SMART DESIGN: CREATING SUSTAINABLE BUILDINGS

Sustainability Advisory Leaflet

Householders Applications

Residential Conversions 1-3 units

Non-Residential Development up to 200m^2 Floor Area

Why Consider Sustainable Design and Construction?

By including more sustainable measures in the design and construction of buildings, we can help improve the quality of life and the environment in Enfield. This advisory leaflet will help you design a better extension or building – having long-term benefits for you and your environment and achieving a better quality building.

How will my Planning Application be affected?

For the types of development detailed above, it is up to you whether or not you implement some of the measures detailed in this leaflet, and the outcome of your planning application will not be affected by whether or not you choose to implement the measures. **However, we would like you to complete the forms and return them to us with your planning application for the purpose of measuring the impacts of the Sustainable Design and Construction Policy.**

While implementation of these measures is not compulsory, there are often great benefits to implementing them, both in reducing the running costs for your building, and improving comfort levels in the building. Energy bills can be reduced dramatically by installing high levels of insulation or double glazed windows, for example, as well as improving the comfort levels in your home.

How to Use this Leaflet

This leaflet is structured as a series of questions about your development. Each 'question' is followed by advice on the best practice to follow in order to ensure that your development includes as many principles of sustainable design and construction as possible. There are tick boxes beside each question and sustainability measure that you can use as a checklist for your development project.

The 'questions' are grouped under 3 topic headings:

Minimising Energy Consumption

Water Conservation

Efficient Resource Use

Smart Design sustainability measures should be considered from the outset of the development process, and it is intended that this leaflet be used throughout the design process so that you can implement as many of the measures as possible.

As a guide, you should be aiming to implement at least 50% of the applicable measures in your development. But if you can't do them all, don't worry, even if you only do a few things, they all help to make our environment a better one, both for us and future generations.

For More Information…

'Greening Your Home: A Guide for Householders'

Published by the London Borough of Enfield, this guide provides more detailed guidance on the issues covered in this leaflet, and is available from the sources below.

The Council Website:	www.enfield.gov.uk
Council Offices:	Environment Direct Reception, Civic Centre, Silver Street
By Telephone:	Call Planning Services on 0208 379 3821 or 0208 379 3827

PLEASE remember to return your form to us with your planning application.

ENFIELD Council

Applicant to Complete

Name of Applicant or Agent: _____

Address of Property: _____

Brief Description of Proposal: _____

_____

Office Use Only

Planning Reference Number: _____

MINIMISING ENERGY CONSUMPTION

1 Does the development include south facing windows?

- ❑ Yes (see information below)
- ❑ No (go to question 2)

In the UK, the sun travels from East to West in a southerly path. Windows that face south therefore will obtain plenty of sunlight throughout the day. This is a useful source of heat and light, but over-exposure to the sun may lead to the rooms becoming overheated, particularly in summertime.

It is important to provide some sort of measure to prevent overheating, such as blinds, wider eaves, screens, or something similar. Wider eaves will allow sunlight into the room in winter, when the sun is lower in the sky, but shade the room in summer, when the sun is higher. Blinds and screens that can be lowered as required provide a flexible control.

Will measures for shading for south facing windows be implemented?	❑ Yes ❑ No

2 It is of particular importance to provide adequate daylight to living and working areas, kitchens and bathrooms. This saves you money by not having to artificially light rooms during the day, and improves the users' enjoyment of the building.

Will the development ensure that natural light is available to all rooms?	❑ Yes ❑ No

3 Does the development include a conservatory?

- ❑ Yes (see information below)
- ❑ No (go to question 4)

If you are putting in a conservatory, it is very important that it is partitioned from the main building to prevent excessive heat gain during the day, and heat loss at night.

Conservatories should be well partitioned from the main building. Walls, windows and doors facing into the conservatory should be insulated to the same standard as any other external part of your home. Conservatories should not be heated (other than background heat to prevent frost damage).

High and low level opening vents and blinds need to be provided to help reduce excessive summer and afternoon heat.

Will the conservatory be well designed to minimise heat loss and energy consumption?	❑ Yes ❑ Well partitioned from main building ❑ Insulated ❑ Vents and blinds provided ❑ No

4

Ventilation is important to prevent excessive moisture build-up within a home. The best option is 'passive ventilation'; methods which do not require the use of energy. Windows should be able to be opened without compromising safety and security. Trickle ventilation slots built into window heads are sufficient for minimum level ventilation for bedrooms and the living room.

For kitchens and bathrooms, warm air and pollution from indoor cooking processes makes it very important to ventilate well, usually by mechanical methods.

Will natural ventilation be provided to all new rooms?	❑ Yes ❑ No

5

Will you be replacing your boiler or heating system?

❑ Yes (see information below)

❑ No (go to question 6)

If you're replacing your boiler or heating system, it is a good opportunity to look at either installing a solar hot water heating system or a high efficiency boiler (over 85%). If you've got a southerly facing roof, why not consider a solar hot water heating system? Installation of this type of system, while more expensive than traditional systems, can reduce your fuel bills as it pre-heats the water entering your conventional system.

Grants may be available for installation of both solar hot water systems and energy efficient boilers. Contact your local Energy Advice Centre for further details (www.est.org.uk/myhome/localadvice) or call the North East London Energy Advice Centre on 020 8521 3156)

Will an energy efficient boiler or solar hot water system be installed?	❑ Yes ❑ Solar Hot Water system ❑ Energy efficient boiler (85% or above) ❑ No

6

Saving energy in the home can be as simple as insulating your hot water tanks and hot water pipes, using timers and controls for heating systems, and installing a thermostat for your hot water system. Saving energy saves you money and the environment.

How will energy be saved in the home?	❑ Water tanks and hot water pipes insulated ❑ Timers and controls will be used for heating systems ❑ A thermostat will be installed for the hot water system ❑ External lighting fitted with sensors

7

Insulating your building's walls, floor and roof will give you a more comfortable building, as well as save you money on energy for heating and cooling. If you can provide insulation over and above the minimum building requirements, you will see even better results!

Will insulation be provided over and above building regulation requirements?	❑ Yes ❑ No

8

Providing high performance glazing in your windows will also help minimise heat loss, making the building more comfortable and more energy efficient. Large amounts of heat can be lost through windows, so it is particularly important to provide smaller windows with high performance glazing on northern sides of the building, where it is often cooler from lack of sunlight. Going beyond building regulations by providing glazing such as 12mm or 16mm argon filled glazing will give even better results

Will high performance glazing such as 12mm or 16mm Argon filled glazing be specified for all new windows in the development?	❑ Yes ❑ No

WATER CONSERVATION

1	If you are putting a new paved surface on the site, such as a driveway or patio, using permeable pavers allows rainwater to filter into the ground below, rather than increasing the amount of run off from the site. This run off usually drains to our rivers and streams and can pollute our waterways.	
	Will permeable paving be used in the development?	❑ Yes ❑ No

2	Think about ways you can reduce your water usage. If a new bathroom or kitchen is involved in your development, install a dual/low flush toilet and aerated/spray taps. Power showers use a lot of water, so they are best avoided. Why not install a water butt to collect rainwater from the roof for watering the garden or washing the car?	
	What measures will be used to save water in the development?	❑ Dual flush/low flush toilet ❑ No power shower will be installed ❑ Shower and taps with water saving features ❑ Installation of a water butt

EFFICIENT RESOURCE USE

1	Using recycled materials in the construction of your development reduces the amount of waste going to landfill, and relieves the demand for new construction materials, which are 'energy-hungry' to produce. Materials that can be re-used in construction include bricks, tiles, and timber, among other things.	
	Will recycled materials be specified in the development?	❑ Yes ❑ No

2	Many finishing products within the home contain chemicals that can be harmful to human health. Use of natural materials can limit these adverse health effects. Consider the use of water-based paints, natural textile floor coverings and avoid products that contain u-PVC. Other examples include timber, unfired clay bricks or tiles, cork, wool, and flax insulation.	
	Will low-toxicity materials be specified in the development?	❑ Yes ❑ No

3	Use of timber windows and finishing products can be a sustainable choice, but it is important that the timber comes from sustainably managed forests. Choose timber that displays the Forestry Stewardship Council logo (FSC).	
	Will timber products used be from an independently certified sustainable source such as the FSC?	❑ Yes ❑ No

4	u-PVC windows are often seen as a low maintenance, long lasting choice for window frames. However, the production and disposal of u-PVC joinery releases chemicals which may threaten the environment and human health. u-PVC windows degrade over time, and cannot be repaired, but timber windows can. Timber is a sustainable resource, as long as it comes from a sustainably managed source. Specify timber windows and doors and protect the environment.	
	u-PVC will **NOT** be used in the development.	❑ Yes ❑ No