



Quotation for the supply of Rainwater Harvesting Equipment

Client :

**Brendan Pocock
Beaufort Building**

Site Reference :

**Rain Activ for
Bristol Road, Allington, Chippenham. SN14 6NA**

Prepared by:

Ian Woodcock

ianw@rainwaterharvesting.co.uk

01733 405104 / [REDACTED]

Our reference : IMW224259

Date of proposal : 16/04/2026



Your Proposal

Thank you for your email containing additional information and as requested please find the following information regarding our proposed system.

SHALLOW DIG F-LINE TANK

	7500
Weight Kg	310
Length	3340
Width	2310
Overall Height	1815

Ground to Invert VS60

710

Minimum Attenuation Volume

11,500 litres

Invert to Outlet

898

EXCAVATION

15000 (2 x 7500 side by side)

Length	3740
Width	5520
Overall height	1915

Overall height allows for 100mm compacted aggregate

The system below has been upgraded with vehicle loading shafts and lids

If you would like to use the excess 3500 litres for garden irrigation please add £1000 ex vat to the quoted price below and we will supply a pressure sensitive submersible pump, 25m rainwater hdpe pipe and a label pack.

Please see Drainage Calculation Summary on page 7

Rainwater Harvesting Limited is a private family owned company, our strong service ethos has been built on many years of experience and this is reflected in our ability to offer both simple to install rainwater harvesting systems and mix and match components to provide bespoke solutions reflecting clients needs. At our 100,000sq ft warehouse in Peterborough we hold over 3000 stock items, we are the largest stockholder of the Shallow Dig Rewatec tanks in the UK and we regularly despatch to site complete rainwater harvesting systems within 7-10 days of order, we also provide full technical support on all our products.

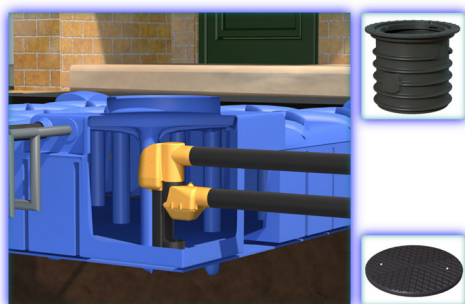
We would welcome the opportunity of supplying your rainwater harvesting system and I can easily be contacted either by phone or email as shown on the previous page



Components and Prices – Supply Only

Product Code : **RWH15000FL-RA**

15,000 Litre Rain Activ Attenuation System



Components

Product Code	Description	Qty
RWFT7500	F-LINE 7500L TANK	2
RWDS0059	F-LINE STEEL COVER AND SHAFT - BS60	2
GF-332033	DN100 SEALS FOR TANK CONNECTION	2
RWH-RV01	RAINVANTAGE FILTER KIT INC SIPHON & OVERFLOW	1
RWH-RA02	RAIN ACTIV SUDS COMPONENT SITE SPECIFIC AND PRE FITTED ALLOWING FOR A MINIMUM OF 11500 LITRES WORTH OF ATTENUATION WITH A CONTROLLED DISCHARGE RATE OF 2.0 LITRES PER SECOND	1
RWH-RA01	MICRO DRAINAGE CALCULATIONS	1

Price :

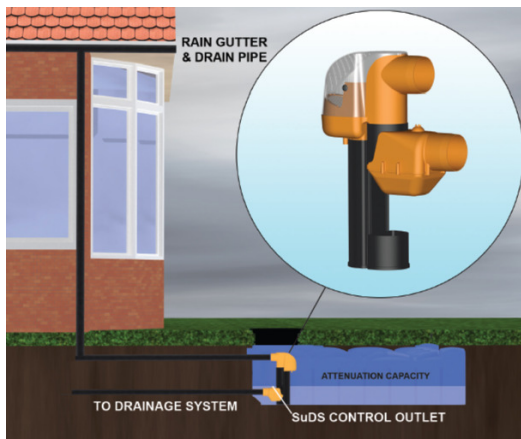
UK delivery is included in the price (Highlands and islands extra)



Rain Activ SuDS Solution

Rain Activ is a totally new concept within the storm attenuation market. Utilising shallow dig underground water tanks as well as a filtration and controlled discharge module.

Rain Activ collects water from the roof and removes debris via a self-cleaning filter. Once inside the tank, the clean water is attenuated and discharged slowly at a calculated rate through an orifice.



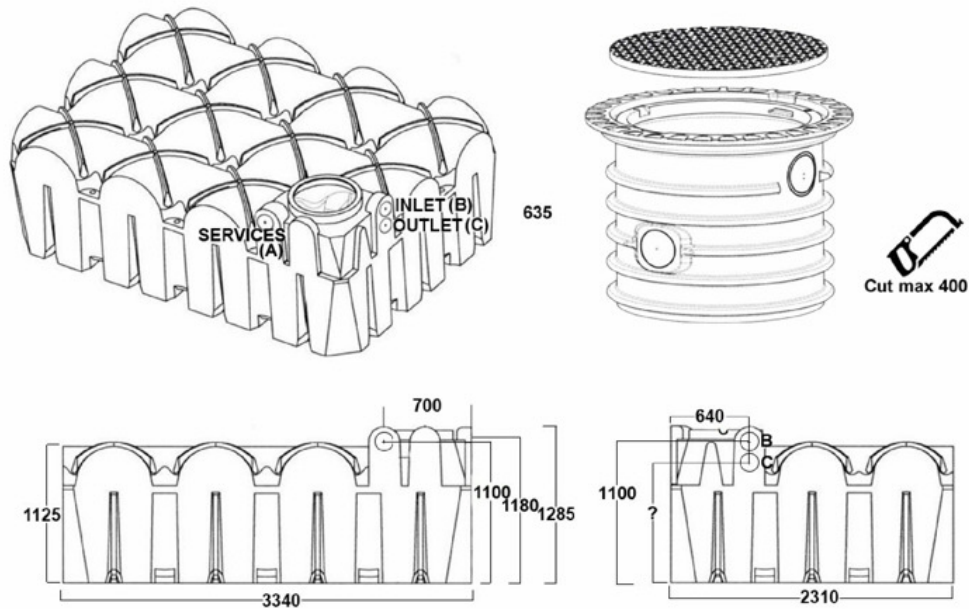
- Ultra-low discharge SuDS system.
- Peak discharge rates as low as 0.05 L/sec per property.
- Primary solution reduces secondary SuDS infrastructure and costs.
- Each system individually calibrated to site requirement.
- Can be used in combination with Rainwater Harvesting.

Rain Activ is ideal for sites where low rates of storm water discharge are required. With peak discharge rates as low as 0.05 L/sec, the system provides a solution for applications where flow is typically not sufficient for vortex flow control systems.

By collecting and slowing the water at source, the scale and cost of secondary SuDS infrastructure such as balancing ponds and geocellular storage can be heavily reduced. For many developments this can increase the available land for development.

Where applicable, Rain Activ can be used in conjunction with Rainwater Harvesting by simply adding a pump and management system.

7500L F-Line



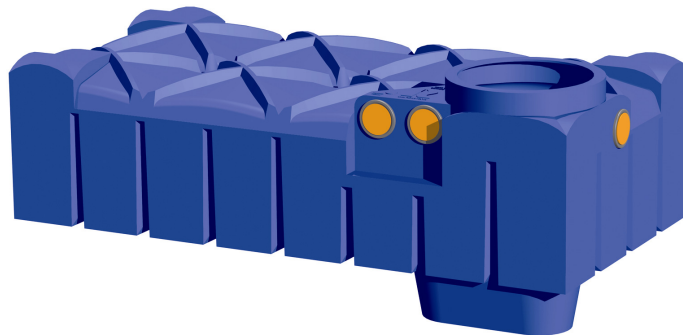
**15,000 is achieved by linking 2 x 7500L tanks at low level
using the DN100 seals supplied**

A vehicle loading shaft cannot be cut down

**Please check your invert / outlet levels carefully, details can be found on page 2,
if the outlet cannot connect to the drains so the system discharges by gravity you
will require a pumping station (which we do not supply)**



F-Line Flat Tank shallow dig underground tank



Why buy this tank?

- The F-Line is a high quality, rotationally moulded, one piece rainwater tank that can be installed without the need for concrete, thereby minimising installation costs and supported by our long term 25 year tank guarantee.
- Minimal installation depth
- Easy and quick to install
- Small excavation pit and little earth excavation preserves your garden
- Ideal for installation in new or existing properties
- Can be installed in ground water up to tank shoulder
- Easy to install

The F-line flat tank can be installed into much higher water tables than a standard round tank. If you don't know what your water table will be like in the winter, you're safer to install a flat tank. The F-Line tanks are flat and the installation depth is up to 60% less than other rainwater tanks. The excavation can be up to 70% less, meaning little earth excavation, easy handling and less cost for you! The small excavation pit is easily filled in and your garden will look just like it did before.



Drainage Calculation Summary

The calculations below have been based on the following criteria:

1:100 Year Storm Event + 40% Climate Change

Geographical Location; Bristol Road, Allington, Chippenham. SN14 6NA

Pre development Total impermeable area = 259 sqm

Discharge rate = 4.0 l/s

Post development Total impermeable area = 325 sqm

We have run the Micro Drainage Calculations (see pages below) and designed a site specific system as follows;

- 15000L tank with a 26mm orifice, providing 11500 litres of attenuation with a peak discharge of 2.0 l/s
- The highest stress put on the system was during the 1:100 year (+40%), 120 minute winter storm.
- Various other events were trailed; (38 in total) all at or below a peak discharge of 2.0 l/s

The reason we can use a very small orifice (between 5-44mm) without risk of blockage is because;

- High quality pre filtration, removing any particles larger than 1000 micron. *(So nothing larger than 1mm can enter the tank.)*
- The filter is self cleaning but does require an annual check for any major debris. As detailed in the maintenance guide.
- The orifice and filter have been developed for simple auditing. (Remove the manhole and look directly below to check for blockage.)

THE SITE SPECIFIC CALCULATIONS BELOW ARE BASED SPECIFICALLY ON OUR TANKS AND SuDS MODULE, THEY ARE NOT VALID FOR ANY OTHER SOLUTION



PRE DEVELOPMENT

Rainwater Harvesting Ltd					Page 1
Unit A Harrier Park Orton Southgate Peterborough PE2 6YQ					
Date 16/04/2026 12:25 File IMW SN14 6NA PRE.SRCX		Designed by RainWater Harves... Checked by			
XP Solutions		Source Control 2016.1			
Summary of Results for 1 year Return Period					
Storm Event	Max Level (m)	Max Depth (m)	Max Overflow (l/s)	Max Volume (m³)	Status
15 min Summer	0.149	0.149	4.0	0.1	O K
30 min Summer	0.145	0.145	3.4	0.1	O K
60 min Summer	0.138	0.138	2.6	0.1	O K
120 min Summer	0.132	0.132	1.7	0.1	O K
180 min Summer	0.128	0.128	1.3	0.1	O K
240 min Summer	0.123	0.123	1.1	0.1	O K
360 min Summer	0.118	0.118	0.9	0.1	O K
480 min Summer	0.114	0.114	0.7	0.1	O K
600 min Summer	0.112	0.112	0.6	0.1	O K
720 min Summer	0.111	0.111	0.5	0.1	O K
960 min Summer	0.109	0.109	0.4	0.1	O K
1440 min Summer	0.107	0.107	0.3	0.1	O K
2160 min Summer	0.105	0.105	0.3	0.1	O K
2880 min Summer	0.105	0.105	0.2	0.1	O K
4320 min Summer	0.104	0.104	0.2	0.1	O K
5760 min Summer	0.104	0.104	0.2	0.1	O K
7200 min Summer	0.103	0.103	0.1	0.1	O K
8640 min Summer	0.103	0.103	0.1	0.1	O K
10080 min Summer	0.103	0.103	0.1	0.1	O K
15 min Winter	0.148	0.148	3.9	0.1	O K
30 min Winter	0.142	0.142	3.0	0.1	O K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Overflow Volume (m³)	Time-Peak (mins)	
15 min Summer	31.328	0.0	1.4	10	
30 min Summer	20.710	0.0	1.9	17	
60 min Summer	13.306	0.0	2.5	32	
120 min Summer	8.388	0.0	3.2	64	
180 min Summer	6.376	0.0	3.6	92	
240 min Summer	5.233	0.0	4.0	122	
360 min Summer	3.932	0.0	4.5	180	
480 min Summer	3.209	0.0	4.9	240	
600 min Summer	2.741	0.0	5.2	306	
720 min Summer	2.410	0.0	5.5	366	
960 min Summer	1.967	0.0	6.0	478	
1440 min Summer	1.478	0.0	6.8	710	
2160 min Summer	1.109	0.0	7.7	1096	
2880 min Summer	0.905	0.0	8.4	1404	
4320 min Summer	0.680	0.0	9.5	2164	
5760 min Summer	0.556	0.0	10.3	3064	
7200 min Summer	0.475	0.0	11.0	3984	
8640 min Summer	0.417	0.0	11.6	3824	
10080 min Summer	0.373	0.0	12.1	5304	
15 min Winter	31.328	0.0	1.6	10	
30 min Winter	20.710	0.0	2.2	17	
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Unit A Harrier Park Orton Southgate Peterborough PE2 6YQ					
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XP Solutions		Source Control 2016.1			
Summary of Results for 1 year Return Period					
Storm Event	Max Level (m)	Max Depth (m)	Max Overflow (l/s)	Max Volume (m³)	Status
60 min Winter	0.134	0.134	2.0	0.1	O K
120 min Winter	0.126	0.126	1.3	0.1	O K
180 min Winter	0.120	0.120	1.0	0.1	O K
240 min Winter	0.117	0.117	0.8	0.1	O K
360 min Winter	0.113	0.113	0.6	0.1	O K
480 min Winter	0.110	0.110	0.5	0.1	O K
600 min Winter	0.109	0.109	0.4	0.1	O K
720 min Winter	0.108	0.108	0.4	0.1	O K
960 min Winter	0.107	0.107	0.3	0.1	O K
1440 min Winter	0.105	0.105	0.3	0.1	O K
2160 min Winter	0.104	0.104	0.2	0.1	O K
2880 min Winter	0.103	0.103	0.2	0.1	O K
4320 min Winter	0.103	0.103	0.1	0.1	O K
5760 min Winter	0.103	0.103	0.1	0.1	O K
7200 min Winter	0.103	0.103	0.1	0.1	O K
8640 min Winter	0.102	0.102	0.1	0.1	O K
10080 min Winter	0.102	0.102	0.1	0.1	O K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Overflow Volume (m³)	Time-Peak (mins)	
60 min Winter	13.306	0.0	2.8	36	
120 min Winter	8.388	0.0	3.6	64	
180 min Winter	6.376	0.0	4.1	92	
240 min Winter	5.233	0.0	4.5	122	
360 min Winter	3.932	0.0	5.1	180	
480 min Winter	3.209	0.0	5.5	248	
600 min Winter	2.741	0.0	5.9	302	
720 min Winter	2.410	0.0	6.2	352	
960 min Winter	1.967	0.0	6.8	460	
1440 min Winter	1.478	0.0	7.7	734	
2160 min Winter	1.109	0.0	8.6	1200	
2880 min Winter	0.905	0.0	9.4	1576	
4320 min Winter	0.680	0.0	10.6	2104	
5760 min Winter	0.556	0.0	11.6	3152	
7200 min Winter	0.475	0.0	12.4	3136	
8640 min Winter	0.417	0.0	13.0	3768	
10080 min Winter	0.373	0.0	13.6	4688	
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Unit A Harrier Park Orton Southgate Peterborough PE2 6YQ		
Date 16/04/2026 12:25 File IMW SN14 6NA PRE.SRCX	Designed by RainWater Harves... Checked by	
XP Solutions		Source Control 2016.1

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)	20.700	Shortest Storm (mins)	15
Ratio R	0.371	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+0

Time Area Diagram

Total Area (ha) 0.026

Time (mins)	Area
From:	To: (ha)
0	4 0.026

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Unit A Harrier Park Orton Southgate Peterborough PE2 6YQ														
Date 16/04/2026 12:25 File IMW SN14 6NA PRE.SRCX	Designed by RainWater Harves... Checked by													
XP Solutions														
Source Control 2016.1														
Model Details Storage is Online Cover Level (m) 1.000 Tank or Pond Structure Invert Level (m) 0.000 <table><thead><tr><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th></tr></thead><tbody><tr><td>0.000</td><td>0.1</td><td>0.001</td><td>0.1</td><td>0.002</td><td>0.0</td></tr></tbody></table> Orifice Overflow Control Diameter (m) 1.000 Discharge Coefficient 0.600 Invert Level (m) 0.100			Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)	0.000	0.1	0.001	0.1	0.002	0.0
Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)									
0.000	0.1	0.001	0.1	0.002	0.0									
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POST DEVELOPMENT

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XP Solutions			Source Control 2016.1				
Summary of Results for 100 year Return Period (+40%)							
Storm Event	Max Level (m)	Max Depth (m)	Max Control (l/s)	Max Overflow (l/s)	Max Σ Outflow (l/s)	Max Volume (m³)	Status
15 min Summer	0.507	0.507	1.6	0.0	1.6	7.4	O K
30 min Summer	0.624	0.624	1.7	0.0	1.7	9.1	O K
60 min Summer	0.690	0.690	1.8	0.0	1.8	10.1	O K
120 min Summer	0.703	0.703	1.9	0.0	1.9	10.3	O K
180 min Summer	0.674	0.674	1.8	0.0	1.8	9.8	O K
240 min Summer	0.635	0.635	1.8	0.0	1.8	9.3	O K
360 min Summer	0.564	0.564	1.7	0.0	1.7	8.2	O K
480 min Summer	0.502	0.502	1.6	0.0	1.6	7.3	O K
600 min Summer	0.450	0.450	1.5	0.0	1.5	6.6	O K
720 min Summer	0.405	0.405	1.4	0.0	1.4	5.9	O K
960 min Summer	0.335	0.335	1.3	0.0	1.3	4.9	O K
1440 min Summer	0.241	0.241	1.1	0.0	1.1	3.5	O K
2160 min Summer	0.162	0.162	0.9	0.0	0.9	2.4	O K
2880 min Summer	0.118	0.118	0.7	0.0	0.7	1.7	O K
4320 min Summer	0.074	0.074	0.6	0.0	0.6	1.1	O K
5760 min Summer	0.053	0.053	0.4	0.0	0.4	0.8	O K
7200 min Summer	0.041	0.041	0.4	0.0	0.4	0.6	O K
8640 min Summer	0.036	0.036	0.3	0.0	0.3	0.5	O K
10080 min Summer	0.033	0.033	0.3	0.0	0.3	0.5	O K
15 min Winter	0.572	0.572	1.7	0.0	1.7	8.4	O K
30 min Winter	0.709	0.709	1.9	0.0	1.9	10.4	O K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Discharge Volume (m³)	Overflow Volume (m³)	Time-Peak (mins)		
15 min Summer	139.736	0.0	8.4	0.0	17		
30 min Summer	92.862	0.0	11.1	0.0	31		
60 min Summer	58.745	0.0	14.1	0.0	50		
120 min Summer	35.803	0.0	17.2	0.0	84		
180 min Summer	26.378	0.0	19.0	0.0	118		
240 min Summer	21.130	0.0	20.3	0.0	152		
360 min Summer	15.468	0.0	22.3	0.0	218		
480 min Summer	12.377	0.0	23.8	0.0	282		
600 min Summer	10.403	0.0	25.0	0.0	346		
720 min Summer	9.022	0.0	26.0	0.0	406		
960 min Summer	7.199	0.0	27.6	0.0	530		
1440 min Summer	5.228	0.0	30.1	0.0	766		
2160 min Summer	3.790	0.0	32.7	0.0	1124		
2880 min Summer	3.012	0.0	34.7	0.0	1476		
4320 min Summer	2.176	0.0	37.6	0.0	2204		
5760 min Summer	1.726	0.0	39.8	0.0	2936		
7200 min Summer	1.441	0.0	41.5	0.0	3672		
8640 min Summer	1.245	0.0	43.0	0.0	4360		
10080 min Summer	1.100	0.0	44.4	0.0	5136		
15 min Winter	139.736	0.0	9.4	0.0	17		
30 min Winter	92.862	0.0	12.5	0.0	31		
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Date 16/04/2026 12:31 File IMW SN14 6NA POST.SRCX			Designed by RainWater Harves... Checked by				
XP Solutions			Source Control 2016.1				
<u>Summary of Results for 100 year Return Period (+40%)</u>							
Storm Event	Max Level (m)	Max Depth (m)	Max Control (l/s)	Max Overflow (l/s)	Max Σ Outflow (l/s)	Max Volume (m³)	Status
60 min Winter	0.783	0.783	2.0	0.0	2.0	11.4	O K
120 min Winter	0.788	0.788	2.0	0.0	2.0	11.5	O K
180 min Winter	0.739	0.739	1.9	0.0	1.9	10.8	O K
240 min Winter	0.681	0.681	1.8	0.0	1.8	9.9	O K
360 min Winter	0.577	0.577	1.7	0.0	1.7	8.4	O K
480 min Winter	0.491	0.491	1.5	0.0	1.5	7.2	O K
600 min Winter	0.421	0.421	1.4	0.0	1.4	6.1	O K
720 min Winter	0.364	0.364	1.3	0.0	1.3	5.3	O K
960 min Winter	0.280	0.280	1.2	0.0	1.2	4.1	O K
1440 min Winter	0.180	0.180	0.9	0.0	0.9	2.6	O K
2160 min Winter	0.109	0.109	0.7	0.0	0.7	1.6	O K
2880 min Winter	0.076	0.076	0.6	0.0	0.6	1.1	O K
4320 min Winter	0.047	0.047	0.4	0.0	0.4	0.7	O K
5760 min Winter	0.036	0.036	0.3	0.0	0.3	0.5	O K
7200 min Winter	0.032	0.032	0.3	0.0	0.3	0.5	O K
8640 min Winter	0.029	0.029	0.2	0.0	0.2	0.4	O K
10080 min Winter	0.026	0.026	0.2	0.0	0.2	0.4	O K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Discharge Volume (m³)	Overflow Volume (m³)	Time-Peak (mins)		
60 min Winter	58.745	0.0	15.8	0.0	54		
120 min Winter	35.803	0.0	19.2	0.0	90		
180 min Winter	26.378	0.0	21.3	0.0	126		
240 min Winter	21.130	0.0	22.7	0.0	162		
360 min Winter	15.468	0.0	24.9	0.0	232		
480 min Winter	12.377	0.0	26.6	0.0	298		
600 min Winter	10.403	0.0	28.0	0.0	362		
720 min Winter	9.022	0.0	29.1	0.0	424		
960 min Winter	7.199	0.0	31.0	0.0	548		
1440 min Winter	5.228	0.0	33.7	0.0	780		
2160 min Winter	3.790	0.0	36.7	0.0	1128		
2880 min Winter	3.012	0.0	38.9	0.0	1496		
4320 min Winter	2.176	0.0	42.1	0.0	2200		
5760 min Winter	1.726	0.0	44.5	0.0	2880		
7200 min Winter	1.441	0.0	46.5	0.0	3656		
8640 min Winter	1.245	0.0	48.2	0.0	4416		
10080 min Winter	1.100	0.0	49.7	0.0	5136		
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Unit A Harrier Park Orton Southgate Peterborough PE2 6YQ		
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XP Solutions		Source Control 2016.1

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)	20.700	Shortest Storm (mins)	15
Ratio R	0.371	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+40

Time Area Diagram

Total Area (ha) 0.032

Time (mins)	Area
From:	To: (ha)
0	4 0.032

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XP Solutions		Source Control 2016.1

Model Details

Storage is Online Cover Level (m) 1.100

Tank or Pond Structure

Invert Level (m) 0.000

Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)
0.000	14.6	0.825	14.6	0.826	0.0

Orifice Outflow Control

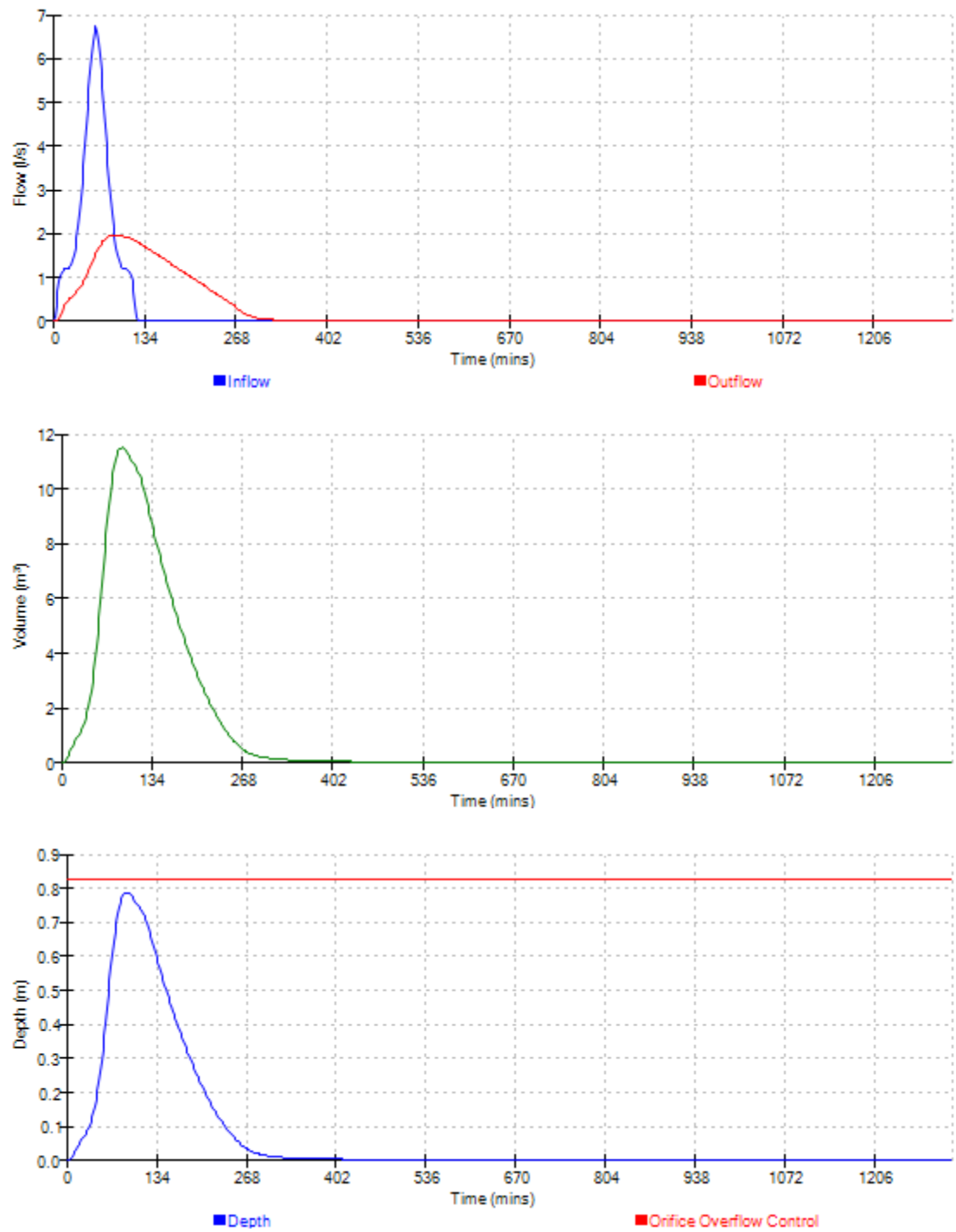
Diameter (m) 0.026 Discharge Coefficient 0.950 Invert Level (m) 0.000

Orifice Overflow Control

Diameter (m) 0.100 Discharge Coefficient 0.600 Invert Level (m) 0.824

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Event: 120 min Winter



Rain Activ maintenance schedule.

Filter: *Warranty 2 years. Expected service life 100 years.*

Self cleaning filter with 1000 micron screen.

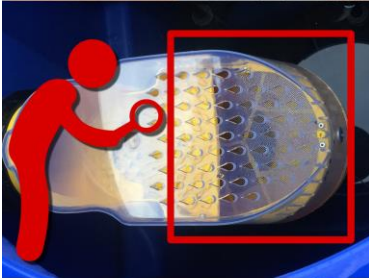
Every 6 months. Visually check the filter for larger blockages.

1. Release child locks on the lid. (13mm bolt).



2. Inspect filter for visible large blockage.

If large or non moving debris is found refer to stage 3. If none is found refer to stage 6.



NB: Small debris will be periodically self cleaned during storms. Leaves, moss and other smaller debris will self clean and do not require removing unless obvious they are causing a blockage.

3. (If a blockage has been found) Remove filter lid.



4. Remove debris, wash filter head under a tap.



5. Replace filter head.



6. Replace lid, ensure 13mm child safe locks are tight.



Risk if neglected: Very low, possible reduction of filter efficiency. Reduction in quality of water for rainwater harvesting.

NB: the filter is fully self cleaning under normal conditions. Only abnormal or large debris from gutters can cause a blockage.

Maintenance frequency can be reduced by adding additional leaf and debris guards to gutters. Dependant on the quality of guarding and location, maintenance intervals can be reduced to 12, 18, or 24 months.

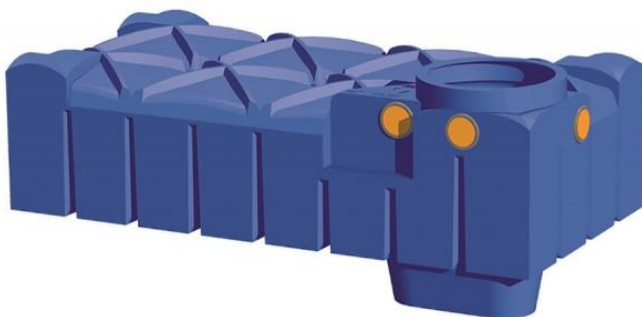
Examples of gutter guarding systems.



F-Line Tank. *Warranty 25 years. Expected service life 100 years.*

Every 10 years. Pump out completely and clean sidewalls with pressure washer, pump out using dirty water pump. (Around 0.5cm of very fine silt builds per year.)

Risk if missed: Low, potential reduction in water quality for rainwater harvesting. If missed multiple times (circa 50 years), potential blockage of outlet orifice.



Gutters: N/A

Clean every 10 years to reduce strain on self cleaning filter. Remove all leaf matter, moss, debris. Wash through.

Risk if missed: Very low, increased fine sediment entering the tank.