



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.

Resalia Winery, Arcos de la Frontera, 2018

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



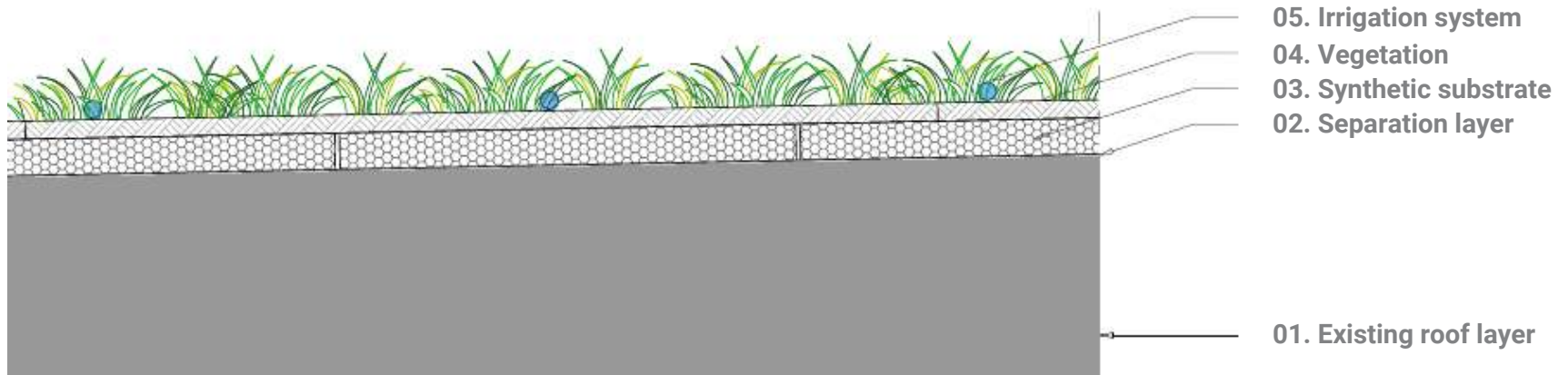
Valladolid vegetable shelter, 2021



Green roof Madrid, 2018

# 02

## DETAIL GENERIC CONSTRUCTION



DETAIL  
GENERIC CONSTRUCTION  
DWG



DETAIL  
GENERIC CONSTRUCTION  
PDF



# 03

## 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 gr/m<sup>2</sup>.

### 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

## TYPES OF VEGETATION



**SEDUM (LOW MAINTENANCE)**



**SUCCULENTS**



**AROMATIC**

<b>TYPE OF VEGETATION</b>	Sedum species	Selected species of succulents	Selected aromatic species
<b>PLANTING SYSTEM</b>	sod or seeded	Plantación 25 plantas/m2	Plantación 25 plantas/m2
<b>TYPE OF SUBSTRATE</b>	SG-L25	SG-L40	SG-L40
<b>THICKNESS OF SUBSTRATE</b>	5 cm.	7 cm.	7 cm.
<b>CLIMATE TYPE</b>	Dry	Tropical (or dry climate with irrigation))	Tropical (or dry climate with irrigation))

# 05

## SPECIFICATIONS TECHNICAL



**WEIGHT IN SATURATION:** 46 kg/m<sup>2</sup> + 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).

**Ultralight  
system**

**Latest technology in  
synthetic substrates**

**Suitable for  
flat and pitched roofs**

**Low  
thickness systems**



Green Roof Granada, 2018



Green Roof 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



Valladolid vegetable shelter, 2021

# 07

## WHO ARE WE?



Valladolid vegetable shelter, 2021



Green Roof Madrid, 2021

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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