



# Is it really green?

#### Many 'green' claims for building materials are made, but how can you be sure of their accuracy?

The first edition of The Green Guide series in 1996 aimed to provide a simple, generic 'green guide' to the environmental impacts of building materials which was easy-to-use and soundly based on numerical data.

But many manufacturers wanted to demonstrate how their 'specific' product compared to the industry norm and also to find ways to improve the environmental performance of their product.

A reliable way of assessing and certifying materials is needed, both by the specifier fulfilling a sustainability brief, and the manufacturer wanting to demonstrate a product's environmental credentials.

To meet this need BRE Global developed the Environmental Profiles Certification Scheme, which provides ongoing, independent assessment and certification of environmental performance.

BRE Global has continuously developed its Environmental Profiling Assessment Method establishing a set of common rules and guidelines for applying Life Cycle Assessment (LCA) to UK construction products.

Most recently BRE Global has launched a

comprehensive EPD Scheme in line with the European standard EN 15804. As an EPD may need to be used in many different countries, we have allowed for the development of scenarios that meet the manufacturer's needs as well as their customers'. To join the scheme visit www.GreenBookLive.com

# What is 'The Green Guide to Specification'?

The Green Guide to Specification assesses materials and components in terms of their environmental impacts, within comparable specifications, across their entire life cycles.

The Guide presents this information by a rating system, A+ to E. These environmental ratings are based on life cycle assessment (LCA), using BRE Global's Environmental Profiles Methodology. These are generic ratings that illustrate a range of typical materials.

This data is mainly provided by the trade association working with its members using data on their individual products to build up generic data about a 'typical' product, which can then be used by everyone.

The Guide examines the relative environmental impacts of the construction materials commonly used in six generic building types – commercial (e.g. offices), educational, healthcare, retail, domestic and industrial – covering more than 2000 specifications.

Materials and components are arranged on a building element basis so that you can compare and select from comparable systems or materials as you compile your specification. The elements include, external walls, internal walls and partitions, roofs, ground floors, upper floors, floor finishes, windows, insulation and landscaping.

This extensive catalogue is continually being updated with specifications covering most common building materials. Full details and listings are available at **www.thegreenguide.org.uk** 



# BRE Construction Products Environmental Certification Schemes

### Why get certification?

Manufacturers benefit from certification by being able to positively distinguish their products from the competition in a way that purchasers will recognise and accept. Certification also provides performance benchmarks, a greater understanding of supply chain impacts, and the opportunity to identify and correct inefficiencies and environmental impact hotspots.

#### What are Environmental Profiles?

BRE Environmental Profiles measure the impacts of a construction product or building system throughout its life – not only during its manufacture, but also its use in a building over a typical building lifetime. This includes maintenance and replacement, and also the demolition of the product, taking waste produced and provision for recycling and reuse into account.

Environmental profiles are generated using BRE's Environmental profiles methodology, which is in line with the requirements of ISO 21930 and the relevant ISO 14000 series.

## What are European Environmental Product Declarations?

Similar to Environmental Profiles, BRE European Environmental Product Declarations (EN 15804 EPD) measure the impacts of a construction product or building system throughout its life cycle. It is possible to have a declaration for all the life cycle stages covering manufacture, installation, use in a building over a typical building lifetime, and end of life (cradle to grave EPD); just the manufacture (cradle to gate EPD); or the manufacture and any other stages of the life cycle (cradle to gate with options EPD).

European EPD are generated using product category rules to the European standard, EN 15804, and the relevant ISO standards including ISO 14040, 14044, and 14025; and are issued under the membership-based BRE Global EN 15804 Verified EPD Scheme.

#### The process and outputs

#### **Environmental Profiles**

The manufacturer supplies information about the factory and the manufacturing process. This information is reviewed by BRE Global and verified through a site audit. The LCA modelling to derive the environmental profile is carried out by BRE Global using BRE's Environmental Profiles 2008 methodology, and the results are verified internally by a third-party independent of the modelling project.

#### **European EPD**

The manufacturer supplies information about the factory and the manufacturing process to an LCA consultant. The LCA modelling to derive the EPD data is carried out using the EN 15804 Product Category Rules. Following this the EPD data along with the background LCA report is submitted to BRE Global for verification by a BRE-appointed Verifier. The verified EPD is then certified and issued by the BRE Global EN 15804 EPD programme.

## utputs

- A certificate
- A certified environmental profile
- A Green Guide rating (if the product is covered in the Green Guide)
- A report of the assessment's findings
- Listing on GreenBookLive.com
- Used in BREEAM

- A verified EN 15804 EPD
- Listing on GreenBookLive.com
- Listing on ECO Platform (if required)
- Used in BREEAM, HQM
- Available in IMPACT database
- Available in LIST database
- Internationally accepted

Additional information on both the Environmental Profiles scheme and the European Environmental Product Declaration scheme can be found on **GreenBookLive.com** 

For further information, contact the BRE Centre for Sustainable Products helpdesk on 0333 321 8811 or email **envprofiles@bre.co.uk** or **envprofiles15804@bre.co.uk** 





## Are you sourcing responsibly?

Consumers are increasingly concerned about where the products they are buying come from. Key areas of concern range across ethical, environmental and societal issues including:

- Where do the materials come from?
- Have they been extracted and processed in an environmentally sensitive manner?
- Have the highest levels of ethics been demonstrated within the supply chain?
- Has the workforce involved in their extraction and production been treated fairly?
- Have all stakeholders in the supply chain been effectively consulted?
- Are communities local to the extraction and manufacture adequately considered?

Highly visible responsible sourcing schemes are now recognised across society – Fairtrade, Rainforest Alliance, Marine Stewardship Council, FSC, PEFC etc.

The construction industry is a major consumer of natural resources, user of manpower and has a large impact on the sustainability of the UK and the wider world. Recognising the importance of this issue BRE Global has developed BES 6001 Framework Standard for the Responsible Sourcing of Construction Products and an associated independent third-party certification scheme providing an effective means by which the responsible sourcing characteristics of all construction products and materials can be objectively assessed and compared.

#### The BES 6001 Standard

The BES 6001 Standard assesses an organisation's performance in three areas:

- Organisational Management
- Supply chain Management
- Environmental and social issues

Fundamental issues within these areas require a basic 'Compulsory' level of performance which must be passed in order to secure the basic 'Pass' level of certification. Additional points can be scored in most areas of the standard demonstrating a performance above the basic and these can help deliver to the organisation one of the three higher levels of certification – 'Good', 'Very Good' and 'Excellent'.

Once certified all materials are listed in the BRE Global on-line service GreenBookLive.com enabling specifiers to compare and select those products and materials with the best responsible sourcing performance.

BREEAM recognises the increasing importance of the issue of responsible sourcing. A section on responsible sourcing of materials is an integral part of the materials element of the methodology and points secured from BES 6001 secure additional credits in BREEAM.

#### **Benefits of certification**

Securing certification to BES 6001 will benefit all organisations within the supply chain.

#### Manufacturers benefit through:

- Differentiation of their products against competitors
- Securing increased competitiveness and market share
- Demonstrating corporate reputation and leadership
- Benchmarking their manufacturing performance and facilitating continuous improvement through certification

## Specifiers and purchasers benefit through

- Securing additional BREEAM credits for their buildings
- Reducing risk down the supply chain
- Demonstrating corporate reputation and leadership.

Further information on BES 6001, including an application form, fee sheet and a downloadable copy of the full Standard text can be found at www.GreenBookLive.com/responsiblesourcing

For further information, please contact the BRE Centre for Sustainable Products helpdesk on 0333 321 8811 or email responsiblesourcing@bre.co.uk



## Training and awareness

The BRE Centre for Sustainable Products provides a range of training courses and awareness raising seminars regarding the work that is carried out by the team and how this links to other tools such as BREEAM and the newly launched Home Quality Mark. Training can be offered to existing or future clients on Environmental Profiles, Environmental Product Declarations, LCA, the Green Guide, BREEAM and Home Quality Mark, IMPACT, LIST and many other topics.

BRE Centre for Sustainable Products team also frequently speak at conferences and seminars.

To explore the training options available or discuss more bespoke options, please contact 0333 321 8811 or visit www.bre.co.uk/events



### Assessment tools and services

#### GreenBookLive.com

This is the unique reference source for environmental products and services.

GreenBookLive is a free online database designed to help specifiers and end users identify products and services that can help to reduce their impact on the environment.

GreenBookLive brings together listings from a number of organisations and delivers comprehensive information on 'green' products and services, some approved to stringent environmental requirements and others based on information provided by manufacturers and trade bodies.

GreenBookLive provides specifiers and end users with an opportunity to select products and services which demonstrate their commitment to environmental best practice.

Certified Environmental Profiles, European Environmental Product Declarations, and Responsibly Sourced Construction Products are listed within this site.

For more information please go to www.GreenBookLive.com

### GreenBook live

#### **BREEAM**

BREEAM is the world's longest established and most widely used environmental assessment method for buildings. It sets the standards for best practice in sustainable development and demonstrates a level of achievement.

The Green Guide to Specification is the mechanism BREEAM uses to measure the environmental impact of specifications for key building elements. The elements assessed and the value of the particular credits varies within each BREEAM scheme.

Individual manufacturer-specific Certified Environmental Profiles which have been modelled as specifications to obtain Green Guide ratings, can also be used to award credits within BREEAM schemes. European Environmental Product Declarations can also be used to gain credits.

Responsibly Sourced construction products are also recognised by the BREEAM family of certification schemes where credits can be awarded for construction products independently certified through BES 6001.

For more information regarding BREEAM, please visit **www.breeam.org** 

## **BREEAM®**

#### **The Home Quality Mark**

The Home Quality Mark (HQM) is the new national quality mark for homes, giving consumers a better choice for a healthier, smarter and more sustainable new home.

HQM does this by providing impartial information from independent experts on a new home's quality. It will indicate to householders the overall expected running costs, health and wellbeing benefits, and the environmental footprint associated with living in the home. It will also highlight benefits such as access to local amenities and the quality of the local neighbourhood.

For more information on HQM please visit **www.homequalitymark.com** 





#### IMPACT – BRE protocol for whole building assessment sustainability tool

IMPACT is a specification and database that software developers incorporate into their tools to enable consistent life cycle assessment (LCA: BRE Ecopoints/m<sup>2</sup> and kgCO<sub>3</sub>/m<sup>2</sup>) and costing (LCC: £/m²) calculations. The tool is then described as IMPACT compliant. IMPACT compliant tools allow the user to attribute environmental and cost information to items within a building information model (BIM). The results generated enable

- Analysis of a building design to calculate and optimise cost and environmental impacts
- Comparison of whole building results to a suitable benchmark to assess performance

IMPACT was developed by BRE in partnership with a consortium of experts.

For more information regarding IMPACT and IMPACT compliant tools, please contact the BRE Centre for Sustainable Products helpdesk on 0333 321 8811 or visit

www.impactwba.com

## LIST – the low impact

LIST is both a web-based tool and a database of materials information for use in software design tools. LIST and LIST compliant tools allow the user to calculate the embodied impact of moveable items in a building, such as shopfitting display equipment in a retail unit or furniture in an office. The results are provided in both kgCO<sub>2</sub>/unit and BRE Ecopoints/unit.

For more information on LIST and LIST compliant tools, please contact the BRE Centre for Sustainable Products helpdesk on 0333 321 8811 or visit

www.bre.co.uk/sustainableshopfit

**BRE LIST** 











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#### Part of the BRE Trust

The BRE Group of companies is wholly owned by the BRE Trust, a charitable organisation representing interests across the built environment sector. The Trust uses the profits made by its companies to fund new research and education programmes that will help to meet its goal of 'Building a better world together'.

The BRE Trust is a registered charity in England & Wales: No. 1092193, and Scotland: No. SC039320.