



Water Use Assessment

Design Stage - Calculation Report

Certificate Ref: BE44967636 Performance Target: 110 (litres / person / day)

Issued: 01 February 2023 Building Regulations Part G - 110l

Hempton Road - Phase 2 - HT B Number of Bedrooms: 2

Burrington Estates Occupancy for Calculation Purposes 3

Design Stage

Installation Type	Unit	Capacity/ Flow Rate	Use Factor	Fixed use (I/p/day)	Total Use (I/p/day)
WC's	Volume (I)	3.50	4.42	0.00	15.47
Taps Exc. Kitchen	Flow Rate	5.00	1.58	1.58	9.48
Baths	(1)	180.00	0.11	0.00	19.80
Showers	(I/s)	8.00	4.37	0.00	34.96
Kitchen Taps	(I/s)	8.00	0.44	10.36	13.88
Washing Machines	(I/kgdry)	8.17	2.10	0.00	17.16
Dishwashers	(I/place)	1.25	3.60	0.00	4.50
Waste Disposal	(I/s)				0.00
Water Softener	(I/s)				0.00
Total Calculated Water Use (I/p/day)		•	-		115.25
Grey/Rainwater Reused (I)					0.00
Normalisation Factor					0.91
Total Water Consumption (I/p/day)					104.88
External Water Use Allowance (I)					5.00
Total Consumption Part G (I/p/day)					109.88
Part G Reg Assessment Result					Pass √

The calculation methodology uses the water consumption figures provided from manufacturers' product details. Where details have not been provided, assumed figures have been used to achieve compliance. These must be met in order to satisfy the Part G Calculation for Hempton Road - Phase 2 - HT B. The calculation methodology is to be used to assess compliance against the water performance targets in Regulation 36. It is not a design tool for water supply and drainage systems. It is also not capable of calculating the actual potable water consumption of a new dwelling. Behaviour and changing behaviour can also have an effect on the amount of potable water used throughout a home.



Appliance/Usage Details

Taps (Excluding Kitchen Ta	ips)			Showers			
Tap Fitting Type F	Flow Rate	Quantity	Total per	Shower fitting	Flow Rate	Quantity	Total per
L	_itres/Min	(No.)	Fitting type	Type	Litres/Min	(No.)	Fitting type
Bathroom sink mixer taps	5	3	15.00	Shower over Bath	8	1	8.00
Batti com sint mixer taps	3		13.00	Shower	8	1	8.00
				SHOWEI	O	т	0.00
Total No. of Fittings (No.)			3	Total No. of Fittings (No.)			2
Total Flow (I/s)			15.00	Total Flow (I/s)			16.00
Maximum Flow (I/s)			5.00	Maximum Flow (I/s)			8.00
Average Flow (I/s)			5.00	Average Flow (I/s)	8.00		
Weighted Average Flow (I/s)			3.50	Weighted Average Flow (I/s)			5.60
Flow for Calculation (I/s)			5.00	Flow for Calculation (I/s)			8.00
Baths				WCs			
	Capacity to	Quantity	Total per		Full Flush	Part Flush	Quantity (No)
	Overflow	(No.)	Fitting type	WC Type	Volume	Volume	
Bath	180	1	180.00	Dual flush toilet	4.5	3	3
Total No. of Fittings (No.)			1				
Total Capacity (I)			180.00	Total number of fittings			3
Maximum Capacity (I)			180.00	Average effective flushing	volume		3.50
Average Capacity (I)			180.00				
Weighted Average Capacity	∨ (I)		126.00				
Capacity for Calculation (I)	, . ,		180.00				
Dishwashers				Washing Machines			
	per Place	Quantity	Total per	Washing Machine	L per Kg	Quantity	Total per
/							
		(No.)					
Dishwasher	Setting	(No.)	Fitting type	Туре	Dry Load	(No.)	Fitting type
Dishwasher		(No.)					
	Setting		Fitting type	Type Washing Machine	Dry Load	(No.)	Fitting type
Total No. of Fittings (No.)	Setting		Fitting type 1.25	Type Washing Machine Total No. of Fittings (No.)	Dry Load	(No.)	Fitting type 8.17
Total No. of Fittings (No.) Total Consumption (I)	Setting		Fitting type 1.25 1 1.25	Type Washing Machine Total No. of Fittings (No.) Total Consumption (I)	Dry Load 8.17	(No.)	Fitting type 8.17 1 8.17
Total No. of Fittings (No.) Total Consumption (I) Maximum Consumption (I)	Setting		1.25 1 1 1.25 1.25	Type Washing Machine Total No. of Fittings (No.) Total Consumption (I) Maximum Consumption (I)	Dry Load 8.17	(No.)	8.17 1 8.17 8.17 8.17
Total No. of Fittings (No.) Total Consumption (I) Maximum Consumption (I) Average Consumption (I/s)	Setting 1.25		1.25 1 1 1.25 1.25 1.25 1.25	Type Washing Machine Total No. of Fittings (No.) Total Consumption (I) Maximum Consumption (I/s) Average Consumption (I/s)	Dry Load 8.17	(No.)	8.17 1 8.17 8.17 8.17 8.17
Total No. of Fittings (No.) Total Consumption (I) Maximum Consumption (I) Average Consumption (I/s) Weighted Average Consum	Setting 1.25 nption (I)		1.25 1.25 1.25 1.25 1.25 0.88	Type Washing Machine Total No. of Fittings (No.) Total Consumption (I) Maximum Consumption (I/s Average Consumption Consumption (I/s) Weighted Average Consumption	Dry Load 8.17 8.17 mption (I)	(No.)	8.17 1 8.17 8.17 8.17 8.17 5.72
Total No. of Fittings (No.) Total Consumption (I) Maximum Consumption (I) Average Consumption (I/s)	Setting 1.25 nption (I)		1.25 1 1 1.25 1.25 1.25 1.25	Type Washing Machine Total No. of Fittings (No.) Total Consumption (I) Maximum Consumption (I/s) Average Consumption (I/s)	Dry Load 8.17 8.17 mption (I)	(No.)	8.17 1 8.17 8.17 8.17 8.17
Total No. of Fittings (No.) Total Consumption (I) Maximum Consumption (I) Average Consumption (I/s) Weighted Average Consum Consumption for Calculatio	Setting 1.25 nption (I) on (I/s)	1	1.25 1.25 1.25 1.25 1.25 0.88 1.25	Type Washing Machine Total No. of Fittings (No.) Total Consumption (I) Maximum Consumption (I/s) Average Consumption (I/s) Weighted Average Consur Consumption for Calculati	Dry Load 8.17 8.17 mption (I)	(No.) 1	8.17 1 8.17 8.17 8.17 8.17 5.72
Total No. of Fittings (No.) Total Consumption (I) Maximum Consumption (I/s) Average Consumption (I/s) Weighted Average Consum Consumption for Calculatio Kitchen Taps Tap Fitting Type	Setting 1.25 nption (I) on (I/s)	1 Quantity	1.25 1 1 1.25 1.25 1.25 0.88 1.25 Total per	Type Washing Machine Total No. of Fittings (No.) Total Consumption (I) Maximum Consumption (I/s Weighted Average Consur Consumption for Calculati Other Fittings Waste Disposal Y/N	Dry Load 8.17 8.17 mption (I)	(No.)	8.17 1 8.17 8.17 8.17 8.17 5.72
Total No. of Fittings (No.) Total Consumption (I) Maximum Consumption (I/s) Average Consumption (I/s) Weighted Average Consum Consumption for Calculatio Kitchen Taps Tap Fitting Type E	Setting 1.25 Inption (I) Inption (I/s) Flow Rate Litres/Min	1	1.25 1.25 1.25 1.25 0.88 1.25 Total per Fitting type	Type Washing Machine Total No. of Fittings (No.) Total Consumption (I) Maximum Consumption (I/s Weighted Average Consur Consumption for Calculati Other Fittings Waste Disposal Y/N Water softener	Dry Load 8.17) mption (I) on (I/s)	(No.) 1	8.17 1 8.17 8.17 8.17 8.17 5.72
Total No. of Fittings (No.) Total Consumption (I) Maximum Consumption (I/s) Average Consumption (I/s) Weighted Average Consum Consumption for Calculatio Kitchen Taps Tap Fitting Type	Setting 1.25 Inption (I) on (I/s) Flow Rate Litres/Min 8	1 Quantity	1.25 1 1 1.25 1.25 1.25 0.88 1.25 Total per	Type Washing Machine Total No. of Fittings (No.) Total Consumption (I) Maximum Consumption (I/s Weighted Average Consur Consumption for Calculati Other Fittings Waste Disposal Y/N	Dry Load 8.17) mption (I) on (I/s)	(No.) 1	8.17 1 8.17 8.17 8.17 8.17 5.72
Total No. of Fittings (No.) Total Consumption (I) Maximum Consumption (I/s) Average Consumption (I/s) Weighted Average Consum Consumption for Calculatio Kitchen Taps Tap Fitting Type E	Setting 1.25 Inption (I) Inption (I/s) Flow Rate Litres/Min	Quantity (No.)	1.25 1.25 1.25 1.25 0.88 1.25 Total per Fitting type	Type Washing Machine Total No. of Fittings (No.) Total Consumption (I) Maximum Consumption (I/s Weighted Average Consur Consumption for Calculati Other Fittings Waste Disposal Y/N Water softener Consumption beyond 4% I	Dry Load 8.17) mption (I) on (I/s)	(No.) 1	8.17 1 8.17 8.17 8.17 8.17 5.72
Total No. of Fittings (No.) Total Consumption (I) Maximum Consumption (I/s) Average Consumption (I/s) Weighted Average Consum Consumption for Calculatio Kitchen Taps Tap Fitting Type Kitchen Tap Utility Tap	Setting 1.25 Inption (I) on (I/s) Flow Rate Litres/Min 8	Quantity (No.)	1.25 1.25 1.25 1.25 0.88 1.25 Total per Fitting type	Type Washing Machine Total No. of Fittings (No.) Total Consumption (I) Maximum Consumption (I/s Weighted Average Consur Consumption for Calculati Other Fittings Waste Disposal Y/N Water softener	Dry Load 8.17) mption (I) on (I/s)	(No.) 1	8.17 1 8.17 8.17 8.17 8.17 5.72
Total No. of Fittings (No.) Total Consumption (I) Maximum Consumption (I/s) Average Consumption (I/s) Weighted Average Consum Consumption for Calculatio Kitchen Taps Tap Fitting Type Kitchen Tap Utility Tap Total No. of Fittings (No.)	Setting 1.25 Inption (I) on (I/s) Flow Rate Litres/Min 8	Quantity (No.)	1.25 1.25 1.25 1.25 0.88 1.25 Total per Fitting type 8.00	Type Washing Machine Total No. of Fittings (No.) Total Consumption (I) Maximum Consumption (I/s Weighted Average Consur Consumption for Calculati Other Fittings Waste Disposal Y/N Water softener Consumption beyond 4% I Use of grey water and har	Dry Load 8.17) mption (I) on (I/s) /p/d vested rainw	(No.) 1	8.17 1 8.17 8.17 8.17 8.17 5.72
Total No. of Fittings (No.) Total Consumption (I) Maximum Consumption (I/s) Average Consumption (I/s) Weighted Average Consum Consumption for Calculatio Kitchen Taps Tap Fitting Type Kitchen Tap Utility Tap	Setting 1.25 Inption (I) on (I/s) Flow Rate Litres/Min 8	Quantity (No.)	1.25 1.25 1.25 1.25 0.88 1.25 Total per Fitting type	Type Washing Machine Total No. of Fittings (No.) Total Consumption (I) Maximum Consumption (I/s Weighted Average Consur Consumption for Calculati Other Fittings Waste Disposal Y/N Water softener Consumption beyond 4% I	Dry Load 8.17) mption (I) on (I/s) /p/d vested rainw	(No.) 1	8.17 1 8.17 8.17 8.17 8.17 5.72
Total No. of Fittings (No.) Total Consumption (I) Maximum Consumption (I/s) Average Consumption (I/s) Weighted Average Consum Consumption for Calculatio Kitchen Taps Tap Fitting Type Kitchen Tap Utility Tap Total No. of Fittings (No.) Total Flow (I/s)	Setting 1.25 Inption (I) on (I/s) Flow Rate Litres/Min 8	Quantity (No.)	1.25 1.25 1.25 1.25 0.88 1.25 Total per Fitting type 8.00	Type Washing Machine Total No. of Fittings (No.) Total Consumption (I) Maximum Consumption (I/s Weighted Average Consur Consumption for Calculati Other Fittings Waste Disposal Y/N Water softener Consumption beyond 4% I Use of grey water and har Total Grey water from Wh	Dry Load 8.17) mption (I) on (I/s) /p/d vested rainw HB taps (I)	(No.) 1	8.17 1 8.17 8.17 8.17 8.17 5.72
Total No. of Fittings (No.) Total Consumption (I) Maximum Consumption (I/s) Average Consumption (I/s) Weighted Average Consum Consumption for Calculatio Kitchen Taps Tap Fitting Type Kitchen Tap Utility Tap Total No. of Fittings (No.) Total Flow (I/s) Maximum Flow (I/s)	Setting 1.25 Inption (I) on (I/s) Flow Rate Litres/Min 8	Quantity (No.)	1.25 1.25 1.25 1.25 0.88 1.25 Total per Fitting type 8.00 1 8.00 8.00	Type Washing Machine Total No. of Fittings (No.) Total Consumption (I) Maximum Consumption (I/s Weighted Average Consur Consumption for Calculati Other Fittings Waste Disposal Y/N Water softener Consumption beyond 4% I Use of grey water and har Total Grey water from Wh Total Available Grey Water	Dry Load 8.17) mption (I) on (I/s) /p/d vested rainw HB taps (I)	(No.) 1	8.17 1 8.17 8.17 8.17 8.17 5.72
Total No. of Fittings (No.) Total Consumption (I) Maximum Consumption (I/s) Average Consumption (I/s) Weighted Average Consum Consumption for Calculatio Kitchen Taps Tap Fitting Type Kitchen Tap Utility Tap Total No. of Fittings (No.) Total Flow (I/s) Maximum Flow (I/s) Average Flow (I/s)	Setting 1.25 nption (I) on (I/s) Flow Rate itres/Min 8 8	Quantity (No.)	1.25 1.25 1.25 1.25 0.88 1.25 Total per Fitting type 8.00 1 8.00 8.00 8.00	Type Washing Machine Total No. of Fittings (No.) Total Consumption (I) Maximum Consumption (I/s Weighted Average Consur Consumption for Calculati Other Fittings Waste Disposal Y/N Water softener Consumption beyond 4% I Use of grey water and har Total Grey water from WH Total Available Grey Water Possible Demand (I)	Dry Load 8.17 mption (I) on (I/s) /p/d vested rainw HB taps (I) r Supply (I)	(No.) 1	8.17 1 8.17 8.17 8.17 8.17 5.72
Total No. of Fittings (No.) Total Consumption (I) Maximum Consumption (I/s) Average Consumption (I/s) Weighted Average Consum Consumption for Calculatio Kitchen Taps Tap Fitting Type Kitchen Tap Utility Tap Total No. of Fittings (No.) Total Flow (I/s) Maximum Flow (I/s)	Setting 1.25 nption (I) on (I/s) Flow Rate itres/Min 8 8	Quantity (No.)	1.25 1.25 1.25 1.25 0.88 1.25 Total per Fitting type 8.00 1 8.00 8.00	Type Washing Machine Total No. of Fittings (No.) Total Consumption (I) Maximum Consumption (I/s Weighted Average Consur Consumption for Calculati Other Fittings Waste Disposal Y/N Water softener Consumption beyond 4% I Use of grey water and har Total Grey water from Wh Total Available Grey Water	Dry Load 8.17 mption (I) on (I/s) /p/d vested rainw HB taps (I) r Supply (I) ity (I)	(No.) 1	8.17 1 8.17 8.17 8.17 8.17 5.72