

LBRUT Sustainable Construction Checklist - June 2020

This document forms part of the Sustainable Construction Checklist SPD. This document **must** cover all developments: all residential development providing **one or more new residential units (including conversions)** and all non-residential development providing **100sqm or more of non-residential floor space**. Developments including new builds, extensions less than 100sqm, and other conversions are strongly encouraged to comply with this checklist. For more information on the relevant section, or refer to the document where this information may be found in detail, e.g. Flood Risk Assessment may be found in the Justification and Guidance section of this SPD.

Property Name (if relevant):

Address (include. postcode)

Completed by:

For Non-Residential

Size of development (m2)

1 MINIMUM COMPLIANCE (RESIDENTIAL AND NON-RESIDENTIAL)

Energy Assessment

Has an energy assessment been submitted that demonstrates the expected energy and energy efficiency and renewable energy measures, including the feasibility of CHP/CCHP please select TRUE.

Carbon Dioxide emissions reduction

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

What is the percentage reduction from efficiency measures alone against a Building Regulations Part L 2013 *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 against a Building Regulations Part L 2013 *Policy LP 22 B. and Draft London Plan Policy 9.2.4 require Major developments to achieve a net zero carbon footprint*

Are remaining emissions going to be offset through offset fund payment in accordance with the London Plan?

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 to reflect current market prices*

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

Please check the Guidance Section of this SPD for the requirements

Environmental Rating of development:

Non-Residential new-build (100sqm or more)

BREEAM Level

Excellent

Excellent required under Policy LP22 A 3

Extensions and conversions for residential dwellings

BREEAM Domestic Refurbishment

Please Select

Excellent required under Policy LP22 A 4

Extensions and conversions for non-residential buildings

BREEAM Level

Please Select

Excellent required under Policy LP 22

Score awarded for Environmental Rating:

BREEAM: Good = 0, Very Good = 4, Excellent = 8, Outstanding = 16

1B MINIMUM POLICY COMPLIANCE (RESIDENTIAL)

Water Usage

Internal water usage after gray/rainwater systems limited to 105 litres person per day. (Excluding external water consumption). Calculations using the water efficiency calculator for new dwellings. *110l/p/d Required for new dwellings under Policy LP22 A 2 105l/p/d required under Draft*

2. ENERGY USE AND POLLUTION

2.1 Need for Cooling

a. How does the development incorporate cooling measures? Tick all that apply:

- Energy efficient design incorporating specific heat demand to
- Reduce heat entering a building through providing
- Reduce heat entering a building through shading
- Exposed thermal mass and high ceilings
- Passive ventilation
- Mechanical ventilation with heat recovery
- Active cooling systems, i.e. Air Conditioning Unit

See Draft London Plan SI4

2.2 Heat Generation

b. How have the heating and cooling systems, with preference to the heating system hierarchy, been specified? Tick all heating and cooling systems that will be used in the development:

- Connection to existing heating or cooling networks
- Connection to existing heating or cooling networks
- Site wide CHP network powered by renewable energy
- Site wide CHP network powered by gas
- Communal heating and cooling powered by renewable energy
- Communal heating and cooling powered by gas or electricity
- Individual heating and cooling

See Draft London Plan SI3

2.3 Pollution: Air, Noise and Light

a. Does the development plan to implement reduction strategies for dust emissions from construction?

b. Does the development plan to include a biomass boiler?

If yes, please refer to the biomass guidelines for the Borough of Richmond for supplementary information. If the proposed boiler is of a qualifying type, please complete the information request form found on the Richmond website.

- c. Has an air quality impact assessment been provided
If yes, has 'Emissions Neutral' been achieved
If yes, have occupants of new development been protected from noise
If no to any of the above are there any sensitive receptors?
see Policy LP 10
- d. Please tick only one option below
Has the development taken measures to reduce existing noise impacts?
Has the development taken care to not create any new noise generation?
see Policy LP 10
- e. Has the development taken measures to reduce light pollution impacts on character?
see Policy LP 10
- f. Have you attached a Lighting Pollution Report?

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

We intend to install new renewable energy Ground Source Heat Pumps for heating, with PV windows and noisy external plant are

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 options?

Please explain:

We aim for the bulk of visitors to travel by foot. As these will be parents/carers visiting the centre with children, the noise from the building will be low.

- b. Does your development provide for 100% active provision for electric vehicle charging points?
- c. **For major developments ONLY:** Has a Transport Assessment been produced for your development?
If you have provided a Transport Assessment as part of your planning application, please refer to it.
See policy LP44
- d. **For smaller developments ONLY:** Have you provided a Transport Statement?
- e. Does your development provide cycle storage? (Standard space requirements are set out in the Local Plan)
If so, for how many bicycles?
Is this shown on the site plans?
See Local Plan Appendix 3
- f. Will the development create or improve links with local and wider transport networks?

Please give any additional relevant comments to the Transport Section below

We aim for the bulk of visitors to travel by foot. As these will be parents/carers visiting the centre with children, the number of vehicles entering the building will be low.

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 trees? (Indicate if yes)
If so, please state how much in 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?
- 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:
- | | |
|---|-----|
| Pond, reedbed or extensive native planting | 6 |
| An extensive green roof | 5 |
| An intensive green roof | 4 |
| Garden space | 4 |
| Additional native and/or wildlife friendly planting | 3 |
| Additional planting to peripheral areas | 2 |
| A living wall | 2 |
| 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?
Policy LP 17 requires 70%

Please give any additional relevant comments to the Biodiversity Section below

Aiming to improve the existing green spaces, and improve bio-diversity.

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)
- b. Which of the following measures of the drainage hierarchy are incorporated onto your site?
- Store rainwater for later use

Use of infiltration techniques such as porous surfacing materials
Attenuate rainwater in ponds or open water features
Store rainwater in tanks for gradual release to a watercourse
Discharge rainwater directly to watercourse
Discharge rainwater to surface water drain
Discharge rainwater to combined sewer
Have you submitted a Drainage Statement (Indicate i

See Policy LP 21 and Draft London Plan SL 13

- c. Please give the change in area of permeable surfacing which will result from your c
Please provide details of the permeable surfacing below

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

6 IMPROVING RESOURCE EFFICIENCY

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

- a. Will demolition be required on your site prior to construction? *[Points will only be awarded*

If so, what percentage of demolition waste will be reused in tl

What percentage of demolition waste will be recycled?

- b. Does your site have any contaminated land?
Have you submitted an assessment of the site contamination?
Are plans in place to remediate the contamination?
Have you submitted a remediation plan?
Are plans in place to include composting on site?
- c. Will a waste management plan and facilities be in place in line with Policy LP24

6.2 Reducing levels of water waste

- a. Will the following measures of water conservation be incorporated into the develop
Fitting of water efficient taps, shower heads etc
Use of water efficient A or B rated appliances
Rainwater harvesting for internal use
Greywater systems
Fit a water meter

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

We are not expecting contaminated land to be found. However should some be found, it wi

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 describe
 If the standards are not met, in the space below, please provide

AND

b. **If the development is residential**, will it meet Building Regulation Requirement M4 (2) 'a
 If this is not met, in the space below, please provide details of

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

OR

c. **If the development is non-residential**, does it comply with requirements included in Rich
 Please provide details of the accessibility measures specified in the
 in the development

Level

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

LBRUT Sustainable Construction Checklist- Scoring Matrix for New Construction (Non-Residential)

Score	Rating	Significance
84 or more	A+	Project strives to achieve highest standard in ene
75-83	A	Makes a major contribution towards achieving su
56-74	B	Helps to significantly improve the Borough's stoc
40-55	C	Minimal effort to increase sustainability beyond
39 or less	FAIL	Does not comply with SPD Policy

LBRUT Sustainable Construction Checklist- Scoring Matrix for New Construction Residential

Score	Rating	Significance
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85 or more	A++	Project strives to achieve highest standard in energy
68-84	A+	Project strives to achieve higher standard in energy
59-67	A	Makes a major contribution towards achieving su
39-58	B	Helps to significantly improve the Borough's stoc
24-38	C	Minimal effort to increase sustainability beyond
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



be filled out as part of the planning application for the following **conversions leading to one or more new units**), and all other forms of new non-residential development of less than 100sqm floor space, checklist. Where further information is requested, please either fill in the Risk Assessment or similar. **Further guidance** on completing the Checklist

Application No. (if known):

For Residential

Number of dwellings



carbon dioxide emissions saving from ' and community heating systems? If yes,

part L (2013) baseline %
CO₂ emissions beyond Building Regulations 2013.

CO₂ emissions non-residential. %

%

Net Zero Carbon after offsetting. Tonne

in line with current guidelines issued for the cost per tonne of CO₂

based on As Build calculations. £



the policy requirements

Have you attached a pre-assessment to support this?

Have you attached a pre-assessment to support this?

Please Select

Have you attached a pre-assessment to support this?

Please Select

Subtotal

Score

including an allowance 5 litres per person per day for
appliances have been submitted.

1

TRUE

London Plan Policy S15

Subtotal

Score

less than or equal to 15 kWh/sqm
improving insulation and living roofs and walls

6

TRUE

2

TRUE

3

TRUE

4

TRUE

3

TRUE

1

TRUE

0

FALSE

energy, been selected (defined in London Plan policy S13)

Score

powered by renewable energy

6

FALSE

powered by gas or electricity

5

FALSE

any

4

TRUE

3

FALSE

single energy

2

TRUE

electricity

1

FALSE

0

FALSE

from construction sites?

2

TRUE

TRUE

Richmond, please see guidance for
size, you may need to complete

existing pollution
receptors as defined in Policy LP 10 present?

1

1

-1

FALSE

FALSE

FALSE

TRUE

and enhance the existing soundscape of
generation/transmission issues in its

3

1

TRUE

FALSE

r, residential amenity and biodiversity?

3

-

TRUE

Subtotal

panels. The plan is also to remove or greatly reduce the need for unsightly
as.

technologies?

TRUE

small children, many of which will be in a buggy, thus bicycle usage to the

Score

int(s) and have you successfully demonstrated that it

2

FALSE

development based on TfL's Best Practice Guidance?
ring application, please tick here and move to Section 3 o

5

FALSE

5

TRUE

it in the Council's Parking Standards - Local I

2

FALSE

FALSE

orks? If yes, please provide details.

2

FALSE

Subtotal

...n small children, many of which will be in a buggy, thus bicycle usage to the



e
g a loss of garden or other green space? (Indicate if ye: -2 FALSE
 sqm

ation? (Indicate if yes) FALSE
TRUE

if yes) TRUE

ate to improve on site biodiversity:

Area provided:		sqm	FALSE
Area provided:	200	sqm	TRUE
Area provided:	200	sqm	TRUE
Area provided:	800	sqm	TRUE
Area provided:	50	sqm	TRUE
Area provided:	50	sqm	TRUE
Area provided:	6	sqm	TRUE
			TRUE
			TRUE
			TRUE
			TRUE

1 TRUE

Subtotal 0

...ersity on the site following construction.



-2 FALSE
FALSE

our site? (tick all that appl 5 TRUE

als to allow drainage on-site

3
4
3
2
1
0

TRUE
FALSE
TRUE
FALSE
TRUE
TRUE
TRUE

development proposal:

-490

sqm

please represent a loss in permeable area as a negative number

Subtotal 0

[Empty green box]



use and recycling

[if 10% or greater of demolition waste is reused/recycled]

1

TRUE

ne new development?

70 %

25 %

1
2
2
1
1

FALSE
FALSE
FALSE
FALSE
FALSE

Yes

oment? (Please tick all that apply):

1
1
4
4
1

TRUE
TRUE
TRUE
FALSE
TRUE

Subtotal 0

low

[Empty green box]

ill be managed according the the required local authority standards.

ed space standard for internal space and layout?

1

Please Select

le details of the functionality of the internal space and layout

[Redacted]

ccessible and adaptable dwellings'?

2

Please Select

any accessibility measures included in the development.

[Redacted]

n the development to Building

1

Please Select

iamond's Local Plan LP1, LP28.B, LP30 & LP45

2

TRUE

e Local Plan that will be included

el access provided to all of ground level and all external areas. Lift provided for access to 1st floor areas.

Subtotal 0

low

[Redacted]

ential and domestic refurb)

TOTAL 0

rgy efficient sustainable

ustainable development in

k of sustainable developments

general compliance

new-build

efficient sustainable development
efficient sustainable development
sustainable development in
of sustainable developments
general compliance



CGN

Date 14-Mar-21



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