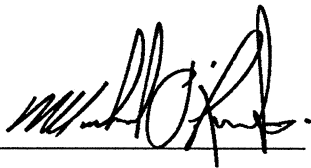


Schedule 1: Designer Information

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 VAUGHAN	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		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 RESIDENTIAL MECHANICAL VENTILATION DESIGN SUMMARY RESIDENTIAL SYSTEM DESIGN per CSA-F280-12		Model: 25-2 – OPT MAIN Project: KLEINBURG GLEN	
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.			
January 15, 2016 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: KLEINGBURG GLEN
BUILDER: GOLD PARK HOMES
OPT. MAIN
TYPE: 25-2
DATE: Jan-16
LO# 66856
GFA: 1861
WINTER NATURAL AIR CHANGE RATE 0.322
SUMMER NATURAL AIR CHANGE RATE 0.095
HEAT LOSS AT °F. 76
HEAT GAIN AT °F. 16
CSA-F280-12
SB-12 PACKAGE J

ROOM USE	EXP. WALL CLG. HT.	MBR	ENS	OPT. MAIN TYPE: 25-2	BED-2	BED-3	DATE: Jan-16 LO# 66856	BATH	WINTER NATURAL AIR CHANGE RATE 0.322 SUMMER NATURAL AIR CHANGE RATE 0.095	HEAT LOSS AT °F. 76 HEAT GAIN AT °F. 16	CSA-F280-12 SB-12 PACKAGE J
GRS.WALL AREA	420	420	207								
GLAZING	10	10	9								
FACTORS											
LOSS GAIN											
NORTH	24.1	17.5	0	0	0	0		63			
EAST	24.1	43.0	14	337	603	0		0			
SOUTH	24.1	26.4	0	0	0	0		0			
WEST	24.1	43.0	0	0	0	0		7			
SKYL.T.	24.1	88.1	0	0	0	0		169			
DOORS	25.2	5.3	0	0	0	0		0			
NET EXPOSED WALL	3.5	0.7	396	1368	288	187		0			
NET EXPOSED BSMT WALL ABOVE GR	6.3	1.3	0	0	0	0		56			
EXPOSED CLG	1.5	0.8	330	502	251	140		193			
NO ATTIC EXPOSED CLG	2.5	1.2	0	0	0	0		41			
EXPOSED FLOOR	2.5	0.5	0	0	0	0		0			
BASEMENT/CRAWL HEAT LOSS								0			
SLAB ON GRADE HEAT LOSS								0			
SUBTOTAL HT LOSS		2448						511			
SUB TOTAL HT GAIN		1572						300			
LEVEL FACTOR / MULTIPLIER		0.20	0.23					0.20			
AIR CHANGE HEAT LOSS		574						120			
AIR CHANGE HEAT GAIN		80						15			
DUCT LOSS		0						0			
DUCT GAIN		0						0			
HEAT GAIN PEOPLE	240	2	480	0	0	0		0			
HEAT GAIN APPLIANCES/LIGHTS		492						0			
TOTAL HT LOSS BTU/H		3022						631			
TOTAL HT GAIN x 1.3 BTU/H		3410						410			

ROOM USE	EXP. WALL CLG. HT.	MBR	ENS	OPT. MAIN TYPE: 25-2	BED-2	BED-3	DATE: Jan-16 LO# 66856	BATH	WINTER NATURAL AIR CHANGE RATE 0.322 SUMMER NATURAL AIR CHANGE RATE 0.095	HEAT LOSS AT °F. 76 HEAT GAIN AT °F. 16	CSA-F280-12 SB-12 PACKAGE J
GRS.WALL AREA	420	420	207								
GLAZING	10	10	9								
FACTORS											
LOSS GAIN											
NORTH	24.1	17.5	0	0	0	0		63			
EAST	24.1	43.0	14	337	603	0		0			
SOUTH	24.1	26.4	0	0	0	0		0			
WEST	24.1	43.0	0	0	0	0		7			
SKYL.T.	24.1	88.1	0	0	0	0		169			
DOORS	25.2	5.3	0	0	0	0		0			
NET EXPOSED WALL	3.5	0.7	396	1368	288	187		0			
NET EXPOSED BSMT WALL ABOVE GR	6.3	1.3	0	0	0	0		56			
EXPOSED CLG	1.5	0.8	330	502	251	140		193			
NO ATTIC EXPOSED CLG	2.5	1.2	0	0	0	0		41			
EXPOSED FLOOR	2.5	0.5	0	0	0	0		0			
BASEMENT/CRAWL HEAT LOSS								0			
SLAB ON GRADE HEAT LOSS								0			
SUBTOTAL HT LOSS		2448						511			
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HEAT GAIN PEOPLE	240	2	480	0	0	0		0			
HEAT GAIN APPLIANCES/LIGHTS		492						0			
TOTAL HT LOSS BTU/H		3022						631			
TOTAL HT GAIN x 1.3 BTU/H		3410						410			

TOTAL HEAT GAIN BTU/H: 24880
TONS: 2.07
LOSS DUE TO VENTILATION LOAD BTU/H: 2149
STRUCTURAL HEAT LOSS: 37826
TOTAL COMBINED HEAT LOSS BTU/H: 39974

SITE NAME: KLEINGBURG GLEN BUILDER: GOLD PARK HOMES TYPE: 25-2 OPT. MAIN DATE: Jan-16 GFA: 1861 LO# 68556

HEATING CFM 700 COOLING CFM 700 AFUE = 95.0 %
TOTAL HEAT LOSS 37,826 TOTAL HEAT GAIN 24,427 INPUT (BTU/H) = 44,000
AIR FLOW RATE CFM 18.51 AIR FLOW RATE CFM 28.66 OUTPUT (BTU/H) = 42,000
FAN SPEED LOW 0 DESIGN CFM = 700
MEDIUM 0 CFM @ 5" E.S.P.
HIGH 800 TEMPERATURE RISE 56 °F

All Statistics 3 x 3 unless noted otherwise on layout.																								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
ROOM NAME	MBR	ENS	BED-2	BED-3	BATH	BATH	BATH	BATH	BATH	BATH	BATH	BATH	BATH	BATH	BATH	BATH	BATH	BATH	BATH	BATH	BATH	BATH	BATH	BATH
RM LOSS MBH	3.02	1.46	1.40	2.95	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63
CFM PER RUN HEAT	56	27	26	55	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
RM GAIN MBH	3.41	1.14	2.08	3.65	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41
CFM PER RUN COOLING	98	33	60	105	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
ADJUSTED PRESSURE	0.16	0.17	0.17	0.16	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
ACTUAL DUCT LGH	60	49	29	40	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
EQUIVALENT LENGTH	170	150	180	130	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170
TOTAL EFFECTIVE LENGTH	230	199	209	170	199	199	199	199	199	199	199	199	199	199	199	199	199	199	199	199	199	199	199	199
ADJUSTED PRESSURE	0.07	0.09	0.08	0.1	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
ROUND DUCT SIZE	6	4	5	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
HEATING VELOCITY (ft/min)	286	310	191	280	138	138	138	138	138	138	138	138	138	138	138	138	138	138	138	138	138	138	138	138
COOLING VELOCITY (ft/min)	500	379	441	535	138	138	138	138	138	138	138	138	138	138	138	138	138	138	138	138	138	138	138	138
OUTLET GRILL SIZE	4X10	3X10	3X10	4X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10
TRUNK	A	A	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B

TYPE: 25-2
SITE NAME: KLEINGBURG GLEN

LO # 66856
OPT. MAIN

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	2 @ 10.6 cfm	21.2 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	137.8 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	63.6 cfm

SUPPLEMENTAL VENTILATION CAPACITY		9.32.3.5.
Total Ventilation Capacity	137.8	cfm
Less Principal Ventil. Capacity	77	cfm
Required Supplemental Capacity	60.8	cfm

PRINCIPAL EXHAUST FAN CAPACITY	
Model: VANEE 40H+	Location: BSMT
77.0 cfm	3.0 sones
☒ HVI Approved	

PRINCIPAL EXHAUST HEAT LOSS CALCULATION			
CFM	ΔT °F	FACTOR	% LOSS
77.0 CFM	76 F	1.08	0.34

SUPPLEMENTAL FANS		NUTONE	
Location	Model	cfm	HVI
ENS	QTXEN050C	50	✓
BATH	QTXEN050C	50	✓
W/R	QTXEN050C	50	✓

HEAT RECOVERY VENTILATOR		9.32.3.11.
Model: VANEE 40H+		
77	cfm high	42 cfm low
66	% 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:	January-16

HEAT LOSS AND GAIN SUMMARY SHEET

MODEL: 25-2	OPT. MAIN	BUILDER: GOLD PARK HOMES
SFQT: 1861	LO# 66856	SITE: KLEINGBURG GLEN

DESIGN ASSUMPTIONS

HEATING	°F	COOLING	°F
OUTDOOR DESIGN TEMP.	-4	OUTDOOR DESIGN TEMP.	88
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 (ft ³):	24851.0	ASSUMED (Y/N):	Y
INTERNAL SHADING:	BLINDS/CURTAINS	ASSUMED OCCUPANTS:	4
INTERIOR LIGHTING LOAD (Btu/h/ft ²):	1.27	DC BRUSHLESS MOTOR (Y/N):	Y
FOUNDATION CONFIGURATION	BCIN_1	DEPTH BELOW GRADE:	6.8 ft
LENGTH: 54.0 ft	WIDTH: 19.0 ft	EXPOSED PERIMETER:	146.0 ft

2012 OBC - COMPLIANCE PACKAGE

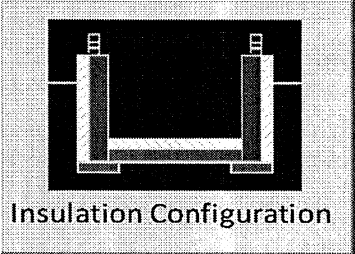
Component	Compliance Package
	J
Ceiling with Attic Space Minimum RSI (R)-Value	50
Ceiling Without Attic Space Minimum RSI (R)-Value	31
Exposed Floor Minimum RSI (R)-Value	31
Walls Above Grade Minimum RSI (R)-Value	22
Basement Walls Minimum RSI (R)-Value	12
Below Grade Slab Entire surface > 600 mm below grade Minimum RSI (R)-Value	-
Edge of Below Grade Slab ≤ 600 mm Below Grade Minimum RSI (R)-Value	10
Heated Slab or Slab ≤ 600 mm below grade Minimum RSI (R)-Value	10
Windows and Sliding Glass Doors Maximum U-Value	1.8
Skylights Maximum U-Value	2.8
Space Heating Equipment Minimum AFUE	0.94
HRV Minimum Efficiency	60%
Domestic Hot Water Heater Minimum EF	0.67

INDIVIDUAL BCIN: 19669
MICHAEL O'ROURKE



Residential Foundation Thermal Load Calculator

Supplemental tool for CAN/CSA-F280

Weather Station Description		
Province:	Ontario	▼
Region:	Vaughan (Woodbridge)	▼
Site Description		
Soil Conductivity:	Normal conductivity: dry sand, loam, clay	▼
Water Table:	Normal (7-10 m, 23-33 Ft)	▼
Foundation Dimensions		
Floor Length (m):	16.5	 Insulation Configuration
Floor Width (m):	5.8	
Exposed Perimeter (m):	0	
Wall Height (m):	2.7	
Depth Below Grade (m):	2.1	
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):	1499	

44.6

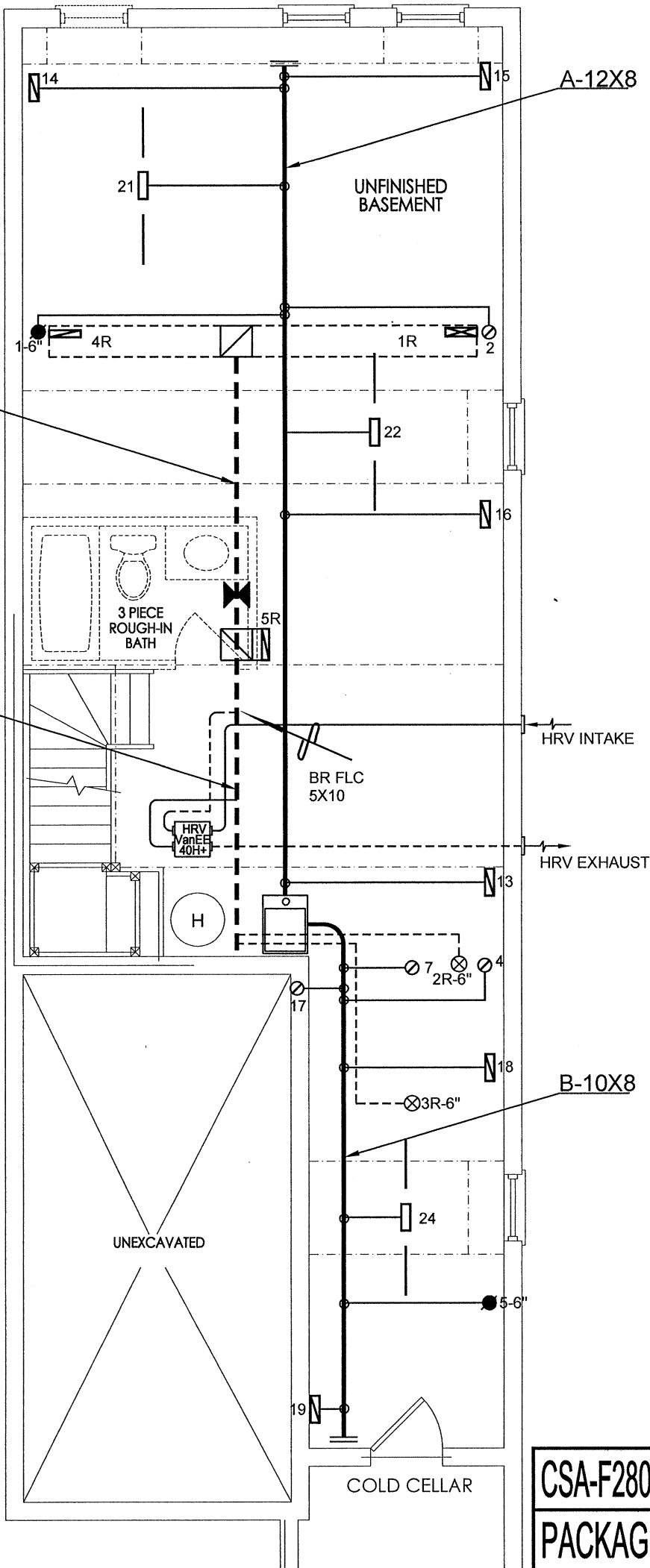
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118.52

Air Infiltration Residential Load Calculator

Supplemental tool for CAN/CSA-F280

Weather Station Description				
Province:	Ontario			
Region:	Vaughan (Woodbridge)			
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):	715.7			
Air Leakage/Ventilation				
Air Tightness Type:	Present (1961-) (ACH=3.57)			
Custom BDT Data:	ELA @ 10 Pa. 716.42 cm ² 3.57 ACH @ 50 Pa			
Mechanical Ventilation (L/s):	Total Supply:		Total Exhaust:	
	0		0	
Flue Size				
Flue #:	#1	#2	#3	#4
Diameter (mm):	0	0	0	0
Natural Infiltration Rates				
Heating Air Change Rate (ACH/H):			0.322	
Cooling Air Change Rate (ACH/H):			0.098	



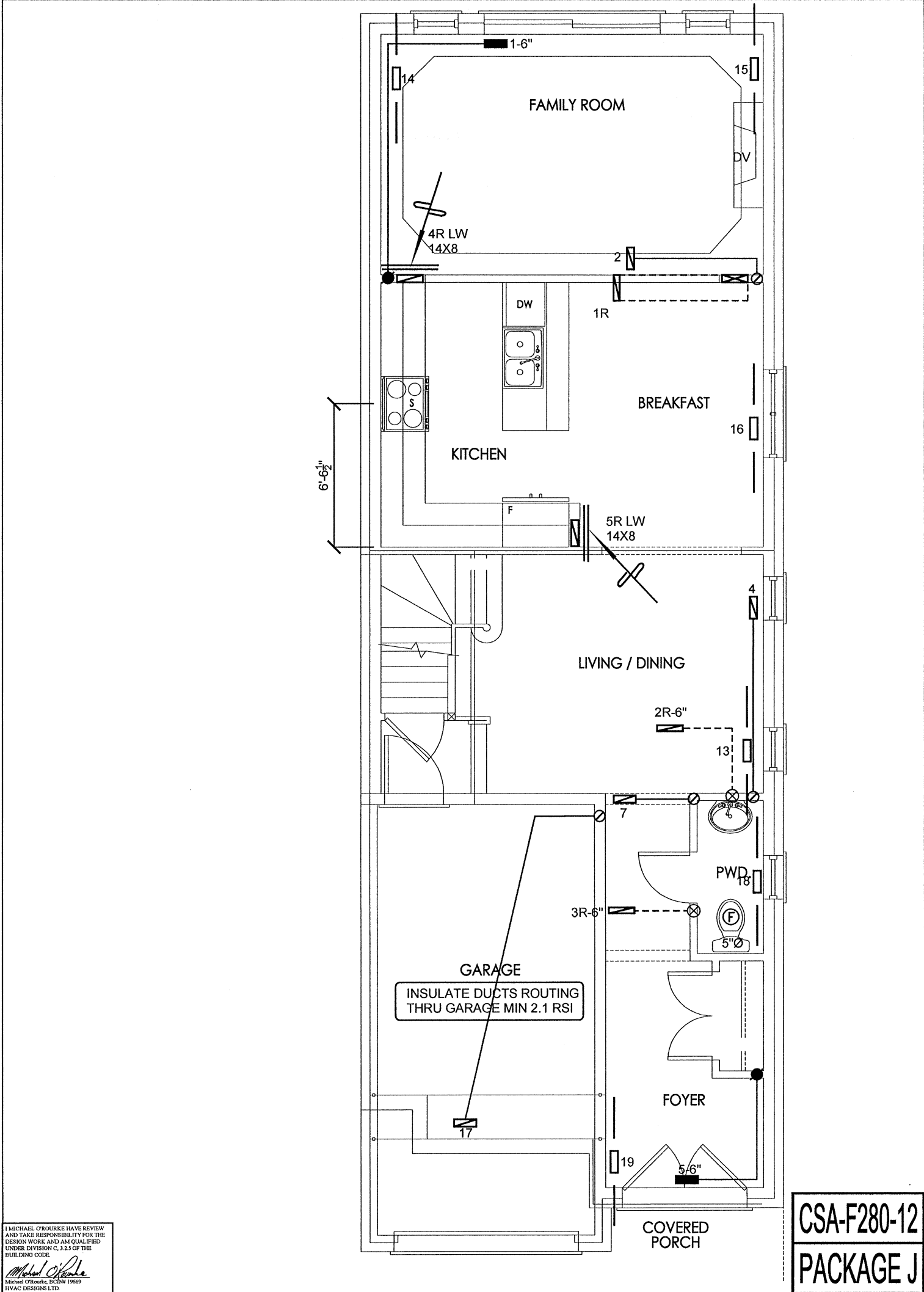
I MICHAEL O'Rourke HAVE REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK AND AM QUALIFIED UNDER DIVISION C, 12.5 OF THE BUILDING CODE.

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

HVAC LEGEND								3.	
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	2.	
	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
	SUPPLY AIR BOOT ABOVE		6" SUPPLY AIR STACK 2nd FLOOR		FRA- FLOOR RETURN AIR GRILLE		REDUCER	Date	
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.								REVISIONS	
Client								Sheet Title	
GOLD PARK HOMES								BASEMENT HEATING LAYOUT	
Project Name								Date	
KLEINBURG GLEN VAUGHAN, ONTARIO								JAN/2016	
25-2 OPT. MAIN 1861 sqft								Scale	
								3/16" = 1'-0"	
								BCIN# 19669	
								LO# 66856	

HEAT LOSS 39974 BTU/H UNIT DATA		# OF RUNS S/A R/A FANS	
MAKE	LENNOX	3RD FLOOR	
MODEL	EL195UH045XE24B-45	2ND FLOOR	6 3 2
INPUT	44 MBTU/H	1ST FLOOR	6 2 2
OUTPUT	42 MBTU/H	BASEMENT	3 1 0
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	
FAN SPEED	700 cfm @ 0.6" w.g.		

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.	



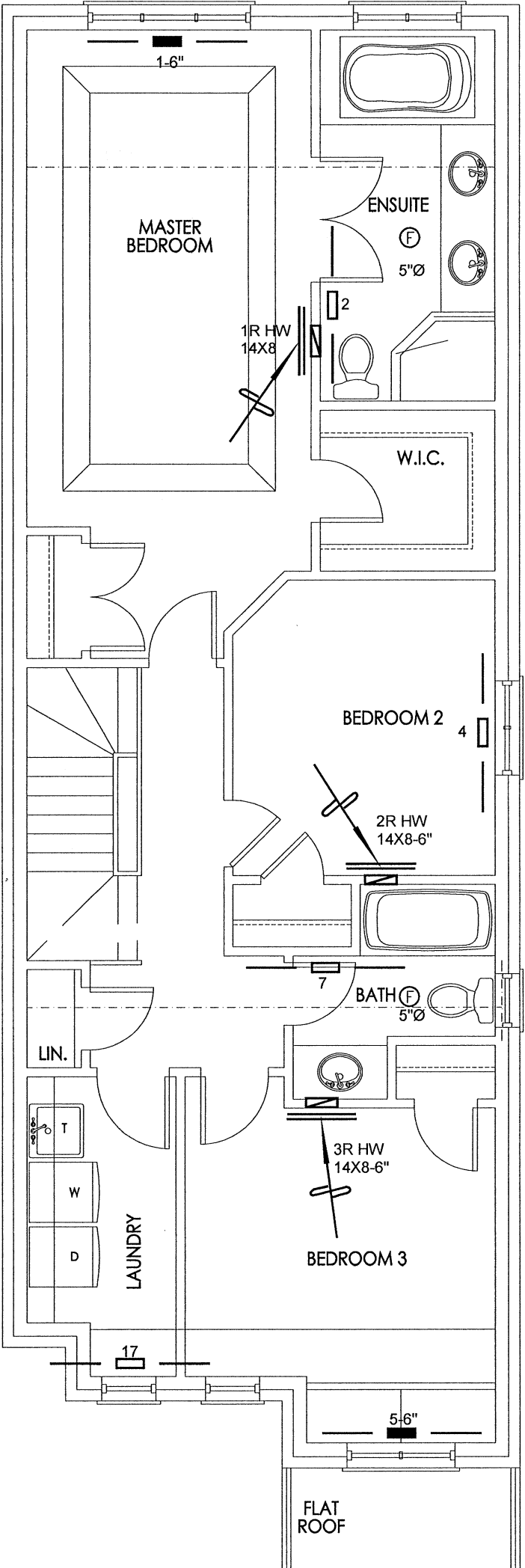
I MICHAEL O'BROURKE HAVE REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK AND AM QUALIFIED UNDER DIVISION C, 32.5 OF THE BUILDING CODE.

Michael O'Brourke
Michael O'Brourke, 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
	SUPPLY AIR BOOT ABOVE		6" SUPPLY AIR STACK 2nd FLOOR		FRA- FLOOR RETURN AIR GRILLE		REDUCER		Date

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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	Sheet Title	
GOLD PARK HOMES			GROUND FLOOR HEATING LAYOUT	
Project Name			Date	JAN/2016
KLEINBURG GLEN VAUGHAN, ONTARIO			Scale	3/16" = 1'-0"
25-2 OPT. MAIN 1861 sqft		BCIN# 19669		
		LO#	66856	



I MICHAEL O'BROURKE HAVE REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK AND AM QUALIFIED UNDER DIVISION C, 3.2.5 OF THE BUILDING CODE.

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

CSA-F280-12
PACKAGE J

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		 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	
GOLD PARK HOMES			SECOND FLOOR HEATING LAYOUT	
Project Name KLEINBURG GLEN VAUGHAN, ONTARIO			Date	JAN/2016
25-2 OPT. MAIN 1861 sqft		Scale	3/16" = 1'-0"	
		BCIN# 19669		
		LO#	66856	
		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.		