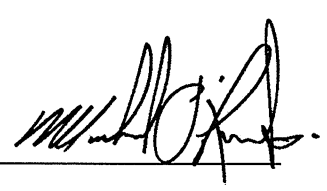


Schedule 1: Designer Information

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 BRAMPTON	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@hvacdsgns.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: SD-3 Project: ENCORE	
D. Declaration of Designer			
I <u>MICHAEL O'ROURKE</u> declare that (choose one as appropriate): (print name) ☐ 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.			
<u>March 7, 2017</u> 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: ENCORE
BUILDING: GOLD PARK HOMES
TYPE: SD-3
DATE: Mar-17
LO# 72730
GFA: 1769
WINTER NATURAL AIR CHANGE RATE 0.336
HEAT LOSS AT °F. 74
CSA-F280-12
SB-12 PACKAGE A1

ROOM USE EXP. WALL CLG. HT.	MBR	ENS	WIC	BED-2	BED-3	BATH	HALL	HEAT LOSS AT °F. 74	HEAT LOSS AT °F. 14
GRS.WALL AREA	144	207	0	99	340	0	72		
FACTORS									
GLAZING	0	0	0	0	0	0	0		
NORTH	20.8	16.3	0	0	0	0	0		
EAST	20.8	41.9	0	0	0	0	0		
SOUTH	20.8	26.2	0	0	0	0	0		
WEST	20.8	41.9	0	0	0	0	0		
SKYLT.	36.4	102.1	0	0	0	0	0		
DOORS	24.7	4.7	0	0	0	0	0		
NET EXPOSED WALL	4.4	0.8	112	488	92	193	841	56	244
NET EXPOSED BSMT WALL ABOVE GR	3.5	0.7	0	0	0	0	0	0	0
EXPOSED CLG	1.3	0.6	208	281	126	128	158	112	140
NO A TTIC EXPOSED CLG	2.7	1.3	0	0	0	0	0	0	0
EXPOSED FLOOR	2.5	0.5	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	1413	1290	120	1459	2165	206	518		
SUB TOTAL HT GAIN	0.20	0.27	0.20	0.27	0.20	0.20	0.27		
LEVEL FACTOR / MUL TIPLIER	385	351	33	397	689	66	195		
AIR CHANGE HEAT LOSS	164	81	6	145	162	6	51		
AIR CHANGE HEAT GAIN	0	0	0	228	0	26	0		
DUCT LOSS	0	0	0	1	240	0	0		
DUCT GAIN	2	480	0	0	0	0	0		
HEAT GAIN PEOPLE	405	405	0	405	405	405	405		
HEAT GAIN APPLIANCES/LIGHTS	1798	1641	153	2042	2754	288	912		
TOTAL HT LOSS BTU/H	3378	1700	83	3229	3036	672	1266		
TOTAL HT GAIN x 1.3 BTU/H									

ROOM USE EXP. WALL CLG. HT.	LAUN	KIT/FM	FOY	BAS
GRS.WALL AREA	54	650	490	846
FACTORS				
GLAZING	0	0	0	0
NORTH	20.8	16.3	0	0
EAST	20.8	41.9	0	0
SOUTH	20.8	26.2	0	0
WEST	20.8	41.9	0	0
SKYLT.	36.4	102.1	0	0
DOORS	24.7	4.7	0	0
NET EXPOSED WALL	4.4	0.8	60	1479
NET EXPOSED BSMT WALL ABOVE GR	3.5	0.7	414	1804
EXPOSED CLG	1.3	0.6	0	0
EXPOSED CLG	2.7	1.3	0	0
EXPOSED FLOOR	2.5	0.5	0	0
BASEMENT/CRAWL HEAT LOSS	0	0	0	0
SLAB ON GRADE HEAT LOSS	0	0	0	0
SUBTOTAL HT LOSS	4716	3974	3615	5722
SUB TOTAL HT GAIN	0.30	0.38	0.30	0.30
LEVEL FACTOR / MUL TIPLIER	1800	1800	1380	5299
AIR CHANGE HEAT LOSS	394	394	128	72
AIR CHANGE HEAT GAIN	0	0	0	0
DUCT LOSS	0	0	0	0
DUCT GAIN	0	0	0	0
HEAT GAIN PEOPLE	405	405	405	405
HEAT GAIN APPLIANCES/LIGHTS	6515	6204	4995	11020
TOTAL HT LOSS BTU/H	6204	6204	1843	1032
TOTAL HT GAIN x 1.3 BTU/H				

SITE NAME: ENCORE
BUILDING: GOLD PARK HOMES

TYPE: SD-3 DATE: Mar-17 GFA: 1759 LO# 72730

HEATING CFM 950 COOLING CFM 950
TOTAL HEAT LOSS 32,649 TOTAL HEAT GAIN 23,324
AIR FLOW RATE CFM 29.1 AIR FLOW RATE CFM 40.73

EL298UH045XE36B

AFUE = 96 %
INPUT (BTU/H) = 44,000
OUTPUT (BTU/H) = 43,000

RUN COUNT	4th	3rd	2nd	1st	Bas
S/A	0	0	10	5	4
R/A	0	0	3	1	1

fan speed LOW 0 MEDLOW 650 MEDIUM 950 HIGH 1060
DESIGN CFM = 950
CFM @ .6" E.S.P.
TEMPERATURE RISE 42 °F

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

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

RUN #	1	2	3	4	5	6	7	8	9	10	14	15	16	17	19	20	21	22	23	24
ROOM NAME	MBR	ENS	WIC	BED-2	BED-3	BATH	BED-2	HALL	MBR		KT/FM	KT/FM	KT/FM	LAUN	FOY	FOY	BAS	BAS	BAS	BAS
RM LOSS MBH	0.90	1.64	0.15	0.15	2.75	0.29	1.02	0.91	0.90		2.17	2.17	2.17	0.53	2.50	2.50	2.76	2.76	2.76	2.76
CFM PER RUN HEAT	26	48	4	30	80	8	30	27	26		63	63	63	15	73	73	80	80	80	80
RM GAIN MBH	1.69	1.70	0.08	1.61	3.04	0.67	1.61	1.27	1.69		2.07	2.07	2.07	0.88	0.92	0.92	0.26	0.26	0.26	0.26
CFM PER RUN COOLING	69	69	3	66	124	27	66	52	69		84	84	84	36	38	38	11	11	11	11
ADJUSTED PRESSURE	0.17	0.17	0.17	0.17	0.15	0.17	0.17	0.17	0.17		0.16	0.16	0.16	0.17	0.17	0.17	0.17	0.17	0.17	0.17
ACTUAL DUCT LGH	50	39	34	29	35	34	31	21	43		29	32	18	38	30	32	32	23	11	27
EQUIVALENT LENGTH	140	150	160	170	150	160	160	160	140		140	170	170	120	140	140	150	170	190	150
TOTAL EFFECTIVE LENGTH	190	189	194	199	185	194	191	181	183		169	202	188	158	170	172	182	193	201	177
ADJUSTED PRESSURE	0.09	0.09	0.09	0.09	0.08	0.09	0.09	0.1	0.09		0.1	0.08	0.09	0.11	0.1	0.1	0.09	0.09	0.09	0.1
ROUND DUCT SIZE	5	5	4	5	6	4	5	4	5		5	6	5	4	5	5	5	5	5	5
HEATING VELOCITY (ft/min)	191	352	46	220	408	92	220	310	191		463	321	463	172	536	536	587	587	587	587
COOLING VELOCITY (ft/min)	507	507	34	485	632	310	485	597	507		617	428	617	413	279	279	81	81	81	81
OUTLET GRILL SIZE	3X10	3X10	3X10	3X10	4X10	3X10	3X10	3X10	3X10		3X10	4X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10
TRUNK	B	A	B	B	D	B	B	D	B		B	A	D	A	D	D	A	B	D	D

RUN #	1	2	3	4	5	6	7	8	9	10	14	15	16	17	19	20	21	22	23	24
ROOM NAME	MBR	ENS	WIC	BED-2	BED-3	BATH	BED-2	HALL	MBR		KT/FM	KT/FM	KT/FM	LAUN	FOY	FOY	BAS	BAS	BAS	BAS
RM LOSS MBH	0.90	1.64	0.15	0.15	2.75	0.29	1.02	0.91	0.90		2.17	2.17	2.17	0.53	2.50	2.50	2.76	2.76	2.76	2.76
CFM PER RUN HEAT	26	48	4	30	80	8	30	27	26		63	63	63	15	73	73	80	80	80	80
RM GAIN MBH	1.69	1.70	0.08	1.61	3.04	0.67	1.61	1.27	1.69		2.07	2.07	2.07	0.88	0.92	0.92	0.26	0.26	0.26	0.26
CFM PER RUN COOLING	69	69	3	66	124	27	66	52	69		84	84	84	36	38	38	11	11	11	11
ADJUSTED PRESSURE	0.17	0.17	0.17	0.17	0.15	0.17	0.17	0.17	0.17		0.16	0.16	0.16	0.17	0.17	0.17	0.17	0.17	0.17	0.17
ACTUAL DUCT LGH	50	39	34	29	35	34	31	21	43		29	32	18	38	30	32	32	23	11	27
EQUIVALENT LENGTH	140	150	160	170	150	160	160	160	140		140	170	170	120	140	140	150	170	190	150
TOTAL EFFECTIVE LENGTH	190	189	194	199	185	194	191	181	183		169	202	188	158	170	172	182	193	201	177
ADJUSTED PRESSURE	0.09	0.09	0.09	0.09	0.08	0.09	0.09	0.1	0.09		0.1	0.08	0.09	0.11	0.1	0.1	0.09	0.09	0.09	0.1
ROUND DUCT SIZE	5	5	4	5	6	4	5	4	5		5	6	5	4	5	5	5	5	5	5
HEATING VELOCITY (ft/min)	191	352	46	220	408	92	220	310	191		463	321	463	172	536	536	587	587	587	587
COOLING VELOCITY (ft/min)	507	507	34	485	632	310	485	597	507		617	428	617	413	279	279	81	81	81	81
OUTLET GRILL SIZE	3X10	3X10	3X10	3X10	4X10	3X10	3X10	3X10	3X10		3X10	4X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10
TRUNK	B	A	B	B	D	B	B	D	B		B	A	D	A	D	D	A	B	D	D

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	206	0.08	7.8	8	8	464	0	0.00	0	0	0	TRUNK O	0	0.06	0	0	8
TRUNK B	267	0.09	8.3	8	601	0	0.00	0	0	0	0	TRUNK P	0	0.06	0	0	8
TRUNK C	473	0.08	10.6	14	608	0	0.00	0	0	0	0	TRUNK Q	0	0.06	0	0	8
TRUNK D	476	0.08	10.6	14	612	0	0.00	0	0	0	0	TRUNK R	0	0.06	0	0	8
TRUNK E	0	0.00	0	0	0	0	0.00	0	0	0	0	TRUNK S	0	0.06	0	0	8
TRUNK F	0	0.00	0	0	0	0	0.00	0	0	0	0	TRUNK T	0	0.06	0	0	8
												TRUNK U	0	0.06	0	0	8
												TRUNK V	0	0.06	0	0	8
												TRUNK W	0	0.06	0	0	8
												TRUNK X	950	0.06	14.8	26	8
												TRUNK Y	0	0.06	0	0	8
												TRUNK Z	0	0.06	0	0	8
												DROP	950	0.06	14.8	24	10

RETURN AIR #	1	2	3	4	5	6	7	8	9	10	14	15	16	17	19	20	21	22	23	24
AIR VOLUME	120	120	120	440	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PLENUM PRESSURE	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
ACTUAL DUCT LGH	51	25	25	27	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
EQUIVALENT LENGTH	195	175	185	170	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL EFFECTIVE LENGTH	246	200	210	197	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
ADJUSTED PRESSURE	0.06	0.07	0.07	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
ROUND DUCT SIZE	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
INLET GRILL SIZE	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
INLET GRILL SIZE	14	14	14	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

TYPE: SD-3
SITE NAME: ENCORE

LO # 72730

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	<u>2</u> @ 21.2 cfm	<u>42.4</u> cfm
Other Bedrooms	<u>2</u> @ 10.6 cfm	<u>21.2</u> cfm
Kitchen & Bathrooms	<u>4</u> @ 10.6 cfm	<u>42.4</u> cfm
Other Rooms	<u>4</u> @ 10.6 cfm	<u>42.4</u> cfm
Table 9.32.3.A.	TOTAL	<u>148.4</u> 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	
More than 5 - Part 6	TOTAL	<u>63.6</u> cfm

SUPPLEMENTAL VENTILATION CAPACITY		9.32.3.5.
Total Ventilation Capacity	<u>148.4</u>	cfm
Less Principal Ventil. Capacity	<u>139</u>	cfm
Required Supplemental Capacity	<u>9.4</u>	cfm

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

PRINCIPAL EXHAUST HEAT LOSS CALCULATION			
CFM	ΔT °F	FACTOR	% LOSS
139.0 CFM	X 74 F	X 1.08	X 0.25

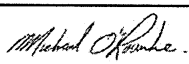
SUPPLEMENTAL FANS		NUTONE		
Location	Model	cfm	HVI	Sones
ENS	QTXEN050C	50	☒	0.3
BATH	QTXEN050C	50	☒	0.3

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

LOCATION OF INSTALLATION	
Lot:	Concession
Township	Plan:
Address	
Roll #	Building Permit #

BUILDER:	
GOLD PARK HOMES	
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:	
HRAI #	001820
Date:	March-17

HEAT LOSS AND GAIN SUMMARY SHEET

MODEL: SD-3

BUILDER: GOLD PARK HOMES

SFQT: 1759

LO# 72730

SITE: ENCORE

DESIGN ASSUMPTIONS

HEATING	°F	COOLING	°F
OUTDOOR DESIGN TEMP.	-2	OUTDOOR DESIGN TEMP.	86
INDOOR DESIGN TEMP.	72	INDOOR DESIGN TEMP. (MAX 75°F)	72

BUILDING DATA

ATTACHMENT:	ATTACHED	# 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 (ft³):	23751.0	ASSUMED (Y/N):	Y
INTERNAL SHADING:	BLINDS/CURTAINS	ASSUMED OCCUPANTS:	4
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: 41.0 ft	WIDTH: 25.0 ft	EXPOSED PERIMETER:	114.0 ft

2012 OBC - COMPLIANCE PACKAGE		Compliance Package	
Component		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	-

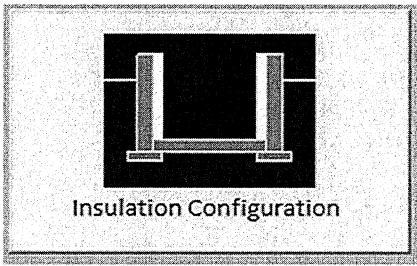
INDIVIDUAL BCIN: 19669

MICHAEL O'ROURKE



Residential Foundation Thermal Load Calculator

Supplemental tool for CAN/CSA-F280

Weather Station Description		
Province:	Ontario	
Region:	Brampton	
Site Description		
Soil Conductivity:	Normal conductivity: dry sand, loam, clay	
Water Table:	Normal (7-10 m, 23-33 ft)	
Foundation Dimensions		
Floor Length (m):	12.5	 Insulation Configuration
Floor Width (m):	7.6	
Exposed Perimeter (m):	34.7	
Wall Height (m):	2.7	
Depth Below Grade (m):	1.8	
Window Area (m ²):	1.1	
Door Area (m ²):	1.9	
Radiant Slab		
Heated Fraction of the Slab:	0	
Fluid Temperature (°C):	33	
Design Months		
Heating Month	1	
Foundation Loads		
Heating Load (Watts):		1107

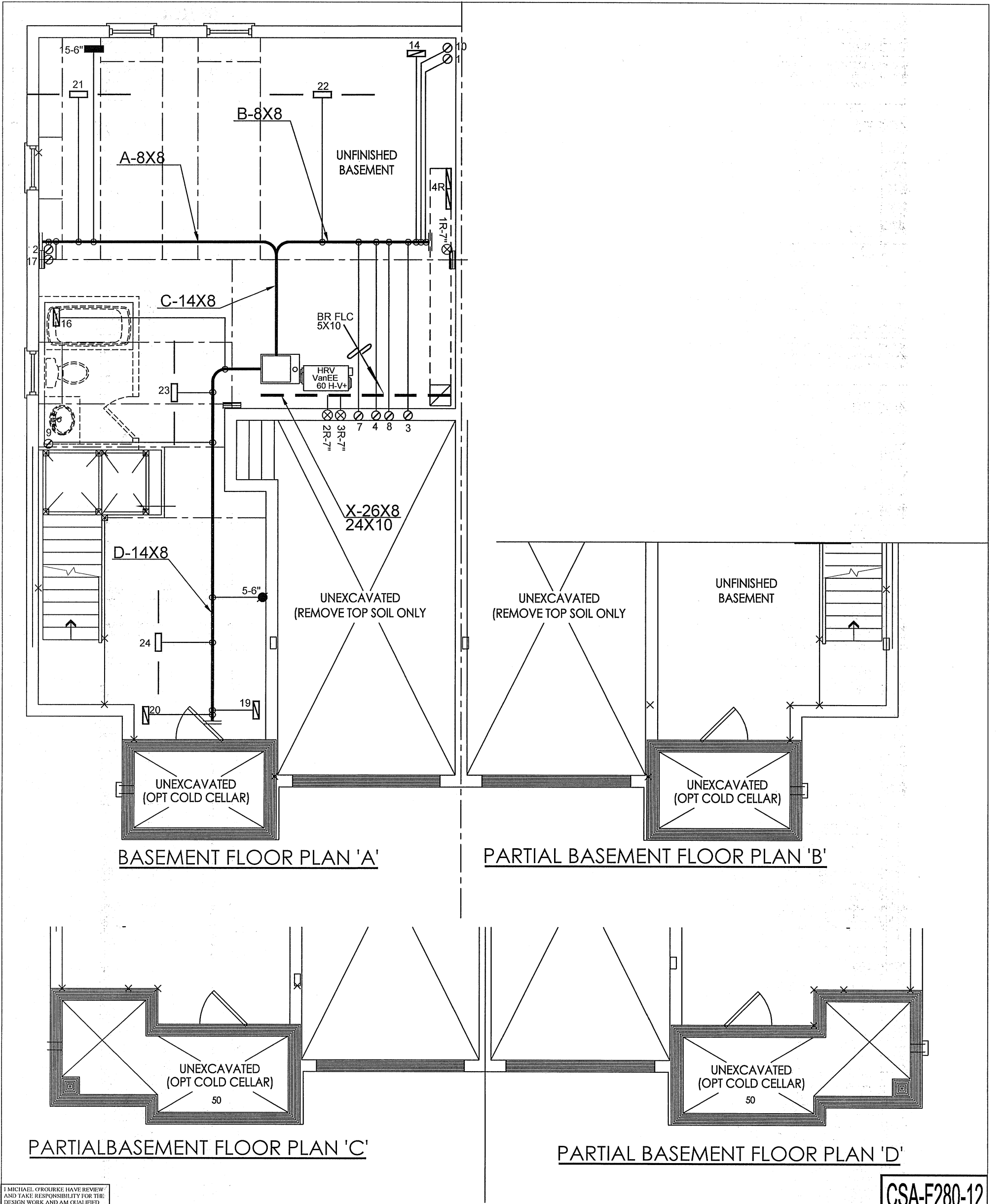
TYPE: SD-3
LO# 72730

Air Infiltration Residential Load Calculator

Supplemental tool for CAN/CSA-F280

Weather Station Description				
Province:	Ontario			
Region:	Brampton			
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 ³):	672.6			
Air Leakage/Ventilation				
Air Tightness Type:	Present (1961-) (3.57 ACH)			
Custom BDT Data:	ELA @ 10 Pa.	896.5 cm ²		
	3.57	ACH @ 50 Pa		
Mechanical Ventilation (L/s):	Total Supply	Total Exhaust		
	65.6	65.6		
Flue Size				
Flue #:	#1	#2	#3	#4
Diameter (mm):	0	0	0	0
Natural Infiltration Rates				
Heating Air Leakage Rate (ACH/H):	0.336			
Cooling Air Leakage Rate (ACH/H):	0.116			

TYPE: SD-3
LO# 72730



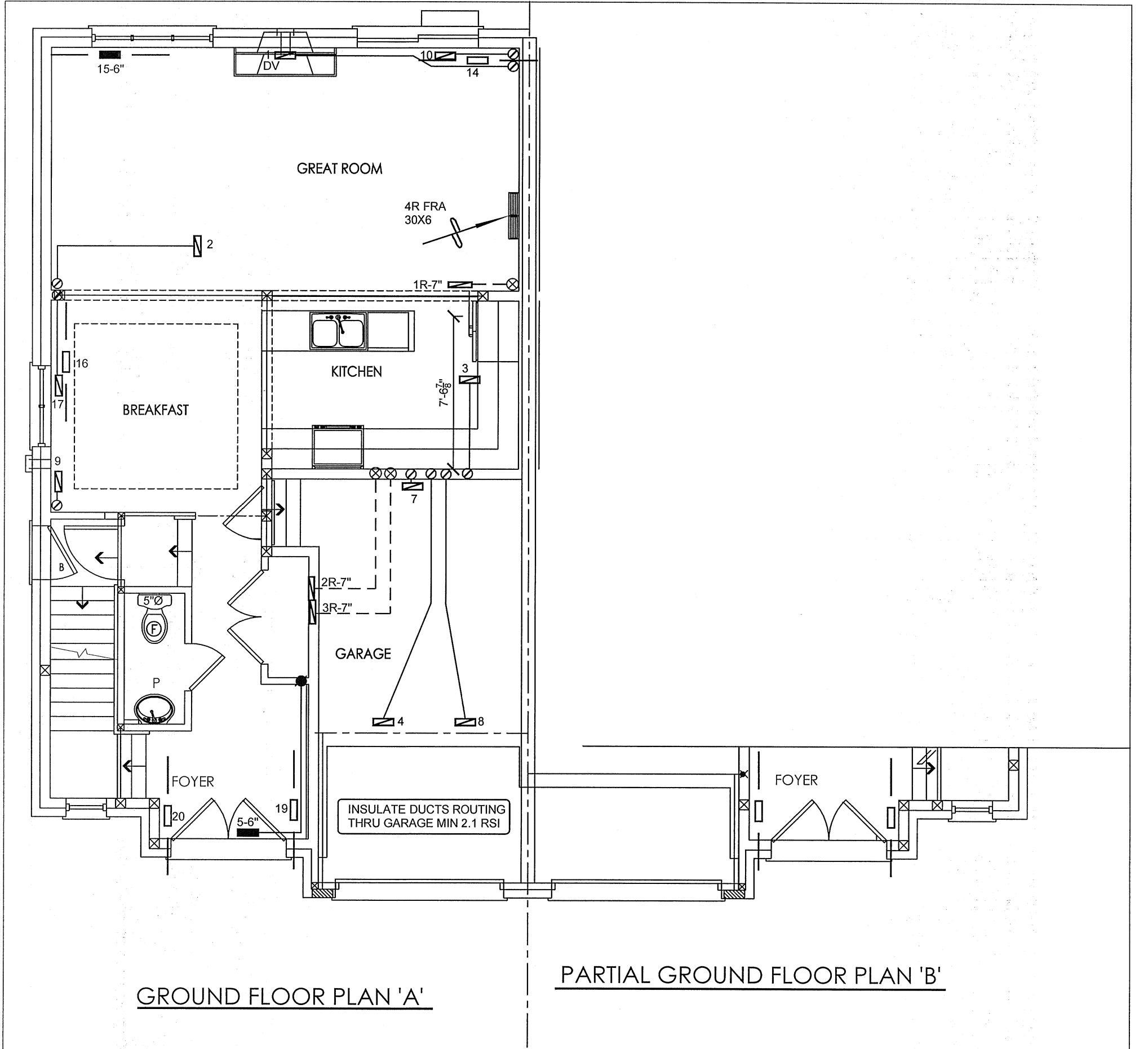
I MICHAEL O'ROURKE HAVE REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK AND AM QUALIFIED UNDER DIVISION C, 3.2.5 OF THE BUILDING CODE.
Michael O'Rourke
Michael O'Rourke, BCIN# 19669
HVAC DESIGNS LTD.

CSA-F280-12
PACKAGE A1

HVAC LEGEND						3.		
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	2.
	FLOOR SUPPLY AIR GRILLE		6" SUPPLY AIR BOOT ABOVE		14"x8" RETURN AIR GRILLE		RETURN AIR STACK ABOVE	1.
	FLOOR 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	
							Description	Date

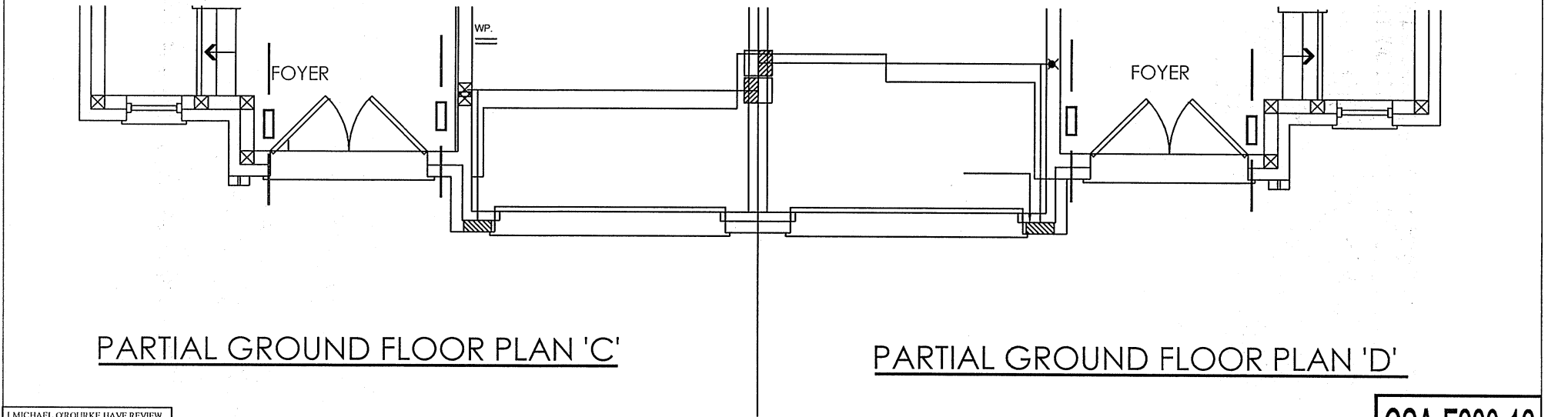
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Client		HVACDESIGNS LTD. 375 Finley Ave. Suite 202 - Ajax, Ontario L1S 2E2 Tel. 905.619.2300 - 905.420.5300 Fax 905.619.2375 Email: info@hvacdesigns.ca Web: www.hvacdesigns.ca Specializing in Residential Mechanical Design Services Installation to comply 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 35434 BTU/H		# OF RUNS S/A R/A FANS				Sheet Title	
GOLD PARK HOMES			UNIT DATA		3RD FLOOR				BASEMENT HEATING LAYOUT	
Project Name			MAKE		2ND FLOOR				Date	
ENCORE			LENNOX		1032				MAR/2017	
BRAMPTON, ONTARIO			MODEL		1ST FLOOR				Scale	
SD-3			EL296UH045XE36B		512				3/16" = 1'-0"	
1759 sqft			INPUT		BASEMENT				BCIN# 19669	
		44 MBTU/H		410				LO#		
		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				72730		
		43 MBTU/H								
		COOLING								
		2.0 TONS								
		FAN SPEED								
		950 cfm @ 0.6" w.c.								



GROUND FLOOR PLAN 'A'

PARTIAL GROUND FLOOR PLAN 'B'



PARTIAL GROUND FLOOR PLAN 'C'

PARTIAL GROUND FLOOR PLAN 'D'

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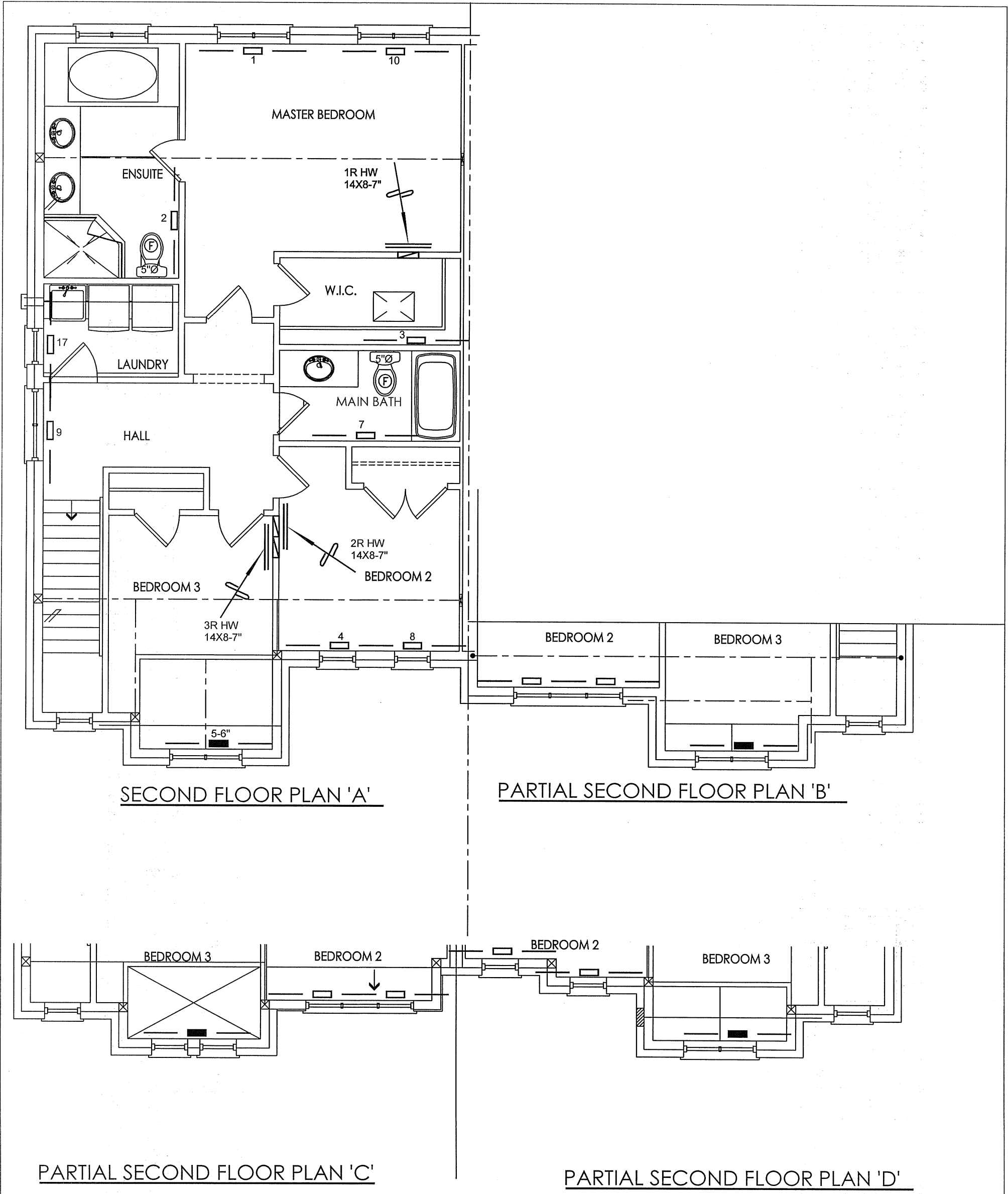
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HVAC LEGEND								3.		
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	2.		
	FLOOR SUPPLY AIR GRILLE		6" SUPPLY AIR BOOT ABOVE		14"x8" RETURN AIR GRILLE		RETURN AIR STACK ABOVE	1.		
	FLOOR SUPPLY AIR GRILLE 6" BOOT		SUPPLY 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 GOLD PARK HOMES		 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 FIRST FLOOR HEATING LAYOUT	
Project Name ENCORE BRAMPTON, ONTARIO			Date MAR/2017	Scale 3/16" = 1'-0"
SD-3		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.	BCIN# 19669	
1759 sqft			LO#	72730



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.

CSA-F280-12
PACKAGE A1

HVAC LEGEND								3.		
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	2.		
	FLOOR SUPPLY AIR GRILLE		6" SUPPLY AIR BOOT ABOVE		14"x8" RETURN AIR GRILLE		RETURN AIR STACK ABOVE	1.		
	FLOOR 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.	Sheet Title	
GOLD PARK HOMES			SECOND FLOOR HEATING LAYOUT	
Project Name ENCORE BRAMPTON, ONTARIO			Date	MAR/2017
			Scale	3/16" = 1'-0"
		BCIN# 19669		
SD-3	1759 sqft	LO#	72730	