

WAVIN Stormwater Management

AquaCell Soakaway designed in accordance with CIRIA 156

Project & Site Details

Project Number	S26304	Produced by	Harry Wrobel
Client	Pope Stevens Architecture	Checked by	
Site Name	Ilex Way, Worthing		
Location	West Sussex, BN12 4UY	Date	24/03/2026

Drainage Details

Area	125 m ²	Climate Change	45 %
Catchment Type	Roof	Effective Area	181 m ²
Area Reduction Factor	1	Additional Inflow	0.00 l/s

Discharge Parameters

Infiltration Rate	1.00E-05	Soil Type	
Factor of Safety	2	Source	
Effective Infiltration Rate	5.00E-06		
Additional Outflow*	0.00 l/s	Depth to Groundwater (m)	

*flat rate from pump only

Rainfall Data

R value					0.35	Storm Return Period			1 in 100 years
M5-60					19	Country			England and Wales
								Storage	Time To
Time	Z1 Value	y mm	Z2 Value	p mm	Value i	a	b	Height	Half -Empty
5min	0.36	6.84	1.81	12.38	0.15	-74.35	0.042	0.260	4.81
10min	0.51	9.69	1.89	18.31	0.11	-54.87	0.042	0.384	6.21
15min	0.61	11.59	1.91	22.14	0.09	-44.13	0.042	0.462	6.94
30min	0.78	14.82	1.91	28.31	0.06	-28.05	0.042	0.584	7.88
1hr	1.00	19.00	1.99	37.81	0.04	-18.59	0.042	0.766	8.99
2hr	1.21	22.99	2.03	46.67	0.02	-11.30	0.042	0.912	9.68
4hr	1.53	29.07	2.01	58.43	0.01	-6.90	0.042	1.070	10.30
6hr	1.71	32.49	1.97	64.01	0.01	-4.92	0.042	1.099	10.40
10hr	2.00	38.00	1.97	74.86	0.01	-3.32	0.042	1.141	10.55
24hr	2.55	48.45	1.89	91.57	0.00	-1.47	0.042	0.935	9.78
48hr	3.00	57.00	1.81	103.17	0.00	-0.63	0.042	0.548	7.63

Soakaway Parameters

Length	1.0 m	Width	9.0 m
Depth	1.2 m	Void	95 %

Results

Critical storm duration (hrs)	10hr	
Required Storage Height (m)	1.141	PASS
Half Time Empty (hrs)	10.55	PASS

AquaCell Modular Units

No. Units Long	1	No. Units Wide	18
No. Units Deep	3		
Total Number of Units	54	Unit Type	



CONNECT TO BETTER