

WATER CONSUMPTION STATEMENT

Introduction

This technical note has been prepared by Hodkinson Consultancy to demonstrate the consumption of the water-consuming components within the two dwellings at the proposed development of The Bungalow, Willoughby Road, Twickenham TW1 2QH. This note has been written in response to the letter from the London Borough of Richmond upon Thames, dated 5th October 2020.

This strategy has been developed to minimise internal water consumption by installing fittings with low flow rate/flush volumes. Flow restrictors may be installed to reduce the flow rates further where necessary. This is an indicative specification to guide the water efficiency strategy; hence, while generally aiming to conform to the strategy, actual specifications may vary slightly.

Specifications – both dwellings

- > **WC** –6/4 litres dual flush;
- > **Basin taps** – 4 litres per minute;
- > **Bath** –160 litres to overflow;
- > **Shower** –8 litres per minute;
- > **Kitchen sink taps** –5 litres per minute;
- > **Dishwasher** –1.25 litres per place setting;
- > **Washing machine** - 8.17 litres/kg.

The Water Efficiency Calculator in **Appendix A** demonstrates the total water use for each of the dwellings, following the above strategy. Based on this, an internal water consumption of **104.9 litres/person/day** will be achieved, which meets the water consumption target of 105 litres/person/day under London Plan Policy 5.15, Draft London Plan Policy S15, and Richmond Local Policy DM SD 9.

Appendix A: Water Efficiency Calculator

Version: 1
Date: 08 October 2020
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Job no:	
Date:	08.10.2020
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WATER EFFICIENCY CALCULATOR FOR NEW DWELLINGS - (BASIC CALCULATOR)																					
House Type:		Type 1		Type 2		Type 3		Type 4		Type 5		Type 6		Type 7		Type 8		Type 9		Type 10	
Description:		Dwelling 1		Dwelling 2																	
Installation Type	Unit of measure	Capacity/flow rate	Litres/person/day	Capacity/flow rate	Litres/person/day	Capacity/flow rate	Litres/person/day	Capacity/flow rate	Litres/person/day	Capacity/flow rate	Litres/person/day	Capacity/flow rate	Litres/person/day	Capacity/flow rate	Litres/person/day	Capacity/flow rate	Litres/person/day	Capacity/flow rate	Litres/person/day	Capacity/flow rate	Litres/person/day
Is a dual or single flush WC specified?		Dual		Dual		Select option:		Select option:		Select option:		Select option:		Select option:		Click to Select		Click to Select		Click to Select	
WC	Full flush volume	6	8.76	6	8.76		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00
	Part flush volume	4	11.84	4	11.84		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00
Taps (excluding kitchen and external taps)	Flow rate (litres / minute)	4	7.90	4	7.90		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00
Are both a Bath & Shower Present?		Bath & Shower		Bath & Shower		Select option:		Select option:		Select option:		Select option:		Select option:		Select option:		Select option:		Select option:	
Bath	Capacity to overflow	160	17.60	160	17.60		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00
Shower	Flow rate (litres / minute)	8	34.96	8	34.96		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00
Kitchen sink taps	Flow rate (litres / minute)	5	12.56	5	12.56		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00
Has a washing machine been specified?		Yes		Yes		Select option:		Select option:		Select option:		Select option:		Select option:		Select option:		Select option:		Select option:	
Washing Machine	Litres / kg	8.17	17.16	8.17	17.16		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00
Has a dishwasher been specified?		Yes		Yes		Select option:		Select option:		Select option:		Select option:		Select option:		Select option:		Select option:		Select option:	
Dishwasher	Litres / place setting	1.25	4.50	1.25	4.50		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00
Has a waste disposal unit been specified?		No		No		Select option:		Select option:		Select option:		Select option:		Select option:		Select option:		Select option:		Select option:	
Water Softener	Litres / person / day		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00
Calculated Use		115.3		115.3		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0	
Normalisation factor		0.91		0.91		0.91		0.91		0.91		0.91		0.91		0.91		0.91		0.91	
Total Consumption		104.9		104.9		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0	
Mandatory level		Level 3/4		Level 3/4		-		-		-		-		-		-		-		-	
External use		5.0		5.0		5.0		5.0		5.0		5.0		5.0		5.0		5.0		5.0	
Total Consumption		109.9		109.9		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0	
17.K Compliance?		Yes		Yes		-		-		-		-		-		-		-		-	