



INSTALLATION INSTRUCTIONS
E6100-25, E6100-38, E6100-50

ebbe **INNI**[®]
TILE OVER LINE DRAIN

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Complies with IAPMO IGC 195-2013a, and ASME A112.18.2/CSA B125.2-2015 Standards.

Complies with 2015, 2012, 2009 and 2006 (IRC) (IPC) (UPC) codes, and 2015 and 2010 (NPC) code.

Patents: US14626581, US15192379, US1549663

Visit www.ebbe-america.com or go to
Ebbe America on YouTube for installation videos.

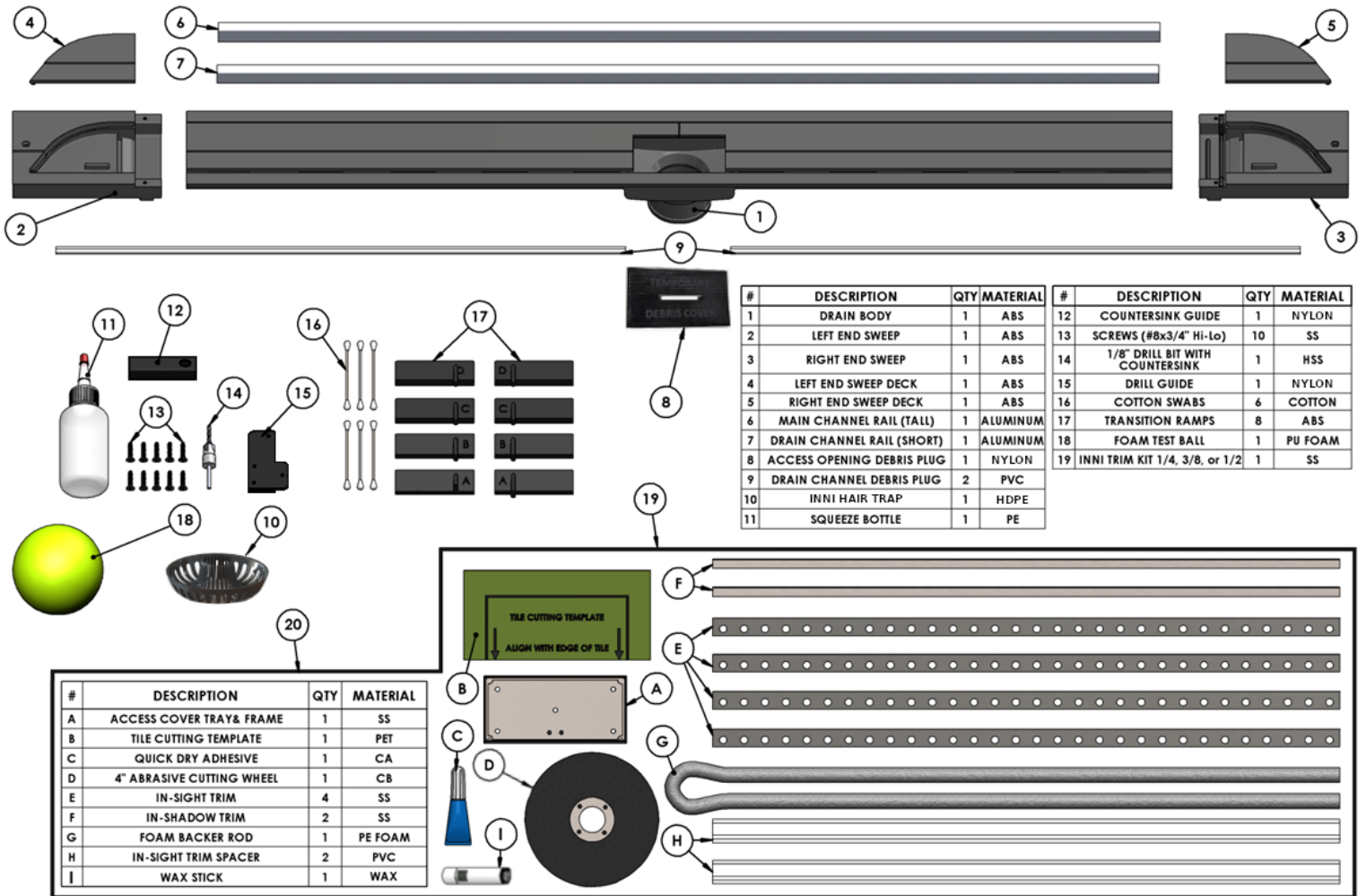
801-820-7200 Hours: M-F 9AM - 4PM MST

Orders@ebbe-america.com



IMPORTANT: Always obtain approval from local code official before installation. INNI is not approved to be installed outdoors due to freeze-thaw conditions. INNI needs to be fully supported and is not approved to bridge gaps in the subfloor.

INNI PARTS LIST (FOR KITS E6100-25 E6100-38 AND E6100-50)



TRIM KITS WILL INCLUDE ONE SET OF 1/4" - 3/8" - OR 1/2" TRIMS

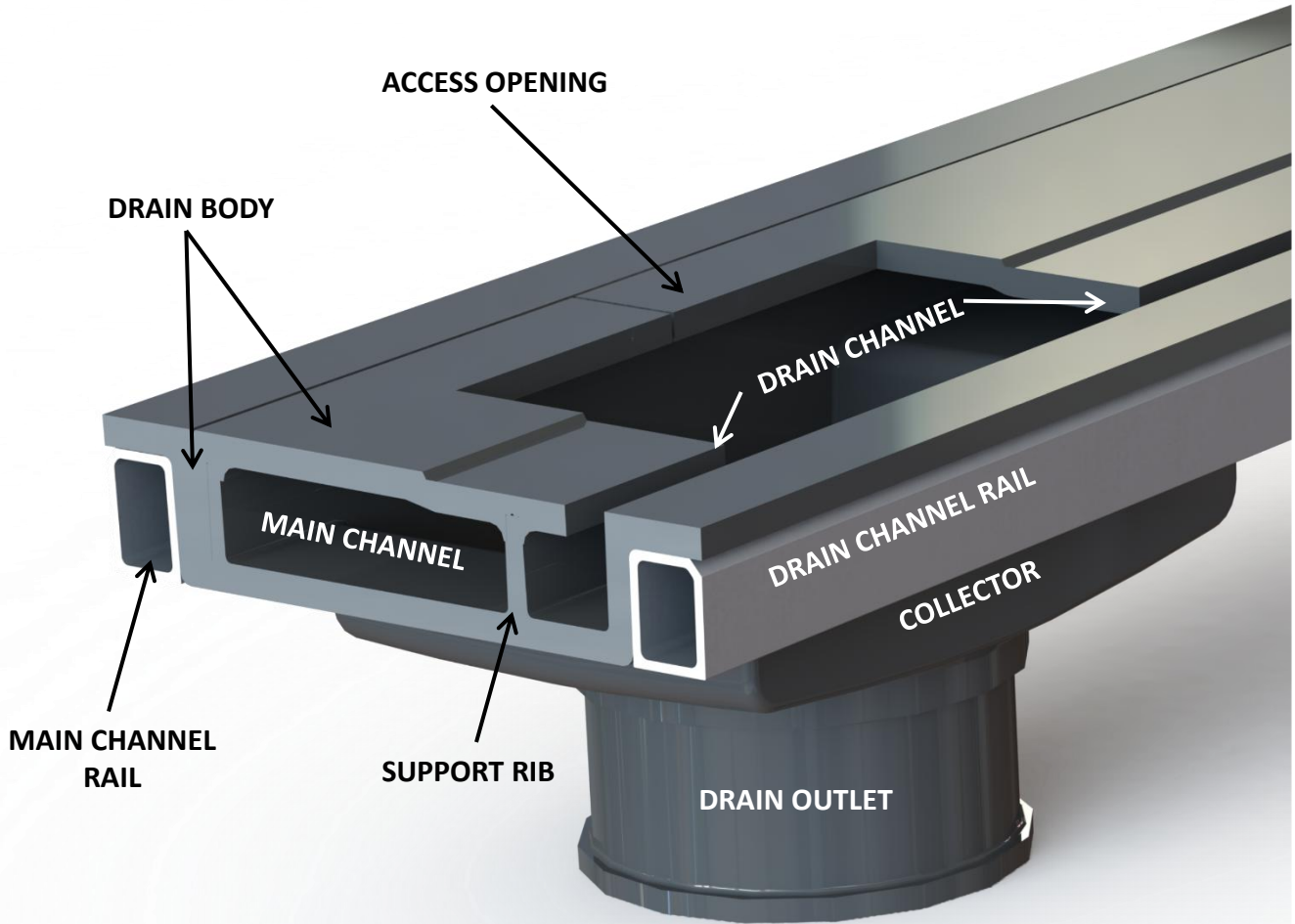


Congratulations on your purchase of the INNI Line Drain. We believe you'll find the INNI to be the best linear drain available. The INNI drain is the perfect addition to complete your dream bathroom.

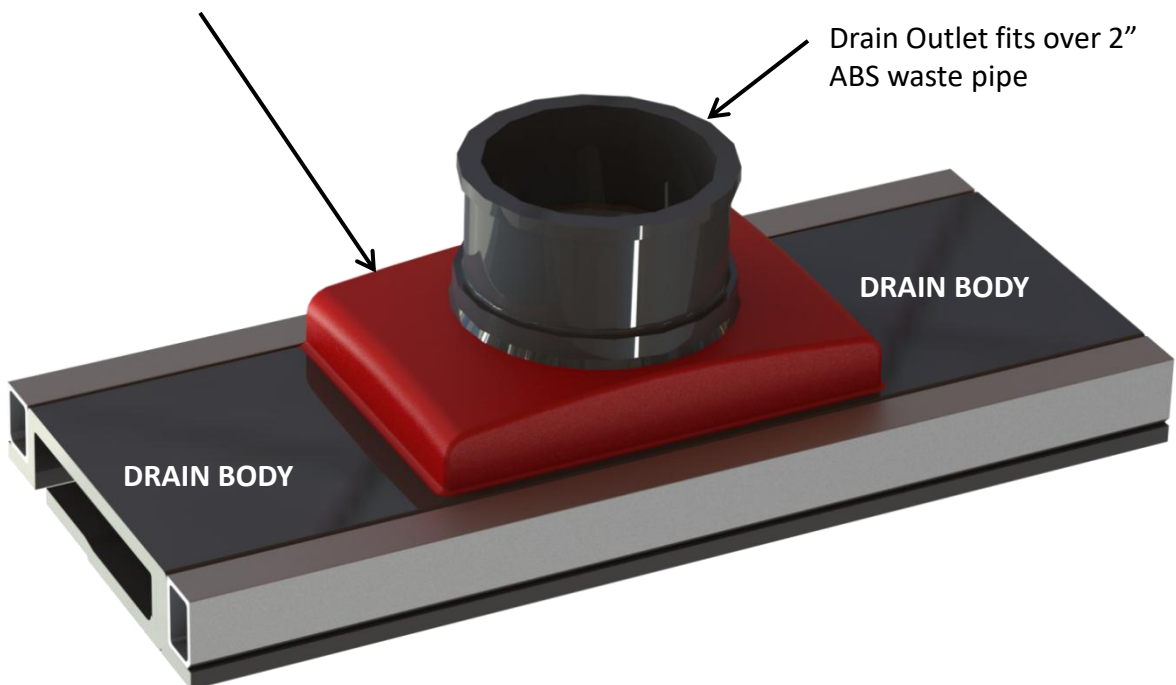
These instructions are designed to guide you through:

- Choosing the best installation location for your INNI
- Custom cutting and assembling the INNI to fit your shower.
- Water testing the assembled INNI to ensure no water leaks
- Installing the Trim to create a clean, finished look

INNI DRAIN TERMINOLOGY



The area highlighted in red is the "Collector." A 4"x6" rectangular hole needs to be made through the subfloor so the Drain Body can sit flat on the subfloor.



CHOOSE AND PREP THE INSTALLATION LOCATION

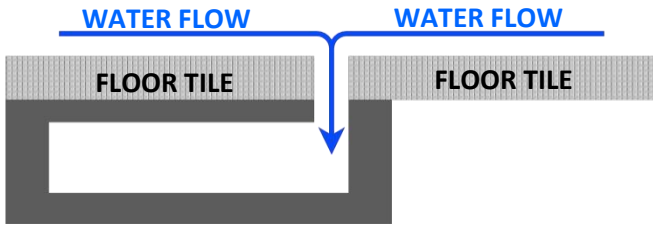
IMPORTANT: INNI is not approved to be installed outdoors due to freeze-thaw conditions.
 INNI needs to be fully supported and is not approved to bridge gaps in the subfloor.



First determine where the INNI will be installed. At the entrance? Against a wall? In sight? Hidden in the shadow? Your installation options may be limited by obstructions, such as floor joists, ducting, or plumbing. After you decide where you want to install the INNI, see below to prepare the installation location. – (See pgs. 16,17,18 for Trim installation details)

IN-SIGHT Install

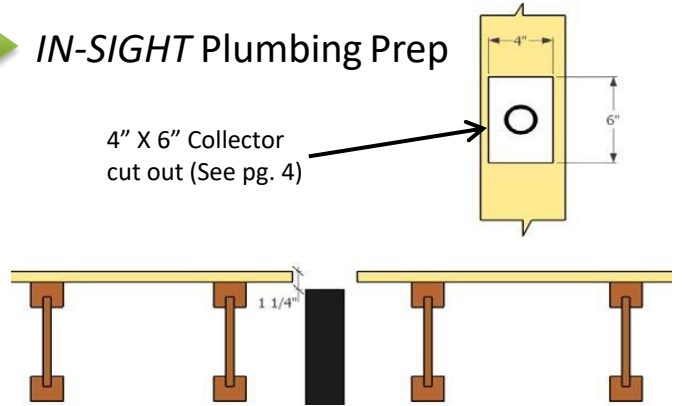
(AT ENTRANCE, CENTER OF SHOWER, ETC)



IMPORTANT: At Entry install requires *IN-SIGHT* Trim & shower enclosure. (See pg.18 for more information.)

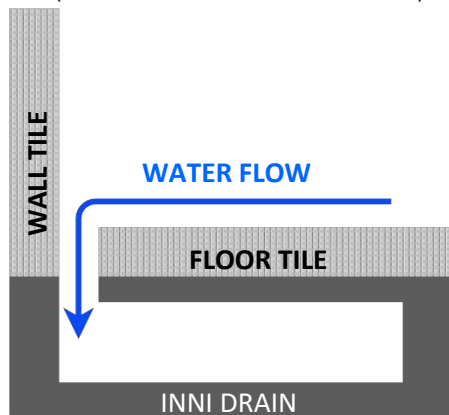
IN-SIGHT Plumbing Prep

4" X 6" Collector cut out (See pg. 4)

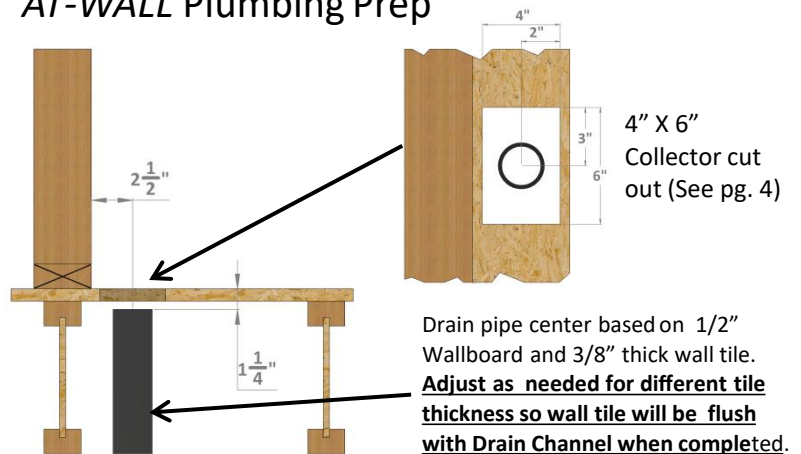


AT-WALL Install

(WALL TILE FLUSH WITH DRAIN CHANNEL)

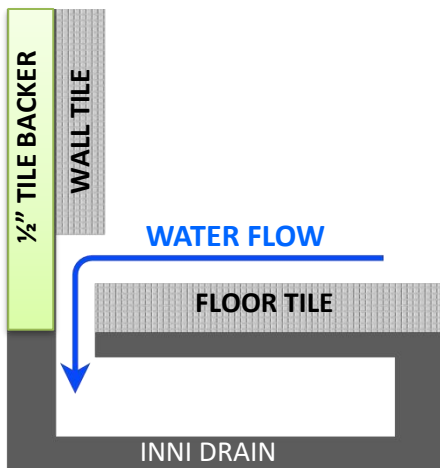


AT-WALL Plumbing Prep

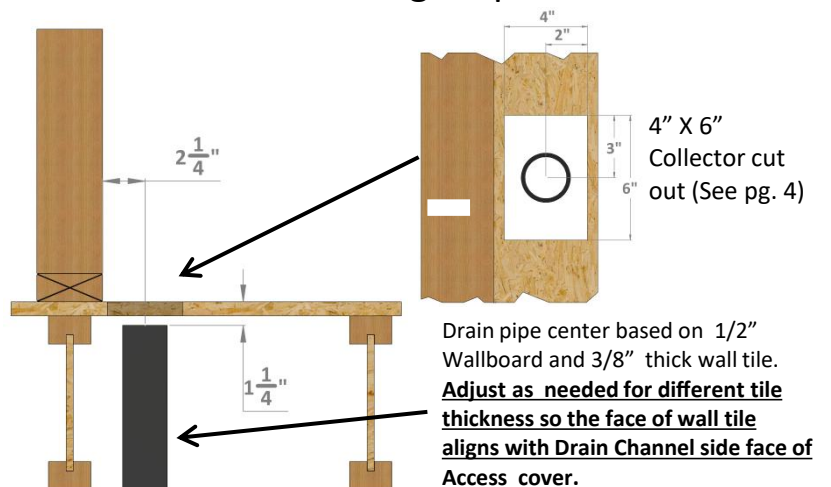


IN-SHADOW Install

(WALL TILE OVERHANGS DRAIN CHANNEL)



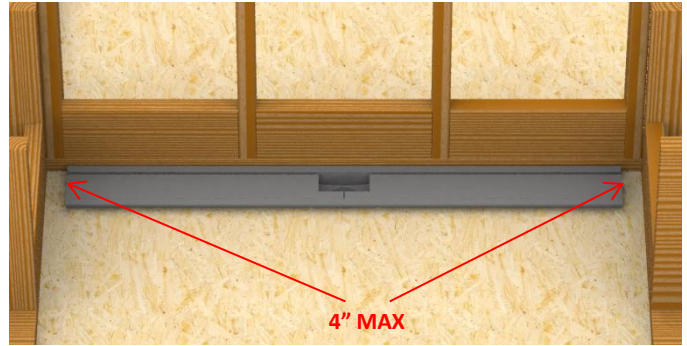
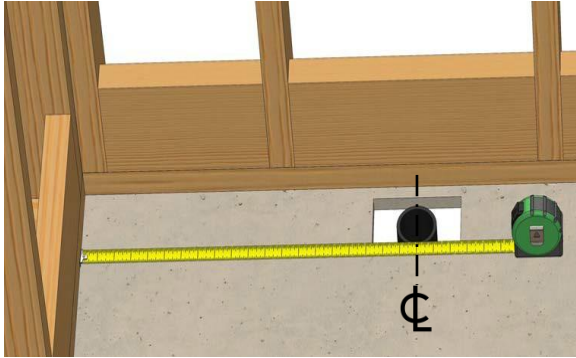
IN-SHADOW Plumbing Prep



CUTTING THE INNI TO SIZE



With End Sweeps, the INNI is 73-3/8" long. If your shower isn't this exact size, cut the Drain Body to fit your shower. If a longer length is needed, the Drain Coupler kit can be used to join two INNI's. (See pg. 19 for information on the Drain Coupler kit).

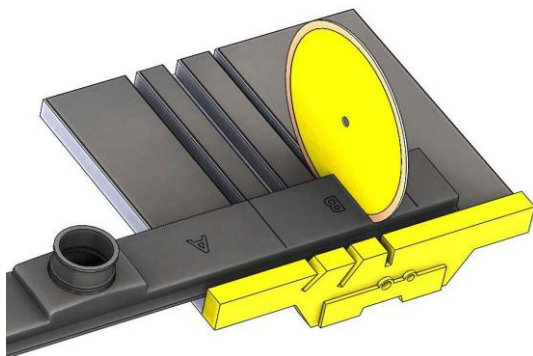
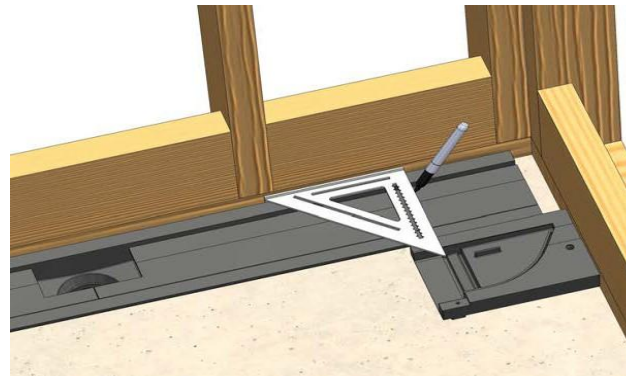


a Rough Cut the Drain Body:

Measuring from the center of the waste pipe, cut the Drain Body within 4" of each wall so it fits into the space and connects to the waste pipe. Don't worry the Drain Body is cut short of the walls; the End Sweeps will make up the remaining distance.

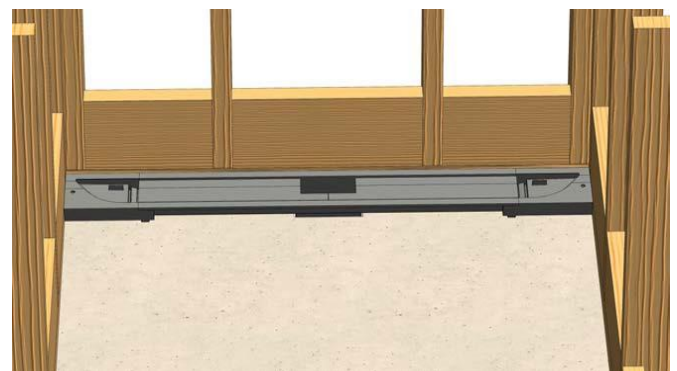
b Mark the Final DrainBody Cut:

- Put the Drain Body in the desired location
- Place the left and right End Sweeps against the left and right walls respectively.
- Use a square and pen to mark the Drain Body at the End Sweep drop down location as shown. The Drain Body is now ready for the final cut.



c Final Cut of the Drain Body:

Cuts can be made with a variety of tools, however, make sure cuts made to the Drain Body are **NEAT and SQUARE**.



d Dry Fit the Drain:

After cutting, de-burr parts, dry-fit the Drain Body and End Sweeps together and verify the assembly fits the space. Adjust as needed.

ASSEMBLING THE INNI

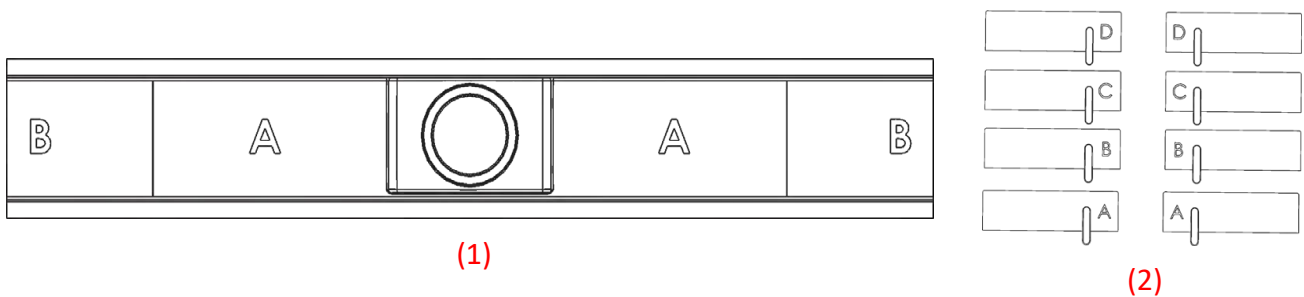


Install the Transition Ramps to create a smooth internal flow surface, permanently connect the End Sweeps to the Drain Body, install the End Sweep Decks and add aluminum Rails for strength.

1. Install Transition Ramps

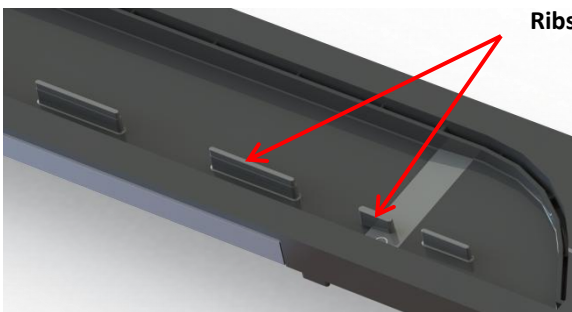
a Identify the Correct Transition Ramps:

On the under-side of the Drain Body you will see zones marked A,B,C, D (1). Transition Ramps (2) are also marked A,B,C, or D. Choose the Ramp that matches the zone where the final cut has been made. Dry fit the Ramps to each End Sweep. Ramps provide a smooth transition between the Main Channel and the End Sweep.

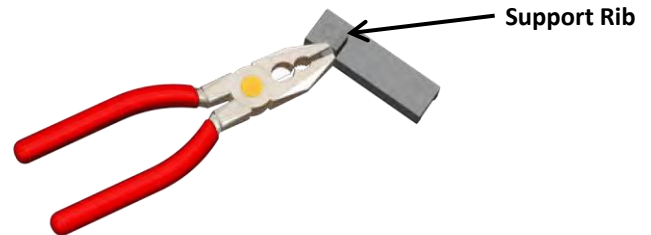


b Remove Support Rib (Only if Needed):

IF the final cut intersects a Support Rib on the Drain Body, then you will need to remove the overhung portion of the Support Rib on the Ramp so they won't interfere with each other when the End Sweeps are connected.

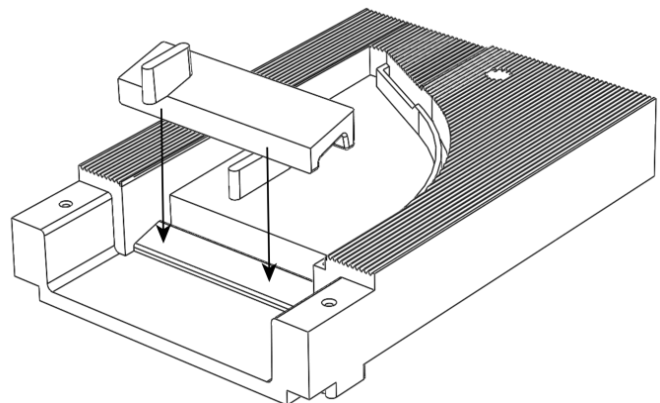


Ribs may interfere depending on Drain Body Cut



c Bond Left and Right Transition Ramps into End Sweeps

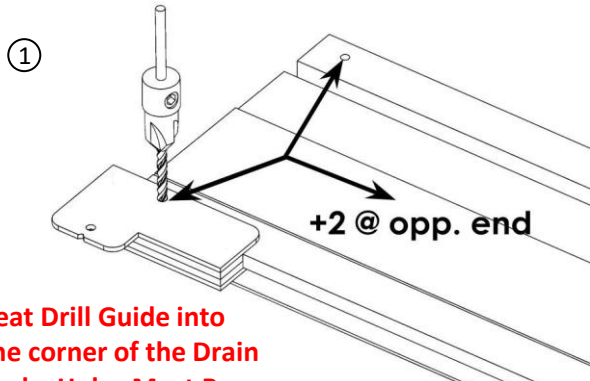
Bond the Ramps into the End Sweeps using the Squeeze Bottle and ABS cement. Clean off any excess cement.



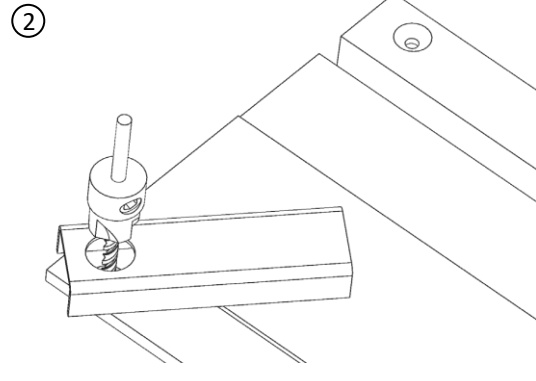
2. Attach Left and Right End Sweeps

a Drill First, Then Countersink for Screws

1. Use the Drill Guide and Drill Bit to create holes at the four corners of the Drain Body. The drilled holes must align precisely with the pilot holes in the End Sweep.
2. Use the Countersink Guide to recess the holes for the Screw heads. The Countersink Guide limits countersink depth and ensures the Screws will be flush with the Drain Body.

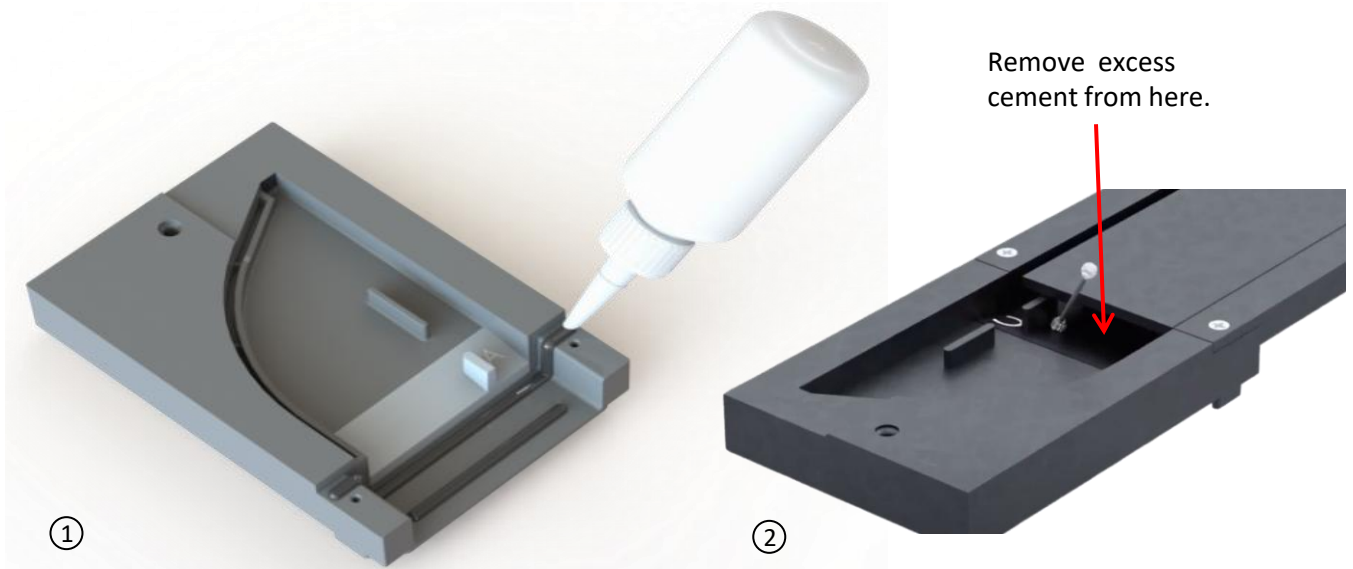


Seat Drill Guide into the corner of the Drain Body. Holes Must Be Accurately Located.



b Prepare to Attach the End Sweep to the Drain Body:

1. Pour ABS cement into the Squeeze Bottle and apply two lines of ABS cement to the End Sweep as shown below. Use sufficient cement to allow a small amount of "squeeze out."
2. Use Cotton Swabs to remove excess cement at inner drain seam.



Remove excess cement from here.

! **IMPORTANT:** Apply two lines of ABS cement as shown to provide for air escape during assembly. If air is trapped by improper application, it can create a pathway for water escape.

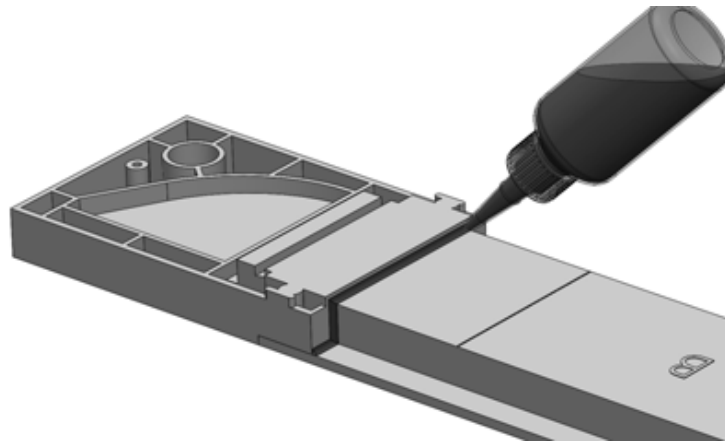


Place the INNI on a block at the joint to prevent misalignment



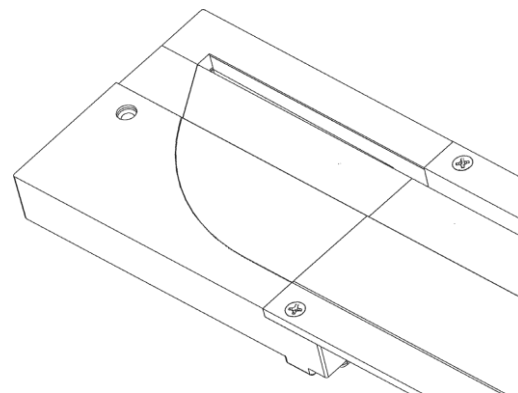
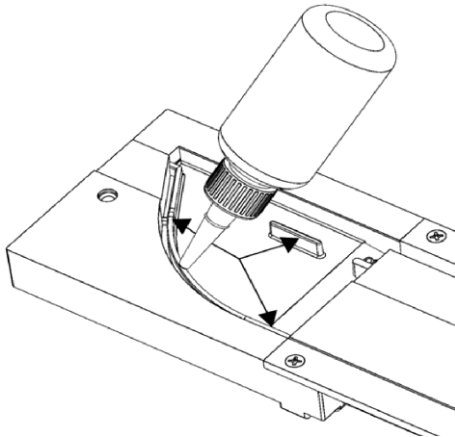
- c Attach End Sweep to the Drain Body:**
After applying ABS cement, you have approximately 30 seconds to join the End Sweep with the Drain Body using the provided Screws. Remove any excess ABS cement from the Main Channel flow surfaces.
- ! CAUTION: Attempting to adjust the End Sweep/Drain Body alignment after the ABS cement has cured will cause a joint failure.**

- d Fill Gaps with ABS Cement**
“Caulk” the back side of the End Sweep and Drain Body joint with ABS cement. Fill any visible gaps with ABS cement and let cure.



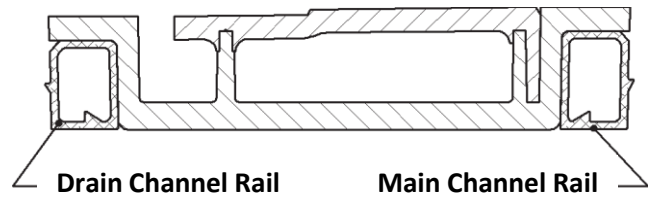
3. Install End Sweep Decks

- a Prep for End Sweep Deck:**
Apply ABS cement to the top of the curved Rib and Support Ribs as shown.
- b Install the End Sweep Deck:**
Push the Deck into position. When fully seated, the Deck should sit flush with the surrounding surfaces.

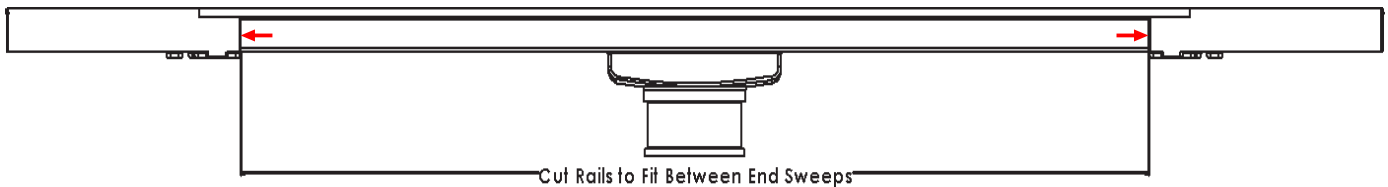


3. Install Stiffening Rails

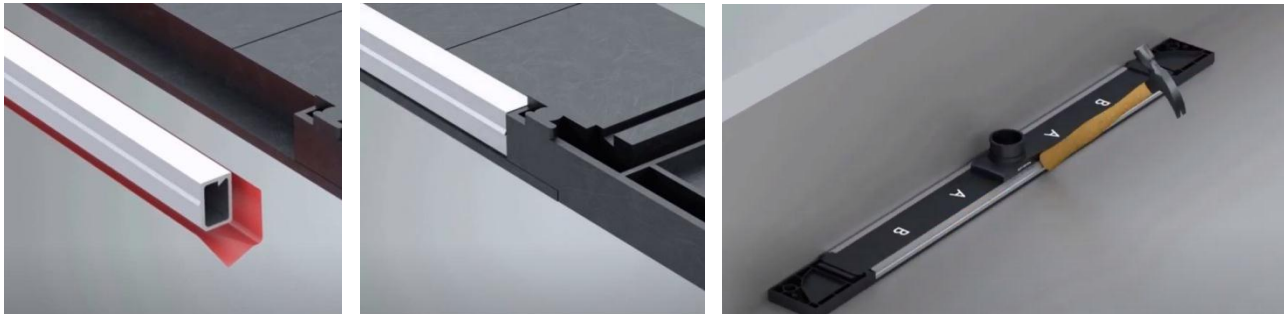
- !** **IMPORTANT:** Two aluminum Rails are provided with the INNI and will need to be shortened if the drain has been cut. The Rails are **NOT** the same height. The Drain Channel Rail (short) is labeled. You can verify that the Rails are in the correct locations if they are flush with the bottom of the Drain Body.



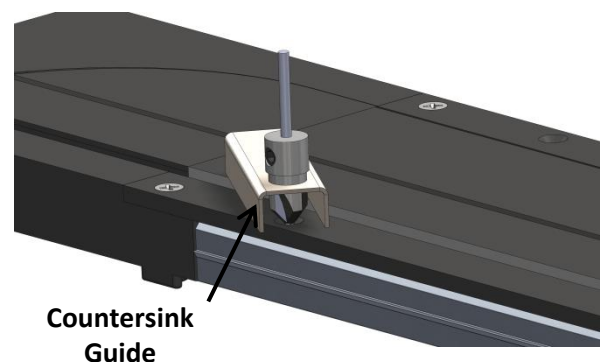
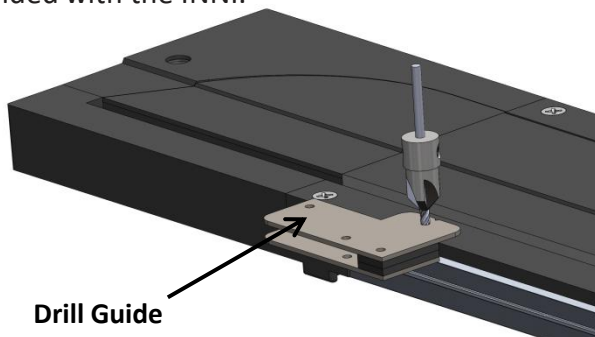
- a** **Measure and Cut Rails:** Measure the distance between the End Sweeps and cut the Rails to length. Both Rails should be the same length.



- b** **Clean Surfaces and Install Rails:** Clean the surfaces where the Rails will be mounted. Remove the pink release liner from one Rail and forcefully install the Rail into position. Use a piece of wood to push and rub along the length of the Rail to make sure it is completely seated. Repeat this process for the opposite rail.



- c** **Drill and Countersink for Rail Attachment Screws:** Use the Drill Guide, Countersink Guide, and Drill Bit to make six countersunk holes through the Drain Body and Rails. Screws should be roughly placed at each end and one inch from center of both Rails. Do not over-tighten the Screws. Only use the screw provided with the INNI.



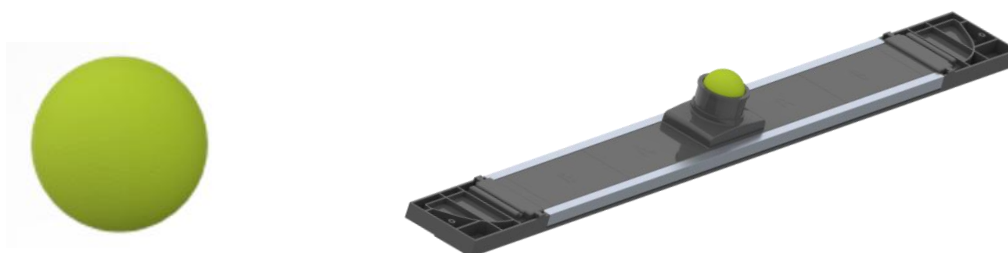
Congratulations! Assembly is complete.

WATER TESTING THE INNI



After assembly you need to water test the assembled INNI for any leaks. The INNI should be tested before installation and after waterproofing the shower floor to ensure that any problems are addressed before tile installation.

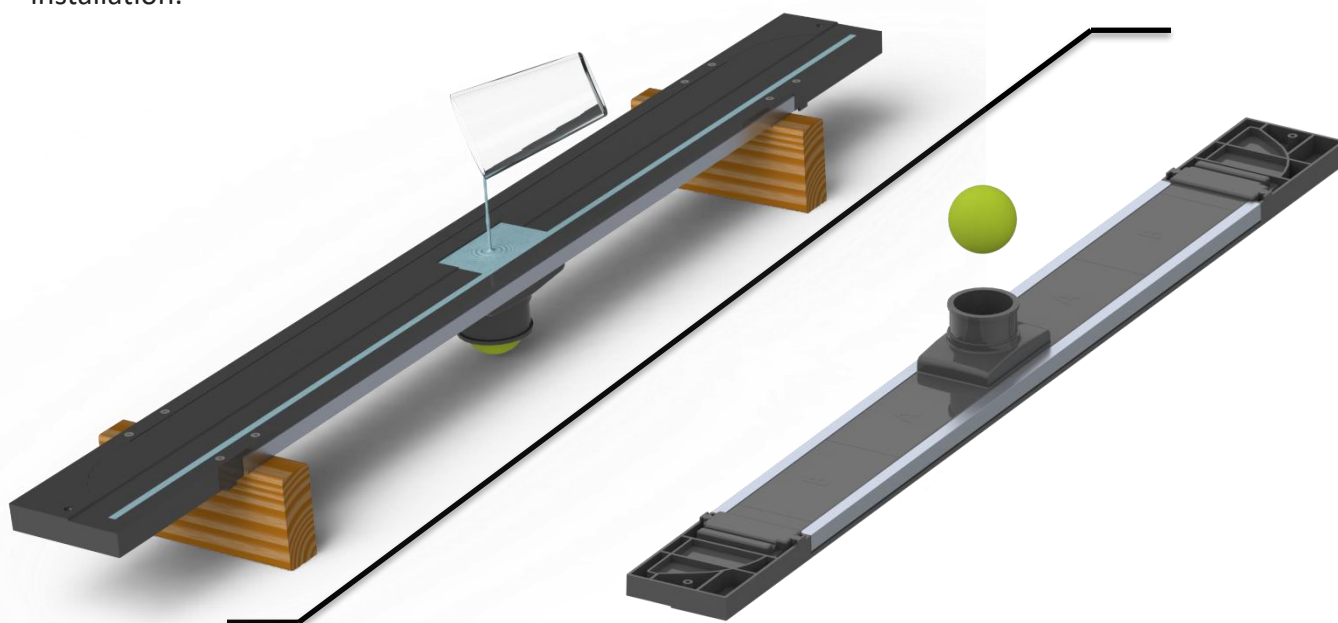
- d **Insert Test Ball:** Place the Test Ball into the Drain Outlet to create a temporary watertight seal.



- b **Block and Level the Drain:** Support the INNI on blocks and make sure it's level.



- c **Fill with Water and Look for Leaks:** Completely fill the INNI with water and verify that there are no leaks. Best practice is to leave the INNI filled for a minimum of one hour. If any leaks are found, repair leaking areas with ABS cement. Repeat until there are no leaks. Remove Test Ball before installation.



INSTALLING THE INNI



Attach the drain to the waste pipe and bond it to the floor with thinset. For a Hot Mop application, install the INNI with the final mortar bed after tar waterproofing.

! Note: When bonding the INNI to a PVC waste pipe be sure to use the appropriate bonding cement.

1. If Installing the INNI in a Wood Framed Floor

- a** **1.** Using a minimum 3/8" x 3/8" notched trowel, apply a layer of thinset or urethane sealant where the INNI will be installed. **2.** Fill the voids in the bottom of the End Sweeps with thinset. **3.** Apply ABS cement to the Drain Outlet and the waste pipe and push them together.



! Use a spirit level to verify that the INNI is absolutely level. Adjust the INNI as needed to ensure a level installation. If the INNI is not leveled, it won't drain properly.

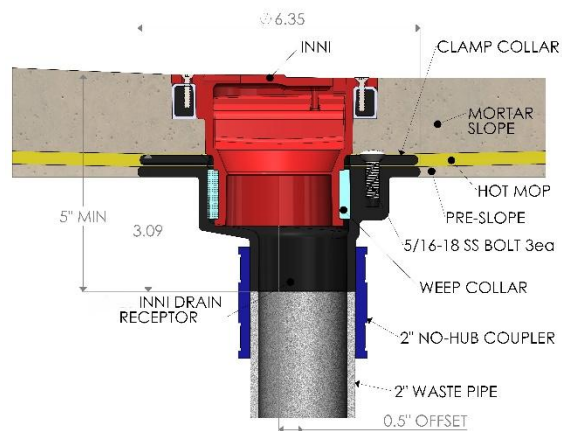
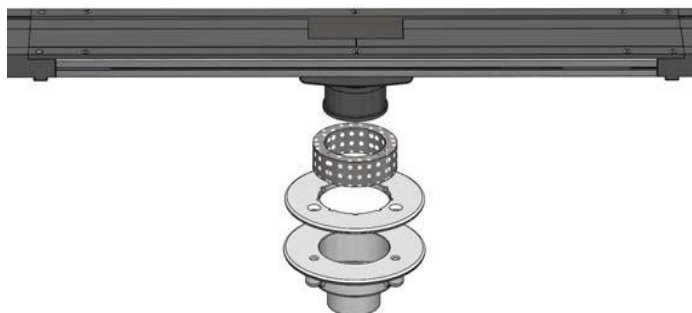
2. If Installing the INNI in a Concrete Floor

- a** The INNI can be used in concrete applications in the following scenarios
- Cast with slab
 - Installed in a recessed slab with deck mud.
 - On top of slab for showers with curbs
- b** If installing on top of concrete, use a minimum 3/8" x 3/8" notched trowel to apply thinset where the INNI will be installed. Apply ABS cement to the Drain Outlet and the waste pipe and push them together.

! Before and during casting the INNI into concrete, it's critical to keep it straight and level.

3. If Installing the INNI using Hot Mop waterproofing

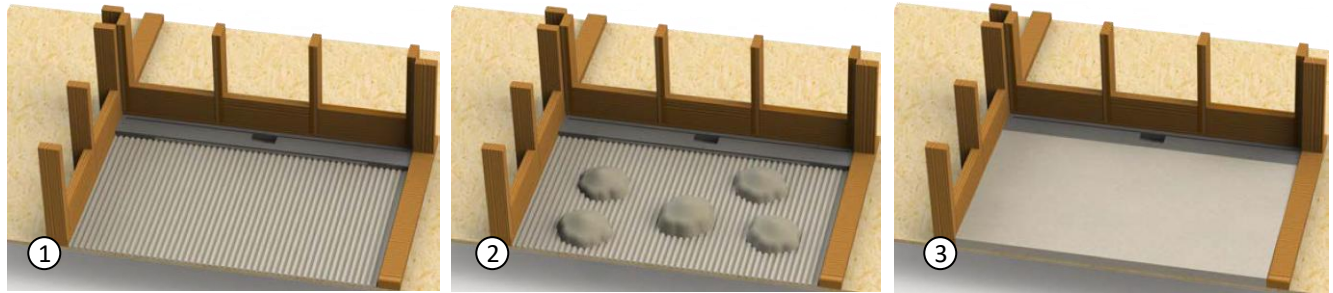
Hot mop waterproofing is popular in Southern California. The INNI can be used in a hot mop and mortar bed application with the addition of the Hot Mop Receptor Kit (sold separately). Install the Receptor, then simply slip the INNI and Weep Collar into the Receptor. The mortar bed will surround and support the INNI. (See pg. 19)



CREATE SLOPE AND WATERPROOF SHOWER



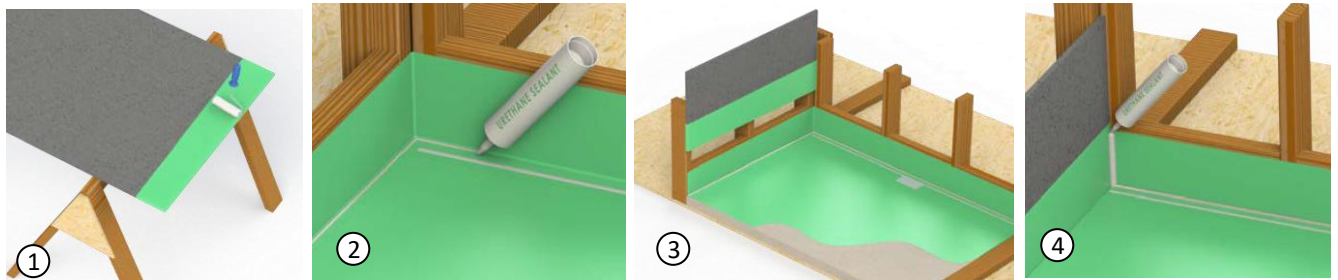
After the INNI is installed, create a slope towards the drain, install the tile backer and waterproof the shower assembly.



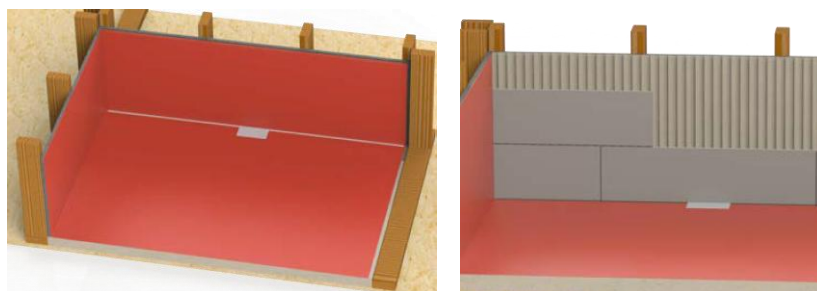
- a** **1.** Apply thinset to the subfloor. **2.** Place mortar over fresh thinset. **3.** Screed mortar to desired slope and let cure. <If using a pre-fabricated shower slope follow all manufacturer's directions>



- b** **1.** Install Debris Plugs **2.** Caulk all joints and prepare for surface applied waterproofing membrane. **3.** Apply waterproofing up walls/framing a minimum of 5". Follow all waterproofing manufacturer's recommendations.



- c** **1.** Coat all faces of wall tile backer up min of 5" with liquid waterproofing to prevent wicking. **2.** Apply a generous bead of sealant at the floor/wall transition. **3.** Embed the coated tile backer into the sealant and secure to the wall. **4.** Apply sealant at the corner of the previously installed tile backer before installing the next piece.



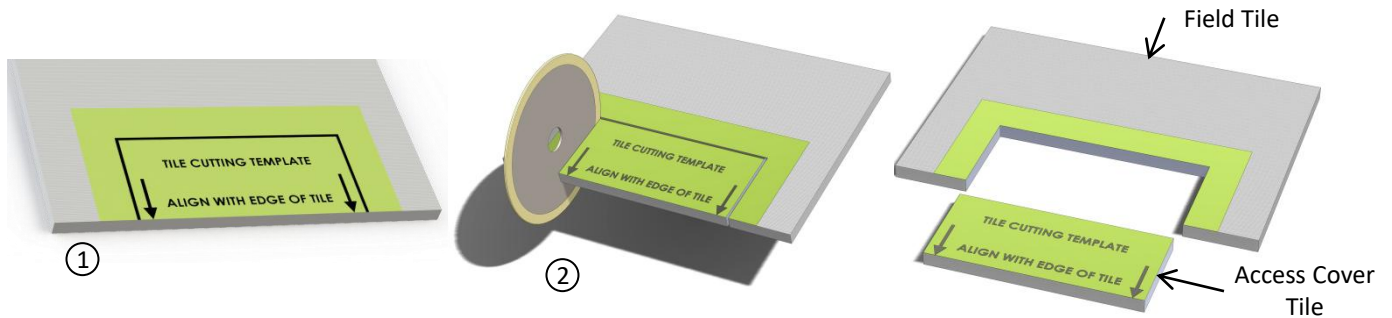
! If the INNI is installed **In-Shadow**, you will need to **Install the In-Shadow Trim** **before** installing the wall tile.

- d** After installing the wall tile backer, waterproof the entire shower with a fluid applied or sheet waterproofing membrane per manufacturers recommendations. Water test the shower floor for several hours. Install desired trim, and begin tile installation.

ACCESS COVER INSTALL – LARGE TILE



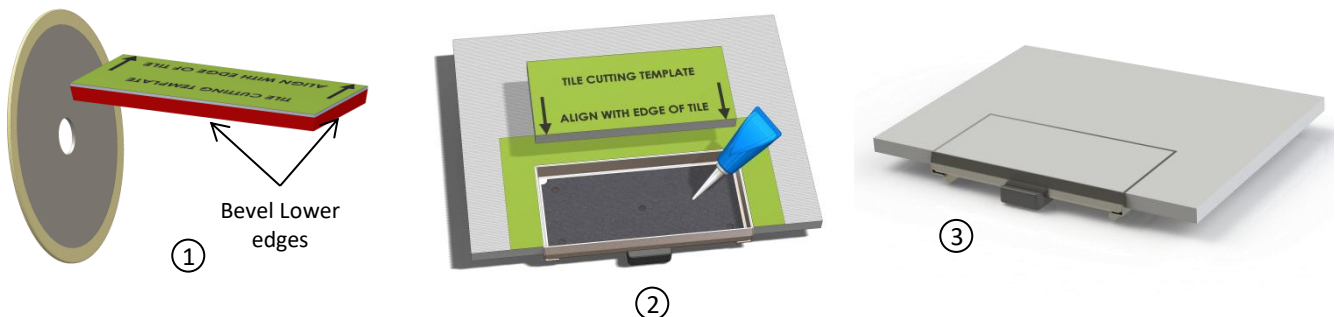
If your tile is greater than 6"x6" follow the steps below for Access Cover installation. If your tile is smaller than 6"x6" inches proceed to page 15.



- a** ① Adhere the Cutting Template to the edge of the tile that aligns with the Access Opening. ② Cut precisely along the black line. ③ Remove the Access Cover Tile from the Field Tile. **Cut precisely to the template. The Quick Dry Adhesive will not span large gaps. The Access Cover Frame should fit tightly to the Field Tile.**

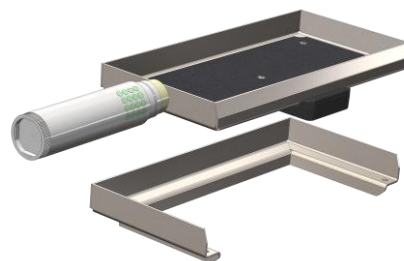


- b** ① Lightly bevel the bottom edges of the Field Tile 1-5 degrees. ② Install the Access Cover Tray and Frame into the cutout. ③ Turn over onto a flat surface, making sure the rim of the Access Cover Frame and Field Tile are flush. Apply Quick Dry Adhesive between the Field Tile and Access Cover Frame.



- c** ① Lightly bevel the bottom edges of the Access Cover Tile until it fits. ② Use thinset mortar or Quick Dry Adhesive to bond the tile into the Tray. ③ Remove the Cutting Template as soon as possible. This assembly can now be installed.

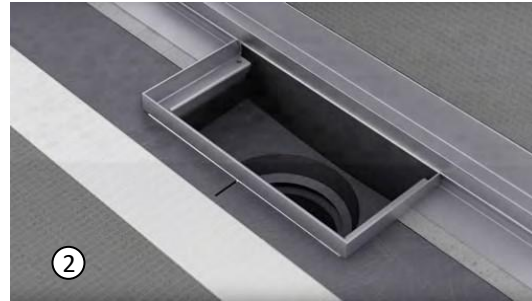
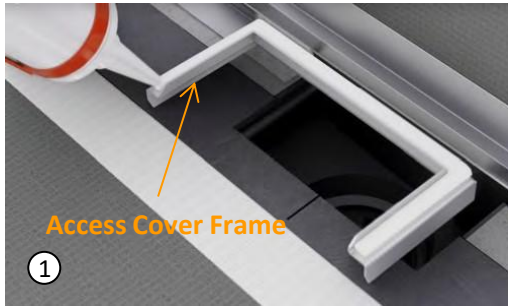
- !** **NOTICE: Use the supplied Wax Stick to wax the Access Cover tray. Waxing the Cover prevents accidental bonding of mortar or adhesive. It also prevents mineral build up and aids in future removal.**



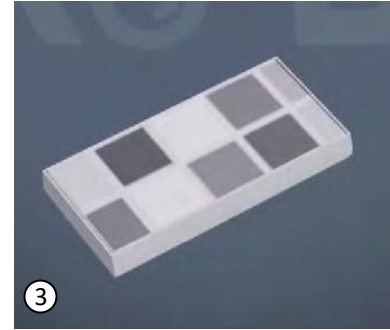
ACCESS COVER INSTALL – SMALL TILE



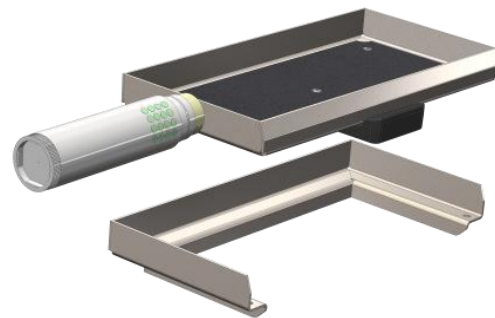
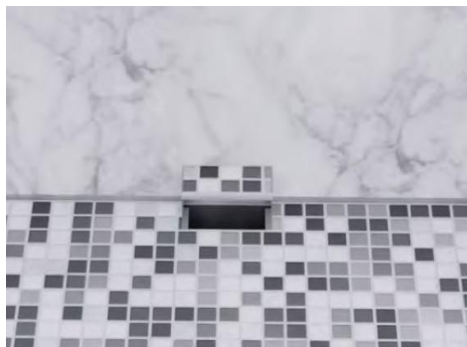
If your tile is smaller than 6" follow the steps below to install the Access Tray. If your tile is 6" or larger, see page 14



- a
1. Apply sealant to the Access Cover Frame and set into the Access Opening.
 2. Align the Frame with the Drain Channel edge or In-Sight trim.



- b
1. Cut and install the floor tile around the Access Cover Frame.
 2. Apply sealant, thinset, or quick dry adhesive to Access Cover Tray
 3. Cut and install Access Cover tile flush with Tray perimeter.



- c
- Re-Install the Access Cover Tray by angling the cover down to the Drain Channel until the ball detents catch the Access Cover Frame. Push the cover down until flush.



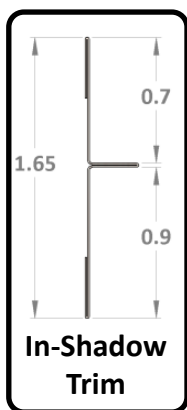
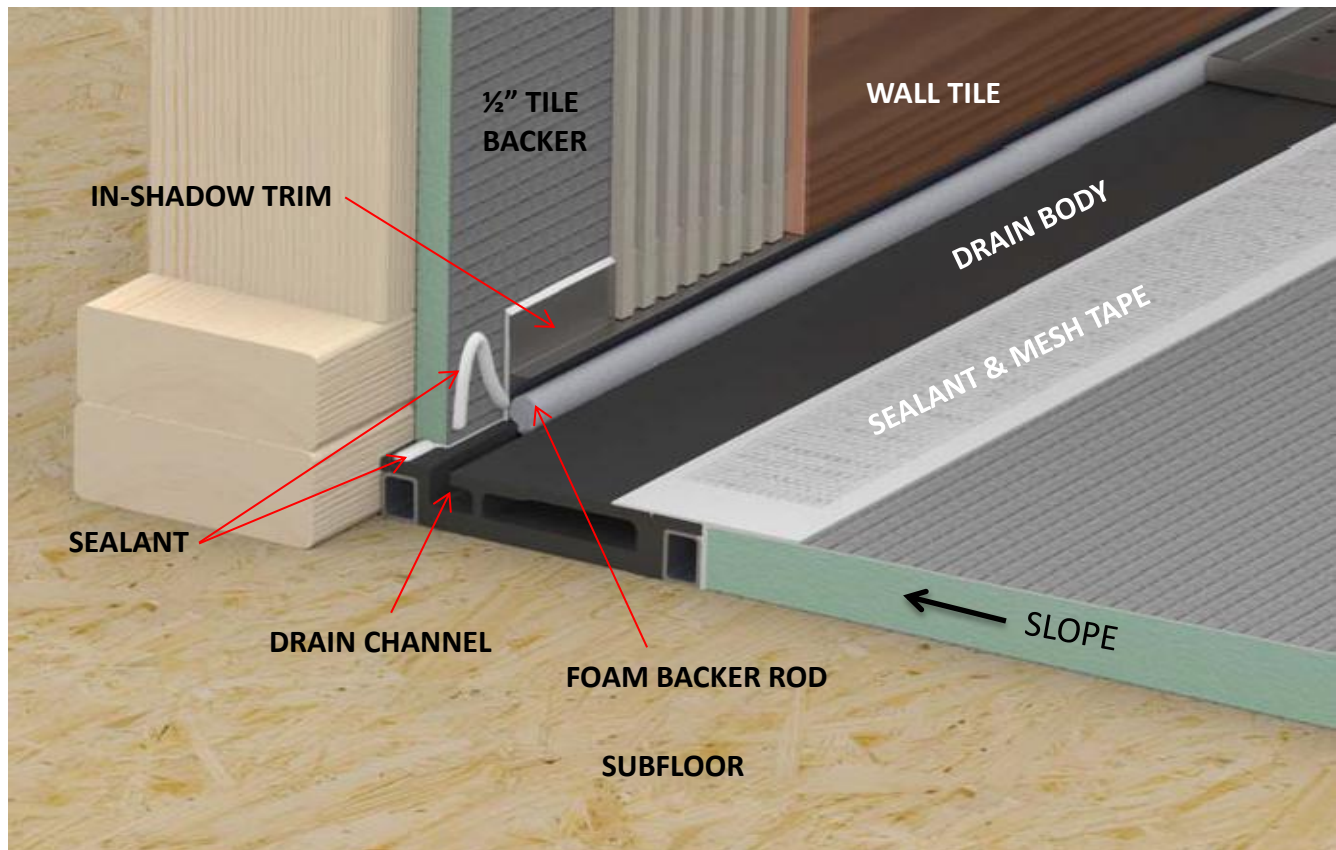
NOTICE: Use the supplied Wax Stick to wax the Access Cover Tray. Waxing the cover prevents accidental bonding of mortar or adhesive. It also prevents mineral build up and aids in future removal.

IN-SHADOW INSTALLATION DETAILS



In-Shadow installations hide the Drain Channel in the shadow of the overhanging wall tile. As the water reaches the wall, it surprisingly disappears before your eyes.

Two pieces of In-shadow Trim are included with the E6100-25, E6100-38, E6100-50 kits.



- The In-Shadow trim is asymmetrical and can be flipped 180 degrees to suit the height of the tile above the Drain Channel. The bottom of the wall tile above the Drain Channel should be a minimum of 0.3" above the installed floor tile. Thicker tile requires a larger gap so the Access Cover can be removed.
- Use the included Abrasive Cut-Off Wheel to cut the Trim to length as needed. **
- Run a heavy continuous bead of urethane sealant along the Tile Backer face that will receive the In-Shadow Trim. Firmly press the Trim piece into the sealant bead and adjust into final position before sealant cures. The Trim pieces should run the entire length of the drain.
- Insert the supplied Foam Backer Rod into the Drain Channel. This is temporary and will keep debris out of the Drain Channel during tiling. It also holds the In-Sight Trim in place during tile installation.
- Apply thinset over the face of the In-Shadow Trim and onto the Tile Backer for setting tile. The bottom edge of tile should rest on the horizontal ledge of the Trim piece. Don't use sealant on this bottom edge of tile. This will allow for any water to weep under the tile and down the drain if necessary.

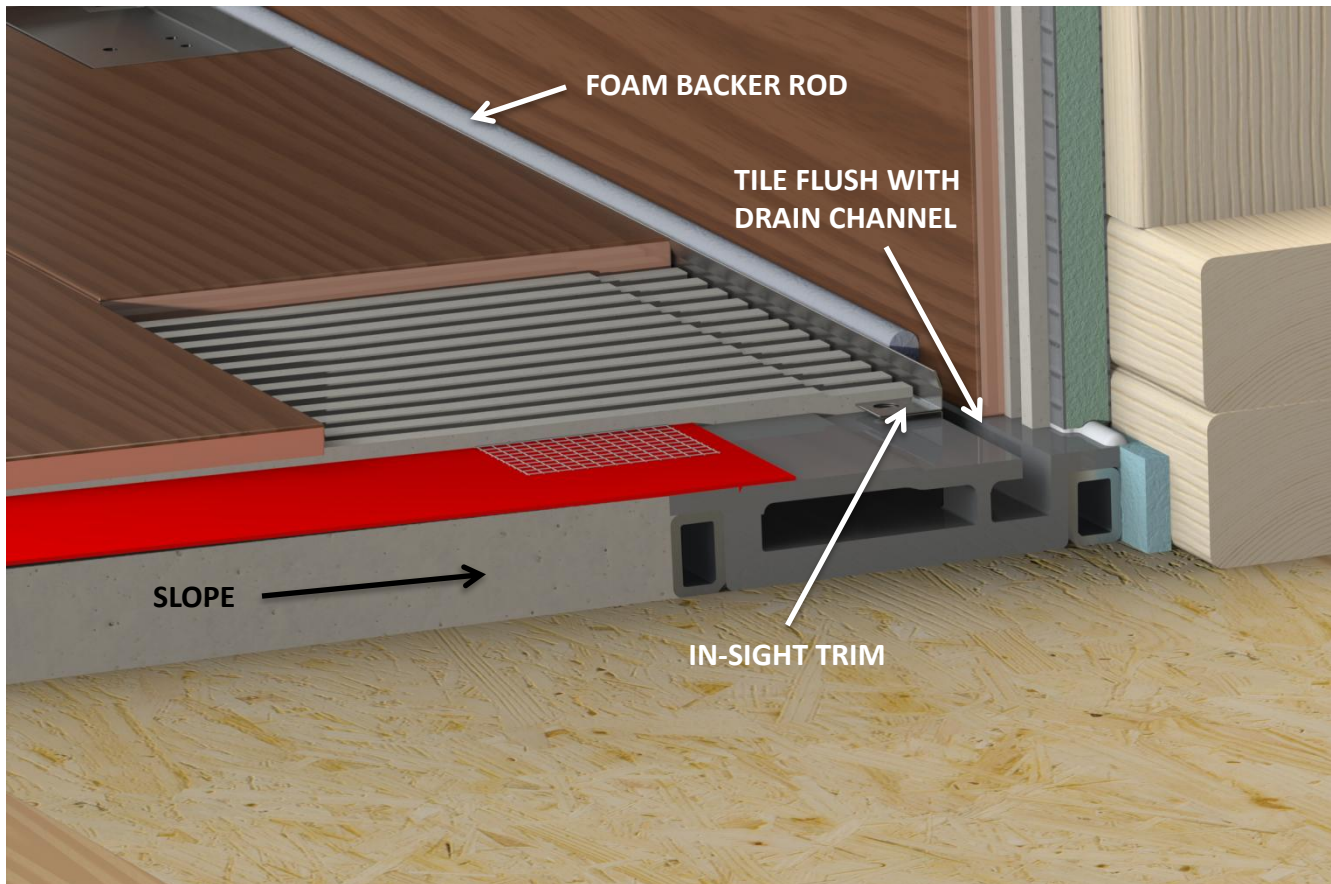
**** PLEASE NOTE: When cutting Trim to desired length it is best practice to place all cut edges at the outer ends of the INNI. This will allow factory edges to butt together when using multiple Trim pieces.**

AT-WALL INSTALLATION DETAILS



At-Wall installation leaves the Drain Channel visible from above. The wall tile extends down to meet the top of the drain and aligns with the back face of the Drain Channel.

Four pieces of In-Sight Trim are included with E6100-25, E6100-38, E6100-50 kits.



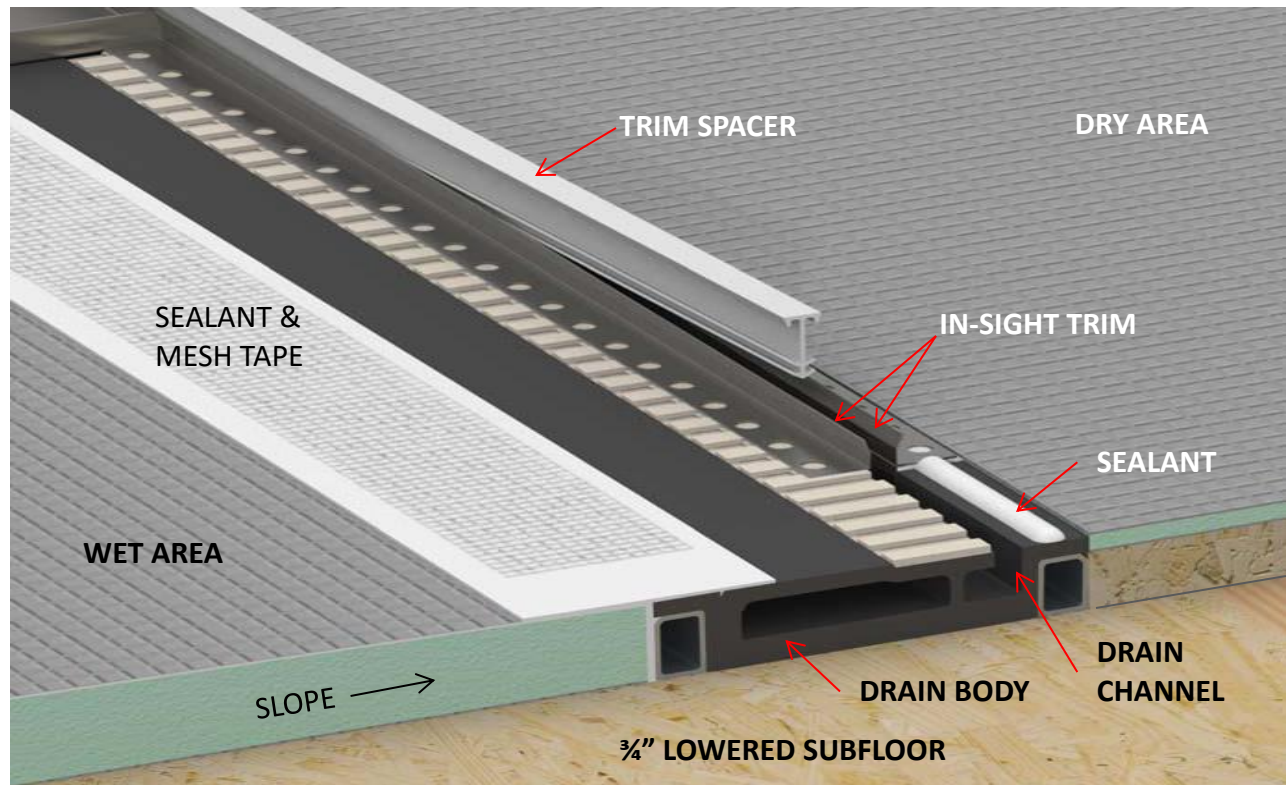
- Using In-Sight Trim for an At-Wall installation is optional. If Trims are used, they will widen the Drain Channel opening and align more properly with the angled front of the Access Cover.
- Install the wall tile so it rests on the back flange of the INNI and aligns with the back face of the Drain Channel.
- Use the Abrasive Cut-Off Wheel to cut the Trim to length as needed. **
- If using urethane sealant to adhere the Trim, use intermittent beads so weep water can escape under the Trim to the Drain Channel. Trim can also be adhered to the drain with thinset in a continuous layer as water will be able to slowly drain through the thinset.
- Insert supplied Foam Backer Rod into Drain Channel between the In-Sight trim and wall tile. In certain circumstances, it is better to use pieces of the Backer Rod to wedge between the wall tile and Trim so it stays firmly in place.
- Install floor tile. Remove Backer Rod after tile and grout have cured.

**** PLEASE NOTE: When cutting Trim to desired length it is best practice to place all cut edges at the outer ends of line drain. This will allow factory edges to butt together when using multiple Trim pieces.**

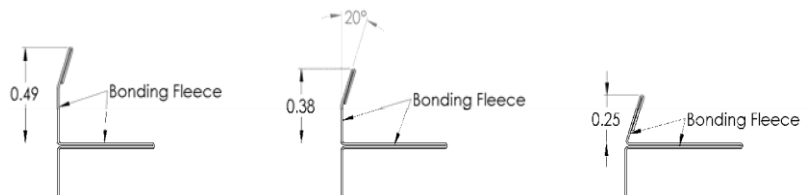
IN-SIGHT INSTALLATION DETAILS



In-Sight Trim provides a minimal stainless steel finished edge along the length of the Drain Channel. **Four pieces of In-Sight Trim are included with E6100-25, E6100-38, E6100-50 kits.**



When the drain is installed at an entry, In-Sight Trims must be used. It is also highly recommended that a glass enclosure or small curb is placed at the entry to limit water escape.

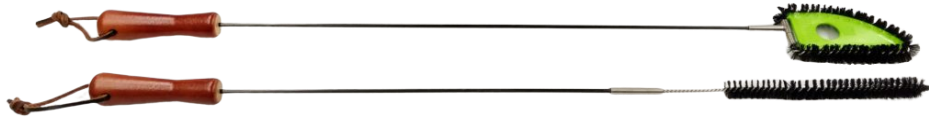


- Use the Abrasive Cut-Off Wheel to cut Trim to length as needed.
- On the shower/wet side of the Drain Channel use thinset along the entire length to bond Trim pieces to the Drain Body. Firmly press the Trim into thinset and position in place. Remove any excess thinset from Drain Channel.
- On dry side of the Drain Channel, run a continuous bead of urethane sealant along the entire length of the INNI to bond Trim piece to the Drain Body. Firmly press the Trim into sealant and adjust as needed. Trim pieces should run the entire length of line drain. The continuous bead of sealant stops the migration of water under the dry side tile.
- Before the thinset and sealant sets, insert the Trim Spacer between the Trim pieces. This will properly space the Trim pieces and hold them in position while the thinset and sealant cure. Leave this temporary Spacer in place while tiling to keep debris out of the Drain Channel. **After the grout has cured**, remove the Trim Spacer sticks.

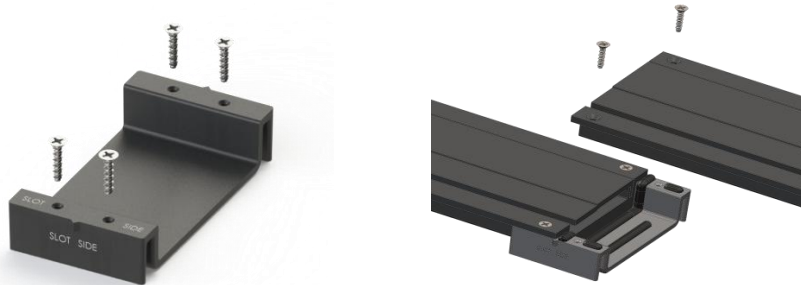
**** PLEASE NOTE: When cutting Trim to desired length it is best practice to place all cut edges at the outer ends of the INNI. This will allow factory edges to be butt together when using multiple Trim pieces.**

INNI ACCESSORIES

Visit ebbe-america.com for INN accessories or scan the QR codes

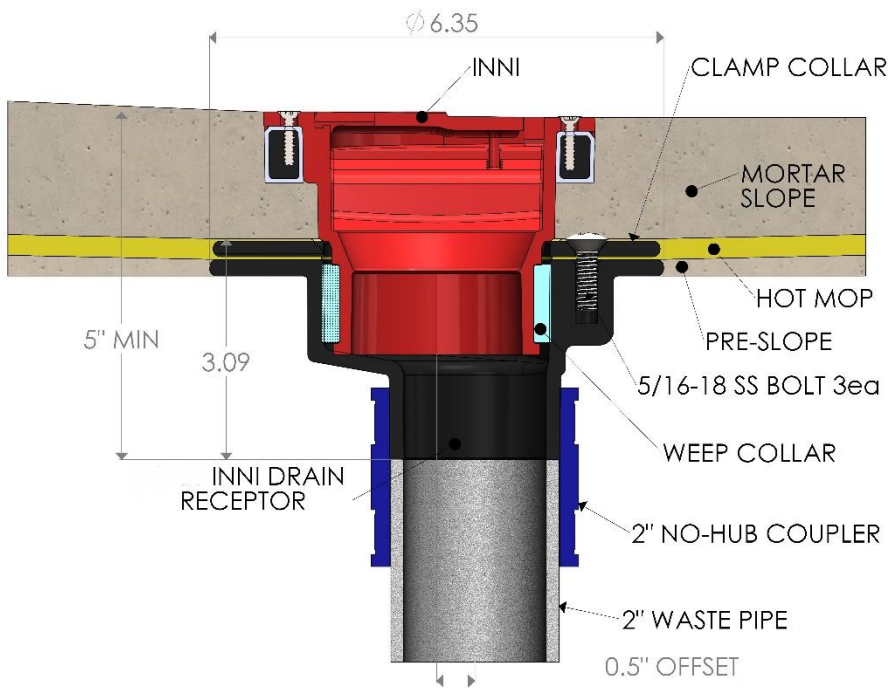


INNI Cleaning Brush Kit (sold separately). Specifically designed and manufactured to quickly clean all interior surfaces of the INNI drain. Custom sized for your INNI.



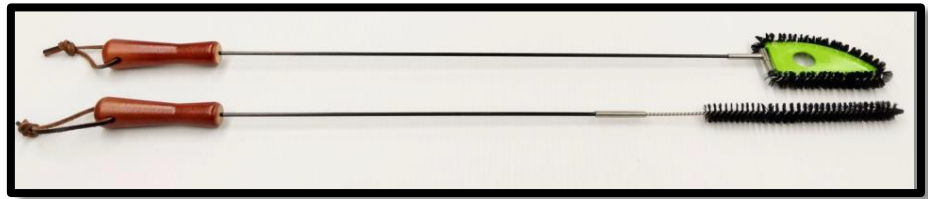
INNI Drain Coupler Kit (sold separately): Attach multiple INNI together. **If coupling two or more INNI, an additional waste pipe/s MUST be installed. Additional Drain Body sections CANNOT be added to the ends of a full length INNI because it will create negative slope and water stagnation, and cleaning problems within the Main Channel.**

INNI Hot Mop Receptor Kit (sold separately): Adapt the INNI drain to a hot mop installation using the Hot Mop Receptor Kit. This sub-drain is made of glass filled PPS plastic and can withstand the high heat of hot tar. The Receptor is hot mopped just like a standard clamping drain and the INNI is mortared into the final slope.

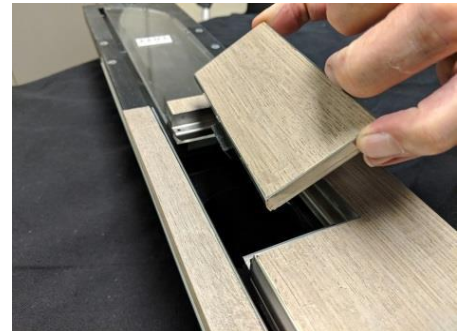
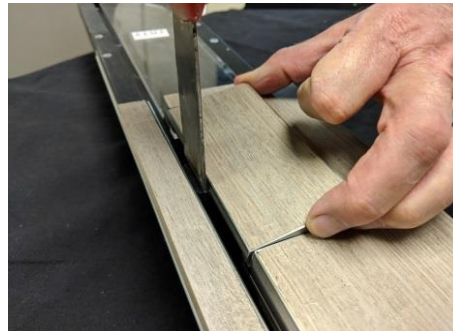
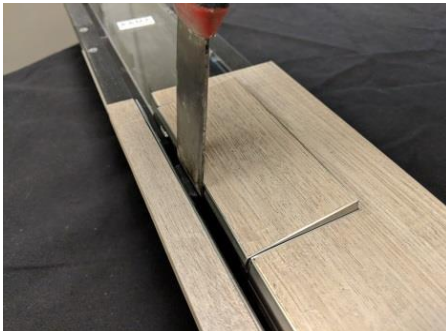


**Recommended
Cleaning Agents**

- Most typical bathroom cleaners and bleach are safe to use.
- Avoid overly acidic or basic cleaners.



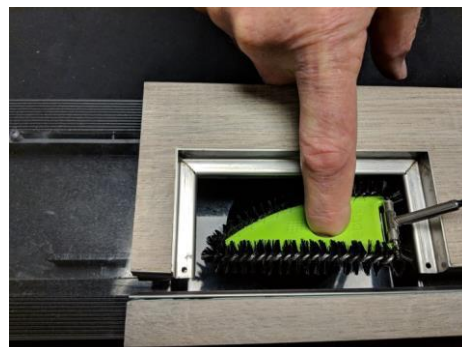
- Brush Kits are sold separately.
- To purchase the brushes, follow the QR link or go to: ebbe-america.com. We will custom cut the brushes to fit your INNI.



1. Remove the Access Cover by pushing down on the black tab at the center of the Access Cover with a screwdriver, putty knife, or similar tool. The Access Cover will pop up and allow you to grab and remove it.



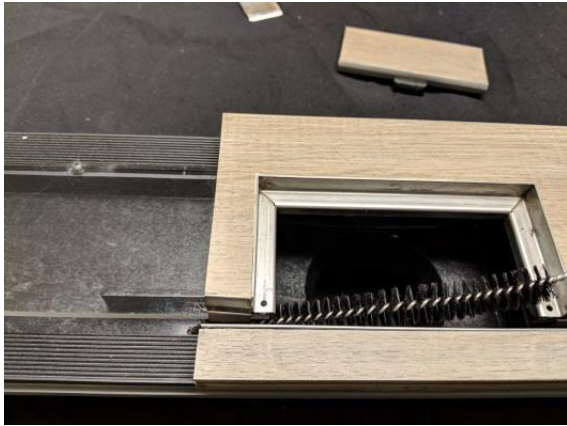
2. Using a cleaning agent as recommended above, apply an ample amount into the Drain Channel from the top side and also into the Main Channel through the Access Opening.



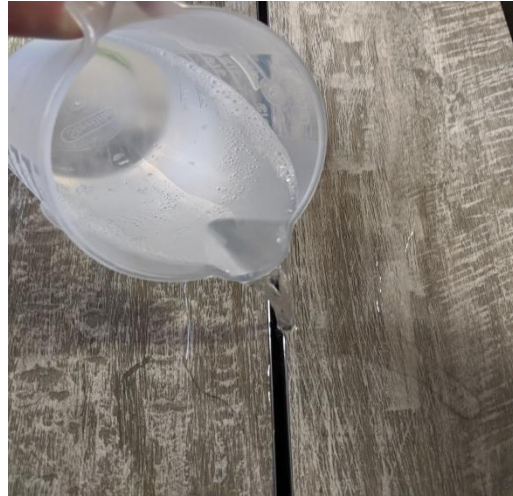
3. Holding the D-shaped Brush with your finger, lower the Brush into the Access Opening with the straight side parallel to the Drain Channel. Push the Brush forward into the Main Channel and pull back and forth several times to clean. If possible, avoid rubbing the Brush shaft on the lower perimeter of the Access Cover Frame.



Note: Make sure to push the D-shaped Brush to the end of the channel, moving any debris to the Drain Channel. (Tile not shown for clarity)



4. Use the round Brush to clean the Drain Channel. The metal portion of the brush head can be formed as needed to access the Drain Channel more effectively.



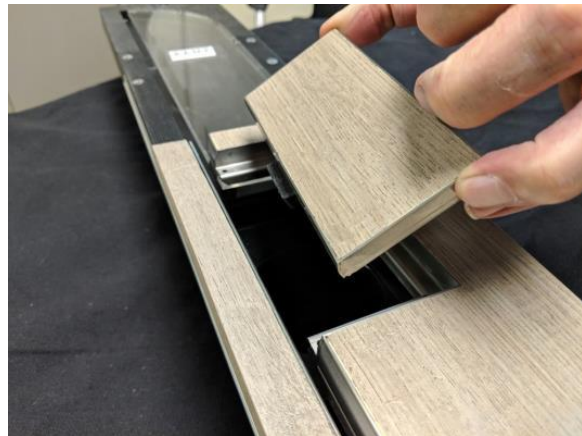
5. After brushing, flush the Drain Channel with several gallons of warm water.



6. Remove and replace the hair trap as needed.



7. Before re-installing the Access Cover apply wax or petroleum jelly around perimeter to aid in future removal.

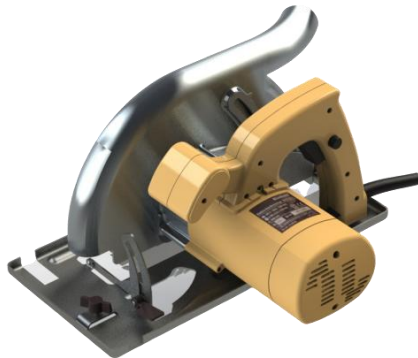


8. Re-Install the Access Cover by angling the cover down to the Drain Channel until the ball detents catch the Access Cover Frame. Push the cover down until flush.

Tools and Supplies Needed for Install



Power Drill



Circular Saw, Miter Saw or Tile Saw



INNI Assembly Video Link



Urethane Sealant & Caulk Gun



At Least 4oz of ABS Cement



Tape Measure



Fiberglass Mesh Tape



Polymer Modified Thinset



Utility Knife



Min 3/8 x 3/8 Notched Trowel



Square



Spirit Level