



Energy Efficiency Design Summary (Part 9 Residential) Supplementary Standard SB-12

This form is to be completed and signed by the person who reviews and takes responsibility for the energy efficiency design of the project. Information on completing this form is contained on the reverse.

Application No. _____ Model/Certification Number: _____

A. Project Information Phoenix Homes: Cardiff: 35-5 2009 B (07032)

Building Number, Street Name 417 TULSONBURG ST Unit Number _____ Lot / Con. 59

Municipality Ottawa Postal Code _____ Reg. Plan Number / Other Description 44 1413

B. Compliance Option

☒ SB-12 Prescriptive [SB-12 - 2.1.1.] Table: 2.1.1.2A Package: 1

☐ SB-12 Performance* [SB-12 - 2.1.2.] * Attach energy performance calculations using an approved software

☐ Energy Star® [SB-12 - 2.1.3.] * Attach BOP form. House must be labeled on completion by Energy Star

☐ EnerGuide 80® * * House must be evaluated by NRCan advisor and meet a rating of 80

C. Project Design Conditions

Climatic Zone (SB-1)	Heating Equipment Efficiency	Space Heating Fuel Source
☒ Zone 1 (< 5000 degree days)	☒ ≥ 90% AFUE	☒ Gas ☐ Propane ☐ Solid Fuel
☐ Zone 2 (≥ 5000 degree days)	☐ ≥ 78% < 90% AFUE	☐ Oil ☐ Electric ☐ Earth Energy

Other Building Conditions

Gross Wall Area = 315.31 m² ☐ ICF Basement ☐ Walkout Basement ☐ Log / Post and Beam

Gross Window+ Area = 32.67 m² ☐ ICF Above Grade ☐ Slab on Grade

D. Building Specifications

Building Component	R _{S1} / R values	Building Component	Efficiency Ratings
Thermal Insulation			
Ceiling with Attic Space	<u>8.81</u>	Windows & Doors ¹	
Ceiling without Attic Space	<u>5.46</u>	Windows/Sliding Glass Doors	<u>1.8</u>
Exposed Floor	<u>5.46</u>	Skylights	
Walls Above Grade	<u>3.87</u>	Mechanicals	
Basement Walls	<u>3.52</u>	Space Heating Equip. ²	<u>92%</u>
Slab (all >600mm below grade)	<u>—</u>	HRV Efficiency (%)	<u>60%</u>
Slab (edge only ≤600mm below grade)	<u>1.76</u>	DHW Heater (EF)	<u>0.62</u>
Slab (all ≤600mm below grade, or heated)	<u>1.76</u>	NOTES	
		1. Provide U-Value in W/m ² .K, or ER rating	
		2. Provide AFUE or indicate if condensing type combined system used	

E. Performance Design Verification [complete applicable sections if SB-12 Performance, Energy Star or EnerGuide80 options used]

SB-12 Performance:

The annual energy consumption using Subsection 2.1.1. SB-12 Package _____ is _____ GJ (1 GJ = 1000MJ)

The annual energy consumption of this house as designed is _____ GJ

The software used to simulate the annual energy use of the building is: _____

The building is being designed using an air leakage of _____ air changes per hour @50Pa.

Energy Star: BOP form attached. The house will be labeled on completion by:

Energy Star and EnerGuide80:

Evaluator / Advisor / Rater Name: _____ Evaluator / Advisor / Rater License #: _____

F. Declaration [by the person who reviews and takes responsibility for the energy efficiency design]

I certify that I have reviewed the design documents submitted with the permit application, that the information contained on this form is consistent with the design documents, and that information used in any annual energy use calculations, if applicable, is a true representation of the design documents.

Name: Ken Viljoen Signature: K. Viljoen Date: APRIL 18-2012

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