



Hydro Ban Linear Drain

DS-034.0-0213

**Globally Proven
Construction Solutions**



1. PRODUCT NAME

LATICRETE® Hydro Ban Linear 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 Linear Drain is a low profile linear floor drain specifically designed for bonded waterproofing installations with LATICRETE Hydro Ban® waterproofing membrane. LATICRETE Hydro Ban Linear Drain allows for the use of large format tile or stone installations in a shower with a single plane slope to the drain. The LATICRETE Hydro Ban Linear Drain can be installed near the wall or at medial locations in a variety of areas requiring waterproof applications. The LATICRETE Hydro Ban Linear Drain is available with a standard vertical waste line or a horizontal side outlet.

Uses

- Interior or exterior
- Showers
- Industrial, commercial and residential bathrooms and laundries
- Kitchens and food processing areas
- Terraces, decks and balconies

Advantages

- Single slope to drain
- Allows for use of large format tile
- Tile in grate available to match floor tile
- Eliminates pre-slope and primary shower pan for a faster installation
- Made from heavy duty 304 stainless steel provides for long lasting performance

- LATICRETE Hydro Ban waterproofing membrane bonds directly to stainless steel flange edge allowing for faster, easier installation

Suitable Substrates

- Concrete
- Exterior Glue Plywood (Interior Only)
- Cement backer board
- Cement mortar beds

Packaging

The LATICRETE Hydro Ban Linear Drain is a two piece drain with a trough and removable grate. Available in six lengths and two grate configurations: offset oval in brushed, polished or oil rubbed bronze stainless steel and a tile in tray.

The LATICRETE Hydro Ban Linear Drains are available in 24"(61 cm), 32"(81 cm), 36"(91 cm), 42"(107 cm) and 60"(152 cm) lengths.

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 Hydro Ban (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.
- All stainless steel surfaces must be clean and free of any dirt, oil, grease and fingerprints prior to coating with LATICRETE Hydro Ban.

4. TECHNICAL DATA

Applicable Standard

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

Working Properties

The LATICRETE Hydro Ban Linear Drain series installs per IAPMO IGC 195-2010. Waterproof using LATICRETE Hydro Ban per TCNA B422.

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.

Typically Linear Drains should run from sill plate to sill plate (the width of the shower) against a wall (see ES-B415LD Bonded Corner Placement). Alternatively they can also be placed in medial locations (see ES-B415LD Unbonded Medial Placement) or at the shower entrance. In all locations the waste line for standard size LATICRETE® Hydro Ban Linear Drains are in the center of the linear drain. When installed against a wall the center of the waste line should be located far enough away from the sill plate to accommodate wall sheathing and finished tile surface. For 1/2" (12 mm) wall board and 3/8" (9 mm) tile the center of the waste line should be located far enough away from the sill plate to accommodate wall sheathing and finished tile surface. For 1/2" (12mm) wall board and 3/8" (9 mm) tile the center of the waste line should be located 2 1/4" (57mm) out from the sill plate.

Mortar Bed—Installation Over Concrete (see ES-B415LD Bonded Corner Placement and ES-B415LD Unbonded Medial) 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-415LD Unbonded Medial) a cleavage membrane as specified in ANSI A108.02-3.8 should be used in place of the slurry bond coat. 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 where the linear drain will be set to support the bottom and under the flanges of the drain trough. Minimum height from the flange to the substrate should be 1-1/2" (38 mm). Make the connection to the waste line when the drain is set into place using a no hub connection (not supplied), see installation instructions below. 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 Linear 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.

Mortar Bed – Installation Over Exterior Glue Plywood (EGP) (see ES-415LD EGP Bonded Corner Placement and ES-415LD EGP Unbonded Medial Placement)

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 (0.8 square meters) and complying with ANSI A108.02 3.6) is then nailed or stapled to the subfloor over the cleavage membrane. Following the lath 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-415LD EGP Unbonded Medial Placement) install a cleavage membrane as specified in ANSI A108.02-3.8 and then spread the LATICRETE 3701 Fortified Mortar Bed. In both bonded and unbonded mortar bed installations place enough LATICRETE 3701 Fortified Mortar Bed where the linear drain will be set to support the bottom and under the flanges of the drain trough. Minimum height from the flange to the substrate should be 1-1/2" (38 mm). Make the connection to the waste line when the drain is set into place using a no hub connection (not supplied). 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 Linear 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.

Installation Instructions (Fig. 1)

1. Connect outlet (D) to waste pipe (F) via 2"(50 mm) no hub connection using a rubber coupling (E) (not provided). Note: outlet section (D) is 3"(76 mm) long and can be modified for height adjustment. Grate A has adjustable feet for finer adjustment (Minimum tile height with thin-set is 3/8"(10 mm), maximum tile height is 3/4"(19 mm).
2. Using LATICRETE 3701 Fortified Mortar Bed, set and level channel (C).
3. Spread LATICRETE 3701 Fortified Mortar Bed, slope 1/4" per foot (19mm per m) to the drain in a single plane. Note: tile height should finish 1/16"(1.5 mm) higher than the grate height or the tile in the Tile in Drain Grate.
4. When the mortar is dry install backer board per manufacturer's instructions. The backer board will sit on the drain flange and mortar (see ES-B415LD Bonded Corner Placement or ES-B415LD EGP Bonded Corner Placement).
5. After the backer board has been installed waterproof the installation using LATICRETE Hydro Ban per instructions in DS663.0 and DS663.5. The stainless steel needs to be clean and free of any grease, dirt or fingerprints prior to coating with Hydro Ban. The LATICRETE Hydro Ban should cover the metal flange on the linear drain trough to the top of the first radius and extend up the walls and over the entire mortar bed. If the gap between the linear drain flange and the wall board is larger than 1/8" (3 mm) it should be filled with a LATICRETE Polymer Modified Thin-Set (e.g. LATICRETE 254 Platinum). An alternative would be to use 6" (150 mm) wide LATICRETE Waterproofing/Anti-Fracture Fabric imbedded into the LATICRETE Hydro Ban around four sides of the linear drain overlapping the flange and the LATICRETE 3701 Fortified Mortar Bed. Lap LATICRETE Waterproofing/Anti-Fracture Fabric and LATICRETE Hydro Ban liquid up the wall when adjacent to shower wall and over wall board. When using LATICRETE Waterproofing/Anti-Fracture Fabric with LATICRETE Hydro Ban to bridge a gap larger than 1/8" (3 mm) the gap should be filled with a LATICRETE Polymer Modified Thin-Set (e.g. LATICRETE 254 Platinum) prior to waterproofing. DO NOT waterproof the inside walls and bottom of the linear drain channels.
6. Take measures to protect grate (A) prior to tiling. Keeping the grate (A) in the channel (C), thin-set and tile on the waterproof membrane. Ensure tile allows for easy removal of the grate (A). The height should finish 1/16" (1.5 mm) higher than the grate height or tile in the tile-in drain grate.
7. If the grate has adjustable feet then adjust grate (A) height with adjustable feet (B) as needed.

8. When installing the LATICRETE® Hydro Ban Linear Tile-In Drain Grate (A) will need to be primed with two coats of LATICRETE Hydro Ban® prior to thin-setting the tile into the top grate. The stainless steel from the linear drains needs to be clean and free of any grease, dirt or fingerprints prior to coating with Hydro Ban.
9. When the second coat of LATICRETE Hydro Ban is dry the installation can be tiled using a LATICRETE polymer fortified thin-set and grouted with LATICRETE PermaColor™ Grout or LATICRETE SpectraLOCK® PRO Premium Grout.

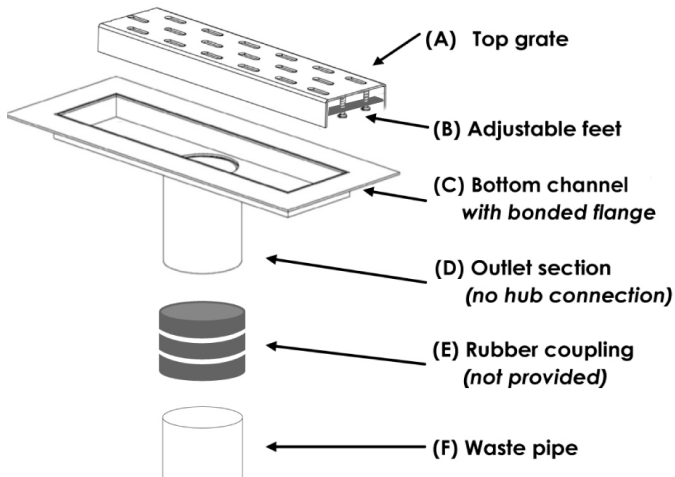


Fig. 1

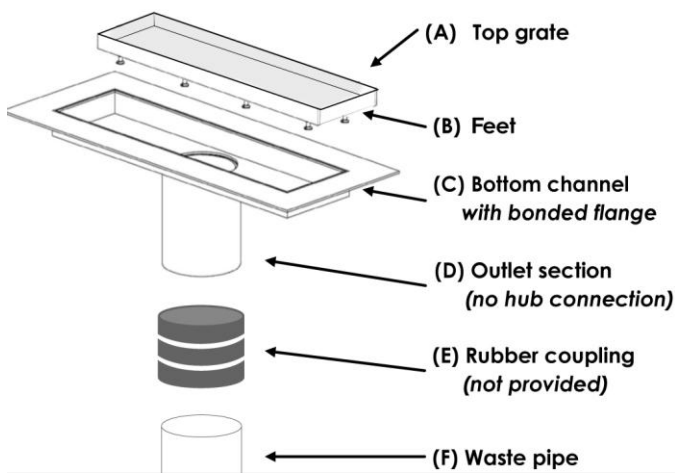


Fig. 2

Instructions to make a drain waste line connection with no access to tighten rubber coupling. Fig. 3 cut the 2" (50 mm) waste line (H) so the drain, a 2" (50 mm) rubber coupling (E), a length of 2" (50 mm) plastic pipe (F) (plastic pipe material should match waste line and plastic coupling material) and 2" (50 mm) plastic coupling (G) can be added to the drain outlet. Cement a 2" (50 mm) plastic coupling (G) to the length of the 2" (50 mm) diameter plastic pipe (F) using the appropriate cement for either PVC or ABS. Attach the rubber coupling (E) to the linear drain outlet and the length of 2" (50 mm) diameter plastic pipe (F). Tighten hose clamps on 2" (50 mm) rubber coupling (E). The final connection is made when the linear drain is installed by cementing the free end of the 2" (50 mm) diameter coupling (G) to the waste line (H).

Side outlet drains will be installed the same as the vertical waste line connections except the plumbing connections will be made through the wall.

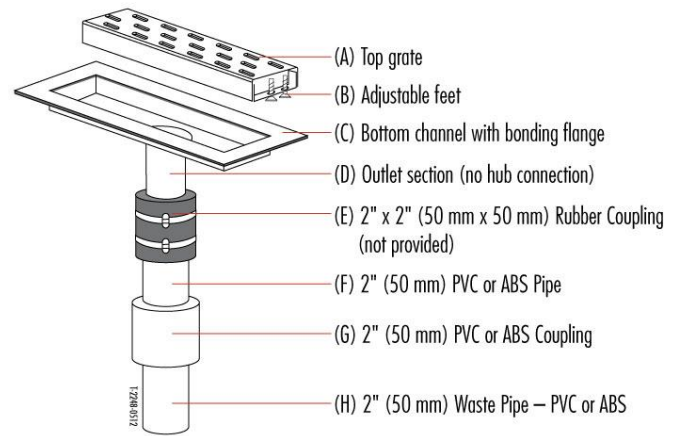


Fig. 3

Cleaning

Clean tools and tile work with water while the LATICRETE products 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 on-line 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

DS 025.0-APD: LATICRETE 25 Year System Warranty - APD

DS 230.99: LATICRETE Lifetime 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

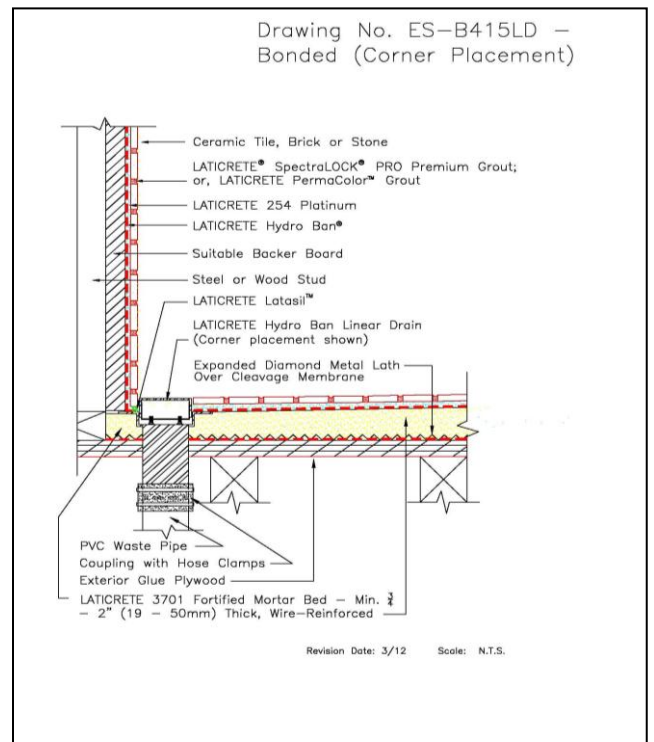
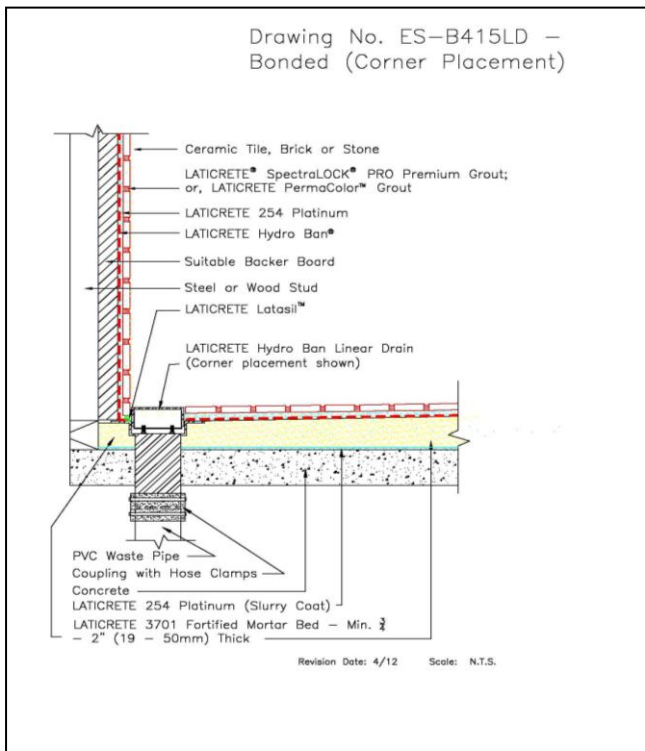
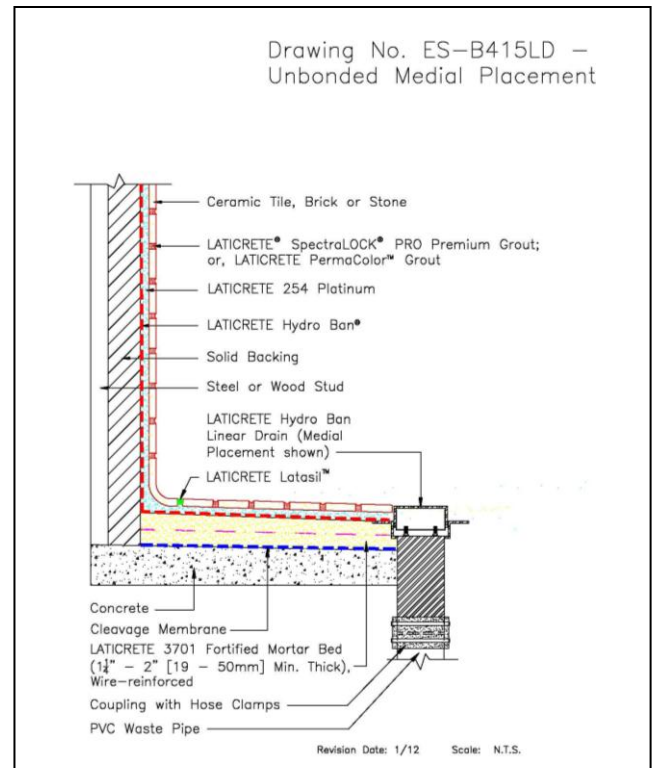
Technical and Safety Literature

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

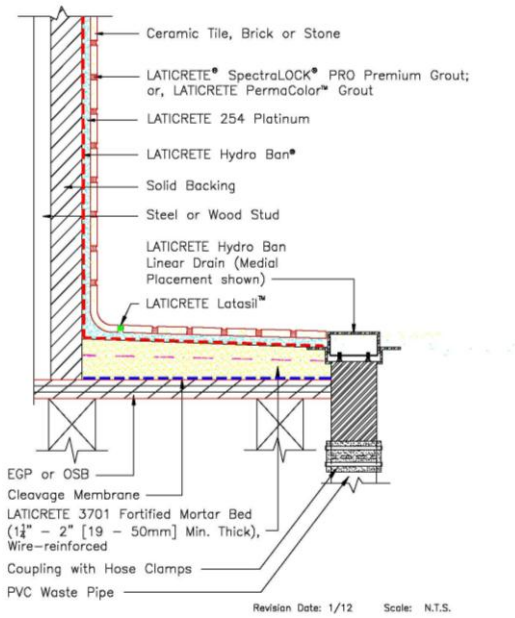
10. FILING SYSTEM

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 025.0-APD: LATICRETE 25 Year System Warranty - APD
- DS 230.99: LATICRETE Lifetime 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



Drawing No. ES-B415LD –
EGP Unbonded Medial Placement



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