

## VULCASOIL

### VOLCANIC SUBSTRATE FOR GRASS CARPETS

#### COMPOSITION:

Volcanic fertile substrate consisting of a mixture of volcanic minerals (pumice and lapillus, of which 25% are sands of volcanic lapillus and 75% are sands of pumice), organic matter (blond peat with average grain size) and/or humidified organic matter (composted vegetable material) and mixed fertilizer with nitrogen in the form of controlled transfer.

#### APPLICATION FIELDS:

- Grass carpets
- Drilling (seed) purposes
- Management and maintenance of green plants

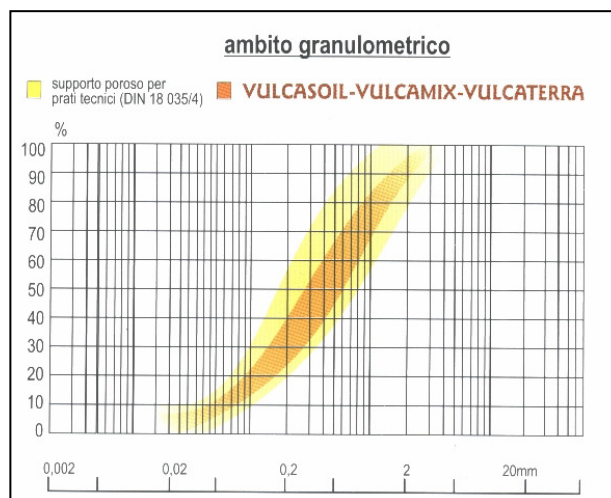
#### PHYSICAL AND CHEMICAL PROPERTIES:

- Specific weight: from 950-1100kg/m<sup>3</sup> (dependent on moisture of quarry)
- Grain size: range in the inside of the environment DIN (from 0 to 0,3 mm with particles between 0 and 0,02 mm in diameter lower than 7% )
- Permeability: more than 0,6mm/min. saturated and pressed, bigger than 6mm/min. under standard conditions (ex DIN: >0,4 e >1mm/min.)
- Water retention (available/usable water): from 15% to 20% in volume
- pH: between 7 and 8
- Organic materials: 15%
- C.S.C.: approx. 30 meq/100g
- Active limestone free

Medium chemical analysis	PUMICE	LAPILLUS
SiO <sub>2</sub>	62,5 %	56 %
Al <sub>2</sub> O <sub>3</sub>	17,5 %	16,5 %
K <sub>2</sub> O	9,5 %	4,9 %
Fe <sub>2</sub> O <sub>3</sub>	2,6 %	6,5 %
CaO	2,5 %	8,8 %
Na <sub>2</sub> O	2,2 %	2,2 %
TiO <sub>2</sub>	0,5 %	0,8 %
MgO	0,4 %	3,1 %
pH	7 - 8	7 - 8

#### FUNCTIONAL PROPERTIES:

- It is a large-pored product ideal for lawn, in sport facilities and for the entire structural engineering
  - Ex DIN standards in all variations
  - STRI standards
  - USGA drainage purposes
  - strengthened drainage purposes
  - vertical drainage purposes
- It is a ready product, easy to use, free from toxic and dangerous essences and weed seeds.
- It is a volcanic soil ideal for the preparation of bottom grass carpets and drainage layers fertile rooting.
- It replaces and/or integrates silica sand with optimal results in processing and reloading of grass carpets (top dressing) and it contributes to the formation of lawn which enables intensive use (up to 500 hours/year).

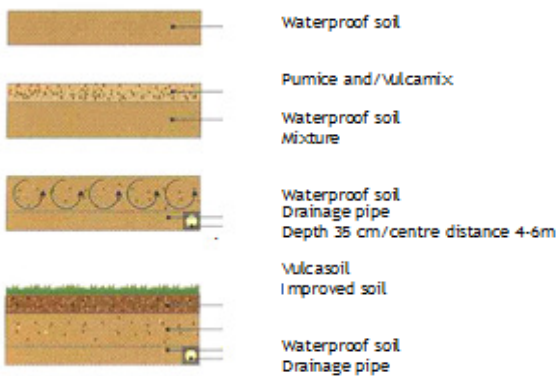


## CONSTRUCTION PLANS FOR SPORT FIELDS

### Scheme 1

**Improvement of physical and chemical properties and the drainage purpose of the ground:**

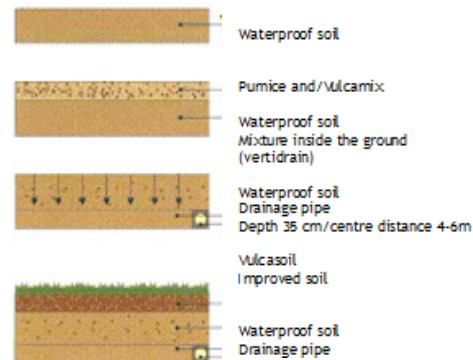
- Filling of 5 cm Pumice Sand or Vulcamix
- Machining with harrows to mix the volcanic sands with the ground
- Top dressing with 5 cm Vulcasoil
- Sowing or mounting of a turf



### Scheme 2

**Improvement of physical and chemical properties and the drainage purpose of the ground:**

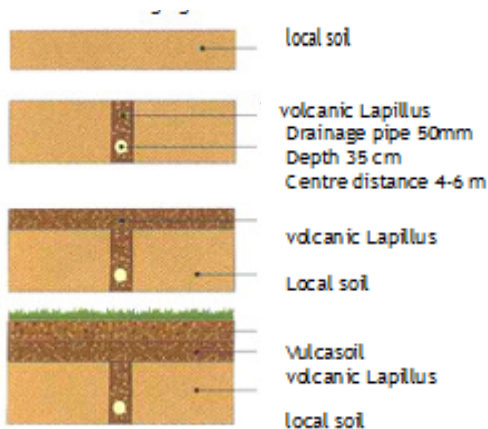
- Filling of 5 cm Pumice Sand or Vulcamix
- Deep coring with a vertidrain machine
- Top dressing with 5 cm Vulcasoil
- Sowing or mounting of a turf



### Scheme 3

**New construction of sport fields with double drained and rooted layer:**

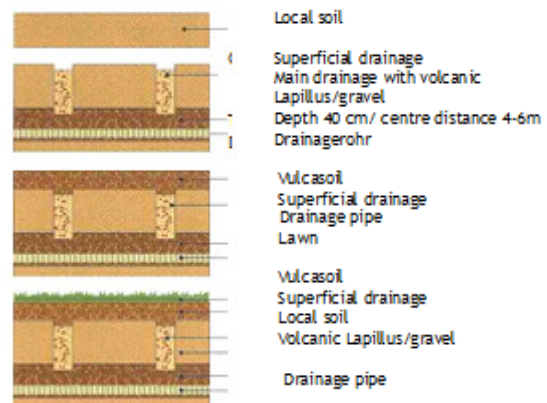
- Formation of the strengthened drainage with the draining pipe filled with gravel of Volcanic Lapillus
- Formation of the drained layer through filling 15 cm of gravel of Volcanic Lapillus all over the surface
- Formation of the fertile layer through filling 15 cm vulcasoil all over the surface
- Sowing or mounting of a turf



### Scheme 4

**New construction of sport fields with the system of drainage trench:**

- Formation of the main cross drainage with the draining pipe filled with gravel of Volcanic Lapillus
- Formation of the superficial longitudinal drainage purpose filled with Volcanic Lapillus or Vulcamix.
- Formation of the fertile layer by filling 10-15 cm vulcasoil all over the surface.
- Sowing or mounting of a turf



AVAILABLE UNPACKED, IN BAGS (BIG-BAGS) 1,5MC SIZE AND IN 33LT BAGS PACKED ON PALLETS (45 bags on each pallet).

*This mineral is a natural raw material. All data indicated above are therefore approximate and do not provide any warranty.*