ACO Hochbau Vertrieb GmbH

Postfach 1125
97661 Bad Kissingen
Neuwirtshauser Straße 14
97723 Oberthulba
Tel. +49 9736 41-60
Fax +49 9736 41-69

hochbau@aco.com
www.buildingmaterial.aco

ACO. creating
the future of drainage

Reinforcement.
Infiltration. Planting.

ACO Self® grass grid

Sustainable, stabilized surfaces

The ACO grass reinforcement panels

Alternatives to paved surfaces arecurrently being discussed on many levels. Some local authorities already require alternatives to paving while other local authorities charge fees for sealed surfaces. The ACO Self® grass grid offers the possibility of creating an occasionally trafficable, reinforced, lawn. The optimal cell size results in a high proportion of grass with good root growth, which helps to loosen the soil. This means that the percolation capacity is maintained over the long term. Easy installation is facilitated by the low weight of the ACO Self®grass panels for permanent stability of the surface, local soil conditions must be taken into account before installation.

The following documents can be consulted during the planning process:

- DIN 18035 Part 4 (sports fields, lawns)
- DIN 18318 (DIN 18318 Traffic route construction work, paved surfaces, slab paving, edgings)
- DIN 18917 (Landscaping Vegetation Technology - Turf and Seeding)
- DWA-A (138 Worksheet DWA-A 138 “Planning, construction and operation of systems for rain water seepage”)
- RStO 01 (Guidelines for the standardisation of the superstructure of traffic areas)
- FGSV - Code of practice for the compaction of subsoil and substructure in road construction
- even with surface infiltration, a drainage system, e.g. with ACO Self® or ACO DRAIN® drainage systems, should be taken into account in accordance with the FGSV* information sheet
- the local bylaws are to be taken into account

MPA ECKERNFÖRDE

The ACO Self® Honeycomb mesh grass paver can withstand a surface load of approx. 250 t/m² in accordance with DIN 53454. Tested by the MPA Eckernförde.

* FGSV = Forschungsgesellschaft für Straßen- und Verkehrswesen (Research Society for Roads and Traffic), Code of Practice for Permeable Pavements on Traffic Areas)

Lawns can be reinforced by the ACO Self® grass grid to enable a maximum of rainwater infiltration and car accessibility at the same time.

Advantages of the ACO Self® grass grid

- Easy transport
- Easy to lay, approx. 5 kg/m2
- Car-accessible
- Visually appealing due to high proportion of greenery
- Consists of recycled plastics (polyolefin materials)
- Recyclable material
- Can be used on occasionally trafficked areas with a gradient up to approx. 5 %

Scope

- Garage entrances
- Car and caravan parking spaces
- Residential roads/pavements
- Green roofs

ACO grass panels
Art. no. 81071

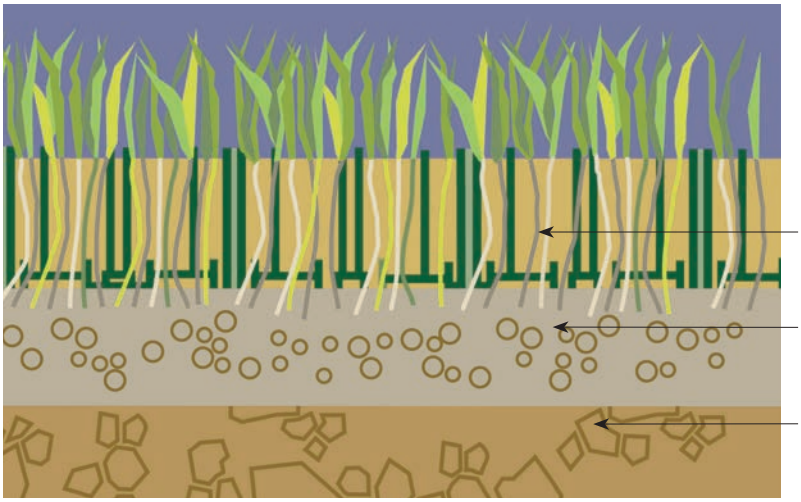
Dimensions of the ACO Self® grass panels
mesh grass paver (L/W/H): 586 x 386 x 38 mm; equivalent to 4.42 pcs./m². Ground pegs (50 pieces - item no. 81073) and parking space markers (10 pieces - item no. 81072) are available as accessories.

For a parking space length of 4.5 m you need 59 markers, for 5.0 m 64 markers, for 5.5 m 69 markers.
If you have any further questions about planning and application, our application technology department will be happy to help.

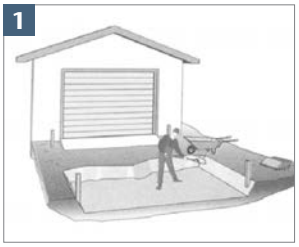
ACO Self® grass grid „space“ when installed in the surface so that, for example, expansion due to heat does not have a negative effect on the surface.

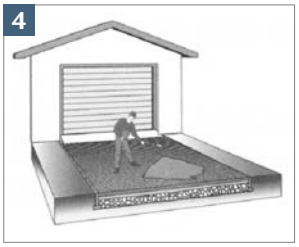
The grass grid is not recommended on curves and manoeuvring areas (occurrence of strong shearing forces).

Substrate installation recommendation



- ACO Self® grass gridwith substrate filling
- Levelling layer approx. 3 to 5 cm
- Water-permeable base layer 15 to 45 cm, depending on load and local soil conditions





Installation example for garage entrances

1) The route that is to be driven on is marked out. The soil is excavated to a depth of approx. 20-30 cm, depending on the subsequent load on the surface, e.g. for cars. For soils that are not easily permeable to water, such as clay, an excavation of approx. 40 cm is recommended.
Installation of the edging:
There should always be stable edging surrounding a surface, e.g. made of lawn curbs (set in concrete).

2) After the boundary has set, the excavation base is mechanically compacted, e.g. with a vibrator. Installation and vibration of the base course, e.g. consisting of gravel/crushed stone 2/32-2/45. The installed layer thickness should be approx. 15-45 cm, depending on the subsequent load and local soil conditions. The material should not contain any fine particles, otherwise the infiltration of rainwater cannot be guaranteed.

3) On top of the substructure, a levelling layer approx. 4 cm thick is applied as a subgrade of sand or a mixture of sieved compost with sand/lava (ratio 50/50) and smoothed out.
The levelling layer should contain humus so that the lawn roots can take root in it and the stability of the entire surface is ensured. The ACO Self® grass panels are then connected lengthwise first. Then fasten in the diagonal direction. To do this, lift the honeycombs up slightly at the bottom of the panel and push the tabs into the recess with the raised points. ACO Self® grass grids can be cut/sawed to any size using commercially available equipment.

4) The ACO grass panelsare backfilled with a mixture of topsoil and sand/lava (ratio 70/30), for example, and sown with lawn seed. Water the substrate in so that it is approx. 0.5 cm below the top edge (to protect the turf). After completion and sowing the lawn seeds, water the area regularly. By the time the lawn is driven over for the first time, it should have been cut approx. 3-4 times in order to achieve a consistently green surface.
Care and maintenance: fertilise regularly, water if necessary and mow.

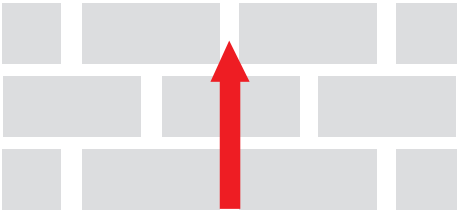
Laying instructions

It is recommended to lay the tiles in an interlocking bond rather than in a cross joint and, if possible transverse to the driving direction.

wrong

Laying in a cross joint

correct



Recommendation: Lay in interlocking