

**Tra 3 Cyclist facilities****0 of 2 credits achieved****Credit criteria**

One credit where evidence provided demonstrates that covered, secure and well-lit cycle storage facilities are provided for all *building users*.

Two credits where, in addition to the above, adequate changing facilities are provided for staff use.

**Credit validation**

There are no cycle storages for all users and no changing facilities in the building.

**Credit references**

Assumption based on drawings provided by Ramsden and Partners.

**Further information/action**

To achieve the first credit, it is required that

Cycle storage facilities and showers must be provided as follows

- 10% of building occupants up to 500 PLUS
- 7% of building occupants in the range of 501 – 1000
- 5% of building occupants over 1000

The proximity of the racks to the main building entrance must be indicated on drawings

The racks are covered and adequately lit in accordance with BS5489 Part 1 – Lighting of roads and amenity areas

Number and location of showers must be indicated

To achieve the second credit, at least two of the following facilities must be provided:

- Compliant showers
- Compliant changing facilities and lockers for clothes
- Compliant drying space for wet clothes

**Tra 4 Pedestrian and cycle safety****1 of 1 credits achieved****Credit criteria**

One credit where evidence provided demonstrates that the site layout has been designed in accordance with best practice to ensure safe and adequate pedestrian and cycle access.

**Credit validation**

Internal access is directly from the public highway/footpath.

**Credit references**

Assumption based on drawings provided by Ramsden and Partners.

**Further Information/action**

The following demonstrates compliance:

1. Where external site areas form part of the assessed site and these areas contain vehicle access roads, parking and/or pedestrian access to the building, adequate cycle lanes and pedestrian pathways must be provided. If the building does not have any external areas and internal access is directly from the public highway/footpath, then the credit(s) can be awarded on a default basis

**Cycle access requirements**

2. The cycle lanes have been designed and constructed in accordance with the guidance in the National Cycle Network "Guidelines and Practical Details – issue 2", Sustrans[1] and the relevant parts of Appendix VI NCN Design and Construction Checklist

3. The cycle lanes and pedestrian paths meet the following minimum width dimensions:

- Where pedestrian and cycle routes are shared the minimum total width of the combined path is 3.0m
- Where the cycle lane is segregated from both the pedestrian route and carriageway the minimum width of the cycle path is 2.0m and the minimum width of the pedestrian path is 1.5m
- Where the cycle route forms a part of the carriageway, the minimum width of the lane is 1.5m

Minimum widths should not be regarded as the design target, where possible best practice as detailed in the Sustrans[1] and DfT[2] guidance must be aimed for.

4. Cycle lanes provide direct access to any cycle storage facilities provided on the site, without the need to deviate from the cycle path and, if relevant, connect to offsite cycle paths where these run adjacent to the development's boundary.

**Pedestrian access requirements**

5. Onsite footpaths connect to public footpaths off site, providing access to local transport nodes and other offsite amenities (where present).

6. Where provided, drop-off areas are designed off the access road and provide direct access to pedestrian pathways/areas, therefore avoiding the need for the pedestrian to cross vehicle access routes.

7. Where dedicated pedestrian crossing of a vehicle access route is provided, the road is raised to the pavement level (i.e. the pavement is not lowered to road level).

8. For larger developments with a high number of public users/visitors, pedestrian pathways must be signposted to other local amenities off site, including public transport nodes.

**Combined cyclists and pedestrian access requirements**

9. Delivery areas are not accessed through parking areas and do not cross or share pedestrian and cyclist routes and other outside amenity areas accessible to building users and general public.

10. Lighting design of pedestrian pathways and cycle paths on site are in compliance with CIBSE Lighting Guide 6, 1992 (LG6)[6] and BS5489 Part 1[5].



**Tra 5 Travel plan****1 of 1 credits achieved****Credit criteria**

One credit where evidence is provided to demonstrate that a travel plan has been developed and tailored to the specific needs of the users of the assessed development.

**Credit validation**

A travel plan will be developed and all requirements will be addressed.

**Credit references**

Confirmation given by Ramsden and Partners.

**Further information/action**

A travel plan must be developed according to the following requirements:

The travel plan must be structured and take into account

- Current local environment for walkers and cyclists
- Public transport links serving the site
- Current facilities for cyclists

Plan must demonstrate how and what measures have been, or will be taken to minimise the impact of traffic, as a result of the new development

The findings of the travel plan have been used to steer the design of the development in order to meet the travel plan objectives, for example

- Providing parking priority spaces for car sharers
- Providing dedicated cycle storage facilities and cycle lanes on site
- Negotiating improved bus service
- Restricting and/or charging for car parking

Travel plan must address the following types of travel:

- Commuter journeys
- Business travel
- Visitors/customers
- Deliveries

Travel plan must include a package of measures that address constraints and opportunities for the following:

- Walking
- Cycling
- Public transport
- Use of the private car for travel to work
- Mopeds/motorcycles
- Reducing the need to travel
- Visitors/customers
- deliveries

To award the credit, evidence must be provided in form of:

The plan itself or a firm commitment that a plan will be developed according to requirements

Evidence from design team illustrating specific examples of how the travel plan has influenced the design

**Tra 6 Maximum car parking capacity****2 of 2 credits achieved****Credit criteria**

One credit where evidence provided demonstrates that the number of parking spaces provided for the building has been limited.

**Credit validation**

Considering there will be no more than 25 parking spaces; one parking space for every four building users.

**Credit references**

Assumption by Lugus Engineering.

**Further information/action**

The following demonstrates compliance:

**First credit**

1. No more than one parking space is provided for every three building users.

**Second credit**

1. No more than one parking space is provided for every four building users.

## Water

The following table summarises the credits awarded for this section.

The Code Credit Reference	Number of Credits Achieved	Number of Credits Available
Wat 1 - Water consumption	2	3
Wat 2 - Water meter	1	1
Wat 3 - Major leak detection	1	1
Wat 4 - Sanitary supply shut off	1	1
<b>TOTAL CREDITS</b>	<b>5</b>	<b>6</b>

**Wat 1 Water consumption****2 of 3 credits achieved****Credit criteria**

Up to three credits are available where evidence provided demonstrates that the specification/building includes taps, urinals, WCs and showers that consume less water in use than standard specifications for the same type of fittings.

**Credit validation**

The total water consumption in this development will be between 1.5 and 4.4 m<sup>3</sup> per person per year.

**Credit references**

Confirmation by Ramsden and Partners that low water consumption fitting will be specified and greywater recycling system will be installed.

**Further Information/action**

Credits awarded as follows:

- 1 credit where water consumption is 4.5 – 5.5 m<sup>3</sup> per person per year
- 2 credits where water consumption is 1.5 – 4.4 m<sup>3</sup> per person per year
- 3 credits where water consumption is < 1.5 m<sup>3</sup> per person per year

Specific information required to calculate water consumption per person per year:

Specified types and where more than one type, the proportion of each different type of the following fittings:

- WCs
- Urinals
- Showers
- Taps

Details including storage capacity and amounts/proportions of any rainwater collection or greywater recycling system (where specified)



**Wat 2 Water meter****1 of 1 credits achieved****Credit criteria**

One credit where evidence provided demonstrates that a water meter with a pulsed output will be installed on the mains supply to each building.

**Credit validation**

Water metering will be installed for the main water supplier to the building

**Credit references**

Confirmation given by Ramsden and Partners.

**Further Information/action**

The following demonstrates compliance:

- The specification of a water meter on the mains water supply to the building
- The water meter has a pulsed output to enable a future connection to a Building Management System(BMS) for the monitoring of water consumption

**Exemplary level requirements**

The following outlines the exemplary level requirements to achieve an *innovation credit* for this BREEAM issue:

- Where sub meters are fitted to allow individual water-consuming plant or building areas to be monitored such as cooling towers, car washes, catering areas, etc. If the building does not have any major water consuming plant this exemplar credit is not available.
- Each sub meter has a pulsed output to enable connection to a Building Management System (BMS) for the monitoring of water consumption.



**Wat 3 Major leak detection****1 of 1 credits achieved****Credit criteria**

One credit where evidence provided demonstrates that a leak detection system is specified or installed on the building's water supply.

**Credit validation**

Leak detection system will be installed on the building's water supply.

**Credit references**

Confirmation given by Ramsden and Partners.

**Further Information/action**

The following requirements must be met in order to award credit:

A leak detection system is specified

The system is capable of identifying major leaks both within the building and between the building and the site boundary, and should cover all mains water supplies to the building. The system must be:

- Audible when activated
- Activated when a continuous flow of water passes through at flow rate above the pre-set value
- Programmable to suit the owner/occupiers' requirements
- Where applicable, designed to avoid false alarms

The system need not to cut off the water supply when the alarm is triggered.

**Wat 4 Sanitary supply shut off****1 of 1 credits achieved****Credit criteria**

One credit where evidence is provided to demonstrate that proximity detection shut off is provided to the water supply to all urinals and WC's.

**Credit validation**

Sanitary supply shut off will be installed for all toilet areas.

**Credit references**

Confirmation given by Ramsden and Partners.

**Further Information/action**

The following demonstrates compliance:

Solenoid valves are specified for each toilet area in the building (controlling the water supply to all urinals and WCs) and these are linked to either

- Infra red movement detectors OR
- Sensors placed at or on entry doors

## Materials

The following table summarises the credits awarded for this section.

The Code Credit Reference	Number of Credits Achieved	Number of Credits Available
Mat 1 - Materials specification (major building elements).	2	4
Mat 2 - Hard landscaping and boundary protection	0	1
Mat 3 - Re-use of building façade	0	1
Mat 4 - Re-use of building structure	0	1
Mat 5 - Responsible Sourcing of Materials	2	3
Mat 6 - Insulation	1	2
Mat 7 - Design For Robustness	0	1
<b>TOTAL CREDITS</b>	<b>5</b>	<b>13</b>

**Mat 1    Materials specification (major building elements)**

**2 of 4 credits achieved**

**Credit criteria**

Credits are awarded where evidence provided demonstrates that the major building elements specified have an 'A rating', as defined in the *Green Guide to Specification*.

**Credit validation**

Major building elements included in this project are external walls, windows and roof. The specifications will be selected based on the approved green guide 2008 ratings.

**Credit references**

Assumption by Lugus Engineering.

**Further information/action**

The following demonstrates compliance:

The Green Guide rating for the specifications for the following building elements (External Walls, Windows, Roof and Upper floor slabs) must be determined and entered in to the BREEAM assessor's *Mat 1 Calculator*. Green Guide ratings for the specification(s) of each element can be found at: [www.thegreenguide.org.uk](http://www.thegreenguide.org.uk)

**Exemplary level requirements**

The following outlines the exemplary level requirements to achieve an *innovation credit* for this BREEAM issue.

One exemplary BREEAM credit can be awarded as follows:

- Where assessing four or more applicable building elements, the building achieves at least two points additional to the total points required to achieve maximum credits under the standard BREEAM requirements.
- Where assessing fewer than four applicable building elements, the building achieves at least one point additional to the total points required to achieve maximum credits under the standard BREEAM requirements.