

INSTALLATION GUIDE

StreamLine™ Linear Drain

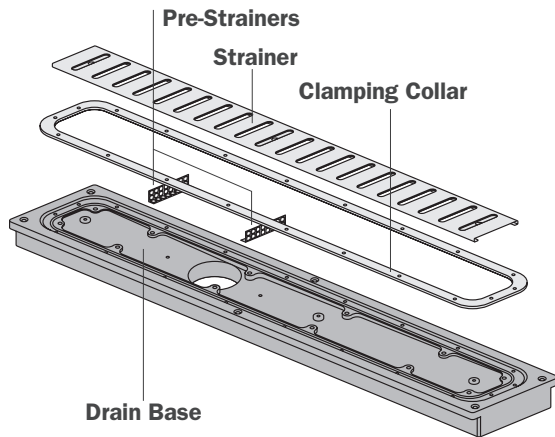



StreamLine™ Linear Drain


Installation Instructions


823 SERIES


StreamLine Linear Drain Includes:




 **Pre-Strainer Screw**
#8 x 1/2" Phillips Pan Head Screws


 **Clamping Collar Screw**
#6 x 5/8" Phillips Flat Head Screws

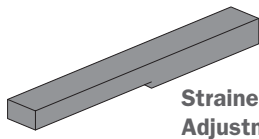
 **Strainer to Base Screw**
#6 x 1" Phillips Pan Head Screws

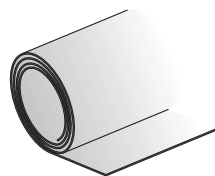
 **Strainer Height Adjustment Screw**
#10 x 1-1/4" Phillips Flat Head Screws

Note: Will not be used with Full Mortar Bed Kit.

 **Base to Sub-Floor Screw**
#8 x 2-1/2" Phillips Course Deck Screws

 **Base to Sub-Floor, Concrete Anchor**
1" Long, 1/4" Hole

 **Strainer Height Adjustment Tool**

 **NobleSeal® Flashing***

 **NobleSealant 150**

Note: If NobleSeal® will be used to waterproof entire shower, the included piece will not be needed.

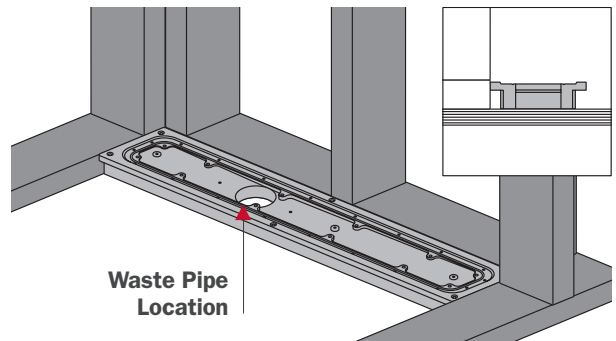
Pre-Planning

Be certain to gather all required tools and materials required prior to installation.

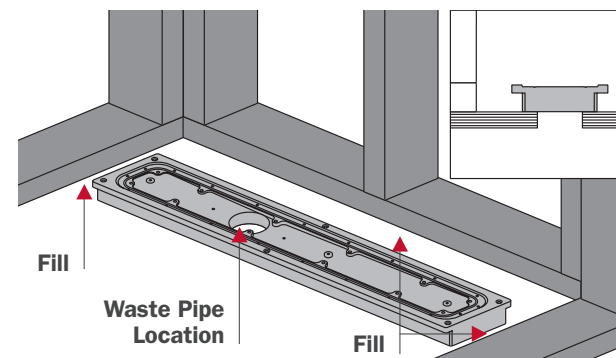
Sub-floor Caution: Sub-floor must meet local code requirements and Tile Council of North America (TCNA) guidelines. Clean sub-floor to be sure it is smooth and level.

Sloped Bed Requirements

Follow manufacturers instructions. Use products recommended for the type of sloped bed being installed. StreamLine Linear Drain assembly is intended to install tight to toe plate and studs within shower PRIOR to installation of mortar bed, backer board, waterproofing and tile.



If StreamLine Linear Drain assembly is installed inside toe plates within shower, add a properly sloped mortar bed to fill the space between the toe plates and the drain base.

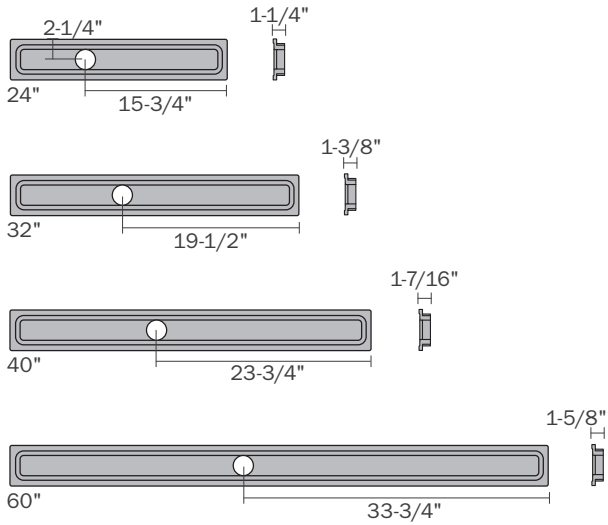


Drain Sizes

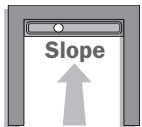
Confirm Drain Size, Waste Pipe

Type and Waste Pipe Location

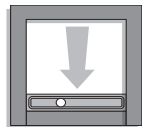
Drain hole is off-set to accommodate floor joist location. Size of shower determines size of drain to be used, which determines location of waste pipe through sub-floor. Match 2" I.D Schedule 40 DWV material (PVC or ABS) to drain base material.



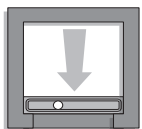
Typical Drain Locations



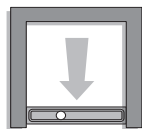
Back Wall
Flush to back wall



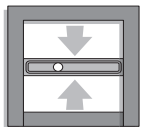
Full Curb
Flush to curb



Partial Curb
Flush to curb



Curb-less
Flush to both side walls

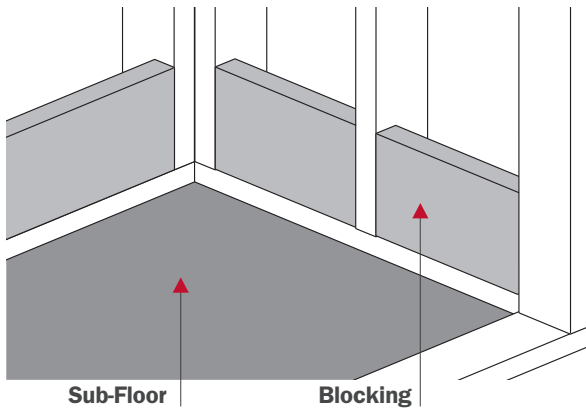


On Center
Flush to both side walls

1. Wall Preparation

Blocking

Blocking between studs may be needed for flashing and membrane attachment prior to drain installation.

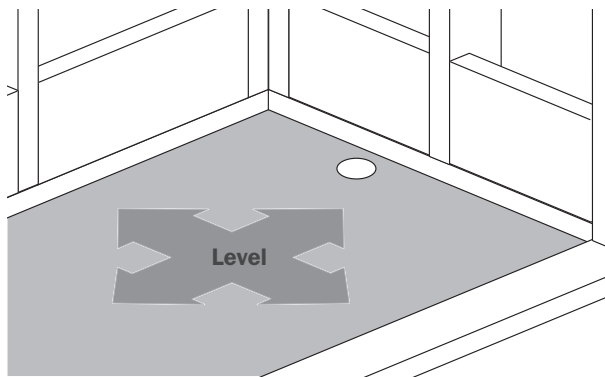


2. Sub-Floor Preparation

Caution: Confirm that sub-floor meets all local code requirements and the Tile Council of North America's (TCNA) guidelines.

Check for Level. Clean

Sub-floor must be smooth and level. Clean sub-floor.

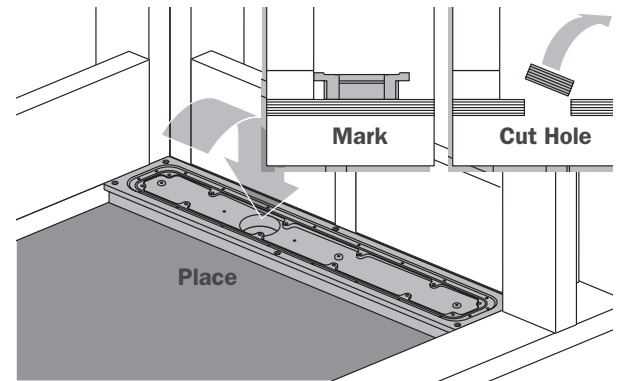


3. Waste Pipe

Option A: Waste Pipe Not Installed

Place, Mark and Cut

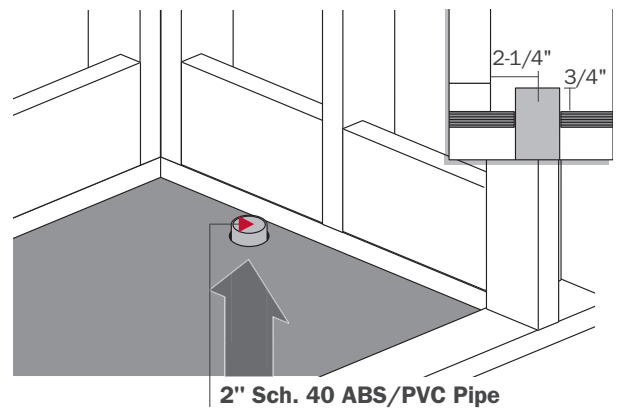
Place drain base in desired location on sub-floor. Mark waste pipe location on sub-floor. Cut opening in sub-floor to access plumbing below.



Install Waste Pipe

Follow local plumbing codes to properly install and secure 2" Sch. 40 ABS or PVC waste pipe 3/4" above sub-floor.

Note: Waste pipe may be installed after fastening drain base if accessible from below.

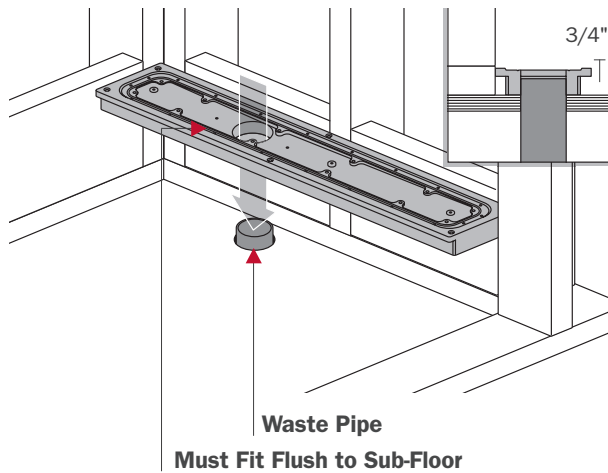


3. Waste Pipe (cont.)

Option B: Waste Pipe Pre-Installed

Dry fit drain base over location of existing waste pipe. If location does not allow drain base to fit flush against at least 2 shower walls, move location of plumbing to allow for proper installation. May also require moving existing studs and toe plate.

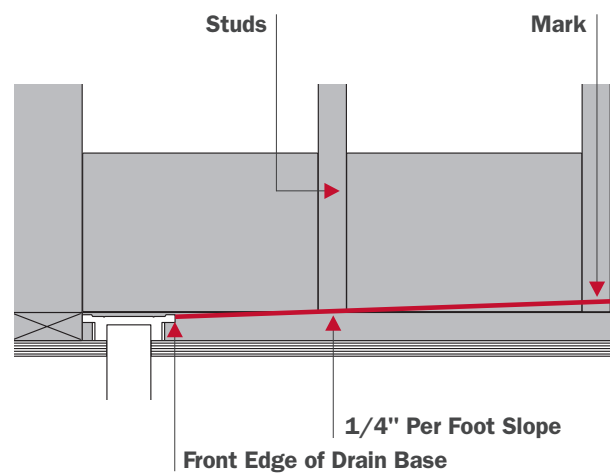
Dry Fit



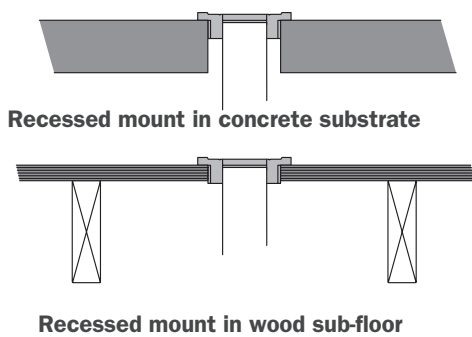
4. Preparation for Sloped Mortar Bed

Mark Bed Slope

1/4" per foot slope to drain is required.



Alternate Drain Mounting Methods



Note: Any modification of substrate must comply with local building codes.

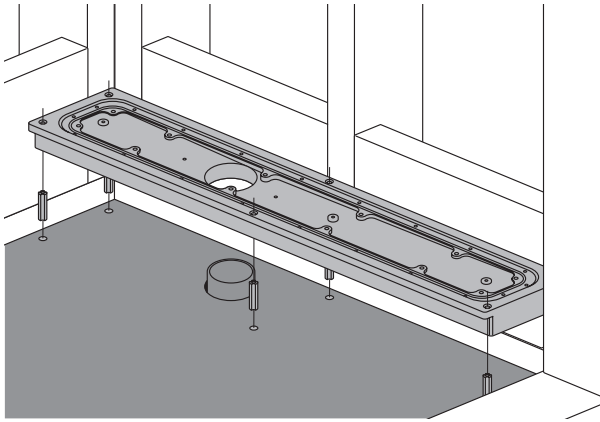
5. Fasten Drain Base to Sub-Floor

For Concrete Sub-Floor A & B

For Wood Sub-Floor B only

A. Mark for Anchors

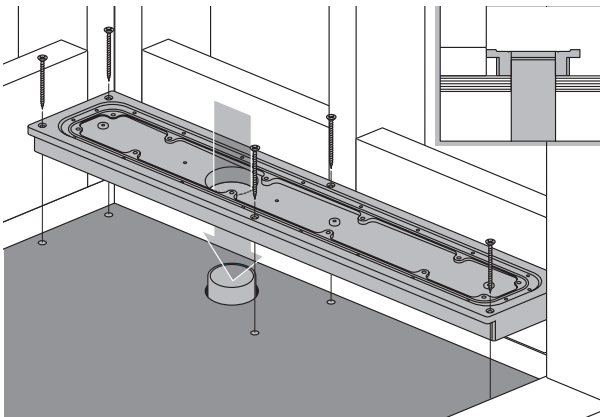
Dry fit drain base over waste pipe. Mark all holes in outside flange of drain base on concrete floor. Remove drain base. Drill 1/4" holes, 1-1/2" deep where marked. Drive plastic anchors flush into all holes.



B. Install Drain Base to Waste Pipe and Sub-Floor

Caution: Confirm proper plastic pipe primer and cement for drain base type (PVC or ABS). Check drain base label to confirm.

Apply appropriate plastic pipe primer and cement to drain and waste pipe following local plumbing codes and manufacturers instructions. Fit and fully seat drain base onto waste pipe. Fasten drain base to sub-floor by screwing 2-1/2" deck screws through all holes in outside flange of drain base into plastic anchors or directly into wood sub-floor. DO NOT OVER-TIGHTEN.



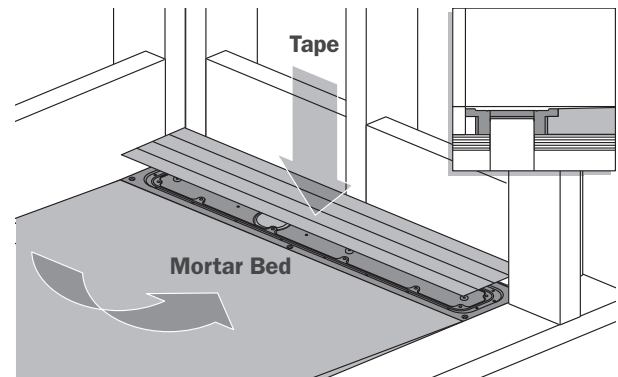
6. Sloped Mortar Bed Installation

Protect Drain Base.

Apply tape over entire top surface of drain base.

Install Sloped Bed.

Follow industry standards to complete sloped mortar bed installation. Be certain mortar completely fills void below drain base flange. Allow to dry before proceeding.



7. Prepare Flashing

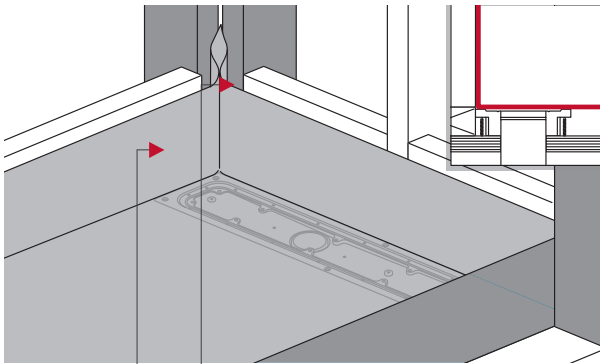


**Option 1:
For Drain at Back Wall**

Flashing must turn up the walls a minimum of 3" above shower curb and 6" above floor in showers without curbs.

Measure width of shower floor across drain base. Lay flashing flat. Measure and mark flashing. Fold and crease for upturns and create corners.

Note: Do not secure flashing at this time.

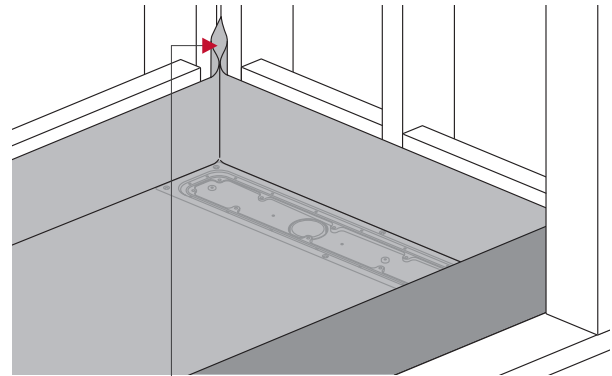


Fold | **Tuck or Fold**

Making Corners

Tucked Corner (when space is available between studs)

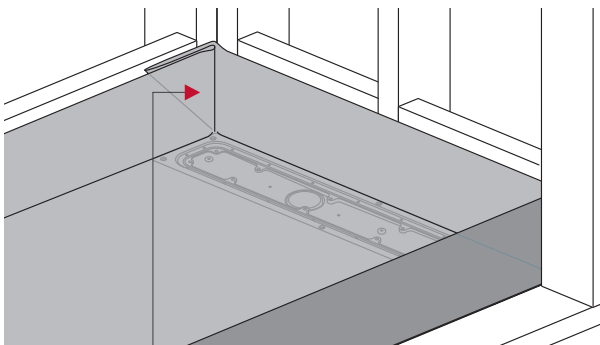
Fold and crease to size. Tuck shower pan liner into space between studs.



Tuck between Studs

Folded Corner

Fold and crease to size. Fold corners behind shower pan liner.



Fold Corners Behind

7. Prepare Flashing (cont.)



**Option 2:
For Drain at Full Curb Entry**

Flashing must turn up the walls a minimum of 3" above shower curb and 6" above floor in showers without curbs.

Prior to installing flashing, install pre-formed outside corners (available separately) following manufacturer's instructions. 2 per side.

Measure width of shower floor across drain base. Measure up and over curb. Lay flashing flat. Measure and mark flashing.

Cut, fold and crease to proper size and fit.

Note: Do not secure flashing at this time.

Note: Preformed curbs may also be used. See manufacturer's instructions.



**Option 3:
For Drain at Partial Width Curb**

Flashing must turn up the walls a minimum of 3" above shower curb and 6" above floor in showers without curbs.

Prior to installing flashing, install pre-formed outside corners (available separately) following manufacturer's instructions. 2 per side.

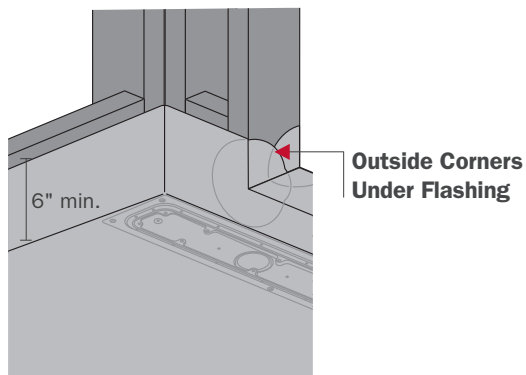
Measure width of shower floor across drain base. Measure up and over curb. Lay flashing flat. Measure and mark flashing.

Cut, fold and crease to proper size and fit.

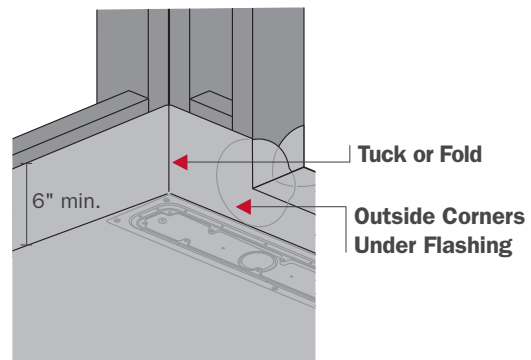
Note: Do not secure flashing at this time.

Note: Preformed curbs may also be used. See manufacturer's instructions.

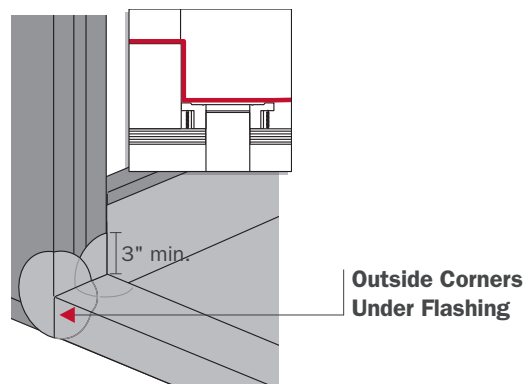
Inside Shower



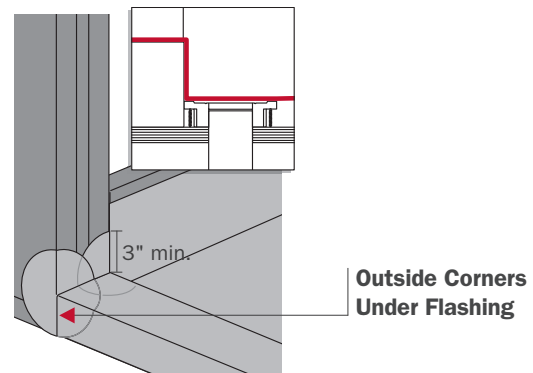
Inside Shower



Outside Shower



Outside Shower



7. Prepare Flashing (cont.)



Option 4: For Drain at Curbless Entry

Flashing must turn up the walls a minimum of 3" above shower curb and 6" above floor in showers without curbs.

Measure width of shower floor across drain base. Lay flashing flat. Measure and mark flashing.

Cut, fold and crease to proper size and fit.

Note: Do not secure flashing at this time.



Option 5: For Drain in Center of Floor

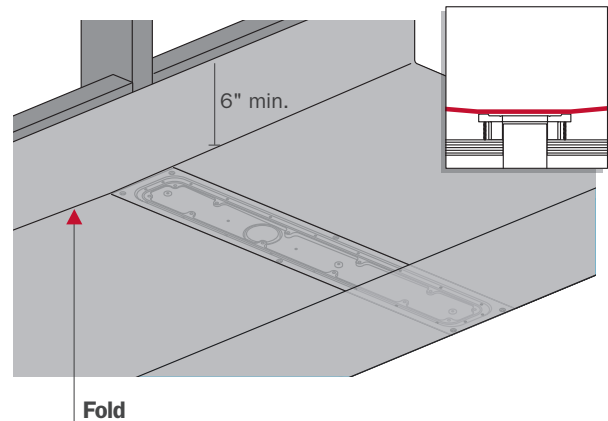
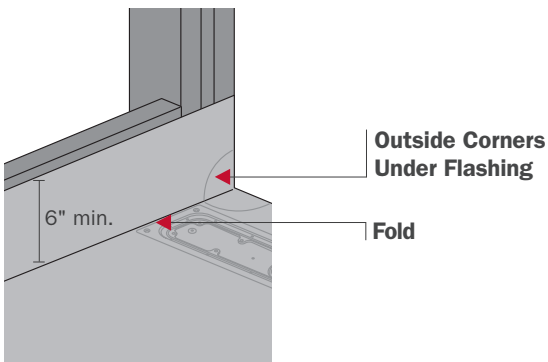
Flashing must turn up the walls a minimum of 3" above shower curb and 6" above floor in showers without curbs.

Measure width of shower floor across drain base. Lay flashing flat. Measure and mark flashing.

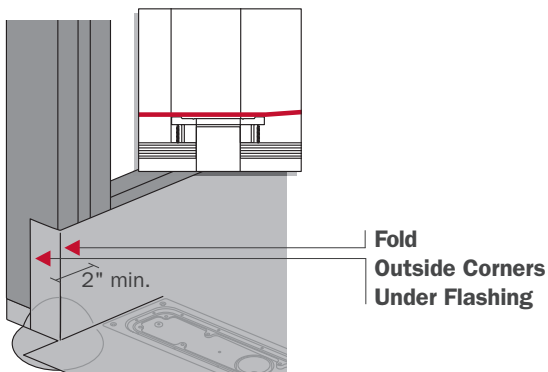
Fold and crease for upturns.

Note: Do not secure Shower Pan Liner at this time.

Inside Shower



Outside Shower

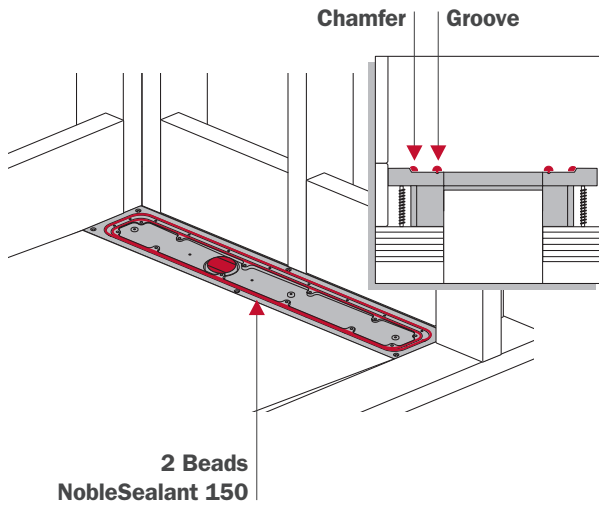


8. Secure Flashing

A. Seal Drain Base

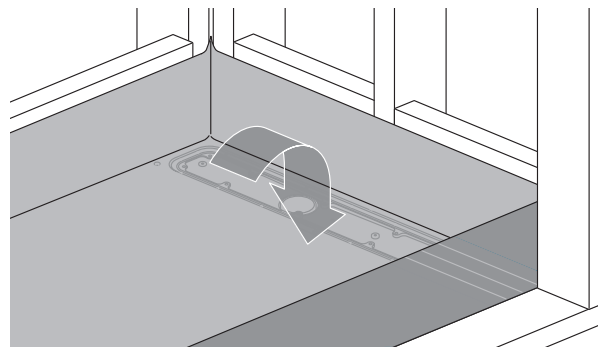
Lift out flashing. Remove tape, leaving tape over drain hole only.

Apply a 1/8" continuous bead of NobleSealant 150 around chamfer on base flange and another bead in groove on drain base.



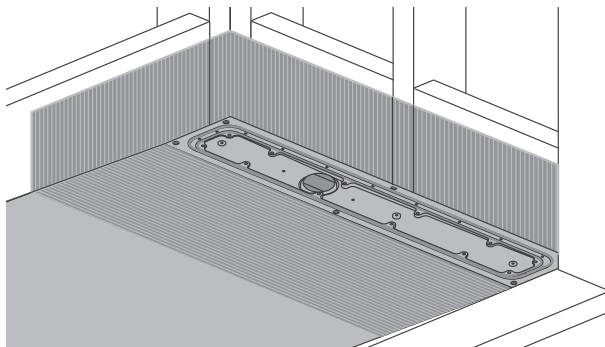
C. Press Into Sealant and Adhesive

Align flashing and firmly press all areas of flashing into adhesive on walls, floor, curb and sealant on drain base and any pre-formed corners.



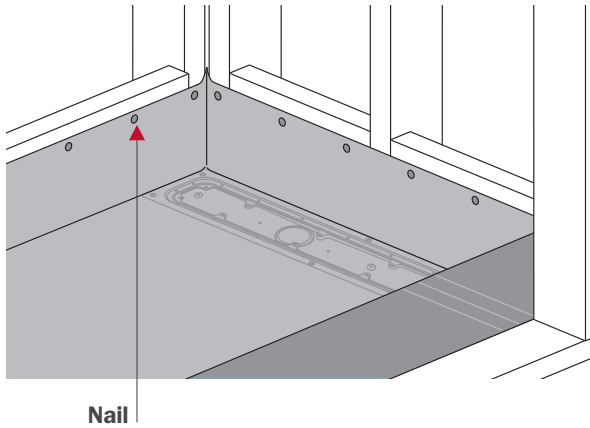
B. Apply Adhesives

Apply latex-modified thin-set to mortar bed, walls and curb as needed. Apply NobleSealant 150 to any pre-formed corners.



9. Fasten Flashing

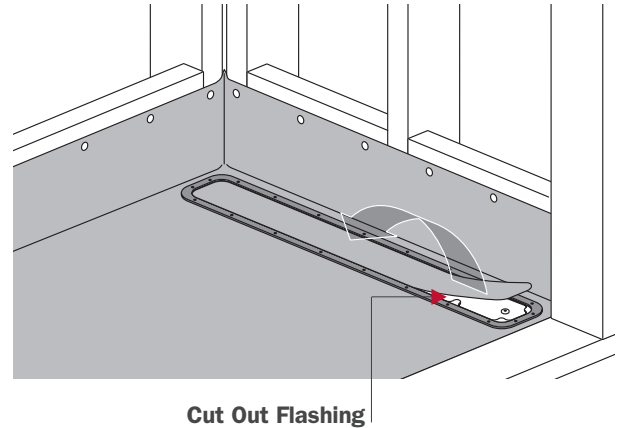
Nail through top 1" of flashing to studs and/or blocking.



11. Cut Out Flashing

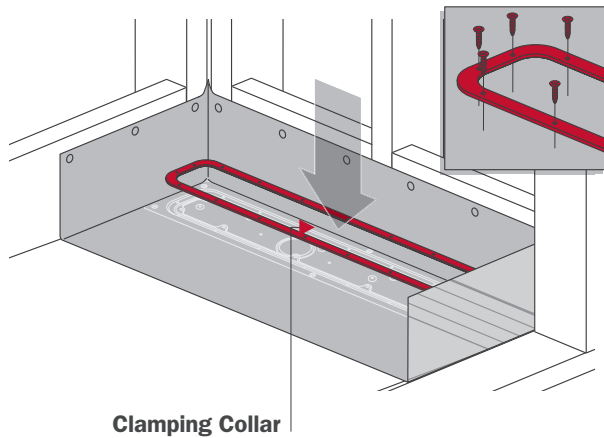
With a razor knife, carefully trim out flashing from center of collar. Remove tape from drain hole.

Caution: Do not puncture flashing outside of collar.



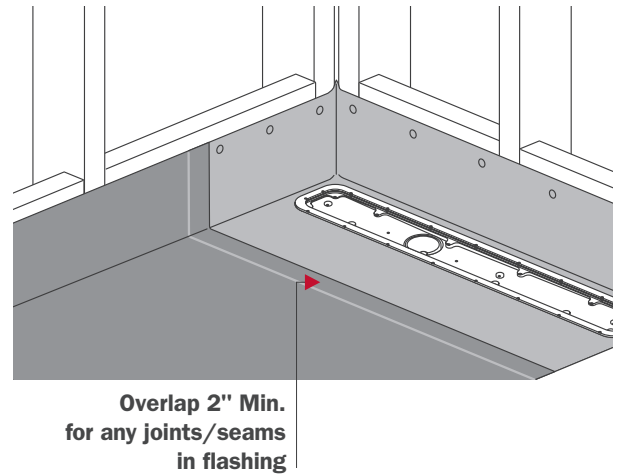
10. Install Clamping Collar

Align collar with drain base under flashing. Press firmly. Starting at one end, insert 5/8" screw through collar, punch through flashing and screw into base. Repeat for all screws. DO NOT OVER-TIGHTEN.



12. Complete Floor Waterproofing

Complete installation of bonded waterproofing membrane (ANSI A118.10) on shower floor.



13. Flood Test

Flood test as required by local codes.

14. Install Backer Board and Wall Waterproofing

Note: TCNA guidelines require waterproofing or a vapor membrane be installed on all walls.

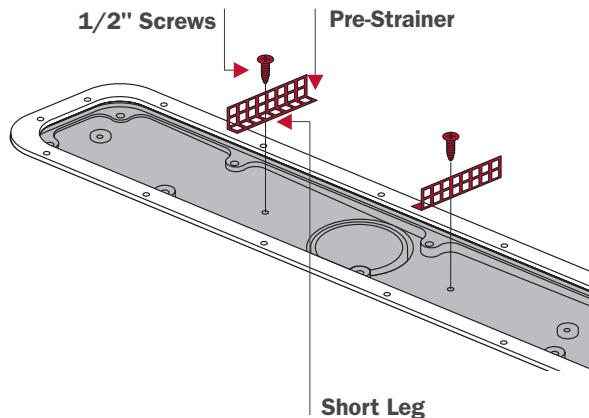
Install 1/2" backer board and wall waterproofing according to manufacturer's instructions, local plumbing codes and TCNA guidelines.

Caution: Do not puncture flashing.

15. Install Pre-Strainers

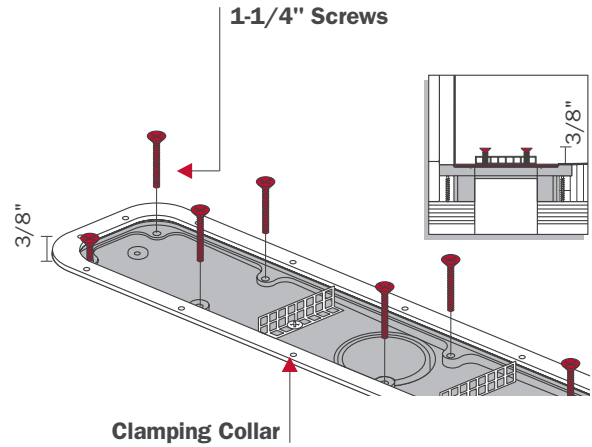
Place short leg of Pre-Strainer down, facing drain hole. Install 1/2" pan head screw, align strainer and tighten screw. Repeat for opposite strainer.

Note: On 24" drain, place long leg of Pre-Strainer down, facing drain hole.



16. Install Height Adjustment Screws

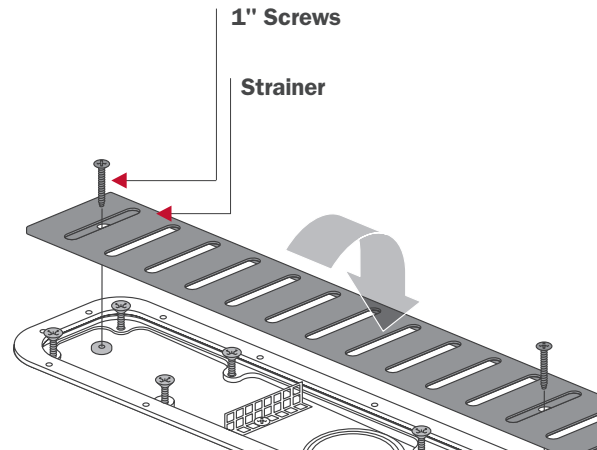
Screw in all 1-1/4" flat head height adjustment screws to approximately 3/8" above the clamping collar.



17. Temporarily Attach Strainer

Note: Strainer attachment holes are not symmetrical. If screws do not align with holes in drain base, turn strainer end-to-end.

Place strainer over height adjustment screws. Temporarily fasten with three 1" pan head screws. DO NOT OVER-TIGHTEN.

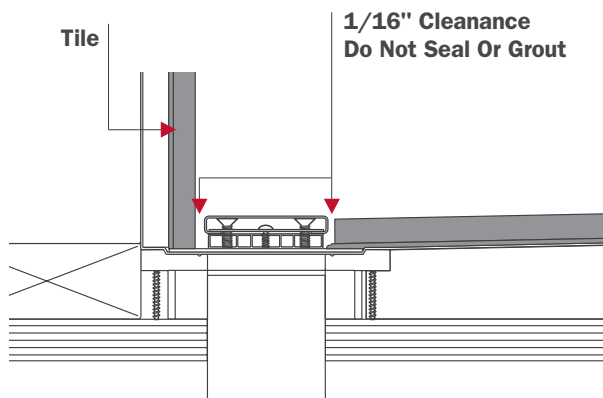


18. Tile and Grout

Be certain strainer is protected with tape. Allow for 1/16" clearance between strainer and tile.

Caution: Do not grout or seal this space.

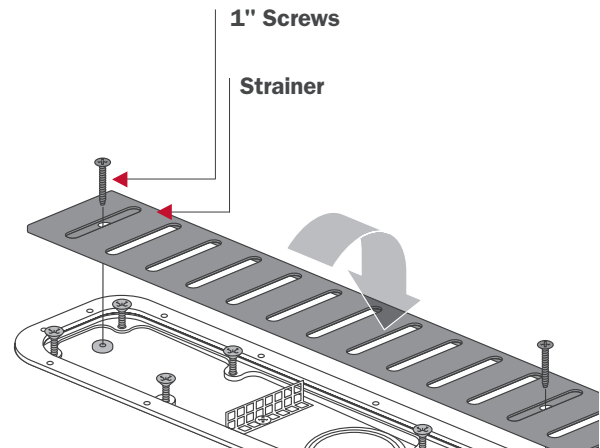
Tile and grout all surfaces following manufacturers instructions and TCNA guidelines.



20. Re-Install Strainer

Note: Strainer attachment holes are not symmetrical. If screws do not align with holes in drain base, turn strainer end-to-end.

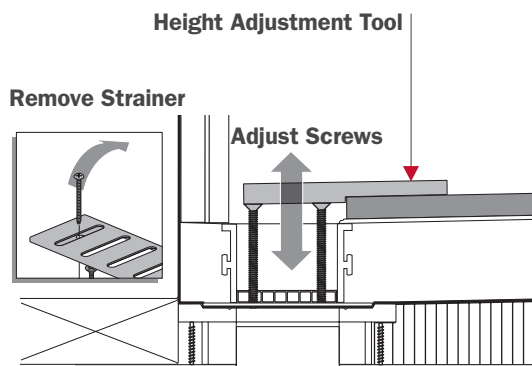
Place strainer over height adjustment screws. Confirm that strainer is flush with all tiles. Fasten with three 1" pan head screws. DO NOT OVER-TIGHTEN.



19. Adjust Strainer Height

Remove strainer. Remove tape from strainer and clean any remaining residue.

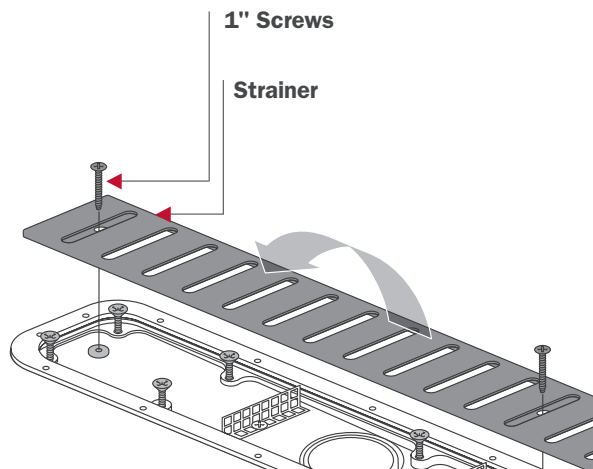
Place thin end of height adjustment tool on tile and rest other end on height adjustment screw. Adjust screws so heads are flat against bottom of tool, and tool is flat against tile. Repeat for all height adjustment screws.



Cleaning Drain

To clean drain, remove 3 screws in top of strainer. Clear any hair or other obstructions from drain.

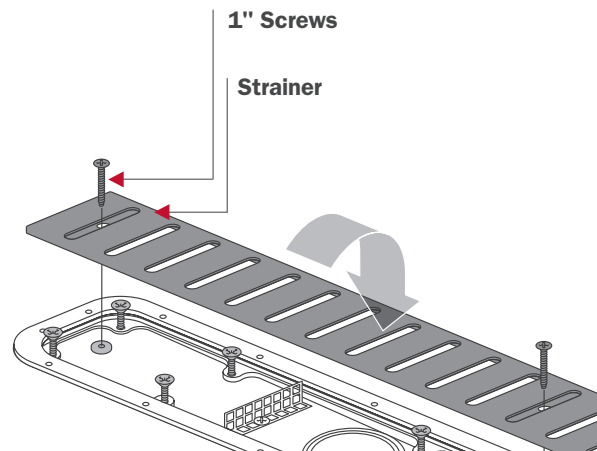
Remove Strainer



Re-Attach Strainer

Note: Strainer attachment holes are not symmetrical. If screws do not align with holes in drain base, turn strainer end-to-end.

Place strainer over height adjustment screws.
Replace all three screws. DO NOT OVER-TIGHTEN.



Sioux Chief

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More than 50 years ago, Sioux Chief started manufacturing rough plumbing products. Today, we still do — right in the heart of America. Many of you knew us when we started out. Some of you came to know us as we grew. Along the way, we made a name for ourselves with quality products, innovative ideas and dependable service. Since our start, Sioux Chief has changed a great deal. However, we are also very much the same. We make high quality rough plumbing products and systems that help plumbing contractors grow their businesses. We innovate. We manufacture in America. And we could not do it without you.

Thank you for your business. We promise to continue to work hard to support you. Together, we will take the field.



TAKE THE FIELD.

