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)		1.46	0.00	0
	Part flush Volume (litres)		2.96	0.00	0
WC (multiple fittings)	Average effective flushing Volume (litres)	4.00	4.42	0.00	17.68
Taps (excluding kitchen/utility room taps)	Flow rate (litres/min)	4.00	1.58	1.58	7.90
Bath (where shower also present)	Capacity to overflow(litres)	17.50	0.11	0.00	1.93
Shower (where bath also present)	Flow Rate(litres / minute)	9.70	4.37	0.00	42.39
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)	6.00	0.44	10.36	13.00
Washing Machine	(Litres/kg dry load)	7.60	2.1	0.00	15.96
Dishwasher	(Litres/place setting)	10.46	3.6	0.00	37.66
Waste disposal unit	(Litres/use)	☐ Present	3.08	0.00	0
Water Softener	(Litres/person/day)	21.00	1.00	0.00	21.00
	(5)	Total Calculated use (litres/person/day) =SUM(column 4)			157.52
	(6)	Contribution from greywater (litres/person/day)			16
	(7)	Contribution from rainwater (litres/person/day)			29
	(8)	Normalisation factor			0.91
	(9)	Total water consumption (Code for Sustainable Homes) = [(5)-(6)-(7)]x(8) (litres/person/day)			102.39
	(10)	External water use			5.0
	(11)	Total water consumption (Building Regulation 17.K) =(9)+(10)(litres/person/day)			107.4

Installation Type	Type	Litres/Person/Day
WC (multiple fittings)		17.68
Taps		7.90
Baths (shower(s) present)		1.93
Showers (bath(s) present)		42.39
Kitchen Taps		13.00
Washing Machines		15.96
Dishwasher		37.66
Water Softener		21.00

WC Type	Effective Flushing volume* (litres) (a)	Quantity (No.) (b)	Total per Fitting Type = (a)x(b) (c)
Multiple Fittings?	☑		
Dual Flush?	☐		
1	4	2	8.00
2	4	2	8.00
3	4	2	8.00
4	4	1	4.00
5	4	2	8.00
6			
Total (Sum of all Quantities) (d)		9	
Total (Sum of all totals per fitting type) (e)			36.00
Average effective flushing volume (litres)=(e)/(d)			4.00

Calculate

Installation Type	Type	Litres/Person/Day
WC (multiple fittings)		17.68
Taps		7.90
Baths (shower(s) present)		1.93
Showers (bath(s) present)		42.39
Kitchen Taps		13.00
Washing Machines		15.96
Dishwasher		37.66
Water Softener		21.00

Tap Fitting Type	Flow rate (litres/min) (a)	Quantity (No.) (b)	Total per Fitting Type =(a)x(b) (c)
1	6	1	6.00
2	6	1	6.00
3	6	1	6.00
4	6	1	6.00
5	6	1	6.00
6			6.00
Total (Sum of all Quantities) (d)		5	
Total (Sum of all totals per fitting type) (e)			30.00
Average flow rate (litres/min) = [(e)/(d)]			6.00
Maximum flow rate (litres/min) (f)			6.00
Weighted Average flow rate (litres/min) = [(f)x0.7]			4.20

Calculate

Installation Type	Type	Litres/Person/Day
WC (multiple fittings)		17.68
Taps		7.90
Baths (shower(s) present)		1.93
Showers (bath(s) present)		42.39
Kitchen Taps		13.00
Washing Machines		15.96
Dishwasher		37.66
Water Softener		21.00

Tap Fitting Type	Flow rate (litres/min) (a)	Quantity (No.) (b)	Total per Fitting Type =(a)x(b) (c)
1	4	2	8.00
2	4	2	8.00
3	4	2	8.00
4	4	1	4.00
5	4	2	8.00
6			8.00
Total (Sum of all Quantities) (d)		9	
Total (Sum of all totals per fitting type) (e)			36.00
Average flow rate (litres/min) = [(e)/(d)]			4.00
Maximum flow rate (litres/min) (f)			4.00
Weighted Average flow rate (litres/min) = [(f)x0.7]			2.80

Calculate

Installation Type	Type	Litres/Person/Day
WC (multiple fittings)		17.68
Taps		7.90
Baths (shower(s) present)		1.93
Showers (bath(s) present)		42.39
Kitchen Taps		13.00
Washing Machines		15.96
Dishwasher		37.66
Water Softener		21.00

Type of washing machine	Litres per kilogram of dry load (a)	Quantity (No.) (b)	Total per Fitting Type =(a)x(b) (c)
1	8	1	8.00
2	8	1	8.00
3	8	1	8.00
4	7	1	7.00
5	7	1	7.00
6			
Total (Sum of all Quantities) (d)		5	
Total (Sum of all totals per fitting type) (e)			38.00
Average litres per kilogram of dry load = [(e)/(d)]			7.60
Maximum litres per kilogram of dry load (f)			8.00
Weighted Average litres per kilogram of dry load = [(f)x0.7]			5.60

Calculate

Installation Type	Type	Litres/Person/Day
WC (multiple fittings)		17.68
Taps		7.90
Baths (shower(s) present)		1.93
Showers (bath(s) present)		42.39
Kitchen Taps		13.00
Washing Machines		15.96
Dishwasher		37.66
Water Softener		21.00

Bath Fitting Type	Capacity to overflow(litres) (a)	Quantity (No.) (b)	Total per Fitting Type =(a)x(b) (c)
Are there any showers present?	☑		
1	17.5	2	35.00
2	17.5	2	35.00
3	17.5	2	35.00
4	17.5	1	17.50
5	17.5	2	35.00
6			
Total (Sum of all Quantities) (d)		9	
Total (Sum of all totals per fitting type) (e)			157.50
Average capacity to overflow(litres) = [(e)/(d)]			17.50
Maximum Capacity to overflow (litres) (f)			17.50
Weighted Average capacity to overflow(litres) = [(f)x0.7]			12.25

Calculate

Installation Type	Type	Litres/Person/Day
WC (multiple fittings)		17.68
Taps		7.90
Baths (shower(s) present)		1.93
Showers (bath(s) present)		42.39
Kitchen Taps		13.00
Washing Machines		15.96
Dishwasher		37.66
Water Softener		21.00

Shower fitting Type	Flow rate (litres/min) (a)	Quantity (No.) (b)	Total per Fitting Type =(a)x(b) (c)
Are there any Baths Present?	☑		
1	10.5	1	10.50
2	10.5	1	10.50
3	10.5	1	10.50
4	8.5	1	8.50
5	8.5	1	8.50
6			
Total (Sum of all Quantities) (d)		5	
Total (Sum of all totals per fitting type) (e)			48.50
Average flow rate (litres/min) = [(e)/(d)]			9.70
Maximum flow rate (litres/min) (f)			10.50
Weighted Average flow rate (litres/min) = [(f)x0.7]			7.35

Calculate

Installation Type	Type	Litres/Person/Day
WC (multiple fittings)		17.68
Taps		7.90
Baths (shower(s) present)		1.93
Showers (bath(s) present)		42.39
Kitchen Taps		13.00
Washing Machines		15.96
Dishwasher		37.66
Water Softener		21.00

Water softener consumption calculation for New Dwellings		
Total Capacity used per regeneration (%)	(a)	50
Water Consumed per regeneration (litres)	(b)	25
Average number of regeneration cycles per day (No.)	(c)	1
Number of occupants served by the system (No.)	(d)	2
Water consumed beyond 4% (litres/day) [1-[4/(a)]]x[(b)x(c)]=	(e)	42.00
Water consumed beyond 4% (litres/person/day) [(e)/(d)]=		21.00
Calculate		

Installation Type	Type	Litres/Person/Day
WC (multiple fittings)		17.68
Taps		7.90
Baths (shower(s) present)		1.93
Showers (bath(s) present)		42.39
Kitchen Taps		13.00
Washing Machines		15.96
Dishwasher		37.66
Water Softener		21.00

Type of Dishwasher	Litres per place setting (a)	Quantity (No.) (b)	Total per Fitting Type =(a)x(b) (c)
1	13.3	1	13.30
2	13.5	1	13.50
3	13.5	1	13.50
4	6	1	6.00
5	6	1	6.00
6			
Total (Sum of all Quantities) (d)		5	
Total (Sum of all totals per fitting type) (e)			52.30
Average litres per place setting = [(e)/(d)]			10.46
Maximum litres per place setting (f)			13.50
Weighted Average litres per place setting = [(f)x0.7]			9.45

Calculate

Installation Type	Type	Litres/Person/Day
WC (multiple fittings)		17.68
Taps		7.90
Baths (shower(s) present)		1.93
Showers (bath(s) present)		42.39
Kitchen Taps		13.00
Washing Machines		15.96
Dishwasher		37.66
Water Softener		21.00

The greywater collection calculation for New Dwellings

Bath, shower and wash hand basin usage (litres/person/day) (a)	Percentage of used water (a) to be recycled (%) (b)	Greywater available for use (litres/person/day) (c)=(a)x[(b)/100] (c)	Greywater demand litres/person/day) (d)	Greywater savings (litres/person/day) Where (c) is greater than (d), (e)=(d), otherwise (e)=(c) (e)
80	20	16.00	60	16

Calculate

Demand calculation

For any appliance (WC, or washing machine) where grey water is to be used for supply to all of the appliances of that type within the property, the volume of water for grey water demand can be taken directly from the relevant appliance row. For any appliance (WC, or washing machine) where grey water is to be supplied to only a proportion of the appliances of that type within a property, the volume of water for grey water demand should be calculated according to an alternative methodology. This can be found in Section 2.7.1 of the water calculator for new dwellings methodology document (available here) and allows calculation of the water demand from only the appliances where grey water is to be used. The total volume of grey water demand calculated in accordance with either of the above methodologies (as appropriate) should be summed for WCs and/or washing machines and entered into Column (d)

Supply calculation

For any appliance (tap, shower or bath) where grey water is being collected from all of that appliance within the property, the volume of water for grey water supply can be taken from the relevant appliance row. For any appliance (tap, shower or bath) where grey water is being collected from only a proportion of the appliances within the property, an alternative methodology must be used. This can be found in Section 2.7.2 of the water calculator for new dwellings methodology document (available here) and allows calculation of the water use for only the appliances where water is being collected. The total volume of water available for grey water supply calculated in accordance with either of the above methodologies (as appropriate) should be summed for taps, baths and showers and entered into Column (a).

Savings calculation

The percentage of grey water collected to be recycled should be based upon manufacturers or system designer details of the system specified and be entered into Column (b). Where the grey water available for use is of greater volume than the grey water demand, the savings (litres / person / day) will be equal to the volume of grey water demand. Where the grey water demand is of greater volume than the grey water available for use, the savings (litres / person / day) will be equal to the volume of grey water use. This will be populated in Column (e), and this value transferred through to the relevant row.

Installation Type	Type	Litres/Person/Day
WC (multiple fittings)		17.68
Taps		7.90
Baths (shower(s) present)		1.93
Showers (bath(s) present)		42.39
Kitchen Taps		13.00
Washing Machines		15.96
Dishwasher		37.66
Water Softener		21.00

The rainwater collection calculation for New Dwellings		
Rainwater Collected	(a)	29
Rainwater demand	(b)	100
Rainwater savings* (c)=(a)/(b)*(b)=	(c)	29

Calculate

Rainwater collection

The water calculator for new dwellings methodology document (available here) allows calculation of rainwater collection volume according to two methodologies, both of which are based upon BS8515:2009. These are outlined in Section 2.8.1 of the methodology document. The daily rainwater per person (litres) figure calculated by either method should be entered into row (a).

Rainwater demand

For any appliance (WC, or washing machine) where rainwater is to be used for supply to all of the appliances of that type within the property, the volume of water for rainwater demand can be taken directly from the relevant appliance row in Column (4). For any appliance (WC, or washing machine) where rainwater is to be supplied to only a proportion of the appliances of that type within a property, the volume of water for rainwater demand should be calculated according to an alternative methodology. This can be found in Section 2.8.2 of the water calculator for new dwellings methodology document (available here) and allows calculation of the water demand from only the appliances where rainwater is to be used. The total volume of rainwater demand calculated in accordance with either of the above methodologies (as appropriate) should be summed for WCs and/or washing machines and entered into Row (b).

Installation Type	Type	Litres/Person/Day
WC (multiple fittings)		17.68
Taps		7.90
Baths (shower(s) present)		1.93
Showers (bath(s) present)		42.39
Kitchen Taps		13.00
Washing Machines		15.96
Dishwasher		37.66
Water Softener		21.00