

GREEN FACADES REVOLUTIONIZE OUR HABITAT

Facade greening is the key to a sustainable and climate-resilient urban development. Increasing density with sealed surfaces creates urban heat islands that negatively influence the quality of life in cities. In urban areas, the building facade is the largest unused residual area to positively affect CO₂ levels. With POHL FOREST, we have developed back ventilated facade systems that can be planted in a variety of ways. Regardless of whether you want to green a large-area or focus on selective planting – we have the right system for you.

FORECAST OF THE INCREASE IN SUMMER DAYS

Reference period: 1971 - 2000

2021 - 2050 Increase by up to 25 summer days per year



2071 - 2100 Increase by a further 20 - 35 summer days per year

2021 2050 2071 2100

Source: Zentralanstalt für Meteorologie und Geodynamik (ZAMG) (www.zamg.ac.at/cms/de/klima/news/hitzetage-werden-immer-haeufiger)

BENEFITS OF GREEN FACADES

Increase in biodiversity

New habitat for biological diversity



Water management

 Retention, storage and evaporation



Life cycle extension

 Material protection of the facade via outer green layer



Improvement of microclimate

- Binding of fine dust and CO₂
- Increased production of O₂



Highest Fire Protection (EN 13501-1)



Aesthetic enhancement of urban residual areas



Building optimization

- Insulation, Protection against environmental influences
- Reduction of operating costs



Urban development

- Foster, greener, more natural surroundings
- Increase in value of real estate
- Funding opportunities by municipalities are widely available

Human well-being

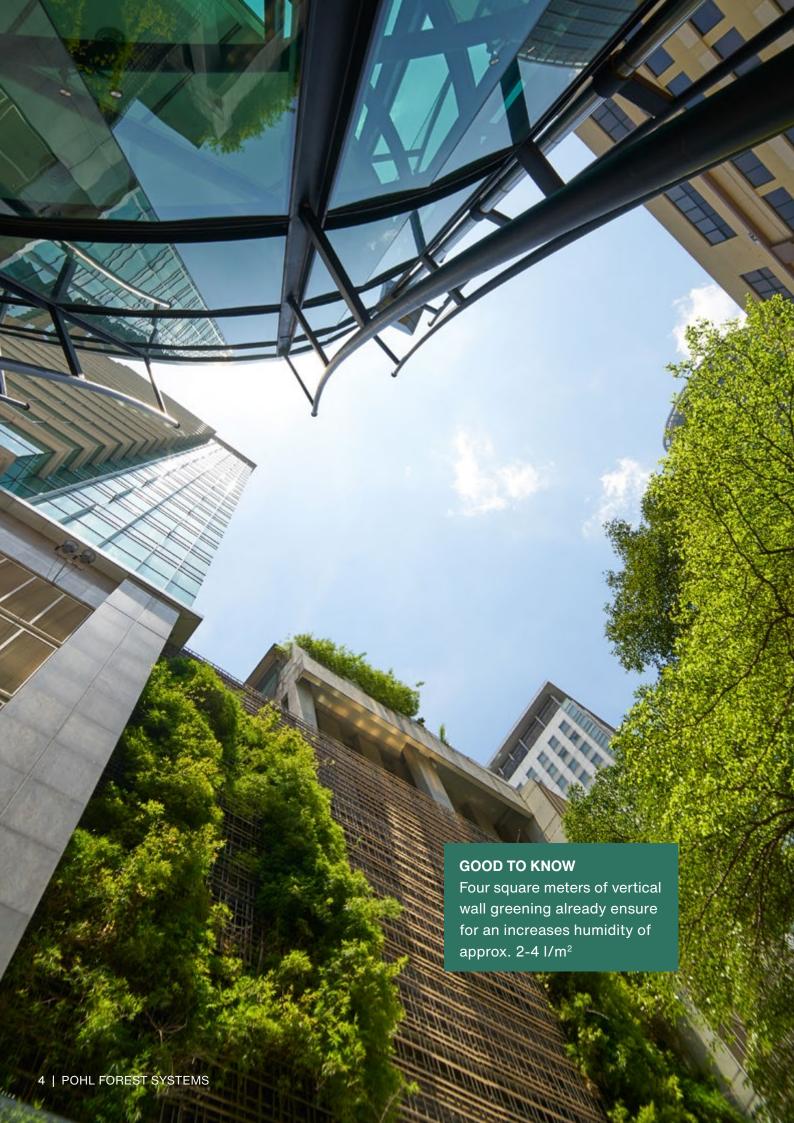
- Improved productivity
- Noise protection
- Stress reduction
- Thermal comfort

Economical Benefits

 Substitution of sun protection and shading systems %

 Reduction in heating / cooling costs



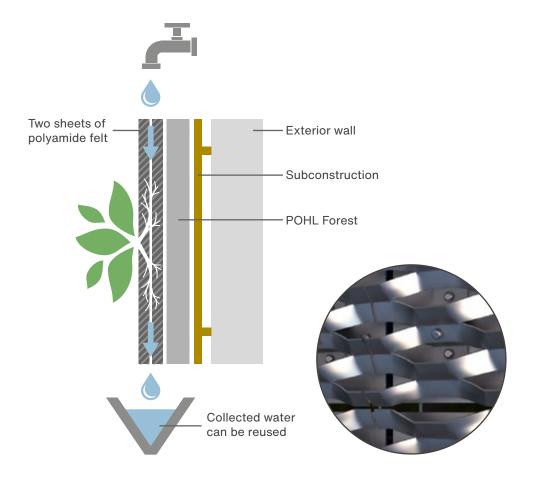


POHL FOREST SYSTEMS

Based on our back ventilated rainscreen facade system, we have developed a vertical garden for urban greening.

Expanded metal mesh serves both as micro-plant holder for selective planting on mineral wool as well as a climbing aid for suitable plants. An automated irrigation system supplies the plants with nutrients.

IRRIGATION FOR POHL FOREST SYSTEMS



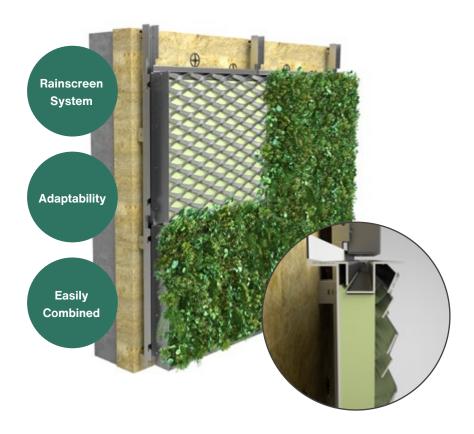
GREEN WALL SYSTEM

BACK VENTILATED RAINSCREEN FACADE WITH VERTICAL **PLANTING SUBSTRATE**

Thanks to the POHL system approach paired with intelligent irrigation and nutrition supply, the substrate system offers an appealing appearance all year long. They combine the matching mesh, surface and planting.



Generally suited for planting succulents, ivy or grass.*



^{*}Please note that the selection of plants should be tailored to the location and climatic conditions.

HYBRID EM SYSTEM

BACK VENTILATED RAINSCREEN FACADE WITH PLANT TROUGH AND CLIMBING AID

In cooperation with the University of Applied Sciences Frankfurt, we have developed a back ventilated rainscreen facade green system that includes plant troughs at the base.



Generally suited for climbing plants such as Virginia creepers, Clematis or ivy. *



^{*}Please note that the selection of plants should be tailored to the location and climatic conditions.

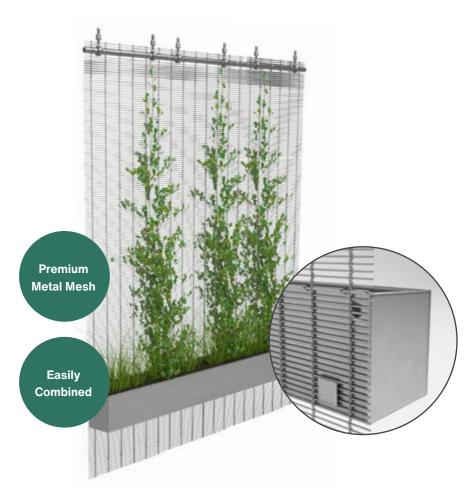
HYBRID MESH SYSTEM

HYBRID BACK VENTILATED RAINSCREEN FACADE OR PRIVACY PROTECTION SYSTEM WITH METAL MESH MADE OF STAINLESS **STEEL**

In cooperation with the metal mesh specialists at GKD™, we can also offer our POHL Forest Hybrid System with stainless steel mesh in lieu of expanded metal serving as a climbing aid.



Generally, climbing plants such as Virginia creepers, Clematis or ivy are suitable for planting.*



*Please note that the selection of plants should be tailored to the location and climatic conditions.

This product is a cooperation with:



TRAY SYSTEM

ALUMINUM PLANT TROUGHS

Our Tray System is primarily suitable for being used on balcony railings or window sills.

The aluminum trays can be individually integrated into bespoke architectural designs during the early planning stages. This will guarantee a cost-effective solution of setting green accents on a building.



SYSTEM COMPARISON

	GREEN WALL	HYBRID EM	HYBRID MESH	TRAY SYSTEM
Cost Efficiency	+	+++	+++	++
Resistance	+	++	++	++
Adaptability	+++	+	+	+
Irrigation Effort	+	++	++	+++
Installation Effort	++	++	+++	+++
Maintenance Effort	+	++	++	+++
Botanics	e.g. succulent and sedum plants	Climbing plants	Climbing plants	Green or flowering plants

BOTANICS

The vertical building facade is an extreme location for plants. When developing a bespoke greening concept for POHL FOREST, there are many factors that have to be considered in order achieve the desired outcomes:

- Desired Overall appearance (selective, linear or surface greening)
- Light and climate conditions of the specific location
- Water and nutrition requirement for different plants
- Amount of space required for the roots
- Intensity of care and maintenance intervals
- Competitive behavior between the chosen plants
- Life cycle of chosen plants
- Appearance with the change of seasons





We are a member of the German **Federal Association of Green** Buildings (BuGG) and will be happy to put you in touch with a contact for planting.



POHL Group of Companies

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GET IN TOUCH

