PROCONNEXcurve

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Flexible thin-bed profile Plain aluminium / stainless steel I.4301 (V2A) with silicone insert





Fields of application:

The aluminium / stainless steel **PROCONNEXcurve thin-bed profile** is a flexible joint profile for creating expansion and boundary joints with demanding aesthetic requirements when laying tiles and boards using the thin-bed principle.

PROCONNEXcurve thin-bed profiles are fitted to absorb horizontal tension. The high-quality silicone is approximately 6 mm wide and is available in your choice of colours. It seals the joint and absorbs movements up to about 25% of the filled width.

The angled profile edges are made from aluminium or stainless steel and protect the edges of the material laid on the left and right from mechanical stress.

The stamped fitting strips are anchored under the adjacent coverings in their bonding compound (adhesive). The profile is engineered for joints in the substrate of up to 10 mm wide.

PROCONNEXcurve thin-bed profiles feature a special perforation that permits various inner and outer radii without any trouble.

The design of the **PROCONNEXcurve thin-bed profiles** has been adapted to the floor coverings in such a way that, with a high level of application safety during installation, the assigned functions and loads on inside surfaces subjected to traffic in domestic and commercial settings (such as shops and offices) are possible without chemical loads (or even limited chemical loads for **PROCONNEXcurve stainless steel profiles**).

Driving loads from the wheels of vehicles with pneumatic tyres or rolling appliances with super elastic or full rubber tyres are possible, for example, in passenger vehicle showrooms/exhibition halls, sales areas, canteens and the like.

PROCONNEXcurve aluminium profiles:

The typical areas of application inside buildings equate to load group I and II, such as those in the ZDB bulletin "Ceramic flooring with high mechanical loads", though they are specified for compression forces under I N/mm².

PROCONNEXcurve stainless steel profiles:

The typical areas of application inside buildings correspond to load groups I to III, such as those in the ZDB bulletin "Ceramic flooring with high mechanical loads", though they are specified for compression forces under 4 N/mm².

- Round, radial transitions and boundaries for a wide variety of materials (such as tiles, natural and artificial stone, laminate, wooden floors, carpets, coatings, designer flooring and elastic coverings).
- Radial-guided edge protection.
- Decorative design element in mosaic or inlay work.

Product advantages:

Flexible **PROCONNEX curve thin-bed profiles** are easy to install. The materials used and their formation enable a high level of functionality and elasticity for the allocated movement. the many different colours available for filler options enable a design that meets the highest aesthetic standards. They blend in with the laid surfaces harmoniously.

Different geometries allow you to adapt installation for different heights. The profiles can be shortened to length on-site.

The silicone insert has a concave surface, preventing it from sticking to wheels due to negative pressure and reducing the potential

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need for maintenance and repairs. The silicone insert can also be replaced years later by cutting it out and applying new silicone. Flexible **PROCONNEXcurve thin-bed profiles** are designed for reliably minimising the effects of mechanical impacts (such as bumps and knocks) in the joint area of floor coverings over the long term. The neutrally cross-linked S 110 filler material from Otto-Chemie is very elastic and, according to TÜV Rheinland's list of building materials, is "a highly recommended low-impact building product" and, at the same time, conforms with LEED[®] in accordance with IEQ Credit 4.1 Adhesives and Sealants.

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Technical data:

Material aluminium	Aluminium / stainless steel 1.4301 (V2A) with silicone insert
Length [m]	2.50
For covering heights [mm]	3 / 4.5 / 6 / 8 / 10 / 11 / 12.5 / 15
Face width [mm]	Approx. 12 / Approx. 10
Standard colours	Ottoseal S 110 concrete grey *
Custom colours	Colours available on request from Otto-Chemie in accordance with Ottoseal S 110 * - on request

For details, see latest price list

* Ottoseal S 110 sealant, refer to data sheets at www.otto-chemie.de

Delivery form:

Bound at the ends with stretch wrap, packed in a dispatch box

10 profiles	l pack
Packaging unit	Bars 10 / 40
Customs tariff number for aluminium	76042990
Customs tariff number for stainless steel	72224050

For the latest order quantities and packaging units, please refer to the price list, the relevant price sheets or product news sheets, or speak to your specialist dealer.

Supplementary products:





PROSECUREfibretec 2.0 Reinforcement and decoupling mat Width of 1 m Item no. 93719 (10 m² roll) Item no. 93720 (25 m² roll)

Cutoff wheel Specifically for cutting stainless steel profiles Item no. 94230 (115 mm diameter) Item no. 94240 (125 mm diameter)



PROBEND bending device Ideal aid for forming curves in profiles

Storage and transportation:

Store and transport in dry areas that are protected against dirt, impact, abrasion and other foreign matter. Do not place any load on the profiles and preferably store them horizontally to avoid any risk of deformation.

Environmental protection and disposal:

Profiles that have been cleaned of foreign matter and silicone can be disposed of in a metal recycling container. Profiles that are contaminated or still have silicone on them can be disposed of through the non-recycable or commercial waste system. Observe local authority regulations respectively. Seals manufactured through complete vulcanisation are not easily biodegradable.

Thermal degradation:

No degradation if used in the correct manner. Avoid excessive heat.

Laying/working:

Preparatory measures/site planning

The surface to which the product is being fitted must be sturdy, dry, level, straight, flush and horizontal, free of parting agents and solvents and suitable for the bonding substance. The fitting strips must always lie beneath a hard covering, tiles or boards which are firmly bonded.

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<u>Installation</u>

Select flexible **PROCONNEXcurve thin-bed profiles** corresponding to the planned thickness of the floor covering. For installation, the upper edge of the profile must always be at the same height or lower than the adjacent covering edges. Check the profile for damage. Use only undamaged profiles.

Use suitable clamps, saws or cutoff wheels as well as personal protective equipment for cutting the pieces to size. Deburr the edges using a suitable tool. Always install the profiles with equal coverage centrally above the boundary joints formed in the substrate.

For bends and curves, the **PROBEND** bending device is recommended as an ideal aid for creating curves. The openings at regular intervals along the fitting strip serve as an additional means of attaching the profiles using steel pins or screws along the planned, curved line. Generally, the profiles can also be bent by hand and/ or using templates (e.g. made from particle board) or similar. It is recommended that the profiles first be adapted to the desired curves and then bonded.

Place the flexible **PROCONNEXcurve thin-bed profile** with the punched fitting strip into the freshly combed bonding compound and align it. Then plaster over the fitting strip, covering it completely.

The covering materials adjacent to the fitting strip must be laid so they are completely embedded.

Tiles cut or made to fit the profile must be at least 10 cm wide. If necessary, lay a **PROSECUREfibretec 2.0** reinforcement strip measuring approx. 20 cm in width over the fitting strip in the thinbed mortar layer. Mortar should not be allowed to find its way into the gap in the flooring/covering substrate.

In the event of cross-shaped profile joints, do not allow the fitting strips on the profile ends to overlap. If necessary, cut an angled joint or make recesses and fill in the open gap with an elastic material.

Upon completing the gap filling measures, profile joints can be covered using Ottoseal S110 silicone sealant in the same colour. If the surface as a whole has a joint pattern, the joint to the profile can be formed to match the joint width, though it should be no wider than 2 mm. The joint between the floor covering and the profile should be filled completely with grout.

Clean away any mortar/grout and adhesive residue from the sides of the profile on display immediately and completely using clean water and a non-abrasive sponge pad or cloth. Bonding and joint filling substances should not dry onto the surface. Use non-abrasive bonding and joint compound.

Cleaning:

Use copious amounts of clean water and common, commercially available household cleaners without any moisturising agents. Ensure that there is no sanding or grinding effect. Always make sure that there are no remnants of cleaning agent and dirt. If necessary, use an alcohol-based cleaner or a cleaner especially developed for aluminium/stainless steel.

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If necessary, use suitable cleaning paste to polish up untreated aluminium profiles if tarnished.

Perform routine cleaning regularly in accordance with local conditions.

Chemical and physical resilience:

Before using cleaning agent or collected water, check whether it has a corrosive or damaging effect on the profiles. This also applies to correct dosage during use.

The profile should never come into contact with agents containing hydrochloric or hydrofluoric acid. Any contact with chlorine bleaching agents, cement residue cleaners, strong acids or bases should be avoided.

<u>Aluminium</u>: Reacts sensitively to potent alkaline substances. Substances containing cement or lime in combination with water can alter the surface depending on the solution and time allowed to take effect.

Stainless steel: Avoid contact with substances containing chloride ions (such as road salt, chlorinated swimming pool water, brine). Stainless steel reacts with oxygen in the air and forms a protective layer that becomes damaged upon abrasive contact with normal steel or iron and flying sparks from welding and cutting work, thereby resulting in corrosion.

Always immediately remove mortar and joint compound from the visible sides.

Once the adhesive, grout and filling compound is dry, the profile can take mechanical loads as per its intended use. Abrasive influences or the use of damaging equipment or activities on the profile should be avoided as a rule.

Check cleaning tools and equipment with bristles and abrasive polishing pads to see if they scratch the surface.

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Standards and regulations:

In addition to the observation and consideration of relevant specialist rules, standards and generally recognised rules of technology, attention is drawn in particular to the following regulations:

- ATV DIN 18352 Tile laying work
- ATV DIN 18332 Natural stone work
- DIN 18202 "Tolerances in surface construction"
- ZDB bulletin "Expansion joints" (latest version)
- ZDB bulletin "Coverings exposed to heavy loads" (latest version)

Important information:

- In conjunction with the profiles, use only neutrally cross-linked sealing and filling substances, preferably Ottoseal S 110.
- Ensure that regular cleaning is carried out.
- The use of profiles does not provide a seal in terms of joint sealing or in accordance with DIN 18195.
- If filling joints with reactive resins, first check whether they can damage the profile surfaces and whether adhesives and sealants can be removed completely.
- The temperature at the time of installation should be the same as the temperature during later use. Allow profiles to acclimatise before fitting.
- <u>Aluminium</u>:

The production processes necessitate a certain slight variation of colours between the individual profiles and their appearance is subject to the characteristic, industrial processes during manufacture.

• <u>Stainless steel</u>:

Iron particles from tools, scaffolding, transportation devices, etc. must be removed without delay. Grinding/sanding dust, swarf and weld splatter from structural steel work accelerate the rusting process when left on stainless steel.

The concentration, formulae, temperatures and compositions of the substances involved are often responsible for the chemical resistance of the profiles. Their diversity cannot be covered here. The resistance to corrosion should therefore be checked and scrutinised in individual cases.

Chloride ions present in fluids, condensation and chemicals have a corrosive effect. These loads should be avoided as often as possible or eliminated by thorough cleaning. If loads occur only briefly, do not exceed a concentration of 250 mg/ ltr.

All information, references, instructions, basic engineering principles, regulations, standards and expertise are based on the German regulations and largely equivalent European regulations and training standards, irrespective of additional country-specific supplements and amendments.

All our specifications are based on our experience and careful analysis. We are unable to examine or influence the diversity of associated materials used and the various construction site and processing conditions in detail.

Fulfilment of an imposed work order and verifiable functionality of the object therefore depends on the observation of current VOB rules and the recognised rules of technology.

Our details do not absolve the accountable planner and fitter from the obligation to assesson their own authoritythe building conditions and practicability of the products. In case of doubt, carry out your own tests or seek application-specific advice. Please refer to the laying and working guidelines of the floor covering manufacturers or the manufacturers of associated products.

All previously published product data sheets shall be superseded by this product data sheet once published.

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