

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		Unit no.	Lot/con.
Municipality INNISFIL	Postal code	Plan number/ other description	
B. Individual who reviews and takes responsibility for design activities			
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 ()	
C. Design activities undertaken by individual identified in Section B. [Building Code Table 3.5.2.1 OF Division C]			
☐ House ☐ Small Buildings ☐ Large Buildings ☐ Complex Buildings ☒ HVAC – House ☐ Building Services ☐ Detection, Lighting and Power ☐ Fire Protection ☐ Building Structural ☐ Plumbing – House ☐ Plumbing – All Buildings ☐ 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: 45-2 Project: ALCONA	
D. Declaration of Designer			
I, <u>MICHAEL O'ROURKE</u> (print name)		declare that (choose one as appropriate):	
☐ 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: _____			
☒ 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>			
☐ 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 23, 2017 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.

Application for a Permit Construct or Demolish – Effective January 1, 2015

SITE NAME: ALCONA										DATE: Jun-17		WINTER NATURAL AIR CHANGE RATE 0.332		HEAT LOSS AT °F. 83		CSA-F280-12	
BUILDER: BAYVIEW WELLINGTON										LOW 74595		SUMMER NATURAL AIR CHANGE RATE 0.085		HEAT GAIN AT °F. 12		SB-12 PACKAGE A1	
ROOM USE	EXP. WALL	CLG. HT.	MBR	ENS	TYPE: 45-2	WIC	BED-2	BED-3	BED-4	BATH	ENS-2						
GRS.WALL AREA	LOSS GAIN	FACTORS	LOSS GAIN	LOSS GAIN	LOSS GAIN	LOSS GAIN	LOSS GAIN	LOSS GAIN	LOSS GAIN	LOSS GAIN	LOSS GAIN						
NORTH	23.3	15.7	0	0	0	0	0	0	0	0	0						
EAST	23.3	41.3	0	0	0	0	0	0	0	0	0						
SOUTH	23.3	24.6	0	0	0	0	0	0	0	0	0						
WEST	23.3	41.3	32	745	1321	0	0	0	0	0	0						
SKYLT.	40.8	101.1	0	0	0	0	0	0	0	0	0						
DOORS	27.6	3.9	0	0	0	0	0	0	0	0	0						
NET EXPOSED WALL	4.9	0.7	458	2238	317	213	1041	148	54	264	37						
NET EXPOSED BSMT WALL ABOVE GR	3.9	0.6	0	0	0	0	0	0	0	0	0						
EXPOSED CLG	1.4	0.6	407	572	232	182	256	104	108	152	62						
NO ATTIC EXPOSED CLG	3.0	1.2	0	0	0	0	0	0	0	0	0						
EXPOSED FLOOR	2.8	0.4	0	0	0	0	0	0	0	0	0						
BASEMENT/CRAWL HEAT LOSS			0	0	0	0	0	0	0	0	0						
SLAB ON GRADE HEAT LOSS			0	0	0	0	0	0	0	0	0						
SUBTOTAL HT LOSS			3555	1995		416	2935	2149	1284	1681	1153						
SUB TOTAL HT GAIN			1870	1256		99	1813	1761	622	1121	454						
LEVEL FACTOR / MULTIPLIER			0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20						
AIR CHANGE HEAT LOSS			947	532		111	782	573	342	448	307						
AIR CHANGE HEAT GAIN			114	77		6	110	107	38	68	28						
DUCT LOSS			0	0		0	372	0	0	0	146						
DUCT GAIN			0	0		0	292	0	0	0	43						
HEAT GAIN PEOPLE	240		2	480	0	0	1	240	1	240	0						
HEAT APPLIANCES/LIGHTS			758	0		0	758	758	758	0	0						
TOTAL HT LOSS BTU/H			4502	2527		526	4088	2721	1626	2129	1607						
TOTAL HT GAIN x 1.3 BTU/H			4188	1733		137	4177	3726	2155	1545	689						

Town of Innisfil Certified Model
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SITE NAME: ALCONA
BUILDER: BAYVIEW WELLINGTON

DATE: Jun-17 GFA: 3154 LO# 74595

TYPE: 45-2

HEATING CFM 1105 COOLING CFM 1105
TOTAL HEAT LOSS 63,397 TOTAL HEAT GAIN 36,576
AIR FLOW RATE CFM 17.43 AIR FLOW RATE CFM 30.21

EL296UH090XE48C
FAN SPEED

ALENNOX 90

AFUE = 96 %
INPUT (BTU/H) = 88,000
OUTPUT (BTU/H) = 85,000

DESIGN CFM = 1105
CFM @ 5" E.S.P.

RUN COUNT	4th	3rd	2nd	1st	Bas
S/A	0	0	12	9	5
R/A	0	0	4	2	1

All S/A diffusers 4"x10" unless noted otherwise on layout.

All S/A runs 5"Ø unless noted otherwise on layout.

ROOM #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
ROOM NAME	MBR	ENS	WIC	BED-2	BED-3	BED-4	ENS	BATH	MBR	ENS-2	LVDN	LVDN	LVDN	KT/FM	KT/FM	KT/FM	LAUN	PWD	FOY	MUD	BAS	BAS	BAS	BAS
RM LOSS MBH	2.25	1.26	0.53	2.04	2.72	1.63	1.26	2.13	2.25	1.61	2.84	2.84	2.84	2.35	2.35	2.35	1.07	1.32	4.08	1.47	4.13	4.13	4.13	4.13
CFM PER RUN HEAT	39	22	9	36	47	28	22	37	39	28	50	50	50	41	41	41	19	23	71	26	72	72	72	72
RM GAIN MBH	2.09	0.87	0.14	2.09	3.73	2.15	0.87	1.55	2.09	0.69	2.28	2.28	2.28	2.34	2.34	2.34	1.46	0.30	0.68	0.20	0.33	0.33	0.33	0.33
CFM PER RUN COOLING	63	26	4	63	113	65	26	47	63	21	69	69	69	71	71	71	44	9	21	6	10	10	10	10
ADJUSTED PRESSURE	0.17	0.17	0.17	0.17	0.15	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
ACTUAL DUCT LGH.	60	51	66	42	48	52	47	41	76	44	22	31	42	38	45	43	45	34	32	33	33	33	33	33
EQUIVALENT LENGTH	150	140	170	170	180	190	140	140	190	190	160	160	160	170	170	170	160	150	140	120	140	150	160	120
TOTAL EFFECTIVE LENGTH	210	191	236	212	228	242	187	181	226	234	182	141	162	208	185	203	203	195	154	159	173	201	200	138
ADJUSTED PRESSURE	0.08	0.09	0.07	0.08	0.07	0.07	0.09	0.1	0.08	0.07	0.09	0.12	0.11	0.11	0.08	0.09	0.08	0.09	0.11	0.11	0.1	0.09	0.09	0.12
ROUND DUCT SIZE	5	4	4	5	6	5	4	4	5	4	5	5	5	5	5	5	4	4	5	5	5	5	5	5
HEATING VELOCITY (ft/min)	286	252	103	264	240	206	252	424	286	321	367	367	301	301	301	301	218	264	521	298	529	529	529	529
COOLING VELOCITY (ft/min)	463	298	46	463	576	477	298	539	463	241	507	507	521	521	521	521	505	103	154	69	73	73	73	73
OUTLET GRILL SIZE	3X10	3X10	3X10	3X10	4X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10
TRUNK	A	B	C	D	D	B	B	D	A	D	C	C	D	B	A	A	C	C	D	C	B	A	A	C

RUN #	25	26	27
ROOM NAME	BAS	BED-2	KT/FM
RM LOSS MBH	4.13	2.04	2.35
CFM PER RUN HEAT	72	36	41
RM GAIN MBH	0.33	2.09	2.34
CFM PER RUN COOLING	10	63	71
ADJUSTED PRESSURE	0.17	0.17	0.17
ACTUAL DUCT LGH.	21	48	60
EQUIVALENT LENGTH	120	180	140
TOTAL EFFECTIVE LENGTH	141	228	200
ADJUSTED PRESSURE	0.12	0.08	0.09
ROUND DUCT SIZE	5	5	5
HEATING VELOCITY (ft/min)	529	264	301
COOLING VELOCITY (ft/min)	73	463	521
OUTLET GRILL SIZE	3X10	3X10	3X10
TRUNK	D	D	A

SUPPLY AIR TRUNK SIZE										RETURN AIR TRUNK SIZE									
TRUNK	CFM	STATIC PRESS.	ROUND DUCT	RECT DUCT	VELOCITY (ft/min)	TRUNK	CFM	STATIC PRESS.	ROUND DUCT	RECT DUCT	VELOCITY (ft/min)	TRUNK	CFM	STATIC PRESS.	ROUND DUCT	RECT DUCT	VELOCITY (ft/min)		
TRUNK A	345	0.08	9.4	10	8	TRUNK G	0	0.00	0	0	8	TRUNK O	0	0.05	0	0	8		
TRUNK B	185	0.07	7.7	8	8	TRUNK H	0	0.00	0	0	8	TRUNK P	0	0.05	0	0	8		
TRUNK C	729	0.07	12.9	20	8	TRUNK I	0	0.00	0	0	8	TRUNK Q	0	0.05	0	0	8		
TRUNK D	377	0.07	10.1	12	8	TRUNK J	0	0.00	0	0	8	TRUNK R	0	0.05	0	0	8		
TRUNK E	1105	0.07	15.1	26	8	TRUNK K	0	0.00	0	0	8	TRUNK S	0	0.05	0	0	8		
TRUNK F	0	0.00	0	0	0	TRUNK L	0	0.00	0	0	8	TRUNK T	0	0.05	0	0	8		
												TRUNK U	0	0.05	0	0	8		
												TRUNK V	0	0.05	0	0	8		
												TRUNK W	0	0.05	0	0	8		
RETURN AIR #	1	2	3	4	6						BR								
AIR VOLUME	115	130	130	130	135	0	0	0	0	0	0	TRUNK X	1105	0.05	16.4	32	8		
PLENUM PRESSURE	0.15	0.15	0.15	0.15	0.15	0	0	0	0	0	0	TRUNK Y	680	0.05	13.7	22	8		
ACTUAL DUCT LGH.	75	47	45	50	39	0.15	0.15	0.15	0.15	0.15	0.15	TRUNK Z	550	0.05	12.6	18	8		
EQUIVALENT LENGTH	245	135	155	185	235	1	1	1	1	1	14	DROP	1105	0.05	16.4	24	10		
TOTAL EFFECTIVE LH	320	182	200	235	294	0	0	0	0	0	150								
ADJUSTED PRESSURE	0.05	0.08	0.07	0.06	0.05	1	1	1	1	1	164								
ROUND DUCT SIZE	7	6.5	6.8	7	7.5	14.80	14.80	14.80	14.80	14.80	14.80								
INLET GRILL SIZE	8	8	8	8	8	0	0	0	0	0	0.09								
	X	X	X	X	X	X	X	X	X	X	X								
INLET GRILL SIZE	14	14	14	14	14	0	0	0	0	0	14								

Michael O'Rourke

TYPE: 45-2
SITE NAME: ALCONA

LO # 74595

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	5 @ 10.6 cfm	53 cfm
Other Rooms	4 @ 10.6 cfm	42.4 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	139	cfm
Required Supplemental Capacity	30.6	cfm

PRINCIPAL EXHAUST FAN CAPACITY	
Model: VANEE 60H-V+	Location: BSMT
139.0 cfm	3.0 sones
☒ HVI Approved	

PRINCIPAL EXHAUST HEAT LOSS CALCULATION				
CFM	ΔT °F	FACTOR	% LOSS	
139.0 CFM	83 F	X	1.08	X
				0.25

SUPPLEMENTAL FANS		NUTONE	
Location	Model	cfm	HVI
ENS	QTXEN050C	50	☒
BATH	QTXEN050C	50	☒
ENS-2	QTXEN050C	50	☒
PWD	QTXEN050C	50	☒

HEAT RECOVERY VENTILATOR		9.32.3.11.
Model: VANEE 60H-V+		
139	cfm high	50 cfm low
75	% Sensible Efficiency	☒ HVI Approved
@ 32 deg F (0 deg C)		

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:	<i>Michael O'Rourke</i>
HRAI #	001820
Date:	June-17

HEAT LOSS AND GAIN SUMMARY SHEET**MODEL:** 45-2**BUILDER:** BAYVIEW WELLINGTON**SFQT:** 3154**LO#** 74595**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)	72

BUILDING DATA

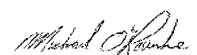
ATTACHMENT:	DETACHED	# OF STORIES (+BASEMENT):	3
FRONT FACES:	EAST	ASSUMED (Y/N):	Y
AIR CHANGES PER HOUR:	3.57	ASSUMED (Y/N):	Y
AIR TIGHTNESS CATEGORY:	AVERAGE	ASSUMED (Y/N):	Y
WIND EXPOSURE:	SHELTERED	ASSUMED (Y/N):	Y
HOUSE VOLUME (ft ³):	42956.0	ASSUMED (Y/N):	Y
INTERNAL SHADING:	BLINDS/CURTAINS	ASSUMED OCCUPANTS:	5
INTERIOR LIGHTING LOAD (Btu/h/ft ²):	1.15	DC BRUSHLESS MOTOR (Y/N):	Y
FOUNDATION CONFIGURATION	BCIN_1	DEPTH BELOW GRADE:	6.0 ft
LENGTH: 56.0 ft	WIDTH: 37.0 ft	EXPOSED PERIMETER:	186.0 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	29.8
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	-

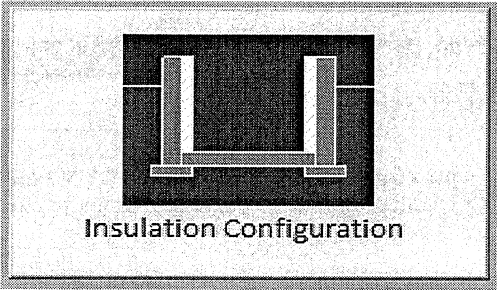
INDIVIDUAL BCIN: 19669

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	 Insulation Configuration
Floor Width (m):	11.3	
Exposed Perimeter (m):	0.0	
Wall Height (m):	2.7	
Depth Below Grade (m):	1.83	
Window Area (m ²):	5.4	
Door Area (m ²):	0.0	
Radiant Slab		
Heated Fraction of the Slab:	0	
Fluid Temperature (°C):	33	
Design Months		
Heating Month	1	
Foundation Loads		
Heating Load (Watts):		1956

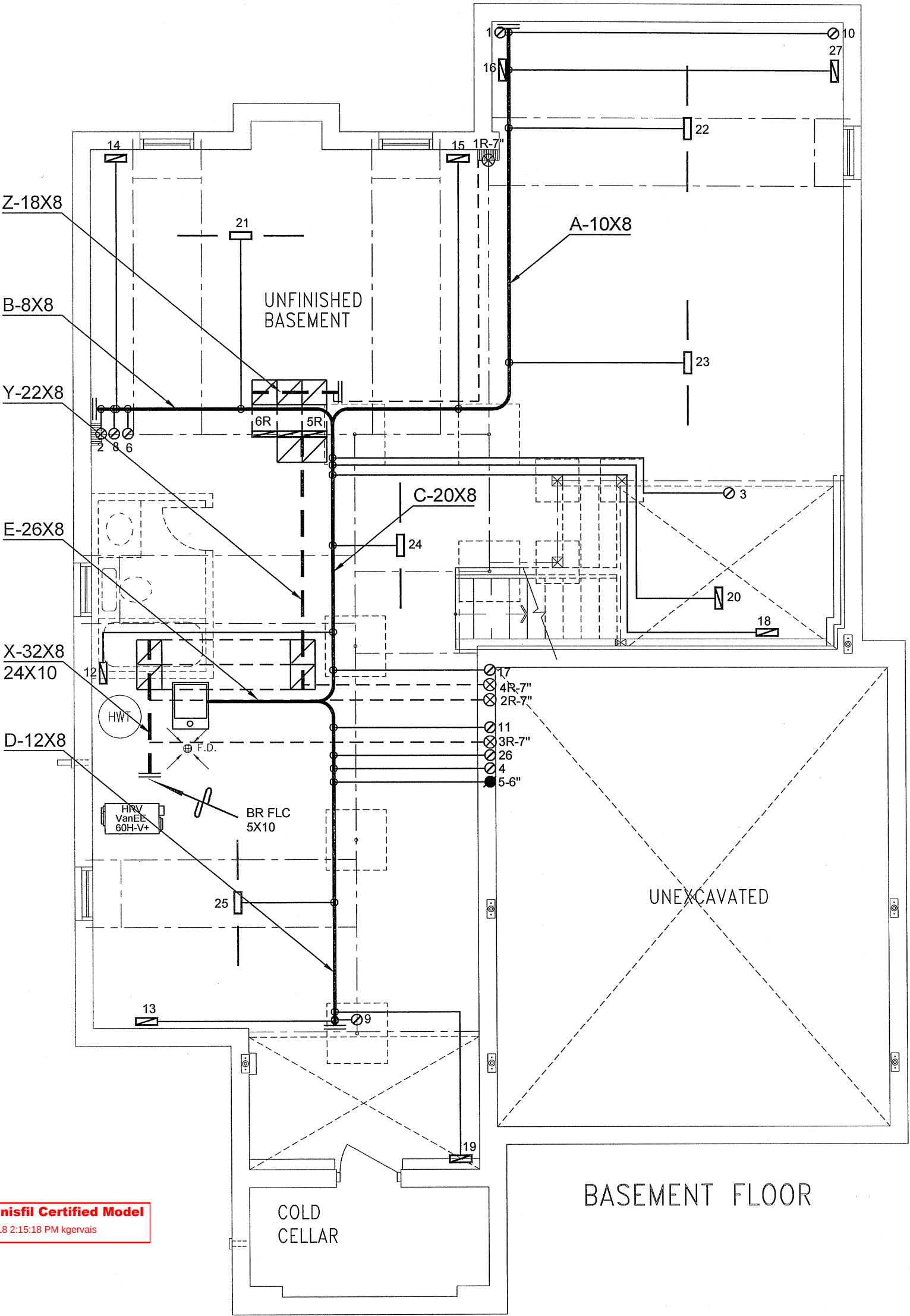
TYPE: 45-2
LO# 74595

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:	Detached		
Number of Stories:	Two		
Foundation:	Full		
House Volume (m ³):	1216.4		
Air Leakage/Ventilation			
Air Tightness Type:	Present (1961-) (3.57 ACH)		
Custom BDT Data:	ELA @ 10 Pa. 3.57	1621.5 cm ² ACH @ 50 Pa	
Mechanical Ventilation (L/s):	Total Supply 65.6	Total Exhaust 65.6	
Flue Size			
Flue #:	#1	#2	#3
Diameter (mm):	0	0	0
Natural Infiltration Rates			
Heating Air Leakage Rate (ACH/H):	0.332		
Cooling Air Leakage Rate (ACH/H):	0.085		

TYPE: 45-2
LO# 74595



Town of Innisfil Certified Model
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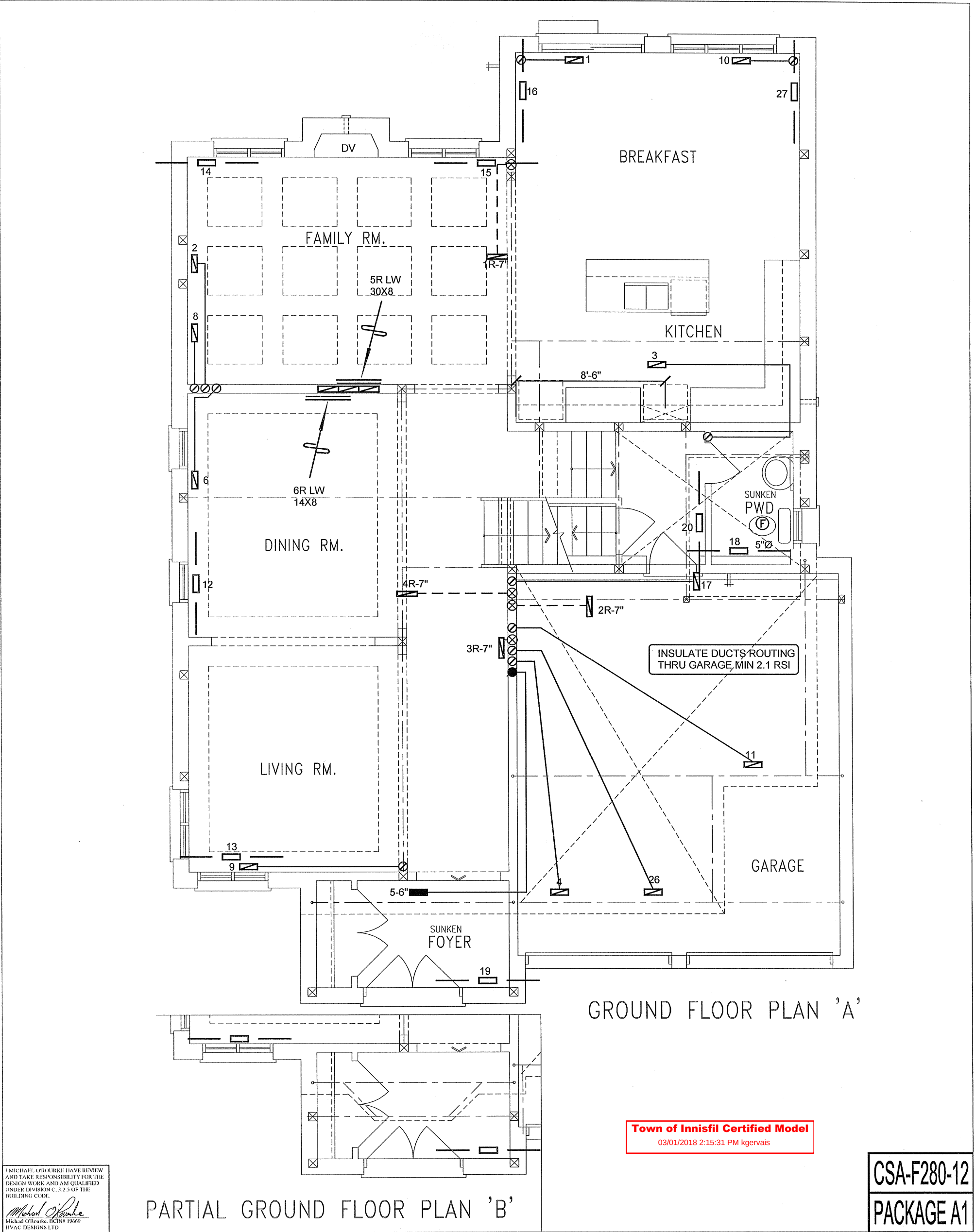
I MICHAEL O'Rourke HAVE REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK AND AM QUALIFIED UNDER DIVISION C.3.2.5 OF THE BUILDING CODE.
Michael O'Rourke
Michael O'Rourke, D.C.N. 19669
HVAC DESIGNS LTD.

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.	Description Date
	SUPPLY AIR BOOT ABOVE		6" SUPPLY AIR STACK 2nd FLOOR		FRA- FLOOR RETURN AIR GRILLE		REDUCER	REVISIONS	

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Client		 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 Specializing in Residential Mechanical Design Services 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.	HEAT LOSS 66519 BTU/H UNIT DATA		# OF RUNS S/A R/A FANS			Sheet Title	
BAYVIEW WELLINGTON			MAKE LENNOX	3RD FLOOR				BASEMENT HEATING LAYOUT	
Project Name ALCONA INNISFIL, ONTARIO			MODEL EL296UH090XE48C	2ND FLOOR	12	4	4	Date JUNE/2017	
45-2			INPUT 88 MBTU/H	1ST FLOOR	9	2	2	Scale 3/16" = 1'-0"	
3154 sqft			OUTPUT 85 MBTU/H	BASEMENT	5	1	0	BCIN# 19669	
			COOLING 3.0 TONS	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				LO# 74595	
			FAN SPEED 1105 cfm @ 0.6" w.c.						



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

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

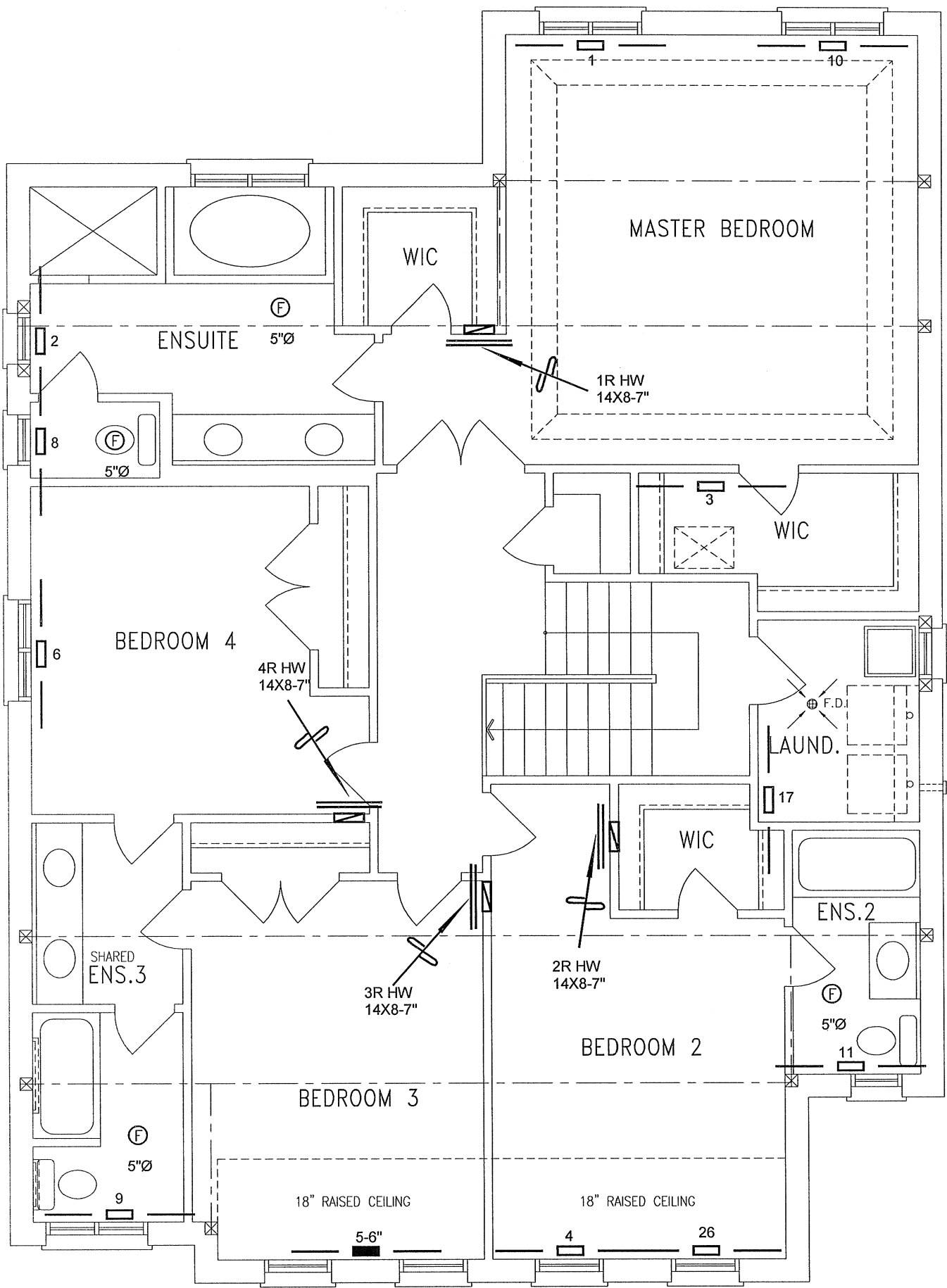
Town of Innisfil Certified Model
03/01/2018 2:15:31 PM kgervais

CSA-F280-12
PACKAGE A1

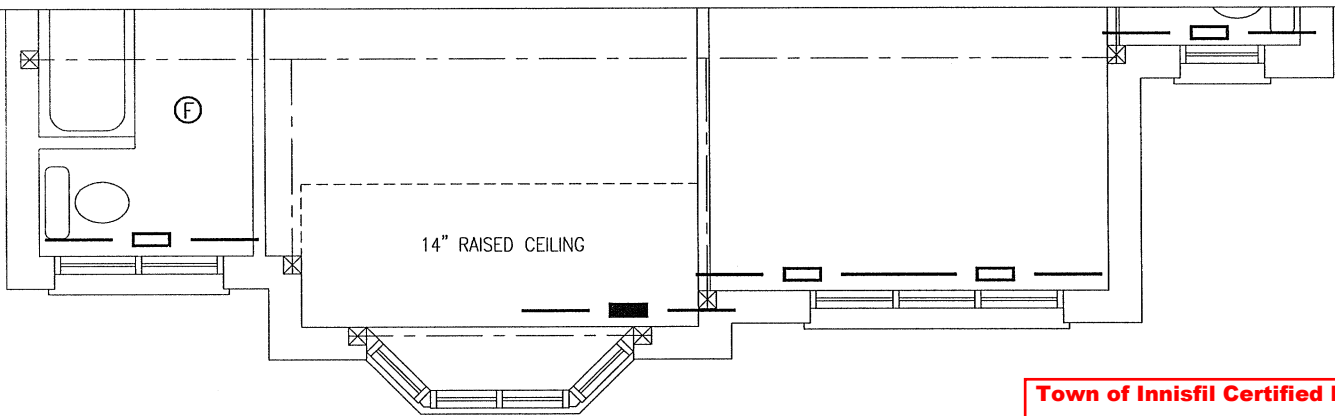
HVAC LEGEND								3.		
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	2.		
	SUPPLY AIR GRILLE		6" SUPPLY AIR BOOT ABOVE		14"x8" RETURN AIR GRILLE		RETURN AIR STACK ABOVE	1.		
	SUPPLY AIR GRILLE 6" BOOT		SUPPLY AIR STACK FROM 2nd FLOOR		30"x8" RETURN AIR GRILLE		RETURN AIR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

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Client		 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 Specializing in Residential Mechanical Design Services	Sheet Title	
BAYVIEW WELLINGTON			FIRST FLOOR HEATING LAYOUT	
Project Name			Date	JUNE/2017
ALCONA INNISFIL, ONTARIO			Scale	3/16" = 1'-0"
			BCIN# 19669	
45-2	3154 sqft	LO# 74595		



SECOND FLOOR PLAN 'A'



PARTIAL SECOND FLOOR PLAN 'B'

Town of Innisfil Certified Model
03/01/2018 2:15:38 PM kgervais

CSA-F280-12
PACKAGE A1

I MICHAEL O'BROURKE HAVE REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK AND AM QUALIFIED UNDER DIVISION C.3.2.5 OF THE BUILDING CODE.
Michael O'Brourke
Michael O'Brourke, BCIN# 19669
HVAC DESIGNS LTD.

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.	Description Date
	SUPPLY AIR BOOT ABOVE		6" SUPPLY AIR STACK 2nd FLOOR		FRA- FLOOR RETURN AIR GRILLE		REDUCER	REVISIONS	

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Client BAYVIEW WELLINGTON		 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 Specializing in Residential Mechanical Design Services 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.	Sheet Title SECOND FLOOR HEATING LAYOUT	
Project Name ALCONA INNISFIL, ONTARIO			Date JUNE/2017	
45-2			Scale 3/16" = 1'-0"	
3154 sqft			BCIN# 19669	
		LO#	74595	