



Pre-assessment Estimator  
MANAGEMENT & OPERATION



**2006**

## BREEAM Offices 2006 PRE-ASSESSMENT ESTIMATOR

### **IMPORTANT** **(Please read this before using the checklist).**

This pre-assessment checklist allows a quick evaluation of the rating, that could be achieved, under a formal **BREEAM Offices** assessment.

The points system used in this checklist is an approximation of the scoring and weighting system in the formal BREEAM Offices method. In addition the checklist gives a brief summary of the compliance requirements for BREEAM Offices. The rating obtained by using this checklist is therefore for guidance only.

Estimated ratings may differ from those obtained through a formal assessment which must be carried out by a licensed BREEAM Offices assessor (a list of assessors is available from [www.BREEAM.org](http://www.BREEAM.org)). The assessor will require evidence to support each credit claimed.

## USING THE MANAGEMENT & OPERATION PRE-ASSESSMENT ESTIMATOR

This checklist should be used when carrying out approximate assessments on

- Existing occupied buildings

The checklist calculates scores for both the 'Core building performance' and the 'Management & Operation' parts of BREEAM Offices. This enables both an approximate BREEAM rating and an Environmental Performance Index to be produced. . Note: It is not possible to carry out a Management and Operation Assessment unless the building has been occupied and in operation for a minimum of a 12 months.

In order to generate an estimated rating for a Design & Procurement assessment, please complete the separate checklist, 'DESIGN & PROCUREMENT Assessment Estimator'.

In order to generate an estimated Environmental Performance Index score for a Core assessment, please complete the separate checklist, 'CORE CREDITS ONLY Assessment Estimator'. CORE credits assess the building performance.

## COMPLETION OF THE CHECKLIST

<b>Step 1</b>	Complete the checklist by entering the number of points (shown in the 'Points' column shaded light grey) into the unshaded 'Management & Operation' column where the criteria is achieved. NOTE: Evidence of compliance will be required in the formal assessment.
<b>Step 2</b>	At the end of each section, total the Management & Operation column and enter in the box titled, 'Total points achieved to carry forward'.
<b>Step 3</b>	Complete for all sections.
<b>Step 4</b>	Sum the total points achieved to carry forward and enter in to the box titled 'Total of points achieved.'
<b>Step 5</b>	The total should then be assessed against the table titled 'Probable BREEAM Rating' – the score achieved will generate a rating of Fail, Pass, Good, Very Good or Excellent. Make a note of this rating.
<b>NOTE:</b>	In some cases, there are multiple performance levels for the same criteria, simply award the appropriate points score corresponding to the predicted level of achievement. NOTE: These points scores are not cumulative.
	Seek guidance from a licensed assessor early in the design process to ensure that the predicted rating is achieved during the design stages.

Credit Reference	MANAGEMENT	Points	Management & Operation
M17	<p>Where there is evidence of the existence of an openly available and established company policy on the environment. This should include the following as a minimum requirement.</p> <ul style="list-style-type: none"> <li>• Health and wellbeing (internal and external) impacts</li> <li>• Energy and resultant CO<sub>2</sub> emissions</li> <li>• Transport impacts</li> <li>• Water use</li> <li>• Resource use including consumables</li> <li>• Waste management</li> <li>• Procurement</li> <li>• Biodiversity</li> <li>• Pollution</li> <li>• Internal management procedures</li> <li>• Management of suppliers and contractors</li> <li>• Action Plan</li> <li>• Responsibilities and nominated people</li> <li>• Strategic and short term targets</li> <li>• A commitment to reviews on an annual basis</li> <li>• A commitment to report the results of review and performance annually both internally to staff and externally.</li> </ul>	3.75	
M18	<p>Where evidence provided demonstrates the existence and implementation of a formal environmental purchasing policy which has endorsement from senior directors.</p>	3.75	
M21	<p>Where evidence is provided to demonstrate that an Environmental Management System (EMS) is in place.</p>	3.75	
M22	<p>Where up to date building operation and maintenance (O&amp;M) manuals are available on site.</p>	3.75	
<b>Total points achieved to carry forward</b>			

Credit Reference	HEALTH & WELLBEING	Points	Management & Operation
HW01	Where at least 80% of net lettable office floor area is adequately daylight	1	
HW02	Where evidence provided demonstrates that all desks are within a 7m radius of a window.	1	
HW03	Where evidence provided demonstrates that an occupant controlled glare control system (e.g. internal or external blinds) is fitted.	1	
HW04	Where evidence provided demonstrates that high frequency ballasts are installed on all fluorescent and compact fluorescent lamps.	1	
HW05	Where evidence provided demonstrates that all internal and external lighting, where relevant, is specified in accordance with the appropriate maintained illuminance levels (in lux) recommended by CIBSE.	1	
HW06	Where evidence provided demonstrates that lighting, in all occupied areas, is zoned to allow separate control.	1	
HW08	Where evidence provided demonstrates that external façade windows to all occupied areas are openable.	1	
HW09	Where air intakes serving occupied areas avoid major sources of external pollution and recirculation of exhaust air.	1	
HW11	<p>Where either:</p> <ul style="list-style-type: none"> <li>• In the case of <u>mechanically ventilated</u> and <u>air conditioned</u> buildings, fresh air is provided at 12l/s/person.</li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>• In the case of <u>naturally ventilated</u> buildings, trickle vents are provided on the majority of windows, Where the window openable area is the equivalent to 5% of the gross internal area of the building and the plan depth is no more than 15m otherwise extra ventilation is required.</li> </ul>	1	
HW12	Where a smoking ban is in effect within the building.	1	
HW15	Where evidence provided demonstrates that local control is available for temperature adjustment in each area to reflect differing load requirements.	1	
HW16	Where evidence provided demonstrates that the risk of waterborne and airborne legionella contamination has been minimised	1	

<b>HW20</b>	Where maintenance schedules include high performance cleaning of carpets and soft furnishings with steam or liquid nitrogen cleaning at least once a year using high efficiency filters or a centralised systems.	1	
<b>HW21</b>	Where evidence provided demonstrates that procedures are in place for taking occupant satisfaction feedback into account, for addressing issues that has been highlighted and for putting improvement targets, relating to occupant satisfaction, in place.	1	
<b>HW22</b>	Where procedures operate for the collection and recording of occupant satisfaction feedback.	1	
<b>Total points achieved to carry forward</b>			

Credit Reference	ENERGY	Points	Management & Operation
<b>E01</b> Percentage difference of CO <sub>2</sub> emissions of the assessed building over a notional building which is compliant to 2002 Building Regulations. <ul style="list-style-type: none"> <li>-20%</li> <li>0</li> <li>20%</li> <li>35%</li> <li>45%</li> <li>50%</li> <li>60%</li> <li>70%</li> <li>85%</li> <li>100%</li> </ul> <p><b>NOTE: These point scores are not cumulative, simply award the appropriate points core corresponding to the predicted level of achievement.</b></p>		0.64	
		1.28	
		1.92	
		2.56	
		3.21	
		3.85	
		4.49	
		5.13	
		5.77	
		6.42	
<b>E02</b> Where electricity sub metering is provided for substantive energy uses within the building covering <u>lighting</u> and <u>small power</u> , and each of the following where present: <ul style="list-style-type: none"> <li>Computer Room</li> <li>Humidification Plant</li> <li>Cooling Plant</li> <li>Fans (major)</li> <li>If a building has other major energy consuming items, they should be covered as appropriate e.g. catering facilities.</li> </ul>		0.64	
<b>E03</b> Where evidence provided demonstrates sub-metering of energy use by tenancy/areas is installed within the building.		0.64	
<b>E04</b> Where energy efficient external luminaires are specified and all light fittings controlled for the presence of daylight.		0.64	
<b>E06</b> Where preventative maintenance procedures for mechanical and electrical services have been installed in the building. This can be done where there are established periodic scheduled maintenance procedures in place covering the following: <ul style="list-style-type: none"> <li>calibration and operation of heating and cooling systems including boiler/burner systems.</li> <li>ventilation and humidification systems.</li> <li>lighting systems.</li> <li>domestic hot water systems.</li> </ul> <p><b>NOTE: These point scores <u>ARE</u> cumulative.</b></p>		0.64	
		0.64	
		0.64	
		0.64	
		0.64	

<b>E07</b>	Where there is an established energy policy endorsed at Board level and freely available to staff.	0.64	
	Where an energy audit is carried out on the building at least once every three years and where recommendations have been acted on	0.64	
	<b>NOTE: These point scores <u>ARE</u> cumulative.</b>		
<b>E08</b>	Where energy/CO <sub>2</sub> monitoring is carried out and where historical records are kept.	0.64	
	Where energy/CO <sub>2</sub> targeting is carried out using historical data	0.64	
	Where evidence demonstrates movement towards energy/CO <sub>2</sub> targets over time.	0.64	
	<b>NOTE: These point scores <u>ARE</u> cumulative.</b>		
<b>E09</b>	Where information on energy use and savings is regularly disseminated to office occupants and where building managers are trained in energy saving techniques.	0.64	
<b>Total points achieved to carry forward</b>			

Credit Reference	TRANSPORT	Points	Management & Operation
T01	Where good access is available to and from public transport networks for <ul style="list-style-type: none"> <li>• Commuting</li> </ul> <b>AND/OR</b> <ul style="list-style-type: none"> <li>• Business travel.</li> </ul> <b>NOTE: These point scores <u>ARE</u> cumulative.</b>	0.64	
		0.64	
T02	Total Net CO <sub>2</sub> emissions arising from transport to and from the building will be predicted based on location. Credits given are based on the scale below: <ul style="list-style-type: none"> <li>• RURAL location with TYPICAL public transport connections</li> <li>• EDGE OF TOWN location with TYPICAL public transport connections</li> <li>• SMALL TOWN location with TYPICAL public transport connections</li> <li>• CITY / TOWN CENTRE location with TYPICAL public transport connections</li> <li>• CENTRAL URBAN CONURBATION location with TYPICAL public transport connections</li> <li>• CLOSE TO MAJOR TRANSPORT NODE location with TYPICAL public transport connections</li> </ul> <b>NOTE: These point scores are not cumulative, simply award the appropriate points score corresponding to the predicted level of achievement.</b>	0	
		1.28	
		2.56	
		3.85	
		5.13	
		6.42	
T05	Where evidence is provided to demonstrate that there is adequate provision of covered, secure and well lit cycle racks and showers. Compliant cycle storage facilities must be provided for a percentage of building occupants in accordance with the following figures: <ul style="list-style-type: none"> <li>• 10% of building occupants up to 500 <b>PLUS</b></li> <li>• 7% for building occupants in the range of 501 – 1000 <b>PLUS</b></li> <li>• 5% for building occupants over 1000</li> </ul> <b>Where in addition</b> to the above, information is provided to demonstrate that there is adequate provision of changing facilities and lockers for clothes or a dedicated drying space for wet clothes. <b>NOTE: These point scores are not cumulative, simply award the appropriate points score corresponding to the predicted level of achievement.</b>	0.64	
		1.28	
T07	Where evidence is provided to demonstrate that a travel survey has been carried out to determine the travel patterns of the building users who work at, and commute to, the building. An audit must also be carried out to determine the travel patterns associated with business travel, visitors and deliveries	0.64	
T08	Where evidence is provided to demonstrate that a travel plan has been developed and tailored to the specific needs of the users of the assessed development. <ul style="list-style-type: none"> <li>• walking;</li> <li>• cycling;</li> <li>• public transport;</li> <li>• use of the private car for travel to work;</li> <li>• mopeds/motorcycles;</li> </ul>	0.64	

	<ul style="list-style-type: none"> <li>• reducing the need to travel;</li> <li>• visitors/customers;</li> <li>• deliveries.</li> </ul>		
<b>Total points achieved to carry forward</b>			

Credit Reference	WATER	Points	Management & Operation
<b>W01</b>	<p>Credits are awarded based on the improvement over standard specification of water fittings. A standard specification would include 6 litre flush toilets, urinals with no controls, a shower that uses 12-15 litres per minute, standard taps with no flow restrictors. In a formal BREEAM assessment the predicted water consumption will be calculated using the BREEAM water calculator, _ as a guide the following can be used as a rough estimate of likely number of credits:</p> <ul style="list-style-type: none"> <li>• where some of the fittings use less water than a standard fitting</li> </ul> <p><b>OR</b></p> <ul style="list-style-type: none"> <li>• where all of the fittings are low water or, where only some of the fittings are low water, rainwater or grey water systems are specified.</li> </ul> <p><b>OR</b></p> <ul style="list-style-type: none"> <li>• where the water fittings are all low water and rainwater or greywater fittings have been specified.</li> </ul> <p><b>NOTE: These point scores are not cumulative, simply award the appropriate points score corresponding to the predicted level of achievement.</b></p>	0.56	
		1.11	
		1.67	
<b>W02</b>	Where evidence is provided to demonstrate that a water meter with a pulsed output will be installed on the mains supply to each building.	0.56	
<b>W03</b>	Where evidence is provided to demonstrate that a leak detection system is specified or installed.	0.56	
<b>W04</b>	Where proximity detection shut off is provided to water supply for all urinals and WC's.	0.56	
<b>W08</b>	Where evidence is provided to demonstrate that there are established and operational maintenance procedures covering all sanitary fittings.	0.56	
<b>W09</b>	<p>Where evidence is provided to demonstrate water consumption is monitored and recorded at least once every quarter.</p> <p><b>In addition</b> to the above, evidence should be provided to show that monitoring demonstrates reductions in water consumption. To demonstrate achievement there must be historical data on water consumption for at least the previous two years, i.e. one full year of monitoring and a second years monitoring to demonstrate legitimate reductions.</p> <p><b>NOTE: These point scores <u>ARE</u> cumulative.</b></p>	0.56	
		0.56	
<b>Total points achieved to carry forward</b>			

Credit Reference	MATERIALS	Points	Management & Operation
MW09	Where information on the presence of hazardous materials is available for staff and contractors.	3.33	
MW12	Where the presence of central dedicated storage space for recycling materials either within the building or on site skips are provided with good access for collections (2m <sup>2</sup> per 1000m <sup>2</sup> of floor area, up to 10m <sup>2</sup> max).	3.33	
MW19	Where corporate policies endorsed at board level and operational procedures are in place for the collection and recycling of office consumables. The policy should cover at least paper, printer cartridges, toner cartridges, and plastics.	3.33	
<b>Total points achieved to carry forward</b>			

POLLUTION		Points	Management & Operation
Credit Reference			
P01	Where evidence provided demonstrates the use of refrigerants with a global warming potential (GWP) of less than 5 or where there are no refrigerants specified for use in building services.	1.07	
P02	Where evidence provided demonstrates that refrigerant leaks can be detected or where there are no refrigerants specified for use in the building or development.	1.07	
	Where there are refrigerants, evidence should be provided to demonstrate that the provision of automatic refrigerant pump down is made to a heat exchanger (or dedicated storage tanks) with isolation valves.  <b>NOTE: These point scores ARE cumulative.</b>	1.07	
P06	Where evidence provided demonstrates that the maximum dry NO <sub>x</sub> emissions from delivered space heating energy are: <ul style="list-style-type: none"> <li>• ≤100 mg/kWh (at 0% excess O<sub>2</sub>).</li> <li>• ≤70 mg/kWh (at 0% excess O<sub>2</sub>).</li> <li>• ≤40mg/kWh (at 0% excess O<sub>2</sub>).</li> </ul> <b>NOTE: These point scores are not cumulative, simply award the appropriate points score corresponding to the predicted level of achievement.</b>	1.07	
		2.14	
		3.22	
P07	Where evidence provided demonstrates that the assessed development is located in a zone defined as having a low annual probability of flooding. <b>OR</b> Where evidence provided demonstrates that the assessed development is located in a zone defined as having a medium annual probability of flooding and the ground level of the building, car parking and access is above the design flood level for the site's location.  <b>NOTE: These point scores are not cumulative, simply award the appropriate points score corresponding to the predicted level of achievement.</b>	2.14	
		1.07	
		1.07	
P08	Where evidence provided demonstrates that on site treatment such as oil separators/interceptors or filtration have been specified for areas at risk from pollution, i.e. vehicle manoeuvring areas, car parks, waste disposal facilities, delivery facilities or plant areas	1.07	
P11	Where evidence provided demonstrates that :  A feasibility study considering renewable and low emission energy has been carried out and the results implemented.	1.07	

	<p>OR  <b>In addition to the above</b>, 10% of total energy demand for the building/development is supplied from local renewable or low emission energy, sources.</p> <p>OR  <b>In addition to the above</b> and 15% of total energy demand for the building/development is supplied from local renewable or low emission energy, sources.</p> <p><b>NOTE: These point scores are not cumulative, simply award the appropriate points score corresponding to the predicted level of achievement.</b></p>	2.14	
		3.22	
<b>P12</b>	Where evidence provided demonstrates that the external lighting design is in compliance with the guidance in the Institution of Lighting Engineers (ILE) Guidance notes for the reduction of obtrusive light, 2005.	1.07	
<b>Total points achieved to carry forward</b>			

<b>SCORING</b>
<b>TOTAL OF POINTS ACHIEVED</b>

Rating	Minimum Score Required
	Management & Operation stage
<b>PASS</b>	<b>20</b>
<b>GOOD</b>	<b>35</b>
<b>VERY GOOD</b>	<b>50</b>
<b>EXCELLENT</b>	<b>65</b>