BVM-2, GREEN ROOF GARDENS SUBSTRATE

The new residential areas, as well as the new transport facilities, make clear the need of recovering green space to improve our environment's health and our quality life.

The green covers can reduce locally the impact of the constructions, as well as offering plenty of economical and ecological benefits:

- Use and administration of rain water
- Energy saving: thermal isolation and protection against direct insulation
- Decrease of the "urban heat island" effect
- Creation of a more harmonious and pleasant working and living environment
- Increase of the useful life of the covers' membranes

To enjoy all the advantages of a green cover it's necessary to choose the right species to grow on it and, of course, the right substrate to allow a proper growth.

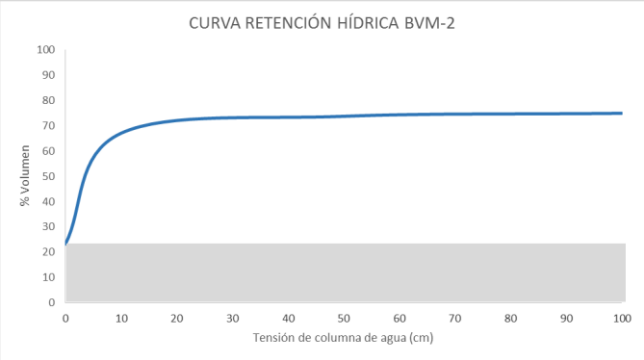
BURÉS has a wide offer of substrates specially designed for green covers, adapted to the needs of different projects.

properties

The substrates for green covers of **BURÉS** are made out of high-quality prime materials, and designed to have the optimal aeration, water retention capacity and density values.

The **BVM-2** is specially designed for extensive farming in green covers, using a layer of **only 3cm depth.** The thin layer reduces the amount of substrate used, thus reducing both the cost of the cover and its weight. This allows for green covers on buildings without any strain on their structure: when saturated (heaviest), the substrate plus the water weights less than 60Kg/m^2.

The **BVM-2** is suitable for plants with low watering needs, such as the *sedum* type.



composition

The **BVM-2** is made out mostly of volcanic sand of 0-6mm (>80% in weight) from the BURÉS PROFESIONAL mines, being the other 20% vegetal organic matter.

The vegetal compost has all the properties of a vegetal amendment: the organic matter increases water retention, maintains the substrate's structure and slowly releases nutrients.

On the other hand, the volcanic sand has a high aeration (porosity) and is very stable, giving stability to the mix. It's also chemically inert, letting the wonderful chemical properties of the vegetal compost stand out.

The mix of these two materials gives an efficient substrate, with a good aeration and drainage, necessary for green covers.

It is remarkable that the high mineral matter gives the substrate a high stability, avoiding its erosion through wind or water, stopping it from compacting and not letting undesired herbs grow, ensuring a low maintenance cost in both time and money.

The substrate brings nutrients, water and oxygen to the plants, apart from supporting

them physically and providing them a good structure.

The **BVM-2** has a good agronomical use, but it mostly stands out for its stable structure and good water/air exchanging relation.

Due to its physical properties (high porosity and fast drainage), it is recommended to water it during dry seasons.

The composting of the organic matter ensures a substrate free of adventitious-seeds and vegetal pathogens.

Furthermore, the substrate includes a base fertilizer (NPK+MgO) that helps the root fixing and supports the beginning of the plant growth.

The physical and chemical properties of this substrate are shown below.

PARAMETER	UNIT	VALUE
WATER RETENTION	%	30-35
ORGANIC MATTER	% s.m.s.	20-25
pH (1:5)	-.	7-8
CONDUCTIVITY (1:5)	µS/cm	350-500
APARENT DENSITY	kg/m^3	785±10%
SATURATION WIEGHT	kg/m^3	1450±10%
TOTAL POROOUS SPACE	%	70-80

This product has several advantages compared to others in the market:

- High porosity
- Excellent and very fast drainage
- Highly stable
- Very good control of undesired plants'.

recommended vegetation

The layer depth of the substrate is directly related to the plants that will grow on it, its extension and the microclimate of the area.

The vegetal species that must be grown on an extensive cover must require a low maintenance, and be able to adapt themselves to the climatic conditions of the area.

The main aim of the vegetal layer is reaching the maximum covering percentage of the substrate's surface, so that the technical and ambient aims of an extensive green cover are reached.

Species with non-deep root systems, a good regeneration capacity and a growth of less than 50cm must be used.

product presentation

The **BMV-2** substrate is in bulk and in 1m^3 big-bags.

We also offer green cover modules where the substrate has already been applied and the plants are grown.

The whole producing processes, as well as the final product, is under our accurate quality controls certified by "Normas" ISO-9001 and 14001, with the aim of guaranteeing the satisfaction of our clients as well as a deep respect towards the environment as in all our activities.