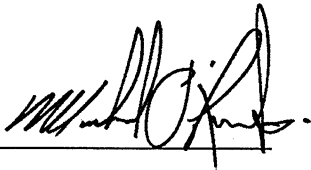


Schedule 1: Designer Information

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	☒ HVAC – House	☐ Building Structural	
☐ Small Buildings	☐ Building Services	☐ Plumbing – House	
☐ Large Buildings	☐ Detection, Lighting and Power	☐ Plumbing – All Buildings	
☐ Complex Buildings	☐ Fire Protection	☐ 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-6 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
BUILDER: GOLD PARK HOMES
DATE: Mar-17
LO# 72734
GFA: 2007
TYPE: SD-6
WINTER NATURAL AIR CHANGE RATE 0.316
SUMMER NATURAL AIR CHANGE RATE 0.104
HEAT LOSS AT °F. 74
HEAT GAIN AT °F. 13
CSA-F280-12
SB-12 PACKAGE A1

ROOM USE	EXP. WALL	CLG. HT.	MBR	ENS	TYPE: SD-6	GFA: 2007	DATE: Mar-17 LO# 72734	BATH	WINTER NATURAL AIR CHANGE RATE 0.316	SUMMER NATURAL AIR CHANGE RATE 0.104	HEAT LOSS AT °F. 74	HEAT GAIN AT °F. 13	CSA-F280-12 SB-12 PACKAGE A1
GRS.WALL AREA	14	9	119	213				94					
GLAZING	0	0	0	0				0					
NORTH	20.8	15.9	0	0				0					
EAST	20.8	41.5	0	0				0					
SOUTH	20.8	24.8	0	0				0					
WEST	20.8	41.5	32	457	913			0					
SKYLT.	36.4	101.5	0	0	0			0					
DOORS	24.7	4.2	0	0	0			0					
NET EXPOSED WALL	4.4	0.7	87	379	64			94	407	69			
NET EXPOSED BSMT WALL ABOVE GR	3.5	0.6	0	0	0			0	0	0			
EXPOSED CLG	1.3	0.6	312	391	182			0	0	0			
NO ATTIC EXPOSED CLG	2.7	1.3	0	0	0			126	168	74			
EXPOSED FLOOR	2.5	0.4	30	75	13			0	0	0			
BASEMENT/CRAWL HEAT LOSS	0	0	0	0	0			0	0	0			
SLAB ON GRADE HEAT LOSS	0	0	0	0	0			0	0	0			
SUB TOTAL HT LOSS	1510		1587	1480	1144			565	143				
SUB TOTAL HT GAIN	0.20	0.24	0.20	0.24	0.24			0.20	0.24				
LEVEL FACTOR / MULTIPLIER	362		362	356				136					
AIR CHANGE HEAT LOSS	187		125	90				11					
AIR CHANGE HEAT GAIN	0		0	0				0					
DUCT LOSS	272		272	0				0					
DUCT GAIN	480		480	0				0					
HEAT GAIN PEOPLE	530		530	0				0					
HEAT GAIN APPLIANCES/LIGHTS	2059		2059	1835				701					
TOTAL HT LOSS BTU/H	3893		3893	1604				200					
TOTAL HT GAIN x 1.3 BTU/H													

ROOM USE	EXP. WALL	CLG. HT.	FORM	KT/IFM	LAUN	FOY	BAS
GRS.WALL AREA	285		285	447	280	430	995
GLAZING	0		0	0	0	13	14
NORTH	20.8	15.9	0	0	0	270	291
EAST	20.8	41.5	0	0	0	0	0
SOUTH	20.8	24.8	20	0	0	0	0
WEST	20.8	41.5	0	82	0	0	0
SKYLT.	36.4	101.5	0	1704	0	0	0
DOORS	24.7	4.2	20	0	0	0	0
NET EXPOSED WALL	4.4	0.7	245	1688	1111	60	20
NET EXPOSED BSMT WALL ABOVE GR	3.5	0.6	0	366	1111	357	483
EXPOSED CLG	1.3	0.6	0	0	0	0	84
NO ATTIC EXPOSED CLG	2.7	1.3	0	0	0	0	0
EXPOSED FLOOR	2.5	0.4	0	0	0	0	0
BASEMENT/CRAWL HEAT LOSS	0	0	0	0	0	0	0
SLAB ON GRADE HEAT LOSS	0	0	0	0	0	0	0
SUB TOTAL HT LOSS	1976		3292	3672	2120	3305	5322
SUB TOTAL HT GAIN	0.30	0.38	0.30	0.38	0.20	0.30	0.50
LEVEL FACTOR / MULTIPLIER	744		1240	288	508	1245	5382
AIR CHANGE HEAT LOSS	0		0	0	0	0	0
AIR CHANGE HEAT GAIN	0		0	0	0	0	0
DUCT LOSS	0		0	0	0	0	0
DUCT GAIN	0		0	0	0	0	0
HEAT GAIN PEOPLE	530		530	530	530	530	0
HEAT GAIN APPLIANCES/LIGHTS	2720		2720	4532	2628	4549	10704
TOTAL HT LOSS BTU/H	1758		5838	5838	3174	1702	636
TOTAL HT GAIN x 1.3 BTU/H							

TOTAL HEAT GAIN BTU/H: 26234 TONS: 2.10 LOSS DUE TO VENTILATION LOAD BTU/H: 2404

STRUCTURAL HEAT LOSS: 34060

TOTAL COMBINED HEAT LOSS BTU/H: 36464

SITE NAME: ENCORE
BUILDER: GOLD PARK HOMES

TYPE: SD-6 DATE: Mar-17 LO# 72734

HEATING CFM 950 COOLING CFM 950
TOTAL HEAT LOSS 34,060 TOTAL HEAT GAIN 24,926
AIR FLOW RATE CFM 27.89 AIR FLOW RATE CFM 38.27

EL296UH045XE38B 45

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

RUN COUNT	4th	3rd	2nd	1st	Bas
S/A	0	0	8	4	3
R/A	0	0	3	1	1

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	10	12	14	15	17	20	21	22	23
ROOM NAME	MBR	ENS	BED-2	BED-3	BED-3	BATH	BATH	MBR	FORM	KT/FM	KT/FM	LAUN	FOY	BAS	BAS	BAS
RM LOSS MBH	1.03	1.83	1.72	1.31	1.31	1.31	0.70	1.03	2.72	2.27	2.27	2.63	4.55	3.57	3.57	3.57
CFM PER RUN HEAT	29	51	48	36	36	20	20	29	76	63	63	73	127	100	100	100
RM GAIN MBH	1.95	1.60	2.17	1.93	1.93	0.20	0.20	1.95	1.76	2.92	2.92	3.17	1.70	0.21	0.21	0.21
CFM PER RUN COOLING	74	61	83	74	74	8	8	74	67	112	112	121	65	8	8	8
ADJUSTED PRESSURE	0.17	0.17	0.16	0.17	0.17	0.17	0.17	0.17	0.17	0.15	0.15	0.15	0.15	0.16	0.16	0.16
EQUIVALENT LENGTH	43	45	37	42	40	34	34	40	23	21	21	50	34	32	16	31
TOTAL EFFECTIVE LENGTH	130	160	180	190	190	180	180	170	140	120	100	130	110	120	120	120
ADJUSTED PRESSURE	0.1	0.08	0.07	0.07	0.07	0.08	0.08	0.08	0.11	0.13	0.13	0.08	0.11	0.11	0.11	0.11
ROUND DUCT SIZE	5	5	6	5	5	4	4	5	5	6	6	6	6	5	5	5
HEATING VELOCITY (ft/min)	213	374	245	264	264	229	229	213	558	321	321	372	648	734	734	734
COOLING VELOCITY (ft/min)	543	448	423	543	543	92	92	543	492	571	571	4X10	3X10	59	59	59
OUTLET GRILL SIZE	3X10	3X10	4X10	3X10	3X10	3X10	3X10	3X10	3X10	4X10	4X10	4X10	4X10	3X10	3X10	3X10
TRUNK	A	A	A	B	B	B	B	A	B	A	A	B	B	A	A	B

RUN #	1	2	3	4	5	6	7	10	12	14	15	17	20	21	22	23
ROOM NAME	MBR	ENS	BED-2	BED-3	BED-3	BATH	BATH	MBR	FORM	KT/FM	KT/FM	LAUN	FOY	BAS	BAS	BAS
RM LOSS MBH	1.03	1.83	1.72	1.31	1.31	1.31	0.70	1.03	2.72	2.27	2.27	2.63	4.55	3.57	3.57	3.57
CFM PER RUN HEAT	29	51	48	36	36	20	20	29	76	63	63	73	127	100	100	100
RM GAIN MBH	1.95	1.60	2.17	1.93	1.93	0.20	0.20	1.95	1.76	2.92	2.92	3.17	1.70	0.21	0.21	0.21
CFM PER RUN COOLING	74	61	83	74	74	8	8	74	67	112	112	121	65	8	8	8
ADJUSTED PRESSURE	0.17	0.17	0.16	0.17	0.17	0.17	0.17	0.17	0.17	0.15	0.15	0.15	0.15	0.16	0.16	0.16
EQUIVALENT LENGTH	43	45	37	42	40	34	34	40	23	21	21	50	34	32	16	31
TOTAL EFFECTIVE LENGTH	130	160	180	190	190	180	180	170	140	120	100	130	110	120	120	120
ADJUSTED PRESSURE	0.1	0.08	0.07	0.07	0.07	0.08	0.08	0.08	0.11	0.13	0.13	0.08	0.11	0.11	0.11	0.11
ROUND DUCT SIZE	5	5	6	5	5	4	4	5	5	6	6	6	6	5	5	5
HEATING VELOCITY (ft/min)	213	374	245	264	264	229	229	213	558	321	321	372	648	734	734	734
COOLING VELOCITY (ft/min)	543	448	423	543	543	92	92	543	492	571	571	4X10	4X10	59	59	59
OUTLET GRILL SIZE	3X10	3X10	4X10	3X10	3X10	3X10	3X10	3X10	3X10	4X10	4X10	4X10	4X10	3X10	3X10	3X10
TRUNK	A	A	A	B	B	B	B	A	B	A	A	B	B	A	A	B

SUPPLY AIR TRUNK SIZE	TRUNK	STATIC PRESS.	ROUND DUCT	RECT DUCT	VELOCITY (ft/min)	TRUNK CFM	STATIC PRESS.	ROUND DUCT	RECT DUCT	VELOCITY (ft/min)	TRUNK CFM	TRUNK PRESS.	ROUND DUCT	RECT DUCT	VELOCITY (ft/min)
TRUNK A	483	0.07	11	14	621	0	0.00	0	0	8	0	0.06	0	0	8
TRUNK B	468	0.07	10.9	14	602	0	0.00	0	0	8	0	0.06	0	0	8
TRUNK C	0	0.00	0	0	0	0	0.00	0	0	8	0	0.06	0	0	8
TRUNK D	0	0.00	0	0	0	0	0.00	0	0	8	0	0.06	0	0	8
TRUNK E	0	0.00	0	0	0	0	0.00	0	0	8	0	0.06	0	0	8
TRUNK F	0	0.00	0	0	0	0	0.00	0	0	8	0	0.06	0	0	8

RETURN AIR #	1	2	3	4	5	6	7	10	12	14	15	17	20	21	22	23
AIR VOLUME	155	155	120	380	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
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
ACTUAL DUCT LGH.	52	55	37	36	1	1	1	1	1	1	1	1	1	1	1	1
EQUIVALENT LENGTH	195	200	165	165	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL EFFECTIVE LH	247	255	202	201	1	1	1	1	1	1	1	1	1	1	1	1
ADJUSTED PRESSURE	0.06	0.06	0.07	0.07	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80
ROUND DUCT SIZE	7.5	7.5	6.6	10.1	0	0	0	0	0	0	0	0	0	0	0	0
INLET GRILL SIZE	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
INLET GRILL SIZE	14	14	14	30	0	0	0	0	0	0	0	0	0	0	0	0

TYPE: SD-6
SITE NAME: ENCORE

LO # 72734

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>120</u>	cfm
Required Supplemental Capacity	<u>28.4</u>	cfm

PRINCIPAL EXHAUST FAN CAPACITY			
Model:	VANEE 60H-V+		
Location:	BSMT		
<u>120.0</u> cfm	<u>3.0</u> sones		
☒ HVI Approved			
PRINCIPAL EXHAUST HEAT LOSS CALCULATION			
CFM	ΔT °F	FACTOR	% LOSS
120.0 CFM	X 74 F	X 1.08	X 0.25

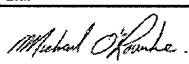
SUPPLEMENTAL FANS		NUTONE	
Location	Model	cfm	HVI
ENS	QTXEN050C	50	☒
BATH	QTXEN050C	50	☒
PWD	QTXEN050C	50	☒

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-6**BUILDER:** GOLD PARK HOMES**SFQT:** 2007**LO#** 72734**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)	73

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):	25760.5	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:	6.5 ft
LENGTH: 48.0 ft	WIDTH: 25.0 ft	EXPOSED PERIMETER:	123.0 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	-

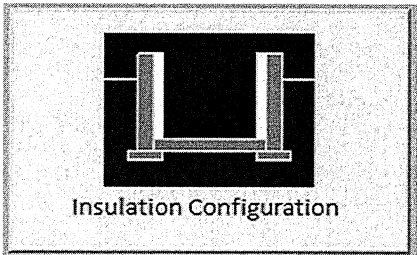
INDIVIDUAL BCIN: 19669

MICHAEL O'ROURKE



Residential Foundation Thermal Load Calculator

Supplemental tool for CAN/CSA-F280

Weather Station Description		
Province:	Ontario	
Region:	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):	14.6	 Insulation Configuration
Floor Width (m):	7.6	
Exposed Perimeter (m):	37.5	
Wall Height (m):	2.6	
Depth Below Grade (m):	2.0	
Window Area (m ²):	1.3	
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):		1076

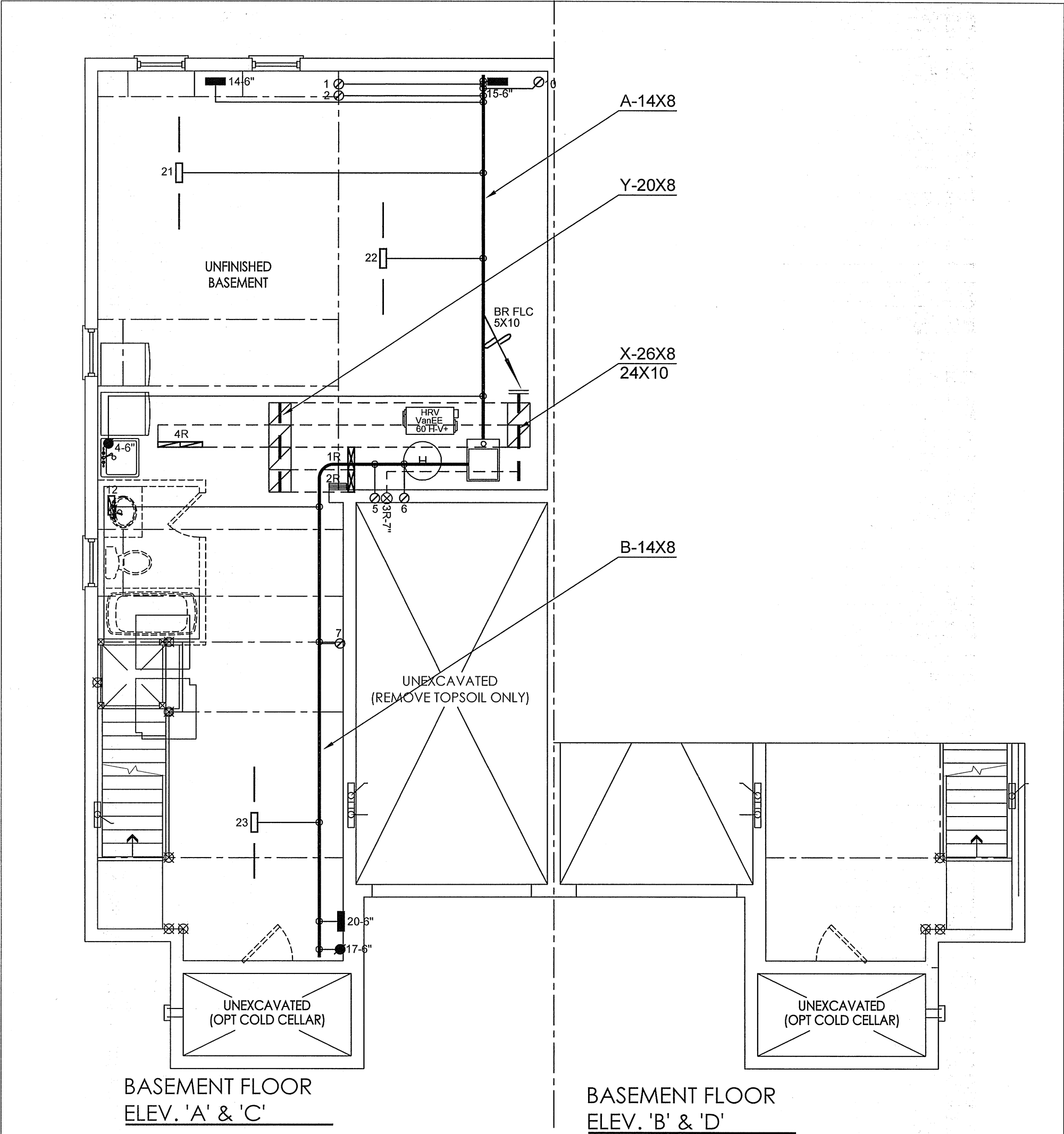
TYPE: SD-6
LO# 72734

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):	6.10			
Building Configuration				
Type:	Semi			
Number of Stories:	Two			
Foundation:	Full			
House Volume (m ³):	729.5			
Air Leakage/Ventilation				
Air Tightness Type:	Present (1961-) (3.57 ACH)			
Custom BDT Data:	ELA @ 10 Pa.	972.4 cm ²		
	3.57	ACH @ 50 Pa		
Mechanical Ventilation (L/s):	Total Supply	Total Exhaust		
	56.6	56.6		
Flue Size				
Flue #:	#1	#2	#3	#4
Diameter (mm):	0	0	0	0
Natural Infiltration Rates				
Heating Air Leakage Rate (ACH/H):	0.315			
Cooling Air Leakage Rate (ACH/H):	0.104			

TYPE: SD-6
LO# 72734



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.

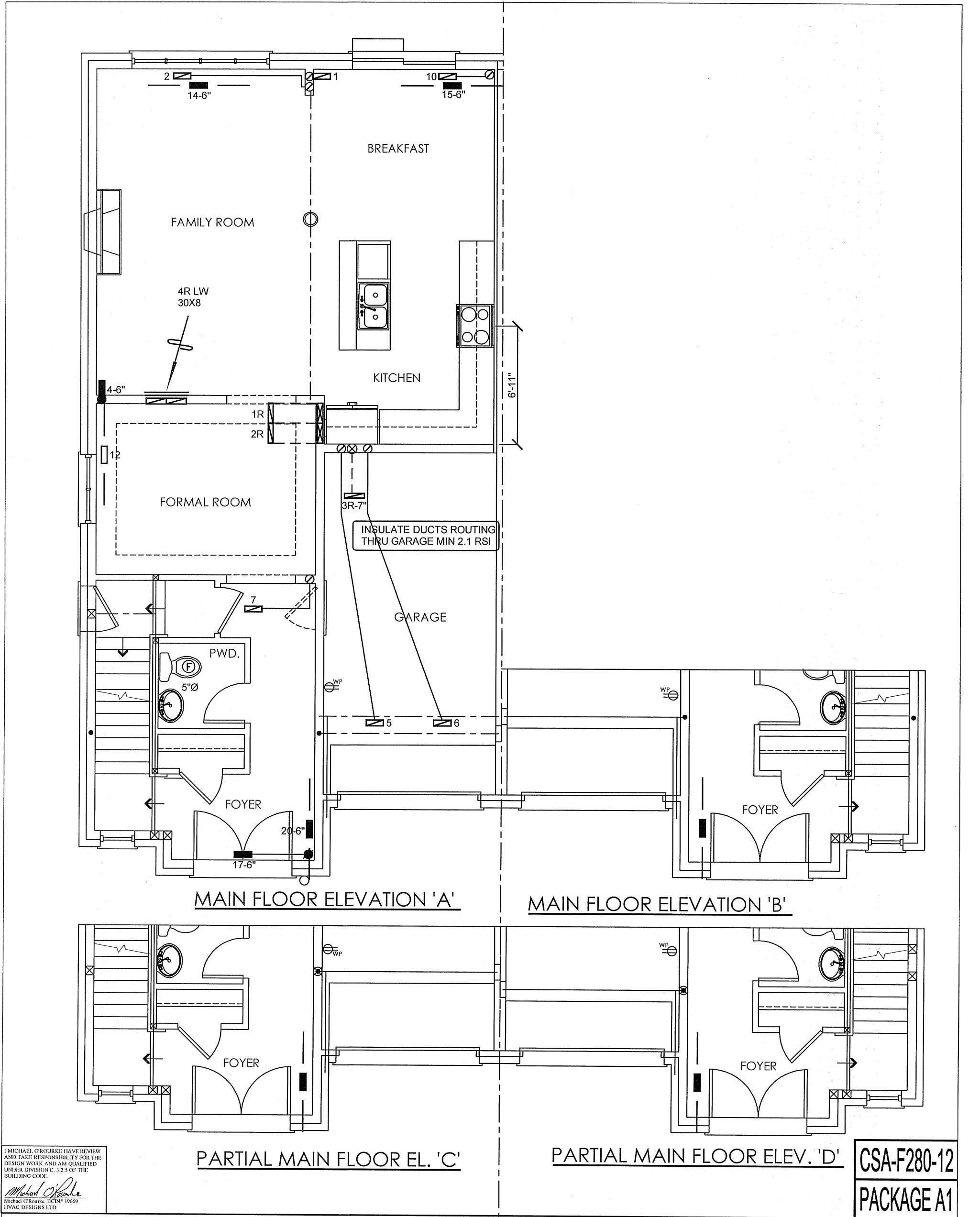
Michael O'Rourke
Michael O'Rourke, BCIN# 19669
HVAC DESIGNS LTD.

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		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 36464 BTU/H UNIT DATA		# OF RUNS S/A R/A FANS			Sheet Title		
GOLD PARK HOMES			MAKE	LENNOX	3RD FLOOR			BASEMENT HEATING LAYOUT		
Project Name			MODEL	EL296UH045XE36B	2ND FLOOR	8	3	2	Date	MAR/2017
ENCORE BRAMPTON, ONTARIO			INPUT	44 MBTU/H	1ST FLOOR	4	1	2		
SD-6			OUTPUT	43 MBTU/H	BASEMENT	3	1	0	Scale	3/16" = 1'-0"
2007 sqft		COOLING	2.0 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					BCIN# 19669	
		FAN SPEED	950 cfm @ 0.6" w.c.						LO#	72734



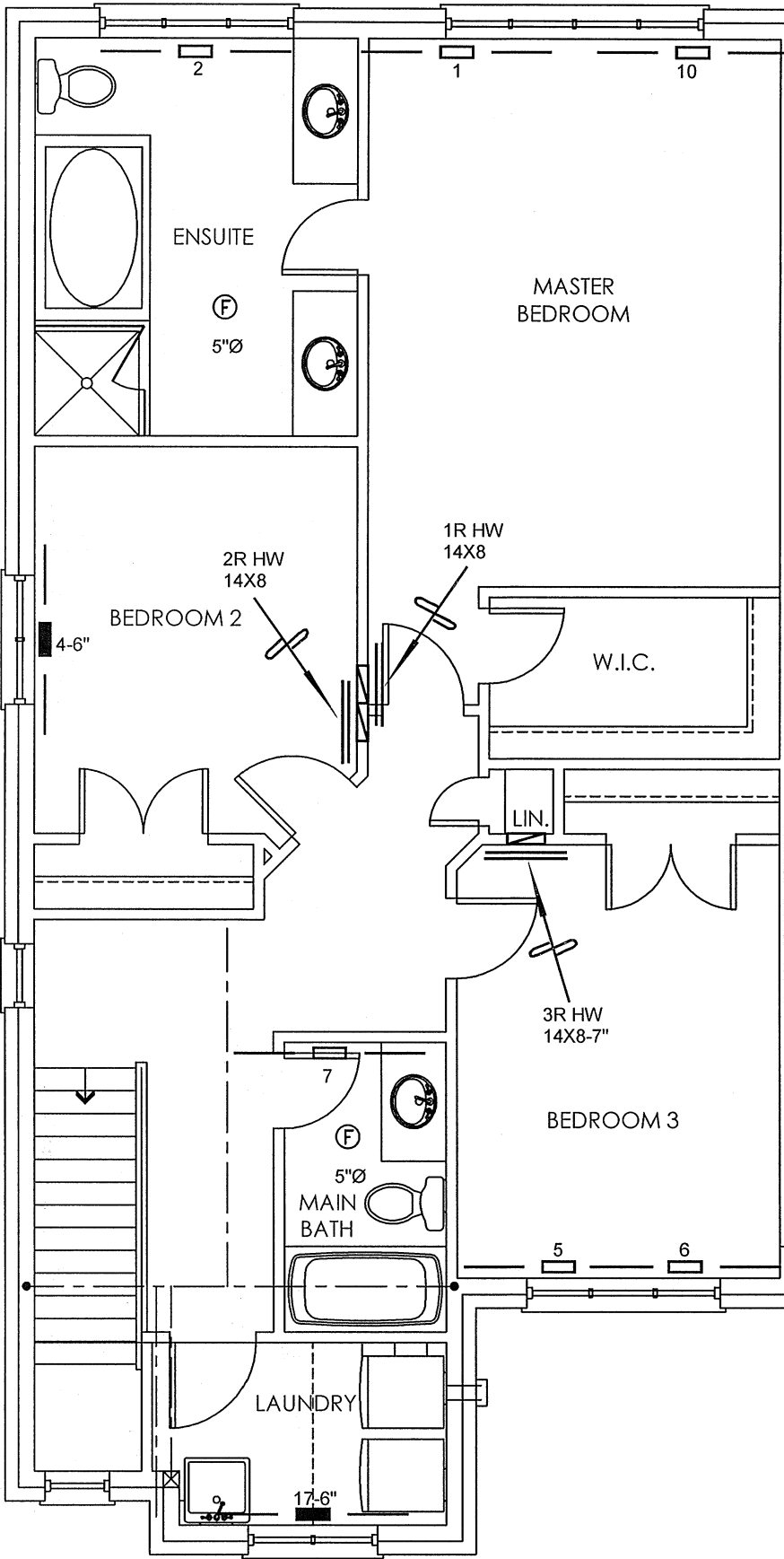
I MICHAEL O'ROURKE HAVE REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK AND AM QUALIFIED UNDER DIVISION C.3.2.5 OF THE BUILDING CODE.

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

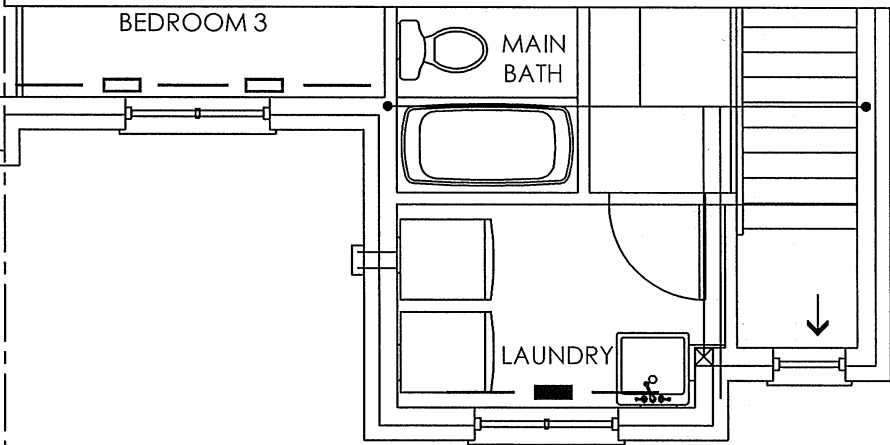
HVAC LEGEND								3.		
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	2.		
	FLOOR SUPPLY AIR GRILLE		6" SUPPLY AIR BOOT ABOVE		14"x8" RETURN AIR GRILLE		RETURN AIR STACK ABOVE	1.		
	FLOOR SUPPLY AIR GRILLE 6" BOOT		SUPPLY AIR STACK FROM 2nd FLOOR		30"x8" RETURN AIR GRILLE		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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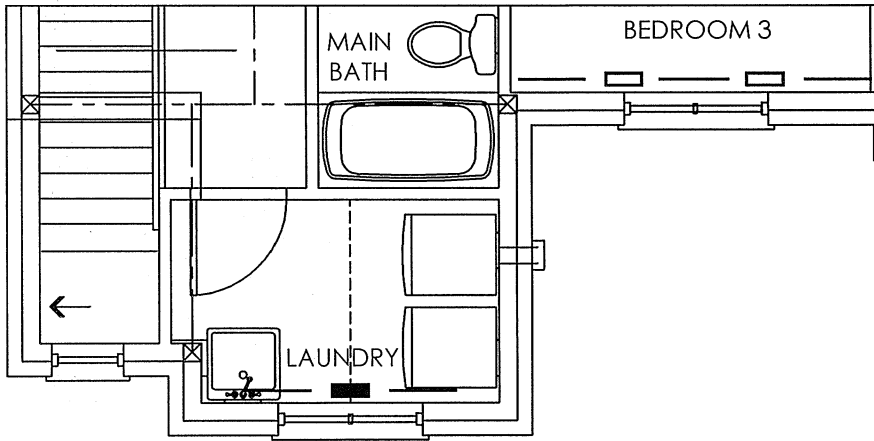
Client		HVACDESIGNS LTD. 375 Finley Ave. Suite 202 - Ajax, Ontario L1S 2E2 Tel. 905.619.2300 - 905.420.5300 Fax 905.619.2375 Email: info@hvacdesigns.ca Web: www.hvacdesigns.ca Specializing in Residential Mechanical Design Services Installation to comply with the latest Ontario Building Code. All supply 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.	Sheet Title	
GOLD PARK HOMES			FIRST FLOOR HEATING LAYOUT	
Project Name			Date	MAR/2017
ENCORE BRAMPTON, ONTARIO			Scale	3/16" = 1'-0"
			BCIN# 19669	
SD-6	2007 sqft	LO#	72734	



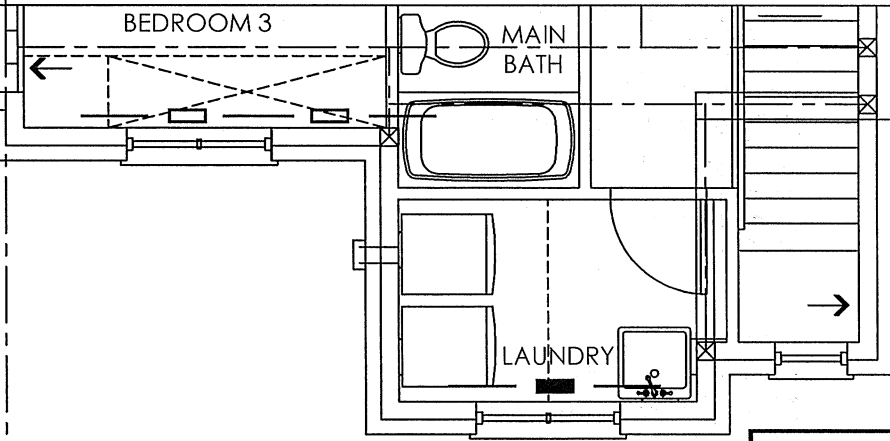
SECOND FLOOR ELEVATION 'A'



SECOND FLOOR ELEVATION 'B'



PARTIAL SECOND FLOOR ELEV. 'C'



PARTIAL SECOND FLOOR ELEV. 'D'

CSA-F280-12
PACKAGE A1

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.

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.		
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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 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 ENCORE BRAMPTON, ONTARIO			Date MAR/2017	
SD-6 2007 sqft			Scale 3/16" = 1'-0"	
			BCIN# 19669	
			LO# 72734	