

# 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	Unit number	Lot/Con
658 Miikana Road		279
Municipality	Postal code	Reg. Plan number / other description
Gloucester		4M-1618

## B. Prescriptive Compliance [indicate the building code compliance package being employed in this house design]

SB-12 Prescriptive (input design package):	Package: <u>A1</u>	Table: <u>3.1.1.2.A(IP)</u>
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## C. Project Design Conditions

<b>Climatic Zone (SB-1):</b> <input checked="" type="checkbox"/> Zone 1 (< 5000 degree days) <input type="checkbox"/> Zone 2 (≥ 5000 degree days)	<b>Heating Equipment Efficiency</b> <input checked="" type="checkbox"/> ≥ 92% AFUE <input type="checkbox"/> ≥ 84% < 92% AFUE	<b>Space Heating Fuel Source</b> <input checked="" type="checkbox"/> Gas <input type="checkbox"/> Oil <input type="checkbox"/> Propane <input type="checkbox"/> Electric <input type="checkbox"/> Solid Fuel <input type="checkbox"/> Earth Energy
<b>Ratio of Windows, Skylights &amp; Glass (W, S &amp; G) to Wall Area</b> Area of walls = _____ m <sup>2</sup> or <u>3858</u> ft <sup>2</sup> W, S & G % = <u>13.8</u> Area of W, S & G = _____ m <sup>2</sup> or <u>533</u> ft <sup>2</sup> Utilize window averaging: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<b>Other Building Characteristics</b> <input type="checkbox"/> Log/Post&Beam <input type="checkbox"/> Slab-on-ground <input type="checkbox"/> Air Conditioning <input type="checkbox"/> Air Sourced Heat Pump (ASHP) <input type="checkbox"/> Ground Sourced Heat Pump (GSHP) <input type="checkbox"/> ICF Above Grade <input type="checkbox"/> Walkout Basement <input type="checkbox"/> Combo Unit <input type="checkbox"/> ICF Basement

## 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) Airtightness test required (Refer to Design Guide Attached) <input type="checkbox"/> Table 3.1.1.4.B Required: _____ Permitted Substitution: _____ <input type="checkbox"/> Table 3.1.1.4.C Required: _____ Permitted Substitution: _____ Required: _____ Permitted Substitution: _____				
Building Component	Minimum RSI / R values or Maximum U-Value <sup>(1)</sup>		Building Component	Efficiency Ratings
<b>Thermal Insulation</b>	Nominal	Effective	<b>Windows &amp; Doors</b> Provide U-Value <sup>(1)</sup> or ER rating	
Ceiling with Attic Space	R60		Windows/Sliding Glass Doors	25
Ceiling without Attic Space	R31		Skylights/Glazed Roofs	0.49
Exposed Floor	R31		<b>Mechanicals</b>	
Walls Above Grade	R22		Heating Equip.(AFUE)	96%
Basement Walls		R21.12	HRV Efficiency (SRE% at 0°C)	75%
Slab (all >600mm below grade)	--		DHW Heater (EF)	0.8
Slab (edge only ≤600mm below grade)	R10		DWHR (CSA B55.1 (min. 42% efficiency))	# Showers _____
Slab (all ≤600mm below grade, or heated)	R10		Combined Heating System	NO

(1) U value to be provided in either W/(m<sup>2</sup>·K) or Btu/(h·ft<sup>2</sup>·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	BCIN	Signature
Catherine Buck	46674	