CONDITION 21

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SHDC
Planning & Development
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Ref: 0145-10

Barrington Gate, Holbeach

on behalf of Hill Partnership

Introduction

We have been appointed by Hill Partnership to provide the Standard Assessment Procedure (SAP) calculations for the above development, together with the predicated Energy Assessments and Energy Performance Certificates.

The purpose of this report is to advise the client on the energy performance of the new development and to demonstrate compliance with Approved Document L1A of the Building Regulations 2000 (as amended) and the Code for Sustainable Homes Ene1 Dwelling Emission Rate.

Clients Brief

The client required SAP's and EPC's for each house and flat on the site to show compliance with Building Regulations but also Condition 21 of the planning permission (H09/0438/08) which requires 10% of the total energy use pertaining to this development to be sourced from renewable sources. We have therefore calculated the renewable energy source for the site to ensure it meets with this requirement using PV panels as directed by the client.

Assessment Methodology

Our assessment methodology was carried out using the Government approved software calculation providers, the Building Research Establishment (BRE) and Elmhurst Energy Systems. We have used both tools to determine the overall energy usage for the proposed development and to model and recommend the use of renewable energy to meet all the requirements.

To demonstrate compliance with the requirements we have calculated each individual dwellings total energy demand and the energy supplied from the renewable technology. The following table demonstrates compliance with the 10% renewable planning condition

Plot Number	Total Energy Demand	Energy Supplied from renewable	TER	DER
2	10678.374	1951.488	21.63	14.55
3	10678.374	1951.488	21.63	14.65
4	10741.866	1951.488	23.47	15.34
5	8241.8069	1734.656	23.47	15.28
6	8213.563	1734.656	23.47	15.34
7	8241.8069	1734.656	23.47	15.28
8	8213.563	1734.656	20.44	13.83
9	11143.077	1734.656	20.44	13.83
10	11143.077	1734.656	23.47	15.34
11	8241.8069	1734.656	20.64	13.64
12	7537.2938	1734.656	23.47	15.28
13	8213.563	1734.656	20.44	13.83
14	11143.077	1734.656	20.44	13.83
15	11143.077	1734.656	21.63	14.91
16	10903.927	1951.488	21.63	14.37
17	10568.38	1951.488	21.63	14.91
18	10903.927	1951.488	21.63	14.37
19	10568.38	1951.488	21.63	14.91
20	10903.927	1951.488	21.63	14.37
21	10568.38	1951.488	21.63	14.91
22	10903.927	1951.488	21.63	14.37
23	10568.38	1951.488	24.94	16.21
24	7406.8079	1734.656	24.94	16.21
25	7406.8079	1734.656	21.19	13.6
26	6512.0548	1734.656	21.19	13.6
27	6512.0548	1734.656	23.97	15.49
28	7140.5349	1734.656	23.97	15.49
29	7140.5349	1734.656	23.5	15.27
30	8196.9272	1734.656	23.5	15.21
31	8169.0657	1734.656	23.5	14.98
32	8072.138	1734.656	20.6	13.29
33	7376.1895	1734.656	23.5	14.92
34	8046.936	1734.656	21.6	14.68
35	10032.987	1734.656	18.66	12.53
36	9069.08	1951.488	21.6	14.68
37	10032.987	1734.656	23.5	14.98
38	8072.138	1734.656	23.5	14.92
39	8046.936	1734.656	21.16	14.47
40	11920.302	1951.488	18.66	12.53

41	9069.08	1951.488	18.66	12.53
42	9069.08	1951.488	18.66	12.53
43	9069.08	1951.488	21.16	14.47

Summary Results

Total Energy Demand	=387067.2031
Total Energy Supply from renewable	=76324.864
Percentage of energy supplied from renewables	= 19.71%

Results

We believe that the Standard Assessment Procedure (SAP) assessments meets the clients brief, complies with the requirements of Approved Document L1A of the building regulations 2000 (as amended), Planning condition 21 and the Code for Sustainable Homes.