

Wat01

Water consumption

Objective:

“To reduce the consumption of potable water for sanitary use in new buildings through the use of water efficient components and water recycling systems.”

Content:

This guidance document sets out a simple method to achieve the desired number of credits for the Wat01 issue. There are **two methods** to achieve credits in BREEAM 2018, through the **standard** Wat01 method or the **alternative** Wat01 method. This guidance is based on the **standard Wat01 method** but uses the alternative figures as a guide.

Actions:

- i. Design your sanitaryware specification to comply with the figures set out in section ii.
- ii. Your BREEAM assessor will enter the data into the Wat01 calculator and should provide feedback on the overall score and changes to components which will allow the desired number of credits to be achieved.
- iii. Ensure the fit-out is compliant with the design figures and adaptations (i.e. flow restrictors) are used and documented, where necessary.

i. How credits are awarded

Under the standard method, credits are awarded where the design achieves a **given improvement** over the ‘baseline’ water consumption, as assessed by the BREEAM Wat01 calculator. The credits are as follows:

Number of credits	% improvement required over baseline
1	12.5
2	25
3	40
4	50
5	55
5 + 1 exemplary performance credit	65

For some building types an alternative approach to compliance must be used to award credits (for further information please refer to the Wat01 issue methodology and the BREEAM Wat01 calculator).

Note: This document is intended as guidance only. Consult your BREEAM AP or Assessor to ensure compliance is achieved.

The use of **rainwater or greywater** harvesting systems allows the potable water offset to be considered with the Wat01 calculation (which is based on a final water use value in L/person/day).

Greywater systems must be installed in compliance with BS 8525-1:2010 Greywater systems - Part 1 Code of Practice, and Rainwater systems in compliance with BS EN 16941-1:2018. (NOTE: Wat02 - Water monitoring: Criterion 6, must also be achieved for post occupancy stage certification).

Additionally, the following building specific criteria are applicable:

Healthcare

If applicable, the flushing control for each WC or urinal must be suitable for operation by patients with frail or infirm hands or activated by electronic sensors.

Prisons

Sanitary components specified within a prison cell have a volume controller specified on the individual fittings or water supply to each cell.

ii. Component specification

The following table should be used as a **guide** on which to base the specification of each component. The desired specification should be checked against the Wat01 calculator to ensure compliance, prior to the final specification of sanitaryware components. The table indicates the number of credits that are likely to be achieved, without the use of rainwater or greywater harvesting. Where rainwater or greywater harvesting is planned to be used, consult your BREEAM AP or assessor for guidance.

Component	Baseline	1 credit	2 credits	3 credits	4 credits	5 credits	Unit
WC	6	4.5	4	3.75	3.5	3	Effective flush volume (litres)
Wash-hand basin taps	10	8	6	5	4	3	Litres/min
Showers	12	10	8	6	5	3.50	Litres/min
Baths	200	180	160	140	120	100	Litres
Urinal (2 or more urinals)	7.5	6	3	1.50	0.75	0	Litres/bowl/hour
Urinal (1 urinal only)	10	8	4	2	1	0	Litres/bowl/hour
Greywater and rainwater system	0	0	0	25	50	75	% of WC or urinal flushing demand met using recycled non-potable water
Kitchen tap: kitchenette	10	8	7	6	5	5	Litres/min
Kitchen taps: restaurant (pre-rinse nozzles only)	10.30	9	8.30	7.30	6.30	6	Litres/min

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Component	Baseline	1 credit	2 credits	3 credits	4 credits	5 credits	Unit
Domestic sized dishwashers	17	13	13	12	11	10	Litres/cycle
Domestic sized washing machines	90	60	50	40	35	30	Litres/use
Waste disposal unit	17	17	0	0	0	0	Litres/min
Commercial sized dishwashers	8	7	6	5	4	3	Litres/rack
Commercial or industrial sized washing machines	14	12	10	7.50	5	4.50	Litres/kg

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