Singular Breen

GREEN ROOF CIKLA





01GREEN ROOF CIKLA

The Cikla system is the only green roof that uses the plot's own soil as substrate, which makes it a more sustainable green roof as it generates less waste.

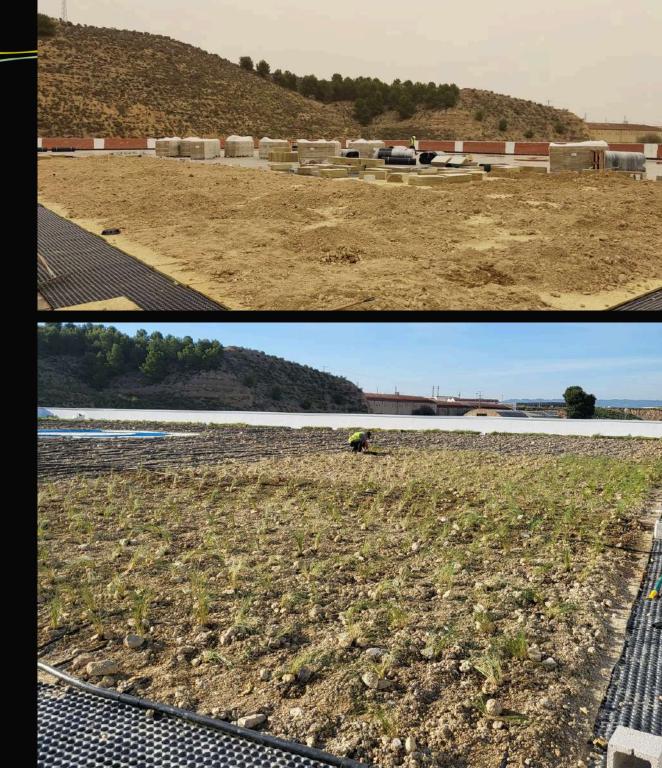
The Cikla system uses a retentive, absorbent and draining bottom layer, 2.5 cm thick, by using the SG-L25 substrate, specific for green roofs.

The species recommended in this green roof system are native plants, as they are the best adapted, so the final thickness of the substrate depends on the selected vegetation.

Sustainable system

Latest technology in green roofs

Adapts to flat surfaces with **minimal slope**



02TYPES OF ROOFING CIKLA

The Cikla roof comes in two versions, adapting to the needs and objectives of each project:

Cikla Selecta: Uses selected native plants, carefully chosen to guarantee sustainable development and perfect integration with the environment.

Cikla Semillada: Offers a more natural and spontaneous solution, based on the direct sowing of local species, allowing the vegetation to evolve according to the conditions of the site.

Both versions share a commitment to reusing the project's own resources, combining sustainability and landscape design in an efficient and environmentally friendly solution.



Topsoil obtained from construction excavation

CIKLA SELECTA

Irrigation piping SG-R16- Irrigation centralisation system SG-A24R

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

Waterproofing membrane and additional layers according to the project

Separation layer SG-GT2 Non-woven geotextile

Support

SG-LN20 HDPE retaining and draining layer SG-LN20 2mm thick with a retention capacity of 6ltr/m²

SG-L25 Panel: Special inert substrate for green roofs

CIKLA SEMILLADA

Irrigation piping SG-R16- Irrigation centralisation system SG-A24R

Topsoil obtained from construction

excavation

Vegetable finish: Seedlings of native species selected by the SingularGreen technical team.

Support

Waterproofing membrane and additional layers according to the project

Separation layer SG-GT2 Non-woven geotextile

SG-LN20 HDPE retaining and draining layer SG-LN20 2mm thick with a retention capacity of 6ltr/m²

SG-L25 Panel: Special inert substrate for green roofs



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COMPOSITION OF THE SYSTEM

SEPARATING, DRAINING AND RETAINING LAYER



SG-LN20 Nodular high-density polyethylene drainage sheet 2 cm high

ABSORBENT AND FILTERING LAYER



SG-L25

Type and thickness depending on the plant finish. Recommended minimum thickness 50mm.

SUBSTRATE



LOCAL SOIL SUBSTRATE

Type and thickness depending on the topsoil finish of at least 50 mm.

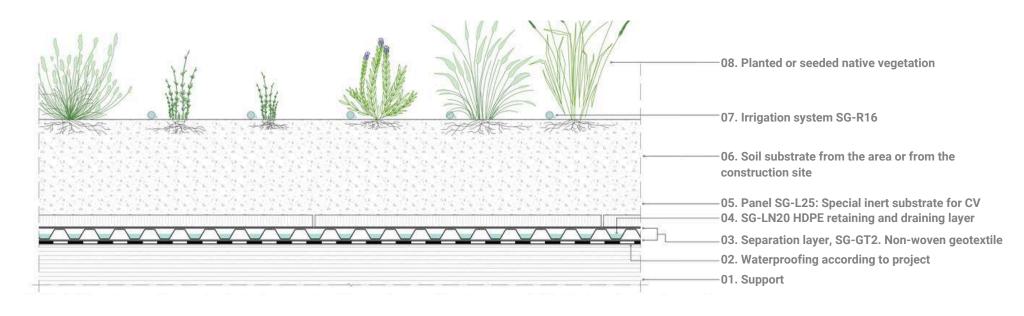
IRRIGATION SYSTEM



SG-R16 INTEGRATED DRIPPER SYSTEM

Underground irrigation system consisting of Ø16 mm. pipes, made of low density polyethylene, with integrated drippers.

04DETAIL GENERIC CONSTRUCTION



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GENERIC CONSTRUCTION
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05SPECIFICATIONS TECHNICAL

WEIGHT IN SATURATION: 46 kg/m² + vegetation

WATER STORAGE: 30 l/m²

PENDING:

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

DRAINING CAPACITY: To ISO 12958 600 I/min/m

COMPRESSIVE STRENGTH:

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

06VEGETATION TYPES



AUTOCHTHONOUS VEGETATION

TYPE OF VEGETATION Native species selected by SingularGreen specialists.

PLANTING SYSTEM By transplanting or seeding.

TYPE OF SUBSTRATE Own land

THICKNESS OF SUBSTRATE From 5 cm depending on the vegetation.

CLIMATE TYPE It adapts to all types of climate, depending on plant selection.

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

Mainstreaming CIRCULAR ECONOMY





07TECHNICAL 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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