

PROSTILTadvance

ALUMINIUM SUB-CONSTRUCTION SYSTEM FOR PATIOS AND BALCONIES



GENERAL INFORMATION

Closed frame construction
Recommended for wood-plastic composite (WPC)
and wooden decking boards

The PROSTILTadvance aluminium sub-construction system is mounted as closed frame. Cross connections are not required for the certified load capacity. However, cross connections can be mounted between the longitudinal profiles for a particularly high dimensional stability.

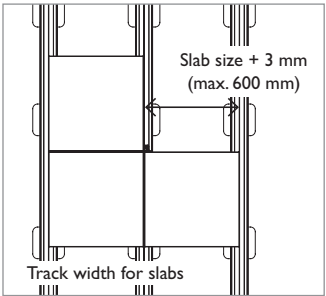
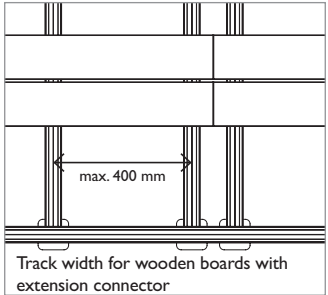
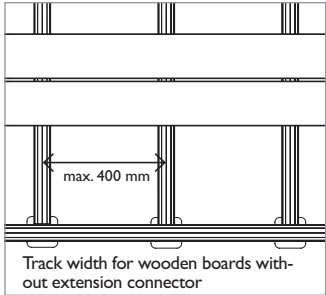
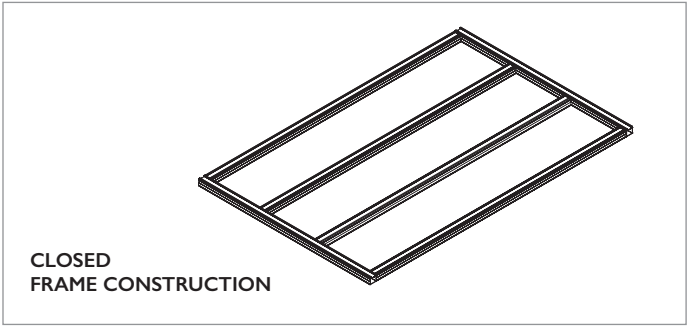
Track width

In the closed frame construction, the distances of the parallel longitudinal profiles are called track width. The maximum track widths for the respective floor covering must be observed here.

Important: The specifications of the respective covering manufacturer must be observed primarily.

Wood / WPC	max. 400 mm
Slabs	max. 600 mm (slabs + 3 mm)

Tip: Always measure distances from the centre of the base profiles and observe distances between joints.



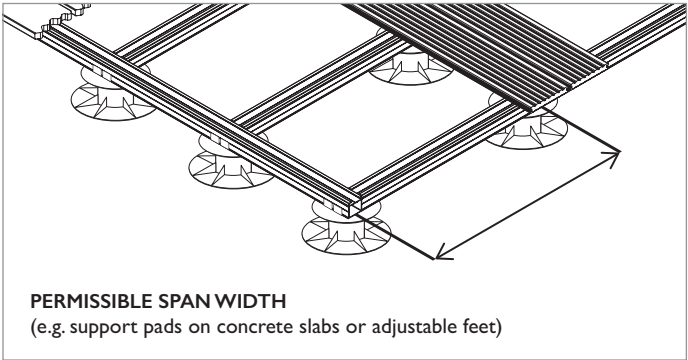
Span widths for support points

Depending on the track width and load capacity, the maximum permissible span widths for the support points must be observed.

Maximum permissible span widths for PROSTILTadvance aluminium base profiles

Track width	300 mm WPC	400 mm WPC	500 mm WPC	600 mm Tiling/ceramics
Load capacity (area-related)				
2 kN/qm	1450 mm	1350 mm	1250 mm	1200 mm
5 kN/qm	1100 mm	1050 mm	950 mm	900 mm
max. permissible span width				

DIN 1991-1-1, the maximum fall height from 600 mm and the permissible deflection with a span of 1/200 form the basis for calculating the values specified in the table. For optimum installation of the patio, we recommend not to fully utilise the maximum possible span widths to keep the deflection as low as possible.



You can find our patio configurator on our website. If you have any queries, please contact us.

GENERAL INFORMATION

Patio covering

Wooden boards

Floorboards can be mounted on the PROSTILTadvance aluminium sub-construction system with and without groove. Floorboards with groove can be installed without visible screws with the PROSTILTadvance multiclip T. Floorboards without groove are screwed directly onto the PROSTILTadvance aluminium substructure.

Use modified decking boards or dried wood with low swelling and shrinkage. Acclimatise the wood 48 hours before laying. The system is also suitable for WPC and BPC floorings. The formation of waterlogging (critical for WPC and BPC floorings) can be avoided with end-to-end vertical water drainage boreholes in the base profile (distance approx. 1-1.5 m, max. Ø 8 mm).

IMPORTANT: The specifications of the covering manufacturers must be taken into account primarily. Contact your specialist dealer to obtain information about product standards and recommendations for use for patio as well as floor coverings from GD Holz.

Plattenbelag

Only use frost-proof slabs that are suitable for outside areas. The minimum height for ceramic tiles is 20 mm, for natural stone 30 mm and for artificial stone 40 mm. Exceptions can only be approved by the flooring manufacturers. These must be authorised by the relevant manufacturer for laying on mortar-free systems. For dark slabs, we recommend the use of the PROSTILTadvance base profile blackline. This results in a uniform floor covering without disruptions.

IMPORTANT: The specifications of the covering manufacturers must be taken into account primarily. Contact your specialist dealer to obtain information on product standards and recommendations for use.

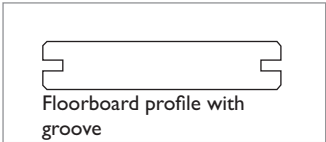
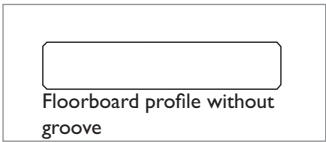
Ground

Before starting to build, you should clarify whether planning permission is required for your new patio and whether guidelines like for example a specific distance to the neighbouring property must be observed. You should also know the current location of power lines and water pipes. The size of the patio should consider the required space for seating areas, sun loungers or suitable sun protection.

Make sure the substrate is able to take a weight. A compacted ballast bed is ideal. The soil must first be excavated for the ballast bed (depth approx. 30-40 cm).

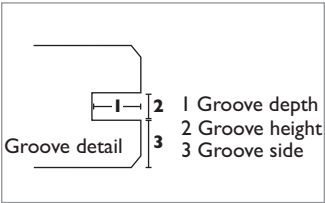
The ballast bed should have a gradient between 1-2% (away from the building, to ensure water drainage). The ideal solution is to apply a layer of gravel at least 3 cm high to level out a slope. However, this is not absolutely necessary to ensure best results, it is just to make the work easier. To prevent plants growing in the subsoil, we recommend using a root fleece. Concrete slabs are suitable as solid underlays for patios for example, finished with support pads or height-adjustable feet for balancing.

IMPORTANT: The later installation height must be considered during preparations. Sufficient rear ventilation must be ensured for wooden boards. A deeper ballast bed or adjustable patio feet can compensate variations in height.

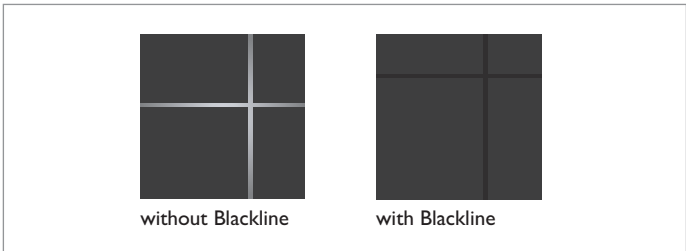


SUITABLE FLOORBOARDS WITH GROOVE FOR PROSTILTadvance MULTICLIP T

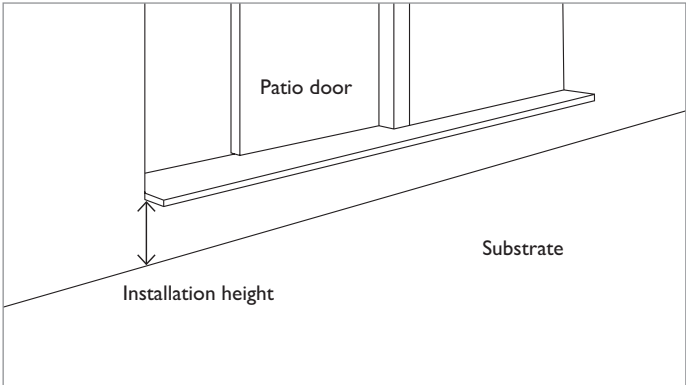
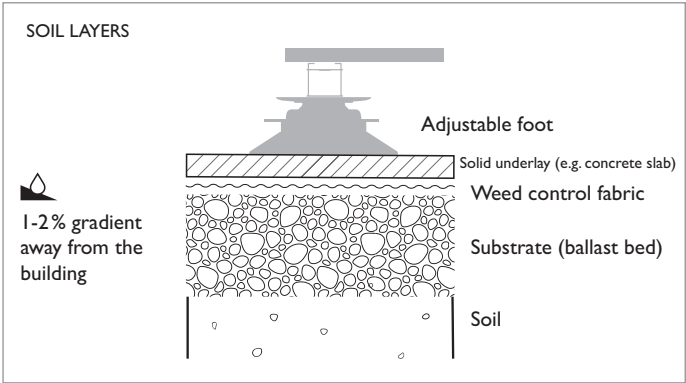
Floorboard thickness:	20-26 mm
Groove height:	> 3,5 mm
Groove side:	6-12 mm
Groove depth:	6,5-13 mm



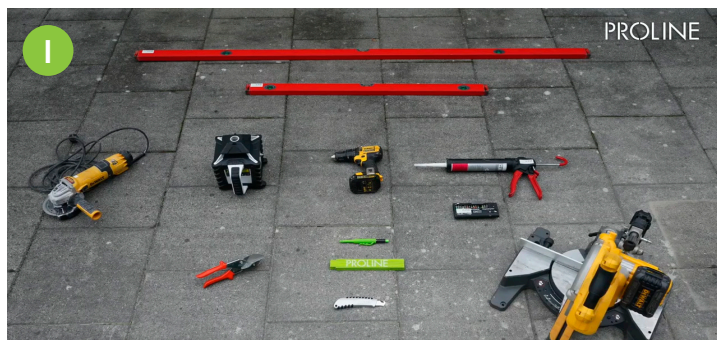
SUITABLE SLABS FOR PROSTILTadvance MULTICLIP X
Slabs from a height of 10 mm



NOTE
Edging/abutment
From a planning point of view, it must be ensured in advance that outer rows of pedestal supports can be stabilised by means of an abutment such as edging stones, masonry walls, elevations or similar and secured against slipping. This particularly applies to roof waterproofing, bitumen-based exterior waterproofing and gravel substrates.



Installation instructions for PROSTILTadvance aluminium sub-construction system for outdoor ceramics, concrete and natural stone



Tools: folding ruler; cutter knife, pencil, spirit levels in various lengths, rotating laser, silicone gun, bevelling shears, cordless screwdriver, angle grinder, mitre saw with metal blade.



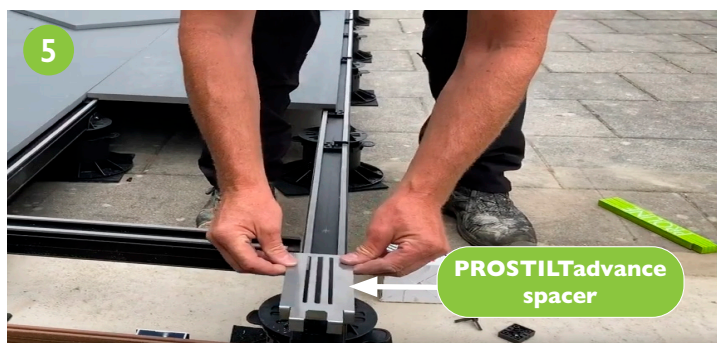
For example, when laying outdoor tiles with rectangular formats of 50 cm x 100 cm, we recommend laying the substructure profiles in rows. When dividing the patio area, make sure that it is partitioned symmetrically. Levelling strips should be at least half the width of the flooring material. In addition, make sure that the long side of the flooring material is always parallel to the substructure profiles. This ensures that the flooring has the largest possible contact surface on the substructure profiles.



The flooring is then installed row by row. This method of installation is particularly beneficial as the lengthwise axis of the substructure profiles can be adjusted when the flooring is being laid.

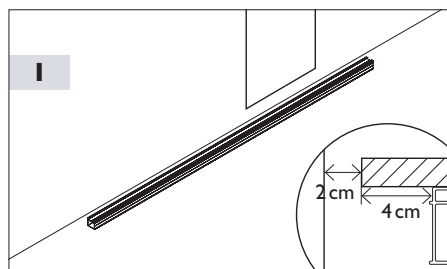


Cross braces are built at the head ends of the patio or decking surface by means of suitable substructure profile sections and PROSTILTadvance corner connectors. One cross brace requires two brackets and eight screws. For long patios, we recommend using a central cross brace to ensure stability and to compensate better for dynamic movements on the flooring.

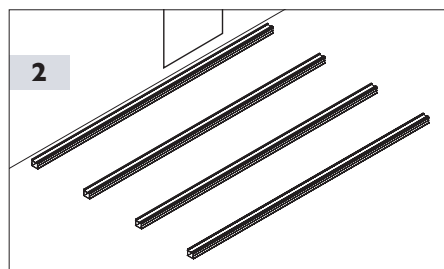


PROSTILTadvance spacers are to be fitted on the free ends of the flooring. These are absolutely necessary to prevent the flooring from "migrating" over the edge of the patio. The PROSTILTadvance clip U spacer spacer shown at the top of the image features the described retaining function and a mounting bracket for the facing profile.

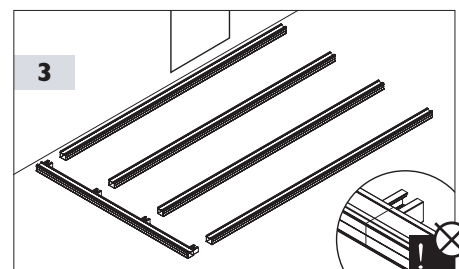
INSTALLING THE SUBSTRUCTURE WITH WOOD-PLASTIC COMPOSITE (WPC) AND WOODEN FLOORBOARDS



For patios joining onto the house, we recommend laying the first track along the house wall. The correct distance to the house wall must be ensured (total of 6 cm: ground overhang approx. 4 cm, distance to wall at least 2 cm).

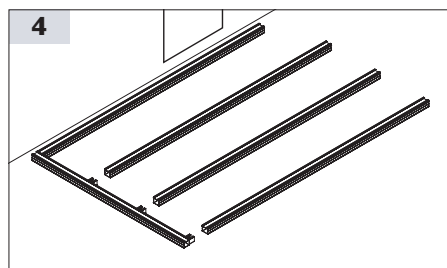


We recommend preparation of all longitudinal profiles to start with. For this purpose, shorten the base profiles to the desired length, or attach additional base profiles with the PROSTILTadvance connector L (see below "Profile connections").

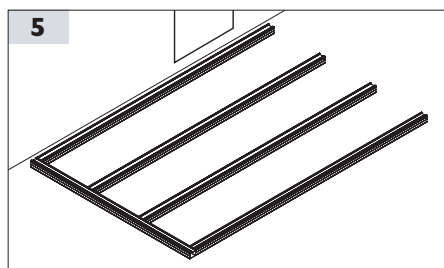


Then prepare the lateral ending profiles. Shorten or extend the base profiles for this purpose and install the Q connectors at the correct distance (see p. 2 "Track width").

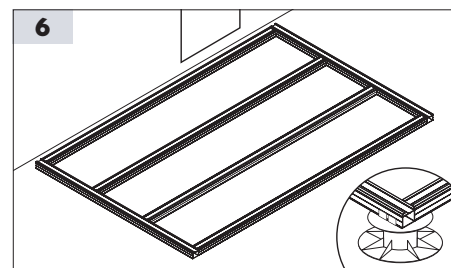
Refer to "Profile connections" for information on installing the PROSTILT connector Q.



Close the first corner connection by connecting the side ending profile with a longitudinal profile. Attach the profile to the PROSTILTadvance connector Q for this purpose and screw tight.



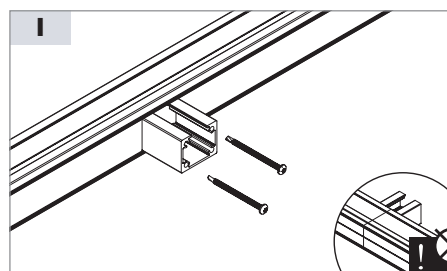
Then connect all other longitudinal profiles to the lateral end track bit by bit.



The frame can now be closed by installing the second lateral ending profile. The closed frame construction can now be placed on support pads or adjustable feet and aligned.

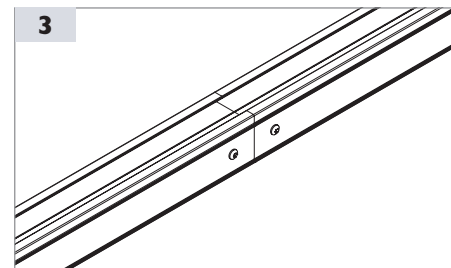
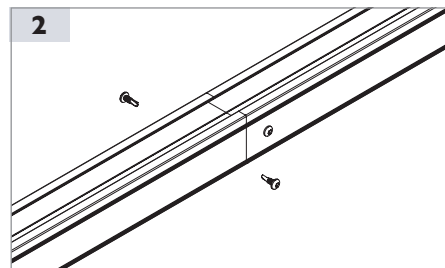
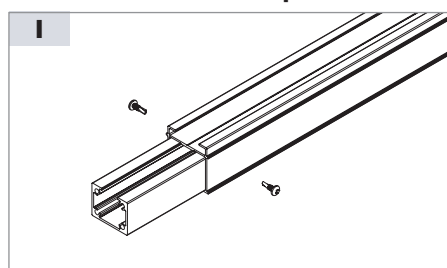
PROFILE CONNECTIONS

Install cross and corner connections with the PROSTILTadvance connector Q
Recommended for wood-plastic composite (WPC) and wooden floorboards



Please note: The PROSTILTadvance connector Q cannot be directly installed on a profile extension connector.

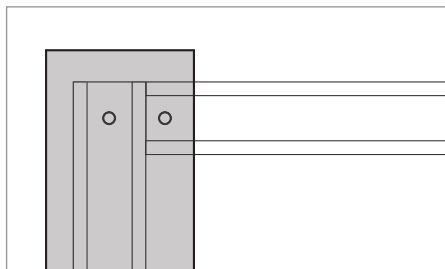
Extend PROSTILT base profiles with the PROSTILTadvance connector L:



Please note: There must be a support point (support pad or adjustable foot) below the extension connector. The maximum permissible distance for support points (see p. 2 "Span width") must not be exceeded here.

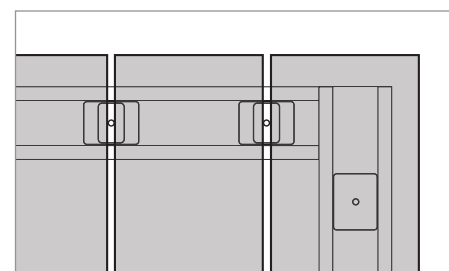
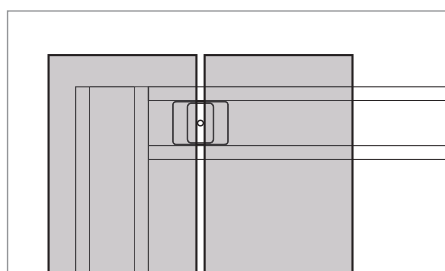
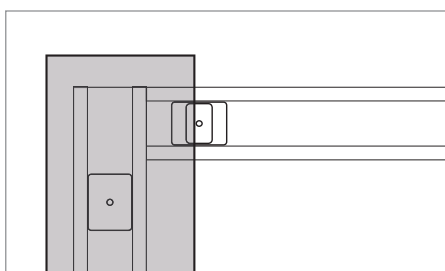
INSTALLING THE PATIO COVERING

Boards without groove (visible screws)



Lay the first board in the centre and attach to each longitudinal profile with two screws (1x ending profile, 1x longitudinal profile). Lay further boards and attach with two screws per longitudinal profile. Ensure a joint distance of approx. 7 mm here.

Boards with groove and PROSTILT Multiclip T (invisible screws)

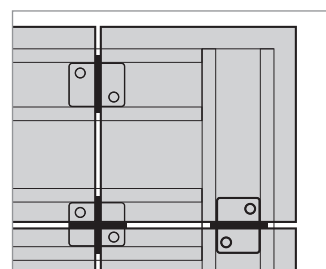
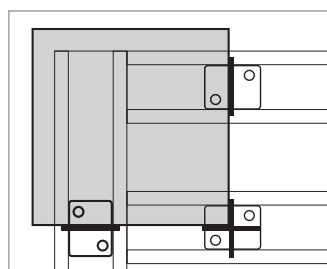
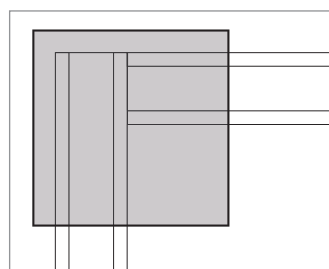
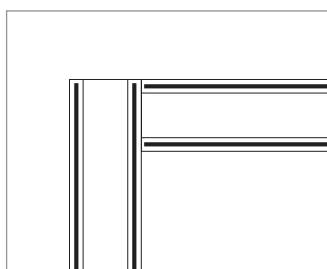


First board: To start with, screw the multiclips (without T adapter) to the first board from below at the distance of the longitudinal profile (with 20 mm screw, not included in the set). Place the board with the screwed multiclips onto the substructure.

Lay the flooring: Now the other boards can be laid. For this purpose, place a PROSTILTadvance multiclip T each into the base profile, push into the groove of the already laid board and screw tight (max. tightening torque 1.5 Nm). Now lay the next board. Ensure a joint distance of 7 mm here.

Last board: As for the first board, screw multiclips into the board from below without T adapter. Then place the board with the screwed multiclips onto the substructure.

Slabs and PROSTILT Multiclip X



Impact sound reduction: Clean the surface beforehand and then stick the PROSTILTadvance soft tape onto the base profiles.

First row of slabs: If the first row of slabs is not secured against slipping with edging like the PROSTILTadvance tile and stop clip, we recommend to attach the slabs to the substructure with suitable mounting adhesive.

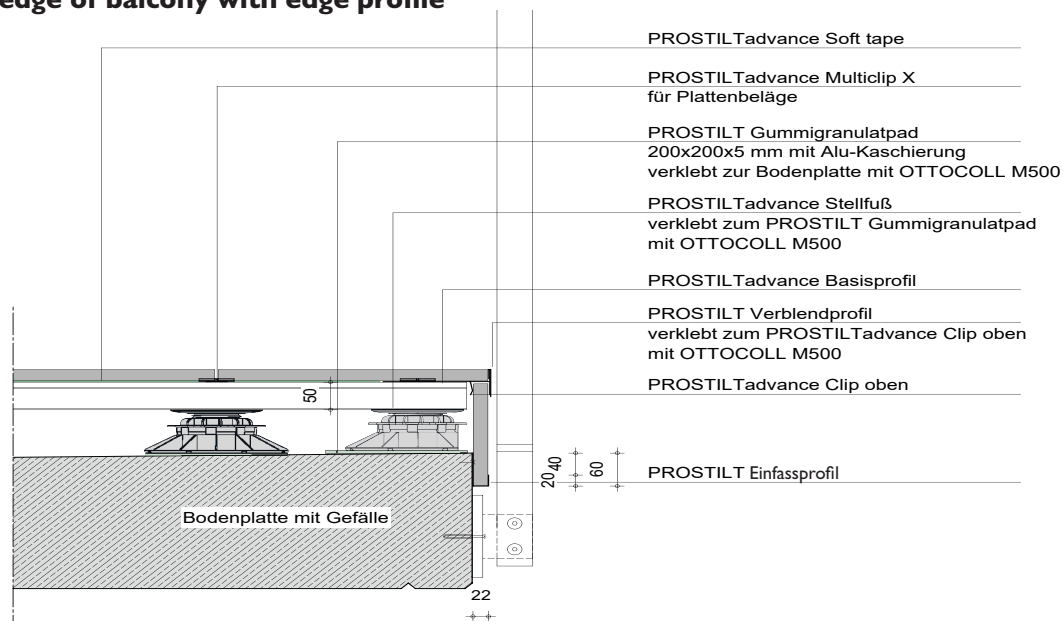
Lay the flooring: For this purpose, click the PROSTILTadvance multiclip X into the base profile, push the clip onto the already laid slab and screw tight (max. tightening torque 1.5 Nm). For the edge slabs, first remove two wings of the X adapter cross at the pre-determined breaking points.

Last row of slabs: Proceed as for the first row of slabs. The PROSTILTadvance spacer with neoprene pad is suitable as edging against slipping. If no edging is used, we recommend to attach the slabs to the substructure with suitable mounting adhesive.

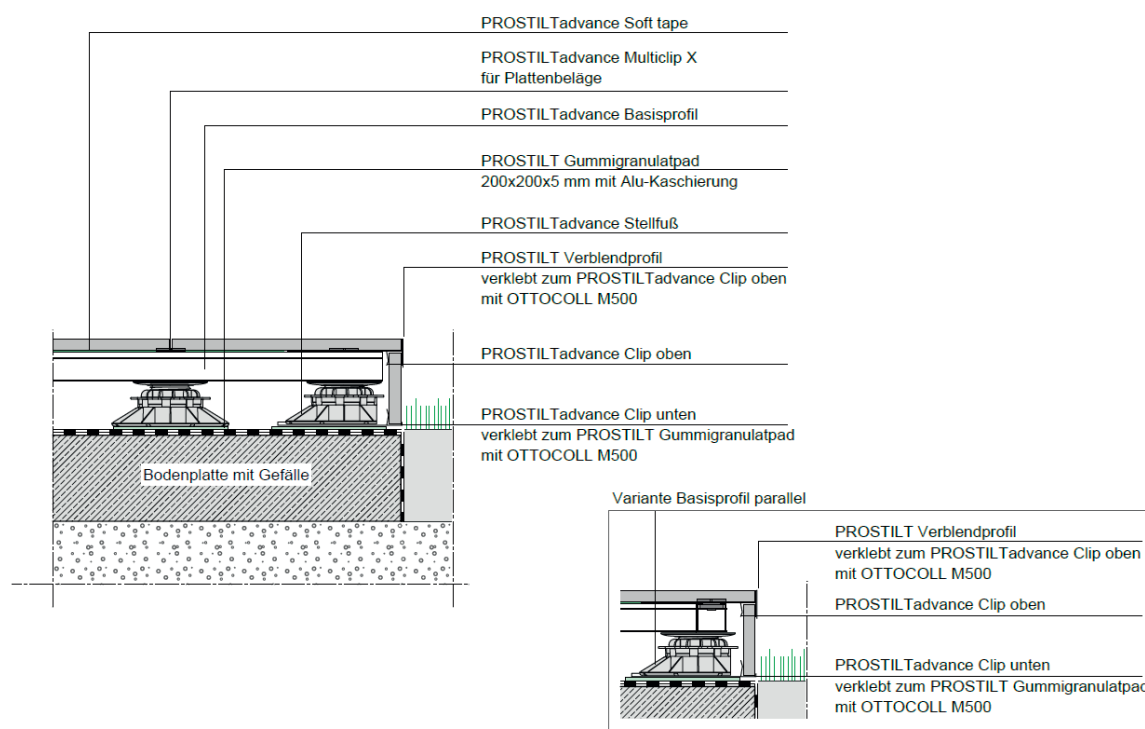
TECHNICAL DETAILS

PROSTILTadvance facing

Outer edge of balcony with edge profile



Outer edge of patio with facing profile



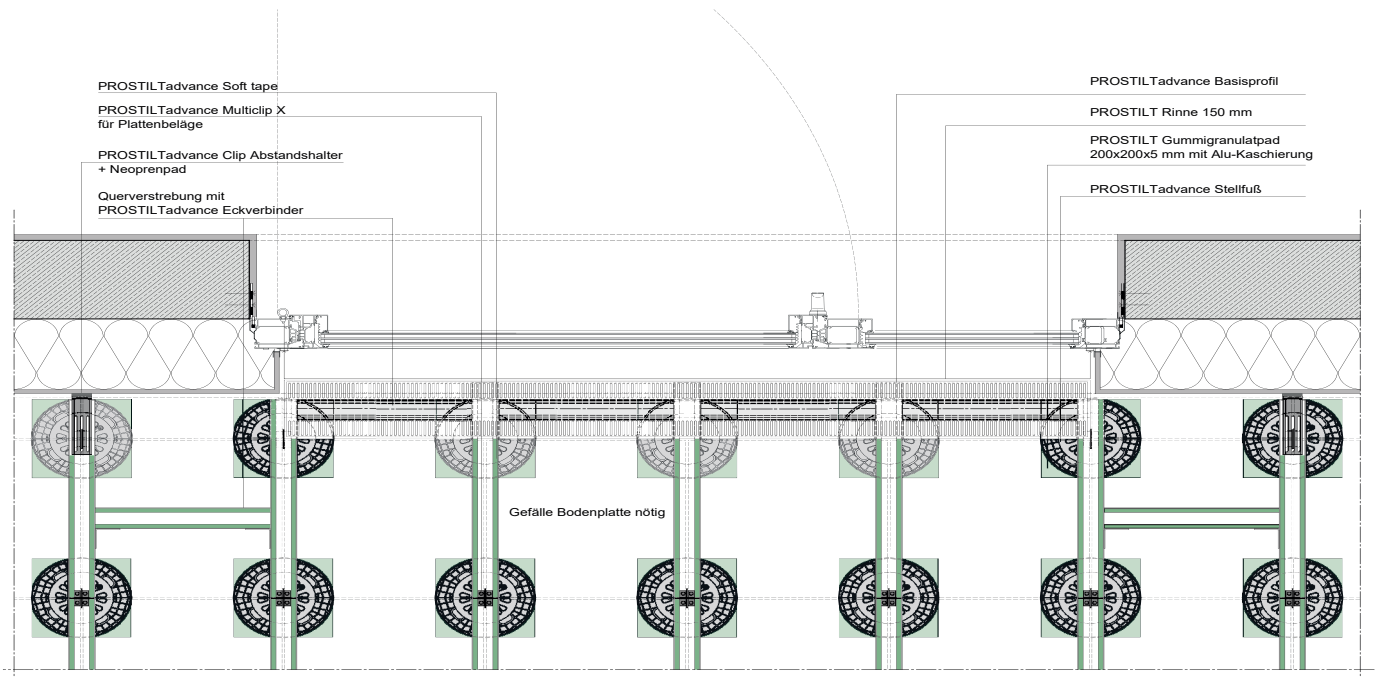
The edging of free laying areas with a vertical facing slab is carried out using the PROSTILTadvance clip U and the PROSTILT edge profile. For this purpose, the facing slab is to be cut from the surface covering material at the corresponding height, and positioned in the PROSTILT edge profile previously screwed to the foundation at the correct height. The top edge of the facing slab is inserted into the bracket of the PROSTILTadvance clip U, which is then screwed to the groove of the PROSTILTadvance base profile with stainless steel screws.

For facing at ground level, instead of the PROSTILT edge profile, the PROSTILT lower clip is used, which receives the facing slab and the PROSTILTadvance adjustable foot. To seal the joint between the facing slab and the surface covering, the PROSTILT facing profile V2A brushed stainless steel is clipped into the top clips. The PROSTILTadvance system components are to be glued with a suitable adhesive (e.g. Ottocoll M500 hybrid adhesive and sealant) to the floor surface as well. The PROSTILT external corner is used for forming the corners.

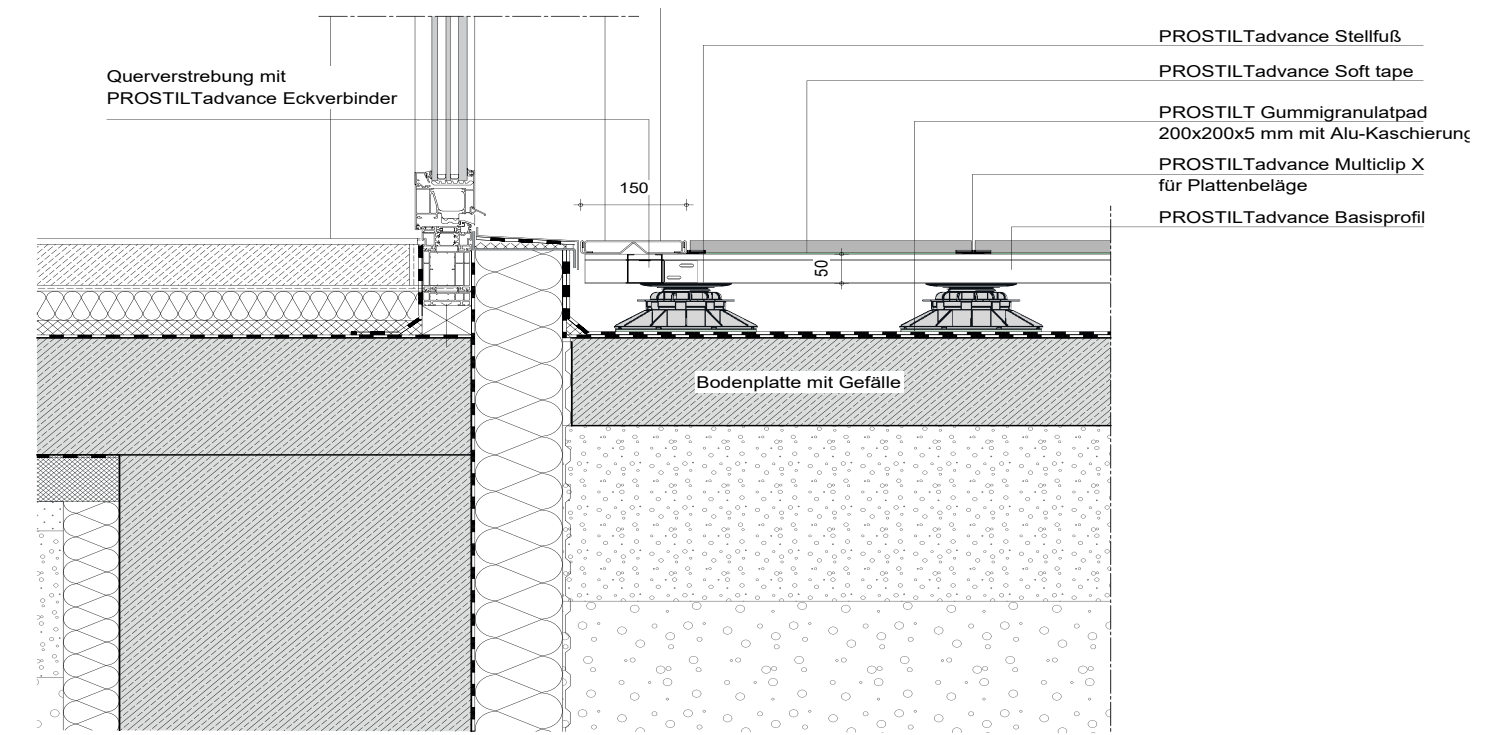
TECHNICAL DETAILS

PROSTILTadvance installation channel set

Connection of the drainage channel to a patio door at insulation level



Connection of the drainage channel to a patio door at wall level



PROSTILTadvance ALUMINIUM SUB-CONSTRUCTION SYSTEM



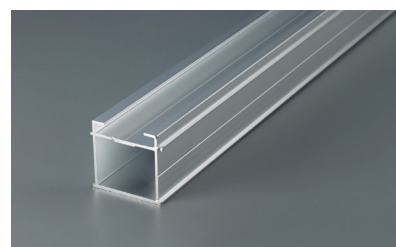
**PROSTILTadvance adjustable foot
basic U**

Art. Nr. 79820 - 79823



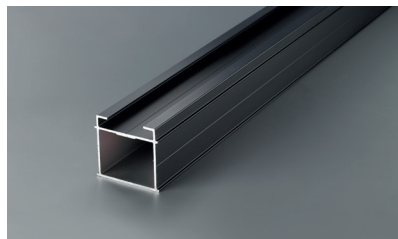
**PROSTILTadvance adjustable foot
basic U**

Art. Nr. 79824 - 79828



PROSTILTadvance base profile

Art. Nr. 79870



**PROSTILTadvance base profile
blackline**

Art. Nr. 79871



PROSTILTadvance connector L

Art. Nr. 79872



PROSTILTadvance connector Q

Art. Nr. 79873



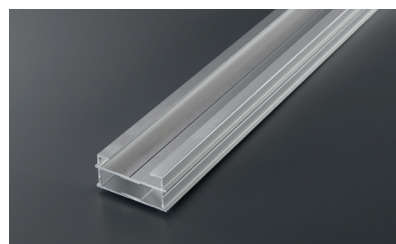
PROSTILTadvance corner connector

Art. Nr. 79894



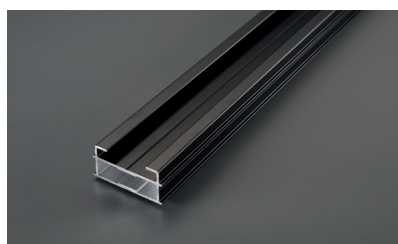
**PROSTILTadvance flexible corner
connectors**

Art. Nr. 79881



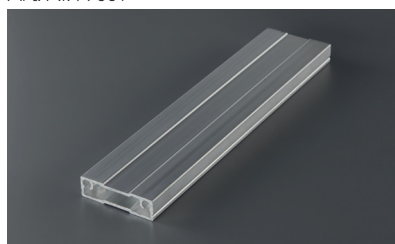
PROSTILTadvance base profile slim

Art. Nr. 79890



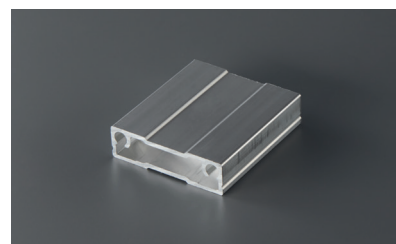
**PROSTILTadvance base profile slim
blackline**

Art. Nr. 79891



PROSTILTadvance connector slim L

Art. Nr. 79892



PROSTILTadvance connector slim Q

Art. Nr. 79893



**PROSTILTadvance corner connector
slim**

Art. Nr. 79895



PROSTILTadvance soft tape

Art. Nr. 79874



PROSTILT rubber granulate pad

Art. Nr. 79818, 79819

NOTE

When using PROSTILTadvance Slim, only the PROSTILTadvance base profile (50 mm) may be used for higher superstructures (over 97 mm, measured from the flooring). Additional pedestal bases may be required for stability reasons.

FIXATION



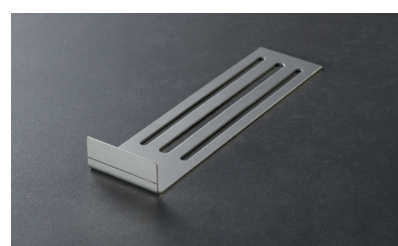
PROSTILTadvance bit

Art. Nr. 94333



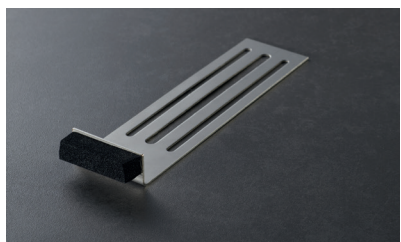
120 PROLINE Price list 2021 PROSTILTadvance flat-head drilling screw

Art. Nr. 94328 oder 94338, 94329



PROSTILTadvance spacer without neoprene pad

Art. Nr. 79868



PROSTILTadvance spacer with neoprene pad

Art. Nr. 79869



PROSTILTadvance clip U upper spacer

Art. Nr. 79880



PROSTILT lower clip

Art. Nr. 79854



PROSTILTadvance multiclip T

Art. Nr. 79875, 79876



PROSTILTadvance multiclip X

Art. Nr. 79877, 79878



OTTOCOLL M500 / M501 hybrid adhesive and sealants

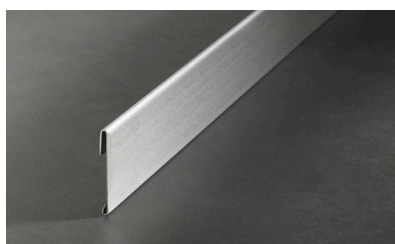
Art. Nr. 93514, 93516, 93517

FACING



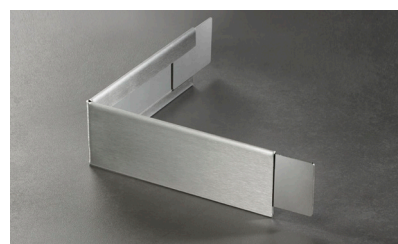
PROSTILT edge profile

Art. Nr. 79886 / 79884 / 79885 / 79883



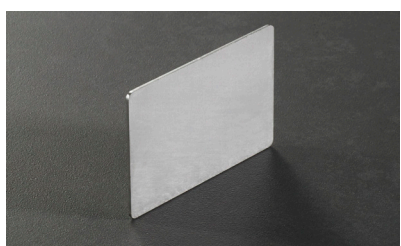
PROSTILT facing profile

Art. Nr. 79850



PROSTILT external corner

Art. Nr. 79851, 79855



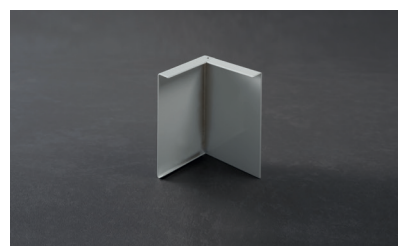
PROSTILT connector

Art. Nr. 79852



PROFORM TOS T profile

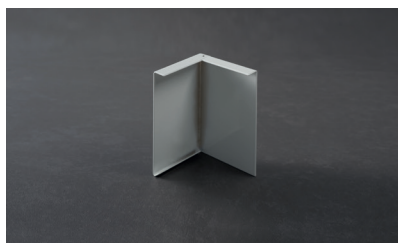
Art. Nr. 76440, 76415, 76416, 76400



PROFORM TOS external corner pieces

Art. Nr. 76240, 76215, 76216, 76200

FACING



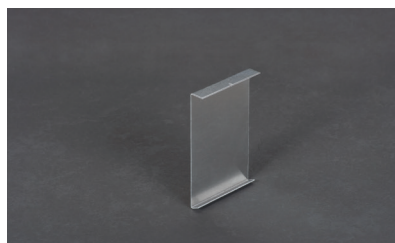
PROFORM TOS internal corner pieces

Art. Nr. 76340, 76315, 76316, 73600



PROFORM W external corner

Art. Nr. 74040



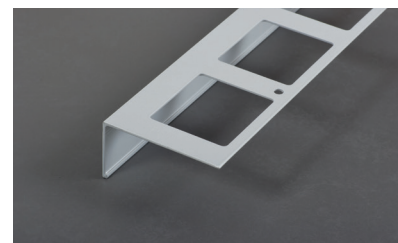
PROFORM TOS connector

Art. Nr. 78240, 78215, 78216, 78200



PROFORM W connector

Art. Nr. 77040



PROFORM W angle profile

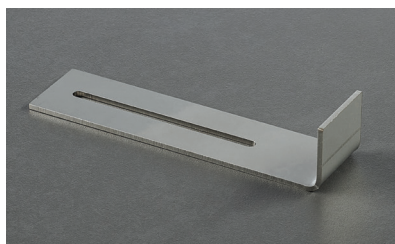
Available in Aluminium powder-coated, aluminium mill-finished or stainless steel, height 40 - 150 mm

CHANNEL SETS



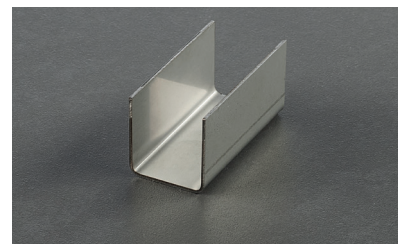
PROSTILTadvance slotted channel
26 x 29 mm

Art. Nr. 79835



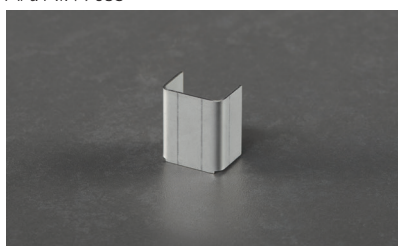
PROSTILTadvance bracket for slotted channel

Art. Nr. 79836



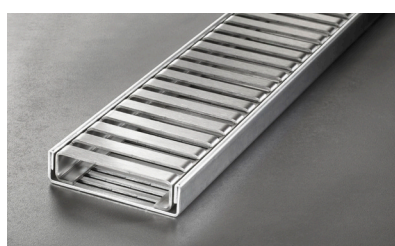
PROSTILTadvance connector for slotted channel

Art. Nr. 79837



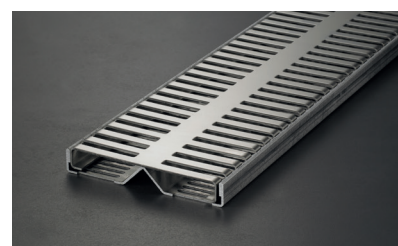
PROSTILTadvance end cap for slotted channel

Art. Nr. 79838



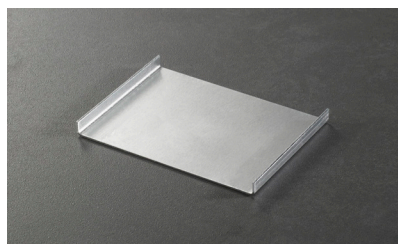
PROSTILT channel set Classic
1000 mm x 85 mm x 21 mm

Art. Nr. 79860



PROSTILT channel set Classic
1000 mm x 150 mm x 21 mm

Art. Nr. 79865



PROSTILT connector for channel set Classic 85 mm

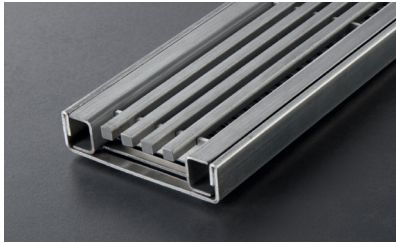
Art. Nr. 79862



PROSTILT connector for channel set Classic 150 mm

Art. Nr. 79867

CHANNEL SETS



PROSTILT channel set Design
1000 mm x 85 mm x 21 mm

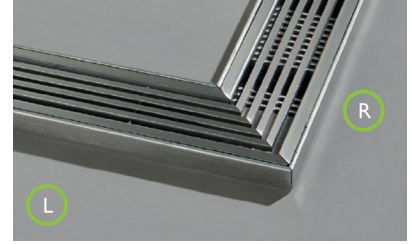
Art. Nr. 79858



79859

1000 mm x 150 mm x 21 mm

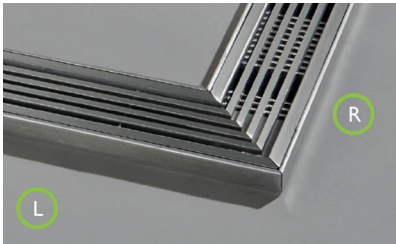
Art. Nr. 79859



PROSTILT channel set Design 85
mm with mitre cut

Art. Nr. 79840 left

Art. Nr. 79841 right



PROSTILT channel set Design 150
mm with mitre cut

Art. Nr. 79842 left

Art. Nr. 79843 right



PROSTILT connector for channel
set Design

Art. Nr. 79848 for 85 mm

Art. Nr. 79849 for 150 mm

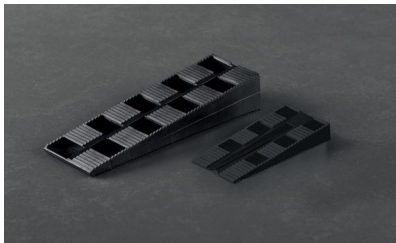


PROSTILT head pieces for channel
set Classic and Design

Art. Nr. 79856 für 85 mm

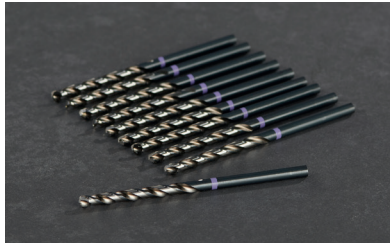
Art. Nr. 79857 für 150 mm

TOOLS



PROSTILT assembly wedges
Gradient 2 - 10 mm / 4 - 23 mm

Art. Nr. 79814, 79815



PROSTILT metal drill HSCO MFD
speed

Art. Nr. 94330, 94331, 94332



PROSTILT countersink 90°
8,3 mm / 12,4 mm

Art. Nr. 94334, 94335



PROSTILT socket wrench E 6,3
Spanner gap 7 mm / 8 mm

Art. Nr. 94337, 94336

All details, references, notes, applicable specialist regulations, guidelines, standards and specialist knowledge are directed towards the German, and insofar as they are congruent, to the existing European regulations and training standards, irrespective of additional country-specific extensions or modifications. All our information is based on our experience and carefully performed tests. The variety of additional materials that might be used and differing construction and working conditions cannot be individually checked or influenced by us. The fulfilment of an outstanding service contract and the manufacturing of a demonstrable functional capability of the trades is therefore dependent on adhesion to the current VOB (German Construction Contract Procedures) regulations and recognised technological rules.

Our details do not preclude responsible planners and processors from their duty to independently assess the conditions of a building and suitable application of the products. In case of doubt, please seek technical application advice or carry out your own tests. The manufacturer's guidelines for laying and processing the surfacing material or the guidelines for other products used must be observed.

The publication of this product data sheet invalidates all previous product data sheets.

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General information

The generally applicable specialist carpentry regulations 02 for balconies and patios must be complied with during installation and assembly. Galvanised screws cannot be used in combination with aluminium. No direct connection to chlorinated environment.

The range of materials and products for patio coverings is ever increasing. For this reason, the respective manufacturer specifications must be observed primarily with regard to material- and manufacturer-specific properties. (Source: GD Holz Terrassen und Balkonbeläge)

Care and maintenance

You have decided on an aluminium substructure, which is weather-resistant and maintenance-free. Please refer to manufacturer's instructions for maintaining the patio covering.

Disclaimer

In case of unprofessional and unsuitable assembly, misuse of the product and faulty installation, the manufacturer does not accept any liability. Ensure personal safety during assembly. Safety regulations and specialist information from specified sources must be observed. Subject to technical changes.