

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: SD-10 THE STRAVINSKY Project: ENCORE 2	
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.			
October 17, 2019		 Signature of Designer	
Date			

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

SITE NAME: ENCORE 2										DATE: Oct-19		WINTER NATURAL AIR CHANGE RATE		HEAT LOSS AT °F		CSA-F280-12	
BUILDER: GOLD PARK HOMES										LO# 84186		SUMMER NATURAL AIR CHANGE RATE		HEAT GAIN AT °F		SB-12 PACKAGE A1	
THE STRAVINSKY										GFA: 2123		BATH					
TYPE: SD-10										BED-2		BED-3		BED-4			
										ENS		LAUN		WIR		FOY	
										MBR		KT/GT		WIR		BAS	
										EXP. WALL		LOSS GAIN		LOSS GAIN		LOSS GAIN	
										CLG. HT.		FACTORS		FACTORS		FACTORS	
										GRS.WALL AREA		GLAZING		GLAZING		GLAZING	
										NORTH		EAST		EAST		EAST	
										SOUTH		SOUTH		SOUTH		SOUTH	
										WEST		WEST		WEST		WEST	
										SKYL.T.		SKYL.T.		SKYL.T.		SKYL.T.	
										DOORS		DOORS		DOORS		DOORS	
										NET EXPOSED WALL		NET EXPOSED WALL		NET EXPOSED WALL		NET EXPOSED WALL	
										NET EXPOSED BSMT WALL ABOVE GR		NET EXPOSED BSMT WALL ABOVE GR		NET EXPOSED BSMT WALL ABOVE GR		NET EXPOSED BSMT WALL ABOVE GR	
										EXPOSED CLG		EXPOSED CLG		EXPOSED CLG		EXPOSED CLG	
										NO ATTIC EXPOSED CLG		NO ATTIC EXPOSED CLG		NO ATTIC EXPOSED CLG		NO ATTIC EXPOSED CLG	
										EXPOSED FLOOR		EXPOSED FLOOR		EXPOSED FLOOR		EXPOSED FLOOR	
										BASEMENT/CRAWL HEAT LOSS		BASEMENT/CRAWL HEAT LOSS		BASEMENT/CRAWL HEAT LOSS		BASEMENT/CRAWL HEAT LOSS	
										SLAB ON GRADE HEAT LOSS		SLAB ON GRADE HEAT LOSS		SLAB ON GRADE HEAT LOSS		SLAB ON GRADE HEAT LOSS	
										SUBTOTAL HT LOSS		SUBTOTAL HT LOSS		SUBTOTAL HT LOSS		SUBTOTAL HT LOSS	
										SUB TOTAL HT GAIN		SUB TOTAL HT GAIN		SUB TOTAL HT GAIN		SUB TOTAL HT GAIN	
										LEVEL FACTOR / MUL TIPLIER		LEVEL FACTOR / MUL TIPLIER		LEVEL FACTOR / MUL TIPLIER		LEVEL FACTOR / MUL TIPLIER	
										AIR CHANGE HEAT LOSS		AIR CHANGE HEAT LOSS		AIR CHANGE HEAT LOSS		AIR CHANGE HEAT LOSS	
										AIR CHANGE HEAT GAIN		AIR CHANGE HEAT GAIN		AIR CHANGE HEAT GAIN		AIR CHANGE HEAT GAIN	
										DUCT LOSS		DUCT LOSS		DUCT LOSS		DUCT LOSS	
										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	
TOTAL HEAT GAIN BTU/H:										24433		24433		24433		24433	
TOTAL COMBINED HEAT LOSS BTU/H:										33985		33985		33985		33985	
TOTAL COMBINED HEAT LOSS BTU/H:										35588		35588		35588		35588	

Michael O'Rourke

GFA: 2123 LO# 84186

r/a pressure	0.17
r/a grille press. Loss	0.02

LENNOX
EL196UH045XE24B
45
FAN SPEED

AFUE = 96 %
INPUT (BTU/H) = 44,000
OUTPUT (BTU/H) = 42,800

for s/a & r/a	0.35
lenum pressure s/a	0.18
x s/a dif press. loss	0.02

r/a pressure	0.17
r/a grille press. Loss	0.02

Adjusted pressure	s/a	0.16
-------------------	-----	------

12	13	14
K7/GT	K7/GT	K7/GT
2.28	2.28	2.28
54	54	54
2.37	2.37	2.37
78	78	78
0.17	0.17	0.17
20	20	20
160	130	120
180	158	140
0.1	0.11	0.12
5	5	5
396	396	396
573	573	573
3X10	3X10	3X10
C	C	C

The first two items are related to the fact that the model is based on a single point estimate of the mean value of the dependent variable. The third item is related to the fact that the model is based on a single point estimate of the standard deviation of the dependent variable.

C	S.	ROUND DUCT	RECT DUCT	
0	0	0	0	X
0	0	0	0	X
0	0	0	0	X
0	0	0	0	X
0	0	0	0	X

[illegible]

TYPE: SD-10
SITE NAME: ENCORE 2

LO # 84186
THE STRAVINSKY

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	4 @ 10.6 cfm	42.4 cfm
Other Rooms	3 @ 10.6 cfm	31.8 cfm
Table 9.32.3.A.	TOTAL	148.4 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	148.4	cfm
Less Principal Ventil. Capacity	79.5	cfm
Required Supplemental Capacity	68.9	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
79.5 CFM	74 F
X	X
FACTOR	% LOSS
1.08	X
	0.25

SUPPLEMENTAL FANS		PANASONIC	
Location	Model	cfm	HVI
ENS	FV-05-11VK1	50	☒
BATH	FV-05-11VK1	50	☒
W/R	FV-05-11VK1	50	☒
			Sones
			0.3
			0.3
			0.3

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#: 84186	Model: SD-10	Builder: GOLD PARK HOMES	Date: 10/17/2019																																																																								
Volume Calculation		Air Change & Delta T Data																																																																									
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5.2.3.1 Heat Loss due to Air Leakage																																																																											
$HL_{air-b} = LR_{air-b} \times \frac{V_b}{3.6} \times DTD_h \times 1.2$																																																																											
0.336	x	226.43	x																																																																								
		41 °C	x																																																																								
		1.2	=																																																																								
			3764 W																																																																								
			=																																																																								
			12844 Btu/h																																																																								
5.2.3.2 Heat Loss due to Mechanical Ventilation																																																																											
$HL_{vair-b} = PVC \times DTD_h \times 1.08 \times (1 - E)$																																																																											
80 CFM	x	74 °F	x																																																																								
		1.08	x																																																																								
		0.25	=																																																																								
			1593 Btu/h																																																																								
5.2.3.3 Calculation of Air Change Heat Loss for Each Room (Floor Multiplier Section)																																																																											
$HL_{airrr} = Level\ Factor \times HL_{airbv} \times \{(HL_{agcr} + HL_{bgcr}) \div (HL_{agclvl} + HL_{bgclvl})\}$																																																																											
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*HLairbv = Air leakage heat loss + ventilation heat loss *For a balanced or supply only ventilation system HLairbv = 0																																																																											

HEAT LOSS AND GAIN SUMMARY SHEET

MODEL: SD-10	THE STRAVINSKY	BUILDER: GOLD PARK HOMES
SFQT: 2123	LO# 84186	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:	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):	28787.0	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: 48.0 ft	WIDTH: 25.0 ft	EXPOSED PERIMETER:	117.0 ft

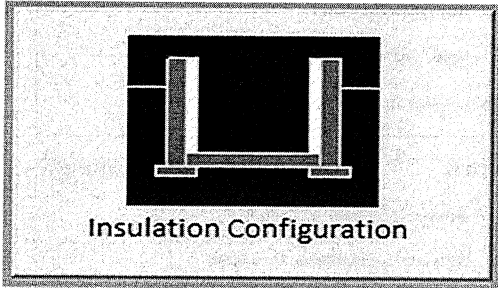
2012 OBC - COMPLIANCE PACKAGE		
Component	Compliance Package A1	
	Nominal	Min. Eff.
Ceiling with Attic Space Minimum RSI (R)-Value	60	59.22
Ceiling Without Attic Space Minimum RSI (R)-Value	31	27.65
Exposed Floor Minimum RSI (R)-Value	31	29.80
Walls Above Grade Minimum RSI (R)-Value	22	17.03
Basement 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):	14.6	
Floor Width (m):	7.6	
Exposed Perimeter (m):	35.7	
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):		1173

TYPE: SD-10
LO# 84186

THE STRAVINSKY

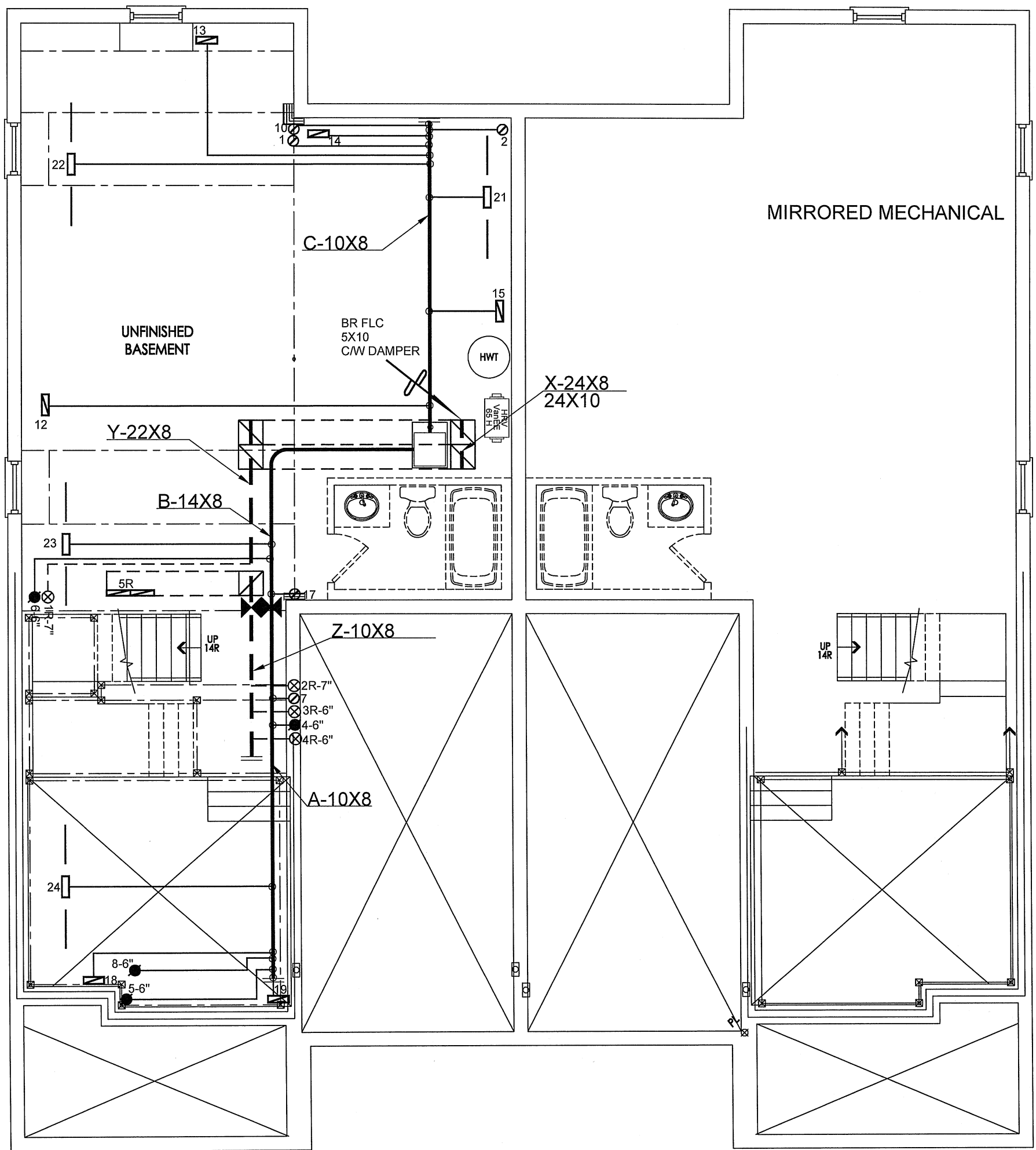
Air Infiltration Residential Load Calculator

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):	815.2			
Air Leakage/Ventilation				
Air Tightness Type:	Present (1961-) (3.57 ACH)			
Custom BDT Data:	ELA @ 10 Pa.	1086.6 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):	0.336			
Cooling Air Leakage Rate (ACH/H):	0.105			

TYPE: SD-10
LO# 84186

THE STRAVINSKY



BASEMENT FLOOR ELEV 'A'

BASEMENT FLOOR ELEV 'B'

PARTIAL BASEMENT FLOOR ELEV 'C'

PARTIAL BASEMENT FLOOR ELEV 'D'

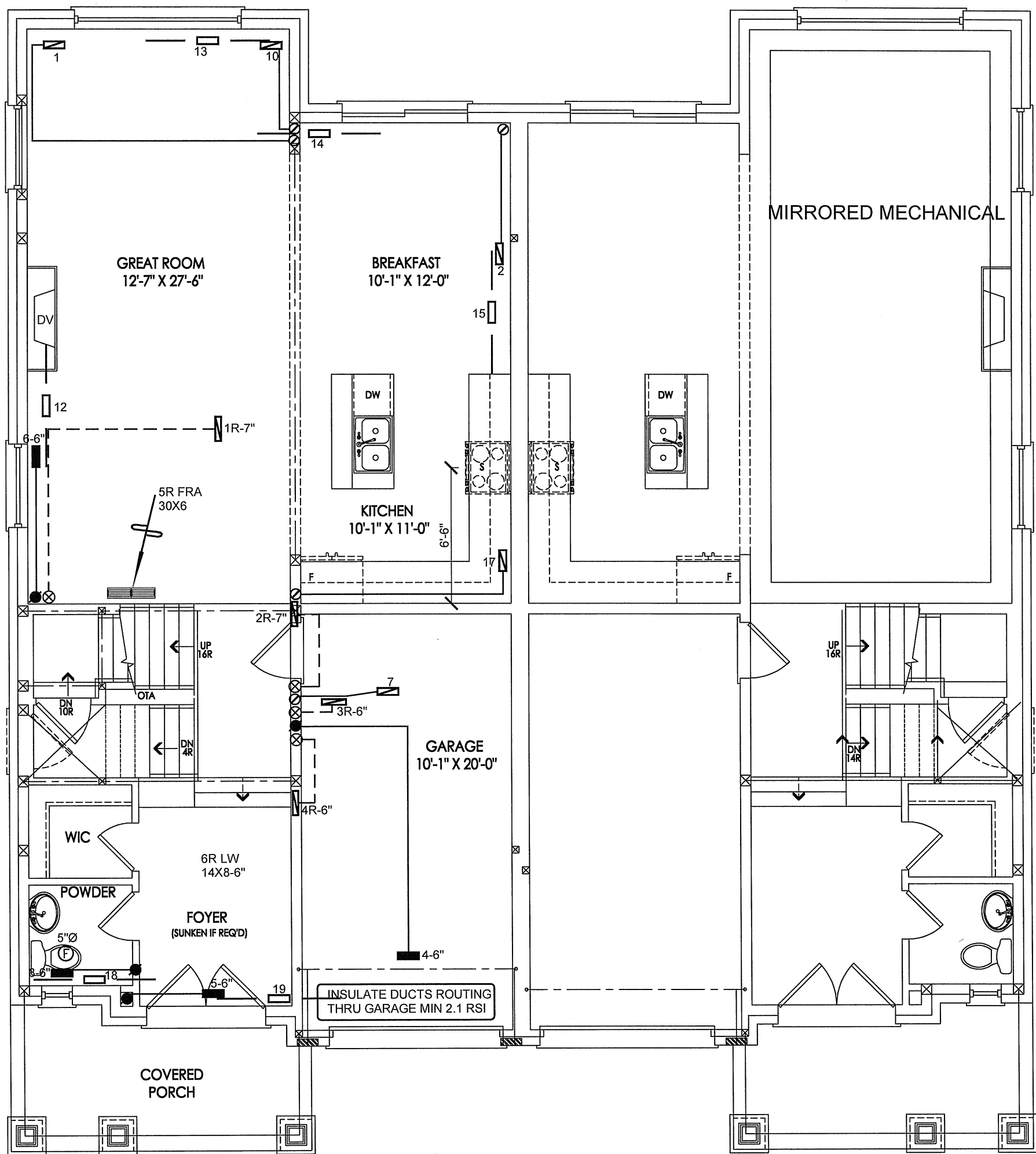
CSA-F280-12
PACKAGE A1

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.		
	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		

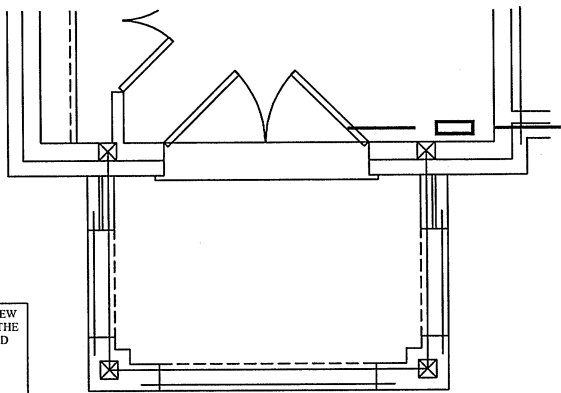
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Client		 375 Finley Ave. Suite 202 - Ajax, Ontario L1S 2E2 Tel. 905.619.2300 - 905.420.5300 Fax 905.619.2375 Email: info@hvacdesigns.ca Web: www.hvacdesigns.ca Specializing in Residential Mechanical Design Services	HEAT LOSS 35588 BTU/H		# OF RUNS S/A R/A FANS				Sheet Title		
GOLD PARK HOMES			UNIT DATA		3RD FLOOR						
Project Name			MAKE		2ND FLOOR		9	4	3		
ENCORE 2			MODEL		1ST FLOOR		5	1	2		
BRAMPTON, ONTARIO			EL196UH045XE24B		BASEMENT		4	1	0		
THE STRAVINSKY		INPUT		44 MBTU/H						Date	OCT/2019
SD-10		OUTPUT		42.8 MBTU/H		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	3/16" = 1'-0"
2123 sqft		COOLING		2.0 TONS						BCIN# 19669	
		FAN SPEED		800 cfm @ 0.6" w.c.						LO# 84186	

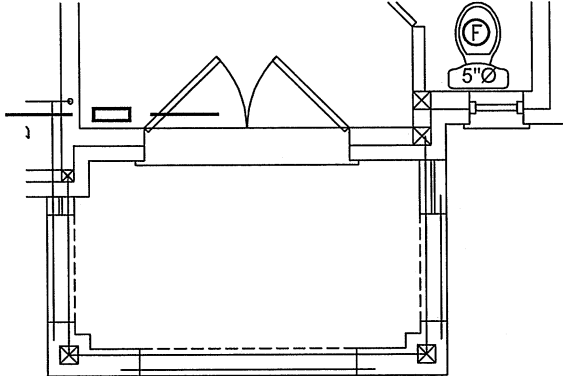


GROUND FLOOR ELEV 'A'

GROUND FLOOR ELEV 'B'



PARTIAL GROUND FLOOR ELEV 'C'



PARTIAL GROUND FLOOR ELEV 'D'

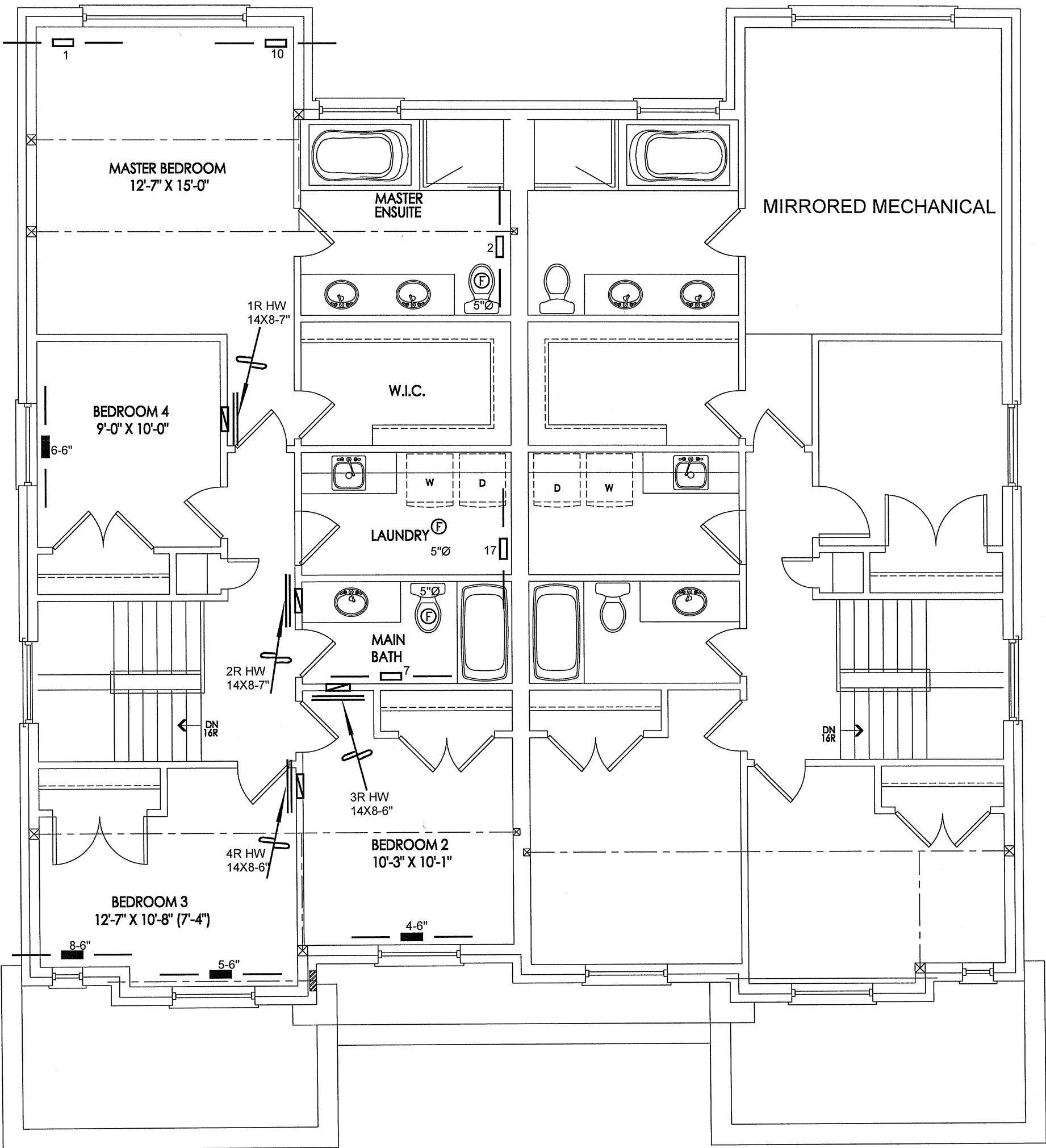
I MICHAEL O'ROURKE HAVE REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK AND AM QUALIFIED UNDER DIVISION C, 3.2.5 OF THE BUILDING CODE.
Michael O'Rourke
Michael O'Rourke, BCIN# 19669
HVAC DESIGNS LTD.

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		

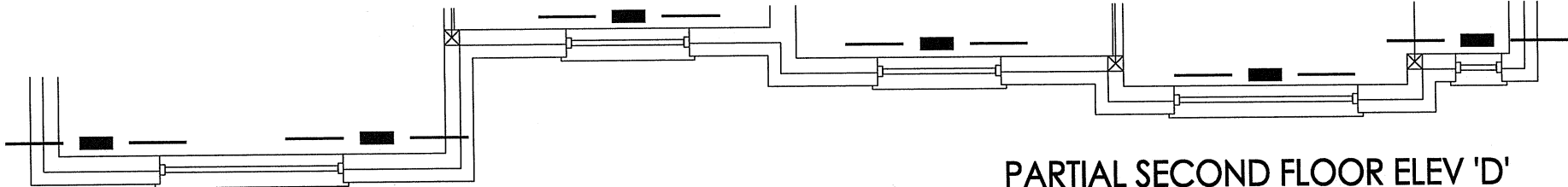
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Client		HVACDESIGNS LTD. 375 Finley Ave. Suite 202 - Ajax, Ontario L1S 2E2 Tel. 905.619.2300 - 905.420.5300 Fax 905.619.2375 Email: info@hvacadesigns.ca Web: www.hvacadesigns.ca Specializing in Residential Mechanical Design Services Installation to 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	OCT/2019
ENCORE 2 BRAMPTON, ONTARIO			Scale	3/16" = 1'-0"
THE STRAVINSKY SD-10			BCIN# 19669	
2123 sqft			LO#	84186



SECOND FLOOR ELEV 'A'

SECOND FLOOR ELEV 'B'



PARTIAL SECOND FLOOR ELEV 'C'

PARTIAL SECOND FLOOR ELEV 'D'

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Michael O'Rourke
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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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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 SECOND FLOOR HEATING LAYOUT	
Project Name ENCORE 2 BRAMPTON, ONTARIO			Date OCT/2019	
THE STRAVINSKY SD-10 2123 sqft		Scale 3/16" = 1'-0"	BCIN# 19669	
		LO#	84186	