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. For use by Principal Authority Application No. Model/Certification Number: A. Project Information Phoenix Homes Model S3 BABYLONIAN 2007 A (06087)SRZ Building Number, Street Name Unit Number Lot / Con. Municipality Ottawa Postal Code Reg. Plan Number / Other Description **B.** Compliance Option 2.1.1.2A Table: Package: SB-12 Prescriptive [SB-12 - 2.1.1.] 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 Solid Fuel Propane Zone 2 (≥ 5000 degree days) ≥ 78% < 90% AFUE Oil Electric Earth Energy Windows + Skylights + Glass Doors Other Building Conditions Log / Post 303.34 m² Gross Wall Area = ICF Basement Walkout Basement % Windows+ 13.01 % and Beam Gross Window+ Area = 39.45 ☐ ICF Above Grade ☐ Slab on Grade D. Building Specifications **Building Component** RSI / R values **Building Component Efficiency Ratings** Thermal Insulation Windows & Doors Windows/Sliding Glass Doors Ceiling with Attic Space 1.8 8.81 Ceiling without Attic Space Skylights 5.46 Mechanicals Exposed Floor 5.46 Walls Above Grade 3.87 Space Heating Equip. 92% HRV Efficiency (%) **Basement Walls** 60% 3.52 DHW Heater (EF) Slab (all >600mm below grade) 0.62 Slab (edge only ≤600mm below NOTES 1.76 grade) 1. Provide U-Value in W/m2.K, or ER rating Slab (all ≤600mm below grade, or 2. Provide AFUE or indicate if condensing type combined system used 1.76 heated) 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 Gj (1 Gj =1000Mj) The annual energy consumption of this house as designed is_ The software used to simulate the annual energy use of the building is:_ _ air changes per hour @50Pa. The building is being designed using an air leakage of _ Energy Star. BOP form attached. The house will be labeled on completion by: Energy Star and EnerGuide80: Evaluator / Advisor / Rater License #: Evaluator / Advisor /Rater Name: 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 Viljoen Architec Inc 300A Wilson Ave Toronto Signature: **APRIL 18-2012** OAA License 2393 Tel 416-630-2255