AKW

Installation Instructions

WETROOM®

02/25

Install an Wetroom shower base directly on top of floor joists—it's easy, fast, and very durable. When finished, you'll have a fully accessible curbless shower foundation that will serve you and your loved ones throughout the life of your home. Choose any tile you like, and you can retile as many times as you want to.

You'll also enjoy a huge improvement in bathroom maintenance. No more getting on your knees to reach over a curb while picking at all the nasty corners. With a curbless shower, just wash your tile and glass and plumbing fixtures, then squeegee everything to the drain from anywhere in the room.

Wetroom structural, tileable shower bases can be installed on any joist system, without altering the joists. This is a huge advantage with I-Joists and truss joists especially, because they can't be cut. Only a thin, strong Wetroom will give you a true level-entry shower without costly, unnecessary work.

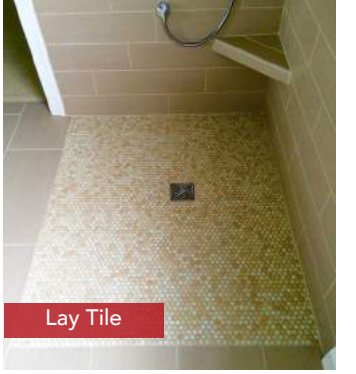
When it comes to wood joists, installing a Wetroom base avoids all the joist notching and reinforcement with sister joists and beams that thicker shower bases require. And keep in mind, sister joists have to rest on bearing points that might be far away, difficult to access, or require new framing, all of which adds more materials, more time, and more cost.

As with all building projects, preparation is the key. You'll be surprised how quickly you complete a Wetroom installation when you have a strong, level, and even support structure, which allows everything else to fall easily into place.


Layout & Blocking


Install Base & Drain

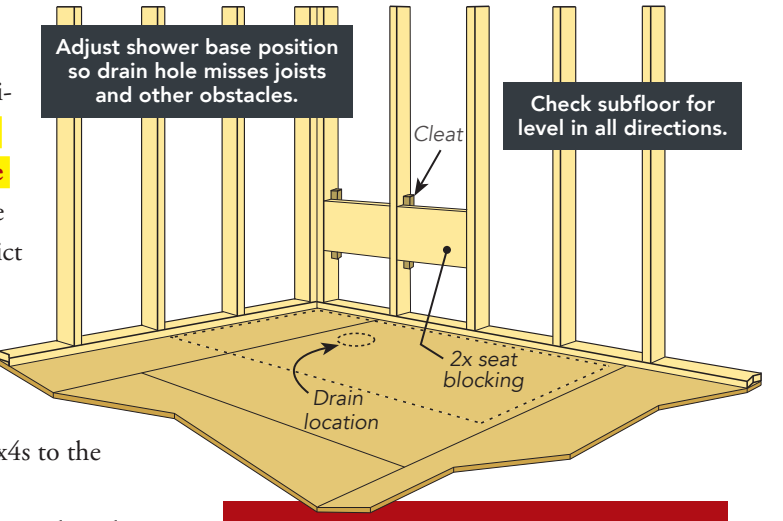
Waterproofing


Lay Tile

Layout Tips

Begin by outlining the shower base location on the subfloor. Position the base so the **center of the drain hole is at least 5" to 6" from any joist, which ensures that the reinforcement ring (see photo at right on page 3) hangs freely.** It's okay to pull the base away from walls a bit to enlarge the shower or avoid a joist conflict at the drain.

Be sure to check the site for level in all directions. If the subfloor is out of level, plan on making alterations to the joists after they're exposed. For high spots, remove material with a belt sander or rasp. Low spots require shims or sistering 2x4s to the joists. The base must be level when installed.



1. The center of the drain hole should be 5" to 6" from any joist.
2. Offsetting the base up to 6" from walls can enlarge a shower and avoid a joist conflict.
3. The tools you use for the subfloor cuts may influence the base location; some tools require no clearance while others require clearance of 1" to 2" from the walls.

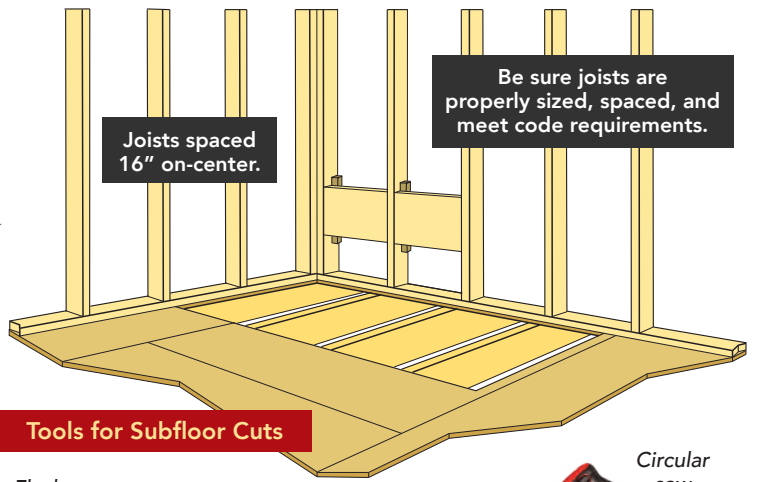
Keep in mind that you can cut these shower bases to size or shape, though you must not cut within 6" of the drain hole. If you do remove part of a base, you'll want to float thinset on affected areas to create uniformly level edges for laying tile. To do this, apply a coat of Tank/10 waterproofing to the base first, then do the float and allow it to dry. After that, proceed with all waterproofing steps as described on pages 6 to 8.

With wall framing exposed, this is a great time to add blocking to support a shower seat or grab bars. For a shower seat, use cleats to install 2x blocking at the appropriate mounting height between studs. For lighter-duty demands, use cleats to secure ¾"-thick plywood between studs.

Cut the Subfloor

For your safety and to prevent damage to utilities, check for wiring, plumbing, and ductwork before you make any cuts through the subfloor. If you can't view joists or utilities from below, carefully cut small access holes with your circular saw so that you can reach underneath the subfloor to feel for obstructions. Match the cutting depth of your saw to the thickness of the subfloor.

Use a flush cut saw or circular saw to make the major cuts for the shower base, and a reciprocating saw or multi-tool will finish the cuts at the corners. Remove the subfloor waste with a prybar—to ease its removal, especially if it's glued to the joists, cut the waste into smaller pieces.



Tools for Subfloor Cuts


Reciprocating saw


Flush cut saw


Multi-tool


Circular saw

Add Blocking

Before preparing the joist framework, notice the reinforcement ring around the drain hole on the bottom of the shower base (at right). Do not allow any part of this ring to contact blocking or joists.

Joists must be spaced no more than 14½" apart (16" o.c.). Joist spacing greater than that will require blocking to create support with gaps of 14½" or less.

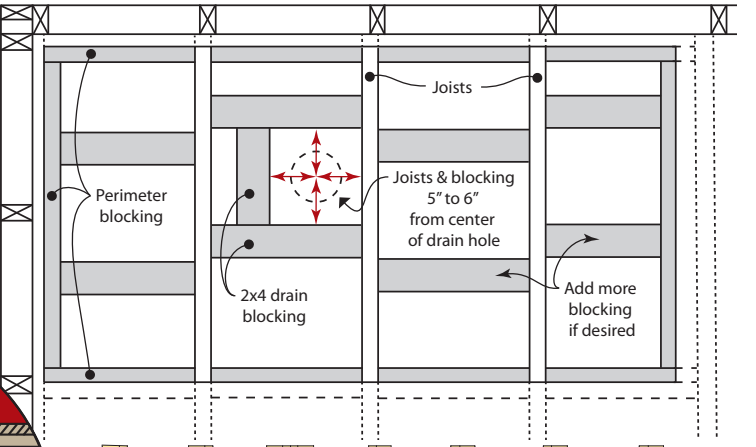
When it comes to blocking the joists, every installation is different. Whatever way you do it, the results have to be level and even, and all edges of the shower base and the adjacent subfloor must be well supported.

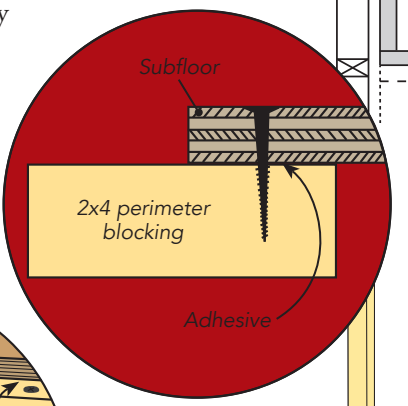
Once you know the joists are level and even, add blocking to support the shower base and subfloor edges. 2x4s work well, though you can always use bigger material if you want. Install 2x blocking on edge or flat. At the perimeter you want at least 1" of support under every shower base edge and subfloor edge. Flat 2x4s offer enough width to support both subfloor and shower base edges (see Perimeter Detail below). Always apply construction adhesive between blocking and subfloor, and drive screws through the subfloor to pull the blocking tight underneath. In addition, drive screws through joists into the ends of all blocking, unless you're working with I-Joists that have laminated flanges—in these cases, it's best to use a sandwich of 2x4s for each blocking location and install as shown in the I-Joist Detail below.

Adding blocking around the drain hole of the shower base is also required. Install drain blocking 5" to 6" from the center of the drain hole, as shown in the drawing at right, to provide support that's close to the hole yet avoids all contact with the reinforcement ring.

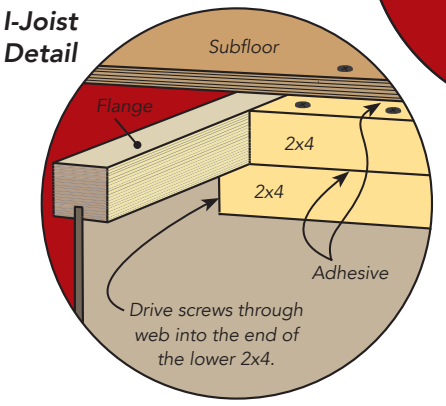
For good measure you can choose to add blocking in any joist bay that might need it; while a Wetroom shower base will span these spaces, overbuilding will eliminate any opportunity for flex in the base after it's installed, and this is the best time to ensure that result.

Test fit the shower base and check that it's level in all directions—do correct any out of level results now, as this is the last opportunity to access joists and blocking before you install the base.



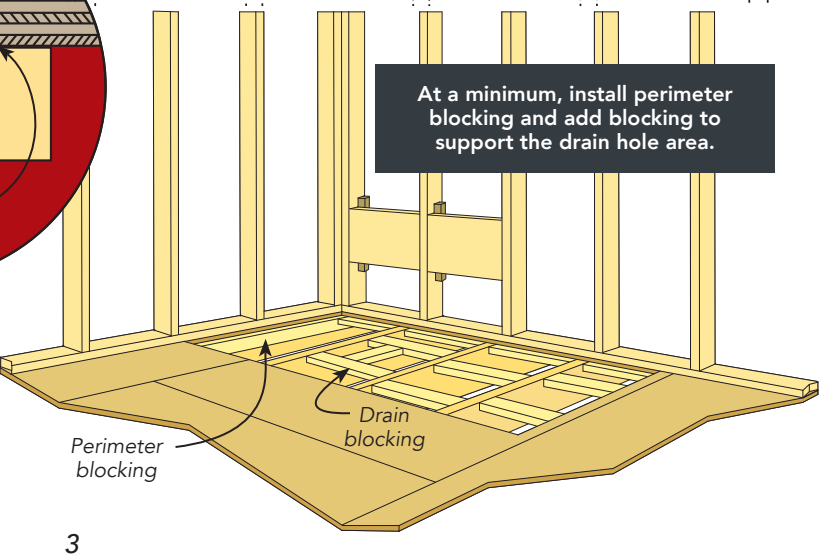


Perimeter Detail

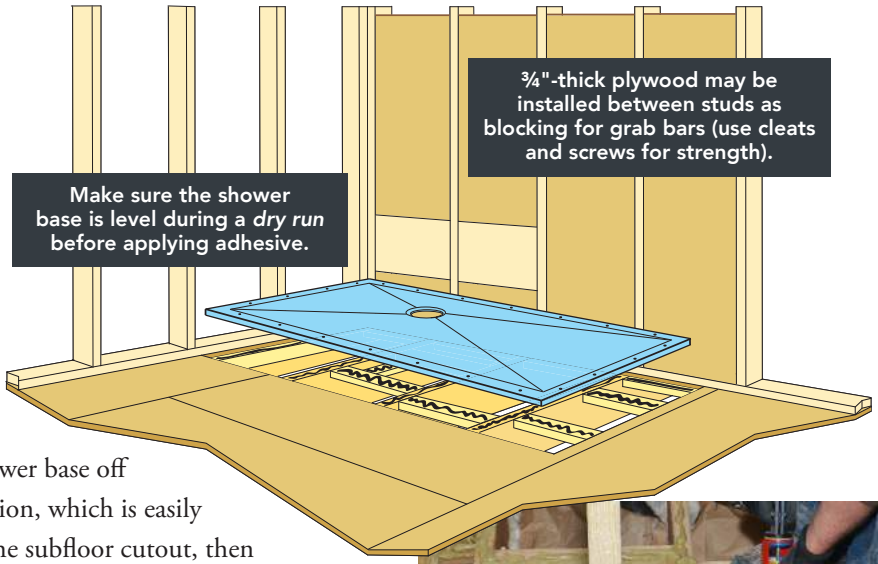


I-Joist Detail

At a minimum, install perimeter blocking and add blocking to support the drain hole area.



Set the Base



Code requires installation of tile backer over subfloor for tile or stone floors. ¼"-thick tile backer on ¾"-thick subfloor is most common, though some areas require ½"-thick tile backer on ¾"-thick subfloor. Whichever thickness is required, you want your shower base to be flush or slightly lower than the surrounding tile backer once everything is installed. For ¼" tile backer, setting the base directly on joists works out just fine. For ½" tile backer, you'll need to raise the shower base off the joists and blocking to achieve the correct elevation, which is easily done with a panel of ¼"-thick plywood cut to fit the subfloor cutout, then glued and screwed to the joists. **Be sure to cut a hole in this panel to accommodate the drain hole reinforcement ring.**

Once you know the shower base rests solidly and evenly when in position on the joists and blocking, that it is level all around, and you're certain that the reinforcement ring hangs freely, you can install the Wetroom base.

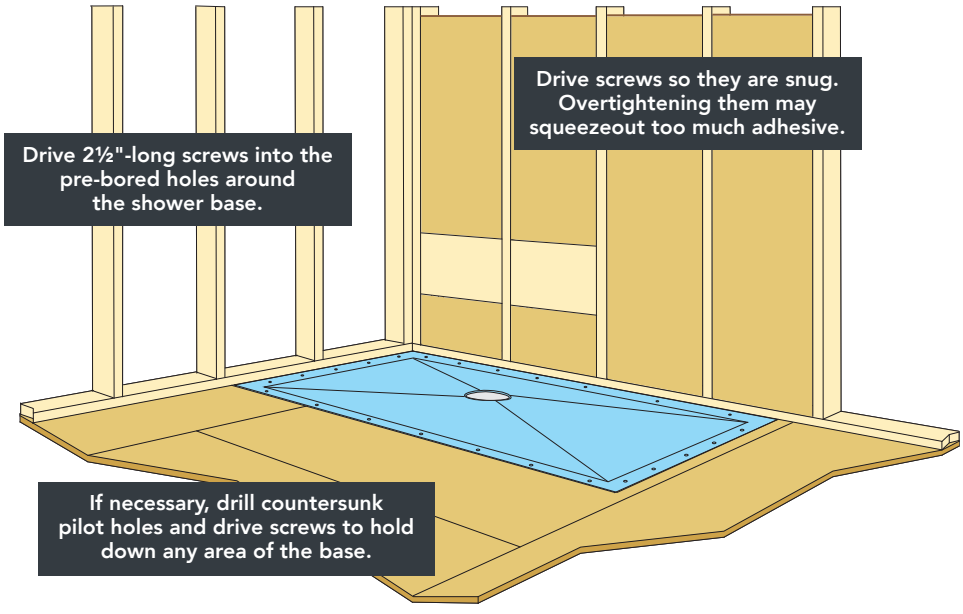
With your caulking gun loaded, apply thick, continuous beads of Tank/10 polyurethane construction adhesive to the floor framing. Polyurethane construction adhesive is a must for this application because it bonds with the shower base, which is made with a mixture of plastic and fiberglass, and the wood framework. Many construction adhesives will not bond with fiberglass and plastic. Be generous with the adhesive. As a general rule of thumb, use five to six 10 oz. tubes of adhesive for the installation of any Wetroom foundation that's 15 sq. ft. or more in size.

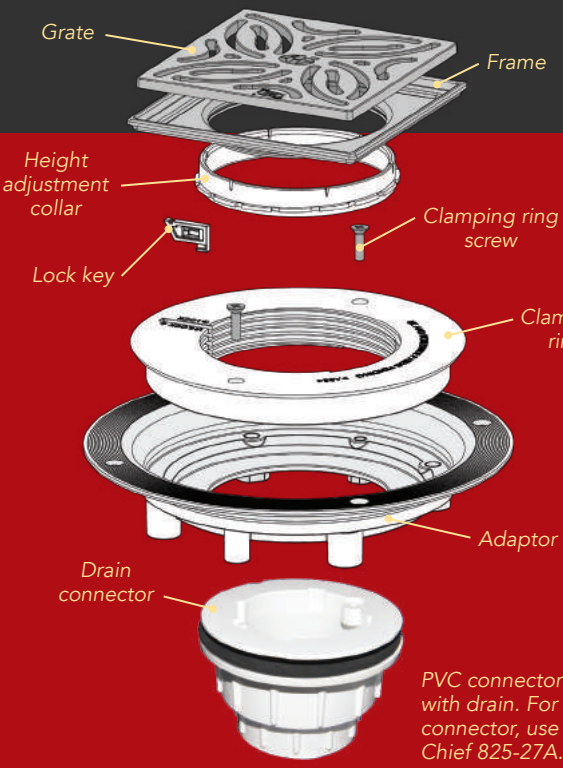
Set the shower base into the adhesive, press it down, and drive #9 x 2½" screws into the pre-bored pilot holes around the perimeter. If you've cut away any of the pre-drilled holes, simply drill 3⁄16"-dia. countersunk pilot holes spaced about 8" apart. You can drill countersunk pilot holes and drive screws anywhere in the base, as long as you waterproof over them.

As you drive the screws, check the base for level all around. The shower base must be level. Once the base is set you can install the drain adaptor and drain connector, as shown on the next page.

Make sure the shower base is level (bubble centered) all around. Check as you go.

Drive perimeter screws so they are snug, but not so tight as to unlevel the base.





PVC connector supplied with drain. For an ABS connector, use a Sioux Chief 825-27A.

Install the Drain

The instructions below will guide you through the drain adaptor and drain connector installations—all other drain assembly parts will be added later, after completing the waterproofing. Store all drain parts securely, especially the clamping ring screws since they're easy to lose (just in case you do lose them, they're flat head, 70 pitch, 4mm x 15mm stainless steel).

If needed, prepare the drain line before installing the base (when you won't have access from below), by cutting the tailpiece 2⅜" to 2½" below the joists and blocking.

The drain connector includes a female-threaded tail, polyethylene and rubber gaskets, and a male-threaded top.

When assembling the connector onto the adaptor, the polyethylene (clear) gasket goes underneath the rubber (black) gasket.

Solvent weld the PVC tail to the PVC drain line. Local code may require that a licensed plumber complete this step.

Put a bead of acrylic caulk (not silicone as it prevents adhesion of waterproofing) on the shower base and position the adaptor.

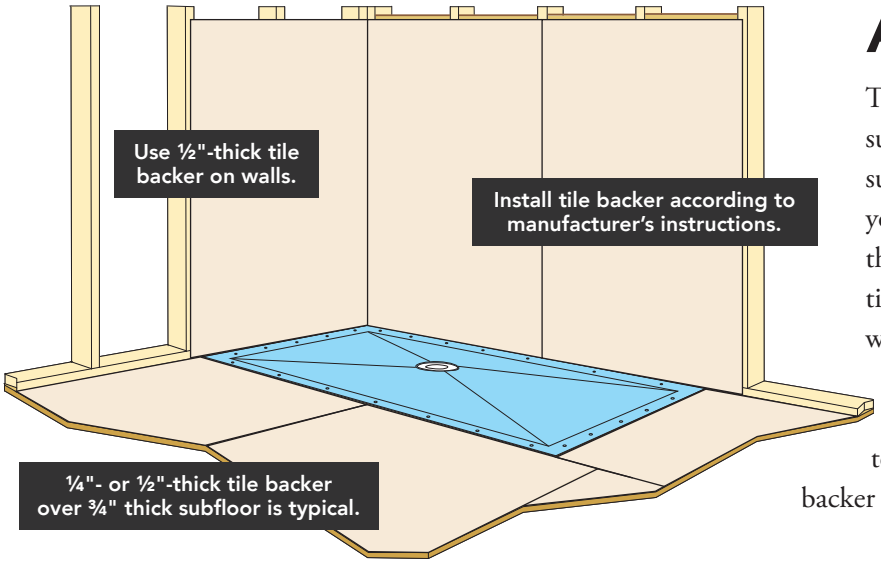
Drill the four pilot holes, then drive the stainless steel screws (supplied with the drain) so they're snug—do not overtighten.

Wet the end of your finger and spread the squeezed out caulk to fill the gap around the adaptor.

Apply caulk to the top's flange. Here, you can use acrylic or silicone caulk, since there's no contact with waterproofing.

Reach into the hole to place the gaskets on the tail flange (clear gasket under black), then thread the top in by hand.

To seal the drain connection, gain leverage by inserting a "speed square" into notches in the top, and turn the top until tight.



Add Tile Backer

Tile backer goes on the walls and over the subfloor in preparation for tile or stone—consult local codes for specific requirements. Install your choice of tile backer material according to the manufacturer's instructions. Fiber cement tile backer is shown here, though you can pick whatever product you like. Remember to pitch any pieces filling gaps on the floor between the shower base and walls. Some installers prefer to use an uncoupling membrane instead of tile backer board, which is also fine.

Prepare for Waterproofing

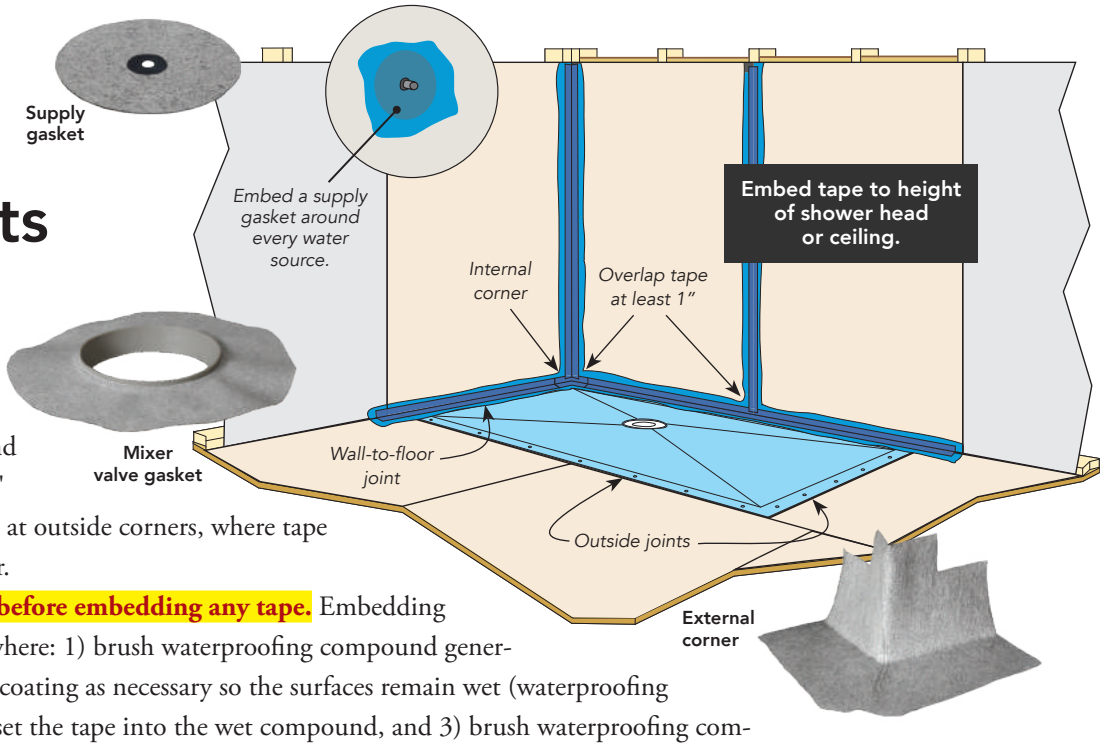
After securing tile backer to the subfloor and stud walls you'll want to complete a few details before the waterproofing steps.

First, to remove residue from handling, footprints, dirt, etc., clean the shower base with coarse sandpaper (80 to 100 grit). This takes just a minute or two and can be done easily with a random orbit sander. Next, with a belt sander or orbital sander, sand the tile backer edges next to the base so they mimic the slope of the shower base. Close is good enough here; all transitions will look fine once you spread thinset mortar and lay your tile.

After sanding, vacuum dust and debris from the site—you don't want anything to prevent waterproofing tape from laying flat on the joints, or interfering with the bond of the liquid waterproofing. Followup with a damp sponge to wipe off the entire area thoroughly, then let it dry completely—**all surfaces must be dry before applying the waterproofing compound.**

When you're satisfied with the clean up, fill all voids (⅛" and wider) to provide solid backing for the waterproofing tape and liquid compound. This typically includes covering screw heads and filling unused screw holes in the shower base, and filling gaps around the shower base and between tile backer panels. Acrylic caulk does a good job as a void filler and it skins over quickly. You do not need to wait for the caulk to cure or harden before moving on to the waterproofing steps.

Cover All Joints

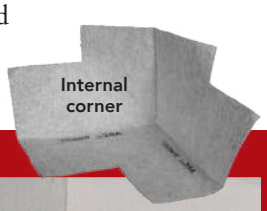


Cut tape to length for each joint—cutting all tape segments first, while your hands are clean, is a good idea. To stay organized, some installers number every piece of tape and its corresponding location. Allow for 1" overlaps where tape pieces meet, except at outside corners, where tape pieces must completely cross each other.

All surfaces must be clean and dry before embedding any tape. Embedding tape follows the same procedure everywhere: 1) brush waterproofing compound generously onto the surfaces along a joint, recoating as necessary so the surfaces remain wet (waterproofing should be glistening, and not dull), 2) set the tape into the wet compound, and 3) brush waterproofing compound over the tape. If surfaces seem too dry, lift the tape and brush on more waterproofing compound. Some types of tile backer absorb a lot of waterproofing, so it may take several applications before it stays wet.

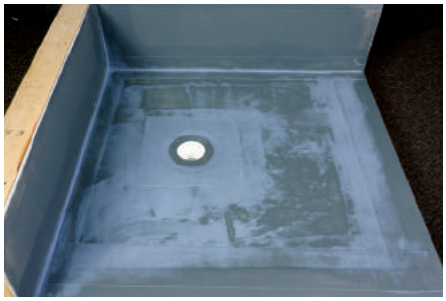
Generally, it's best to work from the back of the shower to the front to reduce the chance of stepping in wet waterproofing. Start by embedding internal corners at the rear, then cover all wall joints. While you're working on the walls, embed the mixer valve gasket and supply gasket—every water supply fitting needs a gasket. Next, cover all wall-to-floor joints, then embed tape over the outside joints. It is recommended that you embed tape over tile backer joints in the walls and floor at least 12" beyond the shower base perimeter to fully prevent water penetration throughout all likely wet spaces.

If you want a full wet room treatment, embed tape over all floor joints, floor-to-wall joints, and corners throughout the room—you'll need more tape, preformed corners, and Tank/10 waterproofing to do this. A wet room will protect all subfloor and structural framing from water penetration, and prevent the growth of mold below tile throughout the bathroom.



“Tanking” the Shower

A wet room may be the right solution for you. In a wet room, you waterproof the entire bathroom floor and up all walls a few inches, in addition to waterproofing the shower. This treatment prevents moisture from reaching the subfloor and the rooms below. If you want a wet room, embed tape over all floor joints (joints between tile backer panels and floor-to-wall joints) and all wall joints up to 3" above the floor.



With all tape and gaskets embedded, cover the shower area with two full coats of Tank/10 liquid compound. You can apply the first full coat before waterproofing dries on the tape and gaskets. Roll or brush Tank/10 everywhere in the shower, and extend the waterproofing outside the shower by at least 12"—for a wet room, spread waterproofing compound over the entire floor and 3" up the walls.

Allow the first full coat to dry (typically 1 to 2 hours) before applying a second full coat. To speed up drying, run a dehumidifier or fan in the room. The second coat should dry for 12 hours under typical conditions before doing a water test or installing tile—longer if there is high humidity. Surfaces must be totally dry before proceeding.

With the waterproofing steps completed, you can thread the drain grate subassembly into the drain’s clamping ring. Make sure the clamping ring threads are free of waterproofing to ease height adjustments. As you tile, adjust the height of the grate so that it is slightly below the surface of your tile, which will ensure proper drainage. The Classic drain works with tile from ¼" to 1" thick. You can adjust the drain grate height right up to the moment you tile around it to get a perfect tile-to-drain transition.