

Blue Roof

Data Sheet

Aquality Blue Roof attenuation system is a complete roof water attenuation system for blue, green and blue/green roofs. It enables you to create a drainage platform which gives architects the design flexibility required to create imaginative, multi-functional open green spaces at roof or podium level

Blue Roof Applications:

Stormwater attenuation

Rainwater harvesting

Key Features:

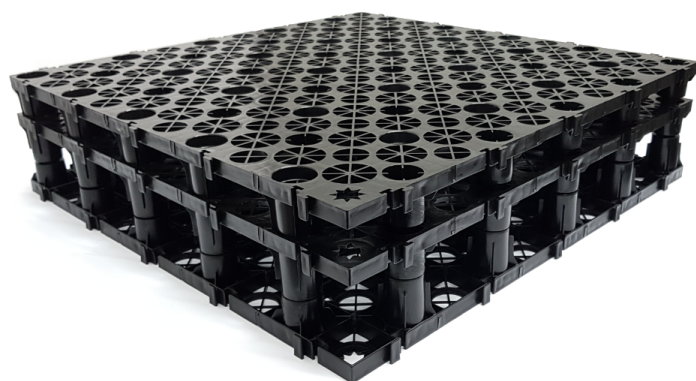
- Modular structure allows for design flexibility
- Interlocks in any orientation
- Stackable without additional shear connectors
- Stormwater attenuation at shallow depth
- Passive irrigation attainable with capillary wick
- Suitable for use beneath both permeable and impermeable surfaces
- High loading bearing capacity > 800 kN/m²
- 100% recyclable
- 90% void volume for maximum water storage
- Nested packing for easy storage and delivery

Module Properties	Unit	Value
Gross Volume	Litres	0.21m ³
Length	mm	500
Width	mm	500
Height	mm	85
Weight	kg	2.2
Colour	-	Black
porosity (void ratio) ⁽¹⁾	%	90



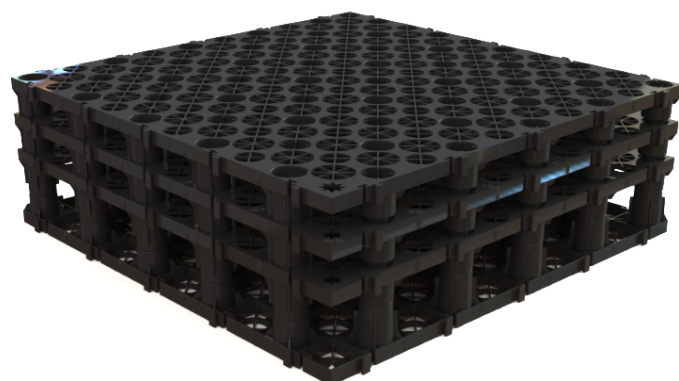
Aquality Blue Roof Block 85mm

Module Properties	Unit	Value
Gross Volume	Litres	0.31m ³
Length	mm	500
Width	mm	500
Height	mm	125
Weight	kg	3.3
Colour	-	Black
porosity (void ratio) ⁽¹⁾	%	90



Aquality Blue Roof Block 125mm

Module Properties	Unit	Value
Gross Volume	Litres	0.41m ³
Length	mm	500
Width	mm	500
Height	mm	165
Weight	kg	4.4
Colour	-	Black
porosity (void ratio) ⁽¹⁾	%	90



Aquality Blue Roof Block 165mm

Blue Roof

Data Sheet

Aquality offers a Blue Roof Flow Restrictor as a means of controlling the rate of runoff from a blue roof.

The design of the restrictor is individually tailored to suit the site-specific requirements for each blue or blue green roof. The design of the flow restrictor(s) can be carried out with tailored roofs designed to BSEN12056-3:2000 or to attenuation sizing principles.

To size the restrictor, Aquality Design Services will need to know:

- The desired flow rate from the roof (l/s)
- The maximum design storage depth (mm)
- The number of roof outlets and overflows
- Water Reservoir depth (mm) if required

Aquality Design Services can also provide guidance on the design and sizing of the blue roof storage.

Features

1. Manufactured from corrosion-resistant 304 grade stainless
2. Built-in overflow with vertical orifice option – provides a failsafe drainage solution
3. The orifice height can be positioned so water can be retained on the roof for passive irrigation of a green roof.
4. Larger single orifice is less prone to blockages – applies to vertical and horizontal orifices if the system is designed using attenuation principles
5. Wide flange allows a secondary liner (if needed) to be dressed and sealed around the outlet without disturbing the roofing membrane seal.
6. The position of the orifice ensures that the roof membrane clamp ring seal is not subjected to prolonged periods of hydrostatic pressure when surcharged.
7. Coded solid cover (with vent) ensures the restrictor position is easily identified and prevents debris from entering and potentially blocking the outlet.



Note

BSEN12056-3:2000 – This standard uses a traditional approach to the sizing and positioning rainwater outlets as the primary aim is to remove rainwater from the roof as quickly as possible. The primary aim of a blue roof is to retain rainwater on the roof for a defined period of time (normally not more than 24 hours).