

ROOM USE					K/L/D			PWD	FOY						BAS	
EXP. WALL					48			15	30						91	
CLG. HT.					10			10	10						9	
FACTORS																
GRS.WALL AREA	LOSS	GAIN			480			150	300						546	
GLAZING					LOSS	GAIN		LOSS	GAIN	LOSS	GAIN				LOSS	GAIN
NORTH	20.3	15.0	0	0	0		0	0	0	0	0	0	0	0	0	0
EAST	20.3	40.5	56	1135	2270		0	0	0	0	0	0	4	81	162	
SOUTH	20.3	23.9	0	0	0		0	0	0	0	0	0	0	0	0	
WEST	20.3	40.5	0	0	0		0	0	0	11	223	446	0	0	0	
SKYLT.	35.5	99.8	0	0	0		0	0	0	0	0	0	0	0	0	
DOORS	19.1	2.4	10	191	24		0	0	0	56	1070	136	21	401	51	
NET EXPOSED WALL	4.3	0.5	414	1760	224		150	638	81	233	991	126	0	0	0	
NET EXPOSED BSMT WALL ABOVE GR	3.4	0.4	0	0	0		0	0	0	0	0	0	273	936	119	
EXPOSED CLG	1.2	0.5	0	0	0		0	0	0	0	0	0	0	0	0	
NO ATTIC EXPOSED CLG	2.6	1.1	0	0	0		0	0	0	0	0	0	0	0	0	
EXPOSED FLOOR	2.4	0.3	0	0	0		0	0	0	0	0	0	0	0	0	
BASEMENT/CRAWL HEAT LOSS			0				0			0						
SLAB ON GRADE HEAT LOSS			0				0			0					2758	
SUBTOTAL HT LOSS				3086			638			2283					4176	
SUB TOTAL HT GAIN					2518			81			708					332
LEVEL FACTOR / MULTIPLIER			0.30	0.53			0.30	0.53		0.30	0.53		0.50	1.27		
AIR CHANGE HEAT LOSS				1637				338			1211			5311		
AIR CHANGE HEAT GAIN					163				5			46			21	
DUCT LOSS				0				0			0			0		
DUCT GAIN					0				0		0				0	
HEAT GAIN PEOPLE	240			0	0		0		0	0	0		0		0	
HEAT GAIN APPLIANCES/LIGHTS					585				0		0				585	
TOTAL HT LOSS BTU/H				4724				976			3495			9487		
TOTAL HT GAIN x 1.3 BTU/H					4245				112		980					1222

TOTAL COMBINED HEAT LOSS BTU/H: 27798

SITE NAME: BARLASSINA
BUILDER: GREENPARK HOMES

TYPE: CHERRY 1

DATE: Aug-22

GFA: 1946 LO# 98649

HEATING CFM 614 COOLING CFM 614
TOTAL HEAT LOSS 26,554 TOTAL HEAT GAIN 17,418
AIR FLOW RATE CFM 23.12 AIR FLOW RATE CFM 35.25

furnace pressure 0.6
furnace filter 0.05
a/c coil pressure 0.2
available pressure for s/a & r/a 0.35

#GOODMAN
GMEC960302BNA 30
FAN SPEED LOW
MEDLOW
MEDIUM 614
MEDIUM HIGH 895

AFUE = 96 %
INPUT (BTU/H) = 30,000
OUTPUT (BTU/H) = 28,800

DESIGN CFM = 614
CFM @ .6" E.S.P.

TEMPERATURE RISE 43 °F

RUN COUNT	4th	3rd	2nd	1st	Bas
S/A	0	0	9	5	3
R/A	0	0	3	1	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	10	14	15	16	18	19	21	22	24
ROOM NAME	MBR	ENS	WIC	BED-2	BED-3	BATH	BATH	FLEX	MBR	K/L/D	K/L/D	K/L/D	PWD	FOY	BAS	BAS	BAS
RM LOSS MBH.	1.27	1.56	0.20	1.23	1.59	0.21	0.21	0.33	1.27	1.57	1.57	1.57	0.98	3.49	3.16	3.16	3.16
CFM PER RUN HEAT	29	36	5	28	37	5	5	8	29	36	36	36	23	81	73	73	73
RM GAIN MBH.	1.79	1.54	0.06	2.26	2.41	0.06	0.06	0.90	1.79	1.42	1.42	1.42	0.11	0.98	0.41	0.41	0.41
CFM PER RUN COOLING	63	54	2	80	85	2	2	32	63	50	50	50	4	35	14	14	14
ADJUSTED PRESSURE	0.17	0.17	0.17	0.17	0.16	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.16	0.17	0.17	0.17
ACTUAL DUCT LGH.	51	42	18	54	45	26	24	45	55	45	40	12	6	28	44	31	22
EQUIVALENT LENGTH	180	160	170	160	130	150	170	170	200	120	120	90	90	120	120	130	140
TOTAL EFFECTIVE LENGTH	231	202	188	214	175	176	194	215	255	165	160	102	96	148	164	161	162
ADJUSTED PRESSURE	0.07	0.09	0.09	0.08	0.09	0.1	0.09	0.08	0.07	0.1	0.11	0.17	0.18	0.11	0.1	0.11	0.11
ROUND DUCT SIZE	6	5	4	6	6	4	4	5	6	5	4	5	4	5	5	5	5
HEATING VELOCITY (ft/min)	148	264	57	143	189	57	57	59	148	264	413	264	264	595	536	536	536
COOLING VELOCITY (ft/min)	321	396	23	408	433	23	23	235	321	367	574	367	46	257	103	103	103
OUTLET GRILL SIZE	4X10	3X10	3X10	4X10	4X10	3X10	3X10	3X10	4X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10
TRUNK	C	C	B	A	A	B	B	B	C	A	A	B	C	C	A	A	C

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 (ft/min)	COOLING VELOCITY (ft/min)	OUTLET GRILL SIZE	TRUNK
1	MBR	1.27	29	1.79	63	0.17	51	180	231	0.07	6	148	321	4X10	C
2	ENS	1.56	36	1.54	54	0.17	42	160	202	0.09	5	264	396	3X10	C
3	WIC	0.20	5	0.06	2	0.17	18	170	188	0.09	4	57	23	3X10	B
4	BED-2	1.23	28	2.26	80	0.17	54	160	214	0.08	6	143	408	4X10	A
5	BED-3	1.59	37	2.41	85	0.16	45	130	175	0.09	6	189	433	4X10	A
6	BATH	0.21	5	0.06	2	0.17	26	150	176	0.1	4	57	23	3X10	B
7	BATH	0.21	5	0.06	2	0.17	24	170	194	0.09	4	57	23	3X10	B
8	FLEX	0.33	8	0.90	32	0.17	45	170	215	0.08	5	59	235	3X10	B
10	MBR	1.27	29	1.79	63	0.17	55	200	255	0.07	6	148	321	4X10	C
14	K/L/D	1.57	36	1.42	50	0.17	45	120	165	0.1	5	264	367	3X10	A
15	K/L/D	1.57	36	1.42	50	0.17	40	120	160	0.11	4	413	574	3X10	A
16	K/L/D	1.57	36	1.42	50	0.17	12	90	102	0.17	5	264	367	3X10	B
18	PWD	0.98	23	0.11	4	0.16	6	90	96	0.18	4	264	46	3X10	C
19	FOY	3.49	81	0.98	35	0.16	28	120	148	0.11	5	595	257	3X10	C
21	BAS	3.16	73	0.41	14	0.17	44	120	164	0.1	5	536	103	3X10	A
22	BAS	3.16	73	0.41	14	0.17	31	130	161	0.11	5	536	103	3X10	A
24	BAS	3.16	73	0.41	14	0.17	22	140	162	0.11	5	536	103	3X10	C

NOT THE GRANTING OF A PERMIT NOR REVIEWING OF SPECS & DRAWINGS NOR INSPECTIONS MADE DURING INSTALLATION BY THE OFFICIAL HAVING JURISDICTION SHALL RELIEVE THE OWNER FROM REQUIREMENTS OF THE ONTARIO BUILDING CODE AND ANY OTHER REFERENCED REQUIREMENTS.

SUPPLY AIR TRUNK SIZE															RETURN AIR TRUNK SIZE								
	TRUNK CFM	STATIC PRESS.	ROUND DUCT	RECT DUCT			VELOCITY (ft/min)			TRUNK CFM	STATIC PRESS.	ROUND DUCT	RECT DUCT	VELOCITY (ft/min)		TRUNK CFM	STATIC PRESS.	ROUND DUCT	RECT DUCT			VELOCITY (ft/min)	
TRUNK A	283	0.08	8.7	10	x	8	509	TRUNK G	0	0.00	0	0	x	8	0	TRUNK O	0	0.07	0	0	x	8	0
TRUNK B	342	0.08	9.4	14	x	8	440	TRUNK H	0	0.00	0	0	x	8	0	TRUNK P	0	0.07	0	0	x	8	0
TRUNK C	271	0.07	8.9	10	x	8	488	TRUNK I	0	0.00	0	0	x	8	0	TRUNK Q	0	0.07	0	0	x	8	0
TRUNK D	0	0.00	0	0	x	8	0	TRUNK J	0	0.00	0	0	x	8	0	TRUNK R	0	0.07	0	0	x	8	0
TRUNK E	0	0.00	0	0	x	8	0	TRUNK K	0	0.00	0	0	x	8	0	TRUNK S	0	0.07	0	0	x	8	0
TRUNK F	0	0.00	0	0	x	8	0	TRUNK L	0	0.00	0	0	x	8	0	TRUNK T	0	0.07	0	0	x	8	0
																TRUNK U	0	0.07	0	0	x	8	0
																TRUNK V	0	0.07	0	0	x	8	0
																TRUNK W	0	0.07	0	0	x	8	0
																TRUNK X	614	0.07	12.1	18	x	8	614
																TRUNK Y	85	0.07	5.8	8	x	8	191
																TRUNK Z	0	0.07	0	0	x	8	0
																DROP	614	0.07	12.1	24	x	10	368

RETURN AIR #	1	3	4	5											BR	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	89
AIR VOLUME	85		85	85	270	0	0	0	0	0	0	0	0	0	0	89
PLENUM PRESSURE	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
ACTUAL DUCT LGH.	55	1	28	27	14	1	1	1	1	1	1	1	1	1	1	14
EQUIVALENT LENGTH	145	0	175	140	180	0	0	0	0	0	0	0	0	0	0	180
TOTAL EFFECTIVE LH	200	1	203	167	194	1	1	1	1	1	1	1	1	1	1	194
ADJUSTED PRESSURE	0.07	14.80	0.07	0.09	0.08	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	0.08	0.08
ROUND DUCT SIZE	5.8	0	5.8	5.4	8.6	0	0	0	0	0	0	0	0	0	0	5.7
INLET GRILL SIZE	8	0	8	8	8	0	0	0	0	0	0	0	0	0	0	8
	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
INLET GRILL SIZE	14	0	14	14	30	0	0	0	0	0	0	0	0	0	0	14

RETURN AIR #	1	3	4	5											BR
AIR VOLUME	85	85	85	270	0	0	0	0	0	0	0	0	0	0	89
PLENUM PRESSURE	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
ACTUAL DUCT LGH.	55	1	28	27	14	1	1	1	1	1	1	1	1	1	14
EQUIVALENT LENGTH	145	0	175	140	180	0	0	0	0	0	0	0	0	0	180
TOTAL EFFECTIVE LH	200	1	203	167	194	1	1	1	1	1	1	1	1	1	194
ADJUSTED PRESSURE	0.07	14.80	0.07	0.09	0.08	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	0.08
ROUND DUCT SIZE	5.8	0	5.8	5.4	8.6	0	0	0	0	0	0	0	0	0	5.7
INLET GRILL SIZE	8	0	8	8	8	0	0	0	0	0	0	0	0	0	8
	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
INLET GRILL SIZE	14	0	14	14	30	0	0	0	0	0	0	0	0	0	14

TYPE: CHERRY 1
SITE NAME: BARLASSINA

LO # 98649

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	4 @ 10.6 cfm	42.4 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		63.6 cfm

SUPPLEMENTAL VENTILATION CAPACITY		9.32.3.5.
Total Ventilation Capacity	148.4	cfm
Less Principal Ventil. Capacity	63.6	cfm
Required Supplemental Capacity	84.8	cfm

PRINCIPAL EXHAUST FAN CAPACITY	
Model:	VANEE V150H
Location:	BSMT
63.6 cfm	☒ HVI Approved

PRINCIPAL EXHAUST HEAT LOSS CALCULATION				
CFM	ΔT °F	FACTOR	% LOSS	
63.6 CFM	72 F	1.08	X	0.25

SUPPLEMENTAL FANS BY INSTALLING CONTRACTOR				
Location	Model	cfm	HVI	Sones
ENS	BY INSTALLING CONTRACTOR	50	☒	3.5
BATH	BY INSTALLING CONTRACTOR	50	☒	3.5
LAUN	BY INSTALLING CONTRACTOR	50	☒	3.5
PWD	BY INSTALLING CONTRACTOR	50	☒	3.5

HEAT RECOVERY VENTILATOR		9.32.3.11.
Model:	VANEE V150H	
150	cfm high	35 cfm low
75	% Sensible Efficiency @ 32 deg F (0 deg C)	☒ HVI Approved

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:	August-22

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& DRAWINGS NOR INSPECTIONS MADE DURING INSTALLATION
BY THE OFFICIAL HAVING JURISDICTION SHALL RELIEVE THE
OWNER FROM REQUIREMENTS OF THE ONTARIO BUILDING
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CSA F280-12 Residential Heat Loss and Heat Gain Calculations																																																												
Formula Sheet (For Air Leakage / Ventilation Calculation)																																																												
LO#: 98649		Model: CHERRY 1		Date: 2022-08-22																																																								
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House Volume <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Level</th> <th>Floor Area (ft²)</th> <th>Floor Height (ft)</th> <th>Volume (ft³)</th> </tr> </thead> <tbody> <tr> <td>Bsmt</td> <td>816</td> <td>9</td> <td>7344</td> </tr> <tr> <td>First</td> <td>816</td> <td>10</td> <td>8160</td> </tr> <tr> <td>Second</td> <td>1130</td> <td>9</td> <td>10170</td> </tr> <tr> <td>Third</td> <td>0</td> <td>9</td> <td>0</td> </tr> <tr> <td>Fourth</td> <td>0</td> <td>9</td> <td>0</td> </tr> <tr> <td colspan="3" style="text-align: right;">Total:</td> <td>25,674.0 ft³</td> </tr> <tr> <td colspan="3" style="text-align: right;">Total:</td> <td>727.0 m³</td> </tr> </tbody> </table>			Level	Floor Area (ft²)	Floor Height (ft)	Volume (ft³)	Bsmt	816	9	7344	First	816	10	8160	Second	1130	9	10170	Third	0	9	0	Fourth	0	9	0	Total:			25,674.0 ft³	Total:			727.0 m³	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">WINTER NATURAL AIR CHANGE RATE</td> <td style="width: 20%;">0.319</td> </tr> <tr> <td>SUMMER NATURAL AIR CHANGE RATE</td> <td>0.085</td> </tr> </table> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="5" style="text-align: center;">Design Temperature Difference</th> </tr> <tr> <th></th> <th>Tin °C</th> <th>Tout °C</th> <th>ΔT °C</th> <th>ΔT °F</th> </tr> <tr> <td>Winter DTDh</td> <td>22</td> <td>-18</td> <td>40</td> <td>72</td> </tr> <tr> <td>Summer DTDc</td> <td>24</td> <td>29</td> <td>5</td> <td>9</td> </tr> </table>		WINTER NATURAL AIR CHANGE RATE	0.319	SUMMER NATURAL AIR CHANGE RATE	0.085	Design Temperature Difference						Tin °C	Tout °C	ΔT °C	ΔT °F	Winter DTDh	22	-18	40	72	Summer DTDc	24	29	5	9
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5.2.3.1 Heat Loss due to Air Leakage			6.2.6 Sensible Gain due to Air Leakage																																																									
$HL_{airb} = LR_{airh} \times \frac{V_b}{3.6} \times DTD_h \times 1.2$ 0.319 x 201.95 x 40 °C x 1.2 = 3113 W = 10623 Btu/h			$HG_{salb} = LR_{airc} \times \frac{V_b}{3.6} \times DTD_c \times 1.2$ = 0.085 x 201.95 x 5 °C x 1.2 = 105 W = 358 Btu/h																																																									
5.2.3.2 Heat Loss due to Mechanical Ventilation			6.2.7 Sensible heat Gain due to Ventilation																																																									
$HL_{vairb} = PVC \times DTD_h \times 1.08 \times (1 - E)$ 64 CFM x 72 °F x 1.08 x 0.25 = 1243 Btu/h			$HL_{vairb} = PVC \times DTD_h \times 1.08 \times (1 - E)$ 64 CFM x 9 °F x 1.08 x 0.25 = 158 Btu/h																																																									
5.2.3.3 Calculation of Air Change Heat Loss for Each Room (Floor Multiplier Section)																																																												
$HL_{airr} = Level\ Factor \times HL_{airbv} \times \{(HL_{agcr} + HL_{bgcr}) \div (HL_{agclevel} + HL_{bgclevel})\}$																																																												
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Tel: 905.619.2300 Fax: 905.619.2375

Web: www.hvacdesigns.ca E-mail: info@hvacdesigns.ca

HEAT LOSS AND GAIN SUMMARY SHEET

MODEL: CHERRY 1

BUILDER: GREENPARK HOMES

SFQT: 1946

LO# 98649

SITE: BARLASSINA

DESIGN ASSUMPTIONS

HEATING	°F	COOLING	°F
OUTDOOR DESIGN TEMP.	0	OUTDOOR DESIGN TEMP.	84
INDOOR DESIGN TEMP.	72	INDOOR DESIGN TEMP. (MAX 75°F)	75
		WINDOW SHGC	0.50

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 (ft ³):	25674.0	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:	6.0 ft
LENGTH: 57.0 ft	WIDTH: 17.0 ft	EXPOSED PERIMETER:	91.0 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	96%	-
HRV/ERV Minimum Efficiency	75%	-
Domestic Hot Water Heater Minimum EF	0.8	-

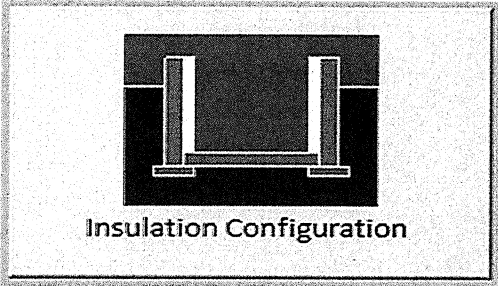
INDIVIDUAL BCIN: 19669

MICHAEL O'ROURKE

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Residential Foundation Thermal Load Calculator

Supplemental tool for CAN/CSA-F280

Weather Station Description		
Province:	Ontario	
Region:	Cambridge	
Site Description		
Soil Conductivity:	Normal conductivity: dry sand, loam, clay	
Water Table:	Normal (7-10 m, 23-33 ft)	
Foundation Dimensions		
Floor Length (m):	17.4	 Insulation Configuration
Floor Width (m):	5.2	
Exposed Perimeter (m):	27.7	
Wall Height (m):	2.7	
Depth Below Grade (m):	1.83	
Window Area (m ²):	0.4	
Door Area (m ²):	2.0	
Radiant Slab		
Heated Fraction of the Slab:	0	
Fluid Temperature (°C):	33	
Design Months		
Heating Month	1	
Foundation Loads		
Heating Load (Watts):		808

TYPE: CHERRY 1
LO# 98649

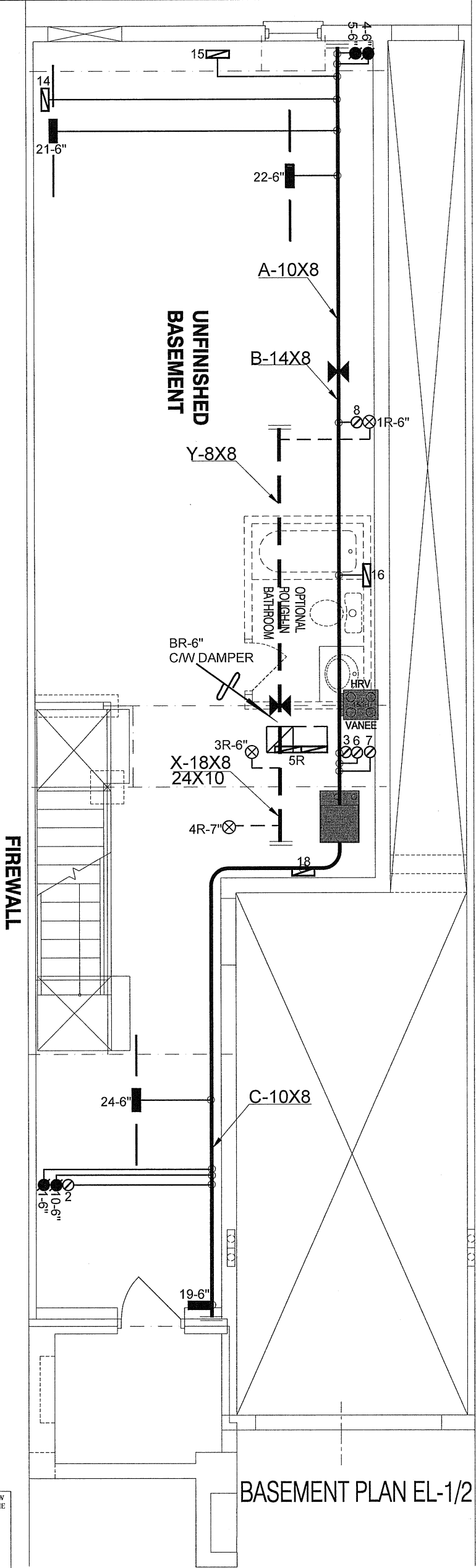
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Air Infiltration Residential Load Calculator

Supplemental tool for CAN/CSA-F280

Weather Station Description				
Province:	Ontario			
Region:	Cambridge			
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):	727.0			
Air Leakage/Ventilation				
Air Tightness Type:	Present (1961-) (3.57 ACH)			
Custom BDT Data:	ELA @ 10 Pa.	969.1 cm ²		
	3.57	ACH @ 50 Pa		
Mechanical Ventilation (L/s):	Total Supply	Total Exhaust		
	30.0	30.0		
Flue Size				
Flue #:	#1	#2	#3	#4
Diameter (mm):	0	0	0	0
Natural Infiltration Rates				
Heating Air Leakage Rate (ACH/H):	0.319			
Cooling Air Leakage Rate (ACH/H):	0.085			

TYPE: CHERRY 1
LO# 98649



I MICHAEL O'ROURKE HAVE REVIEW 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.

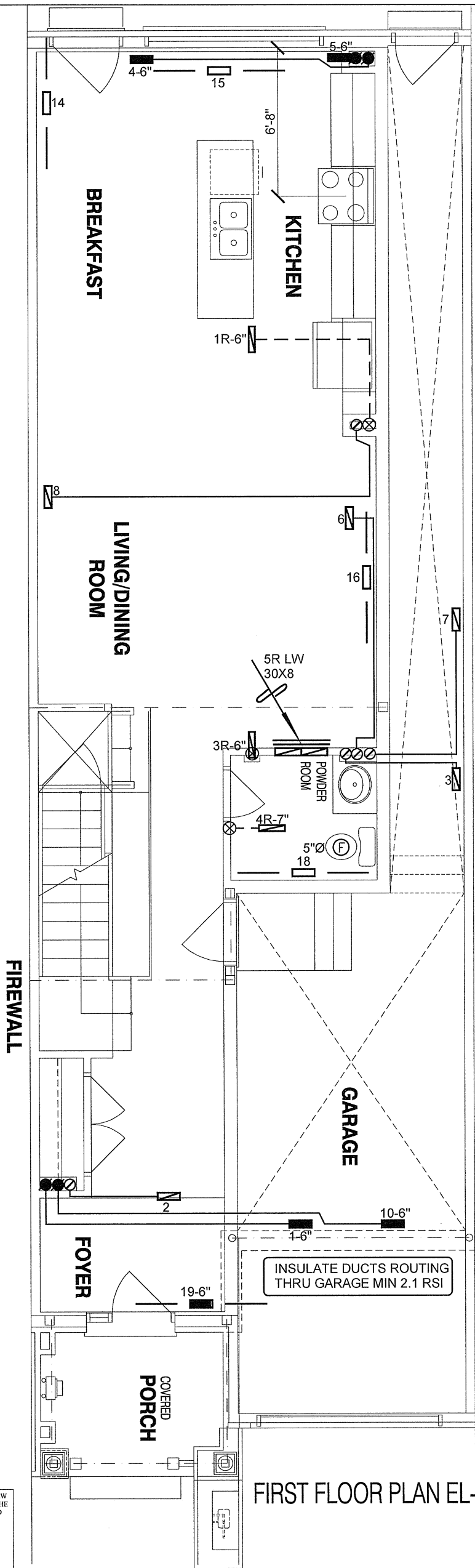
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CSA-F280-12
PACKAGE A1

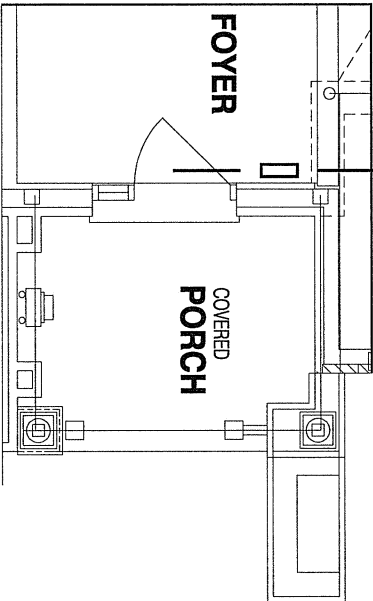
HVAC LEGEND								3.		
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	2.		
	SUPPLY AIR GRILLE		6" SUPPLY AIR BOOT ABOVE		14"x8" RETURN AIR GRILLE		RETURN AIR STACK ABOVE	1.		
	SUPPLY AIR GRILLE 6" BOOT		SUPPLY AIR STACK FROM 2nd FLOOR		30"x8" RETURN AIR GRILLE		RETURN AIR 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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GREENPARK HOMES			MAKE	GOODMAN	3RD FLOOR				BASEMENT HEATING LAYOUT		
Project Name			MODEL	GMEC960302BNA	2ND FLOOR	9	3	3			
BARLASSINA CAMBRIDGE, ONTARIO			INPUT	30 MBTU/H	1ST FLOOR	5	1	2			
Block 119 Units 25 to 30			OUTPUT	29 MBTU/H	BASEMENT	3	1	0	Date	AUG/2022	
CHERRY 1			COOLING	1.5 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"
1946 sqft			FAN SPEED	735 cfm @ 0.6" w.c.						BCIN# 19669	
								LO#		98649	



FIRST FLOOR PLAN EL-1



FIRST FLOOR PLAN EL-2

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CSA-F280-12
PACKAGE A1

HVAC LEGEND								3.		
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GREENPARK HOMES			FIRST FLOOR HEATING LAYOUT	
Project Name BARLASSINA CAMBRIDGE, ONTARIO			Date	AUG/2022
Block 119 Units 25 to 30			Scale	3/16" = 1'-0"
CHERRY 1			BCIN# 19669	
1946 sqft		LO#	98649	

FIREWALL

BEDROOM 2

4-6"

BEDROOM 3

5-6"

1R HW
14X8-6"

FLEX ROOM

8

5"Ø
LAUNDRY

5"Ø

(MAIN)
BATH

7

3R HW
14X8-6"

MASTER
BEDROOM

4R HW
14X8-7"

3

ENSUITE

2

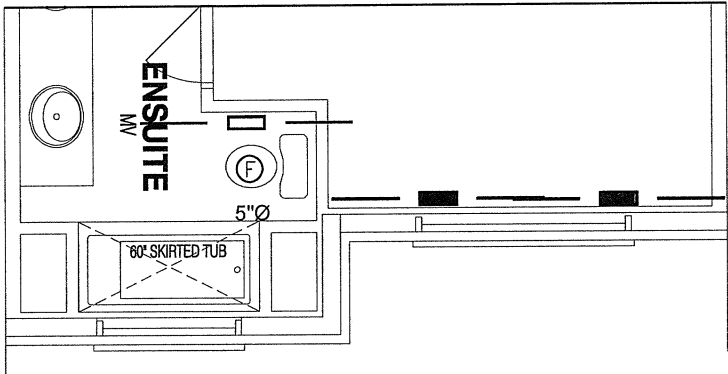
1-6"

10-6"

5"Ø

60" SKIRTED TUB

SEC. FLOOR PLAN EL-1



SEC. FLOOR PLAN EL-2

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CSA-F280-12
PACKAGE A1

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GREENPARK HOMES			SECOND FLOOR	
Project Name			HEATING LAYOUT	
BARLASSINA CAMBRIDGE, ONTARIO			Date	AUG/2022
Block 119 Units 25 to 30			Scale	3/16" = 1'-0"
CHERRY 1		BCIN# 19669		
1946 sqft		LO#	98649	