SPA-JET ltd

ShowerFORM
Level access solutions

A Guide To Installing ShowerFORM Wetroom Floor Formers

STEP 1: MARK THE FLOOR

Mark out the floor where the floor former is to be installed.

It may be helpful to temporarily place the floor former on top of the floor where it is to be installed and trace a line around the outside.

STEP 2: Cut The Floor

Using a suitable cutting tool, such as a circular saw, cut out the section of flooring that needs to be removed.

When cutting the flooring, ensure that your circular saw is set to the correct depth so that joists are not damaged by the cutting process.

It may be necessary to use a hand saw in places where the floor former meets walls in order to finish the cut.

It is recommended that you do not dispose of the flooring that was cut away as a portion of it may be suitable for use in the sub-floor that will be installed in a later step.

STEP 3: Set The Waste Trap

Note that this section only applies to installations that are using the recommended waste traps as specified below. Other models of waste trap are also suitable, however the installer must refer to the manufacturers instructions regarding installation. Page 5 shows the components of the trap models that will be referred to here.

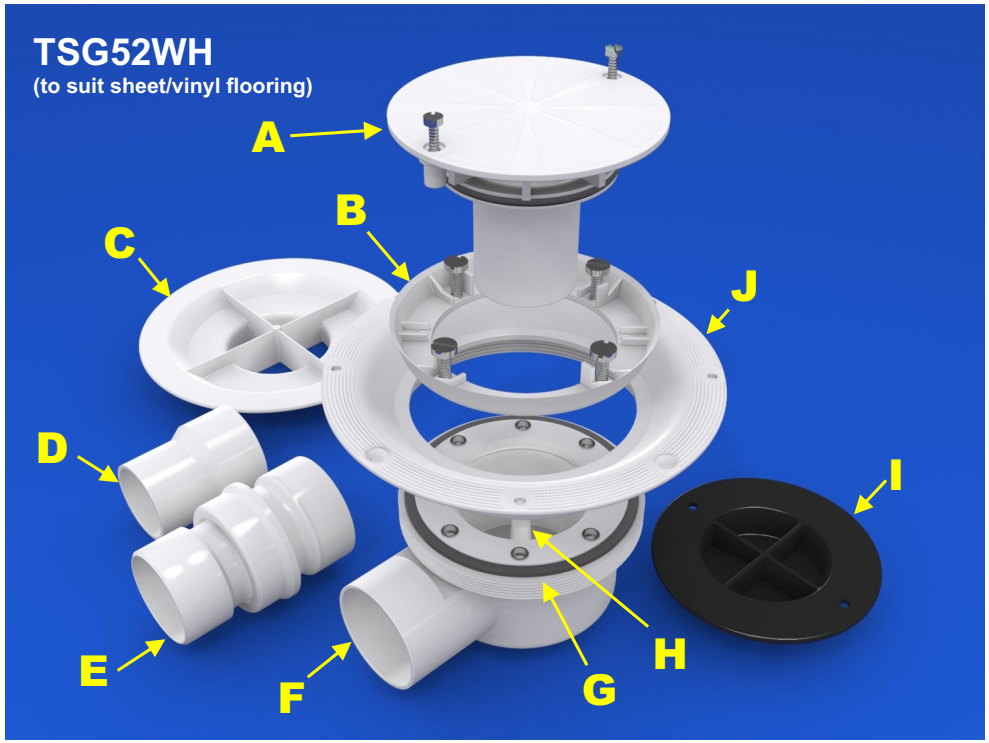
McAlpine TSG52T6SS (suitable for tiled flooring)
McAlpine TSG52SS (suitable for sheet flooring)
McAlpine TSG52WH (suitable for sheet flooring)

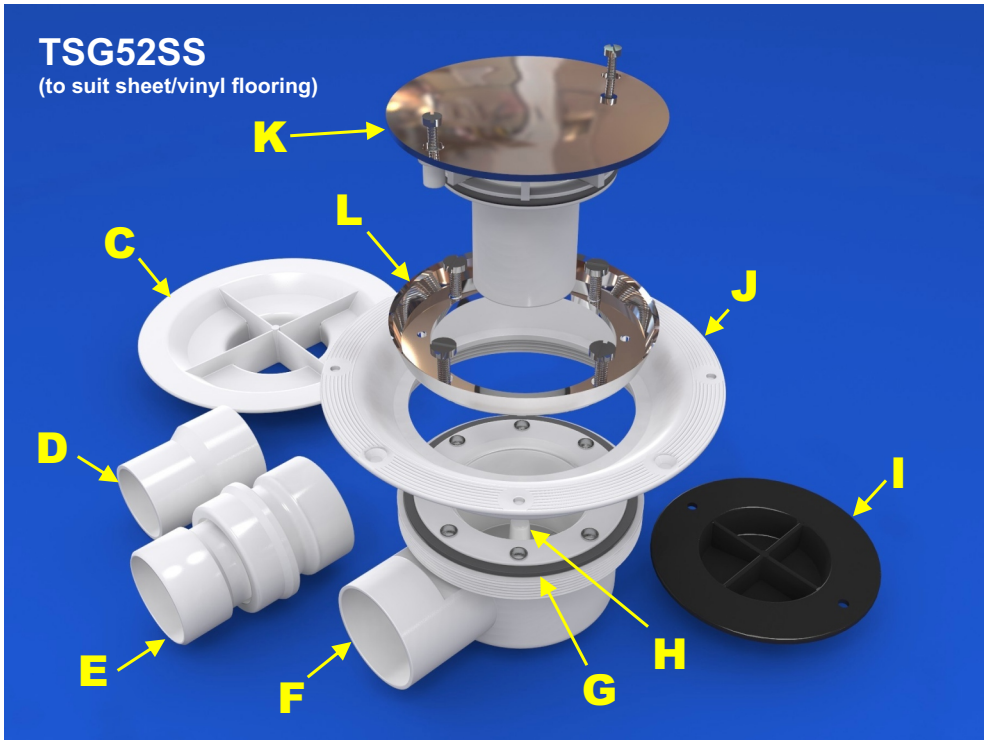
The waste traps specified above are called a "**two part split waste"**. They are specially designed to make the installation of the floor former easier than otherwise may be with a single part waste trap. This is because the bottom section of the trap (part F) can be fitted in place before the sub-floor and floor former go into position. This makes attaching the drain pipe a simple process. In order to fit the bottom part (part F) of the waste trap, you may need to disassemble the parts first. If so, remove the inner collar (part B, L or Q) by unscrewing the four stainless steel machine screws. Now unscrew the outer collar (part J) to leave the bottom part (part F) of the waste trap. Ensure that the rubber seal (part G) that separated the bottom of the waste trap and the outer collar is still correctly situated in the bottom section.

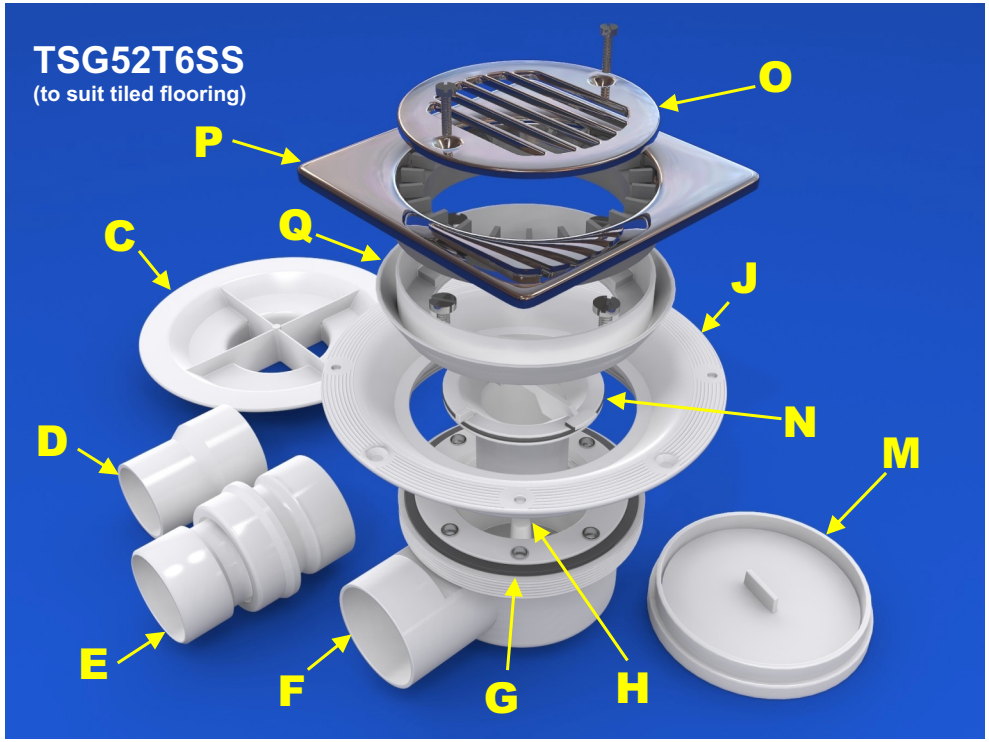
When setting the position of the waste trap, ensure that the centre of the trap will line up accurately with the centre of the floor former outlet hole.

Note that the waste trap is designed to accommodate a solvent weld to a 2" drainage pipe or 1.5" solvent weld using the supplied adapter. Test that the drainage pipe has a water tight bond to the waste trap by running water though before continuing with the installation. Note that if you are using 1.5" compression fittings rather than solvent weld, then an adapter (not supplied) will need to be used. e.g. the Polypipe WP59 adapter.

Once the waste has been set it is advisable to temporarily set the floor former into position to ensure that the trap and former outlet are correctly aligned.







A: Trap Top (White)
B: Inner Collar
C: Tightening Tool
D: Reducer
E: Flexible Adapter
F: Trap Bottom
G: Rubber Seal
H: Inner Bucket
I: Air Tight Cap (for testing air/water tightness)
J: Outer Collar
K: Trap Top (Stainless Steel)
L: Inner Collar (Stainless Steel)
M: Spacer (centre can be broken and discarded after glue has set)
N: Inner Stem
O: Removable inner grate
P: Stainless steel grate housing
Q: Inner Collar

STEP 4: Reinforce the Floor

Reinforcing the floor is a critical stage in installing the floor former.

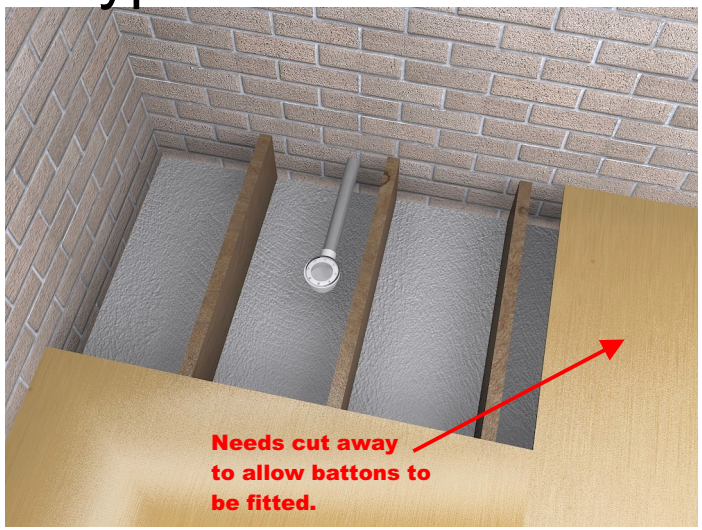
Why is this important? - There will always be a degree of movement in the floor as people are walking on it as well as movement due to other factors such as settlement and subsidence. When the floor moves it is important the floor former moves exactly in unison with it. This is so that the sealant around the joints where the former meets the floor do not break causing leaks.

The ShowerFORM floor former has been specially designed to be flexible to move with the floor whilst providing a high compressive strength to support a large amount of weight (independently tested to accommodate over one ton of weight). The flexibility of the ShowerFORM floor former along with its compressive strength are one of the key attributes of this design. The rigid design that some floor formers posses may lead to leaks under certain circumstances due to their inability to flex.

In order for the floor former to flex in unison with the floor, suitable wooden battons must be fitted to support all outer edges of the floor former **and** the floor. Depending on the position of joist and walls, it may be necessary to temporarily cut out portions of flooring so that supporting battons can be installed. Various scenarios can arise when fitting the supporting battons, however the key point is that the floor should not be able to move independently of the floor former. All supporting battons should be flush with adjoining joists and firmly screwed to the joist or wall. The flooring should be firmly **screwed** down to all supporting battons.

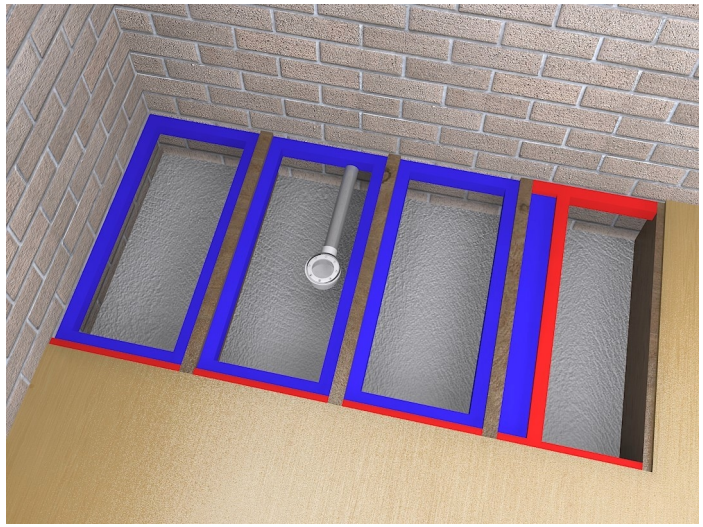
Page 7 demonstrates a typical installation scenario.

A Typical Sub-Floor Installation Scenario

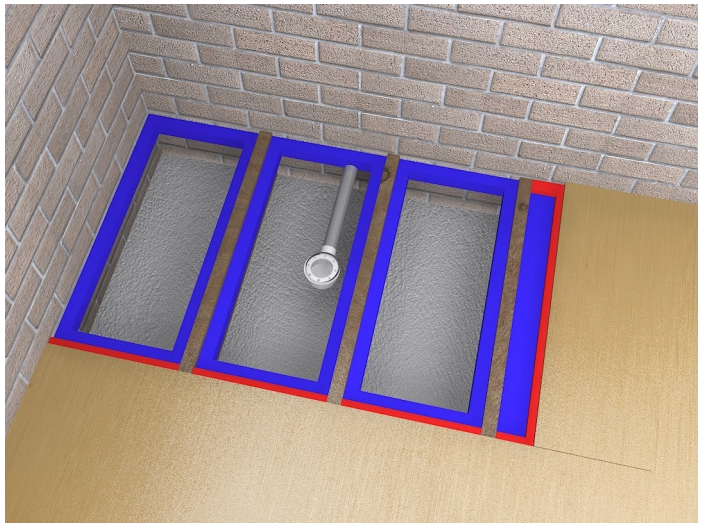


1. After cutting away the floor, areas that need to be supported with battons can be identified. In this case we can see that a further portion of the floor will need cut away to allow battons to be fitted.

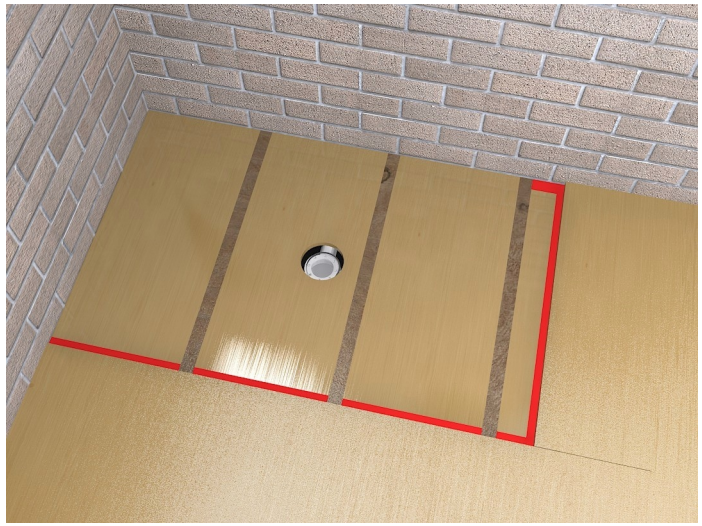
2. Now that the floor has been cut back, battons can be fitted. Note that the floor has been cut back so that it is resting half on the joist and can be screwed down.



3. The battons highlighted in red have been fitted so that they are flush with the joists and support the floor. The battons highlighted in blue are sitting 18mm (floor thickness) lower than the joists to accommodate the sub-floor.



4. The extra portion of flooring that was cut away in point 2 can now be screwed back into place.



5. The sub floor can now be screwed down to the battons highlighted in blue. Note that a 160mm diameter hole has been cut to accommodate the waste trap.

6. The floor former can now be screwed down to the subfloor along with the outer collar of the waste trap. A sheet of plyboard can be fitted to bring up the floor level flush to the floor former.

STEP 5: Prepare for the Sub-Floor

This stage involves installing wooden battons to support the sub-floor. It is necessary to install a sub-floor to support the entire floor former since it will flex even though it can easily support over one ton of weight without compressing. Note that the section of flooring that was cut away at step 2 may be partially reused as the sub-floor.

The sub-floor will be in a number of sections depending on the circumstances of the installation. Anywhere that a portion of sub-floor needs to be installed will require battons around all edges to support it. Take a note of the thickness of the flooring that will be used for the sub-floor. This will usually be around 18mm if you are using the flooring that was removed at step 2. The battons should be fitted so that they will be this depth lower than the adjoining woodwork. This means that the sub-floor will be flush with all adjoining woodwork/joists and ready to take the floor former.

STEP 6: Install the Sub-Floor

Now that all supporting battons have been installed, the sub floor can be fitted.

Using the flooring that was cut away in step 2, mark out and cut pieces of suitable quantity and size for the particular installation.

Note that there will be one portion of the sub-floor that will require a hole to be cut into it to allow for the waste trap. Carefully measure the centre point of the hole and cut a circle 160mm diameter using a suitable tool such as a jigsaw.

Once cut, firmly screw all sub floor sections into place ensuring that the section with the hole accurately lines up with the waste trap that was set in step 3.

STEP 7: Install the floor former

Now that the sub-floor is ready, it is possible to install the floor former.

You will notice that around the outer edges of the floor former are recesses to accommodate counter sunk screws. Using a 4mm diameter drill bit (not supplied), drill pilot holes through each of the points. Note that you will not damage the floor former by drilling through these points.

Now set the floor former into its final position. Note that the floor former may be sitting a few millimetres higher than the surrounding floor. This is normal and is due to the floor former having a 22mm thickness. The floor former requires this thickness in order to provide an acceptable gradient for the water to flow to the waste trap. Later steps will detail what should be done to counter this.

Once in position use wood screws (4x50mm recommended - not supplied) to firmly fix the floor former to the sub floor (do not overtighten). Note that it is not necessary to use stainless steel screws, as the tanking that will be fitted later will protect the screws against oxidation.

STEP 8: Fit the Top Section of the Waste Trap

As in step 3, this section only applies to the recommended waste traps. If using another type of waste trap, refer to the manufacturers instructions.

Take the outer collar (part J) of the waste trap. You will notice four counter sunk recesses. Drill 4mm pilot holes through each of the recesses.

As in step three, ensure that the rubber seal (Part G) is still in place. You will now be able to locate the collar onto the threads of the bottom of the waste trap that was installed in step 3. Firmly tighten the outer collar to the bottom of the waste trap ensuring that the rubber seal remains in place. A tool is supplied (part C) with the waste trap to assist in tightening the outer collar.

Test the rubber seal by running water into the waste trap (NOT over the floor former as it hasn't been sealed around the waste or joints yet). As the outer collar has not yet been fixed to the floor former, it is possible, to carefully lift the collar and bottom part of the waste that it is screwed to in order to inspect for leaks. Do not lift higher than necessary as it may damaged the drainage pipe connection.

Mark the four outer collar holes so that 3mm pilot holes can be drilled through the floor former. To recap, there should be 4mm pilot holes through the outer collar and 3mm pilot holes through the floor former.

Using four wood screws (4x30mm recommended - not supplied) firmly fix the outer collar to the floor former and sub floor.

Do not fit the rest of the waste trap at this stage.

STEP 9: Bring Up the Floor Level

As mentioned in step 7, the floor former may be sitting higher than the surrounding flooring. If so, a couple of options are available to bring the floor up to the same level.

The recommended option is to fit a skin of plywood of the necessary thickness to the flooring to bring it up to the same level.

An alternative option is to use a self leveling compound to bring up the floor level.

STEP 10: Tank the Floor Former

The floor former and waste trap must now be sealed using a tanking system.

Many variations of tanking system are available on the market which are suitable for this application. Care must be taken to follow the manufacturers instructions in order to prevent leaks. Regardless of the tanking system that is being used, it is important that the following points are followed.

Where the outer edges of the floor former meets the adjoining flooring, the tanking must be liberally applied so that no leaks can possibly occur. Note that all screws around the outer edge of the floor former must be completely sealed with the tanking.

Where the outer collar of the waste trap fits to the floor former must be sealed with the tanking kit, including all screws.

Note that it doesn't do any harm to completely cover the floor former with the tanking however, it is not necessary. As long as all joints and screws are completely sealed then the tanking of the floor former has been satisfactory completed. Note however, that the floor former has guide lines marked on it to visually assist the tiler if it is a tiled floor being fitted. As such, it is useful to leave the guide lines visible to the tiler.

Note that whilst this step has sealed the floor former and waste trap, it is imperative that the entire wet area is also tanked. This however is outside the remit of this guide and is the responsibility of the fitter.

STEP 11: Finish the Flooring

The floor former has now been fitted and tanked and the adjoining floor has been brought up to the same level as the floor former. The finished flooring can now be fitted.

The parts of the waste trap that have been fitted so far will be to suit either tiled flooring or sheet/vinyl flooring. Please follow either section A or B on the following pages based on the type of flooring that will be fitted.

A. Tiled Flooring
It is highly recommended that a flexible cement based adhesive is used so that movements in the floor will not break away tiles. Note that the shininess of the Acrylic surface of the floor former will not impact on bond strength, however it may be abraded if the tiler wishes to do so.

Tiling can now be fitted as normal. Note however, when tiling over the floor former that the fall towards the waste hole should be maintained. Guidelines have been moulded into the floor former to visually assist the tiler.

A stainless steel waste grating (parts O and P) is supplied with the McAlpine TSG52T6SS waste trap. The tiler should leave just enough space to accommodate this grating plus grout.

Once the tile adhesive is fully set, the waste trap installation can be completed. Locate the central collar (part B, L or Q) of the waste trap and screw it into place with the four stainless steel machine screws (supplied). Insert the removable inner bucket (part H) and the inner stem (part N).

Unscrew the removable central section (part O) of the stainless steel grate. This will make it easier to set the height of the grate. Temporarily set the stainless steel grate into place and determine what height it needs to be set at to be flush with the adjoining tiles. If very thick tiles are being used, it may be necessary to use the supplied spacer (part M) to bring the grate up high enough to be flush. (The inner part of the spacer can be broken away and discarded once the glue has set). Note that it you are using very thin tiles then you may find that the grate won't sit low enough to become flush. If this is the case, you will need a modified grate. Please contact your supplier or Spa-Jet who will be able to assist.

Once you have determined what height is necessary remove the grate and use solvent glue to permanently fix it back into position along with a spacer (also glued), if necessary. Finally re-fit the central section of the steel grate (part O).

Ensure that the installation is satisfactory by testing the drainage.

THIS COMPLETES THE INSTALLATION.

B. Sheet/Vinyl Flooring

A stainless steel waste cover (part K) is supplied with the McAlpine TSG52SS waste trap and a white one (part A) with the McAlpine TSG52WH. Both of these waste traps are fitted in the same manner.

The floor can now be fitted as normal with a hole cut a suitable size using the supplied template (on the waste trap box). When the flooring has been fitted around the waste trap, it can be clamped into place by securing the central collar (part B or L) using the four stainless steel machine screws. The inner removable bucket (part H) can now be placed into the trap.

The chrome cover (part K) / white cover (part A) can now be fitted using the two supplied screws.

THIS COMPLETES THE INSTALLATION.