

Strong, smart and super fast installation system for UPM ProFi Deck 150 and Piazza Pro deck boards

UPM ProFi® Click System

Installation Instructions



For installation with UPM ProFi Deck 150 boards use Click Alu Support Rail 150.

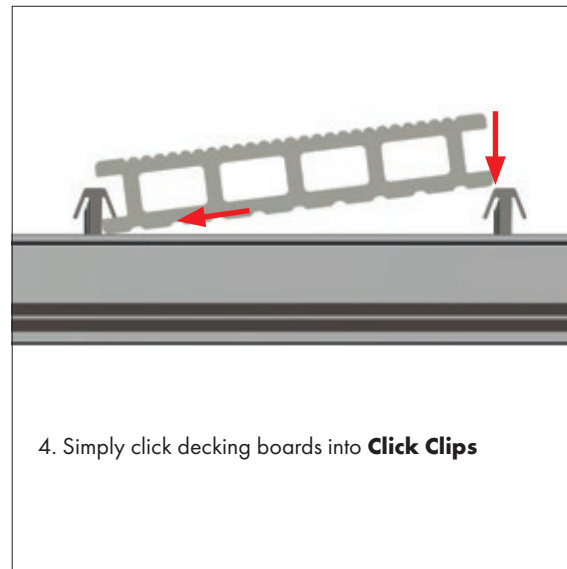
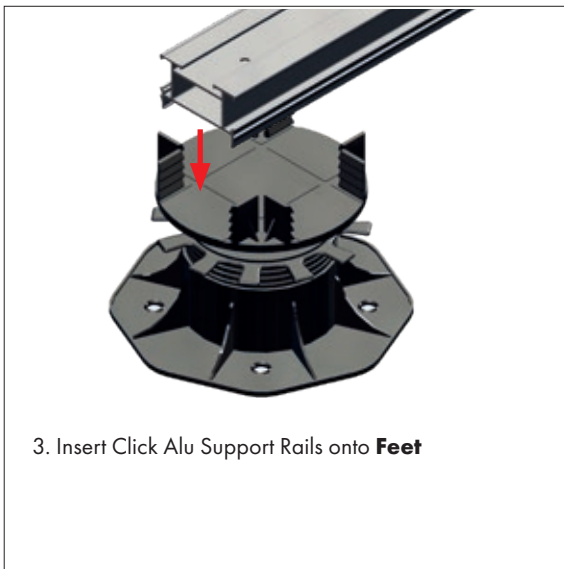
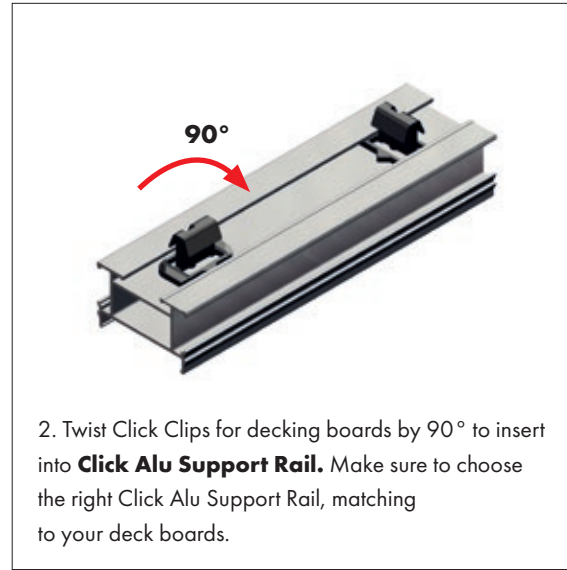
For installation with UPM ProFi Piazza Pro boards use Click Alu Support Rail 140.

It is important to follow the instructions carefully.

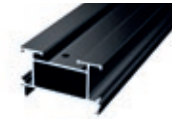
Failure to do so may lead to a reduced product performance and will invalidate the manufacturer's guarantee. If you are in doubt, please contact your UPM ProFi distributor's representative and / or visit www.upmprofi.com for further information.

Note! Please ensure that you meet the requirements of the local building regulations. Please be careful not to scratch new boards when using sharp edged tools or other implements during installation.

MAIN PRINCIPLES OF UPM PROFI CLICK SYSTEM

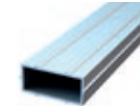


UPM PROFI CLICK SYSTEM COMPONENTS



Click Alu Support Rail 150 / 140

- ✓ Creates strong and durable structural frame for decks.
Max loading of 400 kg/m²



Connector for Click Alu Support Rail 150 / 140

- ✓ Enables strong and stable lengthwise connection of support rail



Click Clip

- ✓ Enables fast and firm twist-lock installation of deck boards



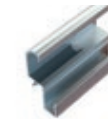
Direct Fix Clip

- ✓ Eliminates board "wander": boards stay in position & end gaps remain even



Click Start Clip

- ✓ Enables fast and firm installation of the first and last deck board



Click Rail Step Clip

(for UPM ProFi Deck 150 boards only)

- ✓ Enables fast installation of UPM's patented Rail Step board for the best looking and hardest wearing deck edges



Corner Piece

- ✓ Enables strong and stable 90 degree connection of support rails



Quiet Tape

- ✓ Dampens sound vibrations for ultimate quiet deck

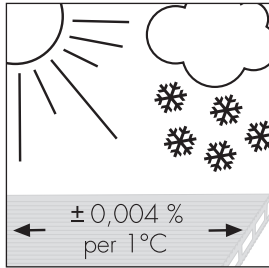


Foot

Small/Medium/Large

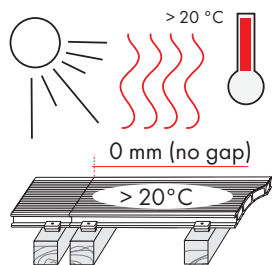
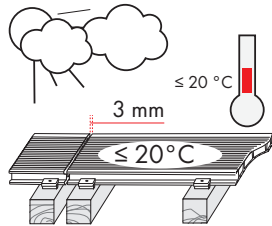
- ✓ Enables raised decks from 35 mm to 225 mm

GENERAL GUIDELINES



1. Thermal expansion gaps

Composite deck boards will expand and contract slightly along their length with changes in temperature. UPM ProFi deck boards installed during the early spring or winter, (when the boards are cold), will expand as the weather warms up. Expansion gaps must be considered at the ends of the deck boards, whether it is where the ends of two boards meet, or where the end of a board is laid up to a wall or other fixed surface. Please note the local building regulations and the generally accepted practice, e.g. regarding the minimum distance of the decking to the wall of a building and the possible need for drainage channels between house wall and decking edge, see also chapter 3. A detailed expansion table can be found on the Technical Data Sheet (downloadable from www.upmprofi.com). It is also normal that the relaxation of residual production stress may result in a small shortening of the deck boards in the first years after installation. Typical values are less than 0,5mm/m for Piazza Pro and approximately 1,5 mm/m for Deck 150. To allow for board relaxation and thermal movement, the following gaps should be left when two 4 m boards are installed end to end.

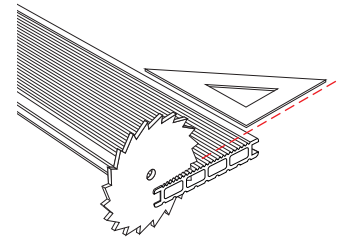
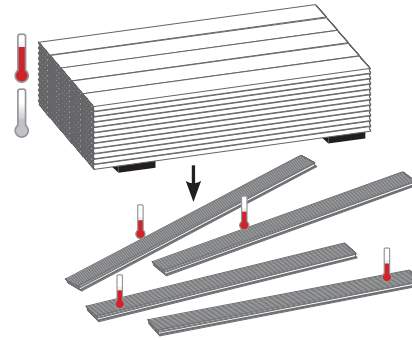


DECK BOARD TEMPERATURE	Piazza PRO	Deck 150
> 20 °C	3 mm	0 mm
≤ 20 °C	6 mm	3 mm

Use an infrared thermometer to measure the surface temperature during installation.

The amount of expansion per degree change in temperature is proportional to the length of a board. Butt joints should be avoided in extreme environments with very strong differences in temperature. The expansion gaps can be made into part of the deck design: see the reference photos on www.upmprofi.com.

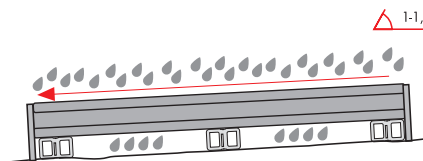
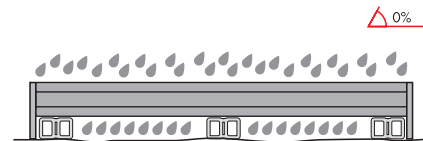
Random staggering of joints, as is often used in timber decks, is not recommended, as it may lead to unequal expansion gaps and complicates double support rail/joists.



2. Before cutting and installation: Batch control and equalising the board temperature

Before installing the deck boards it is important to check for possible colour variations between different batches. If they exist, it is best to mix the different batches together. If in doubt please contact your local dealer before installing. As the boards are cut to length while still moving in the production process, to ensure perfect square ends and exact length requirements, it is recommended to trim the board ends before installation. It is important that the boards are cut at approximately the same temperature, otherwise the lengths will vary slightly when the temperature equalizes. Deck board end trimming at the edge of the deck is best done after installation using a circular saw with guide rail. For perfect finishes we recommend to chamfer the cut edges of the boards.

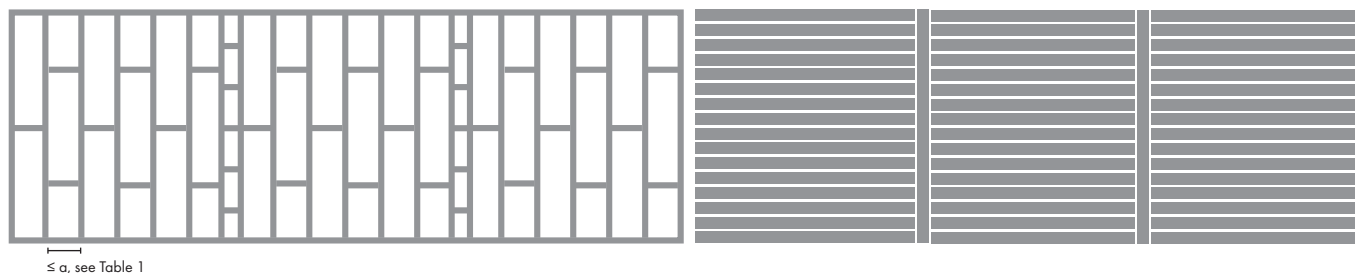
Note: Always mix boards from the pallet/pallets before installation.



3. Inclination & Ventilation

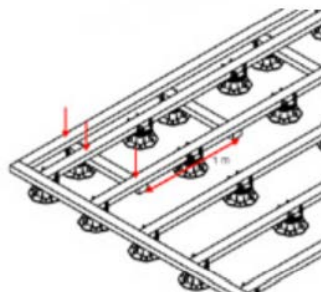
As UPM ProFi deck products have a very low rate of moisture absorption, they can be installed horizontally with no incline. However, installing the boards at a gradient (e.g. 1 – 1.5%) results in faster deck drying and the run-off rainwater will help to wash away dust. To ensure the ground has good drainage and the deck is well ventilated please observe normal terrace building procedure. When using UPM ProFi Alu Rubber Strip, it is mandatory to create additional ventilation in the deck to ensure a free flow of air underneath the deck. This is particularly relevant where decks are exposed to high humidity i.e. swimming pools, garden ponds or wet areas. If installing up to a wall or other fixed surface, please leave a gap for ventilation of minimum 20 mm (30 mm if the deck is entirely surrounded by walls or fixed surfaces).





4. Subconstruction

UPM ProFi deck boards must not be used above ground floor applications, unless built on a solid load bearing surface: e.g. a concrete balcony or roof terrace. In any case, the subconstruction must be built as a rigid framework with cross members. The maximum distance of cross members must not exceed 2 m (centre to centre). Butt joints must be covered by deck boards and connected with each other, e.g. by using the UPM ProFi Connector for Click Alu Support Rail. Building regulations must be followed, and specialist advice should be sought for roof terraces and other raised decking.



Notes

- The preparation of the subconstruction can easily be done working on trestles.
- When two board ends meet, it is required to support both boards with their own joist/support rail (joists should be spaced 4 cm apart). Leave an expansion gap between the two boards.

Table 1

JOIST SPACING (a)	Deck 150	Piazza PRO
Residential	40 cm	40 cm
Commercial	40 cm	30 cm

If UPM ProFi Deck 150 boards should be installed in harsh environments (especially in hotter climates and areas with higher UV levels like high altitude locations) please visit www.upmprofi.com or contact your UPM ProFi distributor for further information.

4.1 Frame Edge with Rail Step & Feet

A special edge construction to install UPM ProFi Rail Step is needed when the frame is built on feet. Short cross members (~60 cm) should be installed underneath the main support rails at angle of 90°. The cross members should be connected to the main support rails by screws and the outer end should be installed on a foot. The final edge support rail can then be installed on the cross members so that it is flush with the bottom of the feet. This should be made part of the rigid frame.

5. Optimizing expansion gaps in larger decks

In larger decks, where 4 m or longer boards are laid end to end, the following tips will help optimize expansion gaps:

- Be sure to build a subconstruction as a rigid framework with cross members.
- Be sure to follow the thermal expansion guideline described in chapter 1 of this guide.
- Plan your deck so as to minimize the number of board-end joints / expansion gaps (e.g. by changing the board direction or using a framing board running at a 90° angle to the main area).
- As a last resort it is also possible to place the direct fix clip at the end of a board. This will force the expansion/contraction to the other end of the board. Sufficient space must be left at the other end.
- The larger the deck size, the bigger the distance of the deck up to a wall or other fixed surface must be kept.

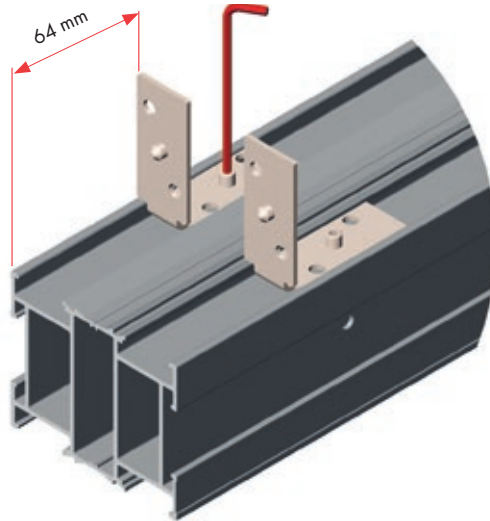
6. Cleaning and Maintenance

UPM ProFi deck products have been designed with closed surfaces that offer greater resistance to spills and stains. However, as with any outdoor flooring surface, periodic cleaning and correct care is needed to ensure that the deck retains its beauty for many years. Please follow our Cleaning, Maintenance and Use Instructions at www.upmprofi.com

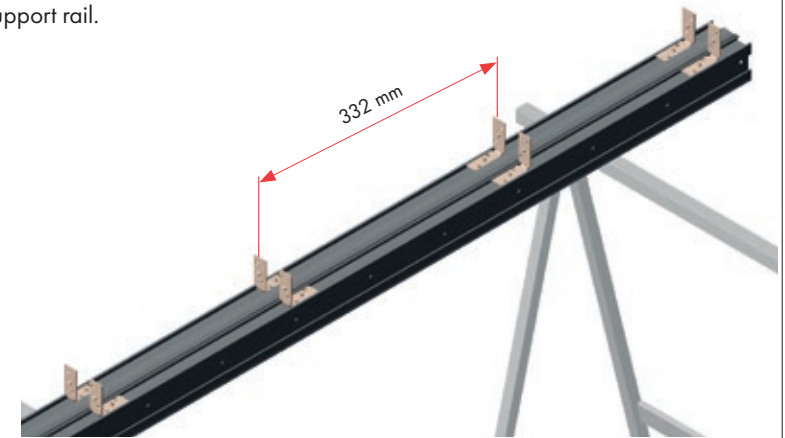
UPM PROFI CLICK SYSTEM INSTALLATION STEPS

Sub-construction: Preparing start/end with UPM ProFi Click Alu Support Rail 150 / 140

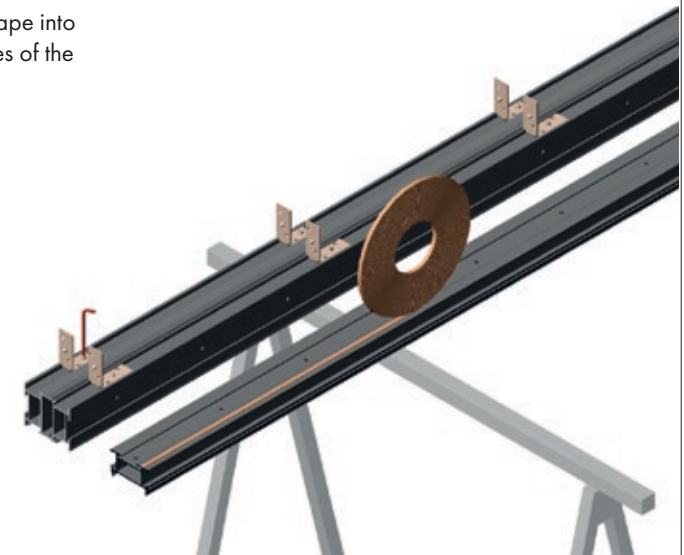
1. Cut to desired length with circular saw (placement of support rail holes is free. For other support rails please pay attention to cutting measurements in step 7 and alignment of the holes in the deck).
2. Place two click alu support rails on trestles; they should be laid on their sides symmetrically so that the bottom sides are facing each other.
3. Place the first two UPM ProFi Corner Pieces at the start of the two click alu support rails at 64 mm distance from the edge of the rail (correct distance for installing the perpendicular click alu support rail).
4. Attach the corner pieces with an Allen key (a power screwdriver can also be used).



5. Fix all other corner pieces to the click alu support rails with 40 cm spacing until to half of the support rail and then turn their direction for the rest of the support rail.



6. Attach UPM ProFi Quiet Tape into the designated top grooves of the support rails.



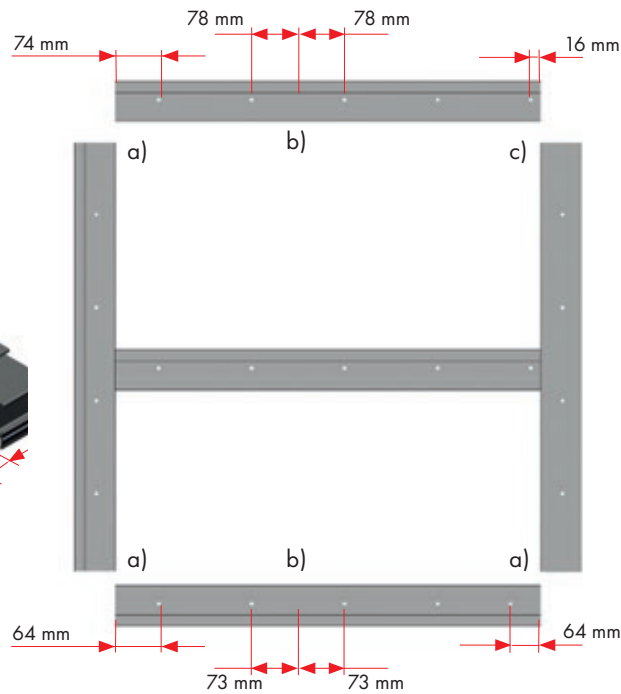
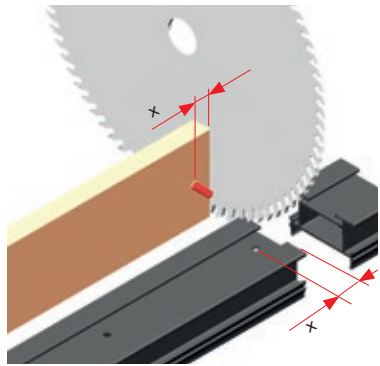
Sub-construction: Preparing intermediate click alu support rails (does not apply to cross-members)

7. Cut to length with circular saw. Pay special attention to the cutting distance from the hole, which varies depending on situation.

- a) for UPM ProFi Click Start Clip
- b) for UPM ProFi Connector
- c) for edging with UPM ProFi Rail Step (for Deck 150 boards only)

TIP: All the holes in the support rails are precisely drilled (± 0.2 mm). When cutting the support rails, it is advisable to use cutting template with a tap on which a hole of the support rail is attached for each cut, to guide the distance from the center of the hole to the end of the support rail.

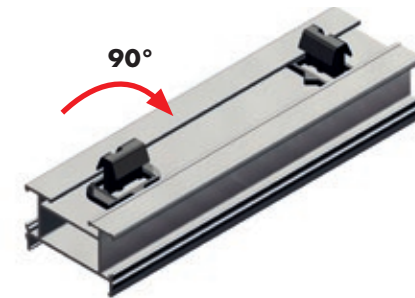
Installation with Deck 150 boards:



Installation with Piazza Pro boards:

8. After cutting, place the support rails on trestles the holed side upwards, holes aligned and top grooves in the same side.

9. Attach the UPM ProFi Click Clip by inserting the clip into the hole of the support rail with the arrow pointing to the top groove. Turn the clip clockwise until it clicks in. Repeat with all the clips. Do not insert clips into the start/end support rails.



10. Attach the quiet tape into the designated top grooves of the support rails, as shown in the image of installation step 6.

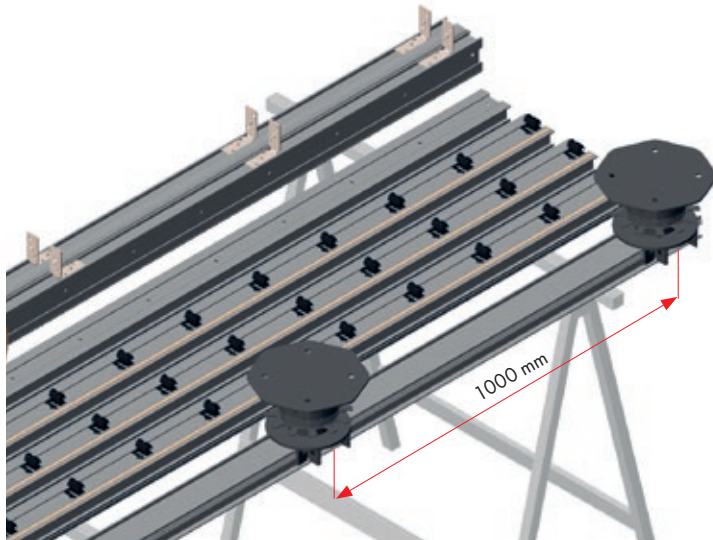




OPTION A: Installing UPM ProFi Foot

11. Turn the support rails on the trestles, so that click clips point to the ground.

12. Click in the UPM ProFi Foot with a maximum spacing of 100 cm.



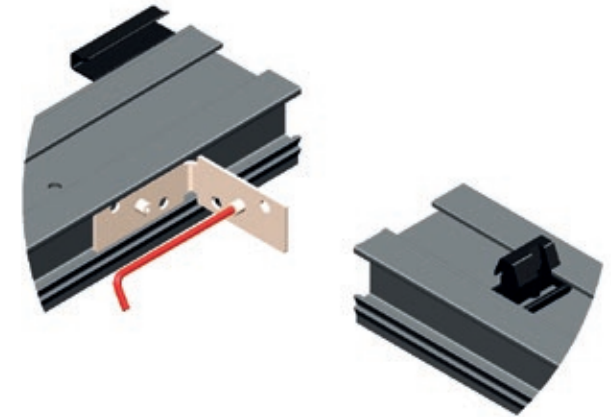
OPTION B: Installing directly on the ground with UPM ProFi Rubber Pads

13. When laying the click alu support rails directly on the ground, UPM ProFi Rubber Pads need to be inserted into the bottom part of the support rails with a maximum distance of 100 cm (center to center).

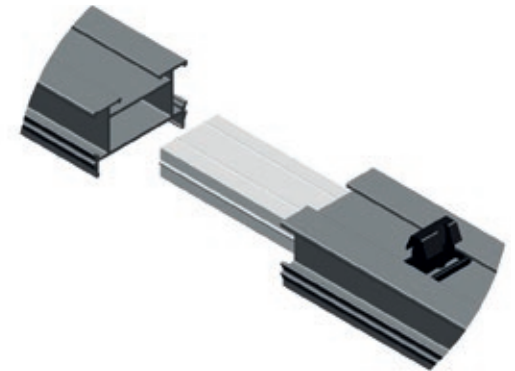
Installing the framework on the ground:

14. Fix the whole sub-construction together with an Allen key or equivalent.

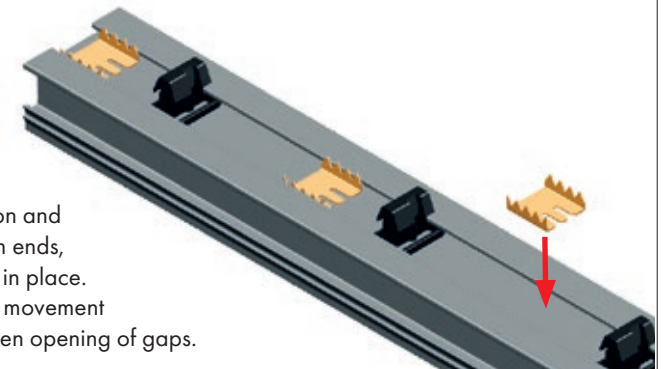
15. Attach the cross-members using corner pieces.



16. (Optional) Use UPM ProFi Connector for extension of click alu support rails, if needed.



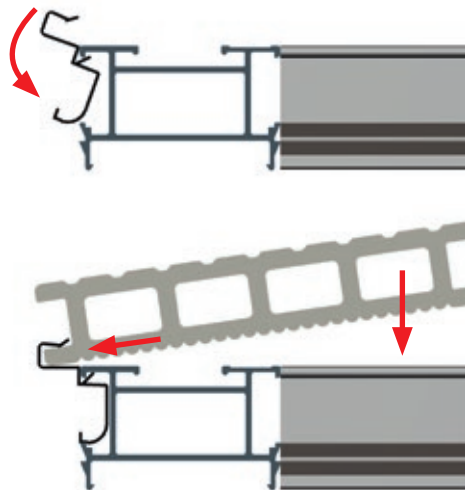
17. Put UPM ProFi Direct Fix Clip onto the intermediate click alu support rail (to be placed at the middle of each deck board). This single direct fixing of each deck board will ensure that normal thermal expansion and contraction can occur at both ends, but that the board itself stays in place. Failure to do so may result in movement of the deck boards and uneven opening of gaps.



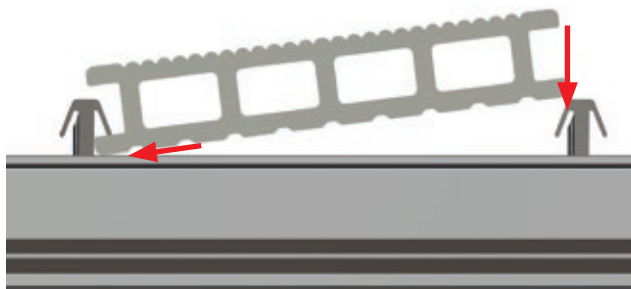


Installing UPM ProFi Deck 150 / Piazza Pro boards on top of finished subconstruction framework

- 18.** For fixing the first row of deck boards use UPM ProFi Click Start Clip (maximum distance 40 cm between two start clips).



- 19.** For the rest of the boards: slide one side of the deck board into the click clips.



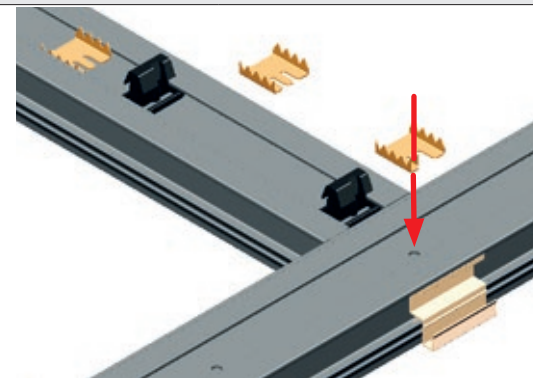
- 20.** Align the boards to each other. Note the need of expansion gaps (see chapter 1).

- 21.** Click the board into place by pushing it down, until it clicks in.

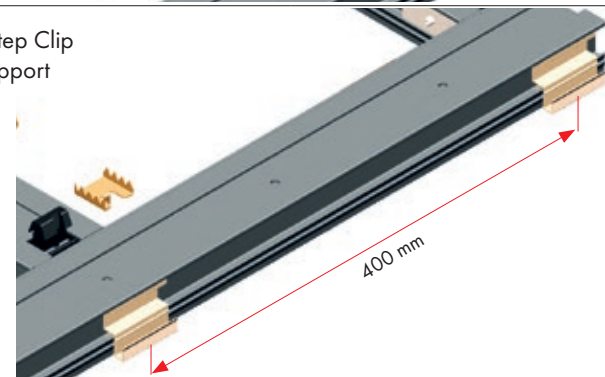


Preparing edges with UPM ProFi Rail Step (optional for Deck 150 system only)

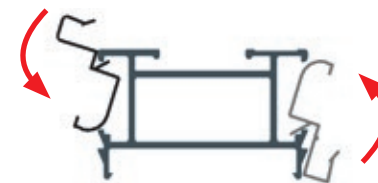
- 22.** Bend the tongue of the direct fix clip. Put the clip into the middle hole of the click alu support rail.



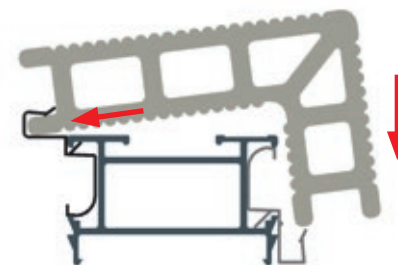
- 23.** Insert the UPM ProFi Click Rail Step Clip into the outer deck side of the support rail until it clicks in (maximum distance 40 cm).



- 24.** Insert start clips into the opposite side until they click in.



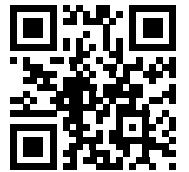
- 25.** First slide the UPM ProFi Rail Step into the start clips. Then push it down until it clicks into the rail step clip.





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