

Water Use Calculations

49a-51a

George Street,
Reading, RG1
7NP

April 2020

Ref: 22-9173



Building Regulations Water Part G Calculations for New Dwellings

Installation Type	Unit of Measure	Capacity/ flow rate (1)	Use factor (2)	Fixed use (litres/person/day) (3)	Litres/person/day = [(1) x (2)] + (3) (4)
WC (single flush)	Flush Volume (litres)	-	4.42	0.00	-
WC (dual flush)	Full Flush Volume (litres)	6.0	1.46	0.00	8.76
	Part flush Volume (litres)	3.0	2.96	0.00	8.88
WCs (multiple fittings)	Average effective flushing volume (litres)	-	4.42	0.00	-
Taps (excluding kitchen/ utility room taps)	Flow rate (litres/minute)	3.0	1.58	1.58	6.32
Bath (where shower also present)	Capacity to overflow (litres)	-	0.11	0.00	-
Shower (where bath also present)	Flow rate (litres/minute)	-	4.37	0.00	-
Bath only	Capacity to overflow (litres)	-	0.5	0.00	-
Shower only	Flow rate (litres/minute)	6	5.6	0.00	33.60
Kitchen / utility room sink taps	Flow rate (litres/minute)	5.0	0.44	10.36	12.56
Washing machine	Flow rate (litres/kg)	7	2.1	0.00	14.70
Dishwasher	Litres/place setting	12	3.6	0.00	43.20
Waste disposal unit	Litres/use	If present = 1 If absent = 0	3.08	0.00	0
Water Softener	Litres/person/day	-	1.00	0.00	-

	(5)	Total calculated use (litres/ person/day) = (Sum column 4)	128.0
	(6)	Contribution from greywater (litres/person/day)	0
	(7)	Contribution from rainwater (litres/person/day)	0
	(8)	Normalisation Factor	0.91
	(9)	Total internal water consumption (litres/ person/day) = [(5)-(6)-(7)]*(8)	116.5
	(10)	External water use	5
	(11)	Total water consumption (litres/ person/day) = (9)+(10)	121.5

Based on the as-built specifications above, the dwelling cannot comply with the requirement of the Building Regulation Part G, i.e., water consumption is equal to or less than 125 litres per person per day.