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Part G Water Efficiency Report
1A St Johns Wood Park Road

28/07/2022

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Date:

28/07/2022

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Section 1.0: Introduction

From 6th April 2010 all new homes are required to meet new water efficiency targets.

Calculations are now required to show that no more than 125 litres of potable water per person, per day are used in all new dwellings and those formed by a material change of use. In practice this means that developers will now have to consider what types of taps, showers, WC's, baths and other appliances they will be fitting.

We are very experienced in water efficiency calculations and there are two main routes for developers to take. Firstly, rainwater harvesting systems can be installed to capture rainwater and reuse it in WCs, washing machines and outside taps. These systems can have a very significant effect on reducing potable water consumption to under the maximum 125 l/p/d. Alternatively reduced flow taps & showers, more efficient WC's and sometimes smaller baths will need to be installed.

Provided that fittings are installed that meet or improve upon the flow rates and capacities as shown in Section 2 of this report this property will comply with the requirements of Approved Document G 2010 requirement G2 and regulation 17K having an estimated wholesome water consumption no greater than 125 litres per person per day.

If fittings are installed with flow rates or capacities outside the efficiencies as set out in Section 2 of this report, new calculations will need to be undertaken to ensure that the requirements of Approved Document G 2010 requirement G2 and regulation 17K are still being met.

Section 2.0: Summary of Data

Calculations have been produced using approved software from information provided by the client

Maximum design flow rates & capacities:

***Taps** (other than kitchen taps)*		***4.00**(litres/min)*
Kitchen and Utility Taps		***6.00**(litres/min)*
Showers		***6.50**(litres/min)*
***Baths** (with shower over)*		***220**(litres to overflow)*
***WCs** (Flush Volume)*	***Full Flush:***	***4.00**(litres)*
	Part Flush:	***3.00**(litres)*

Please note that dual flush toilets must be specified with maximum flush capacities as specified. Single flush toilets with a maximum flush volume complying with the maximum 'full flush' volume specified above may result in non-compliance with Part G.

***Washing Machine** (Where specified)*	***8.17**(litres/kg dry load)*
***Dishwasher** (Where Specified)*	***1.25**(litres/place setting)*

We have assumed that the following are not present for the purposes of these calculations:

- ***Waste disposal units***
- ***Water softeners***
- ***Grey water harvesting***

In compliance with Approved Document G 2010 requirement G2 and regulation 17K, design water efficiency calculations have been completed for this property

These have been completed following the Governments methodology as set out in the document "The Water Efficiency Calculator for New Dwellings" using approved software

The resulting estimated consumption of wholesome water has been calculated as:

104.7 litres per person per day

as such the dwelling will comply with Approved Document G 2010 requirement G2 and regulation 17K if built to this design specification.

Please see the attached calculator tool output in Section 3 for detailed assumptions.

Section 3.0: Calculation Tool Outputs

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Job no:	
Date:	28/07/2022
Assessor name:	Jack Palmer
Registration no:	
Development name:	1A St Johns Wood Park Road
Issue Date:	

Rainwater | Greywater | Results

WATER EFFICIENCY CALCULATOR FOR NEW DWELLINGS

(for use with the Code for Sustainable Homes issues Wat 1 for the May 2009 and subsequent versions)

Dwelling Description	1A St Johns Wood Park

1st step - Select from options below:

Is a Rain and/or Greywater system specified?	**No**
Is a shower AND bath present?	**Yes**
Has a washing machine been specified?	**No**
Has a dishwasher been specified?	**Yes**

2nd step - Build spreadsheet (click button below)

BUILD SPREADSHEET

As soon as this button is pressed the spreadsheet will change according to the options selected previously in the 1st step. Scroll down to see the changes.

3rd step - Enter consumption details for the specified fittings

TAPS (excluding kitchen taps)	Fitting type	Flow rate (litres/min)	Number of fittings
1	Calypso Atlanta	4.00	14
2	Grohe Atrio	3.00	1
3			
4			
	Proportionate flow rate (litres/min)		2.80
	Consumption / person / day (Litres)		**7.79**

BATHS	Fitting type	Capacity to overflow (litres)	Number of fittings
1	Slington Freestanding Bath	220.00	3
2	DBT Bath D-Code	180.00	9
3			
4			
	Proportionate capacity to overflow (litres)		154.00
	Consumption / person / day (Litres)		**20.90**

SHOWERS	Fitting type	Flow rate (litres/min)	Number of fittings
1	Grohe Grohtherm Round	6.50	15
2			
3			
4			
	Proportionate flow rate (litres/min)		4.55
	Consumption / person / day (Litres)		**28.41**

DISHWASHER	Fitting Type	Litres per place setting	Number of fittings
1	Miele G 5260 SCVi Active Plus	1.25	1
2			
3			
4			
	Proportionate litres per place setting		0.88
	Consumption / person / day (Litres)		**4.50**

WASHING MACHINES	Number of fittings
Where no washing machine is specified, a default consumption figure of 8.17 litres per kilogram of dry load is used.	
Where no washing machines have been specified but plumbing for future supply of grey/rainwater was installed, please enter details:	
Consumption / person / day (Litres)	17.16

WC's	Fitting Type	Flush Type	Volume**	Number of fittings
1	Kartell POT224MK	Full Flush	4.00	20
		Part Flush	3.00	
2		Full Flush		
		Part Flush		
3		Full Flush		
		Part Flush		
4		Full Flush		
		Part Flush		
		Average effective flushing volume (litres)		3.33
		Consumption / person / day (Litres)		14.72

KITCHEN SINK TAPS	Fitting Type	Flow rate (litres/minute)	Number of fittings
1	Grande Stainless Steel Tap	6.00	9
2			
3			
4			
	Proportionate flow rate (litres/min)		4.20
	Consumption / person / day (Litres)		**13.00**

WASTE DISPOSAL UNIT	
Is a waste disposal unit specified for the dwelling?	Yes
Consumption / person / day (Litres)	**3.08**

WATER SOFTENER	
Water Softener in use?	No
Total capacity used per regeneration (%)	
Water consumed per regeneration (litres)	
Average number of regeneration cycles per day (No.)	
Number of occupants served by the system (No.)	
Water consumed beyond 4% person / day (Litres)	**0.00**

4th step - Analyse Results	Go to Start

INTERNAL WATER CONSUMPTION		
NET INTERNAL WATER CONSUMPTION	(litres/person/day)	109.56
RAINWATER ONLY COLLECTION SAVING	(litres/person/day)	0.00
GREYWATER ONLY RECYCLING SAVING	(litres/person/day)	0.00
RAIN/GREYWATER COLLECTION SAVING (combined system)	(litres/person/day)	0.00
NORMALISATION FACTOR	(litres/person/day)	0.91
TOTAL WATER CONSUMPTION	(litres/person/day)	99.7
CSH CREDITS ACHIEVED		3
CSH MANDATORY LEVEL:		Level 3/4

17. K COMPLIANCE		
EXTERNAL WATER USE	(litres / person / day)	5.00
TOTAL WATER CONSUMPTION	(litres / person / day)	104.7
17. K COMPLIANCE?		Yes

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