

SITE NAME: LAMBERT'S LANE PH.2
BUILDING: GREENPARK HOMES
TYPE: HORIZONTAL
GFA: 1862
DATE: Feb-19
LO# 81878
SUMMER NATURAL AIR CHANGE RATE 0.088
WINTER NATURAL AIR CHANGE RATE 0.282
HEAT GAIN AT F. 74
HEAT LOSS AT F. 74
CSA-F280-12
ENERGYSTAR

ROOM USE	CLG. HT.	EXP. WALL	FACTORS	GLAZING	NORTH	EAST	SOUTH	WEST	SKYLT.	DOORS	NET EXPOSED WALL	NET EXPOSED ROOF WALL ABOVE GR	EXPOSED CLG	NO ATTIC EXPOSED CLG	EXPOSED FLOOR	BASEMENT/CRAWL HEAT LOSS	SLAB ON GRADE HEAT LOSS	SUBTOTAL HT LOSS	SUB TOTAL HT GAIN	LEVEL FACTOR / MULTIPLIER	AIR CHANGE HEAT LOSS	DUCT LOSS	DUCT GAIN	HEAT GAIN PEOPLE	HEAT GAIN APPLIANCES/LIGHTS	TOTAL HT LOSS BTU/H	TOTAL HT GAIN x 1.3 BTU/H
ROOM USE	CLG. HT.	EXP. WALL	FACTORS	GLAZING	NORTH	EAST	SOUTH	WEST	SKYLT.	DOORS	NET EXPOSED WALL	NET EXPOSED ROOF WALL ABOVE GR	EXPOSED CLG	NO ATTIC EXPOSED CLG	EXPOSED FLOOR	BASEMENT/CRAWL HEAT LOSS	SLAB ON GRADE HEAT LOSS	SUBTOTAL HT LOSS	SUB TOTAL HT GAIN	LEVEL FACTOR / MULTIPLIER	AIR CHANGE HEAT LOSS	DUCT LOSS	DUCT GAIN	HEAT GAIN PEOPLE	HEAT GAIN APPLIANCES/LIGHTS	TOTAL HT LOSS BTU/H	TOTAL HT GAIN x 1.3 BTU/H
MBR	10	31	310	LOSS GAIN	15.1	40.7	24.1	40.7	39.9	24.7	3.5	0.5	1.3	2.7	0.4	0	0	2256	2090	0.20	648	0	0	0	443	2904	4048
ENS	9	6	64	LOSS GAIN	0	0	0	0	0	0	0	0	0	0	0	0	0	400	390	0.20	116	0	0	0	0	616	531
WIC	7	9	63	LOSS GAIN	0	0	0	0	0	0	0	0	0	0	0	0	0	481	308	0.20	129	0	0	0	0	580	413
BED-2	10	26	260	LOSS GAIN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1926	0.20	553	0	0	0	0	2479	3242
BED-3	13	9	117	LOSS GAIN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	257	0.20	257	0	0	0	0	1150	2085
BATH	10	10	100	LOSS GAIN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	894	0.20	188	0	0	0	0	842	530
TOTAL COMBINED HEAT LOSS BTU/H: 29917																											

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LVDN	10	35	350	LOSS GAIN	16.1	40.7	24.1	40.7	39.9	24.7	3.5	0.5	1.3	2.7	0.4	0	0	2449	2872	0.30	980	0	0	0	443	3428	4486
FAM	10	28	280	LOSS GAIN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2037	0.30	815	0	0	0	0	2882	3838
KIT	12	10	120	LOSS GAIN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1236	0.30	496	0	0	0	0	1734	2326
LAUN	9	9	0	LOSS GAIN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	101	0.30	65	0	0	0	0	294	716
WDR	10	8	80	LOSS GAIN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	281	0.40	113	0	0	0	0	394	57
FOY	11	10	110	LOSS GAIN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1322	0.30	529	0	0	0	0	1662	441
TOTAL COMBINED HEAT LOSS: 28642																											

THIS STRUCTURE MUST BE
CONSTRUCTED TO MEET OR
EXCEED THE PROVISIONS OF
THE ONTARIO BUILDING CODE

I 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

SITE NAME: LAMBERT'S LANE PH.2
BUILDER: GREENPARK HOMES

TYPE: HORIZON 12

DATE: Feb-19

GFA: 1862 LO# 81378

HEATING CFM	890	COOLING CFM	890
TOTAL HEAT LOSS	28,642	TOTAL HEAT GAIN	24,212
AIR FLOW RATE CFM	31.07	AIR FLOW RATE CFM	36.76
RUN COUNT			
4th	0	3rd	0
3rd	0	2nd	0
2nd	0	1st	0
1st	0		0
S/A	0		0
R/A	0		0

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

RUN #	ROOM NAME	RM LOSS MBH	CFM PER RUN HEAT	RM GAIN MBH	CFM PER RUN COOLING	ADJUSTED PRESSURE	ACTUAL DUCT LGH	EQUIVALENT LENGTH	TOTAL EFFECTIVE LENGTH	ADJUSTED PRESSURE	ROUND DUCT SIZE	HEATING VELOCITY (fpm)	COOLING VELOCITY (fpm)	TRUNK
1	MBR	1.45	0.52	0.68	1.24	0.17	0.17	0.17	0.17	0.17	6	229	377	4X10
2	ENS	0.16	0.53	0.16	0.16	0.06	0.17	20	265	0.06	6	184	229	3X10
3	WIC	0.68	0.41	1.71	1.71	0.07	0.17	210	236	0.07	4	207	112	3X10
4	BED-2	0.17	0.17	0.17	0.17	0.06	0.17	190	191	0.06	5	266	463	3X10
5	BED-3	1.15	0.84	1.24	1.15	0.08	0.17	180	180	0.08	4	268	393	4X10
6	BATH	0.39	0.39	0.39	0.39	0.09	0.17	39	199	0.09	5	266	463	3X10
7	BED-2	1.45	1.71	1.71	1.71	0.06	0.17	50	220	0.06	6	229	377	4X10
8	MBR	2.02	2.24	2.24	2.24	0.06	0.17	74	270	0.06	6	229	377	4X10
9	LVDN	0.16	0.16	0.16	0.16	0.09	0.16	82	175	0.09	6	270	418	4X10
10	FAM	1.71	1.71	1.71	1.71	0.11	0.17	25	130	0.11	5	275	438	4X10
11	FAM	1.43	1.43	1.43	1.43	0.12	0.17	28	158	0.12	5	275	438	4X10
12	KIT	1.73	2.02	2.02	2.02	0.09	0.17	24	134	0.09	4	275	438	4X10
13	LAUN	0.29	0.39	0.39	0.39	0.13	0.17	9	120	0.13	4	275	438	3X10
14	W/R	0.06	0.06	0.06	0.06	0.09	0.17	2	129	0.09	5	275	438	3X10
15	FOY	1.85	2.40	2.40	2.40	0.11	0.17	19	159	0.11	5	275	438	3X10
16	BAS	2.40	2.40	2.40	2.40	0.16	0.17	25	160	0.16	5	275	438	3X10
17	BAS	2.40	2.40	2.40	2.40	0.16	0.17	25	160	0.16	5	275	438	3X10
18	BAS	2.40	2.40	2.40	2.40	0.16	0.17	25	160	0.16	5	275	438	3X10
19	BAS	2.40	2.40	2.40	2.40	0.16	0.17	25	160	0.16	5	275	438	3X10
20	BAS	2.40	2.40	2.40	2.40	0.16	0.17	25	160	0.16	5	275	438	3X10
21	BAS	2.40	2.40	2.40	2.40	0.16	0.17	25	160	0.16	5	275	438	3X10
22	BAS	2.40	2.40	2.40	2.40	0.16	0.17	25	160	0.16	5	275	438	3X10
23	BAS	2.40	2.40	2.40	2.40	0.16	0.17	25	160	0.16	5	275	438	3X10
24	BAS	2.40	2.40	2.40	2.40	0.16	0.17	25	160	0.16	5	275	438	3X10

TYPE: HORIZON 12
 SITE NAME: LAMBERT'S LANE PH.2

LO # 81378

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	5 @ 10.6 cfm 53.0 cfm
Table 9.32.3.A.	TOTAL 159.0 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	63.6 cfm

SUPPLEMENTAL VENTILATION CAPACITY 9.32.3.5.	
Total Ventilation Capacity	159 cfm
Less Principal Ventil. Capacity	63.6 cfm
Required Supplemental Capacity	95.4 cfm

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

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

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

HEAT RECOVERY VENTILATOR 9.32.3.11.	
Model: VANE 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: GREENPARK 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:	February-19

 I 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.
 INDIVIDUAL BCIN: 19669 MICHAEL O'ROURKE

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Specializing in Residential Mechanical Design Services

CSA F280-12 Residential Heat Loss and Heat Gain Calculations																																															
LO#: 81378 Model: HORIZON 12 Builder: GREENPARK HOMES Date: 06/02/2019	Formula Sheet (For Air Leakage / Ventilation Calculation)																																														
Volume Calculation																																															
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<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>Level</th> <th>Level Factor (LF)</th> <th>Ventilation Heat Loss (Btu/h)</th> <th>Level Conductive Heat Loss: (HL_{level})</th> <th>Air Leakage Heat Loss Multiplier (LF x HL_{airbv} / HL_{level})</th> </tr> <tr> <td>1</td> <td>0.5</td> <td>4,731</td> <td>1,033</td> <td>0.400</td> </tr> <tr> <td>2</td> <td>0.3</td> <td>7,328</td> <td>0,400</td> <td>0.287</td> </tr> <tr> <td>3</td> <td>0.2</td> <td>6,810</td> <td>0</td> <td>0.000</td> </tr> <tr> <td>4</td> <td>0</td> <td>0</td> <td>0</td> <td>0.000</td> </tr> <tr> <td>5</td> <td>0</td> <td>0</td> <td>0</td> <td>0.000</td> </tr> </table>		Level	Level Factor (LF)	Ventilation Heat Loss (Btu/h)	Level Conductive Heat Loss: (HL _{level})	Air Leakage Heat Loss Multiplier (LF x HL _{airbv} / HL _{level})	1	0.5	4,731	1,033	0.400	2	0.3	7,328	0,400	0.287	3	0.2	6,810	0	0.000	4	0	0	0	0.000	5	0	0	0	0.000																
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4	0	0	0	0.000																																											
5	0	0	0	0.000																																											
* HL_{airbv} = Air leakage heat loss + ventilation system HL_{airv} = 0 For a balanced or supply only ventilation system HL_{airv} = 0																																															

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JUN 05 2019

HEAT LOSS AND GAIN SUMMARY SHEET**MODEL:** HORIZON 12**BUILDER:** GREENPARK HOMES**SFQT:** 1862**LO#** 81378**SITE:** LAMBERT'S LANE PH.2**DESIGN ASSUMPTIONS**

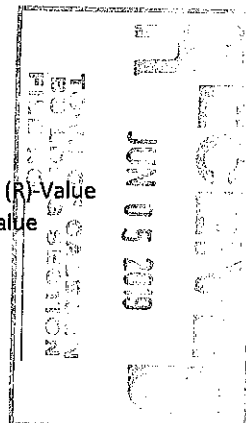
HEATING	°F	COOLING	°F
OUTDOOR DESIGN TEMP.	-2	OUTDOOR DESIGN TEMP.	86
INDOOR DESIGN TEMP.	72	INDOOR DESIGN TEMP. (MAX 75°F)	75

BUILDING DATA

ATTACHMENT:	ATTACHED	# OF STORIES (+BASEMENT):	3
FRONT FACES:	EAST	ASSUMED (Y/N):	Y
AIR CHANGES PER HOUR:	3.00	ASSUMED (Y/N):	Y
AIR TIGHTNESS CATEGORY:	TIGHT	ASSUMED (Y/N):	Y
WIND EXPOSURE:	SHELTERED	ASSUMED (Y/N):	Y
HOUSE VOLUME (ft³):	26068.0	ASSUMED (Y/N):	Y
INTERNAL SHADING:	BLINDS/CURTAINS	ASSUMED OCCUPANTS:	4
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: 41.0 ft	WIDTH: 26.0 ft	EXPOSED PERIMETER:	93.0 ft

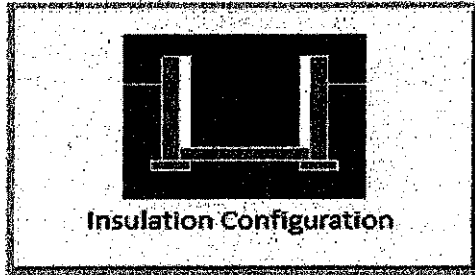
2012 OBC - COMPLIANCE PACKAGE**Component****Compliance Package
ENERGYSTAR****Nominal Min. Eff.**

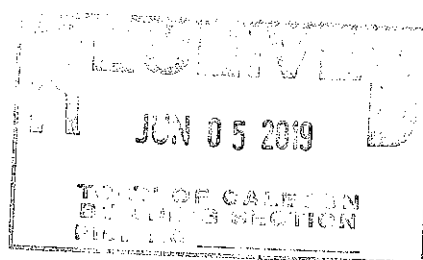
Ceiling with Attic Space Minimum RSI (R)-Value	60	59.20
Ceiling Without Attic Space Minimum RSI (R)-Value	31	27.70
Exposed Floor Minimum RSI (R)-Value	31	29.80
Walls Above Grade Minimum RSI (R)-Value	R22+R5	21.10
Basement Walls Minimum RSI (R)-Value	20	21.12
Below Grade Slab Entire surface > 600 mm below 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	ZONE 2	-
Skylights Maximum U-Value	ZONE 2	-
Space Heating Equipment Minimum AFUE	0.96	-
HRV Minimum Efficiency	75%	-
Domestic Hot Water Heater Minimum EF	0.9	-

INDIVIDUAL BCIN: 19669
MICHAEL O'ROURKE*Michael O'Rourke*THIS STRUCTURE MUST BE
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THE ONTARIO BUILDING CODE

Residential Foundation Thermal Load Calculator

Supplemental tool for CAN/CSA-F280

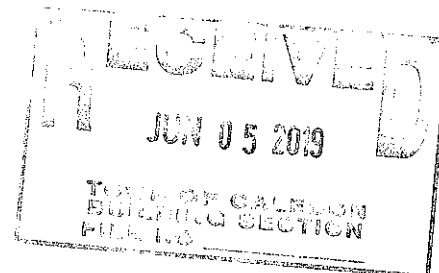
Weather Station Description		
Province:	Ontario	
Region:	Brampton	
Site Description		
Soil Conductivity:	Normal conductivity: dry sand, loam, clay	
Water Table:	Normal (7-10 m, 23-33 ft)	
Foundation Dimensions		
Floor Length (m):	12.5	
Floor Width (m):	7.9	
Exposed Perimeter (m):	28.3	
Wall Height (m):	2.7	
Depth Below Grade (m):	1.83	
Window Area (m ²):	0.7	
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):	911	

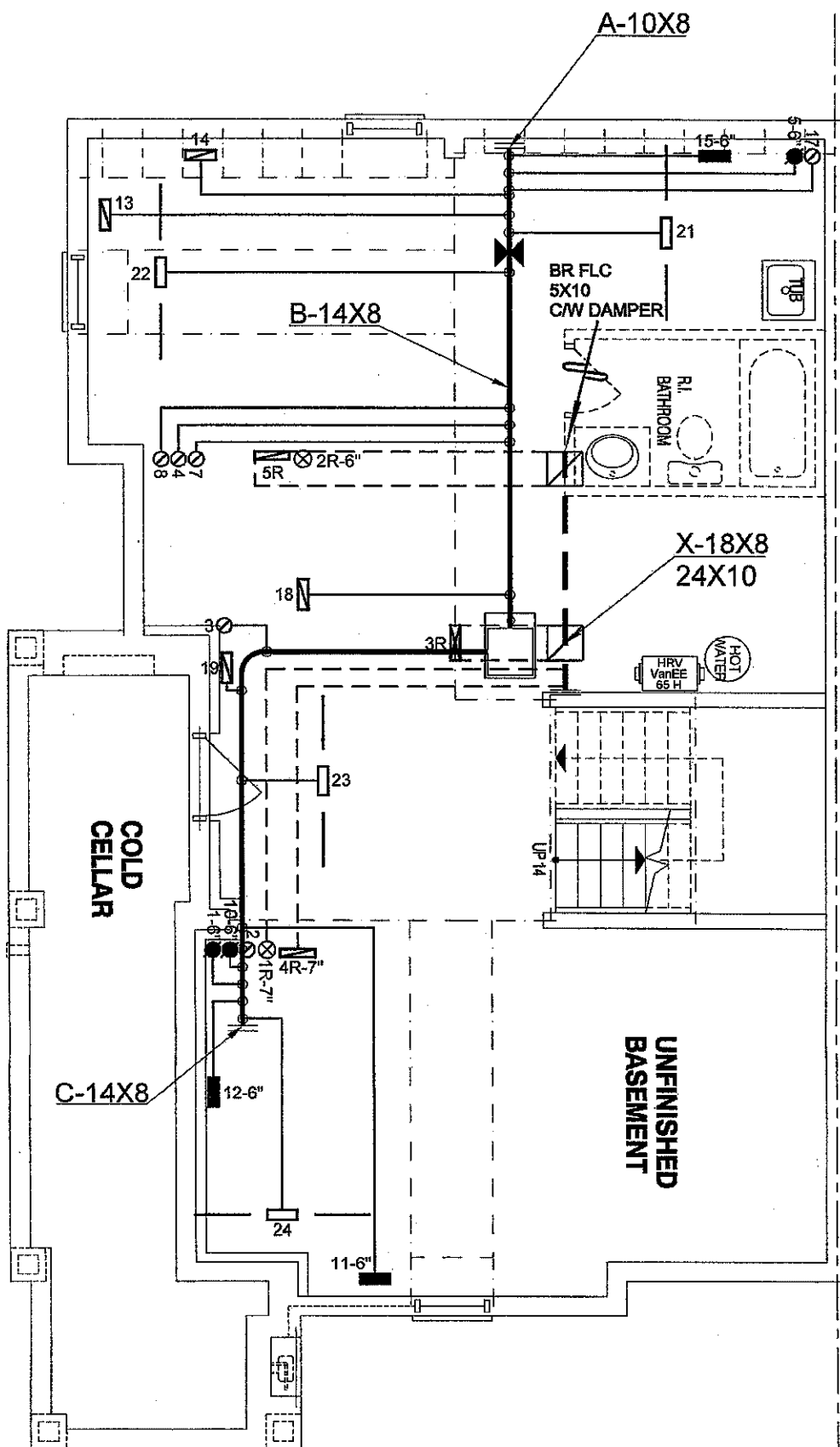
TYPE: HORIZON 12
LO# 81378THIS STRUCTURE MUST BE
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Air Infiltration Residential Load Calculator

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):	738.2		
Air Leakage/Ventilation			
Air Tightness Type:	Energy Star Attached (3.0 ACH)		
Custom BDT Data:	ELA @ 10 Pa. 3.00	826.9 cm ² ACH @ 50 Pa	
Mechanical Ventilation (L/s):	Total Supply 30.0	Total Exhaust 30.0	
Flue Size			
Flue #:	#1	#2	#3
Diameter (mm):	0	0	0
Natural Infiltration Rates			
Heating Air Leakage Rate (ACH/H):	0.282		
Cooling Air Leakage Rate (ACH/H):	0.088		

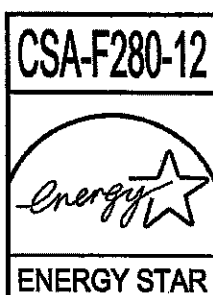
THIS STRUCTURE MUST BE
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THE ONTARIO BUILDING CODETYPE: HORIZON 12
LO# 81378



RECEIVED
JUN 05 2019
TOWN OF CALEDON
BUILDING SECTION
FILE NO.

THIS STRUCTURE MUST BE
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THE ONTARIO BUILDING CODE

CERTIFIED MODEL
PRE-APPROVED
FOR PERMIT APPLICATION AS PER THE
ONTARIO BUILDING CODE
TOWN OF CALEDON BUILDING DIVISION
REVIEWED BY *[Signature]* (SA)
DATE JUNE 13, 2019
FILE # CMOD - Horizon 12
(SUBMITTATION 1)



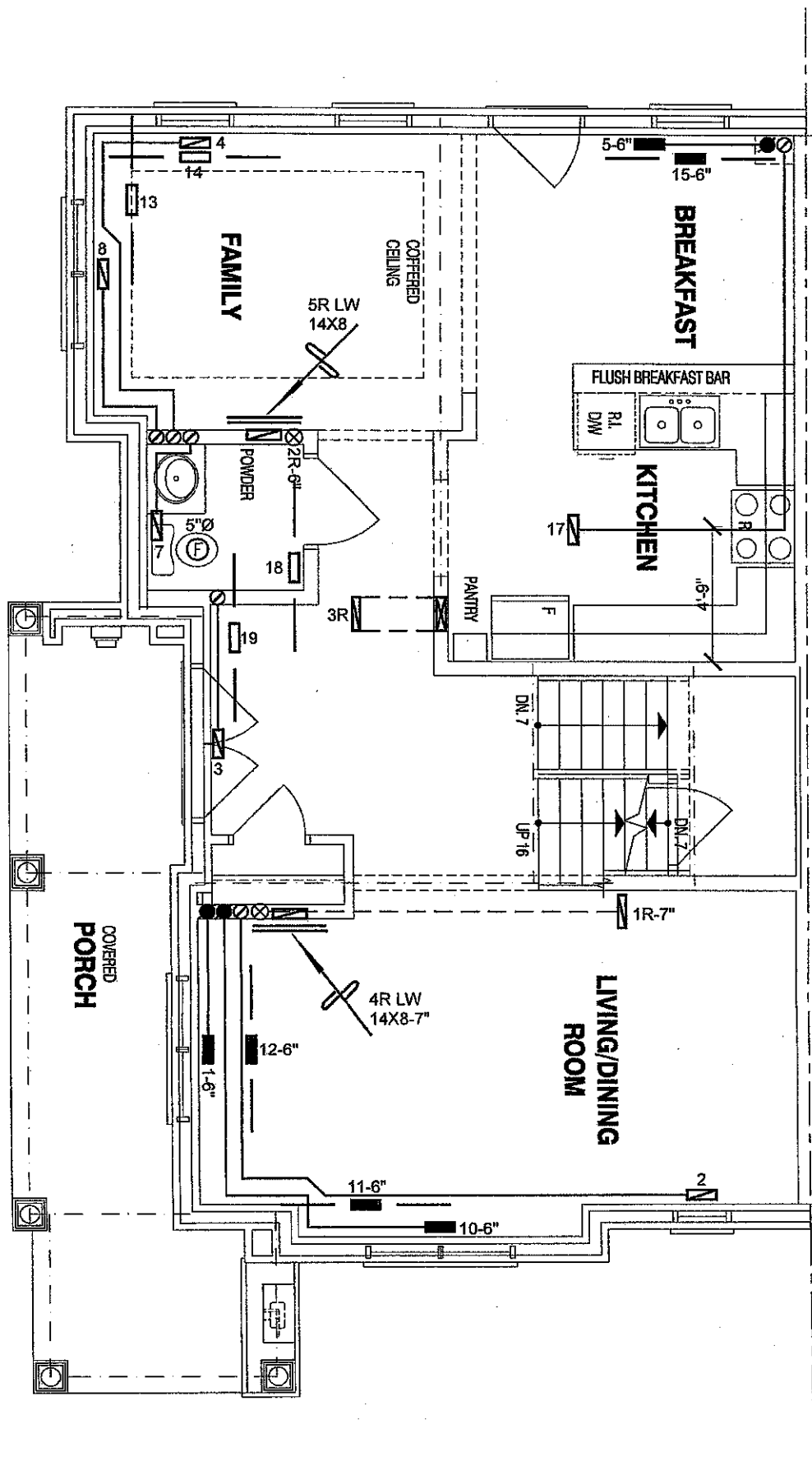
I MICHAEL O'ROURKE HAVE REVIEWED
AND TAKE RESPONSIBILITY FOR THE
DESIGN WORK AND AM QUALIFIED
UNDER DIVISION C.3.2.5 OF THE
BUILDING CODE.
[Signature]
Michael O'Rourke, BCIN# 19669
HVAC DESIGNS LTD.

APPLICANT COPY

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
	SUPPLY AIR BOOT ABOVE		6" SUPPLY AIR STACK 2nd FLOOR		FRA- FLOOR RETURN AIR GRILLE		REDUCER	Date	

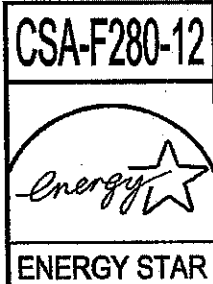
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Client GREENPARK HOMES		HVACDESIGNS LTD. 375 Finley Ave. Suite 202 - Ajax, Ontario L1S 2E2 Tel. 905.619.2300 - 905.420.5300 Fax 905.619.2375 Email: info@hvacdesigns.ca Web: www.hvacdesigns.ca Specializing in Residential Mechanical Design Services Installation 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 29917 BTU/H UNIT DATA		# OF RUNS S/A R/A FANS				Sheet Title	
Project Name LAMBERT'S LANE HOME CORP PH 2 CALEDON, ONTARIO			MAKE GOODMAN		3RD FLOOR				BASEMENT HEATING LAYOUT	
HORIZON 12 1862 sqft			MODEL GMEC960402BNA		2ND FLOOR 9 3 3					
			INPUT 40 MBTU/H		1ST FLOOR 7 2 2					
			OUTPUT 38.4 MBTU/H		BASEMENT 4 1 0				Date FEB/2019	
			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				Scale 3/16" = 1'-0"	
			FAN SPEED 890 cfm @ 0.6" w.c.						BCIN# 19669	
								LO# 81378		



I MICHAEL O'DRISCOLL HAVE REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK AND AM QUALIFIED UNDER DIVISION C, 3.2.3 OF THE BUILDING CODE.

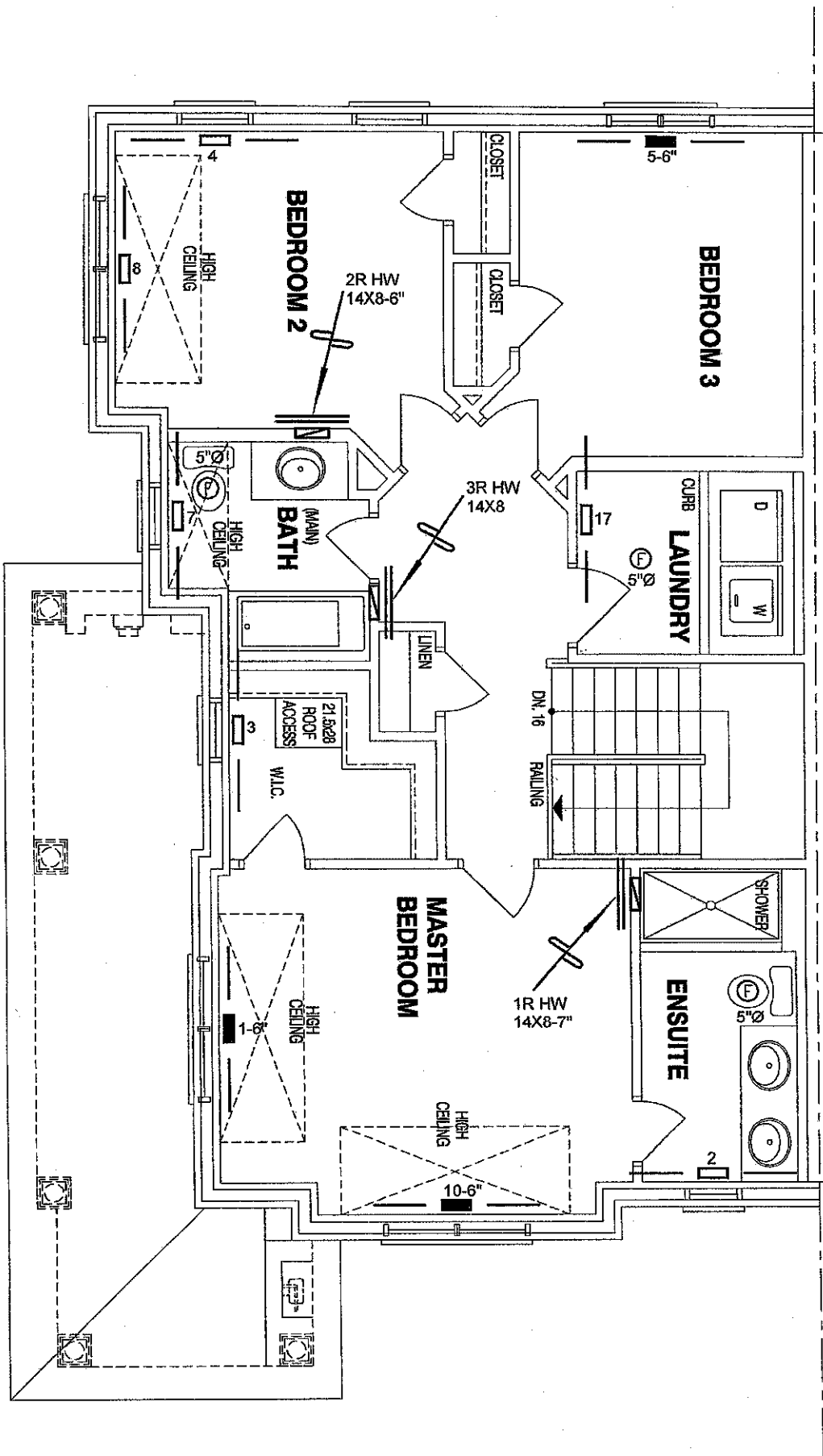
Michael O'Driscoll
Michael O'Driscoll, BCIN# 19669
HVAC DESIGNS LTD.



HVAC LEGEND						3.		
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	
	SUPPLY AIR GRILLE		6" SUPPLY AIR BOOT ABOVE		14"x8" RETURN AIR GRILLE		RETURN AIR STACK ABOVE	2.
	SUPPLY AIR GRILLE 6" BOOT		SUPPLY AIR STACK FROM 2nd FLOOR		30"x8" RETURN AIR GRILLE		RETURN AIR STACK 2nd FLOOR	1.
	SUPPLY AIR BOOT ABOVE		6" SUPPLY AIR STACK 2nd FLOOR		FRA- FLOOR RETURN AIR GRILLE		REDUCER	No. Description Date
REVISIONS								

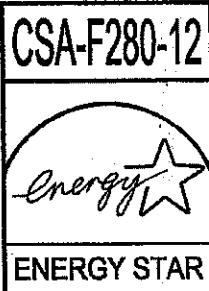
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Client GREENPARK HOMES		HVACDESIGNS LTD. 375 Finley Ave. Suite 202 - Ajax, Ontario L1S 2E2 Tel. 905.619.2300 - 905.420.5300 Fax 905.619.2375 Email: info@hvacdesigns.ca Web: www.hvacdesigns.ca Specializing in Residential Mechanical Design Services	THIS STRUCTURE MUST BE CONSTRUCTED TO MEET OR EXCEED THE PROVISIONS OF THE ONTARIO BUILDING CODE.	Sheet Title FIRST FLOOR HEATING LAYOUT	
Project Name LAMBERT'S LANE HOME CORP PH 2 CALEDON, ONTARIO				Date FEB/2019	Scale 3/16" = 1'-0"
HORIZON 12 1862 sqft		BCIN# 19669			
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.		LO#		81378	



I MICHAEL O'Rourke HAVE REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK AND AM QUALIFIED UNDER DIVISION C, 32.5 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		

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.

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Project Name LAMBERT'S LANE HOME CORP PH 2 CALEDON, ONTARIO				Date FEB/2019	Scale 3/16" = 1'-0"
HORIZON 12 1862 sqft		BCIN# 19669			
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.		LO#		81378	