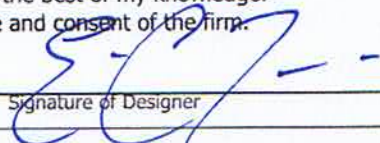


Schedule 1: Designer Information

Use one form for each individual who reviews and takes responsibility for design activities with respect to the project.

A. Project Information															
Building number, street name	970 Beach Blvd.	Unit no.	Lot/con.												
Municipality	Hamilton Ontario	Postal code	Plan number/ other description												
B. Individual who reviews and takes responsibility for design activities															
Name	Eric Canton	Firm	Virtual Creations Inc												
Street address	17 King Street East	Unit no.	205 Lot/con.												
Municipality	Dundas	Postal code	Province												
		L9H 1B7	Ontario												
E-mail	eric@vcinc.ca														
Telephone number	Fax number	Cell number													
(905) 481 1153	(905) 481 3643	()													
C. Design activities undertaken by individual identified in Section B. [Building Code Table 3.5.2.1. of Division C]															
<table style="width: 100%; border: none;"> <tr> <td style="width: 33%;"><input checked="" type="checkbox"/> House</td> <td style="width: 33%;"><input type="checkbox"/> HVAC - House</td> <td style="width: 33%;"><input checked="" type="checkbox"/> Building Structural</td> </tr> <tr> <td><input checked="" type="checkbox"/> Small Buildings</td> <td><input type="checkbox"/> Building Services</td> <td><input type="checkbox"/> Plumbing - House</td> </tr> <tr> <td><input type="checkbox"/> Large Buildings</td> <td><input type="checkbox"/> Detectuib, Lighting and Power</td> <td><input type="checkbox"/> Plumbing - All Buildings</td> </tr> <tr> <td><input type="checkbox"/> Complex Buildings</td> <td><input type="checkbox"/> Fire Protection</td> <td><input type="checkbox"/> On-site Sewage Systems</td> </tr> </table>				<input checked="" type="checkbox"/> House	<input type="checkbox"/> HVAC - House	<input checked="" type="checkbox"/> Building Structural	<input checked="" type="checkbox"/> Small Buildings	<input type="checkbox"/> Building Services	<input type="checkbox"/> Plumbing - House	<input type="checkbox"/> Large Buildings	<input type="checkbox"/> Detectuib, Lighting and Power	<input type="checkbox"/> Plumbing - All Buildings	<input type="checkbox"/> Complex Buildings	<input type="checkbox"/> Fire Protection	<input type="checkbox"/> On-site Sewage Systems
<input checked="" type="checkbox"/> House	<input type="checkbox"/> HVAC - House	<input checked="" type="checkbox"/> Building Structural													
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<input type="checkbox"/> Large Buildings	<input type="checkbox"/> Detectuib, Lighting and Power	<input type="checkbox"/> Plumbing - All Buildings													
<input type="checkbox"/> Complex Buildings	<input type="checkbox"/> Fire Protection	<input type="checkbox"/> On-site Sewage Systems													
Description of designer's work															
2013-003 SINGLE FAMILY DWELLING.															
D. Declaration of Designer															
I, <u>Eric Canton</u> declare that (choose one as appropriate):															
(print name)															
<input checked="" type="checkbox"/> I review and take responsibility for the design work on behalf of a firm registered under subsection 3.2.4.of Division C, of the Building Code. I am qualified, and the firm is registered, in the appropriate classes/categories. Individual BCIN: <u>25135</u> Firm BCIN: <u>28844</u>															
<input type="checkbox"/> I review and take responsibility for the design and am qualified in th eappropriate category as an "other designer" under subsection 3.2.5 of Division C, of the building Code. Individual BCIN: _____ Basis for exemption from registration: _____															
<input type="checkbox"/> The design work is exempt from the registration and qualification requirements of the Building Code. Basis for exemption from registration and qualification: _____															
I certify that:															
1. The information contained in this schedule is true to the best of my knowledge.															
2. I have submitted this application with the knowledge and consent of the firm.															
Date		Signature of Designer													
2017-05-16															

NOTE:

1. For the purposes of this form, "individual" means the "person" referred to in Clause 3.2.4.7(1)(c).of Division C, Article 3.2.5.1. of Division C, and all other persons who are exempt from qualification under Subsections 3.2.4 and 3.2.5. of Division C.
2. Schedule 1 is not required to be completed by a holder of a license, temporary license, or a certificate of practice, issues by the Ontario Association of Architects. Schedule 1 is also not required to be completed by a holder of a license to practise, a limited license to practise, or a certificate of authorization, issued by the Association of Professional Engineers of Ontario.

Energy Efficiency Design Summary

(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 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 970 Beach Blvd.	Unit number	Lot/Con
Municipality Hamilton Ontario	Postal Code	Reg. Plan number / other description

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

<input checked="" type="checkbox"/> SB-12 Perspective (input design package): Package: A1 Table: 3.1.1.2.A (IP)

C. Project Design Conditions

Climactic Zone (SB-1)	Heating Equipment Efficiency	Space Heating Fuel Source
<input checked="" type="checkbox"/> Zone 1 (< 5000 degree days)	<input checked="" type="checkbox"/> ≥ 92% AFUE	<input type="checkbox"/> Gas <input type="checkbox"/> Propane <input type="checkbox"/> Solid Fuel
<input type="checkbox"/> Zone 2 (≥ 5000 degree days)	<input type="checkbox"/> ≥ 84% < 92% AFUE	<input type="checkbox"/> Oil <input type="checkbox"/> Electric <input type="checkbox"/> Earth Energy
Ratio of Windows, Skylights & Glass (W, S & G) to Wall Area		Other Building Conditions
Area of walls = 2927.13 SQ. FT	W, S & G % = 9.66 %	<input type="checkbox"/> Log/Post&Beam <input type="checkbox"/> ICF Above Grade <input type="checkbox"/> ICF Basement
Area of W, S & G = 235.85 SQ. FT	Utilize window averaging: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Slab-on-ground <input type="checkbox"/> Walkout Basement
		<input checked="" type="checkbox"/> Air Conditioning <input type="checkbox"/> Combo Unit
		<input type="checkbox"/> Air Sourced Heat Pump (ASHP)
		<input type="checkbox"/> Ground Sourced Heat Pump (GSHP)

D. Building Specifications [provide values and ratings of the energy efficiency components proposed, or attach Energy Star BOP form]

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 ⁽¹⁾	Building Component	Efficiency Ratings
Thermal Insulation	Nominal Effective	Windows & Doors Provide U-Value ⁽¹⁾ in W/m ² .K, or ER rating	
Ceiling with Attic Space	R60	Windows/Sliding Glass Doors	25er
Ceiling without Attic Space	R31	Skylights/Glazed Roofs	.49
Exposed Floor	R31	Mechanicals	
Walls Above Grade	R22	Heating Equip. (AFUE or condensing type)	96%
Basement Walls	R20 ci	HRV Efficiency (SRE% at 0°C)	75%
Slab (all >600mm below grade)	R10	DHW Heater (EF)	.8
Slab (edge only ≤ 600mm below grade)	R10	DWHR (CSA B55.1 (min. 42% efficiency))	42% #Showers <u>2</u>
Slab (all ≤ 600mm below grade, or heated)	R10	Combined Heating System	

(1) U value to be provided in either W/(m².K) or Btu/(h.ft².F) but not both.

E. House Designer [name & BCIN, if applicable, of person providing information herein to substantiate that design meets the building code]

Name Eric Canton Virtual Creations Inc	BCIN 28844	Signature
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Sizing of Water Service Pipe

Size and capacity of potable water system pipe shall be designed in accordance with 7.6.3.1. of Division B, of the Ontario Building Code (OBC). Where both hot and cold water is supplied to fixtures in residential buildings containing one or two dwelling units, the water system may be sized with tables in Part 1 and Part 2 of this form, provided, the minimum water pressure at the entry to the building is not 200 kPa, the total maximum length of the water system is 90 m, and the hydraulic loads for maximum separate demands on water distribution system piping are not less than 100% of the total hydraulic load of the fixture units given in OBC Division B, Tables 7.6.3.2.A., 7.6.3.2.B., 7.6.3.2.C., and 7.6.3.2.D. for private use.

Address: **970 Beach Blvd.** Date: **2017-05-16**

Part 1 - Hydraulic Load, Fixture Unit Calculation

modification of OBC, Table 7.6.3.2.A.)

Item	Fixture or Device	Minimum Size of Supply Pipe, (Inches)	Private Use Hydraulic Load, (Fixture units)	Quantity	Total Hydraulic Load (Fixture units x Quantity)
1	Bathroom group* with 6 LPF flush tank	N/A	3.6	2	7.2
2	Bathroom group* with greater than 6 LPF flush	N/A	6		
3	Bathtub with or without shower head	1/2	1.4	2	2.8
4	Clothes washer	1/2	1.4		
5	Dishwasher, domestic	3/8	1.4		
6	Hose bibb (1/2")	1/2	2.5	2	5
7	Lavatory	3/8	0.7	2	1.4
8	Shower head	1/2	1.4		
9	Shower, spray, multi-head, fixture unit per head	**	1.4		
10	Sink, bar	3/8	1		
11	Sink, kitchen, domestic	3/8	1.4	1	1.4
12	Sink, laundry (1 or 2 compartments)	3/8	1.4	1	1.4
13	Water closet, 6 LPF or less with flush tank	3/8	2.2	1	2.2
14	Other:				

Total Hydraulic Load: 21.4

* Bathroom group means a group of plumbing fixtures installed in the same room, consisting of one domestic-type lavatory, one water closet and either one 1/2 inch size bathtub, with or without a shower, or one 1/2 inch size one-headed shower. For additional fixtures in the same room add the additional fixture to the appropriate fixture count.

** Refer to manufacturer's recommendations.

Part 2 - Sizing of Water Service Pipe

modification of OBC, Table 7.6.3.4.)

Item	Size of Water Pipe	Water Velocity, m/s	
		2.4 (copper piping, cold water)	Other Pipe Material*, specify:
		Hydraulic Load, (Fixture Units)	
1	1/2"	Up to 7	
2	3/4"	7.1 - 16	
3	1"	16.1 - 31	21.4
4	1-1/4"	31.1 - 57	

* If a water velocity of other than 2.4 m/s is proposed (i.e. other than copper piping), provide documentation showing maximum permitted water velocity with maximum hydraulic loads for each water pipe size as recommended by the pipe and fitting manufacturer

Part 3 - Design of Water Service Pipe

Total Hydraulic Load (fixture units):	21.4
Water Service Pipe size (inches):	1"

Water Meter Size

3/4 Water Service Pipe = 5/8" (16 mm) Water Meter
 1" Water Service Pipe = 3/4" (20 mm) Water Meter
 1-1/4" Water Service Pipe = 1" (25 mm) Water Meter

Designer Information

Name: **Virtual Creations Inc** RCM: **28844** Signature: 