a second layer of concrete on the laid rebar mesh, up to the height of the formwork. **Level the surface of the concrete base so that the flatness of the slab is within +- 2 mm across the entire surface.**

5. Final Layer of Concrete.

After at least 48 hours, carry out a flatness check. Apply this layer with a self-levelling cement screed only if the required flatness in the second layer has not been achieved.

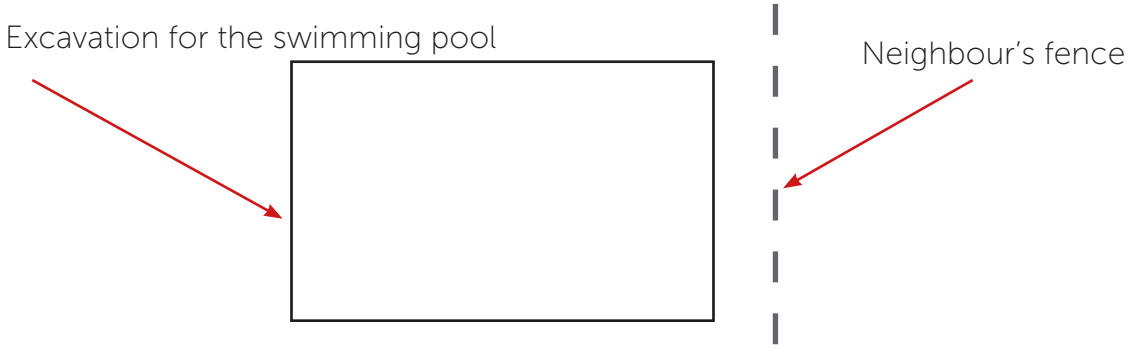
Record the final surveying result in the attached protocol (CUSTOMER'S DECLARATION ON MEASUREMENT OF THE FOUNDATION SLAB FOR THE POOL).



Notification of Readiness for Construction

5.

sample of correctly completed form* – green text

Notification of Readiness for Construction					
Purchase order number	123456789	Customer's name and surname		Josef Novák	
Address	Novákova 123, Předměstí 123 45				
Dimensions of the pool according to the purchase order	Width	Length	Depth	Units	
	400	750	150	cm	
Empty field for drawings of any obstacles: The photo "Excavation Surroundings" shows the neighbour's fence, which is at a distance of 120 cm from the excavation.  					
The distance between the excavation and the place reachable by a vehicle carrying the pool		Clearance of the narrowest passage point (gates, trees,...)		Choose the type of crane to order according to the weight of the pool and the reach at which the pool is to be placed. With greater reach required, the lifting capacity of the cranes diminishes.	
150	Units cm	450	Units cm		
Photo documentation of the preparation for the construction: attached to the email					
Excavation	YES	Foundation slab	YES	Drainage set	YES
Space to install technology shaft	YES	Surroundings of the excavation	YES	Other	YES
Photo documentation of the driveway from the road to the excavation site: attached to the email					
Access road	YES	Entrance to the property	YES	Parking place for the vehicle with the pool to install	YES
Please send this form along with complete photo documentation to: montaze.bazeny@albixon.cz					

* The blank form can be found on page 20.

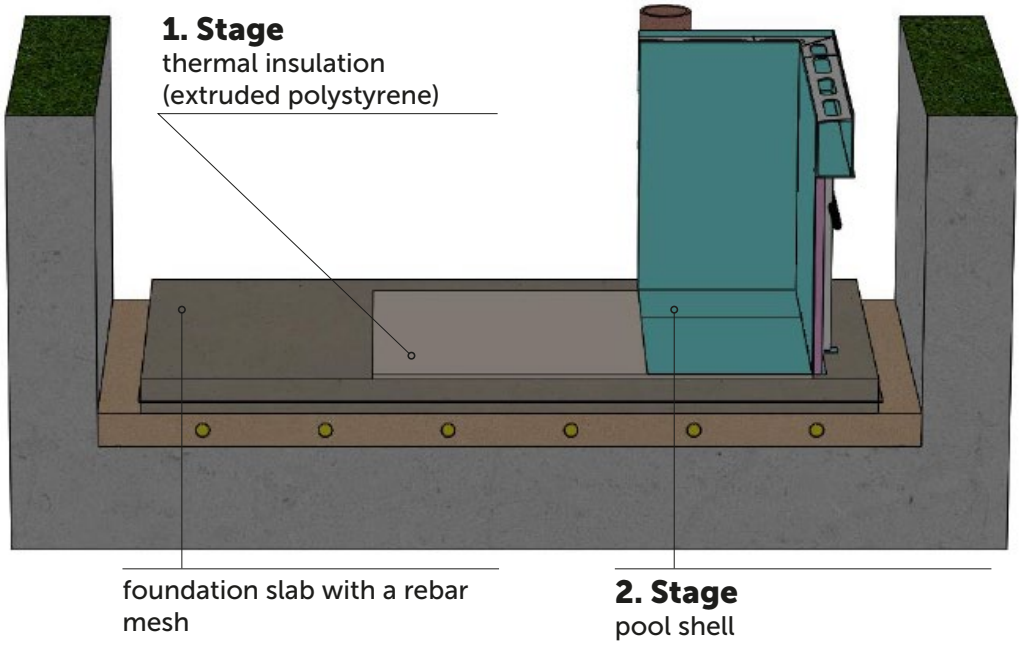
6. Placing the Pool Shell and Installation of the Pool Technology

1. Laying the thermal insulation, 1st Stage

Place thermal insulation (extruded polystyrene, 30 mm in thickness, min. compressive strength of 200 kPa) on the foundation slab, under the bottom of the pool, and secure it against shifting.

2. Placing the Pool Shell in the Excavation (in conjunction with the supplier) 2nd Stage 2.

Place the pool shell, in accordance with local conditions. Once the pool has been laid in the excavation, the customer should check the correct location and approve the fact with the workers installing the pool. The customer then starts filling the pool with water (about 300 mm) to load it.



3. Placing Technology Shafts in the Excavation.

Placing technology shafts in the prepared excavation.

4. Complete Installation of the Pool Technology

Installation of technology and its interconnection via pipes with the pool shell. In order to interconnect the pool and the technology shaft correctly, it is necessary to have an accurately prepared step for the shaft in accordance with Chapter 2 Excavation Depth.

5. Tightness Test by Flooding the Technology

The tightness of joints and pipes is verified by performing a "technology flooding". For this test it is necessary to ensure a sufficient amount of water to fill the technology to a water level of about 300 mm.

6. Underlay of the Overflow Channel (to be provided by the customer)

If not concreted under within 48 hours of delivery, the overflow channel must be underlain. Make the underlay according to the technical data sheet for the pool, which is part of the contract for work. Do not fill the overflow channel with water before the concreting; see page 15.

Warning!

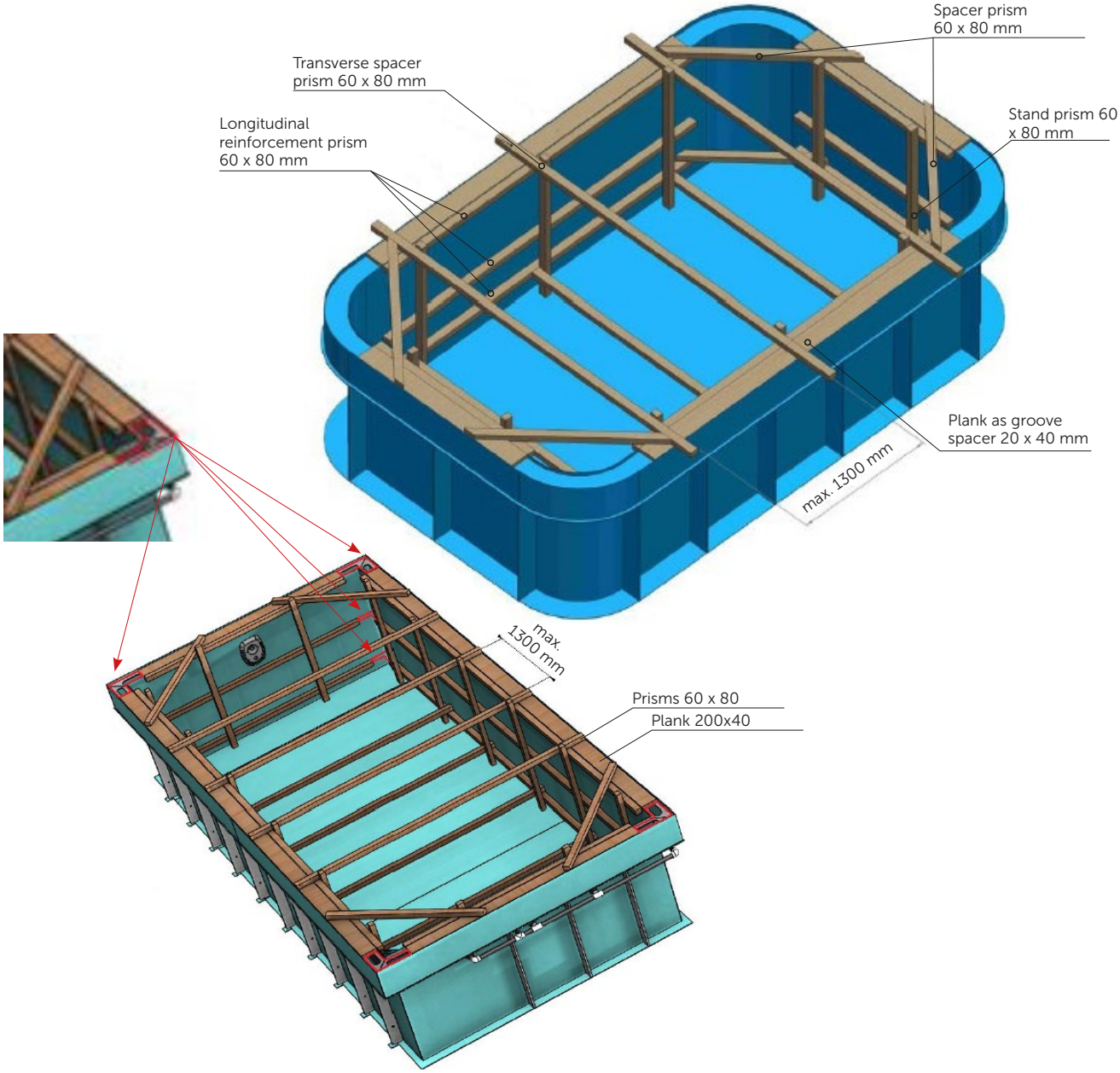
– it is necessary to carry out works subsequently at least according to points 7 and 8 of the construction preparation document so as to prevent damage to the pool (torrential rain, collapse of the excavation wall, etc.).

Bracing the Pool

7.

Bracing the Pool Shell

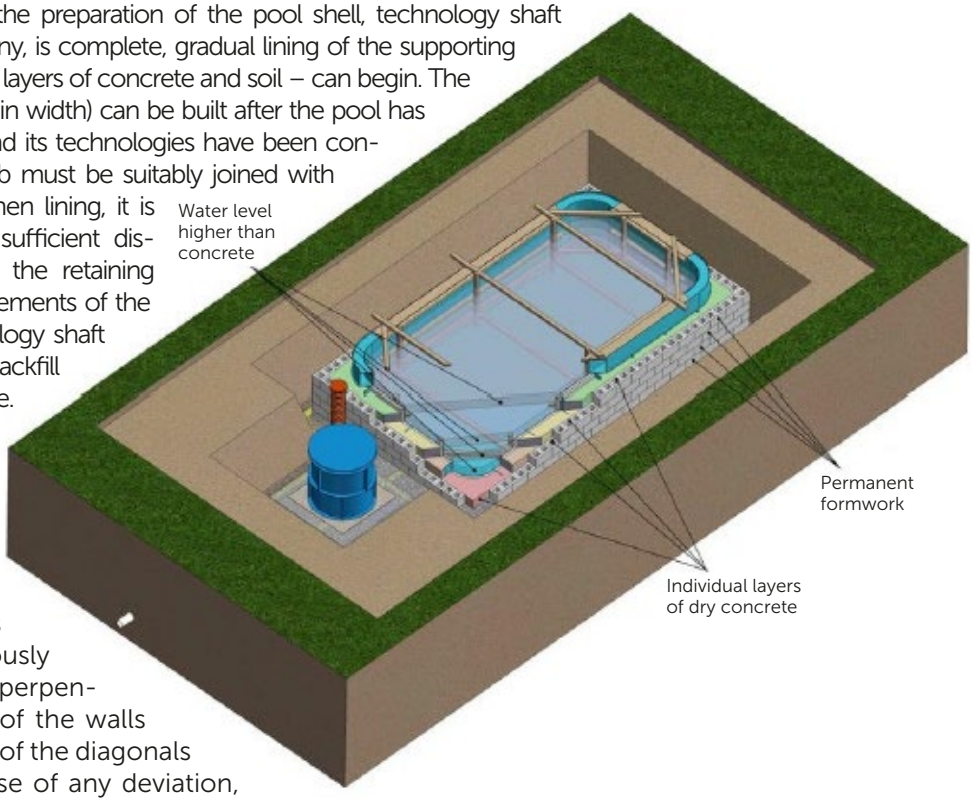
Before concreting, appropriate bracing needs to be put in place to support the pool shell. The braces are placed in order to prevent any potential deformations of the pool shell. Deformations may be caused by careless handling of the concrete (such as when backfilling with concrete that is too thin or when tamping it), or by too high an added water level. The pool walls must not deform inwards or outwards; the walls must be flat and vertical. We recommend that you check the wall perpendicularity and flatness and the overall shape of the pool and its diagonals frequently. **We recommend that the shell should always be braced at the points where reinforcing elements (ribs) are provided. When installing the bracing, care must be taken not to damage the pool's interior walls by wrapping the braces, e.g. using geotextile.** With proper bracing and support for the overflow channel, its outer edge should be 18 mm higher than the inner edge. For a proper bracing of the pool shell, it is necessary to temporarily remove the trim tube on the inner edge of the pool (this does not apply to V02, where there is no trim tube). For rectangular pools, bracing must be omitted within a distance of 200–250 mm from the pool's corners; see below, highlighted in red.



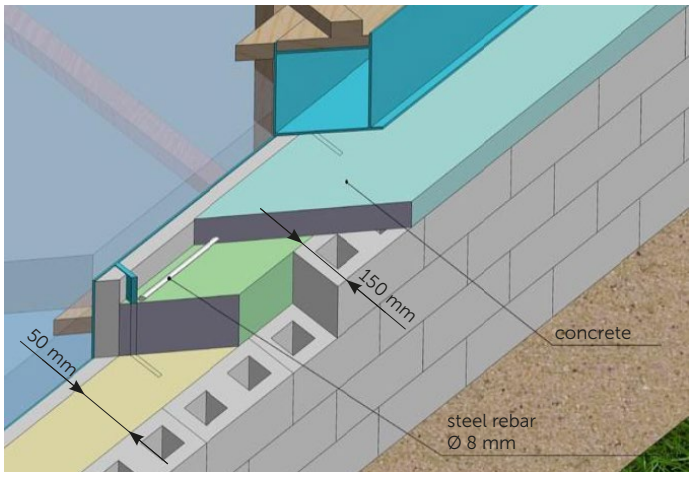
8. Concreting around the pool

1. Lining the supporting walls and concreting around the pool shell

Before commencing the lining and concreting works, all elements of the technology (e.g. circulation nozzles, pipes, fittings, etc.) must be fitted with suitable insulation – for example, MIRELON sleeves with a thickness of 10 mm. This will insulate these components thermally, enable their thermal expansion, and protect them from damage during concreting. Once the preparation of the pool shell, technology shaft and counterflow shaft, if any, is complete, gradual lining of the supporting walls – which separate the layers of concrete and soil – can begin. The supporting walls (150 mm in width) can be built after the pool has been placed in position and its technologies have been connected.The foundation slab must be suitably joined with the underpinning wall. When lining, it is important to maintain a sufficient distance (50 mm) between the retaining wall and the reinforcing elements of the pool shell and the technology shaft so that it is possible to backfill this space with dry concrete. Dry concrete must not be packed. This will prevents the pool shell from becoming uneven.



During concreting, it is necessary to continuously check the verticality (perpendicularity) and flatness of the walls and the identical length of the diagonals of the pool shell. In case of any deviation, immediately stop the concreting operation and level the shell. Concreting is carried out in layers, keeping the height of a single layer of concrete to a maximum of 300 mm. After each single layer of concrete is completed, the next layer is applied only after the previous layer has set. During concreting, it is necessary to gradually add water to the pool so that the water level is 100 to 200 mm higher than the layer of concrete. The part of the water level higher than the concrete depends on the plasticity of the concrete used. Choose a lower height of the water level above the concrete for dry concrete varieties and a higher level for wet concrete. Do not connect the pool shell to the lining firmly from the bottom up to the height of the shell reinforcing elements where these are located – see chapter below. Lay the piping during construction completion operations in perfectly packed sand that contains no stones or clay, and cover it with fine-grained sand that contains no clay (cover sand bed of at least 100 mm). It is necessary to proceed in such a way that no damage to the piping occurs e.g. by movements (settling) of insufficiently packed subsoil and its surroundings, movements of frozen soil, etc. Vehicles must not be allowed to drive over places where the piping runs. The remaining surrounding space between the lining and the ground should be refilled with soil. Pack (compact) this soil carefully. **Do not concrete the place where the counterflow is installed, but only refill it with packed sand.**



Concreting around the pool

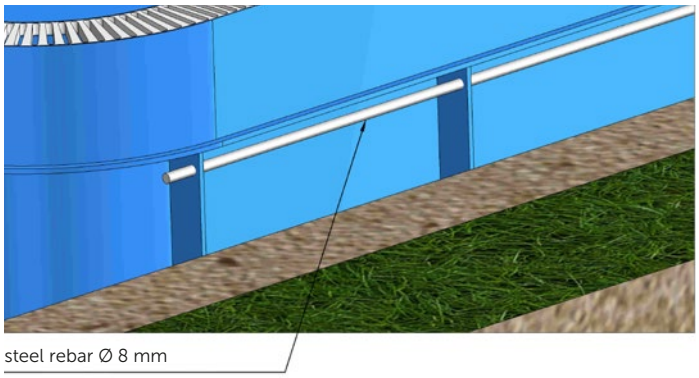
8.

2. Concreting of Technology Shaft (if part of the contract for work)

The technology shaft is to be fitted with a lining or concreting. The lower part of the technology shaft must be anchored in concrete and then lined with concrete in a layer about 150 mm thick up to the top plastic collar, which must be concreted into the base plate for the final surface.The technology shaft can be protected against damage by geotextile. Depending on local conditions (changes between shade and sun, etc.), it is necessary to insulate the inner surface of the shaft cover with polystyrene at least 3 cm thick. This insulation will prevent the precipitation of moisture on the inside of the cover. The interior of the shaft should be dry and ventilated. To ensure this, place a support under the shaft lid so that air can flow between the edge of the shaft wall and below the cover. These measures are the responsibility of the user. Pipes around the technology shaft (or to the service room) must be laid in a sand bed with a minimum covering of 100 mm above and below the pipe, thanks to which any pressures on the pipe are equalized. The sand bed must be provided from the duct transition to the technology shaft up to the outlet of the piping from the pool insulation.

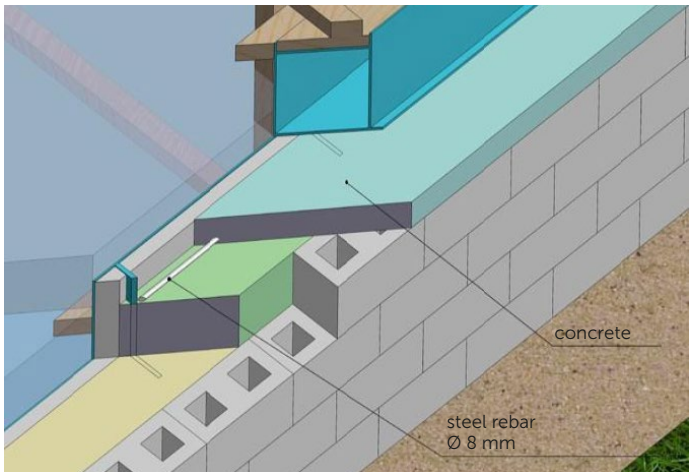
3. Anchoring the walls of the pool

The outer edge of the overflow channel is always higher than its inner edge by 18 mm. This design of the overflow channel prevents excessive spillage of pool water from the pool during its operation. The anchoring of the pool walls to the concrete backfill and lining is executed at a level about 50 mm below the overflow channel. The anchoring is done by steel rebars (Ø 8 mm) that are slid through holes in the ribs of the pool. The detail in the illustration shows the anchoring of the side wall of the pool shell.



4. Concreting Under the Overflow Channel

Prior to the actual concreting of the overflow channel, secure its flatness with sufficient support. Check that the channel is not misaligned outwards or inwards. The outer edge of the overflow channel is 18 mm higher than the inner edge when the channel is lined and the pool shell is braced correctly. Concreting under the overflow channel should be carried out simultaneously with anchoring the pool shell with B20 concrete by means of aggregate of max. 16 mm. The space under the channel must be completely filled – this layer of concrete ensures the stability of the overflow channel. We recommend continuing the concreting only after the concrete layer under the channel has set. During concreting, ensure that the supply cable and the light box are not concreted.



Warning!
Do not carry out the concreting works only (concreting the shell without lining). Should you decide only to concrete around the pool shell, any deformations or bending of the pool shell must be averted.

9. Making the Base Plate for the Final Surface

1. Measures against Damage to the Overflow Channel Casing.

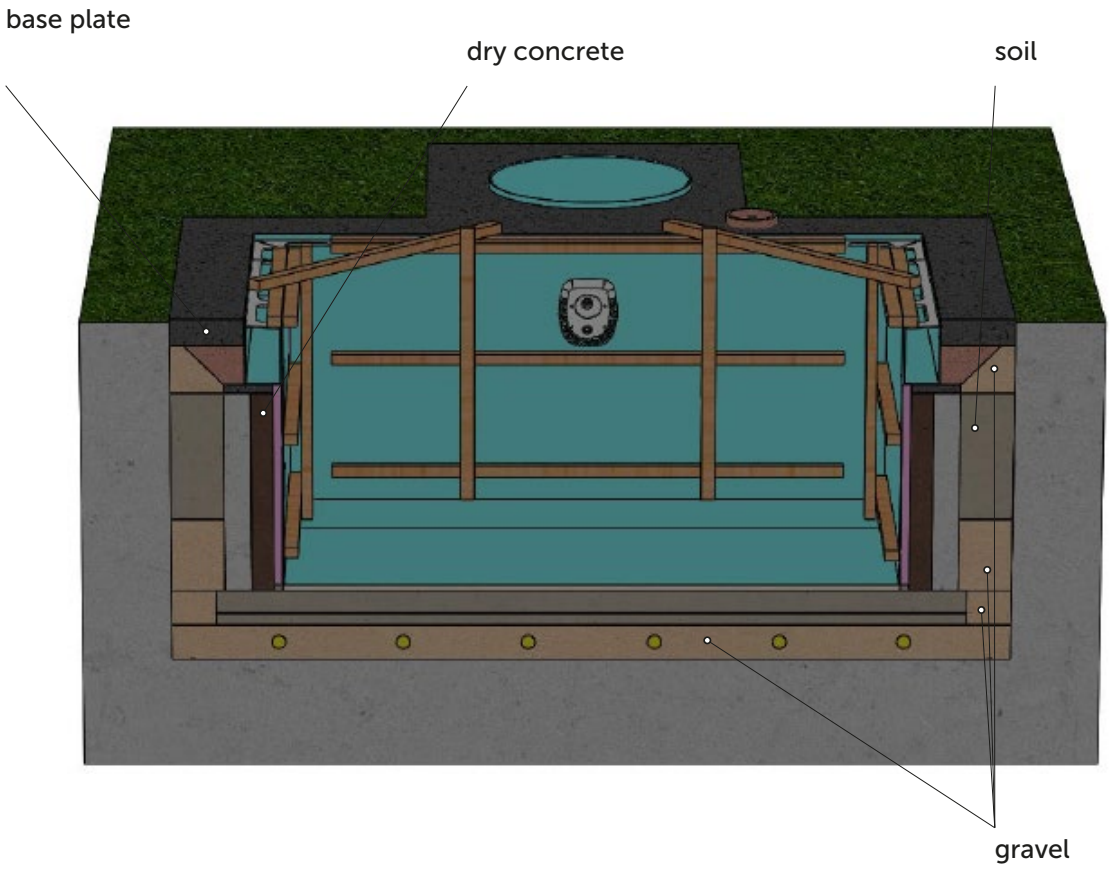
Protect the pool shell around the perimeter against damage in a suitable manner, e.g. by applying a mirelon tape, which protects the outer shell from damage by sharp objects and, at the same time, allows for dilatation.

2. Gravel Underlay for Final Surface

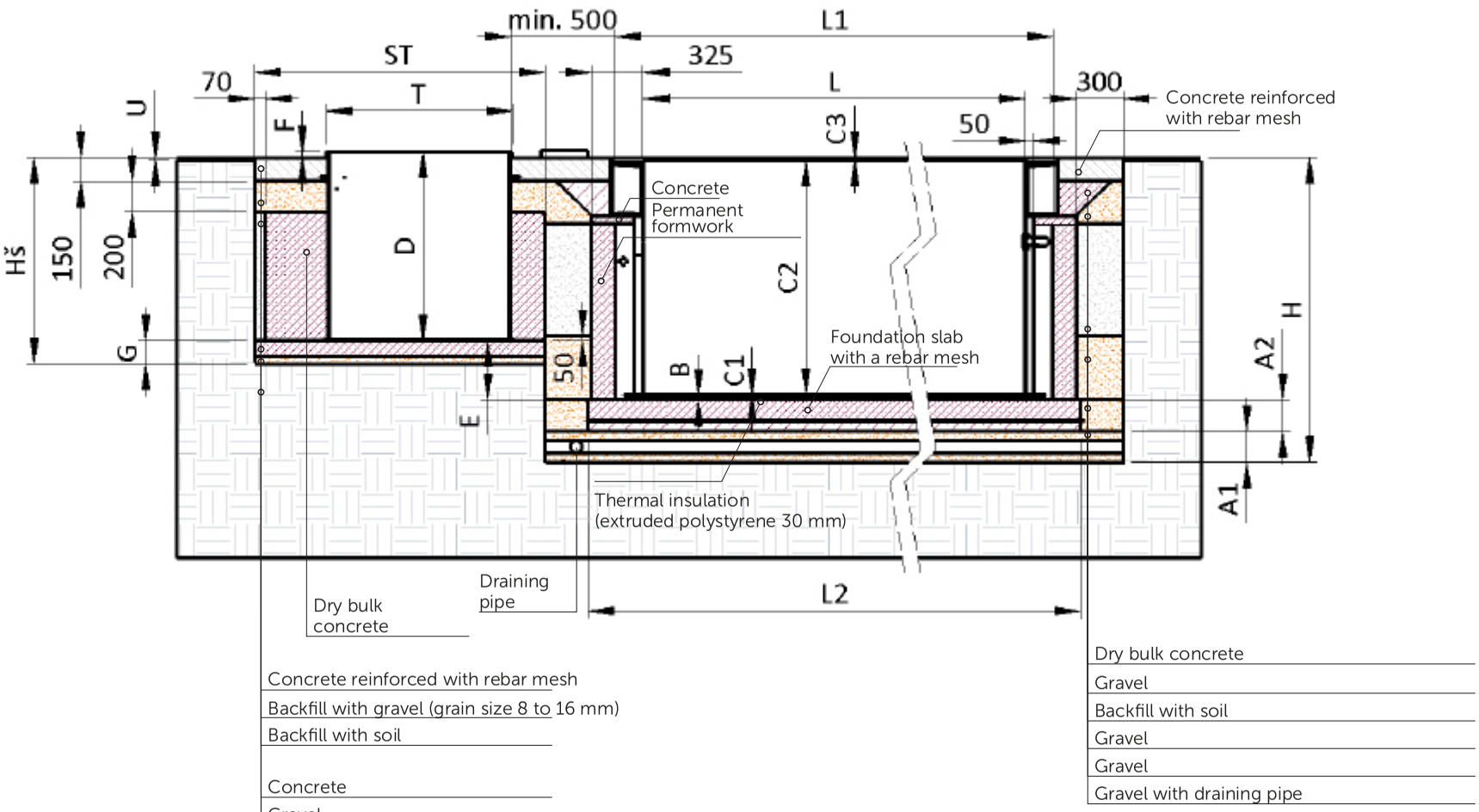
We recommend laying gravel aggregate (with a grain size of 16 to 32 mm) under the concrete plate on which the final surface around the pool will be created. Prepare the gravel bed in such a way that the overflow channel can be concreted along its entire height. The visible upper part must be connected to the final surface by means of commonly available permanently elastic sealants (ideally, the filled space between the final surface and the pool outer wall is at least 5 mm).

3. Making the Base Plate for the Final Surface

The height of the base plate depends on the height of the final surface (paving, stone carpet,...) and its levelling. This plate should be made of monolithic concrete reinforced with rebar mesh (100 x 100 x 6 mm). The height of the base plate depends on the height of the type of paving that is chosen. Make the final base plate for the paving; any irregularities can be levelled with a trowel. At this stage, it is also necessary to install the anchoring elements (plastic footing) for the pool steps and the junction boxes for pool lights, if these are included in the contract for work. The final surface for the enclosure, if any, must be firmly connected to the concrete base. Paving is the most suitable option of the final surface. It must be firmly attached to the concrete base (must not be supported by sand or gravel). Other suitable types of final layers include all solid materials that are designated for the purpose, to be firmly attached to the concrete base. The visible (final) upper part must be connected by means of commonly available permanently elastic sealants to the outer coat of the pool (ideally, the filled space between the final surface and the pool outer wall is at least 5 mm).



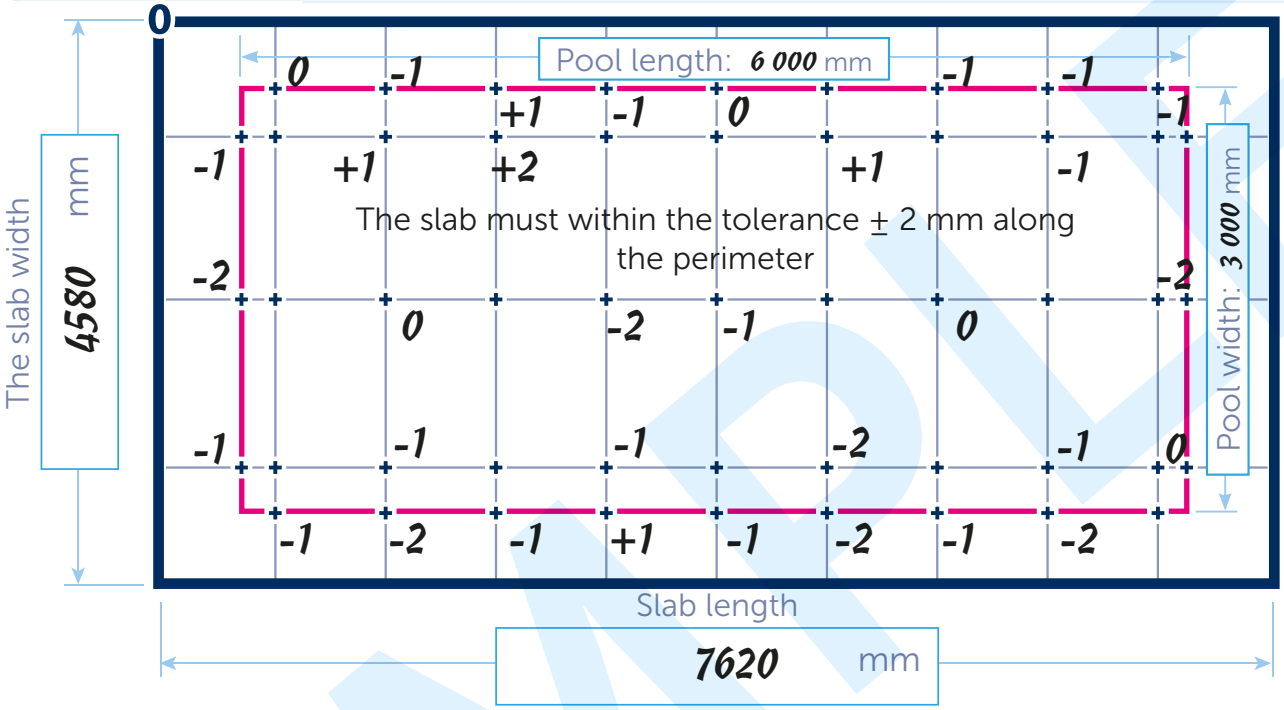
FINISHING WORKS FOR G1 BENEFIT OVERFLOW POOL



CUSTOMER'S STATEMENT ON REMEASURING THE POOL FOUNDATION SLAB

Business case number	1234567890	**Name and surname of the**	Jan Novak
Address	Zbraslavska 55, Praha 5, 158 00		

	Widt	Lengt	Depth
Pool dimensions according to the business case	3 000 mm	6 000 mm	1 500 mm
Excavation pit dimensions (Minimum required values)	Pit width	Pit length	Pit depth
	4 500 mm	7 500 mm	1 500 mm
Measured excavation pit dimensions	4580 mm	7620 mm	1530 mm



i 0 – reference point of measuring **Minimum number of measurements:** + 20 points on the perimeter + 12 inner points (all measured details must be specified in mm)

* cross out which doesn't apply

Flatness of the foundation slab ~~OK / NOT OK*~~ in terms of the mandatory tolerance +/– 2 mm in the whole area of the pool skeleton.

Failure to comply with the prescribed level of the base plate will not cause water to spill evenly over the entire perimeter of the pool, and this cannot be the subject of a claim.

Remeasuring of the mandatory tolerance must be done by an authorised person.

Options of remeasuring and confirming the measured values: (circle the chosen option)

1, The customer remeasures the slab personally and takes full responsibility for the values and parameters specified in the report
2, Remeasuring will be carried out by an authorised person in the construction industry – the parameters specified in the report are the responsibility of the authorised person
3, Remeasuring will be made by the ALBIXON a.-s. engineer - this service will carry a charge of CZK 5,000

Submission of this duly completed and confirmed customer statement is a condition of entering into an agreement for the handover of the workplace and starting works by ALBIXON a. s.

ALBIXON a. s. points out that in case of delay in notification of construction readiness, the delivery date specified in the agreement will be extended accordingly.

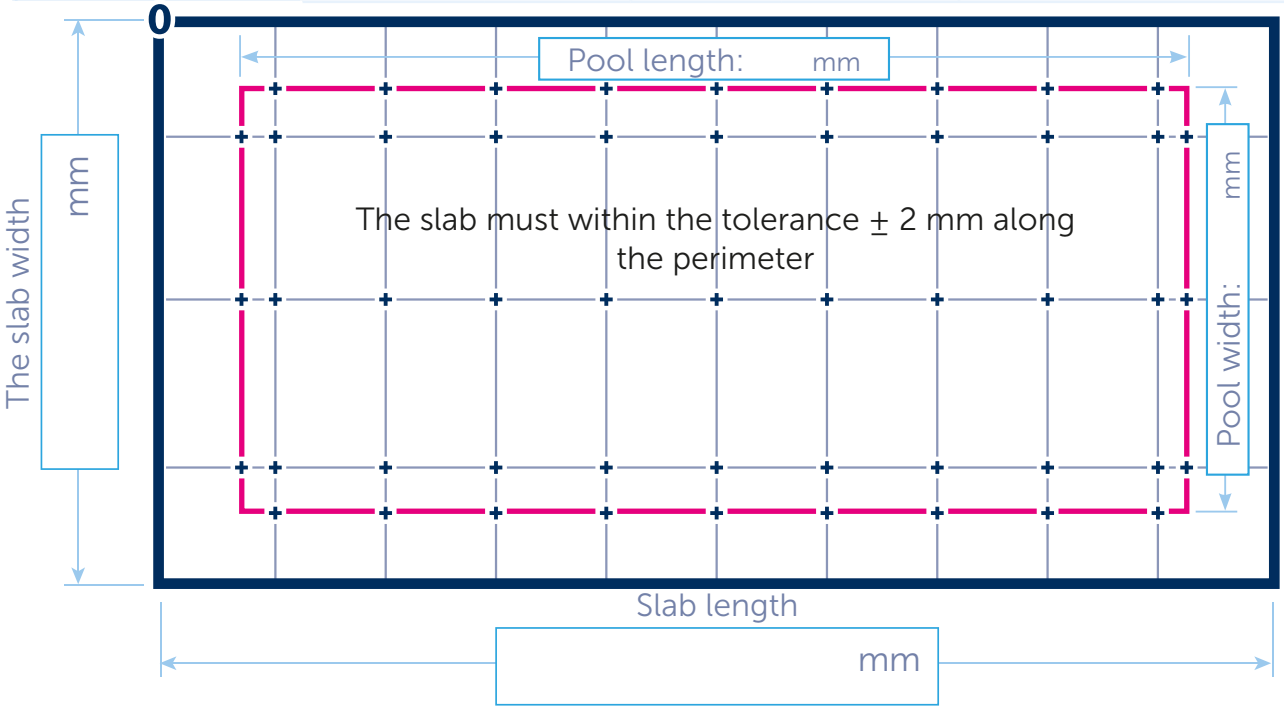
Use an optical or laser device with a minimum measurement accuracy of +/- 1 mm / 10 m to measure the mandatory horizontality.

Measured on: 20. 2. 2016	Type of used of the device: HILTI PR-2 HS	Parameters and accuracy of the device: +/- 0,5 mm/10 m	The date of the latest device calibration: 11. 11. 2015
	Measurement/ alignment made by: Frantz Kozel, Stavbaz,	Authorisation number: CKAIT - xxxxxxx	Date, stamp and signature: 20. 2. 2016
	Customer name and surname: Jan Novak		Date and signature: 20. 2. 2016

Send the properly completed report to the address: montaze.bazeny@albixon.cz

CUSTOMER'S STATEMENT ON REMEASURING THE POOL FOUNDATION SLAB

Business case number		**Name and surname of the**	
Address			
Pool dimensions according to the business case	Widt	Lengt	Depth
	mm	mm	mm
Excavation pit dimensions (Minimum required values)	Pit width	Pit length	Pit depth
	mm		mm
Measured excavation pit dimensions	mm	mm	mm



i 0 – reference point of measuring **Minimum number of measurements:** + 20 points on the perimeter + 12 inner points (all measured details must be specified in mm)

* cross out which doesn't apply

Flatness of the foundation slab OK / NOT OK * in terms of the mandatory tolerance +/– 2 mm in the whole area of the pool skeleton.

Failure to comply with the prescribed level of the base plate will not cause water to spill evenly over the entire perimeter of the pool, and this cannot be the subject of a claim.

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Options of remeasuring and confirming the measured values: (circle the chosen option)

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2, Remeasuring will be carried out by an authorised person in the construction industry – the parameters specified in the report are the responsibility of the authorised person
3, Remeasuring will be made by the ALBIXON a.-s. engineer - this service will carry a charge of CZK 5,000

! **Submission of this duly completed and confirmed customer statement is a condition of entering into an agreement for the handover of the workplace and starting works by ALBIXON a. s.**

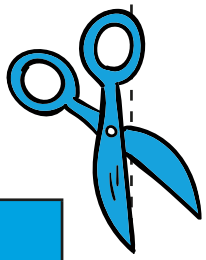
ALBIXON a. s. points out that in case of delay in notification of construction readiness, the delivery date specified in the agreement will be extended accordingly.

Use an optical or laser device with a minimum measurement accuracy of +/- 1 mm / 10 m to measure the mandatory horizontality.

Measured on:	Type of used of the device:	Parameters and accuracy of the device:	The date of the latest device calibration
	Measurement/ alignment made by:	Authorisation number:	Date, stamp and signature:
	Customer name and surname:		Date and signature:

Send the properly completed report to the address: montaze.bazeny@albixon.cz

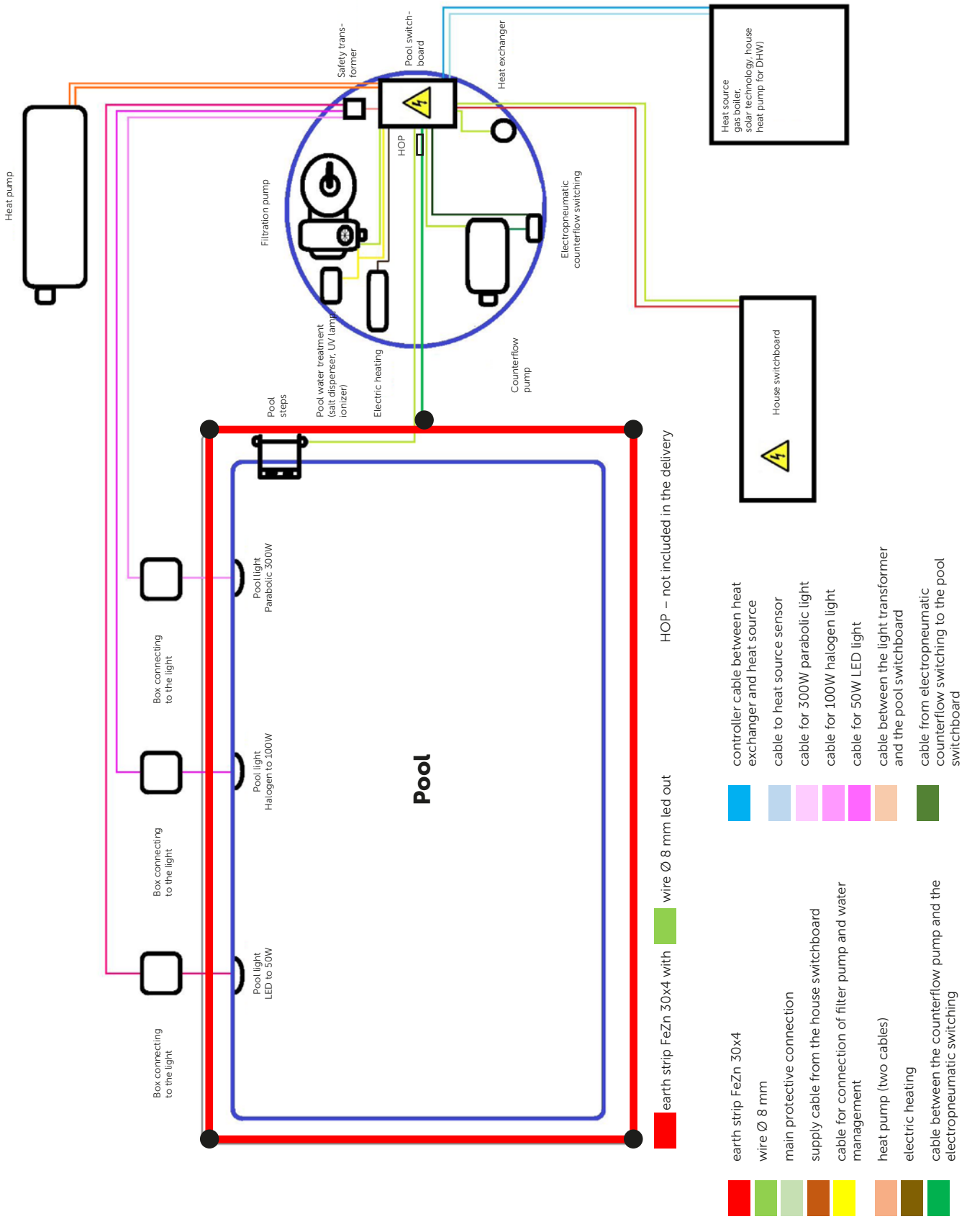
10. Form



Notification of Readiness for Construction				
Purchase order number		Customer's name and surname		
Address				
Dimensions of the pool according to the purchase order	Width	Length	Depth	Units
Empty field for drawings of any obstacles:				
The distance between the excavation and the place reachable by a vehicle carrying the pool		Clearance of the narrowest passage point (gates, trees,...)		The type of crane ordered according to the pool weight and the reach at which the pool is to be placed.
	Units		Units	
Photo documentation of the preparation for the construction				
Excavation		Foundation slab		Drainage set	
Space to install technology shaft		Surroundings of the excavation		Other	
Photo documentation of the driveway from the road to the excavation site				
Access road		Entrance to the property		Parking place for the vehicle with the pool to install	
Please send this form along with complete photo documentation to: montaze.bazeny@albixon.cz				

Electrical Wiring

11.



11. Electrical Wiring

Filtration; XHP60-160 thermal pump without counterflow

- CYKY 3 J x 4 + CY 6 ZŽ supply cable (main protective connection, hereinafter "HOP") including current protector with residual current 30 mA
- 20A/1/B supply cable circuit breaker
- 25A/3/B main house circuit breaker

Filtration; XHP60-160 thermal pump with counterflow

- CYKY 5 J x 4 + CY 6 ZŽ supply cable (main protective connection, hereinafter "HOP") including current protector with residual current 30 mA
- 20A/3/B supply cable circuit breaker
- 25A/3/B main house circuit breaker

Filtration; XHP60-200 thermal pump with counterflow

- CYKY 5 J x 6 + CY 6 ZŽ supply cable ("HOP") including current protector with residual current 30 mA
- 25A/3/B supply cable circuit breaker
- 32A/3/B main house circuit breaker

! ATTENTION! IF YOUR MAIN CIRCUIT BREAKER IS 25A/3/B OR LOWER, WE DO NOT RECOMMEND THIS INSTALLATION!

THE STRENGTH OF THE SUPPLY CABLES PROVIDED CORRESPONDS TO THE DISTANCE OF THE POOL AND
HOUSE SWITCHBOARD UP TO 20M. IF THE DISTANCE IS LONGER, THE CABLE MUST BE OVERSIZED.

THE SUPPLY CABLE FROM THE HOUSE SWITCHBOARD TO THE TECHNOLOGY SHAFT MUST BE PROVIDED BY THE CUSTOMER BEFORE THE ORDERED COMPONENTS ARE DELIVERED. THE SUPPLIER DOES NOT PROVIDE THE CONNECTION OF THE SUPPLY CABLE FROM THE HOUSE SWITCHBOARD TO THE TECHNOLOGY SHAFT. THE SUPPLY CABLE MUST BE REVISED FOR THE CONNECTION TO THE TECHNOLOGY SHAFT. THE SUPPLIER DOES NOT PERFORM THE REVISION OF THE SUPPLY CABLE.

Counterflow pump cables

- CYSY 5 J x 1.5 cable from the counterflow pump to the electropneumatic switching
- CYA 6 ZŽ cable for HOP of the counterflow pumps
- CYKY 5 J x 2.5 cable from the electropneumatic switching of counterflow to the pool switchboard
- 10A/3/C circuit breaker in the pool switchboard

Cables for the filtration pump without pool water treatment (salt dispenser, UV lamp, ionizer)

- CYKY 3 J x 1.5 cable from the filtration pump to the pool switchboard
- 4A/1/C circuit breaker in the pool switchboard

Cables for the filtration pump with pool water treatment (salt dispenser, UV lamp, ionizer)

- CYKY 3 J x 1.5 cable from the filtration pump and the pool water treatment to the pool switchboard
- 6A/1/C circuit breaker in the pool switchboard

Electrical Wiring

11.

Cables for pool lights

- CYKY 3 J x 2.5 cable between light up to 50W and transformer for lights
- CYKY 2 J x 4 cable between light up to 100W and transformer for lights
- CYKY 2 J x 6 cable between light up to 300W and transformer for lights
- the circuit breaker in the pool switchboard for the light transformer is to be determined according to the final sum of the values (W) of the lights

Cables for the heat pump XHP/XHPFD 40-140

- CYKY 3 J x 2.5 cable between heat pump and pool switchboard
- 20A/1/C circuit breaker in pool switchboard

Cables for the heat pump XHP/XHPFD 200

- CYKY 3 J x 4 cable between heat pump and pool switchboard
- 20A/1/C circuit breaker in pool switchboard

Cables for heat exchanger

The cable to the temperature sensor between the pool switchboard and the heat source is provided by the heat source manufacturer. The control cable to the heat source is CYKY 5 J x 1.5.
The heat exchanger must be connected to the main protective connection (HOP).

Cables for electric heating

- CYSY 5 J x 2.5 cable for 3kW heating and 6A/3/B circuit breaker in pool switchboard
- CYSY 5 J x 2.5 cable for 6kW heating and 10A/3/B circuit breaker in pool switchboard
- CYSY 5 J x 2.5 cable for 9kW heating and 16A/3/B circuit breaker in pool switchboard
- CYSY 5 J x 4 cable for 12kW heating and 20A/3/B circuit breaker in pool switchboard
- CYSY 5 J x 4 cable for 15kW heating and 25A/3/B circuit breaker in pool switchboard
- CYSY 5 J x 6 cable for 18kW heating and 32A/3/B circuit breaker in pool switchboard

Metal parts

In pool technology, all metal parts must be connected to HOP CYA 6 or CY 6 ZŽ

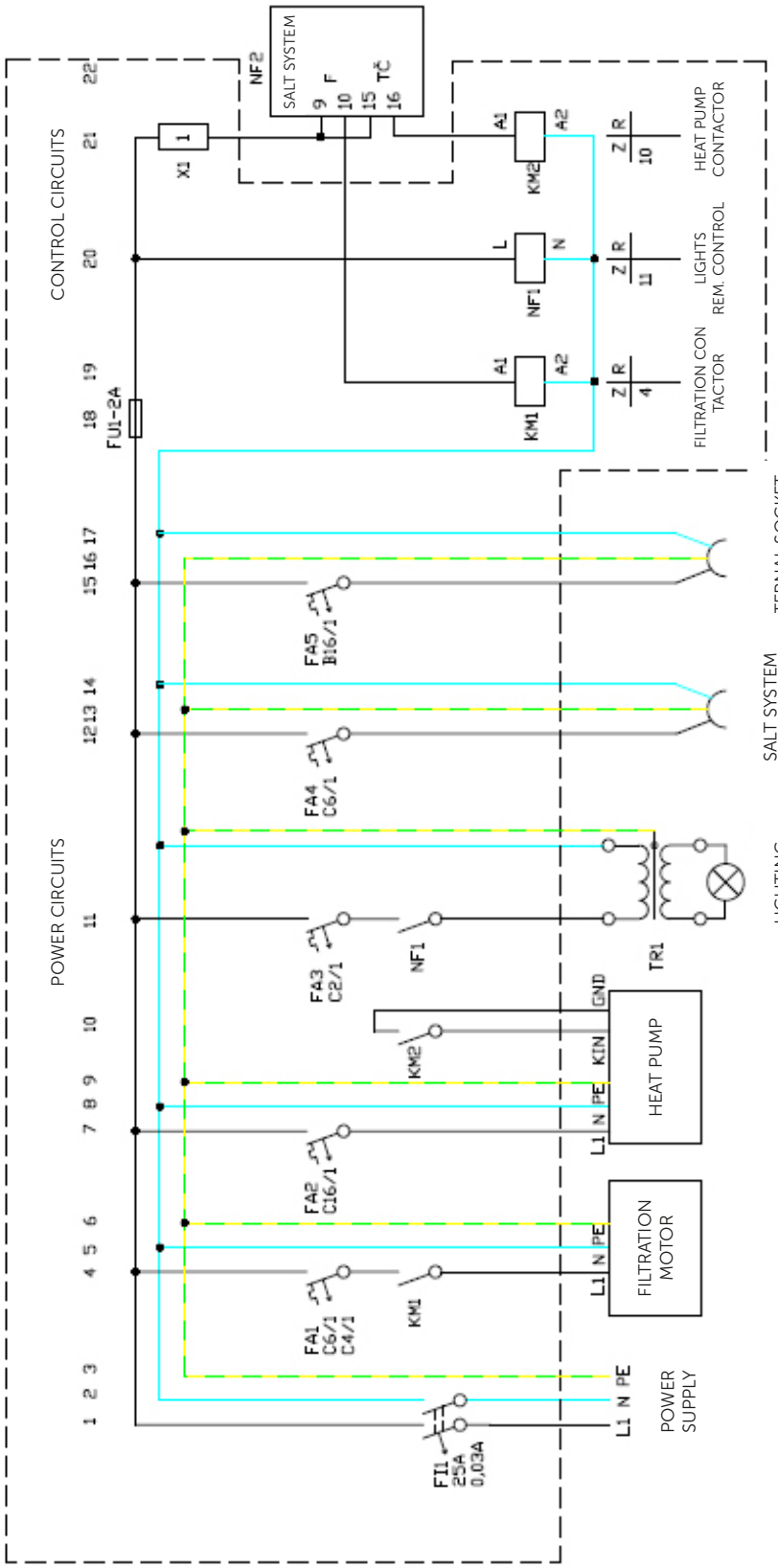
Metal pool steps and other metal components

When installing metal steps and other metal components, the connection to the HOP CYA or CY 6 ZŽ must be made, however always according to the relevant instructions for the given accessory.

SAFETY RECOMMENDATIONS

We recommend protecting the power supply circuit of the pool technology with a trip coil with a probe, which disconnects the power supply circuit when the shaft is flooded with water (up to max. 10 cm).

11. Electrical Wiring



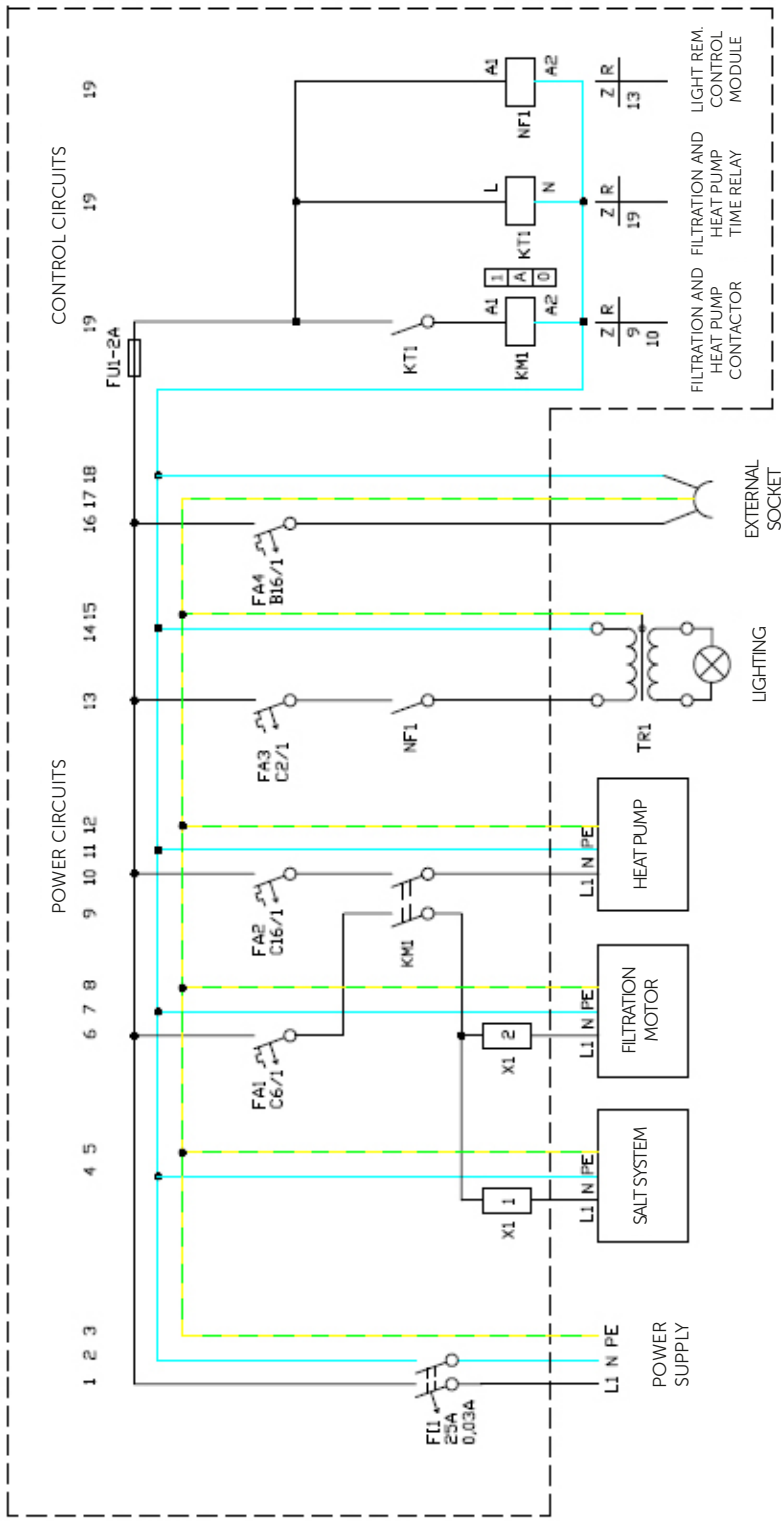
Device with programmed SALT SYSTEM

Drawn by: Jiří Ungr	Date: September 20, 2016	Title: Switchboard AO-2-E
Reviewed by: Jindřich Sobotka	Date: September 22, 2016	
Approved by: Daniel Rychvalský	Date: September 23, 2016	Type: F/SD/TČ/P/NaCl
ALBIXON a. s.		Number of sheets: 1 / Sheet no.: 1
Updated:	March 3, 2020	

Key
FI1 - circuit breaker 25/4/0.03
FA1 - filtration circuit breaker according to pump output C6/1, C4/1
KM1 - filtration contactor
FA2 - heat pump circuit breaker C16/1
KM2 - heat pump contactor
FA3 - counterflow circuit breaker C2/1
FA4 - lighting transformer circuit breaker C6/1
TR1 - safety transformer 230V/12V
FU1 - fuse insert 2A
NF1 - light remote control
NF2 - salt system control unit
FA5 - socket breaker - salt system B16/1
XI-1 salt system power supply terminal

Electrical Wiring

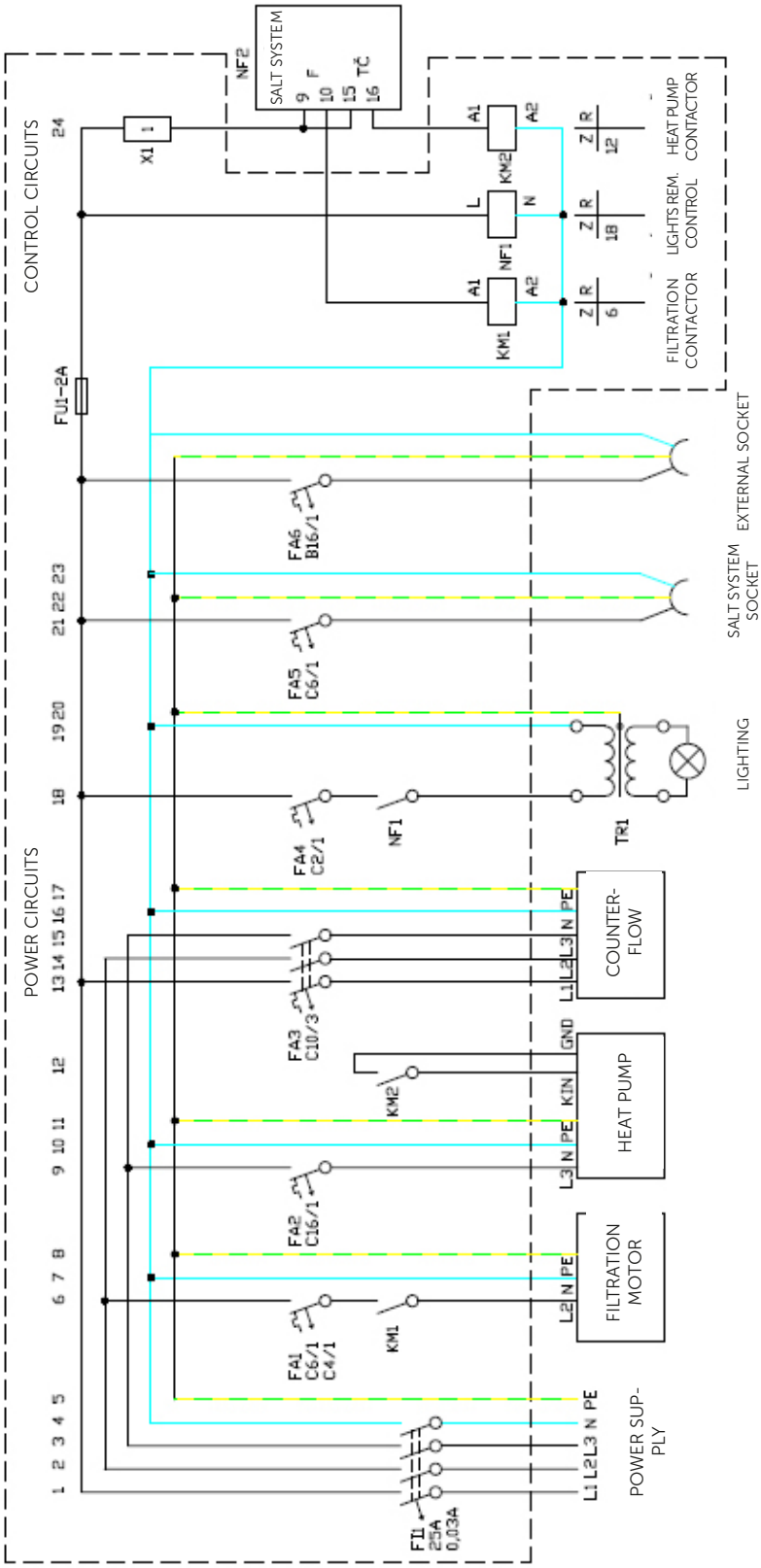
11.



Drawn by: Jiří Ungr	Date: September 22, 2016	Title: Switchboard AO-1 a	
Reviewed by: Jindřich Sobotka	Date: September 25, 2016		
Approved by: Daniel Rychvalský	Date: September 26, 2016	Type: F/SD/TČ/P/NaCl	
ALBIXON a. s.		Number of sheets: 1	Sheet no.: 1
Updated:	March 4, 2020		

Key
FI1 - circuit breaker 25/2/0.03
FA1 - filtration circuit breaker according to pump output C6/1
KM1 - salt system and filtration contactor
FA2 - heat pump circuit breaker C16/1
FA3 - lighting transformer circuit breaker C2/1
FA4 - external socket breaker B16/1
TR1 - safety transformer 230V/12V
FU1 - fuse insert 2A
KT1 – filtration and heat pump timing relay
NF1 - light remote control
X1-1 salt system power supply terminal
X1-2 filtration motor power supply terminal

11. Electrical Wiring



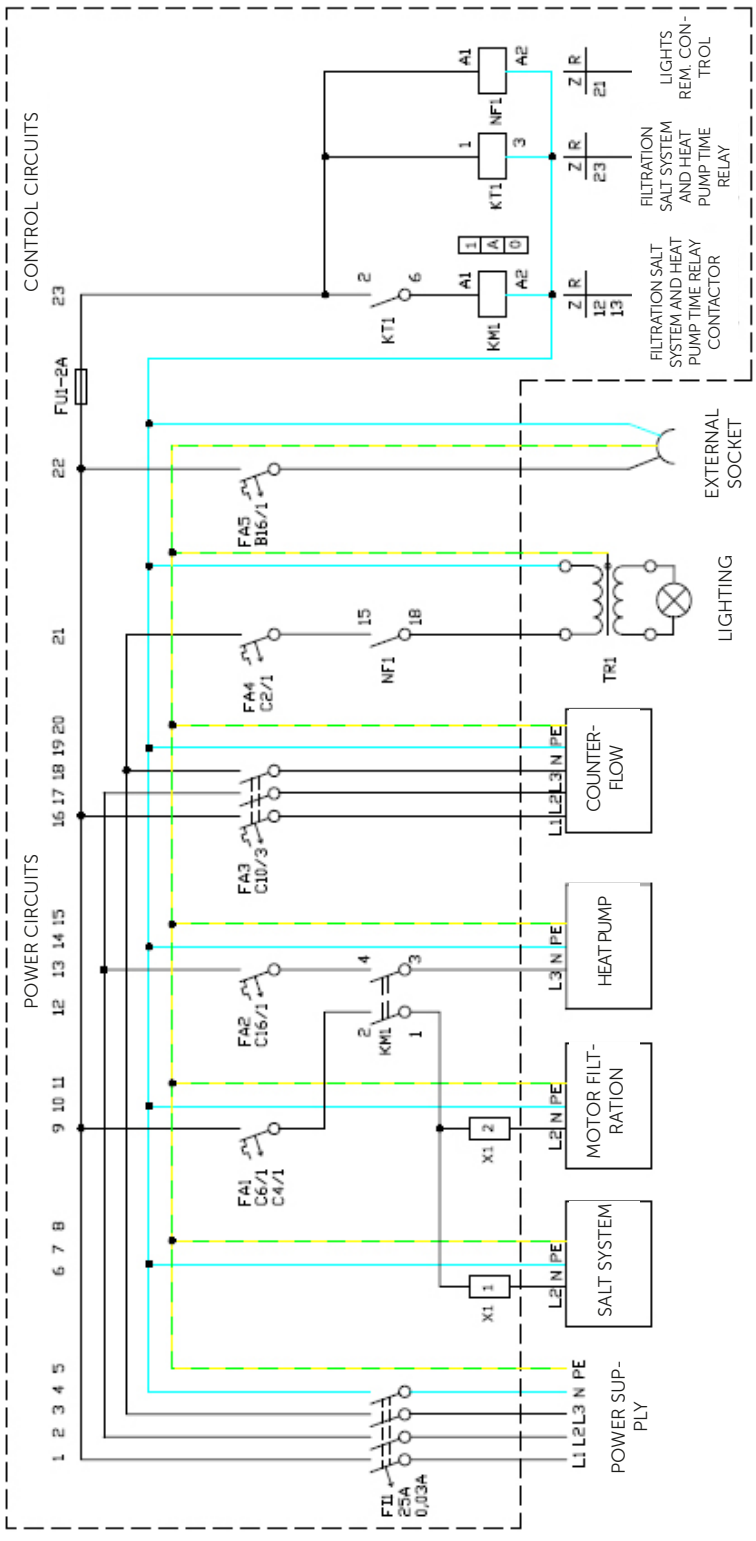
Device with programmed SALT SYSTEM

Drawn by: Jiří Ungr	Date: September 20, 2016	Title: Switchboard AO-2-D
Reviewed by: Jindřich Sobotka	Date: September 22, 2016	
Approved by: Daniel Rychvalský	Date: September 23, 2016	Type: F/SD/TČ/P/NaCl
ALBIXON a. s.		Number of sheets: 1 / Sheet no.: 1
Updated:	March 3, 2020	

Key
FI1 - circuit breaker 25/4/0.03
FA1 - filtration circuit breaker according to pump output C6/1, C4/1
KM1 - filtration contactor
FA2 - heat pump circuit breaker C16/1
FA3 - counterflow circuit breaker C10/3
KM2 - heat pump contactor
FA4 - lighting transformer circuit breaker C2/1
FA5 - socket breaker - salt system C6/1
TR1 - safety transformer 230V/12V
FU1 - fuse insert 2A
NF1 - light remote control
NF2 - salt system control unit
FA6 - external socket breaker B16/1
XI-1 salt system power supply terminal

Electrical Wiring

11.



Drawn by: Jiří Ungr	Date: September 20, 2016	Title: Switchboard AO-2-C	
Reviewed by: Jindřich Sobotka	Date: September 22, 2016		
Approved by: Daniel Rychvalský	Date: September 23, 2016	Type: F/SD/TČ/P/NaCl	
ALBIXON a. s.		Number of sheets: 1	Sheet no.: 1
Updated:	March 5, 2020		

Key
FI1 - circuit breaker 25/4/0.03
FA1 - filtration circuit breaker according to pump output C6/1, C4/1
KM1 - filtration, salt system and heat pump contactor
FA2 - heat pump circuit breaker C16/1
FA3 - counterflow circuit breaker C10/3
FA4 - lighting transformer circuit breaker C2/1
TR1 - safety transformer 230V/12V
FA5 - external socket breaker B16/1
FU1 - fuse insert 2A
KM1 - filtration, salt system and heat pump contactor
KT1 – salt system, filtration and heat pump relay timer
NF1 - light remote control
XI-1 salt system power supply terminal
X1-2 filtration motor power supply terminal

Thank you
for using the products
by ALBIXON

ALBIXON

Call centre: 477 07 07 11

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