

## **Criteria Appendix Document BREEAM Europe Commercial for Latvia**

This appendix document must be read in conjunction with the BREEAM Europe Commercial 2009 Assessment Manual.



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# 1.0 Introduction

This document details the BREEAM assessment criteria specific to commercial buildings in Latvia. It is an appendix to the BREEAM Europe Commercial 2009 assessment manual and must be used in conjunction with the BREEAM Europe Commercial Document when conducting an assessment of a commercial building in Latvia. Commercial buildings shall include retail, industrial and office building types.

Section 2 of this document contains a list of the BREEAM assessment issues included in the Methodology. This list details, by issue, the criteria applicable to an assessment of commercial buildings in Latvia. The assessment criteria for some of these issues will not differ from the criteria contained in the BREEAM Europe Commercial 2009 assessment manual, as such the requirements outlined in the main assessment manual for that issue must be followed. Other issues may have criteria specific to commercial assessments in Latvia, which are detailed in this document and are to be applied in addition to, or in some cases instead of, the assessment criteria outlined in the BREEAM Europe Commercial 2009 manual for that specific issue.

This appendix and the BREEAM Europe Commercial assessment manual must be used in conjunction with the BREEAM assessment spreadsheet tool specific for commercial buildings in Latvia.

## 2.0 Assessment issue list & criteria

Issue ID	Issue title	Relevant criteria	Credits Available
<b>MANAGEMENT</b>			
Man 1	Commissioning	No further guidance required. Please refer to the BREEAM Europe Commercial 2009 manual.	2
Man 2	Constructors' Environmental & Social Code of Conduct	No further guidance required. Please refer to the BREEAM Europe Commercial 2009 manual.	2
Man 3	Construction site impacts	No changes to the main credit text. Checklist A3: reference to ISO 14001 replaced with <i>LVS EN ISO 14001</i>	4
Man 4	Building user guide	No further guidance required. Please refer to the BREEAM Europe Commercial 2009 manual.	1
Man 12	Life Cycle Cost Analysis	No further guidance required. Please refer to the BREEAM Europe Commercial 2009 manual.	2

Issue ID	Issue title	Relevant criteria	Credits Available								
<b>HEALTH &amp; WELLBEING</b>											
Hea 1	Daylighting	No further guidance required. Please refer to the BREEAM Europe Commercial 2009 manual.	1								
Hea 2	View out	No further guidance required. Please refer to the BREEAM Europe Commercial 2009 manual.	1								
Hea 3	Glare control	No further guidance required. Please refer to the BREEAM Europe Commercial 2009 manual.	1								
Hea 4	High frequency lighting	No further guidance required. Please refer to the BREEAM Europe Commercial 2009 manual.	1								
Hea 5	Internal & external lighting levels	<p>Please refer to updated 'Local or national best practice lighting guides' Compliance Note below:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="background-color: black; color: white;">Compliance Notes</th> </tr> </thead> <tbody> <tr> <td style="width: 30%; padding: 5px;"><b>Local or national best practice lighting guides</b></td> <td style="padding: 5px;">The illuminance levels and UGR limits are equal to or more onerous than those set in the standard LVS:EN 12464-1 Light and lighting - Lighting of workspaces, 2002 and LVS:EN 12464-2 Lighting of work places - Part 2: Outdoor work places, 2007</td> </tr> </tbody> </table> <p>Refer to updated Design Stage evidence requirements below:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">Req</th> <th style="width: 10%;">Design Stage</th> </tr> </thead> <tbody> <tr> <td style="text-align: center; vertical-align: top;">All</td> <td> <p>A copy of the specification or relevant room schedules confirming:</p> <ul style="list-style-type: none"> <li>The internal/external illuminance levels</li> <li>UGR limits</li> <li>The uniformity of illuminance over task areas and surrounding area.</li> <li>Where applicable, confirmation that the illuminance levels are equal to or more onerous than those set in LVS EN 12464</li> </ul> <p><b>OR</b></p> <p>A formal written declaration of conformity from the relevant member of the design team confirming: The maintained illuminance levels, UGR limits and uniformity for internal/external space are in compliance with the relevant Standard.</p> </td> </tr> </tbody> </table>	Compliance Notes		<b>Local or national best practice lighting guides</b>	The illuminance levels and UGR limits are equal to or more onerous than those set in the standard LVS:EN 12464-1 Light and lighting - Lighting of workspaces, 2002 and LVS:EN 12464-2 Lighting of work places - Part 2: Outdoor work places, 2007	Req	Design Stage	All	<p>A copy of the specification or relevant room schedules confirming:</p> <ul style="list-style-type: none"> <li>The internal/external illuminance levels</li> <li>UGR limits</li> <li>The uniformity of illuminance over task areas and surrounding area.</li> <li>Where applicable, confirmation that the illuminance levels are equal to or more onerous than those set in LVS EN 12464</li> </ul> <p><b>OR</b></p> <p>A formal written declaration of conformity from the relevant member of the design team confirming: The maintained illuminance levels, UGR limits and uniformity for internal/external space are in compliance with the relevant Standard.</p>	1
Compliance Notes											
<b>Local or national best practice lighting guides</b>	The illuminance levels and UGR limits are equal to or more onerous than those set in the standard LVS:EN 12464-1 Light and lighting - Lighting of workspaces, 2002 and LVS:EN 12464-2 Lighting of work places - Part 2: Outdoor work places, 2007										
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Hea 6	Lighting zones & control	No further guidance required. Please refer to the BREEAM Europe Commercial 2009 manual.	1				
Hea 7	Potential for natural ventilation	All references to 'fresh air' within the Assessment Criteria replaced with 'fresh outside air'.	1				
Hea 8	Indoor air quality	<p>All references to 'fresh air' within the Assessment Criteria replaced with 'fresh outside air'.</p> <p>Refer to updated 'Local or national best practice ventilation standards' compliance note below:</p> <table border="1"> <thead> <tr> <th colspan="2">Compliance Notes</th> </tr> </thead> <tbody> <tr> <td><b>Local or national best practice ventilation standards</b></td> <td>Fresh air is provided in office areas in accordance with the medium indoor air quality levels recommended in table A 11 of LVS EN 13779:2007 ie between 10 and 15 litres per second per person and at a rate of at least 8 litres per second per person in all other spaces.</td> </tr> </tbody> </table> <p>Part 3 or the Design Stage evidence table: reference to EN 13779 replaced with LVS EN 13779:2007.</p>	Compliance Notes		<b>Local or national best practice ventilation standards</b>	Fresh air is provided in office areas in accordance with the medium indoor air quality levels recommended in table A 11 of LVS EN 13779:2007 ie between 10 and 15 litres per second per person and at a rate of at least 8 litres per second per person in all other spaces.	1
Compliance Notes							
<b>Local or national best practice ventilation standards</b>	Fresh air is provided in office areas in accordance with the medium indoor air quality levels recommended in table A 11 of LVS EN 13779:2007 ie between 10 and 15 litres per second per person and at a rate of at least 8 litres per second per person in all other spaces.						
Hea 9	Volatile organic compounds	<p>Assessment Criteria no. 1 is replaced with the following text:</p> <p><i>All decorative paints and varnishes have been tested against EN ISO 11890-2:2006 Paints and varnishes. Determination of volatile organic compound (VOC) content. Gas-chromatographic method, meet the phase II maximum VOC content limit values set in Annex II of Decorative Paint Directive 2004/42/CE and are compliant with Cabinet of Ministers of the Republic of Latvia Regulation No 231 adopted on April 3, 2007 "<a href="#">Regulations Regarding the Limitation of Emissions of Volatile Organic Compounds from Certain Products</a>". All decorative paints and varnishes must also be fungal and algal resistant.</i></p> <p>Table 11 – standards updated as follows:</p> <p>Wood Panels: LVS EN 13986:2005  Timber Structures: LVS EN 14080:2005  Wood flooring: LVS EN 14342+A1:2008  Resilient textile and laminated floor coverings: LVS EN 14041:2005  Suspended ceiling tiles: LVS EN 13964:2004  Flooring adhesives: LVS EN 13999-1:2006  Wall-coverings: LVS EN 233:2001, LVS EN 234:2002+A1, LVS EN 259:2001, LVS EN 266:2001</p>	1				

		<p><i>Testing requirements:</i>  EN 717-1:2005  LVS EN 13999-2:2007 – Volatile Organic Compounds (VOCs)  LVS EN 13999-3+A1:2009 – Volatile aldehydes  LVS EN 13999-4+A1:2009 – Volatile diisocyanates  LVS EN 12149:2001</p>	
Hea 10	Thermal comfort	<p>All references to EN ISO 7730:2005 in the Assessment Criteria and Schedule of Evidence replaced with <i>LVS EN ISO 7730:2006</i>.</p> <p>All references to EN 15251:2007 in the Assessment Criteria and Schedule of Evidence replaced with <i>LVS EN 15251:2007</i>.</p> <p>Second Credit, Criteria 3 is replaced with the following text:</p> <p><i>Thermal comfort levels in occupied spaces meet the Category A requirements set out in Annex A of LVS EN ISO 7730:2006; in particular internal winter and summer temperature ranges will be in line with the recommended comfort criteria.</i></p>	2
Hea 11	Thermal zoning	No further guidance required. Please refer to the BREEAM Europe Commercial 2009 manual.	1
Hea 12	Microbial contamination	No further guidance required. Please refer to the BREEAM Europe Commercial 2009 manual.	1
Hea 13	Acoustic performance	Assessment Criteria no. 2 - reference to EN ISO 140-4:1998 is replaced with <i>LVS EN ISO 140-4:2000</i> .	1
Hea 14	Office Space	No further guidance required. Please refer to the BREEAM Europe Commercial 2009 manual.	2

Issue ID	Issue title	Relevant criteria	Credits Available
<b>ENERGY</b>			
Ene 1	Energy Efficiency	<p>Option 2 'Determination of the energy performance of the building using a Dynamic Simulation Modelling tool' shall be the default approach for all assessments.</p> <p>The Current Standards Building shall be generated using <i>Appendix G of ASHRAE Energy Standard 90.1-2010</i>.</p> <p>All references to 'suitably qualified energy modelling engineer' in the Assessment Criteria are replaced by '<i>energy auditor certified in accordance with the national requirements</i>'.</p> <p>The 'suitably qualified modelling engineer' definition is not relevant.</p>	15
Ene 2	Sub-metering of substantial energy uses	No further guidance required. Please refer to the BREEAM Europe Commercial 2009 manual.	1
Ene 3	Sub-metering of High Energy Load and Tenancy Areas	No further guidance required. Please refer to the BREEAM Europe Commercial 2009 manual.	1
Ene 4	External lighting	No further guidance required. Please refer to the BREEAM Europe Commercial 2009 manual.	1
Ene 5	Low or zero carbon technologies	'List of recognised LZC technologies' Compliance Note: Natural gas is removed as fuel option for Combined Heat and Power (CHP).	3
Ene 6	Building fabric performance and avoidance of air infiltration	'National thermographic best practice standard' Compliance Note: reference to standard EN 13187 is replaced with <i>LVS EN 13187:2002</i> .	1
Ene 7	Cold Storage	Clarification: there are three credits available as indicated by the Assessment Criteria.	3
Ene 8	Lifts	No further guidance required. Please refer to the BREEAM Europe Commercial 2009 manual.	2
Ene 9	Escalators and travelling walkways	No further guidance required. Please refer to the BREEAM Europe Commercial 2009 manual.	1



Issue ID	Issue title	Relevant criteria	Credits Available				
<b>TRANSPORT</b>							
Tra 1	Provision of Public Transport	<p>Refer to updated 'Compliant public transport node' Compliance Note below:</p> <table border="1"> <thead> <tr> <th colspan="2">Compliance Notes</th> </tr> </thead> <tbody> <tr> <td style="width: 20%;"><b>Compliant public transport node</b></td> <td>A compliant node includes any bus stop, railway, tram, trolley bus, or route micro-bus stations measured from the building entrance via a safe pedestrian route (not 'as the crow flies'). The service stopping at each node must provide transport from, or onward travel to, either a local urban centre, major transport node or a community focal point e.g. doctor's surgery, library, school or village centre.</td> </tr> </tbody> </table>	Compliance Notes		<b>Compliant public transport node</b>	A compliant node includes any bus stop, railway, tram, trolley bus, or route micro-bus stations measured from the building entrance via a safe pedestrian route (not 'as the crow flies'). The service stopping at each node must provide transport from, or onward travel to, either a local urban centre, major transport node or a community focal point e.g. doctor's surgery, library, school or village centre.	2 or 4
		Compliance Notes					
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<p>The existing definition of 'Local Urban Centre' is replaced with the following text:</p> <p><b>Local Urban Centre:</b> <i>This is any community focal point, as these will be served by public transport networks, This includes local shops and/or community facilities such as doctor's surgery/dentist/library/school, a major transport node such as a railway/bus station/transport node, or another type of significant non-leisure related meeting place. In cities of Republic importance, this will typically be a neighbourhood (latv. apkaimē) centre. In smaller towns, this will typically be town centre.</i></p> <p>The existing definition of 'Major Transport Node' is replaced with the following text:</p> <p><b>Major Transport Node:</b> <i>This is any node on a regional/national transport infrastructure system. In cities/towns of Latvia (situation as of October 2010), this will be central station/central bus station.</i></p> <p>The default hours of operation for Shopping centres and Banks in Table 17 are updated as follows:</p> <p>Shopping centre: 9.00am – 8.00pm Bank/Service provider: 9.00am – 6.00pm</p>							
Tra 2	Proximity to amenities	Assessment Criteria 2: the following local amenities are included: <i>g. Fitness / sports / wellness centre</i>	1				

		<p>Refer to updated 'Food Outlet' Compliance Note below:</p> <p><b>Compliance Notes</b></p> <table border="1" data-bbox="533 434 1278 658"> <tr> <td data-bbox="533 434 751 658"><b>Food Outlet</b></td> <td data-bbox="751 434 1278 658">                     This includes the following:                     <ul style="list-style-type: none"> <li>• Grocery shop</li> <li>• Supermarket</li> <li>• Sandwich shop</li> <li>• On- or off-site cafeteria or staff canteen or restaurant</li> </ul> </td> </tr> </table> <p>The existing definition of 'Rural location' is replaced with the following text:</p> <p><i><b>Rural location:</b> one where the site is on land clearly not within or on an urban boundary; this includes village locations and green field sites</i></p>	<b>Food Outlet</b>	This includes the following: <ul style="list-style-type: none"> <li>• Grocery shop</li> <li>• Supermarket</li> <li>• Sandwich shop</li> <li>• On- or off-site cafeteria or staff canteen or restaurant</li> </ul>	
<b>Food Outlet</b>	This includes the following: <ul style="list-style-type: none"> <li>• Grocery shop</li> <li>• Supermarket</li> <li>• Sandwich shop</li> <li>• On- or off-site cafeteria or staff canteen or restaurant</li> </ul>				
<p>Tra 3</p>	<p>Alternative modes of transport</p>	<p>The existing criteria for Option 3 is replaced with the following text:</p> <p><i>Negotiations with local public transport companies have resulted in an increase of the local services provision in the development's local area.</i></p> <p>Refer to additional Compliance Note for Option 1 only below:</p> <p><b>Compliance Notes</b></p> <table border="1" data-bbox="533 1272 1278 1547"> <tr> <td data-bbox="533 1272 751 1547"><b>Municipality requirements</b></td> <td data-bbox="751 1272 1278 1547">                     Where municipal planning regulations require greater number of cycling storage spaces than needed for BREEAM certification (e.g. Riga), it is necessary to provide the required total number of storage spaces to comply with planning regulation; in order to achieve BREEAM credit they all need to be <i>compliant cycling storage spaces</i>.                 </td> </tr> </table>	<b>Municipality requirements</b>	Where municipal planning regulations require greater number of cycling storage spaces than needed for BREEAM certification (e.g. Riga), it is necessary to provide the required total number of storage spaces to comply with planning regulation; in order to achieve BREEAM credit they all need to be <i>compliant cycling storage spaces</i> .	<p>2</p>
<b>Municipality requirements</b>	Where municipal planning regulations require greater number of cycling storage spaces than needed for BREEAM certification (e.g. Riga), it is necessary to provide the required total number of storage spaces to comply with planning regulation; in order to achieve BREEAM credit they all need to be <i>compliant cycling storage spaces</i> .				
<p>Tra 4</p>	<p>Pedestrian and Cyclist Safety</p>	<p>The existing Cycle access criteria 2b is replaced with the following text:</p> <p><i>Where the cycle lane is segregated from both the pedestrian route and carriageway the minimum width of the cycle path is 2.25m.</i></p> <p>Refer to updated 'National best practice road lighting guide' Compliance Note below:</p>	<p>1 or 2</p>		

		<p><b>Compliance Notes</b></p> <p><b>National best practice road lighting guide</b></p> <p>Please refer to the country specific reference sheet to locate the appropriate best practice road lighting guides in the country of assessment. Alternatively, please demonstrate applicability as follows;</p> <ul style="list-style-type: none"> <li>The minimum requirements as set out in Checklist A10 are covered by the proposed documents.</li> <li>The illuminance levels are equal to or more onerous than those set in adapted European standard LVS EN 12464-2 (Light and lighting - Lighting of work places - Part 2: Outdoor work places (sets standards for pedestrians/staff)) for pedestrian access areas and LVS CEN/TR 13201-1 (Road lighting - Part 1: Selection of lighting classes) and LVS EN 13201-2 (Road lighting - Part 2: Performance requirements) for cycle access areas.</li> </ul> <p>Refer to the updated Design Stage evidence requirements for criteria 5 &amp; 8 below:</p> <table border="1"> <thead> <tr> <th>Req</th> <th>Design Stage</th> </tr> </thead> <tbody> <tr> <td>5 &amp; 8</td> <td> <p>A copy of the specification, site plan and/or manufacturer's technical details confirming:</p> <ul style="list-style-type: none"> <li>External lighting design strategy in compliance with the relevant standard</li> </ul> <p>Where applicable, confirmation that the minimum requirements as set out in Checklist A10 are met and that illuminance levels are equal to or more onerous than those set in LVS EN 12464-2, LVS CEN/TR 13201-1 and LVS EN 13201-2.</p> </td> </tr> </tbody> </table>	Req	Design Stage	5 & 8	<p>A copy of the specification, site plan and/or manufacturer's technical details confirming:</p> <ul style="list-style-type: none"> <li>External lighting design strategy in compliance with the relevant standard</li> </ul> <p>Where applicable, confirmation that the minimum requirements as set out in Checklist A10 are met and that illuminance levels are equal to or more onerous than those set in LVS EN 12464-2, LVS CEN/TR 13201-1 and LVS EN 13201-2.</p>	
Req	Design Stage						
5 & 8	<p>A copy of the specification, site plan and/or manufacturer's technical details confirming:</p> <ul style="list-style-type: none"> <li>External lighting design strategy in compliance with the relevant standard</li> </ul> <p>Where applicable, confirmation that the minimum requirements as set out in Checklist A10 are met and that illuminance levels are equal to or more onerous than those set in LVS EN 12464-2, LVS CEN/TR 13201-1 and LVS EN 13201-2.</p>						
Tra 5	Travel Plan	No further guidance required. Please refer to the BREEAM Europe Commercial 2009 manual.	1				
Tra 6	Maximum Car Parking Capacity	No further guidance required. Please refer to the BREEAM Europe Commercial 2009 manual.	2				
Tra 7	Travel Information Point	No further guidance required. Please refer to the BREEAM Europe Commercial 2009 manual.	1				

Tra 8	Delivering & Manoeuvring	No further guidance required. Please refer to the BREEAM Europe Commercial 2009 manual.	1
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Issue ID	Issue title	Relevant criteria	Credits Available
<b>WATER</b>			
Wat 1	Water Consumption	<p>The number of credits available for this Assessment Issue are reduced to 2.</p> <p>Part 1 of the Assessment Criteria has been updated as follows:</p> <p><i>The credits are awarded as follows:</i></p> <ul style="list-style-type: none"> <li>• <i>One credit where consumption is 1.5 – 4.4m<sup>3</sup> per person per year</i></li> <li>• <i>Two credits where consumption is &lt;1.5 m<sup>3</sup> per person per year</i></li> </ul> <p>The flow rates for regular taps for wash hand basins and high flow showers in the 'Shell only' Compliance Note are updated as follows:</p> <p><i>Regular taps for wash hand basins: 0.1litres/second</i>  <i>High flow shower: 0.2 litres/second</i></p>	2
Wat 2	Water meter	No further guidance required. Please refer to the BREEAM Europe Commercial 2009 manual.	1
Wat 3	Major leak detection	No further guidance required. Please refer to the BREEAM Europe Commercial 2009 manual.	1
Wat 4	Sanitary supply shut off	No further guidance required. Please refer to the BREEAM Europe Commercial 2009 manual.	1
Wat 6	Irrigation systems	No further guidance required. Please refer to the BREEAM Europe Commercial 2009 manual.	1
Wat 7	Vehicle Wash	No further guidance required. Please refer to the BREEAM Europe Commercial 2009 manual.	1
Wat 8	Sustainable on-site water treatment	<p>The flow rates for regular taps for wash hand basins and high flow showers in the 'Industry-standard fittings' definition are updated as follows:</p> <p><i>Regular taps for wash hand basins: 0.1litres/second</i>  <i>High flow shower: 0.2 litres/second</i></p>	2

Issue ID	Issue title	Relevant criteria	Credits Available
<b>MATERIALS</b>			
Mat 1	Materials specification (major building elements)	All references to 'nationally recognised LCA tool' in the Assessment Criteria replaced by ' <i>LCA tool</i> '	2 or 4
Mat 2	Hard landscaping and boundary protection	All references to 'nationally recognised LCA tool' in the Assessment Criteria replaced by ' <i>LCA tool</i> '	1
Mat 3	Re-use of building façade	No further guidance required. Please refer to the BREEAM Europe Commercial 2009 manual.	1
Mat 4	Re-use of structure	No further guidance required. Please refer to the BREEAM Europe Commercial 2009 manual.	1
Mat 5	Responsible sourcing of materials	No further guidance required. Please refer to the BREEAM Europe Commercial 2009 manual.	3
Mat 6	Insulation	No further guidance required. Please refer to the BREEAM Europe Commercial 2009 manual.	2
Mat 7	Designing for robustness	No further guidance required. Please refer to the BREEAM Europe Commercial 2009 manual.	1

Issue ID	Issue title	Relevant criteria	Credits Available
<b>WASTE</b>			
Wst 1	Construction site waste management	<p>The existing Assessment Criteria under point 1 of the First credit is replaced with the following text:</p> <p><i>Where a Site Waste Management Plan (SWMP) – see definition in the Additional Information section - has been developed and implemented in accordance with Checklist A15a and any local municipal statement for building and construction waste management.</i></p> <p>The existing Assessment Criteria under point 1 of the Third credit is replaced with the following text:</p> <p><i>At least three key waste groups or the minimum required by local regulations plus one, whichever is the most onerous, are identified for diversion from landfill at pre-construction stage SWMP and Checklist A15b (supplemented by Latvian waste classification system) has been completed accordingly.</i></p>	3
Wst 2	Recycled aggregates	The amount of recycled and secondary aggregate shall be assessed by weight and not by volume.	1
Wst 3	Recyclable waste storage	No further guidance required. Please refer to the BREEAM Europe Commercial 2009 manual.	1
Wst 4	Compactor / Baler	No further guidance required. Please refer to the BREEAM Europe Commercial 2009 manual.	1
Wst 5	Composting	<p>The Option 1 point 1 Assessment Criteria is updated as follows:</p> <p><i>A vessel is installed on site for composting suitable food and garden waste resulting from the building's daily operation and use.</i></p> <p>The Option 1 point 2 Assessment Criteria is updated as follows:</p> <p><i>There is adequate space for storing segregated food and garden waste and composted organic material.</i></p> <p>The Option 2 point 1 Assessment Criteria is updated as follows:</p> <p><i>There is a dedicated segregated space for storing compostable waste prior to collection and delivery to an alternative composting facility or use for local purposes.</i></p>	1

		<p>Refer to updated 'Storage Capacity' Compliance Note below:</p> <table border="1" data-bbox="555 412 1311 860"> <thead> <tr> <th colspan="2" data-bbox="555 412 1311 461">Compliance Notes</th> </tr> </thead> <tbody> <tr> <td data-bbox="555 461 778 860"><b>Storage Capacity</b></td> <td data-bbox="778 461 1311 860">No criteria are defined for storage capacity required as this will be determined by the end user and predicted volumes of organic compostable waste. If the composting vessel is located in out door area, it must be isolated and must provide the composting process during cold weather. The assessor should be satisfied that, within reason, the installation is adequate for the size of development, bearing in mind the likely quantity of organic waste that will be produced by the development.</td> </tr> </tbody> </table> <p>Refer to updated Design Stage evidence requirements below:</p> <table border="1" data-bbox="555 963 1311 1570"> <thead> <tr> <th data-bbox="555 963 635 1016">Req</th> <th data-bbox="635 963 1311 1016">Design Stage</th> </tr> </thead> <tbody> <tr> <td colspan="2" data-bbox="555 1016 1311 1070"><b>Option 2</b></td> </tr> <tr> <td data-bbox="555 1070 635 1570">1 &amp; 2</td> <td data-bbox="635 1070 1311 1570"> <p>If appropriate, a letter from the occupier or service provider confirming:</p> <ul style="list-style-type: none"> <li>• Location of the off-site facility where compostable material will be delivered.</li> <li>• The procedure and frequency for collecting the compostable material.</li> <li>• If appropriate, an explanation on waste composting issues and usage for local purposes.</li> </ul> <p>Marked-up design plan and/or a copy of the specification confirming (as appropriate):</p> <ul style="list-style-type: none"> <li>• Location and size of space for storing compostable waste</li> <li>• Water outlet.</li> </ul> </td> </tr> </tbody> </table>	Compliance Notes		<b>Storage Capacity</b>	No criteria are defined for storage capacity required as this will be determined by the end user and predicted volumes of organic compostable waste. If the composting vessel is located in out door area, it must be isolated and must provide the composting process during cold weather. The assessor should be satisfied that, within reason, the installation is adequate for the size of development, bearing in mind the likely quantity of organic waste that will be produced by the development.	Req	Design Stage	<b>Option 2</b>		1 & 2	<p>If appropriate, a letter from the occupier or service provider confirming:</p> <ul style="list-style-type: none"> <li>• Location of the off-site facility where compostable material will be delivered.</li> <li>• The procedure and frequency for collecting the compostable material.</li> <li>• If appropriate, an explanation on waste composting issues and usage for local purposes.</li> </ul> <p>Marked-up design plan and/or a copy of the specification confirming (as appropriate):</p> <ul style="list-style-type: none"> <li>• Location and size of space for storing compostable waste</li> <li>• Water outlet.</li> </ul>
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Req	Design Stage											
<b>Option 2</b>												
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		<p>Refer to updated post construction stage evidence requirements below:</p> <table border="1" data-bbox="560 506 1310 1335"> <thead> <tr> <th data-bbox="560 506 635 555">Req</th> <th data-bbox="635 506 1310 555">Post Construction Stage</th> </tr> </thead> <tbody> <tr> <td colspan="2" data-bbox="560 555 1310 607"><b>Option 1</b></td> </tr> <tr> <td data-bbox="560 607 635 869">1-3</td> <td data-bbox="635 607 1310 869">                     Assessor's building/site inspection and photographic evidence confirming:                     <ul style="list-style-type: none"> <li>• The installation of the vessel</li> <li>• The provision of adequate storage space/facilities</li> <li>• Installation of a water outlet</li> <li>• The composting vessel is installed, maintained and operated according to the manufactures specification.</li> </ul> </td> </tr> <tr> <td colspan="2" data-bbox="560 869 1310 920"><b>Option 2</b></td> </tr> <tr> <td data-bbox="560 920 635 1335">1 &amp; 2</td> <td data-bbox="635 920 1310 1335">                     If appropriate, a letter from the occupier or service provider confirming:                     <ul style="list-style-type: none"> <li>• Location of the off-site facility where compostable material will be delivered.</li> <li>• The procedure and frequency for collecting the compostable material.</li> <li>• If appropriate, an explanation on waste composting issues and usage for local purposes.</li> </ul>                     Assessor's building/site inspection and photographic evidence confirming:                     <ul style="list-style-type: none"> <li>• The provision of adequate storage space/facilities</li> <li>• Installation of a water outlet</li> </ul> </td> </tr> </tbody> </table> <p>Refer to additional definitions below:</p> <p><b>Garden waste:</b> <i>the organic part of garden rubbish (for example, grass clippings, prunings, flowers, branches, weeds) that can rot down relatively easily. It does not include the non-vegetation items such as bags, sacks, plant pots, trays and tools. To achieve quality compost, all garden waste should be placed loose in collection containers and not bagged.</i>  <a href="http://www.newcastle.gov.uk/core.nsf/a/wastegardent">http://www.newcastle.gov.uk/core.nsf/a/wastegardent</a>.</p> <p><b>Local purposes:</b> <i>compost can be used within 1km of the site boundaries for improvement of quality of soil.</i></p>	Req	Post Construction Stage	<b>Option 1</b>		1-3	Assessor's building/site inspection and photographic evidence confirming: <ul style="list-style-type: none"> <li>• The installation of the vessel</li> <li>• The provision of adequate storage space/facilities</li> <li>• Installation of a water outlet</li> <li>• The composting vessel is installed, maintained and operated according to the manufactures specification.</li> </ul>	<b>Option 2</b>		1 & 2	If appropriate, a letter from the occupier or service provider confirming: <ul style="list-style-type: none"> <li>• Location of the off-site facility where compostable material will be delivered.</li> <li>• The procedure and frequency for collecting the compostable material.</li> <li>• If appropriate, an explanation on waste composting issues and usage for local purposes.</li> </ul> Assessor's building/site inspection and photographic evidence confirming: <ul style="list-style-type: none"> <li>• The provision of adequate storage space/facilities</li> <li>• Installation of a water outlet</li> </ul>	
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Wst 6	Floor Finishes	No further guidance required. Please refer to the BREEAM Europe Commercial 2009 manual.	1										

Issue ID	Issue title	Relevant criteria	Credits Available
<b>LAND USE &amp; ECOLOGY</b>			
LE1	Re-use of Land	No further guidance required. Please refer to the BREEAM Europe Commercial 2009 manual.	1
LE2	Contaminated Land	<p>The existing definition of 'Non-native invasive plant species' is replaced with the following text:</p> <p><b>Non-native invasive plant species:</b> <i>Are non-indigenous species that adversely affect the habitats they invade economically, environmentally or ecologically. For the purposes of BREEAM Latvia this currently includes Japanese Knotweed (<i>Reynotria japonica</i>), Giant Hogweed (<i>Heracleum sosnowskyi</i> Manden) and Himalayan Balsam (<i>Impatiens glandulifera</i>). Further information on the control and disposal and how this fits into the legislative framework relating to such species can be obtained from DEFRA.'</i></p>	1
LE3	Ecological Value of Site and Protection of Ecological Features	<p>Assessment Issue Title renamed '<i>Biodiversity Value of Site and Protection of Ecological Features</i>'.</p> <p>All references to 'ecological value' in the assessment criteria and compliance notes are replaced with '<i>biodiversity value</i>'.</p> <p>The first bullet point under criteria 2 is replaced with the following text:</p> <p><i>'Trees of over 100mm diameter, and/or significant biodiversity value, are protected by barriers. Barriers must prohibit construction works in the area between itself and the tree trunk. Minimum distance between the tree trunk and the barriers must be either the distance of branch spread or half tree height, whichever is the greater OR the minimum distance can be set by a suitably qualified ecologist, considering growth conditions of the tree and specific characteristics of the area (e.g. hydrological level, soil types etc).'</i></p> <p>The third bullet point under criteria 2 is replaced with the following text:</p> <p><i>'Greenery and natural areas requiring protection must either have barriers erected and be protected, or, when remote from site works or storage areas, be protected with a prohibition of construction activity in their vicinity.'</i></p> <p>Definition for 'Biodiversity' added as follows:</p> <p><i>'Biodiversity means the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species</i></p>	1

		<p>and of ecosystems. (Convention on Biological Diversity, Rio de Janeiro, 1992). For assessment of issue LE3 the level of diversity within species level is not considered.'</p> <p>The following definition of 'Greenery' is added:</p> <p><b>Greenery:</b> planted areas</p>									
LE4	Mitigating Ecological Impact	<p>Assessment Issue Title renamed '<i>Mitigating Impact on Biodiversity</i>'.</p> <p>All references to 'ecological value' in the assessment criteria and compliance notes are replaced with '<i>biodiversity value</i>'.</p> <p>Refer to new definition of 'biodiversity' in LE3.</p> <p>Refer to updated 'Native species' Compliance Note below:</p> <table border="1"> <thead> <tr> <th colspan="2">Compliance Notes</th> </tr> </thead> <tbody> <tr> <td><b>Native species</b></td> <td>Native floral/plant species and those with a known attraction or benefit to local fauna can be considered for the purpose of increasing the numbers of species on site, as well as general enhancement</td> </tr> </tbody> </table> <p>Refer to updated 'Number of plant species' Compliance Note below:</p> <table border="1"> <thead> <tr> <th colspan="2">Compliance Notes</th> </tr> </thead> <tbody> <tr> <td><b>Number of plant species</b></td> <td>BREEAM measures biodiversity value using the number of species identified in a suitably qualified ecologist's assessment of the site</td> </tr> </tbody> </table> <p>'Calculating the change and increase in ecological/biodiversity value' additional information section replaced with the following text:</p> <p><i>'BREEAM calculates the change in biodiversity value by comparing the diversity (number and area) of plant species on the site pre and post construction according to species calculation from Checklist A6 Section D point 3. The biodiversity value of the site is expressed as an area-weighted average of plant species for the site's landscape type. This enables BREEAM to use this as an indicator of the proposed development's impact on the site's existing biodiversity value'</i></p>	Compliance Notes		<b>Native species</b>	Native floral/plant species and those with a known attraction or benefit to local fauna can be considered for the purpose of increasing the numbers of species on site, as well as general enhancement	Compliance Notes		<b>Number of plant species</b>	BREEAM measures biodiversity value using the number of species identified in a suitably qualified ecologist's assessment of the site	5
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<p>LE6</p>	<p>Long Term Impact on Biodiversity</p>	<p>All references to 'ecological value' in the Assessment Criteria are replaced with '<i>biodiversity value</i>'.</p> <p>Refer to new definition of 'biodiversity' in LE3.</p> <p>Criteria 3 bullet point 3 replaced with the following text:</p> <p><i>'A reference to the current or future site level, local Environmental strategy or Environmental Action Programme, national and EU legal acts concerning biodiversity and nature conservation'</i>.</p> <p>Additional criteria part 1 (and subsequent compliance notes &amp; relevant definitions): reference to 'Biodiversity Champion' replaced with '<i>Responsible person</i>'.</p> <p>Additional criteria part 4 replaced with the following text:</p> <p><i>'Where a new valuable habitat from a biodiversity point of view, appropriate to the local area, is created. This includes habitat that supports nationally, regionally or locally important biodiversity, and/or which is nationally, regionally or locally important itself; including any habitat listed in the national and EU legal acts.'</i></p> <p>Refer to updated 'Local biodiversity expertise' Compliance Note below:</p> <table border="1" data-bbox="555 1205 1311 1527"> <thead> <tr> <th colspan="2" data-bbox="555 1205 1311 1258">Compliance Notes</th> </tr> </thead> <tbody> <tr> <td data-bbox="555 1258 778 1527"> <p><b>Local biodiversity expertise</b></p> </td> <td data-bbox="778 1258 1311 1527"> <p>Local biodiversity expertise should be sought at, or before, the design stage to help identify species of local biodiversity importance on site. It is likely that their recommendations will draw on the Local Environmental strategy or Environmental Action Programme where one exists.</p> </td> </tr> </tbody> </table> <p>The following definitions are added:</p> <p><b>Local Environmental Strategy:</b> <i>document of local municipality which sets the priorities, objectives and activities in the field of environment including nature conservation and biodiversity.</i></p> <p><b>Local Environmental Action Programme:</b> <i>programme of local municipality which includes activities for implementation Environmental Strategy.</i></p>	Compliance Notes		<p><b>Local biodiversity expertise</b></p>	<p>Local biodiversity expertise should be sought at, or before, the design stage to help identify species of local biodiversity importance on site. It is likely that their recommendations will draw on the Local Environmental strategy or Environmental Action Programme where one exists.</p>	<p>2</p>
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	Checklist A16	<p>Question 2 replaced with the following text:</p> <p><i>Does the site (site and surroundings within 250m) have any previous uses that fall in the table 40 below? Where this cannot be answered because of a lack of information available, the worst case scenario should be assumed</i></p> <p>Following example added to Table 40:</p> <p><i>Historically contaminated sites as a result of former military and economic activities, such as former oil depot, warehouses of chemicals and pesticides etc</i></p> <p>Table 40, 'Hospitals and Cemeteries' replaced with:</p> <p><i>Hospitals and Cemeteries and/or burial places</i></p>	
	Technical Checklist A4	<p>Section 1 questions are replaced with the following text:</p> <p><i>1.1 Are there any Latvia or EU protected habitats or species as well as notable trees present on the site?</i>  <i>1.2 Are there any water courses or rivers present on the site?</i>  <i>1.3 Is there any marsh or other wetland present on the site?</i>  <i>1.4 Are there any meadows or species-rich grassland present on the site?</i>  <i>1.5 Are there areas of forest, heath land, individual trees or tree groups or shrubbery within the construction zone?</i></p> <p>Question 2.5 is replaced with the following text:</p> <p><i>Does 80% of the land within the construction zone comply with statements 2.1, 2.2 or 2.3 and the remaining 20% of the footprint of the construction zone extend into land which has been either:</i></p> <ul style="list-style-type: none"> <li><i>a. Used for arable land or allotments for at least 5 years, OR</i></li> <li><i>b. Consists of regularly managed greenery, play grounds containing planted areas or sports fields</i></li> </ul>	
	Technical Checklist A6	<p>Section D Question 3 – for urban environments, an estimate of alien species is required in addition to the existing criteria.</p> <p>In addition, details of the species per habitat should be included as an Annex for Checklist A6.</p>	

Issue ID	Issue title	Relevant criteria	Credits Available				
<b>POLLUTION</b>							
Pol 1	Refrigerant GWP - Building services	No further guidance required. Please refer to the BREEAM Europe Commercial 2009 manual.	1				
Pol 2	Preventing refrigerant leaks	No further guidance required. Please refer to the BREEAM Europe Commercial 2009 manual.	1 or 2				
Pol 3	Refrigerant GWP – Cold Storage	No further guidance required. Please refer to the BREEAM Europe Commercial 2009 manual.	1				
Pol 4	NOx emissions from heating source	Table 27 and 28 - Boiler class standards updated as follows: EN 297:1994 replaced by <i>LVS EN 297:2001</i> EN 676:2003 replaced by <i>LVS EN 676:2003</i>	2 or 3				
Pol 5	Flood risk	<p>Reference to EN752:2008 under point 2 of 'Additional credit for attenuation measures' replaced by <i>LVS EN752:2008</i></p> <p>Refer to updated 'Definition of risk' Compliance Note below:</p> <table border="1" style="width: 100%;"> <thead> <tr> <th colspan="2" style="background-color: black; color: white;">Compliance Notes</th> </tr> </thead> <tbody> <tr> <td style="width: 30%;"><b>Definition of risk</b></td> <td> <p>The definition of flood zones and probabilities of flooding will generally be similar throughout the EU. The Latvian Environment, Geology and Meteorology Centre is in charge for developing of national flood map. Regulation No 1354 (24.11.2009) accepted by the Cabinet of Ministers of the Republic of Latvia defines categories of flood risk: low, medium and high risk zones.</p> <ul style="list-style-type: none"> <li>• Low annual probability of flooding: extreme floods which repeats once in 200 years or less;</li> <li>• medium annual probability of flooding: floods which repeats once in 100 years or less;</li> <li>• high annual probability of flooding: frequent floods, which recurs every 10 years or less.</li> </ul> </td> </tr> </tbody> </table> <p>The existing definition of 'Relevant local authority/national water authority' is replaced with the following text:</p> <p><b>Relevant local authority/national water authority:</b> refers to the body responsible for setting the flood risk such as the local water authority or local sewage utility company. The Latvian Environment, Geology and Meteorology Centre is in charge for</p>	Compliance Notes		<b>Definition of risk</b>	<p>The definition of flood zones and probabilities of flooding will generally be similar throughout the EU. The Latvian Environment, Geology and Meteorology Centre is in charge for developing of national flood map. Regulation No 1354 (24.11.2009) accepted by the Cabinet of Ministers of the Republic of Latvia defines categories of flood risk: low, medium and high risk zones.</p> <ul style="list-style-type: none"> <li>• Low annual probability of flooding: extreme floods which repeats once in 200 years or less;</li> <li>• medium annual probability of flooding: floods which repeats once in 100 years or less;</li> <li>• high annual probability of flooding: frequent floods, which recurs every 10 years or less.</li> </ul>	3
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		<i>developing of national flood map. The flood map is a part of "National programme of flood risk prevention and management 2008-2015", <a href="http://polsis.mk.gov.lv/view.do?id=2432">http://polsis.mk.gov.lv/view.do?id=2432</a> .On local level, the local spatial plan shall consider the flood risk zones.</i>	
Pol 6	Minimising watercourse pollution	No further guidance required. Please refer to the BREEAM Europe Commercial 2009 manual.	1
Pol 7	Reduction of night time light pollution	No further guidance required. Please refer to the BREEAM Europe Commercial 2009 manual.	1
Pol 8	Noise attenuation	Reference to 'ISO 1996' is replaced with ' <i>LVS ISO 1996-1:2004</i> ' throughout the assessment issue.  Assessment criteria 3 is replaced with the following text:  <i>Where the specific noise level of the noise source(s) from the site/building is not higher than/or equal +5dB during the day (07:00hrs to 23:00hrs) and +3dB at night (23:00hrs to 07:00hrs) compared to the background noise level, the credit can be awarded.</i>	1