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Please read very carefully

Pre-Installation + Installation Services Requirements

**For
Kingkraft Argent Bath**

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PLEASE READ VERY CAREFULLY PRIOR TO COMMENCING

*(Please contact Kingkraft to confirm the issue number on the front cover is current and the information provided is relevant to the unit supplied.
(Deliveries after 1/4/10)*

This booklet describes the ideal conditions to which a site should be prepared prior to the installation of the Argent Bath and form recommended guidelines for installing the Argent Bath.



WARNING

The Kingkraft Multibath is intended for use by people with disabilities, who require assistance with bathing. Bathing should be safe and pleasurable for the user and Carers and the following points must be considered carefully before attempting installation of the bath.

The bath is intended to be used for assisted bathing and should only be installed by competent individuals. The bath may incorporate manually operated lifting mechanisms and other electrical items and hot and cold taps, possibly regulated by thermostatic mixer valves (not supplied). These mixer valves will require careful setting and subsequent maintenance by qualified others if fitted.

The Argent Bath is supplied as standard with separate hot and cold taps. If thermostatic mixer valves are not incorporated into the hot water supply (by others) there is a danger of scalding! Also if these are incorrectly set up there is also a danger of scalding.

If an electrical supply is connected to the bath for the whirlpool option, it must be installed by a competent electrician to the latest standards for electrical installation in bathrooms. This includes

using armoured cabling and waterproof connections and particularly the supply must be a separate circuit protected by an earth leakage detector and residual current device installed in the appropriate position and to the required standards. The bath must be adequately earth bonded. Please refer to the electrical requirements section in this document and current IEE regulations for this type of installation.

The bath will be supplied with hydraulic lifting legs (unless it is a fixed height version), operated by a handle. These must be installed in such a manner as to allow free movement through the whole of its travel without straining any connected pipes or wires.

Raising / Lowering Handle:



This bath should only be installed by competent individuals. At any stage, Kingkraft can provide telephone advice, on site assistance with installation, and / or a full commissioning service if required. Kingkraft also offer a maintenance service. Please call the company for details. If requested Kingkraft will also undertake a pre-delivery site survey and offer advice.

We always recommend that commissioning of the bath is carried out if thermostatic mixer valves have been provided by others to ensure water temperatures.

Please note, specially manufactured versions of the Multibath to the customer's specifications may require different or extra procedures. Please refer to the manufacturer if so.

The Argent bath is adjustable in height by manually turning the handle. Due to the fact it is a manual system; the user must ensure nothing is below the bath when lowering the unit or at any other time.

There is no automatic safety device to stop the bath from lowering onto any foreign objects / items under the bath.

General Information

The Multibath is available in one size, 1700mm x 700mm. The bath features fixed height or a manual raise / lower versions, and as standard comes with standard hot and cold taps. If different bath fill control options are specified contact kingkraft for details. The bath can be supplied with waterproof cushion options which can be manufactured to cover different parts of the bath if required.

Before Starting

Before installing, check that all the required services are available in the correct positions and to the required standards. (shown in the following pages)

The bath (not fixed height version) is intended to travel up and down. This necessitates locating it in a position where it will not touch surrounding walls or objects and will not present a hazard to users and carers such as by trapping hands or other body parts against walls or projections (radiators, ledges etc.). The room should be adequately ventilated to reduce humidity and moisture in the air.

The bath can be installed in various positions. The bath drain is in the middle of the bath tub, biased towards the back of the bath. The bath should be secured to the floor, through the lifting leg base metalwork.

Check that the positioning of any fixings to be used will not interfere with any under floor pipe work or cables. Remember that the bath is heavier than a conventional bath and is rated to support a bather of up to 133Kg in weight. Together with the weight of water in a full bath, it is imperative that the floor is fully load bearing.

Delivery + Room Preparation

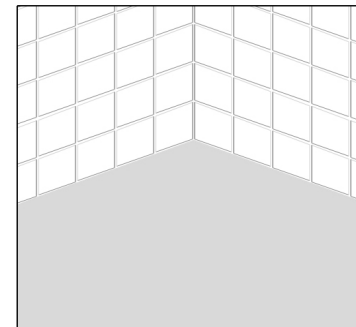
Please remember the bath is a large and heavy item. How to move the bath into the room / house should be considered and if the bathroom is not particularly large, it is recommended to leave other fittings, e.g. basins, etc, until after installing the bath.

The room must be easily accessible for large products

The Argent Bath may need to be disassembled to allow easier access into the room. The bath tub can be separated from the lifting framework and panels. (this should be only done by or under strict supervision of Kingkraft engineers) The dedicated area for the bath installation should be finished to allow assembly of the Argent Bath.

The bath must be screwed down to the floor to stop any possible movement of the bath and improve stability. This should be done before any commissioning. Great care must be taken if under floor heating has been installed.

When positioning the bath, allowance will have to be given for wall clearance as the bath moves up and down. The Argent bath requires a maximum clearance of 6mm around it to allow free movement. Nothing should be wall mounted above the bath as this may cause a risk of trapping as the bath traverses upwards. If the Argent bath specified is different from the standard specification, fixtures and fittings might be different. Please phone Kingkraft to check if you are in doubt.



- **The room must be easily accessible for the manoeuvring of the very large bath unit**
- **Walls Finished - Painted / Tiled**
- **Floor Finished + Level**

Positioning

At this stage, the bath can be positioned. Remember that the drain of the bath is built into the bathtub itself: The adjustable feet can be screwed out to level / slightly raise the bath tube.

Position the complete assembled bath where required and very carefully operate the bath through the full extent of its travel to ensure free up / down movement without any fouling. For fixed height contact Kingkraft for details if required.

Beginning Installation

Having determined the required position of the bath, piping up the supply can begin. If any mixer valve assembly has been included within the supply pipework, make sure this is correct and not compromising the positioning of the bath.

The hot and cold supplies and waste pipe should be positioned as shown in the following diagrams.

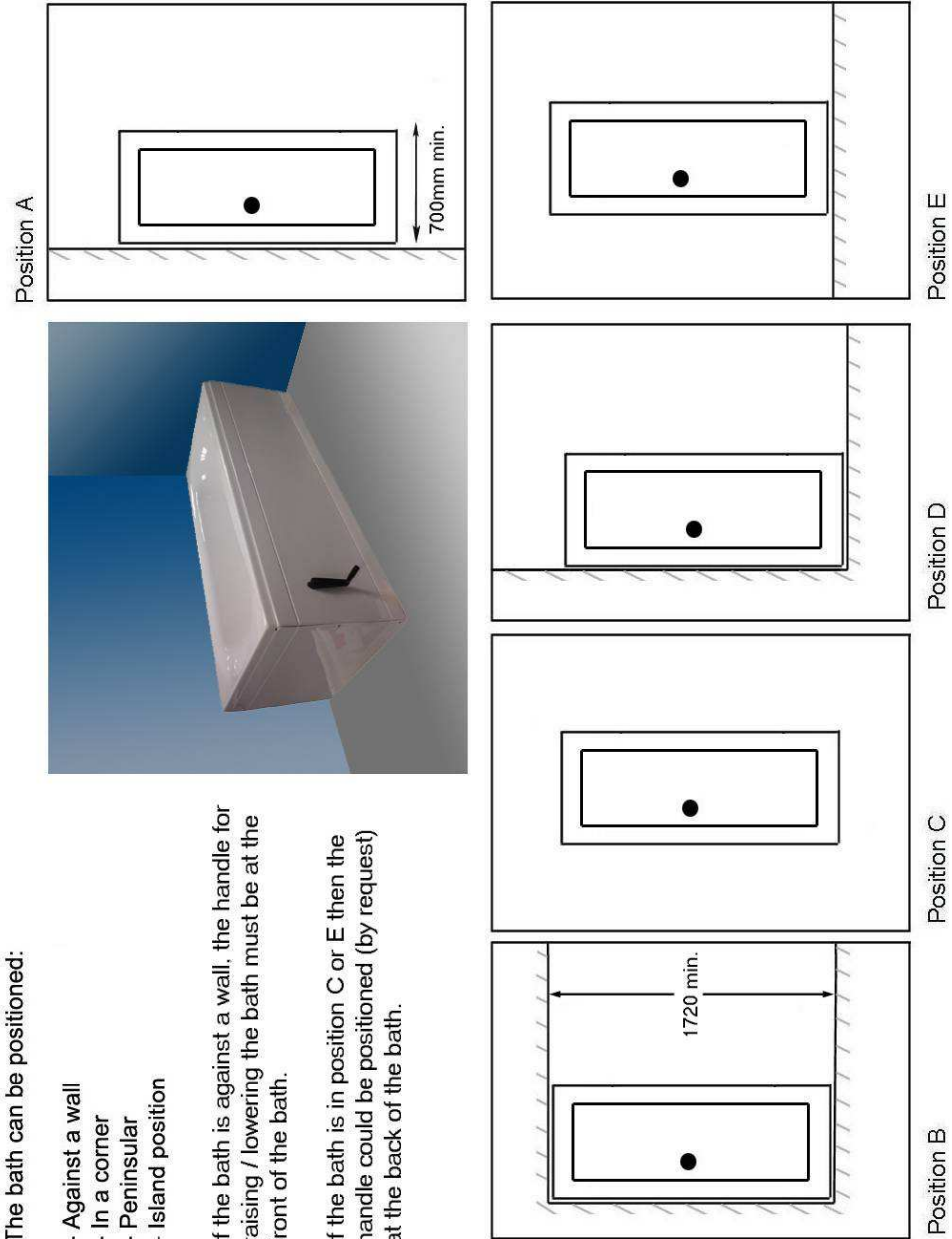
Argent Bath Installation Positions -

The bath can be positioned:

- Against a wall
- In a corner
- Peninsular
- Island position

If the bath is against a wall, the handle for raising / lowering the bath must be at the front of the bath.

If the bath is in position C or E then the handle could be positioned (by request) at the back of the bath.



Water Supply Regulations

Depending on the nature of the establishment where the bath is to be used, UK water regulations stipulate certain conditions of supply. It is understood that the bath might be classed by the water authorities as either a Category 3 fluid container (typically if used in a private domestic dwelling) or a Category 5 fluid container if used in a medical multi-user environment (e.g. Hospital). The categorisation is important. If the installation is a Category 5, the local water provider should be informed in advance of the installation by the person responsible for the installation and a regulation air gap must be included in the cold water supply. The air gap is to prevent back siphoning down a shower hose if there is one in the direct vicinity of the bath.

By definition, a category 5 installation cannot be supplied via a Combi-Boiler. If there is any doubt as to the nature of the installation, please refer to your local water supply authority.

If the installation is for a Category 3 container, back siphoning will need to be adequately prevented by the provision of twin non-return valves. (Not supplied as standard with the bath)

A standard Argent Bath has a volume of no more than 230 litres.

Your local water authority should be able to advise you on the likely categorisation of the bath in your particular establishment.

Water Supply Requirements

The bath can either be 'stepped' into at its lowest height or the user lowered into the bath using a hoisting system. If the bather enters the bath before it has water in, the bath can only be subsequently be filled with water mixed to a safe temperature by a mixer valve but this is only if a thermostatic valve has been fitted in line with the hot water supply pipe.

In order that the bather does not become cold, the bath is designed to permit high flow rates. They may work with low flow rates but the fill time will of course be longer. Depending on how the bath is to be used, it is therefore important to establish that there is sufficient flow available. Typical high flow rates are 20 litres per minute, low rates are, say, less than 5 litres per minute. If a mixer valve is fitted to the hot water supply, together with the necessary non-return valves and filters, they can cause restrictions that reduce flow rate still further. If high flow rates are available then it is preferable to pipe supplies in 22mm. (Combi-Boilers require 15mm pipework, and will generally fill quite slowly).

Consideration may need to be given to providing a pumped supply to the bath if flow rate is likely to be an issue. A minimum head of water of 4 metres is preferable to avoid the need for a pump. (Combi-boilers cannot be pumped) A competent plumber should be able to advise and install the best option before the bath is delivered.

In addition to adequate flow rates, the incoming water pressures must ideally be, especially if a mixer valve is to be fitted to the hot water supply, in a ratio of 5:1 cold to hot with no tendency for air locks and with a nominal hot temperature of 55°C or higher. The mixer valve may need to be set up and checked at commissioning to mix the incoming hot water to supply controlled water at 43°C to the bath. A competent plumber should be able to advise and install the best option before the bath is delivered.

The boiler must be plumbed in and working to the correct temperatures before final commissioning can commence.

If the bath is being used in continuous cycles, adequate hot water storage must be available. A standard Kingkraft Argent Bath is less than or equal to 230 litres in volume.

Thermostatic Mixer Valve Requirement

The Argent bath is supplied as standard with separate hot and cold taps.



- **This is not suitable if the bath is to be filled with the user already in the bath!**

A thermostatic mixer valve assembly must be included within the hot water supply, as close to the bath taps as possible but no more than 2m away from the tap outlet.

Please check your requirements with a qualified plumber or call Kingkraft for advise at any time.

Ballofix type isolation valves, two non-return valves and in-line filters must be fitted between the water supply pipes and the thermostatic valve and / or the bath taps.



- **The thermostatic mixer valve / hot tap temperatures must be checked and correctly set by a competent individual once installed and regularly maintained thereafter.**
- **Should the flow rate and / or pressure of the supply alter, the valve may need to be reset by a qualified engineer.**
- **If the mixer valve or tap is incorrectly set up / installed there is a danger of scalding!**
- **Kingkraft would recommend a yearly service, or every 6 months if in hard water area or a 'high usage' installation.**

Pipework

Position the hot and cold supplies so the pipes can be safely run for connection to the flexible hoses provided. The bath taps will be positioned in the middle, at the back of the bath.

Due to the various installation positions possible for the Argent Bath, the bath panels will have to be cut out to avoid any water supply pipes and waste pipes running under the bath, when it is lowered to its lowest position. This will have to be done carefully during installation.

Do NOT use jointing paste with the supply pipework. Only PTFE tape should be used if required.

If the recommended pipe positions shown can not be exactly followed, please raise and lower the bath through the whole of its travel before committing the positions of the pipes to ensure they are not trapped or kinked in any way or straining any connected pipes or wires.

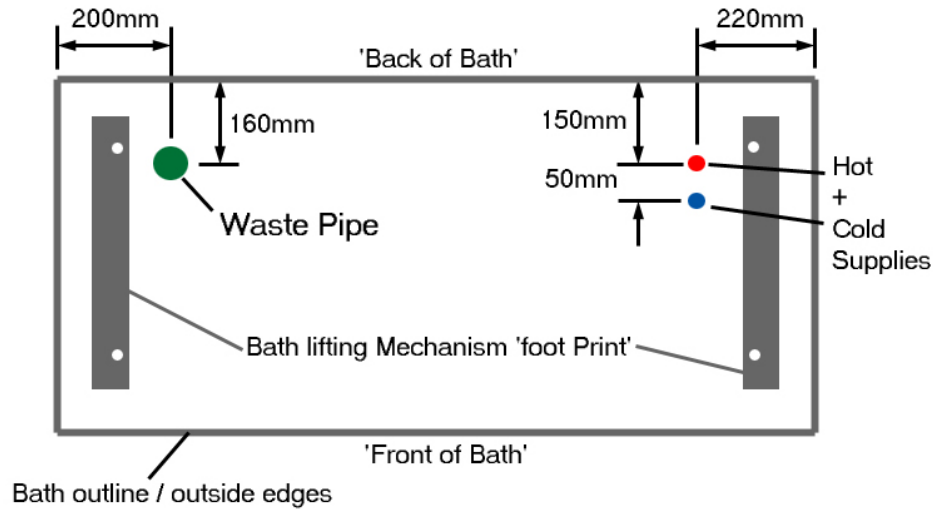
Check these do not interfere with the use of floor hoists. If so, these may have to be moved to a more suitable position if possible.

The water supplies must incorporate ballofix type isolation valves, non-return valves and in-line filters.

All pipework must be earthed

Isolation valves must be fitted to ensure the bath can be isolated for maintenance of the baths pipework etc.

Floor level plan view: Dimensions from outside edges of bath.



Pipe work must be kept at low / floor level, but if the pipes are brought through the ends of the bath, over the lifting mechanism foot plates, there should be 40mm above the floor.

Lifting mechanism foot plates:



Drainage / Waste Pipe

The bath is supplied with a single drain pipe.

The drain passes through a low level trap connected to 40mm flexible drain hoses with a sleeve fitting / compression straight connector.

A rigid 40mm tail should be provided **at low level**, protruding no more than 50mm from floor **as shown in the diagram provided**, to allow for an elbow to be glued on top. If no elbow is required, and the pipe is run along the floor, the height of the bottom of the waste pipe should be 40mm from the floor to avoid / go over the foot plates.

Waste fittings up to the point where the Kingkraft straight connector attaches to the pipe must be glued together - not using the 38mm push-fit type.

Electrical

The room into which the baths will be installed must comply with the latest electrical zoning / building regulations, a qualified electrical engineer should advise on this. These regulations stipulate the minimum distance from the bath to electrical equipment in the room.

The Argent Bath does not require power unless optional extras such as a Whirlpool System have been specified.

Kingkraft will not be able to complete installation / commissioning of a bath unless an Electrical Installation Certificate (Including Test Details) is issued to the Kingkraft engineer prior to the work commencing. This certificate is normally held by the householder / property owner.

Part P of the Building Electrical Safety Regulations applies to domestic dwellings where persons reside or share a common supply of electricity with a business premise. These regulations were effective from 1st January 2005. At the very least residential type properties require a confirmation in writing that the installation complies with the requirements of BS 7671.

This can only be supplied by a qualified electrician and will not be provided by Kingkraft Ltd.

The electrical supply must be installed by a competent electrician to the latest standards for electrical installation in bathrooms and be consulted at all times.

Please ensure any relevant Building Electrical Safety Regulations that apply to the installation are followed.

The electrical low voltage installation for the bath facility must conform to the following specification: A competent electrician must be consulted at all times.

1. The supply shall be 240V, 50Hz, Single Phase & Neutral on a fused spur.
2. The supply shall be protected by a suitably rated RCD with a 30mA trip (Not supplied with bath) and shall be of a dedicated type, i.e. supplying the bath installation only. (a 13 amp fuse for the whirlpool option) A suitable isolation switch (not supplied) should be included in a suitable location within sight of the bath.
3. The supply shall terminate at an agreed position nominally 200mm above floor level *preferably* at the end of the bath. This positioning must not impede raise / lower movement of the bath / surrounding paneling. If this is not practicable then other locations can be considered, the water ingress risk must be minimised when considering other locations. Kingkraft is to be consulted in this event.
4. The supply shall terminate in an enclosure of IPX5 rating; the enclosure shall have facility for "glanding off" using waterproof compression glands to preserve the IPX5 rating of the installation. (Not supplied with bath)
5. The Enclosure shall be 100mm x 100mm x 50mm in dimension. Armoured cable is to be used with mains powered lifting frames and whirlpool connections.
6. The final cable terminating at the bath SELV unit will be armored via the braid protection of the cable; facility shall be left within the enclosure to accept the termination of the armoring as part of the installation earthing system.
7. Accessible metallic parts of the bath and its frame are equipotentially bonded, an earth bonding connection close to hot and cold water supplies should be made available for the installer to connect to the bath frame via a flexible connecting bond.
8. The entire electrical installation shall comply with the requirements of BS 7671.

9. Upon completion of the electrical installation those responsible for the Electrical Installation shall issue a copy of the Electrical Installation Certificate (Including Test Details) over to the installer for his records
10. It is anticipated that the bathroom will comply with the Building Regulations 2000 and in particular "Approved Document P" and associated sections. Any departure from these Regulations must be brought to the attention of Kingkraft at the time of order.
 - **Route any armoured cable safely under the bath, preferably towards the back of the bath, to the waterproof junction box on wall, allowing for movement up / down.**

Final Connections

Connect the water supply flexible pipes (supplied) to the hot and cold supply pipes.

Connect the waste hose (using PTFE tape)

Do NOT use any joining compound, only PTFE tape for all plumbing fittings.

Using armoured cabling on any exposed wiring, connect any electrical components (i.e. whirlpool pump) to a suitable mains supply IPX5/X6 distribution box and connect all earthing straps / wiring.

At this stage do not as yet attempt to put any supplied cushioned supports in the bath or attempt to use the bath. The cushions may become stained before the pipework is flushed for the first time.

FINAL CHECKING OF THE BATH & COMMISSIONING OF THE MIXER VALVE/TAPS

- **Check all electrical connections are correct and secure.**
- Check all pipe work joints are correct and secure.
- Check all fixings and panelling appear secure.
- Check for full and free movement of the bath and that this movement presents no danger to the user or carers.
- Check the operation of the taps and waste mechanisms.

Whirlpool (if Fitted) -

- Fill the bath above the whirlpool jets with clean water and check the operation of the whirlpool system. IF THE BATH HAS A WHIRLPOOL SYSTEM PLEASE REFER TO THE MANUFACTURERS INSTRUCTIONS REGARDING THE USE AND PARTICULARLY THE DISINFECTION ROUTINES FOR THIS SYSTEM PRIOR TO USE. The system must be regularly cleaned and disinfected in use with suitable frequency and with the correct fluids. Kingkraft supply recommended cleaners.

Any mixer valves used within the supply pipework must be commissioned in accordance with DO8 / manufacturers procedures. This should be done by a qualified plumber. Kingkraft would recommend to adjust the valve to give a maximum 43 degrees C for the bath fill / hot tap. Do not attempt to use the bath / fill with the user already in the bath if this valve has not been installed and commissioned in accordance with the relevant procedures / DO8.

Finally insert any cushions supplied in the bath.

If there is any doubt in the user's mind as to the correct use of the bath and its cushioning then please ring Kingkraft immediately for advice and assistance: (0114 269 0697)

Please ensure only competent individuals undertake the above work and remember at all times to consult Kingkraft if there is any doubt. If required, Kingkraft Engineers will check over any work done, following installation of the bath by others, and provide a full commissioning service and certificate.

This is the recommended course of action