INNOVATIVE PROFILES

12.1 Schlüter®-KERDI-BOARD

SUBSTRATE

UNIVERSAL STRUCTURAL PANEL, BONDED WATERPROOFING

Application and Function

Schlüter®-KERDI-BOARD is a multifunctional tile substrate for wall areas, which can be used for creating bonded waterproofing assemblies with tile coverings. Additionally, the product has many uses as a structural panel.

It consists of an extruded hard foam panel, with a special reinforcement material on both sides and fleece webbing for effective anchoring in the tile adhesive.

With the available panel thicknesses of 5, 9, 12.5, 19, 28, 38 and 50 mm, Schlüter®-KERDI-BOARD covers a broad range of application areas for creating level, waterproof substrates for the installation of ceramic and natural stone tiles. With suitable preparation of the abutting seams and joint areas, the structural panel may be used for officially approved bonded waterproofing assemblies.

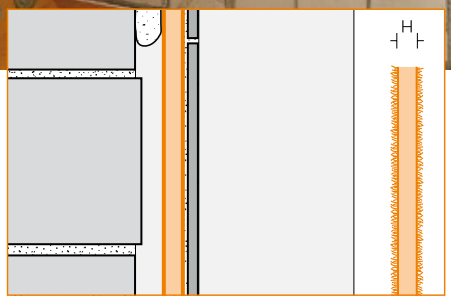
Schlüter®-KERDI-BOARD is suitable for: creating tile substrates on green masonry, existing substrates of all kinds and stud frames made of wood or metal; creating straight or curved separating walls; concealing wall mounted installations and piping (pipe boxes); creating straight or curved bathtub and shower surrounds; as well as creating work surfaces, vanities, storage shelves or any other bathroom structures. The material is equally suitable for creating level substrates in floor renovation projects e.g. residential bathroom installations designed for foot traffic.

Schlüter®-KERDI-BOARD is simply cut to size with a utility knife. The gridlines printed on the surface are helpful for neat and quick installation.

Schlüter®-KERDI-BOARD can be fully adhered in wall areas or alternatively attached with dabs of thin-bed mortar or another suitable adhesive or mortar. If necessary, the material may be secured with additional wall anchors. In the case of stud frames made of wood or metal, Schlüter®-KERDI-BOARD is attached with screws from the matching hardware system.

Tiles can be installed directly over Schlüter®-KERDI-BOARD using the thin-bed method, but other suitable trowel applied coverings or plaster layers are equally possible.

Angle and U shaped components (for pipe panelling and grooved Schlüter®-KERDI-BOARD panels for example) are available for creating curved features. Schlüter-Systems also offers profiles and attachment hardware for wall connections and finishing edges, as well as matching wall anchors and screws.



Material

Schlüter®-KERDI-BOARD is made from an extruded XPS hard foam, with a cement free reinforcement layer laminated onto both sides, together with an anchoring fleece webbing. The surface of the board has gridlines consisting of 10 x 10 mm squares printed on one side.

Material properties and areas of application

Schlüter®-KERDI-BOARD is waterproof and can withstand all chemical stresses that typically occur in conjunction with ceramic tile coverings. Schlüter®-KERDI-BOARD may be used in bonded waterproofing assemblies where required. Test certificates (abP- German Certificate of National Technical Approval) for load classes A1, A2 and C are available. These assemblies also meet the corresponding requirements of the ZDB information sheet.
Schlüter®-KERDI-BOARD is completely level and remains free of distortions and decay. It will not rot and is highly stable, even with one sided exposure to temperature fluctuations and moisture.
Schlüter®-KERDI-BOARD can be used in a multitude of different application areas. In special cases, the suitability of the material must be verified based on the anticipated chemical and mechanical stresses. The information provided below is intended as general guidelines.
Substrates on which Schlüter®-KERDI-BOARD is to be installed need to be evaluated for their stability and other project specific requirements. Before directly adhering the panel with tile adhesive, remove all surface components that may weaken the bond. Otherwise, we recommend attaching the panel with additional fasteners.
Select a suitable material thickness if using Schlüter®-KERDI-BOARD for the construction of freestanding partition walls, shelving or similar structures and use reinforcement profiles as necessary. The use of Schlüter®-KERDI-BOARD in floor assemblies is restricted to foot traffic areas. Floor coverings may have a certain hollow sound when they are walked upon with hard shoes or tapped with a hard object.
Select the material thickness and installation method depending on the evenness of the substrate. Thin panels of Schlüter®-KERDI-BOARD (5 mm) should be fully embedded in tile adhesive.

Areas of Application and Installation

Installation: Fully embedded Schlüter®-KERDI-BOARD

1. The adhesive must bond with the substrate and mechanically set in the anchoring fleece of Schlüter®-KERDI-BOARD. Standard dry set mortars as defined by EN 12004 are suitable for most substrates. Otherwise, select another suitable adhesive, carefully checking for any incompatibilities of materials.
2. The thin-bed mortar is applied either over the substrate or onto Schlüter®-KERDI-BOARD with a notched trowel.
3. The anchoring fleece of the Schlüter®-KERDI-BOARD panels are fully embedded in the adhesive bed. Observe the curing times of all materials.
4. Tightly abut the individual panels and align them appropriately.
5. The tiles can be installed immediately after adhering the Schlüter®-KERDI-BOARD panels, using a dry-setting mortar that meets the requirements of the covering. Choose a notched trowel to match the tile format. The curing times of the thin-bed mortar must be observed.

Note: See section “Waterproofing” on the use of Schlüter®-KERDI-BOARD in bonded waterproofing assemblies.

Attachment of Schlüter®-KERDI-BOARD with dabs of mortar

1. Place dabs of mortar on the Schlüter®-KERDI-BOARD panel in intervals of approx. 30 cm. Depending on the required thickness of the layer, use a dry-setting mortar or a suitable bonding mortar.
2. Set the panels at the wall, firmly press them in place and align them with the use of a spirit level.
3. The tiles can be installed immediately after adhering the Schlüter®-KERDI-BOARD panel, using a thin-bed mortar that meets the requirements of the covering. Choose a notched trowel to match the tile format. The curing times of the thin-bed mortar must be observed.

Note: If no lasting adhesion can be created between the dabs of mortar and the substrate, additional mechanical attachment with the corresponding wall anchors or screws is required.

Note: See section “Waterproofing” on the use of Schlüter®-KERDI-BOARD in bonded waterproofing assemblies.

Use of Schlüter®-KERDI-BOARD on stud frame structures

1. Schlüter®-KERDI-BOARD can be installed and screw mounted vertically or horizontally on professionally constructed stud frames. If using the system fasteners, the panels may be tightly abutted when setting the screws. The selected screws should be of sufficient length to reach a depth of at least 20 mm in wooden studs and at least 10 mm in metal studs. The distance between the screws should not exceed 25 cm.
2. In the case of vertical installation, abut the individual panels over the centre of the studs. In the case of horizontal installation, seal all vertical joints that are not located over a stud with tile adhesive, Schlüter®-KERDI-FIX or the double sided adhesive tape Schlüter®-KERDI-BOARD-ZDK. Such abutting joints should be offset.

Note: See section “Waterproofing” on the use of Schlüter®-KERDI-BOARD in bonded waterproofing assemblies.

Use of Schlüter®-KERDI-BOARD in partition wall systems

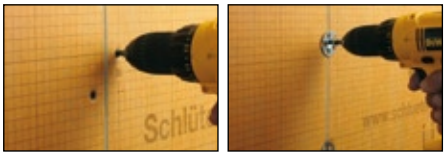
1. Schlüter®-KERDI-BOARD is adhered to the permanent wall with the abutting edge to make sure that the tile covering to be installed on the permanent wall includes the Schlüter®-KERDI-BOARD partition wall. If possible, the partition wall should be stabilised between Schlüter®-KERDI-BOARD panels adhered to the permanent wall. As an alternative, you can also screw mount a matching angle or U shaped profile on the permanent wall for the attachment of the partition wall.
2. Open ended partition walls can be further stabilised with the U shaped components of the attachment hardware. If you plan to screw fittings to the U shaped profile, adhere the matching flat plastic profile to the back of the U shaped profile to improve the fixing of the screws. U shaped profiles may also be used for connections in the wall and ceiling area.
3. All vertical and horizontal joints of Schlüter®-KERDI-BOARD panels must be sealed with thin-bed mortar or Schlüter®-KERDI-FIX, if applicable. In the case of elongated partition walls, a matching angle or U shaped profile may be included in one or several abutting joints for improved stability.
4. Depending on the individual construction site requirements, such partition walls are considered lightweight walls without structural analysis. As a rule, use the 50 mm panels for this kind of structure. Panels from a thickness of 19 mm may be used for building shelving. Again, this must be evaluated in accordance with the building specifications.

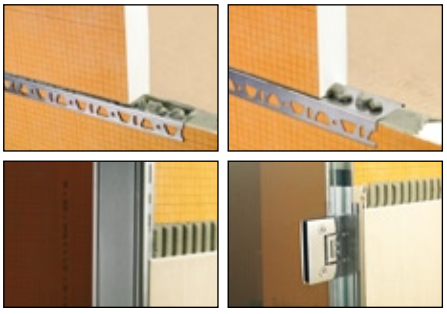
Note: See section “Waterproofing” on the use of Schlüter®-KERDI-BOARD in bonded waterproofing assemblies.

Panel coverings made of Schlüter®-KERDI-BOARD

1. The angle and U shaped components of the Schlüter®-KERDI-BOARD attachment hardware allow for quick and easy panelling of piping and electrical installations.
2. The components with V shaped grooves are supplied flat and can easily be cut to the required size. As an alternative, you can also cut a single U shaped component into two angle elements with shorter legs.
3. The components are folded for installation, with a prepared adhesive strip holding them together in a V shaped groove.
4. Adhere the edges of Schlüter®-KERDI-BOARD U shaped or angle components to the existing walls, using either thin-bed mortar or Schlüter®-KERDI-FIX. If required, mount the angle profile Schlüter®-KERDI-BOARD-ZW on the wall area first to attach the panel.

Note: See section “Waterproofing” on the use of Schlüter®-KERDI-BOARD in bonded waterproofing assemblies.





Curved wall areas made of Schlüter®-KERDI-BOARD

1. The grooved version of the Schlüter®-KERDI-BOARD panel is designed for creating rounded and curved structures.
2. First, cut the grooved panels to the required size. If a larger expanse of panels is required, several panels can be connected along the edges with double sided adhesive tape.
3. If the grooved surface points toward the inside, it is recommended to fill the grooves with tile adhesive prior to installation.
4. Exterior grooves should be filled with thin-bed mortar prior to or during the tile installation.

Note: See section “Waterproofing” on the use of Schlüter®-KERDI-BOARD in bonded waterproofing assemblies.

Use of Schlüter®-KERDI-BOARD in floor areas

1. To install Schlüter®-KERDI-BOARD in 5, 9, 12.5 and 19 mm thicknesses the substrate must be level, ready to bear weight and free of all substances that may weaken the bond. Any levelling must be completed prior to installing Schlüter®-KERDI-BOARD.
2. The adhesive must bond well with the substrate and mechanically set in the anchoring fleece of Schlüter®-KERDI-BOARD. Standard dry set mortars as defined by EN 12004 are suitable for most substrates. Otherwise, select another suitable adhesive, carefully checking for any incompatibilities of materials.
3. Apply thin-bed mortar over the substrate with a notched trowel and fully embed the anchoring fleece of the Schlüter®-KERDI-BOARD panels in the adhesive bed. Tightly abut the individual panels and align them appropriately. Observe the curing times of all materials.
4. To install Schlüter®-KERDI-BOARD in thicknesses of 28 mm or more, the substrate must be sufficiently load bearing. Over such substrates, Schlüter®-KERDI-BOARD can be installed with dabs of thin-bed mortar or other suitable mortar, followed by height alignment. To ensure proper weight bearing of the covering, place the dabs of mortar closely together. Apply thin-bed mortar to the joints at the edges of the panels and ensure they are supported by dabs of mortar from below.
5. Use an edge strip to rule out the buildup of tensions in Schlüter®-KERDI-BOARD and the tile covering in edge areas.
6. The tiles (minimum size: 5 x 5 cm) can be installed immediately after fully embedding the Schlüter®-KERDI-BOARD panels, using a dry setting mortar that meets the requirements of the covering. If using dabs of mortar, allow them to cure first for full weight bearing of the substrate. Choose a notched trowel to match the tile format. The curing times of the thin-bed mortar must be observed.
7. Observe the applicable technical standards for movement joints used in field definition and edge and connection joints.

Note: See section “Waterproofing” on the use of Schlüter®-KERDI-BOARD in bonded waterproofing assemblies.

Waterproofing with Schlüter®-KERDI-BOARD

Schlüter®-KERDI-BOARD is officially approved for bonded waterproofing assemblies with tile covering for load classes A1, A2 and C. These assemblies also meet the corresponding requirements of the currently valid ZDB information sheet.
The corresponding test certificates (abP-German Certificate of National Technical Approval) are available upon request.
This presumes the use of the system tested thin-bed mortars that are listed in the certificate of technical approval. If constructing designs of load category B, “Containers” (e.g. swimming pools), we recommend the use of our waterproofing membrane Schlüter®-KERDI (see product data sheet 8.1 Schlüter®-KERDI).
For this purpose, the joints and corners of Schlüter®-KERDI-BOARD in the area must be fully covered with the sealing band Schlüter®-KERDI-BAND (minimum width 12.5 cm), using the sealing adhesive Schlüter®-KERDI-COLL for embedding. The sealing bands should be covered with at least 5 cm of material.
Schlüter®-KERDI-BAND is also suitable for creating functional connections to fixed structural elements such as door openings or windows of metal, wood or plastic. For

this purpose, apply Schlüter®-KERDI-FIX on the adhesive area of the fixed structures and Schlüter®-KERDI-COLL on the adhesive area of Schlüter®-KERDI-BOARD and cover the entire joint area with sealing band.
The suitability of Schlüter®-KERDI-FIX for the built in components must be verified in each individual case. The feasibility of the connections must be evaluated on the basis of individual construction requirements. Implement all connections with great care.
Separate Schlüter®-KERDI-BOARD above the existing movement joints and structural joints and cover the abutting joints with Schlüter®-KERDI-FLEX. Schlüter®-KERDI-FLEX is also recommended for flexible edges.

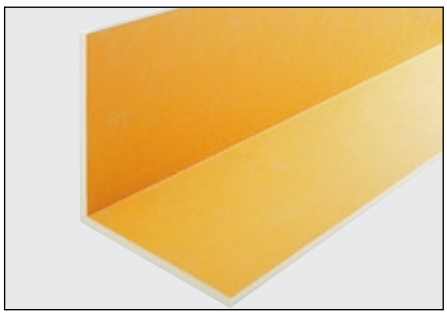
Product Overview

Schlüter®-KERDI-BOARD

can be used as a substrate and a universal structural panel, as well as in bonded waterproofing assemblies.

Width = 62.5 cm H = Height/thickness

Length	1.25 m	2.60 m
H = 5 mm	•	•
H = 9 mm	•	•
H = 12.5 mm	•	•
H = 19 mm	•	•
H = 28 mm	•	•
H = 38 mm	•	•
H = 50 mm	•	•



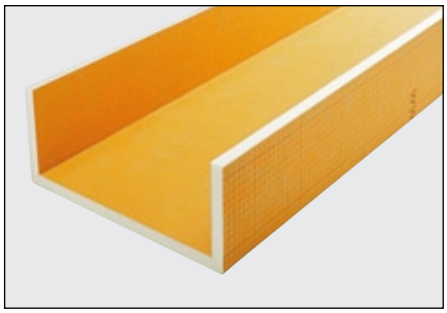
Schlüter®-KERDI-BOARD-E

Schlüter®-KERDI-BOARD-E is an angle component to create corner formations and pipe panelling.

Width = 62.5 cm H = Height/thickness

Length	2.60 m
H = 12.5 mm	•
H = 19 mm	•
H = 28 mm	•

Segmentation: 31.25 x 31.25 cm



Schlüter®-KERDI-BOARD-U

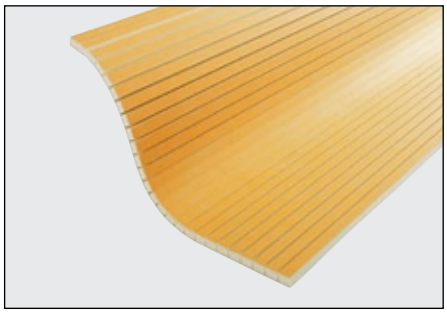
Schlüter®-KERDI-BOARD-U is a U shaped component to create pipe panelling.

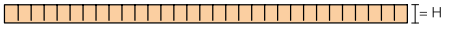
Width = 62.5 cm H = Height/thickness

Length	2.60 m
H = 19 mm	•

Segmentation: 21.25 x 20 x 21.25 cm, 16.25 x 30 x 16.25 cm

Note: U shaped components may be divided into two angle components.





Schlüter®-KERDI-BOARD-V

Schlüter®-KERDI-BOARD-V is a vertically grooved substrate and construction panel for creating tile coverings with curved installation substrates.

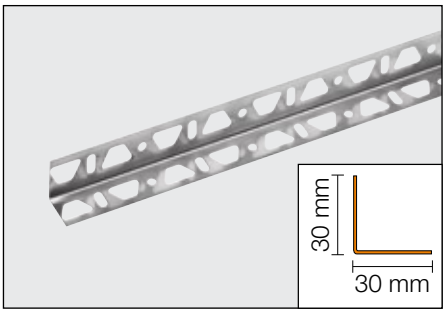
Width = 62.5 cm H = Height/thickness

Length	2.60 m
H = 9 mm	•
H = 12.5 mm	•
H = 19 mm	•
H = 28 mm	•
H = 38 mm	•
H = 50 mm	•

Schlüter®-KERDI-BOARD-ZW

Schlüter®-KERDI-BOARD-ZW is a 30 x 30 x 0.6 mm stainless steel angle profile with two trapezoid perforated anchoring legs. It is used for fastening and stabilising structures made of Schlüter®-KERDI-BOARD panels. It is either attached with screws or thin-bed adhesive.

Length	0.15 m	2.50 m
30 x 30 mm	•	•

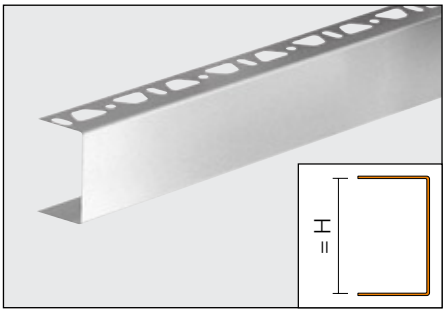


Schlüter®-KERDI-BOARD-ZC / -ZA / -ZB

Schlüter®-KERDI-BOARD-ZC is a U shaped profile of brushed stainless steel with one perforated anchoring leg. It is particularly suited for finishing the edges of work surfaces, vanities and similar structures.

Length supplied: 2.50 m

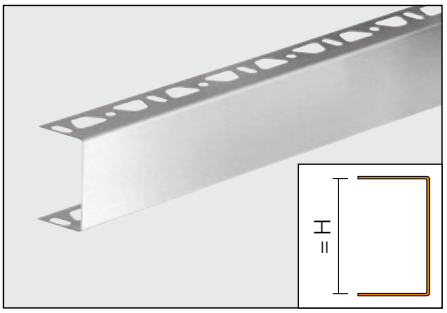
Accessories	Profile	Corner	Connector
H = 19 mm	–	–	•
H = 28 mm	–	–	•
H = 38 mm	•	•	•
H = 50 mm	•	•	•



Schlüter®-KERDI-BOARD-ZA is a U shaped profile of brushed stainless steel with two perforated anchoring legs. It is suited for visible edges of partition walls and shelves.

Length supplied: 2.50 m

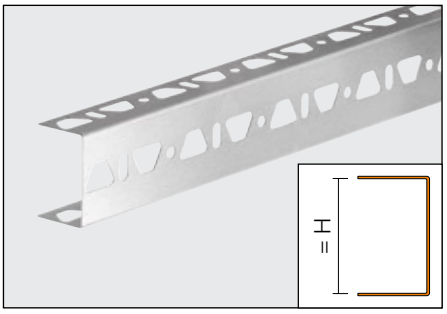
Accessories	Profile	Corner	Connector
H = 19 mm	•	–	•
H = 28 mm	•	–	•
H = 38 mm	•	•	•
H = 50 mm	•	•	•

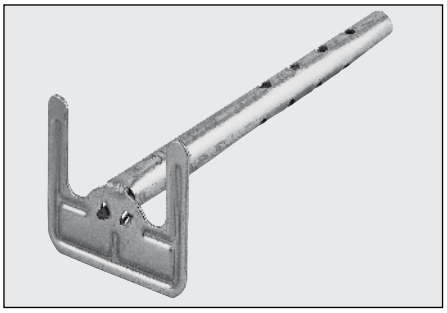


Schlüter®-KERDI-BOARD-ZB is a U shaped profile of stainless steel with three sided perforation. It is used for fastening and stabilising structures made of Schlüter®-KERDI-BOARD panels.

Length supplied: 2.50 m

Accessories	Profile	Corner	Connector
H = 19 mm	•	–	–
H = 28 mm	•	–	–
H = 38 mm	•	–	–
H = 50 mm	•	–	–

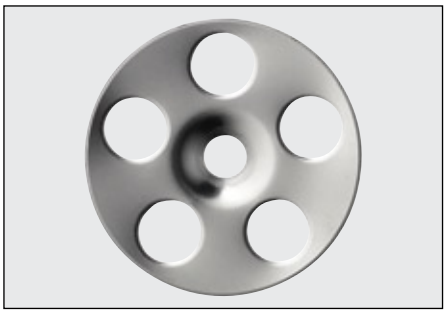




Schlüter®-KERDI-BOARD-ZSD

Schlüter®-KERDI-BOARD-ZSD are anchors made of galvanised steel or stainless steel for the additional mechanical attachment of Schlüter®-KERDI-BOARD to the substrate.

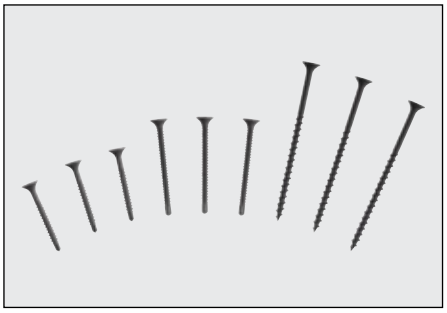
Material	Galvanised	Stainless steel
L = 90 mm	•	•
L = 110 mm	•	•



Schlüter®-KERDI-BOARD-ZT

Schlüter®-KERDI-BOARD-ZT are fixing washers made of galvanised steel or stainless steel for the attachment of Schlüter®-KERDI-BOARD to stud frame structures with the corresponding screws.

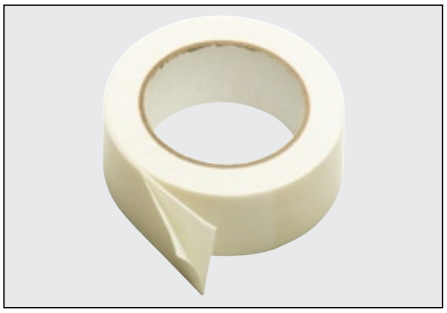
Material	Galvanised	Stainless steel
Ø 36 mm	•	•



Schlüter®-KERDI-BOARD-ZS

Schlüter®-KERDI-BOARD-ZS are quick installation screws for the attachment of Schlüter®-KERDI-BOARD to stud frame structures.

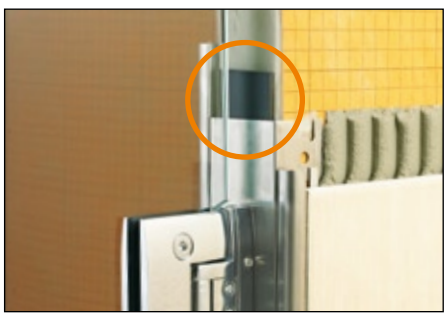
3.5 x 35 mm with self tapping tip (for wood and metal thicknesses up to 2.25 mm)
3.5 x 55 mm with self tapping tip (for wood and metal thicknesses up to 2.25 mm)
4.2 x 75 mm with coarse threading (for wooden structures)



Schlüter®-KERDI-BOARD-ZDK

Schlüter®-KERDI-BOARD-ZDK is a double sided adhesive tape for the attachment of Schlüter®-KERDI-BOARD panels in joint areas or similar.

Length	10 m
B = 12 mm	•
B = 19 mm	•
B = 30 mm	•



Schlüter®-KERDI-BOARD-ZFP

Schlüter®-KERDI-BOARD-ZFP is a flat plastic profile, which is adhered behind the U shaped profile giving strong reinforcement for fixing screws.

System products for bonded waterproofing assemblies

Schlüter®-KERDI-KEBA (Band) Ⓐ

Thickness = 0.1 mm

Length	5 m	30 m
Width = 8.5 cm	•	•
Width = 12.5 cm	•	•
Width = 15 cm	•	•
Width = 18.5 cm	•	•
Width = 25 cm	•	•
see product data sheet 8.1		

Schlüter®-KERDI-FLEX Ⓑ

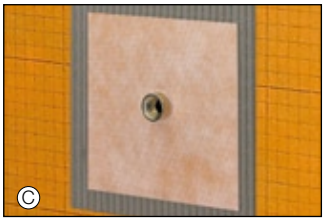
Thickness = 0.3 mm

Length	5 m	30 m
Width = 12.5 cm	•	•
Width = 25 cm	•	•

Schlüter®-KERDI-KM (Pipe collar) Ⓒ

Thickness = 0.1 mm

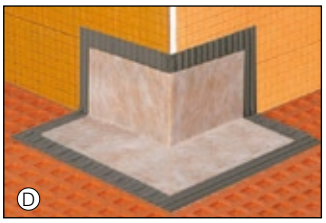
Dim. 17 x 17 / Hole 22 mm	
KM 5117 / 22	Set = 5 pieces



Schlüter®-KERDI-KERECK Ⓓ

Thickness = 0.1 mm

Internal Corner	2 Pc.	5 Pc.	10 Pc.
prefabricated	•		•
pre cut section		•	
External Corner	**2 Pc.**	**5 Pc.**	**10 Pc.**
prefabricated	•		•
pre cut section		•	



Schlüter®-KERDI-COLL Ⓔ

Sealant adhesive	4.25 kg
	1.85 kg
see product data sheet 8.4	

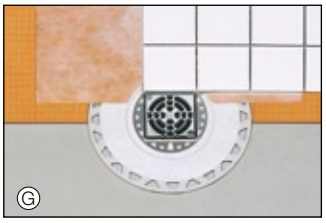
Schlüter®-KERDI-FIX (Installation adhesive) Ⓕ

G = grey, BW = brilliant white

Colour	G	BW
Cartridge 290 ml	•	•
Squeezable tube 100 ml	•	
see product data sheet 8.3		

Schlüter®-KERDI-DRAIN (Floor drains) Ⓖ

see product data sheet 8.2



Technical data:

Thermal conductivity	DIN EN 12667	0.035 W/mK
Temperature resistance		–50 to 75°C
Material density (hard foam)	DIN EN 1602	33 kg/m³
Water penetration capacity		0
Water vapour diffusion resistance rating	DIN EN 12086	
Panel thicknesses 5, 9, 12.5 mm		μ = 1550
Panel thicknesses 19, 28, 38, 50 mm		μ = 440
Linear heat expansion coefficient		0.007 mm/mK
Useable area		
Panel size 125 x 62.5 cm		0.78 m²
Panel size 260 x 62.5 cm		1.62 m²

Notes

Schlüter®-KERDI-BOARD should be stored flat or in another suitable manner. In case of outdoor storage, protect the material from direct sunlight or weather influences. If installing bathroom fittings such as vanities, toilets or other heavy objects, the material must be anchored in the weight bearing substrate. In the case of stud frame substrates or wall mounted installation, the material must be attached to weight bearing components with abutments in the lower area of the structures, which may need to be reinforced.

Text template for tenders:

_____ m² Schlüter®-KERDI-BOARD as a substrate for tiles made of extruded hard foam, with special cement free reinforcement material and an integrated anchoring fleece laminated on both sides to bond with the tile adhesive, to be supplied and professionally installed, while observing the manufacturer's instructions,

- ■ On wall areas, consisting of _____ with suitable material (mortar, adhesive)
  - ● Fully embedded
  - ● Mortar dab attachment
  - ● With additional mechanical anchoring, using
    - ○ Stainless steel anchors
    - ○ Galvanised anchors.
- ■ On stud frame structures made of
  - ● Metal
  - ● Wood.
- ■ Screw mounted on wall mounted installation systems

including the required connections.

The wall areas are to completed:

- ■ Without waterproofing function.
- ■ For bonded waterproofing.
- ■ For bonded waterproofing with official approval.
- ■ For load class
  - ● A_1
  - ● C.

The applicable material requirements must be observed.

Material: _____ …/m²
Labour: _____ …/m²
Total price: _____ …/m²

Text template for tenders:

_____m² Schlüter®-KERDI-BOARD as self supporting partition wall system and tile substrate made of extruded hard foam, with special cement free reinforcement material and an integrated anchoring fleece laminated on both sides to bond with the tile adhesive, to be supplied and professionally installed, including all required materials and observing all manufacturer instructions, in the following rooms:

_____,

using panel thicknesses of _____ mm, including the required connections.

The wall areas are to be completed

- ■ Without waterproofing function.
- ■ For bonded waterproofing.
- ■ For bonded waterproofing with official approval for the load class
  - ● A_1
  - ● C.

The applicable material requirements must be observed.

Material: _____ …/m²
Labour: _____ …/m²
Total price: _____ …/m²

Text template for tenders:

As an accessory to the above item _____ linear metres Schlüter®-KERDI-BOARD-ZW as a stainless steel angle profile with dimensions 30 x 30 x 0.6 mm with two trapezoid perforated anchoring legs for use as

_____,

to be supplied and professionally installed while observing the manufacturer's instructions.

Material: _____ …/m
Labour: _____ …/m
Total price: _____ …/m

Text template for tenders:

_____linear metres

- ■ Schlüter®-KERDI-BOARD-ZA
- ■ Schlüter®-KERDI-BOARD-ZB
- ■ Schlüter®-KERDI-BOARD-ZC

as a stainless steel U shaped profile with a trapezoid perforated anchoring leg, with dimensions to match the panel thickness for use as

_____,

to be supplied and professionally installed while observing the manufacturer's instructions.

Material: _____ …/m
Labour: _____ …/m
Total price: _____ …/m

Text template for tenders:

_____ m² Schlüter®-KERDI-BOARD as a tile substrate in floor areas made of extruded hard foam, with special cement free reinforcement material and an integrated anchoring fleece laminated on both sides to bond with the tile adhesive, to be supplied and professionally installed, including all required materials and observing all manufacturer instructions, onto a floor substrate consisting of _____ in rooms to be used as _____ (foot traffic only), including the required connections.

The floor areas are to be completed

- ■ Without waterproofing function.
- ■ For bonded waterproofing.
- ■ For bonded waterproofing with official approval for the load class
  - ● A_2
  - ● C.

The applicable material requirements must be observed.

Material: _____ …/m²
Labour: _____ …/m²
Total price: _____ …/m²

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