

Tiznow Property Company Limited (Comer Group Ireland)

City Park Development at the Former Tedcastles Site

Provisional Building Energy Rating (BER)/Part L Compliance

Reference: 267365-ARUP-XX-XX-RP-M-0003

P02 | 28 March 2022

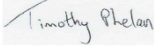
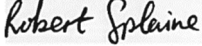
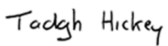
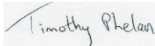
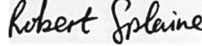
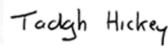
This report takes into account the particular instructions and requirements of our client. It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

Job number 267365-00

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			Prepared by	Checked by	Approved by
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1. Executive Summary

A Domestic Energy Assessment Procedure (DEAP) was carried out on eight sample apartments which are typical examples proposed at the City Park Development.

All apartments examined passed the three criteria for Part L Compliance, the Energy Performance Coefficient (EPC), the Carbon Performance Coefficient (CPC) and the Renewable Energy Ratio (RER).

Seven apartments achieved a provisional Building Energy Rating (BER) of A2 and one apartment achieved a provisional Building Energy Rating (BER) of A3.

Results provided in this report are indicative only and are subject to change when final BER assessments are undertaken by the assigned final assessor.

For a breakdown of results for each apartment please see appendices A and D.

ACD sign off is required in order to achieve the outlined ratings in this report.

2. Introduction

The development requires demolition of the existing structures on site and the construction of a strategic housing development of 823 no. apartments, resident amenity and ancillary commercial areas including childcare facilities. The development will comprise 6 no. buildings ranging in height from part 1 no. to part 35 no. storeys over lower ground floor level. The proposed development also comprises hard and soft landscaping, pedestrian bridges, car parking, bicycle stores and shelters, bin stores, ESB substations, plant rooms and all ancillary site development works. Vehicular access to the proposed development will be provided via Centre Park Road.

The purpose of this report is to demonstrate the ability of the proposed design strategy to achieve Part L compliance and the target BER standard.

An assessment of all 823 apartments is not feasible at this stage of the project. Eight sample type apartments are chosen for assessment.

The scope of this report does not include the non-domestic spaces.

See Appendix B for a detailed description of each typical apartment.

Assumptions have been made to use the DEAP 4 software to complete an energy and carbon calculation for Domestic Part L compliance along with a provisional Building Energy Rating (BER). All assumptions are outlined within this report.

3. Key Assumptions

This section of the report outlines the key assumptions made and applied to the DEAP software to best represent the building envelope and HVAC system performance for each apartment.

3.1 Construction Elements

External walls, ground floors, external doors and windows are modelled using the Maximum U-values permitted by Part L for the area-weighted average elemental U-value. These values are shown in the below **Table 1, Column 2** which was extracted from the Technical Guidance Document Part L 2021 for Dwellings.

Extract from Table 1 of TGD Part L for Dwellings– U-values for façade elements

Table 1 Maximum elemental U-value (W/m ² K) ^{1, 2}		
Column 1 Fabric Elements	Column 2 Area-weighted Average Elemental U-value (Um)	Column 3 Average Elemental U-value - individual element or section of element
Roofs		
Pitched roof		
- Insulation at ceiling	0.16	0.3
- Insulation on slope	0.16	
Flat roof	0.20	
Walls	0.18	0.6
Ground floors ³	0.18	0.6
Other exposed floors	0.18	0.6
External doors, windows and rooflights	1.4 ^{4,5}	3.0
Notes:		
1. The U-value includes the effect of unheated voids or other spaces.		
2. For alternative method of showing compliance see paragraph 1.3.2.3.		
3. For insulation of ground floors and exposed floors incorporating underfloor heating, see paragraph 1.3.2.2.		
4. Windows, doors and rooflights should have a maximum U-value of 1.4 W/m ² K.		
5 The NSAI Window Energy Performance Scheme (WEPS) provides a rating for windows combining heat loss and solar transmittance. The solar transmittance value g_{perp} measures the solar energy through the window.		

Doors which separate the apartments and unheated corridor space have an assumed U-value of 1.36 W/m²K. This is a standard value used in DEAP calculation which has been extracted from the DEAP Manual, see image below.

Extract from Table 6a of the DEAP Manual – Door U-values

Solid door between house and an unheated space (semi-exposed)	1.71
Solid door between apartment and an unheated space (semi-exposed)	1.36
Metal uninsulated garage door	5.9

Below is the table of consolidated U-values and corresponding solar transmittance used in the DEAP calculation.

Building Fabric Element	U-Value (W/m ² K)	Solar Transmittance
External Wall	0.18 W/m ² K	-
Exposed Ground Floor	0.18 W/m ² K	-
External Roof	0.15 W/m ² K	-
Internal Wall to Unheated Corridor	0.22 W/m ² K	-
External Door	1.4 W/m ² K	0.72 from DEAP
Glazing incl. Frame	1.4 W/m ² K	0.72 from DEAP
Internal Door to Corridor	1.36 W/m ² K	-

3.2 Air Permeability

An air permeability of 3m^3 per m^2 per hour at 50Pa (equivalent to 0.15 Air Changes per Hour) has been chosen for the DEAP calculation. This is referenced from Part L for non-domestic buildings with gross internal area greater than 250m^2 .

Extracts from DEAP Manual:

An air permeability design value may be used for new dwelling provisional BERs, subject to verification when the dwelling is built:

- Default of 0.25ac/h may be used in DEAP for provisional dwellings without balanced mechanical ventilation proposed (CIBSE TM 23 best practice)
- Default of 0.15ac/h may be used in DEAP for provisional dwellings with balanced mechanical ventilation proposed
- Non-default can be made via a permeability test for a similar building with all the following
 - Same builder/ developer
 - Same structure type (timber frame/ masonry/ ICF)
 - Same dwelling type
 - Same floor area

Assessors should verify the pressure test result relate to building area and that the building elements are appropriate for the new building type.

3.3 Thermal Bridging

A more stringent value of $0.08\text{ W/m}^2\text{K}$ (when compared with the DEAP manual standard value of $0.15\text{ W/m}^2\text{K}$) was chosen to achieve compliance when modelling each apartment type on the DEAP software. The below extract from The DEAP manual, Appendix K, shows that this can be achieved on new dwellings.

Extracts from DEAP Manual Appendix K

- 1) **$y=0.08\text{ W/m}^2\text{K}$** : for **new dwellings** whose details conform with "Limiting Thermal Bridging and Air Infiltration – Acceptable Construction Details" (<https://www.housing.gov.ie>) as referenced in Building Regulations 2008, 2011 and 2019 TGD L.

This value of $0.08\text{ W/m}^2\text{K}$ applies to **new dwellings only**, where the dwelling has been designed and constructed in accordance with the acceptable construction details. It is important to note the following in relation to the use of a $0.08\text{ W/m}^2\text{K}$ y-factor:

If a y-value of $0.08\text{ W/m}^2\text{K}$ is being used to calculate the BER, **the relevant person must provide evidence to support the default of $0.08\text{ W/m}^2\text{K}$.**

These documents should be signed by the relevant person, confirming the junctions identified were designed and built in accordance with the associated ACDs. (For New-Provisional ratings it is sufficient to confirm design only, as the dwelling has not yet been built.)

3.4 Thermal Mass Category

A thermal mass category of Medium-Heavy was inputted to the DEAP calculation.

3.5 Building Services

The information which was used for space heating and domestic hot water was provided from Nilan for the Compact P Air to Air Heat Pump on the 13 December 2021. As per the Nilan document, supplementary space heating is entered to DEAP as a backup heater only and not a secondary heating system.

The breakdown of inputs from Nilan is detailed in Appendix C of this report for reference.

Below is the table of consolidated key values which have been inputted to the heating, ventilation, lighting and domestic hot water sections of the DEAP calculation.

Variable	DEAP Input
Space Heating Seasonal Efficiency (Source)	247.77% (Heat Pump)
Ventilation Method	Balanced whole house mechanical ventilation with heat recovery
Mechanical Ventilation Specific Fan Power	0.73-0.88 W/l/s
Heat Exchanger Efficiency	85-86%
Manufacturer and Model Name	Nilan Compact P
Number of wet rooms incl. kitchen	See Appendix B for Apartment Types
Hot Water Storage Volume	180 L
Declare Loss Factor	1.17 kWh/d
Energy Efficient Light Fittings Installed (Efficacy)	Default LED/CFL (66.90 lum/W)
Central Heating Pump/Fan	None
Water Heating Seasonal Efficiency (Source)	213.81% (Heat Pump)
Flow Restriction for Showers (Flow)	Yes (6 l/min)

There is a boosted cold water pump per apartment but it is assumed that this will normally be off when taps etc are not running, so this is not included in the calculation.

3.6 Non-Heat Loss Floors

It was assumed that no heat occurred through the internal floors of each of the apartments. The below extract from the DEAP Manual, Appendix S, states that non-heat loss elements can be ignored.

Extract from DEAP Manual Appendix S

The assessment of an existing dwelling is also concerned with assessing and measuring the **building elements that lose heat** from the habitable dwelling. Non-heat loss areas (e.g. party walls, a floor or a ceiling wholly above or below another apartment, or walls adjoining a heated circulation space) are ignored altogether as heat loss elements.

4. Results Summary

All eight no. examined apartment types, using the key assumptions, demonstrated compliance with TGD Part L 2021 for each of the three criteria, Energy Performance Co-efficient (EPC), Carbon Performance Co-efficient (CPC) and Renewable Energy Ratio (RER).

Seven apartments achieved a provisional Building Energy Rating (BER) of A2 and one apartment achieved a provisional Building Energy Rating (BER) of A3.

DEAP Part L Specification outputs for each apartment can be found in Appendix D.

5. Conclusion

The utilisation of the exhaust air heat pump alone for space heating and domestic hot water generation meets the renewable requirement for Part L compliance and reduces the overall carbon associated with conditioning the apartments. Efficient LED lighting also reduces the energy consumption of the spaces.

In conclusion, under the key assumptions which have been stated in this report, compliance is achieved for the sample apartments selected. This provides a reasonable indication that other apartments would also achieve an A Rating.

Appendix A Breakdown of Apartment BER Results

A.1 Breakdown of Apartment BER Results

The table below outlines the result of the DEAP 4 calculations for apartment types 1 through to 8.

Apartment Type	Apartment Reference	Building Energy Rating Band	Energy Value (kWh/m ² /Yr)	CO ₂ Emissions (kgCO ₂ /m ² /Yr)	Renewable Energy Ratio
1	A-3402	A2	47.60	9.36	.302
2	B-0901	A2	33.49	6.59	.293
3	B-0105	A2	44.16	8.68	.292
4	C-0102	A3	65.49	12.88	.36
5	C-0510	A2	40.05	7.87	.30
6	D-0117	A2	49.86	9.81	.331
7	E-0110 (DL-02)	A2	39.12	7.69	.28
8	F-0109	A2	39.83	7.85	.284

A further breakdown the Output documents can be found in Appendix C for each of the apartment types.

Appendix B Breakdown of Apartment Types

B.1 Breakdown of Apartment Types

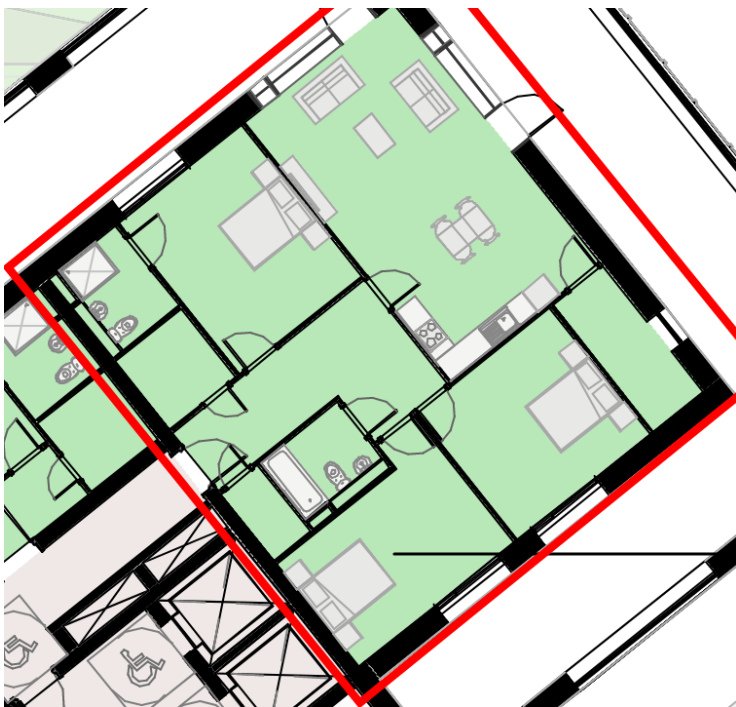
The plan drawings that were used for DEAP modelling are as follows:

- PE21055-CWO-ZZ-01-DR-A-2001 rev P07 dated 16/02/2022
- PE21055-CWO-ZZ-02-DR-A-2002 rev P09 dated 18/02/2022
- PE21055-CWO-ZZ-06-DR-A-2006 rev P01 dated 18/02/2022
- PE21055-CWO-ZZ-08-DR-A-2008 rev P01 dated 18/02/2022
- PE21055-CWO-ZZ-32-DR-A-2032 rev P02 dated 18/02/2022

Elevations were based on views taken from the Revit model received from CWOB architects on 17/02/2022.

Type 1 – 3 Bedroom

The image shows the examined 3-bedroom apartment in Block A.

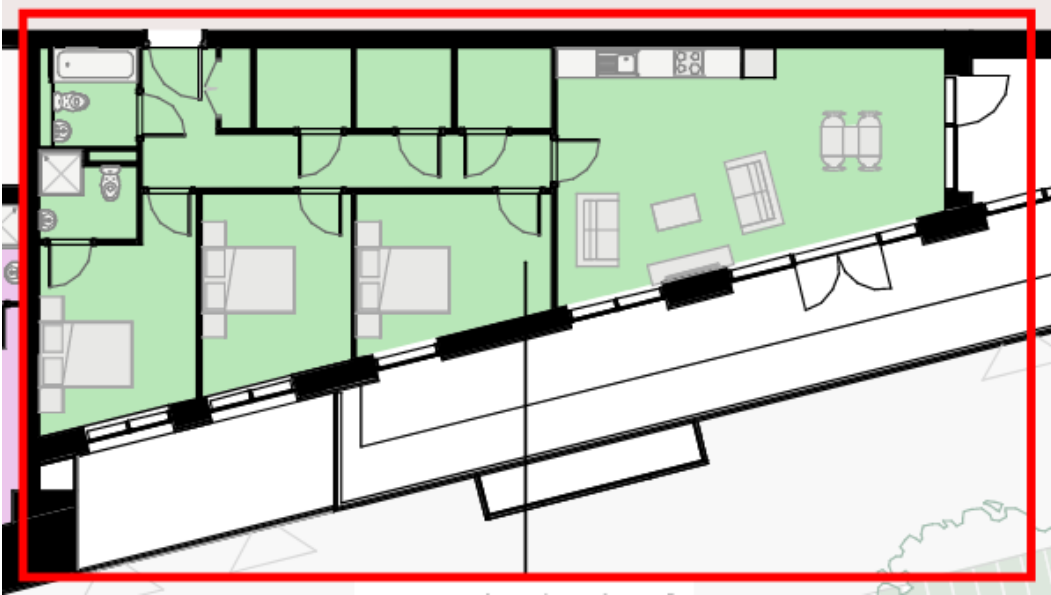


Variable	Value
Apartment Reference	A-3402
Bedroom No.	3
How Many Wet Rooms (incl. Kitchen)	3 = 2 Wet Rooms plus Kitchen
Floor Area	100.7 m ²
External Wall Area	68.99 m ²
External Floor/Roof Area	0/100.7 m ²
Glazed Area	27.72 m ²
Façade Orientation	North East & North West

Variable	Value
Building	Block A
Level Examined	Level 34 (top floor)

Type 2 – 3 Bedroom

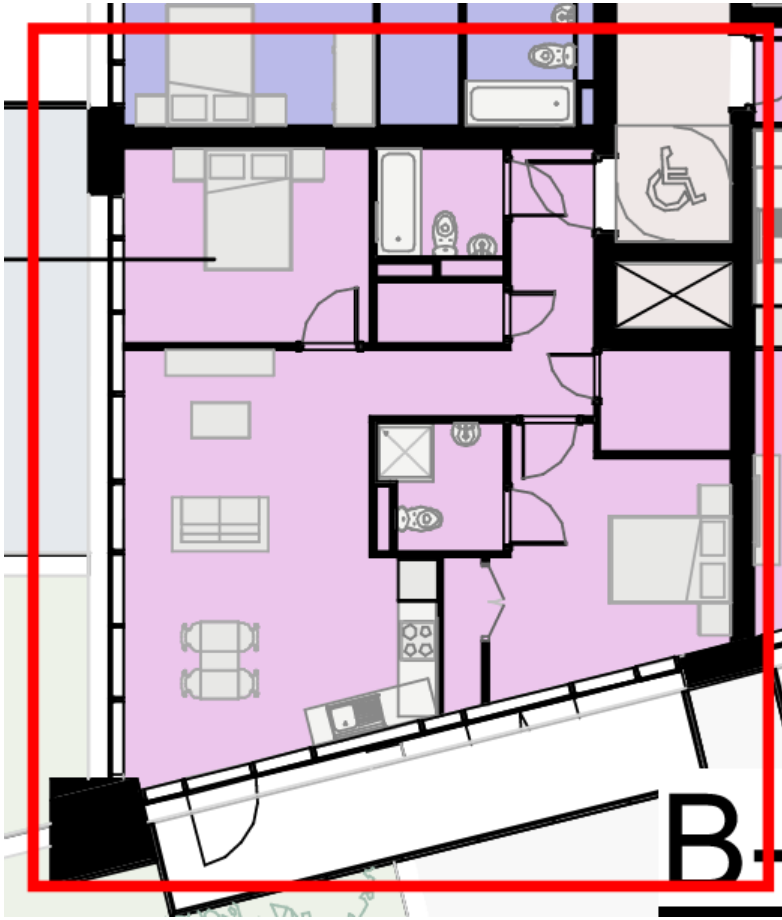
The image below shows the examined 3-bedroom apartment in Block B.



Variable	Value
Apartment Reference	B-0901
Bedroom No.	3
How Many Wet Rooms (incl. Kitchen)	3 = 2 Wet Rooms plus Kitchen
Floor Area	105.32 m ²
External Wall Area	35.43 m ²
External Floor/Roof Area	0/105.32 m ²
Glazed Area	24.42 m ²
Façade Orientation	South
Building	Block B
Level Examined	Level 9 (top floor)

Type 3 – 2 Bedroom

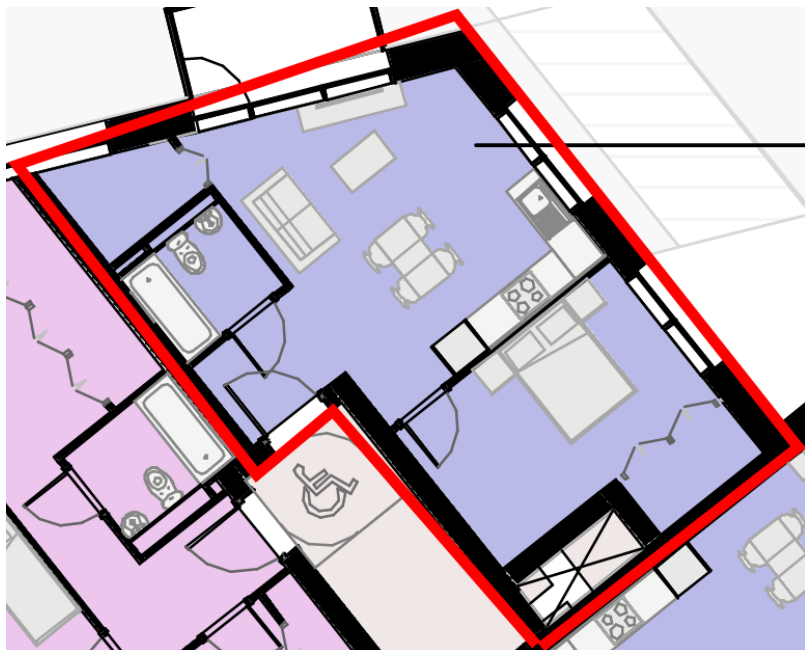
The image below shows the first type of examined 2-bedroom apartment in Block B.



Variable	Value
Apartment Reference	B-0105
Bedroom No.	2
How Many Wet Rooms (incl. Kitchen)	3 = 2 Wet Rooms plus Kitchen
Floor Area	79.87 m ²
External Wall Area	16.3 m ²
External Floor/Roof Area	79.87/0 m ²
Glazed Area	44.5 m ²
Façade Orientation	West & South
Building	Block B
Level Examined	Level 01

Type 4 – 1 Bedroom

The image below shows the first type of examined 1-bedroom apartment in Block C.



Variable	Value
Apartment Reference	C-0102
Bedroom No.	1
How Many Wet Rooms (incl. Kitchen)	2 = 1 Wet Rooms plus Kitchen
Floor Area	49.15 m ²
External Wall Area	27.70 m ²
External Floor/Roof Area	49.15/0 m ²
Glazed Area	19.55 m ²
Façade Orientation	North East & North West
Building	Block C
Level Examined	Level 01

Type 5 – 2 Bedroom

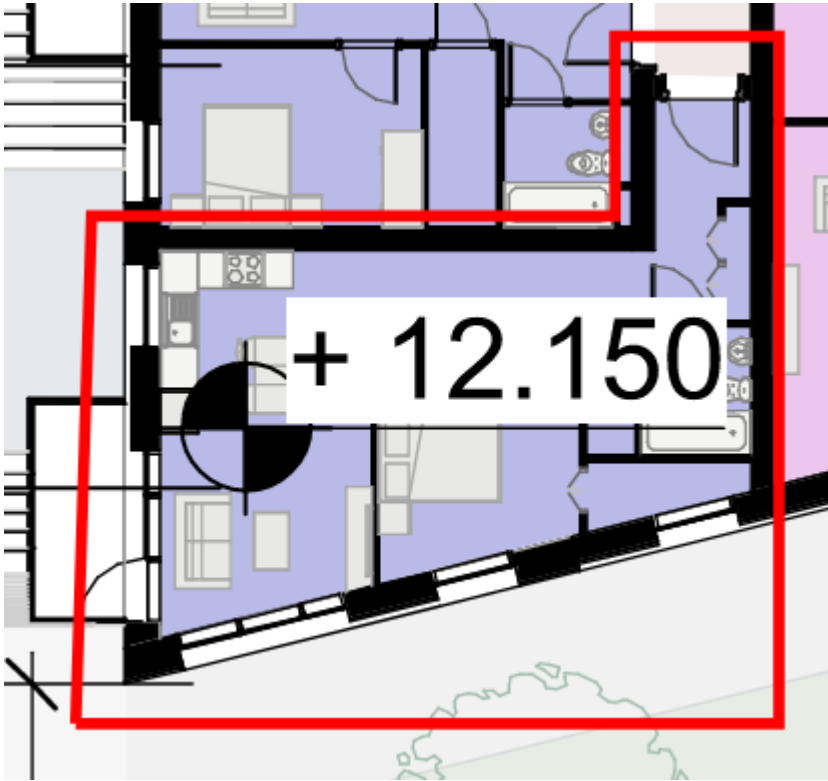
The image below shows the second type of examined 2-bedroom apartment in Block C.



Variable	Value
Apartment Reference	C-0510
Bedroom No.	2
How Many Wet Rooms (incl. Kitchen)	3 = 2 Wet Room plus Kitchen
Floor Area	78.81 m ²
External Wall Area	16.33 m ²
External Floor/Roof Area	0/78.81 m ²
Glazed Area	41 m ²
Façade Orientation	South East & South West
Building	Block C
Level Examined	Level 05 (top floor)

Type 6 – 1 Bedroom

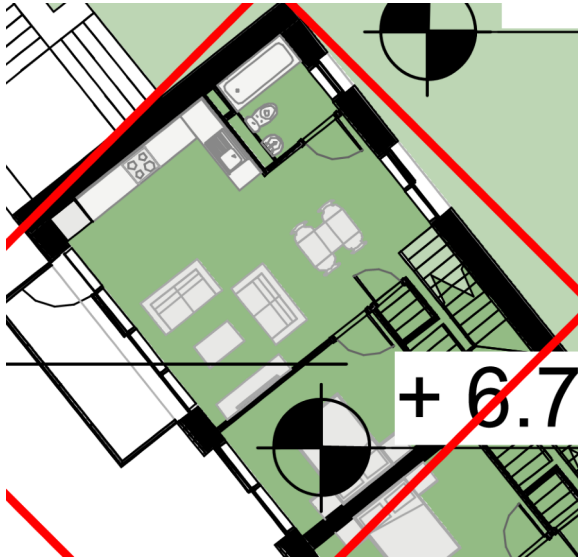
The image below shows the second type of examined 1-bedroom apartment in Block D.



Variable	Value
Apartment Reference	D-0117
Bedroom No.	1
How Many Wet Rooms (incl. Kitchen)	2 = 1 Wet Room plus Kitchen
Floor Area	48.22 m ²
External Wall Area	26.47 m ²
External Floor/Roof Area	48.22/0 m ²
Glazed Area	22.36 m ²
Façade Orientation	South & West
Building	Block D
Level Examined	Level 01

Type 7 – 3 Bedroom Duplex

The image below shows the second type of examined 3-bedroom duplex apartment in Block E.



Duplex Lower Level



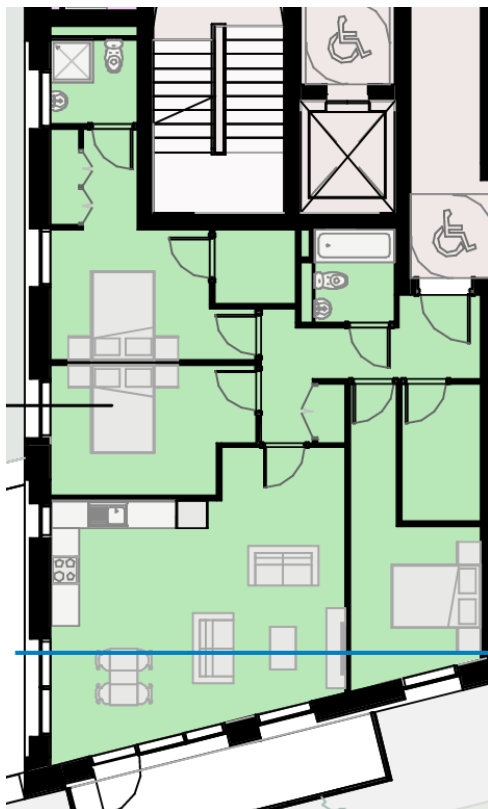
Duplex Upper Level

Variable	Value
Apartment Reference	E-0110 (DL-02)
Bedroom No.	3
How Many Wet Rooms (incl. Kitchen)	3 = 2 Wet Rooms plus Kitchen
Floor Area	102 m ²
External Wall Area	58.33 m ²
External Floor/Roof Area	51/0 m ²
Glazed Area	44.52 m ²
Façade Orientation	North East & South West

Variable	Value
Building	Block E
Level Examined	Level 01 & Level 02

Type 8 – 3 Bedroom

The image below shows the examined 3-bedroom apartment in Block F.



Variable	Value
Apartment Reference	F-0109
Bedroom No.	3
How Many Wet Rooms (incl. Kitchen)	3 = 2 Wet Room plus Kitchen
Floor Area	122.22 m ²
External Wall Area	56.75 m ²
External Floor/Roof Area	122.22/0 m ²
Glazed Area	23.26 m ²
Façade Orientation	South & West
Building	Block F
Level Examined	Level 01

Appendix C Nilan Compact P Exhaust Air Heat Pump Input Data

Space heating	
Heating System Category	Warm air systems
Heating system	Air to air heat pump
Heating System Controls	Programmer and room thermostat
Central Heating Pump	Number none

Inputs for Heat Pump					
Basic Properties					
Heat Pump Type	Air to air				
Space Heating Standard	I.S. EN 14825				
Water Heating Standard	I.S. EN 16147				
Seasonal Space Heating Efficiency ηs	310				
Water Heating Efficiency ηwh	92				
TOL	-8				
WTOL	35				
Temperature Control	Variable Outlet				
Heat Pump Test Data					
Test Condition - High (55°C)					
	A(88%)	B(54%)	C(35%)	D(15%)	E(100%)
Source	-7°C	2°C	7°C	12°C	TOL
Sink	A-7	A2	A7	A12	A-8
Heat Capacity (kW)	A20	A20	A20	A20	A20
Coefficient of Performance (kW/kW)	0.52	0.77	0.92	0.92	0.52
	2.15	2.77	3.1	3.1	2.15
Source of Data	Water heating energy efficiency, ηwh(%)				
Water Heating Energy Efficiency	92				
Reference Hot Water temperature	54				
Capacity of Heat Pump (kW)	2				
Declared Load Profile	L				
Standby heat Loss (kWh/day)	1.17				
Volume of DHW accounted for in test (litre)	180				

Primary Heat Source			
Heats water	Yes		
Design Flow Temperature	35		
Daily Operation	24		
Water Storage	Integral Hot Water Storage		
Back Up Space Heater Fuel	Electricity	Back Up Space Heater Efficiency	100
Back Up Water Heater Fuel	Electricity	Back Up Water Heater Efficiency	100

Water Heating							
Distribution Losses	No						
Storage Losses	Yes						
Is supplementary electric water heating used in summer	No						
Is there a combi boiler	No						
Is hot water storage indoors or in group heating scheme	No	Storage Type	Integrated thermal store and gas fired CPSU	Storage Volume (L)	180	Heat Pump Type of DHW	Integral Hot Water Storage
Is manufacturers declared loss available	Yes	Make and Model	Nilan Compact P	Declared Loss (kWh/Day)	1.17		
Primary Circuit loss Type	None						
Cylinder thermostat	Yes						
Cylinder Heated by Boiler system having separate time control of DHW	Yes						
Is there a separate timer for heating the store	Yes						
Is store in an airing cupboard	Yes						
Low water usage(Less than 125l/p/d)	Yes						

Ventilation Method	
Method	Balanced whole-house mechanical ventilation with heat recovery
Specific Fan power (W/(l/s))	0.76
Heat exchanger Efficiency (%)	86

Appendix D Part L Compliance Specifications

Type 1

Part L Specification

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Property Details

Dwelling Type	Top-floor apartment	Type of BER rating	New Dwelling - Provisional
Address line 1		Year of Construction	2025
Address line 2		Date of Assessment	25/02/2022
Address line 3		Date of Plans	
County	Co. Cork	Planning Reference	
Eircode		Building Regulations	2019 TGD L
BER Number		MPRN No.	
Purpose of Rating	New dwelling for owner occupation	Is MPRN shared with another dwelling?	N/A
Assessor Name		BER number assigned to shared dwelling	N/A
Comment			

Dimension Details

	Area [m ²]	Height [m]	Volume [m ³]	
Ground Floor	100.70	2.90	292.03	
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	0.00	0.00	0.00	
Total Floor Area	100.70		292.03	
Living Area [m ²]	30.24			Living area percentage [%] 30.03
No of Storeys	1			

Ventilation Details

	Number		
Chimneys	0	Has permeability test been carried out?	Yes
Open Flues	0	Structure type	N/A
Fans & Vents	0	Is there a suspended wooden ground floor?	No
Number of flueless combustion room heaters	0	Percentage windows/doors draught stripped [%]	N/A
Is there a draught lobby on main entrance?	Yes	Number of sides sheltered	2
Ventilation method	Balanced whole-house mechanical ventilation with heat recovery	Mechanical Ventilation Manufacturer	Nilan
Specific fan power [W/(L/s)]	0.760	Mechanical Ventilation Model Name	Compact P
Heat exchanger efficiency [%]	86.00	How many wetrooms (incl. kitchen)?	k+2

Building Elements - Floor Details

Type	Description	Underfloor heating	U-Value [W/m ² K]	Area [m ²]
Non-Heat Loss Floor	Main Floor	N/A	0	100.7

Building Elements - Roof Details

Type	Description	U-Value [W/m ² K]	Area [m ²]
Flat Roof	Roof Default U-value	0.15	100.7

Building Elements - Wall Details

Type	Description	U-Value [W/m ² K]	Area [m ²]
Unknown	External Walls	0.18	69
Unknown	Corridor Wall U-value 0.18 + Ru 0.5 unheated space	0.165	14.5

Building Elements - Door Details

Description	Number of Doors	U-Value [W/m ² K]	Area [m ²]
	1	1.36	2.300

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Building Elements - Window Details

Glazing type	User defined u-value	U-Value [W/m ² K]	Area [m ²]
Double-glazed, air filled (low-E, en = 0.15, hard coat)	Yes	1.400	8.800
Double-glazed, air filled (low-E, en = 0.15, hard coat)	Yes	1.400	7.920
Double-glazed, air filled (low-E, en = 0.15, hard coat)	Yes	1.400	11.000

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Other Details

Thermal bridging factor [W/m ² k]	0.0800	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 ²]	N/A
Type, manufacturer, model	N/A	Collector heat loss coefficient, a1 [W/m ² >K]	N/A
Zero loss collector efficiency, n0	N/A	Overshading factor	N/A
Annual Solar Radiation [kWh/m ²] (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	0	Combi boiler present?	No
Supplementary electric water heating	N/A	Water Storage Volume [L]	180
Hot water storage manufacturer and model name	Nilan Compact P	Declared loss factor [kWh/d]	1.17
Temperature factor unadjusted	0.89	Temperature Factor Multiplier	0.81
Primary Circuit loss type	None	Insulation type	None
Is hot water storage indoors or in group heating system?	No		
Insulation thickness [mm]	0		

Heating System - Dist. system losses and gains

Temperature adjustment [°C]	0	Control Category	1	Responsiveness category	1
Central heating pumps	0	Oil Boiler Pump	0	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 [%]	235.69	Space heating efficiency adjustment factor	1.0000	Main space heating fuel	Electricity
Main water heating system efficiency [%]	213.81	Water heating efficiency adjustment factor	1.0000	Main water heating fuel	Electricity
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	A2	Energy Value kWh/m ² /yr	47.60
CO ₂ emissions [kg/m ² /yr]	9.36		
EPC	0.284	EPC Pass/Fail	Pass
CPC	0.273	CPC Pass/Fail	Pass

Part L Conformance - Fabric

Conformity with Maximum avg U-value requirements	U-value [W/m ² K]	Pass/Fail	Conformity with Maximum U-value requirements	U-Value [W/m ² K]	Pass/Fail
Pitched roof insulated on ceiling	0.00	Pass	Roofs	0.15	Pass
Pitched roof insulated on slope	0	Pass	Walls	0.18	Pass
Flat Roof	0.15	Pass	Floors	0	Pass
Floors with no underfloor heat	0.00	Pass	External doors / windows / rooflights	1.40	Pass
Floors with underfloor heat	0.00	Pass			
Walls	0.18	Pass			
Percentage of opening areas [%]	29.81				
Average U value of openings	1.40	Pass			
Permeability test carried out and meets guidelines in TGD L				0.15	Pass

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	2078.80	2078.80	
+ Saved energy	CHP	0.00	0.00	
+ District heating	District Heating	0.00	0.00	
+ Delivered energy	Grid	0.00	4793.41	
+ Delivered energy	Thermal	0.00	0.00	
SUBTOTAL		2078.80	6872.21	0.30 - Pass
Energy not used in Regulated Loads	PV/Wind/CHP	0.00	0.00	
TOTAL		2078.80	6872.21	0.30

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Type 2

Part L Specification

BER IS NOT PUBLISHED

Property Details

Dwelling Type	Top-floor apartment	Type of BER rating	New Dwelling - Provisional
Address line 1		Year of Construction	2025
Address line 2		Date of Assessment	25/02/2022
Address line 3		Date of Plans	
County	Co. Cork	Planning Reference	
Eircode		Building Regulations	2019 TGD L
BER Number		MPRN No.	
Purpose of Rating	New dwelling for owner occupation	Is MPRN shared with another dwelling?	N/A
Assessor Name			
Comment		BER number assigned to shared dwelling	N/A

Dimension Details

	Area [m ²]	Height [m]	Volume [m ³]	
Ground Floor	105.32	2.90	305.43	
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	0.00	0.00	0.00	
Total Floor Area	105.32		305.43	
Living Area [m ²]	34.09			Living area percentage [%] 32.37
No of Storeys	1			

Ventilation Details

	Number		
Chimneys	0	Has permeability test been carried out?	Yes
Open Flues	0	Structure type	N/A
Fans & Vents	0	Is there a suspended wooden ground floor?	No
Number of flueless combustion room heaters	0	Percentage windows/doors draught stripped [%]	N/A
Is there a draught lobby on main entrance?	Yes	Number of sides sheltered	2
Ventilation method	Balanced whole-house mechanical ventilation with heat recovery	Mechanical Ventilation Manufacturer	Nilan
Specific fan power [W/(L/s)]	0.760	Mechanical Ventilation Model Name	Compact P
Heat exchanger efficiency [%]	86.00	How many wetrooms (incl. kitchen)?	k+2

Building Elements - Floor Details

Type	Description	Underfloor heating	U-Value [W/m ² K]	Area [m ²]
Non-Heat Loss Floor	Main Floor	N/A	0	105.32

Building Elements - Roof Details

Type	Description	U-Value [W/m ² K]	Area [m ²]
Flat Roof	Roof Default U-value	0.15	105.32

Building Elements - Wall Details

Type	Description	U-Value [W/m ² K]	Area [m ²]
Unknown	External Walls	0.18	35.43
Unknown	Corridor Wall U-value 0.18 + Ru 0.5 unheated space	0.165	18.6

Building Elements - Door Details

Description	Number of Doors	U-Value [W/m ² K]	Area [m ²]
	1	1.36	2.300

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Building Elements - Window Details

Glazing type	User defined u-value	U-Value [W/m ² K]	Area [m ²]
Double-glazed, air filled (low-E, en = 0.15, hard coat)	Yes	1.400	24.420

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Other Details

Thermal bridging factor [W/m ² k]	0.0800	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 ²]	N/A
Type, manufacturer, model	N/A	Collector heat loss coefficient, a1 [W/m ² >K]	N/A
Zero loss collector efficiency, n0	N/A	Overshading factor	N/A
Annual Solar Radiation [kWh/m ²] (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	0	Combi boiler present?	No
Supplementary electric water heating	N/A	Water Storage Volume [L]	180
Hot water storage manufacturer and model name	Nilan Compact P	Declared loss factor [kWh/d]	1.17
Temperature factor unadjusted	0.89	Temperature Factor Multiplier	0.81
Primary Circuit loss type	None	Insulation type	None
Is hot water storage indoors or in group heating system?	No		
Insulation thickness [mm]	0		

Heating System - Dist. system losses and gains

Temperature adjustment [°C]	0	Control Category	1	Responsiveness category	1
Central heating pumps	0	Oil Boiler Pump	0	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 [%]	252.86	Space heating efficiency adjustment factor	1.0000	Main space heating fuel	Electricity
Main water heating system efficiency [%]	213.81	Water heating efficiency adjustment factor	1.0000	Main water heating fuel	Electricity
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	A2	Energy Value kWh/m ² /yr	33.49
CO ₂ emissions [kg/m ² /yr]	6.59		
EPC	0.215	EPC Pass/Fail	Pass
CPC	0.208	CPC Pass/Fail	Pass

Part L Conformance - Fabric

Conformity with Maximum avg U-value requirements	U-value [W/m ² K]	Pass/Fail	Conformity with Maximum U-value requirements	U-Value [W/m ² K]	Pass/Fail
Pitched roof insulated on ceiling	0.00	Pass	Roofs	0.15	Pass
Pitched roof insulated on slope	0	Pass	Walls	0.18	Pass
Flat Roof	0.15	Pass	Floors	0	Pass
Floors with no underfloor heat	0.00	Pass	External doors / windows / rooflights	1.40	Pass
Floors with underfloor heat	0.00	Pass			
Walls	0.17	Pass			
Percentage of opening areas [%]	25.37				
Average U value of openings	1.40	Pass			
Permeability test carried out and meets guidelines in TGD L				0.15	Pass

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	1459.99	1459.99	
+ Saved energy	CHP	0.00	0.00	
+ District heating	District Heating	0.00	0.00	
+ Delivered energy	Grid	0.00	3527.36	
+ Delivered energy	Thermal	0.00	0.00	
SUBTOTAL		1459.99	4987.35	0.29 - Pass
Energy not used in Regulated Loads	PV/Wind/CHP	0.00	0.00	
TOTAL		1459.99	4987.35	0.29

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Type 3

Part L Specification

BER IS NOT PUBLISHED

Property Details

Dwelling Type	Top-floor apartment	Type of BER rating	New Dwelling - Provisional
Address line 1		Year of Construction	2025
Address line 2		Date of Assessment	25/02/2022
Address line 3		Date of Plans	
County	Co. Cork	Planning Reference	
Eircode		Building Regulations	2019 TGD L
BER Number		MPRN No.	
Purpose of Rating	New dwelling for owner occupation	Is MPRN shared with another dwelling?	N/A
Assessor Name			
Comment		BER number assigned to shared dwelling	N/A

Dimension Details

	Area [m ²]	Height [m]	Volume [m ³]	
Ground Floor	79.87	2.90	231.62	
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	0.00	0.00	0.00	
Total Floor Area	79.87		231.62	
Living Area [m ²]	34.09			Living area percentage [%] 42.68
No of Storeys	1			

Ventilation Details

	Number		
Chimneys	0	Has permeability test been carried out?	Yes
Open Flues	0	Structure type	N/A
Fans & Vents	0	Is there a suspended wooden ground floor?	No
Number of flueless combustion room heaters	0	Percentage windows/doors draught stripped [%]	N/A
Is there a draught lobby on main entrance?	Yes	Number of sides sheltered	2
Ventilation method	Balanced whole-house mechanical ventilation with heat recovery	Mechanical Ventilation Manufacturer	Nilan
Specific fan power [W/(L/s)]	0.760	Mechanical Ventilation Model Name	Compact P
Heat exchanger efficiency [%]	86.00	How many wetrooms (incl. kitchen)?	k+2

Building Elements - Floor Details

Type	Description	Underfloor heating	U-Value [W/m ² K]	Area [m ²]
Ground Floor – Above Unheated Basement	Main Floor	No	0.18	79.87

Building Elements - Roof Details

Type	Description	U-Value [W/m ² K]	Area [m ²]
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Building Elements - Wall Details

Type	Description	U-Value [W/m ² K]	Area [m ²]
Unknown	External Walls	0.18	16.3
Unknown	Corridor Wall U-vale 0.18 + Ru 0.5 unheated space	0.165	11.6

Building Elements - Door Details

Description	Number of Doors	U-Value [W/m ² K]	Area [m ²]
	1	1.36	2.300

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Building Elements - Window Details

Glazing type	User defined u-value	U-Value [W/m ² K]	Area [m ²]
Double-glazed, air filled (low-E, en = 0.15, hard coat)	Yes	1.400	10.250
Double-glazed, air filled (low-E, en = 0.15, hard coat)	Yes	1.400	16.500
Double-glazed, air filled (low-E, en = 0.15, hard coat)	Yes	1.400	6.250
Double-glazed, air filled (low-E, en = 0.15, hard coat)	Yes	1.400	11.500

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Other Details

Thermal bridging factor [W/m ² k]	0.0800	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 ²]	N/A
Type, manufacturer, model	N/A	Collector heat loss coefficient, a1 [W/m ² >K]	N/A
Zero loss collector efficiency, n0	N/A	Overshading factor	N/A
Annual Solar Radiation [kWh/m ²] (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	0	Combi boiler present?	No
Supplementary electric water heating	N/A	Water Storage Volume [L]	180
Hot water storage manufacturer and model name	Nilan Compact P	Declared loss factor [kWh/d]	1.17
Temperature factor unadjusted	0.89	Temperature Factor Multiplier	0.81
Primary Circuit loss type	None	Insulation type	None
Is hot water storage indoors or in group heating system?	No		
Insulation thickness [mm]	0		

Heating System - Dist. system losses and gains

Temperature adjustment [°C]	0	Control Category	1	Responsiveness category	1
Central heating pumps	0	Oil Boiler Pump	0	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 [%]	231.85	Space heating efficiency adjustment factor	1.0000	Main space heating fuel	Electricity
Main water heating system efficiency [%]	213.81	Water heating efficiency adjustment factor	1.0000	Main water heating fuel	Electricity
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	A2	Energy Value kWh/m ² /yr	44.16
CO ₂ emissions [kg/m ² /yr]	8.68		
EPC	0.242	EPC Pass/Fail	Pass
CPC	0.234	CPC Pass/Fail	Pass

Part L Conformance - Fabric

Conformity with Maximum avg U-value requirements	U-value [W/m ² K]	Pass/Fail	Conformity with Maximum U-value requirements	U-Value [W/m ² K]	Pass/Fail
Pitched roof insulated on ceiling	0.00	Pass	Roofs	0	Pass
Pitched roof insulated on slope	0	Pass	Walls	0.18	Pass
Flat Roof	0	Pass	Floors	0.18	Pass
Floors with no underfloor heat	0.18	Pass	External doors / windows / rooflights	1.40	Pass
Floors with underfloor heat	0.00	Pass			
Walls	0.17	Pass			
Percentage of opening areas [%]	58.60				
Average U value of openings	1.40	Pass			
Permeability test carried out and meets guidelines in TGD L				0.15	Pass

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	1453.46	1453.46	
+ Saved energy	CHP	0.00	0.00	
+ District heating	District Heating	0.00	0.00	
+ Delivered energy	Grid	0.00	3526.89	
+ Delivered energy	Thermal	0.00	0.00	
SUBTOTAL		1453.46	4980.36	0.29 - Pass
Energy not used in Regulated Loads	PV/Wind/CHP	0.00	0.00	
TOTAL		1453.46	4980.36	0.29

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Type 4

Part L Specification

BER IS NOT PUBLISHED

Property Details

Dwelling Type	Top-floor apartment	Type of BER rating	New Dwelling - Provisional
Address line 1		Year of Construction	2025
Address line 2		Date of Assessment	25/02/2022
Address line 3		Date of Plans	
County	Co. Cork	Planning Reference	
Eircode		Building Regulations	2019 TGD L
BER Number		MPRN No.	
Purpose of Rating	New dwelling for owner occupation	Is MPRN shared with another dwelling?	N/A
Assessor Name		BER number assigned to shared dwelling	N/A
Comment			

Dimension Details

	Area [m ²]	Height [m]	Volume [m ³]	
Ground Floor	49.15	2.90	142.54	
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	0.00	0.00	0.00	
Total Floor Area	49.15		142.54	
Living Area [m ²]	26.75			Living area percentage [%] 54.43
No of Storeys	1			

Ventilation Details

	Number		
Chimneys	0	Has permeability test been carried out?	Yes
Open Flues	0	Structure type	N/A
Fans & Vents	0	Is there a suspended wooden ground floor?	No
Number of flueless combustion room heaters	0	Percentage windows/doors draught stripped [%]	N/A
Is there a draught lobby on main entrance?	Yes	Number of sides sheltered	2
Ventilation method	Balanced whole-house mechanical ventilation with heat recovery	Mechanical Ventilation Manufacturer	Nilan
Specific fan power [W/(L/s)]	0.730	Mechanical Ventilation Model Name	Compact P
Heat exchanger efficiency [%]	85.00	How many wetrooms (incl. kitchen)?	k+1

Building Elements - Floor Details

Type	Description	Underfloor heating	U-Value [W/m ² K]	Area [m ²]
Ground Floor – Above Unheated Basement	Main Floor	No	0.18	49.15

Building Elements - Roof Details

Type	Description	U-Value [W/m ² K]	Area [m ²]
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Building Elements - Wall Details

Type	Description	U-Value [W/m ² K]	Area [m ²]
Unknown	External Walls	0.18	27.7
Unknown	Corridor Wall U-vale 0.18 + Ru 0.5 unheated space	0.165	21.46

Building Elements - Door Details

Description	Number of Doors	U-Value [W/m ² K]	Area [m ²]
	1	1.36	2.300

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Building Elements - Window Details

Glazing type	User defined u-value	U-Value [W/m ² K]	Area [m ²]
Double-glazed, air filled (low-E, en = 0.15, hard coat)	Yes	1.400	6.900
Double-glazed, air filled (low-E, en = 0.15, hard coat)	Yes	1.400	2.300
Double-glazed, air filled (low-E, en = 0.15, hard coat)	Yes	1.400	7.590
Double-glazed, air filled (low-E, en = 0.15, hard coat)	Yes	1.400	2.760

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Other Details

Thermal bridging factor [W/m ² k]	0.0800	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 ²]	N/A
Type, manufacturer, model	N/A	Collector heat loss coefficient, a1 [W/m ² >K]	N/A
Zero loss collector efficiency, n0	N/A	Overshading factor	N/A
Annual Solar Radiation [kWh/m ²] (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	0	Combi boiler present?	No
Supplementary electric water heating	N/A	Water Storage Volume [L]	180
Hot water storage manufacturer and model name	Nilan Compact P	Declared loss factor [kWh/d]	1.17
Temperature factor unadjusted	0.89	Temperature Factor Multiplier	0.81
Primary Circuit loss type	None	Insulation type	None
Is hot water storage indoors or in group heating system?	No		
Insulation thickness [mm]	0		

Heating System - Dist. system losses and gains

Temperature adjustment [°C]	0	Control Category	1	Responsiveness category	1
Central heating pumps	0	Oil Boiler Pump	0	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 [%]	263.62	Space heating efficiency adjustment factor	1.0000	Main space heating fuel	Electricity
Main water heating system efficiency [%]	213.81	Water heating efficiency adjustment factor	1.0000	Main water heating fuel	Electricity
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	A3	Energy Value kWh/m ² /yr	65.49
CO ₂ emissions [kg/m ² /yr]	12.88		
EPC	0.285	EPC Pass/Fail	Pass
CPC	0.276	CPC Pass/Fail	Pass

Part L Conformance - Fabric

Conformity with Maximum avg U-value requirements	U-value [W/m ² K]	Pass/Fail	Conformity with Maximum U-value requirements	U-Value [W/m ² K]	Pass/Fail
Pitched roof insulated on ceiling	0.00	Pass	Roofs	0	Pass
Pitched roof insulated on slope	0	Pass	Walls	0.18	Pass
Flat Roof	0	Pass	Floors	0.18	Pass
Floors with no underfloor heat	0.18	Pass	External doors / windows / rooflights	1.40	Pass
Floors with underfloor heat	0.00	Pass			
Walls	0.17	Pass			
Percentage of opening areas [%]	44.46				
Average U value of openings	1.40	Pass			
Permeability test carried out and meets guidelines in TGD L				0.15	Pass

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	1809.09	1809.09	
+ Saved energy	CHP	0.00	0.00	
+ District heating	District Heating	0.00	0.00	
+ Delivered energy	Grid	0.00	3218.81	
+ Delivered energy	Thermal	0.00	0.00	
SUBTOTAL		1809.09	5027.90	0.36 - Pass
Energy not used in Regulated Loads	PV/Wind/CHP	0.00	0.00	
TOTAL		1809.09	5027.90	0.36

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Type 5

Part L Specification

BER IS NOT PUBLISHED

Property Details

Dwelling Type	Top-floor apartment	Type of BER rating	New Dwelling - Provisional
Address line 1		Year of Construction	2025
Address line 2		Date of Assessment	28/02/2022
Address line 3		Date of Plans	
County	Co. Cork	Planning Reference	
Eircode		Building Regulations	2019 TGD L
BER Number		MPRN No.	
Purpose of Rating	New dwelling for owner occupation	Is MPRN shared with another dwelling?	N/A
Assessor Name			
Comment		BER number assigned to shared dwelling	N/A

Dimension Details

	Area [m ²]	Height [m]	Volume [m ³]	
Ground Floor	78.81	2.90	228.55	
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	0.00	0.00	0.00	
Total Floor Area	78.81		228.55	
Living Area [m ²]	32.43			Living area percentage [%] 41.15
No of Storeys	1			

Ventilation Details

	Number		
Chimneys	0	Has permeability test been carried out?	Yes
Open Flues	0	Structure type	N/A
Fans & Vents	0	Is there a suspended wooden ground floor?	No
Number of flueless combustion room heaters	0	Percentage windows/doors draught stripped [%]	N/A
Is there a draught lobby on main entrance?	Yes	Number of sides sheltered	2
Ventilation method	Balanced whole-house mechanical ventilation with heat recovery	Mechanical Ventilation Manufacturer	Nilan
Specific fan power [W/(L/s)]	0.760	Mechanical Ventilation Model Name	Compact P
Heat exchanger efficiency [%]	86.00	How many wetrooms (incl. kitchen)?	k+2

Building Elements - Floor Details

Type	Description	Underfloor heating	U-Value [W/m ² K]	Area [m ²]
Non-Heat Loss Floor	Main Floor	N/A	0	78.81

Building Elements - Roof Details

Type	Description	U-Value [W/m ² K]	Area [m ²]
Flat Roof	Main Roof 1	0.15	78.81

Building Elements - Wall Details

Type	Description	U-Value [W/m ² K]	Area [m ²]
Unknown	External Walls	0.18	16.33
Unknown	Corridor Wall U-vale 0.18 + Ru 0.5 unheated space	0.165	2.2

Building Elements - Door Details

Description	Number of Doors	U-Value [W/m ² K]	Area [m ²]
	1	1.36	2.300

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Building Elements - Window Details

Glazing type	User defined u-value	U-Value [W/m ² K]	Area [m ²]
Double-glazed, air filled (low-E, en = 0.15, hard coat)	Yes	1.400	15.000
Double-glazed, air filled (low-E, en = 0.15, hard coat)	Yes	1.400	5.750
Double-glazed, air filled (low-E, en = 0.15, hard coat)	Yes	1.400	20.250

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Other Details

Thermal bridging factor [W/m ² k]	0.0800	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 ²]	N/A
Type, manufacturer, model	N/A	Collector heat loss coefficient, a1 [W/m ² >K]	N/A
Zero loss collector efficiency, n0	N/A	Overshading factor	N/A
Annual Solar Radiation [kWh/m ²] (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	0	Combi boiler present?	No
Supplementary electric water heating	N/A	Water Storage Volume [L]	180
Hot water storage manufacturer and model name	Nilan Compact P	Declared loss factor [kWh/d]	1.17
Temperature factor unadjusted	0.89	Temperature Factor Multiplier	0.81
Primary Circuit loss type	None	Insulation type	None
Is hot water storage indoors or in group heating system?	No		
Insulation thickness [mm]	0		

Heating System - Dist. system losses and gains

Temperature adjustment [°C]	0	Control Category	1	Responsiveness category	1
Central heating pumps	0	Oil Boiler Pump	0	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 [%]	245.31	Space heating efficiency adjustment factor	1.0000	Main space heating fuel	Electricity
Main water heating system efficiency [%]	213.81	Water heating efficiency adjustment factor	1.0000	Main water heating fuel	Electricity
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	A2	Energy Value kWh/m ² /yr	40.05
CO ₂ emissions [kg/m ² /yr]	7.87		
EPC	0.234	EPC Pass/Fail	Pass
CPC	0.228	CPC Pass/Fail	Pass

Part L Conformance - Fabric

Conformity with Maximum avg U-value requirements	U-value [W/m ² K]	Pass/Fail	Conformity with Maximum U-value requirements	U-Value [W/m ² K]	Pass/Fail
Pitched roof insulated on ceiling	0.00	Pass	Roofs	0.15	Pass
Pitched roof insulated on slope	0	Pass	Walls	0.18	Pass
Flat Roof	0.15	Pass	Floors	0	Pass
Floors with no underfloor heat	0.00	Pass	External doors / windows / rooflights	1.40	Pass
Floors with underfloor heat	0.00	Pass			
Walls	0.18	Pass			
Percentage of opening areas [%]	54.94				
Average U value of openings	1.40	Pass			
Permeability test carried out and meets guidelines in TGD L				0.15	Pass

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	1341.49	1341.49	
+ Saved energy	CHP	0.00	0.00	
+ District heating	District Heating	0.00	0.00	
+ Delivered energy	Grid	0.00	3156.07	
+ Delivered energy	Thermal	0.00	0.00	
SUBTOTAL		1341.49	4497.56	0.30 - Pass
Energy not used in Regulated Loads	PV/Wind/CHP	0.00	0.00	
TOTAL		1341.49	4497.56	0.30

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Type 6

Part L Specification

BER IS NOT PUBLISHED

Property Details

Dwelling Type	Top-floor apartment	Type of BER rating	New Dwelling - Provisional
Address line 1		Year of Construction	2025
Address line 2		Date of Assessment	25/02/2022
Address line 3		Date of Plans	
County	Co. Cork	Planning Reference	
Eircode		Building Regulations	2019 TGD L
BER Number		MPRN No.	
Purpose of Rating	New dwelling for owner occupation	Is MPRN shared with another dwelling?	N/A
Assessor Name			
Comment		BER number assigned to shared dwelling	N/A

Dimension Details

	Area [m ²]	Height [m]	Volume [m ³]	
Ground Floor	48.22	2.90	139.84	
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	0.00	0.00	0.00	
Total Floor Area	48.22		139.84	
Living Area [m ²]	23.71			Living area percentage [%] 49.17
No of Storeys	1			

Ventilation Details

	Number		
Chimneys	0	Has permeability test been carried out?	Yes
Open Flues	0	Structure type	N/A
Fans & Vents	0	Is there a suspended wooden ground floor?	No
Number of flueless combustion room heaters	0	Percentage windows/doors draught stripped [%]	N/A
Is there a draught lobby on main entrance?	Yes	Number of sides sheltered	2
Ventilation method	Balanced whole-house mechanical ventilation with heat recovery	Mechanical Ventilation Manufacturer	Nilan
Specific fan power [W/(L/s)]	0.730	Mechanical Ventilation Model Name	Compact P
Heat exchanger efficiency [%]	85.00	How many wetrooms (incl. kitchen)?	k+1

Building Elements - Floor Details

Type	Description	Underfloor heating	U-Value [W/m ² K]	Area [m ²]
Ground Floor – Above Unheated Basement	Main Floor	No	0.18	48.22

Building Elements - Roof Details

Type	Description	U-Value [W/m ² K]	Area [m ²]
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Building Elements - Wall Details

Type	Description	U-Value [W/m ² K]	Area [m ²]
Unknown	External Walls	0.48	26.47

Building Elements - Door Details

Description	Number of Doors	U-Value [W/m ² K]	Area [m ²]
	1	1.36	2.300

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Building Elements - Window Details

Glazing type	User defined u-value	U-Value [W/m ² K]	Area [m ²]
Double-glazed, air filled (low-E, en = 0.15, hard coat)	Yes	1.400	11.220
Double-glazed, air filled (low-E, en = 0.15, hard coat)	Yes	1.400	3.520
Double-glazed, air filled (low-E, en = 0.15, hard coat)	Yes	1.400	7.620

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Other Details

Thermal bridging factor [W/m ² k]	0.0800	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 ²]	N/A
Type, manufacturer, model	N/A	Collector heat loss coefficient, a1 [W/m ² >K]	N/A
Zero loss collector efficiency, n0	N/A	Overshading factor	N/A
Annual Solar Radiation [kWh/m ²] (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	0	Combi boiler present?	No
Supplementary electric water heating	N/A	Water Storage Volume [L]	180
Hot water storage manufacturer and model name	Nilan Compact P	Declared loss factor [kWh/d]	1.17
Temperature factor unadjusted	0.89	Temperature Factor Multiplier	0.81
Primary Circuit loss type	None	Insulation type	None
Is hot water storage indoors or in group heating system?	No		
Insulation thickness [mm]	0		

Heating System - Dist. system losses and gains

Temperature adjustment [°C]	0	Control Category	1	Responsiveness category	1
Central heating pumps	0	Oil Boiler Pump	0	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 [%]	266.03	Space heating efficiency adjustment factor	1.0000	Main space heating fuel	Electricity
Main water heating system efficiency [%]	213.81	Water heating efficiency adjustment factor	1.0000	Main water heating fuel	Electricity
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	A2	Energy Value kWh/m ² /yr	49.86
CO ₂ emissions [kg/m ² /yr]	9.81		
EPC	0.229	EPC Pass/Fail	Pass
CPC	0.223	CPC Pass/Fail	Pass

Part L Conformance - Fabric

Conformity with Maximum avg U-value requirements	U-value [W/m ² K]	Pass/Fail	Conformity with Maximum U-value requirements	U-Value [W/m ² K]	Pass/Fail
Pitched roof insulated on ceiling	0.00	Pass	Roofs	0	Pass
Pitched roof insulated on slope	0	Pass	Walls	0.18	Pass
Fiat Roof	0	Pass	Floors	0.18	Pass
Floors with no underfloor heat	0.18	Pass	External doors / windows / rooflights	1.40	Pass
Floors with underfloor heat	0.00	Pass			
Walls	0.18	Pass			
Percentage of opening areas [%]	51.14				
Average U value of openings	1.40	Pass			
Permeability test carried out and meets guidelines in TGD L				0.15	Pass

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	1187.63	1187.63	
+ Saved energy	CHP	0.00	0.00	
+ District heating	District Heating	0.00	0.00	
+ Delivered energy	Grid	0.00	2404.48	
+ Delivered energy	Thermal	0.00	0.00	
SUBTOTAL		1187.63	3592.12	0.33 - Pass
Energy not used in Regulated Loads	PV/Wind/CHP	0.00	0.00	
TOTAL		1187.63	3592.12	0.33

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Type 7

Part L Specification

BER IS NOT PUBLISHED

Property Details

Dwelling Type	Top-floor apartment	Type of BER rating	New Dwelling - Provisional
Address line 1		Year of Construction	2025
Address line 2		Date of Assessment	25/02/2022
Address line 3		Date of Plans	
County	Co. Cork	Planning Reference	
Eircode		Building Regulations	2019 TGD L
BER Number		MPRN No.	
Purpose of Rating	New dwelling for owner occupation	Is MPRN shared with another dwelling?	N/A
Assessor Name			
Comment		BER number assigned to shared dwelling	N/A

Dimension Details

	Area [m ²]	Height [m]	Volume [m ³]	
Ground Floor	51.00	2.90	147.90	
First Floor	51.00	3.15	160.65	
Second Floor	0.00	0.00	0.00	
Third and other floors	0.00	0.00	0.00	
Room in roof	0.00	0.00	0.00	
Total Floor Area	102.00		308.55	
Living Area [m ²]	30.13			Living area percentage [%] 29.54
No of Storeys	2			

Ventilation Details

	Number		
Chimneys	0	Has permeability test been carried out?	Yes
Open Flues	0	Structure type	N/A
Fans & Vents	0	Is there a suspended wooden ground floor?	No
Number of flueless combustion room heaters	0	Percentage windows/doors draught stripped [%]	N/A
Is there a draught lobby on main entrance?	Yes	Number of sides sheltered	2
Ventilation method	Balanced whole-house mechanical ventilation with heat recovery	Mechanical Ventilation Manufacturer	Nilan
Specific fan power [W/(L/s)]	0.760	Mechanical Ventilation Model Name	Compact P
Heat exchanger efficiency [%]	86.00	How many wetrooms (incl. kitchen)?	k+2

Building Elements - Floor Details

Type	Description	Underfloor heating	U-Value [W/m ² K]	Area [m ²]
Non-Heat Loss Floor	Main Floor	N/A	0	51
Ground Floor – Above Unheated Basement	Main Floor	No	0.18	51

Building Elements - Roof Details

Type	Description	U-Value [W/m ² K]	Area [m ²]
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Building Elements - Wall Details

Type	Description	U-Value [W/m ² K]	Area [m ²]
Unknown	External Walls	0.18	58.33

Building Elements - Door Details

Description	Number of Doors	U-Value [W/m ² K]	Area [m ²]
	1	1.36	2.300

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Building Elements - Window Details

Glazing type	User defined u-value	U-Value [W/m ² K]	Area [m ²]
Double-glazed, air filled (low-E, en = 0.15, hard coat)	Yes	1.400	11.520
Double-glazed, air filled (low-E, en = 0.15, hard coat)	Yes	1.400	30.250
Double-glazed, air filled (low-E, en = 0.15, hard coat)	Yes	1.400	2.750

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Other Details

Thermal bridging factor [W/m ² k]	0.0800	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 ²]	N/A
Type, manufacturer, model	N/A	Collector heat loss coefficient, a1 [W/m ² >K]	N/A
Zero loss collector efficiency, n0	N/A	Overshading factor	N/A
Annual Solar Radiation [kWh/m ²] (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	0	Combi boiler present?	No
Supplementary electric water heating	N/A	Water Storage Volume [L]	180
Hot water storage manufacturer and model name	Nilan Compact P	Declared loss factor [kWh/d]	1.17
Temperature factor unadjusted	0.89	Temperature Factor Multiplier	0.81
Primary Circuit loss type	None	Insulation type	None
Is hot water storage indoors or in group heating system?	No		
Insulation thickness [mm]	0		

Heating System - Dist. system losses and gains

Temperature adjustment [°C]	0	Control Category	1	Responsiveness category	1
Central heating pumps	0	Oil Boiler Pump	0	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 [%]	230	Space heating efficiency adjustment factor	1.0000	Main space heating fuel	Electricity
Main water heating system efficiency [%]	213.81	Water heating efficiency adjustment factor	1.0000	Main water heating fuel	Electricity
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	A2	Energy Value kWh/m ² /yr	39.12
CO ₂ emissions [kg/m ² /yr]	7.69		
EPC	0.246	EPC Pass/Fail	Pass
CPC	0.238	CPC Pass/Fail	Pass

Part L Conformance - Fabric

Conformity with Maximum avg U-value requirements	U-value [W/m ² K]	Pass/Fail	Conformity with Maximum U-value requirements	U-Value [W/m ² K]	Pass/Fail
Pitched roof insulated on ceiling	0.00	Pass	Roofs	0	Pass
Pitched roof insulated on slope	0	Pass	Walls	0.18	Pass
Flat Roof	0	Pass	Floors	0.18	Pass
Floors with no underfloor heat	0.18	Pass	External doors / windows / rooflights	1.40	Pass
Floors with underfloor heat	0.00	Pass			
Walls	0.18	Pass			
Percentage of opening areas [%]	45.90				
Average U value of openings	1.40	Pass			
Permeability test carried out and meets guidelines in TGD L				0.15	Pass

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	1553.00	1553.00	
+ Saved energy	CHP	0.00	0.00	
+ District heating	District Heating	0.00	0.00	
+ Delivered energy	Grid	0.00	3990.22	
+ Delivered energy	Thermal	0.00	0.00	
SUBTOTAL		1553.00	5543.22	0.28 - Pass
Energy not used in Regulated Loads	PV/Wind/CHP	0.00	0.00	
TOTAL		1553.00	5543.22	0.28

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Type 8

Part L Specification

BER IS NOT PUBLISHED

Property Details

Dwelling Type	Top-floor apartment	Type of BER rating	New Dwelling - Provisional
Address line 1		Year of Construction	2025
Address line 2		Date of Assessment	25/02/2022
Address line 3		Date of Plans	
County	Co. Cork	Planning Reference	
Eircode		Building Regulations	2019 TGD L
BER Number		MPRN No.	
Purpose of Rating	New dwelling for owner occupation	Is MPRN shared with another dwelling?	N/A
Assessor Name			
Comment		BER number assigned to shared dwelling	N/A

Dimension Details

	Area [m ²]	Height [m]	Volume [m ³]	
Ground Floor	122.22	2.90	354.44	
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	0.00	0.00	0.00	
Total Floor Area	122.22		354.44	
Living Area [m ²]	33.77			Living area percentage [%] 27.63
No of Storeys	1			

Ventilation Details

	Number		
Chimneys	0	Has permeability test been carried out?	Yes
Open Flues	0	Structure type	N/A
Fans & Vents	0	Is there a suspended wooden ground floor?	No
Number of flueless combustion room heaters	0	Percentage windows/doors draught stripped [%]	N/A
Is there a draught lobby on main entrance?	Yes	Number of sides sheltered	2
Ventilation method	Balanced whole-house mechanical ventilation with heat recovery	Mechanical Ventilation Manufacturer	Nilan
Specific fan power [W/(L/s)]	0.760	Mechanical Ventilation Model Name	Compact P
Heat exchanger efficiency [%]	86.00	How many wetrooms (incl. kitchen)?	k+2

Building Elements - Floor Details

Type	Description	Underfloor heating	U-Value [W/m ² K]	Area [m ²]
Ground Floor – Above Unheated Basement	Main Floor	No	0.18	122.22

Building Elements - Roof Details

Type	Description	U-Value [W/m ² K]	Area [m ²]
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Building Elements - Wall Details

Type	Description	U-Value [W/m ² K]	Area [m ²]
Unknown	External Walls	0.48	56.75
Unknown	Corridor Wall U-value 0.18 + Ru 0.5 unheated space	0.165	31.32

Building Elements - Door Details

Description	Number of Doors	U-Value [W/m ² K]	Area [m ²]
	1	1.36	2.300

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Building Elements - Window Details

Glazing type	User defined u-value	U-Value [W/m ² K]	Area [m ²]
Double-glazed, air filled (low-E, en = 0.15, hard coat)	Yes	1.400	9.900
Double-glazed, air filled (low-E, en = 0.15, hard coat)	Yes	1.400	13.360

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Other Details

Thermal bridging factor [W/m ² k]	0.0800	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 ²]	N/A
Type, manufacturer, model	N/A	Collector heat loss coefficient, a1 [W/m ² >K]	N/A
Zero loss collector efficiency, n0	N/A	Overshading factor	N/A
Annual Solar Radiation [kWh/m ²] (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	0	Combi boiler present?	No
Supplementary electric water heating	N/A	Water Storage Volume [L]	180
Hot water storage manufacturer and model name	Nilan Compact P	Declared loss factor [kWh/d]	1.17
Temperature factor unadjusted	0.89	Temperature Factor Multiplier	0.81
Primary Circuit loss type	None	Insulation type	None
Is hot water storage indoors or in group heating system?	No		
Insulation thickness [mm]	0		

Heating System - Dist. system losses and gains

Temperature adjustment [°C]	0	Control Category	1	Responsiveness category	1
Central heating pumps	0	Oil Boiler Pump	0	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 [%]	229.94	Space heating efficiency adjustment factor	1.0000	Main space heating fuel	Electricity
Main water heating system efficiency [%]	213.81	Water heating efficiency adjustment factor	1.0000	Main water heating fuel	Electricity
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	A2	Energy Value kWh/m ² /yr	39.93
CO ₂ emissions [kg/m ² /yr]	7.85		
EPC	0.250	EPC Pass/Fail	Pass
CPC	0.239	CPC Pass/Fail	Pass

Part L Conformance - Fabric

Conformity with Maximum avg U-value requirements	U-value [W/m ² K]	Pass/Fail	Conformity with Maximum U-value requirements	U-Value [W/m ² K]	Pass/Fail
Pitched roof insulated on ceiling	0.00	Pass	Roofs	0	Pass
Pitched roof insulated on slope	0	Pass	Walls	0.18	Pass
Flat Roof	0	Pass	Floors	0.18	Pass
Floors with no underfloor heat	0.18	Pass	External doors / windows / rooflights	1.40	Pass
Floors with underfloor heat	0.00	Pass			
Walls	0.18	Pass			
Percentage of opening areas [%]	20.91				
Average U value of openings	1.40	Pass			
Permeability test carried out and meets guidelines in TGD L				0.15	Pass

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	1936.57	1936.57	
+ Saved energy	CHP	0.00	0.00	
+ District heating	District Heating	0.00	0.00	
+ Delivered energy	Grid	0.00	4879.80	
+ Delivered energy	Thermal	0.00	0.00	
SUBTOTAL		1936.57	6816.37	0.28 - Pass
Energy not used in Regulated Loads	PV/Wind/CHP	0.00	0.00	
TOTAL		1936.57	6816.37	0.28

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