


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 (WOODBIDGE)	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]				
<input type="checkbox"/> House <input type="checkbox"/> Small Buildings <input type="checkbox"/> Large Buildings <input type="checkbox"/> Complex Buildings <input checked="" type="checkbox"/> HVAC – House <input type="checkbox"/> Building Services <input type="checkbox"/> Detection, Lighting and Power <input type="checkbox"/> Fire Protection <input type="checkbox"/> Building Structural <input type="checkbox"/> Plumbing – House <input type="checkbox"/> Plumbing – All Buildings <input type="checkbox"/> 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: 4004 - LOT 94 - OPT. 5 BED THE DALERIDGE Project: PINE VALLEY & TESTON		
D. Declaration of Designer				
I, <u>MICHAEL O'ROURKE</u>		declare that (choose one as appropriate):		
(print name)				
<input type="checkbox"/> 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: _____				
<input checked="" type="checkbox"/> 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>				
<input type="checkbox"/> 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.				
November 2, 2018				
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: PINE VALLEY & TESTON
BUILDER: GOLD PARK HOMES
TYPE: 4004 - LOT 94 - OPT. 5 BED
DATE: Nov-18
LO# 80585
GFA: 3312
WINTER NATURAL AIR CHANGE RATE 0.370
SUMMER NATURAL AIR CHANGE RATE 0.124
HEAT LOSS AT °F. 76
HEAT GAIN AT °F. 13
CSA-F280-12
SB-12 PACKAGE A1

ROOM USE	EXP. WALL CLG. HT.	MBR	ENS	WIC	BED-2	BED-3	BED-4	ENS-2/3	BED-5	LOFT	ENS-4/5	WIC-3
GRS.WALL AREA GLAZING	330	216	99	90	306	90	10	54	135	288	54	45
NORTH	0	0	0	18	0	0	0	8	0	0	0	0
EAST	0	0	0	0	0	0	0	0	0	0	0	0
SOUTH	0	0	0	0	0	0	0	0	0	0	0	0
WEST	0	0	0	0	0	0	0	0	0	0	0	0
SKYL.T.	0	0	0	0	0	0	0	0	0	0	0	0
DOORS	0	0	0	0	0	0	0	0	0	0	0	0
NET EXPOSED WALL	25.2	4.3	0	0	0	0	0	0	0	0	0	0
NET EXPOSED BSMT WALL ABOVE GR	286	1321	222	182	812	137	93	415	70	72	321	54
EXPOSED CLG	1.3	0.6	318	408	187	140	180	82	210	270	123	158
NO ATTIC EXPOSED CLG	2.7	1.3	0	0	0	0	0	0	0	0	0	0
EXPOSED FLOOR	2.6	0.4	0	0	0	0	0	0	0	0	0	0
BASEMENT/CRAWL HEAT LOSS	0	0	0	0	0	0	0	0	0	0	0	0
SLAB ON GRADE HEAT LOSS	0	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL HT LOSS	2453	1715	712	1043	2894	884	201	483	1175	2803	349	503
SUB TOTAL HT GAIN	0.20	0.32	0.20	0.32	0.20	0.32	0.20	0.32	0.20	0.32	0.20	0.32
LEVEL FACTOR / MULTIPLIER	784	548	228	333	925	283	154	154	375	896	111	161
AIR CHANGE HEAT LOSS	0	0	0	0	0	0	0	0	0	0	0	0
AIR CHANGE HEAT GAIN	0	0	0	0	0	0	0	0	0	0	0	0
DUCT LOSS	0	0	0	0	0	0	0	0	0	0	0	0
DUCT GAIN	0	0	0	0	0	0	0	0	0	0	0	0
HEAT GAIN PEOPLE	2	480	0	0	1	240	1	22	1	240	0	0
HEAT GAIN APPLIANCES/LIGHTS	555	0	0	0	555	555	555	0	555	555	0	0
TOTAL HT LOSS BTU/H	3236	2264	940	1514	4201	1167	701	312	1550	3698	460	729
TOTAL HT GAIN x 1.3 BTU/H	3919	2117	344	1891	3840	1659	585	201	1965	4575	127	572

ROOM USE	EXP. WALL CLG. HT.	DIN	KT/IGT	LN/MD	FOY	STUDY	LOD	BAS
GRS.WALL AREA GLAZING	264	264	836	273	550	110	420	1512
NORTH	0	0	0	8	0	23	0	0
EAST	0	0	0	0	6	0	0	0
SOUTH	0	0	0	0	0	0	0	0
WEST	0	0	0	0	0	0	0	0
SKYL.T.	0	0	0	0	0	0	0	0
DOORS	0	0	0	0	0	0	0	0
NET EXPOSED WALL	25.2	4.3	0	0	0	0	0	0
NET EXPOSED BSMT WALL ABOVE GR	4.5	0.8	236	245	504	87	388	65
EXPOSED CLG	1.3	0.6	0	0	0	0	0	0
EXPOSED FLOOR	2.7	1.3	0	0	0	0	0	0
EXPOSED FLOOR	2.6	0.4	0	0	0	0	0	0
BASEMENT/CRAWL HEAT LOSS	0	0	0	0	0	0	0	0
SLAB ON GRADE HEAT LOSS	0	0	0	0	0	0	0	0
SUBTOTAL HT LOSS	1649	875	6573	1769	3387	878	1437	8107
SUB TOTAL HT GAIN	0.30	0.50	7141	397	0.30	0.50	1381	472
LEVEL FACTOR / MULTIPLIER	833	833	3319	893	1710	443	222	789
AIR CHANGE HEAT LOSS	0	0	0	0	0	0	0	0
AIR CHANGE HEAT GAIN	0	0	0	0	0	0	0	0
DUCT LOSS	0	0	0	0	0	0	0	0
DUCT GAIN	0	0	0	0	0	0	0	0
HEAT GAIN PEOPLE	0	0	0	0	0	0	0	0
HEAT GAIN APPLIANCES/LIGHTS	555	555	555	555	5097	555	555	555
TOTAL HT LOSS BTU/H	2482	1956	9892	2662	5097	1321	1437	20103
TOTAL HT GAIN x 1.3 BTU/H	3956	2117	10806	1282	1127	1333	1795	1544

TOTAL HEAT GAIN BTU/H: 41899 TONS: 3.49 LOSS DUE TO VENTILATION LOAD BTU/H: 3181 STRUCTURAL HEAT LOSS: 63453 TOTAL COMBINED HEAT LOSS BTU/H: 66634

SITE NAME: PINE VALLEY & TESTON				THE DALERIDGE				DATE: Nov-18				LO# 80585			
BUILDER: GOLD PARK HOMES				TYPE: 4004 - LOT 94 - OPT. 5 BED				furnace pressure 0.6				GFA: 3312			
HEATING CFM 1255				COOLING CFM 1255				furnace filter 0.05				AFUE = 96 %			
TOTAL HEAT LOSS 63,453				TOTAL HEAT GAIN 41,363				a/c coil pressure 0.2				INPUT (BTU/H) = 88,000			
AIR FLOW RATE CFM 19,78				AIR FLOW RATE CFM 30,34				available pressure for s/a & r/a 0.35				OUTPUT (BTU/H) = 85,000			
RUN COUNT				4th 0				3rd 0				2nd 14			
S/A				0				0				1st 9			
R/A				0				0				5			
				Bas 6				1st 3				Bas 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	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
ROOM NAME	MBR	ENS	WIC	BED-2	BED-3	ENS-4/5	ENS-2/3	BED-5	LOFT	MBR	WIC-3	DIN	KT/GT	KT/GT	KT/GT	KT/GT	LN/MD	BED-4	FOY	STUDY	BAS	BAS	BAS	BAS
RM LOSS MBH	1.62	2.26	0.94	1.51	2.10	0.46	0.70	1.55	1.85	1.62	0.73	2.48	2.47	2.47	2.47	2.47	2.66	1.17	2.55	1.32	3.59	3.59	3.59	3.59
CFM PER RUN HEAT	32	45	19	30	42	9	14	31	37	32	14	49	49	49	49	49	53	23	50	26	71	71	71	71
RM GAIN MBH	1.96	2.12	0.34	1.89	1.92	0.13	0.31	1.96	2.29	1.96	0.57	1.96	2.70	2.70	2.70	2.70	1.28	1.86	0.56	1.33	0.56	0.56	0.56	0.56
CFM PER RUN COOLING	59	64	10	57	58	4	9	60	69	59	17	59	82	82	82	82	39	56	17	40	17	17	17	17
ADJUSTED PRESSURE	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	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
ACTUAL DUCT LGH	71	58	51	49	42	40	37	33	44	63	35	18	45	37	39	46	11	55	16	27	36	39	28	21
EQUIVALENT LENGTH	200	150	150	180	190	150	220	200	140	210	180	130	140	150	160	150	160	140	140	80	100	90	110	110
TOTAL EFFECTIVE LENGTH	271	208	201	229	232	190	257	233	184	273	215	148	185	187	199	196	171	195	156	107	136	129	138	131
ADJUSTED PRESSURE	0.06	0.08	0.09	0.08	0.07	0.09	0.07	0.07	0.09	0.06	0.08	0.12	0.09	0.09	0.08	0.08	0.11	0.09	0.11	0.16	0.13	0.13	0.12	0.13
ROUND DUCT SIZE	5	5	4	6	5	5	4	6	5	5	4	6	5	5	5	5	4	6	5	5	5	5	5	5
HEATING VELOCITY (ft/min)	235	330	218	153	308	66	161	158	272	235	161	250	360	360	360	360	608	117	367	191	521	521	521	521
COOLING VELOCITY (ft/min)	433	470	115	291	426	29	103	306	507	433	195	301	602	602	602	602	447	286	125	294	125	125	125	125
OUTLET GRILL SIZE	3X10	3X10	3X10	4X10	3X10	3X10	3X10	4X10	3X10	3X10	3X10	4X10	3X10	3X10	3X10	3X10	3X10	4X10	3X10	3X10	3X10	3X10	3X10	3X10
TRUNK	A	A	B	B	D	C	D	C	D	A	D	C	A	A	A	A	C	C	D	C	B	B	B	C

RUN #	25	26	27	28	29
ROOM NAME	BAS	BAS	BED-3	LOFT	FOY
RM LOSS MBH	3.59	3.59	2.10	1.85	2.55
CFM PER RUN HEAT	71	71	42	37	50
RM GAIN MBH	0.56	0.56	1.92	2.29	0.56
CFM PER RUN COOLING	17	17	58	69	17
ADJUSTED PRESSURE	0.17	0.17	0.17	0.17	0.17
ACTUAL DUCT LGH	19	32	48	57	25
EQUIVALENT LENGTH	120	120	200	200	120
TOTAL EFFECTIVE LENGTH	139	152	248	257	145
ADJUSTED PRESSURE	0.12	0.11	0.07	0.07	0.12
ROUND DUCT SIZE	5	5	5	5	5
HEATING VELOCITY (ft/min)	521	521	308	272	367
COOLING VELOCITY (ft/min)	125	125	426	507	125
OUTLET GRILL SIZE	3X10	3X10	3X10	3X10	3X10
TRUNK	C	D	D	D	D

SUPPLY AIR TRUNK SIZE				RETURN AIR TRUNK SIZE			
TRUNK	STATIC PRESS.	ROUND DUCT	RECT DUCT	TRUNK	STATIC PRESS.	ROUND DUCT	RECT DUCT
TRUNK A	0.06	9.7	14	TRUNK G	0.00	0	0
TRUNK B	0.06	12.2	18	TRUNK H	0.00	0	0
TRUNK C	0.06	14.5	24	TRUNK I	0.00	0	0
TRUNK D	0.07	9.9	12	TRUNK J	0.00	0	0
TRUNK E	0.00	0	0	TRUNK K	0.00	0	0
TRUNK F	0.00	0	0	TRUNK L	0.00	0	0

RETURN AIR #				VELOCITY (ft/min)			
TRUNK	STATIC PRESS.	ROUND DUCT	RECT DUCT	TRUNK	STATIC PRESS.	ROUND DUCT	RECT DUCT
TRUNK A	0.06	9.7	14	TRUNK X	0.06	0	0
TRUNK B	0.06	12.2	18	TRUNK Y	0.06	15.5	28
TRUNK C	0.06	14.5	24	TRUNK Z	0.06	11.5	16
TRUNK D	0.07	9.9	12	DROP	0.06	0	0
TRUNK E	0.00	0	0		0.06	16.4	24
TRUNK F	0.00	0	0		0.06		

TYPE: 4004 - LOT 94 - OPT. 5 BED
SITE NAME: PINE VALLEY & TESTON

LO # 80585
THE DALERIDGE

RESIDENTIAL MECHANICAL VENTILATION DESIGN SUMMARY

COMBUSTION APPLIANCES		9.32.3.1(1)
a)	<input checked="" type="checkbox"/> Direct vent (sealed combustion) only	
b)	<input type="checkbox"/> Positive venting induced draft (except fireplaces)	
c)	<input type="checkbox"/> Natural draft, B-vent or induced draft gas fireplace	
d)	<input type="checkbox"/> Solid Fuel (including fireplaces)	
e)	<input type="checkbox"/> No Combustion Appliances	

HEATING SYSTEM	
<input checked="" type="checkbox"/> Forced Air	<input type="checkbox"/> Non Forced Air
<input type="checkbox"/> Electric Space Heat	

HOUSE TYPE		9.32.1(2)
<input checked="" type="checkbox"/> I	Type a) or b) appliance only, no solid fuel	
<input type="checkbox"/> II	Type I except with solid fuel (including fireplaces)	
<input type="checkbox"/> III	Any Type c) appliance	
<input type="checkbox"/> IV	Type I, or II with electric space heat	
<input type="checkbox"/>	Other: Type I, II or IV no forced air	

SYSTEM DESIGN OPTIONS		O.N.H.W.P.
<input type="checkbox"/> 1	Exhaust only/Forced Air System	
<input type="checkbox"/> 2	HRV with Ducting/Forced Air System	
<input checked="" type="checkbox"/> 3	HRV Simplified/connected to forced air system	
<input type="checkbox"/> 4	HRV with Ducting/non forced air system	
<input type="checkbox"/>	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	5 @ 10.6 cfm	53 cfm
Other Rooms	6 @ 10.6 cfm	63.6 cfm
Table 9.32.3.A.	TOTAL	201.4 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		95.4 cfm

SUPPLEMENTAL VENTILATION CAPACITY		9.32.3.5.
Total Ventilation Capacity	201.4	cfm
Less Principal Ventil. Capacity	155	cfm
Required Supplemental Capacity	46.4	cfm

PRINCIPAL EXHAUST FAN CAPACITY	
Model: VANEE 65H	Location: BSMT
155.0 cfm	3.0 sones
<input checked="" type="checkbox"/> HVI Approved	

PRINCIPAL EXHAUST HEAT LOSS CALCULATION			
CFM	$\Delta T \cdot F$	FACTOR	% LOSS
155.0 CFM	X 76 F	X 1.08	X 0.25


SUPPLEMENTAL FANS		NUTONE	
Location	Model	cfm	HVI
ENS	QTXEN050C	50	<input checked="" type="checkbox"/>
ENS-2/3	QTXEN050C	50	<input checked="" type="checkbox"/>
ENS-4/5	QTXEN050C	50	<input checked="" type="checkbox"/>
PWD	QTXEN050C	50	<input checked="" type="checkbox"/>

HEAT RECOVERY VENTILATOR		9.32.3.11.
Model: VANEE 65H		
155 cfm high	64 cfm low	
75 % Sensible Efficiency	<input checked="" type="checkbox"/> 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:	November-18

CSA F280-12 Residential Heat Loss and Heat Gain Calculations																																																																											
Formula Sheet (For Air Leakage / Ventilation Calculation)																																																																											
LO#: 80585	Model: 4004 - LOT 94 - OPT. 5 BED	Builder: GOLD PARK HOMES	Date: 02/11/2018																																																																								
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5.2.3.1 Heat Loss due to Air Leakage																																																																											
$HL_{airb} = LR_{airh} \times \frac{V_b}{3.6} \times DTD_h \times 1.2$																																																																											
0.370	x	375.48	x																																																																								
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5.2.3.2 Heat Loss due to Mechanical Ventilation																																																																											
$HL_{vairb} = PVC \times DTD_h \times 1.08 \times (1 - E)$																																																																											
155 CFM	x	76 °F	x																																																																								
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5.2.3.3 Calculation of Air Change Heat Loss for Each Room (Floor Multiplier Section)																																																																											
$HL_{airr} = Level Factor \times HL_{airbv} \times \{(HL_{agcr} + HL_{bgcr}) \div (HL_{aglevel} + HL_{bglevel})\}$																																																																											
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<p>*HLairbv = Air leakage heat loss + ventilation heat loss</p> <p>*For a balanced or supply only ventilation system HLairv = 0</p>																																																																											

HEAT LOSS AND GAIN SUMMARY SHEET

MODEL: 4004 - LOT 94 - OPT. 5 BED	THE DALERIDGE	BUILDER: GOLD PARK HOMES
SFQT: 3312	LO# 80585	SITE: PINE VALLEY & TESTON

DESIGN ASSUMPTIONS

HEATING	°F	COOLING	°F
OUTDOOR DESIGN TEMP.	-4	OUTDOOR DESIGN TEMP.	88
INDOOR DESIGN TEMP.	72	INDOOR DESIGN TEMP. (MAX 75°F)	75

BUILDING DATA

ATTACHMENT:	DETACHED	# 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 (ft ³):	47736.0	ASSUMED (Y/N):	Y
INTERNAL SHADING:	BLINDS/CURTAINS	ASSUMED OCCUPANTS:	6
INTERIOR LIGHTING LOAD (Btu/h/ft ²):	1.27	DC BRUSHLESS MOTOR (Y/N):	Y
FOUNDATION CONFIGURATION	BCIN_1	DEPTH BELOW GRADE:	7.0 ft
LENGTH: 58.0 ft	WIDTH: 32.0 ft	EXPOSED PERIMETER:	180.0 ft

2012 OBC - COMPLIANCE PACKAGE

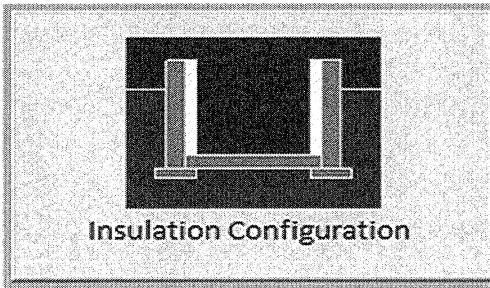
Component	Compliance Package A1	
	Nominal	Min. Eff.
Ceiling with Attic Space Minimum RSI (R)-Value	60	59.22
Ceiling Without Attic Space Minimum RSI (R)-Value	31	27.65
Exposed Floor Minimum RSI (R)-Value	31	29.80
Walls Above Grade Minimum RSI (R)-Value	22	17.03
Basement Walls Minimum RSI (R)-Value	20 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:	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):	17.7	 Insulation Configuration
Floor Width (m):	9.8	
Exposed Perimeter (m):	0.0	
Wall Height (m):	3.0	
Depth Below Grade (m):	2.13	
Window Area (m ²):	3.5	
Door Area (m ²):	3.7	
Radiant Slab		
Heated Fraction of the Slab:	0	
Fluid Temperature (°C):	33	
Design Months		
Heating Month	1	
Foundation Loads		
Heating Load (Watts):		1726

TYPE: 4004 - LOT 94 - OPT. 5 BED
LO# 80585

THE DALERIDGE

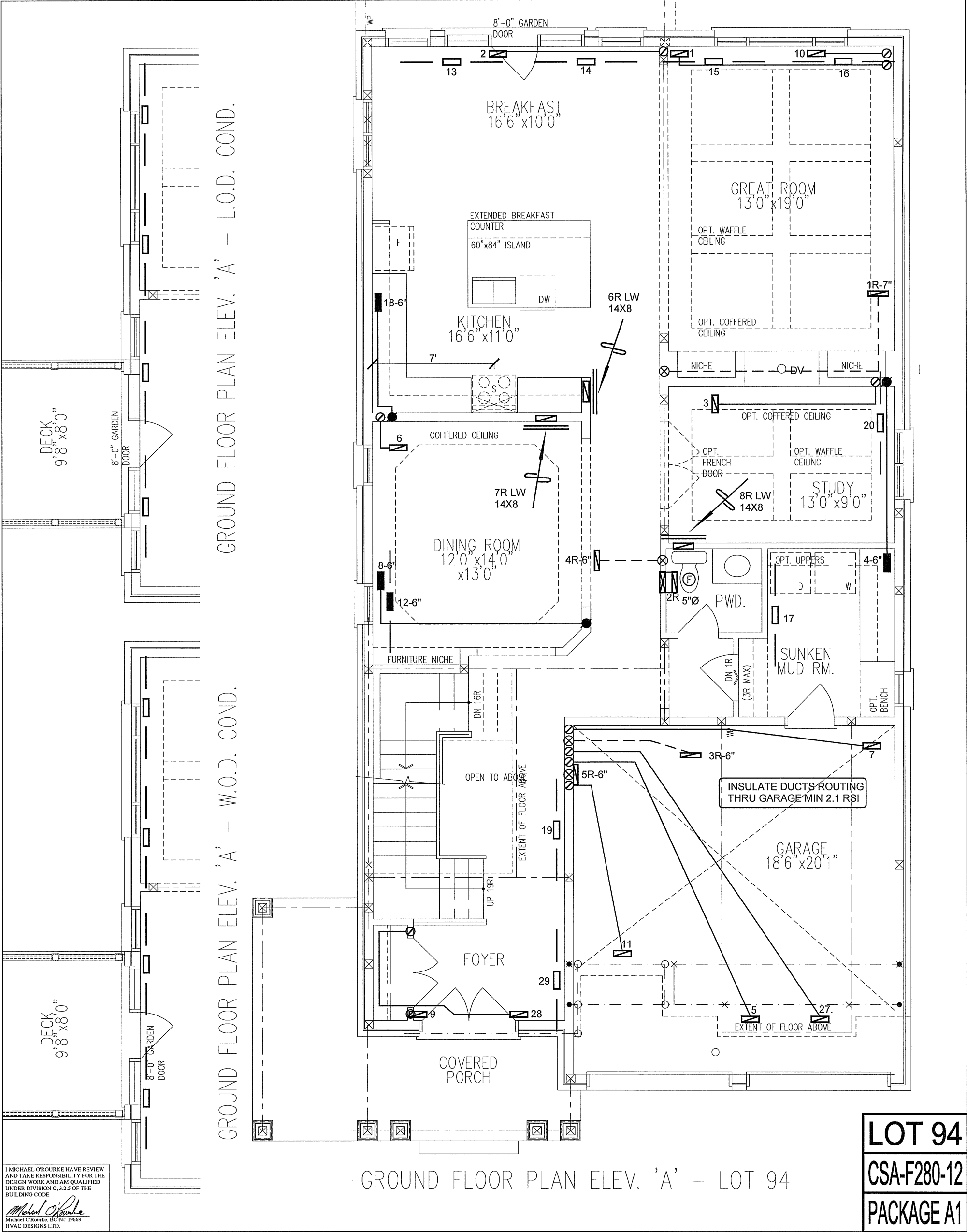
Air Infiltration Residential Load Calculator

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):	7.92			
Building Configuration				
Type:	Detached			
Number of Stories:	Two			
Foundation:	Full			
House Volume (m ³):	1351.7			
Air Leakage/Ventilation				
Air Tightness Type:	Present (1961-) (3.57 ACH)			
Custom BDT Data:	ELA @ 10 Pa.	1801.9 cm ²		
	3.57	ACH @ 50 Pa		
Mechanical Ventilation (L/s):	Total Supply	Total Exhaust		
	73.2	73.2		
Flue Size				
Flue #:	#1	#2	#3	#4
Diameter (mm):	0	0	0	0
Natural Infiltration Rates				
Heating Air Leakage Rate (ACH/H):	0.370			
Cooling Air Leakage Rate (ACH/H):	0.124			

TYPE: 4004 - LOT 94 - OPT. 5 BED
LO# 80585

THE DALERIDGE



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.

LOT 94

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		<div></div> <div>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</div> <div>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.</div>	Sheet Title	
GOLD PARK HOMES			FIRST FLOOR HEATING LAYOUT	
Project Name			Date	NOV/2018
PINE VALLEY & TESTON VAUGHAN, ONTARIO			Scale	3/16" = 1'-0"
THE DALERIDGE			BCIN# 19669	
OPT. 5 BED			LO#	80585
4004 - LOT 94	3312 sqft			

