

Energy Efficiency Design Summary: Prescriptive Method

(Building Code Part 9, Residential)

This form is used by a designer to demonstrate that the energy efficiency design of a house complies with the building code using the prescriptive method described in Subsection 3.1.1. of SB-12. This form is applicable where the ratio of gross area of windows/sidelights/skylights/glazing in doors and sliding glass doors to the gross area of peripheral walls is not more than 22%.

For use by Principal Authority	
Application No:	Model/Certification Number

A. Project Information

Building number, street name 47 QUEEN STREET (DUPLEX), MORRISTON		Unit number	Lot/Con
Municipality PUSLINCH	Postal code	Reg. Plan number / other description	

B. Compliance Option

SB-12 Prescriptive (input design package)	Package: Electric space heating Table: [SB-12 - 3.1.1.]
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C. Project Design Conditions

Climatic Zone (SB-1):	Heating Equipment Efficiency	Space Heating Fuel Source
<input checked="" type="checkbox"/> Zone 1 (< 5000 degree days)	<input checked="" type="checkbox"/> ≥ 92% AFUE	<input type="checkbox"/> Gas <input type="checkbox"/> Propane <input type="checkbox"/> Solid Fuel
<input type="checkbox"/> Zone 2 (≥ 5000 degree days)	<input type="checkbox"/> ≥ 84% < 92% AFUE	<input type="checkbox"/> Oil <input checked="" type="checkbox"/> Electric <input type="checkbox"/> Earth Energy

Ratio of Windows, Skylights & Glass (W, S & G) to Wall Area				Other Building Conditions				
Area of Walls =	225.55	m ² or	0.0	ft ²	W, S & G % = 16%	<input type="checkbox"/> Log/Post&Beam	<input type="checkbox"/> ICF Above Grade	<input type="checkbox"/> ICF Basement
Area of W, S & G =	36.09	m ² or	0.0	ft ²	Utilize window averaging:	<input type="checkbox"/> Slab on ground	<input type="checkbox"/> Walkout Basement	
					<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Air conditioning	<input type="checkbox"/> Combo unit	
						<input type="checkbox"/> Air Sourced Heat Pump	<input type="checkbox"/> Ground Sourced Heat Pump (GSHP)	

D. Building Specifications [provide values and ratings of the energy efficiency components proposed]

Energy Efficiency Substitutions	
<input type="checkbox"/> ICF (3.1.1.2.(5) & (6) / 3.1.1.3.(5) & (6))	
<input type="checkbox"/> Combined space heating and domestic water heating systems (3.1.1.2.(7) / 3.1.1.3.(7))	

<input type="checkbox"/> Airtightness substitution(s)	<input type="checkbox"/> Table 3.1.1.4.B	Required:	Permitted substitution:
	<input type="checkbox"/> Table 3.1.1.4.C	Required:	Permitted substitution:
Airtightness test required (Refer to design guide attached)		Required:	Permitted substitution:

Building Component	Minimum RSI / R values or maximum U-Value ⁽¹⁾		Building Component	Efficiency Ratings
Thermal Insulation	Nominal	Effective	Windows & Doors Provide U-Value¹ or ER rating	
Ceiling with Attic Space	60	59.22	Windows/Sliding Glass Doors	1.4
Ceiling without Attic Space	31	27.65	Skylights/Glazed roofs	2.8
Exposed Floor	31	29.8	Mechanicals	
Walls Above Grade	22 + 10 c	26.4	Heating Equip. (AFUE)	ELECTRIC BOILER
Basement Walls	20 ci	21.12	HRV Efficiency (SRE% at 0°C)	81%
Slab (all >600mm below grade)	X		DHW Heater (EF)	-
Slab (edge only ≤600mm below grade)	10		DWHR (CSA B55.1 (min. 42% efficiency))	42% #Showers: 2
Slab (all ≤600mm below grade, or heated)	10		Combined heating system	

(1) U-Value to be provided in either W/(m²K) or Btu/(h·ft²·F) but not both

E. Designer(s) [name(s) & BCIN(s), if applicable, of person(s) providing information herein to substantiate that design meets the building code]

Qualified Designer Declaration of designer to have reviewed and take responsibility for the design work		
NAME Doug McCallum	BCIN 102614	Signature