The New Standard in Blue & Green Infrastructure
to optimize Stormwater Management

HYDROventiv®

HYDROACTIVE SMART ROOF SYSTEM

INNOVATION Lauréat 2015 — le mondial du bâtiment — SOLUTION SMART HOME-BUILDING-GRID

A Modular Solution

For on-site stormwater management & monitoring

Mitigate peak runoff flow rates

Reduce the volume of water discharged to the sewer system

Store and reuse rainwater for irrigation

Cool down the building and the surrounding area

Promote urban biodiversity

Monitor real-time performance

Our design team is your support partner. We offer tailored solutions for your project requirements and situation to adapt the HYDROACTIVE SMART ROOF.

We provide:

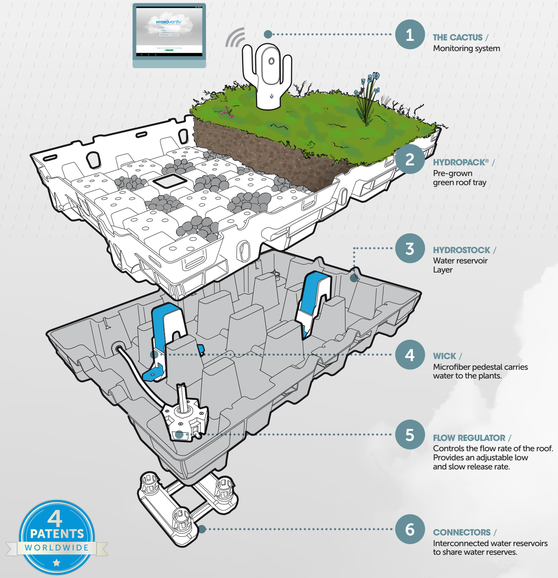
- Detailed layout drawings
- Tailored specifications

STORMWATER MODELING TO DESIGN THE PERFECT HYDROACTIVE SMART ROOF

Based on real-world data and partnerships with Universities, Vegetal i.D. Inc. has developed the HYDROACTIVE SMART ROOF software which features:

- Incorporation of local rainfall data
- Tracking of performance and health of the system

Discover a smart & beautiful roof... Connect to its real-time performance
Welcome to HYDROVENTIV®, the Hydroactive Smart Roof



1 THE CACTUS /
Monitoring system

2 HYDROPACK® /
Pre-grown
green roof tray

3 HYDROSTOCK /
Water reservoir
Layer

4 WICK /
Microfiber pedestal carries
water to the plants.

5 FLOW REGULATOR /
Controls the flow rate of the roof.
Provides an adjustable low
and slow release rate.

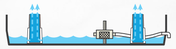
6 CONNECTORS /
Interconnected water reservoirs
to share water reserves.

4 PATENTS WORLDWIDE

This system can be installed on any type of building as long as it supports the weight load and on any roofing system, without modifying roof drains.
This lightweight system is comparable to a typical extensive green roof in weight, enabling it to fit a wide array of buildings without modification.

1 WATER CAPTURE /
Rainfall is captured by the plants
and growing media contained
in without being released.

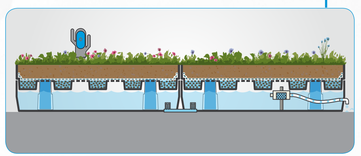
2 RETENTION /
When the vegetated roof is saturated,
excess water is retained in the
HYDROSTOCK.
The retention volume is adjustable.



Permanent water storage saves rain
for irrigation.

Here the water reservoir is both emptying by
capillarity and throught the flow regulator.

3 SUB-IRRIGATION
THROUGH CAPILLARITY ACTION /
The wicking pedestals, water in
the reservoir nurtures the plants
and provides a healthy plant cover.
Sub-irrigation is maximized
to reduce the heat-island effect
and cool down the building.



4 DELAYED RUNOFF
WITH LOW FLOW-RATE /
Part of the water contained in
the reservoir is released slowly
with the flow regulator* system.
Flow rate is minimal and adjustable.

* Water reservoir flushing is possible with the addition
of an electro valve.

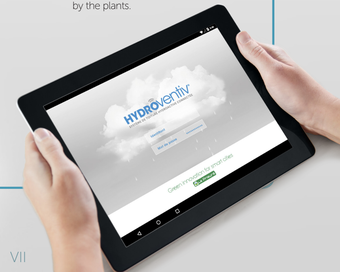
Watch
the video at
www.vegetalid.us

REAL-TIME MONITORING: THE CACTUS®

With our secured dashboard,
you can see the performance
of your HYDROACTIVE SMART ROOF
any time, anywhere.

Temperature, stored water volume
and instant flow rate monitoring.

Weekly, monthly, and annually
performance reports:
- Graphs comparing rainfall and
system performance
- Total volume consumed
by the plants.

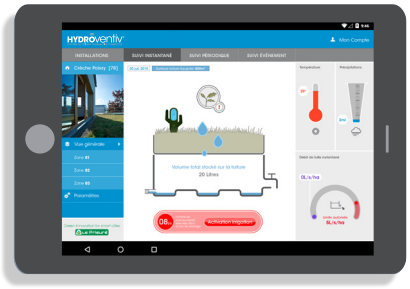


Control your water resources from your phone or tablet

Wireless Sub-irrigation control and monitoring

Water is essential to life and scarce in many places. It is important to use water efficiently for landscaping by using smart irrigation control technologies. By measuring the water level in the product, our HYDROACTIVE SMART ROOF tailors irrigation schedules to meet water needs based on seasonal patterns, as well as prevailing conditions on the vegetative roof.

This technology can achieve much higher efficiency than scheduled irrigation systems.



FACT /
Sub-irrigation systems
help you conserve water compared to drip or sprinkler systems. The plants absorb the amount of water they need, thanks to capillarity action.

GUARANTEE

Our solution allows for real-time monitoring to guaranty performance. For the first time you get seasonal reports from your blue & green infrastructure installation.

R.O.I.

Modeling and real-world performance reporting empowers you to track R.O.I. for your green investment.

Maintenance

The HYDROACTIVE SMART ROOF maintenance is twice a year*.
Real-time cloud monitoring will help manage the maintenance visits and secure your long term investment.

** green roof may require additional maintenance.*

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