

BREEAM – THE ENVIRONMENTAL ASSESSMENT METHOD FOR BUILDINGS AROUND THE WORLD



What is BREEAM?

BREEAM (BRE Environmental Assessment Method) is the leading and most widely used environmental assessment method for buildings. It sets the standard for best practice in sustainable design and has become the de facto measure used to describe a building's environmental performance.

BREEAM provides clients, developers, designers and others with

- market recognition for low environmental impact buildings
- assurance that best environmental practice is incorporated into a building
- inspiration to find innovative solutions that minimise the environmental impact
- a benchmark that is higher than regulation
- a tool to help reduce running costs, improve working and living environments
- a standard that demonstrates progress towards corporate and organisational environmental objectives

BREEAM addresses wide-ranging environmental and sustainability issues and enables developers and designers to prove the environmental credentials of their buildings to planners and clients. It:

- uses a straightforward scoring system that is transparent, easy to understand and supported by evidence-based research
- has a positive influence on the design, construction and management of buildings
- sets and maintains a robust technical standard with rigorous quality assurance and certification

Front cover:

Cabot Circus, Bristol, UK. An award-winning mixed use urban regeneration scheme which achieved BREEAM Excellent. The development by the Bristol Alliance (a partnership between Land Securities and Hammerson) has nine different uses: retail, catering, leisure, offices, market housing, affordable housing, student housing, hotel accommodation and car parking.

Image produced by Miller Hare and courtesy Benoy Architects / Chapman Taylor / Hammerson.

How is BREEAM used?

Clients, planners, development agencies, funders and developers use BREEAM to specify the sustainability performance of their buildings in a way that is quick, comprehensive, highly visible in the marketplace and provides a level playing field.

Property agents use it to promote the environmental credentials and benefits of a building to potential purchasers and tenants.

Design teams use it as a tool to improve the performance of their buildings and their own experience and knowledge of environmental aspects of sustainability.

Managers use it to reduce running costs, measure and improve the performance of buildings, empower staff, develop action plans and monitor and report performance at both single building and portfolio level.

BREEAM around the world

BREEAM is the leading environmental assessment method for buildings, with over 110,000 buildings certified and over half a million registered for certification.

BREEAM is used all around the world and can be used to assess a single development or a portfolio of developments both within and across national boundaries. BREEAM has a particular benefit in that it can be readily adapted to local regulation and conditions.

Specific versions of BREEAM are available for the UK, the Gulf and Europe. BREEAM schemes can also be tailored for use for any specific country or region, and will address the following:

- categories of environmental issues
- environmental weightings
- details of the construction methods, products and materials
- references to local codes, standards and good practice guides



BREEAM Gulf has region-specific credits for water and energy

C&A store, Mainz, Germany. This retail unit underwent a major redevelopment by developer Redevco who were the first to achieve a BREEAM rating for a refurbishment project in mainland Europe.



The scope of BREEAM

BREEAM covers a number of building types:

- offices
- retail
- education
- prisons
- courts
- healthcare
- industrial
- certain types of housing under Ecohomes (see below)

We can also tailor schemes for any building not included under one of the standard building types.

For the housing sector, there are a number of variants:

- **the UK Government's Code for Sustainable Homes (CSH)** replaced EcoHomes for the assessment of new housing in England in April 2007
- **BREEAM EcoHomes** for new homes outside England
- **BREEAM Multi-Residential** covering buildings housing many individuals and offering shared facilities

How BREEAM works

BREEAM rewards performance above regulation which delivers environmental, higher comfort or health benefits. BREEAM awards points or 'credits' and groups the environmental impacts into the sections below:

- **Energy:** operational energy and carbon dioxide (CO₂)
- **Management:** management policy, commissioning, site management and procurement
- **Health and Wellbeing:** indoor and external issues (noise, light, air quality etc)
- **Transport:** transport-related CO₂ and location-related factors
- **Water:** consumption and efficiency inside and out
- **Materials:** embodied impacts of building materials, including lifecycle impacts like embodied carbon dioxide
- **Waste:** construction resource efficiency and operational waste management and minimisation
- **Land Use:** type of site and building footprint
- **Pollution:** external air and water pollution
- **Ecology:** ecological value, conservation and enhancement of the site

The total number of points or credits gained in each section is multiplied by an environmental weighting factor which takes into account the relative importance of each section. Section scores are then added together to produce a single overall score.

Once the overall score for the building is known this is translated into a rating on a scale of:

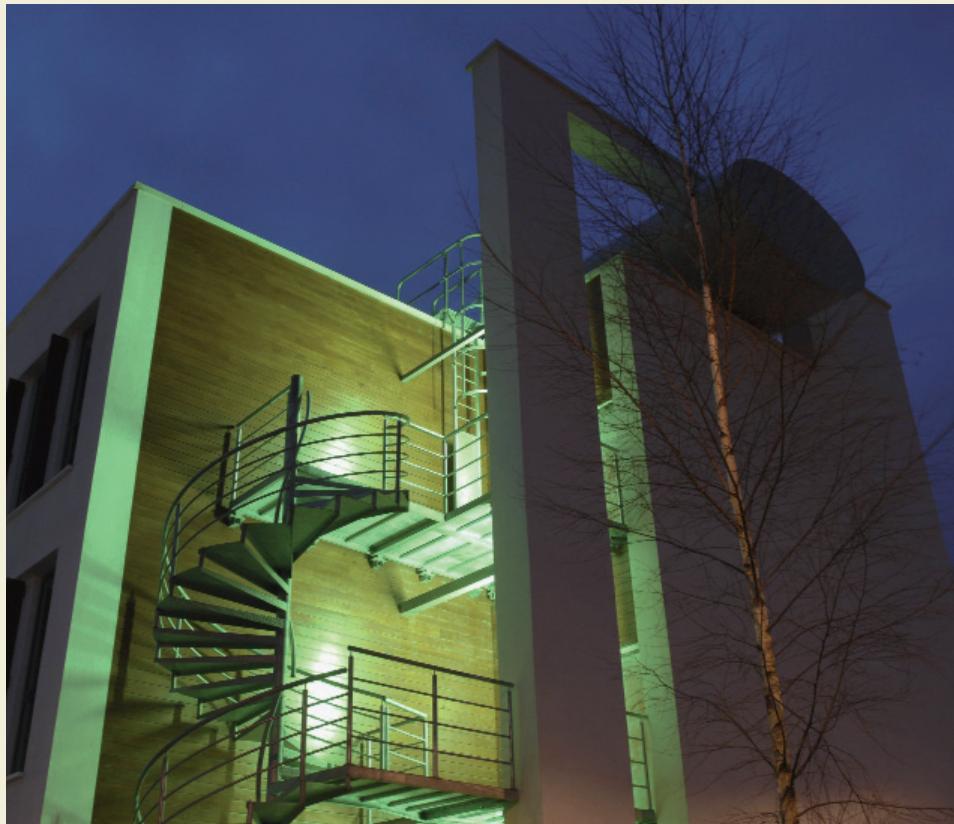
- Pass - Good - Very Good

- Excellent - Outstanding

A star rating from 1 to 5 stars is also provided:



Allerton Bywater Network Centre, Leeds, UK. The development scored Excellent under BREEAM Industrial and includes both office space and a factory floor.



Innovate Property's Green Office in Leeds, UK achieved a BREEAM Excellent rating. The development is naturally ventilated with high levels of natural daylighting throughout.



Residential development at Upton, Northampton, UK which scored Excellent under BREEAM Ecohomes.

BREEAM In-Use

A significant opportunity to address the environmental impact lies in better management and improvement of the existing building stock. BREEAM In-Use is a scheme to help building managers reduce the running costs and improve the environmental performance of existing buildings. It consists of a standard, an easy-to-use assessment methodology and a 3rd party certification process that provides a clear and credible route map to improving sustainability. BREEAM In-Use can assist users to:

- reduce operational costs
- enhance the value and marketability of property assets
- give a transparent platform for negotiating building improvements with landlords and owners
- provide a route to compliance with environmental legislation and standards,
- give greater engagement with staff in implementing sustainable business practices
- provide opportunities to improve staff satisfaction with the working environment with the potential for significant improvements in productivity

Getting a BREEAM Assessment

Assessments are carried out by independent Assessors who are trained and licensed by BRE Global. The Assessor produces a report outlining the development's performance in each of the sections and its overall score. Upon completion of the assessment, the client is presented with a certificate confirming the BREEAM rating. The earlier an Assessor is involved in the design process, the easier it is to gain a high rating in the most cost-effective way. To contact a licensed BREEAM Assessor please visit www.breeam.org/assessors.



Morgan Lovell specialises in the design and build of sustainable offices and achieved a BREEAM Excellent rating for the fit-out of its own offices in London.

BREEAM Communities

To improve the sustainability of our built environment, there is now a strong focus on communities, especially on communities which provide integrated working, living and recreational facilities. BREEAM Communities is a certification scheme to independently certify development proposals at the planning stage.



BREEAM Excellent rated student accommodation at Lancaster University, UK. The development provides high levels of air tightness and insulation amongst other environmental features.

Assessor training

BRE Global holds training courses at our headquarters in Watford and at venues outside the UK for BREEAM International training. Courses provide a thorough understanding of the assessment process and also provide a broader understanding of sustainability issues.

For the latest information and for dates of forthcoming training go to www.breeam.org/events

BREEAM AP

The BREEAM Accredited Professional qualification recognises specialist skills in sustainability and environmental design combined with a high level of competence in the BREEAM assessment process. It is aimed at architects, engineers and others with design skills and responsibilities.

Governance and quality standards

In order to meet the needs of our stakeholders, BRE Global has formed a Sustainability Board. The Board oversees the development of BREEAM as well as the production of all our sustainability guides, publications, standards and certification schemes. The Board represents a wide cross-section of stakeholders from the construction industry including designers, developers, end users, financiers, insurers and regulators.

BRE Global's BREEAM schemes and licensed assessors are accredited by UKAS. They are also managed under ISO9001 quality management systems.



British Land's 201 Bishopsgate and The Broadgate Tower scored BREEAM Excellent. The development was designed by Skidmore Owings & Merrill LLP and built by Bovis Lend Lease.



About BRE Global

BRE Global Limited (incorporating LPCB & BREEAM) is an independent third party approvals body offering certification of fire, security and sustainability products and services to an international market. BRE Global's product testing and approvals are carried out by internationally recognised experts in our renowned testing laboratories. BRE Global Limited is custodian of a number of world leading brands including:

- LPCB for the approval of fire and security products and services, listed in the Red Books.
- BREEAM the leading environmental assessment method for buildings, sets the standard for best practice in sustainable design and has become the de-facto measure of a building's environmental performance.

BRE Global's mission is to 'Protect People, Property and the Planet' and is a trading subsidiary of the BRE Trust, the registered research and education charity which owns the BRE Group.

Further Information

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