



TRANSFORMING URBAN SPACES WITH URBANSCAPE GREEN SOLUTIONS

KNAUFINSULATION
URBANSCAPE

Build on us.

Sustainable Innovation for a Greener Future

Welcome to the world of Urbanscape Green Solutions, where nature meets innovation to create sustainable urban landscapes. **Urbanscape by Knauf Insulation** presents an advanced suite of green infrastructure solutions that enhance urban landscapes by introducing sustainable,

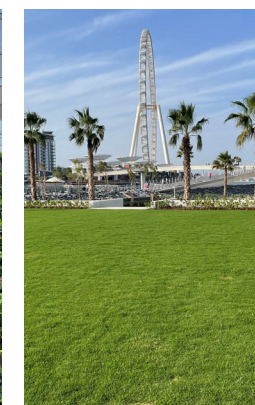
health-focused greenery. Urbanscape Green Solutions cover essential green infrastructure categories, including **Green Roofs, Green Walls, Landscaping and the Solar Base and SafetyPro systems**, ensuring both aesthetic enhancement and functional benefits to urban areas.



01 Green Roof



02 Green Wall



03 Landscaping



04 Solar Base



05 SafetyPro

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Addressing Urban Challenges

Urban environments are facing increasing challenges, from rising temperatures to poor air quality and water management issues. Urbanscape Green Solutions is dedicated to transforming cities into greener, healthier, and more sustainable spaces. Our innovative Urbanscape Green Solution systems offer cutting-edge responses to these challenges with sustainable systems that enhance urban life.



01 Air Pollution

Over 90% of the world's population lives in areas where air quality exceeds safe limits, posing severe health risks and lowering the quality of urban life.



02 Urban Heat Island Effect

Cities are, on average, 5 to 7°C warmer than surrounding areas, intensifying heat waves and increasing energy consumption for cooling.



03 Urban Flooding

Human migration to urban areas has created a dense, opaque, and impermeable urban landscape, which generates a high volume of stormwater runoff and frequent flash flooding episodes.

From Nature to Nature: The Green Roll Story

Our innovative Green Roll is at the core of Urbanscape systems. Made from natural rock mineral wool, it ensures optimal water retention, lightweight design, and long-term plant sustainability.

1. Nature's Raw Forces

Volcanic rocks like Basalt and Amphibolite form the foundation of sustainable solutions, harnessed directly from nature's reserves. These raw materials represent the starting point of a closed-loop process.

2. From Raw Materials to Rock Mineral Wool

Natural stones undergo transformation into high-performance Rock Mineral Wool through innovative production processes, ensuring minimal environmental impact.

Applications: Green Roofs, Landscaping Systems, Living Green Walls.

3. Integration into Green Solutions

The resulting materials are utilized in Green Roofs, Green Walls, and Landscaping Systems, offering benefits such as energy efficiency, water retention, and enhanced biodiversity.

4. Closing the Circle

These solutions return to nature, creating a full-circle approach that respects natural cycles and minimizes waste. The process exemplifies sustainable practices, turning natural resources into eco-friendly solutions that support the environment long-term.

Proven Solution for Success Urbanscape Green Roll

The Urbanscape Green Roll is a high-performance growing medium composed of natural rock mineral wool fibers, engineered to provide optimal water retention and support efficient plant root growth. Its innovative design ensures exceptional water retention, efficient nutrient distribution, and optimal root support, making it a sustainable choice for diverse landscaping needs. This durable and eco-friendly solution enhances plant development and promotes long-term sustainability.

Key Benefits

1. Lightweight Solution

8-10 times lighter than traditional substrates, ideal for lightweight constructions.

2. High Fire Resistance

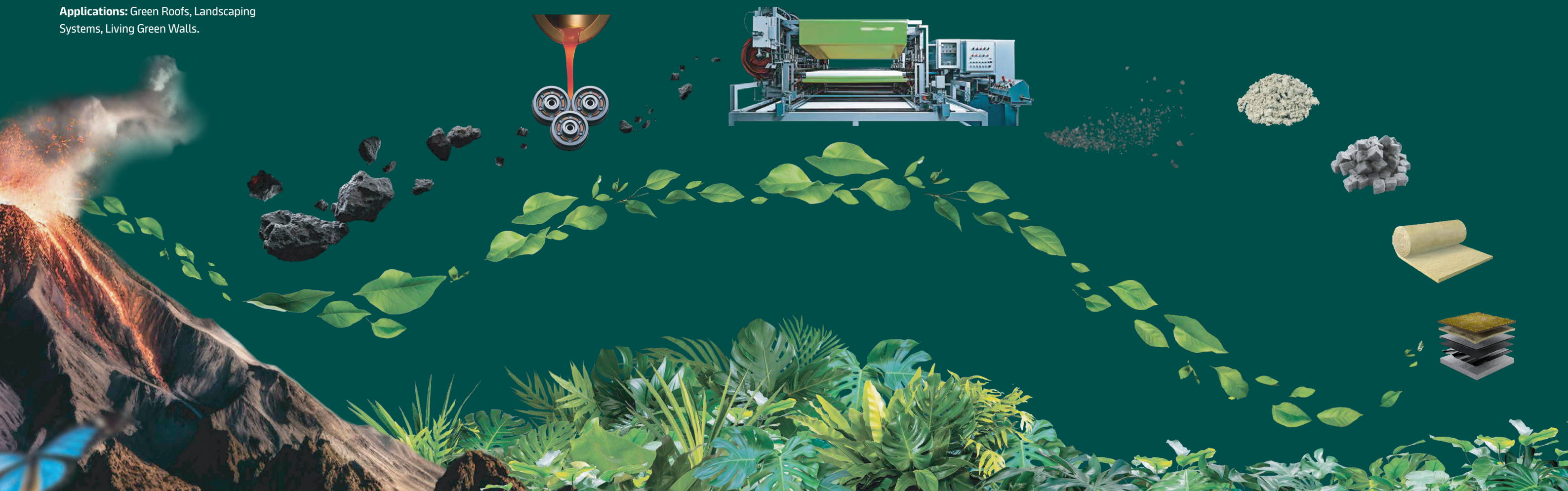
Certified A1 Euroclass non-combustibility ensures maximum safety.

3. Fast Installation

A team of three can install up to 500 m² of Urbanscape Green Roof in a day.

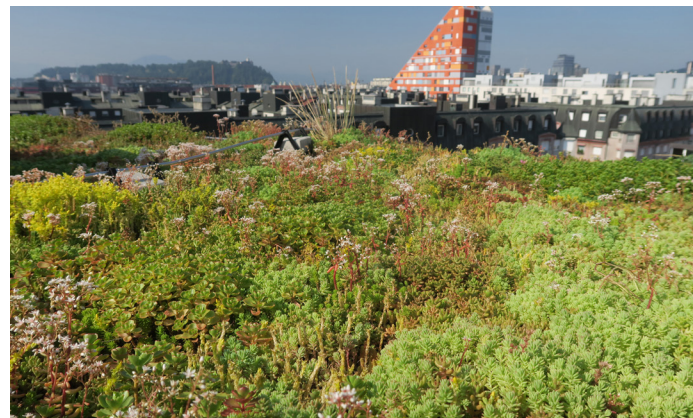
4. Superior Water Retention

Reduces irrigation needs and minimizes stormwater runoff effectively.



Urbanscape Extensive Flat Green Roof Systems

While the design of buildings has evolved over time, their core purpose remains unchanged—providing protection, comfort, warmth in winter, and coolness in summer. Urbanscape Extensive Flat Green Roof Systems are at the heart of our product portfolio, offering a modular, layer-based design built for adaptability and performance. These systems feature pre-grown vegetation blankets that deliver immediate visual impact and functionality, eliminating the need to wait months for your green roof to thrive. Urbanscape Green Roofs enhance energy efficiency, optimize water management, and improve air quality.



One system, countless benefits



50% Lighter

At just 20 kg/m² dry, it's ideal for a variety of buildings, even lightweight constructions.



Faster Installation

Simplified assembly with a preplanted sedum blanket significantly reduces timelines.



Superior Water Retention

Holds up to 78 liters/m², minimizing flooding and optimizing water management.



Thinner Design

At 6–8 cm, it reduces structural load while maintaining performance.



Low Maintenance

Engineered for minimal upkeep, saving time and costs long-term.

Lightweight Solutions for a Sustainable Future

Urbanscape Extensive Flat Green Roof Systems represent the core product range featuring a modular layer design consisting of 3–4 core layers. Each Urbanscape Green Roof System is composed of three core elements:

Pre-Grown Vegetation Blanket

Provides immediate greenery and long-term plant performance.

Urbanscape Green Roll

Multipurpose growing media: A lightweight, highly absorbent layer designed for efficient water retention and root development.

Drainage Layer

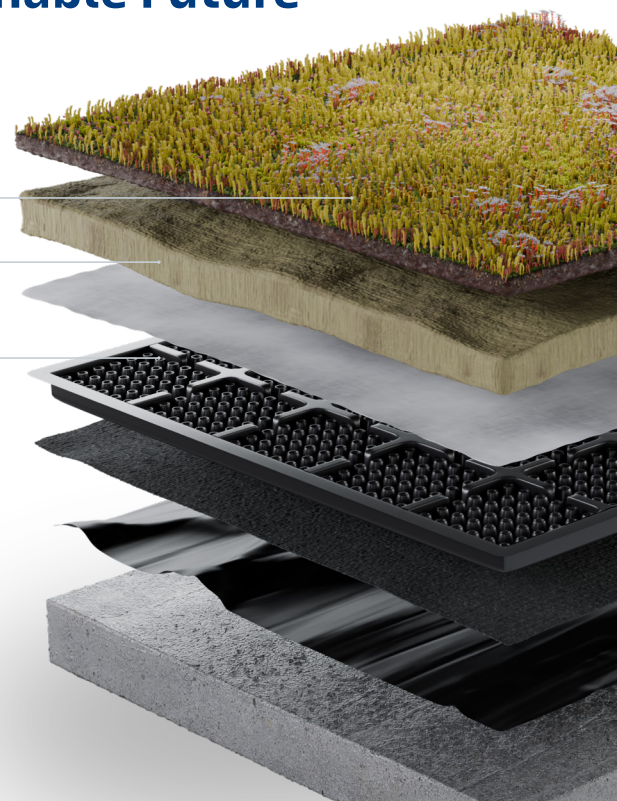
Ensures optimal water flow and supports system stability.

Urbanscape Green Roof Systems can be installed on a wide range of roof constructions, including:

- Concrete
- Wooden deck
- Any other commonly used roofing materials
- Steel deck
- Inverted roof systems



For any special construction designs or other challenges, please consult our local technical specialist or contact our central technical support team directly.



Urbanscape Green Roof Installation & Maintenance

Green Roof Installation Steps

1. **Surface Preparation:** Clean the roof surface thoroughly, removing all particles, especially sharp ones, to prevent damage to the layers.
2. **Roof Inspection:** Check for potential damage and, if possible, verify the roof's watertightness and the condition of the waterproofing.
3. **Protective Layer:** Lay the protective Urbanscape Geotextile over the roof surface.
4. **Drainage Layer:** Place the Urbanscape Drainage layer crosswise over the geotextile.
5. **Separation Layer (if required):** In some regions, install the Urbanscape Geotextile layer crosswise over the drainage layer.
6. **Green Roll Installation:** Add the Urbanscape Green Roll 20 or 40 as the next layer. Before installation, it is recommended to water the Green Roll to ensure optimal performance.
7. **Vegetation Blanket:** Complete the installation with the Urbanscape Vegetation Blanket.



For Installations with Substrate

- After the Green Roll, apply a layer of green roof substrate.
- Plant sedum cuttings at a rate of 100–150 grams per square meter.

Important-Post-Installation Care

Ensure sufficient watering for 3–4 weeks to allow the sedum to root. If there is no rain, provide irrigation to maintain adequate moisture.

Maintenance

1. FERTILIZATION (spring and autumn)

To maintain healthy vegetation, fertilize the green area once or twice a year, preferably either in spring or autumn, using a suitable fertilizer with a prolonged effect. For optimal results, apply Urbanscape Sedum Conditioner.

- Evenly spread the fertilizer over the green area before precipitation.
- Perform the first fertilization no later than six months after installation, depending on the vegetation's condition.
- Use approximately 1 kg of Urbanscape Sedum Conditioner per 40 m².
- This routine supports vibrant and long-lasting greenery.

2. WEED AND SEED REMOVAL (spring)

Invasive and windblown seeds from other plant species can compromise the performance of the Urbanscape Green Roof System. Regularly, especially in the spring, inspect the area and promptly remove any weeds or unwanted growth to preserve the system's functionality and long-lasting greenery.

Seasonal Visual Appeal of Green Roofs



01 Winter

02 Spring



03 Summer

04 Autumn

KI SolarBase System

The Solar Base ballasted substructure is a type of PV module substructure that allows photovoltaic modules to be fitted safely and securely without penetrating the roof structure. Types of ballast that might be used are: Urbanscape Green Roll, Urbanscape Green Roof System, Green Roof Substrate or gravel.

Solar Base – RAIL – 6000 mm

Solar Base – Holder

Urbanscape Sedum-Mix blanket

Substrate 40 mm

Urbanscape Green Roll 40 mm

Urbanscape Geotextile 300-REC

Urbanscape Base Plate (Drainage Q25)

Urbanscape Geotextile 300-REC

Waterproof membrane with integrated root protection

Roof base structure



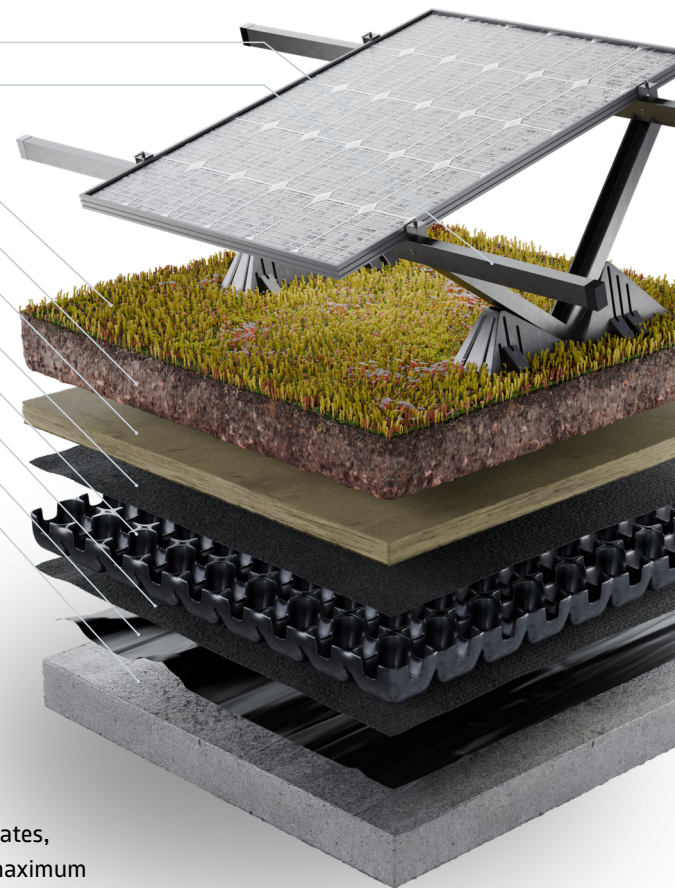
Optimal water distribution in Urbanscape Green Roll



Fire Resistance - Urbanscape Green Roll A1



Increased PV Output



Urbanscape Stormwater System

Whether your flat roof faces heavy rainfall, extreme weather, or varying climates, the Urbanscape Stormwater System is built to handle it all. Engineered for maximum efficiency, it helps manage rainwater effectively while integrating seamlessly with the Urbanscape Green Roofs, Solar Base, and SafetyPro solutions.

Our system is built on two key components:

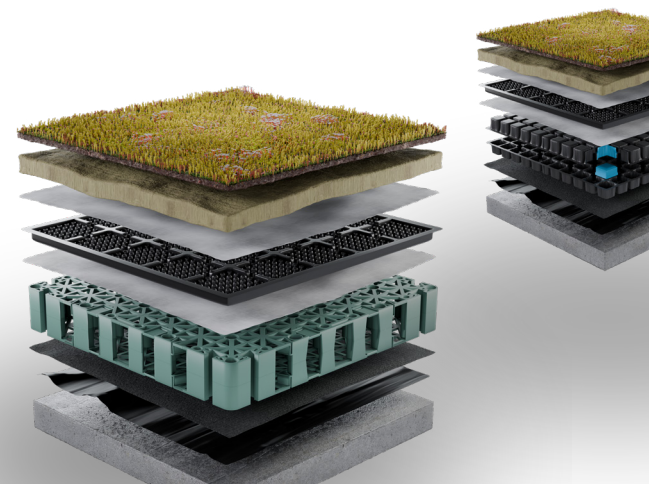
- The first is a custom-designed outlet for each project, which slows down the outflow of rainwater from the roof.
- The second component is a temporary storage area where water is held until it's released through the outlet.

Why choose the Urbanscape Stormwater System:

- Up to 95% of the system's volume is optimized for water retention.
- Optimized performance with Urbanscape Green Roll, replacing additional drainage layers.
- Precise runoff calculations with our advanced ProPET tool.



Simply provide your requirements – and we will design the perfect system for you.



Living Green Walls

Living green walls seamlessly integrate nature with architecture, transforming vertical spaces into lush, vibrant gardens. Ideal for residential, commercial, and public spaces. Living green walls offer unparalleled benefits and are available for installation through our network of certified installation partners.

Benefits



Enhances air quality by absorbing pollutants.



Provides thermal insulation and reduces energy costs.



Reduces ambient noise in urban areas.



Scan here



Applications: Interior and exterior wall in urban, industrial, and residential settings.



Landscaping Systems

Sustainable Ground-Level Solutions

Urbanscape Landscaping Systems are engineered for maximum water efficiency and plant health. Designed for public parks, gardens, and sports fields, they offer reliable and environmentally friendly solutions.

Vegetation: Selected plants enhance biodiversity, regulate temperature, and provide aesthetic value.

Fertile layer: Ensures strong roots and long-term plant health.

Key Benefits



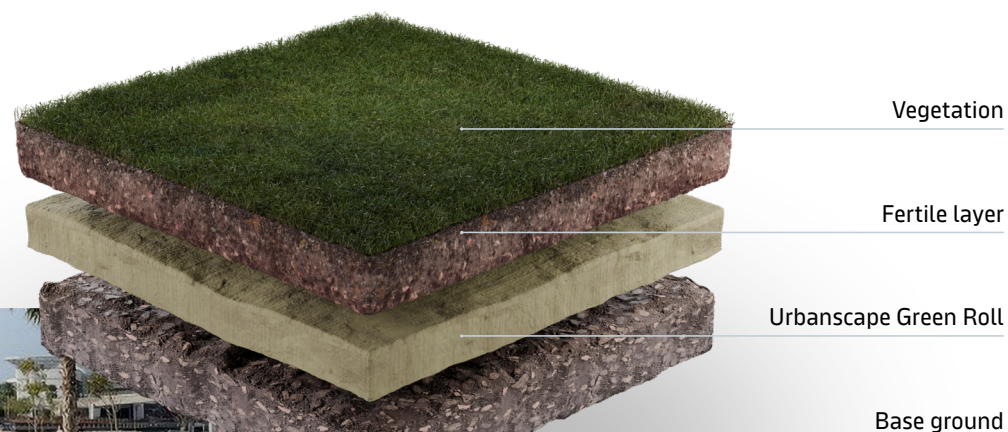
Enhanced water efficiency through superior retention.



Supports deep root development for healthier plants.



Reduces the need for frequent irrigation.



Jumeirah Gate Project,
UAE 2021



Find out more

Urbanscape Green Roll, Green Cubes, and Green Flocks:

Lightweight rock mineral wool ensures superior water retention and root growth.

Base ground: Provides stable support and durability for all layers.

SafetyPro Systems



SafetyPro Systems are engineered to ensure worker safety at heights while complying with the latest EU standards. Designed for flexibility and ease of use, they provide reliable protection for diverse roof structures without compromising safety or building integrity.

1

SafetyPro GreenSec

A ballasted solution for flat roofs, offering lifeline and anchor point variants without penetrating the roof's waterproof layer. Ideal for preserving durability and reducing maintenance costs.

2

SafetyPro Fix

Advanced systems for reinforced concrete, wooden, hollow core, and metal roof structures, offering lifelines or single anchor points. Certified to EN 795:2012 and CEN/TS 16415:2013.

3

SafetyPro GuardRail

Freestanding fall protection, ensuring compliance and adaptability for industrial and commercial applications.



Key Benefits



Adaptable for various roof configurations.



Fully compliant with safety regulations.



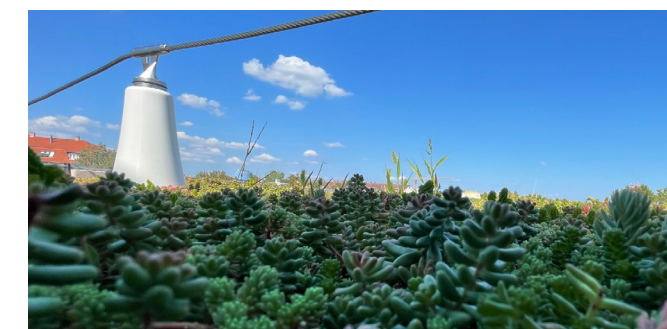
Non-invasive designs protect waterproofing and insulation layers.



Straightforward installation ensures cost-effectiveness and durability.



Explore our product range



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