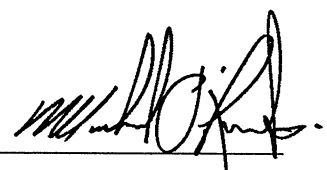


Schedule 1: Designer Information

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 ☐ 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: 38-9 OPT. GROUND 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 L# 72716		WINTER NATURAL AIR CHANGE RATE 0.409		HEAT LOSS $\Delta T^{\circ}F$ 74		CSA-F280-12 SB-12 PACKAGE A1	
OPT. GROUND TYPE 38-9										GFA: 3776		SUMMER NATURAL AIR CHANGE RATE 0.163		HEAT GAIN $\Delta T^{\circ}F$ 16		ENS-3	
ROOM USE EXP. WALL CLG. HT.										BED-4		BATH		ENS-2		REC	
FACTORS										BED-3		FOY		MUD		BED-5	
GRS.WALL AREA										WIR		LAUN		K/T/IFM		DIN	
GLAZING										LIV		LIV		LIV		LIV	
NORTH										EXP. WALL		EXP. WALL		EXP. WALL		EXP. WALL	
EAST										CLG. HT.		CLG. HT.		CLG. HT.		CLG. HT.	
SOUTH										FACTORS		FACTORS		FACTORS		FACTORS	
WEST										GRS.WALL AREA		GRS.WALL AREA		GRS.WALL AREA		GRS.WALL AREA	
SKYLT.										GLAZING		GLAZING		GLAZING		GLAZING	
DOORS										NORTH		NORTH		NORTH		NORTH	
NET EXPOSED WALL										EAST		EAST		EAST		EAST	
NET EXPOSED BSMT WALL ABOVE GR										SOUTH		SOUTH		SOUTH		SOUTH	
EXPOSED CLG										WEST		WEST		WEST		WEST	
NO A TIC EXPOSED CLG										SKYLT.		SKYLT.		SKYLT.		SKYLT.	
EXPOSED FLOOR										DOORS		DOORS		DOORS		DOORS	
BASEMENT/CRAWL HEAT LOSS										NET EXPOSED WALL		NET EXPOSED WALL		NET EXPOSED WALL		NET EXPOSED WALL	
SLAB ON GRADE HEAT LOSS										NET EXPOSED BSMT WALL ABOVE GR		NET EXPOSED BSMT WALL ABOVE GR		NET EXPOSED BSMT WALL ABOVE GR		NET EXPOSED BSMT WALL ABOVE GR	
SUBTOTAL HT LOSS										EXPOSED CLG		EXPOSED CLG		EXPOSED CLG		EXPOSED CLG	
LEVEL FACTOR / MULTIPLIER										NO A TIC EXPOSED CLG		NO A TIC EXPOSED CLG		NO A TIC EXPOSED CLG		NO A TIC EXPOSED CLG	
AIR CHANGE HEAT LOSS										EXPOSED FLOOR		EXPOSED FLOOR		EXPOSED FLOOR		EXPOSED FLOOR	
AIR CHANGE HEAT GAIN										BASEMENT/CRAWL HEAT LOSS		BASEMENT/CRAWL HEAT LOSS		BASEMENT/CRAWL HEAT LOSS		BASEMENT/CRAWL HEAT LOSS	
DUCT LOSS										SLAB ON GRADE HEAT LOSS		SLAB ON GRADE HEAT LOSS		SLAB ON GRADE HEAT LOSS		SLAB ON GRADE HEAT LOSS	
DUCT GAIN										SUBTOTAL HT LOSS		SUBTOTAL HT LOSS		SUBTOTAL HT LOSS		SUBTOTAL HT LOSS	
HEAT GAIN PEOPLE										LEVEL FACTOR / MULTIPLIER		LEVEL FACTOR / MULTIPLIER		LEVEL FACTOR / MULTIPLIER		LEVEL FACTOR / MULTIPLIER	
HEAT GAIN APPLIANCES/LIGHTS										AIR CHANGE HEAT LOSS		AIR CHANGE HEAT LOSS		AIR CHANGE HEAT LOSS		AIR CHANGE HEAT LOSS	
TOTAL HT LOSS BTU/H										AIR CHANGE HEAT GAIN		AIR CHANGE HEAT GAIN		AIR CHANGE HEAT GAIN		AIR CHANGE HEAT GAIN	
TOTAL HT GAIN x 1.3 BTU/H										DUCT LOSS		DUCT LOSS		DUCT LOSS		DUCT LOSS	
										DUCT GAIN		DUCT GAIN		DUCT GAIN		DUCT GAIN	
										HEAT GAIN PEOPLE		HEAT GAIN PEOPLE		HEAT GAIN PEOPLE		HEAT GAIN PEOPLE	
										HEAT GAIN APPLIANCES/LIGHTS		HEAT GAIN APPLIANCES/LIGHTS		HEAT GAIN APPLIANCES/LIGHTS		HEAT GAIN APPLIANCES/LIGHTS	
										TOTAL HT LOSS BTU/H		TOTAL HT LOSS BTU/H		TOTAL HT LOSS BTU/H		TOTAL HT LOSS BTU/H	
										TOTAL HT GAIN x 1.3 BTU/H		TOTAL HT GAIN x 1.3 BTU/H		TOTAL HT GAIN x 1.3 BTU/H		TOTAL HT GAIN x 1.3 BTU/H	

ROOM USE	LIV	DIN	K/T/IFM	LAUN	WIR	FOY	MUD	BED-5	BAS
EXP. WALL	36	14	86	6	4	27	36	29	158
CLG. HT.	10	10	10	10	16	16	10	9	10
FACTORS									
GRS.WALL AREA	360	140	860	60	64	576	270	261	1106
GLAZING	LOSS GAIN	LOSS GAIN	LOSS GAIN	LOSS GAIN	LOSS GAIN	LOSS GAIN	LOSS GAIN	LOSS GAIN	LOSS GAIN
NORTH	0	0	0	0	0	20	414	337	0
EAST	46	953	1953	0	0	55	1140	2335	0
SOUTH	0	0	0	0	0	0	0	0	0
WEST	0	0	0	0	0	0	0	0	0
SKYLT.	20.7	87.5	20.7	0	0	0	0	0	0
DOORS	24.6	5.3	10	0	0	0	0	0	0
NET EXPOSED WALL	4.3	0.9	304	261	56	64	278	60	20
NET EXPOSED BSMT WALL ABOVE GR	3.5	0.8	0	0	0	0	0	0	492
EXPOSED CLG	1.2	0.6	0	114	142	73	0	0	106
NO A TIC EXPOSED CLG	2.7	1.4	0	0	0	0	0	0	0
EXPOSED FLOOR	2.5	0.5	298	740	160	20	50	11	359
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	5442
SUBTOTAL HT LOSS	3260	1264	5573	403	278	4173	1944	1462	7718
SUB TOTAL HT GAIN	2451	732	5002	130	60	3250	544	1075	720
LEVEL FACTOR / MULTIPLIER	0.20	0.31	0.20	0.10	0.20	0.20	0.30	0.30	0.40
AIR CHANGE HEAT LOSS	1014	393	1734	79	87	1298	1964	1476	1.17
AIR CHANGE HEAT GAIN	188	56	383	10	5	249	42	82	9051
DUCT LOSS	427	166	731	48	0	0	0	0	0
DUCT GAIN	325	140	600	75	0	0	0	0	0
HEAT GAIN PEOPLE	0	0	0	0	0	0	0	1	0
HEAT GAIN APPLIANCES/LIGHTS	613	613	613	613	0	0	613	613	0
TOTAL HT LOSS BTU/H	4701	1823	8037	531	365	5471	3908	2938	16769
TOTAL HT GAIN x 1.3 BTU/H	4650	2003	8577	1076	84	4548	1558	2614	1008

SITE NAME: ENCORE				OPT. GROUND				DATE: Mar-17				GFA: 3778				LO# 72716			
BUILDER: GOLD PARK HOMES				TYPE: 3B-9															
HEATING CFM 1525				COOLING CFM 1525				furnace pressure 0.6				furnace filter 0.05				AFUE = 95 %			
TOTAL HEAT LOSS 65,621				TOTAL HEAT GAIN 46,908				a/c coil pressure 0.21				available pressure for s/a & r/a 0.34				INPUT (BTU/H) = 88,000			
AIR FLOW RATE CFM 23.24				AIR FLOW RATE CFM 32.51				plenum pressure s/a 0.18				r/a pressure 0.16				OUTPUT (BTU/H) = 84,000			
								max s/a dif press. loss 0.02				r/a grille press. Loss 0.02							
								min adjusted pressure s/a 0.16				adjusted pressure r/a 0.14							

TYPE: 38-9
SITE NAME: ENCORE

LO # 72716
OPT. GROUND

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	4 @ 10.6 cfm	42.4 cfm
Kitchen & Bathrooms	6 @ 10.6 cfm	63.6 cfm
Other Rooms	7 @ 10.6 cfm	74.2 cfm
Table 9.32.3.A.	TOTAL	222.6 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
More than 5 - Part 6	TOTAL	95.4 cfm

SUPPLEMENTAL VENTILATION CAPACITY		9.32.3.5.
Total Ventilation Capacity	222.6	cfm
Less Principal Ventil. Capacity	139	cfm
Required Supplemental Capacity	83.6	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	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
ENS-2	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	☒ 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:	<i>Michael O'Rourke</i>
HRAI #	001820
Date:	March-17

HEAT LOSS AND GAIN SUMMARY SHEET

MODEL: 38-9	OPT. GROUND	BUILDER: GOLD PARK HOMES
SFQT: 3776	LO# 72716	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)	70

BUILDING DATA

ATTACHMENT:	DETACHED	# OF STORIES (+BASEMENT):	4
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):	41826.0	ASSUMED (Y/N):	Y
INTERNAL SHADING:	BLINDS/CURTAINS	ASSUMED OCCUPANTS:	6
INTERIOR LIGHTING LOAD (Btu/h/ft²):	1.50	DC BRUSHLESS MOTOR (Y/N):	Y
FOUNDATION CONFIGURATION	BCIN_1	DEPTH BELOW GRADE:	7.0 ft
LENGTH: 47.0 ft	WIDTH: 32.0 ft	EXPOSED PERIMETER:	158.0 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	-

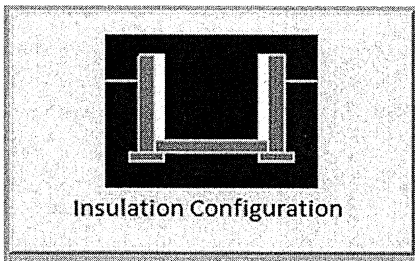
INDIVIDUAL BCIN: 19669

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):	14.3	 Insulation Configuration
Floor Width (m):	9.8	
Exposed Perimeter (m):	0.0	
Wall Height (m):	3.0	
Depth Below Grade (m):	2.1	
Window Area (m ²):	0.6	
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):		1594

TYPE: 38-9
LO# 72716

OPT. GROUND

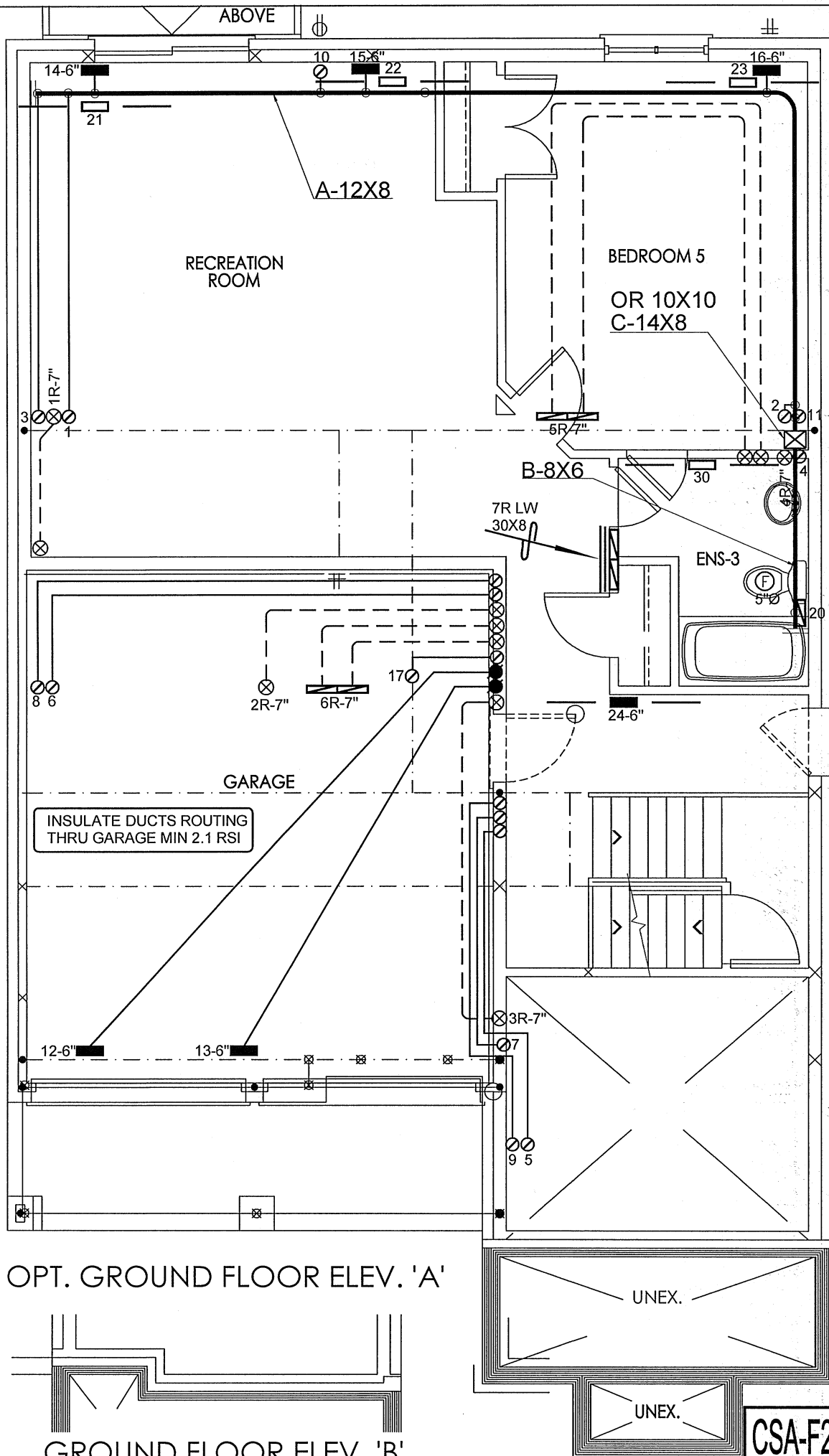
Air Infiltration Residential Load Calculator

Supplemental tool for CAN/CSA-F280

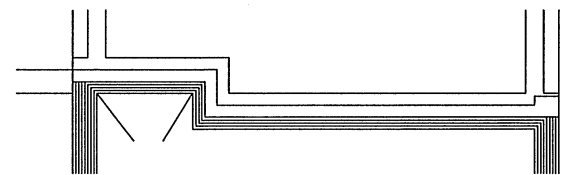
Weather Station Description			
Province:	Ontario		
Region:	Brampton		
Weather Station Location:	Open flat terrain, grass		
Anemometer height (m):	10		
Local Shielding			
Building Site:	Suburban, forest		
Walls:	Heavy		
Flue:	Heavy		
Highest Ceiling Height (m):	9.45		
Building Configuration			
Type:	Detached		
Number of Stories:	Three		
Foundation:	Full		
House Volume (m ³):	1184.4		
Air Leakage/Ventilation			
Air Tightness Type:	Present (1961-) (3.57 ACH)		
Custom BDT Data:	ELA @ 10 Pa.	1578.8 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):	0.409		
Cooling Air Leakage Rate (ACH/H):	0.153		

TYPE: 38-9
LO# 72716

OPT. GROUND



OPT. GROUND FLOOR ELEV. 'A'



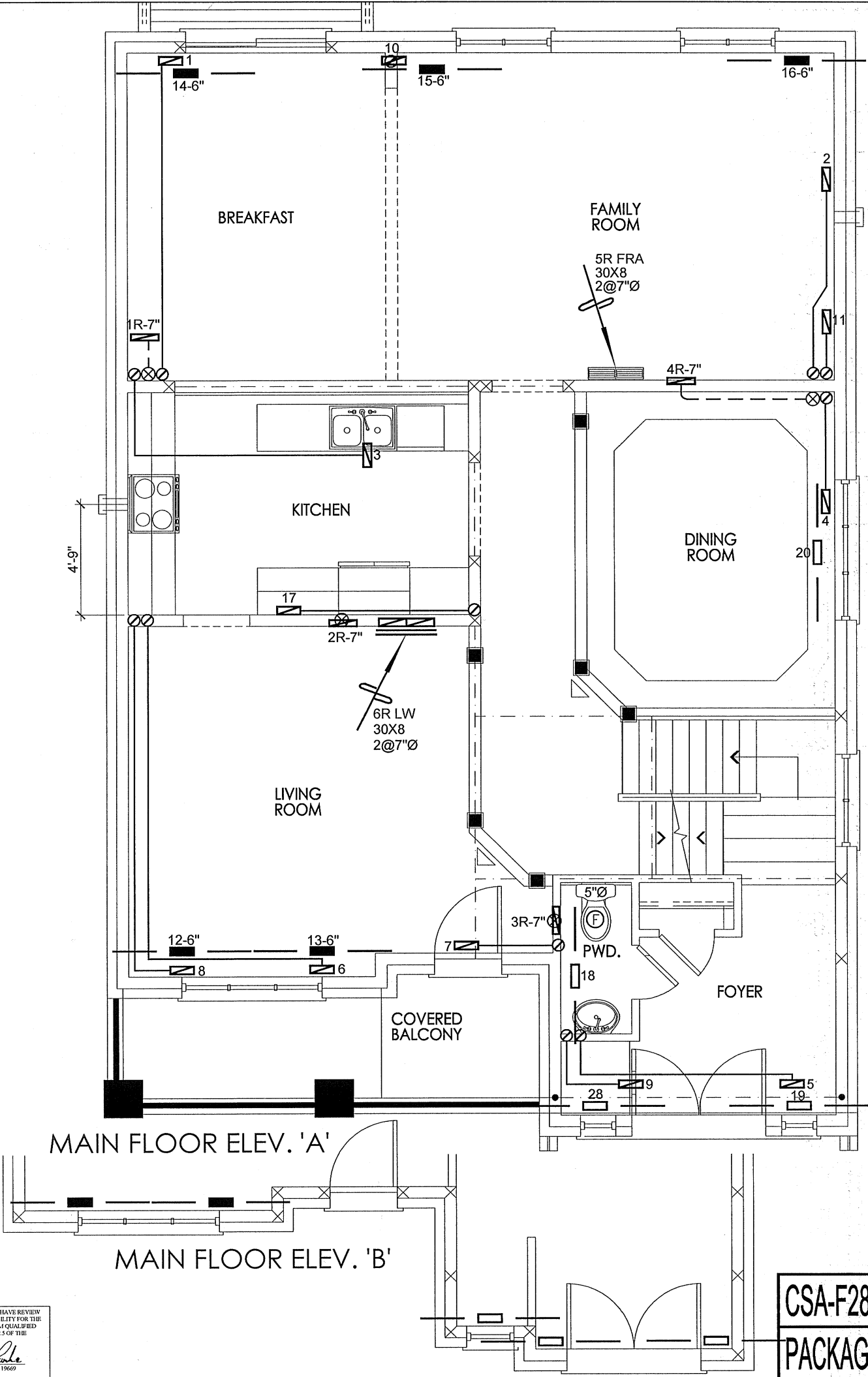
GROUND FLOOR ELEV. 'B'

1. MICHAEL O'DOURKE HAVE REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK AND AM QUALIFIED UNDER DIVISION C. 3.2.5 OF THE BUILDING CODE.
Michael O'Dourke
Michael O'Dourke, 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	

ALL DRAWINGS, CALCULATIONS AND SPECIFICATIONS ARE THE PROPERTY OF HVAC DESIGNS LTD. AND MAY NOT BE REPRODUCED, MODIFIED OR ALTERED WITHOUT EXPRESSED WRITTEN CONSENT. THE DRAWINGS ARE DATED AND USE OF THESE DRAWINGS AFTER ONE YEAR FROM THE DATED NOTED IS NOT AUTHORIZED. CONTRACTOR SHALL CHECK ALL CONDITIONS BEFORE PROCEEDING WITH WORK. LATEST MUNICIPAL APPROVED DRAWINGS ONLY TO BE USED DURING INSTALLATION OF HEATING SYSTEM. HVAC DESIGNS LTD. IS NOT LIABLE FOR ANY CLAIMS ARISING FROM UNAUTHORIZED USE OF THE DRAWINGS OR FROM ANY CHANGES TO ACCEPTED STANDARDS AND/OR THE ONTARIO BUILDING CODE.

Client GOLD PARK HOMES		HVACDESIGNS LTD. 375 Finley Ave, Suite 202 - Ajax, Ontario L1S 2E2 Tel. 905.619.2300 - 905.420.5300 Fax 905.619.2375 Email: mike@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	
OPT. GROUND 38-9		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"	
3776 sqft			BCIN# 19669	
			LO# 72716	



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

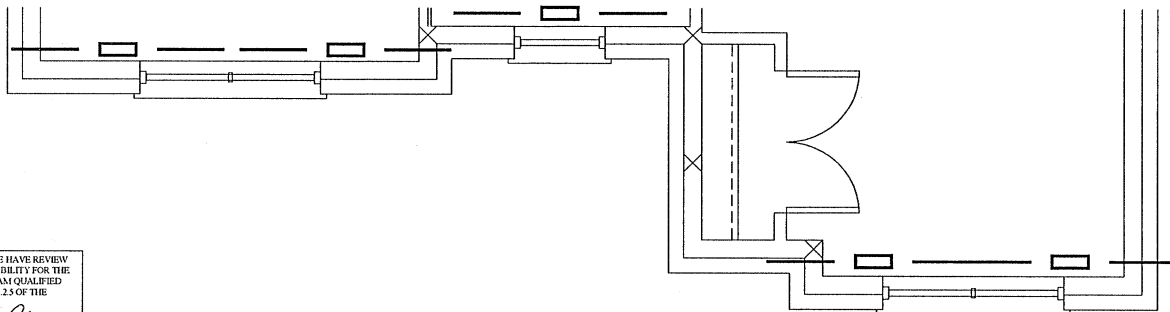
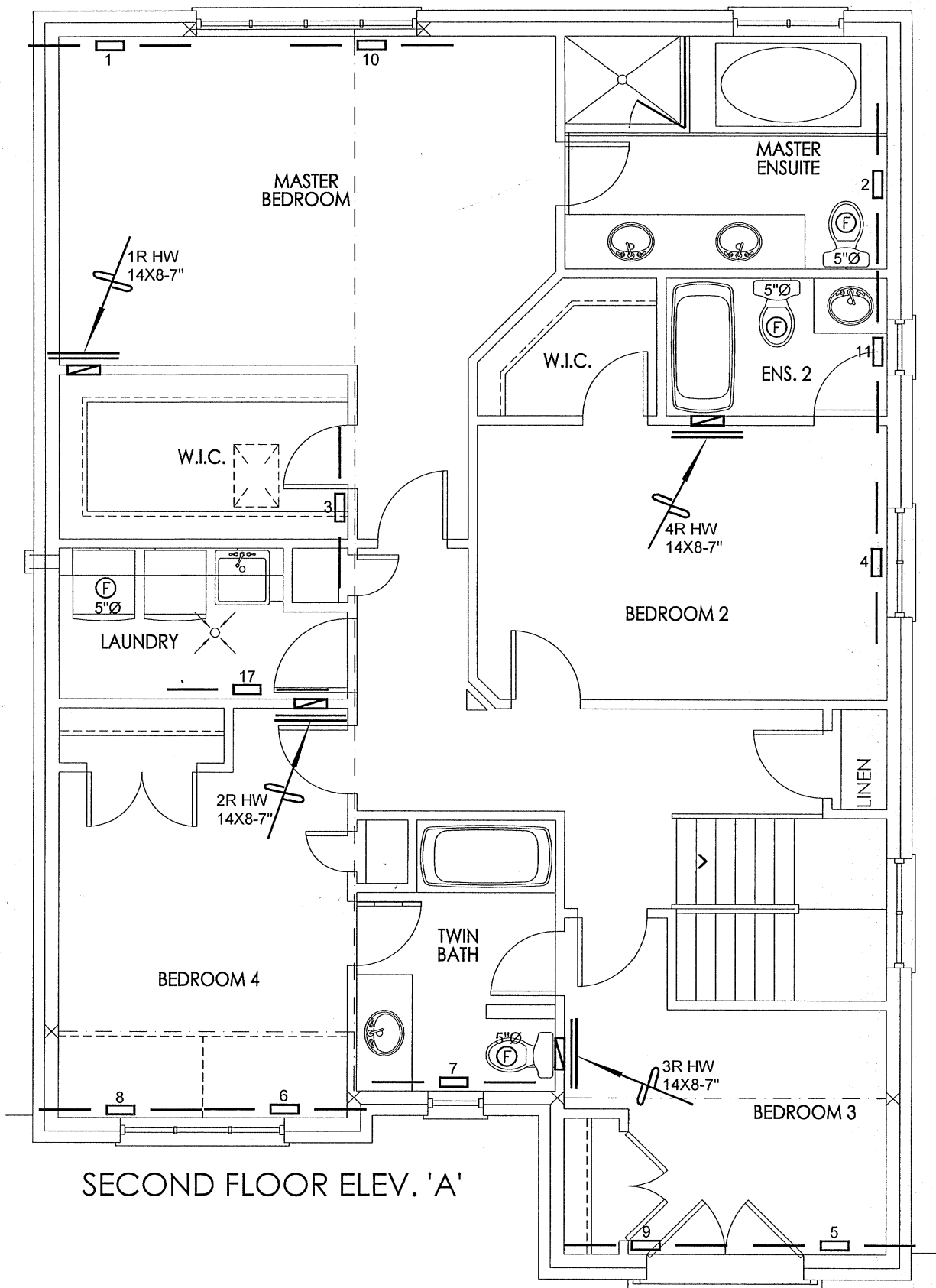
Michael O'Rourke
Michael O'Rourke, BCIN# 19669
HVAC DESIGNS LTD.

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	

ALL DRAWINGS, CALCULATIONS AND SPECIFICATIONS ARE THE PROPERTY OF HVAC DESIGNS LTD.© AND MAY NOT BE REPRODUCED, MODIFIED OR ALTERED WITHOUT EXPRESSED WRITTEN CONSENT. THE DRAWINGS ARE DATED AND USE OF THESE DRAWINGS AFTER ONE YEAR FROM THE DATED NOTED IS NOT AUTHORIZED. CONTRACTOR SHALL CHECK ALL CONDITIONS BEFORE PROCEEDING WITH WORK. LATEST MUNICIPAL APPROVED DRAWINGS ONLY TO BE USED DURING INSTALLATION OF HEATING SYSTEM. HVAC DESIGNS LTD. IS NOT LIABLE FOR ANY CLAIMS ARISING FROM UNAUTHORIZED USE OF THE DRAWINGS OR FROM ANY CHANGES TO ACCEPTED STANDARDS AND/OR THE ONTARIO BUILDING CODE.

Client GOLD PARK HOMES		HVACDESIGNS LTD. 375 Finley Ave, Suite 202 - Ajax, Ontario L1S 2E2 Tel. 905.619.2300 - 905.420.5300 Fax 905.619.2375 Email: mike@hvacdsgns.ca Web: www.hvacdesigns.ca Specializing in Residential Mechanical Design Services	Sheet Title SECOND FLOOR HEATING LAYOUT	
Project Name ENCORE BRAMPTON, ONTARIO			Date MAR/2017	
OPT. GROUND 38-9	3776 sqft	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
			LO#	72716



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		HVACDESIGNS LTD. 375 Finley Ave, Suite 202 - Ajax, Ontario L1S 2E2 Tel. 905.619.2300 - 905.420.5300 Fax 905.619.2375 Email: mike@hvacdesigns.ca Web: www.hvacdesigns.ca Specializing in Residential Mechanical Design Services	Sheet Title THIRD FLOOR HEATING LAYOUT	
Project Name ENCORE BRAMPTON, ONTARIO			Date MAR/2017	
OPT. GROUND 38-9		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"	
3776 sqft			BCIN# 19669	
		LO# 72716		