

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: 38-11 THE SCHUMANN Project: ENCORE 2	
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.				
October 17, 2019				
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.

Application for a Permit Construct or Demolish – Effective January 1, 2015

ROOM USE	ROOM USE	FACTORS	FACTORS	DIN	KT/IFM	LIV	LAUN	WIR	FOY	MUD	BAS
EXP. WALL	EXP. WALL	CLG. HT.	CLG. HT.	LOSS	LOSS	LOSS	LOSS	LOSS	LOSS	LOSS	LOSS
CLG. HT.	CLG. HT.	CLG. HT.	CLG. HT.	CLG. HT.	CLG. HT.	CLG. HT.	CLG. HT.	CLG. HT.	CLG. HT.	CLG. HT.	CLG. HT.
GRSWALL AREA	GRSWALL AREA	LOSS	GAIN	190	690	430	126	48	288	252	1092
GLAZING	GLAZING	20.8	14.9	0	0	0	0	0	0	0	0
NORTH	NORTH	20.8	14.9	0	0	0	0	0	0	0	0
EAST	EAST	20.8	39.1	0	0	0	0	0	0	0	0
SOUTH	SOUTH	20.8	23.3	30	623	700	24	499	560	0	83
WEST	WEST	20.8	39.1	0	0	0	0	0	0	0	167
SKYL.T.	SKYL.T.	36.4	100.7	0	0	0	0	0	0	0	145
DOORS	DOORS	24.7	3.7	0	0	0	0	0	0	0	163
NET EXPOSED WALL	NET EXPOSED WALL	4.4	0.5	160	697	103	374	2523	374	386	1918
NET EXPOSED BSMY WALL ABOVE GR	NET EXPOSED BSMY WALL ABOVE GR	3.5	0.5	0	0	0	0	0	0	0	284
EXPOSED CLG	EXPOSED CLG	1.3	0.6	0	0	0	0	0	0	0	0
NO ATTIC EXPOSED CLG	NO ATTIC EXPOSED CLG	2.7	1.2	0	0	0	0	0	0	0	0
EXPOSED FLOOR	EXPOSED FLOOR	2.5	0.4	0	0	0	0	0	0	0	0
BASEMENT/CRAWL	BASEMENT/CRAWL	HEAT LOSS		0	0	0	0	0	0	0	0
SLAB ON GRADE	SLAB ON GRADE	HEAT LOSS		0	0	0	0	0	0	0	0
SUBTOTAL HT LOSS	SUBTOTAL HT LOSS			1320	4829	2673	1113	209	2209	1552	8614
SUB TOTAL HT GAIN	SUB TOTAL HT GAIN			803	4720	882	702	31	327	244	604
LEVEL FACTOR / MULTIPLIER	LEVEL FACTOR / MULTIPLIER			0.30	0.41	0.30	0.28	0.30	0.41	0.30	0.50
AIR CHANGE HEAT LOSS	AIR CHANGE HEAT LOSS			537	1962	1086	306	85	898	631	1.01
AIR CHANGE HEAT GAIN	AIR CHANGE HEAT GAIN			55	321	60	48	2	22	17	8665
DUCT LOSS	DUCT LOSS			0	0	0	0	0	0	0	41
DUCT GAIN	DUCT GAIN			0	0	0	0	0	0	0	0
HEAT GAIN PEOPLE	HEAT GAIN PEOPLE	240		0	0	0	0	0	0	0	0
HEAT GAIN APPLIANCES/LIGHTS	HEAT GAIN APPLIANCES/LIGHTS			686	686	686	686	0	0	0	0
TOTAL HT LOSS	TOTAL HT LOSS	BTU/H		1857	6791	3760	1420	294	3106	2183	17279
TOTAL HT GAIN x 1.3 BTU/H	TOTAL HT GAIN x 1.3 BTU/H			2007	7445	2117	1866	43	455	339	800

TOTAL HEAT GAIN BTU/H:	31206	TONS: 2.60	LOSS DUE TO VENTILATION LOAD BTU/H: 1993	STRUCTURAL HEAT LOSS: 61776	TOTAL COMBINED HEAT LOSS BTU/H: 53369
					035

REVIEW AND TAKE RESPONSIBILITY FOR THE DESIGN WORK AND AM QUALIFIED IN THE APPROPRIATE CATEGORY AS AN "OTHER DESIGNER" UNDER DIVISION C, 3.2.5 OF THE BUILDING CODE.

Michael O'Rourke

MICHAEL O'ROURKE
INDIVIDUAL BCIN: 19659

SITE NAME: ENCORE 2
BUILDER: GOLD PARK HOMES

TYPE: 38-11 THE SCHUMANN

DATE: Oct-19

GFA: 2995 LO# 84184

HEATING CFM 985
TOTAL HEAT LOSS 51,776
AIR FLOW RATE CFM 19.02

COOLING CFM 985
TOTAL HEAT GAIN 30,970
AIR FLOW RATE CFM 31.8

LENNOX
EL190UH070XE36B 70
FAN SPEED 0
LOW 0
MEDIUM 985
HIGH 1110
HIGH 1275

AFUE = 96 %
INPUT (BTU/H) = 66,000
OUTPUT (BTU/H) = 63,900
DESIGN CFM = 985
CFM @ .8" E.S.P.

ROOM NAME	1st	2nd	3rd	4th
RM A	0	0	0	0
RM B	0	0	0	0
RM C	0	0	0	0
RM D	0	0	0	0
RM E	0	0	0	0
RM F	0	0	0	0
RM G	0	0	0	0
RM H	0	0	0	0
RM I	0	0	0	0
RM J	0	0	0	0
RM K	0	0	0	0
RM L	0	0	0	0
RM M	0	0	0	0
RM N	0	0	0	0
RM O	0	0	0	0
RM P	0	0	0	0
RM Q	0	0	0	0
RM R	0	0	0	0
RM S	0	0	0	0
RM T	0	0	0	0
RM U	0	0	0	0
RM V	0	0	0	0
RM W	0	0	0	0
RM X	0	0	0	0
RM Y	0	0	0	0
RM Z	0	0	0	0

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

All S/A runs 5'x2 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 A	1.46	1.89	0.58	1.47	1.65	1.28	0.57	0.65	1.65	1.46	0.48	2.26	1.86	2.26	2.26	3.76	1.42	0.29	3.11	2.18	4.32	4.32	4.32	4.32
RM B	2.8	36	11	28	31	24	11	12	31	28	9	43	35	43	43	72	27	6	59	42	82	82	82	82
RM C	60	41	4	60	66	53	9	16	66	60	4	79	64	79	79	67	59	1	14	11	7	7	7	7
RM D	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	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.16	0.16	0.16	0.16
RM E	43	43	40	84	58	37	68	46	59	36	48	16	36	25	39	58	49	61	62	21	51	32	36	14
RM F	200	130	160	180	120	170	220	91	130	190	150	120	120	120	120	140	170	150	130	90	150	130	110	100
RM G	243	173	200	264	178	207	288	137	189	226	198	166	156	145	159	198	211	211	192	111	201	162	146	114
RM H	0.07	0.1	0.09	0.07	0.1	0.08	0.06	0.13	0.09	0.08	0.09	0.1	0.11	0.12	0.11	0.09	0.08	0.08	0.09	0.15	0.08	0.1	0.11	0.14
RM I	5	4	4	5	5	6	4	4	5	5	4	6	6	6	6	5	5	4	5	4	6	6	6	6
RM J	206	413	126	206	228	122	126	138	228	206	103	219	178	219	219	529	198	69	433	482	418	418	418	418
RM K	441	470	46	441	485	270	103	184	485	441	46	403	326	403	403	492	433	11	103	126	36	36	36	36
RM L	3X10	3X10	3X10	3X10	3X10	4X10	3X10	3X10	3X10	3X10	3X10	4X10	4X10	4X10	4X10	3X10	3X10	3X10	3X10	3X10	4X10	4X10	4X10	4X10
RM M	D	C	B	A	D	D	A	D	D	D	D	E	B	D	C	A	B	A	A	E	A	B	C	E

ROOM NAME	25	26
RM A	0.48	1.47
RM B	0.11	1.89
RM C	0.17	0.17
RM D	43	80
RM E	180	180
RM F	223	260
RM G	0.08	0.07
RM H	4	5
RM I	103	206
RM J	46	441
RM K	3X10	3X10
RM L	D	A

ROOM NAME	25	26
RM A	0.48	1.47
RM B	0.11	1.89
RM C	0.17	0.17
RM D	43	80
RM E	180	180
RM F	223	260
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RM H	4	5
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RM L	D	A

TYPE: 38-11
SITE NAME: ENCORE 2

LO # 84184
THE SCHUMANN

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	4 @ 10.6 cfm	42.4 cfm
Table 9.32.3.A.	TOTAL	169.6 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
TOTAL		79.5 cfm

SUPPLEMENTAL VENTILATION CAPACITY		9.32.3.5.
Total Ventilation Capacity	169.6	cfm
Less Principal Ventil. Capacity	79.5	cfm
Required Supplemental Capacity	90.1	cfm

PRINCIPAL EXHAUST FAN CAPACITY	
Model: VANEE 65H	Location: BSMT
79.5 cfm	3.0 sones
☒ HVI Approved	

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

SUPPLEMENTAL FANS		PANASONIC	
Location	Model	cfm	HVI
ENS	FV-05-11VK1	50	☒
ENS-2	FV-05-11VK1	50	☒
T-BATH	FV-05-11VK1	50	☒
W/R	FV-05-11VK1	50	☒

HEAT RECOVERY VENTILATOR		9.32.3.11.
Model: VANEE 65H		
155 cfm high	64 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:	October-19

CSA F280-12 Residential Heat Loss and Heat Gain Calculations																																																																																	
Formula Sheet (For Air Leakage / Ventilation Calculation)																																																																																	
LO#: 84184		Model: 38-11		Builder: GOLD PARK HOMES		Date: 10/17/2019																																																																											
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5.2.3.1 Heat Loss due to Air Leakage				6.2.6 Sensible Gain due to Air Leakage																																																																													
$HL_{air-b} = LR_{air-b} \times \frac{V_b}{3.6} \times DTD_h \times 1.2$				$HG_{salb} = LR_{air-c} \times \frac{V_b}{3.6} \times DTD_c \times 1.2$																																																																													
0.325 x 316.24 x 41 °C x 1.2 = 5079 W				= 0.106 x 316.24 x 6 °C x 1.2 = 245 W																																																																													
= 17329 Btu/h				= 835 Btu/h																																																																													
5.2.3.2 Heat Loss due to Mechanical Ventilation				6.2.7 Sensible Heat Gain due to Ventilation																																																																													
$HL_{vair-b} = PVC \times DTD_h \times 1.08 \times (1 - E)$				$HL_{vair-b} = PVC \times DTD_h \times 1.08 \times (1 - E)$																																																																													
80 CFM x 74 °F x 1.08 x 0.25 = 1593 Btu/h				80 CFM x 11 °F x 1.08 x 0.25 = 236 Btu/h																																																																													
5.2.3.3 Calculation of Air Change Heat Loss for Each Room (Floor Multiplier Section)																																																																																	
$HL_{airr} = Level Factor \times HL_{airbv} \times \{(HL_{agcr} + HL_{bgcr}) \div (HL_{agcleve} + HL_{bgcleve})\}$																																																																																	
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4	0		0	0.000																																																																													
5	0		0	0.000																																																																													
*HLairbv = Air leakage heat loss + ventilation heat loss **For a balanced or supply only ventilation system HLairrv = 0																																																																																	

HEAT LOSS AND GAIN SUMMARY SHEET

MODEL: 38-11	THE SCHUMANN	BUILDER: GOLD PARK HOMES
SFQT: 2995	LO# 84184	SITE: ENCORE 2

DESIGN ASSUMPTIONS

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

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):	40205.0	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: 59.0 ft	WIDTH: 32.0 ft	EXPOSED PERIMETER:	182.0 ft

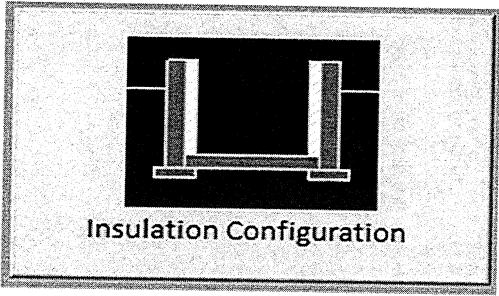
2012 OBC - COMPLIANCE PACKAGE		
Component	Compliance Package A1	
	Nominal	Min. Eff.
Ceiling with Attic Space Minimum RSI (R)-Value	60	59.22
Ceiling Without Attic Space Minimum RSI (R)-Value	31	27.65
Exposed Floor Minimum RSI (R)-Value	31	29.80
Walls Above Grade Minimum RSI (R)-Value	22	17.03
Basement 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):	18.0	 Insulation Configuration
Floor Width (m):	9.8	
Exposed Perimeter (m):	0.0	
Wall Height (m):	2.7	
Depth Below Grade (m):	1.83	
Window Area (m ²):	1.0	
Door Area (m ²):	0.0	
Radiant Slab		
Heated Fraction of the Slab:	0	
Fluid Temperature (°C):	33	
Design Months		
Heating Month	1	
Foundation Loads		
Heating Load (Watts):		1895

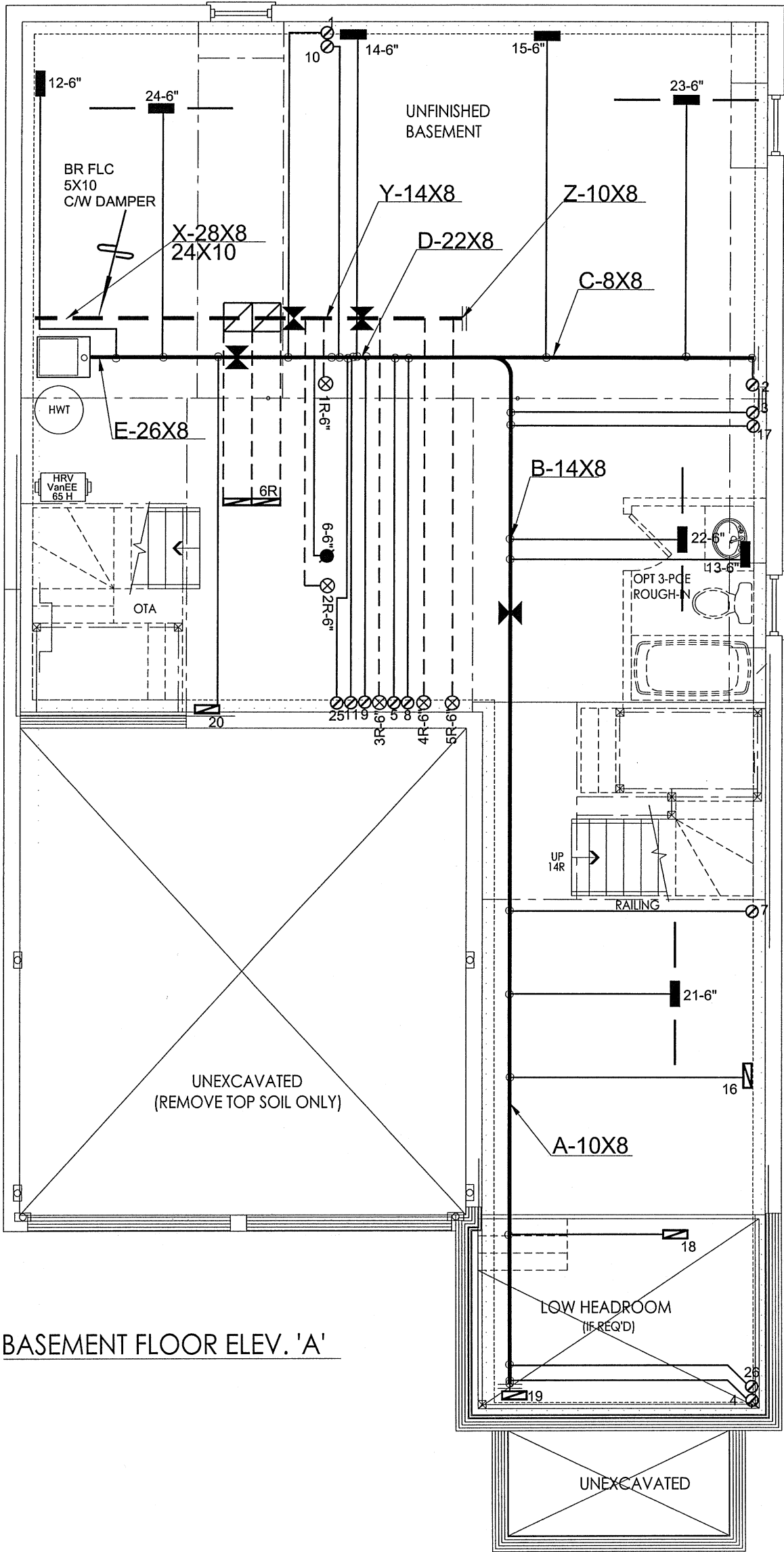
TYPE: 38-11
LO# 84184

THE SCHUMANN

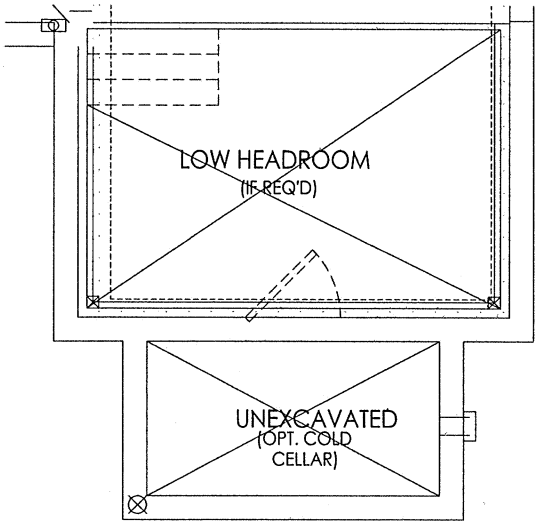
Air Infiltration Residential Load Calculator

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):	1138.5			
Air Leakage/Ventilation				
Air Tightness Type:	Present (1961-) (3.57 ACH)			
Custom BDT Data:	ELA @ 10 Pa.	1517.6 cm ²		
	3.57	ACH @ 50 Pa		
Mechanical Ventilation (L/s):	Total Supply	Total Exhaust		
	37.5	37.5		
Flue Size				
Flue #:	#1	#2	#3	#4
Diameter (mm):	0	0	0	0
Natural Infiltration Rates				
Heating Air Leakage Rate (ACH/H):	0.325			
Cooling Air Leakage Rate (ACH/H):	0.106			



BASEMENT FLOOR ELEV. 'A'



PARTIAL BASEMENT FLOOR ELEV. 'B'

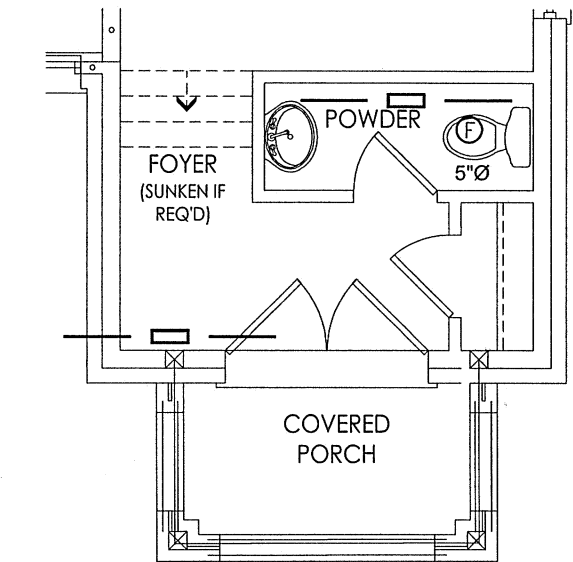
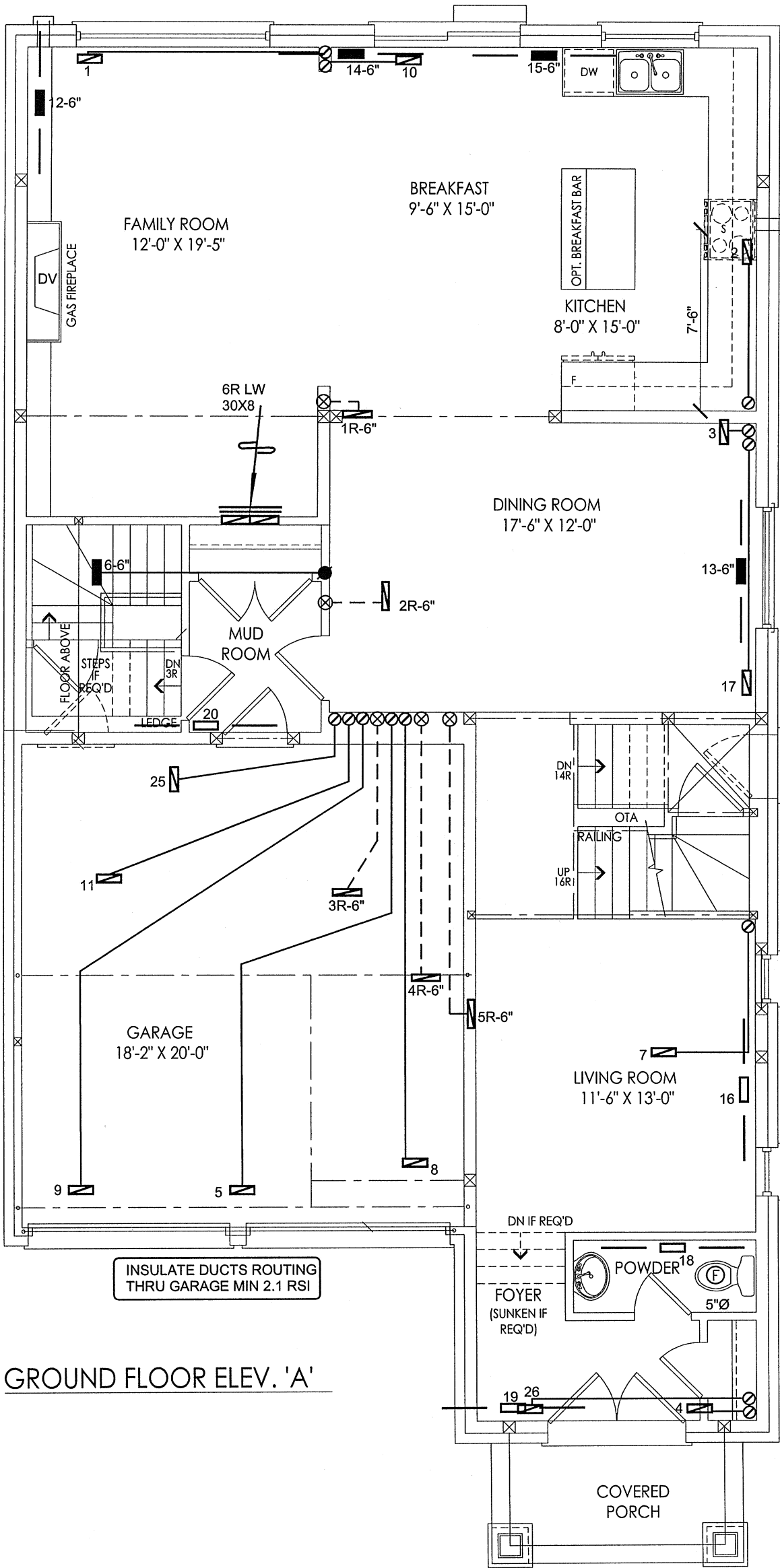
I MICHAEL O'ROURKE HAVE REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK AND AM QUALIFIED UNDER DIVISION C, 3.2.5 OF THE BUILDING CODE.
Michael O'Rourke
Michael O'Rourke, BCIN# 19669
HVAC DESIGNS LTD.

CSA-F280-12
PACKAGE A1

HVAC LEGEND								3.		
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	2.		
	SUPPLY AIR GRILLE		6" SUPPLY AIR BOOT ABOVE		14"x8" RETURN AIR GRILLE		RETURN AIR STACK ABOVE	1.		
	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			UNIT DATA		3RD FLOOR			BASEMENT	
Project Name			MAKE		2ND FLOOR			HEATING	
ENCORE 2			LENNOX		1453			LAYOUT	
BRAMPTON, ONTARIO			MODEL		1ST FLOOR				
			EL196UH070XE36B		812				
			INPUT		BASEMENT			Date	
			66 MBTU/H		410			OCT/2019	
THE SCHUMANN		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			Scale		
38-11		63.9 MBTU/H					3/16" = 1'-0"		
2995 sqft		COOLING					BCIN# 19669		
		2.5 TONS					LO# 84184		
		FAN SPEED		cfm @ 0.6" w.c.					
		985							



PARTIAL GROUND FLOOR ELEV. 'B'

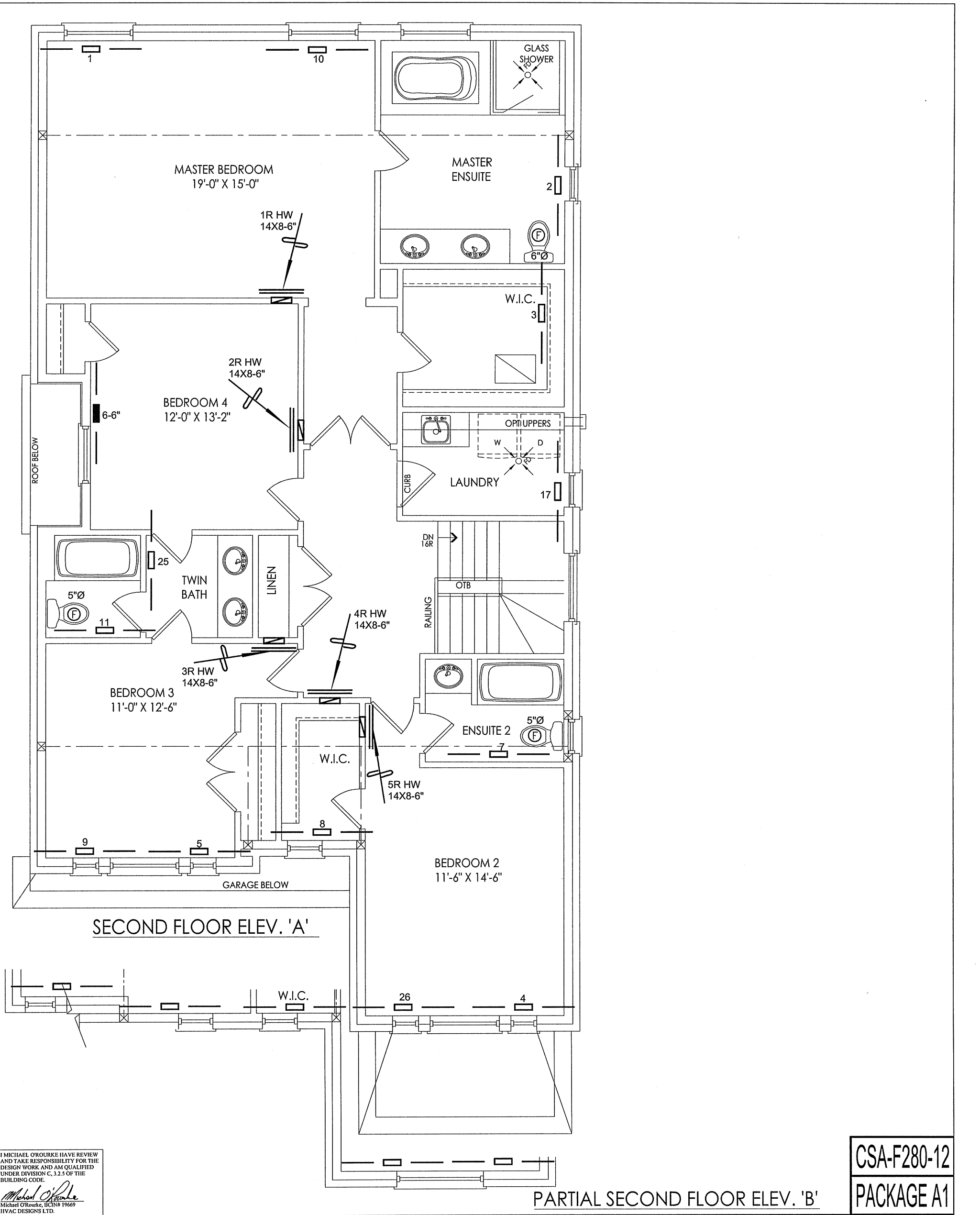
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HVAC DESIGNS LTD.

CSA-F280-12
PACKAGE A1

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	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			FIRST FLOOR HEATING LAYOUT	
Project Name		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.	Date	OCT/2019
ENCORE 2 BRAMPTON, ONTARIO			Scale	3/16" = 1'-0"
THE SCHUMANN 38-11			BCIN# 19669	
2995 sqft			LO#	84184



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Michael O'Rourke, BCIN# 19669
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CSA-F280-12
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GOLD PARK HOMES			SECOND FLOOR HEATING LAYOUT	
Project Name			Date	OCT/2019
ENCORE 2 BRAMPTON, ONTARIO			Scale	3/16" = 1'-0"
THE SCHUMANN 38-11			BCIN# 19669	
2995 sqft			LO#	84184