

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: SD-2 LOTS 19L & 32R Project: ENCORE	
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.			
August 16, 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.

SITE NAME: ENCORE
BUILDER: GOLDPARK HOMES
TYPE: SD-2
DATE: Aug-17
LO# 76557
GFA: 1672
WINTER NATURAL AIR CHANGE RATE 0.336
SUMMER NATURAL AIR CHANGE RATE 0.119
HEAT LOSS AT °F. 74
HEAT GAIN AT °F. 16
CSA-P280-12
SB-12 PACKAGE A1

ROOM USE EXP. WALL CLG. HT.	MBR	ENS	WIC	BED-2	BED-3	BATH		
GRS WALL AREA GLAZING	324	99	0	108	144	260		
FACTORS	LOSS GAIN	LOSS GAIN	LOSS GAIN	LOSS GAIN	LOSS GAIN	LOSS GAIN		
NORTH	0	0	0	0	0	0		
EAST	0	0	0	0	0	0		
SOUTH	21	0	0	30	10	20		
WEST	32	14	0	0	0	0		
SKYLT.	36.4	0	0	0	0	0		
DOORS	24.7	0	0	0	0	0		
NET EXPOSED WALL	271	85	0	78	103	240		
NET EXPOSED BSMT WALL ABOVE GR	4.4	0	0	0	0	0		
EXPOSED CLG	3.5	0	0	0	0	0		
NO ATTIC EXPOSED CLG	1.3	0	0	0	0	0		
EXPOSED FLOOR	2.7	0	0	154	0	48		
BASEMENT/CRAWL HEAT LOSS	2.5	0	0	383	78	129		
SLAB ON GRADE HEAT LOSS	0	0	0	0	0	0		
SUBTOTAL HT LOSS	2650	799	75	1540	1494	1654		
LEVEL FACTOR / MULTIPLIER	0.20	0.24	0.20	0.20	0.24	0.20		
AIR CHANGE HEAT LOSS	630	190	18	366	355	393		
AIR CHANGE HEAT GAIN	186	59	3	121	112	92		
DUCT LOSS	0	0	0	191	0	0		
DUCT GAIN	0	0	0	247	0	0		
HEAT GAIN PEOPLE	2	0	0	1	240	0		
HEAT GAIN APPLIANCES/LIGHTS	604	0	0	604	604	0		
TOTAL HT LOSS BTU/H	3280	989	93	2096	1849	2047		
TOTAL HT GAIN x 1.3 BTU/H	4649	1031	53	3534	3082	1616		

ROOM USE EXP. WALL CLG. HT.	DIN	KTIFM	LAUN	WIR	FOY	BAS		
GRS WALL AREA GLAZING	300	590	0	170	160	933		
FACTORS	LOSS GAIN	LOSS GAIN	LOSS GAIN	LOSS GAIN	LOSS GAIN	LOSS GAIN		
NORTH	0	0	0	0	0	0		
EAST	10	0	0	18	0	4		
SOUTH	39	810	0	374	0	83		
WEST	86	1787	0	0	0	0		
SKYLT.	0	0	0	0	0	0		
DOORS	20	493	0	0	0	0		
NET EXPOSED WALL	251	1094	0	0	51	20		
NET EXPOSED BSMT WALL ABOVE GR	4.4	0	0	0	1257	493		
EXPOSED CLG	3.5	0	0	0	0	0		
NO ATTIC EXPOSED CLG	2.7	0	0	0	0	0		
EXPOSED FLOOR	2.5	0	0	0	0	0		
BASEMENT/CRAWL HEAT LOSS	0	0	0	0	0	0		
SLAB ON GRADE HEAT LOSS	0	0	0	0	0	0		
SUBTOTAL HT LOSS	2112	5029	220	1036	1732	3022		
LEVEL FACTOR / MULTIPLIER	0.30	0.30	0.20	0.30	0.30	0.50		
AIR CHANGE HEAT LOSS	641	1526	52	315	526	106		
AIR CHANGE HEAT GAIN	131	409	6	71	28	64		
DUCT LOSS	0	0	27	0	0	0		
DUCT GAIN	0	0	69	0	0	0		
HEAT GAIN PEOPLE	0	0	0	0	0	0		
HEAT GAIN APPLIANCES/LIGHTS	604	604	604	0	0	0		
TOTAL HT LOSS BTU/H	2753	6555	299	1351	2258	9736		
TOTAL HT GAIN x 1.3 BTU/H	3084	7964	982	1254	492	1123		

TOTAL HEAT GAIN BTU/H: 29405 TONS: 2.46 LOSS DUE TO VENTILATION LOAD BTU/H: 2785 STRUCTURAL HEAT LOSS: 33306 TOTAL COMBINED HEAT LOSS BTU/H: 36091

SITE NAME: ENCORE
BUILDER: GOLD PARK HOMES

DATE: Aug-17

LOTS 19L & 32R

GFA: 1672 LO# 75557

HEATING CFM 950 COOLING CFM 950
TOTAL HEAT LOSS 33,306 TOTAL HEAT GAIN 28,842
AIR FLOW RATE CFM 28.52 AIR FLOW RATE CFM 32.94

EL296UH045XE36B

FAN SPEED 45

LOW 0

MEDIUM 650

HIGH 1060

AFUE = 96 %

INPUT (BTU/H) = 44,000

OUTPUT (BTU/H) = 43,000

DESIGN CFM = 950

CFM @ 0.5" E.S.P.

TEMPERATURE RISE 42 °F

RUN COUNT	4th	3rd	2nd	1st	Bas
S/A	0	0	9	6	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	8	10	13	14	15	16	17	18	19	22	23	24
ROOM NAME	MBR	ENS	WIC	BED-2	BED-3	BATH	BED-2	BED-2	MBR	DIN	KT/FM	KT/FM	KT/FM	LAUN	W/R	FOY	BAS	BAS	BAS
RM LOSS MBH	1.64	0.99	0.09	1.05	1.85	2.05	1.05	1.64	1.64	2.75	2.19	2.19	2.19	0.30	1.35	2.26	3.25	3.25	3.25
CFM PER RUN HEAT	47	28	3	30	53	58	30	47	47	79	62	62	62	9	39	64	93	93	93
RM GAIN MBH	2.32	1.03	0.05	1.77	3.06	1.62	1.77	2.32	2.32	3.08	2.65	2.65	2.65	0.98	1.25	0.49	0.37	0.37	0.37
CFM PER RUN COOLING	77	34	2	58	101	53	58	77	77	102	87	87	87	32	41	16	12	12	12
ADJUSTED PRESSURE	0.17	0.17	0.17	0.17	0.16	0.17	0.17	0.17	0.17	0.16	0.16	0.16	0.16	0.17	0.17	0.17	0.16	0.16	0.16
EQUIVALENT LENGTH	49	35	38	35	52	60	37	55	55	35	19	25	25	34	35	34	31	24	36
TOTAL EFFECTIVE LENGTH	150	130	140	160	160	150	170	170	170	160	130	140	140	150	140	160	170	120	150
ADJUSTED PRESSURE	0.09	0.1	0.1	0.09	0.08	0.08	0.08	0.08	0.08	0.08	0.11	0.1	0.1	0.09	0.1	0.09	0.08	0.11	0.09
ROUND DUCT SIZE	5	4	4	5	6	5	5	5	5	6	5	5	5	4	4	5	6	5	6
HEATING VELOCITY (ft/min)	345	321	34	220	270	426	220	345	345	403	455	455	455	103	447	470	474	683	474
COOLING VELOCITY (ft/min)	565	390	23	426	515	389	426	565	565	520	639	639	639	367	470	117	61	88	61
OUTLET GRILL SIZE	3X10	3X10	3X10	3X10	4X10	3X10	3X10	3X10	3X10	4X10	3X10	3X10	3X10	3X10	3X10	3X10	4X10	3X10	4X10
TRUNK	A	A	C	C	C	B	C	A	A	C	A	A	A	C	B	B	A	C	B

RUN #	ROOM NAME	RM LOSS MBH	CFM PER RUN HEAT	CFM PER RUN COOLING	ADJUSTED PRESSURE	EQUIVALENT LENGTH	ADJUSTED PRESSURE	ROUND DUCT SIZE	HEATING VELOCITY (ft/min)	COOLING VELOCITY (ft/min)	OUTLET GRILL SIZE	TRUNK
TRUNK A	401	0.08	10	12	0.08	10	0.08	10	0.08	10	12	0.08
TRUNK B	254	0.08	8	8	0.08	8	0.08	8	0.08	8	8	0.08
TRUNK C	551	0.08	11.2	14	0.08	11.2	0.08	11.2	0.08	11.2	14	0.08
TRUNK D	0	0.00	0	0	0.00	0	0.00	0	0.00	0	0	0.00
TRUNK E	0	0.00	0	0	0.00	0	0.00	0	0.00	0	0	0.00
TRUNK F	0	0.00	0	0	0.00	0	0.00	0	0.00	0	0	0.00

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)	RETURN AIR TRUNK SIZE	TRUNK CFM	STATIC PRESS	ROUND DUCT	RECT DUCT	VELOCITY (ft/min)
TRUNK A	401	0.08	10	12	0.08	10	0.08	10	0.08	10	12	0.08	0.06	0	0	0.06
TRUNK B	254	0.08	8	8	0.08	8	0.08	8	0.08	8	8	0.08	0.06	0	0	0.06
TRUNK C	551	0.08	11.2	14	0.08	11.2	0.08	11.2	0.08	11.2	14	0.08	0.06	0	0	0.06
TRUNK D	0	0.00	0	0	0.00	0	0.00	0	0.00	0	0	0.00	0.06	0	0	0.06
TRUNK E	0	0.00	0	0	0.00	0	0.00	0	0.00	0	0	0.00	0.06	0	0	0.06
TRUNK F	0	0.00	0	0	0.00	0	0.00	0	0.00	0	0	0.00	0.06	0	0	0.06
RETURN AIR #	1	2	3	4	0	0	0	0	0	0	0	950	0.06	0	0	0.06
AIR VOLUME	120	120	120	455	0	0	0	0	0	0	0	0	0.06	0	0	0.06
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	0.06	0	0	0.06
ACTUAL DUCT LGH	58	32	32	27	1	1	1	1	1	1	1	1	0.06	0	0	0.06
EQUIVALENT LENGTH	185	175	175	160	0	0	0	0	0	0	0	0	0.06	0	0	0.06
TOTAL EFFECTIVE LENGTH	243	207	207	187	0	0	0	0	0	0	0	0	0.06	0	0	0.06
ADJUSTED PRESSURE	0.06	0.07	0.07	0.08	0	0	0	0	0	0	0	0	0.06	0	0	0.06
ROUND DUCT SIZE	6.8	6.6	6.6	10.4	0	0	0	0	0	0	0	0	0.06	0	0	0.06
INLET GRILL SIZE	8	8	8	8	0	0	0	0	0	0	0	0	0.06	0	0	0.06
INLET GRILL SIZE	14	14	14	30	0	0	0	0	0	0	0	0	0.06	0	0	0.06

TYPE: SD-2
SITE NAME: ENCORE

LO # 75557
LOTS 19L & 32R

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
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: VANE 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
W/R	QTXEN050C	50	☒ 0.3

HEAT RECOVERY VENTILATOR		9.32.3.11.
Model: VANE 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:	August-17

HEAT LOSS AND GAIN SUMMARY SHEET

MODEL: SD-2	LOTS 19L & 32R	BUILDER: GOLD PARK HOMES
SFQT: 1672	LO# 75557	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)	71

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):	22469.0	ASSUMED (Y/N):	Y
INTERNAL SHADING:	BLINDS/CURTAINS	ASSUMED OCCUPANTS:	4
INTERIOR LIGHTING LOAD (Btu/h/ft²):	1.50	DC BRUSHLESS MOTOR (Y/N):	Y
FOUNDATION CONFIGURATION	BCIN_1	DEPTH BELOW GRADE:	6.0 ft
LENGTH: 42.0 ft	WIDTH: 25.0 ft	EXPOSED PERIMETER:	91.0 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	-

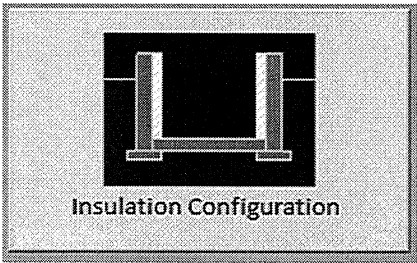
INDIVIDUAL BCIN: 19669

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):	12.8	 Insulation Configuration
Floor Width (m):	7.6	
Exposed Perimeter (m):	27.7	
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):		885

TYPE: SD-2
LO# 75557

LOTS 19L & 32R

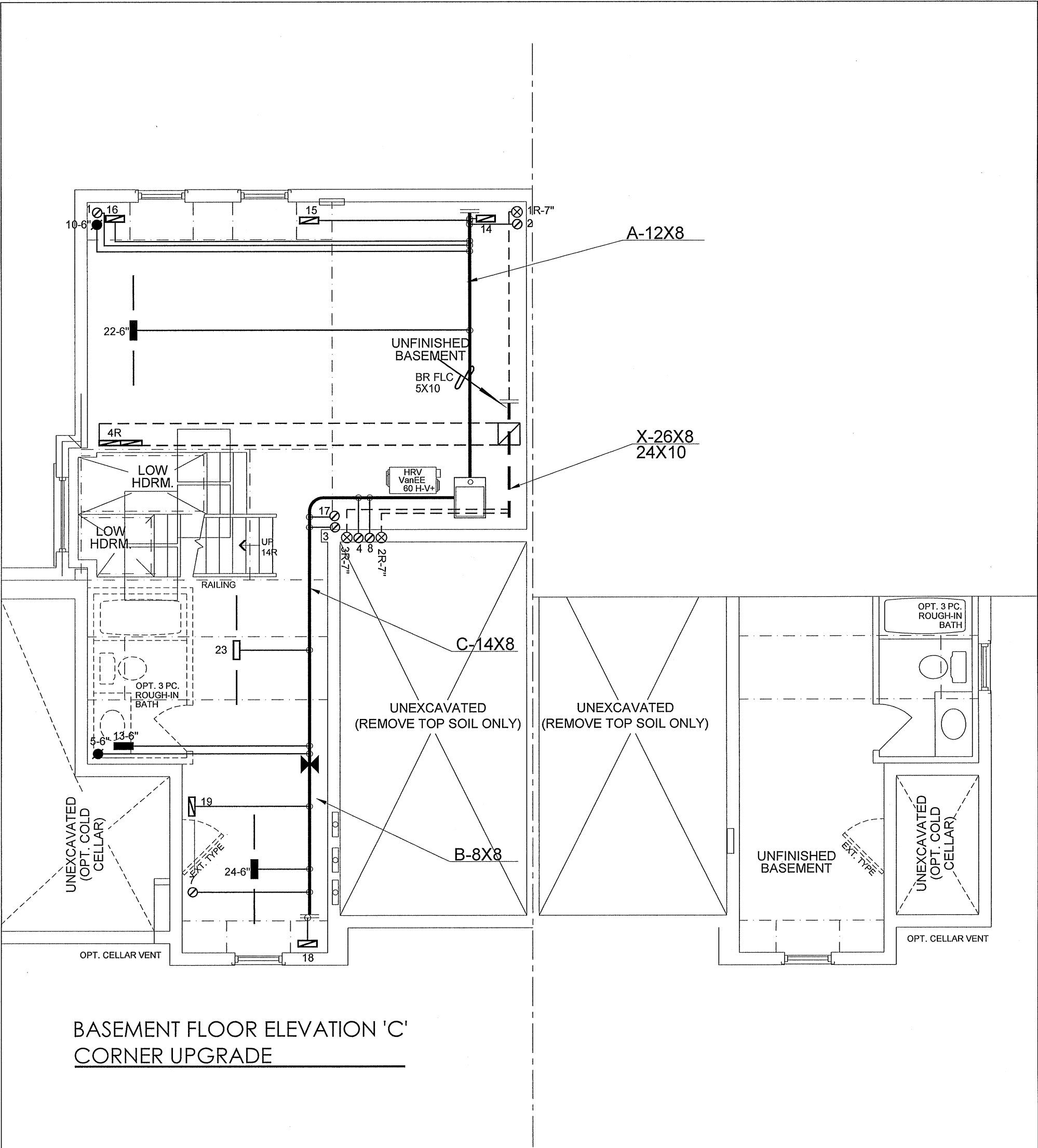
Air Infiltration Residential Load Calculator

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):	636.3			
Air Leakage/Ventilation				
Air Tightness Type:	Present (1961-) (3.57 ACH)			
Custom BDT Data:	ELA @ 10 Pa.	848.1 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	#4
Diameter (mm):	0	0	0	0
Natural Infiltration Rates				
Heating Air Leakage Rate (ACH/H):	0.336			
Cooling Air Leakage Rate (ACH/H):	0.119			

TYPE: SD-2
LO# 75557

LOTS 19L & 32R



BASEMENT FLOOR ELEVATION 'C'
CORNER UPGRADE

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.

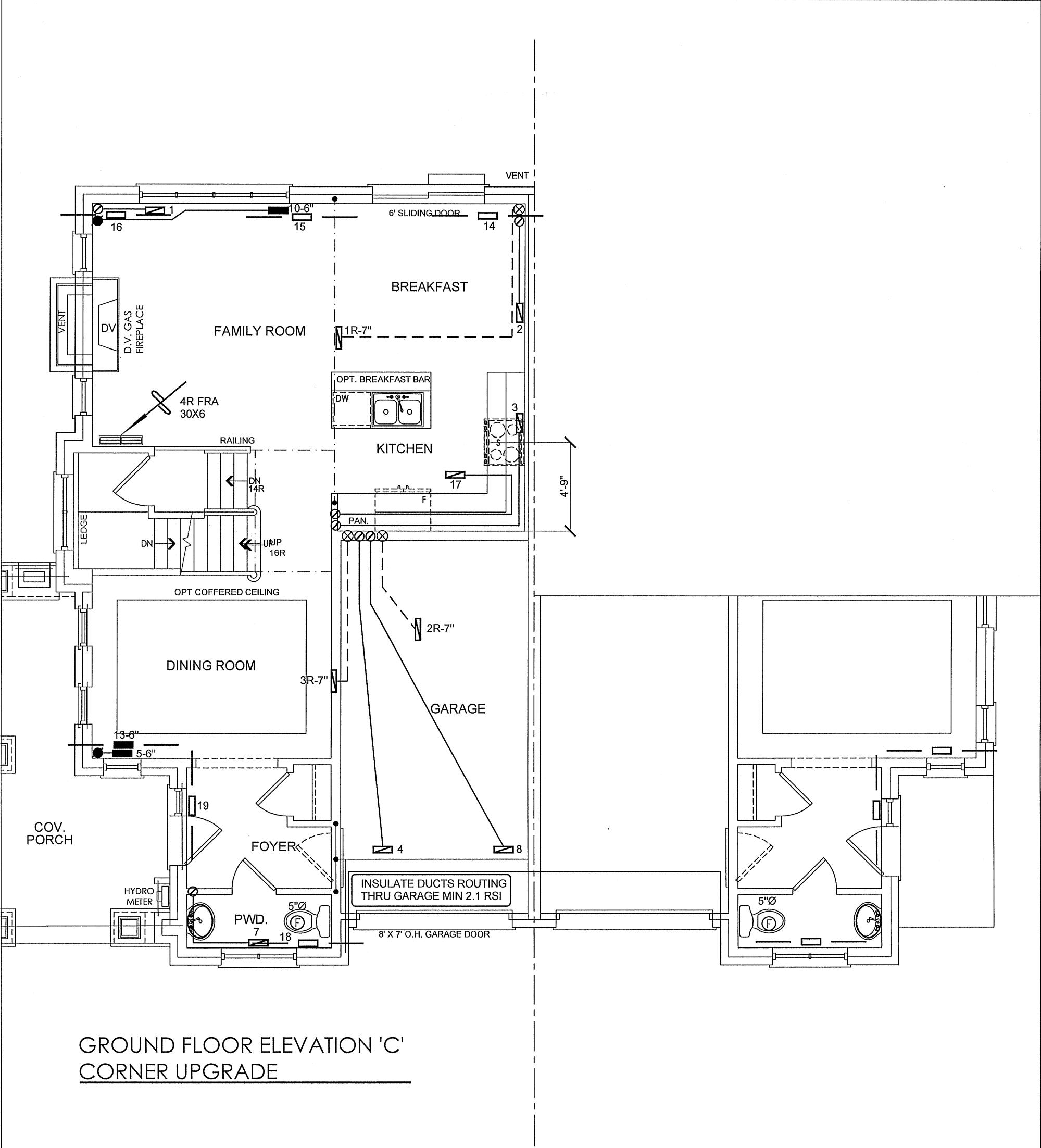
Michael O'Rourke
Michael O'Rourke, BCIN# 19669
HVAC DESIGNS LTD.

19L & 32R
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 36091 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	9	3	3	Date	
ENCORE BRAMPTON, ONTARIO		INPUT 44 MBTU/H	1ST FLOOR	6	1	2	AUG/2017	
		OUTPUT 43 MBTU/H	BASEMENT	3	1	0	Scale	
	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				3/16" = 1'-0"		
	FAN SPEED 950 cfm @ 0.6" w.c.					BCIN# 19669		
SD-2 - 19L & 32R 1655 sqft						LO#	75557	



GROUND FLOOR ELEVATION 'C'
CORNER UPGRADE

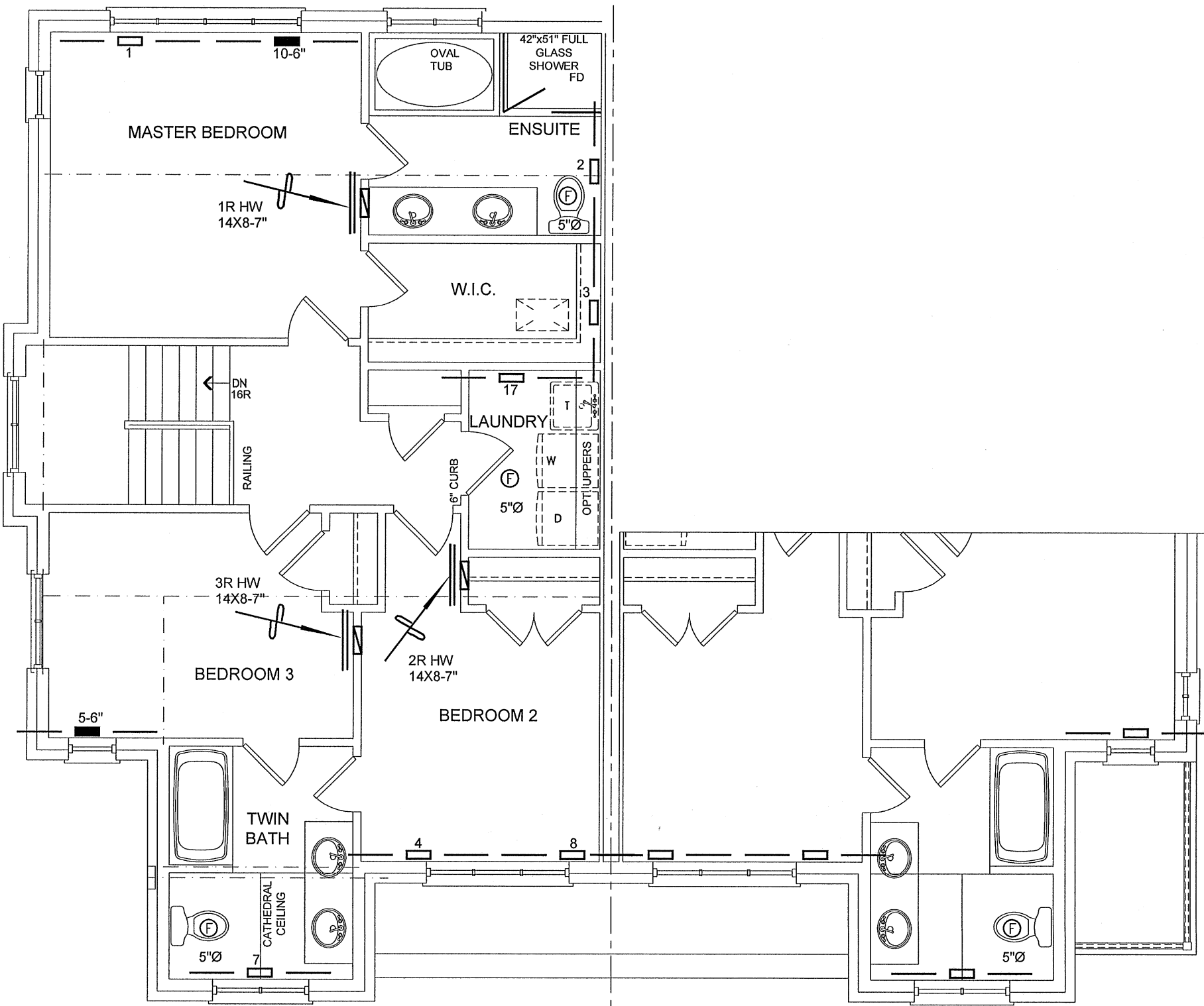
I MICHAEL O'ROURKE HAVE REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK AND AM QUALIFIED UNDER DIVISION C.3.2.5 OF THE BUILDING CODE.
Michael O'Rourke
Michael O'Rourke, BCIN# 19669
HVAC DESIGNS LTD.

19L & 32R
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 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 FIRST FLOOR HEATING LAYOUT	
Project Name ENCORE BRAMPTON, ONTARIO			Date AUG/2017	
SD-2 - 19L & 32R 1655 sqft			Scale 3/16" = 1'-0"	
			BCIN# 19669	
			LO#	75557



SECOND FLOOR ELEVATION 'C'
CORNER UPGRADE

I MICHAEL O'ROURKE HAVE REVIEW
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.

19L & 32R
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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GOLD PARK HOMES			SECOND FLOOR	
Project Name			HEATING	
ENCORE			LAYOUT	
BRAMPTON, ONTARIO			Date	AUG/2017
		Scale	3/16" = 1'-0"	
		BCIN# 19669		
SD-2 - 19L & 32R 1655 sqft		LO#	75557	