



Hydro Ban Bonding Flange Drains

DS-035.0-0313

**Globally Proven
Construction Solutions**



1. PRODUCT NAME

LATICRETE® Hydro Ban Bonding Flange Drain
LATICRETE Hydro Ban Bonding Flange Tile Drain

2. MANUFACTURER

LATICRETE International, Inc.
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Bethany, CT 06524-3423 USA

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3. PRODUCT DESCRIPTION

LATICRETE Hydro Ban Bonding Flange Drain and the LATICRETE Hydro Ban Bonding Flange Tile Drain are low profile floor drains specifically designed for bonded waterproofing installations with LATICRETE Hydro Ban® waterproofing membrane. LATICRETE Hydro Ban Bonding Flange Drains allow for the installation in a shower eliminating the pre-slope and primary shower pan liner according to TCNA B422.

Uses

- Interior applications only
- Showers
- Commercial and residential bathrooms and laundries
- Kitchens and food processing areas

Advantages

- Attaches to 2" (50 mm), 3" (76 mm) and 4" (102 mm) waste lines
- Tile-in grate available to match floor tile
- Eliminates pre-slope and primary shower pan for a faster installation
- Made from heavy duty PVC or ABS and 304 stainless steel to provide long lasting performance
- LATICRETE Hydro Ban waterproof membrane bonds directly to PVC or ABS flange

- Integrates seamlessly with portland cement mortar beds waterproofed with LATICRETE Hydro Ban

Suitable Substrates

- Concrete
- Exterior glue plywood (interior only)
- Cement backer board
- Cement mortar beds

Packaging

The LATICRETE Hydro Ban Bonding Flange Drain is a three piece drain flange, adjusting ring and a 5" x 5" (127 x 127 mm) grate assembly in brushed, polished or oil rubbed bronze stainless steel.

The LATICRETE Hydro Ban Bonding Flange Tile Drain is a four piece drain flange, adjusting ring and a 5" x 5" (127 x 127 mm) grate assembly that can be tiled to match the shower floor. All Bonding Flange Drains are available with either PVC or ABS Bonding Flange. When ordering a LATICRETE Hydro Ban Bonding Flange Drain check with local code official to determine whether a PVC or ABS LATICRETE Hydro Ban Bonding Flange Drain is required. Most areas in the United States will require a PVC drain connection except California and some surrounding states.

Limitations

- Adhesives/mastics, mortars and grouts for ceramic tile, pavers, brick and stone are not replacements for waterproofing membranes. When a waterproofing membrane is required, use a LATICRETE waterproofing membrane (see Section 10 FILING SYSTEMS).
- **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

Consult MSDS for more safety information.

- During cold weather, protect finished work from traffic until fully cured.

4. TECHNICAL DATA

Applicable Standard

Code approval per ASME A 112.18-2-2005 / CSA B125.2.05 (US and Canada)

Working Properties

The LATICRETE Hydro Ban Bonding Flange Drain and LATICRETE Hydro Ban Bonding Flange Tile Drain series installs per TCNA B422 using LATICRETE Hydro Ban as the waterproofing membrane.

5. INSTALLATION

Surface Preparation

All surfaces should be between 40°F (4°C) and 90°F (32°C) and structurally sound, clean and free of all dirt, oil, grease, laitance, paint, concrete sealers or curing compounds. Dry dusty concrete slabs or masonry should be dampened and excess water swept off. Installation may be made on a damp surface. Expansion joints shall be provided through the tile work from all construction or expansion joints in the substrate. Follow ANSI specification A108.01-3.7: Requirements for Movement Joints: Preparations by Other Trades” or TCNA detail EJ-171 “Movement Joints – Vertical & Horizontal”. Do not cover expansion joints with mortar.

Bonded Mortar Bed—Installation

Before placing mortar, apply a slurry bond coat made from LATICRETE® 254 Platinum or LATICRETE 4237 Latex Additive mixed with LATICRETE 211 Powder. While the slurry bond coat is wet, spread LATICRETE 3701 Fortified Mortar Bed and compact well. Mortar beds shall be 3/4" minimum to 2" (50 mm) maximum. Mortar beds in excess of 2" (50 mm) thick shall be detailed by the architect per TCNA F112-11. Prior to installing the LATICRETE Hydro Ban Bonding Flange Drain make sure the backer board has been installed on the walls following the manufacturer's recommendations. The LATICRETE Hydro Ban Bonding Flange Drain should be installed per TCNA B422. Before installing the LATICRETE Bonding Flange Drains make sure the opening in the floor where the waste line connection is made is 4-1/4" (108 mm) in diameter. The lip of the LATICRETE Hydro Ban Bonding Flange Drain should sit approximately 1-1/4" (32 mm) above the substrate. Dry fit the LATICRETE Hydro Ban Bonding Flange Drain through the hole and to the waste line below. When connecting to a 2" (50 mm) waste line which is already in place the top of the waste line should be 1-3/4" (44 mm) below the surface of the substrate. Make sure that the LATICRETE Hydro Ban Bonding Flange Drain is PVC when connecting to a PVC waste line or ABS when connecting to an ABS waste line. Cement the LATICRETE Hydro Ban Bonding Flange Drain in place using PVC solvent and cement for PVC and ABS solvent and Cement for ABS LATICRETE Hydro Ban Bonding Flange Drain and waste line connections. Make sure that the LATICRETE Hydro Ban Bonding Flange is level before the PVC or ABS cement has cured. DO NOT MIX materials, this will cause a failure in the pipe weld. When installed over EGP the bonding flange (D) Fig 1 and 2 can be screwed to the substrate using stainless steel or zinc coated 3" (76 mm) drywall screws. There are four countersunk holes around the perimeter of the bonding flange (D) for this purpose. The installation is now ready to accept the mortar bed.

Mortar Bed—Installation Over Concrete (see ES-B422BFD Concrete Bonded and ES-B422BFD Concrete Unbonded)

For a bonded mortar bed over concrete installation, before placing mortar, apply a slurry bond coat made from LATICRETE 254 Platinum or LATICRETE 4237 Latex Additive mixed with LATICRETE 211 Powder. While the slurry bond coat is wet, spread LATICRETE 3701 Fortified Mortar Bed and compact well. Bonded mortar beds over concrete shall be 3/4"(19 mm) minimum to 2"(50 mm) maximum. For an unbonded installation over concrete (see ES-415BFD Concrete Unbonded) a cleavage membrane as specified in ANSI A108.02-3.8 should be used in place of the slurry bond coat.

When using the unbounded method install the cleavage membrane prior to the LATICRETE Hydro Ban Bonding Flange Drain installation. The LATICRETE 3701 Fortified Mortar Bed should be reinforced with 2" x 2" (50 x 50 mm) reinforcing mesh. Unbonded mortar beds over concrete shall be 1-1/4" (32 mm) minimum to 2" (50 mm) maximum. In both bonded and unbonded mortar bed installations place enough LATICRETE 3701 Fortified Mortar Bed under the LATICRETE Hydro Ban Bonding Flange Drain to support the flange of the drain. Minimum height from the flange to the substrate should be 1-1/4" (32 mm). Next place a ribbon of LATICRETE 3701 Fortified Mortar Bed along the opposite walls to create a 1/4" (6 mm) per foot slope to the LATICRETE Bonding Flange Drain. Fill the area between the drain and the walls with LATICRETE 3701 Fortified Mortar Bed; screed and compact well. Mortar beds in excess of 2" (50 mm) thick shall be detailed by the architect per TCNA F112-11.

Mortar Bed – Installation Over EGP (see ES-422BFD EGP Bonded and ES-422BFD EGP Unbonded)

For a bonded mortar bed over EGP installation, before placing mortar, install a cleavage membrane as specified in ANSI A108.02-3.8, expanded metal lath (minimum 2.5 pounds (1.1 kg)/square yard [0.84 square meters]) is then nailed or stapled to the subfloor over the cleavage membrane. The cleavage membrane and lath should be installed prior to the bonding flange (D) installation. Following the lath installation spread LATICRETE 3701 Fortified Mortar Bed and compact well. Bonded mortar beds over EGP shall be 3/4" (19 mm) minimum to 1 1/2" (38 mm) maximum. For an unbonded installation over EGP (see ES-422BFD EGP Unbonded) install a cleavage membrane as specified in ANSI A108.02-3.8 prior to the LATICRETE Hydro Ban Bonding Flange Drain installation. For an unbonded mortar bed the LATICRETE 3701 Fortified Mortar Bed should be reinforced with 2" x 2" (50 x 50 mm) reinforcing mesh. In both bonded and unbounded mortar bed installations place enough LATICRETE 3701 Fortified Mortar Bed where the LATICRETE Hydro Ban Bonding Flange Drain will be set to support under the flange of the drain. Minimum height from the flange to the substrate should be 1-1/4" (32 mm). Next place a ribbon of LATICRETE 3701 Fortified Mortar Bed along the opposite wall to create a 1/4" (6 mm) per foot slope to the LATICRETE Hydro Ban Bonding Flange Drain. Fill the area between the drain and the walls with LATICRETE 3701 Fortified Mortar Bed; screed and compact well. Mortar beds in excess of 2" (50 mm) thick shall be detailed by the architect per TCNA F112-11.

Installing LATICRETE Hydro Ban® and Tile (Fig. 1 and Fig. 2)

1. Before applying LATICRETE Hydro Ban make sure the bonding flange is clean and free of any mortar, thin-set, grease, dirt or finger prints that could cause debonding of the Hydro Ban. Apply LATICRETE Hydro Ban waterproofing membrane according to LATICRETE DS 663.0 and 663.5. Cover wall and mortar with two coats of LATICRETE Hydro Ban. Apply two coats of waterproofing on top of the flange from the first vertical radius and onto the LATICRETE 3701 Fortified Mortar Bed. Alternatively LATICRETE Waterproofing Anti-Fracture Fabric can be imbedded into the LATICRETE Hydro Ban around the bonding flange overlapping the flange and the LATICRETE 3701 Fortified Mortar Bed. DO NOT waterproof the inside flange walls and bottom after the first vertical radius.
2. When the second coat of LATICRETE Hydro Ban is dry tile can be installed using a LATICRETE polymer fortified thinset and grouted with LATICRETE PermaColor™^A or LATICRETE SpectraLOCK® PRO Premium Grout†.

- Tile walls and floors; when thin-set and tile are ready to be installed around the LATICRETE Hydro Ban Bonding Flange Drain comb thin-set onto bonding flange (D) and set top plate (C) onto the bonding flange. Thin-set should ooze through the triangle voids in the top plate (C). Scrape any excess thin-set from the top plate (C) using a trowel. As you tile closer to the top plate insert the threaded outlet of the top and bottom frame (A and B) into the top plate (C). Adjust the top and bottom frame by screwing in the threaded outlet to the top plate (C) to allow for height adjustment (fig. 2). Thin-set over the top plate (C) and install tile.
- If using the tile-in grate with the LATICRETE® Hydro Ban Bonding Flange Drain, remove top frame (A) and prime surface with two coats of LATICRETE Hydro Ban® prior to installing tile within the frame using a LATICRETE polymer fortified thin-set. Make sure that the stainless steel top frame (A) is free of grease, dirt or finger prints prior to applying the LATICRETE Hydro Ban.
- The finished floor must be 1/16" (1.5 mm) higher than the top and bottom frame (A and B with tile).

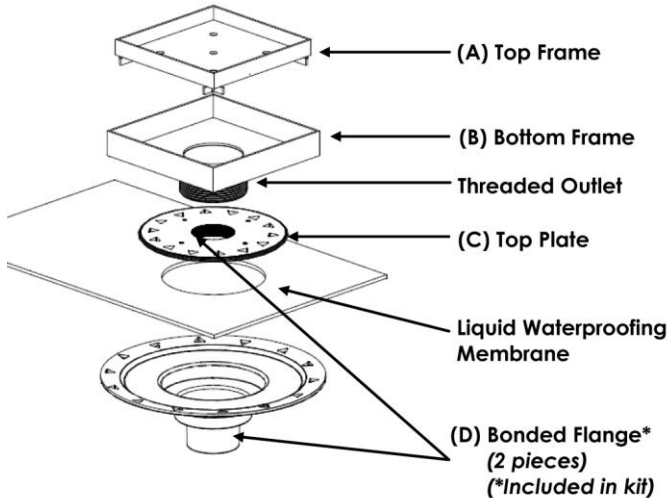


Fig. 1

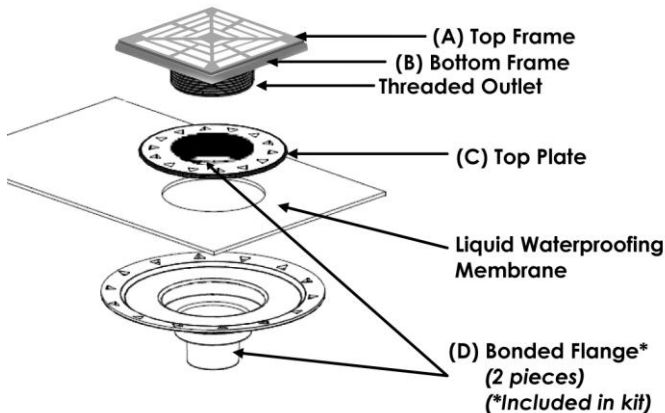


Fig. 2

Cleaning

Clean tools and tile work with water while the LATICRETE 3701 Fortified Mortar Bed and LATICRETE Hydro Ban are fresh.

6. AVAILABILITY AND COST

Availability

LATICRETE and LATAPOXY® materials are available worldwide.

For Distributor information:

Toll Free: 1.800.243.4788

Telephone: +1.203.393.0010

For online distributor information, visit LATICRETE at www.laticrete.com.

Cost

Contact a LATICRETE Distributor in your area.

7. WARRANTY

See 10. FILING SYSTEM:

DS 230.13: LATICRETE Product Warranty

8. MAINTENANCE

The non-finish or non-exposed portion of the LATICRETE Hydro Ban Shower System products require no maintenance. However, installation performance and durability may depend on properly maintaining products and finishes that cover the LATICRETE Hydro Ban Shower System products and those supplied by other manufacturers. The exposed portion of the stainless steel LATICRETE Hydro Ban Drains can be cleaned and maintained using a non-abrasive stainless steel cleaner or polish with a clean soft white cotton cloth. When cleaning the oil rubbed bronze drains use a non-abrasive cleaner and clean soft cloth. When cleaning the stainless steel or oil rubbed bronze drains contact the cleaner manufacturer if another cleaner type will be used to ensure compatibility with the drain material.

9. TECHNICAL SERVICES

Technical Assistance

Information is available by calling:

Toll Free: 1.800.243.4788, ext. 235

Telephone: +1.203.393.0010, ext. 235

Fax: +1.203.393.1948

Technical and Safety Literature

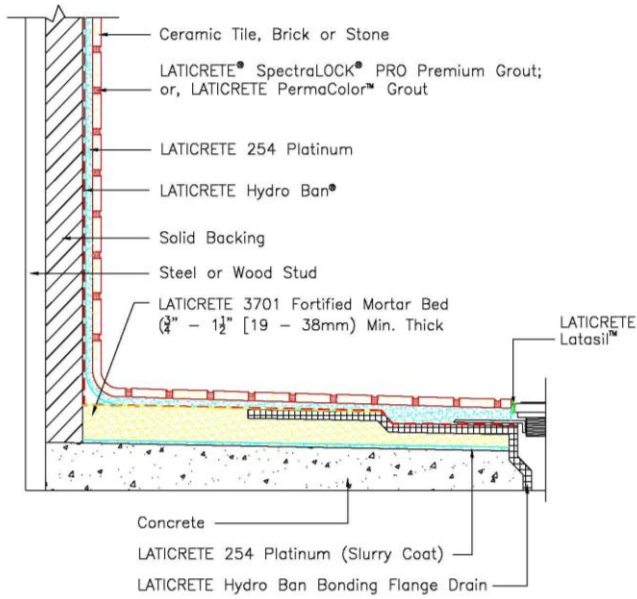
To acquire technical and safety literature, please visit our website at www.laticrete.com.

10. FILING SYSTEM

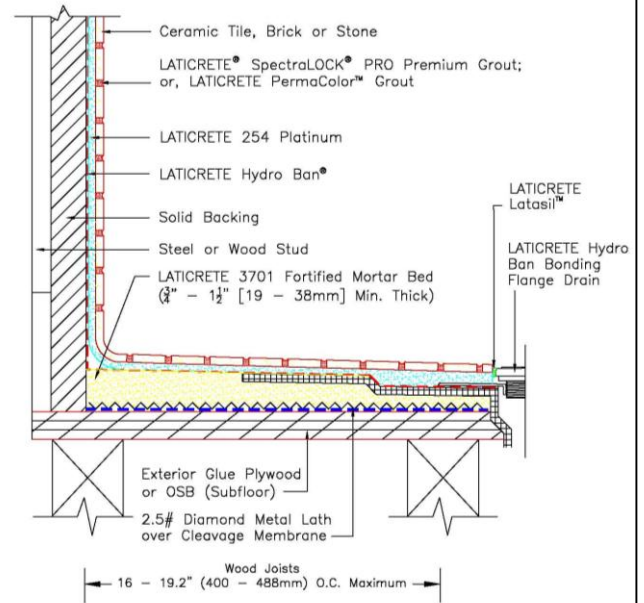
Additional product information is available on our website at www.laticrete.com. The following is a list of related documents:

DS 230.13:	LATICRETE Product Warranty
DS 100.0:	LATICRETE 3701 Fortified Mortar Bed
DS 230.1:	LATICRETE 4237 Latex Additive
DS 239.0:	LATICRETE 211 Powder
DS 663.0:	LATICRETE Hydro Ban
DS 677.0:	LATICRETE 254 Platinum
DS 663.5:	LATICRETE Hydro Ban how to instructions

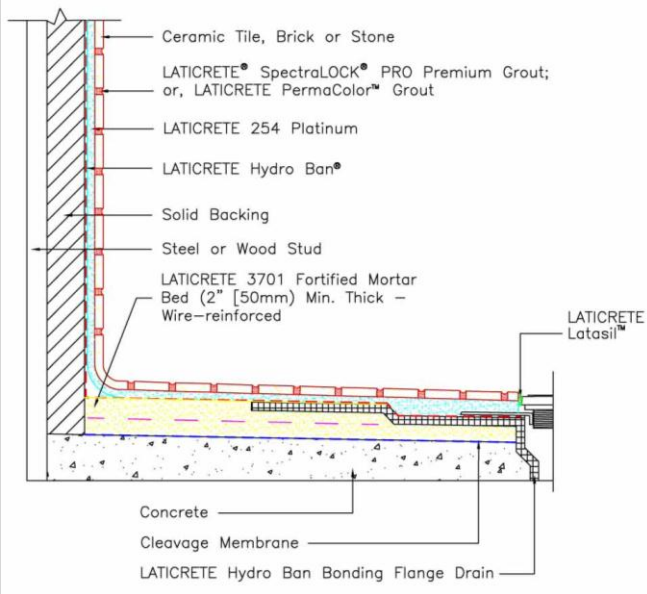
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Concrete – Bonded



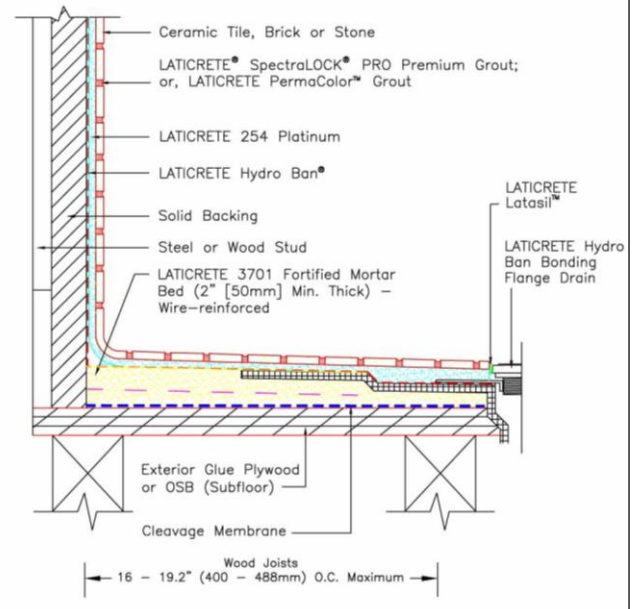
Drawing No. ES-B422BFD
EGP – Bonded



Drawing No. ES-B422BFD
Concrete – Unbonded



Drawing No. ES-B422BFD
EGP Subfloor – Unbonded



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