

BREEAM Retail

2005

Scope of the Method

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Background

The aim of this document is to give the reader an introduction to the scope and content of the BREEAM version for retail developments. The document is split into three sections:

1. What type of retail developments can be assessed using BREEAM Retail.
2. At which stages of the building life cycle the method can be used.
3. The assessment issues covered in the 2005 version of BREEAM Retail.

It is recommended that the information presented within this document is not used to carry out any form of pre-assessment scoring or BREEAM rating prediction. To do so would not give an accurate reflection of likely performance in a formal assessment. The document is intended to act as an introduction to the scope of the method and assessment issues only.

If you have any questions concerning BREEAM or require a list of licensed BREEAM Retail assessors please contact the BREEAM office; tel: 01923 664462 fax: 01923 664103 email: breeam@bre.co.uk

What can be assessed using BREEAM Retail

Development types

BREEAM Retail can be used to assess the following types of building development:

Single retail unit/building development: This includes stand-alone retail developments and retail units/department stores within or part of a larger retail development.

Shopping mall: Purpose-built centres incorporating many individual shop units, sometimes with leisure or other facilities, i.e. food court.

Retail park: A warehouse type of development consisting of several retail units.

High street development: A development consisting of several retail units on a traditional high street, which may be part of a mixed use development.

Retail functions

The scope of the retail scheme covers the following retail functions where they exist within, or can be defined as, one of the above types of building development:

1. general shops: most types of shops.
2. service providers: banks, building societies, post offices, betting offices etc.;
3. supermarkets/superstores: mainly selling food, or food and non-food goods;
4. retail warehouses: large 'out of town' stores specialising in the sale of household goods (such as carpets, furniture and electrical goods) and bulky DIY items;

5. showroom retail: vehicle, furniture and other showrooms not defined as a retail warehouse.

The following associated retail/building functions can be covered in the assessment where they form a part of one of the above types of retail function:

- Ø bakery;
- Ø workshop;
- Ø catering facilities/food court;
- Ø laundry;
- Ø dry cleaners;
- Ø cinema;
- Ø office space;
- Ø petrol station;
- Ø vehicle washers.

NOTE: BREEAM Retail cannot be used to assess any of the above associated areas as stand-alone developments, i.e. BRE will not certify a stand-alone cinema or restaurant assessed using BREEAM Retail. The Bespoke BREEAM route should be used in such instances.

When can BREEAM Retail be used

The BREEAM Retail scheme can be used to carry out assessments of retail developments, as defined above, at four different stages in the building life cycle. These are:

1. Design & Procurement stage
2. Post Construction stage
3. Fit Out stage
4. Operation & Management stage

Design & Procurement assessment

The formal assessment and certification will traditionally be carried out at RIBA plan of works stage E (i.e. final proposals). Design stage assessment can also be carried out at a later stage, RIBA stage F to G, (Production information/tendering) but this limits the opportunities to improve performance of the assessment. Post construction design stage assessments can be carried out if required at stage L (after practical completion).

The scope of the design stage assessment criteria covers the core BREEAM credit issues, i.e. proximity to public transport nodes', company EMS etc. It also covers those credit issues applicable to the design stage stakeholders' and specific to design stage assessment, e.g. building fabric heat loss.

The design stage assessment criteria can be used to carry out an assessment of any new build design or *major refurbishment* of a retail building that qualifies under this BREEAM version. Assessments can be carried out for *shell only* (speculative), partial or fully fitted developments.

Major refurbishment is defined as the refurbishment of an existing building that will result in the overhaul/replacement of the major building services and/or significant remedial or replacement works carried out to the building fabric and internal layout. The reader should be aware that certain types of refurbishment maybe more appropriate to a fit out stage assessment.

Post Construction Review

A post construction review serves to confirm the BREEAM rating achieved at the post construction stage. To this end a post construction review can only be carried out where a design stage assessment of the same development has previously been completed and certified. A post construction review should be carried out at RIBA stage L, i.e. '*after practical completion*'.

The scope of the post construction review covers the same criteria as that used to assess the development at the design stage.

Fit out assessment

This stage of assessment can be used to assess a tenant or owner occupier fit out of an existing retail unit/building. A fit out assessment can be carried out prior to any fit out works at any time during the operational life of a retail unit.

The fit out stage assessment criteria can be used at two levels of assessment:

- 1) Fit out of an individual store: the certification relates to, and the criteria covers design and specification of a fit out for an individual store, in the same way as a traditional BREEAM assessment.
- 2) Fit out of a standard specification: the certification relates to, and the assessment covers a standard specification which is to be applied to the fit out of several stores within an organisations building portfolio. Using this type of fit out assessment, BRE certify the specification and not the individual units which are subsequently fitted out using that standard specification.

The scope of the fit out assessment criteria covers the core BREEAM credit issues, i.e. proximity to public transport nodes, building user guide, internal air pollution etc., and those credit issues that are fit out specific, i.e. display lighting efficiency, embodied impacts; floor finishes, partitions etc.

The fit out assessment structure can cater for situations where minor replacement of building services is being carried out, e.g. replacement of an old boiler, however where there is a substantial overhaul of building services, i.e. a major refurbishment, the design stage criteria must be used if certification is required.

Operation & Management assessment

This type of assessment is used at the operational stage of the building life cycle to assess the environmental impacts of any retail building that qualifies under this BREEAM version.

The scope of the O&M assessment criteria covers the core BREEAM credit issues, i.e. proximity to public transport nodes, building user guide, internal air pollution etc., and those credit issues that are O&M specific, i.e. energy management, maintenance schedules etc.

Assessment issues

The following pages detail each credit issue included in the 2005 retail version of BREEAM. In each case the credit aim and criteria are given. The reader should be aware that for each credit a number of requirements must be demonstrably met to award the number of credits available for that issue. These detailed compliance requirements have not been provided in this document. Where it is the intention to carryout a formal assessment advice should be sought from a licensed assessor at an early stage in the design process. This will help to ensure that the design considers the detailed compliance requirements, and therefore maximises potential BREEAM performance.

The reader should also note that not all the credits will apply to an assessment scenario. The selection of credits for each assessment is dependant on two factors.

1. The first of these factors is the stage of assessment; as outlined above there are four stages of assessment. The title header, for each credit in this document, includes the relevant stages of assessment. If the stage is highlighted in black then that issue applies at that stage of assessment. (Credits applicable at the post construction stage are the same as those applicable at the design stage, for this reason the post construction stage does not appear in the credit title header).
2. The second factor is the assessment type, i.e. landlord or tenant, type and function of the retail development, the servicing strategy and the additional building functions that form a part of the development. For example the credit that addresses cold food storage will apply to the assessment of a supermarket but not to a post office. Equally, the assessment may be of a building which is *shell only* (where services will be installed post construction by the retailer), therefore a credit that assesses the internal lighting controls at the design stage would not be included in an assessment of this type of development.

Outlining the applicability of each credit to each potential assessment scenario is beyond the scope of this document. Though in most cases this can be assumed from the credit title, aim and criteria. When undertaking a formal assessment a qualified assessor will determine which credits apply to the development that requires assessment. The assessor will do this by determining a profile for the development, and then using the information from that profile to filter the list of retail credits applicable to the particular assessment scenario.

Management section

RM01: Commissioning - monitoring

Design

Fit out

Operation

Credit Aim

To recognise and encourage an appropriate level of building services commissioning and ensure that commissioning is carried out in a co-ordinated and comprehensive manner.

Credit Criteria

One credit can be awarded where information is provided to demonstrate that:

1. project team member(s) have been appointed to monitor commissioning or re-commissioning on behalf of the client;
2. commissioning or re-commissioning of complex building services systems will be carried out by a competent person;
3. that all commissioning or re-commissioning will be carried out in line with current Building Regulations and best practice.

RM02: Commissioning - responsibilities

Design

Fit out

Operation

Credit Aim

To recognise and encourage constructors (main contractors, sub-contractors, specialist contractors) to carry out commissioning as required by BSRIA/CIBSE guidelines.

Credit Criteria

One credit can be awarded where evidence is provided to demonstrate that responsibility for pre-commissioning, commissioning, and quality monitoring, will be passed on to the appropriate contractors and all trades on site.

RM03: Seasonal commissioning

Design

Fit out

Operation

Credit Aim

To recognise and encourage seasonal commissioning of building services to ensure optimum performance under actual occupancy conditions, particularly during extremes of weather.

Credit Criteria

One credit can be awarded where information is provided to demonstrate that seasonal commissioning will be carried out during the first year of occupation post construction/fit out. For complex systems such as air conditioning, mechanical ventilation, displacement ventilation, complex passive ventilation, BMS, etc. this should be carried out by a specialist commissioning agent as required for credit RM01.

RM04: Considerate Constructors

Design

Fit out

Operation

Credit Aim

To recognise and encourage construction sites managed in an environmentally considerate and accountable manner.

Credit Criteria

A maximum of two credits can be awarded where evidence is provided to demonstrate that there is a commitment to comply with recognised best practice site management principles.

RM05: Construction site impacts

Design

Fit out

Operation

Credit Aim

To recognise and encourage construction sites managed in an environmentally sound manner in terms of resource use, energy consumption, waste management and pollution.

Credit Criteria

A maximum of four credits are available (design stage) and two credits (fit out stage) where evidence is provided to demonstrate that there is a commitment to employ best practice principles in respect of construction site environmental impacts.

RM06: Environmental Management System

Design

Fit out

Operation

Credit Aim

To recognise and encourage companies to monitor and manage their own environmental impacts by ensuring adequate management systems are in place.

Credit Criteria

One credit can be awarded where information is provided to demonstrate that a company wide Environmental Management System (EMS) in place. Two credits can be awarded where information is provided to demonstrate that a third party certified EMS is in place.

RM07: Environmental responsibility

Design

Fit out

Operation

Credit Aim

To recognise and encourage the appointment of named individuals who can take ownership and responsibility for monitoring and implementing strategies to avoid environmental impacts.

Credit Criteria

One credit can be awarded where information is provided to demonstrate that environmental responsibilities have been allocated to an appropriate individual.

RM08: Tenant engagement

Design

Fit out

Operation

Credit Aim

To raise awareness on environmental issues in general, and in particular the ways in which the building management team is responding to them practically.

Credit Criteria

One credit can be awarded where information is provided to demonstrate ongoing engagement between the tenant and landlord – and vice-versa – to raise awareness of ongoing energy and environmental operational issues that affect both stakeholders.

RM09: Customer information and interface

Design

Fit out

Operation

Credit Aim

To recognise facilities that provides information on environmental related issues concerning the development's operation and its customer's environmental impacts. And also provide a platform for customer feedback on concerns regarding the development's daily operation and associated environmental impacts.

Credit Criteria

One credit can be awarded where information is provided to demonstrate:

1. the existence of an environmental information centre open to all stakeholders, staff and customers and any other interested parties.
2. That there are customer interface procedures in place that allow complaints and feedback to be channelled to those responsible for building management.

RM10: Public information dissemination

Design

Fit out

Operation

Credit Aim

To encourage the dissemination of information concerning the building related environmental impacts and management minimisation strategies to reduce those impacts.

Credit Criteria

One credit can be awarded where information is provided to demonstrate the publication and dissemination of the following:

1. details concerning the development's operational environmental impacts;
2. the management team's monitoring and management strategies developed and employed to minimise and mitigate them;
3. specific examples of good practice.

RM11: Building users' guide

Design

Fit out

Operation

Credit Aim

To recognise and encourage the provision of guidance to enable a building user to understand and operate the building efficiently, in line with current good practice.

Credit Criteria

One credit can be awarded where information is provided to demonstrate the provision of a simple guide that covers information relevant to the tenant and non-technical manager on the environmental performance of the building and development as a whole.

RM12: Building user education

Design

Fit out

Operation

Credit Aim

To facilitate the structured and systematic provision of training that enables building users to understand and operate the building efficiently and in a manner that reduces and minimises operational environmental impacts.

Credit Criteria

One credit can be awarded where information is provided to demonstrate that training is provided to the building's staff on the appropriate use of building controls and procedures to maintain efficient building operation and minimise operational environmental impacts.

RM13: Company environmental policy

Design

Fit out

Operation

Credit Aim

To recognise and encourage a formal company environmental policy that addresses, and aims to reduce, organisational environmental impacts.

Credit Criteria

One credit can be awarded where information is provided to demonstrate:

1. the existence of a formal project, site or property specific company environmental policy; or a corporate environmental policy that makes specific reference to property-related environmental impacts.
2. That the policy has the endorsement and commitment from senior company directors; and
3. that the policy objectives are demonstrably being met via specific operational example(s).

RM14: Company purchasing policy**Design****Fit out****Operation****Credit Aim**

To recognise and encourage a formal company environmental purchasing policy that address, and aims to minimise, the environmental impacts from supply and purchasing of materials/goods.

Credit Criteria

One credit can be awarded where evidence is provided to demonstrate:

1. the existence of a formal environmental purchasing policy;
2. that the policy has the endorsement and commitment from senior company directors; and
3. that the policy objectives are demonstrably being met via specific operational example(s).

Health & Wellbeing section

HW01: Failsafe humidification

Design

Fit out

Operation

Credit Aim

To avoid risk of illness related to microbial contamination of humidification systems.

Credit Criteria

One credit can be awarded where information is provided to demonstrate that potential microbial contamination of humidification systems has been minimised.

HW02: Contamination dws

Design

Fit out

Operation

Credit Aim

To minimise the risk of microbial contamination within domestic water systems.

Credit Criteria

One credit can be awarded where information is provided to demonstrate domestic water systems have been designed (D&P/Fit Out) or actions taken to minimise operating (O&M) risks of legionellosis.

HW03: Office space

Design

Fit out

Operation

Credit Aim

To recognise steps taken to provide a good working environment in the office areas within the retail development.

Credit Criteria

Up to two credits are available where information is provided to demonstrate that office space within the retail development achieves best practice in terms of occupant comfort and control.

HW04: High frequency lighting

Design

Fit out

Operation

Credit Aim

To reduce risk of health problems related to frequency of fluorescent lighting.

Credit Criteria

One credit can be awarded where information is provided to demonstrate that high frequency ballasts are installed on all fluorescent and compact fluorescent lamps.

HW05: External lighting levels

Design

Fit out

Operation

Credit Aim

To ensure external lighting is provided at a level of illumination suitable for its task, and to ensure safety and security.

Credit Criteria

One credit can be awarded where information is provided to demonstrate that all external lighting is specified in accordance with the appropriate *maintained illuminance* levels, (in lux), recommended by CIBSE.

HW06: Internal lighting levels

Design

Fit out

Operation

Credit Aim

To ensure that internal lighting is designed to provide a level of illumination suitable for the task.

Credit Criteria

One credit can be awarded where information is provided to demonstrate that lighting in all internal areas is specified in accordance with the appropriate *maintained illuminance* levels, (in lux), recommended by the CIBSE *Code for Lighting*.

HW07: Secure car parks

Design

Fit out

Operation

Credit Aim

To recognise retail developments that provide safe and secure car parks that reduces public fears and restricts opportunities for crime to be committed.

Credit Criteria

One credit can be awarded where information is provided to demonstrate that the customer car park is designed in accordance with the Secured Car Park Award Scheme Self-Assessment guidance (design/Fit out), or certified under the Secured Car Park Award Scheme (Operation & management/fit out stage).

HW08: Internal air pollution

Design

Fit out

Operation

Credit Aim

To reduce the risk to health associated with poor indoor air quality.

Credit Criteria

One credit can be awarded where information is provided to demonstrate that air intakes supplying fresh air to occupied areas are positioned to avoid major sources of external pollution.

HW09: Maintenance schedules

Design

Fit out

Operation

Credit Aim

To reduce the risk to health associated with poor indoor air quality, from poorly maintained air conditioning and mechanical ventilation systems.

Credit Criteria

One credit can be awarded where information is provided to demonstrate that air conditioning and/or mechanical ventilation systems have planned preventative maintenance procedures in place.

HW10: Smoking policy

Design

Fit out

Operation

Credit Aim

To minimise the risk to health from passive smoking.

Credit Criteria

One credit can be awarded where information is provided to demonstrate that smoking is prohibited in all areas of the development.

HW11: Ventilation rates

Design

Fit out

Operation

Credit Aim

To ensure adequate provision of fresh air.

Credit Criteria

One credit can be awarded where each space within the development achieves CIBSE recommended minimum fresh air rates.

HW12: Indoor air quality

Design

Fit out

Operation

Credit Aim

To ensure adequate indoor air quality conditions.

Credit Criteria

One credit can be awarded where Carbon dioxide levels can be regularly monitored within occupied areas.

Energy section

EN01: Building fabric heat loss

Design

Fit out

Operation

Credit Aim

To recognise and encourage buildings that have minimised the emission of CO₂, produced in meeting the buildings space heating requirements, through considered fabric design, building form and system specification.

Credit Criteria

Up to five credits are available where information is provided to demonstrate that the assessed building out-performs a reference building designed to the current regulatory requirements for building fabric heat loss, heating system efficiency and air infiltration rate.

EN02: Internal/external lighting efficiency

Design

Fit out

Operation

Credit Aim

To recognise and encourage light fittings that consume less energy, for the same task, than more traditional fittings.

Credit Criteria

Up to two credits are available and can be awarded where information is provided to demonstrate that all internal & external light fittings, other than fittings for display purposes, are:

- 1) greater than 50 lumens/watt (1 credit)
- 2) greater than 75 lumens/watt (2 credits)

EN03: Display lighting

Design

Fit out

Operation

Credit Aim

To recognise and encourage display light fittings that consume less energy, for the same task, than more traditional fittings.

Credit Criteria

One credit can be awarded where information is provided to demonstrate that the efficacy for each type of display light fitting is greater than or equal to 20 lumens/watt.

EN04: Internal lighting strategy

Design

Fit out

Operation

Credit Aim

To recognise developments that employ a lighting strategy that minimises the need for general internal lighting.

Credit Criteria

Up to three credits are available and can be awarded where information is provided to demonstrate that the development minimises potential energy demand for internal lighting by maximising the use of natural daylight and providing effective lighting controls.

EN05: External lighting strategy

Design

Fit out

Operation

Credit Aim

To recognise buildings that control the level of external lighting and lighting for signs in balance with daylight levels.

Credit Criteria

One credit can be awarded where information is provided to demonstrate that external lighting and sign lighting have automatic controls that ensure fittings do not operate during daylight hours.

EN06: Energy sub-metering

Design

Fit out

Operation

Credit Aim

To recognise the provision of energy metering for the purposes of monitoring and targeting of energy consumption for the whole development.

Credit Criteria

One credit can be awarded where information is provided to demonstrate the provision of direct sub-metering of substantial energy consuming plant within the building.

EN07: Tenancy sub-metering

Design

Fit out

Operation

Credit Aim

To recognise and encourage the provision of energy sub-metering to facilitate energy monitoring by tenant or end user.

Credit Criteria

One credit can be awarded where information is provided to demonstrate that electrical sub-metering of tenancy areas is installed.

EN08: Specification of space heating plant

Design

Fit out

Operation

Credit Aim

To encourage the specification of an energy efficient heating system.

Credit Criteria

Two credits are available. The number of credits awarded is determined by providing evidence that demonstrates:

1. that the *seasonal efficiency* of the source of space heating is $\geq 85\%$ (1 credit); or
2. that the *seasonal efficiency* of the source of space heating $\geq 90\%$ (2 credits).

EN09: Specification of water heating plant

Design

Fit out

Operation

Credit Aim

To recognise and encourage energy efficient hot water plant and distribution.

Credit Criteria

One credit can be awarded where evidence is provided to demonstrate that hot water plant has been designed to maximise energy efficient operation.

EN10: Specification of Mech vent. plant

Design

Fit out

Operation

Credit Aim

To recognise and encourage the specification of energy efficient ventilation strategies

Credit Criteria

Up to two credits are available where evidence is provided to demonstrate the specification of energy efficient mechanical ventilation system, or where the building is naturally ventilated.

EN11: Specification of air cond. plant

Design

Fit out

Operation

Credit Aim

To recognise and encourage the specification of energy efficient cooling strategies.

Credit Criteria

Up to two credits are available where evidence is provided to demonstrate the specification of energy efficient cooling system, or where the building avoids air conditioning.

EN12: Maintenance schedules

Design

Fit out

Operation

Credit Aim

To reward procedures that ensure building services are maintained and calibrated for optimum performance.

Credit Criteria

One credit can be awarded where information is provided to demonstrate that there are established and operational maintenance schedules covering calibration and operation of heating, mechanical ventilation and cooling system controls (where specified).

EN13: Building management system

Design

Fit out

Operation

Credit Aim

To identify and minimise potential energy-inefficient operations and procedures through adequate monitoring and control of the major energy consumers.

Credit Criteria

One credit can be awarded where information is provided to demonstrate that a building energy management system is specified.

EN14: Lighting maintenance survey

Design

Fit out

Operation

Credit Aim

To ensure energy-efficient operation, maintenance and replacement of light fittings and strategy.

Credit Criteria

One credit can be awarded where information is provided to demonstrate that a lighting survey has been carried out prior to fit-out, or for O&M assessments where surveys are carried out on a regular basis.

EN15: Renewable & low carbon energy use

Design

Fit out

Operation

Credit Aim

To encourage the use of a source of energy that emits zero or low carbon emissions, to meet part of the building energy demand.

Credit Criteria

A total of three credits are available where information is provided to demonstrate that a proportion of the energy demand for the development is sourced from renewable or low carbon producing energy sources.

EN16: Avoiding air infiltration

Design

Fit out

Operation

Credit Aim

To avoid air infiltration and subsequent heat loss from the development.

Credit Criteria

Up to two credits can be awarded credit where information is provided to demonstrate that measures have been specified to control air leakage from goods loading/unloading and large storage areas.

EN17: Passive solar design

Design

Fit out

Operation

Credit Aim

To ensure the design maximises the benefits, and takes into consideration the effects of solar radiation and light.

Credit Criteria

A total of two credits can be awarded where evidence is provided to demonstrate that thermal modelling has been carried out at the design stage, and the results used to influence the design of the building so that it:

1. utilises solar heat gain appropriately, avoids overheating and minimises heat loss;
2. maximises the use of daylight throughout the internal space;
3. allows solar heated air to assist natural convection.

EN18: Services whole life performance

Design

Fit out

Operation

Credit Aim

To encourage the selection of viable options for the main building services on the basis of their CO₂ emissions over the course of the building's life cycle.

Credit Criteria

A total of four credits are available. The number of credits awarded should be determined in compliance with the following:

one credit can be awarded, for each of the services below, where evidence has been provided to demonstrate that the project team has carried out quantitative analysis of the life cycle energy consumption for a range of *viable* design options, and they have specified the option that has the lower CO₂ emissions over a 60 year building life cycle.

- 1) General lighting (fittings, control gear, lighting controls)
- 2) Heating and Hot water (boilers, distribution systems, controls)
- 3) Mechanical ventilation (system & controls)
- 4) Air conditioning (system & controls)

EN19: Cold food storage - cabinets

Design

Fit out

Operation

Credit Aim

To encourage energy efficient specification and operation of cold food cabinets and thus reduce electricity demand and subsequent CO₂ emissions.

Credit Criteria

Up to four credits are available and can be awarded where information is provided to demonstrate best practice specification and operation of cold food storage cabinets.

EN20: Cold food storage – cold store

Design

Fit out

Operation

Credit Aim

To encourage energy-efficient specification and operation of cold food stores and thus reduce electricity demand and subsequent CO₂ emissions.

Credit Criteria

Upto four credits available and can be awarded where information is provided to demonstrate the energy efficient specification and operation of walk in cold food stores.

EN21: Cold drink coolers

Design

Fit out

Operation

Credit Aim

To recognise and encourage the specification of cold drink dispensers that minimise energy use.

Credit Criteria

One credit can be awarded where information is provided to demonstrate that energy efficient coolers have been specified.

EN22: Kitchen and bakery layout

Design

Fit out

Operation

Credit Aim

To encourage a kitchen and bakery layout and specification that is complimentary to energy efficiency.

Credit Criteria

Two credits are available and can be awarded where information is provided to demonstrate that the kitchen layout and catering equipment specified is designed to minimise energy consumption.

EN23: Laundry equipment

Design

Fit out

Operation

Credit Aim

To encourage the specification of energy efficient equipment for laundry use.

Credit Criteria

Upto two credits can be awarded where information is provided to demonstrate that commercial sized laundry equipment minimises energy consumption (D&P/Fit out); and energy efficient operational procedures are in place (O&M).

EN24: Dry cleaning equipment

Design

Fit out

Operation

Credit Aim

To recognise the energy efficient operation of dry cleaning equipment.

Credit Criteria

Upto two credits can be awarded where information is provided to demonstrate that energy efficient dry cleaning equipment is specified (D&P/Fit out) and energy efficient operational procedures in place (O&M).

EN25: Lifts

Design

Fit out

Operation

Credit Aim

To encourage the specification of energy efficient transportation systems.

Credit Criteria

One credit can be awarded where information is provided to demonstrate that the assessed developments passenger and/or goods lifts match motor output to passenger demand and returns excess energy to the grid or to meet other on site demand.

EN26: Escalators & travelling walkways

Design

Fit out

Operation

Credit Aim

To encourage the specification of energy efficient transportation systems.

Credit Criteria

One credit can be awarded where information is provided to demonstrate that escalators avoid unnecessary operation when there are no passengers, thereby minimising energy consumption.

EN27: Energy management

Design

Fit out

Operation

Credit Aim

To encourage energy efficiency through best practice management of energy consumption.

Credit Criteria

Three credits can be awarded where information is provided to demonstrate that the assessment stakeholder has achieved accreditation under the National Energy Foundation, Energy Efficiency Accreditation Scheme. Or where the retail organisation is not accredited under the scheme, two credits are available for demonstrating good practice in terms of energy management, monitoring and targeting.

Transport section

TR01: Proximity to public transport nodes **Design** **Fit out** **Operation**

Credit Aim

To recognise developments that are in close proximity to good public transport links, thereby increasing the likelihood of staff and customers using public transport.

Credit Criteria

Up to four credits are available. The number of credits achieved depends on the proximity of the public transport node and frequency of the service at that node.

TR02: Quality partnership public transport Design Fit out **Operation**

Credit Aim

To improve the efficiency of public transport and increase the opportunity for non-car travel through closer ties between retailers and local operators.

Credit Criteria

Two credits can be awarded where information is provided to demonstrate that the assessment stakeholder is an active member partner in a local Quality Bus Partnership (QBP) or other public transport quality partnership.

TR03: Quality partnership freight transport Design Fit out **Operation**

Credit Aim

To improve the efficiency of freight transport and reduce its impact on the local environment

Credit Criteria

One credit can be awarded where information is provided to demonstrate that the retailer or landlord is an active member partner in a local authority freight quality partnership.

TR04: Travel survey Design Fit out **Operation**

Credit Aim

To assess the travel patterns of building users so that the information may be used to develop or update travel plans.

Credit Criteria

One credit is available and can be awarded where information is provided to demonstrate that a travel survey has been carried out to determine the travel patterns of the building users who work at, and commute to, the retail development.

One credit is available and can be awarded where information is provided to demonstrate that travel audits have been carried out to determine the travel patterns of customers, visitors and deliveries to the retail development.

TR05: Travel plan **Design** Fit out **Operation**

Credit Aim

To recognise the development of a travel plan that will encourage building users' to maximise the use of environmentally friendly forms of transport.

Credit Criteria

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

TR06: Travel information space

Design

Fit out

Operation

Credit Aim

To encourage the provision of up-to-date travel and transport information for customer use, and thereby encourage greater use of car alternatives for travel.

Credit Criteria

A maximum of two credits are available. The credits can be awarded where information is provided to demonstrate that there is a dedicated space within the development for the provision of up-to-date public transport information.

TR07: Bicycle racks

Design

Fit out

Operation

Credit Aim

To provide adequate facilities for customers and staff who choose to cycle to the development, and encourage more customers to do the same.

Credit Criteria

One credit can be awarded where information is provided to demonstrate that there are covered, secure and well lit cycle racks for staff & customer use.

TR08: Cyclists changing facilities

Design

Fit out

Operation

Credit Aim

To encourage building occupants to cycle by ensuring adequate cyclists facilities are or will be present on site.

Credit Criteria

One credit is available and can be awarded where information is provided to demonstrate that adequate washing and changing facilities are available for staff use.

TR09: Cycle lanes on site

Design

Fit out

Operation

Credit Aim

To provide infrastructure that helps to encourage staff and customers to cycle, and thus reduce congestion and pollution caused by other means of travel.

Credit Criteria

One credit can be awarded where information is provided to demonstrate that there are dedicated cycle lanes leading from site entrances to on-site cyclist facilities.

TR10: Pedestrian routes

Design

Fit out

Operation

Credit Aim

To recognise and encourage the provision of safe and secure pedestrian routes.

Credit Criteria

One credit can be awarded where information is provided to demonstrate that pedestrian routes form a direct route onto and off the site, in the direction of public transport nodes and other amenities, where in proximity to the development.

TR11: Remote purchase of goods

Design

Fit out

Operation

Credit Aim

To reduce unnecessary journeys, and thus potential congestion and pollution.

Credit Criteria

One credit can be awarded where information is provided to demonstrate that customers can purchase goods or services without the need to travel to the retail development.

Water section

W01: Water efficient sanitaryware

Design

Fit out

Operation

Credit Aim

To minimise the consumption of fresh water in sanitary applications to a level that saves water whilst still performing the desired function.

Credit Criteria

Up to three credits can be awarded where information is provided to demonstrate that the following types of fittings are designed to minimise the consumption of fresh water:

1. wash facilities;
2. toilets.

W02: Water efficient urinals

Design

Fit out

Operation

Credit Aim

To minimise the consumption of fresh water for urinal flushing.

Credit Criteria

Up to two credits can be awarded where information is provided to demonstrate that urinals minimise the consumption of water, or they are waterless.

W03: Sanitary supply shut off

Design

Fit out

Operation

Credit Aim

To reduce risk of minor leaks in toilet accommodation.

Credit Criteria

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

W04: Maintenance of sanitary fittings

Design

Fit out

Operation

Credit Aim

To recognise the provision of a good level of maintenance for all water fittings, thereby ensuring ongoing efficient performance.

Credit Criteria

One credit can be awarded where information is provided to demonstrate that there are established and operational maintenance procedures covering all sanitary fittings. This includes where present; taps, WC's, urinals, showers, the individual controls of such fittings and other sanitary based washroom controls, e.g. leak detection or proximity shut off.

W05: Water meter

Design

Fit out

Operation

Credit Aim

To ensure systems are capable of being monitored and managed, leading to subsequent reductions in water consumption.

Credit Criteria

One credit can be awarded where evidence is provided to demonstrate that a water meter with a pulsed output will be installed on the mains supply to each building or retail unit.

W06: Major leak detection

Design

Fit out

Operation

Credit Aim

To reduce the risk of major water leaks.

Credit Criteria

One credit can be awarded where information is provided to demonstrate that a leak detection system is specified or installed. The system must be capable of identifying major leaks both inside and outside the building, and should cover all mains water supplies to the building.

W07: Reclaimed water: rainwater

Design

Fit out

Operation

Credit Aim

To reduce high-quality water consumption for WC flushing, irrigation, laundries or vehicle washes.

Credit Criteria

Up to three credits are available where evidence is provided to demonstrate the specification of systems that collect, store, and where necessary, treat rainwater to meet all or part of the water demand for WC and urinal flushing and where appropriate landscape and plant irrigation, laundry use and vehicle washing.

W08: Reclaimed water: Greywater

Design

Fit out

Operation

Credit Aim

To reduce high-quality water consumption for WC flushing and irrigation.

Credit Criteria

One credit can be awarded where evidence is provided to demonstrate the specification of systems that collect, store, and treat greywater to meet all or part of the water demand for WC and urinal flushing and where appropriate landscape and plant irrigation.

W09: Irrigation methods

Design

Fit out

Operation

Credit Aim

To reduce the consumption of fresh water used for plant and landscape irrigation.

Credit Criteria

One credit can be awarded where information is provided to demonstrate that low-water irrigation systems are specified/installed, or where planting and landscaping is irrigated via rainwater or reclaimed water.

W10: Water re-circulation: Vehicle wash

Design

Fit out

Operation

Credit Aim

To minimise the volume of fresh water used by vehicle washing facilities.

Credit Criteria

Up to two credits can be awarded where information is provided to demonstrate that vehicle washing facilities include a water reclaim system.

W11: Water consumption monitoring

Design

Fit out

Operation

Credit Aim

To ensure that monitoring and targeting of water consumption is carried out.

Credit Criteria

Up to two credits are available and can be awarded where information is provided to demonstrate that water consumption monitoring is carried out, targets for reductions in place and evidence of an historical downward trend in water consumption for the development.

Materials & Waste section

MW01: Re-use of building facade Design Fit out Operation

Credit Aim

To recognise and encourage the reuse of any existing facades from buildings that had previously occupied the site.

Credit Criteria

One credit can be awarded where evidence is provided to demonstrate that the new development re-uses the façades of an existing building.

MW02: Re-use of building structure Design Fit out Operation

Credit Aim

To recognise and encourage the reuse of existing structures that previously occupied the site.

Credit Criteria

One credit can be awarded where evidence is provided to demonstrate that a design reuses at least 80% of an existing primary structure by gross building volume.

MW03: Recycled aggregates Design Fit out Operation

Credit Aim

To recognise and encourage the use of recycled aggregates in construction thereby reducing the demand for virgin material.

Credit Criteria

One credit can be awarded where evidence is provided to demonstrate that significant use of crushed aggregate, crushed masonry or alternative aggregates (manufactured from recycled materials/waste streams) are specified for high grade aggregate uses.

MW04: Embodied impacts: building Design Fit out Operation

Credit Aim

To recognise and encourage the use of materials that have less impact on the environment, taking account of the full life cycle of materials used in the major specifications.

Credit Criteria

Up to four credits are available where evidence is provided to demonstrate that the major building or fit out elements specified have an 'A rating', as defined in the *Green Guide to Specification*.

MW5: Embodied impacts: External surfaces Design Fit out Operation

Credit Aim

To recognise and encourage the use of materials in construction that have less impact on the environment, taking account of the full life cycle of materials used to provide external hard surfaces.

Credit Criteria

One credit can be awarded where information is provided to demonstrate that materials specified for the external hard landscaping of the retail development, have a low environmental impact.

MW06: Embodied impacts: Site Boundary

Design

Fit out

Operation

Credit Aim

To recognise and encourage the use of materials in construction that have less impact on the environment, taking account of the full life cycle of materials used for the site boundary.

Credit Criteria

One credit can be awarded where information is provided to demonstrate that materials specified for the boundary protection of the retail development have a low environmental impact.

MW07: Low impact paints and varnishes

Design

Fit out

Operation

Credit Aim

To recognise and encourage the use of paints and varnishes that have a lower embodied environmental impact.

Credit Criteria

One credit can be awarded where evidence is provided to demonstrate that paints and varnishes used for internal decoration and durability have a low environmental impact.

MW08: Sustainably sourced timber

Design

Fit out

Operation

Credit Aim

To recognise and encourage the specification of responsibly sourced timber for primary building elements.

Credit Criteria

Up to two credits are available where timber and wood products used in structural and non-structural elements are responsibly sourced, OR utilise reused or recycled timber.

MW09: Vehicle impact protection

Design

Fit out

Operation

Credit Aim

To ensure that exposed parts of the development are protected from damage by vehicles, forklift trucks and trolleys.

Credit Criteria

One credit can be awarded where information is provided to demonstrate that areas of the building fabric, that are exposed to vehicular and trolley movements, are protected from impact.

MW10: Waste minimisation

Design

Fit out

Operation

Credit Aim

To recognise and encourage measures adopted to minimise waste produced on site as a result of building operation.

Credit Criteria

Up to three credits are available as follows:

- Ø One credit can be awarded where information is provided to demonstrate that there is a company policy addressing waste and waste minimisation; and a site specific waste strategy has been developed.
- Ø One credit can be awarded where information is provided to demonstrate that there are adequate waste collection/storage facilities and that waste monitoring is carried out on a regular basis. The credit for waste facilities and monitoring cannot be awarded where the credit for waste strategy is not achieved.
- Ø One credit can be awarded where information is provided to demonstrate that a waste audit will be carried out at least once a year. This credit can only be awarded where one of the previous two are achieved.

MW11: Recycling facilities household waste

Design

Fit out

Operation

Credit Aim

To encourage the provision of facilities on site for the collection of customers' recyclable waste, therefore preventing such waste going directly to landfill.

Credit Criteria

One credit can be awarded where information is provided to demonstrate that there is or will be provision for recycling storage facilities on site, for the collection of customers' household wastes.

MW12: Recycling facilities for customers

Design

Fit out

Operation

Credit Aim

To recognise and encourage retailers who have dedicated 'recyclable waste' bins throughout the development for customer use.

Credit Criteria

One credit can be awarded where information is provided to demonstrate that there are separate (but grouped) bins for the collection of customers recyclable materials, in the retail development.

MW13: Recycling facilities for retailers

Design

Fit out

Operation

Credit Aim

To encourage the provision of adequate facilities to cater for the collection and storage of recyclable waste materials generated from the retailers' daily operations.

Credit Criteria

One credit can be awarded where information is provided to demonstrate that there are dedicated facilities for the separation and storage of retail generated recyclable waste materials.

MW14: Waste disposal facilities

Design

Fit out

Operation

Credit Aim

To recognise the provision of facilities that enables the efficient and hygienic operation of waste sorting and storage facilities.

Credit Criteria

Two credits are available and can be awarded where information is provided to demonstrate the following:

1. One credit where a water outlet is provided for cleaning.
2. One credit where either a compactor or baler is provided for compacting/baling waste generated on site, thus increasing the capacity of the site's waste storage facilities.

MW15: Composting

Design

Fit out

Operation

Credit Aim

To encourage the provision of facilities for composting of organic waste, thereby reducing waste from the development going to directly to landfill.

Credit Criteria

One credit can be awarded where information is provided to demonstrate that:

- Ø there is a composting vessel on site for organic waste arising from on site activities. Plus adequate storage for organic material.
- OR
- Ø where there are space limitations; there is a dedicated space for organic waste to be stored prior to removal and composting at an alternative site.

MW16: Asbestos

Design

Fit out

Operation

Credit Aim

To recognise and encourage the use of alternatives to asbestos, (i.e. materials that do not present the same health risks to occupants).

Credit Criteria

- Ø For new buildings, one credit can be awarded where asbestos is excluded from any new works in the structure, services, lifts, etc.
- Ø For existing buildings, one credit can be awarded where an asbestos survey has been carried out, and all asbestos either removed or contained and identified within an H&S plan.

Land Use & Ecology section

LE01: Re-use of land Design Fit out Operation

Credit Aim

To encourage the reuse of land that has been previously occupied by building developments and discourage the use of previously undeveloped land for building.

Credit Criteria

One credit can be awarded where information is provided to demonstrate that the site has been previously built on or used for industrial purposes within the last 50 years.

LE02: Contaminated land Design Fit out Operation

Credit Aim

To encourage positive action to use contaminated land that otherwise would not have been developed.

Credit Criteria

One credit can be awarded where information is provided to demonstrate that the land used for the new development has, prior to development, been defined as contaminated. And where adequate remedial steps have been taken to decontaminate the site prior to construction.

LE03: Land of low ecological value Design Fit out Operation

Credit Aim

To encourage, wherever possible, development on land that already has a limited value to wildlife and discourage the development of ecologically valuable sites.

Credit Criteria

One credit can be awarded where information is provided to demonstrate that the development site is defined as land of low ecological value.

LE04: Change in ecological value Design Fit out Operation

Credit Aim

To encourage, wherever possible, development on land that already has a low ecological value and thereby discourage the development of more ecologically valuable sites.

Credit Criteria

Up to five credits are available where the ecological value of a development site is either:

∅ not substantially harmed;

OR

∅ enhanced ecologically, beyond its previously existing state.

The number of credits achieved are calculated using the "Change in Ecological Value" calculator in the assessor's spreadsheet tool.

LE05: Ecological enhancement Design Fit out Operation

Credit Aim

To encourage the protection, enhancement and/or introduction of ecological features on site.

Credit Criteria

One credit can be awarded where information is provided to demonstrate that the design team (or client) has sought, and acted upon, advice on enhancing the site's ecological value from an adequately qualified ecologist.

LE06: Protection of ecological features

Design

Fit out

Operation

Credit Aim

To protect existing ecological features from substantial damage during the clearing of the site and completion of construction works.

Credit Criteria

One credit can be awarded where evidence is provided to demonstrate that the contract specification ensures that all trees over 100 mm trunk diameter, hedges, ponds, streams and other ecologically valuable features are maintained and adequately protected from damage during clearing and construction works.

LE07: Long term impact on biodiversity

Design

Fit out

Operation

Credit Aim

To minimise the long term impact of the development on the site's and surrounding area's biodiversity.

Credit Criteria

One credit can be awarded where information is provided to demonstrate that steps have been taken to prevent adverse impacts on biodiversity.

Pollution section

P01: Building services refrigerant use

Design
Fit out
Operation

Credit Aim

To reduce the potential for long-term damage to the Earth's stratospheric ozone layer through the accidental release of ozone depleting substances to the atmosphere.

Credit Criteria

Two credits are available and can be awarded where information is provided to demonstrate the following:

- Ø One credit where all refrigerant types used in building services have an ozone depletion potential (ODP) of ZERO; AND
- Ø One credit where all refrigerant types used in building services have a global warming potential (GWP) of below 5.

Where there are no refrigerants specified for use in building services then the credits can be awarded.

P02: Cold food storage refrigerant use

Design
Fit out
Operation

Credit Aim

To reduce the potential for long-term damage to the Earth's stratospheric ozone layer through the accidental release of ozone depleting substances to the atmosphere.

Credit Criteria

Two credits are available and can be awarded where information is provided to demonstrate the following:

1. One credit where all refrigerant types used in cold food storage systems have an ozone depletion potential (ODP) of ZERO;

AND

2. One credit where all refrigerant types used in cold food storage systems have a global warming potential (GWP) of below 5.

This credit excludes domestic-scale refrigeration equipment and small plug-in sandwich chillers.

P03: Refrigerant leak detection

Design
Fit out
Operation

Credit Aim

To reduce the emissions of refrigerants to the atmosphere arising from leakages in cooling plant.

Credit Criteria

One credit can be awarded where information is provided to demonstrate that:

EITHER

- Ø systems using refrigerants are contained in a moderately air tight enclosure (or a mechanically ventilated plant room); AND
- Ø a refrigerant leak detection system is specified / installed covering high-risk parts of the plant (evaporator or condenser coils can be omitted from this); OR
- Ø where an automatic permanent refrigerant leak detection system, NOT based on the principle of detecting or measuring the concentration of refrigerant in air, is specified; OR
- Ø where no refrigerants are specified for the development.

P04: Refrigerant recovery

Design

Fit out

Operation

Credit Aim

To reduce and prevent unnecessary loss of refrigerants in the event of a leak.

Credit Criteria

One credit can be awarded where information is provided to demonstrate that:

EITHER

- Ø the provision of automatic refrigerant pump down is made to a heat exchanger (or dedicated storage tanks) with isolation valves; OR
- Ø where there are no refrigerants specified for the development.

P05: Refrigerant leak detection procedures

Design

Fit out

Operation

Credit Aim

To ensure that effective procedures are in place to cover the management and maintenance of refrigeration plant to minimise refrigerant leaks.

Credit Criteria

One credit can be awarded where information is provided to demonstrate that planned maintenance schedules for refrigeration equipment are in place. This credit can be awarded where there are no refrigerants used in the development.

P06: NO_x emission from heating source

Design

Fit out

Operation

Credit Aim

To encourage the use of space heating that minimises NO_x emissions, and so reduces pollution in the local vicinity and/or from fossil-fuelled power stations.

Credit Criteria

A maximum of three credits are available. The number of credits achieved must be determined in compliance with the following:

Where burners in boiler plant (except standby) have maximum dry NO_x emission levels as follows:

- Ø One credit where emissions are 200 100 mg/kWh delivered heating energy or less.
- Ø Two credits where emissions are 99 70 mg/kWh delivered heating energy or less.
- Ø Three credits where emissions are 69 40 mg/kWh delivered heating energy or less.

P07: Minimising pollution to water course

Design

Fit out

Operation

Credit Aim

To reduce the potential for pollution to natural watercourses from surface water run-off from buildings and hard surfaces.

Credit Criteria

One credit can be awarded where information is provided to demonstrate that on site treatment such as oil separators/interceptors or filtration have been specified for areas at risk from pollution, i.e. vehicle manoeuvring areas, car parks, waste disposal facilities, delivery facilities or plant areas.

P08: Minimising site water run off

Design

Fit out

Operation

Credit Aim

To delay water run off from hard surfaces to public sewers and watercourses thus reducing the risk of localised flooding, pollution and other environmental damage.

Credit Criteria

One credit can be awarded where information is provided to demonstrate that rainwater holding facilities and/or sustainable drainage techniques is specified. These must provide attenuation of water run-off by 50% at peak times to either natural watercourses and/or municipal drainage systems.

P09: Minimising artificial light pollution

Design

Fit out

Operation

Credit Aim

To ensure that night-time lighting is concentrated in the appropriate areas and that upward lighting is minimised, reducing unnecessary energy consumption, light pollution and nuisance to neighbouring properties.

Credit Criteria

One credit where the external lighting design is in compliance with the guidance in the Institution of Lighting Engineers (ILE) Guidance notes for the reduction of light pollution, 2000.

P10: Insulant use for services & structure

Design

Fit out

Operation

Credit Aim

To reduce the potential for long term damage to the earth's stratospheric ozone layer and the potential for increased global warming from substances used in the manufacture or composition of insulating materials.

Credit Criteria

One credit can be awarded where evidence is provided to demonstrate that the specification of thermal insulating materials avoids in either manufacture or composition:

1. the use of ozone depleting substances; and
2. substances with a global warming potential (GWP) of 25 or more.

P11: Insulant use for cold food storage

Design

Fit out

Operation

Credit Aim

To reduce the potential for long term damage to the earth's stratospheric ozone layer and the potential for increased global warming from substances used in the manufacture or composition of insulating materials.

Credit Criteria

One credit can be awarded where evidence is provided to demonstrate that the specification of thermal insulating materials avoids in either manufacture or composition:

1. the use of ozone depleting substances; and
2. substances with a global warming potential (GWP) of 25 or more.

P12: Noise attenuation

Design

Fit out

Operation

Credit Aim

To reduce the likelihood of complaints of noise from the occupants of nearby noise-sensitive buildings, such as homes, hospitals and schools.

Credit Criteria

One credit can be awarded where evidence is provided to demonstrate that sources of noise from the development do not give rise to the likelihood of complaints from existing noise sensitive premises that are within the locality of the site.