BC STEP CODE COMPLIANCE CHECKLIST · PERFORMANCE PATHS FOR PART 9 BUILDINGS

A: PROJECT INFORMATION

Building Permit #:
Builder: Twin Lions Contracting
Project Address: [redacted]
Municipality / District:
Postal Code:
PID or Legal Description:

As Built

Building Type
Single Detached

# of Dwelling Units: 1

B: CODE COMPLIANCE SUMMARY

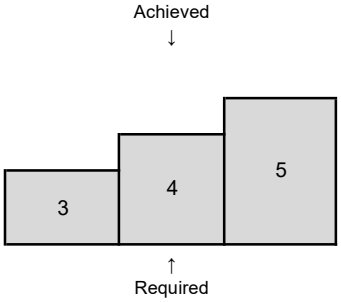
BC Building Code Performance Compliance Path:
9.36.6. BC Energy Step Code ERS

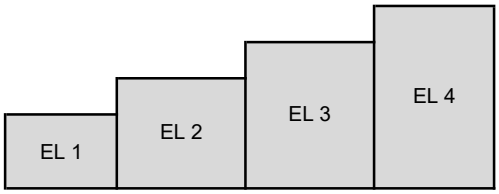
Energy Step Code

Step Required	Step Achieved
4	**4**

Zero Carbon Step Code

Level Required	Level Achieved
EL 1 - Measure Only	**EL 1 - Measure Only**





Based on info provided by the builder & drawings prepared by: Kershcbaumer Design
Site Visit Date 2024 08 26

C: COMPLETED BY

Full Name (Print): Franklin Landry
Company Name: Capital Home Energy
[redacted]

Date (YYYY-MM-DD): 2024-05-07
Service Organisation: Capital Home Energy
Energy Advisor ID #: 1T11
CODECO placed in Field 8 of H2K: x

N File #: 1T11E00096

D: BUILDING CHARACTERISTICS SUMMARY

	Details (Assembly / System Type / Fuel Type / Etc.)	Average Effective RSI	
Roof / Ceilings	Attic: 2X4 truss @ 24” o/c R-60 batt, 12” heel Flat/Vault: 2x12 @ 16” o/c R-56 batt	9.78	
Above Grade Walls	2x6 @ 16” o/c R-24 batt or spray foam	3.38	
Rim Joists / Floor Headers and Lintels	Same as AG walls	3.38	
Floors Over Unheated Space	2” R-8 EPS, 2x10 @ 16” o/c R-28 batt	6.54	
Walls Below Grade	Wall: 2” R-10 GPS, 2x4 @ 16” o/c R-14 batt; pony wall: 2x8 @ 24” o/c R-28 batt/foam	2.70	
Slabs	slab: 2.5" R-12.5 XPS	2.70	
		Performance Values	
		USI	**SHGC**
Windows and glazed doors	Windows: USI: 1.00 or lower, SHGC 0.25 or higher	0.91	0.19
		0.97	0.16
		1.25	0.22
Doors	Doors: R-4.8 or higher insulated core		
Air Barrier System & Location	Poly Vapour barrier and spray foam	**ACH**	1.09
		NLA	0.52
		NLR	0.38
Space Heating/ Cooling	Principal element: Electric Air Source heat pump, backup electric	**HSPF**	11.57
		SEER	16.72
	Supplementary: Advanced airtight wood stove	**SSE**	0.65
Domestic Hot Water	Electric integrated heat pump hot water tank	**UEF**	3.88
Ventilation	HRV @75 CFM	**% EFF**	**L/s**
		81.00	30.20
Other	Solar panels for NZ compliance		
Fossil Fuels	The building including all units has NO fossil fuel use or infrastructure		

E: 9.36.5. ENERGY PERFORMANCE COMPLIANCE

Complete this section if using the Energy Performance Compliance Path in Subsection 9.36.5.

Proposed House Energy Consumption (GJ/year)	
HVAC	
DHW Heating	
SUM	**0**

Reference House Rated Energy Target (GJ/year)	
HVAC	
DHW Heating	
SUM	**0**

The airtightness value used in the energy model calculations for the Proposed house is:
Or Tested At: 1.50

The above calculation was performed in compliance with Subsection 9.36.5. of Division B:

F: 9.36.6. ENERGY STEP CODE COMPLIANCE

As Built House Rated Energy Consumption (GJ/year): 15 **Reference House Rated Energy Target (GJ/year):** 57

Proposed House Metrics	Unit	As Built Step Requirements		As-built Calculations: As-built House Result	As-built House Pass or Fail
Step Code Level	Step 3, 4 or 5	4			
Mechanical Energy Use Intensity (MEUI)	kWh/(m²·year)	45	*(max)*	13	Pass
% Improvement	%	40	*(min)*	78	
Thermal Energy Demand (TEDI)	kWh/(m²·year)	27	*(max)*	27	Pass
% Heat Loss Reduction	%	20	*(min)*	34	
Airtightness in Air Changes per Hour at 50 Pa differential	ACH @ 50 Pa	1.5	*(max)*	1.1	Pass
Normalized Leakage Area (NLA_{10})	10 Pa (cm²/m²)	0.72	*(max)*	0.5	
Normalized Leakage Rate (NLR_{50})	L/s/m²	0.53	*(max)*	0.4	
				Step Code Requirements Met:	Yes

Software Used: Hot 2000 Version: 11.12

Heated Floor Area (m^2): 261.30 Climate Data (Location): PITT MEADOWS

Building Volume (m^3): 740.40 Degree Days Below 18°C (HDD): 2851

FWDR: 23.5% % Of Space Cooled More than 50%

G: ZERO CARBON STEP CODE

Proposed House Metrics		Unit	Proposed Level Requirement		Proposed Calculations: Proposed House Result	Proposed House Pass or Fail
Zero Carbon Step Code Level		EL-1 - EL-4	EL 1 - Measure Only			
Total GHG		kg CO_{2e}/ year	NA	*(max)*	125	Pass
CO_{2e} per floor area with max	Per Floor area	kg CO_{2e}/m²/year	NA	*(max)*	0.5	Pass
	Max	kg CO_{2e}	NA	*(max)*	125	
Perscriptive		Heating	NA		Zero Carb	Pass
		Hot Water	NA		Zero Carb	
		All building systems,equipment and appliances	NA		Carbon	
				Target Reached		Yes