

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%.

Application No:		For use by Principal Authority	
		Model/Certification Number:	
SITE COPY			
City of Ottawa Building Services Branch			
A. Project Information		Unit number	Lot/Con
Building number, street name		AUG 19 2021	6
Municipality		Reg. Plan number / other description	
West Carleton		Building Code Reviewed	

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

SB-12 Prescriptive (input design package): Package: **A1** Table: **3.1.1.2.A(IP)**

C. Project Design Conditions

Climatic Zone (SB-1):	Heating Equipment Efficiency	Space Heating Fuel Source
☒ Zone 1 (< 5000 degree days)	☒ ≥ 92% AFUE	☒ Gas ☐ Propane ☐ Solid Fuel
☐ Zone 2 (≥ 5000 degree days)	☐ ≥ 84% < 92% AFUE	☐ Oil ☐ Electric ☐ Earth Energy
Ratio of Windows, Skylights & Glass (W, S & G) to Wall Area	Other Building Characteristics	
Area of walls = 3683 m ² or 3683 ft ²	☐ Log/Post&Beam ☐ ICF Above Grade ☐ ICF Basement	
	☐ Slab-on-ground ☐ Walkout Basement	
	☐ Air Conditioning ☐ Combo Unit	
	☐ Air Sourced Heat Pump (ASHP)	
Area of W, S & G = 415 m ² or 606 ft ²	☐ Ground Sourced Heat Pump (GSHP)	
	W, S & G % = 11.3 6.5%	
	Utilize window averaging: ☐ Yes ☒ No	

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

Energy Efficiency Substitutions	
☐ ICF (3.1.1.2.(5) & (6) / 3.1.1.3.(5) & (6))	
☐ Combined space heating and domestic water heating systems (3.1.1.2.(7) / 3.1.1.3.(7))	
☐ Airtightness substitution(s)	Permitted Substitution:
Airtightness test required (Refer to Design Guide Attached)	Permitted Substitution:
☐ Table 3.1.1.4.B Required:	Permitted Substitution:
☐ Table 3.1.1.4.C 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-Value ⁽¹⁾ 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	Mechanicals	
Walls Above Grade	R22	Heating Equip.(AFUE)	96%
Basement Walls	R10+R24	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/(m²·K) 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	Signature
Catherine Buck	
BCIN	46674