

WATERPROOFING MEMBRANE



INNOVATIVE SOLUTIONS FOR CERAMIC AND STONE TILE

BONDED WATERPROOF MEMBRANE AND VAPOR RETARDER

Ceramic and stone tiles are durable, easy to maintain, and hygienic, representing ideal surface coverings in wet areas. However, since tiles and grout are not inherently waterproof, it is essential to protect the substrate from moisture penetration.

Application and Function

8.1 Schluter®-KERDI is a pliable, sheet-applied, bonded waterproof membrane and vapor retarder with limited crack-bridging capabilities. It is made of soft polyethylene, which is covered on both sides with a special fleece webbing to anchor the membrane in the thin-set mortar.

Schluter®-KERDI was developed as a waterproofing membrane to be used in conjunction with ceramic and stone tile coverings. Tiles can be installed directly on Schluter®-KERDI using the thin-bed method. Other trowel-applied covering materials, such as plaster, can also be used.

Pre-formed sections of Schluter®-KERDI are available for inside and outside corners, pipe protrusions and mixing valve openings. Use Schluter®-KERDI-BAND, in widths of 5" (12.5 cm), 7-1/4" (18.5 cm), or 10" (25 cm) to seal butt joints or corner joints. Schluter®-KERDI-FLEX, in 5" (12.5 cm) or 10" (25 cm) widths, is used to seal expansion joints or flexible edge joints.

Material Properties and Areas of Application

Schluter®-KERDI is a polyethylene waterproofing membrane with a very low vapor permeance of 0.75 perms. The material is physiologically safe. Schluter®-

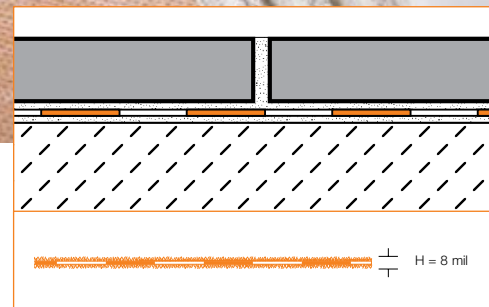


8.1 Schluter®-KERDI

KERDI has been independently tested and found to emit zero VOCs per California Specification 01350: "Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers". Thus, Schluter®-KERDI can contribute towards achieving the following green building credits:

- LEED, IEQ Credit 4.3: Low-Emitting Materials - Flooring Systems
 - ICC 700-2008, 901.6: Pollutant Source Control - Hard-Surface Flooring
 - CHPS, EQ2.2: Low-Emitting Materials
- Schluter®-KERDI requires no special disposal.

Schluter®-KERDI is waterproof and resistant to most chemicals commonly encountered in tiled environments. It is resistant to aging and will not rot. Schluter®-KERDI is



highly resistant to saline solutions, acid and alkaline solutions, many organic solvents, alcohols, and oils. Information regarding its resistance to specific substances can be provided if concentration, temperature, and duration of exposure are known. For acid-resistant coverings, use an epoxy adhesive to set and grout the tile.

Schluter®-KERDI is suitable for wall and floor surfaces where protection against the penetration of moisture or other harmful substances is necessary. Applications include showers, steam showers, tub surrounds, and areas surrounding swimming pools. Industrial applications



Schluter®-KERDI-DRAIN assembly with Schluter®-KERDI waterproofing membrane.

include the food industry, breweries, and dairies. Before placing the Schluter®-KERDI, verify that the substrate is clean, even, load bearing, and free from moisture. Surfaces that inhibit proper adhesion must be removed or appropriately treated.

Schluter®-KERDI meets the American National Standard for Load Bearing, Bonded, Waterproof Membranes for Thin-Set Ceramic Tile and Dimension Stone Installations (ANSI A118.10). The membrane is listed by cUPC® and evaluated by ICC-ES (Report No. ESR-2467). For copies of these documents, please contact Schluter®-Systems at (800) 472-4588 (USA) or (800) 667-8746 (CAN) or by e-mail at info@schluter.com. Links to the documents can also be accessed at www.schluter.com.

Installation

1. The substrate must be clean, even, and load bearing. The thin-set mortar used for bonding Schluter®-KERDI must be appropriate for the substrate, and it must penetrate and engage the KERDI fleece. Generally, an unmodified thin-set mortar is used. Cut Schluter®-KERDI to size prior to application.
2. Apply thin-set mortar to the substrate using a 1/4" x 3/16" (6 mm x 4 mm) V-notched trowel or the Schluter®-KERDI

trowel, which features a 1/8" x 1/8" (3 mm x 3 mm) square-notched design (Note the open time of the mortar). Press Schluter®-KERDI fully into the bond coat. Work the KERDI into the mortar by applying pressure to the membrane with the flat side of the trowel (held at an angle) in smooth, diagonal sweeps. Air bubbles must be avoided.

3. Seams can be constructed by overlapping the edges of the KERDI 2" (5 cm) using unmodified thin-set mortar, or by abutting the edges and covering the joint with Schluter®-KERDI-BAND using an unmodified thin-set mortar.
4. For inside and outside corners, adhere pre-formed Schluter®-KERDI-KERECK-F corners. For floor/wall connections, use the Schluter®-KERDI-BAND. Install KERDI-SEAL-PS pipe seals at showerhead, body sprays, etc. and KERDI-SEAL-MV at the mixing valve. As an alternative to KERDI-SEAL-PS/-MV, KERDI-FIX or equivalent sealant can be used to seal pipe protrusions and protect moisture-sensitive solid backing panels at the mixing valve.
5. Connections to fixed building elements can be achieved by using Schluter®-KERDI, KERDI-BAND, or KERDI-FLEX in conjunction with: Schluter®-KERDI-FIX; suitable trowel-applied waterproofing materials (such as urethane or similar), which require atmospheric moisture to cure; or other suitable sealing compounds.
6. Schluter®-KERDI shall be separated at existing expansion, structural, and flexible edge joints. Cover the joints with Schluter®-KERDI-FLEX. To allow for greater movement, the center section of the Schluter®-KERDI-FLEX can be tucked into the cavity of the expansion joint prior to bonding.
7. Once the entire membrane—with seams, corners, and connections—has been completely bonded, and therefore waterproofed, the covering may be applied.
Note: Water testing of the assembly
Prior to setting tile, wait 24 hours to allow for final set of the mortar before testing to ensure waterproof performance of the assembly at seams and connections.
8. For tile installations using the thin-bed method, apply unmodified thin-set mortar directly to the exposed Schluter®-KERDI surface and install

the tiles, ensuring full coverage. For acid-resistant coverings, use an epoxy adhesive to set and grout the tile.

Connection to Schluter®-KERDI-DRAIN

Schluter®-KERDI-DRAIN is a floor drain specifically designed to allow connections to Schluter®-KERDI or other bonded waterproof membranes, typically in shower applications. When adhering Schluter®-KERDI to Schluter®-KERDI-DRAIN, the membrane must be held back to the step in the fleeced bonding flange. Apply unmodified thin-set mortar to the bonding flange using a 1/4" x 3/16" (6 mm x 4 mm) V-notched trowel or the Schluter®-KERDI trowel, which features a 1/8" x 1/8" (3 mm x 3 mm) square-notched design. Firmly press Schluter®-KERDI into the mortar with the flat side of the trowel to ensure 100% coverage and a watertight seal. When using the stainless steel KERDI-DRAIN bonding flange, KERDI is adhered to the flange with KERDI-FIX. The flange must be clean and free of grease or other contaminants prior to KERDI-FIX application.

Relevant industry standard guidelines for floor drains with integrated bonding flange include method B422 in the Tile Council of North America's (TCNA) Handbook for Ceramic Tile Installation and Method 326DR in the Terrazzo, Tile and Marble Association of Canada (TTMAC) Specification Guide 09300 Tile Installation Manual. Please contact Schluter®-Systems for the Schluter® Shower System installation video and KERDI-DRAIN data sheet.

Notes:

- 1) For complete installation guidelines and warranty criteria for Schluter®-KERDI in showers, steam showers, and bathtub surrounds, please contact Schluter®-Systems for a copy of the Schluter®-Shower System Installation Handbook (USA: 800-472-4588; Canada: 800-667-8746), or download it from our website at www.schluter.com.
- 2) Various configurations of the Schluter®-KERDI-DRAIN are listed by UPC® (IGC 195-2004), CSA (B79-94), and NSF (SE AD 130-007 and SE AD 130-0011). For copies of the above listings, please contact Schluter®-Systems at 800-472-4588 (USA) or 800-667-8746 (CAN) or by e-mail at info@schluter.com. Links to the above listings can also be accessed at www.schluter.com.



Product Item Numbers



8.1 Schluter®-KERDI (waterproofing membrane)

Item No.	Width	Length	Area	Thickness
KERDI 200/5M	3' 3" – 1 m	16' 5" – 5 m	54 ft ² – 5 m ²	8 mil
KERDI 200/10M	3' 3" – 1 m	33' – 10 m	108 ft ² – 10 m ²	8 mil
KERDI 200/20M	3' 3" – 1 m	65' 7" – 20 m	215 ft ² – 20 m ²	8 mil
KERDI 200	3' 3" – 1 m	98' 5" – 30 m	323 ft ² – 30 m ²	8 mil



8.1 Schluter®-KERDI-BAND (waterproofing strip)

Item No.	Width	Length	Thickness
KEBA 100/125/5M	5" – 12.5 cm	16' 5" – 5 m	4 mil
KEBA 100/125/10M	5" – 12.5 cm	33' – 10 m	4 mil
KEBA 100/185/5M	7-1/4" – 18.5 cm	16' 5" – 5 m	4 mil
KEBA 100/250/5M	10" – 25 cm	16' 5" – 5 m	4 mil
KEBA 100/125	5" – 12.5 cm	98' 5" – 30 m	4 mil
KEBA 100/185	7-1/4" – 18.5 cm	98' 5" – 30 m	4 mil
KEBA 100/250	10" – 25 cm	98' 5" – 30 m	4 mil



8.1 Schluter®-KERDI-FLEX (waterproofing strips for use above movement joints)

Item No.	Width	Length	Thickness
FLEX 125/5M	5" – 12.5 cm	16' 5" – 5 m	12 mil
FLEX 250/5M	10" – 25 cm	16' 5" – 5 m	12 mil
FLEX 125/30	5" – 12.5 cm	98' 5" – 30 m	12 mil
FLEX 250/30	10" – 25 cm	98' 5" – 30 m	12 mil



8.1 Schluter®-KERDI-KERECK-F (pre-formed corners)

Item No.	Thickness	Packaging
KERECK / FI 2	4 mil	2 inside corners
KERECK / FI 10	4 mil	10 inside corners
KERECK / FA 2	4 mil	2 Outside corners
KERECK / FA 10	4 mil	10 Outside corners



8.1 Schluter®-KERDI-SEAL-PS (pipe seal with over-moulded rubber gasket)

Item No.	Pipe nipple opening diam.	Thickness	Packaging
KMS185/12	1/2" – 12.5 mm	4 mil	1 unit
KMS185/20	3/4" – 20 mm	4 mil	1 unit
KMS10185/12	1/2" – 12.5 mm	4 mil	10 units
KMS10185/20	3/4" – 20 mm	4 mil	10 units



8.1 Schluter®-KERDI-SEAL-MV (mixing valve seal with over-moulded rubber gasket)

Item No.	Mixing valve opening diam.	Thickness	Packaging
KMSMV114	4-1/2" – 114 mm	4 mil	1 unit
KMSMV10235/114	4-1/2" – 114 mm	4 mil	10 units



Schluter®-KERDI-TROWEL


Item No.	Notch size	Packaging
TRL-KER6	1/8" x 1/8" – 3 mm x 3 mm	6 units




Schluter®-KERDI-FIX

Item No.	Cartridge Volume
KERDIFIX + <i>color</i> *	1/8" x 1/8" – 3 mm x 3 mm

***Color Codes**

 **BW**
Bright white

 **G**
Grey

To complete the item number, add the *color* code (e.g., KERDIFIX / *BW*).



Schluter®-KERDI is used to provide waterproofing and vapor protection in wet areas (e.g., showers, steam showers, tub surrounds, etc.) and is easy to install.



PROFILE OF INNOVATION

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