

Building Energy Rating (BER)

BER for the building detailed below is: **A3**

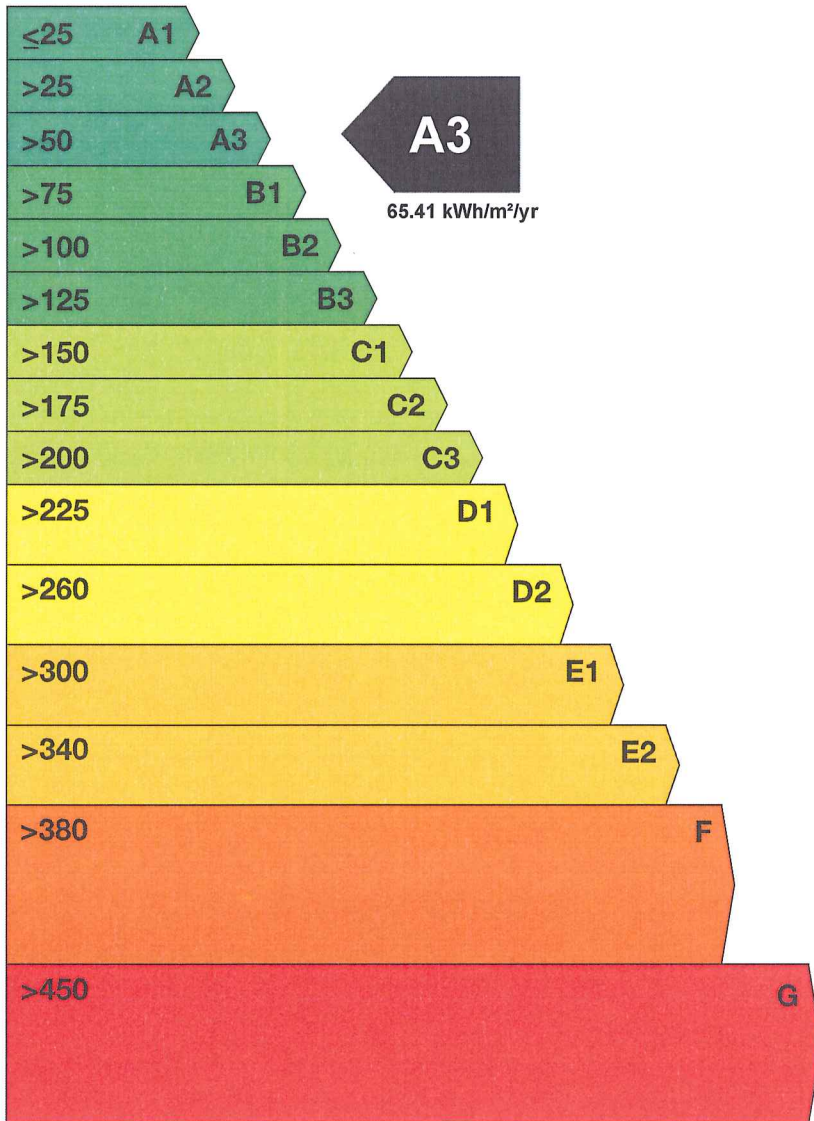
Address APT 12 55 PERCY PLACE
DUBLIN 4

BER Number 108175050
Date of Issue 07/12/2015
Valid Until 07/12/2025
Assessor Number 101428
Assessor Company No 101068

The Building Energy Rating (BER) is an indication of the energy performance of this dwelling. It covers energy use for space heating, water heating, ventilation and lighting, calculated on the basis of standard occupancy. It is expressed as primary energy use per unit floor area per year (kWh/m²/yr).

'A' rated properties are the most energy efficient and will tend to have the lowest energy bills.

Building Energy Rating kWh/m²/yr MOST EFFICIENT



Carbon Dioxide (CO₂) Emissions Indicator kgCO₂/m²/yr

BEST
0

Calculated
annual CO₂
emissions
11.84 kgCO₂/m²/yr

WORST
>120

The less CO₂ produced, the less the dwelling contributes to global warming.

IMPORTANT: This BER is calculated on the basis of data provided to and by the BER Assessor, and using the version of the assessment software quoted below. A future BER assigned to this dwelling may be different, as a result of changes to the dwelling or to the assessment software.



Building Energy Rating (BER)

ADVISORY REPORT

Energy use in our homes is responsible for more than a quarter of Ireland's total CO₂ emissions. Reducing energy use will save you money and is good for the environment. This report provides advice on improving your Building Energy Rating, reducing your energy usage and costs, while improving the comfort and condition of your home.

Report Date: 07/12/2015

Assessor: Michael Hodnett

Address: APT 12 55 PERCY PLACE
DUBLIN 4

BER: 108175050

MPRN: 10305916806

About this Advisory Report

Energy use in our homes is responsible for almost a quarter of Ireland's total CO₂ emissions. Reducing energy use will save you money and is good for the environment. This report provides advice on improving your BER, reducing your energy usage and costs, while improving the comfort of your home. The improvement measures recommended in this report are not mandatory and can be completed at your own discretion. Some improvements may require the use of suitably qualified installers or professional advice. All works should be completed to the relevant health and safety standards. Where applicable, works should be completed to the relevant Building Regulations.

In this report an associated cost and impact are provided for the recommendations specific to your home. Costs and impacts are divided into categories and these are defined as follows:

Low Cost are improvements that are expected to cost less than 100 euro to complete.

Medium Cost are improvements that are expected to cost 100 euro to 1,000 euro to complete.

High Cost are improvements that are expected to cost more than 1,000 euro to complete.

The above costs are guidelines only and actual costs will vary depending on house size, work specification and market conditions.

Low Impact are measures that will make a small improvement in energy efficiency.

Medium Impact are measures that will make a medium improvement in energy efficiency.

High Impact are measures that will make a large improvement in energy efficiency.

Implementing any improvement measure will reduce your energy consumption. When implementing improvements it is sensible to prioritise those with a low cost and a high impact first. The money saved by reducing energy usage can help to pay for the improvement measures. Moreover apart from increasing the comfort and costs the measures could increase the value of your home and reduce its environmental impact.

Ventilation

General Operational Advice on Ventilation

Care should always be taken to ensure a sufficient level of ventilation to maintain fresh air levels in each room and to remove moisture, water vapour and pollutants. For health and safety reasons it is important to ensure an adequate air supply to combustion appliances e.g. gas, oil or solid fuel. Signs of inadequate ventilation are persistent condensation and mould growth. If such problems exist, they should be addressed first, since reducing ventilation may make the problem worse. In a typical home 20% of all heat loss is through ventilation and draughts. Energy consumption can be improved while maintaining adequate ventilation. If draught sealing is damaged at any time make sure to replace it. When draughtproofing or making houses more airtight, it is important to maintain recommended ventilation standards.

Radon concentrations can increase in existing houses as a result of greater airtightness. Further information on Radon is available from the Radiological Protection Institute of Ireland in their publication "Radon in Homes". This guide can be downloaded from www.rpii.ie.

Fan & Vents

This dwelling has one or more fans/vents.

The fans and vents in this dwelling increase heat loss by allowing heated air to escape but can be important in ensuring adequate ventilation.

If there is no cover on the inside of the vents, installing controllable vent covers will allow you to control the air flow through the vents, and so can help reduce heat loss. It is important not to permanently close or cover over air vents as they are required to provide ventilation for the removal of moisture, pollutants and operation of combustion appliances. It is important for safety reasons to have proper ventilation in any room which contains combustion appliances. For further details please refer to publication 'A Detailed Guide to Insulating Your Home' available on www.seai.ie.

Cost: Low **Impact:** Low

Building Elements

Floors

General Operational Advice on Floors

Floors can be a source of significant heat loss and dampness in a dwelling. For example heat loss through the ground floor of a two storey house typically accounts for about 10% of total heat loss. For a single storey house this figure is about 15%. However, if a house is well insulated everywhere except for the ground floor, this percentage will be higher. A U-Value is a measure of the heat loss through the fabric of the building. The lower the U-Value the better and the higher the U-Value the greater the heat loss. Floors with a U-Value greater than 0.25 could be improved in a number of ways. A relatively simple way to reduce heat loss through a ground floor is to lay a carpet with foam backing or a foam underlay ensuring that both carpet and underlay are laid wall to wall. Sealing of gaps in the ground floor will help to reduce draughts. Modern insulation methods for new houses may also be implemented in existing houses. In some cases this would be disruptive and costly, but if work needs

to be done on the floor anyway, this is a good time to consider an insulation upgrade. For further details please refer to publication 'A Detailed Guide to Insulating Your Home' available on www.seai.ie

Roofs

General Operational Advice on Roofs

Proper insulation will help retain valuable heat and improve overall comfort levels. If insulation is disturbed or damaged at any time, e.g. in attic space, make sure to restore or replace it.

Heat loss through an un-insulated roof of a typical house can account for up to 30% of the total heat loss. Installing insulation will reduce this heat loss, and hence reduce the energy demand of the dwelling. A U-Value is the measure of the heat loss through the fabric of the building. The lower the U-Value the better and the higher the U-Value the greater the heat loss. Modern pitched roofs or habitable roof spaces that are insulated between the rafters, have a U-Value less than or equal to 0.2. Modern flat and pitched roofs that are insulated at ceiling level, have a U-Value less than or equal to 0.16. Blanket insulation, rigid board insulation or expanding foam may be used to achieve the required insulation level. Loose beads may also be used for roofs insulated on the ceiling. Installing roof insulation generally involves a considerable amount of work. The attic/roof space must have adequate ventilation to prevent dampness. This is achieved by leaving a continuous air gap along the eaves at each side. Electric cables should not be buried under insulation. Leave clearance for recessed lights to avoid them overheating. For further details please refer to publication 'A Detailed Guide to Insulating Your Home' available on www.seai.ie

Walls

Heat loss through the walls can account for up to 30% of the total heat loss. This can typically be reduced by two-thirds by insulating the walls and so reduce the energy demand of the dwelling. A U-Value is a measure of the heat loss through the building fabric. The lower the U-Value the better and the higher the U-Value the greater the heat loss. Walls with a U-Value greater than 0.27 could be improved. Insulation may be installed as cavity fill. This is where the gap between the inner and outer layers of external walls is filled with an insulating material. If cavity insulation is not applicable or is not technically possible, insulation may be installed internally or externally. Internal insulation involves a layer of insulation being fixed to the inside surface of external walls, and a suitable fire resistant finish being incorporated or applied. External solid wall insulation is the application of an insulant and a weather-protective finish to the outside of the wall.

For further details please refer to publication 'A Detailed Guide to Insulating Your Home' available on www.seai.ie

Windows

Glass allows heat to escape more readily than most other building materials. For this reason, it is important that the windows are as energy efficient as possible. Windows can account for around 15% of the heat loss in your home. Installing energy efficient windows such as low-E double glazing helps to retain heat and improves comfort through elimination of cold window surfaces and associated downdraughts and

condensation. The use of shutters, lined curtains and blinds can improve heat retention at night and further reduce draughts.

A U-Value is a measure of the heat loss through the building fabric. The lower the U-Value the better and the higher the U-Value the greater the heat loss. Windows with a heat loss greater than the current building standards (i.e. have a U-Value greater than 2) could be improved. The best benefits are achieved through replacing single glazed windows with low-E double glazing or triple glazing.

Note that single glazing can also be improved by adding secondary glazing (installing a secondary window and frame on the room side of the existing window).

Doors

Heat is lost from dwellings through doors which often have relatively poor thermal insulation compared to other elements of the building. Installing insulated doors will reduce this heat loss, and also generally reduce draughts through air gaps at the frames. Replacement doors, whether glazed or half glazed, should have insulated cores. A U-Value is a measure of the heat loss through the fabric of the building. The lower the U-Value the better and the higher the U-Value the greater the heat loss. Doors with a U-Value greater than 2.0 could be improved. For further details please refer to publication 'A Detailed Guide to Insulating Your Home' available on www.seai.ie

Hot Water

General Operational Advice on Hot Water.

Ensure that the hot water cylinder insulation is not disturbed or damaged. Incomplete insulation increases heat loss and costs money.

Cylinder Timer / Thermostat

The hot water cylinder in this dwelling has a timer and thermostat.

This thermostat allows you to set the temperature at which hot water is stored in your cylinder. The best setpoint for the thermostat is 60°C. Setting the temperature lower than this presents a health risk. Setting the temperature higher than this wastes energy.

Lighting

General Operational Advice on Lighting

Compact Fluorescent Lamps (CFLs) use 20% of the energy used by typical incandescent bulbs to give the same amount of light. A 22 Watt CFL has the same light output as a 100 Watt incandescent. LED (Light-emitting diode) lights use less than 10% of the energy required for corresponding tungsten lights. Low energy lighting will give highest savings in rooms that are most often used.

Space Heating

General Operational Advice on Space Heating

A reduction of 1°C on your thermostat can reduce annual space heating costs by 10% or more. An automatic timer switch or programmer allows you to schedule the heating duty on the hot water and heating system and to turn the system on and off as required. Use this facility to limit the running time for the heating system to fit your specific needs and you will save money.

Room thermostats normally turn the boiler and heating circulation pump off when the room temperature has reached the desired level. A room thermostat is normally located in a living area or circulation area (hall or landing). Guide temperature settings are 20°C for a living room and 16 - 18°C for circulation areas. However, the most appropriate setting depends on location of the thermostat and the heating system design. Choose the lowest setting that gives acceptable comfort conditions. Finding the setting to suit you may take some experimentation.

Thermostatic Radiator Valves (TRVs) can be set to suit the heating requirements of the room(s) in question.

For further details please refer to "A Detailed Guide to Home Heating Systems" available on www.seai.ie

Main Heating System

General Operational Advice on Main Heating System

You should have your boiler professionally serviced at least once per year. A clean and serviced appliance will operate more economically and will have a longer service life.

General Advice on Energy Use in Your Home

The way we use energy in our homes can reduce energy consumption. Some simple everyday measures will save money, improve comfort and reduce your impact on the environment. Some of these are outlined below.

Appliances: New kitchen appliances carry an energy rating label which rates energy efficiency on a scale of A to G. When buying new appliances look for A rated products which are more energy efficient and cost less to run. Do not under or overload appliances, such as dishwashers and washing machines. For washing machines, a 40°C rather than a 60°C wash cycle cuts electricity use by approximately a third. (Modern washing powders and detergents can work equally effectively at lower temperatures.) Defrost your freezer regularly to save energy and extend the operating life. Equipment on standby uses up to 20% of the energy it would use when fully on. When an appliance is not in use, turn it off fully.

Lighting: Avail of natural daylight whenever possible and avoid leaving electric lights switched on in unoccupied rooms. All lighting lamps carry an energy label similar to that on appliances (i.e. an A to G label) so always choose the most efficient to suit your particular needs.

Useful Links and Sources of Further Information

Useful energy saving tips are available on www.change.ie (Tel. 1890 242643) and www.powerofone.ie. For specific queries on BER please contact SEAI on 1890734237 or by email info@ber.seai.ie. There are many useful documents available on The Sustainable Energy Authority of Ireland's (SEAI) website www.seai.ie

The most recent Technical Guidance Documents for the Building Regulations and other supporting documents are available from the Department of Environment, Heritage and Local Government website www.environ.ie on the link to Building Standards (Tel. 1890 202021). Some of these documents are listed below.

Technical Guidance Document Part L Conservation of Fuel and Energy - Dwellings;

Technical Guidance Document Part J Heat Producing Appliances;

Technical Guidance Document Part F Ventilation.

When performing building works it is important to take the correct health and safety measures. Useful health and safety information on ventilation, radon and combustion devices can be found on the Carbon Monoxide safety website:

www.carbonmonoxide.ie Tel. 1850797979 and The Radiological Protect Institute of Ireland website www.rpii.ie/radon Tel. 01 269 77 66.

Please consider the environment before printing this document

Further advice on improving the energy efficiency of your home is available from the Sustainable Energy Authority of Ireland, www.seai.ie

Wilton Park House, Wilton Place, Dublin 2, Ireland
Teach Pháirc Wilton, Plás Wilton, Baile Átha Cliath 2, Éireann

T. +353-1-8082100
F. +353-1-8082002

info@seai.ie
www.seai.ie



EUROPEAN REGIONAL DEVELOPMENT FUND



Ireland's EU Structural Funds

Programmes 2007 - 2013

Co-funded by the Irish Government

and the European Union

The Sustainable Energy Authority of Ireland is financed by Ireland's EU Structural Funds Programme co-funded by the Irish Government and the European Union