

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@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 | ☒ 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**

Model: 41-4

**RESIDENTIAL MECHANICAL VENTILATION DESIGN SUMMARY
RESIDENTIAL SYSTEM DESIGN per CSA-F280-12**

Project: ENCORE

D. Declaration of Designer

I MICHAEL O'ROURKE 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: 19669

Basis for exemption from registration and qualification: O.B.C SENTENCE 3.2.4.1 (4)

- ☐ The design work is exempt from the registration and qualification requirements of the Building Code.

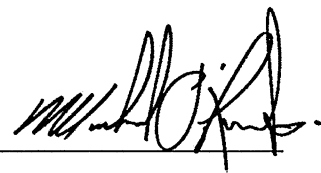
Basis for exemption from registration and qualification: _____

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.

March 7, 2017
Date

Signature of Designer



NOTE:

1. 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.
2. 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# 72720
GFA: 2830
TYPE: 41-4
WINTER NATURAL AIR CHANGE RATE 0.324
SUMMER NATURAL AIR CHANGE RATE 0.115
HEAT LOSS AT °F. 74
HEAT GAIN AT °F. 14
CSA-F280-12
SB-12 PACKAGE A1

ROOM USE EXP. WALL CLG. HT.	MBR	ENS	WIC	BED-2	BED-3	BED-4	ENS-2	WIC-2	TWIN	
GRS.WALL AREA	360	243	108	90	135	250	54	81	63	
GLAZING										
NORTH	20.7 16.3	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
EAST	20.7 41.9	30 622 1257	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
SOUTH	20.7 25.2	0 0	0 0	16 332 404	16 332 404	0 0	0 0	0 0	7 145 177	0 0
WEST	20.7 41.9	0 0	0 0	0 0	0 0	44 912 1843	9 186 377	0 0	0 0	0 0
SKYLT.	20.7 86.9	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
DOORS	24.6 4.7	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
NET EXPOSED WALL	4.3 0.8	330 1434 271	219 952 180	108 469 89	74 322 61	206 895 169	45 196 37	81 352 67	56 243 46	0 0
NET EXPOSED BSMT WALL ABOVE GR	3.5 0.7	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
EXPOSED CLG	1.2 0.6	285 356 173	176 220 107	184 230 112	225 281 137	168 210 102	60 75 36	42 52 26	84 105 51	0 0
NO ATTIC EXPOSED CLG	2.7 1.3	0 0	0 0	0 0	0 0	30 80 39	0 0	0 0	0 0	0 0
EXPOSED FLOOR	2.5 0.5	0 0	0 0	0 0	0 0	198 492 93	50 124 23	42 104 20	0 0	0 0
BASEMENT/CRAWL HEAT LOSS										
SLAB ON GRADE HEAT LOSS										
SUBTOTAL HT LOSS	2412	1669	703	883	1130	2589	581	509	493	274
SUB TOTAL HT GAIN	1701	1176	202	576	638	2247	474	112	0.20 0.30	150
LEVEL FACTOR / MULTIPLIER	0.20 0.30	0.20 0.30	0.20 0.30	0.20 0.30	0.20 0.30	0.20 0.30	0.20 0.30	0.20 0.30	0.20 0.30	0.20 0.30
AIR CHANGE HEAT LOSS	734	508	214	269	344	788	177	155	150	17
AIR CHANGE HEAT GAIN	105	72	12	35	39	138	29	7	0	0
DUCT LOSS										
DUCT GAIN										
HEAT GAIN PEOPLE	240	0	0	0	0	338	76	66	0	0
HEAT GAIN APPLIANCES/LIGHTS	480	0	0	0	0	323	50	12	0	0
TOTAL HT LOSS BTU/H	605	0	0	1	240	1	0	0	0	0
TOTAL HT GAIN x 1.3 BTU/H	3146	2177	917	1152	1474	3715	834	730	644	378

ROOM USE EXP. WALL CLG. HT.	DEN	DIN	KTIFM	LAUN	WIR	FOY	S.ENT	BAS
GRS.WALL AREA	264	300	720	0	66	640	40	1056
GLAZING								
NORTH	20.7 16.3	0 0	0 0	0 0	0 0	0 0	0 0	0 0
EAST	20.7 41.9	0 0	0 0	0 0	0 0	0 0	0 0	6 124 251
SOUTH	20.7 25.2	0 0	127 2631 5320	0 0	0 0	0 0	0 0	3 62 76
WEST	20.7 41.9	0 0	0 0	0 0	0 0	0 0	0 0	0 0
SKYLT.	20.7 86.9	0 0	0 0	0 0	0 0	57 1181 2388	0 0	0 0
DOORS	24.6 4.7	0 0	0 0	0 0	0 0	0 0	0 0	0 0
NET EXPOSED WALL	4.3 0.8	249 1082 205	276 1199 227	593 2577 487	20 482 93	44 1082 205	20 492 93	20 492 93
NET EXPOSED BSMT WALL ABOVE GR	3.5 0.7	0 0	0 0	0 0	0 0	539 2342 443	20 87 16	0 0
EXPOSED CLG	1.2 0.6	0 0	0 0	78 97 47	0 0	157 186 95	0 0	528 1850 350
NO ATTIC EXPOSED CLG	2.7 1.3	0 0	0 0	0 0	0 0	0 0	0 0	0 0
EXPOSED FLOOR	2.5 0.5	0 0	0 0	78 194 37	0 0	0 0	0 0	0 0
BASEMENT/CRAWL HEAT LOSS								
SLAB ON GRADE HEAT LOSS								
SUBTOTAL HT LOSS	1393	1697	5208	291	692	4801	579	8686
SUB TOTAL HT GAIN	449	833	5807	84	131	3131	109	770
LEVEL FACTOR / MULTIPLIER	0.30 0.36	0.30 0.36	0.30 0.36	0.20 0.30	0.30 0.36	0.30 0.36	0.30 0.36	0.50 0.99
AIR CHANGE HEAT LOSS	499	607	1864	89	248	1718	207	8572
AIR CHANGE HEAT GAIN	28	51	357	5	8	193	7	47
DUCT LOSS								
DUCT GAIN								
HEAT GAIN PEOPLE	240	0	0	38	0	0	0	0
HEAT GAIN APPLIANCES/LIGHTS	605	0	1	0	0	0	0	0
TOTAL HT LOSS BTU/H	1891	2304	7072	418	939	6520	786	17258
TOTAL HT GAIN x 1.3 BTU/H	1407	1935	9112	993	181	4320	938	1063

SITE NAME: ENCORE
BUILDER: GOLD PARK HOMES

TYPE: 41-4 DATE: Mar-17 GFA: 2830 LO# 72720

HEATING CFM 1100 COOLING CFM 1100
TOTAL HEAT LOSS 51,975 TOTAL HEAT GAIN 35,367
AIR FLOW RATE CFM 21.16 AIR FLOW RATE CFM 31.1

EL296UH070XE36B
FAN SPEED
LOW 0
MEDIUM 995
HIGH 1100

AFUE = 96 %
INPUT (BTU/H) = 66,000
OUTPUT (BTU/H) = 64,000

RUN COUNT	4th	3rd	2nd	1st	Bas
SIA	0	0	13	9	5
R/A	0	0	4	2	1

All SIA diffusers 4"x10" unless noted otherwise on layout.

All SIA runs 5'Ø unless noted otherwise on layout.

ROOM NAME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
RM LOSS MBH	1.57	1.09	0.92	1.15	1.47	1.86	0.83	0.73	1.86	1.57	0.64	1.89	2.30	2.36	2.36	2.36	0.42	0.94	3.26	3.26	3.45	3.45	3.45	3.45
CFM PER RUN HEAT	33	23	19	24	31	39	18	15	39	33	14	40	49	50	50	50	9	20	69	73	73	73	73	73
RM GAIN MBH	1.88	0.81	0.28	1.89	1.98	2.31	0.72	0.17	2.31	1.88	0.38	1.41	1.94	3.04	3.04	3.04	0.99	0.18	2.16	2.16	0.21	0.21	0.21	0.21
CFM PER RUN COOLING	58	25	9	59	62	72	22	5	72	58	12	44	60	94	94	94	31	6	67	7	7	7	7	7
ADJUSTED PRESSURE	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	0.16	0.16	0.16	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
EQUIVALENT LENGTH	130	150	170	140	180	180	180	170	160	180	160	120	130	140	180	130	180	170	110	120	120	120	170	120
TOTAL EFFECTIVE LENGTH	196	206	219	186	213	220	191	209	197	240	210	173	158	189	224	178	213	212	135	150	168	163	211	145
ADJUSTED PRESSURE	0.09	0.08	0.08	0.09	0.08	0.08	0.09	0.08	0.09	0.07	0.08	0.1	0.11	0.09	0.07	0.09	0.08	0.08	0.13	0.11	0.11	0.11	0.08	0.12
ROUND DUCT SIZE	5	4	4	5	5	5	4	4	5	5	5	4	5	6	6	6	4	4	5	5	5	5	5	5
HEATING VELOCITY (ft/min)	242	284	218	176	228	286	207	172	286	242	161	459	360	255	255	255	103	229	507	507	536	536	536	536
COOLING VELOCITY (ft/min)	426	287	103	433	455	529	252	57	529	426	138	505	441	479	479	479	356	69	492	492	51	51	51	51
OUTLET GRILL SIZE	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	4X10	4X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10
TRUNK	A	B	A	C	C	D	D	C	D	A	C	A	C	A	A	A	C	A	D	D	A	B	A	C

ROOM NAME	25	26	27
BAS	ENS	ENS	SENT
RM LOSS MBH	3.45	1.09	0.79
CFM PER RUN HEAT	73	23	17
RM GAIN MBH	0.21	0.81	0.94
CFM PER RUN COOLING	7	25	29
ADJUSTED PRESSURE	0.17	0.17	0.17
EQUIVALENT LENGTH	110	150	140
TOTAL EFFECTIVE LENGTH	136	203	162
ADJUSTED PRESSURE	0.13	0.08	0.11
ROUND DUCT SIZE	5	4	4
HEATING VELOCITY (ft/min)	536	264	195
COOLING VELOCITY (ft/min)	51	287	333
OUTLET GRILL SIZE	3X10	3X10	3X10
TRUNK	D	C	D

TRUNK	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	0.07	10.2	12	587	0	0.00	0	0	8	0	0.00	0	0	0
TRUNK B	0.08	6.8	6	438	0	0.00	0	0	8	0	0.00	0	0	0
TRUNK C	0.07	13.2	20	698	0	0.00	0	0	8	0	0.00	0	0	0
TRUNK D	0.08	9.2	10	583	0	0.00	0	0	8	0	0.00	0	0	0
TRUNK E	0.07	15	26	762	0	0.00	0	0	8	0	0.00	0	0	0
TRUNK F	0.00	0	0	0	0	0.00	0	0	8	0	0.00	0	0	0

RETURN AIR #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
AIR VOLUME	125	80	155	85	285	180	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
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	0.15	0.15	0.15	0.15
EQUIVALENT LENGTH	68	44	36	45	34	21	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
TOTAL EFFECTIVE LENGTH	278	239	201	220	229	161	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
ADJUSTED PRESSURE	0.05	0.06	0.07	0.07	0.06	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUND DUCT SIZE	7.2	5.9	7.2	5.8	9.4	7.2	0	0	0	0	0	0	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	X	X	X	X	X	X	X	X
INLET GRILL SIZE	14	14	14	14	30	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

TYPE: 41-4
SITE NAME: ENCORE

LO # 72720

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	5 @ 10.6 cfm	53.0 cfm
Table 9.32.3.A.	TOTAL	180.2 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	79.5 cfm

SUPPLEMENTAL VENTILATION CAPACITY		9.32.3.5.
Total Ventilation Capacity	180.2	cfm
Less Principal Ventil. Capacity	139	cfm
Required Supplemental Capacity	41.2	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	74 F	X	1.08	X	0.25

SUPPLEMENTAL FANS		NUTONE		
Location	Model	cfm	HVI	Sones
ENS	QTXEN050C	50	☒	0.3
ENS-2	QTXEN050C	50	☒	0.3
TWIN	QTXEN050C	50	☒	0.3
W/R	QTXEN050C	50	☒	0.3

HEAT RECOVERY VENTILATOR		9.32.3.11.
Model: VANEE 60H-V+		
139	cfm high	50 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: 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:** 41-4**BUILDER:** GOLD PARK HOMES**SFQT:** 2830**LO#** 72720**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

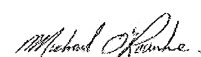
ATTACHMENT:	DETACHED	# OF STORIES (+BASEMENT):	3
FRONT FACES:	WEST	ASSUMED (Y/N):	Y
AIR CHANGES PER HOUR:	3.57	ASSUMED (Y/N):	Y
AIR TIGHTNESS CATEGORY:	AVERAGE	ASSUMED (Y/N):	Y
WIND EXPOSURE:	SHELTERED	ASSUMED (Y/N):	Y
HOUSE VOLUME (ft³):	39953.0	ASSUMED (Y/N):	Y
INTERNAL SHADING:	BLINDS/CURTAINS	ASSUMED 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: 53.0 ft	WIDTH: 35.0 ft	EXPOSED PERIMETER:	176.0 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	-

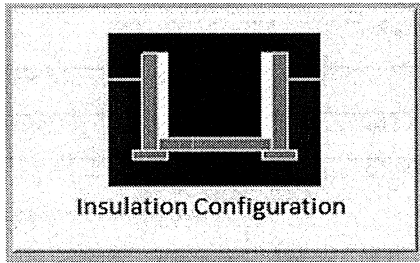
INDIVIDUAL BCIN: 19669

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):	16.2	 Insulation Configuration
Floor Width (m):	10.7	
Exposed Perimeter (m):	0.0	
Wall Height (m):	2.7	
Depth Below Grade (m):	1.8	
Window Area (m ²):	0.8	
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):		1804

TYPE: 41-4

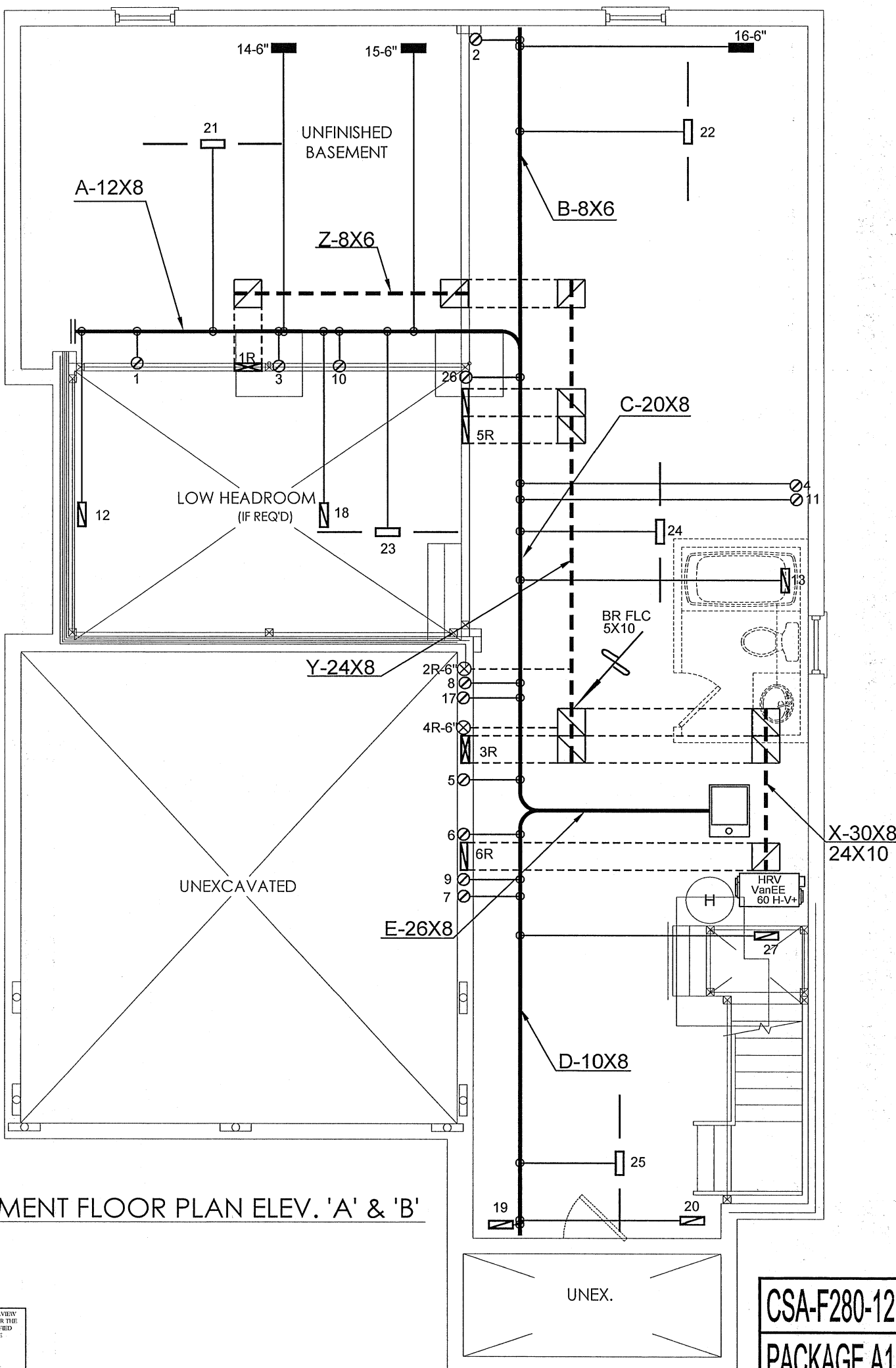
LO# 72720

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:	Detached		
Number of Stories:	Two		
Foundation:	Full		
House Volume (m ³):	1131.3		
Air Leakage/Ventilation			
Air Tightness Type:	Present (1961-) (3.57 ACH)		
Custom BDT Data:	ELA @ 10 Pa.	1508.1 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
Diameter (mm):	0	0	0
	#4		
	0		
Natural Infiltration Rates			
Heating Air Leakage Rate (ACH/H):	0.324		
Cooling Air Leakage Rate (ACH/H):	0.115		

TYPE: 41-4
LO# 72720



BASEMENT FLOOR PLAN ELEV. 'A' & 'B'

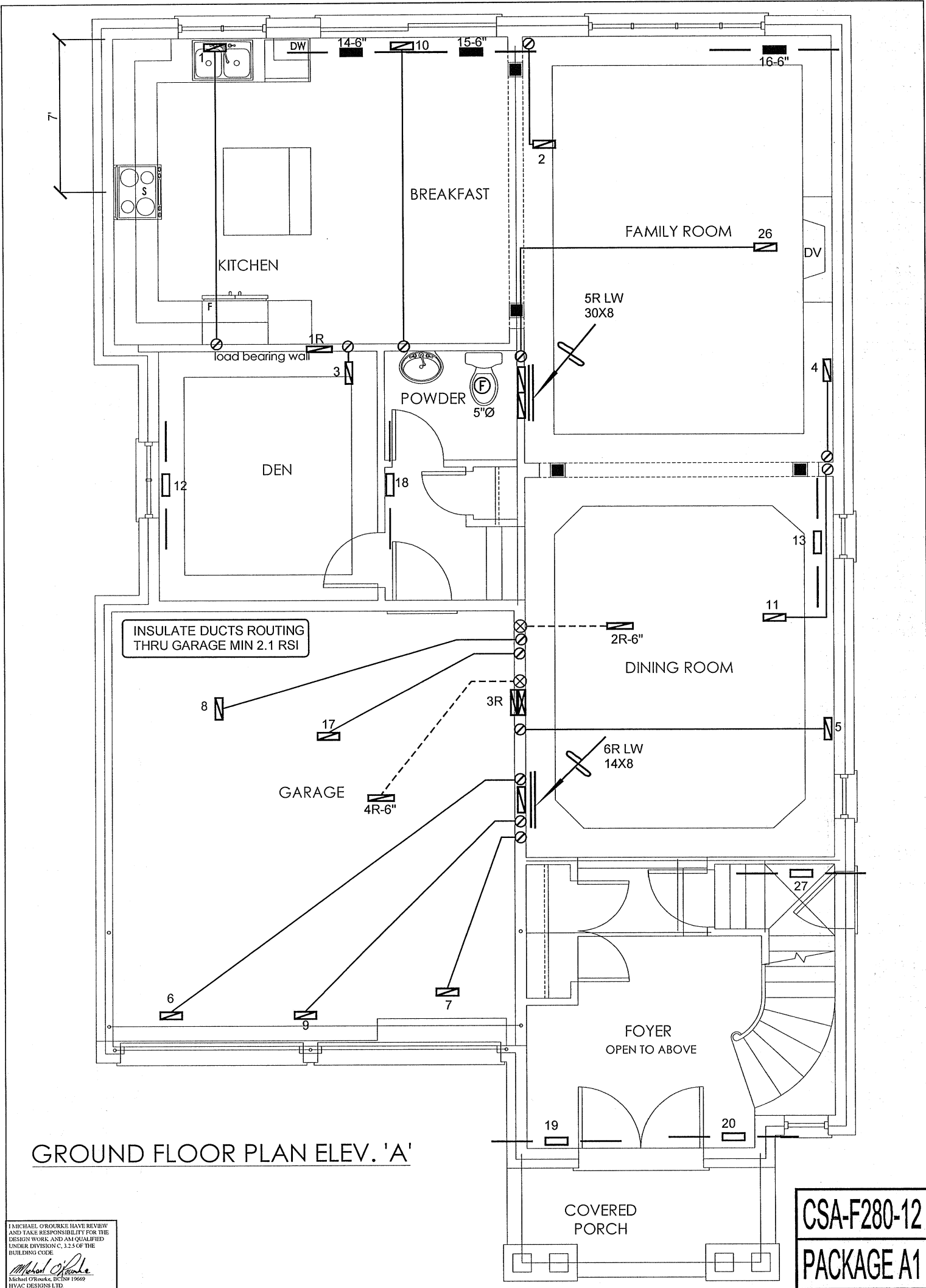
I MICHAEL O'Rourke HAVE REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK AND AM QUALIFIED UNDER DIVISION C.32.5 OF THE BUILDING CODE.
Michael O'Rourke
Michael O'Rourke, BCIN# 19669
HVAC DESIGNS LTD.

CSA-F280-12
PACKAGE A1

HVAC LEGEND								3.		
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	2.		
	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		HEAT LOSS 54753 BTU/H UNIT DATA		# OF RUNS S/A R/A FANS			Sheet Title		
GOLD PARK HOMES				MAKE LENNOX	MODEL EL296UH070XE36B	INPUT 66 MBTU/H	OUTPUT 64 MBTU/H	COOLING 3.0 TONS	FAN SPEED 1100 cfm @ 0.6" w.c.	BASEMENT HEATING LAYOUT	
Project Name ENCORE BRAMPTON, ONTARIO		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.		3RD FLOOR					Date	MAR/2017	
41-42830 sqft				2ND FLOOR		13	4	5	Scale		3/16" = 1'-0"
				1ST FLOOR		9	2	1	BCIN# 19669		
				BASEMENT		5	1	0	LO#	72720	



GROUND FLOOR PLAN ELEV. 'A'

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.

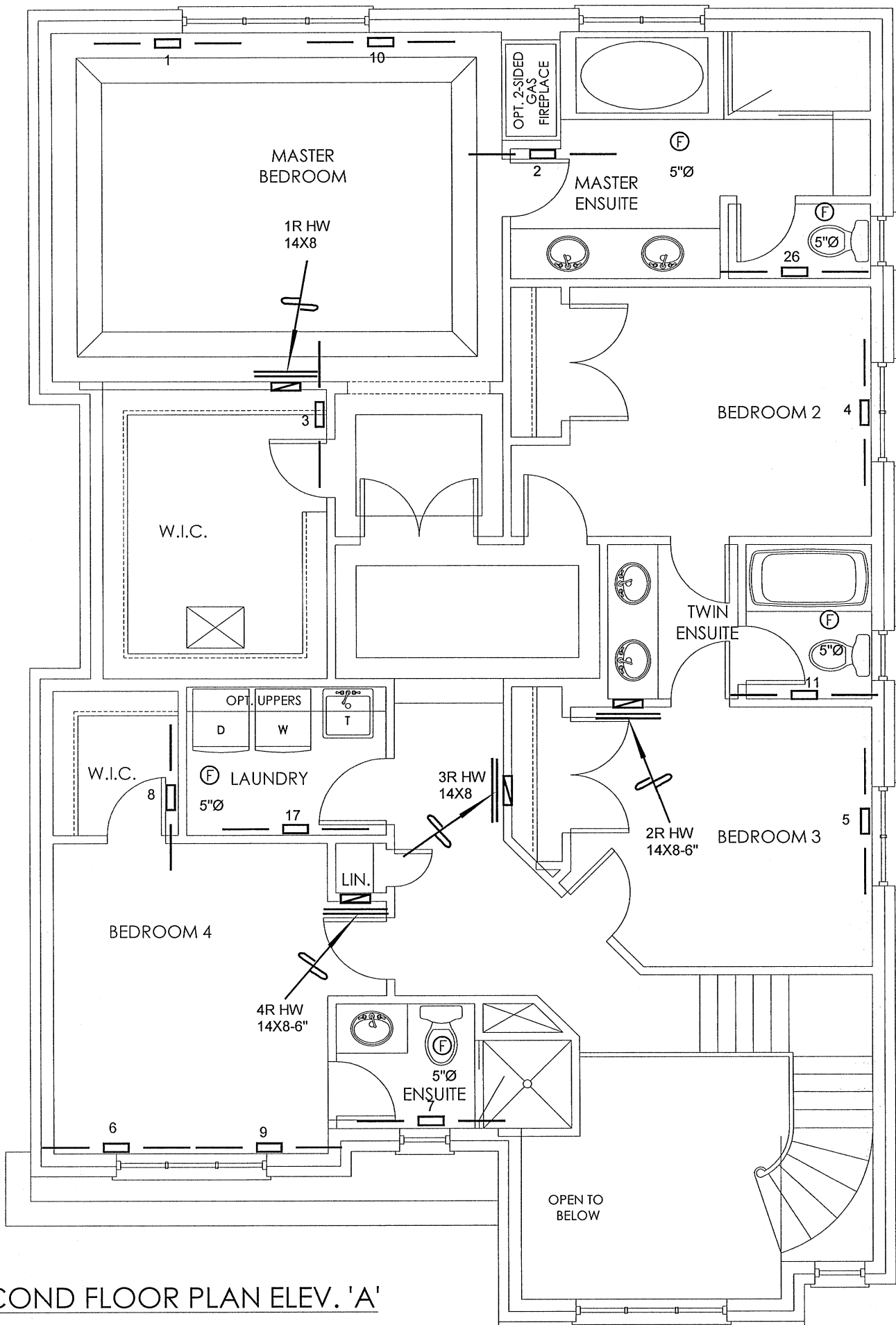
Michael O'Rourke
Michael O'Rourke, BCIN 19669
HVAC DESIGNS LTD.

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 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	
41-4		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.	Scale 3/16" = 1'-0"	BCIN# 19669
2830 sqft			LO#	72720



SECOND FLOOR PLAN ELEV. 'A'

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, BSc 1969
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
GOLD PARK HOMES
Project Name
ENCORE
BRAMPTON, ONTARIO
41-4 2830 sqft

HVACDESIGNS LTD.
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L1S 2E2 Tel. 905.619.2300 - 905.420.5300 Fax 905.619.2375
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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
Date
MAR/2017
Scale
3/16" = 1'-0"
BCIN# 19669
LO# 72720