



©Norbert-Waalboer-Fotografie

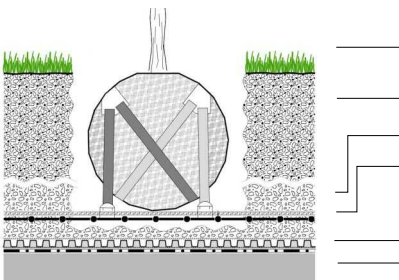
The architects MVRDV achieved their goal of minimising the impact on nature by 'lifting' the existing Museum Park onto the roof and creating a 'rooftop forest' there.

Conception

The Depot Boijmans van Beuningen is a new building in the Rotterdam Museum Park and hosts the first museum art depot worldwide which is entirely accessible to the public. The spectacular glass façade reflects the surroundings and makes the building merge into the Museum Park. To minimise the impact on the existing park, the building was designed in the form of a bowl with a small footprint on ground level, widening only further up towards the roof. This form allowed for the creation of an even bigger park surface on the roof than the building took up on ground level. It is no coincidence that the Depot won the Rooftop Award 2020 for the most eye-catching design in the Netherlands:

A public restaurant situated in the midst of a 'rooftop forest' consisting of 75 carefully selected and pre-treated multi-stemmed Birch Trees with an especially slim root ball. Because of their impressive size of approx. 6 m they had to be lifted up onto the roof with a telescopic crane. The watering system is supplied with stored rainwater. However the green roof is not the only sustainable design feature. The goal of obtaining a BREEAM Excellent classification is also based on a combination of geothermal heat exchange, solar panels, LED lightning and a high-class insulation. Rainwater is collected and used for roof irrigation and toilet flushing.

System Build-up, customized



- Specially adapted Birch Trees
- Customized Intensive Substrate
- Customized Sub-Substrate
- Tree Anchorage System with strap, fixing belts and grid elements
- Customized protection, drainage and filter elements
- Roof construction with root-resistant waterproofing

Development



The substrate and the trees both are lifted on the roof with a telescopic crane.



The root balls are anchored to the ground to withstand the high wind loads on the roof.

Project Data

Area: ca. 1.500 m²

Construction Year: 2020

Architect/Landscape Architect:
MVRDV, MTD Landscape Architects

Landscape Contractor:
Van der Tol Groep BV

System Build-up:
"Roof Garden", customized
"Walkway", customized

Coordinates:
51°54'49.6"N 4°28'16.3"E



<https://www.mtdls.nl>

The plan of the 'rooftop forest' shows the integration of the building into the Museum Park.



The MVRDV/MTD designed green roof received the Rooftop Award during the Rooftop Symposium 2020.



©Norbert-Waalboer-Fotografie

Collected rainwater feeds the watering system.

