

9 Sustainability assessment tools

KEY MESSAGES

Arrangements following the Government's Housing Standards Review and withdrawal of the Code for Sustainable Homes The creation of 5 or more dwellings from an existing building will need to be designed in line with BREEAM Domestic Refurbishment

500sq m or more of non-residential floorspace will need to be designed in line with BREEAM

- 9.1 A way to ensure buildings are sustainable is to use a standardised environmental assessment tool to measure the overall performance of buildings against set criteria. Buildings that achieve high ratings use less energy, consume less water and have lower running costs than those designed to building regulations alone.
- 9.2 Paragraph 13.8 of Core Strategy policy CS13 - *Tackling climate change through promoting higher environmental standards* notes that BREEAM is a helpful assessment tool for general sustainability.
- 9.3 This section explains:
- when you need to carry out a BREEAM assessment
 - arrangements following the Housing Standards Review The standards which need to be met for each type of development. These are more detailed targets for Energy, Water and Materials than those in the Development Policy DP22 - *Promoting sustainable design and construction*.
 - The information required at each stage of the assessment

When do you need to carry out a sustainability assessment?

Development type	What does this include?	Threshold for assessment	Appropriate assessment tool
Residential - Existing	Refurbishments, conversions and changes of use	5 dwellings or more 500sq m of floorspace or more	BREEAM Domestic Refurbishment
Non-residential	Includes offices, retail, industrial, education health	500sq m of floorspace or more	BREEAM
Mixed use schemes	If your scheme includes both residential and non-residential uses that total 500sq m of floorspace or more we will require a BREEAM assessment for the non-residential parts.		

- 9.4 This table sets out when the Council will require a sustainability assessment for all the types of development and which assessment tool to use.
- 9.5 The assessment tools are updated periodically and therefore the most recent version of the assessment tool is to be used.

Code for Sustainable Homes – housing standards review transitional arrangements and approach

- 9.6 The Code for Sustainable Homes has now been withdrawn and the Ministerial Statement dated 25 March 2015 sets out the Government's national policy on the setting of technical standards for new dwellings.
- 9.7 The Council will continue to require new residential development to submit a sustainability statement demonstrating how the development mitigates against the causes of climate change and adapts to climate change, in line with existing policies contained in Camden's Core Strategy CS13 Tackling climate change through promoting higher environmental standards and Development Policies document DP22 Sustainable design and construction.
- 9.8 Proposals should demonstrate how sustainable design and construction principles, including the relevant measures noted in the table on page 104 of the Development Policies Document have been incorporated into the design and proposed implementation. Acceptable new residential schemes will be required to ensure that the measures stated in the Sustainability Statement are secured and implemented.
- 9.9 New residential development will be required to demonstrate that the development is capable of achieving a maximum internal water use of 105 litres per person/day, with an additional 5 litres person/day for external water use.

- 9.10 The Council is still able to apply policies which require compliance with energy performance standards until the Planning and Energy Act 2008 has been amended. The Code Level 4 equivalent in carbon dioxide emissions reduction below part L Building Regulations 2013 is 20%. New residential dwellings will be required to demonstrate how this has been met by following the energy hierarchy in an energy statement. Policy CS13 also requires that all developments (existing and new build) achieve a 20% reduction in on-site carbon dioxide emissions through renewable technologies, unless demonstrated that such provision is not feasible.

Zero Carbon

Zero carbon refers to buildings that are so energy efficient they do not release any carbon emissions. The Government is currently aiming to ensure that all new homes are zero carbon by 2016. For more information visit www.zerocarbonhub.org

You are strongly encouraged to meet the following standards in accordance with Development Policy DP22 - *Promoting sustainable design and construction*:

BREEAM

- 9.11 BREEAM stands for Building Research Establishment Environmental Assessment Method. It is a tool to measure the sustainability of non-domestic buildings. There are specific assessments for various building types such as offices, retail, industrial, education and multi-residential. For developments that are not covered by one of the specific BREEAM assessment tools, this often applies to mixed use schemes, a tailored assessment can be created using the BREEAM Bespoke method
- 9.12 BREEAM assessments are generally made up of nine categories covering:
- Energy
 - Health and Well-being
 - Land use and Ecology
 - Management
 - Materials
 - Pollution
 - Transport
 - Waste
 - Water
- 9.13 Each of the categories above contain criteria which need to be met in order to gain credits. The higher the rating, the greater the number of specific credits needed. Some of the criteria have weighted credits which are used to reflect how important certain elements are, such as energy efficiency. All the credits are added together to produce the overall score. The development is then rated on a scale from PASS, to GOOD, VERY GOOD, EXCELLENT and ending with OUTSTANDING

You are strongly encouraged to meet the following standards in accordance with Development Policy DP22 - *Promoting sustainable design and construction*:

Time period	Minimum rating	Minimum standard for categories (% of un-weighted credits)
2010-2015	'very good'	Energy 60%
2016+	'excellent'	Water 60% Materials 40%

BREEAM Domestic Refurbishment

- 9.14 BREEAM Domestic Refurbishment is used to assess the sustainability of existing of housing where refurbishment, conversion or a change of use is proposed. It uses the same principles as BREEAM with categories, criteria and credits.

You are strongly encouraged to meet the following standards in accordance with Development Policy DP22 - *Promoting sustainable design and construction*:

Time period	Minimum rating	Minimum standard for categories (% of un-weighted credits)
2010-2012	'very good'	Energy 60%
2013+	'excellent'	Water 60% Materials 40%

What are the relevant stages?

Pre-assessment

- 9.15 The pre-assessment stage involves an initial review of the development to determine how sustainable it will be. It provides you with an early indication of the overall score your development will achieve by using the plans and drawings to estimate the number of credits that are likely to be achieved for each category. The results of the pre-assessment identify changes that need to be made to your scheme before construction begins to ensure it is as sustainable as possible. The pre-assessment stage also helps to identify if there are any experts, such as ecologists, that you need to invite to become involved in the development.
- 9.16 The results of your pre-assessment will form the basis of the condition or Section 106 planning obligation for the final development, so accuracy is crucial. In some circumstances it may be appropriate to over estimate the credits needed to achieve the final rating as some credits can be lost during the final design stages.

AT THIS STAGE THE COUNCIL WILL EXPECT:

- The submission of a pre-assessment report at the planning application stage. The report should summarise the design strategy for achieving your chosen level of BREEAM and include details of the credits proposed to be achieved.

- The pre-assessment report is to be carried out by a licensed assessor. The name of the assessor and their licence number should be clearly stated on the report.

Design stage assessment

- 9.17 The aim of the design stage assessment is to review the detailed design specifications of your development. More detailed site specific information is generally available at this stage, in comparison to the pre-assessment stage, which allows the assessor to make a more precise estimate of the BREEAM rating. Some elements of the assessment will need to be refined once construction has begun, because some materials and appliances are not specified until after or during construction. However, the assessor will ensure that any design and/or specification changes are reflected in the final Design Stage Assessment.
- 9.18 Once the assessor has completed the assessment it is submitted to the BRE for review and certification. The BRE will then issue a BREEAM Design Stage certificate indicating what level of sustainability the development has achieved.

AT THIS STAGE THE COUNCIL WILL EXPECT:

- Submission of an early design stage assessment to the Council prior to beginning construction of the development. This is needed to discharge the relevant condition or Section 106 planning obligation
- Ensure the assessor submits the final Design Stage Assessment to BRE for certification
- Submission of a copy of the Design Stage certificate to the Council

Post-construction assessment

- 9.19 The post-construction assessment reviews the design stage assessment and compares it with the completed development to ensure that all the specified credits have been achieved. It is carried out once your development has been completed and is ready for occupation. Once the assessment has been completed, it needs to be submitted to BRE for certification.

AT THIS STAGE THE COUNCIL WILL EXPECT:

- A post-construction assessment to be carried out as soon as possible after completion
- Submission of a copy of the post-construction certificate to the Council
- Submission of a copy of the Design Stage certificate to the Council, if not already submitted

- 9.20 There is often a delay between the completion of a development and the receipt of a post-construction certificate. Therefore the Council will allow occupation prior to the receipt of the final certificate. This approach will

be monitored to ensure that the design stage certificate is consistent with the final post-construction report and certificate.

Further information

BRE (Building Research Establishment)	Provides detailed information on sustainability assessments, how to find an assessor, example assessments and how to submit your assessment: www.bre.co.uk
BREEAM	Provides detailed information on all the different types of BREEAM assessments that are available, how to use them, how to find an assessor, what all the different stages are and other useful guidance: www.breeam.org
Zero Carbon Hub	This organisation is working with the Government to implement the target towards ensuring all new homes are zero carbon. Their website provides information on what zero carbon is, how it can be achieved and case studies: www.zerocarbonhub.org