

## Part L Specification

**BER IS NOT PUBLISHED**

### Property Details

<b>Dwelling Type</b>	Detached house	<b>Type of BER rating</b>	Existing Dwelling
<b>Address line 1</b>	Earth House,	<b>Year of Construction</b>	2008
<b>Address line 2</b>	Derrynalecka,	<b>Date of Assessment</b>	17/06/2021
<b>Address line 3</b>		<b>Date of Plans</b>	
<b>County</b>	Co. Mayo	<b>Planning Reference</b>	
<b>Eircode</b>	F12HP63	<b>Building Regulations</b>	2019 TGD L
<b>BER Number</b>		<b>MPRN No.</b>	0
<b>Purpose of Rating</b>	Major Renovation	<b>Is MPRN shared with another dwelling?</b>	N/A
<b>Assessor Name</b>		<b>BER number assigned to shared dwelling</b>	N/A
<b>Comment</b>			

### Dimension Details

	Area [m <sup>2</sup> ]	Height [m]	Volume [m <sup>3</sup> ]	
Ground Floor	134.74	2.50	336.85	
First Floor	0.00	0.00	0.00	
Second Floor	0.00	0.00	0.00	
Third and other floors	0.00	0.00	0.00	
Room in roof	76.67	2.44	187.07	
Total Floor Area	211.41		523.92	
<b>Living Area [m<sup>2</sup>]</b>	17.64			<b>Living area percentage [%]</b> 8.34
<b>No of Storeys</b>	2			

### Ventilation Details

<b>Chimneys</b>	0	<b>Has permeability test been carried out?</b>	No
<b>Open Flues</b>	0	<b>Structure type</b>	Masonry
<b>Fans &amp; Vents</b>	0	<b>Is there a suspended wooden ground floor?</b>	No
<b>Number of flueless combustion room heaters</b>	0	<b>Percentage windows/doors draught stripped [%]</b>	100.00
<b>Is there a draught lobby on main entrance?</b>	No	<b>Number of sides sheltered</b>	1
<b>Ventilation method</b>	Balanced whole-house mechanical ventilation with heat recovery	<b>Mechanical Ventilation Manufacturer</b>	Vent Axia
<b>Specific fan power [W/(L/s)]</b>	0.630	<b>Mechanical Ventilation Model Name</b>	Sentennial Model B Plus
<b>Heat exchanger efficiency [%]</b>	90.00	<b>How many wetrooms (incl. kitchen)?</b>	2+k

### Building Elements - Floor Details

Type	Description	Underfloor heating	U-Value [W/m <sup>2</sup> K]	Area [m <sup>2</sup> ]
	Ground Floor - Solid	No	0.31	134.74
	Non-Heat Loss Floor	N/A	0	76.67

### Building Elements - Roof Details

Type	Description	U-Value [W/m <sup>2</sup> K]	Area [m <sup>2</sup> ]
	Pitched Roof - Insulated on Ceiling	2.3	47.4
	Pitched Roof - Insulated on Ceiling	2.3	132.4

### Building Elements - Wall Details

Type	Description	U-Value [W/m <sup>2</sup> K]	Area [m <sup>2</sup> ]
	300mm Cavity	0.27	126.35

### Building Elements - Door Details

Description	Number of Doors	U-Value [W/m <sup>2</sup> K]	Area [m <sup>2</sup> ]
	1	3	3.700

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## Building Elements - Window Details

Glazing type	User defined u-value	U-Value [W/m <sup>2</sup> K]	Area [m <sup>2</sup> ]
Double-glazed, air filled (low-E, en = 0.05, soft coat)	Yes	1.700	5.220
Double-glazed, air filled (low-E, en = 0.05, soft coat)	Yes	1.700	7.560
Double-glazed, air filled (low-E, en = 0.05, soft coat)	Yes	1.700	5.940
Double-glazed, air filled (low-E, en = 0.05, soft coat)	Yes	1.700	0.600

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### Other Details

Thermal bridging factor [W/m <sup>2</sup> k]	0.1500	Thermal mass category of dwelling	Medium-high
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### Heating System - Solar Water Heating

Solar Water Heating Present?	No	Aperture area of solar collector [m <sup>2</sup> ]	N/A
Type, manufacturer, model	N/A	Collector heat loss coefficient, a1 [W/m <sup>2</sup> >K]	N/A
Zero loss collector efficiency, n0	N/A	Overshading factor	N/A
Annual Solar Radiation [kWh/m <sup>2</sup> ] (Refer to Appendix H in DEAP)	N/A	Combined Cylinder	N/A
Dedicated storage volume [Litres]	N/A		
Solar fraction [%]	0.000		

### Heating System - Hot Water System

Distribution Losses	283.96	Combi boiler present?	No
Supplementary electric water heating	N/A	Water Storage Volume [L]	140
Hot water storage manufacturer and model name		Declared loss factor [kWh/d]	N/A
Temperature factor unadjusted	0.6	Temperature Factor Multiplier	1.3
Primary Circuit loss type	Boiler with uninsulated primary pipework and no cylinder thermostat		
Is hot water storage indoors or in group heating system?	Yes	Insulation type	Factory Insulated
Insulation thickness [mm]	25		

### Heating System - Dist. system losses and gains

Temperature adjustment [°C]	0.6	Control Category	1	Responsiveness category	1
Central heating pumps	2	Oil Boiler Pump	1	Oil boiler pump inside dwelling	No
Gas boiler flue fan	0	Warm air heating or fan coil radiators present	No		

### Heating System - Energy Requirements (Individual)

Main space heating system efficiency [%]	85.7	Space heating efficiency adjustment factor	0.9500	Main space heating fuel	Heating Oil
Main water heating system efficiency [%]	85.7	Water heating efficiency adjustment factor	0.9500	Main water heating fuel	Heating Oil
Secondary heating system efficiency [%]	N/A	Fraction of heating from secondary heating system	N/A	Secondary space heating system fuel	None
Fraction of main space and water heat from CHP	N/A	Electrical efficiency of CHP	N/A	Heat efficiency of CHP	N/A
CHP Fuel type	N/A				

### Summary for Part L Conformance (Applies to TGD L 2008/2011/2019 for new dwellings only)

BER Number		Building Regulations	2019 TGD L
BER Result	D2	Energy Value kWh/m <sup>2</sup> /yr	269.94
CO <sub>2</sub> emissions [kg/m <sup>2</sup> /yr]	65.64		
EPC	2.098	EPC Pass/Fail	Fail
CPC	2.434	CPC Pass/Fail	Fail

### Part L Conformance - Fabric

Conformity with Maximum avg U-value requirements	U-value [W/m <sup>2</sup> K]	Pass/Fail	Conformity with Maximum U-value requirements	U-Value [W/m <sup>2</sup> K]	Pass/Fail
Pitched roof insulated on ceiling	2.30	Fail	Roofs	2.3	Fail
Pitched roof insulated on slope	0	Pass	Walls	0	Pass
Flat Roof	0	Pass	Floors	0.31	Pass
Floors with no underfloor heat	0.31	Fail	External doors / windows / rooflights	3.00	Pass
Floors with underfloor heat	0.00	Pass	Meets Part L maximum avg U-value requirement for opaque elements using TGD L Section 1.3.2.3		Fail
Walls	0.00	Pass			
Percentage of opening areas [%]	12.64				
Average U value of openings	2.06	Fail			
Permeability test carried out and meets guidelines in TGD L					Fail

Part L Conformance - Renewables (applies to TGD L 2019)

	Source	Renewables Primary Energy	Total Primary Energy	RER
+ Delivered energy	PV/Wind	0.00	0.00	
+ Delivered energy	Other	0.00	0.00	
+ Delivered energy	Solar	0.00	0.00	
+ Delivered energy	Biomass	0.00	0.00	
+ Delivered energy	Biodiesel	0.00	0.00	
+ Delivered energy	Bioethanol	0.00	0.00	
+ Environmental energy	HP	0.00	0.00	
+ Saved energy	CHP	0.00	0.00	
+ District heating	District Heating	0.00	0.00	
+ Delivered energy	Grid	0.00	4645.46	
+ Delivered energy	Thermal	0.00	52423.30	
<b>SUBTOTAL</b>		<b>0.00</b>	<b>57068.76</b>	<b>0.00 - Fail</b>
Energy not used in Regulated Loads	PV/Wind/CHP	0.00	0.00	
<b>TOTAL</b>		<b>0.00</b>	<b>57068.76</b>	<b>0.00</b>

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