

CONCRETE INSTALLATION GUIDE FOR

Encompass

CURBLESS LINEAR DRAIN SHOWER BASES

(Patent No US 10,165,905 B2 and US D792,954 S)



INSTALL ON SLAB CONCRETE and MULTI LEVEL BUILDING WITH CONCRETE FLOORS

Approximately 90% of the Encompass curbless linear drain shower base sets directly on a concrete floor slab. A portion of the drain body must recess into the concrete with a hole bore through the concrete to allow the base drain output assembly to be accessible from the floor below for connection.

Prior to cutting or boring a concrete floor, verify with a Structural Engineer, Architect, or other Professional that is qualified, familiar with, and authorized to approve the cutting and boring of the trench and through holes required to install the shower base in concrete floor locations. Do NOT proceed until you have written approval and specific instructions on how to perform the work required to install the shower base. Verify the shower base is compliant with specific local building codes before installation (as local codes can vary).

SHIPPING / RECEIVING DAMAGE POLICY

On occasion, when products are shipped via third party shippers, there is a chance of damage both outside, and more importantly, inside the carton. THE CUSTOMER IS RESPONSIBLE for claims because of handling unit shortages and damages NOT NOTED ON THE SHIPPING BILL OF LADING at the time of delivery. BEFORE YOU SIGN AND ACCEPT DELIVERY: unpack the carton in view of the delivery driver and thoroughly inspect for damage. If any damage is found, make NOTE OF THE DAMAGE ON THE BILL OF LADING AND RETAIN A COPY. TAKE PICTURES of the damage to the product and packaging material. Do NOT throw away the carton or any packing materials until told to do so. Claims for concealed shortages or damage must be reported immediately upon receipt to Encompass Shower Bases at 303-798-5547 or at Sander and Sons, Inc. at (303) 347-1345.

FOR EASY INSTALLATION

Use professional installers to install the shower base and observe all local building codes.

READ ALL the instructions completely before beginning installation.

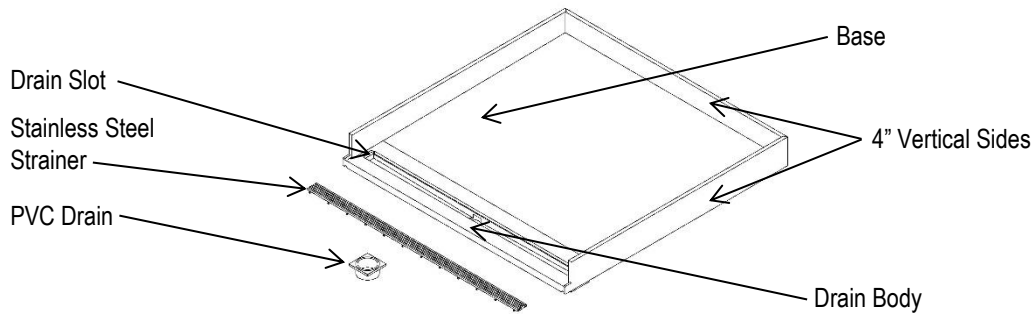
READ ALL warnings, care, and maintenance information.

Use appropriate safety practices and procedures.

Remove the stainless steel drain cover and set aside. This component will NOT be installed until after shower wall finish materials are completely installed. Cover may require trimming to fit based on finish wall material thickness.

Do NOT use any screws through or into any portion of the base for securing or mounting accessories.

CARTON INVENTORY



RECOMMENDED TOOLS AND MATERIALS TO INSTALL SHOWER BASE

Tools:

- Measuring tape
- 4'-0" level
- Carpenter's square
- Small powered concrete chisel
- Safety gloves, glasses, dust mask, face shield, ear plugs, etc.
- Concrete chisel
- Shop vacuum & broom
- Concrete wet/dry saw
- Concrete saw blades
- Fine steel file

Expendable materials:

- (1-2) tubes 100% clear silicone caulk
- Small amount of thin set mortar
- Section of 2" PVC, couplings, and p-trap

BEFORE INSTALLATION THE FLOOR MUST BE LEVEL

Clean and sweep the entire area where shower base is to be installed. Confirm the floor area is clean, smooth and free of any debris. Verify the shower area subfloor is level in all directions with a 4'-0" level. The floor must be level and smooth, so the underside ribs of the base are in full contact with the concrete floor following installation. If the floor is not level, the water may not flow to the drain evenly. Use floor leveling compound to correct out of level conditions that are more than .0625"/foot for optimum performance of the base. Place a piece of plywood or at a minimum a piece of cardboard from the base shipping box, onto the top surface of the base to protect it from damage during the installation.

STEP 1: LOCATE DRAIN OUTPUT AND DRAIN TRENCH LOCATION

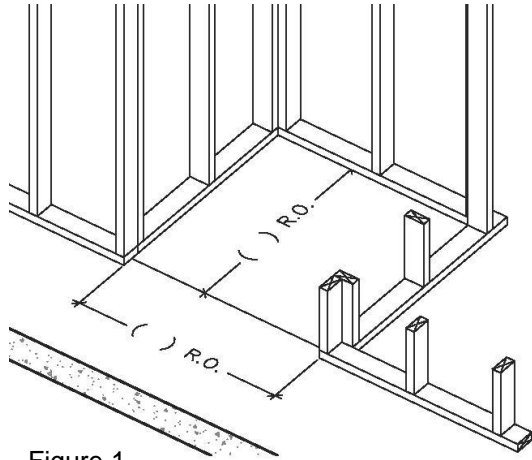


Figure 1

VERIFY THAT SHOWER BASE AND DRAIN LOCATION DO NOT INTERFERE WITH OTHER BUILDING ENTITIES. VERIFY THAT ACCESS AND DRAIN CONNECTION CAN BE MADE IN THE FLOOR BELOW.

Measure shower base to verify dimensions. Verify rough-in dimensions from left to right (shower base width + 1/4") and front to back (shower base depth + 1/8"). Using a carpenter's square, verify all inside corners of the install location are square (90°). If the install location is not the correct size and square, make necessary corrections to enable shower base to be installed with a 1/8" gap on all sides. Shower base must NOT be wedged into place.

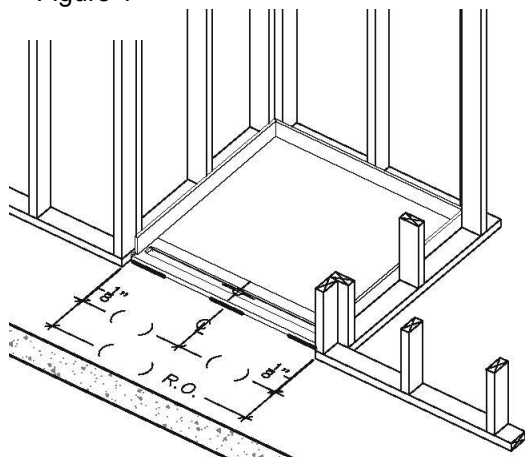


Figure 2

Dry fit shower base. Position shower base in install location with 1/8" gap on all exposed stud walls. Align shower base. Mark X on floor at center of 2" PVC drain pipe of shower base and on the right and left sides where the front of the base will be located.

Carefully remove shower base. Confirm the drain and shower base floor markings. Including the 1/8" gap from the rear and side walls, the drain center should be as follows:

Measuring from left OR right side stud wall:

Base drain center = $\frac{\text{base width} () + 1/8"}{2}$

X base depth () - 2-7/8"

Measure length of 3/4" x 3" thick drain on bottom of shower base.

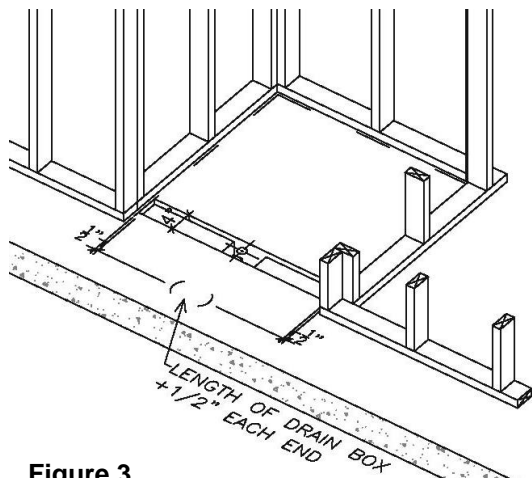


Figure 3

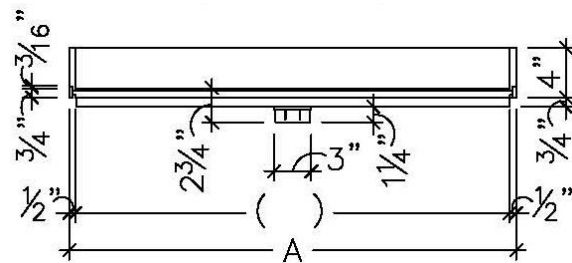


Figure 4

Draw a rectangle on the floor centered on the X centerline of the drain mark that is 4" wide x (length of the 3/4" thick drain lower body). Add 1/2" to the length of the cut out so the drain will fit into the floor easily once it is trenched. Double check all measurements, this area now becomes the "trenched out area".

STEP 2: CUT DRAIN HOLE, SAW CUT TRENCH AREA, AND CHIP OUT

The first logical cut is to bore the 3"– 3 ¼" diameter hole for the shower base 2" PVC drain couplings that will be extended to fit through the concrete and reach the customer provided p-trap.

Before proceeding with saw cutting the trench area, plug the 3"-3 ¼" hole so debris does not escape to the floor below.

Once this is completed, the 1" deep trench perimeter can be saw cut, then cut lengthwise every ½" apart, and then, cross cut if desire to ease the chipping out the concrete for the trench area. At the center of the 3" PVC hole area, the trench will need to be 3-½" deep x 6" wide to accommodate the entire PVC output protective assembly.

Chip out all concrete to the 1" depth on both sides of the drain output and the 3-½" deep x 6" wide area for the drain and its protective assembly. Sweep and vacuum floor area and entire trench area before proceeding.

Use the 1" **Trench Gauge** provided with shower base to assure a clean area. Insert the 1" depth part of the gauge into the trench. Keeping it vertical and square, slide it along the trench and make sure that there are no high spots or any concrete aggregate sticking up above the 1" depth that could damage the bottom of the shower base drain body when dry fitted and cause it to potentially leak when installed.. If high spots are noticed, chip out until NO high spots can be detected.

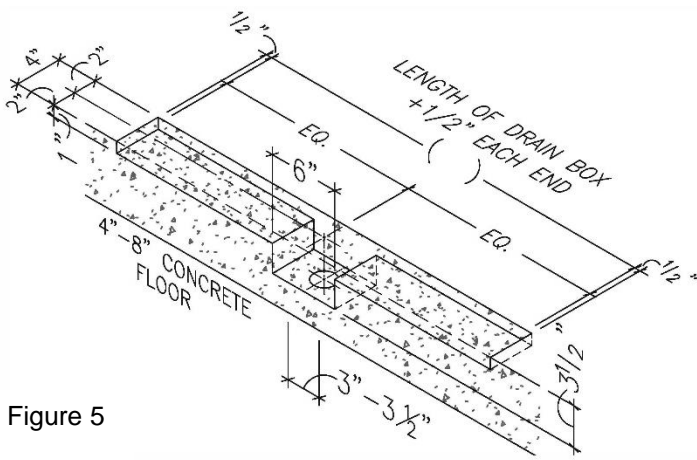


Figure 5

Using the 3-½" **Trench Gauge** provided with shower base to assure a clean area. Insert the 3-½" depth part of the gauge into the trench. Keeping it vertical and square, slide it along the 3 ½" trench and make sure that there are no high spots or any concrete aggregate sticking up above the 3-½" depth that could damage or cause stress on the shower base drain assembly when dry fitted and potentially fail and leak once installed. If high spots are noticed, chip out until NO high spots can be detected. Sweep and vacuum entire trench and shower base floor area before proceeding.

STEP 3: DRY FIT BASE

Carefully set base in place by setting it vertically on its rear against the rear rough in wall, then lowering the front slowly and sliding the base to the rear until the drain output body clears the inside front of the trench. **DO NOT DROP IT** into the trench. Keep it supported until the front of the base contacts the concrete floor across the entire front of the base. If it does not fully contact the floor, **DO NOT FORCE IT**. Remove it and determine what is causing the interference and correct it. Repeat this step until the base drops fully into the trench area without obstructions.

Once the base will set in place and the front and all sides makes full contact with the floor, confirm that the base drain 2" output can be centered on the 3" diameter hole in the concrete floor. If not, make correction before proceeding. Then walk on base to confirm the base is making full contact with the floor with no deflection.

Confirm that the base is centered within the three side walls and that an approximate 1/16 -1/8" gap is seen between the base side wall and the rough in stud.

STEP 4: FINAL BASE SECURING AND SUPPORTING DRAIN BODY

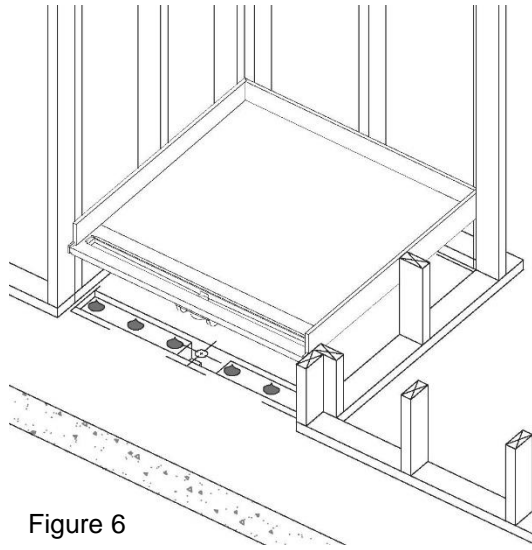


Figure 6

Remove the base from the dry fitting step. Clean and vacuum trench and shower base floor install area.

Mix enough thin-set mortar material to place 2" wide x 1" high mounds of mortar in bottom of trench spaced 6" apart. This material is intended to contact the bottom of the drain body when the base is set in place, then spread out, while allowing base to drop fully on the floor. When cured the mortar will provide important support for the drain body. **Warning:** Do not use too much thin-set mortar or it will raise the front of the base upward.

Move base to the rear of the install area. Lift base onto its rear side piece then apply a bead of 100% silicone caulk to the bottom of the base support ribs. Place a large bead across the entire base front bottom so that excess caulk will squeeze out in front of the base once set in place.

Carefully set base in place by setting it vertically on its rear against the rear rough in wall, then lowering the front slowly and sliding the base to the rear until the drain output body clears the inside front of the trench. **DO NOT DROP IT** into the trench. Keep it supported until the front of the base contacts the concrete floor across the entire front of the base. Make sure the front base bottom contacts the concrete floor along the entire length of the base. Confirm that caulk has squeezed out on the front of the base and concrete floor. **Check to make sure base is making full contact with the floor, is centered in rough-in opening, and the base drain opening is centered on the concrete hole in the floor.**

STEP 5: PLUMBING CONNECTION TO BASE

Two methods to direct connect the base

The Encompass base has a standard 2" PVC output. A PVC Drain is provided and is used for most installations as it provides a reliable connection and allows the base to be removed if needed in the future. With multilevel building concrete floor applications, a direct PVC cement connection can be made. This would consist of a 2" PVC coupling connected to the base 2" output and then a tail piece extending to the floor below where the p-trap will be connected. If removal was ever required, an internal diameter PVC cutter can be used to remove the base, but the cut **MUST** be made below the base's permanent built in 2" PVC output. Check with local building codes to insure the method you select is allowed.

Once the best method to connect is determined, make the connections to the base. **Make sure the p-trap and all piping connected to the base is properly supported** so that Encompass base connection is **NOT** supporting the weight of, or stressed from, any of the drain connection plumbing within the building.

Note: Do NOT install the stainless steel drain cover until the installation of wall board and wall finish (i.e. tile) is complete as you may trap it in place and will not be able to remove it for cleaning.

STEP 06: INSTALLATION OF WALL BOARD AND WALL FINISHES / FLOORING

Install shower wall finishes and flooring. Below are tips on installing flooring and wall materials that interface with the shower base.

- Lay a piece of plywood on the base floor to protect it from damage with dropped tiles, tools, etc.
- Install tile backer board a minimum of 1/8" off the top of the 4" vertical sides of the shower base. Using 100% silicone caulk, fill 1/8" gap between the base vertical side and tile backer board. See Figure 7a & 7b.
- Install wall finish slightly past the drain opening so water that runs down the side walls to the drain cannot escape at the side wall and drain interface. See Figure 6b.
- When shower wall finishes are installed, tile or other wall finishes used should be adhered to the shower base's 4" vertical sides using 100% silicone caulk. Do NOT use tile thin set mortar or any other mastic. These materials will not adhere as well or allow for expansion. See Figure 7a.
- Joint between base front and flooring must be caulked with 100% silicone, NOT grouted. See Figure 7b.
- Install tile or other wall finishes 1/8" off the shower base floor and flush to the front of shower base. Caulk the 1/8" gap with 100% silicone caulk. See Figures 7a & 7b.
- Remember the shower base floor has a 2% slope. It is best to have full tile pieces at the base interface for the finish material to be cut to follow the slope.
- Shower door and glass panels should be mounted at the front of the drain, centered between drain opening and front of shower base. See Figure 7b. Do NOT mount glass channels to shower base with screws. Use 100% silicone to mount glass channels.
- A door sweep on the shower door is recommended to minimize splatter to outside of shower and direct water off door toward drain.

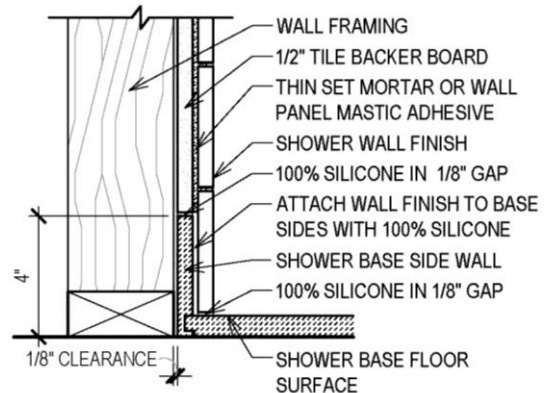


Figure 7a

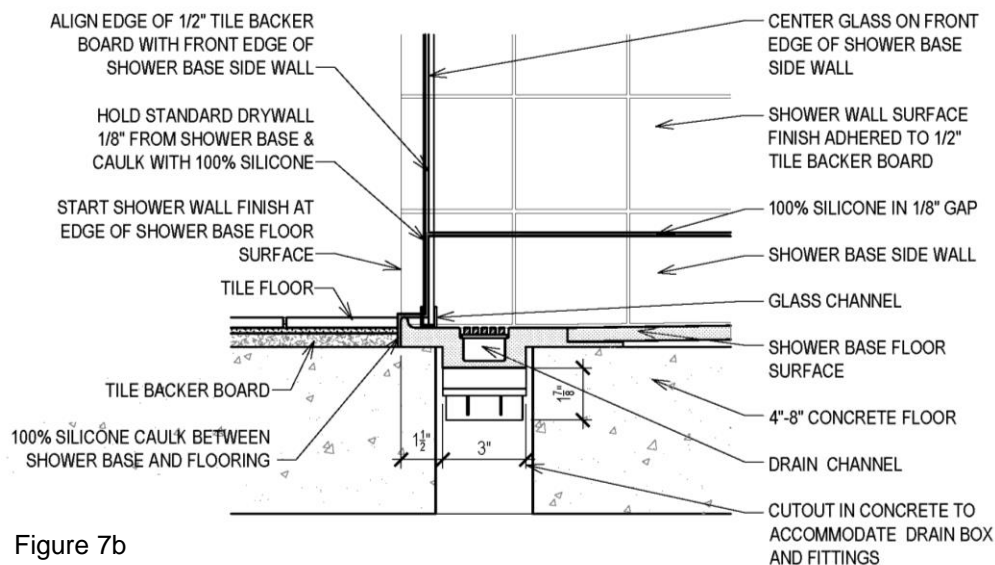


Figure 7b

STEP 07: INSTALL THE DRAIN COVER and optional

Do **NOT** place the drain strainer prior to the installation of wall finish (i.e. tile). It must be fitted and installed **AFTER** the wall finish is completely installed. The stainless steel drain strainer that comes with the shower base may have to be cut to size once wall finish (i.e. tile) is installed. It can be cut with a hack saw or jigsaw using high quality blade used for cutting stainless steel after cutting and filing as needed.

Step 08: OPTIONAL SECURING OF THE DRAIN COVER

For some commercial applications, there is a “screw in place” securing option for the drain cover. This consists of two 6/32 brass inserts installed with the ledge at each end of the shower base, then two stainless steel 6/32 screws with “tamper proof” Torx head are inserted through the second slot of the wedge wire drain cover and screwed into the brass insert. Two screws are provided with each base. A ¼ “driver and T10 Torx insert is provided per commercial location. **This option must be requested** at time of order.