


## Schedule 1: Designer Information

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

<b>A. Project Information</b>					
Building number, street name				Unit no.	Lot/con.
Municipality INNISFIL	Postal code	Plan number/ other description			
<b>B. Individual who reviews and takes responsibility for design activities</b>					
Name MICHAEL O'ROURKE		Firm HVAC DESIGNS LTD.			
Street address 375 FINLEY AVE				Unit no. 202	Lot/con. N/A
Municipality AJAX	Postal code L1S 2E2	Province ONTARIO	E-mail info@hvacdesigns.ca		
Telephone number (905) 619-2300	Fax number (905) 619-2375	Cell number ( )			
<b>C. Design activities undertaken by individual identified in Section B. [Building Code Table 3.5.2.1 OF Division C]</b>					
<input type="checkbox"/> House <input type="checkbox"/> Small Buildings <input type="checkbox"/> Large Buildings <input type="checkbox"/> Complex Buildings		<input checked="" type="checkbox"/> HVAC – House <input type="checkbox"/> Building Services <input type="checkbox"/> Detection, Lighting and Power <input type="checkbox"/> Fire Protection		<input type="checkbox"/> Building Structural <input type="checkbox"/> Plumbing – House <input type="checkbox"/> Plumbing – All Buildings <input type="checkbox"/> On-site Sewage Systems	
Description of designer's work HEAT LOSS / GAIN CALCULATIONS DUCT SIZING RESIDENTIAL MECHANICAL VENTILATION DESIGN SUMMARY RESIDENTIAL SYSTEM DESIGN per CSA-F280-12				Model: TH-8C  Project: ALCONA	
<b>D. Declaration of Designer</b>					
I, <u>MICHAEL O'ROURKE</u> (print name)				declare that (choose one as appropriate):	
<input 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: _____ Firm BCIN: _____					
<input checked="" type="checkbox"/> I review and take responsibility for the design and am qualified in the appropriate category as an "other designer" under subsection 3.2.5. of Division C, of the Building Code.  Individual BCIN: <u>19669</u> Basis for exemption from registration and qualification: <u>O.B.C SENTENCE 3.2.4.1 (4)</u>					
<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.					
June 14, 2018 Date				 Signature of Designer	

**NOTE:**

- For the purposes of this form, "individual" means the "person" referred to in Clause 3.2.4.7(1) d) 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.
- Schedule 1 is not required to be completed by a holder of a license, temporary license, or a certificate of authorization, issued 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.

SITE NAME: ALCONA										DATE: Jun-18		WINTER NATURAL AIR CHANGE RATE		HEAT LOSS AT °F.		HEAT GAIN AT °F.		CSA-F280-12	
BUILDING: BAYVIEW WELLINGTON										LO# 78877		SUMMER NATURAL AIR CHANGE RATE		0.348		0.077		SB-12 PACKAGE A1	
ROOM USE		MBR		ENS		WIC		BED-2		BED-3		BED-4		BATH					
EXP. WALL	CLG. HT.	34	9	7	9	0	9	10	9	33	9	20	9	33	9	20	9	33	9
FACTORS																			
GRS.WALL AREA	LOSS	GAIN	306	63	0	0	90	297	180	81	0	0	0	0	0	0	0	0	0
GLAZING	LOSS	GAIN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NORTH	23.3	14.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EAST	23.3	38.9	0	0	0	0	22	513	856	33	769	1284	0	0	0	0	0	0	0
SOUTH	23.3	23.0	22	513	506	0	0	0	0	22	513	506	33	769	758	9	210	207	0
WEST	23.3	38.9	22	513	856	13	303	506	0	0	0	0	0	0	0	0	0	0	0
SKYL.T.	40.8	99.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DOORS	27.6	3.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NET EXPOSED WALL	4.9	0.5	262	1280	142	50	244	27	0	68	332	37	242	1182	131	147	718	79	72
NET EXPOSED BSMT WALL ABOVE GR	3.9	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXPOSED CLG	1.4	0.5	288	405	152	112	157	59	195	274	103	92	129	48	147	207	77	180	253
NO ATTIC EXPOSED CLG	3.0	1.1	0	0	0	0	0	0	0	48	144	54	48	144	54	0	0	0	0
EXPOSED FLOOR	2.8	0.3	0	0	0	0	0	0	0	140	391	43	0	0	0	10	28	3	0
BASEMENT/CRAWL HEAT LOSS			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SLAB ON GRADE HEAT LOSS			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL HT LOSS			2710		704		274		1609		2815		1768		726		307		
SUB TOTAL HT GAIN			1655		592		103		1039		2052		936		0.20	0.32			
LEVEL FACTOR / MUL TIPLIER	0.20	0.32		0.20	0.32		0.20	0.32		0.20	0.32		0.20	0.32		0.20	0.32		
AIR CHANGE HEAT LOSS			862		224		87		480		896		562		231		11		
AIR CHANGE HEAT GAIN			60		22		4		38		75		34		0		0		
DUCT LOSS			0		0		0		199		0		233		0		0		
DUCT GAIN			0		0		0		177		0		166		0		0		
HEAT GAIN PEOPLE	240		2	480	0	0	0	1	240	1	240	1	240	1	240	0	0	0	0
HEAT GAIN APPLIANCES/LIGHTS				453	0				453		453		453		453		453		
TOTAL HT LOSS BTU/H			3572		929		361		2188		3710		2563		957		414		
TOTAL HT GAIN x 1.3 BTU/H					798		138		2630		3665		2377						

ROOM USE	FAM	DIN	KIT	LIBR	LAUN	W/R	FOY									LOD	BAS
EXP. WALL	29	31	11	39	0	5	23									29	135
CLG. HT.	10	10	10	10	9	10	12									9	9
FACTORS																	
GRS.WALL AREA	290	310	110	390	0	50	276									261	984
GLAZING																LOSS	GAIN
NORTH	0	0	0	0	0	0	0									0	0
EAST	0	0	0	0	0	0	0									0	0
SOUTH	28	42	0	42	0	0	0									0	4
WEST	652	978	0	28	0	10	280									0	93
SKYL.T.	42	0	53	562	0	233	12									4	93
DOORS	978	0	1235	0	0	0	0									23	536
DOORS	40.8	0	0	0	0	0	0									895	0
DOORS	99.8	0	0	0	0	0	0									0	0
DOORS	27.6	0	0	0	0	0	0									0	0
DOORS	3.1	0	0	0	0	0	0									0	0
NET EXPOSED WALL	4.9	20	57	320	0	40	20									0	20
NET EXPOSED BSMT WALL ABOVE GR	0.5	563	278	1563	0	195	553									0	553
EXPOSED CLG	3.9	1212	31	173	0	22	1192									0	61
EXPOSED CLG	0.4	0	0	0	0	0	0									0	0
NO ATTIC EXPOSED CLG	1.4	0	0	0	0	0	0									0	0
EXPOSED FLOOR	3.0	0	0	0	70	0	0									0	0
EXPOSED FLOOR	1.1	0	0	0	37	0	0									0	0
EXPOSED FLOOR	0	0	0	0	0	0	0									0	0
BASEMENT/CRAWL HEAT LOSS	2.8	0	0	0	0	0	0									0	0
BASEMENT/CRAWL HEAT LOSS	0.3	0	0	0	70	0	0									0	0
SLAB ON GRADE HEAT LOSS	0	0	0	0	195	22	0									0	0
SLAB ON GRADE HEAT LOSS	0	0	0	0	22	0	0									0	0
SUBTOTAL HT LOSS	2706	2743	1513	3194	294	428	2024									0	4728
SUBTOTAL HT LOSS	0	0	0	0	0	0	0									0	0
SUB TOTAL HT GAIN																1131	6377
LEVEL FACTOR / MUL TIPLIER	0.30	0.41	0.30	0.41	58	0.30	0.41									961	409
AIR CHANGE HEAT T LOSS	1106	1121	619	1306	0.20	0.30	0.30									0.50	1.14
AIR CHANGE HEAT T LOSS	0	0	0	0	93	175	828									8591	50
AIR CHANGE HEAT T GAIN	87	42	76	89	2	9	17									0	0
DUCT LOSS	0	0	0	0	39	0	0									0	0
DUCT LOSS	0	0	0	0	0	0	0									0	0
DUCT GAIN	0	0	0	0	0	0	0									0	0
HEAT T GAIN PEOPLE	240	0	0	0	51	0	0									0	0
HEAT T GAIN PEOPLE	0	0	0	0	0	0	0									0	0
HEAT GAIN APPLIANCES/LIGHTS	453	453	453	453	453	0	0									0	0
HEAT GAIN APPLIANCES/LIGHTS	0	0	0	0	0	0	0									0	0
TOTAL HT LOSS BTU/H	3812	3864	2132	4500	426	604	2852									1131	14968
TOTAL HT LOSS BTU/H																0	453
TOTAL HT GAIN x 1.3 BTU/H																1249	1185

EL196UH070XE36B  
LENNOX 70  
FAN SPEED

	r/a pressure	0.17
	r/a grille press. Loss	0.02

**p/c ainecoid noren**

17	18	19	20	21	23	24
LAUN	WIR	FOY	LIBR	BAS	BAS	BAS
0.43	0.80	2.85	2.25	4.02	4.02	4.02
9	12	58	46	82	82	82
0.73	0.34	0.63	1.95	0.61	0.61	0.61
23	11	20	62	19	19	19
0.17	0.17	0.17	0.17	0.16	0.16	0.16
37	38	35	41	20	7	33
150	160	110	130	140	140	170
187	198	145	171	160	147	203
0.09	0.09	0.12	0.1	0.1	0.11	0.08
4	4	5	5	6	6	6
103	138	426	338	418	418	418
264	126	147	455	97	97	97
3X10	3X10	3X10	3X10	4X10	4X10	4X10

0	
1	
2	
3	
4	
5	
6	
7	
8	
9	

Y	RETURN AIR TRUNK SIZE			RECT DUCT	VELOCITY (ft/min)
	TRUNK CFM	STATIC PRESS.	ROUND DUCT		
	TRUNK O	0	0.05	0	8
	TRUNK P	0	0.05	0	8
	TRUNK Q	0	0.05	0	8
	TRUNK R	0	0.05	0	8
	TRUNK S	0	0.05	0	8

TRUNK U	0	0.05	0	0	x	8	0
TRUNK V	0	0.05	0	0	x	8	0
TRUNK W	0	0.05	0	0	x	8	0
TRUNK X	705	0.05	13.8	22	x	8	577
TRUNK Y	280	0.05	9.8	12	x	8	420
TRUNK Z	0	0.05	0	0	x	8	0
DROP	985	0.05	15.7	24	x	10	591

TYPE: TH-8C  
SITE NAME: ALCONA

LO # 78877

## RESIDENTIAL MECHANICAL VENTILATION DESIGN SUMMARY

**COMBUSTION APPLIANCES** 9.32.3.1(1)

a) ☒ Direct vent (sealed combustion) only

b) ☐ Positive venting induced draft (except fireplaces)

c) ☐ Natural draft, B-vent or induced draft gas fireplace

d) ☐ Solid Fuel (including fireplaces)

e) ☐ No Combustion Appliances

**HEATING SYSTEM**

☒ Forced Air ☐ Non Forced Air

☐ Electric Space Heat

**HOUSE TYPE** 9.32.1(2)

☒ I Type a) or b) appliance only, no solid fuel

☐ II Type I except with solid fuel (including fireplaces)

☐ III Any Type c) appliance

☐ IV Type I, or II with electric space heat

☐ Other: Type I, II or IV no forced air

**SYSTEM DESIGN OPTIONS** O.N.H.W.P.

☐ 1 Exhaust only/Forced Air System

☐ 2 HRV with Ducting/Forced Air System

☒ 3 HRV Simplified/connected to forced air system

☐ 4 HRV with Ducting/non forced air system

☐ Part 6 Design

**TOTAL VENTILATION CAPACITY** 9.32.3.3(1)

Basement + Master Bedroom	2	@ 21.2 cfm	42.4	cfm
Other Bedrooms	3	@ 10.6 cfm	31.8	cfm
Kitchen & Bathrooms	4	@ 10.6 cfm	42.4	cfm
Other Rooms	5	@ 10.6 cfm	53.0	cfm
Table 9.32.3.A.	TOTAL		169.6	cfm

**PRINCIPAL VENTILATION CAPACITY REQUIRED** 9.32.3.4.(1)

1	Bedroom	31.8	cfm
2	Bedroom	47.7	cfm
3	Bedroom	63.6	cfm
4	Bedroom	79.5	cfm
5	Bedroom	95.4	cfm
TOTAL		79.5	cfm

**SUPPLEMENTAL VENTILATION CAPACITY** 9.32.3.5.

Total Ventilation Capacity	169.6	cfm
Less Principal Ventil. Capacity	79.5	cfm
Required Supplemental Capacity	90.1	cfm

**PRINCIPAL EXHAUST FAN CAPACITY**

Model: VANEE 65H Location: BSMT

79.5 cfm 3.0 sones ☒ HVI Approved

**PRINCIPAL EXHAUST HEAT LOSS CALCULATION**

CFM	ΔT °F	FACTOR	% LOSS
79.5 CFM	X 83 F	X 1.08	X 0.25

**SUPPLEMENTAL FANS** NUTONE

Location	Model	cfm	HVI	Sones
ENS	QTXEN050C	50	<input checked="" type="checkbox"/>	0.3
BATH	QTXEN050C	50	<input checked="" type="checkbox"/>	0.3
W/R	QTXEN050C	50	<input checked="" type="checkbox"/>	0.3

**HEAT RECOVERY VENTILATOR** 9.32.3.11.

Model: VANEE 65H

155 cfm high 64 cfm low

75 % Sensible Efficiency @ 32 deg F ( 0 deg C) ☒ HVI Approved

**LOCATION OF INSTALLATION**

Lot: Concession

Township: Plan:

Address:

Roll # Building Permit #

**BUILDER:** BAYVIEW WELLINGTON

Name:

Address:

City:

Telephone #: Fax #:

**INSTALLING CONTRACTOR**

Name:

Address:

City:

Telephone #: Fax #:

**DESIGNER CERTIFICATION**

I hereby certify that this ventilation system has been designed in accordance with the Ontario Building Code.

Name: HVAC Designs Ltd.

Signature: *Michael O'Rourke*

HRAI # 001820

Date: June-18

## HEAT LOSS AND GAIN SUMMARY SHEET

**MODEL:** TH-8C

**SFQT:** 2453

**LO#** 78877

**BUILDER:** BAYVIEW WELLINGTON

**SITE:** ALCONA

### DESIGN ASSUMPTIONS

HEATING	°F	COOLING	°F
OUTDOOR DESIGN TEMP.	-11	OUTDOOR DESIGN TEMP.	84
INDOOR DESIGN TEMP.	72	INDOOR DESIGN TEMP. (MAX 75°F)	75

### BUILDING DATA

ATTACHMENT:	ATTACHED	# OF STORIES (+BASEMENT):	3
FRONT FACES:	SOUTH	ASSUMED (Y/N):	Y
AIR CHANGES PER HOUR:	3.57	ASSUMED (Y/N):	Y
AIR TIGHTNESS CATEGORY:	AVERAGE	ASSUMED (Y/N):	Y
WIND EXPOSURE:	SHELTERED	ASSUMED (Y/N):	Y
HOUSE VOLUME (ft³):	33177.0	ASSUMED (Y/N):	Y
INTERNAL SHADING:	BLINDS/CURTAINS	ASSUMED OCCUPANTS:	5
INTERIOR LIGHTING LOAD (Btu/h/ft²):	1.27	DC BRUSHLESS MOTOR (Y/N):	Y
FOUNDATION CONFIGURATION	BCIN_1	DEPTH BELOW GRADE:	6.0 ft
LENGTH: 56.0 ft	WIDTH: 27.0 ft	EXPOSED PERIMETER:	135.0 ft

2012 OBC - COMPLIANCE PACKAGE		
Component	Compliance Package A1	
	Nominal	Min. Eff.
Ceiling with Attic Space Minimum RSI (R)-Value	60	59.22
Ceiling Without Attic Space Minimum RSI (R)-Value	31	27.65
Exposed Floor Minimum RSI (R)-Value	31	29.80
Walls Above Grade Minimum RSI (R)-Value	22	17.03
Basement Walls Minimum RSI (R)-Value	20 ci	21.12
Below Grade Slab Entire surface > 600 mm below grade Minimum RSI (R)-Value	-	-
Edge of Below Grade Slab ≤ 600 mm Below Grade Minimum RSI (R)-Value	10	10
Heated Slab or Slab ≤ 600 mm below grade Minimum RSI (R)-Value	10	11.13
Windows and Sliding Glass Doors Maximum U-Value	0.28	-
Skylights Maximum U-Value	0.49	-
Space Heating Equipment Minimum AFUE	0.96	-
HRV Minimum Efficiency	75%	-
Domestic Hot Water Heater Minimum EF	0.8	-

INDIVIDUAL BCIN: 19669

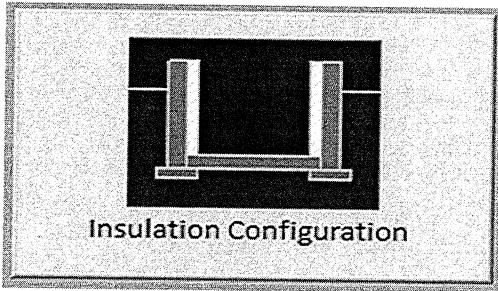
MICHAEL O'ROURKE





## Residential Foundation Thermal Load Calculator

Supplemental tool for CAN/CSA-F280

Weather Station Description		
Province:	Ontario	
Region:	Barrie	
Site Description		
Soil Conductivity:	Normal conductivity: dry sand, loam, clay	
Water Table:	Normal (7-10 m, 23-33 ft)	
Foundation Dimensions		
Floor Length (m):	17.1	 <p>Insulation Configuration</p>
Floor Width (m):	8.2	
Exposed Perimeter (m):	41.1	
Wall Height (m):	2.7	
Depth Below Grade (m):	1.83	
Window Area (m <sup>2</sup> ):	2.9	
Door Area (m <sup>2</sup> ):	1.9	
Radiant Slab		
Heated Fraction of the Slab:	0	
Fluid Temperature (°C):	33	
Design Months		
Heating Month	1	
Foundation Loads		
<b>Heating Load (Watts):</b>		<b>1385</b>

TYPE: TH-8C  
 LO# 78877

# Air Infiltration Residential Load Calculator

Supplemental tool for CAN/CSA-F280

Weather Station Description			
Province:	Ontario		
Region:	Barrie		
Weather Station Location:	Open flat terrain, grass		
Anemometer height (m):	10		
Local Shielding			
Building Site:	Suburban, forest		
Walls:	Heavy		
Flue:	Heavy		
Highest Ceiling Height (m):	6.71		
Building Configuration			
Type:	Semi		
Number of Stories:	Two		
Foundation:	Full		
House Volume (m <sup>3</sup> ):	939.5		
Air Leakage/Ventilation			
Air Tightness Type:	Present (1961-) (3.57 ACH)		
Custom BDT Data:	ELA @ 10 Pa.	1252.3 cm <sup>2</sup>	
	3.57	ACH @ 50 Pa	
Mechanical Ventilation (L/s):	Total Supply	Total Exhaust	
	37.5	37.5	
Flue Size			
Flue #:	#1	#2	#3 #4
Diameter (mm):	0	0	0 0
Natural Infiltration Rates			
Heating Air Leakage Rate (ACH/H):	0.348		
Cooling Air Leakage Rate (ACH/H):	0.077		

TYPE: TH-8C

LO# 78877

PARTIAL BASEMENT FLOOR  
PLAN WOD 9R COND.

15-6"

21-6"

A-10X8

BR FLC  
5X10  
C/W DAMPER

6R

UNFINISHED  
BASEMENT

B-14X8

1 2 3

F.D.

HRV  
VanEE  
65 H

HWT

23-6"

X-22X8  
24X10

1R-6"

4-6"

3R-6"

D-18X8

UNEXCAVATED

Y-12X8

C-12X8

24-6"

4R-6"

5 8

8R

16

25-6"

20

18

19

5R-6"

2R-6"

13-6"

HWT

COLD CELLAR

UNEXCAVATED

COLD CELLAR

UNEXCAVATED

COLD CELLAR

UNEXCAVATED

BASEMENT PLAN 'A'

BASEMENT PLAN 'B'

BASEMENT PLAN 'A' "BLOCK 145-5"

CSA-F280-12  
PACKAGE A1

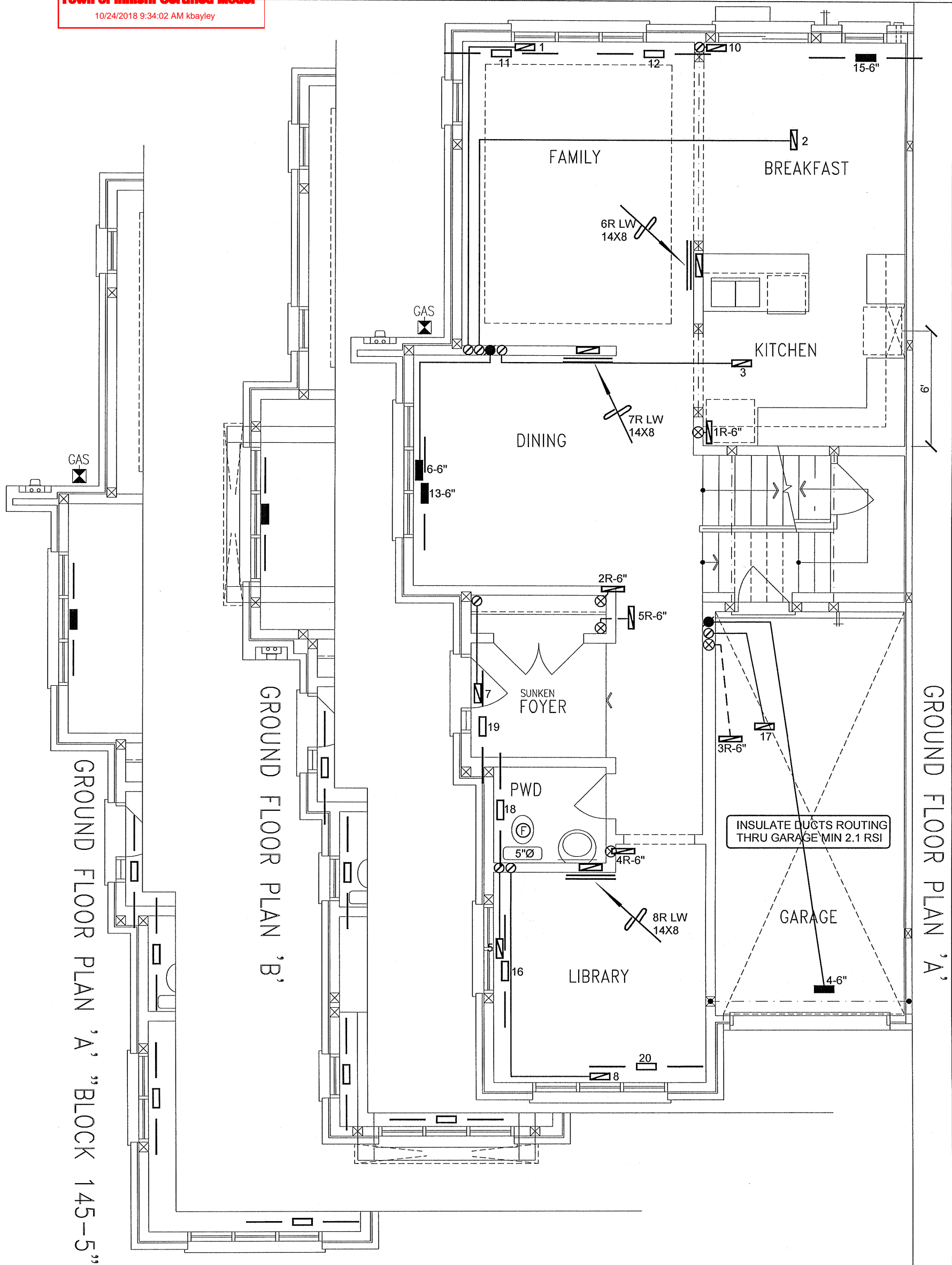
*Michael O'Rourke*  
Michael O'Rourke, BCIN# 19669  
HVAC DESIGNS LTD.

# PACKAGE A1

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Client		 <p>375 Finley Ave. Suite 202 - Ajax, Ontario  L1S 2E2 Tel. 905.619.2300 - 905.420.5300 Fax 905.619.2375  Email: info@hvacdesigns.ca  Web: www.hvacdesigns.ca</p> <p>Specializing in Residential Mechanical Design Services</p>	HEAT LOSS 50353 BTU/H		# OF RUNS S/A R/A FANS				Sheet Title	
BAYVIEW WELLINGTON			UNIT DATA		3RD FLOOR				BASEMENT HEATING LAYOUT	
Project Name			MAKE		2ND FLOOR					
ALCONA			LENNOX		10 5 3					
INNISFIL, ONTARIO			MODEL		1ST FLOOR				Date	
TH-8C		EL196UH070XE36B		8 3 2				JUNE/2018		
2453 sqft		INPUT		BASEMENT				Scale		
Installation to comply with the latest Ontario Building Code. All supply branch outlets shall be equipped with a manual balancing damper. Ductwork which passes through the garage or unheated spaces shall be adequately insulated and be gas-proofed.		66 MBTU/H		4 1 0				3/16" = 1'-0"		
		OUTPUT		ALL S/A DIFFUSERS 4 "x10" UNLESS NOTED OTHERWISE ON LAYOUT. ALL S/A RUNS 5"Ø UNLESS NOTED OTHERWISE ON LAYOUT. UNDERCUT DOORS 1" min. FOR R/A				BCIN# 19669		
		63 MBTU/H						LO#		
		COOLING						78877		
		2.5 TONS								
		FAN SPEED								
		985 cfm @ 0.6" w.c.								





I MICHAEL O'ROURKE HAVE REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK AND AM QUALIFIED UNDER DIVISION C.32.5 OF THE BUILDING CODE.

*Michael O'Rourke*  
Michael O'Rourke, BCIN# 19669  
HVAC DESIGNS LTD.

CSA-F280-12

PACKAGE A1

HVAC LEGEND						3.		
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	2.
	SUPPLY AIR GRILLE		6" SUPPLY AIR BOOT ABOVE		14"x8" RETURN AIR GRILLE		RETURN AIR STACK ABOVE	1.
	SUPPLY AIR GRILLE 6" BOOT		SUPPLY AIR STACK FROM 2nd FLOOR		30"x8" RETURN AIR GRILLE		RETURN AIR STACK 2nd FLOOR	No.
	SUPPLY AIR BOOT ABOVE		6" SUPPLY AIR STACK 2nd FLOOR		FRA- FLOOR RETURN AIR GRILLE		REDUCER	
REVISIONS								Date

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BAYVIEW WELLINGTON			FIRST FLOOR HEATING LAYOUT	
Project Name ALCONA INNISFIL, ONTARIO			Date	JUNE/2018
			Scale	3/16" = 1'-0"
		BCIN# 19669		
TH-8C	2453 sqft	LO#	78877	




## SECOND FLOOR PLAN 'B'

SECOND FLOOR PLAN 'B'

SECOND FLOOR PLAN 'A' "BLOCK 145-5"

## SECOND FLOOR PLAN 'A'

I MICHAEL O'ROURKE HAVE REVIEW  
AND TAKE RESPONSIBILITY FOR THE  
DESIGN WORK AND AM QUALIFIED  
UNDER DIVISION C, 3.2.5 OF THE  
BUILDING CODE.

  
Michael O'Rourke, BCIN# 19669  
HVAC DESIGNS LTD.

CSA-F280-12  
PACKAGE A1

## REVISIONS

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BAYVIEW WELLINGTON			SECOND FLOOR HEATING LAYOUT	
Project Name			Date	JUNE/2018
ALCONA INNISFIL, ONTARIO			Scale	3/16" = 1'-0"
			BCIN# 19669	
TH-8C	2453 sqft	LO# 78877		