

Project Name:	150 Holborn, EC1N 2NS - Residential Roof - FSR Data
Prepared for:	CNM, London
Date:	29/01/2018
ABG Project ID:	12854
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Notes/description:	Green Roof Area - maintenance access only. Sedum or biodiverse surface finish TBC.

Input Parameters - Rainfall Information (Flood Studies Report 1975)

Return period:	100 years	As supplied by Client
Allowance for Climate Change:	40 %	As supplied by Client
Rainfall ratio, R:	0.43	From statistics based on location (FSR)
M5-60 expected rainfall:	20.6 mm/h	From statistics based on location (FSR)
Location selected for FSR data:	London (Central)	

Input Parameters - Roof Information

Catchment area:	144 m ²	As supplied by Client
Storage area:	111 m ²	As supplied by Client
Maximum allowable runoff:	1.0 l/s	As supplied by Client

Output - Rainfall Calculation

Duration	Rainfall (l/s/m ²)	Storage Required (l/m ²)	Time to Empty	Restricted Outflow (l/s)
15 mins	0.0416	49	2 hours and 10 minutes	0.9
30 mins	0.0268	58	2 hours and 30 minutes	1.0
1 hour	0.0163	61	2 hours and 30 minutes	1.0
2 hours	0.0095	53	2 hours and 20 minutes	0.9
4 hours	0.0055	33	1 hour and 30 minutes	0.7
6 hours	0.0039	18	0 hours and 50 minutes	0.5
10 hours	0.0026	6	0 hours and 10 minutes	0.2
24 hours	0.0013	5	0 hours and 0 minutes	0.0
48 hours	0.0007	5	0 hours and 0 minutes	0.0

Total storage required: 6.8 m³
Half empty time: 1 hours and 0 minutes.

Output - Recommended Blue Roof System

System Name:	ABG bluerroof 75mm
Description:	No. of drainage positions & drainage paths TBC with design team. Utilising additional storage capacity of 5 l/m ² in growing medium.

Total storage capacity:	7.8 m ³
Number of Blue Roof outlets:	2

- Notes:
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