

INSTALLATION MANUAL

HORIZEN

Horizen groove posts: fence elements, mounting accessories and maintenance tips



Variable Horizen panel elements



WE THANK YOU...

for your purchase or your interest in Horizen panel elements.

Horizen offers a wide range of options for configuring your fencing with durable and easy to maintain elements. In the Horizen series, you can choose between two modern materials: WPC (coloured wood plastic composites) or coloured, powder-coated aluminium (a lightweight and highly durable building material).

Combine the elements of the various series with and among each other. The tongue and groove profiles of the series Horizen WPC, Horizen ALU can be interchanged or replaced by Dekor profiles in glass or metal, entirely in accordance with your wishes. Over the following pages, we present all the Horizen components and the mounting of the fences. Not only does this manual provide valuable tips on assembly, it is also worth taking a look to find out about planning your fence and how to prepare the assembly. We hope you enjoy planning and assembling your Horizen panel elements.

Material properties in detail:

WPC

WPC consists of natural fibres, synthetic materials and additives in a ratio of approx. 60/35/5 % and therefore has typical properties.

It is therefore possible that there are visual deviations between individual articles or production series.

The surface of normal WPC is not granular and structureless. Unlike the surfaces of BICOLOR and PLATINUM, it has a calmer colour and appearance.

For the WPC BICOLOR elements, the original WPC was mixed with other paint pigments in a special technical treatment. The resulting structure and pigmentation gives the material a natural effect, thanks to its colour nuances. As a result, each profile is visually different.

WPC PLATINUM elements consist of a WPC hollow chamber profile with an additional special coating. This means that the profiles are even more stain-resistant and water-repellent than normal WPC profiles.



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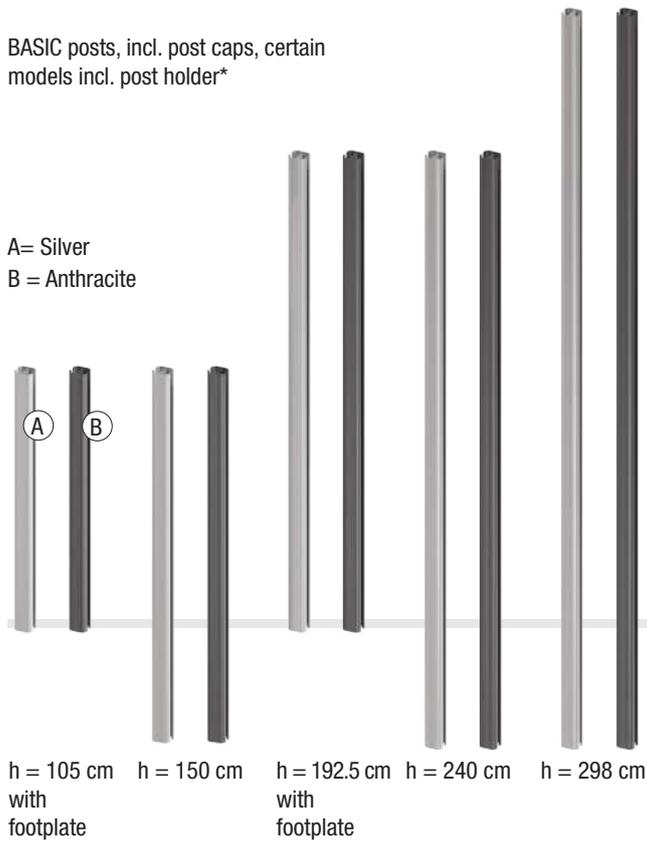
Aluminium (anodised)

Our panel profiles in Aluminium are powder-coated and easy to maintain. Due to weathering, the colour of the panel profiles becomes paler, developing into a trendy, matt metal look.

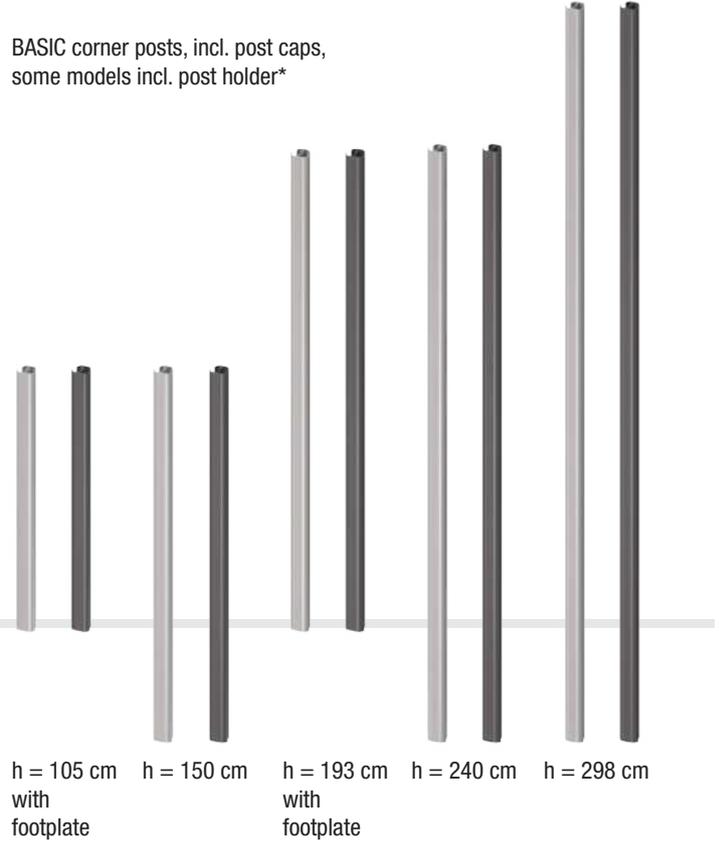
Horizen groove posts and accessories

BASIC posts, incl. post caps, certain models incl. post holder*

A= Silver
B = Anthracite



BASIC corner posts, incl. post caps, some models incl. post holder*



End profiles supplied with the posts



U-assembly profile, Lengths: 105/195/240 cm, without mounting accessories

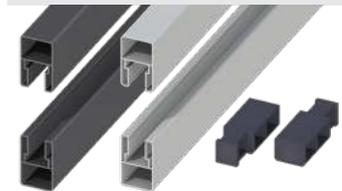
Post caps



Post caps for corner posts



Post holder covering for post holders on concrete



Vertical adapter set incl. T-connector, for WPC and ALU



Start and end profile for WPC and ALU



Adapter profile for dekor elements



Design profile for WPC and ALU



Horizen light strip for WPC and ALU

Ground attachment



Footplate/post holder for concrete, zinc-coated

Chemical anchoring set for 2 anchors for concrete, incl. assembly mortar

Assembly adapter for post holders for concrete

* You can find an overview of the size indications of installation widths and possible combinations of panels and accessories, on page 10.

All Horizen elements and components for the combination with Horizen groove posts

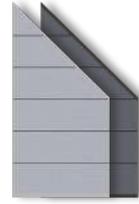
Horizen WPC CLASSIC Anthracite, Almond*, Sand*, Grey
End profiles Anthracite, Silver



*BICOLOR



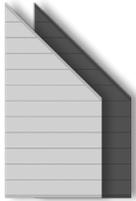
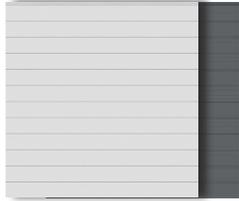
Horizen WPC XL Grey , Anthracite
Panel set with sealing profile top and bottom



Horizen WPC PLATINUM Brown, Grey
Panel set with sealing profile top and bottom



Horizen ALU Silver, Anthracite
Panel set with sealing profile top and bottom



Horizen Dekor profiles (15 and 30 cm high) for the panels WPC, ALU. The Dekor profiles replace certain WPC or ALU profiles.



Bubble



Stainless steel - V2A

Gamma

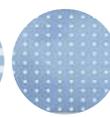


Delta



Safety glass

Theta



Matte glass



Art glass

Horizen light strip



Can be installed in WPC and ALU panels.

Safety instructions and tips for transport, storage and handling of Horizen components.

Please note for all Horizen construction elements:

- Unassembled panels may become warped if stored incorrectly, i.e. not upright. Avoids point loads, especially with profiles and strips.
- Make sure that the goods are protected from rain and are not directly exposed to sunlight (to avoid excessive warming of the material)
- Do not assemble in frost or high temperatures. The outside temperature and ground temperature should ideally be between +5°C and +25°C. The Horizen elements must be able to adapt to this temperature prior to assembly.
- The assembly of all Horizen construction elements must only be carried out with the appropriate and proven Horizen components from Betafence and as described in the current assembly instructions at the time of assembly.



Working with WPC:

The profiles can be cut with hard metal tools.

Working with ALU :

Construction elements in aluminium or steel can be shortened with a fine-toothed saw blade for metal or with a hacksaw.

General rule for working with construction elements in metal: Do not shorten construction elements in aluminium or steel with a grinding wheel!

The material may burn and the lacquer flakes off. Coat the cut areas with a commercial varnish, to prevent corrosion.

BASIC posts / BASIC corner posts – Accessories and ground attachment

In our product range, we differentiate between posts that are directly sunk into concrete and posts that are installed on top of concrete with a post holder.

Please bear in mind that we only provide a guarantee if the BASIC posts and

BASIC posts Length	Ground attachment
105 cm	Ground anchor/footplate ²
150 cm	sunk into concrete ³
192.5 cm	Ground anchor/footplate ²
240 cm	sunk into concrete ³
298 cm ¹	sunk into concrete ³

¹⁾ 298 cm-long posts, primarily intended for slopes. When installing panel elements that are higher than 190 cm, you should consult a specialist planner who will advise you on the foundations and possible additional reinforcement by wind anchors on site.

corner posts are installed in the supplied combination and in accordance with our instructions. An overview of the authorised assembly options can be found in the following tables.

BASIC corner posts length	Ground attachment
105 cm	Ground anchor/footplate ²
150 cm	sunk into concrete ³
192.5 cm	Ground anchor/footplate ²
240 cm	sunk into concrete ³
298 cm ¹	sunk into concrete ³

Assembly with a ground anchor/footplate, is not authorised with a post longer than 200 cm.

²⁾ The ground anchor/footplate is supplied with these posts.

³⁾ Without ground anchor/footplate

Tools

Measuring, marking and assistance:

Roller gauge, set square, spirit level, masonry cord, pickets, support slats, measuring slats, tensioning screws, logs, spacer slats.

Concreting:

Spade, shovel, mortar tub, bucket, wheelbarrow, possibly concrete mixer.

Assembling:

Drill, metal drill bits (2-10 mm), concrete drill bits (14 mm), screwdrivers (crosshead, hexagon and torx), spanners, torque spanners, rubber mallet, saws for wood and metal, circular saw.

Other: silicone gun

Explanation of the symbols/Legend



Drill with the indicated diameter.



Screw tight with the specified torque.



Element can be shortened or must be shortened to the indicated size.



Remove protective film before installation at room temperature.



Glue construction elements.



Article must not be installed upside down.



Preparation and basic construction principles

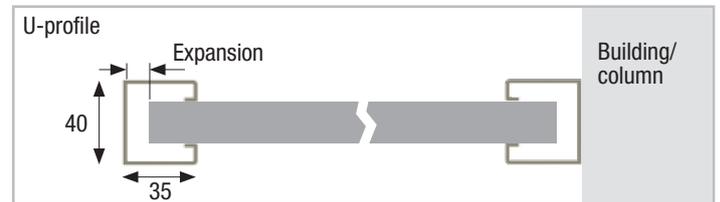
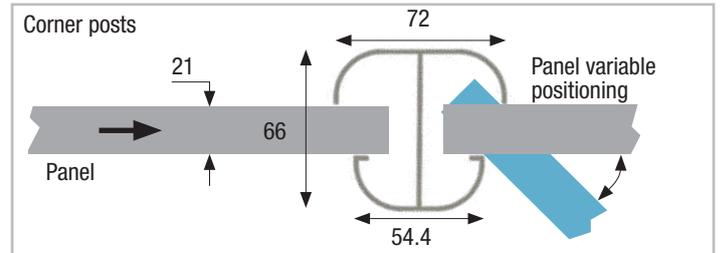
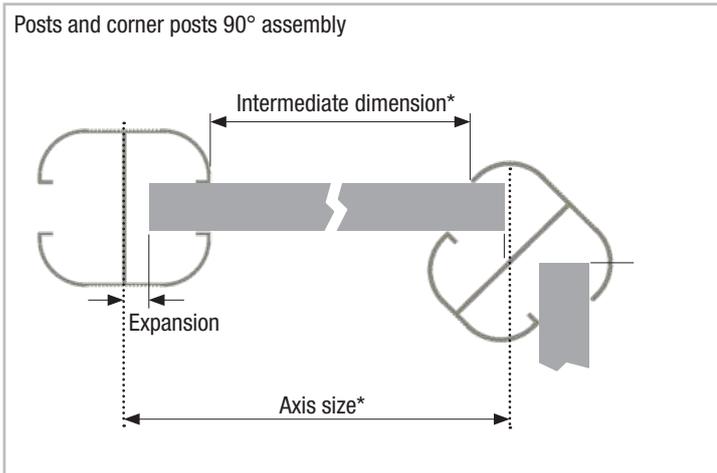
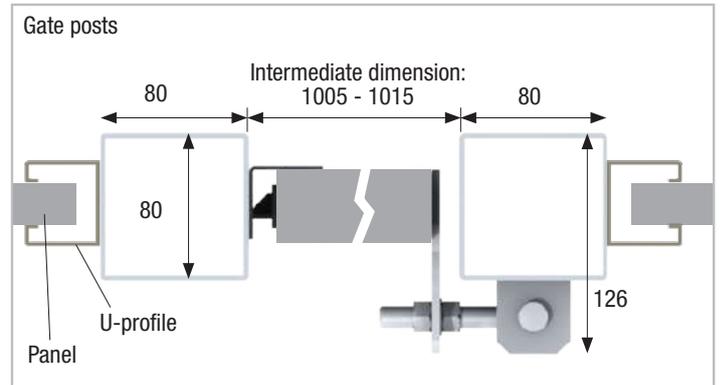
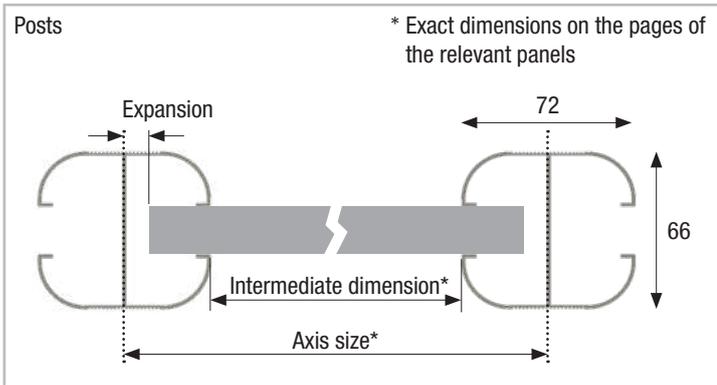
Planning is essential! Using the assembly instructions, draw up a construction plan for your Horizen fence, to determine the correct spacing and positioning of the elements. The axis size always determines the spacing of the posts, which you will find on the overview of the relevant panels.

These assembly instructions are the basis for all construction variants. When planning and executing the work, take into account all local regulations and building codes and adhere to the generally used rules of the trade. No guarantee can be invoked in the event of deviations and resulting defects.

Responsibility for proper installation on existing buildings and for the impact on statics, insulation and fire protection lies with the planners and the professionals involved.

Application properties: The Betafence panels and screening systems do not serve as balustrades and are not authorised for use in this regard.

Basic principles: dimensions and explanation of the terminology (indicated in mm)



The necessary space for material expansion is created automatically when the panels are precisely aligned in the centre, when they are assembled with the

specified axis sizes and intermediate dimensions.

Combinations of the panel-series - heights of the panel elements

All elements of the Horizen panels can be freely combined with each other. As the panel height is not always the same, it is best to align the top of the panels at the same height in order to obtain a visually uniform appearance. If you plan to install a fence with a single or double gate, install the gate first and then align the remaining panel elements with it.



The height indications are guide values for your planning. They may vary slightly due to temperature or by tongue and groove assembly.

- Horizen WPC CLASSIC: 184.5 cm
- Horizen WPC XL: 184.5 cm
- Horizen ALU CLASSIC: 184.5 cm
- Horizen gates: 180 cm
- Horizen light strip: Height of the panel elements + 3 cm
- Horizen Dekor profiles: no height difference in the panel elements.
- Horizen WPC PLATINUM: 184.5 cm

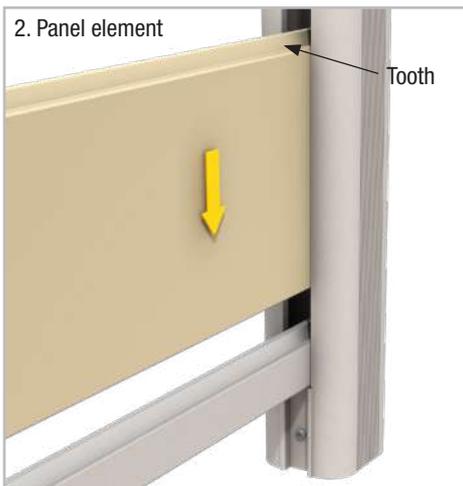
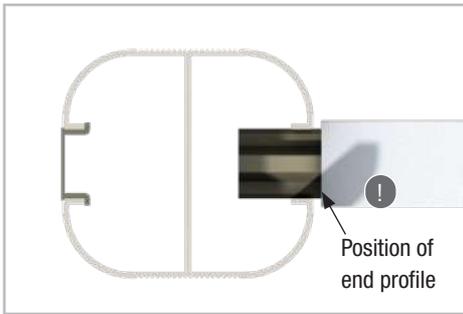
Assembly on sloping terrain

For significant slopes, installation with posts for concreting is recommended. Please note: all panels in the Horizen range must be installed horizontally between the posts!

There are two options:

- The elements and profiles run level at the top, with or without a large space between the bottom of the panel and the ground, depending on the slope.
- The profiles or elements are installed step by step, i.e. always with a height difference in relation to the previous panel.





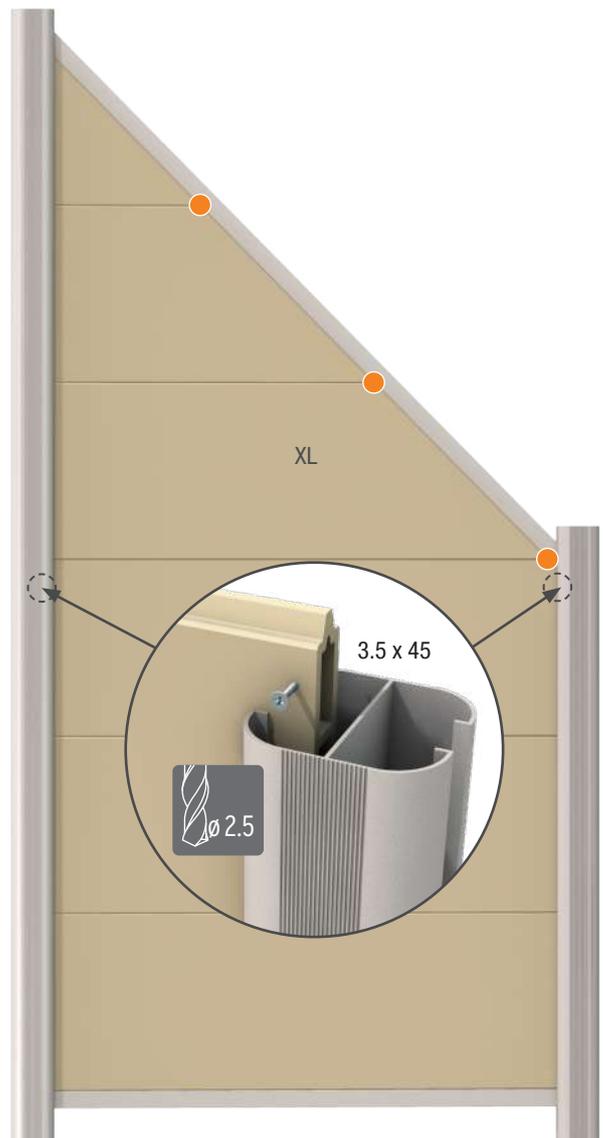
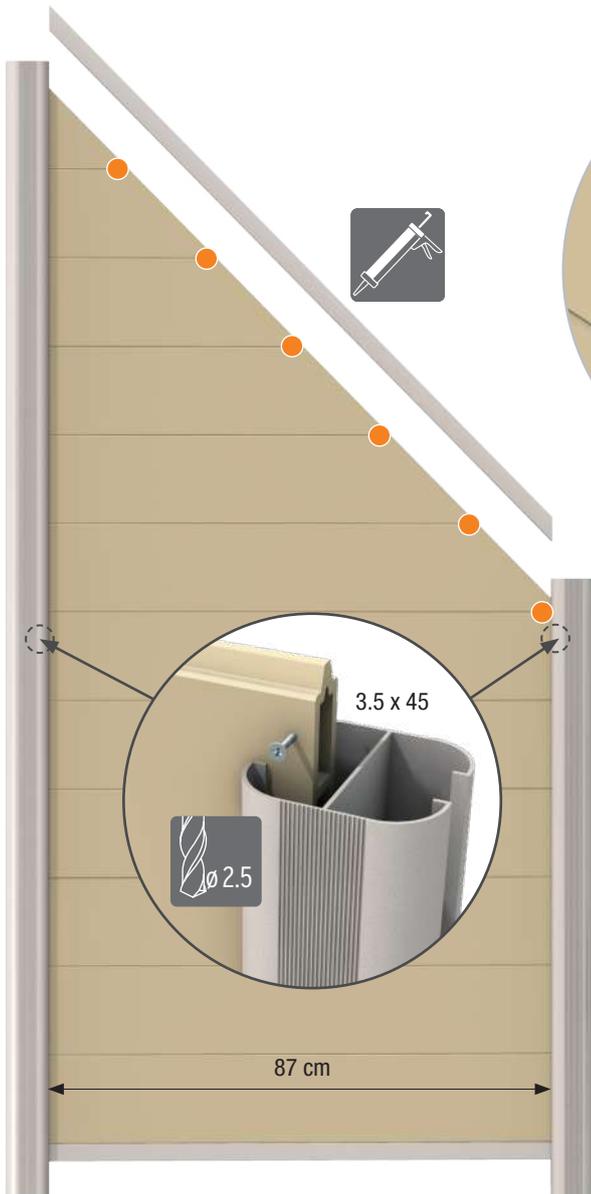
Assembly sequence

First fit the spacer (use only at the bottom) into the post groove and then insert the start profile (1) and centre it >> install the first panel profile (2), the tooth facing up, centre >> second, third, etc. , >> fix the last panel profile with a screw (3) >> put the end profile in place (4) and glue >> install and glue post caps (5).

Assembly tip

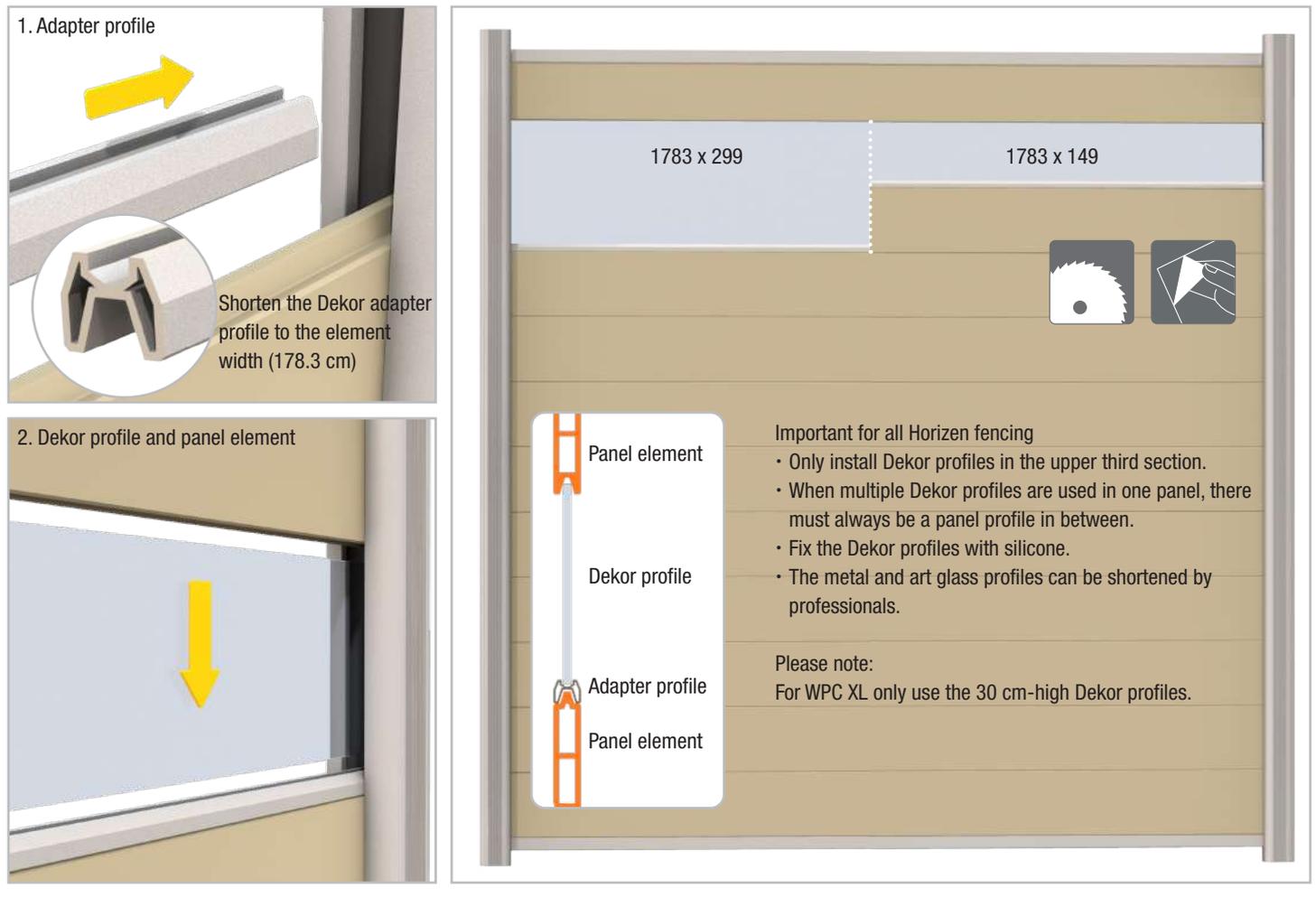
When slotting the panels in, lightly press the groove in the post with a wooden block.
For ALU profiles, a lubricant for sanitary use can also be applied.





Elements can be shortened on site.
 Tip: Desired axis size
 minus 17 mm for WPC,
 minus 10 mm for ALU

Dekor profiles with WPC / ALU



Horizen design profile

Horizen design profile, Alu Anthracite, l = 179 cm

Horizen design profile, Alu Silver, l = 179 cm





Securing What Matters

Proud to be a PRÆSIDIAD brand, Betafence is part of a global network, working alongside Guardiar and Hesco as a leader in perimeter security systems and solutions.

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