

Storage, Installation, and Maintenance of Terrace Boards

1. Storage

Standwood packages the products in bundles designed for side-loading with a forklift. Upon delivery to the construction site, all materials must be inspected to ensure there are no damages that may have occurred during loading or transportation. Even factory-packaged terrace boards should never be stored in rain or moisture, as the tightly packed boards will not dry properly once wet. When using support timbers, a sufficient ventilation gap, preferably around 150 mm, should be left beneath the wood bundle, and the material must not be in direct contact with the ground.

2. Installation

There are various methods for installing decks, primarily depending on the material of the terrace boards. This guide describes the installation of two types of thermally modified wood terrace boards (with and without side grooves). When ordering terrace material, it's important to account for approximately 10% waste due to cutting. For thermally modified spruce terrace boards, ensure that the wood's heartwood faces downwards during installation. For thermally modified pine boards, a visual assessment is sufficient—place the better-looking side facing upwards.

2.1 Base

The first step is constructing the foundation. It is recommended to use lightweight blocks (e.g., Fibo blocks) or concrete posts cast into the ground for building the foundation that is in direct contact with the ground. Plastic supports (e.g., Solidor) can also be used, but they require a compacted base. Concrete posts should be poured below the frost line. The foundation must be strong enough to support the weight of the terrace itself and the load applied to the terrace surface. When constructing the foundation, it is recommended to remove the humus layer under the terrace and replace it with sand, gravel, or crushed stone. This helps prevent excessive moisture buildup on the ground and avoids plant growth between the terrace boards. To further inhibit plant growth, we recommend using geotextile fabric between the new substrate and the ground.

2.2 Structure

The terrace's support structure is generally built from impregnated wood. It is recommended to install the beams at least 10 cm above the ground to prevent excessive moisture condensation on the wooden structure caused by moisture

rising from the ground. The spacing of the terrace's support structure (joists) is determined by the thickness of the terrace boards and is generally 40-50 cm. Any cut surfaces on the support structure material should be manually treated with a wood protection treatment.

The sample image provided shows the use of impregnated timber with a cross-section of 45x145 mm as the material for constructing the support structure.



Puumarket Terrace Calculator

2.3 Installing Terrace Boards

Installation with Screws

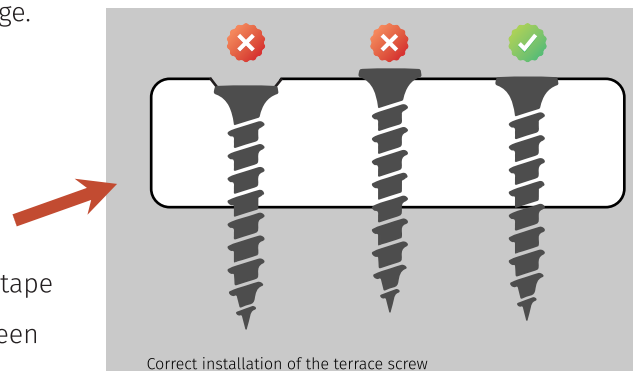
It is recommended to use terrace ventilation tape between the support structure and the terrace boards to prevent moisture accumulation and extend the lifespan of the terrace. When planning the terrace, ensure that a denser substructure is installed under the joints of the decking to avoid having screws placed too close to the edge. The gap between the terrace boards should be 4–7 mm, depending on the width of the board (wider boards require a wider gap). This gap allows the boards to expand and contract with weather changes. At the joint between two boards, leave at least a 5 mm gap between the ends of the boards to allow moisture to ventilate. If you wish to cover the terrace frame with side cladding, such as terrace boards, the bottom edge of the side cladding must be at least 50 mm above the subbase to ensure adequate airflow.

The terrace support structure and terrace boards should be secured with fasteners designed for outdoor use. We recommend using stainless steel screws or screws coated with a rust-resistant layer for constructing the terrace. Screws should be installed at least $\frac{1}{2}$ the width of the board away from the ends of the board. If screws are placed closer to the ends of the board, pre-drilling is necessary to avoid cracking. With pre-drilling, screws can be secured at a minimum distance of 35 mm from the end of the board and 20 mm from the edge.

For thermally modified wood, use stainless steel screws (A2). In harsh environments, such as pools with chlorinated water or coastal areas, use acid-resistant stainless steel screws (A4).

Ensure that the screw head is flush with the surface of the board:

When installing with screws, it is important to use terrace ventilation tape (e.g., Rothoblaas PROFID). This allows moisture to vent out from between the support structure and the boards, significantly extending the lifespan of the terrace.



Installation of terrace boards in Rothoblaas with TERRALOCK PP 60 (plastic) terrace clamp

Clips are screwed from below onto the terrace boards, and then the clips are screwed into the support beam. The clips ensure adequate ventilation between the decking and the support beam, so ventilation tape is not required.

The estimated consumption of clips is 23 pieces per square meter.

Manufacturer's Instructions for Installing TERRALOCK PP 60:

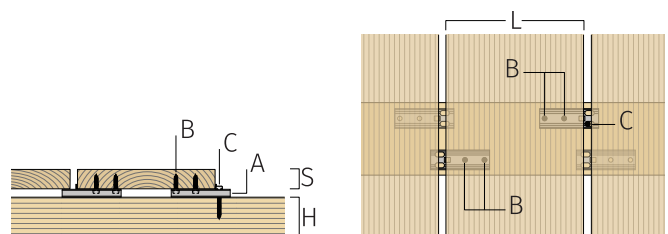
A - TERRALOCK 60 PP clips, 2 pieces

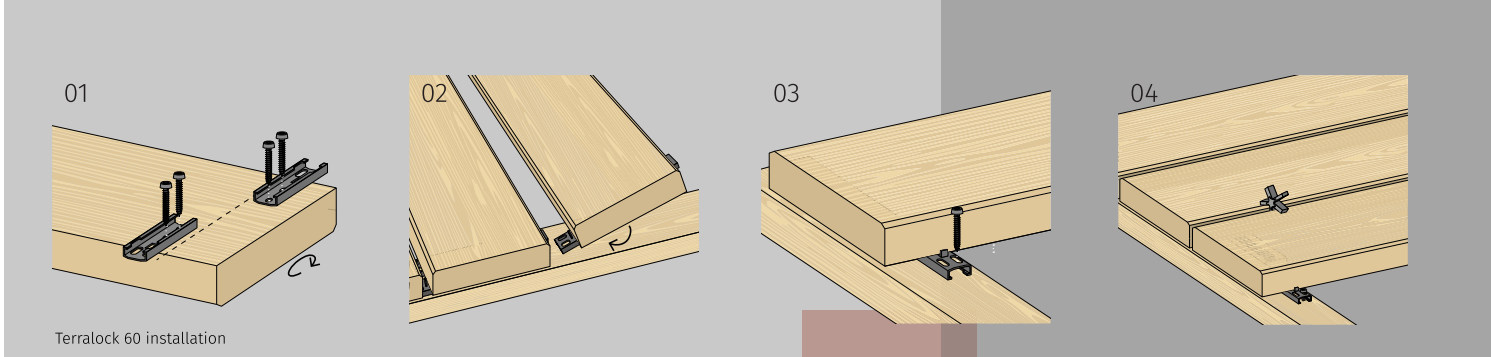
B - Clip fixing screws for terrace boards, KKF 4.5x20, 4 pieces

C - Clip fixing screw for support beam, KKF 4.5x40, 1 piece

S - The thickness of the terrace board must be >19 mm.

H - The thickness of the support beam must be >38mm





Terralock 60 installation

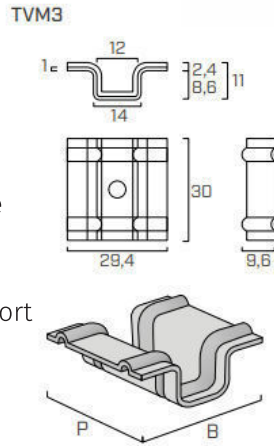
Installation of Grooved Terrace Boards with Rothoblaas TVM3 Clips

Suitable for Standwood's grooved terrace profiles made of 26 mm thick pine and spruce.

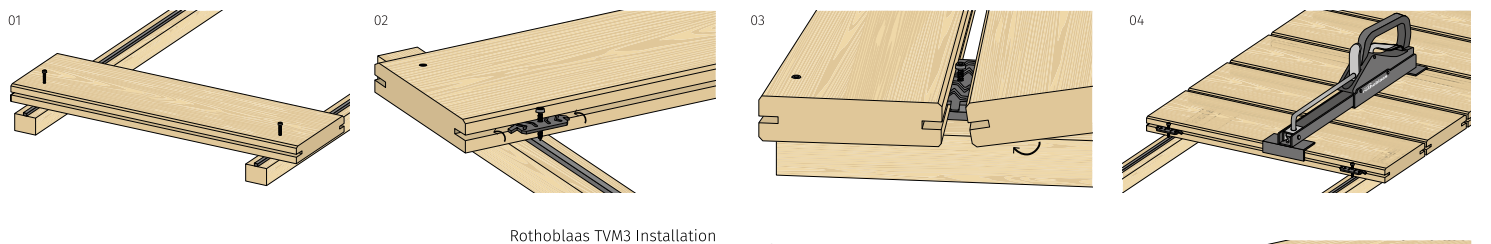
When installing with TVM clips, it is necessary to use terrace ventilation tape (e.g., Rothoblaas PROFID).

For securing the clips to wooden or composite support beams, Rothoblaas KKT X screws are suitable.

The estimated consumption of clips is 12 pieces per square meter.



Rothoblaas TVM3



Rothoblaas TVM3 Installation

3. Usage and Maintenance

Thermally modified wood will naturally turn gray over time

due to UV exposure, similar to untreated wood. Thermally modified wood does not necessarily require oiling, and if the client prefers the natural gray tone, the boards can be left untreated. Applying a clear oil treatment can reduce the likelihood of cracking and extend the lifespan of the terrace boards while allowing the wood to retain its natural gray color.

Using tinted terrace oil helps maintain the original color of the terrace. Regular maintenance is essential to ensure a longer lifespan for the terrace. It is important to prevent the accumulation of leaves and other moisture-retaining debris on the terrace. The terrace can be cleaned with wood cleaning products, but pressure washer may damage the wood surface.

When treating with terrace oil, follow these steps:

Use a wire brush, scrubbing brush, or scraper to remove loose particles, dirt, dust, and any decayed wood layers from the surface. Ensure the surface is clean before treatment. Remove any old paint or varnish layers as needed. Use a terrace cleaning agent if necessary. Rinse the surfaces thoroughly with water and allow them to dry completely. Apply a wood preservative to untreated wood surfaces. Mix the preservative thoroughly before use.

Tinted oil should be stirred as needed during application. Apply one or two coats to the surface. The number of coats may be repeated depending on the condition of the wood. Any excess oil should be wiped off. Mix oil from the same batch to cover the entire surface area. The surface to be treated must be dry, with wood moisture content below 20%. During application and drying, the temperature of the air, the surface, and the oil should be above +5 °C, and the relative humidity should be below 80%. Avoid oiling in direct sunlight and in damp conditions.