

Client: CFA CIVILS Limited

Project: 29 Maresfield Gardens, Camden, NW3 5SD

Location: London

Catchment: Rear roof + blue roof + Patio

Catchment Details:

Buildings	58 m²	x 95 %
Dense surfacing	46 m²	x 95 %
Other	22 m²	x 95 %
Effective Area	119.7 m²	

Storage Details:

Length	68 m
Width	1 m
Depth	0.15 m
Porosity	95 %
Area Increase	0 %

Rainfall Details - FSR Method:

Return Period	100 years
Climate Change Factor	40 %
r value	0.44
M5-60	20.7 mm
Summer Storm Profile	

Duration	Intensity		Required storage(m³)
	mm	mm/h	
5 min	21.0	251.8	2.432
10 min	30.9	185.5	3.483
15 min	37.1	148.3	4.058
30 min	47.9	95.7	4.824
45 min	54.2	72.3	5.080
60 min	58.7	58.7	5.211
2 hours	69.7	34.8	5.277
6 hours	86.8	14.5	4.312
24 hours	112.1	4.7	2.200

Outflow Details:

Infiltration rate	0 m/hr
Attenuation Control	Orifice Plate
Control Diameter	43 mm
Discharge rate	1 l/s

Result:

Outcome	Pass
Critical Storm Duration	1.58 hrs
Hmax	0.082 m
Required Volume	5.305 m³
Time to half empty	44.2 min