

Sustainability Statement

150 Southampton Row
London Borough of Camden

The following is provided to describe the proposed development approach at 150 Southampton Row, London and the overall approach to sustainability in compliance with CPG 3 as mandated by Camden Council. The development involves more than 5 dwelling units and follows the guidelines and requirements of DP22 Promoting Sustainable Design and Construction. More than 10% of the total costs will be spent on the improvements.

Existing Conditions:

- 1.1 The existing building has limited or no insulation
- 1.2 The building is in part historic. In particular the front facade on Southampton Row, thus the building has substantial air leakage
- 1.3 The building windows have significant air infiltration and do not operate correctly to allow for natural ventilation
- 1.4 The existing building heating systems are a combination of gas hot water boiler (excess of 50 years old) and electric heat coils in HVAC systems (excess of 15 years old)
- 1.5 The existing lighting is a combination of florescent and incandescent
- 1.6 The existing roofs are tar and gravel

Proposed Development and Improvements

- 2.1 The building will be fully insulated internally and externally to include walls, floors, roofs and lofts
- 2.2 The building will be served as a central gas system that will be fed from solar panel that will account for in excess of 50% of the system needs
- 2.3 The building will have tempered make up air that allows for a natural 'draft' for natural ventilation use throughout the building, in conjunction with operable windows
- 2.4 The building will be heated and cooled via a highly efficient Daiken air sourced heat pump that is managed by a building wide management control system. The control system allows for outside air temp, time of year, time of day and overall operation to have the efficiencies maximized. Individual control can localized the set points by +/- 2 degrees (of off) to control against inappropriate user operations.
- 2.5 All building appliance will be A+ rated
- 2.6 All building lighting is planned to be LED with PIR sensors
- 2.7 All windows will be repaired for use and to insure air tightness. Secondary glazing and energy saving insulated blinds will be provided.
- 2.8 All water saving taps and shower heads, dual flush toilets and use of reclaimed rain water in toilets and low flow washing machines will be incorporated
- 2.9 Green Roof (on all non historic areas) and a substantial landscaped rear elevation will be incorporated into the design
- 2.10 Site waste management plan, long term recycling and local recovery will be implemented
- 2.11 The current run off will be substantially reduced via green roof and reduction in impervious area and rain collection
- 2.12 The BREEAM Goal of **Very Good** is predicted based on design assessment
- 2.13 Adapting to future climate changes are addressed in the design in the following manner:
 - a. adding of green space, green roof and allowing for a reduction in run off
 - b. substantial improvement in window performance and internal insulated thermal shade
 - c. substantial building insulation
 - d. a substantial building management system and HVAC controls will allow for improved natural ventilation
 - e. re-use of rain water for green roof and or gray (toilet water)