

LBRUT Sustainable Construction Checklist - January 2016

This document forms part of the Sustainable Construction Checklist SPD. This document **must** be filled out as part of the planning application for the following developments: all residential development providing **one or more new residential units (including conversions leading to one or more new units)**, and all other forms of development providing **100sqm or more of non-residential floor space**. Developments including new non-residential development of less than 100sqm floor space, extensions less than 100sqm, and other conversions are strongly encouraged to comply with this checklist. Where further information is requested, please either fill in the relevant section, or refer to the document where this information may be found in detail, e.g. Flood Risk Assessment or similar. **Further guidance** on completing the Checklist may be found in the Justification and Guidance section of this SPD.

Property Name (if relevant): Application No. (if known):

Address (include, postcode):
 Completed by:

For Non-Residential Size of development (m2) For Residential Number of dwellings

1 MINIMUM COMPLIANCE (RESIDENTIAL AND NON-RESIDENTIAL)

Energy Assessment	Has an energy assessment been submitted that demonstrates the expected energy and carbon dioxide emissions saving from energy efficiency and renewable energy measures, including the feasibility of CHP/CCHP and community heating systems? If yes, please tick.	<input type="text" value="Yes"/>
Carbon Dioxide emissions reduction	What is the carbon dioxide emissions reduction against a Building Regulations Part L (2013) baseline <i>Policy DM SD 1 and London Plan Policy 5.2 (2015) require a 35% reduction in CO₂ emissions beyond Building Regulations 2013.</i>	<input type="text" value="50%"/>
	Percentage of total site CO2 emissions saved through renewable energy installation?	<input type="text" value="47%"/>

1A MINIMUM POLICY COMPLIANCE (NON-RESIDENTIAL AND DOMESTIC REFURBISHMENT)

Please check the Guidance Section of this SPD for the policy requirements

Environmental Rating of development:

<i>Non-Residential new-build (100sqm or more)</i>			
BREEAM Level	<input type="text" value="Please Select"/>	Have you attached a pre-assessment to support this?	<input type="text" value="0"/>
<i>Extensions and conversions for residential dwellings</i>			
BREEAM Domestic Refurbishment	<input type="text" value="Please Select"/>	Have you attached a pre-assessment to support this?	<input type="text" value="0"/>
<i>Extensions and conversions for non-residential buildings</i>			
BREEAM Level	<input type="text" value="Please Select"/>	Have you attached a pre-assessment to support this?	<input type="text" value="0"/>

Score awarded for Environmental Rating:
 BREEAM: Good = 0, Very Good = 4, Excellent = 8, Outstanding = 16 Subtotal

1B MINIMUM POLICY COMPLIANCE (RESIDENTIAL)

Water Usage

Internal water usage limited to 105 litres person per day. (Excluding an allowance 5 litres per person per day for external water consumption). Calculations using the water efficiency calculator for new dwellings have been submitted. ▪

Subtotal

2. ENERGY USE AND POLLUTION

2.1 Need for Cooling

Score

- a. How does the development incorporate cooling measures? Tick all that apply:
- | | | |
|---|-------------------------------------|---|
| Energy efficient design incorporating specific heat demand to less than or equal to 15 kWh/sqm | <input type="checkbox"/> | 6 |
| Reduce heat entering a building through providing/improving insulation and living roofs and walls | <input checked="" type="checkbox"/> | 2 |
| Reduce heat entering a building through shading | <input checked="" type="checkbox"/> | 3 |
| Exposed thermal mass and high ceilings | <input type="checkbox"/> | 4 |
| Passive ventilation | <input checked="" type="checkbox"/> | 3 |
| Mechanical ventilation with heat recovery | <input checked="" type="checkbox"/> | 1 |
| Active cooling systems, i.e. Air Conditioning Unit | <input type="checkbox"/> | 0 |

2.2 Heat Generation

- b. How have the heating and cooling systems, with preference to the heating system hierarchy, been selected (defined in London Plan policy 5.6)? Tick all heating and cooling systems that will be used in the development:
- | | | |
|--|-------------------------------------|---|
| Connection to existing heating or cooling networks powered by renewable energy | <input type="checkbox"/> | 6 |
| Connection to existing heating or cooling networks powered by gas or electricity | <input checked="" type="checkbox"/> | 5 |
| Site wide CHP network powered by renewable energy | <input type="checkbox"/> | 4 |
| Site wide CHP network powered by gas | <input checked="" type="checkbox"/> | 3 |
| Communal heating and cooling powered by renewable energy | <input checked="" type="checkbox"/> | 2 |
| Communal heating and cooling powered by gas or electricity | <input type="checkbox"/> | 1 |
| Individual heating and cooling | <input type="checkbox"/> | 0 |

2.3 Pollution: Air, Noise and Light

- a. Does the development plan to implement reduction strategies for dust emissions from construction sites? 2
- b. Does the development plan include a biomass boiler? -
- If yes, please refer to the biomass guidelines for the Borough of Richmond, please see guidance for supplementary information. If the proposed boiler is of a qualifying size, you may need to completed the information request form found on the Richmond website. -
- c. Please tick only one option below
- | | | |
|--|-------------------------------------|---|
| Has the development taken measures to reduce existing noise and enhance the existing soundscape of the site? | <input checked="" type="checkbox"/> | 3 |
| Has the development taken care to not create any new noise generation/transmission issues in its intended operation? | <input type="checkbox"/> | 1 |
- d. Has the development taken measures to reduce light pollution impacts on character, residential amenity and biodiversity? 3
- e. Have you attached a Lighting Pollution Report? -

Subtotal 19

Please give any additional relevant comments to the Energy Use and Pollution Section below

Dust management will form part of the CEMP to prevent fugitive dust sources. Lighting will be fully shielded downlights and kept to the minimum necessary. The building fully encloses the site and raises the wall along the railway reducing the effect of the dominant noise source to the residential environment of Station Yard. Existing car movements and noise associated with the 19 space car park are eliminated.

3. TRANSPORT

3.1 Provision for the safe efficient and sustainable movement of people and goods

- a. Does your development provide opportunities for occupants to use innovative travel technologies?
- Please explain:
- This is a car free development and priority is given to pedestrian, cycle and public transport.
- b. Does your development include charging point(s) for electric cars? 2
- c. **For major developments ONLY:** Has a Transport Assessment been produced for your development based on TfL's Best Practice Guidance? If you have provided a Transport Assessment as part of your planning application, please tick here and move to Section 3 of this Checklist. 5
- d. **For smaller developments ONLY:** Have you provided a Transport Statement? 5
- e. Does your development provide cycle storage? (Standard space requirements are set out in the the Council's Parking Standards - DM DPD Appendix 4) 2
- If so, for how many bicycles? 55
- Is this shown on the site plans? -
- f. Will the development create or improve links with local and wider transport networks? If yes, please provide details. 2

Subtotal 11

Please give any additional relevant comments to the Transport Section below

enhanced pedestrian and cycle movement through enhanced public realm, pavement crossovers, reduced car parking, enhanced pedestrian crossing points and hard and soft landscaping.

4 BIODIVERSITY

4.1 Minimising the threat to biodiversity from new buildings, lighting, hard surfacing and people

- a. Does your development involve the loss of an ecological feature or habitat, including a loss of garden or other green space? (Indicate if yes) □ -2
 If so, please state how much in sqm? □ sqm
- b. Does your development involve the removal of any tree(s)? (Indicate if yes) □
 If so, has a tree report been provided in support of your application? (Indicate if yes) □
- c. Does your development plan to add (and not remove) any tree(s) on site? (Indicate if yes) □
- d. Please indicate which features and/or habitats that your development will incorporate to improve on site biodiversity:
- | | | | | |
|---|------------------|----------------|-------------------------------|-----|
| Pond, reedbed or extensive native planting | 6 □ | Area provided: | <input type="text" value=""/> | sqm |
| An extensive green roof | 5 ^z | Area provided: | <input type="text" value=""/> | sqm |
| An intensive green roof | 4 □ | Area provided: | <input type="text" value=""/> | sqm |
| Garden space | 4 [#] | Area provided: | <input type="text" value=""/> | sqm |
| Additional native and/or wildlife friendly planting to peripheral areas | 3 [#] | Area provided: | <input type="text" value=""/> | sqm |
| Additional planting to peripheral areas | 2 □ | Area provided: | <input type="text" value=""/> | sqm |
| A living wall | 2 □ | Area provided: | <input type="text" value=""/> | sqm |
| Bat boxes | 0.5 [#] | | | |
| Bird boxes | 0.5 [#] | | | |
| Other | 0.5 □ | | | |

Subtotal

Please give any additional relevant comments to the Biodiversity Section below

new street trees outside of site in public realm and landscape planting within the site based on shrubs and other native shrub species. New seedum roof over whole development.

5 FLOODING AND DRAINAGE

5.1 Mitigating the risks of flooding and other impacts of climate change in the borough

- a. Is your site located in a high flood risk zone (Zone 3)? (Indicate if yes) □ -2
 Have you submitted a Flood Risk Assessment? (Indicate if yes) □ -
- b. Which of the following measures of the drainage hierarchy are incorporated onto your site? (tick all that apply)
- | | | |
|---|-----|--|
| Store rainwater for later use | □ 5 | |
| Use of infiltration techniques such as porous surfacing materials to allow drainage on-site | ■ 3 | |
| Attenuate rainwater in ponds or open water features | □ 4 | |
| Store rainwater in tanks for gradual release to a watercourse | ■ 3 | |
| Discharge rainwater directly to watercourse | □ 2 | |
| Discharge rainwater to surface water drain | □ 1 | |
| Discharge rainwater to combined sewer | □ 0 | |
- c. Please give the change in area of permeable surfacing which will result from your development proposal: □ 220 sqm
 Please provide details of the permeable surfacing below *please represent a loss in permeable area as a negative number*

Subtotal

Please give any additional relevant comments to the Flooding and Drainage Section below

permeable paving circa 220m2 plus attenuation tank size of 31m3, 58m2 of soft planting areas and a green roof size of 292m2

6 IMPROVING RESOURCE EFFICIENCY

6.1 Reduce waste generated and amount disposed of by landfill though increasing level of re-use and recycling

- a. Will demolition be required on your site prior to construction? [Points will only be awarded if 10% or greater of demolition waste is reused/recycled] □ 1
- If so, what percentage of demolition waste will be reused in the new development? □ 0 %
- What percentage of demolition waste will be recycled? □ 60 %
- b. Does your site have any contaminated land? □ 1
- Have you submitted an assessment of the site contamination? □ 2
- Are plans in place to remediate the contamination? □ 2
- Have you submitted a remediation plan? □ 1
- Are plans in place to include composting on site? □ 1

6.2 Reducing levels of water waste

- a. Will the following measures of water conservation be incorporated into the development? (Please tick all that apply):
- | | | |
|---|-----|--|
| Fitting of water efficient taps, shower heads etc | □ 1 | |
| Use of water efficient A or B rated appliances | □ 1 | |
| Rainwater harvesting for internal use | □ 4 | |
| Greywater systems | □ 4 | |
| Fit a water meter | □ 1 | |

Subtotal

Please give any additional relevant comments to the Improving Resource Efficiency Section below

7 ACCESSIBILITY

7.1 Ensure flexible adaptable and long-term use of structures

a. **If the development is residential**, will it meet the requirements of the nationally described space standard for internal space and layout? ▫ 1
 If the standards are not met, in the space below, please provide details of the functionality of the internal space and layout

AND
 b. **If the development is residential**, will it meet Building Regulation Requirement M4 (2) 'accessible and adaptable dwellings'? ▫ 2
 If this is not met, in the space below, please provide details of any accessibility measures included in the development.

For major residential developments, are 10% or more of the units in the development to Building Regulation Requirement M4 (3) 'wheelchair user dwellings'? ▫ 1

OR
 c. **If the development is non-residential**, does it comply with requirements included in Richmond's Design for Maximum Access SPG ▫ 2
 Please provide details of the accessibility measures specified in the Maximum Access SPG that will be included in the development

Subtotal 4

Please give any additional relevant comments to the Design Standards and Accessibility Section below

LBRUT Sustainable Construction Checklist- Scoring Matrix for New Construction

(Non-Residential and domestic refurb)

TOTAL 63

Score	Rating	Significance
80 or more	A+	Project strives to achieve highest standard in energy efficient sustainable development
71-79	A	Makes a major contribution towards achieving sustainable development in Richmond
51-70	B	Helps to significantly improve the Borough's stock of sustainable developments
36-50	C	Minimal effort to increase sustainability beyond general compliance
35 or less	FAIL	Does not comply with SPD Policy

LBRUT Sustainable Construction Checklist- Scoring Matrix for New Construction

Residential new-build

Score	Rating	Significance
81 or more	A++	Project strives to achieve highest standard in energy efficient sustainable development
64-80	A+	Project strives to achieve highest standard in energy efficient sustainable development
55-63	A	Makes a major contribution towards achieving sustainable development in Richmond
35-54	B	Helps to significantly improve the Borough's stock of sustainable developments
20-34	C	Minimal effort to increase sustainability beyond general compliance
19 or less	FAIL	Does not comply with SPD Policy

Authorisation:

I herewith declare that I have filled in this form to the best of my knowledge

Signature

Date #####