

ClimaGrün



Intelligent green roof systems

To ensure urban spaces thrive.

ClimaGrün

The resource–friendly green building

Climate change and the green–architecture boom require green roof systems that treat water as a valuable resource.

We’ve been engaged in green–roof and green–technology research and development for over 20 years. Combined with the ClimaGrün roof system, our patented thin water storage layer ensures a sustainable, water–saving design. Its strength lies in intelligent rainwater management and the associated benefits.



Helping planners make decisions

Sound planning is the key. Relevant climate data, feasibility studies and 20 years of ClimaGrün's experience help you to plan and make decisions reliably.

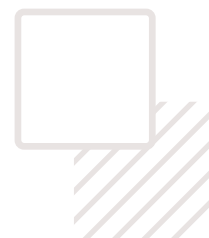


ClimaGrün City

Experience virtually what might soon be real. ClimaGrün City shows you solutions and products for the new generation of green roofs.

Green's a symbol of living things. And for ClimaGrün founder Klaus Kornprobst, green oases are becoming indispensable in today's world. Green roof systems are playing an increasingly crucial role, especially in very built-up urban spaces. Green roofs increase the quality of life and productivity in the workplace, as green courtyards outside office buildings demonstrate.

Our generation needs to combat climate change and its extreme weather conditions, such as water shortages and heavy rainfall, as well as urban heatwaves and the risk of flora and fauna dying out. ClimaGrün applies its system solutions and products to ensure a sustainable and holistic approach to green roofs. ClimaGrün roof systems use water sustainably by collecting, retaining, and releasing rainwater on demand again.



Finding solutions for planners

Developed by ClimaGrün, the configurator gives you an overview, plan, and calculation of the costs quickly.



ClimaGrün City — where you can meet us or your customers.

Discover the ClimaGrün system on a virtual tour of the ClimaGrün City. Come and find out about what our green roof solutions and products offer and how they work.



Explore a virtual city with different green roof systems, products, and end-to-end solutions in 3D with a VR headset or online



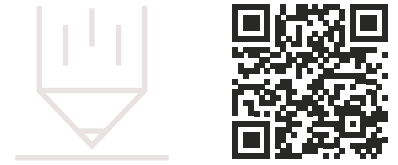
Walk on virtual roof surfaces alone, with your customers or the ClimaGrün team



See what happens during heavy rainfall and heatwaves in real time. Observe water storage and retention in the city and each green-roof layer



A collaboration with



Our calculation software helps you make decisions

Take the guesswork out of planning. The ClimaGrün assistant gives you all the information required.

When planning your green roof, imagine you already knew how weather conditions would develop over the next 20 years. Or what quantity of rainwater to expect in the short, medium, or long term. Or how much water you'd need to irrigate your green spaces. When you design your project, this information would give you a significant competitive edge.

ClimaGrün and the Fraunhofer Institute developed software that calculates factors relevant to green roof planning, based on historical, current, and future climate data. The software draws on all ClimaGrün's intelligent green roof system products, such as substrates, fleeces, and water retention layers. It can even base its calculations on third-party products.



Rainfall data analysis

Past and present rainfall data close to the site is analysed and future rainfall data established.



Irrigation water calculation

The water required to irrigate the vegetation is calculated.



Water balance modelled

The water supply is calculated and analysed.



Evaporation performance calculated

The evaporation performance of the green roof system is calculated.



Roof drainage solutions calculated

Calculation of the roof drains under normal and emergency drainage conditions pursuant to DIN 1986-100.



Dimensioning of the water retention layer

Perfect design of the thin water storage layer and calculation of the evaporation performance.



System-solution configurator for green roof projects

Make your plans reality

Plan perfect green buildings step by step. And ClimaGrün's configurator now makes the process even easier. This outstandingly efficient planning tool is underpinned by technical info from numerous reference projects, case studies, as well as past and future climate data. This software is the result of months in development, years of experience and our unrelenting enthusiasm for green roofs. We'd be delighted if it helps turn your ideas into reality too.



Find out about the standard options and state-of-the-art innovations for your green roofs and spaces



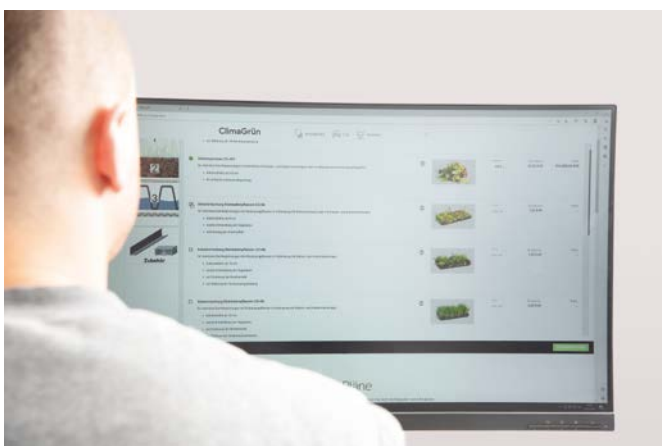
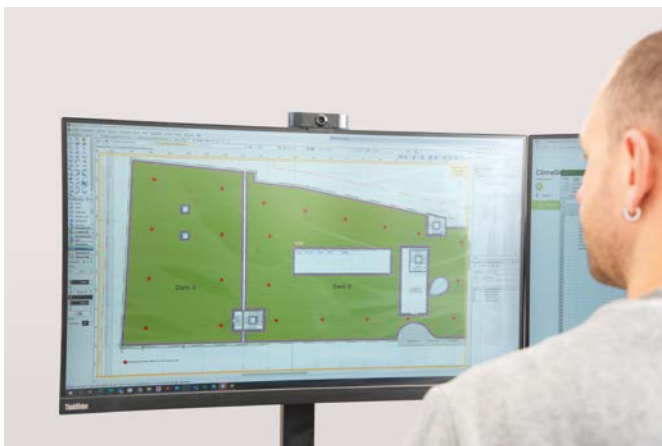
Learn about relevant details like the green building standards and guidelines in the countries concerned



Obtain access to all the key information including texts and templates for tenders, standards and specifications



Create an initial cost calculation with rough information on prices, quantities, and customary costs for laying materials



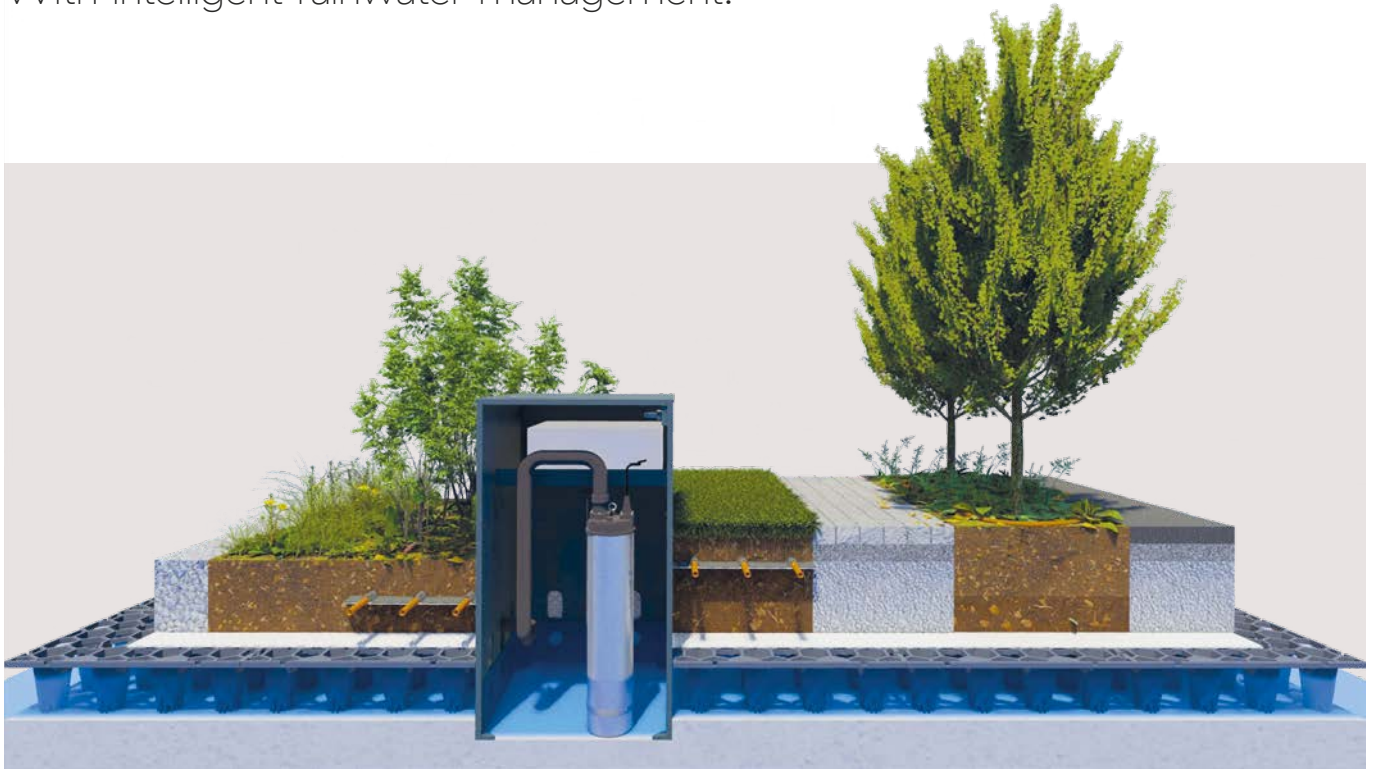


**Meistersingerstrasse
Munich**

- Intensive and extensive green roof area approx. 700 m²
- Subsurface irrigation saves water, lawn can always be walked on

Irrigating green roofs sustainably

With intelligent rainwater management.



How can we save and make the best-possible use of such a valuable resource as water? What measures work when extreme weather conditions prevail? Our patented thin water storage layer is the result of years of in-depth research and development. It lies at the heart of ClimaGrün's intelligent water cycle.

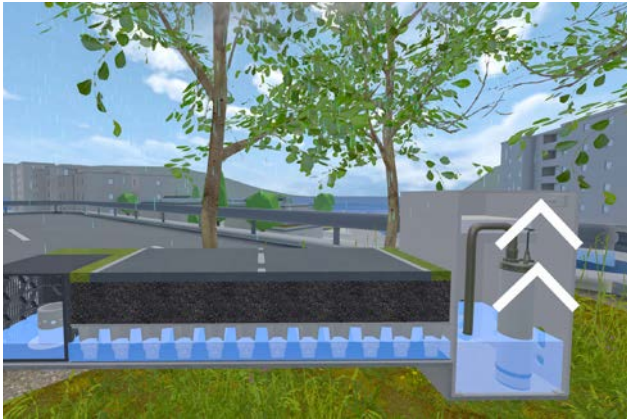
ClimaGrün's thin water storage layer makes optimum use of rainwater. Intelligent rainwater management also provides further benefits. For instance, biodiversity on green roofs is encouraged, evaporation increases and the impact of extreme heat islands in urban spaces is mitigated. And the ClimaGrün roof system responds quickly to heavy rainfall due to climate change.

Rainwater on demand

The thin water storage layer can store rainwater on site. It seeps into the top layer of soil. Any excess water not absorbed by plants at the time flows into the water retention layer that holds the water back. When required, this layer releases the stored water back into the green roof's layer of soil. What's more, it requires less energy than conventional irrigation systems.

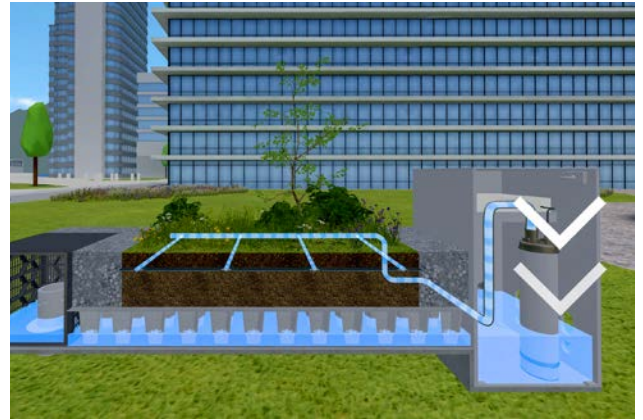
The benefits of the patented thin water storage layer are as follows:

- Temporary or permanent storage of rainwater
- An ideal response to heavy rainfall
- Efficient water consumption
- An enormous quantity of water stored
- Steady evaporation, even in dry spells
- Biodiversity is maintained
- A slim green roof system with a low static load
- A resource-friendly and energy-saving option



The roof as a water storage reservoir

The most efficient way of storing water is with the thin layer rainwater tank on the roof.



Green roofs with no drinking water consumption

The stored water supplies plants with rainwater consistently.



Surplus water used for irrigation

Any surplus water can be used to irrigate green spaces.



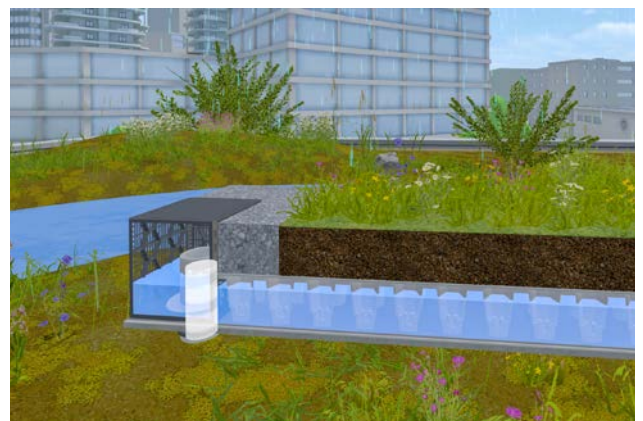
A diverse range of plants

Because water is stored for long periods of time, depending on the local climate, plants with different water requirements are possible.



Excellent evaporation performance

The thin layer rainwater tank with integrated subsurface irrigation increases the plants' evaporation capacity to reduce the ambient temperature.



Retention roof with restrictor

Retention roof with restrictors to hold back the rain and delay run-off in order to put less pressure on urban sewers.

Your green roof solutions.

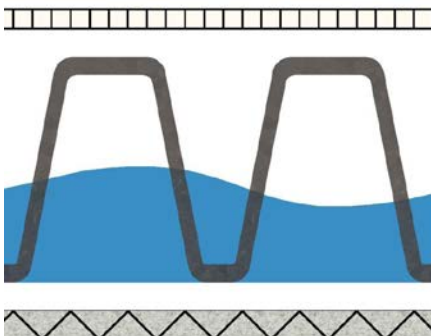
A green building system

Green roofs foster biodiversity and compensate for climate change in urban spaces. And city dwellers love these verdant oases.

We can offer a **standard green roof system** with extensive and intensive green roofs all the way to the **ClimaGrün roof system with its patented thin water storage layer**. Our system solutions adapt to any requirements, both in terms of engineering and design.

ClimaGrün has the right system for any roof, whether it's one covered with a surface or vegetation. As a result, we can guarantee a fully functional green roof system.

This includes all types of green buildings and green solutions for retention, standard and pitched roofs.



1. A retention system solution

With intelligent water management.

ClimaGrün's retention system solution makes optimum use of rainwater and puts less pressure on the sewers too. What's more, this green roof system encourages biodiversity, increases evaporation, therefore mitigating the impact of extreme heat islands in urban spaces.

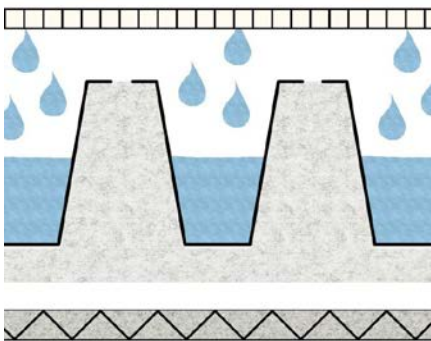
Smart water management on a retention roof delivers huge benefits in urban areas.

- It acts as a temporary water storage option for delayed rainwater runoff (putting less pressure on the sewers)
- It acts as an ongoing water storage option for specific irrigation of vegetation (encouraging biodiversity and increasing evaporation)

And this is where our **patented thin water storage layer** really shows what it can do. Firstly, it retains precipitation and delays water runoff. Secondly, its thin-layer reservoir helps irrigate vegetation and save water.

Our retention systems

- CG Extensive Moss Sedum Retention
- CG Extensive Natural Meadow Retention
- CG Intensive Lawn Retention
- CG Intensive Garden Retention
- CG Intensive Garage Retention
- CG Gravel Layer Retention



2. Standard system solution

Layer by layer to the perfect green roof.

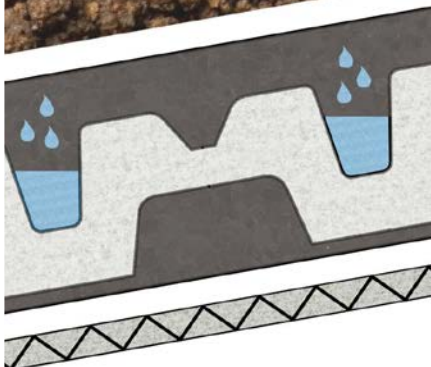
For **simple, intensive** or **intensive and extensive green roof solutions**:

The **standard** system solution provides everything you need for a fully functioning green roof. Choose between a **surface or vegetation** and find the right system solution for you.

Green roofs aren't just eye-catching, they've now also become places where people like to chill out. They can grow vegetables, or herbs on them and the **multiple layers** mean that trees and tall shrubs can take root. Ponds, swings, seating and much more is possible. As **kitchen gardens** or **peaceful oases** — ClimaGrün's standard system solutions allow you to use building surfaces to the full.

Our standard systems:

- CG Extensive Moss Sedum
- CG Extensive Natural Meadow
- CG Intensive Lawn
- CG Intensive Garden
- CG Intensive Garage
- CG Gravel Layer
- CG Pavement Surface
- CG Driving Surface



3. Pitched roof system solution

A system for pitched roofs.

Green pitched roofs are very attractive, but **customised solutions** are normally required in this case. Our **pitched roof** system solution provides the right structure and guarantees a fully functional green roof system.

Designed and developed by ClimaGrün, the system structure reflects the **special features of a pitched roof** and provides the foundations for a **long-lasting, green roof solution that requires little maintenance**.

Each green roof acts like a natural air conditioning system. In winter, the heat stays in, but stays out in summer. In urban areas, green roofs have an impact on the local microclimate, prevent heat islands and foster biodiversity.

Our pitched roof systems:

- CG Extensive Pitched Roof 5–15°
- CG Extensive Pitched Roof 15–35°

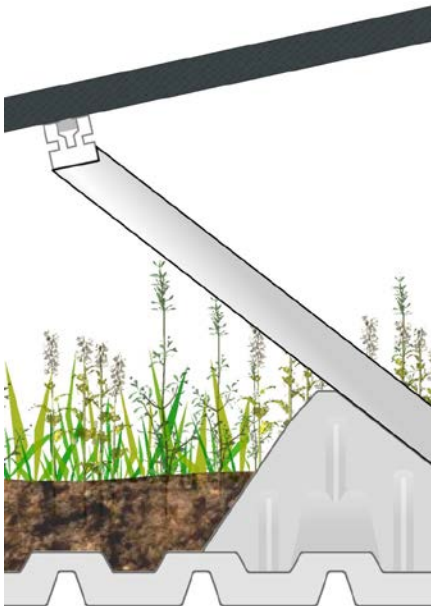
4. Green Solar Roof Retention system solutions

Catching the sun.

The ClimaGrün system effectively turns roofs with solar and photovoltaic panels green. It's a perfect combination of green roofs and solar technology.

Our retention systems

- CG Green Solar Roofs Retention
- CG Green Solar Roofs Standard



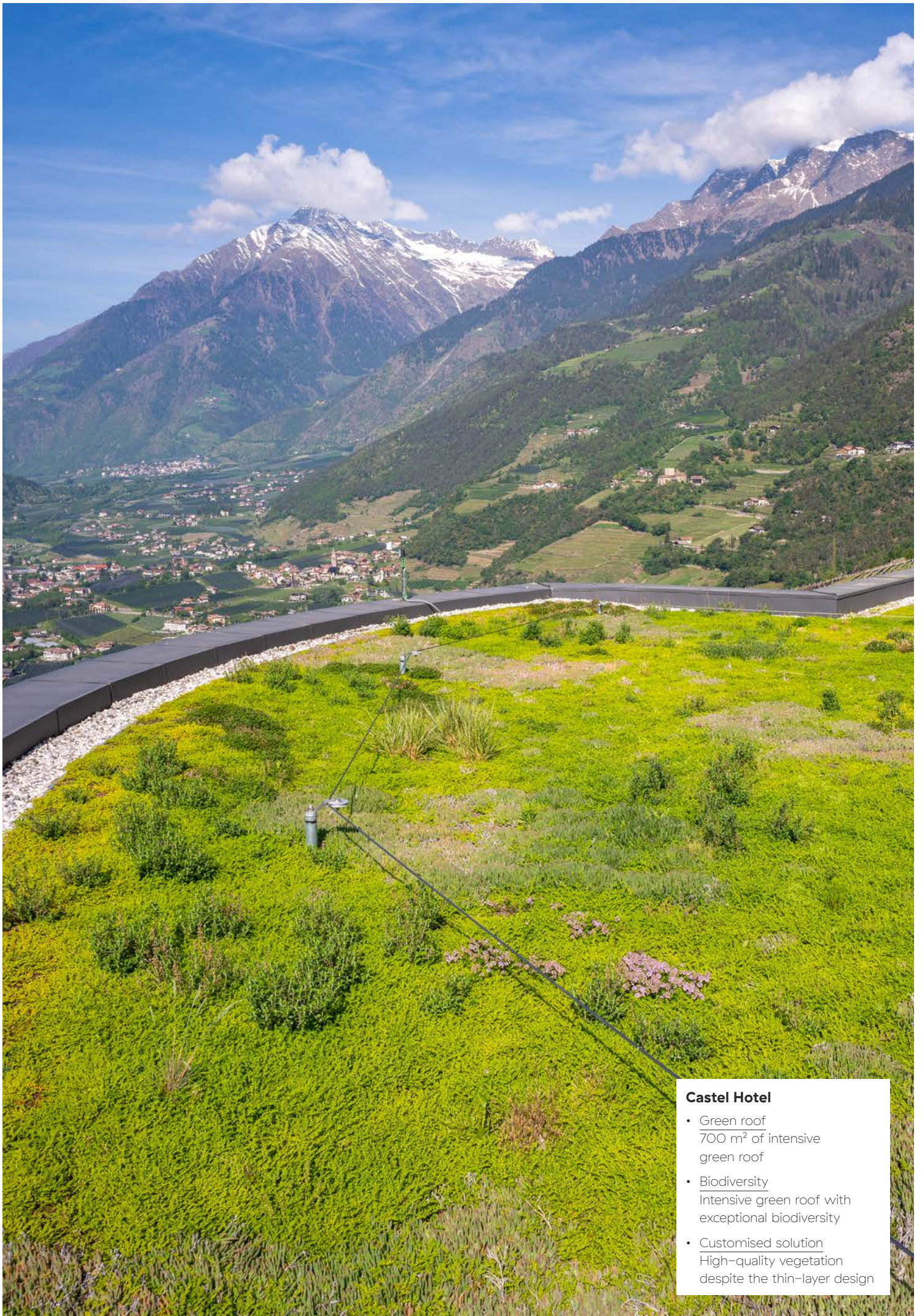
5. Green-Facade system solution

Perfect living walls.

The ClimaGrün green facade system is an effective way of adding greenery to buildings' outside walls.

Our pitched roof systems:

- CG Green-Facade System



Castel Hotel

- Green roof
700 m² of intensive green roof
- Biodiversity
Intensive green roof with exceptional biodiversity
- Customised solution
High-quality vegetation despite the thin-layer design

Everything at a glance

Green roof product groups

These product groups cover all requirements. In addition to standard applications, you can also find special products to enhance water consumption efficiency such as ClimaGrün's patented **thin water storage layer**.

Whatever **system solutions** we design and develop for you, we pick tried-and-tested, as well as innovative products to irrigate and turn buildings green.



Fleeces and layers

Protection and storage fleeces
Separation and water storage fleeces
Capillary and water storage fleeces
Root protection and slip layers
Inverted roof separating layers
Protection mats



Green roof elements

Protection and drainage elements
Drainage and water storage elements
Retention modules



Inspection chambers and elevations

Inspection chambers
Elevations



Retention throttles and retaining elements



Pump systems



Irrigation

Subsurface irrigation
Drip tubes



Edging

Separation profiles
Raised bed profiles



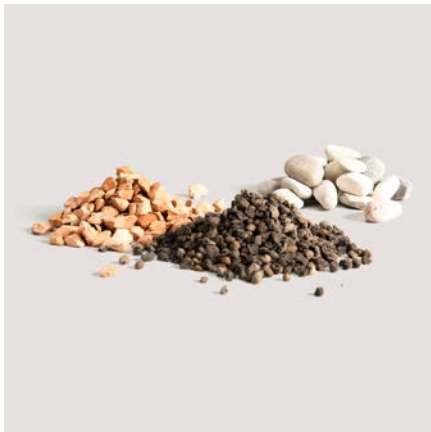
Planters

Plastic planters
Metal planters



Substrates

Multi-layer substrate extensive
Lawn, intensive and sub-substrates



Bulk materials

Bulk material drainage
Gravel bulk materials



Vegetation

Seed mixes
Sedum seedlings
Small-bale plants
Vegetation mats

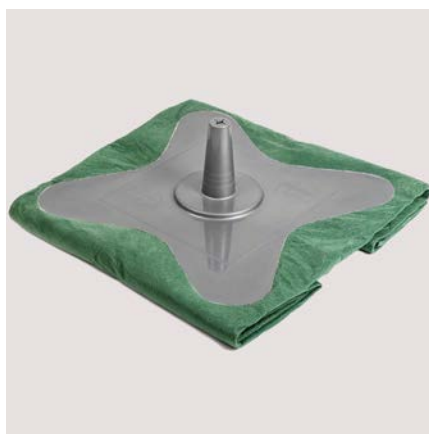


Pitched roof products

Thrust protection
Eaves thrust holders
Drainage profiles



Green solar-roof systems



Ballast mat systems

Products for green roofs

Each in a class of its own

ClimaGrün products meet high standards of quality. Benefit from our expertise when it comes to materials, durability, applications, and impact. We'll provide expert advice so that you make the right choice.



**Protection and storage
fleece CG-SS 300**



**Protection and storage
fleece CG-SS 500**



**Protection and storage
fleece CG-SSV 300**



**Protection and storage
fleece CG-SSV 500**



**Protection and storage
fleece CG-SSV 1000**



**Water storage
fleece CG-FV 105**



**Water storage
fleece CG-FV 200**



**Water storage
fleece CG-FV 325**



**Separating and water
storage fleece
CG-TW 400**



**Protection and water
storage fleece
CG-SW 800**



**Root protection layer
CG-WF 400**



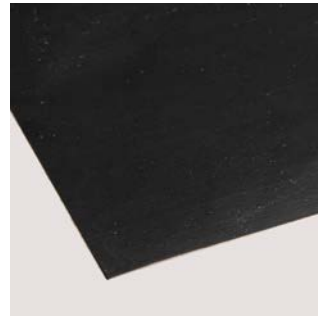
**Slip layer
CG-GF 200**



**Separating layer
CG-TL 2**



**Separating layer
CG-TL 3**



**Protection mat
CG-BSM 6**



**Filter, drainage and
protective element
CG-FDS 8**



**Filter, drainage and
protective element
CG-FDS 12**



**Drainage element
CG-D 90**



**Drainage element
CG-D 150**



**Drainage and water
storage element
CG-DW 25**



**Drainage and water
storage element
CG-DWL 25**



**Drainage and water
storage element
CG-DWH 25**



**Drainage and water
storage element
CG-DW 40**



**Drainage and water
storage element
CG-DWL 40**



**Drainage and water
storage element
CG-DW 60**



**Drainage and water
storage element
CG-DWS 55**



**Retention module
CG-RM 90**



**Retention module
CG-RM 150**



**Retention module
CG-RMK 90**



**Retention module
CG-RMK 150**



**Inspection chamber
CG-KS 30 h10**



**Inspection chamber
CG-KS 40 h5**



**Inspection chamber
CG-KS 40 h10**



**Chamber elevation 30
CG-KSE 10**



**Chamber elevation 40
CG-KSE 5**



**Chamber elevation 40
CG-KSE 10**



**Retaining element with
restrictor CG-AED**



Retaining element CG-AEP



**Pump system
CG-PS vario**



**Subsurface irrigation
mat CG-UB**



**Drip tube
CG-TS**



**Separation profiles ALU
CG-TP**



**Raised bed profile stainless
steel CG-HE**



**Raised bed profile
powder coated, galvanised
steel CG-HSFP**



Planter plastic CG-PK



Planter stainless steel CG-PE



Planter powder coated, galvanized steel CG-PSFP



Multi-layer substrate extensive CG-MSE lightweight



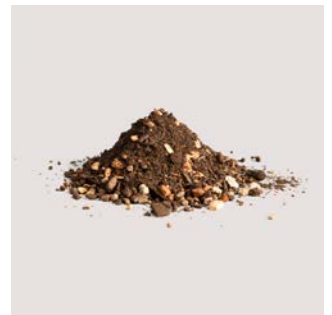
Multi-layer substrate extensive CG-MSE heavy



Intensive substrate CG-RS



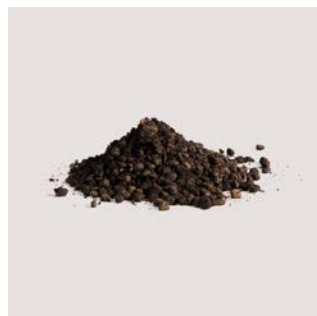
Intensive substrate CG-IS lightweight



Intensive substrate CG-IS heavy



Substrate CG-US lightweight



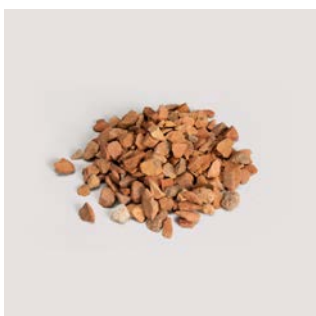
Substrate CG-US extra lightweight



Substrate CG-US heavy



Bulk material expanded clay CG-BT 5/12



Bulk material bricks CG-Z 2/10



Bulk material cellular glass gravel CG-SGS 10/50



Round gravel CG-RK 15/30



Decorative gravel CG-DK 15/25 blue



Decorative gravel
CG-DK 15/25 crema



Decorative gravel
CG-DK 15/25 nero



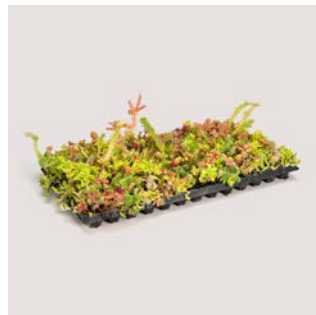
Natural seed herbs
CG-NK



Natural seed grasses
CG-NG



Sedum seedlings
CG-SST



Sedum mix for small-bale
plants CG-SK



Herb mix for small-bale
plants CG-KK



Grass mix for small-bale
plants CG-GK



Sedum vegetation mat
CG-SVM



Sedum vegetation mats
adhesive tape for fabric
CG-SVM GT



Shearing protection
CG-SSZ



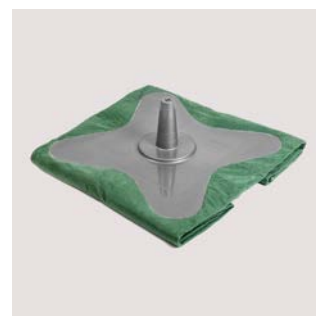
Eaves thrust holders
CG-TH



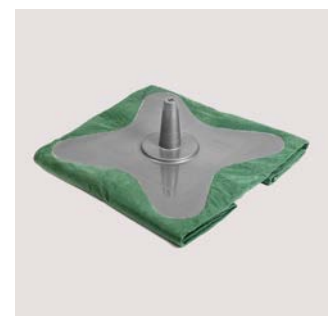
Drainage profile
CG-DP



CG Greenlight pro
solar panel mount



DiaSafe Line System Multi



DiaSafe Single System
Solo/Duo



Villa Scanelli

- Extensive, intensive and green patios on various levels over approx. 2,800 m²



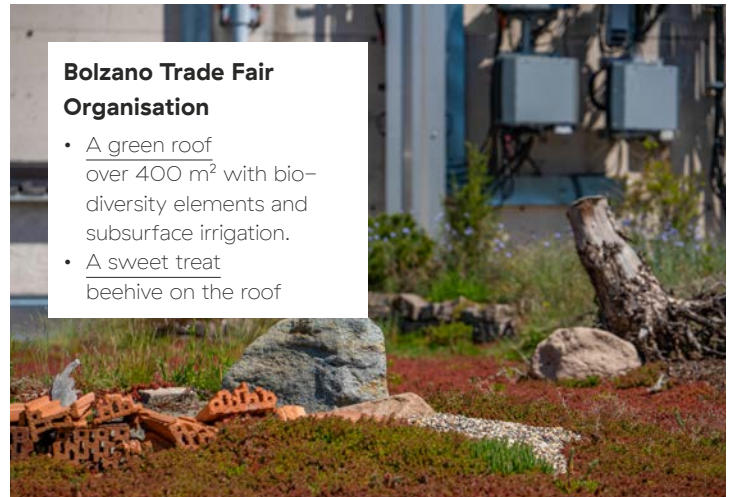
Marostica

- An extensive, green roof over 180 m² with subsurface irrigation.



Rappersbichl

- Pitched green roofing with a 50° slope approx. 600 m² of natural meadow



Bolzano Trade Fair Organisation

- A green roof over 400 m² with bio-diversity elements and subsurface irrigation.
- A sweet treat beehive on the roof



Eco del Mare

- Extensive green roof with lots of varieties of plants



Brückenwirt Hotel

- Pitched green roof for a roof pitch up to 90°



Playground in Bolzano

- Intensive green roof over approx. 3,000 m²



MK3 Hotel Freiamt

- Green solutions
Green roofing and patios on various levels over an area approx. 7,000 m² in size.



Duka in Brixen

- Extensive and intensive green roof over an area of approx. 3,000 m²



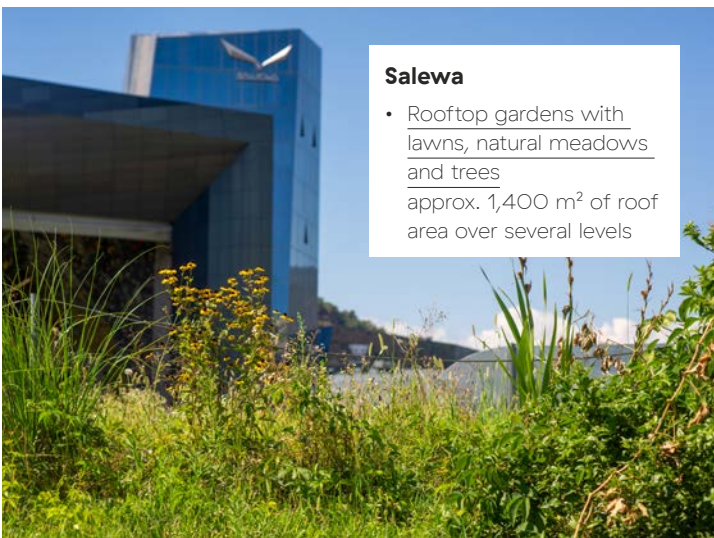
Forestis in Plöse

- Green roofscapes
Extensive and intensive flat and pitched roofs over an area of approx. 6,000 m²



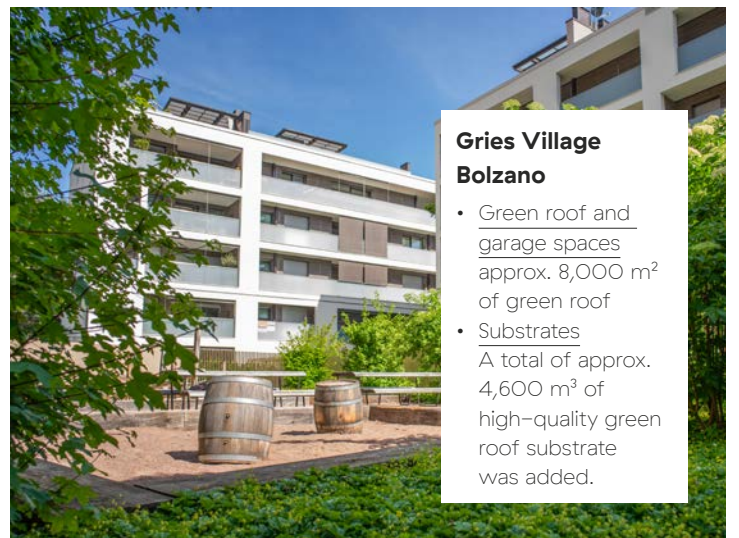
Manna Resort Hotel

- Greenery over 5,500 m²
- Thin water storage layer on the main building
- Large plants



Salewa

- Rooftop gardens with lawns, natural meadows and trees
approx. 1,400 m² of roof area over several levels



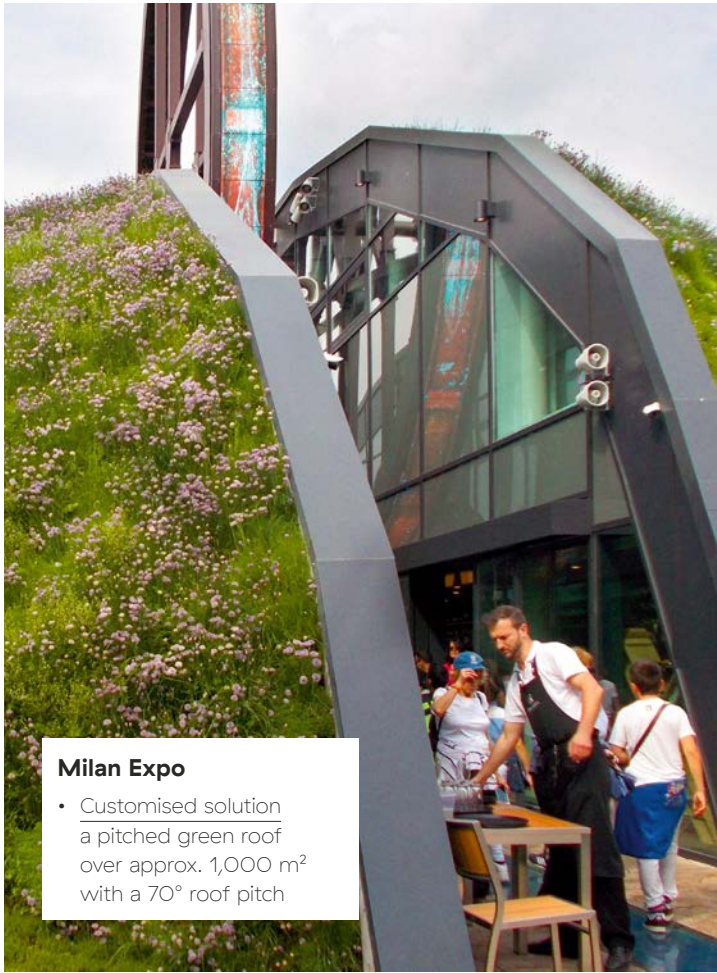
Gries Village Bolzano

- Green roof and garage spaces
approx. 8,000 m² of green roof
- Substrates
A total of approx. 4,600 m³ of high-quality green roof substrate was added.



**Meistersingerstrasse
Munich**

- Intensive and extensive green roof
Area approx. 700 m²
- Subsurface irrigation saves water, lawn can always be walked on



Milan Expo

- Customised solution a pitched green roof over approx. 1,000 m² with a 70° roof pitch



**Urbino Nuova
Porta Santa Lucia**

- Roofscapes on various levels, over an area of approx. 11,000 m² with a roof pitch of 0–60°



Denisstrasse in Munich

- Green roof and patios green roofing of approx. 1,500 m² on various levels



About us

Growth requires roots.

We're based in South Tyrol, the northernmost region of Italy. Our forests, the Mediterranean vineyards, and the Dolomites UNESCO World Natural Heritage Site, remind us every day how unique and worth protecting nature is. This enormous respect for the world around us **and our awareness of our responsibility** vis à vis the next generation are what motivate us. And have been for 20 years now.

ClimaGrün's roots are in the provincial capital of Bolzano, in a green neighbourhood full of vineyards called Gries. We manage all our projects for customers and partners worldwide from here. ClimaGrün has spent many years selling **system solutions** and **products** for green buildings . **But it's also established itself as a partner and solutions finder for** planners, architects and landscape designers.

Our core competency lies in **greening systems with intelligent rainwater management**. Twenty years of research in this field and our thin water storage layer, which was only patented in 2019, underscore our expertise in terms of nature and technology and our commitment to sustainable greening.

Benefit from the following products and services we offer too:

1.

ClimaGrün roof systems with patented thin water storage layers

2.

Established products and system solutions for all types of green roofs

3.

Digital tools and virtual reality options to ensure robust planning and calculations

2022 – today

As a core component of the intelligent ClimaGrün water cycle, the thin water storage layer is patented and all products are prepared and launched. As a virtual assistant for planners and architects, data-based software tools will be developed, tested, deployed and launched in January 2023.

2020 – 2022

Over two years, innovative system solutions with the integrated thin water storage layer are tested thoroughly as part of a ClimaGrün water cycle. All ClimaGrün products and system solutions are trialed, improved, and modified to reflect the latest findings.

2017 – 2019

The idea for ClimaGrün's patented thin water storage layer is born. The first concepts for future-proof complete solutions emerge and the company forges ahead with digitisation. Tests follow in collaboration with research institutes, with findings incorporated into development of the system.

2013 – 2016

ClimaGrün's corporate strategy focuses on boosting its own ClimaGrün brand and sustainability. All system solutions are revised and honed to ensure sustainability in all areas. Sustainability is what drives their development and design. New partnerships are forged to enhance the product range as well.

2009 – 2012

ClimaGrün is extensively involved in researching and developing vertical greening systems, green roofs, and green roof substrates. ClimaGrün founds Optigrün Italia, which spawns various research projects and generates invaluable results.

2002 – 2008

Klaus Kornprobst founds ClimaGrün. Creative garden design and horticulture are some of the first areas of business. The company grows consistently and positions itself to customers as a green roof specialist.

Our team

Teamwork makes projects work

Our team's fascinated by nature and technology. In terms of aesthetics, our standards are high and we adopt a solutions-driven mindset. All of these aspects make us a partner you can trust when it comes to intelligent green buildings and all they encompass.



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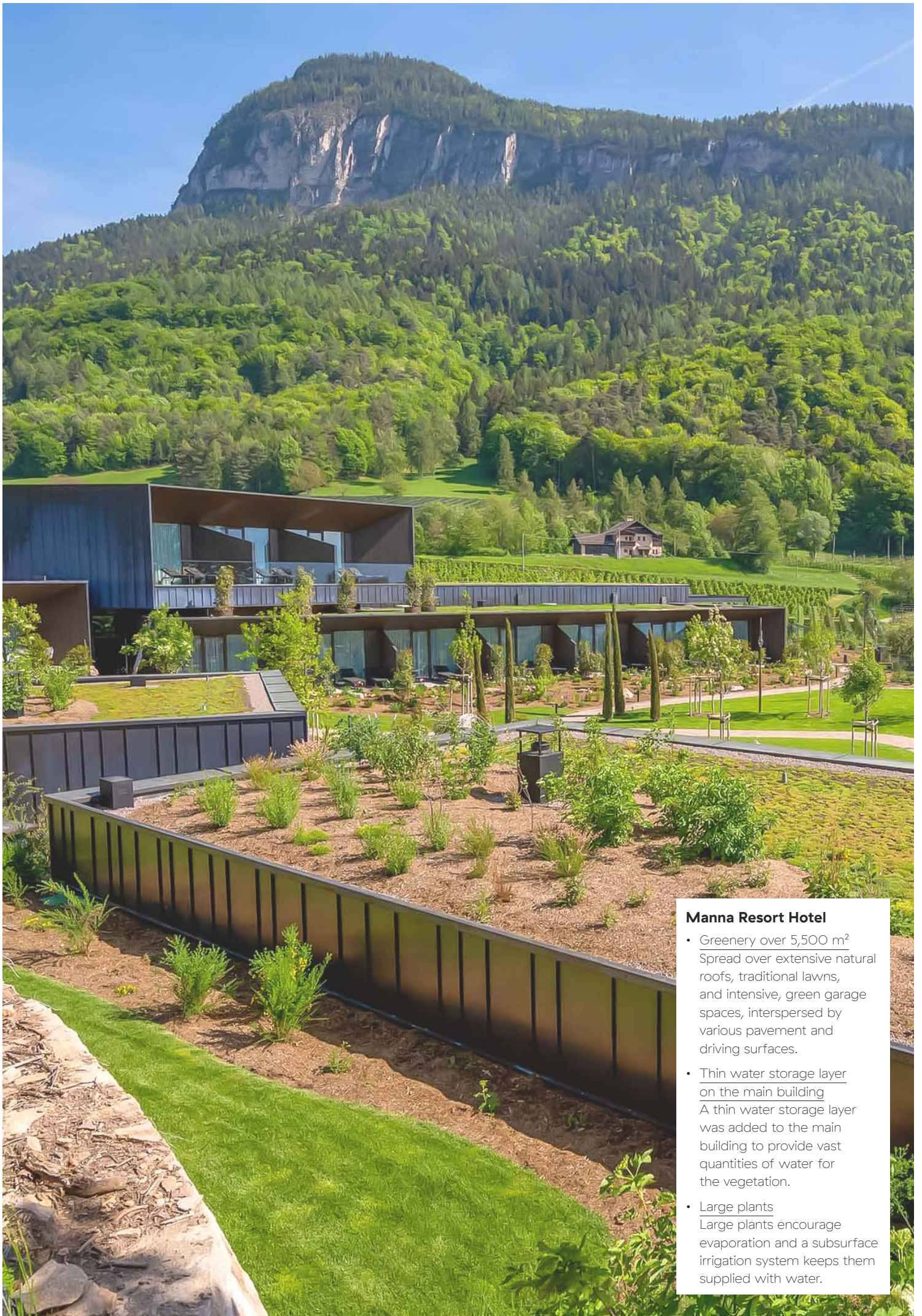


Ahmed Hamo

Warehouse

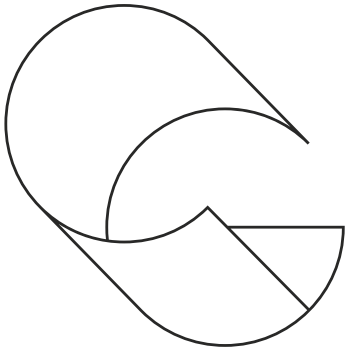
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Manna Resort Hotel

- Greenery over 5,500 m²
Spread over extensive natural roofs, traditional lawns, and intensive, green garage spaces, interspersed by various pavement and driving surfaces.
- Thin water storage layer on the main building
A thin water storage layer was added to the main building to provide vast quantities of water for the vegetation.
- Large plants
Large plants encourage evaporation and a subsurface irrigation system keeps them supplied with water.



ClimaGrün

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for over
20 years



approx. 200
green roof
projects per year



develops and makes
green roof products



Rainwater instead of
drinking water

ClimaGrün stands for innovative constructions, geared to a way of life that embraces nature and is environmentally and climate friendly. As a specialist in green roofs and systems, ClimaGrün helps return nature to urban spaces.