

Technical data sheet



PURE GRID™

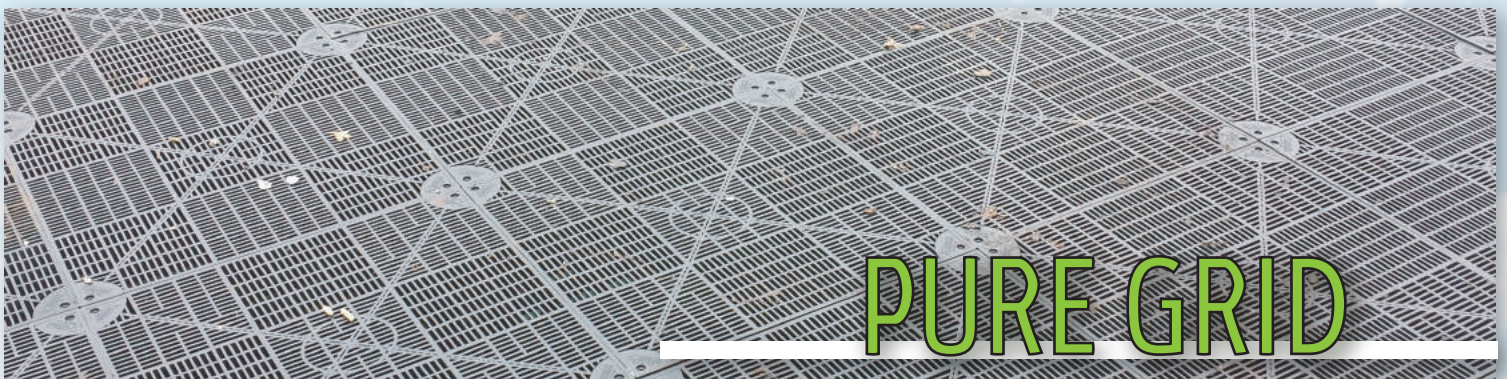
What is the PURE GRID?

PURE GRID is the only air distribution system and biomass (i.e., filtering material) support designed - and not adapted! - for biofiltration systems.

Thanks to the high quantity of passages and their particular geometry (24 x 6 mm), the **PURE GRID** is able to achieve a homogeneous and regular diffusion of the air inside the filter bed and to minimize the fall of the finest filtering mass inside the plenum.

The **PURE GRID** is an easy-to-assemble modular system that can be made with a variable number of supports (so called feet) (from 10 to 14 /m²) depending on the height of bed and on the specific weight of the filtering media. **PURE GRID** is able to withstand the typical operating conditions of biofilters, i.e., air containing corrosive/aggressive pollutants and high quantity of vapor.

In order to contain the emissions of harmful green-house gases (GHGS) and in such a way so as to implement the measures contained in the EU Circular Economy Action Plan, **PURE GRID** is made (in part) with recycled materials.



Description

All pieces composing the **PURE GRID** (i.e., supports and grids) are realized with a mix of new and recycled polypropylene reinforced with fiberglass.

Each grid of **PURE GRID** is composed by 9 sub-dials where the rectangular holes are orthogonally disposed; thanks to that and to the special geometry of the supports (feet are trunk-conical), the air raising up from the plenum is uniformly diffused within the filtering bed, reducing the channelling.

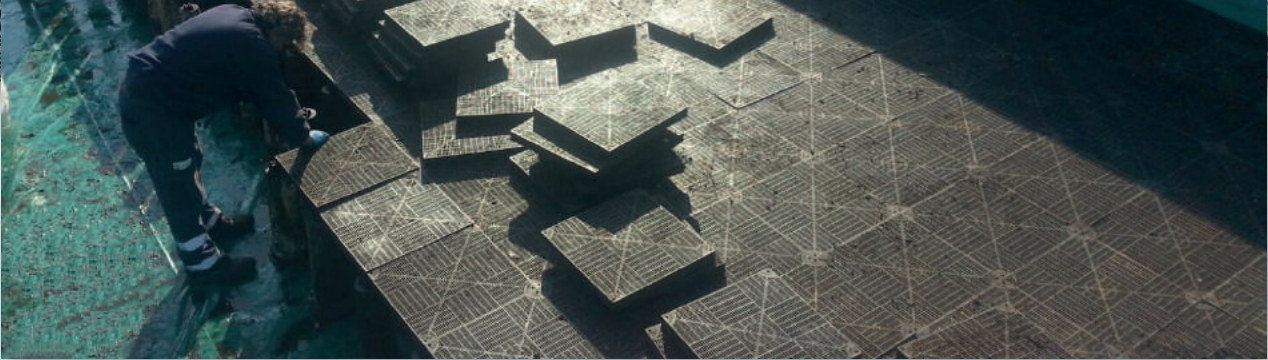
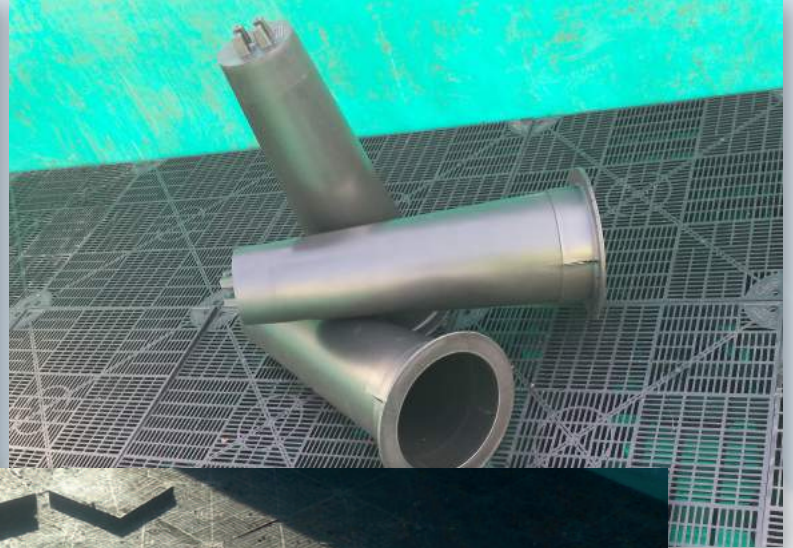
It is important to underline that the geometry of the supports derives from a lot of experimental tests, the purpose of which was to limit the pressure drops during the diffusion of the air within the plenum. Moreover, the supports have an active role in the discharge of the leachate (they are drilled in the upper part).

PURE GRID is designed for support the **PURE BIO**, even if it can sustain any kind of filtering media, such as compost, bark, shredded twig and peat.

Advantages deriving from the installation

Following the advantages deriving from the **PURE GRID**:

- Modular system
- Excellent air distribution within the biofilter (both towards the filter bed - filtration motion - and within the plenum)
- Easy assembly
- Easy maintenance and cleaning of the plenum
- Discharging of leachate without affecting the functionality of the biofilter.



Main characteristics **PURE GRID**

Design static load (as uniformly distributed load)	
Configuration with 4 feet (supports) per square meter	1000 kg/m ²
Configuration with 5 feet (supports) per square meter	1400 kg/m ²

Grid **PURE GRID**

Dimensions (B X L)	500 x 500 mm
Thickness	50 mm
Surface (for each grid)	0,25 m ²
Dimension of rectangular holes	24 x 6 mm
Number of rectangular holes for each grid	>900
Manufacturing material	PP reinforced fiberglass
Colour	black

Support (feet) **PURE GRID**

Height	500 mm
Footprint (for each foot)	0,045 m ²
Manufacturing material	PP reinforced fiberglass
Colour	black

Data shown do not constitute binding technical information.