BlueRoofDesign Software



Bauder Ltd, 70 Landseer Road, Ipswich, IP3 0DH. T: +44 (0)1473 257671 e: info@bauder.co.uk

Client:

Project: 11-12 Hampstead High Street

Location: London

Roof Location: Blue Roof

Roof Details:

BlueRoof $67.6 \text{ m}^2 \times 100 \%$ Additional Area $0 \text{ m}^2 \times 100 \%$

Effective Area 67.6 m²

Storage Details:

Length67.6 mWidth1 mDepth100 mmPorosity95 %

Rainfall Details - FEH Method:

Return Period 100 years

Climate Change Factor 40 %

Summer Storm Profile

Sulfille Storill Frome			
Duration	Intensity		Required
	mm	mm/h	storage(m³)
5 min	26.3	315.8	1.8
10 min	37.4	224.5	2.5
15 min	46.0	183.9	3.0
30 min	59.0	117.9	3.8
45 min	66.5	88.7	4.2
60 min	71.8	71.8	4.5
2 hours	92.2	46.1	5.4
6 hours	126.1	21.0	6.1
24 hours	154.8	6.5	4.6

Outflow Details:

Slope

Attenuation Control BlueRoof Outlet

none

Control2 holesSump DepthNoneDischarge rate0.19 l/sOutlet1 No

Result:

Outcome
Pass
Critical Storm Duration 6 hrs
Hmax 95 mm
Required Volume 6.1 m³
Time to half empty 4.5 hrs
Roof Loading 90.24 Kg/m²

All results based on input data. Please check that input data has been correctly interpreted.

The Bauder Blue Flat Roof Rainwater Calculation Software will perform calculations in accordance with industry best practice for blue roof design based upon provided data relating to a specific building's dimensions geographical location and the flow rate performance of the selected Bauder rainwater outlet product.

Whilst the information contained herein is to the best of our knowledge true and accurate we specifically exclude any liability for errors omissions or otherwise arising therefrom.

Details practices principles values and calculations should be verified for accuracy and suitability for the required purpose for use.

NOTE: These calculations are valid for a zero fall roof with minimal variation in levels. Any significant variation will affect the volume of water stored and the roofs ability to attenuate extreme rain events. Typically variations in roof level should be less than 0 to +30mm with no back falls. The H-Max is measured from the mean roof level

Overflow discharge requirements based on a CAT1 storm event to BSEN12056-3:2000.

Total flow rate: 67.6m2x0.023l/s/m2 = 1.55l/s.

NOTE: Roof loading data shown in the results section is for the blue roof only. For total loading of blue roof and overflows then Hmax + 35mm should be factored in.