

PROFILE OF INNOVATION

# Schlüter<sup>®</sup>-DILEX-KSBT

Movement joint profile for heavy duty applications



# **Application and Function**

**Schlüter-DILEX-KSBT** is a maintenance free movement profile to bridge structural joints within tile and natural stone coverings. Schlüter-DILEX-KSBT assists in reducing the transmission of impact sound.

If the closed movement zone is unable to absorb movements, the joint spacer can be cut open. In this manner, the 20 mm wide insert can absorb movements of  $\pm$  5 mm and the 30 mm wide insert, movements of  $\pm$  10 mm.

The profile can be used in floor areas as well as wall areas, for a continuous, uniform appearance. It is particularly suited for use in walls and ceilings made from gypsum board panels; it can also be integrated directly into the plaster or mortar screed.

The trapezoid perforated anchoring legs, made of stainless steel or aluminium, are connected by a 20 mm or 30 mm wide, soft movement zone made of thermoplastic rubber.

The rubber insert can be replaced in case of damage.

The anchoring metal legs effectively protect the adjoining edges of the floor covering. The broad movement zone limits the load bearing capacity of the profile when subjected to high point loads or when heavy weights are placed directly on the soft zone. A reinforcement cover strip is available for the 30 mm wide profile and additional measures can be adopted for the 20 mm wide profile, please contact us for advice.



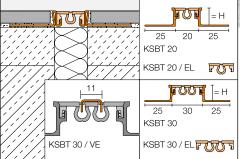
# **Material**

E = Stainless steel

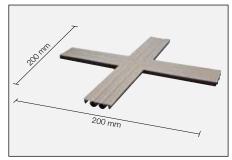
V2A, material no. 1.4301 = AISI 304 V4A material no. 1.4404 = AISI 316L

#### A = Aluminium

The movement zone consists of soft thermoplastic rubber with grip bars made of a rigid material.

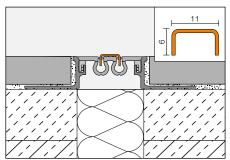






Tile insert Schlüter®-DILEX-KSBT 30/K





U-Profileinlage Schlüter®-DILEX-KSBT 30/VE

# Material properties and areas of application

The suitability of a proposed type of profile must be verified based on the anticipated chemical, mechanical, and/or other stresses.

Schlüter-DILEX-EKSBT with lateral attachment profiles made of stainless steel 1.4301 (V2A) or 1.4404 (V4A) 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. The use of V4A is recommended if consistent exposure is expected, for example in the case of swimming pools (fresh water). Stainless steel is not resistant to all chemical stresses, and may be affected by hydrochloric and hydrofluoric acid or certain chlorine and brine concentrations. Special anticipated stresses should therefore be verified in advance. Depending on the anticipated chemical stresses, customers can choose between the alloy materials 1.4301 or 1.4404.

Schlüter-DILEX-AKSBT, with aluminium anchoring legs, must be tested to verify its suitability if chemical stresses are anticipated. Cementitious materials, in conjunction with moisture, become alkaline. Since aluminium is sensitive to alkaline substances, exposure to the alkali (depending on the concentration and duration of exposure) may result in corrosion (aluminium hydroxide formation). For this reason, remove mortar or grouting material immediately from all visible areas and do not cover freshly installed coverings with foil. The profile must be solidly bedded in the setting material.

Schlüter-DILEX-KSBT 30 / VE is a Ushaped profile insert of brushed stainless steel. It is used to enhance optical appeal and reinforces the soft core of the profiles DILEX-KSBT 30. The movement zone of all Schlüter-DILEX-KSBT profile types consists of highly flexible thermoplastic rubber. This material is highly resistant to chemicals and the chemical stresses typically associated with tile coverings and has been specially treated to resist fungi and bacteria. The insert is resistant to temperatures ranging from -60 °C to +100 °C. Thermoplastic elastomers can be connected by welding if profiles are joined to produce longer lengths. The inserts **Schlüter-DILEX-KSBT 20/K** or **30/K** are available in all colours to form cross joints with Schlüter-DILEX-KSBT movement profiles.

# Installation

- 1. Select Schlüter-DILEX-KSBT in accordance with tile thickness.
- 2. Using a notched trowel, apply tile adhesive to the area where the profile will be placed.
- 3. Press the trapezoid-perforated anchoring leg of Schlüter-DILEX-KSBT firmly into the adhesive and align it. The profile must align directly with expansion and movement joints in the substrate below.
- 4. Trowel tile adhesive over the trapezoid perforated anchoring leg to ensure full coverage. Trowel tile adhesive against the vertical anchoring legs at an angle.
- 5. Firmly press the adjoining tiles into place and align them in such a way that the upper profile edge is flush with the tile (profile should not protrude over the surface of the covering; preferably, it should be approx. 1 mm below the top level of the covering). The tiles must be fully embedded in the area of the profile. Always adjoin the uncut tile edge to the profile.
- 6. Leave a 2-mm joint to the profile, and completely fill the joint between the profile and the tile with mortar.
- 7. For installation of the profile insert Schlüter-DILEX-KSBT 30 / VE into the profile Schlüter-DILEX-KSBT 30, cut the grooves of the soft zone with a utility knife. Apply the installation adhesive Schlüter-KERDI-FIX to the back of the profile insert and press it into the groove.
- For cross joints, trim the profiles in such a way that the trapezoid perforated anchoring legs don't overlap during installation.

# **Maintenance**

Schlüter-DILEX-KSBT is treated to resist fungi and bacteria, and requires no special maintenance or care. The synthetic rubber movement zone is replaceable.

Stainless steel surfaces exposed to the environment or aggressive substances should be cleaned periodically using a mild household cleaner.

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Regular cleaning maintains the neat appearance of stainless steel and reduces the risk of corrosion. All cleaning agents must be free of hydrochloric and hydrofluoric acid. Avoid contact with other metals such as steel, since this can cause extraneous rust. This also includes tools such as trowels or steel wool, i.e. tools used to remove mortar residue.

# **Product overview:**

#### Schlüter®-DILEX-EKSBT 20

E = stainless steel 20 mm wide

mm

mm

mm

mm

Colours

H = 11

H = 21

H = 25

H = 30

H = 8 mm

H = 10 mm

H = 12.5 mm

H = 14 mm

H = 16 mm

H = 18.5 mm

Length supplied: 2.50 m

FG

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Length supplied: 2.50 m

DA

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# Schlüter®-DILEX-EKSBT 20 V4A

E V4A = stainless steel 1.4404 20 mm wide Length supplied: 2.50 m

Colours	G	HB	GS
H = 8 mm	•	•	٠
H = 10 mm	•	٠	٠
H = 11 mm	•	٠	٠
H = 12.5 mm	•	•	٠
H = 14 mm	•	•	٠
H = 16 mm	•	•	٠

#### Schlüter®-DILEX-EKSBT 30

E = stainless steel 30 mm wide

Colours	G	HB	GS	С	SG	DA	FG
H = 8 mm	•	•	•				
H = 10 mm	•	•	•	•	•	•	•
H = 11 mm	•	•	•	•	•	•	٠
H = 12.5 mm	•	•	•	•	•	•	•
H = 14 mm	•	•	•	•	•	•	•
H = 16 mm	•	•	•	•	•	•	•
H = 18.5 mm	•	•	•				
H = 21 mm	•	•	•				
H = 25 mm	•	•	•				
H = 30 mm	•	•	•				

#### Schlüter®-DILEX-EKSBT 30 V4A

E V4A = stainless steel 1.4404 30 mm wide Length supplied: 2.50 m

Colours	G	HB	GS
H = 8 mm	•	٠	•
H = 10 mm	•	•	•
H = 11 mm	•	•	•
H = 12.5 mm	•	•	•
H = 14 mm	•	•	•
H = 16 mm	•	•	•



## Schlüter®-DILEX-AKSBT 20

A = aluminium 20 mm wide

Length supplied: 2.50 m

Colours	G	HB	GS	С	SG	DA	FG	
H = 8 mm	•	٠	•					
H = 10 mm	•	٠	•	•	•	•	•	
H = 11 mm	•	٠	•	•	٠	•	•	
H = 12.5 mm	•	٠	•	•	•	•	•	
H = 14 mm	•	•	•					

#### Schlüter®-DILEX-AKSBT 30

A = aluminium 30 mm wide

Colours	G	HB	GS	С	SG	DA	FG	
H = 8 mm	•	•	•					
H = 10 mm	•	•	•	•	•	•	•	
H = 11 mm	•	•	•	•	•	•	•	
H = 12.5 mm	•	•	•	•	•	•	•	
H = 14 mm	•	•	•					

#### Schlüter®-DILEX-KSBT 20/EL

Colours	G	HB	GS	С	SG	DA	FG	
Insert 20 mm	٠	•	•	•	٠	•	•	



Schlüter®-DILEX-EKSBT 20



Schlüter®-DILEX-AKSBT 20

# Schlüter®-DILEX-KSBT 30/EL

Colours	G	HB	GS	С	SG	DA	FG	
Insert 30 mm	•	•	•	•	•	•	•	

# Schlüter®-DILEX-KSBT 20/K

cross joint insert						Length	supplied: 2.50 m	ſ
Colours	G	HB	GS	С	SG	DA	FG	
Insert 20 mm •	•	•	•	•	•	•		



Schlüter®-DILEX-KSBT 30/VE

# 200 mm

Schlüter®-DILEX-KSBT 20/K

# Schlüter®-DILEX-KSBT 30/K

cross joint insert

Colours	G	HB	GS	С	SG	DA	FG
Insert 30 mm •	٠	•	•	٠	•	٠	

## Schlüter®-DILEX-KSBT 30/VE

EB = brushed stainless steel

Length supplied: 2.50 m

# Stainless steel insert for Schlüter<sup>®</sup>-DILEX-KSBT 30



Movement zone colours:

- SG = stone grey
- DA = dark anthracite
- FG = joint grey

Length supplied: 2.50 m

Length supplied: 2.50 m

Length supplied: 2.50 m

Length supplied: 2.50 m

## Text template for tenders:

\_\_\_\_\_ linear metres of Schlüter-DILEX-KSBT, a movement joint profile, with laterally attached support sections made of

E	= Stainless steel
EV4A	= Stainless steel 1.4404 (V4A)
A	= Aluminium

including trapezoid-perforated anchoring legs and a U-shaped profile chamber to contain a
20 mm wide 30 mm wide movement zone of thermoplastic rubber
... to be supplied and professionally installed while observing the manufacturer's instructions. The installation of tile inserts is to be
included in the unit prices.
invoiced separately.
Profile height

i tonio hoigin	
(depending on tile thickness):	mm
Colour:	
ArtNo.:	
Material:	/m
Labour:	/m
Total:	/m

# Text template for tenders:

\_\_\_\_\_linear metres of Schlüter-DILEX-KSBT 30 / VE as a U-shaped profile insert of brushed stainless steel, to be supplied and professionally installed according to the manufacturer's instructions.

ArtNo.:	
Material:_	/m
Labour: _	/m
Total:	/m

# Application areas depending on local traffic load

	Foot traffic Total weight	_
	Shopping carts Total weight	max. 0.4 t
600	<b>Cars</b> Total weight	max. 3.5 t
	<b>Trucks</b> Total weight	max. 40 t
	Forklifts Pneumatic tyres Total weight Solid rubber tyres Total weight	max. 5 t max. 2.5 t
	Pallet trucks Hard rubber tyres Total weight (Pallet trucks must axles)	
Suitable Unsuitable		



Schlüter-Systems KG · Schmölestraße 7 · D-58640 Iserlohn · Tel.: +49 2371 971-1261 · Fax: +49 2371 971-1112 · schlueter-systems.com
Schlüter-Systems Ltd · Units 3-6 Bardon 22 Industrial Estate · Bardon Hill · Coalville · Leicestershire · LE67 1TE
Tel.: +44 1530 813396 · Fax: +44 1530 813376 · sales@schluter.co.uk · schluter.co.uk