



The græsgitter interlock with one another in a form-fitting manner. Laying in half-staggered offset formation guarantees a sustained connection.

INSTALLATION INSTRUCTIONS

Preparation: Remove the topsoil and smooth the surface. 10 cm thick layer of gravel (0/16) should be applied and compacted.

Laying fall protection covering: Apply substrate* with a grain size 0-4 (Ø in mm) in a thickness of 5 cm onto the gravel layer. Compact the substrate height-retained before the installation of the slabs. Installation of the græsgitter in half-staggered offset formation. Fill mats with substrate and sweep (photo 2 & 3). Take care of a **complete filling of the lawn chambers**. Sow grass seeds. Irrigate the area regularly and close until the lawn has fully grown.



* Lawn substrate acc. to DIN18035-4 Vegetation-specific properties

<u>Granulometry:</u>	
(Quota of the total mass in %)	
Elutriable components	8 – 20
Fine/middle-grained gravel	5 – 20
<u>Volume weight (t/m³)</u>	
Condition as received DIN EN 1097-3	1,10 – 1,30
with max. water capacity of compacted	1,65 – 1,95
discharge coefficient C	
<u>Water/air supply compressed</u>	
Maximum water capacity	25 – 40 Vol. %
Water permeability mod. K _f	1 – 3 mm/min
<u>ph-value</u>	
	6,8 – 7,5
<u>Salt content</u>	
	30 – 100 mg/100 g
<u>Composition</u>	
Naturprodukt (igneous stone composite) made up of augite, olivine, magnetite, limonite, Bionit, different types of clay, enriched with compost	

MAINTENANCE INSTRUCTIONS

The græsgitter are non-hazardous in terms of the norm. The operator has to ensure a regular inspection of the area.

Visual inspection: weekly visual inspection to detect obvious hazards

Operational inspection: quarterly wear control to check the position and durability of the mounting and connector, elimination of possible tripping points, replacement of the slabs in case of damage or surface abrasion

Main inspection: annual intensive verification of the positional safety and operational safety of the fall protection, control of the strength of the connectors used and the enclosure elements. Retesting has shown that impact protection performance increases during lifetime. Nevertheless, depending on exposure, the compartments of the slab should be checked and potentially refilled with lawn substrate in the course of time.

For inspection of equipment foundations, the slabs can be lifted.

Colours



redbrown green anthracite

Specifications





IMPACT RESISTANT PLAYGROUND SURFACE

Correct implementation of European Standard EN 1176/1177

Playground surfacing systems are required to comply with apparatus 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:

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

TECHNICAL INSPECTION AND MAINTENANCE

Controlling and Maintenance

In order to ensure the safety of impact absorption 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 1177 are also binding for the græsgitter. To ensure the safety of the impact protection, the installed slabs require regular inspection and maintenance. Due to their high quality, the græsgitter are designed for a long service life. The clear requirements of DIN EN 1177 are binding for the græsgitter. 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, the græsgitter 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 high abrasion i.e. with a punctual frequentation like under some playground equipment, slabs have eventually 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.