

HYDRO BAN® Shower Pan Kit

DS-36586-0724

Globally Proven Construction Solutions



1. PRODUCT NAME

HYDRO BAN® Shower Pan Kit

2. MANUFACTURER

LATICRETE International, Inc. 1 LATICRETE Park North Bethany, CT 06524-3423 USA

> Telephone: +1.203.393.0010, ext. 1235 Toll Free: 1.800.243.4788, ext. 1235

Fax: +1.203.393.1684 Website: laticrete.com

3. PRODUCT DESCRIPTION

The HYDRO BAN® Shower Pan Kit comes with a high density EPS pan and curb along with all of the HYDRO BAN Sheet Membrane and accessories needed for a shower installation (the HYDRO BAN Bonding Flange Drain is sold separately). The HYDRO BAN Sheet Membrane is a waterproof sheet membrane that is installed using a substrate appropriate LATICRETE® polymer fortified thin-set (sold separately). HYDRO BAN Sheet Membrane allows for a quick and easy waterproofing installation, which will retain its integrity for the life of the installation.

Uses

- Industrial, commercial and residential bathrooms where a pre-sloped shower is required
- Stalled gang showers
- Pet showers

Advantages

- Pre-sloped ready to tile pan eliminates need for traditional mud bed installations
- Lightweight and durable, easy to transport and handle during installation
- · Can quickly and easily be modified to size on site
- Membrane exceeds ANSI A118.10 requirements
- Membrane tested to ASTM E96/E96M Procedure E-0.06 Perms - approved for steam showers / rooms as single membrane
- Membrane is IAPMO approved
- Membrane is pliable conforms easily to substrate
- Membrane Installs with modified or unmodified thin-set
- Complete line of accessories single source supply
- Works in conjunction with LATICRETE tile and stone installation materials

Suitable Substrates (Interior Use Only)

- · Cement Backer Board
- Concrete
- Exterior Glue Plywood (Interior Only)
- Oriented Strand Board (OSB) (Interior Only)

Packaging

Size	Item #
38"x38" CENTER DRAIN KIT	9243-3838-CDK
48"x48" CENTER DRAIN KIT	9243-4848-CDK
72"x72" CENTER DRAIN KIT	9243-7272-CDK
48"x72" CENTER DRAIN KIT	9243-4872-CDK
32"x60" CENTER DRAIN KIT	9243-3260-CDK
32"x60" OFF CENTER DRAIN KIT	9243-3260-OCDK

Each package includes the following:

HYDRO BAN Shower Pan

HYDRO BAN Curb(s) to fit longest side of pan

HYDRO BAN Adhesive & Sealant 10.3 FL. OZ. cartridge

HYDRO BAN Sheet Membrane for walls (roll size below)

HYDRO BAN Sheet Membrane for pan

HYDRO BAN Sealing Tape for installation

4 HYDRO BAN Inside Corners

2 HYDRO BAN Outside Corners

1 HYDRO BAN Pipe Seal

1 HYDRO BAN Mixing Valve Seal

Data Sheet

* BONDING FLANGE DRAIN KIT(S) - SOLD SEPARATELY

Each kit contains the following Size roll of Sheet Membrane

Pan Size	Roll
Size	
38"x38" CENTER DRAIN KIT	98 sq ft
48"x48" CENTER DRAIN KIT	115 sq ft
72"x72" CENTER DRAIN KIT	194 sq ft
48"x72" CENTER DRAIN KIT	148 sq ft
32"x60" CENTER DRAIN KIT	102 sq ft
32"x60" OFF CENTER DRAIN KIT	102 sq ft

Approximate Coverage

Pan Kit Item#	Description	Drain Location
9243-3838- CDK	38"x38" (97x97 cm)	Center Drain
9243-3260- CDK	32"x60" (81x152 cm)	Center Drain
9243-3260- OCDK	32"x60" (81x152 cm)	Off Center Drain
9243-4848- CDK	48"x48" (122x122 cm)	Center Drain
9243-4872- CDK	48"x72" (122x183 cm)	Center Drain
9243-7272- CDK	72"x72" (183x183 cm)	Center Drain

Shelf Life

12 months unopened. Store at 40°F to 75°F (4°-24°C) in a covered area (out of the sun). Material should be kept in a cool dry place prior to application.

Limitations

- DO NOT bond to particle board, luan, interior glue plywood, Masonite® or hardwood surfaces.
- Do not use over dynamic expansion joints, structural cracks or cracks with vertical differential movement.
- HYDRO BAN® Sheet Membrane is not recommended for submerged applications. For these applications, use HYDRO BAN waterproofing membrane.
- Do not use over cracks >1/8" (3 mm) in width.
- Do not expose to negative hydrostatic pressure, rubber solvents or ketones.
- Must be covered with ceramic tile or stone. Use protection board for temporary cover.
- Obtain approval by local building code authority before using product in shower pan applications.
- Do not install directly over single layer wood floors, tubs/showers/fountains or similar constructs.
- Not for use beneath cement or other plaster finishes.
 Consult with plaster manufacturer for their recommendations when waterproofing membrane is required under plaster finishes.

- Not for use under self-leveling underlayments or decorative wear surfaces.
- Not for use with the HYDRO BAN Tile-In Bonding Flange Drain, use the brushed, polished or oil rubbed bronze versions only.
- Note: Surfaces must be structurally sound, stable and rigid enough to support ceramic/stone tile, thin brick and similar finishes. Substrate deflection under all live, dead and impact loads, including concentrated loads, must not exceed L/360 for thin bed ceramic tile/brick installations or L/480 for thin bed stone installations where L=span length.

Cautions

- Protect finished work from traffic until fully cured.
- Use care not to damage HYDRO BAN Sheet
 Membrane prior to installation of tile or stone finishes.
 Cover with protection board to protect from foot traffic
 and other trades when installing on horizontal
 surfaces.
- Wait a minimum of 24 hours after the installation before flood testing in order to allow the thin-set to fully cure and insure the integrity of all seams.
- For white and light-colored marbles, use a white LATICRETE® Latex Portland Cement Thin Set Mortar.

4. TECHNICAL DATA

Applicable Standard

- ASTM E96/E96M
- ASTM D4068
- ANSI A118.10
- HYDRO BAN Sheet Membrane Meets or exceeds ANSI A118.10 specifications

Physical Properties

Test	Test Method	Results
Seam Strength	ASTM D 751	32.7 lbs/in. (0.6kg/mm)
Breaking Strength Transverse	ASTM D 751 Procedure B	1298 psi (9.0 MPa)
Breaking Strength Longitudinal	ASTM D 751 Procedure B	1867 psi (12.9 MPa)
Waterproofness	ASTM D 4068	Pass
7-Day Dry Shear Strength	ASTM C482	175 psi (1.2 MPa)
7-Day Water Immersion Shear Strength	ASTM C482	107 psi (0.7 MPa)
4-Week Shear Strength	ASTM C482	103 psi (0.7 MPa)
12-Week Shear Strength	ASTM C482	105 psi (0.7 MPa)
100-Day Water Immersion Shear Strength	ASTM C482	113 psi (0.8 MPa)
Permeance	ASTM E96 Procedure E	0.06 Perm (inch-lb)
Resistance to Temperature: min./max.	NA	-22°F / +194°F (- 30°C / + 90°C)
Total Thickness (approximate)	Physical measurement	20-30 mils (0.5-0.7 mm)

Specifications subject to change without notification. Results shown are typical but reflect test procedures used. Actual field performance will depend on installation methods and site conditions.

5. INSTALLATION

• Surface Preparation

Surface temperature must be 50 – 90°F (10 – 32°C) during application and for 24 hours after installation. All substrates must be structurally sound, clean and free of dirt, oil, grease, paint, laitance, efflorescence, concrete sealers or curing compounds. Make rough or uneven concrete smooth to a wood float or better finish with a suitable LATICRETE underlayment. Do not level with gypsum or asphalt based products. Maximum deviation in plane must not exceed 1/4" in 10 ft (6 mm in 3 m) with no more than 1/16" in 1 ft (1.5 mm in 0.3 m) variation between high spots. Dampen hot, dry surfaces

and sweep off excess water—installation may be made on a damp surface.

- 1. Surfaces must be structurally sound, stable and rigid enough to support ceramic/stone tile, thin brick and similar finishes. Installer must verify that deflection under all live, dead and impact loads of interior plywood floors does not exceed industry standards of L/360 for ceramic tile and brick or L/480 for stone installations and L/600 for all exterior veneer applications where L=span length.
- 2. Minimum construction for interior plywood floors.

SUB-FLOOR: 5/8" (15 mm) thick exterior glue plywood, either plain with all sheet edges blocked or tongue and groove, over bridged joints spaced 16" (400 mm) o.c. maximum; fasten plywood 6" (150 mm) o.c. along sheet ends and 8" (200 mm) o.c. along intermediate supports with 8d ring-shank, coated or hot dip galvanized nails (or screws); allow 1/8" (3 mm) between sheet ends and 1/4" (6 mm) between sheets edges; all sheet ends must be supported by a framing member; glue sheets to with construction adhesive.

UNDERLAYMENT: 5/8" (15 mm) thick exterior glue plywood fastened 6" (150 mm) o.c. along sheet ends and 8" (200 mm) o.c. in the panel field (both directions) with 8d ring-shank, coated or hot dip galvanized nails (or screws); allow 1/8" (3 mm) to 1/4" (6 mm) between sheets and 1/4" (6 mm) between sheet edges and any abutting surfaces; offset underlayment joints from joints in sub-floor and stagger joints between sheet ends; glue underlayment to sub-floor with construction adhesive. Refer to Technical Data Sheet 152 "Bonding Ceramic Tile, Stone or Brick Over Wood Floors" for complete details.

Installation Preparatory Work

- o Dry fit all materials prior to installation.
- Ensure that wall studding and sill plates are square and plumb for proper fit of pan.
- Do not leave any holes in the substrate other than the one for the waste line connection as indicated below.
 Holes left from tub replacements and unused waste lines need to be filled and structurally sound to meet substrate deflection as indicated in Limitations above.
- The substrate will need a hole to accommodate the drain fitting and waste line when the pan is installed.
 The hole will need to be 6" (15 cm) in diameter.
- Sub floor under pan must be clean and level. Cut floor drainpipe 1-3/4" (44 mm) below floor level.

HYDRO BAN Shower Pan Installation

- Test fit the pan and bonding flange drain to make certain they fit over the domestic drainpipe, flush and level with the floor.
- o Remove the pan.
- If the pan needs to be site adjusted to fit the shower, use a circular saw or utility knife to cut the pan to the proper shower dimensions.
- Using a circular saw or utility knife recut the rabbet joints into the edges of the pan where required. The rabbet joint lip should be 3/4" (19 mm) thick and 1/2" (12 mm) wide.
- Again, dry fit the pan and bonding flange drain to make certain they properly fit over the drainpipe, flush and level with the floor.
- Apply a LATICRETE[®] polymer-fortified mortar to the floor area using a 1/4" x 3/8" (6 mm x 9 mm) square or "U" notched trowel.
- Skim coat the underside of the HYDRO BAN® Shower Pan with a LATICRETE polymer-fortified mortar. Set the pan into the wet mortar and apply pressure to achieve complete coverage.
- Check pan for level and apply weight (thin-set bags) equally across pan for 30 minutes.

Wall Board Installation

- O Apply a 1/4 to 1/2" (6 to 12 mm) continuous thick bead of HYDRO BAN® Adhesive & Sealant into the rabbet joint of the HYDRO BAN Shower Pan. Using 1/2" (12 mm) cement backer board, set the board into the sealant until you see sealant oozing out along the joint. Remove excess sealant using a margin trowel ensuring a continuous seal at the joint.
- Fasten backer board per cement backer board manufacturer's installation instructions directly to framing with cement backer board screws starting 1 foot (30 cm) above the shower pan. Follow the instructions from the backer board manufacturer when treating seams. All screw heads should be covered with thin-set. (Alternatively use HYDRO BAN Board following instructions in DS 040.0.)

HYDRO BAN Preformed Curb installation

- Next, determine location of HYDRO BAN Curb. Affix curb to the floor area using a 1/4" x 3/8" (6 mm x 9 mm) square or "U" notched trowel and skim coat the underside of the curb.
- Before setting curb in place, apply a bead of HYDRO BAN Adhesive & Sealant to HYDRO BAN Shower Pan channel, to the adjoining wall panels and between curbs when installing more than one 24" (61 cm) curb.

HYDRO BAN Sheet Membrane installation

- Measure and cut all of the HYDRO BAN® Sheet
 Membrane sections and HYDRO BAN Sheet
 Membrane Sealing Tape strips provided to the proper
 size before mixing the substrate appropriate
 LATICRETE thin-set.
- Mix the LATICRETE thin-set to a fairly wet consistency but still able to hold a notch. Dampen excessively dry porous surfaces in order to prevent premature drying and skinning of the thin-set. If

- skinning does occur remove thin-set and reapply using fresh mortar.
- o To create the watertight system, the installation process will rely on the layering of components; start with the corners: Apply thin-set mortar with a ¼"x 3/16" (6 mm x 5 mm) V-notched trowel. Press the HYDRO BAN Sheet Membrane Corners firmly into the thin-set. Remove any trapped air and guarantee full adhesion to the material by spreading the thin-set from the inside of the corner out using a trowel or straightedge with rounded corners.
- Continue with thin-set along the floor-to-wall transition from the corner outward for the first strip of HYDRO BAN Sheet Membrane Sealing Tape. Overlap the corners by 2" (50 mm).
- Lay the sealing tape in place and remove all air pockets and excess material as with the corner piece.
- For any sections where two strips of HYDRO BAN Sheet Membrane Sealing Tape will be joined, be certain to overlap the material by 2" (50 mm).
- Continue with these steps around the perimeter of the pan and around the curb.
- Treat the vertical corners with the HYDRO BAN Sheet Membrane Sealing Tape next in the same manner as the floor-to-wall transitions were installed. Overlap the corners by 2" (50 mm).
- Treat pipe penetrations and mixing valves by applying thin-set mortar with a ¼"x 3/16" (6 mm x 5 mm) Vnotched trowel. Slide the appropriate HYDRO BAN Sheet Membrane Pipe Collar over the pipe or mixing valve and press firmly into the thin-set. The urethane rubber will seal around the pipe or mixing valve cover. Remove any trapped air and guarantee full adhesion to the material by spreading the thin-set from the inside out using a trowel or straightedge with rounded corners.
- Important, there should not be excessive overlapping. For example, at the corner, the HYDRO BAN Sheet Membrane Sealing Tape should overlap the HYDRO BAN Sheet Membrane Corner but not the adjacent HYDRO BAN Sheet Membrane Sealing Tape.
- o Continue the same method to install the first HYDRO BAN Sheet Membrane section on the wall. Start in the completed corner and work your way out from the corner to the edge of the installation. Apply the thinset to the surface of the wall with the ½"x 3/16" (6 mm x 5 mm) V-notched trowel. If the surface is uneven, use a square-notched trowel with a wider tooth up to 3/8" (9 mm). Be sure to comb all of the thin-set in the same direction.
- o Install the first length of sheet membrane. It may be easiest to unroll it up the wall or in the direction that you combed the thin-set. Remember to overlap the membrane by a minimum of 2" (5 cm). (Alternatively the HYDRO BAN Sheet Membrane can be butt seamed and a sealed by overlaying a length of sealing tape by applying thin-set to the surface of the installed sheet membrane using a ½"x 3/16" (6 mm x 5 mm) V-notched trowel. Press the HYDRO BAN® Sheet Membrane Sealing Tape firmly into the thin-set. Remove any trapped air and guarantee full adhesion

to the material by spreading the thin-set from the inside of the corner out using a trowel or straightedge with rounded corners.) Be certain to leave at least ¼" (6mm) of space from the floor to the leading edge of the HYDRO BAN Sheet Membrane and/or Sealing Tape.

- Smooth the section of HYDRO BAN Sheet Membrane with a flat trowel or roller from the middle towards the outside edges to assure that no air is trapped underneath. Follow the direction that the thin-set was combed onto the substrate.
- Use short, firm strokes to press out all of the excess thin-set and trapped air. Carefully remove or spread the excess thin-set over the seams.
- Apply the thin-set for the next length of HYDRO BAN Sheet Membrane section. Roll the next length upwards; smoothing it as it is pressed into the thin-set.
- If a bulge or crease appears during the unrolling, it is OK. Simply peel the section carefully away from the wall and reapply it so that it is flat. The sections should always be well pressed; the use of a roller is recommended but this can also be accomplished with a flat trowel.
- Squeeze out any extra thin-set at the seams; remove the excess or spread it uniformly down the seam.
- The remaining lengths can now be installed in this same manner. The floor should be the last section installed.
- If the HYDRO BAN Sheet Membrane is damaged after installation apply a patch of HYDRO BAN Sheet Membrane installed with the appropriate LATICRETE thin-set. The patch must overlap the damaged area by a minimum of 2" (5 cm).
- Tiling can begin immediately after installation when a flood test is not required.

NOTE: Sections of HYDRO BAN® Sheet Membrane may also be shingled (overlapped) during installation without the need for HYDRO BAN Sheet Membrane Sealing Tape. The top section must overlap a minimum of 2" (5 cm onto the bottom section of HYDRO BAN Sheet Membrane.

HYDRO BAN® Bonding Flange Drains

- If the waste line is already in place, dry fit the bonding flange drain making sure that it seats properly on the pan and floor and connects to the domestic waste line.
 If the waste line is not in place and the plumber will make the connection proceed with the installation without connecting the bonding flange drain to the waste line.
- Apply thin-set around the opening where the bonding flange will sit. Apply PVC or ABS solvent and adhesive to the waste line and the bonding flange female portion of the connection on the bonding flange.(if using a stainless steel bonding flange the connection will be made using a no hub connector commonly known as a Fernco.)
- Install the bonding flange and smooth out any thin-set that has oozed out during the installation.

Note: When connecting an ABS or PVC bonding flange drain to the domestic waste line the solvent choice is based on drain type. Follow manufacturer's instructions. (If a plumber is making the connection this step can be performed after the pan and drain installation).

HYDRO BAN Sheet Membrane over the pan

- Install the HYDRO BAN Sheet Membrane over the HYDRO BAN Shower Pan and the bonding flange using a LATICRETE polymer fortified.thin-sets. Insure that the HYDRO BAN Sheet Membrane extends to the first 90° radius of the HYDRO BAN Bonding Flange Drain.
- Apply thin-set mortar with a 1/4" x 3/16" (6mm x 5mm)
 V-notched trowel. Press the HYDRO BAN Sheet
 Membrane firmly into the adhesive. Remove any trapped air and guarantee full adhesion to the material by spreading the adhesive from the inside out using a trowel or straightedge with rounded corners.
- o Install sheet membrane up and over the curb being sure to overlap it onto the sealing tape between the pan and the curb or overlap onto the the pan sheet membrane by 2" (5 cm). The adjusting ring is installed with a LATICRETE polymer fortified thin-set when installing the tile in order to line up the grate with the tile.

Flood Testing

- Allow adhesive to cure fully before flood testing, a minimum of 24 hours after final cure at 70°F (21°C) and 50% RH.
- Cold and/or wet conditions will require a longer curing time.

Drain Grate and Tile Installation

- Install tile according to industry guidelines and installation instructions using a LATICRETE polymer fortified thin-set.
- Screw the HYDRO BAN Drain Grate down so it will be 1/16" (2 mm) below the final tile height with thin-set, cover the adjusting ring with thin-set when installing tile.

6. AVAILABILITY AND COST

Availability

LATICRETE materials are available worldwide.

For Distributor Information, Call:

Toll Free: 1.800.243.4788 Telephone: +1.203.393.0010

For on-line distributor information, visit LATICRETE at laticrete.com

Cost

Contact a LATICRETE Distributor in your area.

7. WARRANTY

See 10. FILING SYSTEM:

8. MAINTENANCE

Non-finish LATICRETE and LATAPOXY installation materials require no maintenance but installation performance and durability may depend on properly maintaining products supplied by other manufacturers. Protect from foot traffic with a piece of thin plywood or heavy cardboard until tile is installed and thin-set and grout are cured.

9. TECHNICAL SERVICES

Technical Assistance

Information is available by calling the LATICRETE Technical Service Hotline:

Toll Free: 1.800.243.4788, ext. 1235 Telephone: +1.203.393.0010, ext. 1235

Fax: +1.203.393.1948

Technical and Safety Literature

To acquire technical and safety literature, please visit our website at laticrete.com.

10. FILING SYSTEM

Additional product information is available on our website at <u>laticrete.com</u>. The following is a list of related documents:

- DS 230.13: LATICRETE Product Warranty
- DS 230.10: LATICRETE 10 Year System
- DS 025.0: LATICRETE 25 Year System
- DS 230.99: LATICRETE Lifetime System
- DS 663.0: HYDRO BAN
- DS 035.0: HYDRO BAN Bonding Flange Drain
- DS 041.0 HYDRO BAN Sheet Membrane
- DS 108.0 HYDRO BAN Adhesive & Sealant