

LEVEL ENTRY SHOWER SYSTEM

BEFORE YOU BEGIN

Items Needed

Phillips head screwdriver	Staple Gun
Hammer	Tape Measure
Level	Pencil / Marker
Utility Knife	4" Wide Paint Brush
Scissors	Drywall Trowel
Carpenters Square	1/2" Tile Trowel
(2) 5 Gallon Buckets	Heavy Duty Mixer
Sheers or grinder to cut tile backer board	Sponge
Skill Saw	5lb Plumbers Putty
Reciprocating Saw	Test Plug
Hand Drill with #2 bit	

Key Notes

1. It is recommended that floor elevations and tile thicknesses are known before starting to ensure the best finished results. When considering elevations, remember that our LES pan sits on top of the existing floor joists and is 7/8" thick.
2. When designing a shower, it is recommended that the slope of the floor extend a few inches past the showering foot print.
3. Tile no larger than 4"x4" should be used for the shower pan area
4. Epoxy grout shall be used on the shower pan area
5. Any penetrations made through the showers waterproofing membrane for shower doors, glass panels, etc. shall be thoroughly cleaned and then doped with 100% GE Silicone to ensure full coverage.
6. Always follow the TCNA (Tile Counsel of North America) recommended procedures for tile installation methods.
7. Always follow North American Adhesives recommended procedures for waterproofing methods.
8. Always follow national and local plumbing codes.
9. Shower spray patterns should always be taken into consideration while laying our your new shower system. A downward shower flow pattern works best.

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The following procedures will guide you through the installation of our LES-6048 "Level Entry Shower" system.

STEP #1: Pan Layout

If space allows, lay your pan on the floor and mark the drain opening. Make sure there are no structural members below that interfere with the required 8" diameter hole opening for the drain assembly. If your shower space does not allow you to lay the entire pan in your shower area, we have provided a cutout template on the box that can be used for this step. Note that the pan can be placed tight to the wall, or it can be pulled out away from the rear and side walls if your layout requires. The pan should always be positioned so there is positive slope past the "shower opening" by at least 2".



Tip: The slope of the shower floor can be extended with NA-500 fast setting patch. (See step #9)

STEP #2: Floor Cut

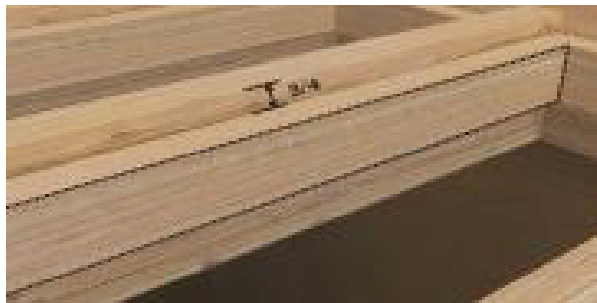
Once the pan has been positioned and the floor marked, cut the floor area out with a skill saw. Set your saw blade just deep enough to cut the sub-floor taking care not to cut anything below the sub-floor. It is OK to over cut the size of the pan by 1/4" all the way around.



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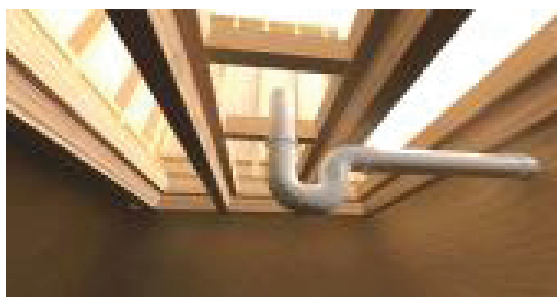
STEP #3: Joist Sistering

Measure and cut 2x4's to picture frame the opening between the joists. Apply construction adhesive and screw or nail the 2x4's to the sides of the joists. The 2x4's should be held 3/4" below the top of the joist. Install (2) cross support 2x4's near the drain opening. These pieces can lay horizontally and should be positioned leaving clearance for the required 8" diameter opening for the drain assembly.



STEP #4: Drain Installation

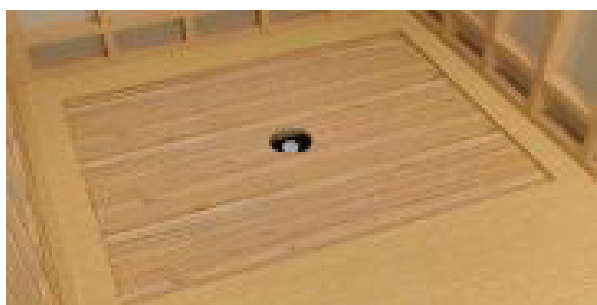
For installations without access below, set the pan in place and pull measurements to the center of your drain opening. Remove the pan and install your drainage waste pipe, stubbing the pipe above the subfloor level.



Tip: The waste pipe can extend above the floor and be cut at a later point.

STEP #5: Plywood Sub-Floor

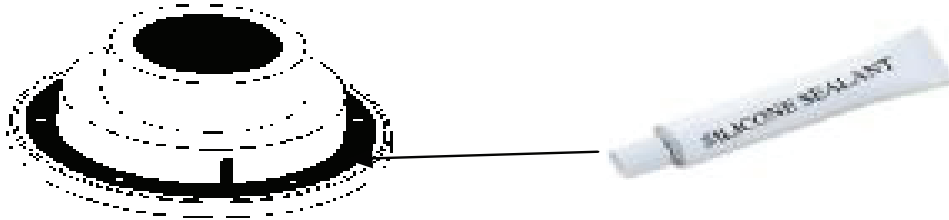
Cut 3/4" plywood to fit between the joists and on top of the 2x4's. Apply construction adhesive to the top of the 2x4's, insert the plywood and screw or nail into place.



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STEP #6: Drain Cup Install

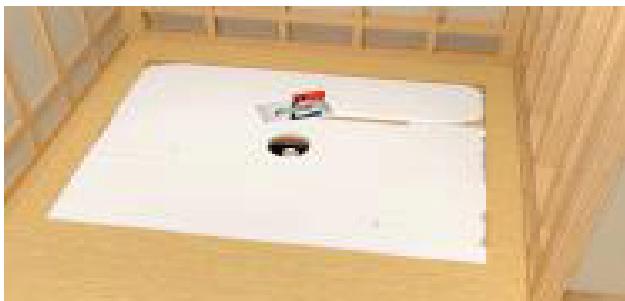
Using the 1 oz. tube of silicone provided, coat the bottom of the LES-20131 Drain Cup (as shown in yellow). The entire tube should be used paying special attention to insure coverage around the screw hole areas. Insert the LES-20131 cup into the pan. Rotate the cup until it drops into the alignment grooves, hand tighten with the (6) screws provided.



STEP #7: Setting the Pan

Mix latex modified thinset North American Brand NA-3200 or NA-3220 according to the package label and pour into the recessed pan opening. The thinset should be thicker at the outside edge tapering towards the drain. Set the LES-6048 pan into place, over the drainage waste pipe. Verify the pan is setting level and insert (4) #14-1.1/2" screws (not provided) into the pre-drilled holes located near the drain. Carefully screw the remaining perimeter screws into place checking for levelness as you go.

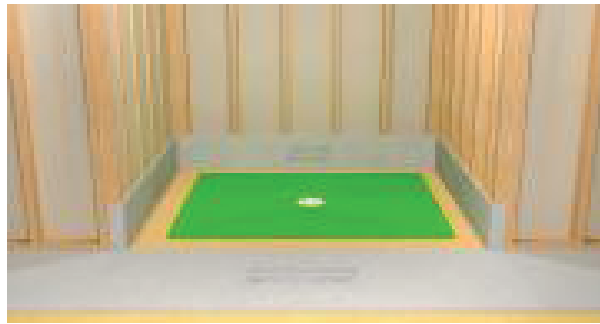
TIP: In the event that the floor is not level, additional thin-set can be applied to the low side to level up pan. Always allow thin-set to set up before standing on pan.



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STEP #8: Tile Backer Board

Cut 1/2" tile backer board approx 12" high and screw to the walls. Determine the thickness of floor backer board and install so the slope from the backer board to the pan will be a min. of 1/4" per ft. On a typical 3/4" sub-floor installation, our 7/8" thick LES-6048 pan will sit 1/8" higher than the surrounding sub-floor. Therefore, if you are installing 1/4" backer board keep it 6" away from the pan. If you are using 1/2" backer board, stay 12" away from the pan. This process can be useful to create a slope past shower area footprint.



STEP #9: Floor Sloping (if required)

Measure, cut and staple the NA-1680 mesh provided into any areas that require sloping. Mix the NA-500 Fast Setting Patch according to the package label and pour into the recessed areas. The NA-500 patch is recommended for thicknesses from 1/2" to a featheredge. Install the patch ensuring that all potential "wet areas" slope back towards the pan and drain.

TIP: The NA-500 Fast setting patch dries quickly and the waterproofing membrane can be applied immediately after drying. Due to its quick drying properties, it should only be installed by experience installers. Use Mapei Planiprep-SC for patch sloping from 1" to a featheredge.



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STEP #10: Seam Waterproofing

Precut 6" wide strips of NA-1750 reinforcement fabric before waterproofing is applied. Apply the NA-1740 waterproofing membrane provided with a 4" wide paint brush to all corners and seams. Cover approximately 5" on both sides of seams. This first coat will be absorbed quickly.



Apply a 2nd coat of water proofing to the seams. Fold the precut 6" wide reinforcement fabric strips in half and set in place. Tuck the reinforcement fabric into place with a flat blade trowel ensuring all corners are tight leaving no air bubbles. Caution should be used not to tear the fabric.



Waterproof over the fabric again and let dry.

Cut a piece of the 6" fabric approx. 8" long. Cut this piece half way up the 6" length and fold to create a corner dam as shown. Apply waterproofing

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STEP #11: Pan Waterproofing

Starting at the rear of the shower, precut strips of the NA-1750 reinforcement fabric large enough to cover down the rear wall, both side walls and across the pan before waterproofing membrane is applied.

Apply the NA-1740 waterproofing membrane with a 4" wide paint brush to an area slightly larger than the reinforcement fabric will cover. Lay the fabric into position and tuck place with a flat blade trowel so all corners are tight. Caution should be used not to tear the fabric.

Waterproof over fabric again and let dry.



Follow the same procedure for the remaining sections of the pan. It is good practice to waterproof over the (6) cup screws, and around the (4) Incert female screw grommets. Do NOT allow waterproofing into the (4) Incert female grommet openings. It is not necessary to waterproof over the center drain opening. Let the waterproofing dry for approx. 30 minutes and re-coat with waterproofing again. This coat should dry overnight. This entire process can typically be completed in one day however, the first couple installations may take slightly longer.

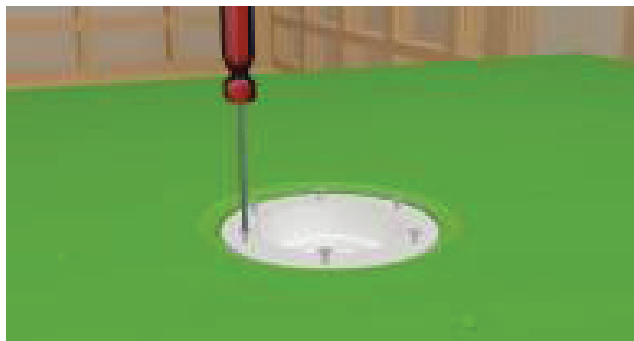
Apply the final coat of waterproofing, the final thickness of waterproofing should be about the thickness of a credit card or .5mm. The final coat should dry for approx. 24hrs before testing. Temperature and humidity can shorten or increase dry times. Follow the waterproofing manufacturers instructions.



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STEP #12: Insert and Drain Connection

Locate the LES cup outer edge with your fingers and carefully cut the fabric using a utility knife. This cut should be made so the fabric is tucked at least 1/2" under the Incert piece. Rotate the Incert until it drops into the alignment grooves, hand tighten with the (4) screws provided. The fabric should be under the Incert at least 1/2" and all exterior weep holes should be clean.



We are now ready to complete the drain seal. When complete, the waste pipe should extend up slightly higher than the gasket. This pipe can be cut using an inside PVC pipe cutter if need be. Remove any burrs from the pipe, apply a small amount of plumbers grease to the gasket and firmly press into place (beveled side up). Screw the gasket lock ring into place (beveled end down) and tighten with the lock ring tightening tool provided.

TIP: The lock ring tightening tool has been designed so it can be flipped over to aid in pressing the gasket into place.



Inside Pipe Cutter.

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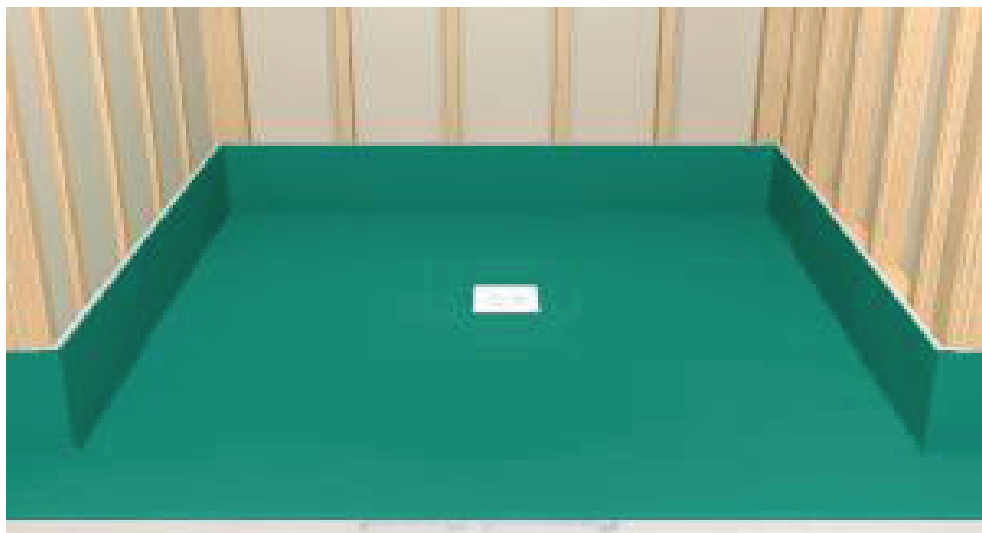
STEP #13: Testing

Seal the drain opening with a test plug and create a temporary dam at the front of the shower using plumbers putty. For larger showers, flexible molding can be used with putty to help create the dam. Fill the shower with water for 30 minutes or as long as local codes require. Once complete, pull the test and remove all the putty from the shower floor and walls.



STEP #14: Adjuster, Retainer and Grate Installation

Thread the LES-20171 adjuster into the insert. Verify the LES-20191 retainer o-ring is seated properly in the grate retainer and press into the adjuster. Applying a small amount of plumbers grease to the o-ring will make removal easier during the tile process should the finished grate height need to be adjusted up or down.



CONGRATULATIONS!

Your Level Entry Shower is complete and ready to be tiled.

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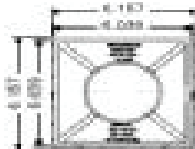
Parts Breakdown



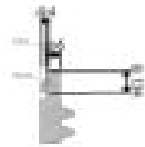
Grate: Name/Color
(Actual Hole Pattern not shown)



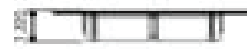
Retainer #20191



Adjuster to Retainer
O-ring #20181



Adjuster #20171



Insert #20161

Screws (4)



M4x1.25mm
Screws (4)
#20161-4



Lock Ring #20151



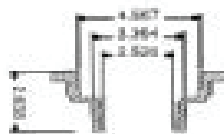
Drain Gasket # 20141



M4x1.25mm
Screws (8)
#20131-8



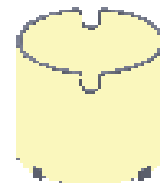
Cup #20131



1oz Silicone Sealant



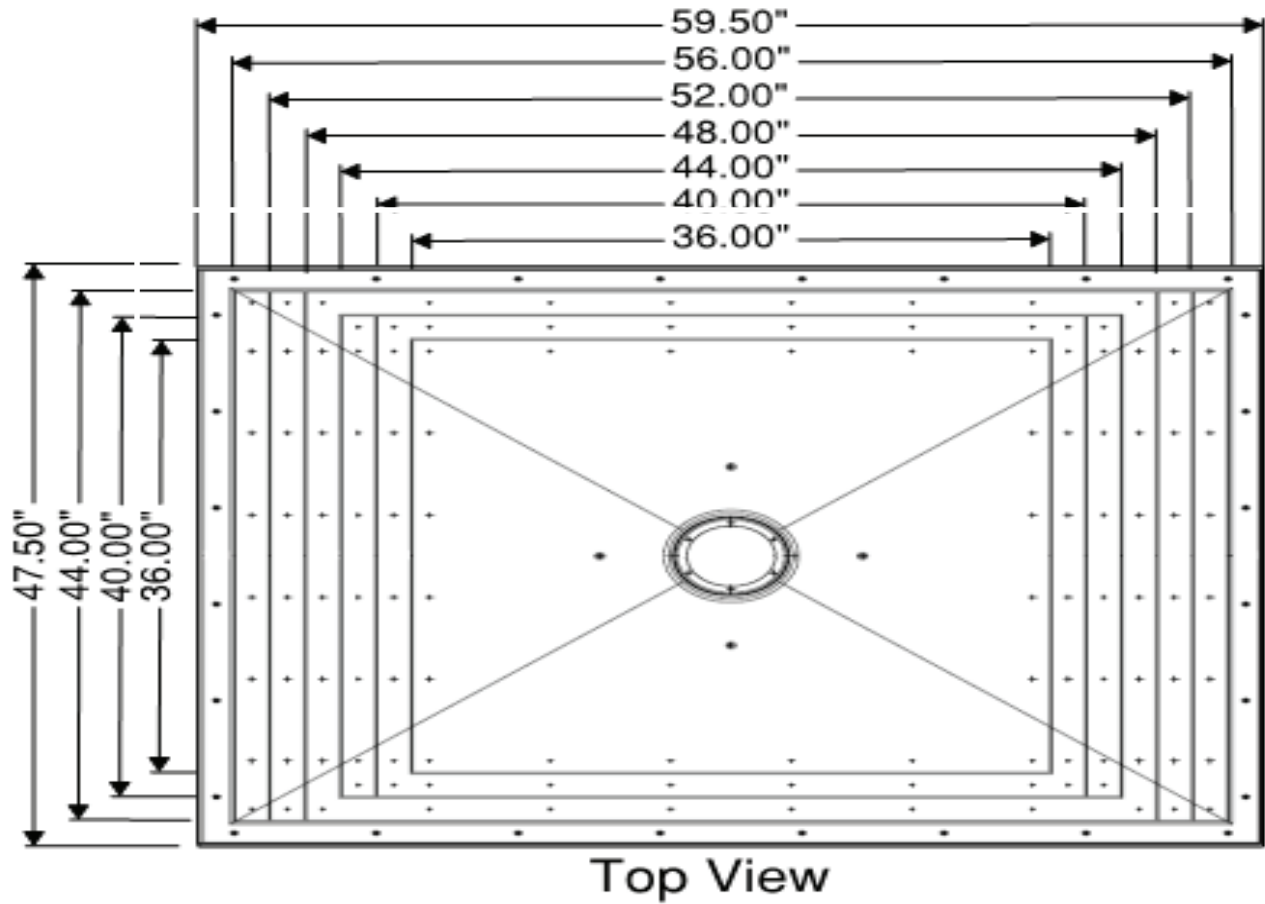
Grate Removal Tool



Lock Ring Tightening Tool

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Parts Breakdown



ICC-ES PMG Listing**PMG-1094**

Effective Date: August 1, 2012

This listing is subject to re-examination in one year.

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A Subsidiary of the International Code Council®

CSI: **DIVISION:** 22 00 00 — PLUMBING
 Section: 22 40 00 — Shower Pan Liners

DIVISION: 09 00 00 — FINISHES
Section: 09 30 00 — Tiling

Product certification system:

The ICC-ES product certification system includes testing samples taken from the market or supplier's stock, or a combination of both, to verify compliance with applicable codes and standards. The system also involves factory inspections, and assessment and surveillance of the supplier's quality system.

Product: Shower Receptor Kit

Listee: VIM Products
 5060 Trademark Drive
 Raleigh, North Carolina 27610
 www.vimproducts.com

Compliance with the following codes:

2012 and 2009 *International Residential Code*® (IRC)
2012 and 2009 *International Plumbing Code*® (IPC)
2012 and 2009 *Uniform Plumbing Code*® (UPC)*
2010 *National Plumbing Code of Canada***

**Uniform Plumbing Code* is a copyrighted publication of the International Association of Plumbing and Mechanical Officials

***National Plumbing Code of Canada* is a copyrighted publication of the National Research Council Canada

Compliance with the following standard:

LC1030-2011 PMG Listing Criteria for Prefabricated, Tailable Shower Receptor Kit

ANSI A 118.10-2011, Specification for Load Bearing, Bonded, Waterproof Membranes for Thin-Set Ceramic Tile and Dimension Stone Installation.

ASME A112.18.2/CSA B125.2-2011, Plumbing Waste Fittings

Identification:

6048-LES Shower Receptor Kit described in this listing must be identified by a stamp bearing the manufacturer's name or trademark, the model number and the ICC-ES PMG listing mark.

Installation:

Each Shower Receptor Kit must be installed in accordance with the manufacturer's published instructions and the applicable codes.

The prefabricated, tilable shower receptor surfaces to be covered shall be smooth and free of irregularities that would make installation covering uneven. The size and slope shall conform to the requirements of the latest editions of the International Plumbing Code, International Residential Code and Uniform Plumbing Code. Provision shall exist to allow movement of water along the prefabricated, tilable shower receptor into drain.

The Shower Lining membrane shall conform to ANSI A118.10 and shall have a current listing with an approved third-party certification agency. Provisions shall exist to allow movement of water along the shower lining membrane into the drain. Attachment of the membrane to the receptor, in the field, shall be made in accordance with the manufacturer's published installation instructions.

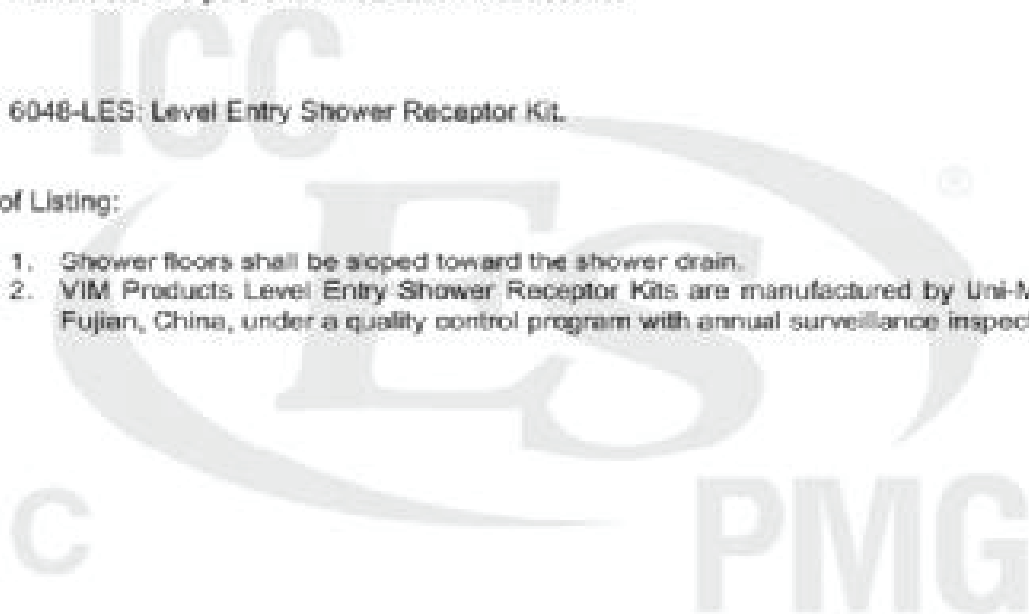
The shower drain shall conform to the applicable material and performance requirements in ASME A112.18.2/CSA B125.2 and shall have a current listing with an approved third-party certification agency. Attachment of the drain to the receptor, in the field, shall be made in accordance with the manufacturer's published installation instructions.

Models:

6048-LES: Level Entry Shower Receptor Kit.

Conditions of Listing:

1. Shower floors shall be sloped toward the shower drain.
2. VIM Products Level Entry Shower Receptor Kits are manufactured by Uni-Moulding in Xiamen, Fujian, China, under a quality control program with annual surveillance inspections by ICC-ES.



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