

Twickenham Riverside Water Calculator



Design Team

Applicant	London Borough of Richmond upon Thames
Project Manager	Arcadis
Architect	Hopkins Architects
Landscape Architect	LDA Design
Structural Engineer	Webb Yates Engineers
Mechanical & Electrical Engineer	Skelly & Couch
Transport Consultant	WSP
Quantity Surveyor	Arcadis
Planning Consultant	Savills
Townscape & Heritage Consultant	Iceni Projects
Sustainability Consultant	Method Consulting
Accessibility Consultant	Lord Consultants
Fire Consultant	FDS Consult UK
Ecology Consultant	BSG Ecology
Arboricultural Consultant	Thomson Environmental Consultants
Daylight & Sunlight Consultant	GIA Chartered Surveyors
Acoustic Consultant	TetraTech
Air Quality Consultant	Entran
Land Contamination Consultant	Geosphere Environmental
Archaeological Consultant	AOC Archaeology Group
Viability Consultant	Lambert Smith Hampton
Principal Designer	Nick Perry Associates
BIM Consultant	BIM Technologies

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	0
WC (dual flush)	Full flush Volume (litres)	4.5	1.46	0.00	6.57
	Part flush Volume (litres)	3	2.96	0.00	8.88
WC (multiple fittings)	Average effective flushing Volume (litres)		4.42	0.00	0
Taps (excluding kitchen/utility room taps)	Flow rate (litres/min)	3.00	1.58	1.58	6.32
Bath (where shower also present)	Capacity to overflow(litres)	187.50	0.11	0.00	20.63
Shower (where bath also present)	Flow Rate(litres / minute)	7.00	4.37	0.00	30.59
Bath Only	Capacity to overflow(litres)		0.50	0.00	0
Shower Only	Flow Rate (litres/minute)		5.60	0.00	0
Kitchen/Utility room sink taps	Flow rate (litres/minute)	5.00	0.44	10.36	12.56
Washing Machine	(Litres/kg dry load)	8.33	2.1	0.00	17.49
Dishwasher	(Litres/place setting)	0.71	3.6	0.00	2.54
Waste disposal unit	(Litres/use)	<input type="checkbox"/> Present	3.08	0.00	0
Water Softener	(Litres/person/day)		1.00	0.00	0
(5)		Total Calculated use (litres/person/day) = SUM(column 4)			105.58
(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 = [(5)-(6)-(7)]x(8) (litres/person/day)			96.08
(10)		External water use			5.0
(11)		Total water consumption (Building Regulation 17.K) = (9)+(10)(litres/person/day)			101.1

Installation Type	Make/Model (mandatory)	Litres/Person/Day
WC (dual flush)	Villeroy & Boch Subway 2.0 Rimless Floor Standing WC - 5602R001	15.45
Taps	Hansgrohe Metris S Single lever basin mixer 100 31068000, Hansgrohe Metris S Single lever basin mixer 100 31068000, both flow restricted	6.32
Baths (shower(s) present)	Villeroy & Boch Subway Rectangular bath Rectangle UBA167SUB2V-01, Duravit Daro Bathtub 72800000	20.63
Showers (bath(s) present)	Hansgrohe Raindance S Overhead shower 240 1jet EcoSmart 27461000, Grohe Euphoria shower system 27296002, both flow restricted	30.59
Kitchen Taps	Hansgrohe Talis M54 Single lever kitchen mixer 210 with pull-out spray 72800000, Grohe Ambi Cosmopolitan two handle sink mixer 30190000, both flow restricted	12.56
Washing Machines	AEG 9000 Series Washer Dryer L9WEC169R	17.49
Dishwasher	Bosch Serie 6 Fully-integrated dishwasher SMD6EDX57G, Bosch Serie 4 Fully-integrated dishwasher SMV4HCX40G	2.54



