

Water Calculations Summary

(Approved Document G Building Regulations)

Project:	Beauchamps Cottage, Wyddial, SG9 0EP
Assessment Date:	13/12/2023
Assessor:	TM

In order to comply with Part G of the Building Regulations, new homes must not exceed a water efficiency standard of 125 litres per person per day.

The water consumption for this project has been calculated as per the standard calculation methodology issued by the DCLG which takes into account the dwelling's assumed occupancy and the number of fixtures/fittings and their associated water use.

A total predicted water consumption has been calculated as **106.98 litres per person per day**.

Therefore the above project has **PASSED** the requirements of Part G. Please refer to Table 1A for the full calculation.

The result is contingent upon the following:

Fixture / Fitting	Water Usage
Basin Taps	Average flow rate of 5 litres per minute (or less)
Kitchen Tap	Average flow rate of 5 litres per minute (or less)
Utility Taps	Average flow rate of 5 litres per minute (or less)
WCs	Full flush volume of 5 litres, part flush volume of 3 litres
Showers	Average flow rate of 8 litres per minute (or less)
Baths	Capacity of 200 litres to overflow (or less)
Washing Machine (if supplied)	To use 6.50 litres per kg dry load (or less)
Dishwasher (if supplied)	To use 0.90 litres per place setting (or less)

Inline flow limiters should be fitted to the pipework where the fittings do not achieve the above flow rates.

Table A1: The water efficiency calculator

Installation type	Unit of measure	Capacity/ flow rate	Use factor	Fixed use (litres/person/day)	Litres/person/day
WC (single flush)	Flush volume (litres)	0.00	4.42	0.00	0.00
WC (dual flush)	Full flush volume (litres)	5.00	1.46	0.00	7.30
	Part flush volume (litres)	3.00	2.96	0.00	8.88
WCs (multiple fittings)	Average effective flushing volume (litres)	0.00	4.42	0.00	0.00
Taps (excluding kitchen/utility room taps)	Flow rate (litres/minute)	5.00	1.58	1.58	9.48
Bath (where shower also present)	Capacity to overflow (litres)	180.00	0.11	0.00	19.80
Shower (where bath also present)	Flow rate (litres/minute)	8.00	4.37	0.00	34.96
Bath only	Capacity to overflow (litres)	0.00	0.50	0.00	0.00
Shower only	Flow rate (litres/minute)	0.00	5.60	0.00	0.00
Kitchen/utility room sink taps	Flow rate (litres/minute)	10.00	0.44	10.36	14.76
Washing machine	Litres/kg dry load	6.50	2.10	0.00	13.65
Dishwasher	Litres/place setting	0.90	3.60	0.00	3.24
Waste disposal unit	Litres/use	0.00	3.08	0.00	0.00
Water softener	Litres/person/day	0.00	1.00	0.00	0.00
Total calculated use = (sum column (4))					112.07
Contribution from greywater (litres/person/day) from table 4.6					0.00
Contribution from rainwater (litres/person/day) from table 5.5					0.00
Normalisation factor					0.91
Total water consumption					101.98
External water use (fixed)					5.00
Total water consumption (litres/person/day)					106.98

PASS