BlueRoofDesign Software



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Date: 13/12/2023 Revision: A (1545) Page: 1

Client:

Project: B235931/1_Bird in Hand
Location: West End Lane, NW6 4NX

Roof Location: Main Roof

Roof Details:

BlueRoof $160 \text{ m}^2 \times 100 \%$ Additional Area $0 \text{ m}^2 \times 100 \%$

Effective Area 160 m²

Storage Details:

Length 160 m

Width 1 m

Depth 100 mm

Porosity 95 %

Slope none

Rainfall Details - FEH Method:

Return Period 100 years Climate Change Factor 40 %

Summer Storm Profile

Sammer Storm Frome			
Duration	Intensity		Required
	mm	mm/h	storage(m³)
5 min	26.0	312.0	4.1
10 min	37.1	222.7	5.7
15 min	45.7	182.8	7.0
30 min	58.8	117.6	8.7
45 min	66.5	88.7	9.5
60 min	71.9	71.9	9.9
2 hours	92.7	46.4	11.4
6 hours	126.9	21.2	11.8
24 hours	154.5	6.4	6.8

Outflow Details:

Attenuation Control BlueRoof Outlet

Control Twist Std. Position 1

Sump Depth None
Discharge rate 0.74 l/s
Outlet 1 No

Result:

Outcome Pass
Critical Storm Duration 4 hrs
Hmax 79 mm
Required Volume 12.1 m³
Time to half empty 2.3 hrs
Roof Loading 75.62 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 overflow discharge rate: 160m2x0.023l/s/m2 = 3.68l/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.