

Polder Roof®

Product sheet



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The Polder Roof transforms flat roofs into multifunctional water storage for limiting urban flooding, drought and heat. The Polder Roof stores rainwater in a buffer consisting of water retention boxes on the roof. This buffer is automatically controlled by a smart valve (sm^{ar}tDROP). The stored water can be used for irrigation, grey water systems or can be drained with a delay.

Application

Applicable to flat roofs in new and existing buildings. Can be combined with gravity flow or negative pressure drain systems. Meets the requirement of a water neutral building plot and norms for rainwater drainage.

Applicable as a basis for:

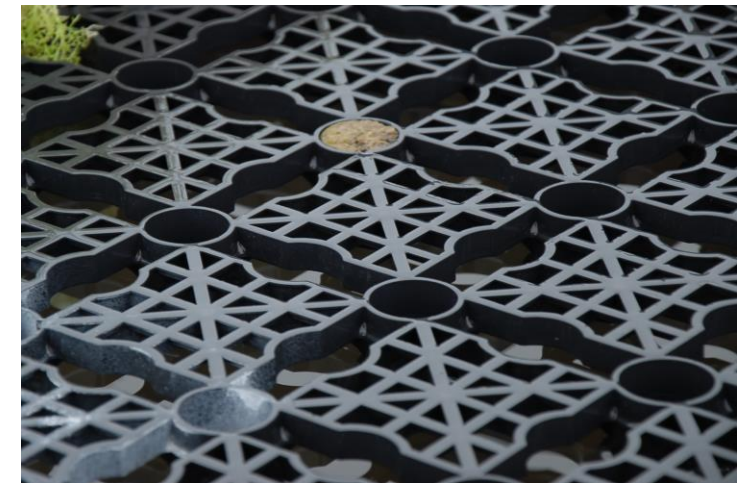
- Green roof (Green Polder)
- Roof garden or roof park (Park Polder)
- Solar panels (Solar Polder)
- Greywater system

BREEAM

New	4 credits
In Use	11 % assets 2,5 % building management

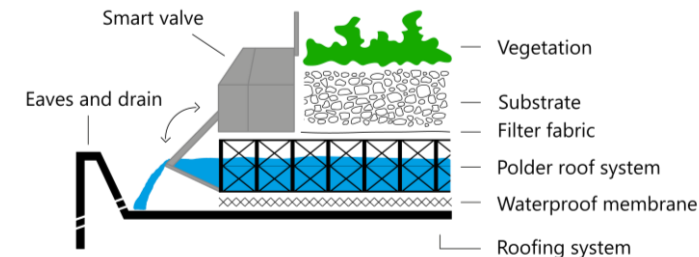
Specifications (PR85)

Water storage	• 71 l/m ² (dynamically controlled)
Control	<ul style="list-style-type: none"> • Automatic based on precipitation forecast and built-in sensors • Adjustable drainage flow rate • Linking to other Polder Roofs optional
Irrigation	• Both vertical and horizontal by use of capillary material
Height	• 85 mm + 8 mm fabrics
Weight	<ul style="list-style-type: none"> • Buffer system 6kg/m² • Water storage 71kg/m² • Free choice of roof system structure



Required conditions

Roofing	• Suited to continuous contact with water
Parapet	<ul style="list-style-type: none"> • 120mm above maximum water level • Vegetation subsequent when parapet is 120 mm above green
Slope	• New building: preference of 0 degrees, minimize slope to maximize water storage



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