

Tidbury Court

Description General information

Client: Wandsworth Design Service
Architect: Arch. Jason Tait
Area: 1,039 m²
Location: Tidbury Court, Wandsworth council
Reference number: GT053

Consulting jobs

- Code for Sustainable Homes Assessment (CSH)
- Standard Assessment Procedure (SAP)
- Energy Strategy report / studies
- Renewable Energy Feasibility studies
- Daylighting calculations
- Thermal modeling and overheating analysis

Sustainable evaluation

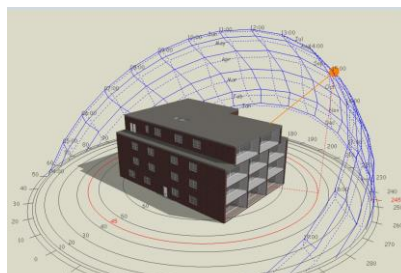
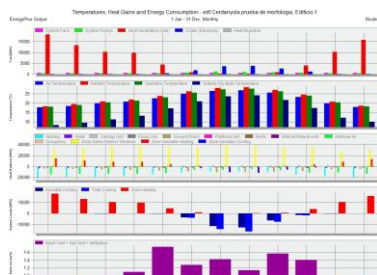
The project is certifying for a **CODE 4 for the Code for Sustainable Homes scheme**. The **energy strategy** for the proposed scheme is to use a highly efficient gas boiler alongside advanced energy efficiency measures and a 93 m² solar Photovoltaic array to meet the carbon emissions reductions target set by Wandsworth Council.

The proposal is to insulate the building to best practice standards, surpassing Part L requirements. The thermal performance targets of the dwelling are the following: U-Values of 0.16 W/m²K for the ground floor and roof, 0.14 W/m²K for walls and windows of 1.3 W/m²K. An air permeability of 3 m³/m²/hr. at 50 pa is targeted, and to be achieved on site. Thermal bridging will also be kept to a minimum with an average Y-value of 0.08, thus following accredited construction details for all dwellings as a minimum.

A mechanical ventilation system with heat recovery (MVHR) will be implemented in the dwelling, recycling heat that would otherwise be lost. This ventilation system will meet the requirements of Part F.

The **Daylight calculations** (ADF) reports that the Kitchens area achieves a minimum average daylight factor of more than 2%, and the living rooms, dining room and studies achieve a minimum average daylight factor of more than 1.5%. Also that the surrounding buildings have not been affected by the projected shadow of the new building. Likewise the Sunlight calculations (APSH) are that every flat for this development meets the requirements recommended by BRE, having 5% of sunlight hours on winter months and 25% of the entire year.

Because the building has considerable window area on the South, East and West façade, as design there was a problem with **overheating**, specially on the bedrooms. We advice the architects to reduce the windows area on 2/3 of the original



Code for Sustainable Homes										Score assessment			
Category	Code	Requirement	Current	Target	Score	Weight	Points	Weighted	Total	Weighted	Score	Weight	Total
Energy	Env 1	Energy Use	120	100	1.0	4	4	4	1.0	4	1.0	1.0	4.0
	Env 2	Building Fabric	120	100	1.0	4	4	4	1.0	4	1.0	1.0	4.0
	Env 3	Energy Source	120	100	1.0	4	4	4	1.0	4	1.0	1.0	4.0
	Env 4	Daylight	120	100	1.0	4	4	4	1.0	4	1.0	1.0	4.0
	Env 5	Lighting	120	100	1.0	4	4	4	1.0	4	1.0	1.0	4.0
	Env 6	Water Efficiency	120	100	1.0	4	4	4	1.0	4	1.0	1.0	4.0
	Env 7	Waste	120	100	1.0	4	4	4	1.0	4	1.0	1.0	4.0
Materials	Mat 1	Embodied Carbon	120	100	1.0	10	10	10	1.0	10	1.0	1.0	10.0
	Mat 2	Embodied Carbon	120	100	1.0	10	10	10	1.0	10	1.0	1.0	10.0
Sustainable Use of Resources	SUR 1	Water Efficiency	120	100	1.0	4	4	4	1.0	4	1.0	1.0	4.0
	SUR 2	Water Efficiency	120	100	1.0	4	4	4	1.0	4	1.0	1.0	4.0
Health and Wellbeing	HWB 1	Daylight	120	100	1.0	8	8	8	1.0	8	1.0	1.0	8.0
	HWB 2	Daylight	120	100	1.0	8	8	8	1.0	8	1.0	1.0	8.0
Management	Man 1	Construction Waste	120	100	1.0	8	8	8	1.0	8	1.0	1.0	8.0
	Man 2	Construction Waste	120	100	1.0	8	8	8	1.0	8	1.0	1.0	8.0
Land Use and Planning	LUP 1	Ecological Value of Site	120	100	1.0	8	8	8	1.0	8	1.0	1.0	8.0
	LUP 2	Ecological Value of Site	120	100	1.0	8	8	8	1.0	8	1.0	1.0	8.0
	LUP 3	Ecological Value of Site	120	100	1.0	8	8	8	1.0	8	1.0	1.0	8.0
	LUP 4	Ecological Value of Site	120	100	1.0	8	8	8	1.0	8	1.0	1.0	8.0
	LUP 5	Ecological Value of Site	120	100	1.0	8	8	8	1.0	8	1.0	1.0	8.0