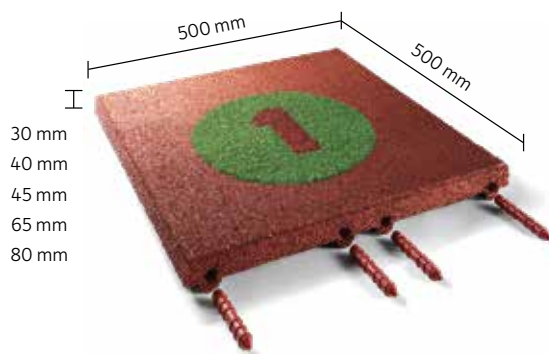




Terrasoft®

Hopping Games



On the floor of the ancient forum in Rome was one of the first verified "Hickel diagram" - predecessor of the popular skipping game "Heaven & Hell", which is still played by children all over the world. Whether in Southeast Asia, where children hop in a stooped posture or with their hands on their hips as in Africa, the simple gameplay principle of jumping on the floor delights children, even after millennia. Children learn the numbers up to 10 playfully, as well as good body control and balance by jumping on one or two legs.

We offer hopping game inserts made from a high-quality, 2-colour poly-grass surface, which are easily integrated into the Terrasoft slabs.

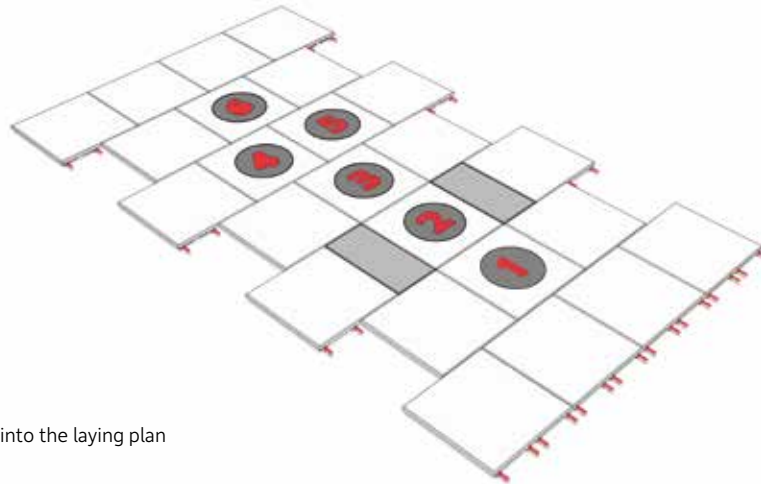
ADVANTAGES

- Upgrading of floor coverings
- Added value through game offers
- the slightly resilient hopping area protects the joints
- Attractive game idea even with small areas and lack of space

APPLICATION

Whether on playgrounds or playing fields, the hopping game inserts upgrade every outdoor area and animate children to unconscious learning. The space-saving game elements are often used especially on outdoor areas of schools or kindergartens. But even recreational areas or public spaces can easily be upgraded with an additional offer for physical activity.





Integration of the hopping game into the laying plan of the Terrasoft Slabs

INSTALLATION INSTRUCTIONS

In all Terrasoft floor systems (except lawn grating slab and paving bricks) number inserts can be integrated. They are manufactured at the factory and can be integrated as required into the surface laying plan. The poly-grass surface used for the inserts fits perfectly into the slab surface and allows numerous colour choices. The connector requirement and the connector diameter are determined by the dimensions of the selected fall protection slabs.

Laying on permeable substrate:

First, remove topsoil and soil down to a load-bearing, firm substrate. In cohesive, impermeable soils (e.g. loam), the foundations should be arranged with an appropriate slope and a drainage system for the discharge of surface water. Then, a load-bearing substructure (grain size 0/32 mm to 0/56 mm) min. 20 cm thick is filled in and compacted. Subsequently, as surface compensation and slab support, high-grade chippings (3/7 mm min. 25 mm thick) are used as backfill with a 2.5 % gradient.

Laying on firm substrate:

An important prerequisite for the installation of slabs made of pure rubber granulate is the professional preparation of the substrate at the appropriate gradient. A smooth gradient screed with subsequently applied moisture insulation is most suitable as the water-bearing layer. Existing films and bituminous membranes must first be tested for their suitability as a substrate. A solid edging to maintain the position is essential. To ensure the desired situational securing in the long term, the border slabs should be glued to the substrate.

Please follow the care instructions.



Colours



red green

Specifications



SURFACE ADHESION

The surface adhesion is mainly for the fixation of solid rubber products.

Preparation of the subsoil

The concrete foundation must be rough, clean and dry. Please pay attention that the glueing areas are free of oil, greases and other residues e.g. colours, rubber abrasion, cement mist etc.

The surface and environment temperature must be at least 8°C resp. at least 3°C above the dew point temperature. Air temperature not higher than 80%.

Adhesion priming

Fill adhesion priming in another pot and apply thinly on the subsoil by rolling or painting.

If necessary, subsequently smooth put to avoid puddles.

The drying depends on the air humidity.

With a high air humidity the drying is delayed. In the drying time, a direct water admission should be avoided.

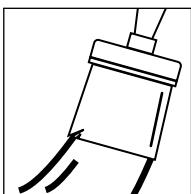
Under certain circumstances, it may be necessary to grind the dried adhesion priming. The grinding dust should be removed thoroughly.

Glueing process

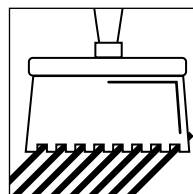
Admit 1.5 kg hardener to 10 kg glueing and mix it at a low rotative speed achieving a mass free of mist.

When glueing rubber on concrete, the glueing mass should be applied and compressed on the concrete surface with a toothed spatula (4 mm).

Please pay attention that the area is not stepped on for 48 hours.



adhesion priming



glueing process

JOINT FILLER

The joint filler is applied when already laid elements should be glued together upon the impact edges. This way, it is not possible to take away single elements.

Processing

With the supplied plastic nozzle, an exact dosage is achieved by simply pressing the middle of the bottle.

Please pay attention that the joint filler remains liquid during the processing period. The joint should not be larger than 3 mm.

Please pay attention that the surface is not stepped on for 48 hours.

CARE INSTRUCTIONS

A regular care of the layed slabs serves the security and increases its attractive appearance and the life span.

- The dust on Terrasoft areas can be swept off with a broom with hard bristles.
- Coloured surfaces can be subsequently refined through application of a special spray coating.
- Fouling with moss or grass in the joint area can lead to the panels being pushed apart or pushed up. Be sure to remove such growth early.
- Decolourations of the surface can occur through durable remaining ram moisture on the substrates as well as diverse plants in the direct surroundings of the slabs.
- External influences can have an effect on the condition of the surfaces. Weather, UV radiation, dust from the air, sites near the coast with high salinity or sand areas near the impact protection slabs can have a negative effect on lack of care.
- In cases of abrasion slabs have to be replaced



IMPACT RESISTANT PLAYGROUND SURFACE

Correct implementation of European Standard EN 1176/1177

Playground surfacing systems are required to comply with product safety legislation.

Adherence to the safety requirements contained in this legislation must be verified in the form of a certificate from an approved test body following successful completion of testing. We have provided a simplified and summarized explanation of how to implement this standard for planners and decision makers who decide in favour of surfacing systems.

It may be assumed that the most serious of all probable accident risks occurring in children's playgrounds is that of head injuries. Consequently, priority has been assigned to the creation of a criterion to evaluate the efficiency of floor surfacing systems which minimize this injury potential.

As a consequence, not only test procedures but also criteria for the choice of playground floors are determined which represent the upper limit of capacity to avoid head injuries, applicable for play equipment installed in accordance with EN 1176.

As you have chosen in favour of impact protection systems, you will be aware that six individual certified height measurements exist for different fall heights from 3 m.

The relevant generally applicable certificate is provided overleaf. After selecting the right slab, what is important is the surface area from which use of the playground apparatus begins and which encompasses at least the impact area.

The impact area is the surface on which a user can land after dropping through the falling space.

The following points must be taken into consideration when defining this area:

Up to a free fall height (free fall height=pedestal height, upper rung or upper handle position for hanging apparatus) of 1,5m, an additional falling space length of at least 1.5m must be provided around the apparatus.

With a free fall height of more than 1.5 m the falling space to be protected with the relevant drop protection measures must be calculated as follows:

Required minimum falling space length: $\frac{\text{free fall height} + 0,75 \text{ m}}{1,5 \text{ m}}$

TECHNICAL INSPECTION AND MAINTENANCE

Controlling and Maintenance

In order to ensure the safety of the product in a responsible way, the plates installed need to be inspected and maintained in regular intervals. Due to their material quality Terrasoft impact-absorbing plates are designed for a long useful life with short maintenance intervals. Even so, the clear guidelines laid down in DIN EN 1176/1177 are also binding for Terrasoft elastic/safety slabs. To ensure the safety of the impact protection, the installed slabs require regular inspection and maintenance. Due to their high quality, Terrasoft impact protection slabs are designed for a long service life. The clear requirements of DIN EN 1176/1177 are binding for Terrasoft impact protection slabs. The external influence and impact on durability of impact protection qualities is not exactly foreseeable. External influences can be high exposure or high-risk locations regarding vandalism. Furthermore, weather conditions, UV radiation, high frequentation areas (i.e. under swings or seesaws), unregular maintenance etc. can influence the impact protection qualities. Dust loading of the air, locations near the coast with high salt concentration or sand areas nearby can have a negative influence if maintenance is insufficient. With regular maintenance and care, Terrasoft system's impact protection can be expected for up to 10 years. This outperforms the durability of all alternative impact protection systems by far, especially as the costs for maintenance and securing of impact protection are far lower compared to sand, bark mulch or wood chips.

Warning!

Maintenance intervals need to be shortened with high frequentation of the area, high risks of vandalism, extreme weather conditions or locations near the coast. This applies to different locations on play and recreation areas. High frequentation on the impact protection areas i.e. by teenagers, in entrance areas or dirt require respective maintenance intervals. In cases of abrasion i.e. with a punctual frequentation like under some playground equipment, slabs have to be replaced. For replacement or repairing, only spare parts of the manufacturer are to be used. Checking of maintenance intervals and controlling of professional execution of installation and repair works are duty of the operator, who generally is responsible for maintenance. During installation and maintenance work, the area has to be visibly closed for children.

It has to be ensured that the drainage system constantly works. Keep yourself informed about the resulting requirements and duties, like they are at least partly specified in EN 1176/1177.