

XROOF®

Evolving roof greening.



xroof-system.com

 **CONVERTA®**
Supply. Shape. Sustain.



XROOF®
Roof greening

The Smart Retention Green Roof System from CONVERTA

XROOF® is a modular green roof system for industrial, commercial, and residential buildings. It collects rainwater, extends the service life of the roof waterproofing, and is available in two installation heights: 65 and 80 mm. Manufactured from recycled plastics sourced through our own XSOURCE® materials management system. Systematic expertise.



This is how cities will become efficient and livable in the future.

Sealed surfaces, heavy rainfall that cannot seep away, 40 °C in the shade, and city centers that no longer cool down at night... This is the result of decades of concrete. Sewers are overflowing, air conditioners are running hot, and in the heart of the city, there's not enough air to breathe. What's missing are spaces that retain water, buffer heat,

and create habitats. The largest untapped reservoir lies right above us: the roof. A green roof retains precipitation, cools through evaporation, traps particulate matter, and doubles the lifespan of the waterproofing beneath it. Anyone building a new structure or renovating today and leaving the roof gray is building for a climate that no longer exists.



Sustainability

Our cassettes are made from 100% post-consumer recycled (PCR) plastic.



Dust and Pollutant Capture

Your green roof actively helps improve air quality. It sequesters approximately 0.9–1.2 kg of CO₂ per square meter per year. The vegetation layer traps particulate matter and converts nitrogen oxides.



Cooling

By allowing a significant portion—50–70%—of precipitation to evaporate, XROOF reduces the load on the storm drainage system and also helps cool the spaces below. And it does so while weighing only about 90 kg per m² at maximum water saturation.



Longevity

A green roof helps mitigate temperature fluctuations between day and night and between winter and summer (–20 to +80 °C) and provides protection from UV radiation. This extends the service life of the roof waterproofing by a factor of 2 to 3.



Cost savings

A green roof saves you money! Depending on your region, you may be eligible for grants and exemptions from the rainwater fee (either in full or in part). Just check with your local municipality.



Bee Pasture

The selection of plants ensures a variety of blooming times and colors, turning your roof into a year-round habitat for bees, insects, and butterflies.

With XROOF® the "Sponge City" becomes a reality

XROOF® Systems make your roof future-proof

Our RETENT-Inlay. Patent pending.

Our innovative inlay ensures perfect drainage. While the plants are supplied with sufficient water via the domes through capillary action, the entire lower area remains free for pure water. Multi-level drainage: that's what makes our patent-pending system so smart.

- + maximum retention
- + reduces substrate requirements by approximately 30%
- + lighter while maintaining the same water retention capacity

How Green Roofs work with XROOF®

An XROOF cassette is a precision-engineered hydraulic component made of plastic. When installed on a roof, it channels every drop of rain through a three-step process: first collecting it, then retaining it, and finally allowing it to evaporate through plants. This process requires energy, which is drawn from the environment in the form of heat (evaporative cooling). It cools the building in the summer, thereby reducing the energy demand for air conditioning and mitigating heat islands in cities. Inside the cassette,

rainwater accumulates up to defined drainage levels. During heavy rain, additional drainage holes at further levels ensure controlled drainage. Our patent-pending drainage holes minimize clogging. The water that remains in the reservoir benefits the vegetation over days and weeks. Above this lies the growing medium, in which sedum, herbs, or wildflowers grow. In the retention variant, an optional inlay neatly separates the water reservoir from the growing medium, creating a modular retention roof.

Greening

Protects and cools the building, improves air quality, and supports the ecosystem.

Optional: RETENT-Inlay

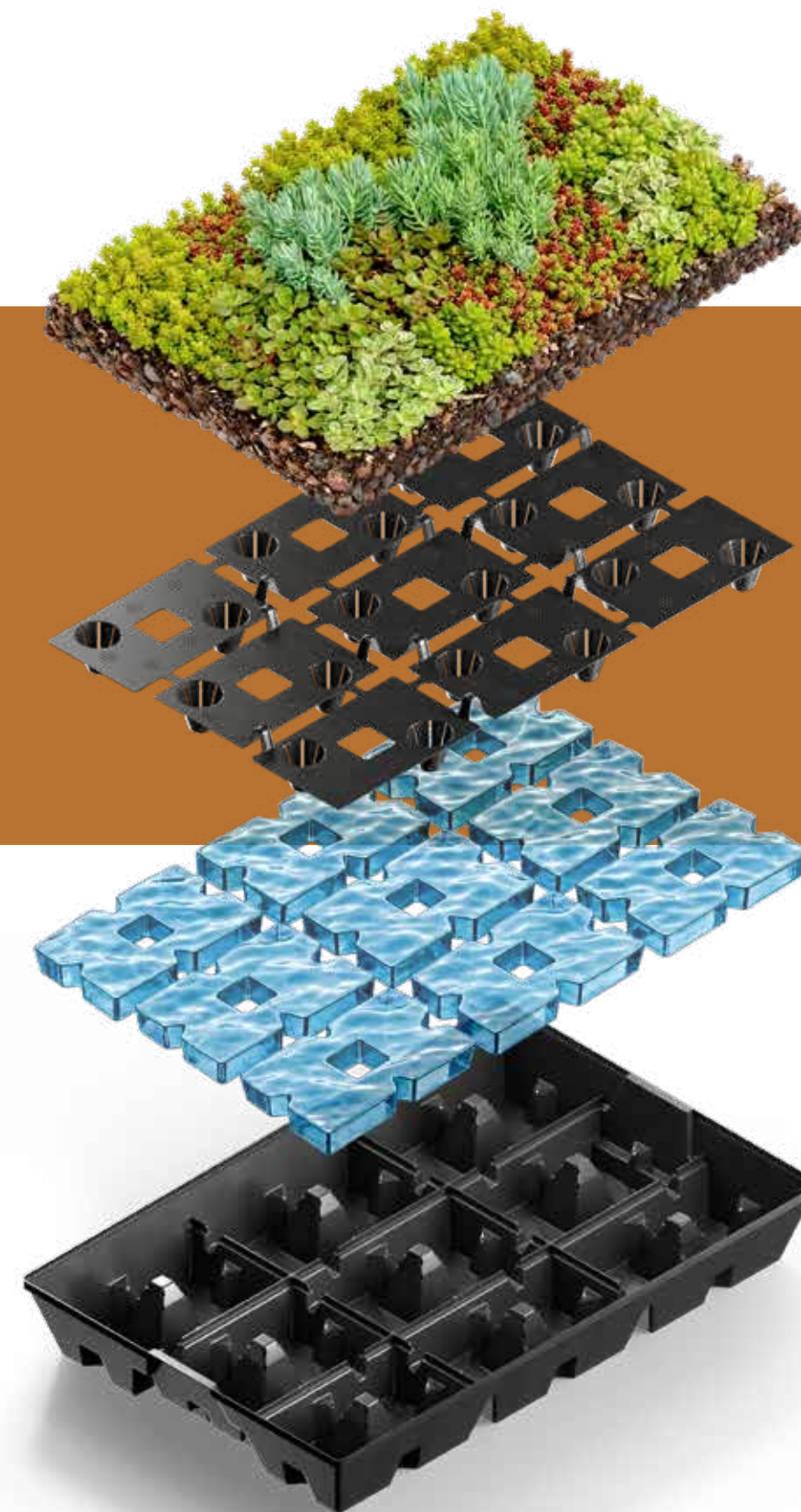
Allows for savings in substrate, thereby maximizing water retention while reducing weight.

Water Retention

Storing rainwater provides a continuous supply of water to plants.

Cassette

Well-designed shape with a level system and drainage holes – patent pending.



Simple, fast, flexibel.

A green roof becomes a no-brainer.



That's why XROOF® is the smart choice.

A green roof can be constructed in two ways: the traditional method, with three to four separate layers—a protective layer, a drainage element, a filter fabric, and a substrate—or a system-based approach using an integrated cassette. XROOF consistently follows the second approach: drainage, water storage, and the substrate carrier are a single component, not a subassembly. This results in differences that matter in planning, installation, and operation.



No flat roof? No problem.

Roofs with a pitch of up to 25° can usually be greened without any problems. The pieces are simply cut to size with a saw.



100 % PCR

Impact Even Before Production

All XROOF products from CONVERTA are made from 100% post-consumer recycled (PCR) plastic.



PV-Compatible by Design

A green roof has been shown to increase the annual average efficiency of a PV system by about four percent. This is due to evaporation, which cools the back of the modules and thus reduces efficiency

losses during high summer temperatures. In this way, two investments utilize the same space and pay off together. XROOF cassettes can be combined with all standard PV mounting systems.



Two installation heights, one design philosophy

Whether it's 65 or 80 mm: The structure remains the same; only the cassette height changes. If an area is repurposed—from a retention roof to a usable rooftop garden or from a commercial roof to a solar panel area—simply replace the cassette, not the system.



Easy installation without the need for specialists

No hot asphalt, no adhesive, no installation training required. One person can install a carport in an afternoon, and a commercial roof in days instead of weeks. For roof repairs, the panels can simply be temporarily set aside and put back in place once the work is complete.

Variable Greening

From low-maintenance extensive green roofs to rooftop gardens: Our system can be easily integrated anywhere. You choose the installation height and type of vegetation, and we'll provide the right package. Future conversions are quick and easy to implement.



Simply extensive ...

Easy to care for, light, and undemanding. Sedum plants thrive with little potting mix, little water, and no regular watering. Checking on them once or twice a year is sufficient.

... to biodiverse.

More color, more variety, more life. Herbs, wildflowers, and grasses bloom throughout the season and attract bees and butterflies. It's almost like a biotope on the roof.

The variants of XROOF®



XROOF® 65
LIGHT

Lightweight: Green Roof without structural modifications

When structural capacity is limited, every kilogram counts. The XROOF® 65 is the lightest option in the system and makes green roofing possible even where other systems reach their limits.

- ✓ Structurally sound
- ✓ Extra-light substrate



XROOF® 80
PRO

Our easy-to-qualify-for option*

Thanks to numerous funding programs in many European countries—for example, in Germany at the federal, state, and local levels—it is possible to apply for attractive financial assistance and grants for greening initiatives.

- ✓ Simple Eligibility Requirements

*depending on the municipality

We offer a solution for every roof.

XROOF is available in various models and packages, depending on your preferences and requirements. Here's how you can decide: Do you need a simple, lightweight cassette that you can install yourself and that works even on older buildings? Or are you looking for a subsidy-eligible option that will upgrade your roof cost-effectively? Tailor your green roof to your needs.



XROOF® 80
BIOTOP

Biodiversity for the Roof

A biodiverse sedum roof consists of more than just sedum plants. It also includes flowering herbs, native flowers, and ornamental grasses.

- ✓ More Color—a sedum roof with flowers
- ✓ More food—nectar and pollen—and a green roof for bees and butterflies.
- ✓ Greater resilience—greater diversity means a healthier and stronger ecosystem.



XROOF® 80
RETENT

The Module for maximum water retention

Combines a traditional green roof with a retention roof.

- ✓ 14.6 liters per square meter of pure water retention beneath the RETENT inlay
- ✓ Substrate savings
- ✓ Weight reduction while maintaining the same water retention capacity
- ✓ Dome with capillary action

Technical Details

Specifications of our XROOF® cassettes

Product Features at a Glance

	XROOF® 65 LIGHT	XROOF® 80 PRO	XROOF® 80 BIOTOP	XROOF® 80 RETENT
Retent- Inlay	✕	✕	✕	✓
Planting	sedum	sedum	sedum, herbs, wildflowers	sedum
Substrate	light	standard	biodiverse	standard
Retention	low	medium	medium	high
Use	Existing Structure / Renovation	New Construction / Existing Structure	Nature Conservation / ESG	Sponge City / Retention Requirements
Buzzword	"Light enough for old roofs."	"The green roof eligible for subsidies."	"A biotope, not just green space."	"Sponge City on the Roof."

Dimensions and Material

	XROOF® 65	XROOF® 80
External Dimensions	390 × 590 mm	390 × 590 mm
Height	65 mm	80 mm
Height with Plants	> 100 mm	> 120 mm
Panels per m²	approx. 4,35	approx. 4,35
Material	PE/PP, 100 % recycled	PE/PP, 100 % recycled
Layout	3 × 3	3 × 3

Water volume

	XROOF® 65	XROOF® 80
Storage Capacity	approx. 28 l/m²	approx. 38 l/m²
Weight When Dry	approx. 40 kg/m²	approx. 50 kg/m²
Weight at Maximum Water Level	approx. 55 kg/m²	approx. 90 kg/m²
Number of Plants per m²	approx. 350 pieces	approx. 350 pieces
Delivered Pre-planted	> 80% of the surface area	> 80% of the surface area
Installation	Available year-round	Available year-round

Storage and Transportation

	XROOF® 65	XROOF® 80
Quantity per pallet	70 – 80 pieces (16,1 – 18,4 m²)	60 – 70 pieces (13,81 – 16,1 m²)
Pallet weight	660 – 1050 kg	800 – 1050 kg
Pallet dimensions	120 × 100 cm	120 × 100 cm
Quantity per truck	400 – 440 m²	300 – 400 m²

All specifications depend on the intensity and amount of precipitation, as well as product modifications.



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