
JC Brennan

Building Regulations Part G2 – 17.K Compliant Specification

Church Lane, Middleton

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Issue Control

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1 Introduction

This report has been prepared to support Building Regulations approval for the development At Church Lane Middleton.

To demonstrate compliance with Building Regulations Part G2, reasonable provision should be made by the installation of fittings and fixed appliances that use water efficiently for the prevention of undue consumption of water.

Part 17k requires that the potential consumption of wholesome water by persons occupying a dwelling to which this regulation applies, must not exceed **125 litres per person per day**, calculated in accordance with the methodology set out in the document “The Water Efficiency Calculator for New Dwellings”

The following information provides a suitable specification for the dwelling to achieve compliance and the supporting calculations.

2 Water Installation Specification

The following specification will achieve 122.28 litres/person/day which is below the maximum level of consumption required for 17.k compliancy (125 litres/person/day).

Appliance	Unit of measure	Amount (litres)
WC (Dual flush)	Full flush volume	6
WC (Dual flush)	Part flush volume	3
Taps (excluding kitchen)	Flow rate l/min	7
Kitchen taps	Flow rate l/min	7
Bath	Capacity to Overflow	180
Shower	Flow rate l/min	10
Washing Machine	Litres / kg dry load	8.17
Dishwasher	Litres / place setting	1.25

Within the calculation we have assumed a **default figures for washing machines and dishwashers**, if you know the models that will be installed please contact us so that we can amend the calculations as this could affect the overall consumption and mean that the specification is no longer compliant. Furthermore, should any changes to the specification occur, please notify us to amend the calculations.



3 Water Calculations

Table 1: The water calculator for new dwellings					
Installation type	Unit of measure	Capacity/ flow rate	Use factor	Fixed use (litres/ person/ day)	Litres/ person/day = [(1) x (2)]
WC (single flush)	Flush volume (litres)	0	4.42	0	0
WC (dual flush)	Full flush volume (litres)	6	1.46	0	8.76
	Part flush volume (litres)	3	2.96	0	8.88
WCs (multiple fittings)	Average effective flushing volume (litres)	0	4.42	0	0
Taps (excluding kitchen/utility room taps)	Flow rate (litres/minute)	7	1.58	1.58	12.64
Bath (where shower also present)	Capacity to overflow (litres)	180	0.11	0	19.8
Shower (where bath also present)	Flow rate (litres/minute)	10	4.37	0	43.7
Bath only	Capacity to overflow (litres)	0	0.5	0	0
Shower only	Flow rate (litres/minute)	0	5.6	0	0
Kitchen/utility room sink taps	Flow rate (litres/minute)	7	0.44	10.36	13.44
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	0	3.08	0	0
Water softener	Litres/person/day	0	1	0	0
Total calculated use (litres/person/day) = (Sum column 4)					128.88
Table 1: The water calculator for new dwellings Cont..					
Installation type	Unit of measure	Capacity/ flow rate	Use factor	Fixed use (litres/ person/ day)	Litres/ person/day = [(1) x (2)]
		Contribution from greywater (litres/person/day) from Table 4.6			0
		Contribution from rainwater (litres/person/day) from Table 5.5			0.00
		Normalisation factor			0.91
		Total water consumption (Code for Sustainable Homes)			117.28
		External water use			5
		Total Water Consumption (Building Regulations Part 17.K)			122.28



