

REPLACEMENT DWELLING AT GREEN ACRES,DOUBLEBOIS,LISKEARD PL14 6LE.

ENERGY STATEMENT.

This energy statement has been prepared on 30th January 2024 by S.J.Hunkin M.C.I.A.T., in conjunction with the Bartlett Design Partnership (Energy Assessor)

OVERVIEW OF PROJECT.

The project is to replace a precast concrete sectional bungalow with a new bungalow built to current standards for use by the applicants.

The existing building is uninsulated,damp and structurally suspect.

The site slopes down from south to north,and is not overshadowed by trees or undergrowth.The existing building is sited on a flat plateau which will be used for the new building.

The design approach was for a simple,economic building to suit applicants domestic arrangements.

The orientation of the new building is dictated by site dimensions and to avoid bulk excavation for any changes in level.

BUILT FABRIC SPECIFICATIONS.

External Walls comprise rendered block outer leaf,cavity with partial fill cavity insulation,insulation block inner leaf dry lined with plasterboard.

Ground Floor- Screed on rigid insulation on concrete ground slab.

Roof-Concrete tiles,battens felt,timber rafters,insulation at ceiling level,plasterboard ceilings.

Windows and Doors-Upvc or powder coated aluminium double glazed units.

Ventilation system-extract fans in kitchen and bathrooms,trickle vents to windows.

Airtightness proposed 100%.

U VALUES OF BUILDING ELEMENTS W/m²k

External Walls 0.15 (actual), 0.26 (target)

Ground Floor 0.10 (actual), 0.18 (target)

Roof 0.11 (actual), 0.16 (target)

confirming that the actual U values proposed are much better than the target U values.

The building has a SAP rating of 98A,Environmental rating of 92A and Co2 rating of 0.7/year.

Water and space heating is mains gas fired (utilising the existing service on site).The boiler is an Ideal LOGIC CODE combi,with full zone time and temperature control.The boiler is 89% efficient. 4.0-0kWp PV panels are proposed on the south facing roof slope linked to the electric meter.There is no overshadowing to the panels.

A smart electric meter is proposed.

100% Energy efficient lighting is proposed.