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# Pre-installation and installation Instructions For Kingkraft Variable Height Basin

Please read very carefully before the installation of this product

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# **INSTALLATION INSTRUCTIONS**

These are recommended Installation Procedures for the Kingkraft Variable Height Basin, mains powered. A Fixed Height unit can be installed if specified.

Please note, specially manufactured versions of the Basin to the customer's specification may require different or extra procedures. Please refer to the manufacturer.

These instructions form recommended guidelines for installing the above equipment and should be referred to before and during the installation of the Basin. Further copies are available from Kingkraft.



The Kingkraft variable height Basin is intended for use by independent and dependent people with varying abilities. If a person requires assistance whilst using the product, this should be a safe and pleasurable experience, for both the user and Carers, and the following points must be considered carefully before attempting installation of the basin.

The Basin is normally supplied as standard with a thermostatic mixing tap to control the supply of hot and cold water to the basin.

- 1. Various other tap configurations are available.
- 2. If a thermostatic mixing valve has been included to limit the hot supply temperature, this must be set up correctly or else there could be a danger of scalding.
- 3. If an electrical supply is connected to the basin 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 basin must be adequately earth bonded. Please refer to the electrical requirements section in this document and current IEE regulations for this type of installation.
- 4. The sink is designed to be adjustable in height (unless it is a fixed height version). This 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, or colliding with other objects.

<u>Kingkraft Ltd can provide full telephone or on site assistance</u> <u>with installation if this is required. Please call the company and</u> <u>we will be pleased to help if possible.</u>

We always recommend that commissioning of the basin is carried out by Kingkraft qualified personnel

# **Components Variations / Specifications**

The variable height basin is normally supplied as separate components for assembly on site. These components may include the following -

**Mounting Frame:** This is used to position the sink, mark out the fixing positions and fix to the wall, before 'hanging' the main framework off these same fixings. The base of the mainframe should at the same time be 'sat' onto this mounting frame so the load is transferred down through the legs.

Main frame including mechanism and basin: This incorporates the variable height mechanism, safety mechanisms, the Corian basin and surround and electrical boxes. This mounts on to the mounting frame, using the initial four fixings into the wall.

**Pipework:** 15mm hot and cold supply pipework from the basin down to floor level for connection is supplied. The copper pipes are fixed to the inside of one leg cover and then flexible hoses are connected at the top to attach to the thermostatic tap connections. A flexible waste hose from the basin, down to a low level connection elbow, is also supplied.

**Leg covers:** These are to hide the pipework and electrical cable and should be hooked on to the mounting frame via two attached brackets. The basin should be moved up into the highest position and the leg covers slotted up underneath the basin, and then down to hook on the brackets.

**Top Cover, including mirror and light options:** This covers the mechanism and supports the light, mirror and shaver socket options. The light connections should be made to the IP box within the main frame before screwing this cover onto the framework and placing the mirror in position.

## **Electrical Requirements**

The room into which the basin 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 basin to electrical equipment in the room.

The fixed height Kingkraft Basin would still require power it is fitted with a light, shaver socket or Infrared controls.

All other specifications require a suitable mains power supply.

Kingkraft will not be able to complete installation / commissioning of a basin 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 are effective from 1<sup>st</sup> January 2005. At the very least residential type properties require a confirmation in writing that the installation complies with the requirements of BS 7671.

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

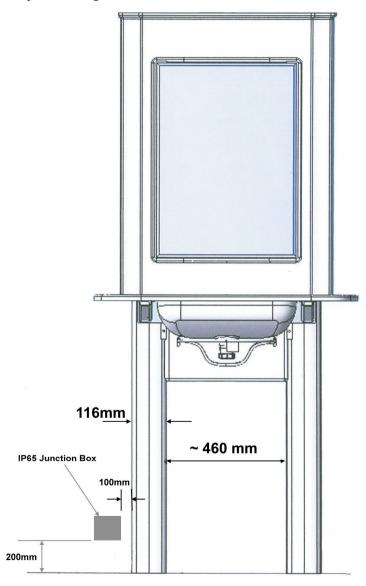
- 1. The supply shall be 240V, 50Hz, Single Phase & Neutral.
- 2. The supply shall be protected by a suitably rated RCD with a 30mA trip and shall be of a dedicated type, i.e. supplying the basin installation only. An isolation switch should be fitted close to / visible from the basin. A **5 amp** fuse should be used.
- 3. The supply shall terminate at an agreed position, shown on the following page, nominally 200mm above floor level at the side of the unit. If this is not practicable then other locations could 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 IPX4 or IPX5 rating; the enclosure shall have facility for "glanding off' using waterproof compression glands to preserve the IPX4 or IPX5 rating of the installation.
- 5. The Enclosure shall be 100mm x 100mm x 50mm in dimension. Armoured cable is to be used (supplied) with mains powered connection from the IP box to the unit.
- 6. The final cable terminating at the basin 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 basins framework 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 basin frame via a flexible connecting bond.

- 8. The entire electrical installation shall comply with the requirements of BS 7671.
- 9. Before 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 tender.

Please note that various safety devices are fitted to the basin which are powered through the variable height mechanism

### **IP Junction box positioning:** (preferably on LHD side as shown)

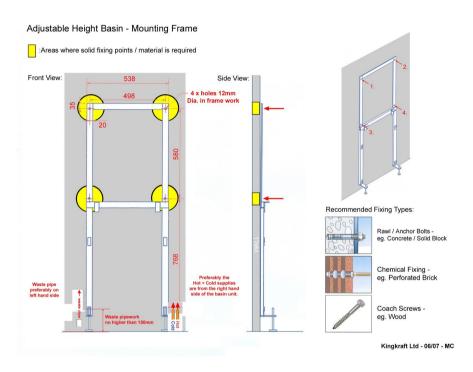
### Adjustable Height Basin - Front View



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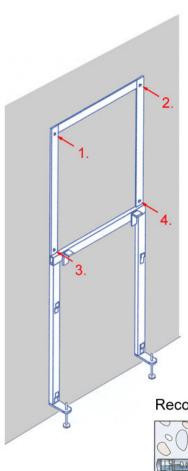
### **Positioning**

### Fixing the basin framework to the wall using the mounting frame:



Please Note: Hot, cold and waste pipes could be installed in between the basin legs and the elbow connections at the bottom of the leg covers turned around to suit. This is not ideal as the pipework may interfere with wheelchair foot rests. White plastic covers can be made to cover pipes running in between leg covers. Please contact Kingkraft if this is required. Glued waste fittings MUST be used, not 'push fit' fittings. Holes in the leg covers need to be cut on site to suit the specific installation situation, using

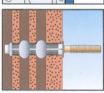
a jigsaw or a large diameter drill. Any cut edges should be smoothed with sandpaper.



Recommended Fixing Types:



Rawl / Anchor Bolts eg. Concrete / Solid Block



Chemical Fixing - eg. Perforated Brick



Coach Screws - eg. Wood

The Basin (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 any body parts against walls or projections (radiators, chairs, ledges etc.). The room should be adequately ventilated to reduce humidity and moisture in the air.

The basin must be installed on a flat, load bearing wall. This can be of timber or block / brick construction and appropriate fixings must be used.

The unit is attached to the wall by four fixing points. The 'Wall Frame' should be used to position the unit and as the template to mark out the positions of the four fixings. These fixings are not supplied with the unit. According to the type of wall construction you must choose the appropriate fixing. These should preferably be at least M10 bolts / rawl bolts / chemical fixings or large coach screws.

Once the four fixings are mounted, about 15mm of the bolt / fixing shaft should be wound out to accommodate the main frame. The main frame is heavy and requires at least two people to lift it on to the four fixings.

Hold the frame firmly against the wall whilst tightening the four fixings. The base of the mainframe should at the same time be 'sat' onto this mounting frame so the load is transferred down through the legs.

The basin has two adjustable feet, (standard distance from floor to the bottom of the foot is 80mm). These do not need to be secured to the floor.

Having determined the required position of the basin, piping up the supply can begin.

Due to various tap / control options, the routing of pipework can vary. Please contact Kingkraft if you are unsure where to route cables / pipework.

Please ensure all plumbing connections are tightened and test the system for any leaks, preferably if possible before putting on all of the covers.



NOTE:

Mount the basin in its highest position. Without any covers fitted, route the armoured mains cable down to the mains junction box on the wall. Then, very slowly, lower the basin to ensure the cable is not strained or trapped when moving up and down and that it is not going to pull the cable out of the junction box!

If this is connected at this stage so it can be easily seen / tested, make sure it is disconnected from the mains supply when connecting the wire for the light!

- Example of Main frame and Basin lifted and fixed onto the Mounting frame.

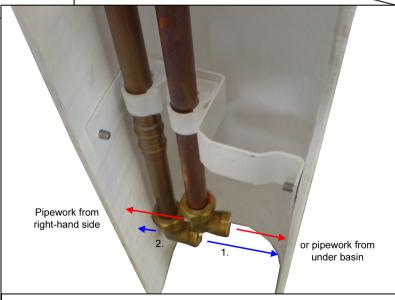


Fixing Detail - A: PI



- Hot and cold supply pipes.

Clips to hold the hot and cold water as standard come attached within the leg cover. Isolation valves should be fitted in-line with each supply for any future maintenance.



NOTE - Holes in covers to be cut to suit the specific installation on site.



Disconnect flexible hose at the top.



Feed leg cover up from underneath the sink on the left hand side, feed armoured cable and flexible waste through the slots and lower the cover down.





Make sure the brackets slot into the hooks on the mounting frame



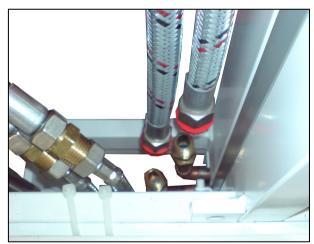
Feed to flexible waste pipe back over the round waste guide brackets and reconnect.



Feed the leg cover with attached pipes up and onto the mounting frame leg hooks. Make sure the hot + cold pipework does not restrict the movement of the adjustable height moving framework.

Make sure the hot supply is connected to the hot tap flexible pipe and the cold to the cold side.

Once all plumbing connections are completed, test the water system under pressure to check for any



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Before opening this junction box, ensure all electricity is isolated to the unit.

Cut the IP box free and open



Lift the Top Cover onto the sink and run light the wire behind the framework and connect into the IP junction box.

Make sure this does not trap or interfere with any of the raise / lower mechanism or pipework.



Re-attach the box



Place the cover over the framework and fix back using the 4 x M6 countersunk bolts.



Screw or slide the mirror in position

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### **Thermostatic Mixer Tap -**

The Hot water supply can be sent through a thermostatic mixer valve, mounted within the basin plumbing, to limit the maximum hot supply temperature. This must be set up correctly or else there could be a danger of scalding.

### Hot + Cold supply leg cover -

Due to the possibility of the heights and positioning of the waste and hot and cold supply pipes varying, holes in the leg covers have not been cut / drilled so they can be cut precisely in the positions required.

### Waste pipe positioning -

The waste pipe elbow at the bottom of the flexible pipe can be turned around to face in between the legs. If required the plastic plate, with clip attached, will just have to be rotated around to suit.

### FINAL CHECKING OF THE BASIN

### & COMMISIONING OF THE MIXER VALVES (optional)

- Check all electrical connections are correct and secure.
- Check all pipe work joints are correct and secure.
- Check all bolts and pins appear correctly positioned and secure.
- Check for full and free movement of the basin and that this movement presents no danger to the user or carers.
- Check the operation of the safety switches is functioning correctly.
- Check the operation of the taps and waste mechanisms.

Any Thermostatic Mixer valves must be commissioned in accordance with DO8 procedures. These can be found in instructions supplied with the valves. Kingkraft normally adjust the valves to give a maximum 43 degrees C.

Do not attempt to use the sink if these valves have not been installed and commissioned in accordance with the DO8 procedure.

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