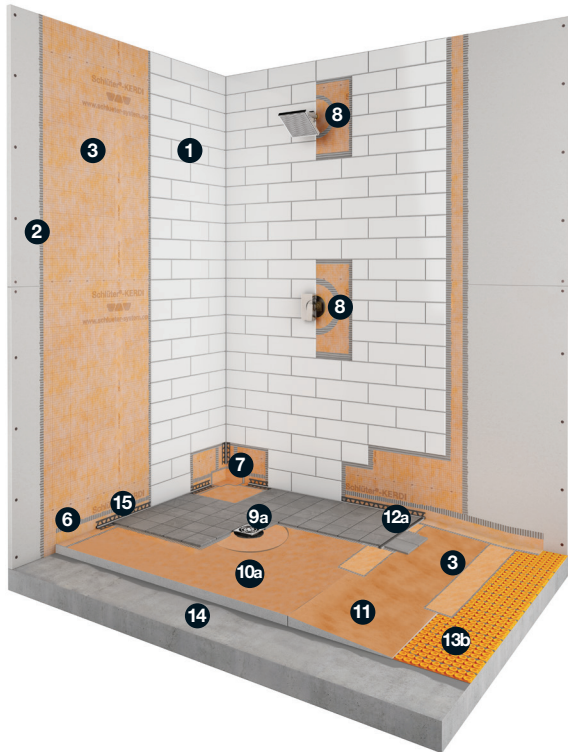


# SHOWER ASSEMBLY

## Curbless Showers – Ceramic or stone tile

### Schluter®-KERDI waterproofing membrane or Schluter®-KERDI-BOARD waterproof building panel

K-SHBF-20



- 1 Ceramic or stone tile
- 2 Schluter **SET**®, Schluter **ALL-SET**®, Schluter **FAST-SET**® or unmodified thin-set mortar
- 3 Schluter®-**KERDI** waterproofing membrane
- 4 Schluter®-**KERDI-BOARD** waterproof building panel
- 5 Schluter®-**KERDI-BOARD-ZT** washers
- 6 Schluter®-**KERDI-BAND** waterproofing strips
- 7 Schluter®-**KERDI-KERECK-F** waterproofing corners
- 8 Schluter®-**KERDI-SEAL-PS/-MV** seals or Schluter®-**KERDI-FIX** sealant and bonding compound
- 9 Drain:
  - a. Schluter®-**KERDI-DRAIN**
  - b. Schluter®-**KERDI-LINE**
- 10 Base:
  - a. Schluter®-**KERDI-SHOWER-T/-TS/-TT**
  - b. Schluter®-**KERDI-SHOWER-LT/-LTS**

Alternative (not shown):
 
  - Mortar bed
- 11 Schluter®-**KERDI-SHOWER-R** ramp
 

Alternative (not shown):
 
  - Mortar ramp
- 12 Shower profiles:
  - a. Schluter®-**SHOWERPROFILE-WS/-WSC**
  - b. Schluter®-**SHOWERPROFILE-WSK/-WSL**
- 13 Uncoupling membrane:
  - a. Schluter®-**DITRA** uncoupling membrane
  - b. Schluter®-**DITRA-HEAT** electric floor warming and uncoupling membrane

Alternative to uncoupling membrane (not shown):
 
  - Schluter®-**KERDI** waterproofing membrane
- 14 Wood or concrete subfloor
- 15 Schluter®-**DILEX** profile (optional)
 

Bench (not shown, optional):
 
  - Schluter®-**KERDI-BOARD-SB**
  - Schluter®-**KERDI-BOARD**

Niche (not shown, optional):
 
  - Schluter®-**KERDI-BOARD-SN**

Shelf (not shown, optional):
 
  - Schluter®-**SHELF-E/-W/-N**

## Schluter®-KERDI waterproofing membrane or Schluter®-KERDI-BOARD waterproof building panel

K-SHBF-20

### Areas of Application

- ▲ Interior showers with curbless access.
- ▲ Over wood or concrete subfloors. See the Base information under Requirements (below) for details.

### Limitations

- ▲ Certain glass tiles may not be compatible with bonded waterproof membranes and/or may require special setting materials. Consult glass tile manufacturer and Schluter®-Systems for more information.
- ▲ Certain moisture sensitive stones, e.g., green marble, or resin-backed tiles may not be appropriate for use in wet areas such as steam showers or may require special setting materials. Consult stone supplier and Schluter®-Systems for more information.

### Requirements

- ▲ Plywood, OSB, or concrete subfloor must be clean, even, and load bearing.
- ▲ Ensure a suitable structure and substrate for the shower floor. This may require the services of a qualified design professional (e.g., architect, engineer, etc.).
- ▲ Recessing the floor of a bathroom must be done in a way that preserves the structural integrity and safety of the construction. This may require the services of a qualified design professional (e.g., architect, engineer, etc.).
- ▲ Solid backing – gypsum wallboard, cementitious backer unit, fiber-cement backerboard, fiber-reinforced water-resistant gypsum backerboard, coated glass mat water-resistant gypsum backerboard, Portland cement mortar, concrete, or masonry.
- ▲ Base – KERDI-SHOWER-T/-TS/-TT/-LT/-LTS or Portland cement mortar bed.
- ▲ Ramp – KERDI-SHOWER-R or Portland cement mortar bed.
- ▲ Bench –KERDI-BOARD-SB, KERDI-BOARD, concrete, masonry block, or sawn lumber sheathed with solid backing (see above).
- ▲ KERDI-DRAIN-/LINE shall be properly supported.
- ▲ KERDI-DRAIN-/LINE shall be connected to the waste line; use ABS cement for ABS drains, PVC cement for PVC drains, a no-hub coupling for stainless steel drains with no-hub outlets, and thread sealing compound or tape for stainless steel drains with threaded outlets.
- ▲ Minimum KERDI-BOARD thickness – 1/2" (12.5 mm) for studs spaced at 16" (40.6 cm) o.c. and 3/4" (19 mm) for studs spaced at 24" (61.0 cm) o.c.
- ▲ KERDI-BOARD shall be fastened to wood or metal framing with appropriate screws (i.e., coarse thread wood screw for wood studs and self-tapping for metal studs) and corresponding KERDI-BOARD-ZT washers. Screws must reach a depth of at least 3/4" (20 mm) in wood studs and 3/8" (10 mm) in metal studs. Maximum allowable on-center fastener spacing is 12" (30 cm) for walls and 6" (15 cm) for ceilings.
- ▲ KERDI or KERDI-BOARD shall be installed up to the height of the showerhead at minimum.
- ▲ In enclosed shower areas, install KERDI or KERDI-BOARD on all surfaces, including the ceiling, door jambs and the door header.
- ▲ KERDI, DITRA or DITRA-HEAT shall be installed in all floor areas subject to water exposure (i.e., wet area and drying area). Floor/wall connections shall be sealed with KERDI-BAND.
- ▲ It is the specifier's responsibility to treat and address all penetrations through the KERDI membrane or KERDI-BOARD (e.g., showerhead, mixing valve, etc.) in the installation. All penetrations must be treated with KERDI-SEAL-PS-/MV seals, KERDI-FIX or suitable sealant.
- ▲ When using the stainless steel KERDI-DRAIN bonding flange, use KERDI-FIX to bond KERDI to the drain.
- ▲ All horizontal surfaces (e.g. benches, window sills, shelves, etc.) must be sloped toward the shower drain. This can be done by sloping the substrate or the tile.

### Substrate Preparation

- ▲ Verify that subfloor panels and solid backing are properly fastened to framing members.
- ▲ Any leveling of the subfloor must be done prior to installing KERDI-SHOWER-T/-TS/-TT/-LT/-LTS-/R and KERDI-BOARD-SB prefabricated substrates.

### Solid Backing Materials

- ▲ Gypsum wallboard – ASTM C1396/C1396M
- ▲ Cementitious backer unit – ANSI A118.9 or ASTM C1325
- ▲ Fiber-cement backerboard – ASTM C1288
- ▲ Fiber-reinforced water-resistant gypsum backerboard – ASTM C1278
- ▲ Coated glass mat water-resistant gypsum backerboard – ASTM C1178
- ▲ Portland cement mortar – ANSI A108.1B
- ▲ Concrete
- ▲ Masonry

### Setting and Grouting Materials

- ▲ Unmodified thin-set mortar – ANSI A118.1
- ▲ Grout – ANSI A118.3, A118.6, A118.7

### Installation Specifications

- ▲ Solid backing panels – follow manufacturer's directions
- ▲ Portland cement mortar bed – ANSI A108.1B
- ▲ Tile – ANSI A108.5
- ▲ Grout – ANSI A108.6, A108.10

### Other Considerations

- ▲ If installing the KERDI-SHOWER-TT thin tray, the installation of a 5/8" or 3/4" plywood/OSB on top of a wood subfloor and Schluter®-DITRA-HEAT or Schluter®-DITRA-XL outside of the shower area is suggested to create a curbless shower application. Due to the additional height, be sure to check the transition height at the bathroom doorway.
- ▲ Curbless tiled showers rely on the slope of the floor to effectively contain water in the immediate shower area and direct water to the drain. Given the wide range of potential configurations, it isn't possible to address them all in this Handbook.
- ▲ Waterproofing must be installed in all areas subject to water exposure. Install KERDI over mortar beds and Schluter® prefabricated EPS foam substrates. Use the DITRA or DITRA-HEAT uncoupling membrane over plywood/OSB or concrete subfloors. All seams are sealed using KERDI-BAND. Please refer to the Schluter®-DITRA or Schluter®-DITRA-HEAT Installation Handbooks for complete details and warranty criteria.
- ▲ If KERDI-LINE is placed at shower entrance, it is recommended that grate assembly A, Pure, or the covering support (D) is chosen and that the drainage openings span the maximum width of the entrance to limit potential overflow; secondary drainage (e.g., KERDI-DRAIN) may be required in the drying area.
- ▲ Schluter®-SHOWERPROFILE-WS-/WSK system profiles can be used to form a splashguard at the entrance of curbless showers.
- ▲ Various building codes and other sources, such as the Americans with Disabilities Act, include specific requirements for disabled access in public buildings and must be consulted when applicable. Areas of interest may include degree of slope, clearance, and supporting structures such as grab bars.
- ▲ Shower grab bars must be anchored in the structure or solid blocking behind KERDI-BOARD.
- ▲ When KERDI-SHOWER-T/-TS/-TT/-LT/-LTS tray dimensions do not match the dimensions of the shower compartment, the tray may be cut or extended with dry pack mortar.
- ▲ When KERDI or KERDI-BOARD and tile are installed on the ceiling, the solid backing and fasteners must be able to support the load of the tile and setting and grouting materials.
- ▲ A water test is strongly recommended before setting tile to verify a successful installation. Wait 24 hours minimum after the membrane installation is complete to allow for final set of thin-set mortar and ensure waterproof performance at seams and connections. Refer to local plumbing codes for any specific requirements in your area. For curbless showers a temporary dam must be provided at the threshold to perform the water test.
- ▲ Schluter®-Systems profiles may be used to finish and protect outside corners and eliminate the use of sealant at inside corners.
- ▲ Schluter®-SHOWERPROFILE-S-/R profiles eliminate the need for cutting wedges of tile by covering the exposed wall area where the floor slopes to KERDI-LINE.
- ▲ Schluter®-SHELF-E-/W-/N are alternatives to tiled shelves that can be easily installed on walls and in corners and niches.