

# HYDRO BAN Stainless Steel Bonding Flange

DS-36601-0324

# Globally Proven Construction Solutions



#### 1. PRODUCT NAME

HYDRO BAN Stainless Steel Bonding Flange

#### 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

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# 3. PRODUCT DESCRIPTION

HYDRO BAN Stainless Steel Bonding Flange is a low profile floor drain flange specifically designed for bonded waterproofing installations with HYDRO BAN waterproofing membranes to be used where a metal drain flange is required by code. The HYDRO BAN Stainless Steel Bonding Flange allows for the installation in a shower eliminating the pre-slope and primary shower pan liner according to TCNA Method B422. The HYDRO BAN Stainless Steel Bonding Flanges connects to the domestic waste line with a no hub connector. The no hub connector (not provided). (The HYDRO BAN Drain Grates are purchased separately.)

# Uses

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

### **Advantages**

- Attaches to a 2" (50 mm) waste line using a no hub connector
- Eliminates pre-slope and primary shower pan for a faster installation
- Made from heavy duty 304L stainless steel to provide long lasting performance
- HYDRO BAN waterproof membrane bonds directly to stainless steel flange
- Integrates seamlessly with portland cement mortar beds waterproofed with HYDRO BAN

# Suitable Substrates (Interior Use Only)

- Cement Backer Board (Consult cement backer board manufacturer for specific installation recommendations and to verify acceptability for exterior use)
- Cement Mortar Bed
- Concrete
- Exterior Glue Plywood (Interior Only)

# **Packaging**

The HYDRO BAN Stainless Steel Bonding Flange is a two-piece drain flange and adjusting ring. The 4" x 4" (102 x 102 mm) grate assembly in brushed, polished or oil rubbed bronze stainless steel are purchased separately from LATICRETE.

When ordering a HYDRO BAN Bonding Flange check with your local code official to determine whether a PVC, ABS or a HYDRO BAN Stainless Steel Bonding Flange is required. The stainless steel bonding flange is sold without a grate.

#### **Shelf Life**

Product should be stored in dry conditions and in the original packaging

#### 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 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**

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

# 4. TECHNICAL DATA

#### **Applicable Standard**

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

# **Physical Properties**

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

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

The HYDRO BAN Stainless Steel Bonding Flange installs per TCNA B422 using HYDRO BAN as the waterproofing membrane.

# **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 254 Platinum. While the slurry bond coat is wet, spread 3701 Fortified Mortar 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. Prior to installing the HYDRO BAN® Stainless Steel Bonding Flange make sure the backer board has been installed on the walls following the manufacturer's recommendations. The HYDRO BAN Stainless Steel Bonding Flange should be installed per TCNA Method B422. Before installing the HYDRO BAN Stainless Steel Bonding Flange make sure the opening in the floor where the waste line connection is made is 4-1/2" (114 mm) in diameter. The lip of the HYDRO BAN Stainless Steel Bonding Flange should sit approximately 1-1/4" (32 mm) above the substrate. Dry fit the HYDRO BAN Stainless Steel Bonding Flange 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 2" (50 mm) below the surface of the substrate. The HYDRO BAN Stainless Steel Bonding Flange should be connected to the domestic waste line using a no hub connector (commonly referred to as a "FernCo", not provided). Make sure that the HYDRO BAN Bonding Flange is level. 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 254 Platinum. While the slurry bond coat is wet, spread 3701 Fortified Mortar 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 HYDRO BAN Stainless Steel Bonding Flange installation. The 3701 Fortified Mortar 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 3701 Fortified Mortar under the HYDRO BAN Stainless Steel Bonding Flange to support the flange of the drain. Minimum height from the flange to the substrate should be 1-1/4" (32 mm). Mortar may be required under the flange to support and level the bonding flange. Next place a ribbon of 3701 Fortified Mortar along the opposite walls to create a 1/4" (6 mm) per foot slope to the HYDRO BAN Stainless Steel Bonding Flange. Fill the area between the drain and the walls with 3701 Fortified Mortar; 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 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 3701 Fortified Mortar 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 HYDRO BAN Stainless Steel Bonding Flange installation. For an unbonded mortar bed the 3701 Fortified Mortar should be reinforced with 2" x 2" (50 x 50 mm) reinforcing mesh. In both bonded and unbounded mortar bed installations place enough 3701 Fortified Mortar where the HYDRO BAN Stainless Steel Bonding Flange 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). Mortar may be required under the flange to support and level the bonding flange. Next place a ribbon of 3701 Fortified Mortar along the opposite wall to create a 1/4" (6 mm) per foot slope to the HYDRO BAN Stainless Steel Bonding Flange. Fill the area between the drain and the walls with 3701 Fortified Mortar; screed and compact well. Mortar beds in excess of 2" (50 mm) thick shall be detailed by the architect per TCNA F112-11.

# **Installing HYDRO BAN and Tile** (Fig. 1)

- 1. Before applying 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 HYDRO BAN waterproofing membrane according to DS 663.0 and 663.5. Cover wall and mortar with two coats of HYDRO BAN. Apply two coats of waterproofing on top of the flange from the first vertical radius and onto the 3701 Fortified Mortar. Alternatively Waterproofing/Anti-Fracture Fabric can be imbedded into the HYDRO BAN around the bonding flange overlapping the flange and the 3701 Fortified Mortar. DO NOT waterproof the inside flange walls and bottom after the first vertical radius.
- When the second coat of HYDRO BAN is dry tile can be installed using a polymer fortified thin-set and grouted with PERMACOLOR®A Select, PERMACOLOR Grout or SPECTRALOCK® PRO Premium Grout<sup>†</sup>.
- 3. Tile walls and floors; when thin-set and tile are ready to be installed around the HYDRO BAN Stainless Steel Bonding Flange 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.
- 4. The finished floor must be 1/16" (1.5 mm) higher than the top and bottom frame (A and B with tile).

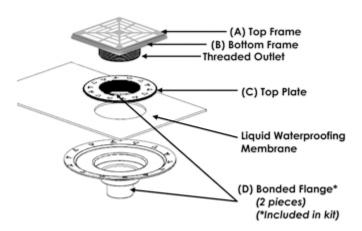


Fig. 1

# 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:

- 25 Year System Warranty (US English)
- LATICRETE Lifetime System Warranty (US English)

# 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 nonabrasive 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 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:

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 WarrantyDS 230.10: LATICRETE 10 Year System Warranty (United States & Canada)DS 025.0: LATICRETE 25 Year System Warranty (United States and Canada)DS 230.99: LATICRETE Lifetime System Warranty

230.99: LATICRETE Lifetime System Warranty (United States and Canada)DS 100.0: 3701 Fortified MortarDS

250.0: PERMACOLOR®ΛDS
281.0: PERMACOLOR SelectDS

663.0: HYDRO BAN®DS 677.0: 254
PlatinumDS 681.0: SPECTRALOCK® PRO
Premium Grout†DS 663.5: HYDRO BAN how

to instructions