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
1931 Cessna Private			2-08
Municipality	**Postal code**	**Reg. Plan number / other description**	
West Carleton			

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 & Glazed Doors (W, S & G) to Wall Area		**Other Building Characteristics**
4475.25+101.70=4576.95 sq. ft.	16.89% ~~17.3%~~	☐ Log/Post&Beam ☐ ICF Above Grade ☐ ICF Basement
Area of walls = ~~4475.25~~ m² or ~~773.42~~ ft²	W, S & G % = ~~16.4067%~~	☐ Slab-on-ground ☐ Wa
Area of W, S & G = m² or ~~734.24~~ ft²	Utilize window averaging: ☒Yes ☐No	☐ Air Conditioning ☐ Cor ☐ Air Sourced Heat Pump ☐ Ground Sourced Heat P

City of Ottawa
Building Services Branch
REVIEWED
By Francisca Butterworth at 9:00 am, Aug 30, 2021
Building Code Reviewed
Signature
F. BUTTERWORTH

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

REVISED WALL AREA - SEPT 10/21
RAISED USF 6" FOR INCREASED WALL EXPOSURE.
(SEE GRADE PLAN)

Energy Efficiency Substitutions

☐ stems (3.1.1.2.(7) / 3.1.1.3.(7))

☐ Table 3.1.1.4.B Required: Permitted Substitution:

Airtightness test required (Refer to Design Guide Attached)

☐ Table 3.1.1.4.C Required: Permitted Substitution:

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	~~0.25 Btu/(h.ft².F)~~
Ceiling with Attic Space	R60		Windows/Sliding Glass Doors	25 ER ~~29~~ 25 ~~1.4 W/(m².K)~~
Ceiling without Attic Space	R31		Skylights/Glazed Roofs	0.49
Exposed Floor	R31		**Mechanicals**	
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)	10		DWHR (CSA B55.1 (min. 42% efficiency))	1 # Showers 3
Slab (all ≤600mm below grade, or heated)	10		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	BCIN	Signature
SANDY POLLOCK	33536	Sandy Pollock