

3.3 Water Efficiency

3.3.1 There is a finite supply of water in the Greater Cambridge area, and irrespective of climate change, action is required now to ensure the availability of water for future uses, including potable water supply and food production, without having a detrimental impact on the environment. Water supply in the area is managed by South Staffordshire Water (Cambridge Region). As part of their Water Resource Management Plans a potential deficit in water supplies post 2035 has been identified. While there remains some uncertainty around the full extent and impact of this deficit, there is likely to be less water available and therefore a greater need for demand management and water efficiency in the area. As a result, designing new developments for optimal sustainable water consumption will become even more important. The 2018 Cambridge and South Cambridgeshire Local Plans set out the following requirements for water efficiency in all new developments.

Water efficiency in residential development

LOCATION:	Cambridge and South Cambridgeshire
POLICY:	<ul style="list-style-type: none">• Cambridge Local Plan (2018) Policy 28: Carbon reduction, community energy networks, sustainable design and construction and water use• South Cambridgeshire Local Plan (2018) Policy CC/4: Water efficiency
SCALE OF DEVELOPMENT:	All residential development
TYPE OF DEVELOPMENT:	Residential
SUBMISSION REQUIREMENTS:	Water Conservation Strategy
LINK TO THE SUSTAINABILITY CHECKLIST:	Wat.1 and Wat.3

Policy overview

3.3.2 Both the 2018 Cambridge and South Cambridgeshire Local Plans include a requirement for all new residential development to meet a minimum water efficiency standard of no more than 110 litres/person/day. This level is in line with the optional water efficiency requirement contained within Part G of Building Regulations, and has the support of South Staffordshire Water (Cambridge Region) and the Environment Agency.

Submission requirements

3.3.3 In order to demonstrate compliance with both the Cambridge and South Cambridgeshire policies, the submission of a **Water Conservation Strategy** is required. This should include a water efficiency specification for each dwelling type, based on the Water Efficiency Calculator Methodology or the Fittings Approach (replicated in Table 3.5 below) set out in Part G of the Building Regulations 2010 (2015 Edition with 2016 amendments) or successor documents.

Table 3.5: Extract of Table 2.2 Maximum fittings consumption optional level from Part G of the Building Regulations 2010 (2015 edition with 2016 amendments)

Water fitting	Maximum Consumption
WC	4/2.6 litres dual flush
Shower	8 l/min
Bath	170 litres
Basin taps	5 l/min
Sink taps	6 l/min
Dishwasher	1.25 l/place setting
Washing machine	8.17 l/kilogram

Water efficiency in non-residential developments - Cambridge

LOCATION:	Cambridge
POLICY:	Policy 28: Carbon reduction, community energy networks, sustainable design and construction and water use
SCALE OF DEVELOPMENT:	All non-residential development
TYPE OF DEVELOPMENT:	Non-residential development
SUBMISSION REQUIREMENTS:	BREEAM pre-assessment
LINK TO THE SUSTAINABILITY CHECKLIST:	Wat.2

Policy overview

- 3.3.4 The requirements for all new non-residential development in Cambridge are for full credits related to category Wat 01 of BREEAM to be achieved. This equates to a 55% improvement over baseline water consumption figures. In order to achieve this level of water efficiency, the use of water harvesting or recycling technologies will be required, alongside other water efficiency measures. Early consideration of the implications of this policy requirement is therefore required, and where possible consideration should be given to the integration of water re-use as part of the drainage strategy for sites, in line with the requirements of policy 31 of the Cambridge Local Plan (2018) (see section 3.7).

Submission requirements

- 3.3.5 In order to demonstrate compliance with the policy, a **BREEAM pre-assessment**, carried out by an approved BREEAM assessor should be submitted as part of the planning application. This will need to demonstrate that maximum BREEAM credits for Wat 01 are being targeted, with compliance secured through the use of a planning condition. The assessment of the efficiency of the building's domestic water consuming components should be undertaken using the BREEAM Wat 01 calculator.

Further guidance

3.3.6 For further guidance on the BREEAM Assessment please see <https://www.breeam.com/>

Water efficiency in non-residential development – South Cambridgeshire

LOCATION:	South Cambridgeshire
POLICY:	Policy CC/4: Water efficiency
SCALE OF DEVELOPMENT:	All scales of non-residential development
TYPE OF DEVELOPMENT:	Non-residential development
SUBMISSION REQUIREMENTS:	Water Conservation Strategy
LINK TO THE SUSTAINABILITY CHECKLIST:	Wat.2

Policy overview

3.3.7 Policy CC/4 of the South Cambridgeshire Local Plan (2018) requires all scales of non-residential development to achieve a minimum of 2 BREEAM credits for Wat 01. This equates to a 25% improvement over baseline building water consumption. This level of water efficiency can be relatively easily achieved using low flow toilets, taps and other fittings.

Submission requirements

3.3.8 In order to demonstrate compliance with the policy, a **Water Conservation Strategy** should be submitted as part of the planning application. This should include an assessment of the building's water efficiency performance using the BREEAM Wat 01 calculator, with implementation of the measures identified secured through the use of a planning condition.

Further guidance

3.3.9 For further guidance on the BREEAM Assessment please see <https://www.breeam.com/>