

GEOCROSS



**PAVING TO REALIZE AIRFIELDS
AND DRIVABLE SURFACES**



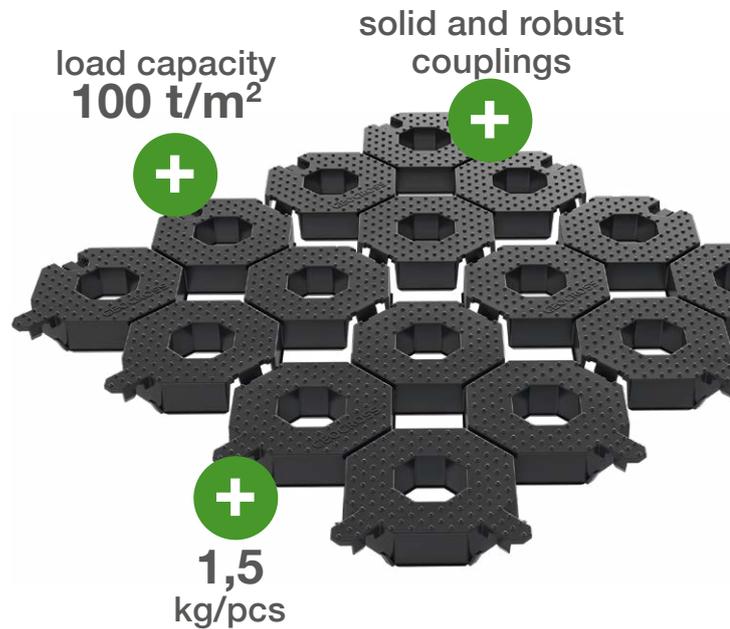
THE SOLUTION

Geocross is a flooring made on regenerated plastic materials for the realization of airfields and drivable surfaces.

It guarantees stabilization and support to grass surfaces already existing and is installed with a simple laying and rolling of the grids in the ground.

To ensure optimal performance it must be completely embedded in the ground and its embossed surface provides an excellent wheels grip.

When Geocross is well rolled in the ground it creates a surface that allows great stability and excellent rainwater permeability over time.



PATENTED

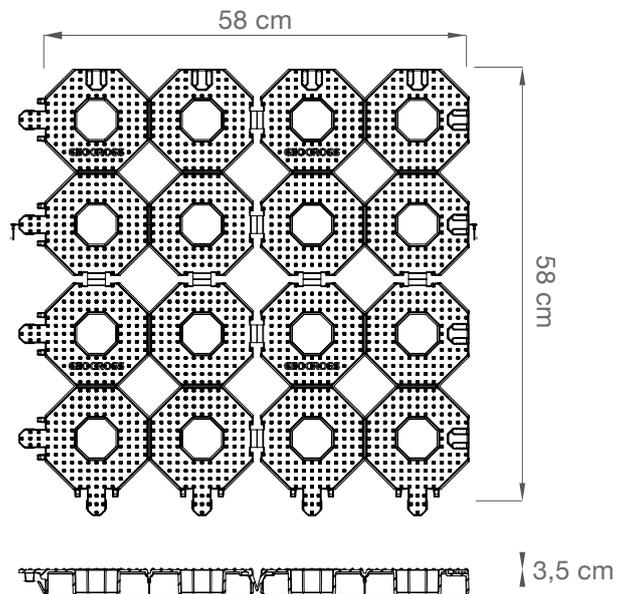
- AIRFIELDS
- PLEASURE FLIGHTS
- ULTRALIGHT RUNWAYS
- ACCESS TO SERVICE VEHICLES
- DRIVING AND TRANSIT AREAS

The 60% closed surface allows to Geocross to “float” on soft ground and distribute the load applied by the wheels of vehicles in transit preventing them from sinking into the soil.

In addition to giving the correct support to light aircraft during landing and take-off, it allows access to the runway for light road vehicles that can be used for maintenance, support and rescue.

TECHNICAL DATA

Dimensions (cm)	58 x 58 x H3,5
Material	Gralene HD Black
Load capacity (t/m ²)	100*
Weight per piece (kg)	1,50
Packaging size (cm)	120 x 120 x H240
No. of pallet pieces	256
m ² pallet	86
Colour	Black
Closed surface area	60%



* The strength and condition of the soil can greatly influence the overall performance of the system.

INNOVATION IS KNOWING THE HISTORY



During the Second World War the allies developed a system of perforated and modular steel grids, called “Marston Mats”, which stretched on the ground and united to others were used for the rapid preparation of airports and roads. The Italians called them “perforated metal grids”, neologism derived from the English term “grill” that means grid.

This paving system, among the most important idea of the Second World War, was equipped with large holes that allowed to take root perfectly to the ground and was also used by war vehicles to cross impervious and marshy areas.

Over the decades, technological evolution and the development of new materials have led to a slow decline of the grella, now too “bulky” and not very suitable for the new needs no longer war.

IL CONCEPT

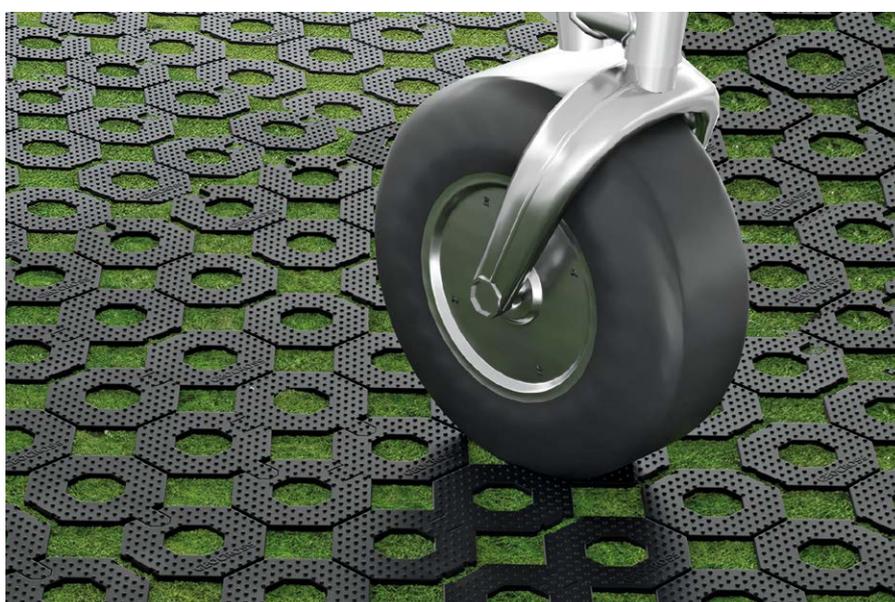
Geoplast, strong of the experience in the realization of flooring for the stabilization of green areas and soil consolidation, has redesigned the “grid” in a modern and sustainable way. He did it interviewing aviators, aircraft enthusiasts and engineers specialized in the design of runways.

The product has taken shape taking inspiration from the classic metal grid, following the different phases of the process of innovation with the aim of meeting the needs of modern airplanes.

Geocross is a modular tile with square dimensions (58x58 cm) for ground reinforcement and for aircraft runway area. Extremely light and easy to handle, it can be overturned, moved and installed by one man.

The octagonal holes made in every single grid facilitate the drainage of the rainwater, avoid water stagnation on the track and allow the grass to grow inside them. Furthermore they contribute to the elasticity and lightening of the element.

It can be used in all weather conditions because it is made of regenerated plastic material, UV and corrosion resistant.



ADVANTAGES



Geocross is an innovative outdoor flooring that is installed to create take-off and landing runways that require high stabilization and ground permeability.



NO-SLIP SURFACE

The surface is provided with a stippled texture that guarantees greater grip and therefore greater adherence during vehicles transit, even in the presence of water or mud.

The surface of Geocross has been designed for a comfortable and safe transit.



HIGH LOAD CAPACITY

The flooring distributes the loads and does not risk structural soil failure or breakage as it “floats” on the ground.

The hollow structure of the element allows it to fit firmly into the soil, creating a uniform and usable surface.

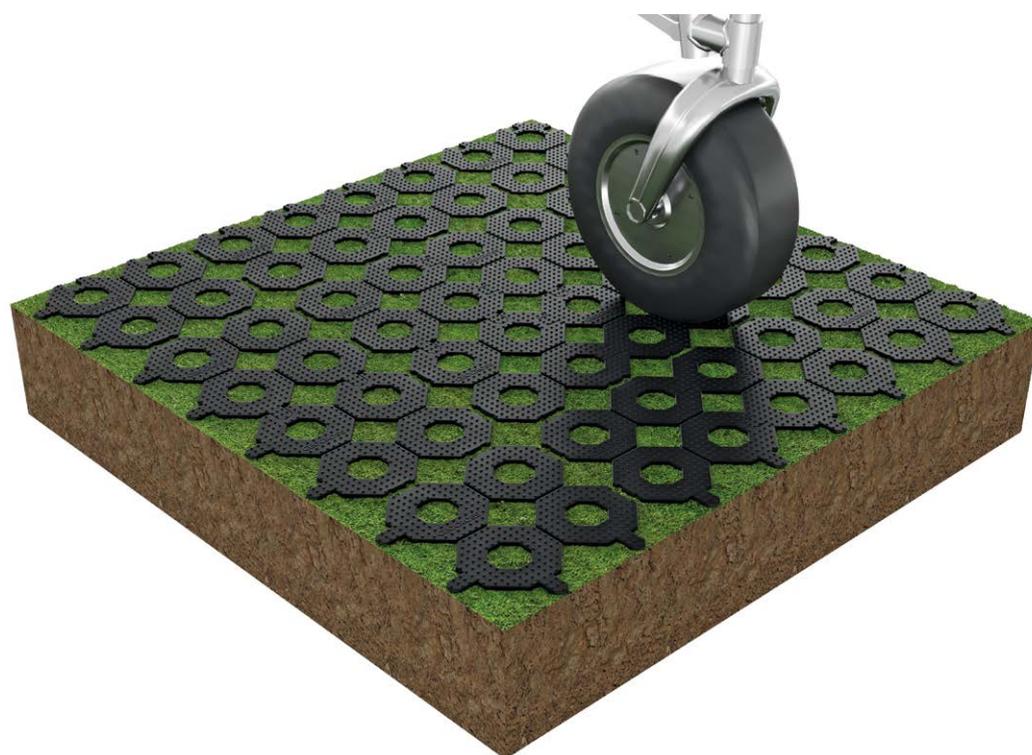


SOIL STABILIZATION

Geocross is a non-invasive solution to improvement stagnant soils or with high silt rate. With the action of the rain, the loamy soils are crushed to create a muddy veil.

The temperature changes and the degree of saturation cause expansion and contraction movements in the soil. Geocross incorporates spring elements that allow it to follow these variations naturally without compromising the integrity of the flooring.

GEOCROSS STRATIGRAPHY



FREQUENCY OF USE

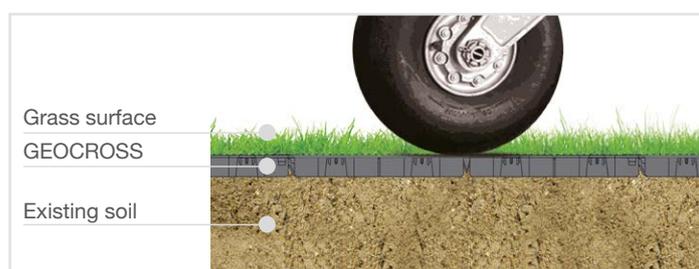


LOAD CAPACITY



A good taxiing, take-off and landing surface improves the runway safety, avoiding the projection of sludge from ground on the top airplane wings surface.

INSTALLATION REQUIREMENTS



AIRCRAFT

- Installation should only take place when the ground is soft enough to ensure that Geocross can be easily compacted.
- Cut the grass before laying geocross on the existing grass surface.

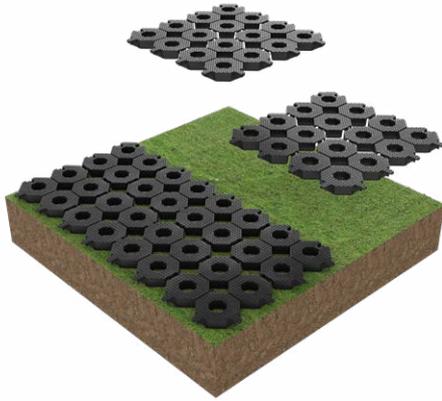
Geocross flooring has been designed as a non-slip tile system that guarantees a conservative intervention that is easily integrated in all green areas of our territory.

Geocross is aimed to a specific public, air tourism, with the mission to ensure a complete usability of the runways with the possibility to land and take off all year round in perfect safety, even in difficult weather conditions.

In the event of disasters, the construction of airfields and airfields with Geocross can be used as an aid for the following means of transport rescue aircraft such as the military armed forces and civil protection.

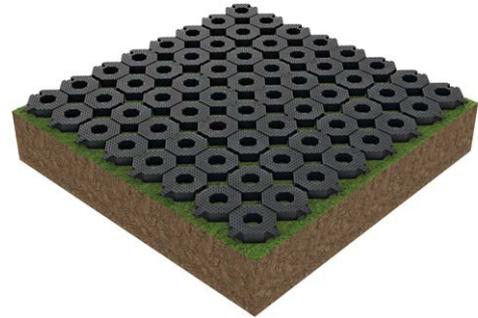
INSTALLATIONS PHASES

The installation of Geocross is innovative compared to the classic grassy grids as no excavation has to be carried out for the laying of the elements and neither preliminary preparations of the substrate.



① LAYING THE FLOORING

Lay the grids on the existing lawn respecting the correct positioning of the hooks.



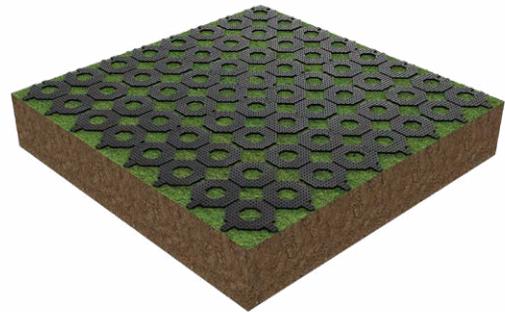
② HOOKING THE FLOORING

Once the affected area has been laid, proceed with the hooking of each individual grid.



③ ROLLING THE FLOORING

Press the flooring with a rammer roller (or vibro compacting roller) so that the grids penetrate into the existing soil.



④ FINISHED FLOORING

Homogeneous anti-slip surface with high bearing capacity for green areas.

PACKAGING AND TRANSPORT

PALLET cm 120 x 120	LORRY (13,6 m)	CONTAINER 20 BOX	CONTAINER 40 HC
86 m ²	2064 m ²	651 m ²	1763 m ²

MANUAL HANDLING



Geocross grids are stored in sheets of four pieces and stacked in classic 120x120 pallets.

They are easy to remove from the pallet due to their low weight.

The grids are then moved and laid in the ground very quickly and without the need for cranes or mechanical equipment.

STRONG HOOKING



INSTALLATION

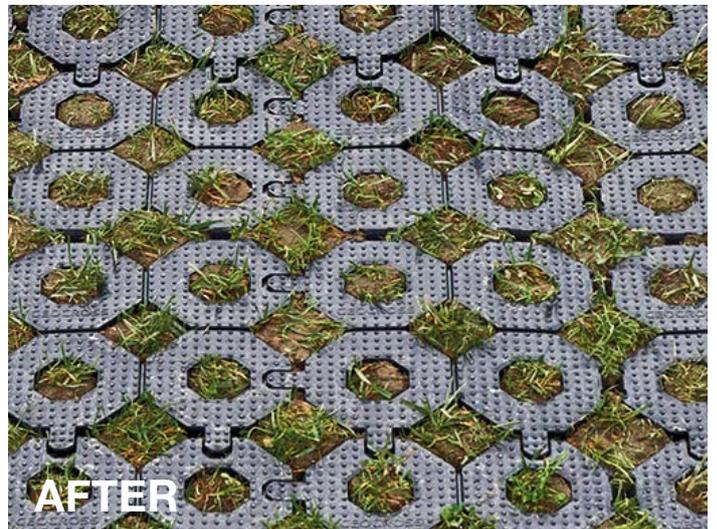


Geocross stabilising paving, has been designed as a system of non-slip plates that guarantees a conservative intervention. Furthermore, it can be easily integrated into all green areas subject to more or less frequent vehicle traffic, such as public city parks, campsites, country lanes, rural areas, etc.

BEFORE AND AFTER COMPACTION

The laid and hooked paving remains on the surface.

To complete the laying process, the grids must be pressed into the ground using a roller compactor machine.



ACCESS ROUTES AND PARKING



Geocross is aimed at a heterogeneous public that needs to develop a sustainable urban model and redevelop green areas that are disused and difficult to use.

Our focus is to convert green areas into usable and drivable areas while always maintaining the principles of permeability and biodiversity that nature imposes on us.

The stabilizing Geocross flooring has been designed as a system of no-slip tiles that ensures a conservative intervention and is easily integrated in all green areas subject to the more or less frequent passage of vehicles such as in public parks, camping, country roads, rural areas, etc.

TECHNICAL SUGGESTION

The installation of Geocross is recommended for soil reinforcement in green areas or areas with low bearing capacity soils. It can be laid directly on the existing grass surface and the grass should be cut as short as possible.

Installation should only take place when the soil is soft enough to ensure the complete product penetration on the soil.





Geoplast
Building beyond together

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REV. 000_01/2022

