

Ene 10 Flexible demand side response

(all buildings)

Number of credits available	Minimum standards
1 exemplary credit	No

Aim

To recognise and encourage flexible demand side response capability for electricity. Reducing carbon emissions by enabling electricity demand profiles to better match the availability of renewable electricity generation sources.

Assessment criteria

The following is required to demonstrate compliance:

Exemplary level criteria

The following outlines the exemplary level criteria to achieve one exemplary credit for this BREEAM issue:

One exemplary credit

- 1 The building is fitted with at least one smart appliance or smart control system that is able to modify the operation of the appliance or system in response to external signals from electricity suppliers.

OR

- 2 The building incorporates electricity or hot water storage facilities that are able to modify their charging or discharging cycles in response to external signals from electricity suppliers. This storage can be at the building level or across multiple buildings.

Checklists and tables

None.

Compliance notes

Ref	Terms	Description
		Shell and core (non-residential and residential institution only)

Ref	Terms	Description
CN1	Applicable assessment criteria	Both options: All criteria relevant to the building type and function apply. Refer to Appendix D – Shell and core project assessments on page 416 of this Scheme Document for further description of the above options.
Residential - Partially fitted and fully fitted		
CN2	Applicable assessment criteria - Single and multiple dwellings	Both options: All criteria relevant to the building type and function apply. Refer to Appendix E – Applicability of BREEAM New Construction to single and multiple dwellings, partially and fully fitted on page 419 for a more detailed description of residential assessment options.
General		
CN3	Single building assessments on larger developments or campuses (and extensions to existing buildings)	Where the building being assessed forms part of a larger development (or is an extension to an existing building) containing common areas and other buildings, the scope of the flexible demand side response criteria applies only to external new and existing elements within the construction zone of the assessed building.

Methodology

None.

Evidence

Criteria	Interim design stage	Final post-construction stage
All	The relevant section or clauses of the building specification or contract. Design drawings.	BREEAM Assessor's site inspection report and photographic evidence or as-built drawings. Manufacturers' product details.

Additional information

Relevant definitions

Smart appliances

For the purpose of this issue smart appliances are defined as appliances that automatically regulate their energy consumption based on the signals they receive from energy suppliers, also known as demand side response. An example of how they can do this is by reducing their energy demand at peak times.

Examples of smart appliances include, but are not limited to:

- Smart cold storage systems (for example, refrigerators or freezers)
- Smart washing machines
- Smart dish washers

Energy storage

For the purpose of this issue energy storage is defined as systems that store energy during times where there is little demand for energy or an over production of energy, which can then be used later where there is high demand for energy. To qualify for this issue, these must be equipped to receive signals from energy suppliers to automatically start or stop storing energy.

Examples of energy storage include, but are not limited to:

- Electric vehicle charging points
- Large scale battery storage
- Liquified air storage systems

Construction zone

For the purpose of this issue the construction zone is defined as the site which is being developed for the BREEAM-assessed building and its external site areas, i.e. the scope of the new works.

Other information

None.