

LBRUT Sustainable Construction Checklist - June 2020

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 select TRUE.

Carbon Dioxide emissions reduction

What is the on site carbon dioxide emissions reduction against a Building Regulations Part L (2013) baseline
Policy LP 22 B. and Draft London Plan Policy 9.2.5 require a 35% onsite reduction in CO₂ emissions beyond Building Regulations 2013. %

What is the percentage reduction from efficiency measures alone
Policy LP 22 C. and Draft London Plan Policy 9.2.6 require a 10% onsite reduction in CO₂ emissions beyond Building Regulations 2013 from efficiency measures for residential and 15% for non-residential. %

Percentage of total site CO₂ emissions saved through renewable energy installation? %

What is the total remaining carbon to be offset
Policy LP 22 B. and Draft London Plan Policy 9.2.4 require Major developments to achieve Zero Carbon after offsetting. Tonne

Are remaining emissions going to be offset through offset fund payment in accordance with current guidelines issued for the cost per tonne of CO₂?

What is the total predicted cost of offset?
The London Plan sets this as £95/tonne per year over 30 years, this should be updated based on As Build calculations. £

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:

Non-Residential new-build (100sqm or more) BREEAM Level <input type="text" value="Please Select"/>	Have you attached a pre-assessment to support this?	<input type="text" value="Please Select"/>
Excellence required under Policy LP22 A 3		
Extensions and conversions for residential dwellings BREEAM Domestic Refurbishment <input type="text" value="Excellent"/>	Have you attached a pre-assessment to support this?	<input type="text" value="TRUE"/>
Excellence required under Policy LP22 A 4		
Extensions and conversions for non-residential buildings BREEAM Level <input type="text" value="Please Select"/>	Have you attached a pre-assessment to support this?	<input type="text" value="Please Select"/>
Excellence required under Policy LP 22		

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

Subtotal

1B MINIMUM POLICY COMPLIANCE (RESIDENTIAL)

Score

Water Usage
 Internal water usage after gray/rainwater systems 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.
 110l/p/d Required for new dwellings under Policy LP22 A 2 105l/p/d required under Draft London Plan Policy S15

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	6	TRUE
Reduce heat entering a building through providing/improving insulation and living roofs and walls	2	TRUE
Reduce heat entering a building through shading	3	FALSE
Exposed thermal mass and high ceilings	4	FALSE
Passive ventilation	3	FALSE
Mechanical ventilation with heat recovery	1	TRUE
Active cooling systems, i.e. Air Conditioning Unit	0	FALSE
<i>See Draft London Plan S14</i>		

2.2 Heat Generation

	Score	
b. How have the heating and cooling systems, with preference to the heating system hierarchy, been selected (defined in London Plan policy S13) Tick all heating and cooling systems that will be used in the development.		
Connection to existing heating or cooling networks powered by renewable energy	6	FALSE
Connection to existing heating or cooling networks powered by gas or electricity	5	FALSE
Site wide CHP network powered by renewable energy	4	FALSE
Site wide CHP network powered by gas	3	FALSE
Communal heating and cooling powered by renewable energy	2	TRUE
Communal heating and cooling powered by gas or electricity	1	TRUE
Individual heating and cooling	0	FALSE
<i>See Draft London Plan S13</i>		

2.3 Pollution: Air, Noise and Light

a. Does the development plan to implement reduction strategies for dust emissions from construction sites?	2	TRUE
b. Does the development plan to include a biomass boiler?		FALSE
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 complete the information request form found on the Richmond website.		
c. Has an air quality impact assessment been provided?		TRUE
If yes, has 'Emissions Neutral' been achieved		
	1	FALSE
If yes, have occupants of new development been protected from existing pollution		
	1	FALSE
If no to any of the above are there any sensitive receptors as defined in Policy LP 10 present?		
	-1	FALSE
<i>see Policy LP 10</i>		
d. Please tick only one option below		
Has the development taken measures to reduce existing noise and enhance the existing soundscape of the site?	3	TRUE
Has the development taken care to not create any new noise generation/transmission issues in its intended operation?	1	TRUE
<i>see Policy LP 10</i>		
e. Has the development taken measures to reduce light pollution impacts on character, residential amenity and biodiversity?	3	TRUE
<i>see Policy LP 10</i>		
f. Have you attached a Lighting Pollution Report?	-	

Subtotal 21

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

With regard to energy consumption, Flatt have completed an Energy Statement for the site. Flatt have advised that the heat demand for the residential units is <10 kWh/sqm. The U-values proposed are an improvement upon the threshold requirements of Part L. The report also confirms that mechanical ventilation will be provided as well as the provision of heat pumps that will serve the heating demands.

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?		TRUE
Please explain:		
The proposed design allows for the provision of 20% active electric charging points for the site, as well as the provision of passive infrastructure for 80% the site to allow future development and on		
	Score	
b. Does your development provide for 100% active provision for electric vehicle charging point(s) and have you successfully demonstrated that it would be able to operate satisfactorily in the future expectation of all vehicles being electrically powered?	2	FALSE
c. For major developments ONLY: Has a Transport Assessment been produced for your development based on TfL's Best Practice Guidance?		TRUE
If you have provided a Transport Assessment as part of your planning application, please tick here and move to Section 3 of this Checklist.		
<i>See policy LP44</i>	5	FALSE
d. For smaller developments ONLY: Have you provided a Transport Statement?	5	FALSE
e. Does your development provide cycle storage? (Standard space requirements are set out in the Council's Parking Standards - Local Plan Appendix 3)	2	TRUE
If so, for how many bicycles?		
Is this shown on the site plans?	194	TRUE
<i>See Local Plan Appendix 3</i>		
f. Will the development create or improve links with local and wider transport networks? If yes, please provide details.	2	FALSE

Subtotal 7

Please give any additional relevant comments to the Transport Section below

A Transport Statement has been developed for the site which sets out transport and travel recommendations. 194No. Cycle storage spaces are provided within the site design.

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) If so, please state how much in sqm?	-2	TRUE
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)		TRUE TRUE
c.	Does your development plan to add (and not remove) any tree(s) on site? (Indicate if yes)		FALSE
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: 1188.79 sqm
	An extensive green roof	5	Area provided: sqm
	An intensive green roof	4	Area provided: 914.6 sqm
	Garden space	4	Area provided: 1,057.15 sqm
	Additional native and/or wildlife friendly planting to peripheral areas	3	Area provided: 1,183.00 sqm
	Additional planting to peripheral areas	2	Area provided: 261.55 sqm
	A living wall	2	Area provided: sqm
	Bat boxes	0.5	
	Bird boxes	0.5	
	Swift boxes	0.5	
	Other	0.5	
e.	Does your development use at least 70% of available roof plate as green/brown roof <i>Policy LP 17 requires 70%</i>	1	TRUE
		Subtotal	18
Please give any additional relevant comments to the Biodiversity Section below			
Aspect have undertaken an Ecology Assessment for the site, which confirms that the existing site comprises of habitats or features that are of low ecological value, or of value at site or local level only. The report continues to state that the removal of an habitat is balanced through the proposed landscaping design.			
Habitat areas are as per the Exterior Design and Access Statement and in line with Urban Greening Factor calculations.			

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) Have you submitted a Flood Risk Assessment? (Indicate if yes)	-2	FALSE TRUE
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	FALSE
	Use of infiltration techniques such as porous surfacing materials to allow drainage on-site	3	TRUE
	Attenuate rainwater in ponds or open water features	4	FALSE
	Store rainwater in tanks for gradual release to a watercourse	3	TRUE
	Discharge rainwater directly to watercourse	2	FALSE
	Discharge rainwater to surface water drain	1	TRUE
	Discharge rainwater to combined sewer	0	FALSE
	Have you submitted a Drainage Statement (Indicate if yes)		TRUE
	<i>See Policy LP 21 and Draft London Plan SL 13</i>		
c.	Please give the change in area of permeable surfacing which will result from your development proposal: Please provide details of the permeable surfacing below	968	sqm
		<i>please represent a loss in permeable area as a negative number</i>	
		Subtotal	7
Please give any additional relevant comments to the Flooding and Drainage Section below			
A Flood Risk Assessment and Drainage Statement have been provided which have informed the above responses.			

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	TRUE
	If so, what percentage of demolition waste will be reused in the new development?		%
	What percentage of demolition waste will be recycled?	80	%
b.	Does your site have any contaminated land?	1	FALSE
	Have you submitted an assessment of the site contamination?	2	TRUE
	Are plans in place to remediate the contamination?	2	FALSE
	Have you submitted a remediation plan?	1	FALSE
	Are plans in place to include composting on site?	1	FALSE
c.	Will a waste management plan and facilities be in place in line with Policy LP24	Yes	
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	TRUE
	Use of water efficient A or B rated appliances	1	TRUE
	Rainwater harvesting for internal use	4	FALSE
	Greywater systems	4	FALSE
	Fit a water meter	1	TRUE
		Subtotal	5
Please give any additional relevant comments to the Improving Resource Efficiency Section below			
It is a requirement within the BREEAM assessment that >80% (by volume) of demolition waste is diverted from landfill. This can be achieved through re-use or recycling.			

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? If the standards are not met, in the space below, please provide details of the functionality of the internal space and layout	1	TRUE
AND			
b.	If the development is residential, will it meet Building Regulation Requirement M4 (2) 'accessible and adaptable dwellings'? If this is not met, in the space below, please provide details of any accessibility measures included in the development.	2	TRUE
OR			
c.	If the development is non-residential, does it comply with requirements included in Richmond's Local Plan LP1, LP28.B, LP30 & LP45 Please provide details of the accessibility measures specified in the Local Plan that will be included in the development	2	FALSE
		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)

Score	Rating	Significance
84 or more	A+	Project strives to achieve highest standard in energy efficient sustainable development
75-83	A	Makes a major contribution towards achieving sustainable development in Richmond
56-74	B	Helps to significantly improve the Borough's stock of sustainable developments
40-55	C	Minimal effort to increase sustainability beyond general compliance
39 or less	FAIL	Does not comply with SPD Policy

TOTAL 77

LBRUT Sustainable Construction Checklist- Scoring Matrix for New Construction Residential new-build

Score	Rating	Significance
85 or more	A++	Project strives to achieve highest standard in energy efficient sustainable development
68-84	A+	Project strives to achieve higher standard in energy efficient sustainable development
59-67	A	Makes a major contribution towards achieving sustainable development in Richmond
39-58	B	Helps to significantly improve the Borough's stock of sustainable developments
24-38	C	Minimal effort to increase sustainability beyond general compliance
23 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 A Diprose Date 20/08/2012