EVERYTHING ABOUT **BATHS**

A bath is often the most comforting, most luxurious and most eye-catching item in the bathroom. It offers deep relaxation, the perfect way to unwind after a stressful day. And for some, it's the centrepiece in a perfectly appointed design space.

Ceramic Industries' Betta Baths factory produces baths of the highest quality in a range wide enough to suit any budget, space constraints and décor preferences. In this newsletter, we'll consider the options and their applications, discuss how they're manufactured and provide some info on installation. Let's jump right in.

EVERYTHING ABOUT BATHS

CERAMIC INDUSTRIES
Tiles & Bathroomware
Creators of style

Bath types

Customers should consider a few factors when choosing a bath – the space available and layout of the bathroom, the design aesthetic, budget and desired function.

Freestanding baths

As the name implies, these baths stand away from the bathroom walls. They can take the form of traditional Victorian baths with decorative feet, or sleek modern baths with smooth skirts that reach down to the floor.

From a design point of view, they have real impact and often form a focal point in the room. They're luxurious and inviting while offering as much style as a fine piece of furniture. These baths require a relatively spacious bathroom.

Their tap fittings are usually attached to the wall or floor, and the waste may be located on the end or the centre.

Drop-in baths

These baths are designed to be placed up against one, two or three walls. The exposed side and ends are usually tiled with the same tiles as the rest of the bathroom. Drop-in baths may have straight, oval or round shapes.

Because these baths are practical and save space, they're a popular choice for customers. Although these are very commonly seen in bathrooms, Ceramic Industries makes drop-in baths in a wide variety of shapes and styles that can add a unique look to the room.

Bath Types

Corner baths

A corner bath makes very clever use of space, because it doesn't require a long wall to sit against. It allows customers to place a luxurious tub in a tight bathroom. However, Ceramic Industries' range of corner baths are very attractive and look great in spacious bathrooms, too. These baths are both practical and stylish, with the look of a spa bath, and often they have ample surface space for decorative elements.

Spa baths

These baths are the ultimate in deep relaxation. Their side jets massage you with a powerful flow of water.

Some spa baths also feature jets that release air bubbles for true luxury, and have heating systems to keep the water at a constant temperature.

All Betta Baths, except the freestanding models, can be converted to spa baths with our conversion kits.

L-shaped baths

This type combines the functionality of a shower and a bath. The extra space at end of the L-shaped bath makes it more comfortable to shower in. It's an attractive solution that gives you the best of both worlds.

Materials

Over the years, baths have been produced in many materials, including enamelled cast iron, steel, copper and stone. The primary raw material used in the manufacture of Betta Baths are acrylic (polymethyl methacrylate), ABS (acrylonitrile butadiene styrene), resin and fibreglass. The materials Betta Baths use offer several advantages, including:

- Good heat insulation - less electricity is used for heating water, reducing electricity bills
- Value for money
- Durable and hardwearing if cared for
- High gloss surface that will not stain, rust or corrode, if cared for
- Minor scratches or cracks in acrylic can be repaired, as the colour is constant right through the material. This also means that the baths should not wear away or flake off. (ABS baths cannot be repaired as easily.)
- Acrylic is versatile and can be formed into a variety of shapes and designs
- All Betta Baths, except for the freestanding models, can be converted into spa baths with chrome jets and a heater if required

BETTABATHS

Manufacturing processes

Acrylic cutting

Acrylic and ABS come in sheets of different sizes and colours, and are either purchased from local suppliers or imported. The cutting department provides a production plan to determine how to cut each sheet, including size and colour, for each bath model. The acrylic or ABS is then cut to the required size for each bath type.

Vacuum forming

There are two types of vacuum machines: the automatic machines that deal with entry-level, high-volume pieces, and the manual machines that handle the more high-quality pieces. The sheet is heated in the furnace for the required amount of time (usually +/- 20 minutes). For manual vacuuming the furnace temperature is set at 185 degrees Celsius, while for the automatic vacuum process, the furnace temperature differs depending on the type of bath. Once heated, the sheet is pliable. It's placed into the correct mould and clamped. It's then vacuumed into shape and kept in the mould for about 10 minutes to cool.

Trimming

In the trimming department, the outlet and overflow holes are drilled, as well as holes for handles, if the bath requires them. Excess resin and fibre are then trimmed off to give the bath a smooth edge.

Mixing

The mixing department combines the correct quantities of resin, fillers and other raw material required for the production of the baths. There are two types of resin mixes – one used by the spray line, and the other by the casting department.

Casting – freestanding baths

This department deals with freestanding baths. The vacuum-formed acrylic shell is placed into a mould and clamped. It is then pumped full of casting resin, weighing between 30 and 50kg, depending on the type of bath. The moulded bath is then left to stand for 2 – 3 hours for the resin to harden. Once the resin has set, the bath is checked for imperfections, and sanded to a smooth finish.

Wood cutting

The wood-cutting department prepares the base boards that are used at the bottom of the baths. These baseboards strengthen the bath.

Spray line

There are 3 spray lines: two automatic and one manual. The automatic lines deal with the contractor and entry-level baths while the manual line deals with the luxury baths. The substance sprayed onto the bath is a combination of resin and fibreglass. The bath is coated with one layer, the wood base board is attached, then a second layer is applied. The automated programme is 2 minutes long, and once spraying is complete, the bath stands for 45 minutes inside a curing tunnel at 50 degrees Celsius.

Conversion

This department converts standard baths into spa baths. Stock required includes the bath frames and pumps.

Final inspection

This is a quality control inspection. Imperfect stock is classified as B-grade.

Packaging

The various baths are packed in a manner to minimise damage during transportation.

Warehouse

Once all required processes have been completed, the finished stock is booked in and loaded onto the system as ready to sell. Available stock is allocated to open orders. Once allocated, the stock is picked by warehouse staff, and loaded when a truck arrives.

Installation

Important:

» Before installation, store the bath in a covered area.
» The bath is not UV protected – contact with prolonged direct sunlight leads to discolouration.
» The fibreglass backing is NOT waterproof. If the bath is left upside down and comes into contact with water or rain, the fibreglass backing will delaminate.
» To ensure the longevity of the product, we recommend using an accredited installer.
» Do not cut or drill holes into the side of the bath. This will compromise the stability and warranty of the product.
» Two people are required whenever the bath needs to be moved. Never drag the bath along the floor as it will damage the feet. The bath must always be lifted and placed into position.

Before you install

- Turn off your water supply at your home and check that all water has drained out of the pipes.
- If you are planning to move the existing plumbing points, get an accredited plumber to do this for you. (If this is a new build, an accredited plumber should be on board for the project.)
- Remove the old bath installation and prepare the area where you are going to install the bath. Ensure that the area is free of any debris that could damage the bottom or sides of the bath.
- Use a rug when turning the bath on its side or top to protect it from becoming damaged.

DROP-IN BATHS

Recommended tools:

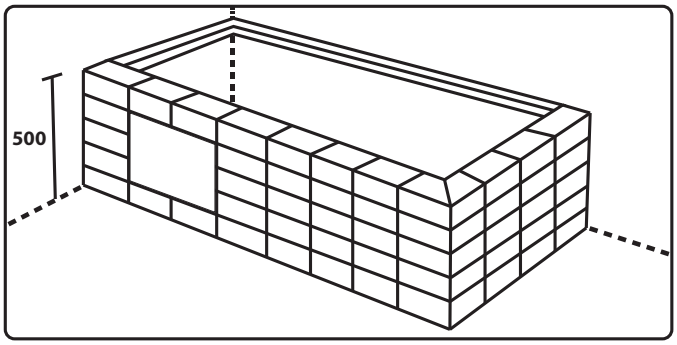
- Tape measure
- Pencil
- Wooden cleats (19mm high x 40mm wide)
- Drill with masonry drill bit
- Spirit level
- Mortar mix (3 parts river sand to 1 part cement) Note: Do not use water when making this mixture
- Tiles
- Tile adhesive
- Grout
- Silicone sealant

Step 1: Build a retaining wall

- The standard height of a bath is 500mm above floor level, which takes into account a 100mm bath trap.
- Build a retaining wall to a height of 490mm, which leaves enough space for the tile adhesive and the tile to bring it to a height of 500mm.
» By law you are required to leave a 350 x 350mm space close to the waste end for an inspection hatch when building the brickwork.
- Complete the bathroom to be tiled before installation, including the area behind the bath above the mounting cleats, and the top of the retaining wall. This will ensure a neat installation.

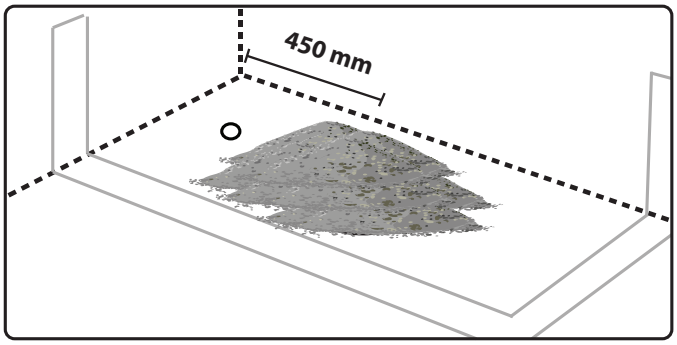
Step 2: Measure and fasten support cleats

- Measure 500mm above the floor and mark.
- Securely fasten the support cleats on the back and side wall, making sure they are level.



Step 3: Pour mortar mix

» Do not use water when making the mortar mixture.
- Pour the mortar mix (3 parts river sand to 1 part cement) in a dome shape in the center, 450mm away from the wall on the waste side to a height of 20 – 25cm. This ensures that when you lower the bath into position (Step 6), the mortar spreads and the bath is imbedded properly.



NOTE

» In the past, bricks and wet mortar were used underneath the bath to support the bath. However, when the mortar dries, it shrinks, leaving a gap between the bath and mortar. With continuous use – getting in and out the bath – the bath develops hairline cracks.

» It was also recommended to fill the bath with water to add weight to sink it into the wet mortar to bond. However, this only creates a gap between the bath and mortar when the bath is empty.

» The correct procedure is to create the new mortar mix (3 parts river sand to 1 part cement). With the bath in place on this mix, the cement dries with the river sand and is fixed in place. This avoids shrinkage and movement which creates gaps.

Step 4: Connecting the motor (if applicable)

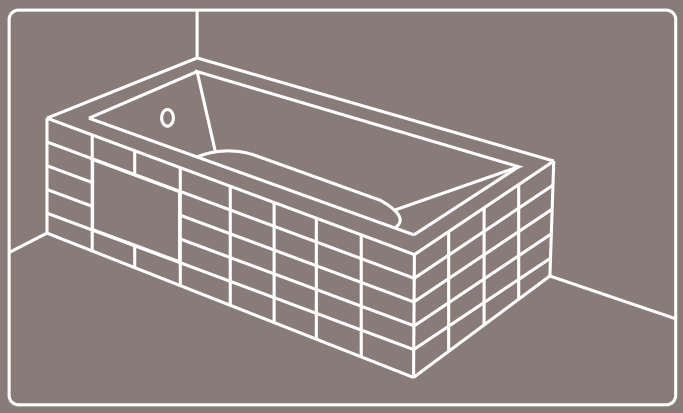
» By law you are required to connect the power for the motor directly to the DB board. This needs to be done by a qualified electrician.

Step 5: Connect waste pipes

- Connect the waste pipe and overflow or Nikki spout where applicable.

Step 6: Place bath

- Position the bath on top of the mortar mix.



Step 7: Install fittings

- Install all the taps and fittings

Step 8: Seal

- Seal the bath with silicone sealant to prevent water from entering through any gaps.
- Leave for 24 hours to set.

FREESTANDING & SKIRTED BATHS

Recommended tools

- Tape measure
- Pencil
- Spirit level
- Silicone sealant
- For wall-mounted skirted baths: drill with masonry drill bit

Step 1: Tiling of bathroom

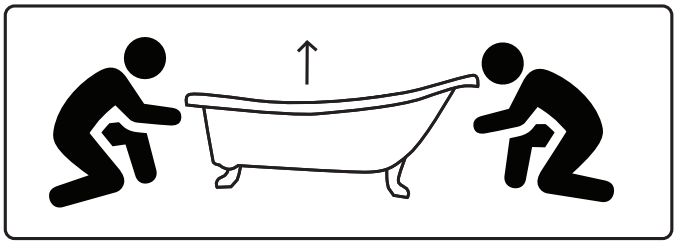
- Complete bathroom's tiling and grouting before installation to ensure a neat finish.

Step 2: Positioning of bath

» Two people are required whenever the bath needs to be moved. Never drag the bath along the floor as it will damage the feet. The bath must always be lifted and placed into position.

» Do not cut into the side of the bath. This will compromise the stability and warranty of the bath.

- Position the bath in its desired final position and trace its contours with a pencil.
- The waste pipe and trap should be installed by an accredited installer, and installation must comply with regulations.



Step 3: Connect the waste pipe

- Turn the bath on its side. Ensure that a rug is used to prevent the side or top of the bath becoming damaged.
- Connect the waste pipe to the p-trap. It is recommended to use a flexible bath connector (e.g. Jollyflex) to connect the waste pipe to the p-trap.
- Once connected, the bath can be placed onto the marked position.

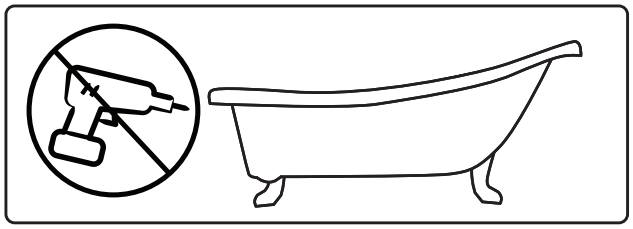
Step 4: Levelling of the bath

- Ensure that the bath is level by using the spirit level.
- Adjust the feet until the required level is achieved.

- For wall-mounted models, attach the rim to the brackets (see the note on wall-mounted models below for full instructions).

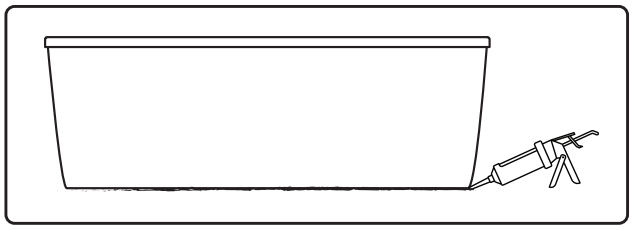
Step 5: Install fittings

» Do not cut or drill holes into the bath. This will compromise the stability and warranty of the product.
- Install all the taps and fittings.
- The Nikki Spout can be used as both an outlet and inlet.



Step 6: Sealing (skirted baths)

- Make sure the bath is flush with the floor for stability.
- Use silicone to seal the contours of the bath.
- Leave for 24 hours to set.



For wall-mounted skirted baths: measure and fasten wall brackets

Wall-mounted models (e.g. Pura, Diana, Paris) are supplied with wall bracket kits. These brackets must be fastened to the wall as per instructions below.

» The bath's weight should be supported by the feet, not the rim – the brackets merely hold the bath against the wall.
- Measure 500mm above the floor and mark.
- Securely fasten the support brackets on the back and side wall, making sure they are level.

Care and repair:

- Baths must be cleaned with a non-corrosive cleaner
- We recommend that customers not use bath salts and effervescent tablets in spa baths, since a residue tends to build up in the pipes over time
- Do not place any heavy products in the bath

ACRYLIC BATHS

Light scratches:
- First check whether the thin cladding covering the bath has been removed – sometimes this makes an undamaged bath appear scratched
- It is normally possible to remove light scratches by sanding them out with 1200-grit water sandpaper. Finish them off by polishing with Brasso and a soft cloth to bring up the natural gloss. Ensure that the Brasso is not old.

Deep scratches, chips and burn marks:
- Clean the damaged area, particularly the edge of the cavity or chip, otherwise a dirty outline will appear on the finished repair
- Mix a teaspoon of liquid acrylic with two drops of hardener and carefully stir, making sure that bubbles do not form. This should be done for +/- 10 minutes until the mixture starts to harden.
- Apply the mixture to the cavity, making sure that no air bubbles are trapped in the repair
- Overfill the cavity, as the material shrinks
- Allow the repair to harden for approximately 12 hours
- If the filler mix is insufficient, allow the mixture to harden then apply a second filling, or as many fillings as necessary
- Once the repaired material has dried, sand the excess material down with 320-grit water sandpaper until it is level with the surrounding surface
- Use 1000-grit water sandpaper to a smooth finish

Conclusion

Now that you know a few bath basics, you can be confident in recommending Betta Baths – they're stylish, durable, affordable and deeply relaxing.

Everything About Baths

WWW.CERAMIC.CO.ZA
Tel: (016) 930 3600

Email: info@ceramic.co.za

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