

You can do it...

...we can help!



Installing toilets & basins

CTM

More than you expect. For less than you think.



Toilets and basins can be installed together, individually or as essential components of most bathrooms. Whether you're building, extending or remodelling, this brochure will provide you with all the relevant information for a successful installation. CTM stocks a comprehensive range of toilets and basins for every style and need, and the CTM sales staff will always assist you with any queries you may have.

Before you start

- Turn off the water supply to your home and check that all water has drained from the cistern and pipes.
- Disconnect the water inlets from the cistern and basin.
- Check the size of your water inlets. Some older inlets are larger than modern ones and you may require a set of reducing bushes to fit your new toilet or basin. (Your local CTM will confirm whether your existing inlets are adaptable or not.)
- If you are planning to move any plumbing points, get an accredited plumber to move them for you.
- Remove the old sanitaryware.
- If you are plastering, secure the pipes with newspaper or plastic to prevent plaster getting into the pipes. Leave the protective covers on stop taps to protect the taps while plastering until you are ready to install your new taps.
- Allow any new plaster to dry for at least 24 hours before you start tiling or installing a new toilet or basin.

Tips & hints

Ask the plumber to install a pressure valve to balance the water pressure. This is especially important if you are installing single-lever or quarter-turn taps, because unbalanced water pressure could damage the cartridges in the taps. It also allows for an even flow of water through the hot and cold taps.

Tips & hints

Continually ensure that all surfaces are plumb and even by using your spirit level. Plan your project carefully to see which tools you'll need. You'll find almost everything at your local CTM or hardware store, or you could save money by hiring the tools you need from a tool hire shop.

You'll need the right tools

Tools available from CTM

Tape measure: For all measuring requirements

Set of ceramic drill bits: Used to begin the drilling process without cracking tiles

Chalk line: Used for accurately marking walls or floors

Chisels: For breaking out old sanitaryware or tiles

Spirit level: To ensure plumb and level installations

- Magic ruler:** To assist when installing accessories
- Builder's pencil:** Designed to be sharpened on plastered surfaces
- Hammer:** Used for fixing batons, etc to walls
- Silicone sealant or silicone gun:** To seal around sanitaryware
- Cloth:** To clean new fixtures once installed
- Silicone scrapers:** For a neat silicone sealant finish
- Plumber's tape:** For a watertight fit on plumbing connections

Tools available from your local hardware store

- Bucket:** For a dozen different uses, including drips and leaks!
- Protective eyewear:** To protect your eyes from flying debris
- Workman's gloves:** To protect your hands when breaking out old tiles or sanitaryware
- Shifting spanner:** To loosen and tighten plumbing connections
- Set of screwdrivers:** Various types and sizes for tightening screws
- Wrench:** To loosen and tighten plumbing connections
- Set of masonry drill bits:** For drilling into walls
- Set of spanners:** Various sizes for tightening bolts and nuts
- Galvanised plumbers' plugs:** To seal exposed water pipes
- Electric drill:** For drilling any holes
- Set of plastering trowels:** To prepare surfaces for installation
- Plastering brush & board:** For plastering if required
- Club hammer:** To assist with the removal of existing sanitaryware
- Plaster sand and cement:** For plastering if required

Cleaning products you may need

- Dirtbuster:** Antibacterial household cleaner for glass and sanitaryware surfaces (not to be used on taps or accessories).
- Dishwashing liquid (or hand liquid soap):** General cleaner used with warm water and a soft cloth to clean taps, accessories and bathroom surfaces.



Tips on toilets and basins

Whatever your decorating style, you'll find a wide range of toilets, basins, bidets and urinals across a wide range of prices at your local CTM outlet. Here are some helpful pointers when considering your options.

- Toilet designs have come a long way since the introduction of flush toilets in the late 19th century, yet the elements remain essentially the same. Most toilets are still made up of a cistern, a pan mechanism that incorporates an "S" or a "P" bend, and the toilet seat. These elements may also be purchased individually.
- Basin designs have undergone something of a revolution in recent years and CTM offers an impressive array of basin suites, cabinets, free-standing basins, wall-hung basins, drop-in basins and corner basins to choose from.
- Bidets and urinals are increasingly being incorporated into modern bathroom design, and CTM offers a range of models to tie in with your other bathroom appliances and overall decorating scheme.

Selecting and installing your toilet

Most contemporary toilets are of the close-coupled type, where the cistern sits directly on top of the toilet pan. CTM's close-coupled Hygenix range incorporates some revolutionary design elements and represents the ultimate in style and quality. Your CTM salesperson will help you to select the best toilet for your requirements and advise on installation.



Hygenix 500

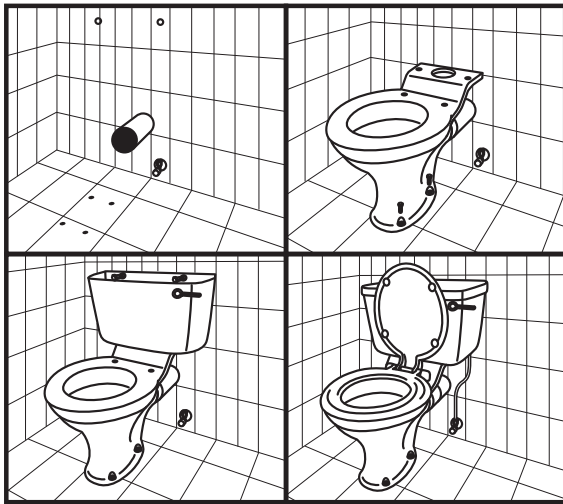
Arctic

Hygenix 1000

- Toilets are available with either top-flush or front-flush mechanisms. Top-flush models are available with single or dual flush. Dual flush allows you to select the amount of water flushed through the pan.
- You can select a design with an open-rimmed or closed-rimmed pan. With an open-rimmed design, most of the water is distributed to the front of the pan. With a closed-rim pan, there is an even distribution of water throughout the pan.

Installing the toilet

- Place the pan in front of the waste outlet in the wall, with the pan's outlet at the back. Ensure that the pan connector will be long enough and of the correct height. If the length or height is not correct, you may have to change the pan connector.
- CTM sells three different sizes of pan connector: the straight pan connector, the off-centre pan connector and a Jollyfix pan connector. The off-centre pan connector usually does the job, as it helps with off-centre or height problems.
- Place your cistern in the correct position to ensure that the pan is the correct distance from the wall. Keep in mind that the cistern will be installed flush with the tiled or plastered wall, so the wall must be tiled or plastered before the toilet is installed.
- Check that the pan is level. If not, the floor may not be level. If this is the case, you may have to use some mortar under the pan to level it.
- Once you have the pan in place with the cistern, pan connector and pan level, take off the cistern and connector. Using your pencil, mark the positions where you have to drill the holes to fix the pan to the floor.
- Place the pan connector on the back of the pan with the wider of the two holes onto the pan and the side slots into the waste outlet.
- Bolt the toilet to the floor. The advantage of bolting instead of cementing the toilet is that if it has to be changed or replaced, this can be done easily and without damaging the existing tiles.



Attaching the cistern

- Before attaching the cistern, you need to assemble the cistern mechanism as per the instructions on the package. (Ensure that you have the correct mechanism for your cistern and pan combination.)
- If yours is a close-coupled pan, you will fix the cistern to the top of the pan,

following the instructions found with the mechanism packet.

- If you've selected a low-level pan or a semi-close-coupled pan, the cistern needs to be mounted to the wall. Follow these instructions:
- Place the cistern in position against the wall (with the PVC connection pipe in place as per instructions) and using your pencil, mark the position of the holes in the back of the cistern on the wall or tiles.
- Apply masking tape over the pencil marks to protect the tiles from damage and drill the holes through the tape.
- Fix the screws provided in the mechanism pack through the holes in the back of the cistern, taking care not to fasten them too tightly, as this could cause the cistern to crack.
- Before connecting the water, check that nothing is blocking the pan's outlet. Now you can attach the flexi-hose to the cistern and the wall angle valve. Turn on the water and test the mechanism.
- Finally, attach your toilet seat.

Tips & hints

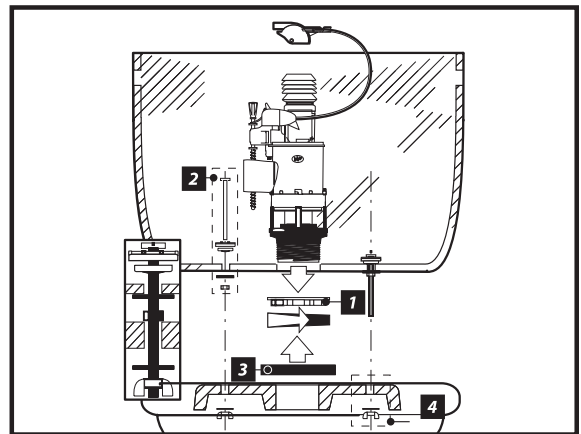
The flush mechanism is supplied ready for installation, so no adjustments have to be made. Mechanism spares are available from CTM on request.

Tips & hints

Do not use putty on the mechanism to secure joints, as this will shorten the lifespan of rubber seals and nuts and invalidate any guarantees on the mechanism of the toilet.

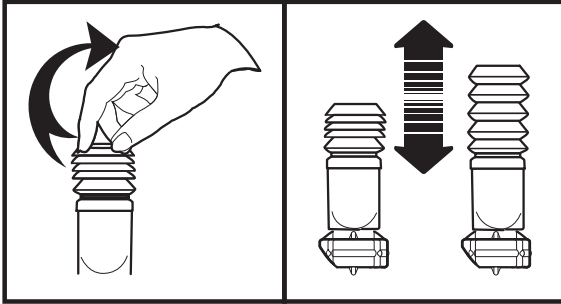
Mechanism installation

- Place the tailpiece portion of the mechanism through the outlet hole of cistern base.
- Orientate the mechanism so that the grey float is perpendicular to the front and back walls of cistern.
- Tighten the tailpiece nut with spanner provided, this will ensure that the mechanism is secured to base of cistern.
- Attach close couple seal ring to tailpiece nut.



Extendable overflow

It is worth noting that the overflow of the mechanism is extendable and compressible. This ensures that the user may accommodate various volumes of water in cistern.



Button installation

- Place button through recess in cistern/lid i.e. front flush, top flush, side flush.
- Secure button by tightening base nut.
- Attach cable housing to button.
- A correct installation will be accompanied by a click sound.

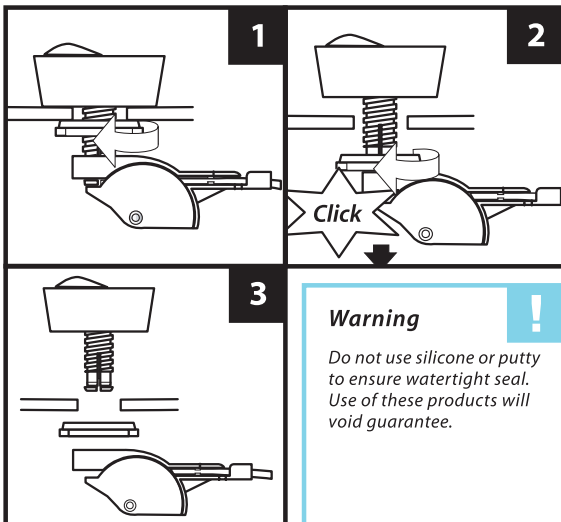
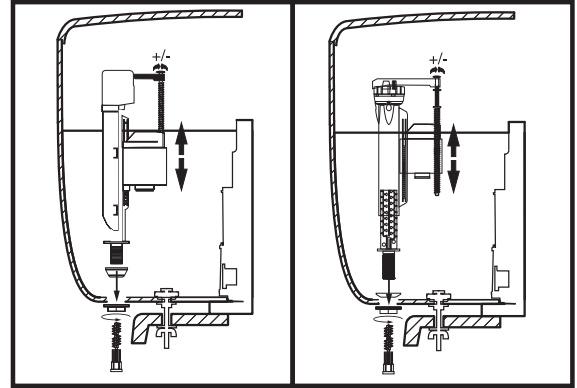


Image 1 and 2 represent the removal of the chrome plated button whilst Image 3 represents the order of installation.

Inlet valve installation



- Ensure water supply to toilet is turned off.
- Place red flow restrictor/filter into the base of the inlet valve.
- Place rubber conical washer over base of threaded shaft.
- Insert inlet valve base through recess in base of cistern.
- Tighten nut with spanner provided i.e. turn anti-clockwise.
- Turn on water supply.

Water level adjustment

Increase water level in cistern: Rotate thread screw anti-clockwise.
Decrease water level in cistern: Rotate thread screw clockwise.

Post installation checklist

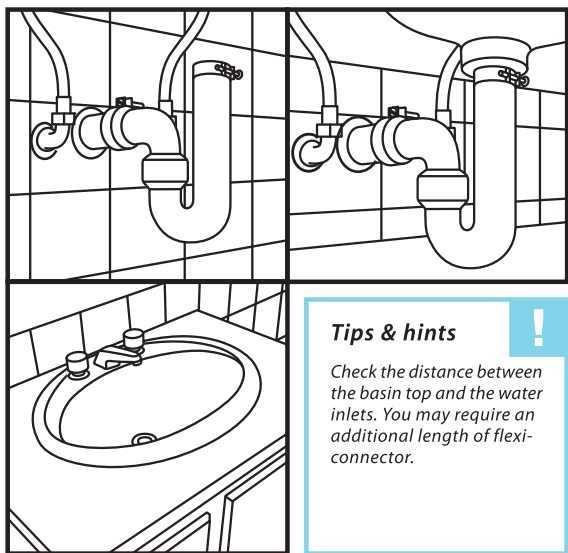
- Flush valve is securely in place.
- Grey float is not touching cistern wall.
- Cable is not kinked or wrapped around inlet valve.
- Flush button is securely fitted.
- Inlet valve float is capable of moving up and down freely.
- Water level once inlet valve shuts off is at least 25mm below overflow.

Selecting and installing your basin

CTM stocks a wide variety of basins and cabinets in many different shapes, styles and sizes, with the Hygenix range representing the top of the line. Materials range from cast ceramic and glass to integral acrylic tops. Pedestal basins come in full and half pedestals, and cabinets are available in different finishes. Your CTM salesperson will be able to provide more information on each type.

Installing a cabinet with an integral basin top

- Tighten nut with spanner provided i.e. turn anti-clockwise.
- Turn on water supply.
- Bolt the cabinet to the wall and screw on the handles.
- CTM recommends that you install angle valves on your basin inlets, allowing you to shut off the water to the basin without affecting the supply to the rest of the house.
- Connect the basin outlet to the waste water outlet in the wall.
- Connect the taps to the integral basin top and fix the top to the cabinet.
- Connect flexi-connectors to the angle valves and connect the trap to the basin.



Tips & hints

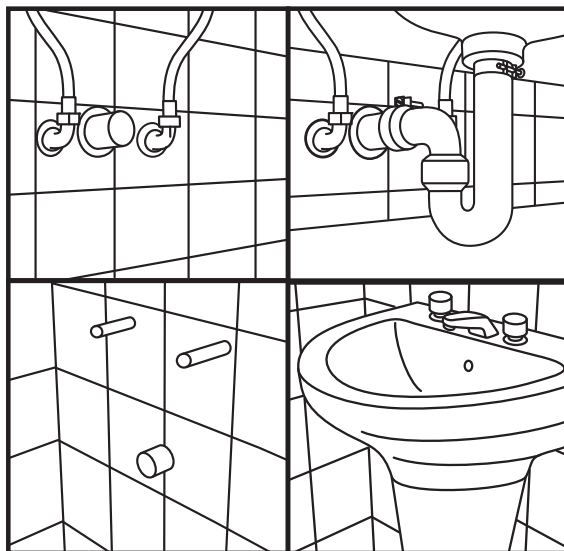
Check the distance between the basin top and the water inlets. You may require an additional length of flexi-connector.

Installing a ceramic basin and pedestal

- Before installing your basin, you first have to install the taps.
- Locate the semi-punched tap holes on the basin. Using a ballpoint hammer, gently tap out the centres of the holes for the type of taps you will be using. Remember to tap from the top of the basin and not the bottom. If the holes are hammered from the bottom, this could cause the basin to crack and break.
- Fit the taps, taking care to insert the seals provided between the taps and the basin.
- Connect the trap to the waste. The waste comes with its own seals, so no plumber's putty is necessary.
- Place the basin on top of the pedestal, firmly against the wall. Using

your spirit level, ensure that the basin is level. Use your pencil to mark the position of the fixation holes on the wall.

- Remove the basin and pedestal. Apply masking tape over the pencil marks to protect the tiles from damage and drill the two holes through the tape.
- Mount the basin to the wall with the bolts provided. Ensure that the plastic protectors are inserted between the nuts and the basin. Do not tighten yet.
- Check that the basin is level. Place the pedestal under the basin and make sure that it is straight. Once you're happy that everything is straight and level, tighten the fixations (never over-tighten, as this may cause the basin to crack).
- Connect flexi-connectors to the taps. Connect the trap to the waste outlet and the taps to the water inlets.



Tips & hints

The pedestal is only there to hide the plumbing and trap. It should not be used to support the basin.

Tips & hints

To clean and maintain your basins, use dishwashing liquid, warm water and a soft cloth.

CTM AT YOUR SERVICE

Remember, when in doubt, ask the CTM sales staff or visit our website at www.ctm.co.za. Good luck, and enjoy your installation!