

HYDRO BAN® Shower Pan

DS-36588-0524

Globally Proven Construction Solutions



1. PRODUCT NAME

HYDRO BAN® Shower Pan

2. MANUFACTURER

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

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3. PRODUCT DESCRIPTION

The HYDRO BAN Shower Pan comes with a high density EPS pan along with HYDRO BAN Sheet Membrane to cover the pan (the HYDRO BAN Curb and 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). The HYDRO BAN Shower Pan gives installer the option to finish the shower walls using a variety of approved methods; cement backer board with HYDRO BAN Sheet Membrane, cement backer board with liquid applied HYDRO BAN or HYDRO BAN Board. Do it your way.

Uses

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

Pet showers

Advantages

- Pre-sloped 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 and is IAPMO approved
- Membrane tested to ASTM E96/E96M Procedure E-0.06 Perms - approved for steam showers / rooms as single membrane
- Membrane is pliable conforms easily to substrate
- Do it your way allows installer to finish walls using HYDRO BAN Board or liquid or sheet membranes over CBB
- 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 PAN	9243-3838-CDP
48"x48" CENTER DRAIN PAN	9243-4848-CDP
48"x48" CDP BARRIER FREE	9243-4848-CDP-BF
72"x72" CENTER DRAIN PAN	9243-7272-CDP
48"x72" CENTER DRAIN PAN	9243-4872-CDP
32"x60" CENTER DRAIN PAN	9243-3260-CDP
32"x60" OFFCENTER DRAIN PAN	9243-3260-OCDP

The following is also included in each package:

HYDRO BAN Shower Pan

HYDRO BAN Sheet Membrane to cover pan and curb Data Sheet

Approximate Coverage

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

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, stone, brick, screeds, terrazzo, or other traffic-bearing finish. 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, plywood, tubs/showers/fountains or similar constructs.
- Not for use with HYDRO BAN Tile-In Bonding Flange Drain, use only the brushed, polished or oil rubbed bronze versions.
- 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.
- 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
- ANSI A118.10
- HYDRO BAN Sheet Membrane Meets or exceeds ANSI A118.10 specifications
- Physical properties shown below are for HYDRO BAN Sheet Membrane only

Physical Properties

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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

- 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.
- 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 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 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.

HYDRO BAN Barrier Free Shower Pan Installation Over Recessed Concrete or Wood Joist Supported Flooring

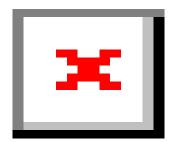
Installation Over Recessed Concrete

- Recess the concrete floor to the thickest dimension required HYDRO BAN Shower Pan, 1" (25 mm) for the pan and 1/8" (3 mm) for the mortar to install the pans, so 1-1/8" (28 mm) total recess.
- Test fit the pan and bonding flange drain to make certain they fit over the domestic drainpipe flush and level with the floor.
- 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 re-cut 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. The rabbet joint can be eliminated at the shower opening to the room.
- 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 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 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.

Installation Over Recessed Wood Joists

- When installing a HYDRO BAN Barrier Free Shower Pan over recessed wood joist flooring the sub floor and underlayment need to be removed to accommodate the shower pan.
- The existing floor joists need to be sistered by adding a 2" x 4" (50 x 100 mm) to either side of the floor joist and two on either side of the waste outlet 8" (203 mm) apart.

 The 2" x 4"s (50 x 100 mm) should be installed 3/4" (19 mm) below the top of the floor joists.



- Cut 3/4" (19 mm) nominal EGP to fit on top of the 2"x4"s (50 x 100 mm) and install the EGP so the top of the EGP is flush with the original floor joists.
- Test fit the pan and bonding flange drain to make certain they fit over the domestic drainpipe flush and level with the floor. (If the shower pan is below the height of the sub-floor and underlayment of the room another layer of EGP can be added on top of the floor joists under the shower pan to raise the height of the pan to meet that of the EGP flooring in the room. Keep in mind that the mortar to install the pan will raise the pan another 1/8" (3 mm).)
- 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 re-cut 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. The rabbet joint can be eliminated at the shower opening to the room.
- 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 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 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

 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) HYDRO BAN Board or 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 board manufacturer's installation instructions (for HYDRO BAN Board follow instructions in DS 040.0.) directly to framing with the appropriate screw starting 1 foot (30 cm) above the shower pan. Follow the instructions from the backer board manufacturer when treating seams and penetrations.

HYDRO BAN Preformed Curb (Sold Separately) installation

- Next, determine location of HYDRO BAN Preformed 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 and to the adjoining wall panels.

HYDRO BAN Membrane installation

- If installing HYDRO BAN Sheet Membrane over cement backer board follow the installation instructions in DS-041.0.
- If installing HYDRO BAN liquid applied waterproofing membrane over cement backer board follow the installation instructions in DS-663.0.

HYDRO BAN® Bonding Flange Drains

- First, 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 a polymer fortified thin-set (253 Gold or better) around the opening where the bonding flange will sit with a 1/4" x 3/16" (6mm x 5mm) V-notched trowel. Apply PVC or ABS solvent and adhesive to the waste line and the bonding flange female portion of the connection on the bonding flange.
- 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).

HYDRO BAN Sheet Membrane over the pan

- Install the HYDRO BAN Sheet Membrane over the HYDRO BAN Shower Pan (and curb for non-barrier free shower pans) and the bonding flange using a LATICRETE polymer fortified thin-set. Insure that the HYDRO BAN Sheet Membrane extends to the first 90° radius of the HYDRO BAN Bonding Flange Drain.
- (For barrier free shower pans without a curb the sheet membrane that covers the pan will need to be trimmed to fit the pan dimensions slightly.)

- Apply polymer fortified thin-set mortar (253 Gold or better) 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.
- 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 (253 Gold or better).
- 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 area over the HYDRO BAN Bonding Flange where the adjusting ring will sit with a polymer fortified thin-set (253 Gold or better) and install the adjusting ring prior to finishing the tile around the drain grate.

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
- DS 663.0 HYDRO BAN
- DS 040.0 HYDRO BAN Board