



VERTICAL GARDEN
F+P



El Corte Inglés, Valladolid, 2020



Torre Realia, Barcelona, 2020

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VERTICAL GARDEN

F+P

The F+P system is currently our go-to option for all types of gardens, both indoor and outdoor.

It is a hydroponic vertical garden system with a specific inert substrate for gardening, made up of SG-L40 panels. Thanks to the characteristics of this substrate, constant root aeration is ensured, which ensures perfect plant development.

These panels retain and distribute water very well, allowing for a greater variety of plant species. Additionally, they enable plants to withstand extreme temperatures, both cold and warm.

Resistant to
extreme temperatures

Higher
species possibility

Ease of
assembly

Root
aeration



Azuqueca de Henares, 2017

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DESCRIPTION OF SYSTEM

SYSTEM TYPE: Hydroponic, with inert substrate.

LOCATION: Indoor and outdoor.

MANUFACTURING: Waterproof SG-P35 support panels with mechanically fixed SG-L40 substrate panels.

INSTALLATION: Panels pre-assembled in our facilities, ready to be fixed to the support, install the irrigation system, and plant the selected plant species.

REQUIREMENTS: Water supply point, power supply point, and connection for water outlet to return or drainage.

IRRIGATION TYPE: SG-A24 hydroponic system adapted to the scale of the vertical garden, with the option of recirculating lost water.

The main advantage of this system is its lightweight design, which does not exceed **50 kg per square meter**. Therefore, it is the ideal system for large-scale vertical gardens.



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TYPICAL COMPOSITION OF THE SYSTEM

Irrigation pipe SG-R16
SG-A24 irrigation system

SG-P35 panel:
Supporting and waterproof
layer

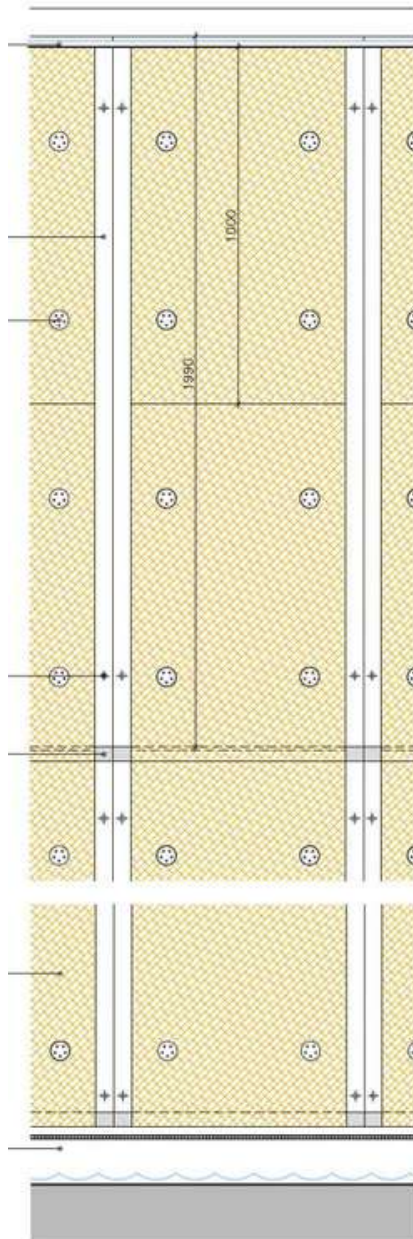
Screw with washer to fix the
substrate panel to the
waterproofing.

Direct anchoring to receiving
wall (according to project)

Z-profile fixed to the
waterproof panel (ensures
contact between substrate
panels)

SG-L40 PANEL:
Synthetic substrate panel
specifically for vertical
hydroponic gardening

Water collection system.
Metal grille and channel.



The F+P system is composed of SG-L40 panels made of inert substrate, specifically designed for hydroponic vertical gardening. These panels are mechanically fixed to waterproof SG-P35 support panels that are anchored to the support wall. The vegetation is established by planting selected plant species at a rate of 20 to 40 units per square meter in the existing holes in the substrate.



BEARING AND RETAINING LAYER

DIRECT ANCHORING:

Metal screw with dowel, according to project.



SG-P35 PANEL:

35 mm thick cellular PVC panel, anchored by screws to the garden wall, with joints and holes sealed with polyurethane mastic.



PLANT SUPPORT

SG-L40 PANEL:

Synthetic substrate panel specifically for vertical hydroponic gardening, 40 mm thick.



PLANT SUPPORT FASTENING

Plastic washer Ø60 mm. and metal screw for fixing self-supporting rigid insulating materials.



VEGETABLE FINISH

Plant species selected by the SingularGreen technical team according to the project and climate zone, at a rate of 20-40 plants/m².



IRRIGATION PIPE

SG-R16 PIPE:

16 mm diameter pipe with self-compensating and anti-drainage drippers with fixed flow rate, separated according to project requirements.



WATER COLLECTION SYSTEM

Metal channel with water outlet, recirculation or drainage.

Spain's largest vertical garden



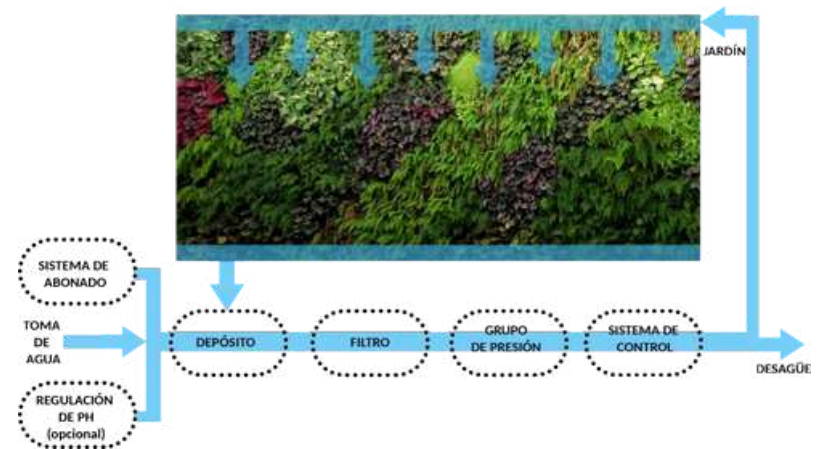
Vertical garden Vitoria Conference Centre, 2014

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SISTEMA DE RIEGO

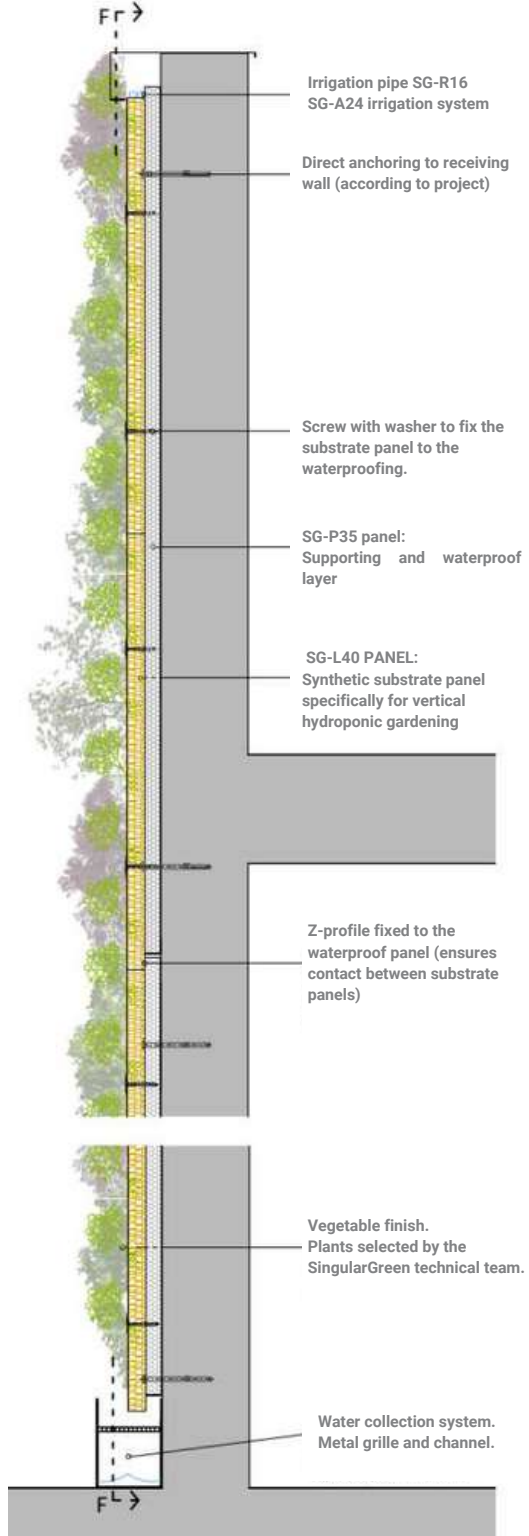
WATER RECIRCULATION: SG-A24R IRRIGATION SYSTEM

The SG-A24R irrigation system allows for maximum water savings since consumption is reduced to almost only evapotranspiration and water consumed by the plants. In a Mediterranean climate, water consumption during winter is approximately 1 liter per square meter per day, while water consumption during summer is around 5 liters per square meter per day.



CONTINUOS WATER DRAINAGE: SG-A24P IRRIGATION SYSTEM

The SG-A24P irrigation system minimizes the space required for the irrigation system. Therefore, it is recommended for projects where the available installation space is very limited.



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DETAIL

GENERIC CONSTRUCTION

DETAIL
GENERIC CONSTRUCTION
DWG



DETAIL
GENERIC CONSTRUCTION
PDF



Easy maintenance and replacement of plants



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COMMITMENT MAINTENANCE

FREE GARDEN MONITORING

Installation of SG-A24 irrigation system with remote control and alarms

100% FREE ADVICE

Whether we carry out the maintenance service ourselves or another company.

MAINTENANCE SERVICE

Carrying out all the necessary maintenance work: start-up and monthly maintenance of the irrigation system, pest control, pruning, remote control of the irrigation system, etc.

PLANT GUARANTEE

100% plant guarantee in our maintenance services.



Vertical garden Vitoria Conference Centre. 2014

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TECHNICAL DOCUMENTATION



El Corte Inglés, Valladolid, 2020

APPLICABLE REGULATIONS

- CTE. DB HS Health and Safety.
- CTE. DB SI Fire Safety.
- CTE. DB-HE Energy Efficiency.
- NTJ 11V Vertical Landscaping.

*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



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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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