

GREEN ROOF RIZOMA





### **01**GREEN ROOF RIZOMA

The Rizoma system is a very light and thin non-trafficable vegetation cover, which can be laid on flat or sloping surfaces due to the adherence of the substrate to the lower layers of the system itself.

The Rizoma system uses the latest technology in synthetic substrates, which perform the functions of a retaining, draining and substrate layer, with a thickness of only 4 cm.

On top of the substrate, species of your choice are placed, whether they are of the Sedum genus or grass sods, aromatic plants or succulent plants, obtaining a total thickness of 7 cm.

If the plant finish requires it, an underground drip irrigation system is included.

### **Energy SAVING**

Improved THERMAL AND ACOUSTIC insulation

Prolonging the SERVICE LIFE OF THE ROOF

Better use of **URBAN SPACES** 

**Better AIR QUALITY** 

**Increased BIODIVERSITY** 

**RAINWATER** use



Valladolid vegetable shelter, 2021



Green roof Madrid, 2018

# **02**Cover types Rizome

Non-passable covers are designed for limited use, allowing access for maintenance only. Our proposal, Rizoma Covers, combines functionality and lightness with two options:

Rizoma Ultralight: Weight of 35 kg/m², ideal for structures with load restrictions.

Standard Rizoma: Weight of 45-50 kg/m², with higher density for certain finishes.

Both guarantee quality, durability and adaptability to the needs of any project.



# COMPOSITION TYPE OF SYSTEM

#### SEPARATION LAYER



#### SG-GT2

Non-woven geotextile composed of 100% high tenacity polypropylene staple fibres, mechanically bonded by a needle-punched and heat-set process, thickness 0.6 mm and grammage  $200 \text{ gr/m}^2$ ..



#### **VEGETAL SUPPORT**

#### SG-L25/SG-L40 PANEL:

25-40 mm thick synthetic substrate panel specifically for hydroponic vertical gardening (depending on plant finish).

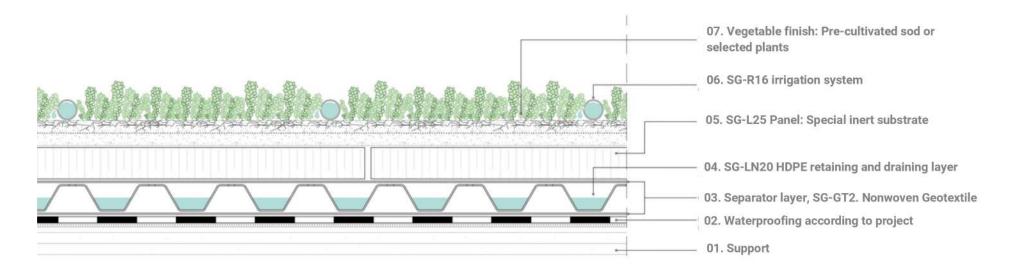


#### IRRIGATION SYSTEM

#### INTEGRATED DRIPPER SYSTEM

Underground irrigation system consisting of Ø16 mm. pipes, made of low density polyethylene, with integrated drippers at 33 or 55 cm.

# **04**DETAIL GENERIC CONSTRUCTION



DETAIL
GENERIC CONSTRUCTION
DWG

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GENERIC CONSTRUCTION
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### O5 SPECIFICATIONS TECHNICAL

WEIGHT IN SATURATION: 46 kg/m² + vegetation

WATER STORAGE: 30 l/m<sup>2</sup>

#### SLOPE:

1-5%. 5-100% with polyurethane membrane waterproofing.

DRAINAGE CAPACITY: ISO 12958 600 l/min/m

#### COMPRESSIVE STRENGTH:

UNE-EN 826:2013 > 10 kPa (at 10% deformation).

### 06 TYPES OF **VEGETATION**

#### **ULTRALIGHT RIZOMA**



SEDUM (LOW **MAINTENANCE)** 

#### STANDAR RIZOMA



SUCCULENTS



**AROMATIC** 

TYPE	OF	VEGE	TAT	TION

Sedum species

**PLANTING SYSTEM** 

sod or seeded

**TYPE OF SUBSTRATE** 

SG-L25

THICKNESS OF SUBSTRATE

**CLIMATE TYPE** 

5 cm.

Dry

Selected species of succulents

Plantación 25 plantas/m2

SG-L40

7 cm.

Tropical

Selected aromatic species

Plantación 25 plantas/m2

SG-L40

7 cm.

Tropical (or dry climate with irrigation)) (or dry climate with irrigation)

### **Ultralight** system

Latest technology in synthetic substrates

Suitable for **flat and pitched roofs** 

Low **thickness systems** 



Alicante, 2020



Madrid, 2021

# 06 TECHNICAL DOCUMENTATION

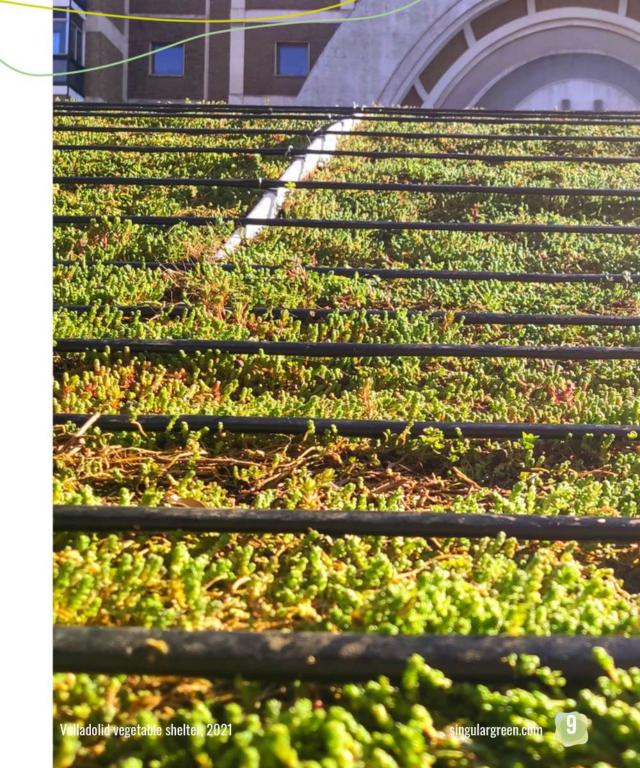
#### APPLICABLE REGULATIONS

- · CTE. DB HS Health and Safety.
- CTE. DB SI Fire Safety.
- NTE-QAA. Roofs: Roof gardens.
- NTJ 11C Green roofs

\*This regulation is mandatory in Spain. If the work is to be carried out in another country, please consult the specific regulations of that country.

#### **SPECIFICATIONS**







# WHO ARE WE?

At SingularGreen, we specialize in providing cities with green spaces through **Nature-Based Solutions** and the **integration of architecture and vegetation**, with the aim of improving the quality of life for those who inhabit them.

That's why we don't just design, we take action by creating all kinds of unique landscaping projects.

Innovation is in our DNA, and our R&D department has been conducting constant research for over **15 years to develop our own technology**, adapting to each environment.

At SingularGreen, we are passionate about what we do, and we are characterized by **creating creative solutions for your project**, offering comprehensive advice, execution, and maintenance services, always adapting to your needs.

SingularGreen: Creative Solutions Based on Nature.



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