DIXON HURST
CONSULTING CIVIL & STRUCTURAL ENGINEERS

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Surface Water Drainage
Soakaway and Rainwater
Harvesting Tank Size Calculations

For
80 High Street ,
Steyning, East Sussex
BN44 4RD

Date: October 2024
Project No: 62217

Summary of Results for 1 year Return Period (+45%)

Half Drain Time : 7 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
15 min Summer	15.823	0.123	0.3	0.2	O K
30 min Summer	15.842	0.142	0.3	0.2	O K
60 min Summer	15.835	0.135	0.3	0.2	O K
120 min Summer	15.805	0.105	0.3	0.1	O K
180 min Summer	15.778	0.078	0.3	0.1	O K
240 min Summer	15.758	0.058	0.3	0.1	O K
360 min Summer	15.743	0.043	0.2	0.1	O K
480 min Summer	15.737	0.037	0.2	0.1	O K
600 min Summer	15.732	0.032	0.2	0.0	O K
720 min Summer	15.728	0.028	0.1	0.0	O K
960 min Summer	15.723	0.023	0.1	0.0	O K
1440 min Summer	15.718	0.018	0.1	0.0	O K
2160 min Summer	15.714	0.014	0.1	0.0	O K
2880 min Summer	15.711	0.011	0.1	0.0	O K
4320 min Summer	15.709	0.009	0.0	0.0	O K
5760 min Summer	15.707	0.007	0.0	0.0	O K
7200 min Summer	15.706	0.006	0.0	0.0	O K
8640 min Summer	15.705	0.005	0.0	0.0	O K
10080 min Summer	15.705	0.005	0.0	0.0	O K
15 min Winter	15.843	0.143	0.3	0.2	O K
30 min Winter	15.860	0.160	0.3	0.2	O K
60 min Winter	15.840	0.140	0.3	0.2	O K
120 min Winter	15.787	0.087	0.3	0.1	O K
180 min Winter	15.753	0.053	0.3	0.1	O K

Storm Event	Rain (mm/hr)	Time-Peak (mins)
15 min Summer	43.437	19
30 min Summer	28.919	27
60 min Summer	18.769	42
120 min Summer	11.963	74
180 min Summer	9.156	104
240 min Summer	7.556	132
360 min Summer	5.714	190
480 min Summer	4.686	250
600 min Summer	4.018	310
720 min Summer	3.544	370
960 min Summer	2.907	492
1440 min Summer	2.201	734
2160 min Summer	1.663	1104
2880 min Summer	1.364	1452
4320 min Summer	1.032	2148
5760 min Summer	0.848	2936
7200 min Summer	0.726	3544
8640 min Summer	0.638	4256
10080 min Summer	0.573	4968
15 min Winter	43.437	19
30 min Winter	28.919	28
60 min Winter	18.769	44
120 min Winter	11.963	76
180 min Winter	9.156	102

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Summary of Results for 1 year Return Period (+45%)

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
240 min Winter	15.743	0.043	0.2	0.1	O K
360 min Winter	15.733	0.033	0.2	0.0	O K
480 min Winter	15.727	0.027	0.1	0.0	O K
600 min Winter	15.724	0.024	0.1	0.0	O K
720 min Winter	15.721	0.021	0.1	0.0	O K
960 min Winter	15.717	0.017	0.1	0.0	O K
1440 min Winter	15.713	0.013	0.1	0.0	O K
2160 min Winter	15.710	0.010	0.0	0.0	O K
2880 min Winter	15.708	0.008	0.0	0.0	O K
4320 min Winter	15.706	0.006	0.0	0.0	O K
5760 min Winter	15.705	0.005	0.0	0.0	O K
7200 min Winter	15.704	0.004	0.0	0.0	O K
8640 min Winter	15.704	0.004	0.0	0.0	O K
10080 min Winter	15.704	0.004	0.0	0.0	O K

Storm Event	Rain (mm/hr)	Time-Peak (mins)
240 min Winter	7.556	130
360 min Winter	5.714	188
480 min Winter	4.686	250
600 min Winter	4.018	312
720 min Winter	3.544	368
960 min Winter	2.907	488
1440 min Winter	2.201	738
2160 min Winter	1.663	1048
2880 min Winter	1.364	1484
4320 min Winter	1.032	2124
5760 min Winter	0.848	2896
7200 min Winter	0.726	3496
8640 min Winter	0.638	4496
10080 min Winter	0.573	5008

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Rainfall Details

Rainfall Model	FSR	Winter Storms	Yes
Return Period (years)	1	Cv (Summer)	0.750
Region	England and Wales	Cv (Winter)	0.840
M5-60 (mm)	20.200	Shortest Storm (mins)	15
Ratio R	0.350	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+45

Time / Area Diagram

Total Area (ha) 0.005

Time (mins)	Area (ha)	Time (mins)	Area (ha)	Time (mins)	Area (ha)
0-4	0.002	4-8	0.002	8-12	0.002

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Model Details

Storage is Online Cover Level (m) 17.100

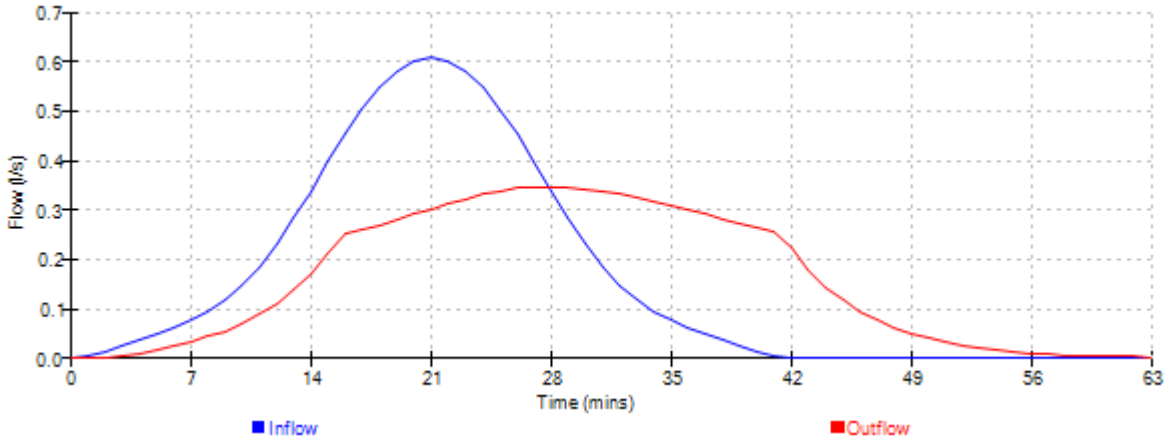
Cellular Storage Structure

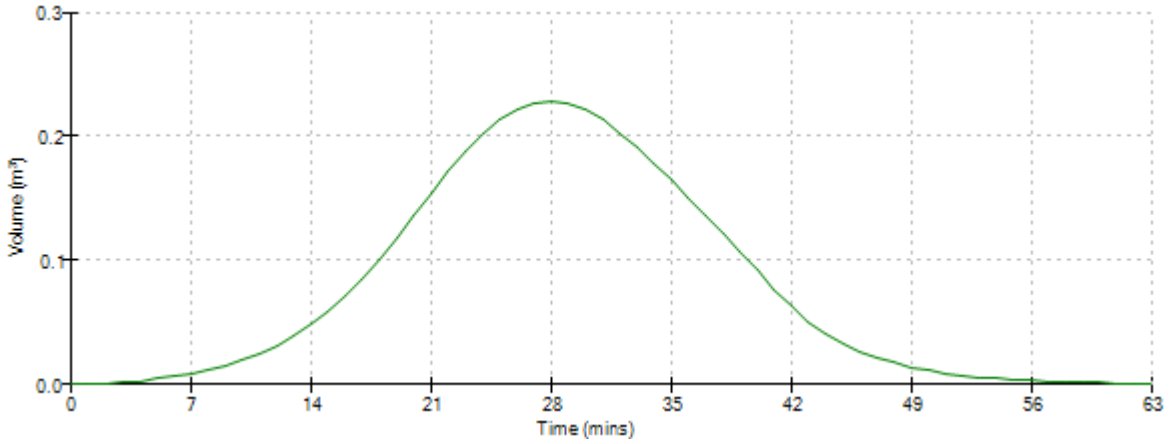
Invert Level (m) 15.700 Safety Factor 2.0
Infiltration Coefficient Base (m/hr) 1.00000 Porosity 0.95
Infiltration Coefficient Side (m/hr) 1.00000

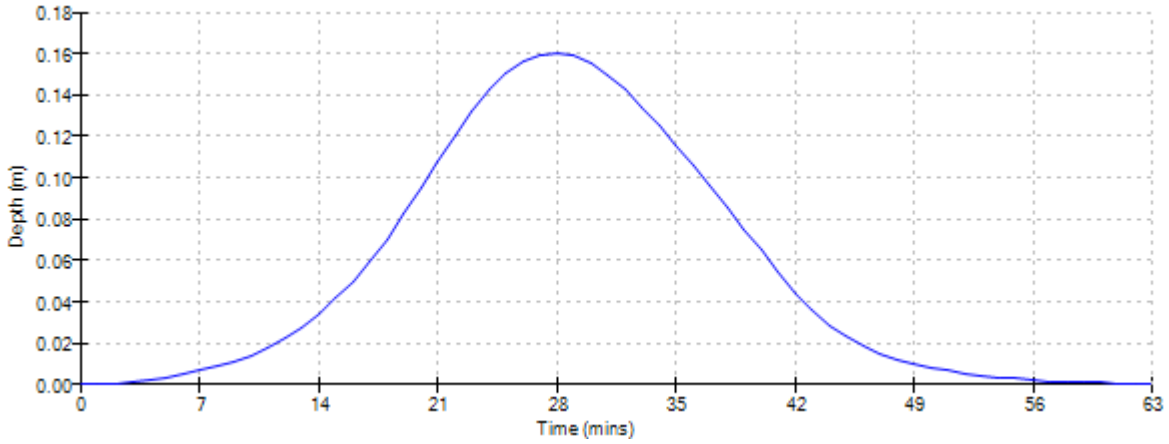
Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)
0.000	1.5	1.5	0.900	0.0	6.5
0.800	1.5	6.5			

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Event: 30 min Winter







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Summary of Results for 30 year Return Period (+45%)

Half Drain Time : 12 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
15 min Summer	16.111	0.411	0.6	0.6	O K
30 min Summer	16.177	0.477	0.6	0.7	O K
60 min Summer	16.171	0.471	0.6	0.7	O K
120 min Summer	16.103	0.403	0.6	0.6	O K
180 min Summer	16.037	0.337	0.5	0.5	O K
240 min Summer	15.982	0.282	0.5	0.4	O K
360 min Summer	15.901	0.201	0.4	0.3	O K
480 min Summer	15.846	0.146	0.3	0.2	O K
600 min Summer	15.806	0.106	0.3	0.2	O K
720 min Summer	15.776	0.076	0.3	0.1	O K
960 min Summer	15.748	0.048	0.2	0.1	O K
1440 min Summer	15.736	0.036	0.2	0.1	O K
2160 min Summer	15.726	0.026	0.1	0.0	O K
2880 min Summer	15.721	0.021	0.1	0.0	O K
4320 min Summer	15.716	0.016	0.1	0.0	O K
5760 min Summer	15.713	0.013	0.1	0.0	O K
7200 min Summer	15.711	0.011	0.1	0.0	O K
8640 min Summer	15.709	0.009	0.0	0.0	O K
10080 min Summer	15.708	0.008	0.0	0.0	O K
15 min Winter	16.165	0.465	0.6	0.7	O K
30 min Winter	16.236	0.536	0.7	0.8	O K
60 min Winter	16.209	0.509	0.6	0.7	O K
120 min Winter	16.097	0.397	0.6	0.6	O K
180 min Winter	16.005	0.305	0.5	0.4	O K

Storm Event	Rain (mm/hr)	Time-Peak (mins)
15 min Summer	106.505	20
30 min Summer	70.861	28
60 min Summer	45.130	44
120 min Summer	27.867	76
180 min Summer	20.764	108
240 min Summer	16.780	138
360 min Summer	12.427	200
480 min Summer	10.029	260
600 min Summer	8.486	318
720 min Summer	7.401	378
960 min Summer	5.959	490
1440 min Summer	4.386	734
2160 min Summer	3.223	1088
2880 min Summer	2.587	1444
4320 min Summer	1.897	2180
5760 min Summer	1.521	2888
7200 min Summer	1.282	3632
8640 min Summer	1.115	4304
10080 min Summer	0.991	5000
15 min Winter	106.505	20
30 min Winter	70.861	29
60 min Winter	45.130	46
120 min Winter	27.867	80
180 min Winter	20.764	112

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Summary of Results for 30 year Return Period (+45%)

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
240 min Winter	15.935	0.235	0.4	0.3	O K
360 min Winter	15.841	0.141	0.3	0.2	O K
480 min Winter	15.782	0.082	0.3	0.1	O K
600 min Winter	15.750	0.050	0.3	0.1	O K
720 min Winter	15.743	0.043	0.2	0.1	O K
960 min Winter	15.735	0.035	0.2	0.0	O K
1440 min Winter	15.726	0.026	0.1	0.0	O K
2160 min Winter	15.719	0.019	0.1	0.0	O K
2880 min Winter	15.715	0.015	0.1	0.0	O K
4320 min Winter	15.711	0.011	0.1	0.0	O K
5760 min Winter	15.709	0.009	0.0	0.0	O K
7200 min Winter	15.708	0.008	0.0	0.0	O K
8640 min Winter	15.707	0.007	0.0	0.0	O K
10080 min Winter	15.706	0.006	0.0	0.0	O K

Storm Event	Rain (mm/hr)	Time-Peak (mins)
240 min Winter	16.780	142
360 min Winter	12.427	204
480 min Winter	10.029	262
600 min Winter	8.486	310
720 min Winter	7.401	370
960 min Winter	5.959	492
1440 min Winter	4.386	730
2160 min Winter	3.223	1080
2880 min Winter	2.587	1440
4320 min Winter	1.897	2160
5760 min Winter	1.521	2832
7200 min Winter	1.282	3664
8640 min Winter	1.115	4344
10080 min Winter	0.991	5112

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Rainfall Details

Rainfall Model	FSR	Winter Storms	Yes
Return Period (years)	30	Cv (Summer)	0.750
Region	England and Wales	Cv (Winter)	0.840
M5-60 (mm)	20.200	Shortest Storm (mins)	15
Ratio R	0.350	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+45

Time / Area Diagram

Total Area (ha) 0.005

Time (mins)	Area (ha)	Time (mins)	Area (ha)	Time (mins)	Area (ha)
0-4	0.002	4-8	0.002	8-12	0.002

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Model Details

Storage is Online Cover Level (m) 17.100

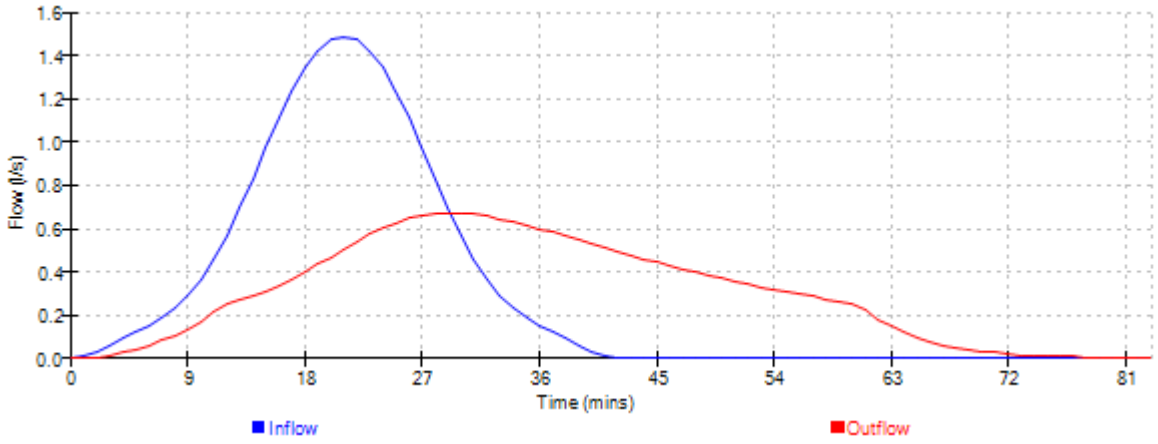
Cellular Storage Structure

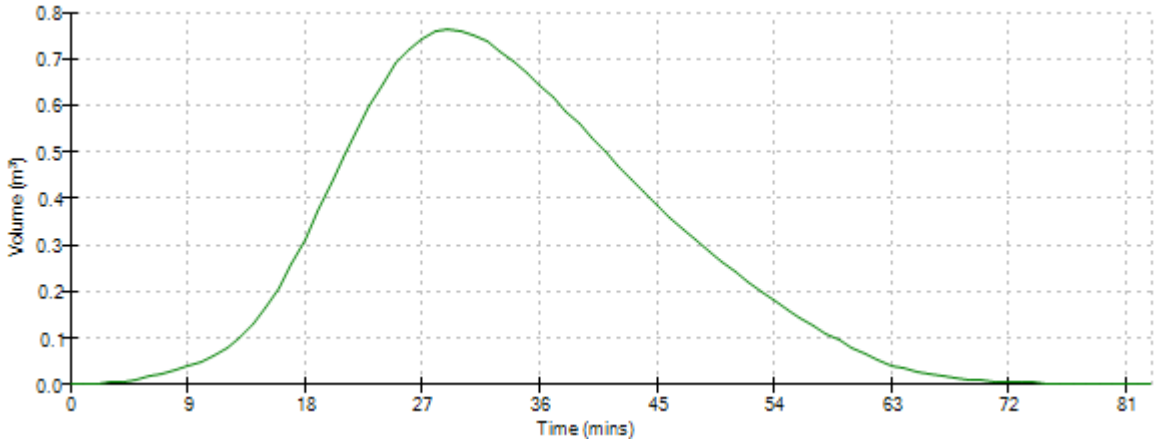
Invert Level (m) 15.700 Safety Factor 2.0
Infiltration Coefficient Base (m/hr) 1.00000 Porosity 0.95
Infiltration Coefficient Side (m/hr) 1.00000

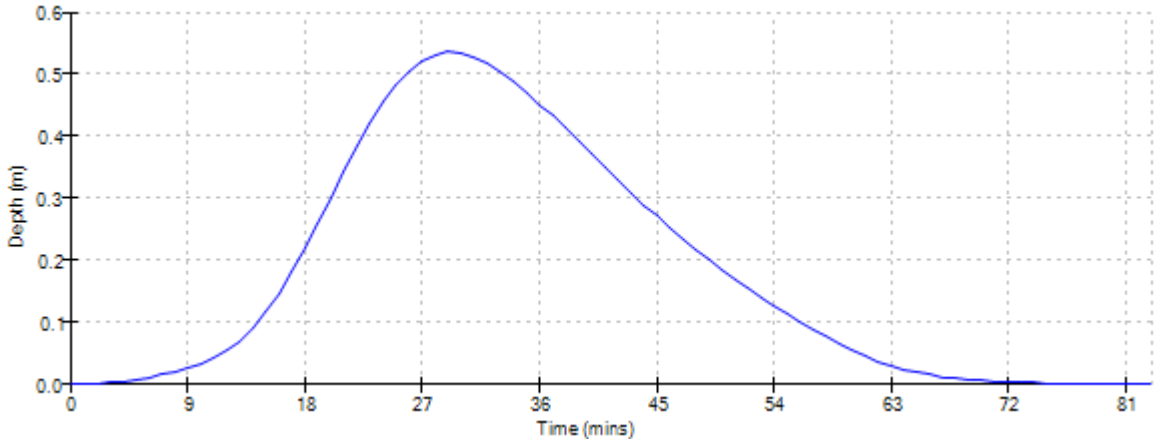
Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)
0.000	1.5	1.5	0.900	0.0	6.5
0.800	1.5	6.5			

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Event: 30 min Winter







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Summary of Results for 100 year Return Period (+45%)

Half Drain Time : 13 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
15 min Summer	16.259	0.559	0.7	0.8	O K
30 min Summer	16.357	0.657	0.8	0.9	O K
60 min Summer	16.361	0.661	0.8	0.9	O K
120 min Summer	16.278	0.578	0.7	0.8	O K
180 min Summer	16.193	0.493	0.6	0.7	O K
240 min Summer	16.120	0.420	0.6	0.6	O K
360 min Summer	16.015	0.315	0.5	0.4	O K
480 min Summer	15.942	0.242	0.4	0.3	O K
600 min Summer	15.887	0.187	0.4	0.3	O K
720 min Summer	15.846	0.146	0.3	0.2	O K
960 min Summer	15.788	0.088	0.3	0.1	O K
1440 min Summer	15.745	0.045	0.2	0.1	O K
2160 min Summer	15.733	0.033	0.2	0.0	O K
2880 min Summer	15.726	0.026	0.1	0.0	O K
4320 min Summer	15.719	0.019	0.1	0.0	O K
5760 min Summer	15.715	0.015	0.1	0.0	O K
7200 min Summer	15.713	0.013	0.1	0.0	O K
8640 min Summer	15.711	0.011	0.1	0.0	O K
10080 min Summer	15.710	0.010	0.0	0.0	O K
15 min Winter	16.329	0.629	0.8	0.9	O K
30 min Winter	16.437	0.737	0.8	1.0	O K
60 min Winter	16.417	0.717	0.8	1.0	O K
120 min Winter	16.279	0.579	0.7	0.8	O K
180 min Winter	16.159	0.459	0.6	0.7	O K

Storm Event	Rain (mm/hr)	Time-Peak (mins)
15 min Summer	138.058	20
30 min Summer	92.717	28
60 min Summer	59.342	44
120 min Summer	36.592	76
180 min Summer	27.130	108
240 min Summer	21.809	140
360 min Summer	16.049	200
480 min Summer	12.889	260
600 min Summer	10.863	322
720 min Summer	9.442	382
960 min Summer	7.560	500
1440 min Summer	5.516	732
2160 min Summer	4.016	1092
2880 min Summer	3.202	1464
4320 min Summer	2.323	2176
5760 min Summer	1.847	2904
7200 min Summer	1.548	3608
8640 min Summer	1.340	4344
10080 min Summer	1.187	4960
15 min Winter	138.058	20
30 min Winter	92.717	29
60 min Winter	59.342	46
120 min Winter	36.592	80
180 min Winter	27.130	112

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Summary of Results for 100 year Return Period (+45%)

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
240 min Winter	16.067	0.367	0.5	0.5	O K
360 min Winter	15.945	0.245	0.4	0.3	O K
480 min Winter	15.865	0.165	0.4	0.2	O K
600 min Winter	15.810	0.110	0.3	0.2	O K
720 min Winter	15.771	0.071	0.3	0.1	O K
960 min Winter	15.744	0.044	0.2	0.1	O K
1440 min Winter	15.732	0.032	0.2	0.0	O K
2160 min Winter	15.724	0.024	0.1	0.0	O K
2880 min Winter	15.719	0.019	0.1	0.0	O K
4320 min Winter	15.714	0.014	0.1	0.0	O K
5760 min Winter	15.711	0.011	0.1	0.0	O K
7200 min Winter	15.709	0.009	0.0	0.0	O K
8640 min Winter	15.708	0.008	0.0	0.0	O K
10080 min Winter	15.707	0.007	0.0	0.0	O K

Storm Event	Rain (mm/hr)	Time-Peak (mins)
240 min Winter	21.809	144
360 min Winter	16.049	206
480 min Winter	12.889	266
600 min Winter	10.863	326
720 min Winter	9.442	384
960 min Winter	7.560	490
1440 min Winter	5.516	736
2160 min Winter	4.016	1092
2880 min Winter	3.202	1468
4320 min Winter	2.323	2152
5760 min Winter	1.847	2928
7200 min Winter	1.548	3672
8640 min Winter	1.340	4264
10080 min Winter	1.187	5232

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Rainfall Details

Rainfall Model	FSR	Winter Storms	Yes
Return Period (years)	100	Cv (Summer)	0.750
Region	England and Wales	Cv (Winter)	0.840
M5-60 (mm)	20.200	Shortest Storm (mins)	15
Ratio R	0.350	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+45

Time / Area Diagram

Total Area (ha) 0.005

Time (mins)	Area (ha)	Time (mins)	Area (ha)	Time (mins)	Area (ha)
0-4	0.002	4-8	0.002	8-12	0.002

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Model Details

Storage is Online Cover Level (m) 17.100

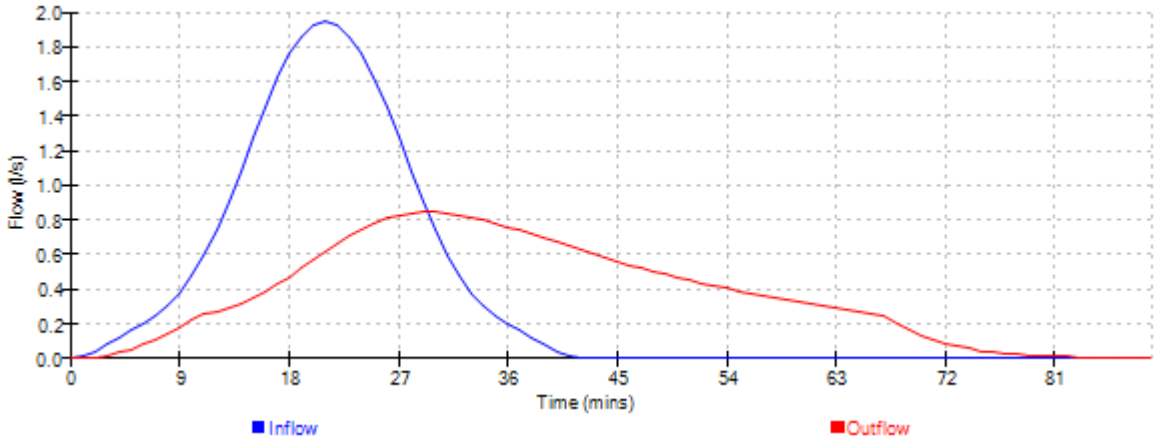
Cellular Storage Structure

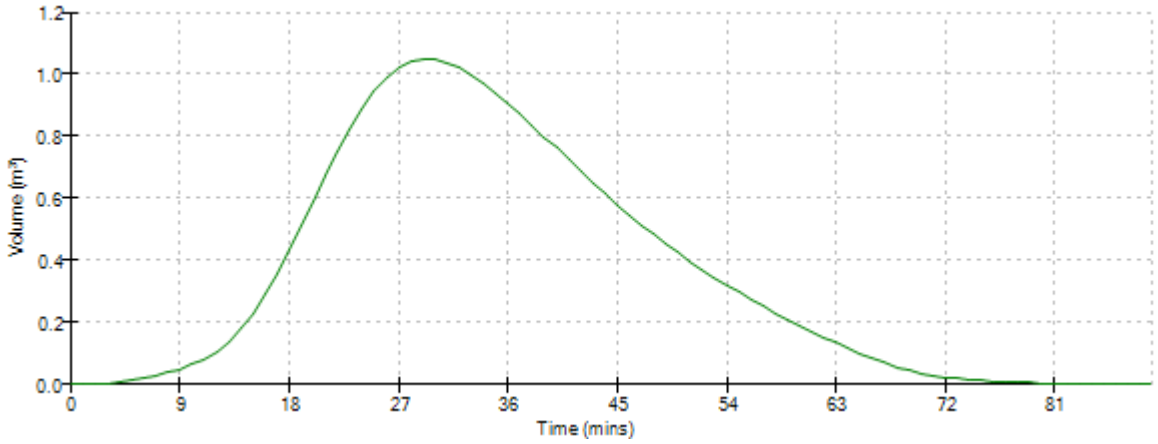
Invert Level (m) 15.700 Safety Factor 2.0
Infiltration Coefficient Base (m/hr) 1.00000 Porosity 0.95
Infiltration Coefficient Side (m/hr) 1.00000

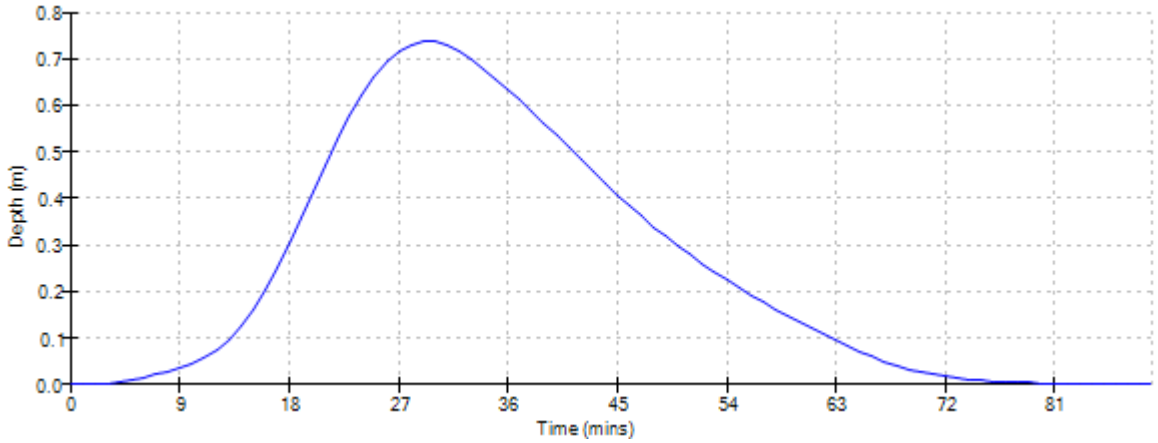
Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)
0.000	1.5	1.5	0.900	0.0	6.5
0.800	1.5	6.5			

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Event: 30 min Winter







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80 High Street, Steyning

www.RainWaterHarvesting.co.uk — **Client and details**

TANK SIZE CALCULATOR

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Insert your building's data in the yellow boxes.

From the roof area off your property, you assess the amount of water available, and equate it to the amount you will use.

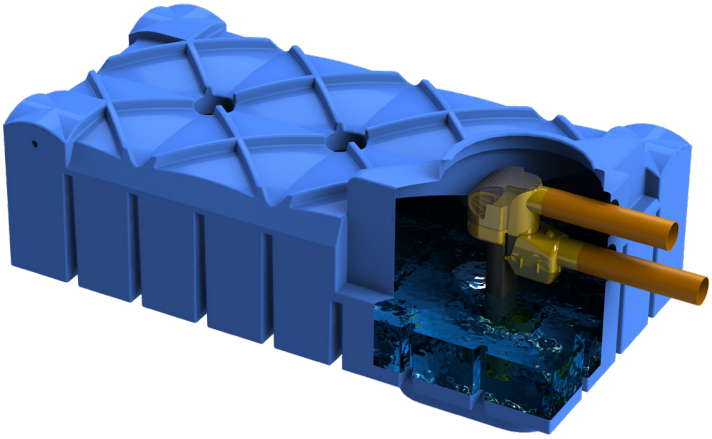
1	**Main Building area**		
	Building width (metres)	6.5	
	Building depth(metres)	16.5	
	Rain Collection Area 1 (square metres)		107
2	**First extension/conservatory/porch/garage/shed etc**		
	width (metres)		
	Depth (metres)		
	Rain Collection Area 2 (square metres)		66
3	**Second extension/conservatory/porch/garage/shed etc**		
	width (metres)		
	Depth (metres)		
	Rain Collection Area 3 (square metres)		0
4	**Third extension/conservatory/porch/garage/shed etc**		
	width (metres)		
	Depth (metres)		
	Rain Collection Area 4 (square metres)		0
5	**Calculate the area of any remaining useful roofs as a figure in square metres and enter directly in the yellow box to the right**		
6	**TOTAL of collectable roof areas (square metres)**		**173**
7	**Rainfall per year in your area (cms).** Use rainfall chart on sheet 2, a figure between 60 and 170.	67	
8	**Collectable rainwater per annum (in litres - discounted by 20% to account for water loss) (YIELD)**		**92,862**
9	**Use of water in the building**		
	Washing machine and toilet flushing are the main usage for rain water in domestic systems. Add an allowance for daily garden use.		
	Number of people in the house	12 *people*	
	Number of clothes washing cycles per day (50 litres each)	3.00	150
	Number of toilet flushes per day (4.42 flushes per person, average 5 litres each)	53	265
	Outdoor use per day (minimum 5 litres per person per day) *or adjust till F46 = F35 more or less*		60
10	**Amount of water you require every day**		475
	Amount of water you require every year (DEMAND)		173,448
11	**How many days drought protection do you need?** Enter a number in the box to the right, typically 21		**21**
12	**Capacity of water storage in litres required for drought protection**		**9,979**
	The lesser of YIELD (8) or DEMAND (10) per annum		92,862
	Therefore, volume of rainwater storage required		**5,343**
13	**Is there sufficient roof water available (CONCLUSION):**		**NOT ENOUGH ROOF WATER**
14	Tank size required - either, in the bestselling **Carat** range,		Use a 6500 litre Carat tank
	or, in the shallow-dig tank range,		Use multiple shallow tanks
	or, in the **Rondus** range,		Use multiple Rondus tanks
	or, if your tank is going to be above ground, in the **Balmoral** range...		Use a 5455 litre Balmoral tank

15 Cross check with the British Standard BS 8515:2009

Based on British Standard BS 8515, the rainwater tank must be big enough to hold 5% of the annual rainwater yield, or 5% of the annual non-potable water demand, whichever is the lesser. The figures below serve as a check against the tank size recommended above.

5% of annual rainwater yield (in litres)	4,643
5% of annual non-potable water demand in the home (in litres)	8,672
To be conform to BS8515, tank must hold at least … (in litres)	**4,643**

Tank size required from RainWaterHarvesting (BSI requirement): **Use a 4800 LITRE Carat TANK**



save water,
save money,
save the
environment

Shallow Dig (SD)
Tank Product Data Sheet

Product Description

The Stormsaver Shallow Dig (SD) storage tanks are ideal for storage of rainwater for domestic rainwater harvesting systems.

Combined with our Monsoon Eco or Monsoon Favorit unit, the SD range of tanks provides a simple and cost effective solution to installing a rainwater system in any home.

Rainwater can be harvested and re-used for a number of applications including toilet flushing, laundry and garden watering and can reduce household water consumption by up to 50%.

Product Benefits

- Minimum installation depth
- Less earth to excavate and remove from site
- One piece, light and easy to manoeuvre without the need for plant equipment
- No concrete surround required
- Suitable for high water tables
- Integral leaf filter, overflow siphon and inlet calmer all pre-fitted
- Durable and economical
- Access for maintenance is easier than other circular tanks

Materials & Manufacture

The SD range is manufactured from high quality rotationally moulded Polyethylene. Being manufactured all in one piece makes it easy to deliver, manoeuvre and install.

The tanks carry a 25 Year Guarantee!

The unique anti-buoyancy technology applied to the design and manufacture means it can be installed in high water table locations so long as the earth coverage requirements are followed.

Installation

As the height of the tanks range from as little as 1015mm to 1415mm the hole needed in the ground is much less than for standard circular or oval tanks. Access for maintenance is also easier.

This also means that the hole can be dug by hand if a JCB is not available and there is no need to shore up the sides.

The structural strength of the SD range means there is no need to concrete it in, again reducing cost and easing installation.



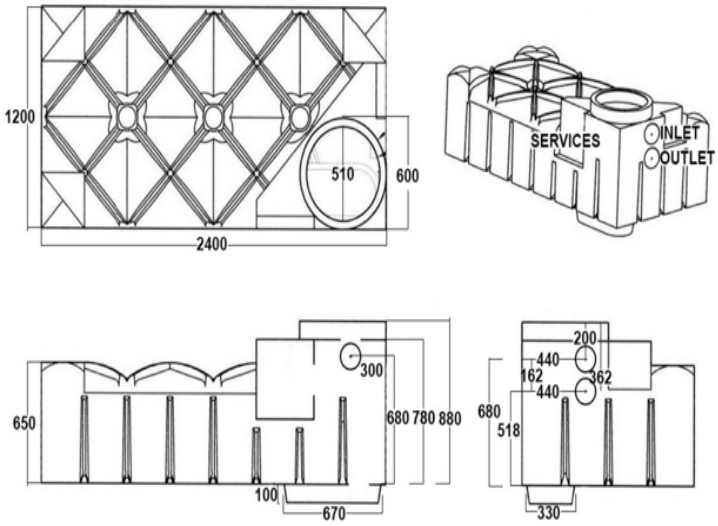
Technical Details

Size	Length	Width	Height (tank body)	Height (inc 235mm turret)	Weight	Inlet & overflow sizes	Service duct size	Height from base of tank to inlet	Height from base of tank to overflow
1500L	2400mm	1200mm	650mm*	1115mm	80kg**	110mm	110mm	680mm	518mm
3000L	2400mm	2400mm	650mm*	1115mm	170kg**	110mm	110mm	680mm	518mm
5000L	2960mm	2220mm	920mm*	1450mm	250kg**	110mm	110mm	1015mm	853mm
7500L	3340mm	2310mm	1125mm	1520mm	310kg**	110mm	110mm	1085mm	923mm

* Sump basin height is 100mm in addition. ** Weight without integral leaf filter and inlet calmer. Add 5kg for tanks which include these items.

Maximum depth of ALL tanks is 1.5m from the top of the tank to finished ground level

Technical Drawing (1500L)



Accessories



235mm
Entrance Shaft



Pedestrian duty lid



635mm
Entrance Shaft



600mm
Spacer Ring

Either a 235mm or 635mm entrance shaft must be used with the SD tank. A spacer ring can be used to extend the 235mm shaft. Vehicle duty lids and 635mm entrance shafts are available on request for driveways.

Complimentary Products

Stormsaver offer a wide range of products. Please contact the FloPlast sales team to find out more about the range:

- Monsoon Eco and Monsoon Favorit control units low energy, compact control units housing all technology necessary to control your rainwater system and mains water back up
- Floating suction filter kits – and other fittings to make your rainwater harvesting system complete
- Suction Hose supplied in 20m or 40m lengths to connect your floating suction filter in your SD tank to the control unit in your home
- Commercial rainwater harvesting solutions

FloPlast

building the future

StormSaver Rainwater Harvesting



www.floplast.co.uk

STORMSAVER RAINWATER HARVESTING

Introduction to StormSaver Rainwater Harvesting

Rainwater Harvesting works by taking the rain from roofs and filtering out leaves and debris, before storing the water underground in the main storage tank. The water is then pumped into the property to be used for non-drinking applications, e.g. flushing toilets, washing machines and garden watering.

Water conservation is an issue facing all households, particularly in the South-East of England where there is less water available per person than in many Mediterranean countries.

Increased water usage through kitchen appliances, power showers, garden sprinklers and hoses, power jet washers for patio and car cleaning, means that on average we each use 150 litres of clean treated mains water per day.

With inflation busting annual water price increases, the need to recycle water is an economic necessity for many households particularly for large ones on water meters.

StormSaver enables the household to recycle water which can potentially reduce annual water bills by up to 50%. In addition, StormSaver can form part of a Sustainable Drainage System (SuDS) for new build or retrofit developments and can contribute to surface water management and reducing flood risk.

You can also help the environment by reducing the demand for mains water for example, using rainwater to keep watering during the summer or whenever there are water restrictions.

Benefits of using StormSaver:

- Uses over 75% less energy than other traditionally pumped Rainwater Harvesting systems, by using clever suction technology.
- Low decibel rating.
- Flow Rate of 10 litres per minute (same as mains pressure).
- Compact control unit, which can easily fit into either a kitchen cupboard, or be located in a utility room or garage.
- Cost effective solution to reuse rainwater effectively.
- The shallow dig tank is robust and comes with all the necessary components such as integral filtration, overflow siphon and inlet calmer pre-fitted for ease of installation.
- Ideal for new build properties and homes with up to 6 bedrooms.



STORMSAVER RAINWATER HARVESTING

StormSaver Information

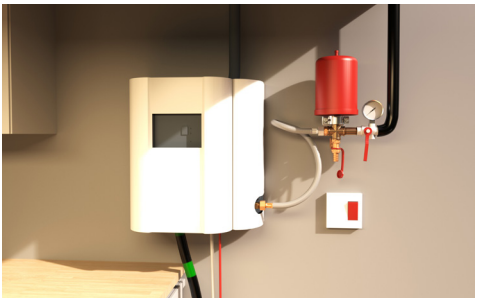
Accreditation
StormSaver has been developed in accordance with BS 16941 for Rainwater Harvesting and the Water Regulations Advisory Service (WRAS) Guidelines.

Easy and Simple Installation
Due to StormSaver's intelligent low energy design, it can be powered via solar panels or wind turbines, therefore reducing both your water usage and carbon footprint.

StormSaver is easy to install, simple to maintain and can reduce domestic consumption.

The system has been developed to provide the homeowner with a simple, yet effective automatic supply of harvested rainwater.

During periods of low rainfall, if the tank should run empty, the system automatically switches to mains water supply.



Uses for the StormSaver system



Vehicle Washing



Landscape Watering and sprinker



Toilet



Garden Watering



Domestic Laundry

Why install the StormSaver system

StormSaver's control unit uses a new technologically advanced membrane pump, which operates on 90 watts. Other systems, waste 90% of their energy operating pumping systems with a power consumption of over 800 watts. This means energy consumption and running costs are 75% lower than traditional pumping systems. The system costs less to operate, less to maintain and emits lower associated CO^2.

- Cost of mains water has increased and will continue to rise.
- Housing Associations need to ensure that their properties use low amounts of water and affordable running costs.
- Buyer purchasing decisions based more on energy efficiency ratings.
- When combined with other sustainable technologies, Rainwater Harvesting Systems can help secure planning permission.

StormSaver Parts

StormSaver parts are available either as a package or sold as individual items, please see the back page of this brochure for the full range.

Underground Storage Tank
The Polyethylene tank is situated below ground and should be fitted at a maximum of 40 metres away from the house with a maximum depth of 3.6 metres.

The tank does not require concrete backfill, which reduces cost as well as the environmental impact.

- The tank is designed for shallow dig excavations, thus avoiding the costs of a deeper excavation, i.e. less soil to remove and dispose of.
- The tank is light and easily manoeuvred by two persons.
- Integral leaf filter, back pressure flap and inlet calmer - all pre-installed.
- Durable and economical.
- Access for maintenance is easier than other tanks due to shallow install.
- The tank comes with a 25 year guarantee.

There are four different sizes of tank to cater for most needs:

- **1500 Litre**:
  2400mm Length x 1200mm width x 1015mm height including 235mm entrance shaft.
- **3000 Litre**:
  2400mm Length x 2400mm width x 1015 height including 235mm entrance shaft.
- **5000 Litre**:
  2960mm Length x 2220mm width x 1350mm height including 235mm entrance shaft.
- **7500 Litre**:
  3340mm Length x 2310mm width x 1415mm height including 235mm entrance shaft.

Control Panel
The compact, low energy control panel provides homeowners with an automatic supply of filtered rainwater that switches to main water supply should the tank run empty during periods of high usage. 90 watt suction pump - can be connected to solar, wind or mains power supply.

- WRAS compliant airbreak.
- Optimised for usual consumption points such as toilets, washing machines, garden tap etc.
- Motor drive 3 part valve, not a solenoid.
- Display has manual/auto switch for supply and LED indication for rainwater, potable water and storage tank low level.
- 40mm overflow included.
- Dry run protection.
- Low noise level in operation with only 48dba.
- Ready to start without pump priming.

Technical Details

Weight:	8kg
Power supply in:	110-230V/50-60 Hz
Power out:	24V DC/4A
Power consumption:	Max 90W
Max pump pressure:	2,5-3,5 bar
Max flow:	10L/min
Primary pressure:	2,5-4 bar (mains)
Pump start pressure:	1,8-2,5 bar
Noise Level:	48dba

StormSaver Accessories

½" Boosted Floating Suction Filter Kit
To be fitted in the main storage tank providing filtered water prior to entering the control panel.

½" Flexible Suction Hose (20m/40m)
Available in either 20m or 40m lengths. Connects the boosted floating suction filter kit to the control panel. The hose must be a continuous length without breaks from the tank to the control panel to ensure correct suction is maintained.

Identification Tape and Labels Pack
To reduce the risk of cross-connection and contamination, it is essential that the reused water pipework is readily distinguishable from other pipework. FloPlast offer an identification tape and labels pack to ensure your system is correctly labelled and meets WRAS Regulations.

Additional accessories are available and shown on the back page.



½" Boosted Floating Suction Filter Kit



½" Flexible Suction Hose



Identification Tape and Label Pack

Maintenance and Spare Parts

Maintenance & Servicing
It is important to service and maintain your rainwater harvesting system on a regular basis. This is to ensure that the water recycling system is operating effectively and efficiently to prolong the lifespan of the rain system components.

We recommend that the Inlet filter is serviced twice a year by simply jet washing the filter. The tanks are usually maintenance free however during installation it is common for dirt and debris to enter the tank. Therefore, it is recommended that the installer ensures that the tank is clean before the system is fully operational.

For Maintenance and Service contracts, please contact: StormSaver on 0844 884 0015.

Parts and Spares
For additional parts, spares and technical advice please contact:

FloPlast StormSaver on 01795 431731.



STORMSAVER RAINWATER HARVESTING

Product List

Product	Size	Code
StormSaver Packages		
Package includes: • Underground storage tank • 235mm Entrance shaft • Pedestrian duty lid for tank • Control panel • ½" Boosted floating suction filter kit • 20m ½" Flexible suction hose 	1500L 3000L 5000L 7500L	S1500 S3000 S5000 S7500
Size is in litres		
StormSaver Tank		
	1500L 3000L 5000L 7500L	ST1500 ST3000 ST5000 ST7500
Pedestrian Duty Lid		
		PDL1
Entrance Shaft		
	235mm	ES235
	635mm	ES635

Product	Size	Code
Control Panel CE		
		CP1
½" Boosted Floating Suction Filter Kit		
		FK1
½" Flexible Suction Hose		
	20mm 40mm	H20 H40
Level Sensor		
		LS1
Identification Tape and Label Pack		
		ID1
110mm Non-Return Valve - Single Flap CE		
		D550
Required for the system to comply with BS 8515		

Contact Details

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