Acorn House

ASHP Planning Condition No 35



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Project: 08580 – Acorn House

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Job Title

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Document Title	ASHP Planning Condition No 35		
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1.0 Executive Summary

This report sets out the proposals for the metering of the energy centre providing heating and cooling to the residential flats for the building. Alongside estimated costs, commitment to monitor performance and lifetime maintenance plan.

Acorn House project is the construction of a new residential development in London. The site will consist of a single building which will be dedicated to residential accommodation, commercial spaces (offices and retail unit) alongside landlord areas.

2.0 Purpose

The purpose of this document is to set out the metering of the energy centre which provides heating and cooling to the residential flats for the building, estimated costs, commitment to monitor performance and lifetime maintenance plan.

3.0 Metering and Estimate costs

A Switch2 metering solution will be provided. This system will have an electricity meter and heat meter for each ASHP, which will capture the amount of energy used by each ASHP and how much of that energy it will deliver as heat. A heat meter will be installed as the LTHW/CHW pipework exits the energy centre and a flow meter to measure the amount of DHW that is distributed around the site.

In each apartment there is a heat meter and DHW meter to record what is actually used by each resident. Residents will only be billed for their usage in a variable tariff. They will also pay a standing charge which consists of the site wide electricity standing charge for the Landlords meter and Switch2 billing service, divided by the number of apartments on site. Obviously, it is difficult to advise what the costs will be without specifics costs for the energy, but this will be calculated before the client takes over so a tariff can be proposed and agreed prior to residents moving in.

Switch2 have advised that other sites that use the same system an estimated usage in a 2-bed apartment to be around 2000kWh for heat and 29 cubic metres of DHW per year. This would equate to approx. £160 for heat and approx. £223 for hot water, based on 2 occupants. Standing charges will vary, but the average is approx. £110.00 per apartment per year for standing charges. Usage varies depending on tariff, number of occupants and lifestyle and Switch2 cannot be held liable for these estimates.

The metering system is continually monitored and Switch2 will enter into an agreement with Newlon Housing for their services, as we have done with them for other sites.

If Switch2 could also take on the maintenance of the energy centre and apartment equipment.

4.0 Commitment to monitor

The client is committed to monitor the system inline with their requirements to fulfil 'Be Seen' as set out in the Energy Statement.

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5.0 Lifetime Maintenance Plan

This section sets out the requirements for maintenance for the ASHP.

The ASHPs will last on average 15 years but could reach 20 to 25 years if maintained well.

ASHP only require yearly maintenance. This would involve: -

- 1) Full Visual Checks
- 2) System checks visual and diagnostic
- 3) Electrical circuits tested
- 4) Temperatures tested
- 5) All relevant pipework pressure tested (including checking for leaks)
- 6) Check and clear any debris

6.0 Safe Access

The plant room and ASHP are located on the 9th floor. All plant has level access for maintenance.