ErgoFloor®
PV Rubber

Installation Guide

ErgoPlay Safety Tiles – Rubber Tiles

Storage of products prior to installation

ErgoPlay rubber tiles shall normally be stored in dry areas at constant temperature above 10 °C. If stored below 10 °C, store the rubber tiles at the installation site temperature (> 10 °C) for at least 72 hours before installation.
To avoid colour variations due to differences in sunlight exposure, please leave the stretch film on the pallets as supplied until just prior to installation.

Adhesives must be stored at all times in dry locations above 0 °C.

Dimensional Variations

The dimensional tolerance of ErgoPlay rubber tiles as manufactured is approx. +/- 1 % in length and width and thickness.

Dimensional variations can be caused by storage in stacks (elastic compression of the rubber tiles due to the stack weight) and changes in thermal expansion, ambient temperature and humidity.
Rubber is a natural product which, similar to wood, will expand and contract with temperature and humidity changes. A tile laid in the morning at e.g. 15 ºC will have a different size than a tile laid at e.g. 30 ºC later in the day.

The following procedures are recommended to minimize dimensional variations:

- Secure that all rubber tiles to be laid have the same temperature over the entire term of installation.
- Spread the rubber tiles out on the ground for 24 hours before final installation to permit them to regain their original dimensions /equalize in size at ambient temperature..
- Install all rubber tiles in a single session to ensure installation under similar conditions.
- For ideal installation conditions, the ambient temperature at the site should have been over 10 °C for at least 24 hours prior to installation. If the ambient temperature at the site is below 10 °C, store the rubber tiles to be installed in a dry area at temperature of at least 10 °C for at least 72 hours prior to installation.

As mentioned above, rubber is a natural product, which, similar to wood, is affected by fluctuations in temperature and humidity. Therefore seams may occur between the rubber tiles after installation. These are not significant to the safety properties of the surface.

Required skills and tools

For the installation job, common sense and skills are required. Furthermore, the following tools and materials may be required:

- Cutting knife, heavy duty, with replacement blades.
- Hand saw, sabre saw or band saw (with blades for wood)
- Tape measure or meter stick
- Perpendicular square
- Gloves
- Marking chalk or similar.
- Chalk line with refill chalk

- Sheet metal, plastic liner or cardboard sheet in approx. size 750x1.000 mm
- Application gun for adhesive compound.
- Adhesive compound.

Subsurfaces

ErgoPlay rubber tiles can be installed on different subsurfaces.
Mentioned in order of priority, we recommend:

A. Paved subsurfaces such as concrete or asphalt.
B. Concrete tiles installed on a proper supporting subbase.
C. Crushed rock
D. Compactable gravel (clayey)
E. Compactable sand (clayey)

Slope, drainage and levelness.

The subsurface shall be made with a slope of at least 1 % and must if necessary be supplied with a suitable drainage system to prevent accumulation of water. By low-lying areas it is important that the slope lead into a take-off drain system.
Drainage must be adequate to prevent floating/raising of the rubber tiles due to water.

Regardless of the type of subsurface used, the subsurface must not deviate from level by more than 3 mm under a 3 m lathe.

Concrete, concrete tiles and Asphalt:

On these surfaces we recommend that the rubber tiles are glued to the subsurface with a suitable 2K polyurethane glue as e.g. Wakol 270, Bostik 828, Cascothan 1855 or similar.
Use the ErgoPlay bevelled ramp and corner tiles as border edges for the surface. Alternatively a frame of e.g. wood can be used as border edge for the surface.

Before installation, all cracks and holes must be repaired.

Crushed rock, compactable gravel and sand

Remove the existing topsoil to a depth of min. 20 cm plus the thickness of the rubber tiles to be installed.
If no border edges is present around the area to be covered, install a suitable edging (Concrete tiles, wood, rubber edging etc.)

Level out the subbase material and ensure that it is compacted adequately by the use of e.g. a vibrating plate compactor.
If necessary, a thin layer of compactable leveling sand or crushed rock powder can be used in top as a level base is crucial for the final result. Also this layer shall be compacted adequately by the use of e.g. a vibrating plate compactor.

Place a geotextile fabric in top of the prepared subbase to retain extra stability before the ErgoPlay rubber tiles are installed.

Should questions arise regarding soil conditions and characteristics or expected soil behaviour, consult a soil mechanics engineer.

Installation of rubber tiles

Start installation by laying a chalk line parallel to and a full rubber tile width away from one side of the surface to be covered. Lay a second chalk line exactly perpendicular (at an angle of 90 °) to the first. Check that the lines are perpendicular by the 3/4/5 rule: Starting at the intersection point of the lines, measure off exactly 3 m down the first line and mark this point, then measure off exactly 4 m down the second line and mark this point. Measure the distance between the two points marked. If the lines are perpendicular, the distance between the points will be exactly 5 m.

The ErgoPlay rubber tiles shall be fitted in a half offset staggered formation to achieve the highest stability. Through the use of the connecting dowels a durable connection is secured. Thereby, please secure that the rubber tiles are joined together as close as possible in all directions.
A sheet metal, plastic liner or cardboard sheet in approx. size 750x1.000 mm can be placed under the tiles when they are “pushed” together to avoid that the subsurface material gets into the joint between the tiles.

Install the first row of ErgoPlay rubber tiles by placing them precisely along the chalk line. Start the second row (and every second row thereafter) with a half tile. Connect the tiles of the second row to the tiles of the first row by the use of the connecting dowels. Cut the last tile in each row to the required size by the use of e.g. a heavy-duty carpet knife or a sabre saw.

To avoid uplifting or unauthorized removal of the rubber tiles, the joints of the rubber tiles in the outer 2 rows of the perimeter can be glued with a suitable gluing compound as e.g. Danalim 534, Danalim 524, Casco Superfix, Sikaflex 11FC or similar. In case, inject the gluing compound into the joint by the help of a application gun for adhesive compound.
The same gluing compounds can be used to spot glue the tiles to the subsurface in necessary.

Removal of topsoil


Add the subbase material

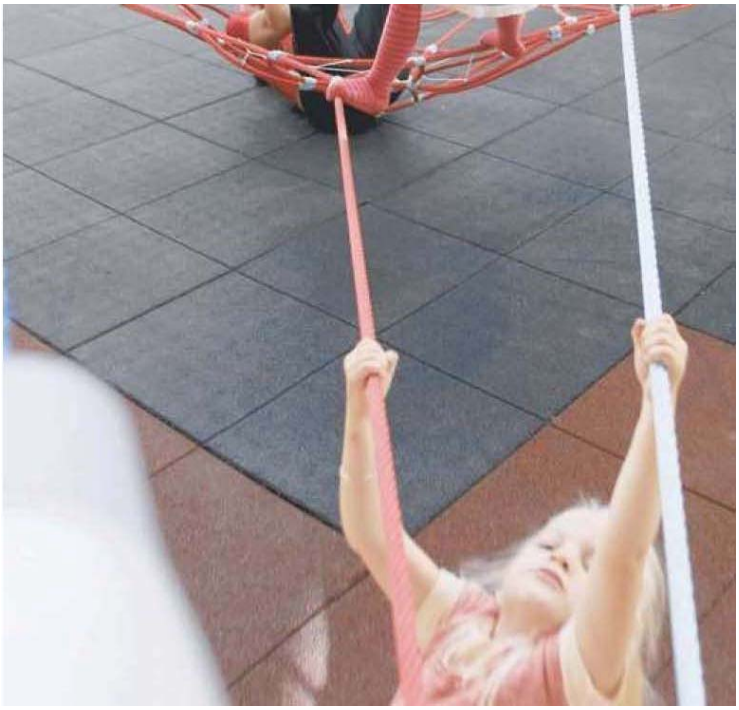
Level out the subbase material

Compact the subbase

Add, if necessary, a thin layer of compactable leveling sand or crushed rock powder and compact and level it.

Place the geotextile fabric in top of the prepared subbase and install the ErgoPlay rubber tiles

Cutting can be done by the use of e.g. a heavy-duty carpet knife or a sabre saw



Ready to ErgoPlay……