Schlüter Systems®

PROFILE OF INNOVATION

Schlüter®-KERDI-LINE-VARIO

Drainage

Variable linear drains for bonded waterproofing assemblies

8.10

Product data sheet

Application and function

Schlüter-KERDI-LINE-VARIO is a flexible multi-piece linear drainage system for creating floor-level showers with ceramic tiles or natural stone.

The two-piece horizontal KERDI-LINE-VARIO drain unit comprises a drain body and a drain adapter. The drain body consists of an ultra-slim, wave shaped drain that is rotatable by 360° and a built-in odour trap. The wave shaped design achieves a high flow rate within the floor drain, which results in a self-cleaning effect.

The drain adapter with integrated Schlüter-KERDI-FLEX collar comes fully inserted into the sealed wave shaped drain and is secured with a clamping ring. The wave shaped drain can be rotated by 360° when the clamping ring is released, which makes the drainage system adaptable to any connection configuration in the existing building.

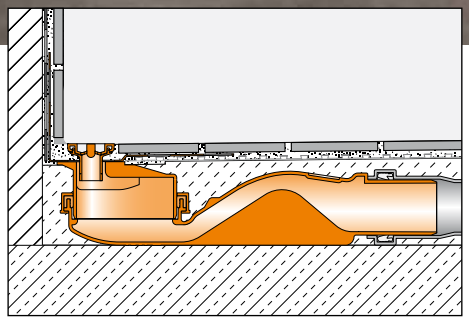
Two design drainage profiles are available for KERDI-LINE-VARIO. These can be variably cut to size, are height adjustable and are shipped with 2 matching end caps.

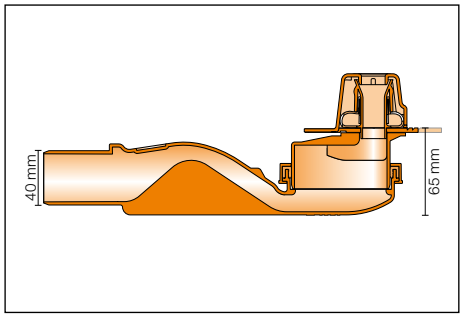
Schlüter-KERDI-LINE-VARIO COVE is a 120 cm cove-shaped drainage profile that can be variably cut to size. It features a visible drain slot of 8 mm in a length of 140 mm. It is available in brushed stainless steel V4A or powder coated aluminium with a textured TRENDLINE finish.

Schlüter-KERDI-LINE-VARIO WAVE is a 120 cm W-shaped drainage profile that can be variably cut to size. It features a visible drain slot of 14 mm in a length of 140 mm, which can be concealed from view with a removable panel. It is also available in brushed stainless steel V4A or powder coated aluminium with a textured TRENDLINE finish.

The pre-adhered flexible KERDI collar integrated into the drain adapter ensures the reliable connection of the drain body to the bonded waterproofing assembly, both in the floor area and on upright walls. It is securely covered by a transparent protective lid.

In conjunction with the waterproofing systems Schlüter-KERDI, Schlüter-DITRA 25, Schlüter-DITRA-HEAT or Schlüter-KERDI-BOARD and the matching system adhesives Schlüter-KERDI-COLL-L or Schlüter-KERDI-FIX, installers can create certified bonded waterproofing assemblies with connecting linear drainage. KERDI-LINE is a system component that complies with the German waterproofing standard DIN 18534. Together with the above-listed Schlüter-systems it has general technical approval (abP) in Germany.





Please refer to the respective product data sheets for information about the moisture exposure classes according to abP. Schlüter-KERDI-LINE is a system component with European Technical Assessment (ETA) according to ETAG 022 (watertight covering kits). Schlüter products tested together with KERDI-LINE bear the CE mark.

Note:
Due to the variable drain construction, KERDI-LINE-VARIO requires the installation of a sloped screed. The surface of the screed must be waterproofed with DITRA 25 (see product data sheet 6.1) or DITRA-HEAT (see product data sheet 6.4). Schlüter-SHOWERPROFILE-S and -R (see product data sheet 14.1) are supplementary components for creating a floor or wall connection. SHOWERPROFILE-S has a triangular design to conceal the sloped lateral edges of floor level showers. Waterproof the surrounding walls with KERDI (see product data sheet 8.1) or create a bonded waterproofing assembly with KERDI-BOARD (see product data sheet 12.1).

Material

The KERDI-LINE-VARIO WAVE drainage profile is made of anodised aluminium with a textured powder coating or of brushed stainless steel (material no. 1.4404 = AISI 316L).
Schlüter-KERDI-LINE-VARIO COVE is made of anodised aluminium with a textured powder coating or of brushed stainless steel (material no. 1.4404 = AISI 316L).
The wave shaped drain and drain adapter are made of high-impact resistant polypropylene (PP).
The KERDI waterproofing collar that is pre-adhered at the drain adapter for connecting to the bonded waterproofing assembly (see product data sheet 8.1) is made of a polyethylene membrane.
The clamping ring at the wave shaped drain is made from coloured polyvinyl chloride (PVC).
The protective lid is made of transparent acrylonitrile butadiene styrene (ABS).

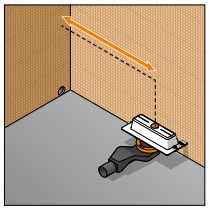
Material properties and areas of application:

KERDI-LINE-VARIO drainage systems are classified as K3 according to DIN EN 1253, Gullies for buildings. This class refers to areas without vehicle traffic. Apart from the aluminium version of the WAVE profile, all drainage profiles are able to withstand wheelchair use.
Schlüter-KERDI-LINE-VARIO drainage profiles are available in a wide variety of materials and finishes. Their suitability must be verified in applications exposed to chemical or mechanical stresses. The information provided below is intended as a general guideline.
The drainage profiles COVE and WAVE in the brushed stainless steel V4A version (material no. 1.4404 = AISI 316L) are particularly well suited for applications that, in addition to heavy mechanical stresses, require resistance to chemicals such as acidic or alkaline media and detergents. Their application areas include bathrooms in apartments, nursing homes, hotels and schools as well as public washroom and shower facilities. Even stainless steel is not resistant to all chemical stresses, and may be affected by, e.g., hydrochloric and hydrofluoric acid or certain chloride and brine concentrations. In certain cases, this also applies to seawater pools. Special anticipated stresses should therefore be verified in advance.
The COVE and WAVE drainage profiles made of aluminium (textured coated aluminium) feature surfaces with a natural appearance. The aluminium is pre-treated (anodised) and powder-coated with a polyurethane covering. The colour-stable coating is UV and weather-resistant. Their application areas include bathrooms in apartments, nursing homes or hotels. Visible edges should be protected against abrasion.

Notes

The set includes a special cleaning brush with instructions for simple periodic cleaning of the drainage channel and the drain area. All cleaning agents must be free of hydrochloric and hydrofluoric acid. Avoid contact with other metals, such as regular steel, to prevent corrosion.
This also includes installation tools such as trowels or steel wool, e.g. for the removal of mortar residue. Do not use abrasive cleaning agents on the sensitive surfaces. We recommend the use of the stainless steel cleaning polish Schlüter-CLEAN-CP.

Schlüter® cleaning brush for KERDI-LINE-VARIO drainage profiles



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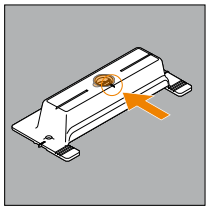

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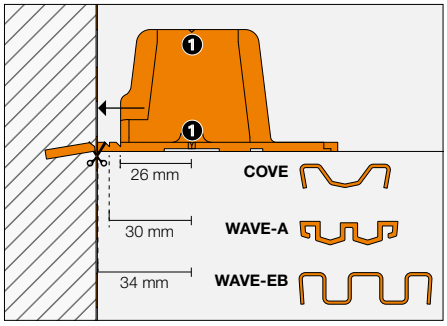

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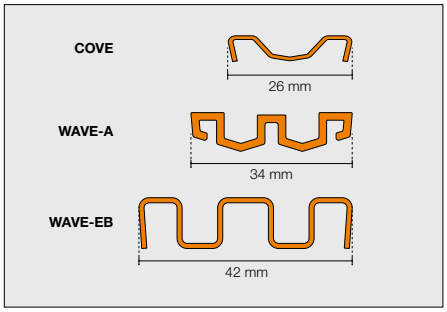

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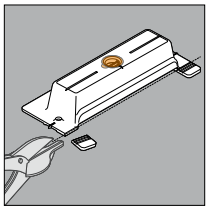

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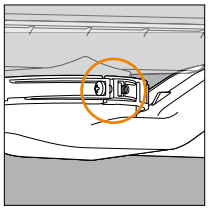

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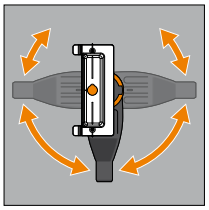

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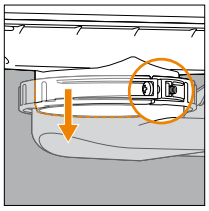

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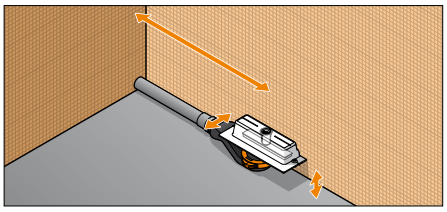
Installation

1. Position the KERDI-LINE-VARIO drain body and adapter in the centre of the weight-bearing structure (over a suitable impact sound insulation layer if necessary; see section on soundproofing for further details) (1). Note the materials label on the protective lid (1 a).
2. For installation against the wall (2), determine the wall spacing for the selected drainage profile (2a) by cutting the spacers of the protective lid (with Schlüter-PROCUT) in the matching groove (2b). This establishes a defined distance of 11 mm from the adjacent wall (not including the wall covering).
3. For connection to the drainage pipe, use the supplied Allen key to open the clamping ring (3) and align the drain body to match the site's structural layout (3a).
4. Then check that the adapter is still fully inserted (4) and re-tighten the clamping ring.
5. Recheck the desired positioning after connecting the assembly to the drain pipe (5). In case of uneven surfaces or for height adjustment, you can also precisely position the drain body on a levelling layer.
6. Perform a leak test (6).
7. Install the sloped screed (2%) of the shower floor area to create a weight bearing assembly that completely encompasses the drain body (7). Use the screw-attached protective lid to aid with alignment and levelling. It must be flush with the top surface of the screed (7a).
8. Remove the protective lid once the screed surface is ready to bear weight (8). Apply thin-bed tile adhesive to amend any flaws in the screed (8a).
9. Now use thin-bed tile adhesive to firmly adhere DITRA 25 (recommended notched trowel size: 3 x 3 mm or 4 x 4 mm) or DITRA-HEAT (recommended notched trowel size 6 x 6 mm) to the screed surface. Tiles adhered over DITRA 25 or DITRA-HEAT must have a size of at least 5 x 5 cm. (see also product data sheet 6.1 or 6.4)



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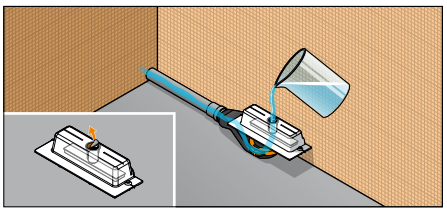

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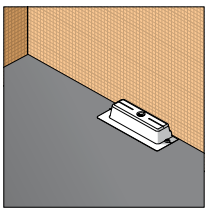

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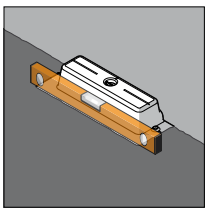
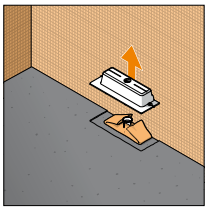


7a



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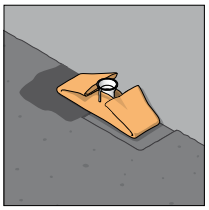

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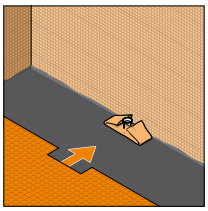

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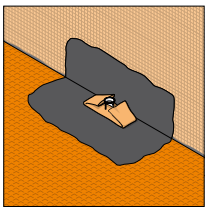
10. To attach the KERDI collar, apply the sealing adhesive KERDI-COLL-L (see product data sheet 8.4) to the adjoining waterproofing assembly, using a 3 x 3 or 4 x 4 mm notched trowel (10) and fully embed the KERDI collar in the adhesive (10a). The curing time of the adhesive must be observed.
11. Create and tightly seal the wall connections with KERDI-KEBA sealing tapes and KERDI-COLL-L (11).
12. Apply covering materials such as tiles or natural stone (12). (Covering thickness must match the selected drainage profile; see Table 12a)
13. Cut the drainage profile to size with a suitable handsaw to match the structural requirements on site, using the supplied cutting gauge (do not use an angle cutter) (13) and de-burr the cut (13a).
14. The set includes two end caps to create a simple and elegant finish (14).
15. Adjust the height of the drainage profile by filling with thin-bed tile adhesive (15) in such a way that it is flush with or just slightly below the covering surface (15a).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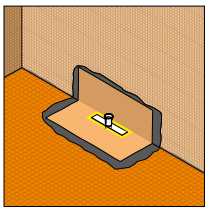
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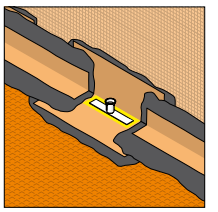
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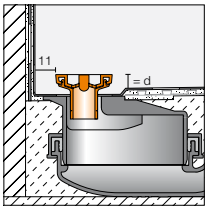
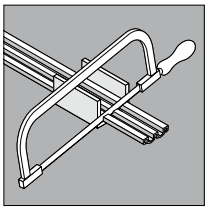


12

Article	Covering thickness (d)
COVE-A	6 – 15 mm *
COVE-EB	6 – 15 mm *
WAVE-A	6 – 15 mm *
WAVE-EB	8 – 18 mm *

* 3 mm if using DITRA-HEAT-DUO

12a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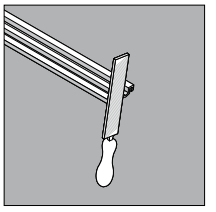
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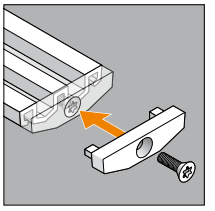
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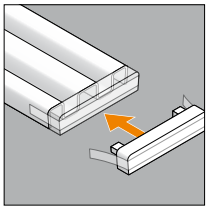
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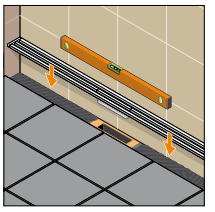
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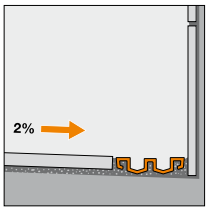
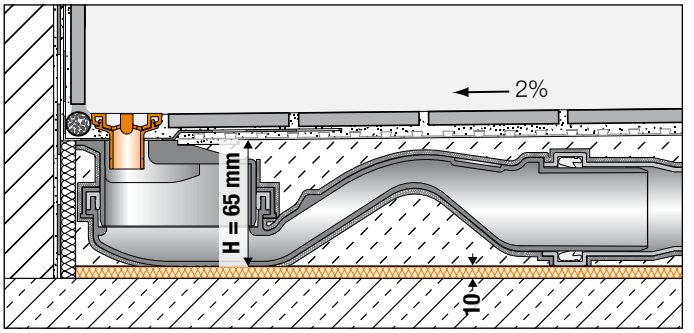


15a

Soundproofing

To meet sound insulation requirements acc. to DIN 4109, VDI 4100, ÖNORM B 8115-2 or SIA 181, the Schlüter-KERDI-LINE-SR sound insulation panel complies with impact sound, installation noise and user noise limits in certified assembly variants of KERDI-LINE-VARIO. Please refer to our Planning Tool for further details.



Shower area with Schlüter®-KERDI-LINE-VARIO on Schlüter®-KERDI-LINE-SR

Schlüter®-KERDI-LINE-VARIO-H40

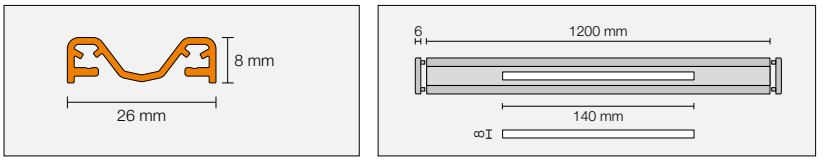
Horizontal drain with built-in odour trap within the drain body

Drain capacity DN 40 according to DIN EN 1253:

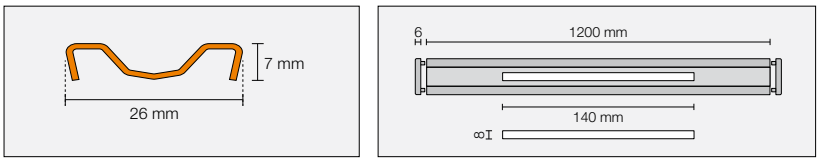
With COVE and WAVE drainage profile
for 2 cm accumulation height =
0.45 l/s (27 l/min)
for 1.5 cm accumulation height =
0.40 l/s (24 l/min)
for 0.5 - 1 cm head of water =
0.35 l/s (21 l/min)

Schlüter®-KERDI-LINE-VARIO

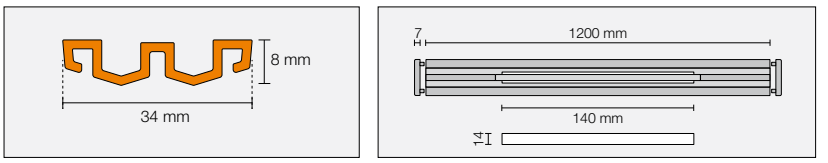
Drainage profiles with end caps, customisable



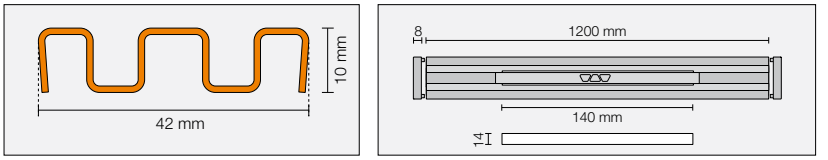
Schlüter®-KERDI-LINE-VARIO COVE-A



Schlüter®-KERDI-LINE-VARIO COVE-EB



Schlüter®-KERDI-LINE-VARIO WAVE-A



Schlüter®-KERDI-LINE-VARIO WAVE-EB

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to watch installation video

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