The International Code for a Sustainable Built Environment and Future BREEAM Products

Alan Yates

Technical Director, Sustainability
Sustainable Buildings
Changing Perceptions
Setting the standard

Environmental Standards

Number of buildings

Regulatory minimum

Minimal

Aspirational

Market Pull

Excellent

Outstanding

BF BREEAM

Protecting People, Property and the Planet
Summary

• Current Developments

• Integration

• International
BREEAM for Domestic Refurbishment

• Promotes, quantifies and delivers sustainable retrofit to the mass market
• Vital role in delivery of zero carbon housing
• Currently being piloted nationally – 220 dwellings
• Launch May 2011
BREEAM Domestic Refurbishment – Key issues

- Moving towards an 80% reduction in CO₂ and beyond
- Encourage fabric first solutions
- Improve over/under heating and health
- Improve water efficiency
- Minimise flood risks
- Reduce embodied impacts of refurbishment materials
- Recycle refurbishment construction waste
- Enhance security, fire detection and accessibility
Small Buildings

- To Improve the accessibility of BREEAM 2010 for simple/small buildings.
- Reduce the scope of assessment by removing issues which are less critical in such buildings.
- Streamline data collection, assessment and QA processes
- Review roles and responsibilities of designers, Assessors and BRE Global.
Pre-Approval Procedures

• Pre-approval against amenable Code credits
  – Not complete type approval
  – Does not guarantee final rating
• Approval of repetitive and standardised...
  – Specifications (e.g. lighting)
  – Processes (e.g. site waste management plan)
• Simplify Assessment process:
  – Used to inform compliance at the Design stage
  – Supplementary evidence required at PCS – informed by current evidence requirements
Historic Buildings

• Appropriate specification:
  – Materials, technologies, uses
• Unforeseen consequences:
  – Mould growth
  – Spalding
  – Movement
BREEAM Communities

- Covers planning policy and detailed negotiations
- Exploring role for broader assessment of community at detailed and post-occupancy stages
- Quantification of impacts resulting from infrastructure
Integration

Protecting People, Property and the Planet
Sustainability through Planning - BRE, April 2007

- Over 200 local authorities across England asked whether they were using or intended to use BREEAM / EcoHomes / the Code to meet their sustainability obligations established under the Planning and Compulsory Purchase Act 2004.
- Figure 1 shows the response:
“When proposing any local requirement for sustainable buildings planning authorities should... 
- specify the requirement in terms of achievement of nationally described sustainable buildings standards, for example in the case of housing by expecting identified housing proposals to be delivered at a specific level of the Code for Sustainable Homes”

For non-residential buildings, BREEAM, although not a statutory code, is widely used and understood by the development industry and local standards based on it are appropriate.
# Ashford Borough Council

CS adopted July 2008

## Ashford LDF 2007 - 2014

<table>
<thead>
<tr>
<th>(A) BREEM</th>
<th>Residential</th>
<th>Code Level</th>
<th>Code Level</th>
<th>Code Level</th>
<th>EcoHomes 'Very Good'</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>Very Good</td>
<td>Excellent</td>
<td>Good</td>
<td>Very Good</td>
<td></td>
</tr>
<tr>
<td>Energy</td>
<td>Excellent</td>
<td>Excellent</td>
<td>Excellent</td>
<td>Excellent</td>
<td></td>
</tr>
<tr>
<td>Water</td>
<td>Maximum</td>
<td>Maximum</td>
<td>Excellent</td>
<td>Excellent</td>
<td></td>
</tr>
<tr>
<td>Material</td>
<td>Excellent</td>
<td>Excellent</td>
<td>Very Good</td>
<td>Very Good</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(B)</th>
<th>Minimum Carbon Dioxide Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>20%</td>
</tr>
</tbody>
</table>

http://www.ashford.gov.uk/pdf/Planning_Adopted_Core_Strategy_July08.pdf

---

Partnership for Urban South Hampshire (PUSH)

Protecting People, Property and the Planet
Integrating BREEAM through the Design Process

• Published November 2010
• Maps out key actions against the RIBA Plan of Work
• Highlights actions and roles required at each stage for optimal outcomes

“The key to achieving sustainability in buildings is making the right decisions at the Pre-Agreement and Preparation (RIBA A and B) stages.”
### BREEAM Scores

<table>
<thead>
<tr>
<th>Location</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Community &amp; Use</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Action</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Planning</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Awareness / Evaluation</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

Pre-Assessment
Post-Assessment
Preparation
Design Stage
Construction
Use

---

Collection of evidence / monitoring
Design stage interim certification
Post Construction stage certification

---

Protecting People, Property and the Planet

---

breglobal
International Developments
International Developments

• International Political Negotiations - Climate Change
• Framework Standards for Environmental/Sustainable Buildings/Construction Materials Assessments
  – ISO
  – CEN TC 350
  – SuperBuildings (EU FP7)
• International Competitors (LEED/GREENSTAR/DGNB)
• Corporate Social Responsibility (CSR)
BREEAM Assessments Internationally

Protecting People, Property and the Planet
Harmonisation “common carbon metrics”

- Other systems exist
- Common indicators must be developed to facilitate comparison between certification schemes
- MoUs with
  - USGBC (LEED), Australian GBC (GreenStar), UKGBC
  - SBA (DGNB, CSTB, VTT BRE)
  - UNEP
International Sustainability Alliance - ISA

- Benchmarking sustainable performance at both individual building and portfolio level
- Accurate, verifiable CSR reporting
- Tracking emerging green legislation and lobbying for sound environmental law
- A route to third party certification - open to all standards
- Bringing together landlords and tenants
- Providing the link between environmental and financial performance

First set of KPIs published at Expo Real in Oct 2010
International Sustainability Alliance - ISA

21 members covering 50 countries

Property covered by ISA Members

Protecting People, Property and the Planet
Code for a Sustainable Built Environment

- A strategic Code and set of supporting Standards
- Promote common structures and scope across locally derived schemes
- Development of BREEAM Accredited Schemes by local organisations
BRE Global Code for a Sustainable Built Environment

- Scheme Documents
- BREEAM Standards
- CSBE
BRE Global Code for a Sustainable Built Environment

FRAMEWORK AGREEMENT

National/Local Schemes

Core Technical Standard

Core Process Standard

International Code for a Sustainable Built Environment

BREEAM Standards

Affiliated Schemes