

## **UCL Estates**

### **Langton Close House Solar Panels – Design and Access Statement**

This proposal is for an installation of solar photovoltaic (PV) panels on the roof of the UCL Langton Close House student residence block. Site plans, a structural survey and information about the equipment proposed are attached as supporting documents.

#### **Design**

UCL is seeking to increase the amount of its power that comes from renewable sources. A suitable site for solar PV panels has been identified on top of this building, on a large area of a flat roof with unshaded southern exposure. The installation will be 36 kWp (equivalent to around nine times larger than an average domestic installation) and is expected to lead to an annual reduction in carbon emissions of 10 tonnes. All electricity generated will be consumed within the building.

The panels will cover the flat area of the roof and will be angled at approx. 10 degrees to the surface of the roof. They will not extend vertically above the height of the existing parapet wall (approx. one metre).

The panels will be supplied and professionally installed by a specialist solar fitting contractor, using a ballast mounting system. The mounting system consists of aluminium and plastic fittings and will be fixed directly to the roof. A structural survey has determined the roof is capable of bearing the proposed load including ballast.

The site is located within the Bloomsbury Conservation Area and care has been taken to ensure that the installation will be in keeping with the principles this entails. The plans do not significantly alter the outward appearance of the building and appropriate arrangements will be made for site access and waste removal.

#### **Access**

The site is located on the roof of this 7-storey (including basement) building. Details can be found on the site and location plans and in photographs below.

Access to the site will be provided through the building. No external scaffolding or road closures will be necessary.

A passenger lift with a suitable weight tolerance is available to transport materials and equipment from ground to fifth floors. One flight of stairs then provides direct access to the roof via a door. The site will continue to be accessible from within the building for future maintenance.

An existing brick parapet wall, interspersed with metal rails, surrounds the entire site area on the rooftop. This means no extra safety measures will be required for the works at height.



Flat roof area (looking north) – panels will be situated in open space avoiding protrusions such as small vents. Brick wall and railing surround rooftop.



Flat roof area (looking west) – smaller area on north side of building where panels will be situated in open space avoiding protrusions. Brick wall and railing surround rooftop.



Roof access point – one flight of stairs lead down to fifth floor lift access lift