



The installation instructions below represent the use of Schluter(r)-KERDI-DRAIN in floor applications.

Installation instructions for the use of KERDI-DRAIN in shower applications can be found in the Schluter®-Shower System Installation Handbook.

#### Preparation

1. After locating the correct position, cut a hole in the substrate for the drain outlet and coupling to the waste line using the template provided.

Note: Fill in box-outs in concrete floors with dry-pack mortar. A pipe coupling or similar can be used as a form around the waste line. Select form to accommodate the drain outlet and mechanical no-hub coupling (when applicable). Limit the diameter of the hole to 5" (125 mm) maximum to ensure proper support of the tile assembly. A larger hole can lead to lack of support and damage the tile assembly (e.g., cracked grout around drain).

#### Drain installation

Access to plumbing from below If there is access to the plumbing from below and the waste line can be connected after installing KERDI-DRAIN, the drain can be installed in conjunction with the mortar bed.

1. Place a ring of loose mortar up to the inlet hole in the floor and firmly press the drain into the mortar. The bonding flange must be fully supported to prevent damage to the tile assembly (e.g., cracked grout around drain). When installing KERDI-DRAIN over wood substrates, the minimum thickness of mortar required at the perimeter of the bonding flange is 1" (25 mm).

2. The screed is then placed flush with the top of the bonding flange of the KERDI-DRAIN. Slope the mortar bed using the bonding flange and mortar screeds as guides.

No access to plumbing from below

When there is no access to the plumbing from below, install the KERDI-DRAIN to the appropriate height prior to the installation of the shower base.

1. Begin the drain installation by dry fitting the components. Measure and cut a section of pipe to connect the KERDI-DRAIN to the odor trap below the floor, using the foam spacers included with the drain as a spacer. When installing KERDI-DRAIN over wood substrates, the minimum thickness of mortar required at the perimeter of the bonding flange is 1" (25 mm).

2. Prepare the odor trap, cut section of pipe, and KERDI-DRAIN with cleaner, primer and ABS or PVC cement per the solvent cement manufacturer's instructions and connect.

3. Pack loose mortar under the drain up to the inlet hole to ensure solid and uniform support of the bonding flange. The screed is then placed flush with the top of the bonding flange of the KERDI-DRAIN. Slope the mortar bed using the bonding flange and mortar screeds as guides.

Clamping ring drain already installed

If a clamping ring drain is already installed, the drain must be replaced with KERDI-DRAIN or converted using the KERDI-DRAIN adaptor kit.

1. If using the KERDI-DRAIN adaptor kit, remove the clamping ring from the installed drain and save the bolts for installation of the adaptor ring. Align the bolt pattern of the clamping ring with the matching punch-outs in the adaptor ring. Punch the matching inserts out through the stainless steel adaptor ring.

2. Apply a continuous 1/4" - 3/8" (6 - 10 mm) bead of KERDI-FIX to the underside of the adaptor ring. Align the holes in the adaptor ring with the bolt holes in the installed drain and place the adaptor ring on the installed drain flange. Re-insert and tighten the bolts using a star pattern. Bolts are to be finger-tight plus 1/4 turn; do not overtighten, as this may warp the adaptor ring and result in leaks.

3. Slide the adaptor flange into the adaptor ring and ensure full support under the adaptor flange with mortar. The screed is then placed flush with the top of the bonding flange of the KERDI-DRAIN. Slope the mortar bed using the bonding flange and mortar screeds as guides.

Note: Schluter®-Systems recommends a leak test be performed on the connection between the drain and the waste line prior to continuing with the remainder of the installation whenever possible.

#### Connection to waterproofing membranes

The KERDI or DITRA waterproofing membranes can be installed over the mortar bed as soon as it can be walked upon. KERDI

1. Apply Schluter-SET, Schluter-ALL-SET, Schluter-FAST-SET, or unmodified thin-set mortar to the bonding flange and surrounding mortar bed with a 1/4" x 3/16" (6 x 5 mm) V-notched trowel or the KERDI-TROWEL, which features a 1/8" x 1/8" (3 x 3 mm)

square-notched design. The thin-set mortar must be mixed to a fairly fluid consistency, but still able to hold a notch.

Note: When using the stainless steel bonding flange, the membrane is bonded to the integrated bonding flange with KERDI-FIX adhesive/ sealant. The stainless steel bonding flange must be clean and free of grease or other contaminants prior to KERDI-FIX application.

2. Embed KERDI in the bond coat and work the membrane onto the KERDI-DRAIN bonding flange and mortar bed with the flat side of the trowel to ensure full coverage and remove air pockets. The membrane is carried to the step in the bonding flange (template provided).

#### DITRA or DITRA-XL

1. DITRA or DITRA-XL is installed up to the outer edge of the KERDI-DRAIN bonding flange. Apply Schluter-SET, Schluter-ALL-SET, Schluter-FAST-SET, or unmodified thin-set mortar to the mortar bed surrounding KERDI-DRAIN with a 1/4" x 3/16" (6 x 5 mm) V-notched trowel or the DITRA-TROWEL, which features an 11/64" x 11/64" (4.5 x 4.5 mm) square-notched design. The thin-set mortar must be mixed to a fairly fluid consistency, but still able to hold a notch. Solidly embed the matting into the bond coat using a float, screed trowel, or DITRA-ROLLER.

2. DITRA or DITRA-XL is sealed to the KERDI-DRAIN bonding flange using a cut section of the KERDI membrane. Apply Schluter-SET, Schluter-ALL-SET, Schluter-FAST-SET, or unmodified thin-set mortar to the bonding flange and surrounding membrane with a 1/4" x 3/16" (6 x 5 mm) V-notched trowel or the KERDI-TROWEL, which features a 1/8" x 1/8" (3 x 3 mm) square-notched design. Note: When using the stainless steel bonding flange, the KERDI is bonded to the integrated bonding flange with KERDI-FIX adhesive/sealant. The stainless steel bonding flange must be clean and free of grease or other contaminants prior to KERDI-FIX application.

3. Embed a 20" x 20" (50 x 50 cm) cut section of KERDI in the bond coat and work the membrane onto the KERDI-DRAIN bonding flange and surrounding membrane to ensure full coverage and remove air pockets. The KERDI is carried to the step in the bonding flange (template provided) and must overlap the DITRA or DITRA-XL membrane by a minimum of 2" (50 mm).

## Grate assembly

### Grate

1. The grate assembly is installed in conjunction with the tile. Place the height adjustment collar inside the lateral adjustment ring and snap the grate into place. Note: For drains with 6" (150 mm) grates, the height adjustment collar is integrated with the grate. For the residential adaptor kit, there is no lateral adjustment ring.

2. Fill the step in the bonding flange with Schluter-SET, Schluter-ALL-SET, Schluter-FAST-SET, or unmodified thin-set mortar and back-butter the underside of the grate to ensure full support. Press the assembly into the mortar and install the surrounding tiles, ensuring full coverage.

3. Position the grate to match the joint pattern of the tile covering and press flush with the tile surface. Remove all excess setting material.

Note: Protect the visible surface of the grate from contact with setting and grouting materials. In particular, anodized aluminum is sensitive to alkaline materials.

## Tileable Covering Support

1. The covering support is installed in conjunction with the tile. Place the tile spacer inside the lateral adjustment ring.

2. Fill the step in the bonding flange with thin-set mortar and press the assembly into the mortar. Install the surrounding tiles up to the tile spacer using Schluter-SET,

Schluter-ALL-SET, Schluter-FAST-SET, or unmodified thin-set mortar, ensuring full coverage. Set the tile to the integrated tabs on the lateral adjustment ring, which provide for a flush transition to the covering support. Remove all excess setting material. Position the tile spacer to match the joint pattern of the tile covering.

3. Apply tile to the top of the covering support using Schluter-SET, Schluter-ALL-SET, Schluter-FAST-SET, or unmodified thin-set mortar. The tile is installed flush with all sides of the covering support to provide the drainage openings.

4. Once the assembly has been set and grouted, remove the tile spacer and insert the tiled covering support in the lateral adjustment ring. Note: For acid-resistant coverings, use an epoxy adhesive to set and grout the tile.