

Issue ID	Description	No. of Credits Available	Mandatory Elements
Wat 2	External Water Use	1	No

## Aim

To promote the recycling of rainwater and reduce the amount of mains potable water used for external water uses.

## Assessment Criteria

Criteria	Credits
Where a <i>correctly specified and sufficient sized system to collect rainwater</i> for external/internal irrigation/use has been provided to a dwelling with a garden, patio or communal garden space (examples of such systems include <i>rainwater butts</i> and <i>central rainwater collection systems</i> )	1
<b>Default Cases</b> If no individual or communal <i>garden</i> spaces are specified or if only balconies are provided, the credit can be awarded by default	1

## Information Required to Demonstrate Compliance

Schedule of Evidence Required	
Design Stage	Post Construction stage
Detailed documentary evidence stating type, size and location of any rainwater collection systems	For post construction stage only assessments, provide detailed documentary evidence (as listed for design stage) representing the dwellings as built
Where detailed documentary evidence is not available;  A letter of instruction to a contractor / supplier or a formal letter from the developer giving a specific undertaking	<p><b>OR</b></p> <p>Written confirmation from the developer that the rainwater collection system has been installed as specified in the design stage detailed documentary evidence</p> <p><b>OR</b></p> <p>Where only a letter of instruction is provided at design stage provide detailed documentary evidence (as listed for design stage) representing the dwellings as built</p> <p><b>OR</b></p> <p>Where different from design stage, provide detailed documentary evidence (as listed for design stage) representing the dwellings as built</p> <p><b>OR</b></p> <p><i>Site Inspection Report</i> confirming compliance</p>

## Definitions

### Central rainwater collection system

A system which will collect and store rainwater for use across the development. This could be a large storage tank or other form of surface water system.

### Correctly specified

The specification of the rainwater collector must meet the following criteria:

- No open access at the top of the collector (a child-proof lid is allowed)
- Provision of a tap or other arrangement for drawing off water
- Connection to the rainwater downpipes with an automatic overflow into the conventional rainwater drainage system
- A means of detaching the rainwater downpipe and access provision to enable the interior to be cleaned
- Where the collection system is to be sited outside, and not buried, it must be stable and adequately supported; the material used for the container shall be durable and opaque to sunlight
- Where the system is part of a rainwater collection system providing internal water, water for external use may be provided in a separate tank to water required for internal use. This could be an overflow pipe leading from the main tank to a correctly specified water butt for external water use.

## Garden

An area where irrigation is required which is normally an external space but may be an internal atrium. This may be a private or communal space.

## Rainwater butt

A large cask or barrel which is set up on end to collect and store rainwater for external irrigation/watering.

## Site Inspection Report

This is a report prepared by the Code assessor during a post construction stage assessment and provided as evidence with the assessment.

## Sufficient size

Storage volume requirements for homes with individual gardens, patios and terraces:

- Terraces and patios – 100 litres minimum
- 1 – 2 bedroom home with private garden – 150 litres minimum
- 3+ bedroom home with private garden – 200 litres minimum

The above volume requirements can be halved if there is no planting provided and the whole of the external space is covered by a hard surface.

For houses with front and rear gardens, a rainwater collector is required only in the main (i.e. larger) garden but must meet the capacity requirements above.

Size requirements for communal gardens:

- 1 litre/m<sup>2</sup> of land allocated to the dwelling with a minimum of 200 litres per communal garden. Where the communal garden is allocated to more than six dwellings, a maximum of 30 litres per dwelling can be applied. The allocated

land can be planted (including grass) or left as unplanted soil, and can be split into plots or communally maintained

- Where planting requiring little water has been specified (following the recommendations from a suitably qualified ecologist, see Eco 1 and 2), the above requirements can be halved subject to written confirmation from the suitably qualified ecologist stating that this is acceptable.

Where the rainwater collection system is providing internal demand for Wat 1 and also for irrigation to achieve credit under this issue, the system can only qualify for external use where:

- The Water Efficiency Calculator for New Dwellings indicates that the demand of internal fittings to be supplied with rainwater has been met and where an excess volume of water is being collected to meet external water use of 5 litres per person per day\* (in line with the external water consumption assigned in the Water Efficiency Calculator for New Dwellings for compliance with Building Regulations Part G).

\*Where gardens are covered entirely by hard landscaping, the above requirement can be halved.

Where a swimming pool or other large water-consuming feature is present, this must be provided with 100 per cent rainwater or grey water. The water must comply with appropriate EU bathing water standards.

### **System to collect rainwater**

Equipment to collect and store rain from hard surfaces (typically roofs) to replace the use of potable mains water for external irrigation/watering.

## Assessment Methodology

The assessment criteria should be read with the methodology and the definitions in this section. Credits are awarded where the performance requirements (set out in the assessment criteria table) have been met.

### ***Design Stage***

- Check that the specifications and capacity of storage comply with the assessment criteria.

### ***Post Construction Stage***

- Confirm which specifications and evidence provided at the design stage are still valid.
- Assess all the new specifications and evidence provided at the post construction Stage.

## Calculation Procedures

- Where rainwater is collected for irrigation for individual gardens, the size requirements are calculated based on the number of bedrooms as defined above in the definition of sufficient size. Once this has been determined, it should then be confirmed whether the garden provided is made up entirely of hard spaces or is provided as a terrace or patio. The size required may then be adjusted and this should be in compliance with the definition of sufficient size defined above.
- Where rainwater is collected for irrigation in communal gardens, the size requirements are based on the size of the communal gardens provided in m<sup>2</sup>, as detailed in the definition of sufficient size. The size requirements can be adjusted where the garden comprises hard landscaping or where the planting requires minimal water, as defined in the definition of sufficient size.
- Where rainwater is collected for both internal and external use, the Water Efficiency Calculator for New Dwellings must be used to determine whether sufficient volume has been collected for external use. Sufficient volume to meet the requirements of this issue can be demonstrated where the demand of internal fittings, which are to use rainwater, is met and where the excess water collected for external use is of sufficient volume (as defined in the definition of sufficient size).

## Checklists and Tables

None.

## Common Cases of Non-Compliance

Pools, hot tubs or other large water-using features which are fed by mains water will automatically mean that credits cannot be awarded for this issue. This rule applies whether it is an internal or external feature, with the exception of internal hot tubs which should be assessed as a bath under the previous issue, Wat 1. Where such water features are present, credits can be awarded only where they use appropriately treated water from 100% rainwater or 100% greywater and all other criteria for this issue are met.

## Special Cases

None.