

Installation and maintenance instructions

ReFlex rubber tiles

Thank you for choosing ReFlex rubber tiles. The rubber tiles can be installed onto a firm surface (concrete / asphalt) or crushed stone base. Please read through carefully and comply with the entire instruction guide related to your chosen installation method prior to the installation.

Should you have any questions about the installation or the use of the chosen product, please contact our customer service using the contact info you find at the end of the guide!



1) Preparation

Please check the quality and quantity of the rubber tiles before installation. Should you find any damages or quality issues, please do not start the installation and call our customer service.

If you want to install the rubber tiles by using adhesives, you must make sure that no moisture can reach the glued surface for about 24 hours after the installation.

Relating to the base, the following important requirements must be met:

- ◆ All playground equipment and landscaping items are recommended to be placed before the installation begins.
- ◆ The foundation must be completely dry before glueing (at least 2 weeks in the case of fresh concrete).
- ◆ Good drainage is required (a 2-percent slope is recommended) to prevent water accumulation.
- ◆ The base layer must be even, free of pot-holes or undulations. Since the rubber tiles are flexible, they are following the shape of the base layer.

2) Edging

Edging or filling is needed in order to protect the edges of the tiles from chipping, and it also prevents rubber tiles from moving.

We recommend the following three methods for providing edging to the rubber covering:

- By preparing a cemented (vertical) edge made from rubber or concrete curb elements

- By preparing a horizontal edge made from ramp elements, wooden or plastic L-profiles
- By filling the soil at the same altitude of the rubber surface

Due to the manufacturing technology of rubber tiles, as large as 1 cm dimensional variations may occur between the tiles. Therefore, if possible, the frame should be made tight enough so that there won't remain any spaces between the rubber tiles.

We recommend starting to lay the rubber tiles from a corner, according to the desired pattern, thus minimizing losses due to cutting.

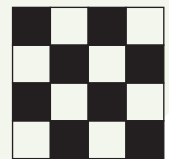
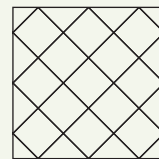
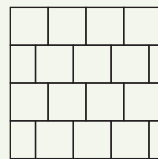
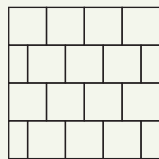
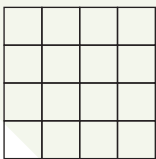
3) The base

b) Concrete and asphalt base

Soil preparation: if the ground is too loose and / or non-horizontal (on a hill or slope), then compression and earthwork are required. Concrete thickness is 10 cm; it must be reinforced (reinforced mesh). It is on such surfaces that the rubber tiles exert their designed flexibility, and fallabsorbing effect. Consequently, you must prepare the formwork, which will grant the concrete its straightness and sloping. Concrete is a good base layer, but it is not water permeable therefore, the area has to be given an appropriate (2%) sloping.

Newly installed concrete need to be left to dry for at least 2 weeks. Do not use paraffin-based sealants. In the case of old concrete surfaces, it is important to properly fix and smoothen any cracks and unevenness before you begin the installation. The surface must be free of dirt, dust, or grease.

We recommend starting to lay the rubber tiles from a corner, according to the desired pattern, thus minimizing losses due to cutting.



The rubber tiles may be glued to the base, in which case the adhesive is to be applied to the four corners of tiles for it to adhere to the surface. It is important not to apply the glue onto the entire surface or the bottom of the rubber tiles, as that may prevent drainage of water and can lead to the doming of the tiles.

We recommend the use of low-expansion foam or dualcomponent glue. Wearing gloves is recommended when gluing the tiles.

b) Crushed stone bed

The rubber tiles can be laid onto compacted crushed stone bed too, but in such cases it must be taken into account that the critical fall height (HIC value) of the rubber tiles is calibrated for laying onto concrete surfaces. When laid onto crushed stone, the fall-absorbing capacity of the rubber tiles may decrease, given that sand may fill the bottom pattern of the rubber tile during the compaction process.

In case of installing on a crushed stone bed, we recommend the use of plastic pin and hole connection system.

The installation process

First, prepare the foundation. The foundation must be made of 0/35 mm crushed stone, and should be 20-30 cm thick, depending on the expected load.

After compression, a 2-4 cm thick felt bed of 0/5 mm sand must be laid onto the base. This layer will get further compacted after installation, which has to be considered when determining the level. After that, you can begin laying the tiles starting from a corner to minimize cuts, and moving forward on top of the already laid elements to proceed with the installation. The completed surface needs to be compacted using a plate vibrator. In the case of laying on a crushed stone bed, you can order the rubber tiles with plastic pin and hole connection system to increase stability.

4) Tips for the installation

The rubber tiles, like other materials, expand when exposed to heat. Therefore, their installation should be carried out optimally at a temperature of 10-20 °C or in shade. We recommend to lay the rubber tiles on a flat surface for 24 hours before the installation, to obtain their original shape and size.

If the adhesive starts foaming between the tiles during the installation process, allow it to dry, then they can be easily removed using a knife or a screwdriver (be careful not to damage the rubber tile).

Use a wallpaper knife to adjust the size of the rubber tiles. Cut the tile along the desired shape, then slightly bend the tile, and keep cutting this way. Jigsaw can be used for cutting thicker tiles with a wavy blade for soft materials.

5) Care of the ReFlex rubber tiles

Respecting the following advice helps you may keep your ReFlex rubber pavement in its best shape for a long time:

Monthly cleaning:

Wash the entire surface with a hose, in order to remove any food or drink residues or debris. If you use a high-pressure washer, the pressure should not exceed 100 bar. Do not approach the nozzle closer than 30 cm from the surface. Repeat this overall cleaning as often as you deem necessary.

In case of stains:

In case of stains that cannot be removed with the above procedure, use a mild household cleaner on the wet surface. Remove the stain from the surface with the cleaner on it using a medium strength brush. For more stubborn stains, repeat the procedure again.

"Overall cleaning":

Wash the surface with a hose, and then wash the surface with a solution of a household cleaning detergent, cleaning an area of approx. 1x1-m at a time. Once done, rinse the entire surface with a garden hose.

For best results ...

1. Do the cleaning early in the morning or late in the afternoon because the cleaner dries quickly in the scorching sun, so it will not have enough time to make effect.

2. The surface to be cleaned must be slightly wet before applying the cleaner.
3. When cleaning, take smaller – about 1x1 m – areas at a time so as to be able to scrub the surface thoroughly without leaving spots or streaks on the surface after cleaning.
4. Keep in mind that stains are usually the easiest to remove immediately. Some types of dirt may get "burnt into" the pavement after a while, so later they can only be removed with great difficulty, or cannot be removed at all.
5. Some stubborn dirt may remain on the surface despite the thorough completion of the above described processes.

The proposed cleaning devices:

1. Mild household cleaners
2. Spray bottle
3. 5-liter garden sprayer
4. 25 cm medium-strength brush
5. Garden hose with a sprinkler head
6. High-pressure cleaner (pressure: max. 100 bar)

Note that the following agents may damage the ReFlex rubber tiles: disinfectants, concentrated bleaches, petrol, gasoline, hydraulic or lubricant oil, weak acids, organic solvents. Never use a wire brush or a brush with hard plastic bristles.

By complying with the above instructions, you guarantee the maximum life-span and nice appearance of the product.

