

Atlantis®
GREEN CITIES FOR LIFE

Graseko Showroom

Project Location

Ostrava, Czech Republic

Atlantis Application

Vertical Garden

Project Overview

Completed in September 2017, the Graseko s.r.o. showroom in Ostrava incorporated two indoor vertical gardens using Atlantis Gro-Wall® 4.5 and Gro-Wall® Slim Pro systems. The installations formed part of the company's Gro-Wall display showroom and combined modular vertical planting with automatic irrigation and controlled daytime lighting.

The larger installation comprised 13 Gro-Wall® 4.5 kits covering 12.5 m² and supporting 213 plants across 11 plant types. A second Gro-Wall® Slim Pro installation used four kits across 2.88 m², supporting 48 plants across 10 plant types. Each plant was served by an individual 2 L/hr dripper, with daytime lighting operating for 16 hours per day.

Technical Summary

Project	Graseko Showroom
Location	Ostrava, Czech Republic
Application	Vertical Garden
Completion	September 2017
Size	12.5 m² Gro-Wall® 4.5 + 2.88 m² Gro-Wall® Slim Pro
Surface Use	Indoor Vertical Gardens
Atlantis System	Gro-Wall® 4.5 & Gro-Wall® Slim Pro

Design Challenge

The project required two vertical garden installations within the Graseko showroom, using two different Atlantis Gro-Wall® systems and accommodating different wall areas, plant quantities and planting compositions. Both installations required irrigation and artificial daytime lighting to be integrated with the planted wall configuration.

The larger vertical garden needed to accommodate 213 plants representing 11 plant types across 12.5 m², while the smaller installation required 48 plants representing 10 plant types across 2.88 m². The irrigation configuration corresponded directly with the plant quantities, requiring 213 individual drippers for the first installation and 48 for the second.

01 Incorporate two indoor vertical gardens within the Graseko showroom.

02 Configure the first installation using 13 Gro-Wall® 4.5 kits across 12.5 m².

03 Accommodate 213 plants across 11 plant types within the Gro-Wall® 4.5 installation.

04 Configure the second installation using 4 Gro-Wall® Slim Pro™ kits across 2.88 m², accommodating 48 plants across 10 plant types.

05 Provide individual irrigation through 2 L/hr drippers, with one dripper corresponding to each plant.

05 Provide daytime lighting operating for 16 hours per day for both installations.

Solution

The first vertical garden was constructed using 13 Atlantis Gro-Wall® 4.5 kits, providing a total planted area of 12.5 m². The installation incorporated 213 plants representing 11 plant types and an automatic irrigation system comprising 213 drippers rated at 2 L/hr. Daytime lighting operated for 16 hours per day, and installation was completed in 5 days.

The second vertical garden incorporated 4 Atlantis Gro-Wall® Slim Pro kits, covering 2.88 m². It supported 48 plants representing 10 plant types, with an automatic irrigation system comprising 48 drippers rated at 2 L/hr. Daytime lighting also operated for 16 hours per day, with installation completed in 2 days.

Together, the two installations provided separate Gro-Wall® configurations within the same indoor showroom, each with its own documented module quantity, planted area, plant quantity and irrigation arrangement.

Benefits

- 12.5 m² Gro-Wall® 4.5 installation incorporating 13 kits and 213 plants.
- 2.88 m² Gro-Wall® Slim Pro installation incorporating 4 kits and 48 plants.
- 11 plant types incorporated within the Gro-Wall® 4.5 installation and 10 plant types within the Slim Pro installation.
- Individual irrigation provided by 261 total 2 L/hr drippers across the two vertical gardens.
- Controlled daytime lighting operated for 16 hours per day for both installations.
- Installation periods of 5 days for Gro-Wall® 4.5 and 2 days for Gro-Wall® Slim Pro.

Considerations

The two vertical gardens required separate modular configurations. The Gro-Wall® 4.5 installation comprised 13 kits across 12.5 m², while the Gro-Wall® Slim Pro installation comprised four kits across 2.88 m².

Automatic irrigation was configured according to the number of plants within each wall. The larger installation incorporated 213 drippers at 2 L/hr, while the smaller installation incorporated 48 drippers at the same 2 L/hr rating. Both installations also incorporated daytime lighting operating for 16 hours per day.

The Gro-Wall® 4.5 installation required 5 days to complete, while the Gro-Wall® Slim Pro installation required 2 days.

Project Outcomes

- 13 Gro-Wall® 4.5 kits installed across 12.5 m².
- 213 plants from 11 plant types incorporated into the Gro-Wall® 4.5 installation.
- 4 Gro-Wall® Slim Pro kits installed across 2.88 m².
- 48 plants from 10 plant types incorporated into the Gro-Wall® Slim Pro installation.
- Automatic irrigation incorporated 213 and 48 individual 2 L/hr drippers respectively.
- Both vertical gardens operated with daytime lighting for 16 hours per day.

The project provides a direct comparison of two Atlantis vertical garden configurations within the same indoor showroom environment. The 13-kit Gro-Wall® 4.5 system supported 213 plants across 12.5 m², while the four-kit Gro-Wall® Slim Pro system supported 48 plants across 2.88 m², with each installation integrating individual 2 L/hr irrigation and 16-hour daytime lighting.

Did You Know?

Across the two showroom installations, 17 Gro-Wall® kits supported 261 plants, with each plant supplied by an individual 2 L/hr irrigation dripper.




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Thank You For Your Attention



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