

Installation Recommendation SHIELDTAC® ricotile (FR)

1. Substrate

The substrate must be tested before installation and prepared in accordance with the applicable technical regulations.

In particular, DIN 18365 and the limits for evenness deviations according to DIN 18202 are relevant. As a guideline, a maximum deviation of approximately 3 mm per 1 m should be allowed for, which must be levelled out before laying.

In addition, the applicable guidelines for shooting ranges must be taken into account. The work must be carried out in such a way as to ensure that the facility can be used safely and for its intended purpose on a long-term basis.

Suitable substrates are, for example:

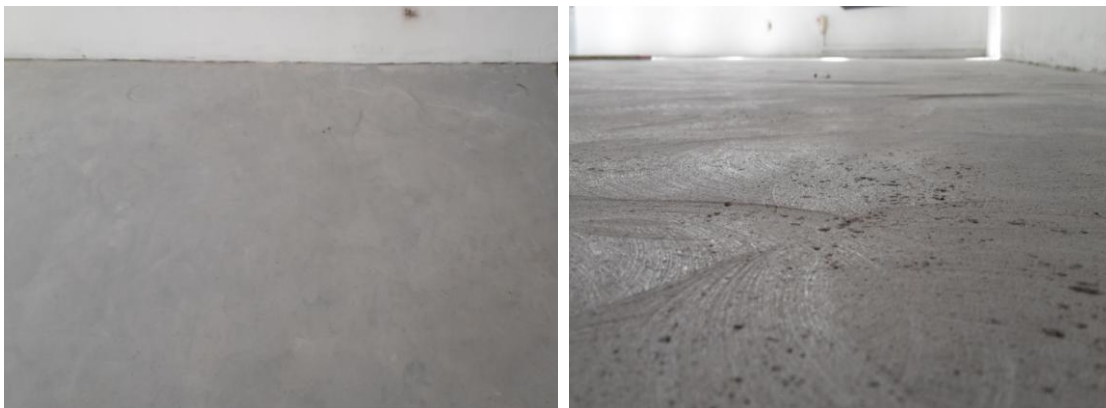
- Concrete
- Asphalt
- Screed

The substrate must meet the following requirements:

- even
- load-bearing
- permanently dry
- clean and free from cracks

Unevenness must be levelled out before laying.

Wall and ceiling applications require suitable, load-bearing structures that ensure the tiles are securely fixed in place.



Suitable, solid substrate

2. Preparation work

The substrate must be thoroughly swept and cleaned before starting installation.

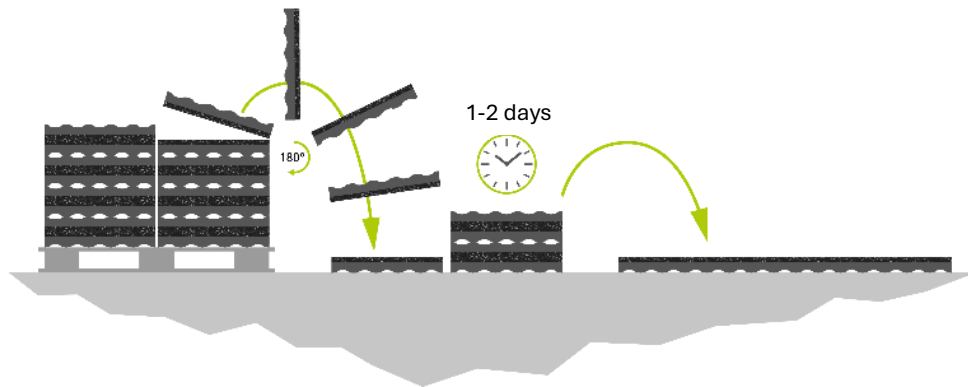
The tiles must be stored at the installation site to allow them to acclimatise to the ambient temperature.

Processing temperature:

- The recommended temperature for the material and for processing is between +10 °C and +25 °C

Notes:

- Acclimatisation time: approx. 24 hours
- It is recommended that the tiles be unstacked in advance to allow them to acclimatise



3. Installation on substrate

3.1 Loose installation (without PU)

Installation begins along a wall or edging.

The tiles are laid close together and connected to one another using the connector pins.

The second row is started in a staggered pattern.

Please note the following:

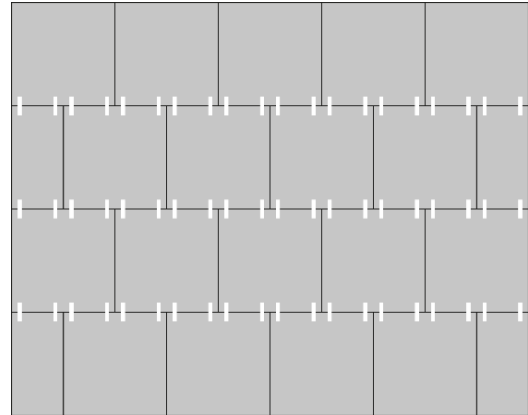
- Installation in a staggered pattern (T-pattern), not in a checkerboard pattern
- Lay the tiles tightly together
- Use a rubber mallet if necessary

For orientation, an auxiliary line using a laser or a chalk line (snap line) may be drawn.

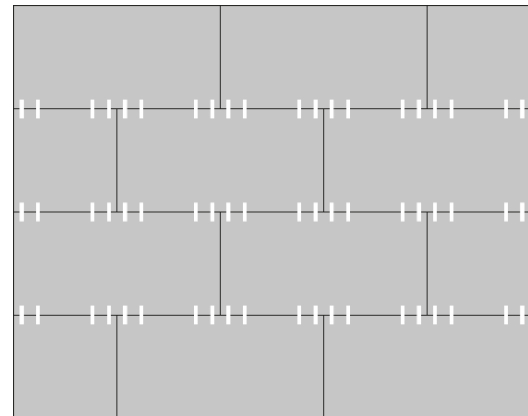
Adjustments to edges, corners or curves are made by cutting the tiles to size accordingly. You will find suitable tools for this in section 5.



Correct installation in a T-pattern (500 x 500 mm tiles)



Correct installation in a T-pattern (1000 x 500 mm tiles)



3.2 Installation with a PU coating

When using a PU coating, the tiles must be glued to the substrate.

To do this, a suitable two-component adhesive must be used and applied evenly with a notched trowel. The tiles must then be laid into the fresh adhesive bed and pressed down evenly using a suitable roller. In addition, the tiles can be bonded at specific points (e.g. at the corners).

For further information on bonding and coating, please refer to the relevant installation instructions for the PU system used (e.g. **SHIELDTAC® ricosys PU**).

4. Installation on a wall or ceiling

Before installation, the factory-fitted connectors can be removed if preferred.

Wooden slats in the dimensions 40 × 60 mm (H × W) are recommended for fixing.

The spacing between the slats depends on the size of the tiles.

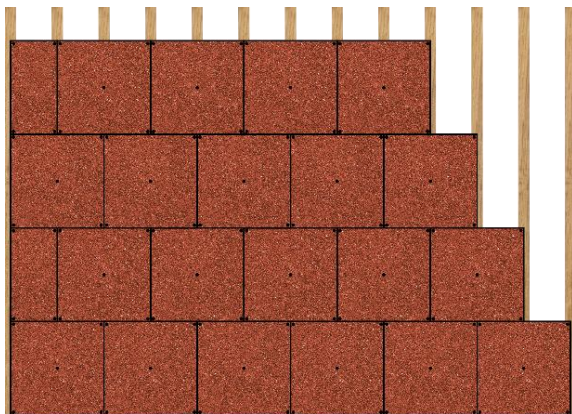
Recommended method of mounting:

- 500 x 500 mm tiles:
 - 5 screws per tile
 - Slat distance approx. 25 cm
- 500 x 1000 mm tiles:
 - 8 screws per tile
 - Slat distance approx. 33 cm

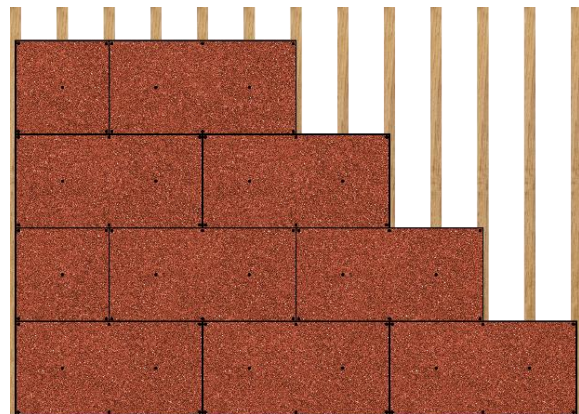
The tiles are screwed directly onto the wooden slats.

- Screw in approx. 3 cm from the edge of the tile
- Countersink the screw head so that it is flush

The installation has to be done in a staggered pattern (T-pattern)



**Screwing of the tiles (500 x 500 mm)
with 5 screws**



**Screwing of the tiles (1000 x 500mm)
with 8 screws**

Alternatively, the tiles can be fixed using a clip or staple system. Please note that replacing individual tiles is more difficult with this installation method.

5. Important details

The installation must be carried out in such a way as to ensure safe, long-term use during shooting operations. Loose or incorrectly secured components must be avoided and any damaged **SHIELDTAC® ricotile** tiles must be replaced immediately.

It is recommended that the installation be carried out under consistent conditions and where possible, within a single working day.

For bonded systems, use only suitable, approved adhesives and primers. Follow the relevant manufacturer's instructions.

Before bonding, the residual moisture of the substrate must be checked via a CM test (DIN 18560):

- Cement screed: $\leq 2,0$ CM-%
- Calcium sulfate screed: $\leq 0,5$ CM-%

Required tools for the installation



Cutting the tiles

The tiles must be cut accurately to ensure clean, precisely fitting edges and to avoid open joints or exposed areas.

- **SHIELDTAC® ricotile** tiles are best cut using power tools.

Suitable tools include:

- **Jigsaw** with suitable saw blades (e.g. **Bosch T345XF** or **T313AW**), operated at a high stroke rate.
- **Circular saw** (approx. ≥ 1400 W, $\geq 5,500$ rpm, cutting depth $\geq$ material thickness) with a coarse-toothed blade
- **Band saw** for precise cuts

When using saws, ensure that the tile is securely fixed to prevent vibration and inaccurate cuts.

Cut with a steady feed rate and appropriate cutting speed to prevent material damage and ensure a straight cut.

Material properties

- A characteristic material odour may be noticeable. It will decrease over time and can be reduced by regular ventilation.

Claims:

- Inspect the goods before installation
- If any visible defects are identified, stop installation immediately
- Report any claims immediately and before installation
- If the defect is visible before installation, claims can only be accepted for uninstalled products
- State the production batch (see the sticker on the underside of the tile)
- Document all defects with sufficient evidence (e.g. pictures)
- Report any transport damage to the carrier immediately upon delivery

**Sticker****DISCLAIMER:**

These recommendations for applications and installation are based on our extensive experience and on current technological practice. Our liability and responsibility in the event of damages shall be limited to the extent defined in our General Terms and Conditions of Business, regardless of the above recommendations or of any statements made or advice given by our sales representatives or applications engineering staff. Ensure that sufficient self-testing is carried out in advance.