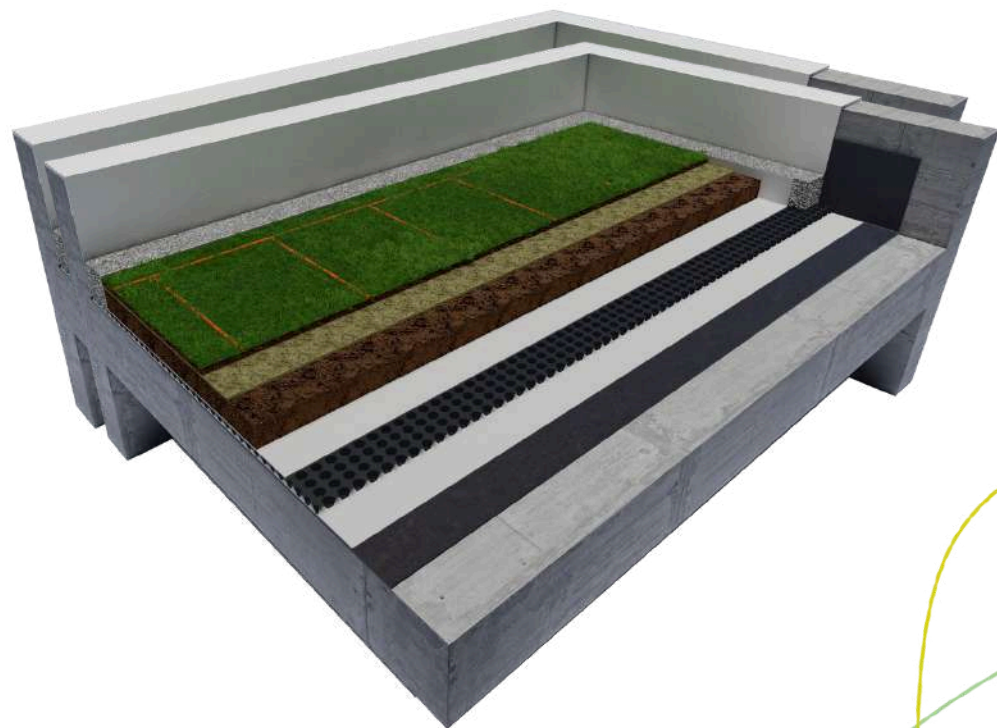




GREEN ROOF  
CANTIR





Valencia, 2017

01

## GREEN ROOF CANTIR

The Cántir green roof system stands out for being the simplest and most versatile. It is a walkable flat roof, of the extensive landscaped type that incorporates a drip irrigation system that allows for multiple options of plant finishes, from low height options such as grass or succulents to shrubs and trees.

It is a lightweight and easy to install system, whose main objective is to cool the building in the warmer months and optimise insulation in winter.

The main advantage of the Cántir system is its high water retention capacity, as it combines the cistern irrigation system with the highly absorbent substrate.



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



# 02

## TIPOS DE CUBIERTA CÁNTIR

The Cántir roof stands out for its ability to adapt to different needs and styles, offering functionality, aesthetics and sustainability in each project.

Cántir Lawn: designed for a uniform green finish, ideal for spaces where natural and cared aesthetics are a priority.

**Planted Cantir:** With grasses, succulents or shrubs, this type allows total customization, adapting the species to the environment and specific needs.

**Seeded Cantir:** The most economical and spontaneous option, based on direct seeding. Perfect for creating a plant environment that evolves naturally, with a mix of local or customized species.

The thickness of the substrate and its specific formulation are adjusted according to the chosen species, guaranteeing optimal growth and a sustainable solution.





## CÁNTIR CÉSPED

Irrigation piping SG-R16- Irrigation centralization system SG-A24R

Vegetable finish: pre-cultivated grass tepee by SingularGreen's technical team.

Support

Waterproofing membrane and complementary layers according to the project

Separation layer SG-GT2  
Nonwoven geotextile

SG-LN20 HDPE retaining and draining layer SG-LN20, 2mm thick, with a retention capacity of 6ltr/m<sup>2</sup>

SG-SCB organic substrate specific for green roofs

Clean mulch screened



## CÁNTIR PLANTADA

Irrigation piping SG-R16- Irrigation centralization system SG-A24R

Plant finish: Planted with native species selected by SingularGreen's technical team.

Support

Waterproofing membrane and complementary layers according to the project

Separation layer SG-GT2  
Nonwoven geotextile

SG-LN20 HDPE retaining and draining layer SG-LN20, 2mm thick, with a retention capacity of 6ltr/m<sup>2</sup>

SG-SCB organic substrate specific for green roofs



## CÁNTIR SEMILLADA

Irrigation piping SG-R16- Irrigation centralization system SG-A24R

Vegetable finish: seeded with native species selected by SingularGreen's technical team.

Support

Waterproofing membrane and complementary layers according to the project

Separation layer SG-GT2  
Nonwoven geotextile

SG-LN20 HDPE retaining and draining layer SG-LN20, 2mm thick, with a retention capacity of 6ltr/m<sup>2</sup>

SG-SCB organic substrate specific for green roofs

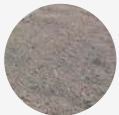


**DRAINAGE AND RETENTION LAYER****SG-LN20**

Nodular high-density polyethylene drainage sheet, 2 cm high.

**ABSORBENT AND FILTERING LAYER****SG-GT2**

Nonwoven geotextile composed of 100% high tenacity polypropylene staple fibers, mechanically bonded by a needlepunching and thermofixing process, weight 200 gr/m<sup>2</sup>.

**SUBSTRATE**

**Consult type in the SUBSYSTEMS AND TYPES OF VEGETATION section.**

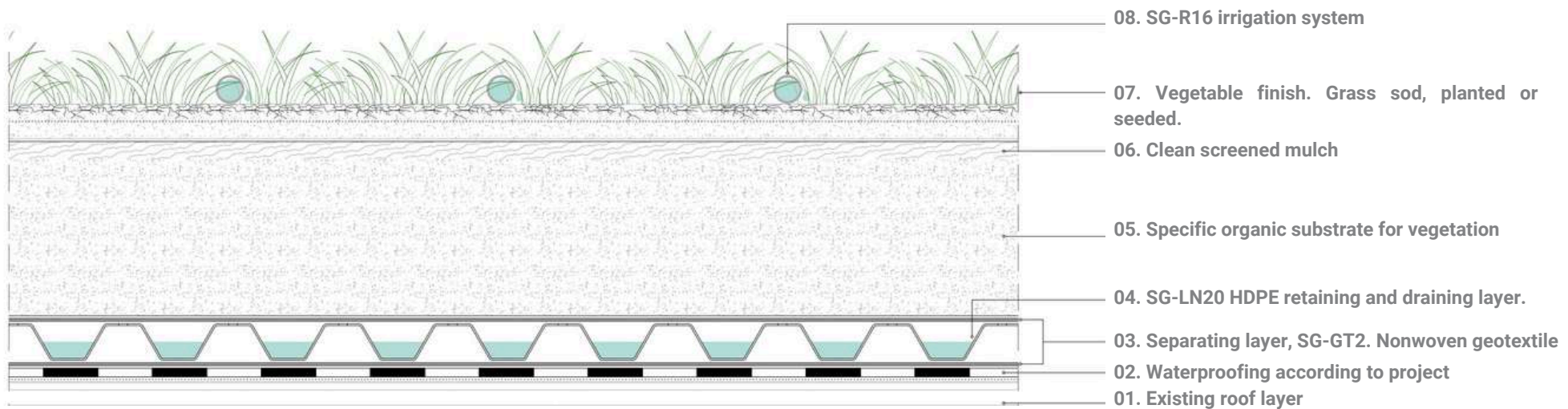
Mixture of organic components (topsoil, peat...) and granular mineral components. Type and thickness depending on the topsoil finish.

**IRRIGATION SYSTEM****SINTEGRATED 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  
CONSTRUCTIVE DWG



DETAIL  
CONSTRUCTIVE PDF





# 05

## SPECIFICATIONS TECHNICAL

**WEIGHT AT SATURATION:** From 120 to 550 kg/m<sup>2</sup>

**WATER STORAGE:** 6 l/m<sup>2</sup>

**SLOPE:** 1-5%

**DRAINAGE CAPACITY:** according to ISO 12958: 10 l/(mxs)

**COMPRESSION STRENGTH:** 150 kn/m<sup>2</sup>

**DURABILITY:** lifetime warranty



# 06

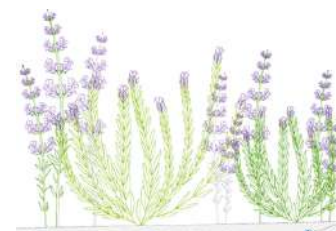
## VEGETATION TYPES



**GRASS**



**PLANTS**



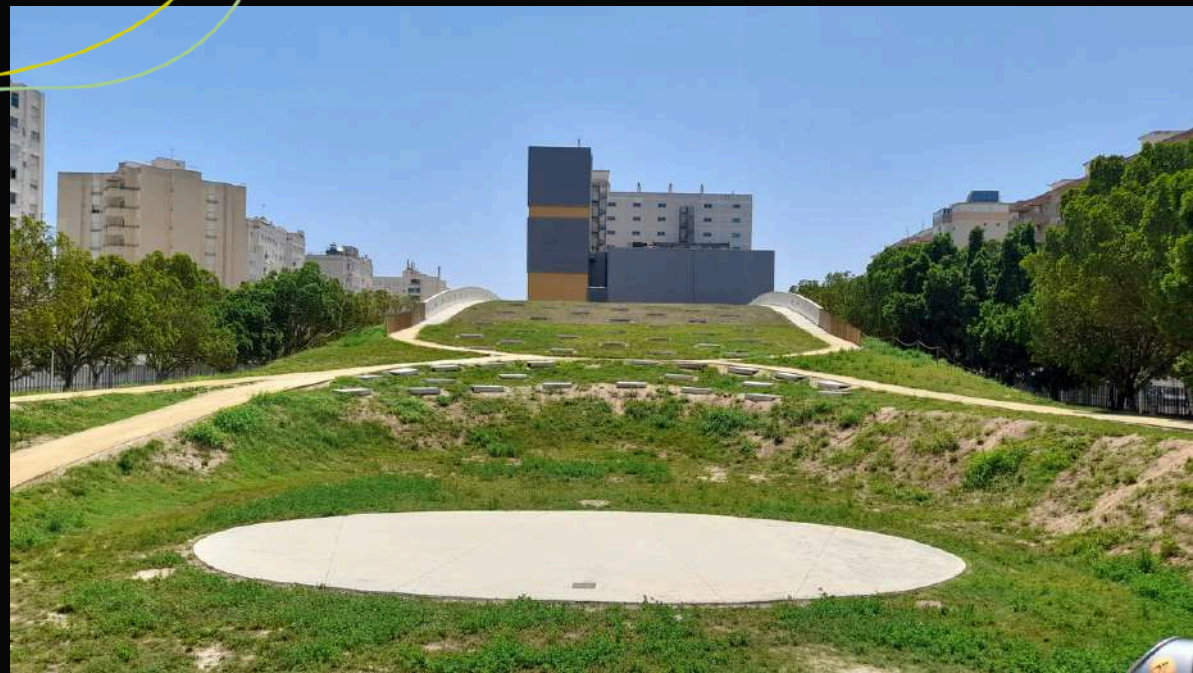
**VEGETABLE GARDEN**

<b>TYPE OF VEGETATION</b>	Cespitose species	Grass species	Species of perennials and shrubs and vegetable garden
<b>PLANTING SYSTEM</b>	Sod or seeded	Sod or seeded	Transplantation
<b>TYPE OF SUBSTRATE</b>	SG-CP type mixture	SG-GR Type mixture	SG-VS type mixture
<b>THICKNESS OF SUBSTRATE</b>	10 cm. + additional 2 cm layer of river sand.	15 cm. + additional 2 cm layer of river sand.	25 cm.
<b>CLIMATE TYPE</b>	Tropical (or dry climate with irrigation)	Adapts to all types of climate, depending on plant selection	Adapts to all types of climate, depending on plant selection

**Versatile  
system**

**Drip  
irrigation**

**Extensive  
vegetation options**



Valencia, 2017



Finestrat, 2020



# 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.

### FIRE RESISTANCE

UNE-EN 13823:2012 +A1:2016

During the test, no sudden flames appear, no smoke from the sample that does not enter the collector is seen, and there is no distortion or collapse of the sample. No flaming droplets fall.

UNE-EN ISO 11925-2:2011

White, grey, scarce, and light smoke is observed. There is no persistent combustion or ignition points after the test. The samples are carbonized in the area of flame application.

### SPECIFICATIONS







SingularGreen, Alicante 2024

## 07

### 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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