

JAMES G IRONSIDE LIMITED

DETAILED PLANNING APPLICATION :

PROPOSED DWELLINGHOUSE ON GROUND TO EAST OF
CLAYMORE HOUSE, TURRIFF, AB53 4PB

MR & MRS SMITH

ENERGY STATEMENT



James G Ironside Limited

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ENERGY REPORT

The aim of the development will be to work towards the proposed Gold level of sustainability as outlined in the Local Development Plan 2017.

The proposed house will be constructed with sustainability in mind as per the points outlined below;

1. High quality insulation to all exposed elements of the proposed structure.
2. Buildings would be orientated to achieve maximum solar gain as well as reducing heat loss.
3. Renewable heating system in the form of the Daikin Altherma hybrid heat pump system being installed or similar and approved heat pump.
4. Heat recovery system is to be installed through out the new house assisting in its energy performance.
5. 5kw of Pv Panels fitted to the garage roof and oriented East and West to maximize solar gain.

Walls are to be designed to achieve a maximum U Value of 0.21w/m²k

Ground Floor Slab is to be designed to achieve a maximum U Value of 0.18w/m²k

Roof is to be designed to achieve a maximum U Value of 0.09w/m²k

Double windows are to be used within the house and are to have a maximum unit U Value of between 1.0 – 1.4 W/m²W.

All external doors are to be off composite style with a minimum construction of 70mm reinforced frames with door being in high insulation foam core within a stable timber inner frame with strong through colour woodgrain fibre glass face or similar and approved so as to give a maximum u Value of 1.0W/m²kK.

Passive ventilation system will be used within all bathrooms / kitchens.

Low water usage fittings and dual flush toilets will be provided throughout the house.

All the information above has been worked into the attached SAP Worksheet giving the building as currently designed with a provisional EPC Rating of B (88) a 46.9% improvement from the TER of the building to the DER.

Project Information

Building type Detached house

Plot number L1164

Reference

Date

Client MR & MRS SMITH Project NEW HOUSE
GROUND AT EAST OF CLAYMORE HOUSE
TURRIFF
ABERDEENSHIRE
AB53 4PB

Code for Sustainable Homes

Assessor Name:

Assessor No.:

Ene 1: Dwelling Emission Rating

TER: 20.43

DER: 10.86

% improvement: 46.9%

Credits: 5

Level: 4

Ene 2: Fabric Energy Efficiency

Dwelling Type: Detached house

FEE: 69.2

Target FEE: 46.0

Credits: 0

Ene 7: Low and Zero Carbon Technologies

Energy is supplied by low or zero carbon technologies: Yes

Reduction in CO2 emissions as a result: 29.7%

	Standard case		Actual case		
	kWh/m ² /year	kg/m ² /year	kWh/m ² /year	kg/m ² /year	
DER		19.5100		10.8578	(ZC1)
CO2 emissions from appliances		8.9958		8.9958	(ZC2)
CO2 emissions from cooking		0.6391		0.6391	(ZC3)
Total CO2 emissions		29.1450		20.4928	(ZC4)
Residual CO2 emissions offset from biofuel CHP		0.0000		0.0000	(ZC5)
Additional allowable generation	0.0000		0.0000		(ZC6)
Resulting CO2 emissions offset		0.0000		0.0000	(ZC7)
Net CO2 emissions		29.1450		20.4928	(ZC8)

Reduction in emissions = 100 x (1 - (ZC8actual / ZC8standard))
= 100 x (1 - (20.4928 / 29.1450))
= 30%

Credits 2

Energy Performance Certificate

Address of dwelling and other details

NEW HOUSE	Dwelling type:	Detached house
GROUND AT EAST OF CLAYMORRIS	Rating protocol:	N/A
TURRIFF	Membership number:	N/A
ABERDEENSHIRE	Date of certificate:	4 May 2022
AB53 4PB	Total floor area:	304 m ²
	Main type of heating and fuel:	Heat pump, underfloor heating, electric

This dwelling's performance ratings

This dwelling has been assessed using the SAP 2012 methodology. Its performance is rated in terms of the energy use per square metre of floor area, energy efficiency based on fuel costs and environmental impact based on carbon dioxide (CO₂) emissions. Carbon dioxide is a greenhouse gas that contributes to climate change.

Energy Efficiency Rating

	Current	Potential
<i>Very energy efficient - lower running costs</i>		
(92-100) A		
(81-91) B	88	88
(69-80) C		
(55-68) D		
(39-54) E		
(21-38) F		
(1-20) G		
<i>Not energy efficient - higher running costs</i>		
Scotland	EU Directive 2002/91/EC	

The energy efficiency rating is a measure of the overall efficiency of a home. The higher the rating the more energy efficient the home is and the lower the fuel bills are likely to be.

Approximate current energy use per square metre of floor area: 56 kWh/m² per year

Approximate current CO₂ emissions: 0.0 kg/m² per year

Environmental Impact (CO₂) Rating

	Current	Potential
<i>Very environmentally friendly - lower CO₂ emissions</i>		
(92-100) A		
(81-91) B	89	89
(69-80) C		
(55-68) D		
(39-54) E		
(21-38) F		
(1-20) G		
<i>Not environmentally friendly - higher CO₂ emissions</i>		
Scotland	EU Directive 2002/91/EC	

The environmental impact rating is a measure of a Home's impact on the environment in terms of Carbon dioxide (CO₂) emissions. The higher the Rating the less impact it has on the environment.

Cost effective improvements

Below is a list of lower cost measures that will raise the energy performance of the dwelling to the potential indicated in the tables above.

Not applicable



Remember to look for the energy saving recommended logo when buying energy-efficient products. It's a quick and easy way to identify the most energy-efficient products on the market. For advice on how to take action and to find out about offers available to help make your home more energy efficient, call 0800 512 012 or visit www.energysavingtrust.org.uk

N.B. THIS CERTIFICATE MUST BE AFFIXED TO THE DWELLING AND NOT BE REMOVED UNLESS IT IS REPLACED WITH AN UPDATED VERSION