

UPM ProFi® Deck



English

ADDITIONAL INFORMATION TO BE USED IN CONJUNCTION WITH INSTALLATION INSTRUCTIONS

UPM ProFi Deck is designed to provide many years of enjoyable outdoor living with minimal maintenance. However, failure to follow the installation instructions exactly may lead to product failure and will invalidate the manufacturer's guarantee. Please ensure that you meet the requirements of the building regulations. If you are in doubt, please contact your UPM ProFi Deck distributor's representative for further information or visit www.upmprofi.com.

Video



1. Thermal expansion gaps

Unlike timber, UPM ProFi will not swell and shrink from moisture absorption. However, 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, (i.e. when the boards are cold), will expand as the weather warms up. Expansion gaps must be left 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. A detailed expansion table can be found on the Technical Data Sheet. (Downloadable from www.upmprofi.com) However, a rough guide is to leave a 6mm gap at the ends of 4m long boards if installed when the board temperature is between 20–30 °C.

Boards installed in hot weather require shorter gaps, as they will shrink when they cool. The amount of expansion per degree change in temperature is proportional to the length of a board. Random staggering of joints as is often made with a timber deck is not recommended. 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.

2. Equalising the boards temperature before cutting and installation

To ensure that all UPM ProFi Deck boards are at the same temperature when cutting and installing, it is important to open the pack and spread the boards out before starting to install. Cutting of the boards to length should ideally be done at the same time. If the boards are not at the same temperature when cut to length, they will end up at different lengths when the temperature has equalized.

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 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. This is specifically important if the planned deck is to have a closed surface by using either UPM ProFi Alu Rail and/or the Rubber Strip. When the surface of the deck is to be closed then ventilation points must be created to allow the deck to ventilate naturally. This is particularly relevant where decks are exposed to high humidity i.e. swimming pools, garden ponds or wet areas.

4. Under-construction

UPM ProFi Deck boards have high impact resistance even during cold winters. However, the boards are more flexible than timber and the distance between support rails or joists must not exceed 40cm. UPM ProFi Support Rails must only be installed on hard flat surfaces. Any raised Deck should be built on a Aluminum or timber frame. 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. Fixing of support rails or joists to the ground is the most stable option. For larger deck areas (e.g. over 20m²), support rails or joists should always be fixed to the ground. If this is not possible, then the under-construction should be made from Alu support rails or timber joists which are connected to form a single floating frame. This construction method is recommended for all roof terraces.

5. a/b Fixing of deck boards

UPM ProFi T-Clips and or Alu Rail must be used to allow the normal thermal expansion and contraction to occur. However, the repeated expansion and contraction over time may result in deck boards slightly shifting from their original location. It is therefore recommended to fix one screw directly through the bottom tongue at the middle of each deck board. This single direct fixing of the deck board to the support rail will ensure that the expansion & contraction can still occur at both ends, but that the board itself stays in place.

The T-Clip or Alu Rail should then be fixed over this single direct fixing. Direct fixing of a deck board with more than one screw must not be done as it will inhibit the normal thermal expansion and contraction and may cause distortion.

In warmer climates, UPM ProFi recommends installation with Alu Rail only to avoid the deck boards bending excessively when hot.

6. Screws

Small headed 4x40mm stainless steel screws should be used for fixing UPM ProFi T-Clips. Whereas A2 screw is sufficient for normal decks, A4 should be used where there is an increased risk of corrosion. (E.g. near the sea or next to a swimming pool), Self-tapping screws should be used with UPM ProFi Alu Rail. (Please see separate screw info sheet at www.upmprofi.com) Please use the correct torque to ensure the screw head finishes level with the clip surface. Do not insert the screw too deep into the clip.

7. Joining ends of boards, T-Clip

When two boards are laid end to end, two support rails must be used where they meet, and separate T-Clips must be fixed to each support rail.

8. Joining ends of boards, aluminium rail

When installing standard 4metre UPM ProFi Alu Rails, 4metre UPM ProFi Deck boards should be used. When two boards are laid end to end, two support rails must be used where they meet, and the ends of the meeting Alu Rails must be fixed to each support rail. Expansion gaps between boards and the Alu Rails must be left as described above.

Please note that you should cut the aluminium rail shorter than the deck boards it is joining together, (e.g. 6mm shorter for a 4metre length) to ensure that the aluminium rail does not protrude from the end of the deck boards during the winter or colder months.

9. Fixing first / last deck boards

A With UPM ProFi Start Clip

First attach one Start Clip onto each UPM Support Rail or joist. Then slide the first row of deck board(s) into the Start Clip tab and continue installation according to the instructions above. Before attaching the last row of boards of the terrace, first screw the Start Clips onto the allocated place of the joists ends. Then slide the last board into the Start Clips. The ProFi Clips between the last two rows of boards are inserted from the side and then attached above each support rail. Please note direct fixing of each deck board (see paragraph 5).

B Without UPM ProFi Start Clips

If no clips are being used at the edges of the deck, oval holes should be drilled through the bottom tongue of the outer edge of the deck board. The board is then screwed directly to the support rails through these holes. The holes can be made oval by moving a 4 mm drill bit from side to side. Do not tighten the screws too tightly. The boards must have room to expand and contract according to the outside temperature, so the screw should move freely within the oval hole.

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