



Pool Dealer Installation manual





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Before you start, please consider the following:- Luxe Pools are designed to be used for Swimming and bathing in a domestic environment. The pool should be filled with water from the mains water supply (drinking water quality). This manual has been written and published for Professional Swimming Pool builder only. All electrical works should also be carried out by a qualified and registered electrician.

Pool Shell - All Luxe Pools are made of fibreglass reinforced polyester to form a waterproof shell. There is a certain amount of flexibility within the pool that is dependant on upon design and size, Stability is obtained fully only through the backfilling process.

Location - Luxe Pools should be installed in the correct environment. If ground conditions are unstable seek advise from building specialist.

Landscape - Ideally, the pool site should be flat to minimise extra work load. If installing on sloping ground make sure that the pool structure will be fully supported by use of retaining wall and suitable backfilling etc.

Sunshine - Locate the pool in sunny position of the garden or that is exposed to the maximum number of direct sunlight hours.

Services - care should be taken to avoid above and below ground services such as electrical, gas, drainage, telephone, sewage pipes etc. Check with local authority for additional information.

Plant Room - a suitable location for the filtration plant is also required and must be sited near the pool structure to minimise heat lost and water flow efficiency.

DPC - if the pool is to be installed close to a private dwelling it is advisable to install the pool below the damp proof course level.

Drainage - adequate drainage system must be installed even if ground conditions are found to be stable upon excavation (not applicable to chalk or high elevated locations).

Permissions - Prior to installing the pool make sure that you have the correct planning permission (if applicable) in place, please check with your local authority.

Site Access - Before excavation, determine the exact location of the pool. Make there is enough space to bring the pool into your garden. There has to be approach road wide enough, and possibility for crane to load the pool into a prepared place. The width of the hole has to be 300 mm wider then width of the external walls of the pool. The depth of the hole has to meet depth dimensions as detailed in the excavation drawings



Excavation

The objective of the excavation is to dig a hole for swimming pool shell. Any over digging can have a significant impact on the stability of the swimming pool if not back-filled correctly and will also incur additional expense. Therefore, please follow the dimensions carefully. **Use the pool dimensions supplied separately by manufacturer.**

When marking out the Swimming Pool position **add 600mm** to pool length and width. The overdig allows for backfilling and working trench.

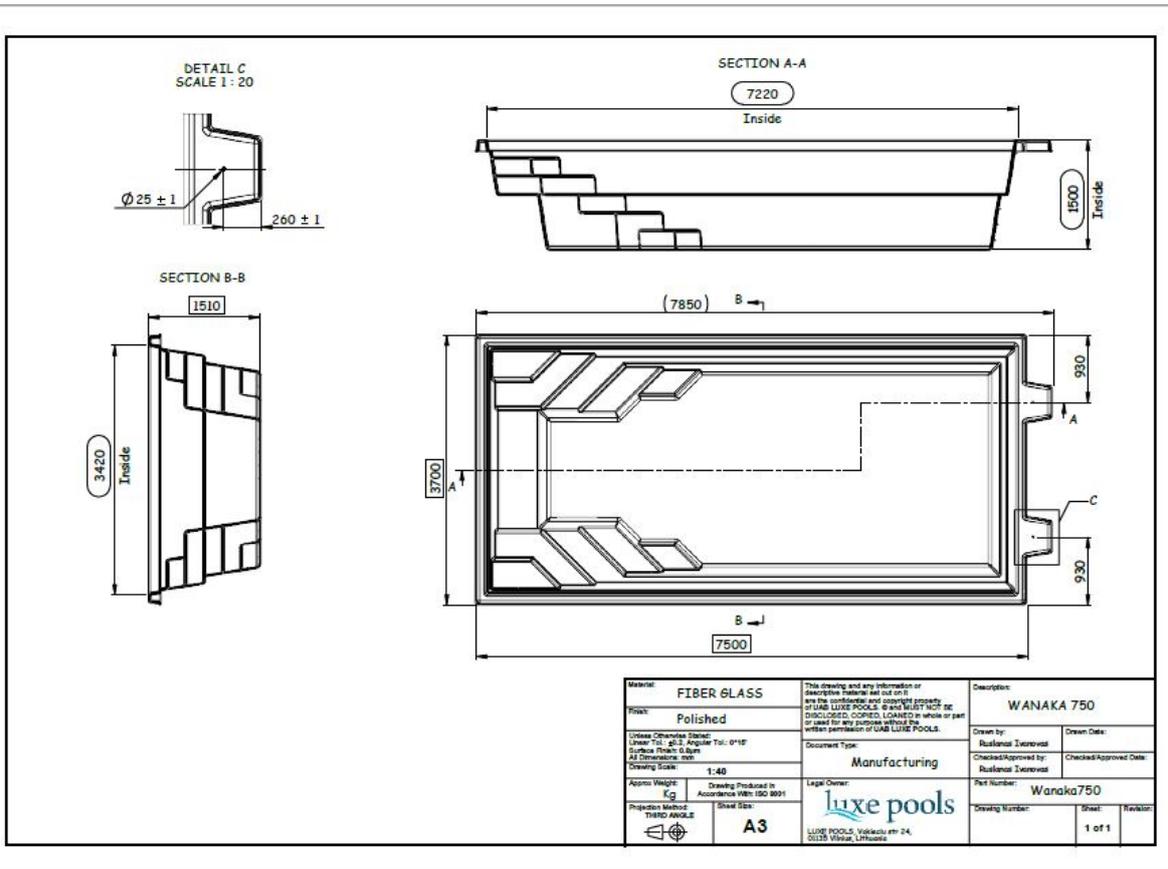
IMPORTANT NOTE! If additional sprayed insulation (50mm) or extruded foam boards (100mm) is to be applied to pool shell please make the necessary adjustments to the excavation measurements.

It is not recommended to install swimming pool on made-up ground (less than 3 years ago), otherwise there is a risk of sinking. If the installation location is on a natural slope, it is necessary to install a platform and retaining walls. Before commencing installation soil conditions must be stabilised; this work should be performed by specialists.

Swimming pool must be installed on a stable, sufficient load-bearing capacity soil.

Pool Size

Due to expansion and contraction in the manufacturing process the pool is not made to an exact measurement. The pool shell is released from a custom-made mould and contraction may occur resulting in the overall pool length or width being effected by 5-15mm.



Example - Specified drawing to be supplied by Luxe

SITE PROCEDURES

INSTALLATION, MARKING, LEVEL POINTS

Before starting installation, it is important to accurately define boundaries of the swimming pool installation (location, height adjustment) and carefully note them in the installation agreement documentation signed and stamped by both parties (client and contractor).

Make sure that there is no gas, electricity, telephone, irrigation or drainage network on the site.

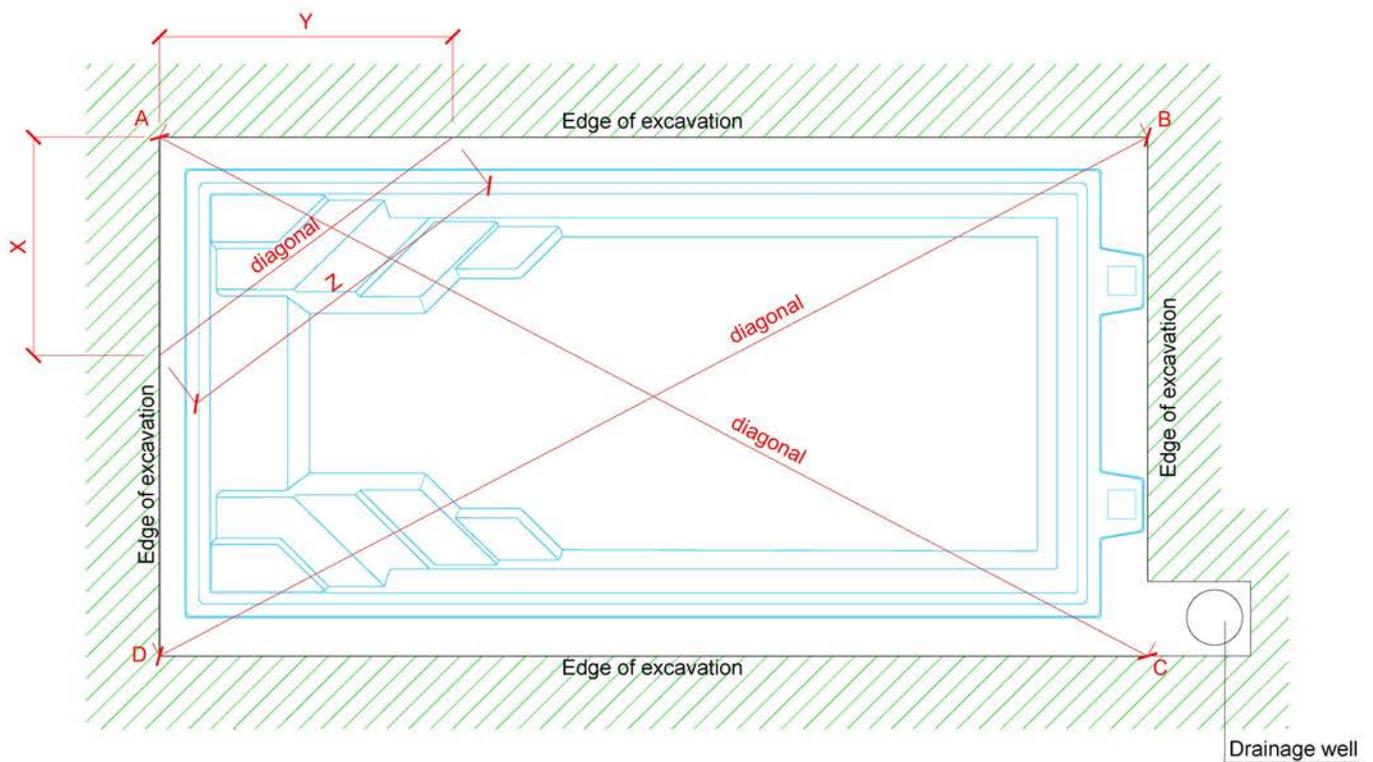
ZERO POINT (0)

Zero point (0) is the starting point; it meets completed work height measurement point. It is used to determine the level of the swimming pool. Zero point is the starting point for the whole duration of the project; use a stationary reference (on the building or on support pole outside of access area).



MARKING

Using the measurement table on page 6 mark out the appropriate shape of the pool.



DIAGONALS

It is important to make sure pool is marked out square using the following diagonal formular.

- Locate the point on the distance of **Y** metres from the corner A of a peripheral AB
- Locate the point on the distance of **X** metres from the corner A of a peripheral AD
- Measure the distance between 2 located points; it must be equal to **Z** metres (if the amount received is greater, repeat marking)

Triangle diagonal: $X^2 + Y^2 = Z^2$

Excavation borders

Model	Squareness checking			Dig dimensions		Hole depth, m
	X	Y	Z	AB/DC	AD/BC	
KORO	1.62	2.00	2.57	5.60	3.25	1.78
TOBA	1.80	2.00	2.70	6.60	3.60	1.83
LUGANO	2.15	2.00	2.93	8.25	4.30	1.88
ANDAMAN	2.05	2.00	2.86	8.80	4.10	1.93
GARDA 800	2.15	2.00	2.93	8.60	4.30	1.88
GARDA 950	2.15	2.00	2.93	10.10	4.30	1.88
WANAKA 650	1.95	2.00	2.80	7.10	3.90	1.88
WANAKA 750	2.15	2.00	2.93	8.10	4.30	1.88
WANAKA 850	2.15	2.00	2.93	9.10	4.30	1.88
WANAKA 1000	2.15	2.00	2.93	10.60	4.30	1.88
DOVE 670	1.80	2.00	2.70	7.00	3.60	1.76
DOVE 670 overflow	1.95	2.00	2.80	7.30	3.90	1.91*

*Including 15cm concrete base

Model	distance between supports	Number of Internal Brace Supports
KORO	1.20	3
TOBA	1.40	3
LUGANO	2.00	3
ANDAMAN	2.00	3
GARDA 800	1.60	3
GARDA 950	1.70	4
WANAKA 650	1.60	3
WANAKA 750	1.60	3
WANAKA 850	1.90	3
WANAKA 1000	2.00	4
DOVE 670	1.60	3
DOVE 670 overflow	1.60	3

NOTES

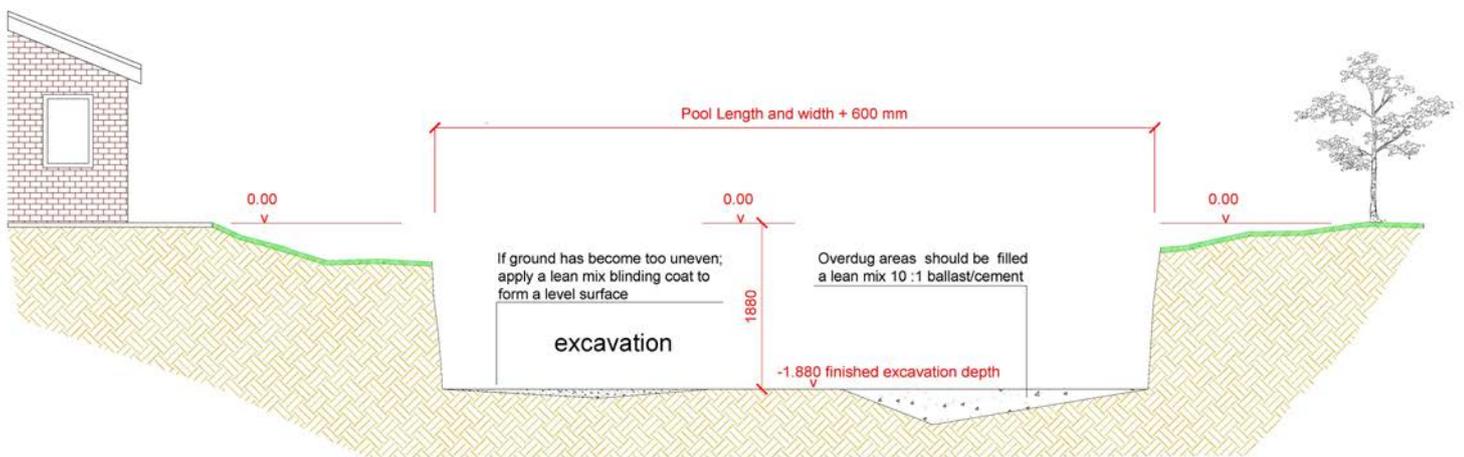
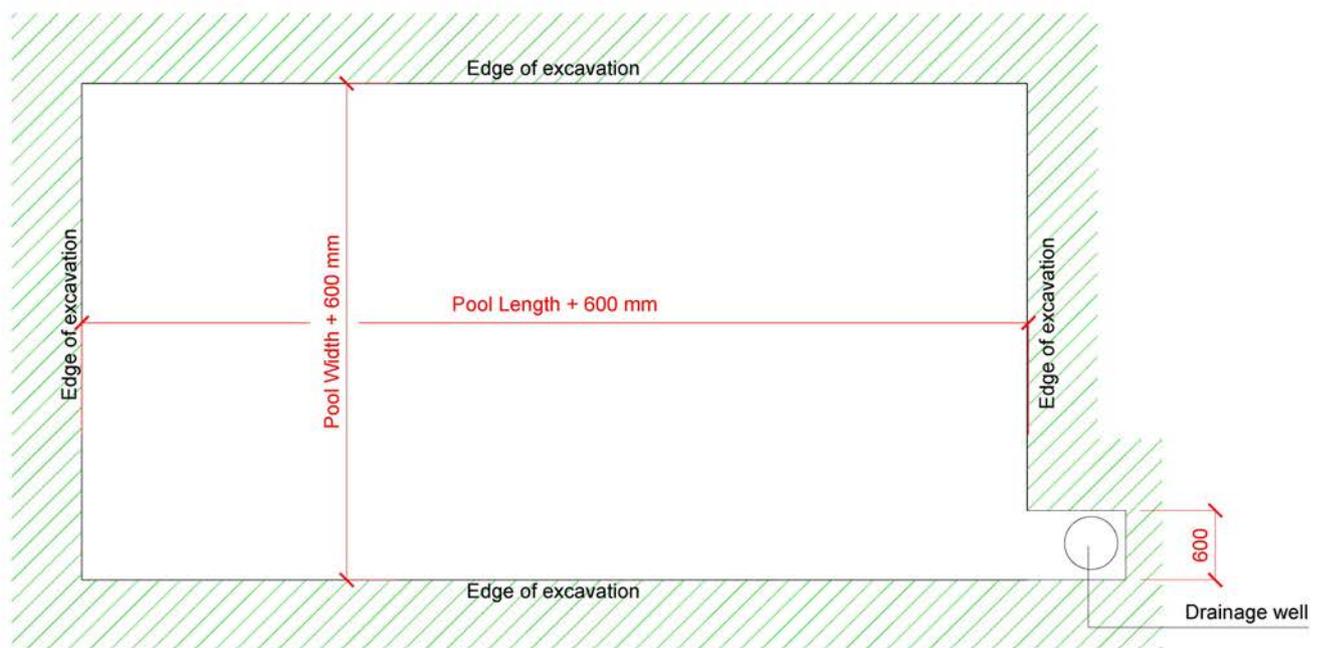
Excavation Continued

Once the excavation has been completed by a mechanical digger it will be necessary to trim and remove all loose spoil, stone or clay by hand, failure to do this may result in the pool shell being deformed or damaged.

If certain areas of the pool are over dug **it is imperative that any voids are not filled** with loose soil (even if compacted with a mechanical digger). All voids should be filled with a lean mix comprising of 10:1 Ballast/Cement.

Once ground has been excavated, do not leave exposed to the elements for a long period of time as inclement weather may undermined the sides walls and extensive and costly shuttering may need to be put in place.

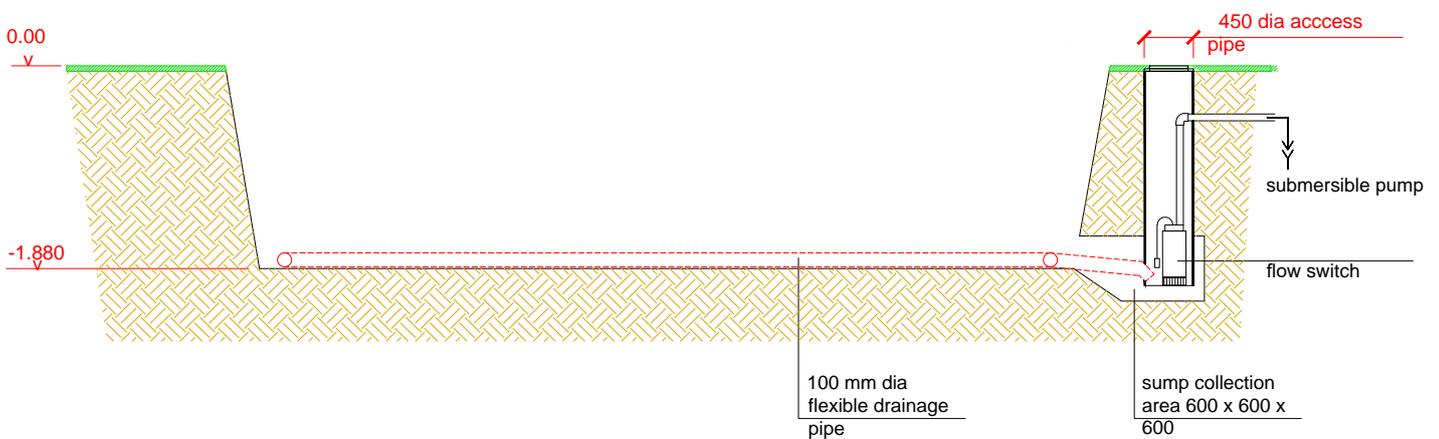
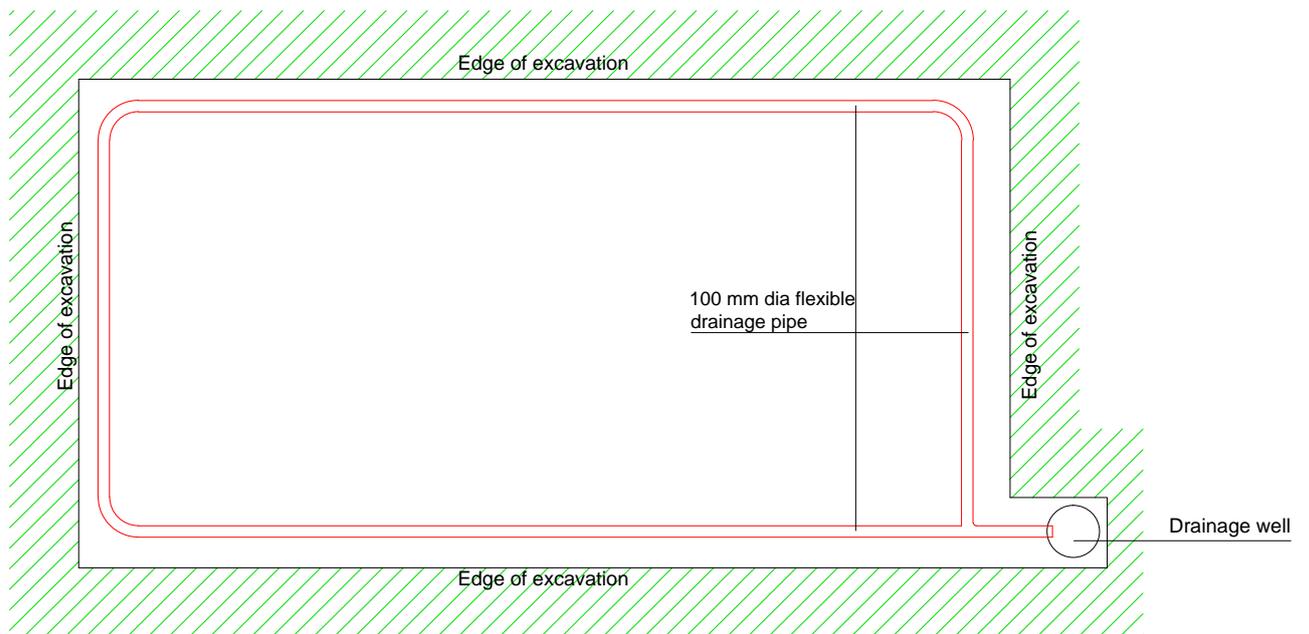
Regardless whether you have water present or not after excavation, **a suitable drainage system must be put in place** (see below), unless the pool is sited in chalk or in an elevated position.



Drainage

It is important to make sure that water can drain freely away from the pool structure and removed via a natural drain off point or removed by mechanical means (submersible pump). To aid drainage and control water flow, a 'flexible drainage pipe' must be installed within the 350mm pea shingle base and positioned around the perimeter edge.

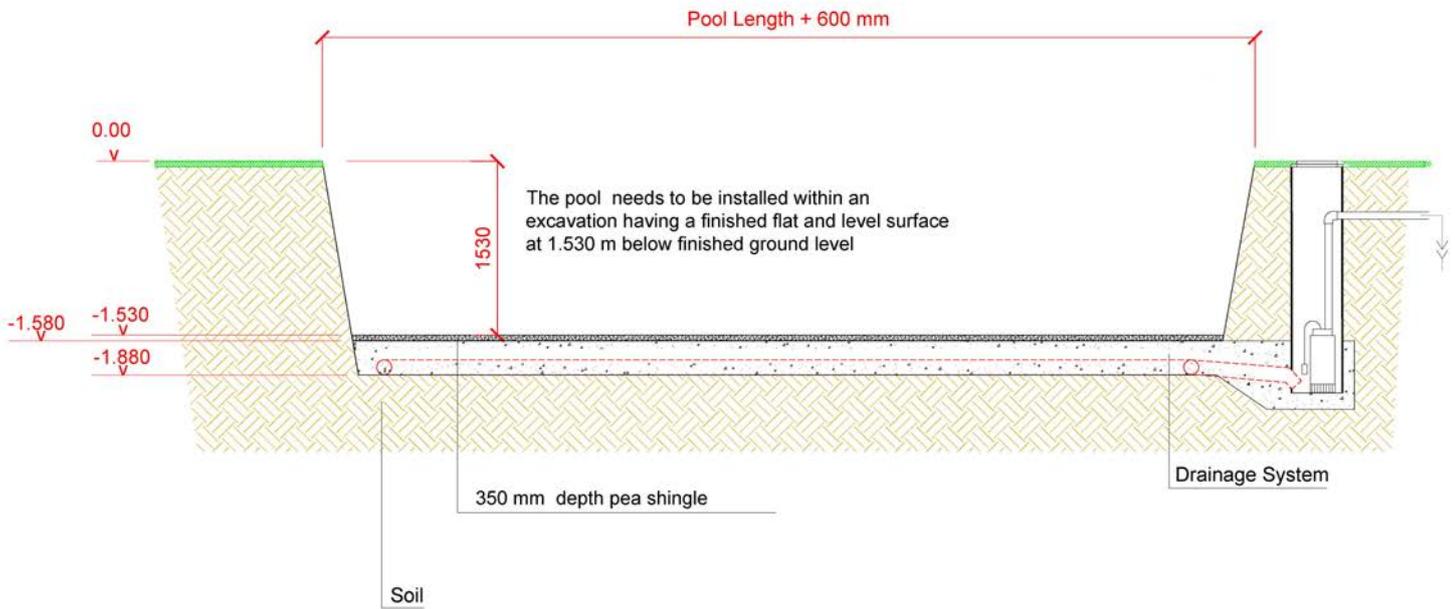
At one corner of the pool terminate the flexible drainage pipe into a sump collection area (600 x 600 x 600mm) where the water can be collected and removed by submersible pump (with float switch). Install a 450mm diameter drain pipe to house and retrieve the sub-mersible pipe. Note; only install submersible pump with an inbuilt flow-switch. Test and check periodically.



Floor Preparation

Once a suitable (drainage) base has been established apply 350mm depth of **10mm washed pea shingle** tamped down firmly . Failure to install a drainage system may invalidate your warranty.

It is **imperative that the floor is finished level** Failure to do so will result in the waterline being out of level. A suitable tolerance for this type of pool structure is +/- 10/15mm.



Delivery All Luxe pools over 6m are delivered on their own transport utilising an low level 8m trailer and transit van.

As Luxe deliver throughout Europe, two pools may arrive on the trailer. As per Luxe's terms and conditions of sale, both pools may need to be offloaded and the remaining unused pool replaced back on the trailer. Please make sure your crane operator is made aware of this.



Lifting & Placing Lifting points are factory welded to the side of the pool. If the pool is to be placed on ground floor prior to dropping into position, car tyres should be used to support and protect the pool edge .



Lifting Points

Tyre Protection



Crane Delivery

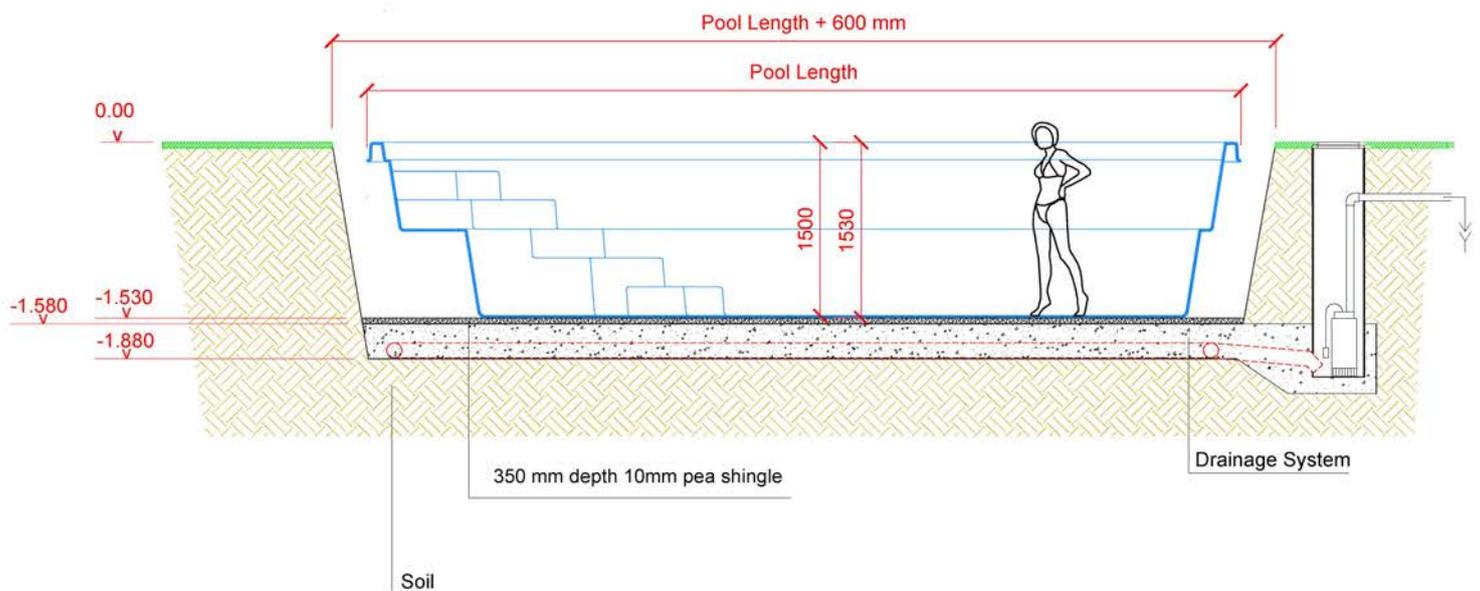


Multi-terrain Forklift(s) can be used for restricted access

Installation

Prior to the pool shell being lowered on to the pool floor make sure any foreign objects that could puncture the pool shell are removed. Lower the pool shell on to the prepared base. Once the pool has settled onto the pool floor and the attaching support harnesses are slack - check that the pool is level.

A suitable 'level' tolerance for this type of pool structure is +/- 10/15mm. In the event that the pool is out of (unacceptable) level make the necessary changes to address the issues that are creating the problem. Make sure that the bottom of swimming pool is in full contact with the ground with its entire surface AT ALL TIMES. Failure to do so may result in the gelcoat layer cracking under water pressure. .

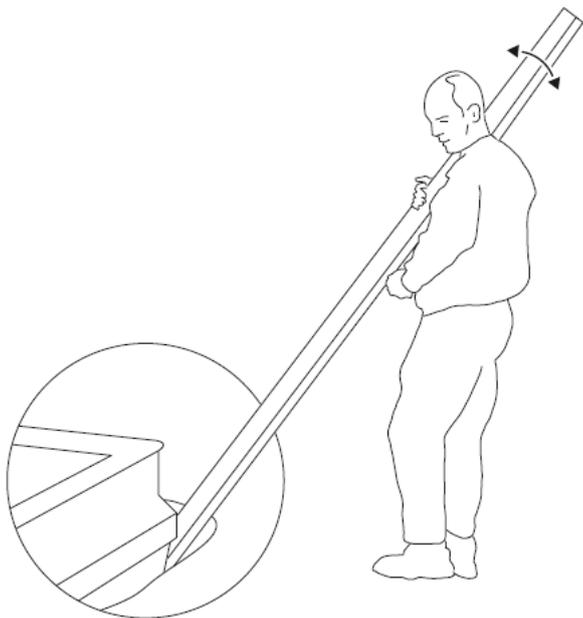
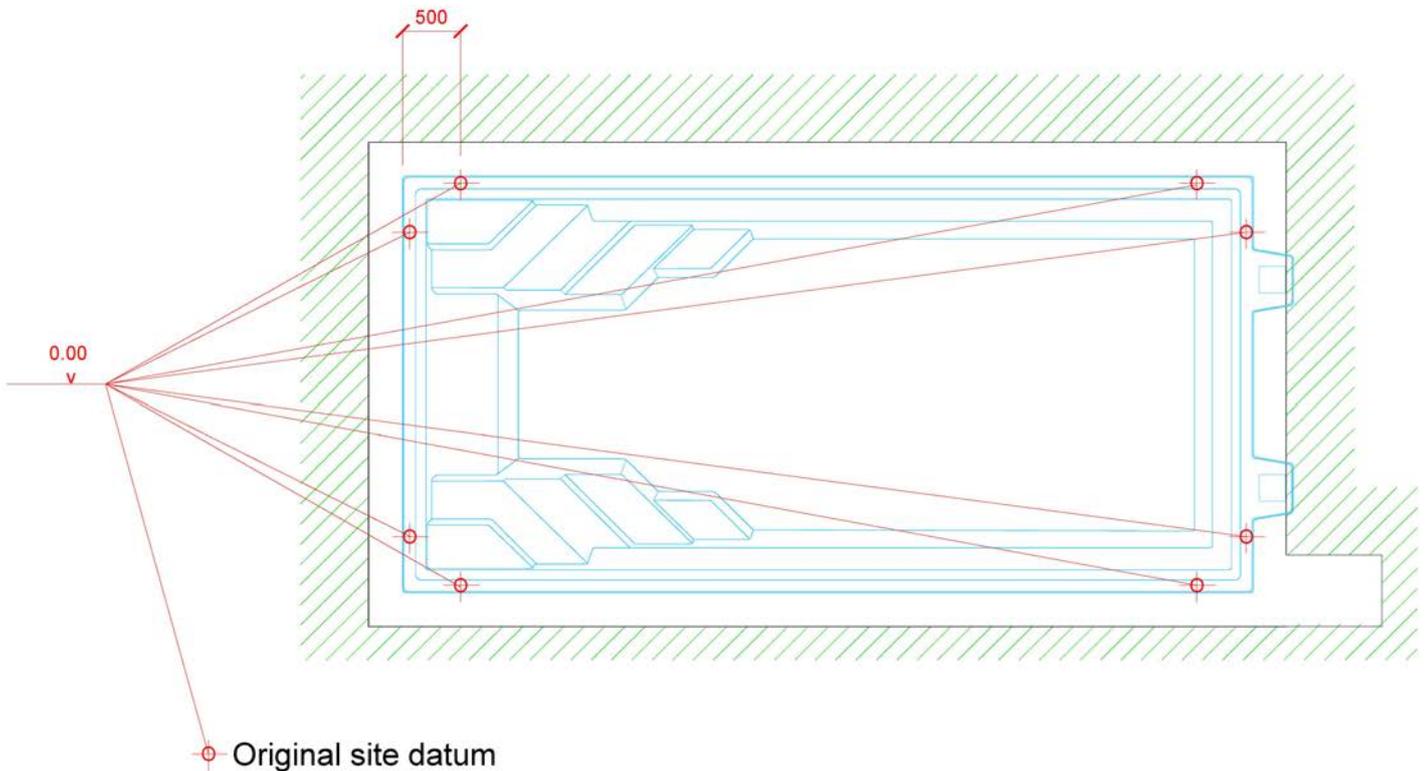


Cont. p12

Installation Contined..

Minor adjustments can be made when the pool is in situ. For example if one or two corners are out of level by 7mm use 100 x 50mm sawn timber (positioned under top flange) to brace or uplift the pool into the correct position. If the pool is excessively out of level i.e. 20mm + the should be lifted and the cause of the problem rectified. If level difference from 1 to 2 centimetres appears, press and jump on the inclined side edges of the highest point, to make the pool completely sits on the ground.

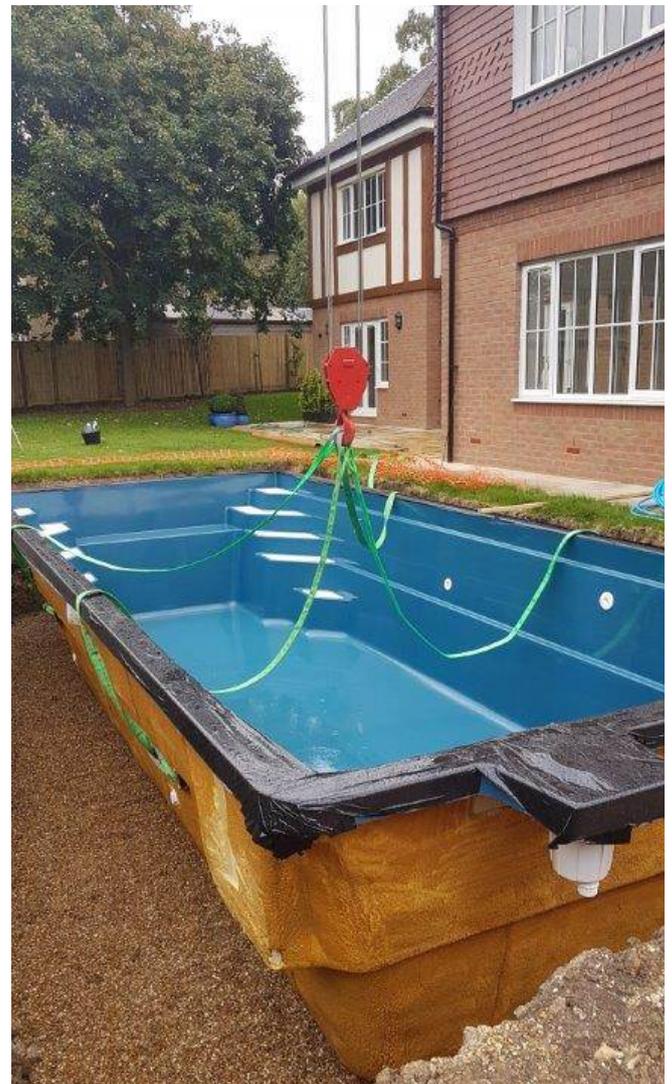
Tip - if possible, insert pool fittings that are difficult to access prior to lowering shell in the hole - see page 12.



- To lower corner, stamp your feet or jump on the edge of the swimming pool.
- To raise the corner, use wooden rafters as a lever to uplift and pack under the base.

Wall Fittings and Pipe Run

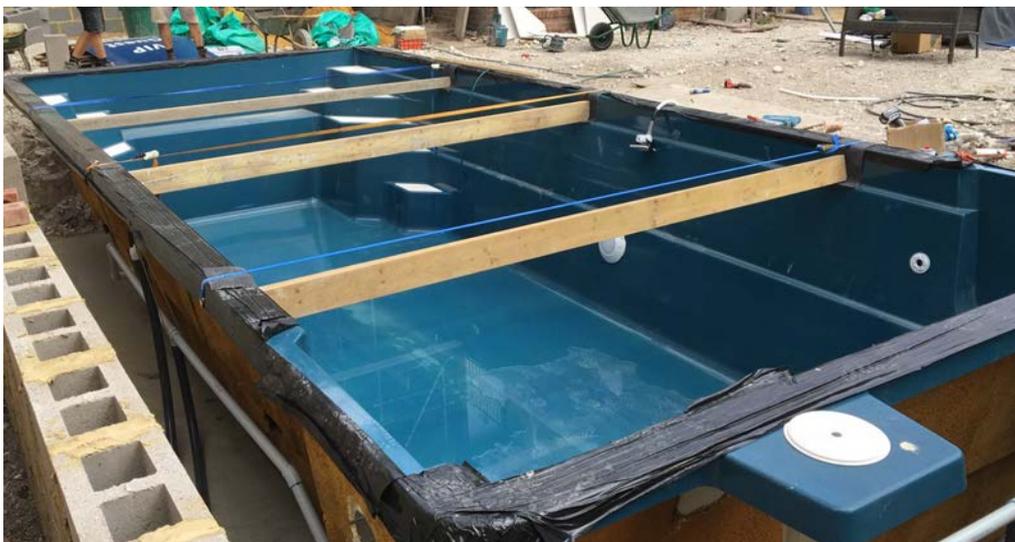
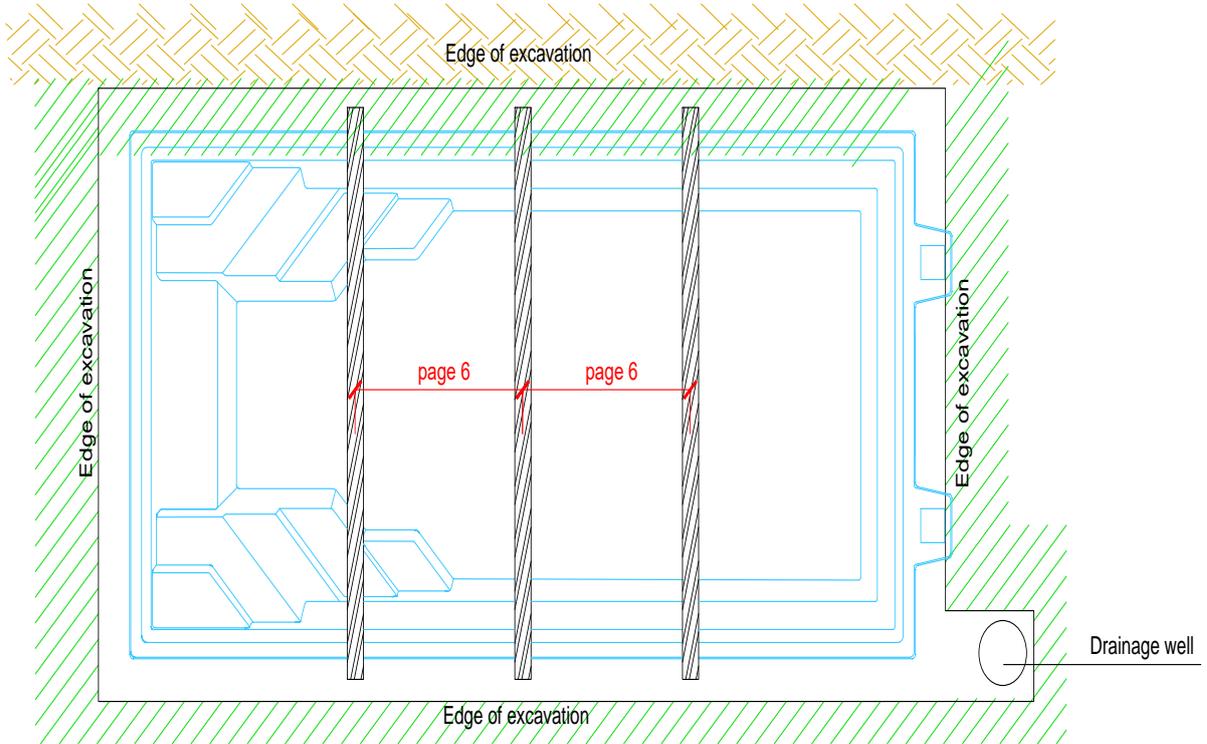
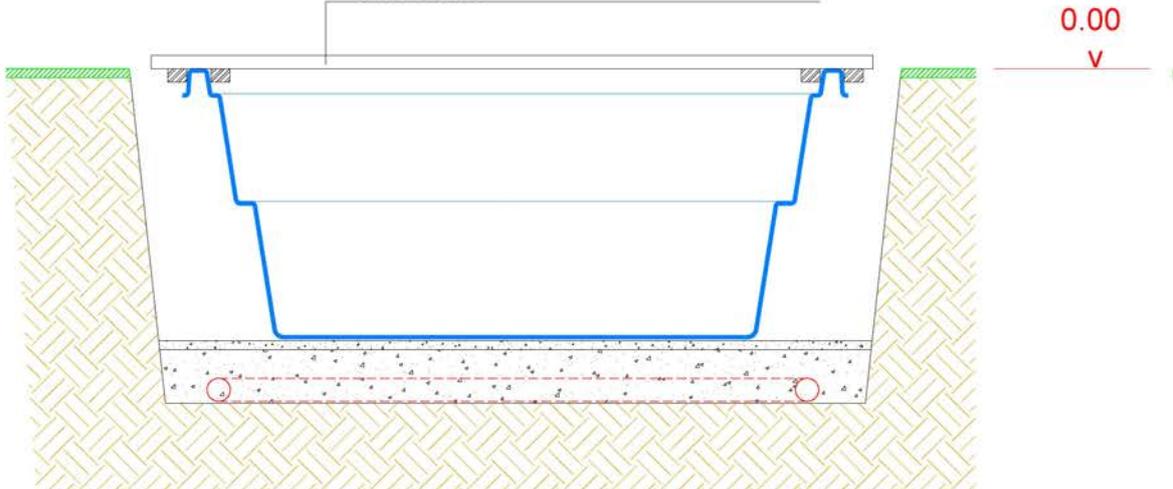
Prior to backfilling, install and connect all white goods (to manufacturers specification) i.e. Skimmer(s), Inlet & Suction fittings Lights etc. Run flexible of rigid pipe back to plant room. We advise testing all plumbing lines for leakage prior to backfilling. **Skimmer Throat** needs to be set at the same angle as the pool wall. Use Skimmer adjustment wedge to obtain this



Internal Brace Supports

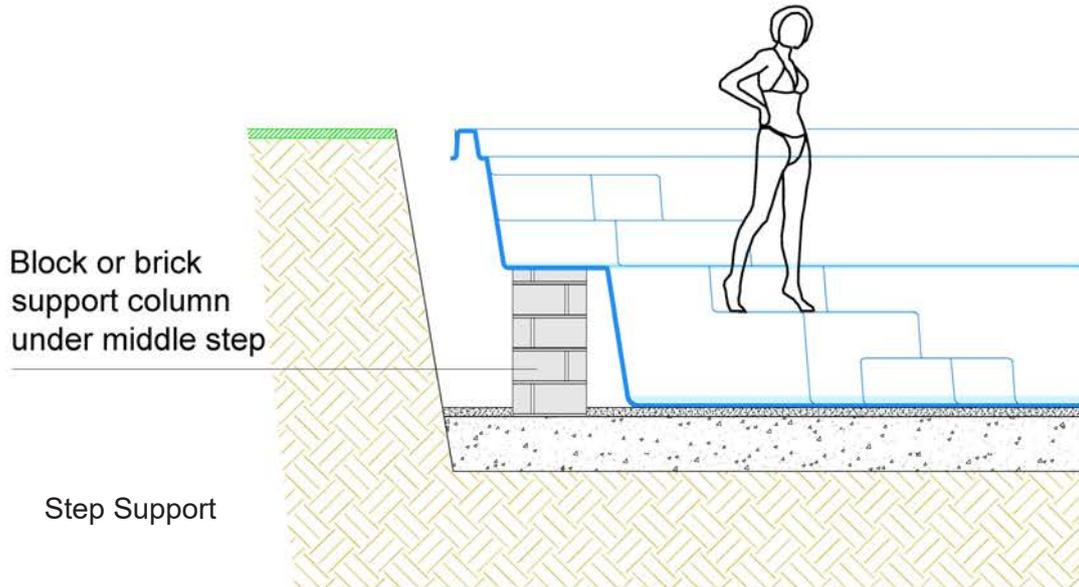
To avoid pool shell deformation it is imperative to install temporary internal brace supports across the width of the pool REFER TO PAGE 6 as shown below. These can be made using sawn timber. Do not remove until pool has been fully backfilled.

Timber struts temporarily located across pool whilst filling the exterior with stone



Step Support

An additional brick, block or reinforced concrete column is required to support the middle step on models **Toba, Andaman & Garda**. We recommend using a strong a 6:1 Concrete (wet) mix when backfilling is commenced. If LED light(s) have been installed into the step or seat area make sure that adequate conduit has been installed behind the fitting(s).



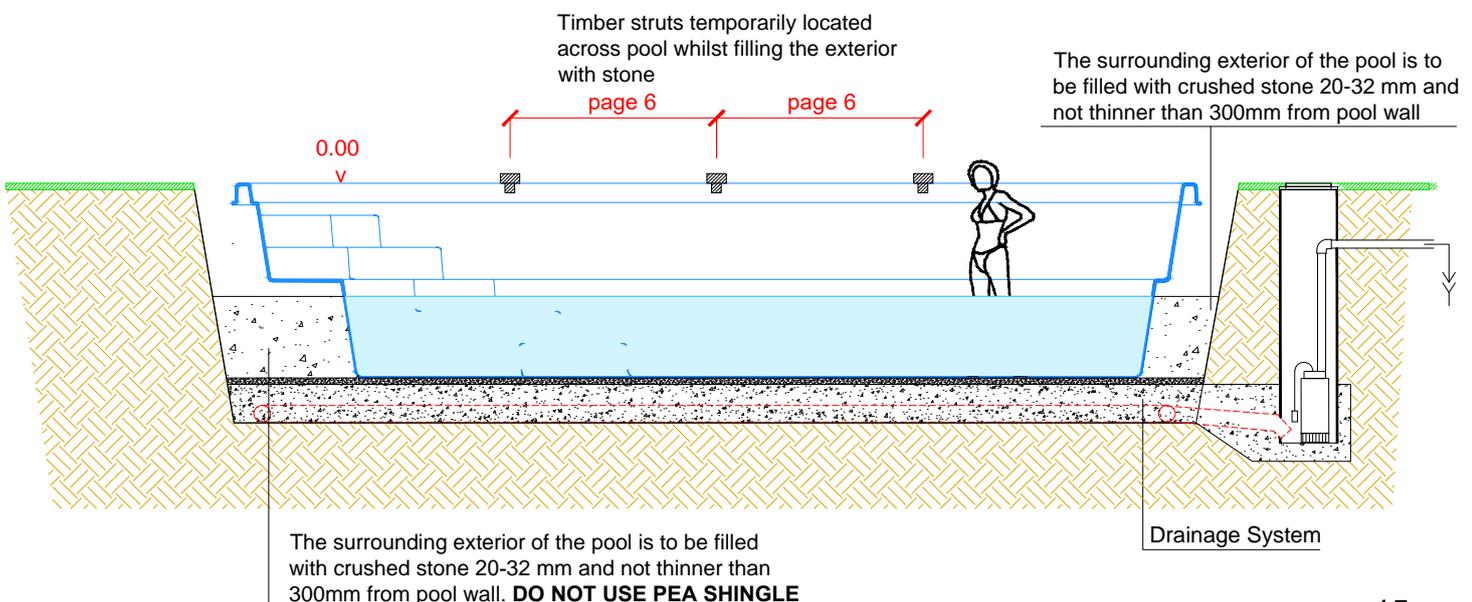
Backfilling

When the pool is fixed at the correct level, begin to fill it with water up to the first step to stabilise pool shell. **DO NOT GO ABOVE THIS HEIGHT!**

Using 20mm stone or concrete lean mix (NOT Peas shingle), it is important to make sure that the backfill is placed evenly and gently around the perimeter of the pool.

Do not be tempted to use pumped/sprayed concrete as this method may distort the pool shell. Do not use a mechanical tamping machine to tamp down the concrete. Apply foot pressure only. Do not use a vibrating machine to compact backfill.

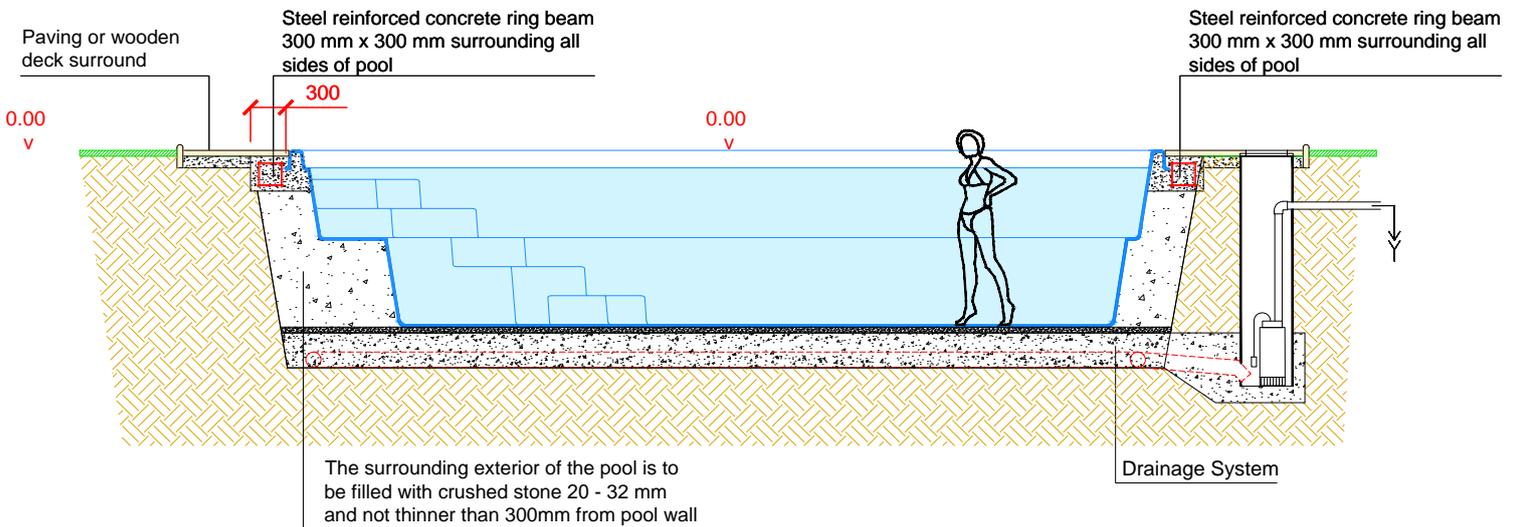
Care should be taken when backfilling around plumbing lines. **Backfill at 150mm intervals making sure water level is no higher than 150mm above backfill at any one time.** This will ensure that there is an equilibrium of pressure when backfilling. If the water level and backfilling level are maintained throughout the backfilling it will ensure that the pool shell will not be distorted. Failure to add water when backfilling may effect your warranty.



Ringbeam

Once backfill has commenced a 300 x 300mm concrete ring beam is required on all four sides of the pool. The ringbeam can be further extended to support paving/, tile, wood decking etc.

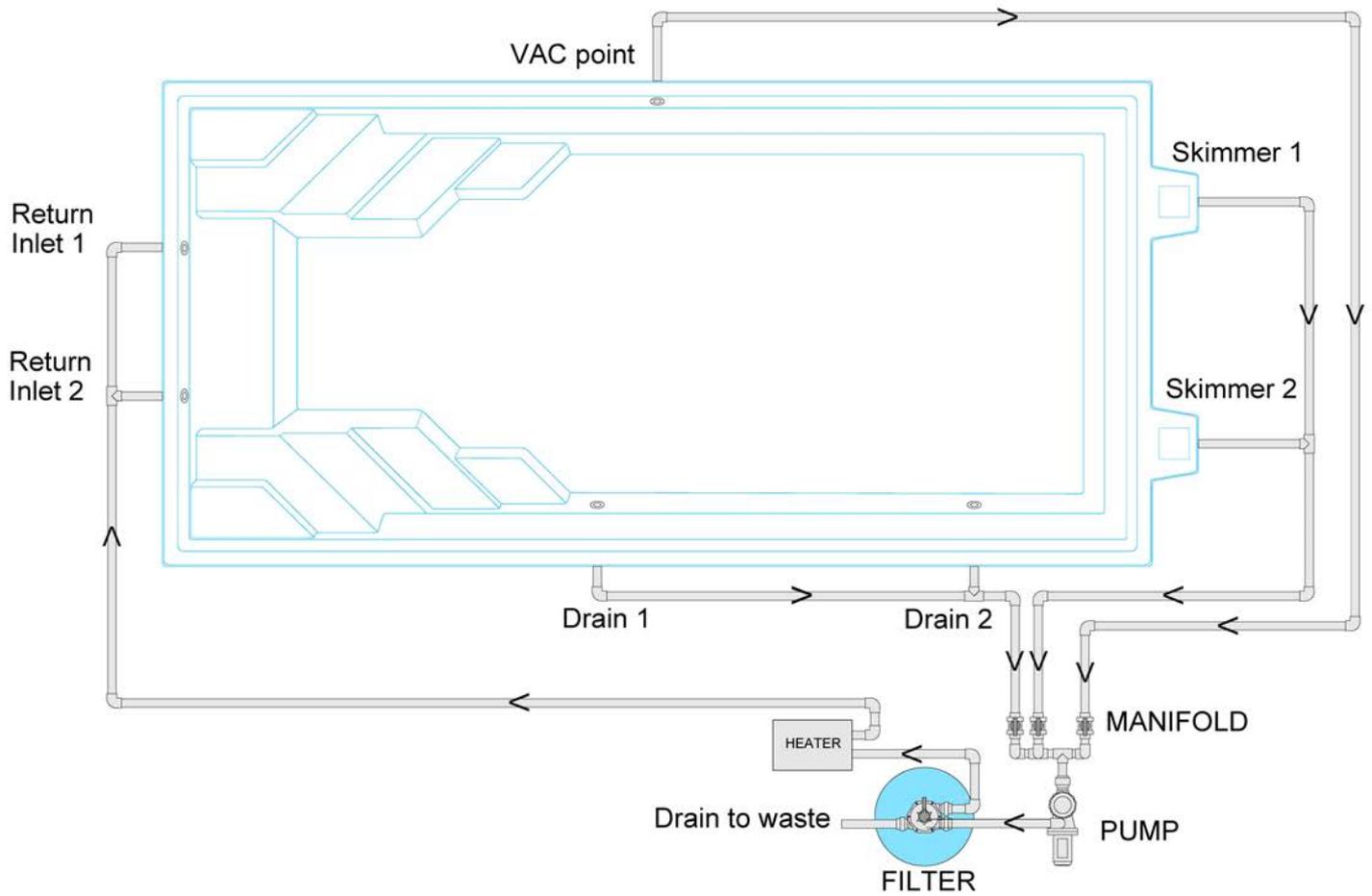
Only remove internal support bracing after concrete ring beam has been applied.



Plumbing Schematic - Example

All Luxe pools are supplied with a 50m metric 63mm flexible pipe kit. For ease of illustration standard, rigid pipe has been used in diagram below.

It is advisable to have metric to imperial conversion adapters to source extra pipe and fittings locally. If adding ABS rigid pipe it is very important to use ABS/PVC Glue.



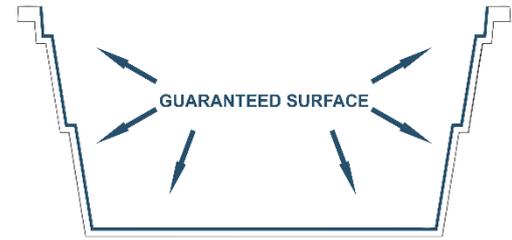
LUXE POOLS warranty

Pool Shell - Impermeability

Manufacturer warrants **the pool shell will hold water** for 20 years. Structural failure shall be defined as water loss due fracture or crack and did **not come from other than manufacturer's workmanship or used materials** as long as the original buyer owns the pool.

Pool Shell Surface - Osmosis

Manufacturer provides 10 years warranty against osmotic blistering for the submerged surface of the pool and formations of blisters for as long as the original buyer owns the pool. Surface guarantee does not cover horizontal surface of the pool beam or the upper and outer pool edge.



The warranties above are applied to the pool **providing the** following conditions are met:

Luxe Pools must receive a written notice of the defect from the original buyer within the warranty period.

The original buyer/**dealer** installed the pool shell **as shown in the Luxe** installation **instruction** manual.

The pool remains full of water all the time. **THE POOL IS DESIGNED TO REMAIN FULL OF WATER AT ALL TIMES.**

The pool is serviced and inspected annually by a LUXE Pools certified **dealer**/installer, keeping the service record logbook.

The original buyer/**dealer has** installed drainage system under all pool floor surface.

During wintertime pool has to be left filled with water **and protected with** ice separation **containers or Frost Protection Thermostat.**

Any surface cleaning and pool emptying has to be done with supervision of LUXE Pools certified **dealer**/installer. The original buyer keeps the pH level of the water between 7.0 and 7.2, total alkalinity of the water between 80 to 120 parts per million and calcium hardness of the water between 175 to 225 parts per million, free chlorine - 0.5 - **3.0** ppm. The original buyer cooperates with the manufacturer, if the service is needed, and provides access to the pool during normal business hours.

The manufacturer warranty is subject to the pool beam being covered by cantilever deck, stone, brick pavers, or deck wood as horizontal part and outer part of beam surface is not considered as pool surface.

Manufacturer has received payment in full for the delivered pool.

Pool water temperature is **kept** below **32°C**.

Warranty is not valid, if defects appear because of:

Damage or failure resulting from improper or unauthorised draining of the pool or the rising of the ground water table above the pool floor level.

Discolouration or deterioration caused by abnormal use of the pool, like excessive use of chlorine or calcium, salt, iron or other chemicals, failure to maintain proper water chemistry of the pool.

Any damage caused or contributed to by accident, negligence, abuse, misuse, act of God, or act of nature (including, but not limited to, flooding, fire, settling of soil, or shifting of earth).

Any damage caused by the buyer's failure to provide reasonable and necessary maintenance to the pool.

Damage to or failure resulting from the installation of any additional equipment or attachments to the pool such as fittings, skimmers, piping, lighting fixtures, wiring, rails, ladders, slides, or any other accessories.

Damage to or failure resulting from the installation or use of any attendant structures to the pool such as decks, concrete, waterfalls, fountains, or spas.

Damage caused by installed salt chlorination systems.

Pool water temperature exceeding 32°C.

Disclaimers:

When a cosmetic or surface repair is performed by the manufacturer, potential shade and/or colour variance may be observable and will be deemed acceptable in satisfaction of this warranty.

Surface degradation may occur over time with normal exposure to elements, like: fading, staining, **discolouration**, cracking or in any manner changing appearance or texture of the surface finish other than osmotic blisters.

The manufacturer denies any responsibility to cover any damage to fencing, grass, shrubbery, driveways, walks, trees, patios, water or other improvements occasioned in the course of making any repairs or replacements made pursuant to this warranty.

LUXE Pools does not recommend using salt chlorination system as pool sanitizer due to possibility by electrolysis appearance of stains on the pool surface. Also any kind of stains, caused by installed salt chlorination shall not be covered by this warranty.

Warranty expressly excludes all and any installation works and materials.

Warranty only covers the original buyer of the pool as shown in this document and is limited to the monetary compensation of the purchase price by the original buyer. Luxe pools **or UK distributor (Paramount Pools Ltd)** shall not be liable for any consequential losses or damages, including but not limited to punitive, monetary claims, relating to the breaches of warranty obligations.

All disputes related to this document can be solved in amicable settlement or in court on territory of Republic of Lithuania, EU according to the governing Lithuanian laws and regulations.

Installation Requirements:

- 1. All GRP LUXE POOLS must be installed in the ground by a minimum depth of 135cm.**
- 2. Exterior of the pool has to be filled with 20-32mm crushed stone, with layers no thinner than 300mm from pool wall.**
- 3. Underneath the pool shell, the pea shingle base including drainage must be installed to a depth of 350mm.** When **back-filling** the external part of the pool, the pool has to be filled with water **at the same time**. During the filling procedure, the level of filled water has to be equal to the level of filled crushed stone; deviation - no more than **150mm**.
- 4. After filling the pool sides with stone - a concrete beam (30 x 30 cm) must be installed around the pool.** When filling the external part, observe the movement of the pool body at the widest point (to the outside or inside), possible deviation up to 5-**10mm** of home position. When loading the pool into the hole, avoid any deformation of the pool body! During the **backfilling process internal braces must be installed**.



Auto Cover - Manufacturer warrants motor and control system for 2 years.

PVC/Polycarbonate slats for 3 years providing the original buyer keeps the pH level of the water between 7.0 and 7.2, total alkalinity of the water between 80 to 120 parts per million and calcium hardness of the water between 175 to 225 parts per million, free chlorine - 0.5 - 3.0 ppm. The original buyer cooperates with the manufacturer, if the service is needed, and provides access to the pool during normal business hours. .

Cover must be installed as per installation guide.

DO NOT EMPTY YOUR SWIMMING POOL WITHOUT LUXE POOLS CERTIFIED DEALER SUPERVISION

Customer:	Pool Installation Date:	
Reference:	Auto Cover Installation Date:	
Fiberglass swimming pool model:	Buyer signature:	LUXE POOLS DEALER signature:
Pool dealer Invoice No:		
Auto Cover Model:		
Slat Type=		