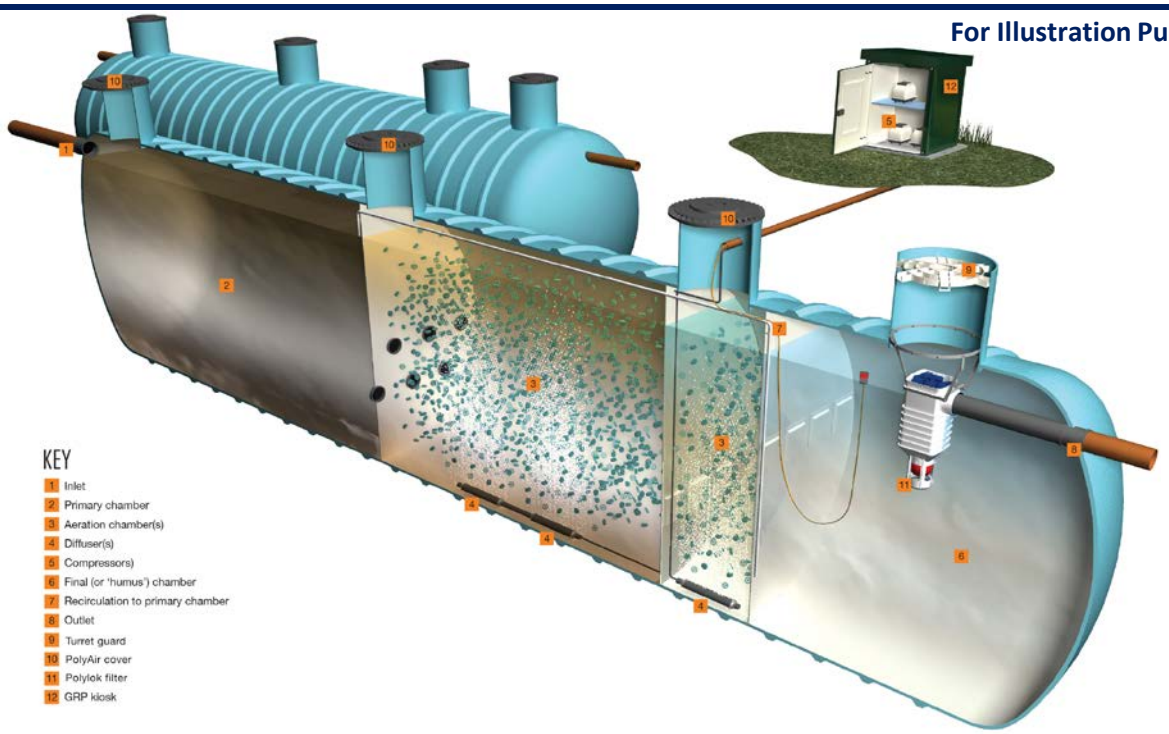
Key Information

Please find below key information & illustration of your Marsh Ultra Polylok

For Illustration Purposes Only



The price for the Ultra Polylok 645PE will be the same regardless of diameter profile

Table 1: Illustrates the daily loadings for the site along with the peak flows over a 24-hour period.
Table 2: Displays peak and average flows along with influent concentrations of BOD and Ammonia.
Table 3: Details the final effluent standard and the optimum de-sludge period when the plant undergoes 100% loading.
Table 4: We have processed the design of the plant using our industry leading Gaia© design system which generates a volume to fit in three different diameter sizes being 1.9m, 2.5m and 3m. This will allow you to consider the best depth and length for site taking into consideration access, pylons, tree roots, hard rock or high water table conditions. Gaia was developed in collaboration with one of the UK's leading civil engineering universities.
Table 5: Specifies the total air and media required for the sewage treatment plant.
Table 6: Price and payment schedule for Ultra Polylok Plant.

When you have chosen the diameter and size of the plant we will prepare a technical drawing in a PDF format.

Literature and installation details are enclosed.

Table 1 - Daily loadings for the site over a 24-hour period							
Waste Source		Flow [l/day]		BOD [g/day]		Ammonia [g/day]	
Description	No.	Per Head	Total	Per Head	Total	Per Head	Total
Existing Cottages	27	150	4050	60	1620	8	216
Day Staff	191	90	17190	38	7258	5	955
Resident staff	15	180	2700	75	1125	10	150
Luxury diners	270	30	8100	38	10260	4	1080
Wedding guests	100	25	2500	30	3000	2.5	250
Toilets	500	10	5000	12	6000	2.5	1250
Urinals	500	5	2500.00	12	6000.00	2.5	1250.00
Total for this Schedule			42040		35263		5151

Table 2 - Flows and influent concentrations	
Biochemical oxygen demand [mg/l]	839
Ammonia concentration [mg/l]	122.5
Average hydraulic flow [l/hour]	1752
Peak flow [l/hour]	5255

Table 3 - Effluent standard and desludge period	
Biochemical oxygen demand [mg/l]	20
Total suspended solids [mg/l]	30
Ammonia concentration [mg/l]	10
Desludge frequency [days]	90

Table 4 - Three bespoke tank options to suit loadings						
Marsh Ultra Polylok 645PE Tank Sizes						
Tank Chambers	Chamber Length [m]			Volume [m^3]		
	1.9m	2.5m	**3m**	1.9m	2.5m	**3m**
Primary Hemisphere	0.45	0.65	**0.85**	0.85	2.13	**4.01**
Primary Settlement Tank	31.12	17.72	**12.04**	88.23	86.96	**85.08**
First Biological Zone	18.30	10.57	**7.34**	51.89	51.89	**51.89**
Second Biological Zone	16.04	9.26	**6.43**	45.48	45.48	**45.48**
Final Settlement Tank	2.93	1.69	**1.17**	8.30	8.30	**8.30**
Final Hemisphere	0.45	0.65	**0.85**	0.85	2.13	**4.01**
Total	69.29	40.54	**28.68**	195.60	196.87	**198.75**
			↑ **Recommended**			↑ **Recommended**

Table 5 -Media and Air Requirements		
Biological Zones	Media Required [m^2]	Total Air Requirements [m^3/day]
First Biological Zone	3155.53	4946.27
Second Biological Zone	2986.09	5631.90