

## Caratteristiche fisico-chimiche

- **Peso specifico:** V. Intensivo ed Estensivo 880-1.000 Kg/m<sup>3</sup>; V. Light 700-800 Kg/m<sup>3</sup> (umidità di cava)
- **Peso materiale saturo di acqua:** 1.400 Kg/m<sup>3</sup>
- **Granulometria:** da 0 a 10 mm
- **Permeabilità:** superiore a 0,6 mm/min. saturo e compresso; maggiore di 6 mm/min. in condizioni normali (ex DIN: > 0,4 e >1 mm/min.)
- **Ritenzione idrica** (acqua disponibile/utile): 35%-45% in volume
- **pH:** 6-7 (UNI EN 13037:2012)
- **Sostanza organica:** 3%-6% per i Vulcaflor Intensivo e Light, 2%-4% per il Vulcaflor Estensivo
- **C.S.C.:** circa 30 meq/100g per i Vulcaflor Intensivo e Light, circa 15 meq/100g per il Vulcaflor Estensivo
- **Esente da calcare attivo e da Silice Libera Cristallina** (Prodotto non tossico)

## Physical and chemical properties\*\*

- **Specific weight:** Intensive and Extensive V. 880-1,000 Kg/m<sup>3</sup>; V. Light 700-800 Kg/m<sup>3</sup> (at quarry humidity)
- **Weight of water saturated material:** 1,400 Kg/m<sup>3</sup>
- **Particle size distribution:** between 0 to 10 mm
- **Permeability:** higher than 0.6 mm/min. when saturated and compressed; more than 6 mm/min. in normal conditions (in compliance with ex DIN: > 0.4 and >1 mm/min.)
- **Water retention** (available/usable water): 35%-45% by volume
- **pH:** 6-7 (UNI EN 13037:2012)
- **Organic substances:** 3%-6% for Vulcaflor Intensive and Vulcaflor Light, 2%-4% for Vulcaflor Extensive
- **Cation Exchange Capacity (C.E.C.):** approx. 30 milliequivalents/100g for Vulcaflor Intensive and Light, approx. 15 milliequivalents/100g for Vulcaflor Extensive
- **Contains no active limestone and no Free Crystalline Silica** (non-toxic product).

### Imperial Measurements:

\* **Effective load capacity:** Vulcaflor Intensive and Light 31-51 lbm/sq ft / V. Extensive 20.5-41 lbm/sq ft

\*\* **Specific weight:** V. Intensive and V. Extensive 54.94-62.43 lb./ft<sup>3</sup>; V. Light 43.70-49.94 lb./ft<sup>3</sup> (at quarry humidity)  
**Weight of water saturated material:** 87.40 lb./ft<sup>3</sup>  
**Particle size distribution:** 3/8" US Mesh  
**Permeability:** higher than 30 US Mesh/min. when saturated and compressed; more than 1/4" US Mesh/min. in normal conditions (in compliance with ex DIN: >0.016 in. and >0.04 in./min.)  
**C.E.C.:** approx. 30 milliequivalents/0.22 lb. for V. Intensive and Light, 15 milliequivalents/0.22 lb. for V. Extensive

# VULCAFLOR

## SUBSTRATO VULCANICO PER TETTI VERDI, ARREDO URBANO E VERDE VERTICALE

### VOLCANIC SUBSTRATE FOR ROOF GARDENS, URBAN STREET FURNITURE AND VERTICAL GREENERY

## Composizione

Substrato vulcanico costituito dalla miscela di materiali vulcanici (pomice e lapilli), torba bionda e/o sostanza organica humificata (tipo materiale vegetale compostato) e concimi complessi con Azoto nelle forme a cessione controllata.

## Composition

Volcanic substrate consisting of a mixture of volcanic materials (pumices and lapilli), blond peat and/or organic substances with humus (like composted vegetable material) and complex fertilizers with Nitrogen in the form of controlled transfer.

VULCAFLOR  
Strato fertile e drenante  
Growing media and  
drainage layer



## Tipologie e caratteristiche funzionali

- **VULCAFLOR INTENSIVO** per coperture verdi fruibili (portata utile 150-250 kg/m<sup>2</sup>)
- **VULCAFLOR ESTENSIVO** per coperture leggere a ridotta manutenzione (portata utile 100-200 kg/m<sup>2</sup>)
- **VULCAFLOR LIGHT** pompabile per coperture verdi intensive fruibili (portata utile 150-250 kg/m<sup>2</sup>)

## Types and functional properties\*

- **VULCAFLOR INTENSIVE** for usable roof gardens (effective load capacity 150-250 kg/sq.m.)
- **VULCAFLOR EXTENSIVE** for lightweight roof gardens requiring reduced maintenance (effective load capacity 100-200 kg/sq.m.)
- **VULCAFLOR LIGHT** pumpable for usable intensive roof gardens (effective load capacity 150-250 kg/sq.m.)

## Campi d'impiego - Fields of application

- Tappeti verdi
- Giardini pensili
- Arredo urbano
- Verde verticale
- Gestione e manutenzione del verde
- Grass lawns
- Hanging gardens
- Urban street furniture
- Vertical greenery
- Greenery management and maintenance



Vulcaflor per giardino pensile  
Vulcaflor for hanging garden  
Giax Tower, MILAN



Vulcaflor come substrato per giardino pensile  
Vulcaflor as substrate for hanging garden  
CityLife SpA, MILAN



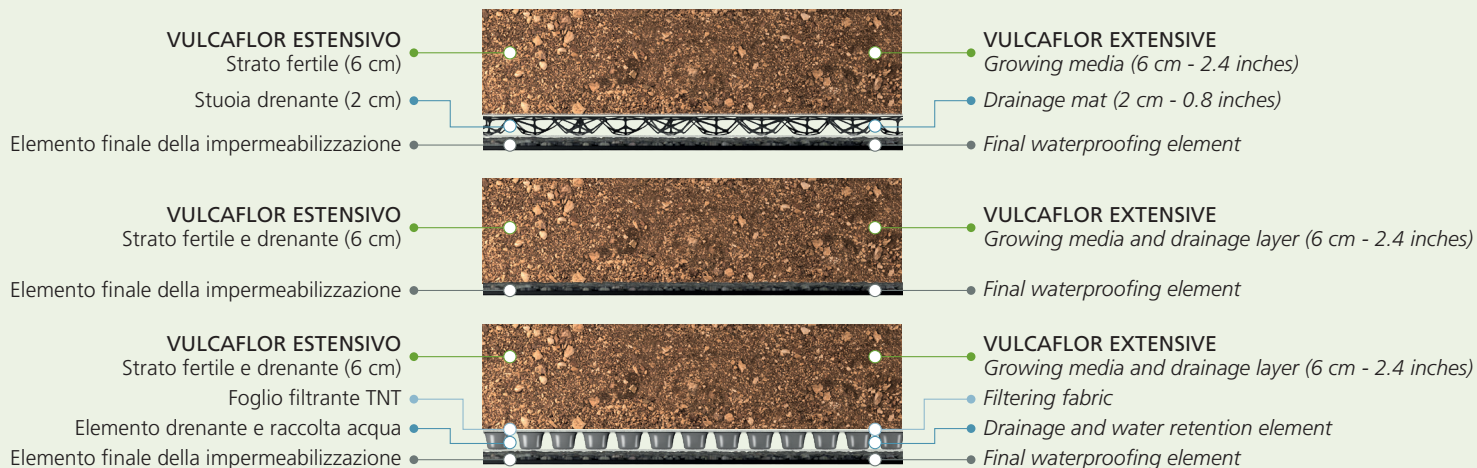
Substrato in Vulcaflor  
Vulcaflor substrate  
Portello Park, MILAN

# SCHEMI COSTRUTTIVI PER RINVERDIMENTO TETTI CON VULCAFLOR

## ROOF GREENING CONSTRUCTION DIAGRAMS WITH VULCAFLOR

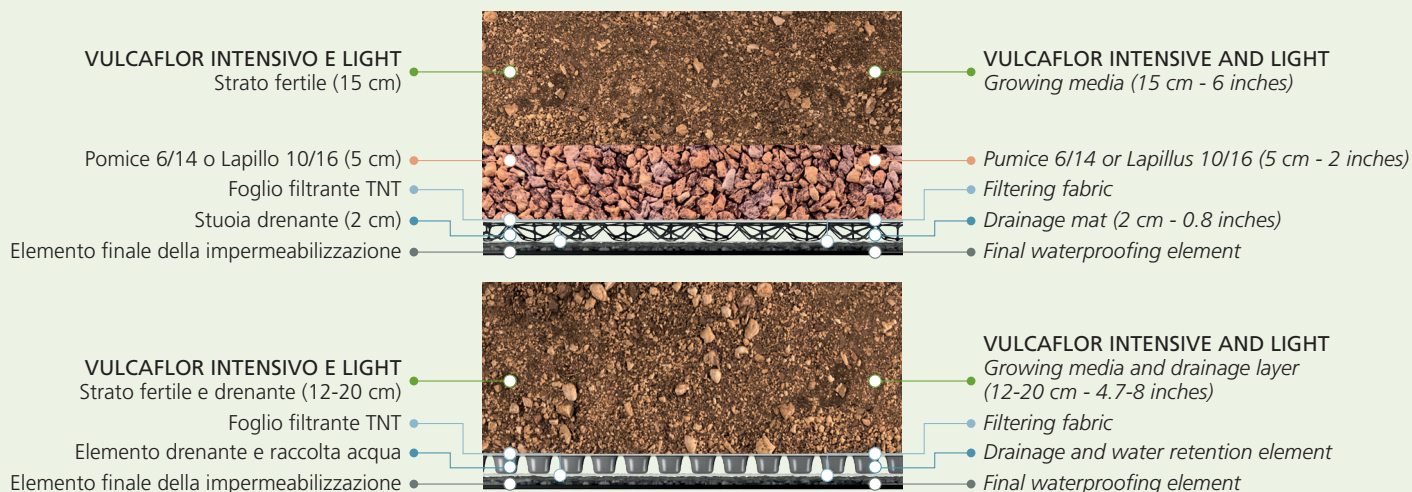
PORTATA UTILE SINO A 100 Kg/m<sup>2</sup> / EFFECTIVE LOAD CAPACITY UP TO 20.5 lbm/sq ft

### VULCAFLOR TIPO ESTENSIVO (Sedum - muschio) / EXTENSIVE TYPE (Sedum - moss)



PORTATA UTILE DA 150 Kg/m<sup>2</sup> A 250 Kg/m<sup>2</sup> / EFFECTIVE LOAD CAPACITY FROM 31 lbm/sq ft TO 51 lbm/sq ft

### VULCAFLOR TIPO INTENSIVO / INTENSIVE TYPE



PORTATA UTILE TRA 100 Kg/m<sup>2</sup> E 200 Kg/m<sup>2</sup> / EFFECTIVE LOAD CAPACITY BETWEEN 20.5 lbm/sq ft AND 41 lbm/sq ft

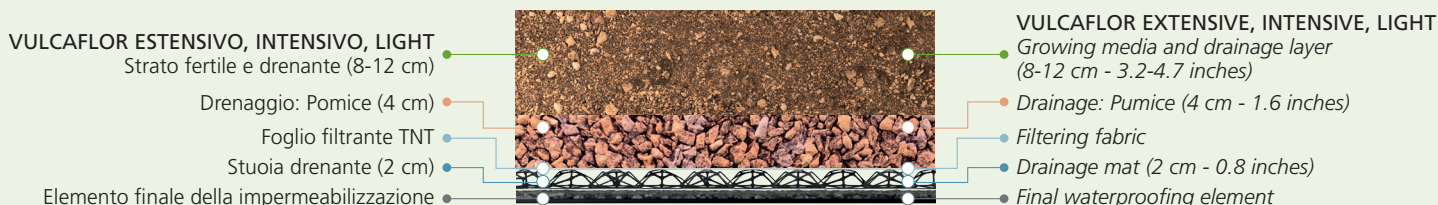
### VULCAFLOR TIPO ESTENSIVO (Sedum - muschio) / EXTENSIVE TYPE (Sedum - moss)



### VULCAFLOR TIPO ESTENSIVO E SEMIESTENSIVO / EXTENSIVE AND SEMI-EXTENSIVE TYPE



### VULCAFLOR TIPO SEMIESTENSIVO ED INTENSIVO / SEMI-EXTENSIVE AND INTENSIVE TYPE





## SCHEMI COSTRUTTIVI PER RINVERDIMENTO TETTI CON VULCAFLOR

### ROOF GREENING CONSTRUCTION DIAGRAMS WITH VULCAFLOR

#### Tipologie e caratteristiche funzionali

**VULCAFLOR INTENSIVO** per coperture verdi fruibili (portata utile 150-250 kg/m<sup>2</sup>)

**VULCAFLOR ESTENSIVO** per coperture leggere a ridotta manutenzione (portata utile 100-200 kg/m<sup>2</sup>)

**VULCAFLOR LIGHT** pompabile per coperture verdi intensive fruibili (portata utile 150-250 kg/m<sup>2</sup>)

PORTATA UTILE DA  
150 Kg/m<sup>2</sup> A 250 Kg/m<sup>2</sup>

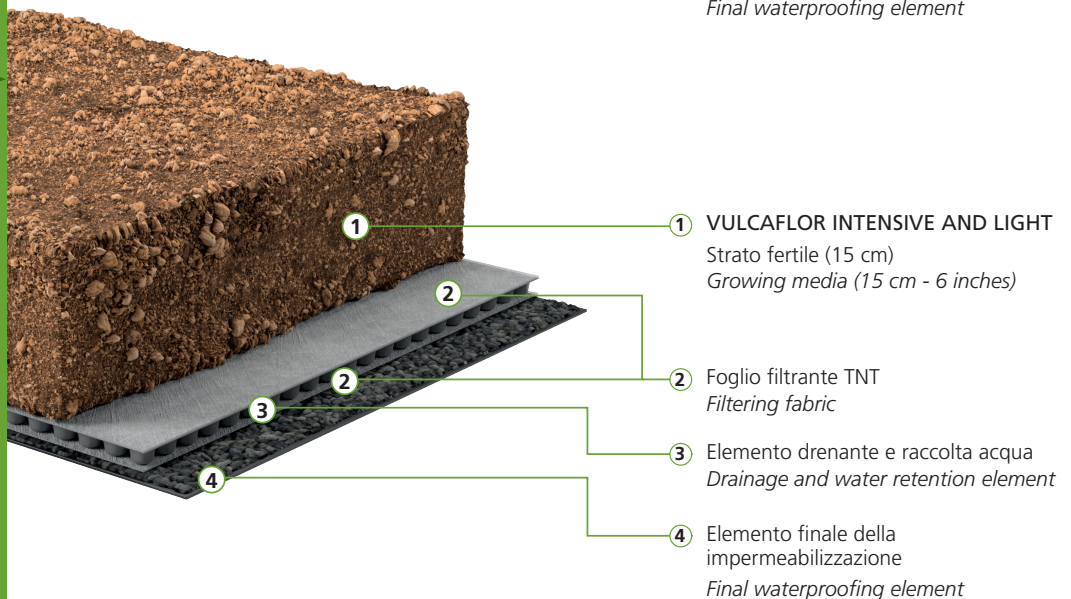
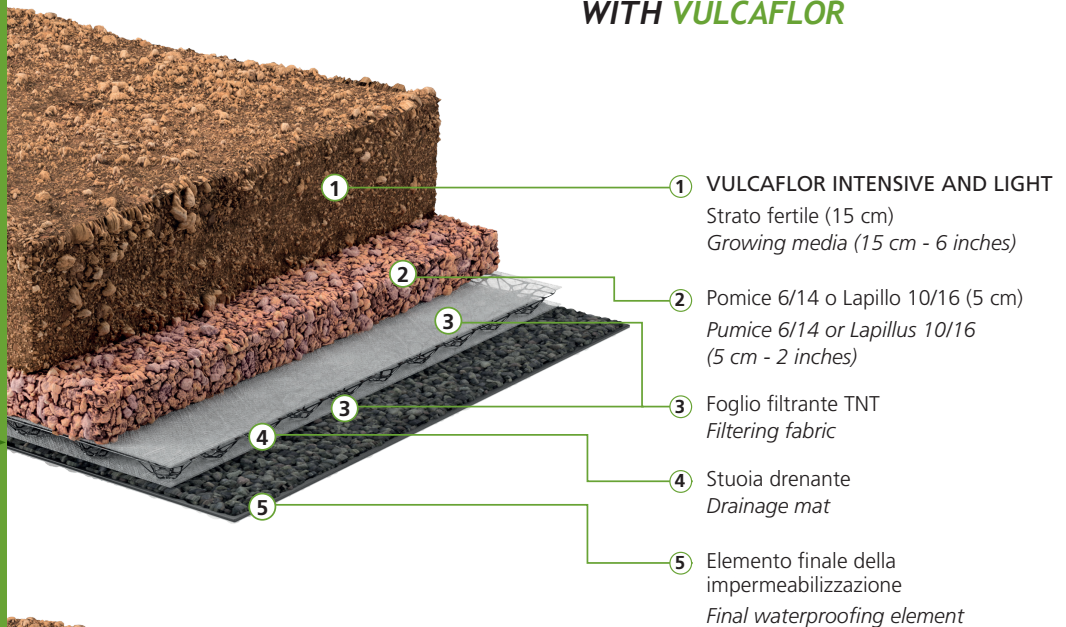
EFFECTIVE LOAD CAPACITY  
FROM 31 lbm/sq ft TO 51 lbm/sq ft

#### Types and functional properties

**VULCAFLOR INTENSIVO** for usable roof gardens (effective load capacity 150-250 kg/sq.m.)

**VULCAFLOR EXTENSIVO** for lightweight roof gardens requiring reduced maintenance (effective load capacity 100-200 kg/sq.m.)

**VULCAFLOR LIGHT** pumpable for usable intensive roof gardens (effective load capacity 150-250 kg/sq.m.)



#### Campi d'impiego - Fields of application



Sistema Vulcaflor per tetti verdi  
Vulcaflor system for green roofs  
ENVIPark, TORINO



Sistema Vulcaflor Intensivo per TETTO VERDE  
Vulcaflor Intensive system for ROOF GARDENING



Sistema Vulcaflor per TETTO VERDE  
Vulcaflor system for GREEN ROOF