

The Water Calculator



<http://www.thewatercalculator.org.uk/>

Congratulations

9 St Albans Road, Havant

You are within your target maximum consumption of potable water (110 litres per person per day).

Total water consumption from your calculation

100.53

litres per person per day

This calculator is intended to inform design choices by demonstrating the likely impact of specification changes on total water consumption. Results can only be used to demonstrate compliance with the Code for Sustainable Homes when the calculations have been verified by a suitably qualified Code for Sustainable Homes assessor.

Calculation summary

Installation type	Unit of measure	Capacity / flow rate	Use factor	Fixed use	Litres / person / day
WCs (single flush)	Flush volume (litres)		4.42	0	20.6
WCs (dual flush)	Average effective flushing volume (litres)	4.66			
Taps (excl. kitchen/utility room)	Flow rate (litres / minute)	4	1.58	1.58	7.9
Bath (shower also present)	Capacity to overflow (litres)	156	0.11	0	17.16
Shower (bath also present)	Flow rate (litres / minute)	7	4.37	0	30.59
Kitchen/utility room sink taps	Flow rate (litres / minute)	5	0.44	10.36	12.56
Washing machine	Litres / kg dry load	8.17	2.1	0	17.16
Dishwasher	Litres / place setting	1.25	3.6	0	4.5
Waste disposal unit	Litres / use	☐	3.08	0	
Water softener	Litres / person / day	☐	1	0	
Contribution from Grey Water					undefined
Contribution from Rain Water					undefined
Normalisation factor					$\Sigma \times 0.91$



calculator & site development by Seedyepa

Product Information

Dual flush WCs		Effective flush volume (litres)	Quantity	Total
	Dual flush WC No. 1	4.66	1	4.66
	Dual flush WC No. 2	4.66	1	4.66
	Dual flush WC No. 3	4.66	1	4.66
		Σ	3	13.98
		Average Effective flush volume (litres)		4.66

Taps (excluding kitchen/utility room taps, bath/shower taps, and external taps)		Flow rate (litres / minute)	Quantity	Total
	Tap No. 1	4	1	4
	Tap No. 2	4	1	4
	Tap No. 3	4	1	4
		Σ	3	12
		Average Flow rate (litres / minute)		4
		Proportionate Flow rate (litres / minute) (Maximum $\times$ 0.7)		2.8

Baths		Capacity to overflow (litres)	Quantity	Total
	Bath No. 1	156	1	156
		Σ	1	156
		Average Capacity to overflow (litres)		156
		Proportionate Capacity to overflow (litres) (Maximum $\times$ 0.7)		109.2

Showers		Flow rate (litres / minute)	Quantity	Total
	Shower No. 1	7	1	7
		Σ	1	7
		Average Flow rate (litres / minute)		7
		Proportionate Flow rate (litres / minute) (Maximum $\times$ 0.7)		4.9

Kitchen/utility room sink taps		Flow rate (litres / minute)	Quantity	Total
	Kitchen/utility room sink tap No. 1	5	1	5
		Σ	1	5
		Average Flow rate (litres / minute)		5
		Proportionate Flow rate (litres / minute) (Maximum $\times$ 0.7)		3.5

Contribution from Grey Water

Bath, shower, and hand basin usage (l/p/d)		a	
Percentage of used water to be recycled (%)		b	
Greywater available for use (litres/person/day)	0	c	$a \times (b + 100)$
Greywater demand (litres/person/day)		d	
Greywater savings (litres/person/day)	0	e	$\min \{c, d\}$

Contribution from Rain Water *

Collection area (m ²)		a	
Yield co-efficient and hydraulic efficiency		b	
Rainfall (average mm/year)		c	
Daily rainwater collection (litres)	0	d	$(a \times b \times c) + 365$
Percentage collected (%)		e	
Number of occupants	1	f	
Daily rainwater per person (litres)	0	g	$(d \times e + 100) \div f$
Rainwater demand (litres/person/day)		h	
Rainwater savings (litres/person/day)	0	i	$\min \{g, h\}$

* BS 8515 intermediate approach.