

SITE NAME: SECONDDO
BUILDER: GREENPARK HOMES
TYPE: HOLLAND 14
DATE: Nov-17
LO# 76861
GFA: 1472
WINTER NATURAL AIR CHANGE RATE 0.286
HEAT LOSS AT °F. 81
HEAT GAIN AT °F. 15
CSA-F280-12
ENERGYSTAR

ROOM USE	MBR	ENS	TYPE: HOLLAND 14	BED-2	BED-3	BATH	WINTER NATURAL AIR CHANGE RATE	HEAT LOSS AT °F.	HEAT GAIN AT °F.	CSA-F280-12
EXP. WALL	28	6		23	9	11				
CLG. HT.	9	9		9	9	9				
FACTORS										
GRS WALL AREA	252	54		207	81	99				
GLAZING										
NORTH	0	0		0	0	0				
EAST	0	0		0	0	0				
SOUTH	9	183	226	23	468	576				
WEST	20.4	41.7	22	448	918	334				
SKYLT.	34.2	101.6		0	0	0				
DOORS	27.0	5.0		0	0	0				
NET EXPOSED WALL	5.4	1.0	221	1190	219	46				
NET EXPOSED BSMT WALL ABOVE GR	3.9	0.7	0	0	0	0				
EXPOSED CLG	1.6	0.7	195	313	142	90				
EXPOSED FLOOR	4.0	1.8	0	0	0	0				
NO ATTIC EXPOSED CLG	3.3	0.6	0	0	0	0				
BASEMENT/CRAWL HEAT LOSS	0	0		0	0	0				
SLAB ON GRADE HEAT LOSS	0	0		0	0	0				
SUBTOTAL HT LOSS	2134	555		1748	1055	1019				
SUB TOTAL HT GAIN	1505	445		1259	0.20	0.26				
LEVEL FACTOR / MULTIPLIER	0.20	0.26		0.20	0.26	0.20				
AIR CHANGE HEAT LOSS	565	147		463	279	270				
AIR CHANGE HEAT GAIN	168	50		141	85	104				
DUCT LOSS	0	0		0	0	0				
DUCT GAIN	0	0		0	0	0				
HEAT GAIN PEOPLE	240	0		1	240	240				
HEAT GAIN APPLIANCES/LIGHTS	740	0		740	740	740				
TOTAL HT LOSS BTU/H	2699	702		2211	1334	1289				
TOTAL HT GAIN x 1.3 BTU/H	3761	643		3095	2371	1344				

ROOM USE	LIV/DIN	KIT	FOY	BAS	WINTER NATURAL AIR CHANGE RATE	HEAT LOSS AT °F.	HEAT GAIN AT °F.	CSA-F280-12
EXP. WALL	30	41	11	80				
CLG. HT.	10	10	10	9				
FACTORS								
GRS WALL AREA	300	410	110	480				
GLAZING								
NORTH	0	0	0	0				
EAST	20.4	41.7	25	509	1043			
SOUTH	20.4	25.1	38	773	952			
WEST	20.4	41.7	0	0	0			
SKYLT.	34.2	101.6	0	0	0			
DOORS	27.0	5.0	0	0	0			
NET EXPOSED WALL	5.4	1.0	237	1276	235			
NET EXPOSED BSMT WALL ABOVE GR	3.9	0.7	0	0	0			
EXPOSED CLG	1.6	0.7	0	0	0			
EXPOSED FLOOR	4.0	1.8	0	0	0			
NO ATTIC EXPOSED CLG	3.3	0.6	0	0	0			
BASEMENT/CRAWL HEAT LOSS	0	0	0	0	0			
SLAB ON GRADE HEAT LOSS	0	0	0	0	0			
SUBTOTAL HT LOSS	2558	3416	1285	2606				
SUB TOTAL HT GAIN	2231	2059	237	4317				
LEVEL FACTOR / MULTIPLIER	0.30	0.36	0.30	0.50				
AIR CHANGE HEAT LOSS	912	1217	458	1000				
AIR CHANGE HEAT GAIN	250	231	27	4311				
DUCT LOSS	0	0	0	0				
DUCT GAIN	0	0	0	0				
HEAT GAIN PEOPLE	240	0	0	0				
HEAT GAIN APPLIANCES/LIGHTS	740	0	0	0				
TOTAL HT LOSS BTU/H	3470	4633	1743	8628				
TOTAL HT GAIN x 1.3 BTU/H	4498	3939	342	1884				

TOTAL HEAT GAIN BTU/H: 22505 TONS: 1.88
TOTAL HEAT LOSS BTU/H: 30116
STRUCTURAL HEAT LOSS: 25710
TOTAL COMBINED HEAT LOSS BTU/H: 30116
LOSS DUE TO VENTILATION LOAD BTU/H: 3407

SITE NAME: SECONDO

BUILDER: GREENPARK HOMES

TYPE: HOLLAND 14

DATE: Nov-17

GFA: 1472 LO# 76861

HEATING CFM 890 COOLING CFM 890
TOTAL HEAT LOSS 26,710 TOTAL HEAT GAIN 21,877
AIR FLOW RATE CFM 33.32 AIR FLOW RATE CFM 40.68

#GOODMAN

GMEC960402BNA 40

FAN SPEED LOW

MEDIUM

HIGH

AFUE = 96 %

INPUT (BTU/H) = 40,000

OUTPUT (BTU/H) = 38,400

DESIGN CFM = 890

CFM @ .6" E.S.P.

TEMPERATURE RISE 40 °F

RUN COUNT	4th	3rd	2nd	1st	BAS
S/A	0	0	6	5	3
R/A	0	0	3	2	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	4	5	7	10	12	13	14	15	19	21	22	23
ROOM NAME	MBR	ENS	BED-2	BED-3	BATH	MBR	LIV/DIN	LIV/DIN	KIT	KIT	FOY	BAS	BAS	BAS
RM LOSS MBH	1.35	0.70	2.21	1.33	1.29	1.35	1.73	1.73	2.32	2.32	1.74	2.88	2.88	2.88
CFM PER RUN HEAT	45	23	74	44	43	45	58	58	77	77	58	96	96	96
RM GAIN MBH	1.88	0.64	3.09	2.37	1.34	1.88	2.25	2.25	1.97	1.97	0.34	0.63	0.63	0.63
CFM PER RUN COOLING	77	26	126	96	55	77	91	91	80	80	14	26	26	26
ADJUSTED PRESSURE	0.17	0.17	0.15	0.16	0.17	0.17	0.16	0.16	0.17	0.17	0.17	0.16	0.16	0.16
ACTUAL DUCT LGH	42	40	39	19	39	28	5	17	19	27	30	24	11	13
EQUIVALENT LENGTH	160	110	150	200	150	160	130	100	150	120	130	120	150	120
TOTAL EFFECTIVE LENGTH	202	150	189	219	189	188	135	117	169	147	160	144	161	133
ADJUSTED PRESSURE	0.09	0.11	0.08	0.07	0.09	0.09	0.12	0.14	0.1	0.1	0.11	0.11	0.1	0.12
ROUND DUCT SIZE	5	4	6	6	5	5	5	5	5	5	4	5	6	5
HEATING VELOCITY (ft/min)	330	264	377	224	316	330	426	426	565	565	665	705	489	705
COOLING VELOCITY (ft/min)	565	298	642	489	404	565	668	668	587	587	161	191	133	191
OUTLET GRILL SIZE	3X10	3X10	4X10	4X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	4X10	3X10
TRUNK	A	A	B	A	B	A	A	B	A	A	B	A	A	B

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	

SUPPLY 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 A	503	0.07	11.2	14	8	TRUNK G	0	0.00	0	0
TRUNK B	387	0.08	9.8	12	8	TRUNK H	0	0.00	0	0
TRUNK C	0	0.00	0	0	8	TRUNK I	0	0.00	0	0
TRUNK D	0	0.00	0	0	8	TRUNK J	0	0.00	0	0
TRUNK E	0	0.00	0	0	8	TRUNK K	0	0.00	0	0
TRUNK F	0	0.00	0	0	8	TRUNK L	0	0.00	0	0

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 X	890	0.06	14.4	24	8	TRUNK O	0	0.06	0	0
TRUNK Y	565	0.06	12.2	18	8	TRUNK P	0	0.06	0	0
TRUNK Z	0	0.06	0	0	8	TRUNK Q	0	0.06	0	0
DROP	890	0.06	14.4	24	10	TRUNK R	0	0.06	0	0
						TRUNK S	0	0.06	0	0
						TRUNK T	0	0.06	0	0
						TRUNK U	0	0.06	0	0
						TRUNK V	0	0.06	0	0
						TRUNK W	0	0.06	0	0
						TRUNK X	890	0.06	14.4	8
						TRUNK Y	565	0.06	12.2	8
						TRUNK Z	0	0.06	0	8

Michael O'Rourke

TYPE: HOLLAND 14
SITE NAME: SECONDO

LO # 76861

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	<u>2</u> @ 21.2 cfm	<u>42.4</u> cfm
Other Bedrooms	<u>2</u> @ 10.6 cfm	<u>21.2</u> cfm
Kitchen & Bathrooms	<u>4</u> @ 10.6 cfm	<u>42.4</u> cfm
Other Rooms	<u>3</u> @ 10.6 cfm	<u>31.8</u> cfm
Table 9.32.3.A.	TOTAL	<u>137.8</u> 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	<u>137.8</u>	cfm
Less Principal Ventil. Capacity	<u>155</u>	cfm
Required Supplemental Capacity	<u>-17.2</u>	cfm

PRINCIPAL EXHAUST FAN CAPACITY	
Model: VANEE 65H	Location: BSMT
<u>155.0</u> cfm	<u>3.0</u> sones
☒ HVI Approved	

PRINCIPAL EXHAUST HEAT LOSS CALCULATION				
CFM	ΔT °F	FACTOR	% LOSS	
155.0 CFM	X 81 F	X 1.08	X	0.25

SUPPLEMENTAL FANS		NUTONE		
Location	Model	cfm	HVI	Sones
ENS	QTXEN050C	50	☒	0.3
BATH	QTXEN050C	50	☒	0.3

HEAT RECOVERY VENTILATOR		9.32.3.11.
Model: VANEE 65H		
<u>155</u> cfm high	<u>64</u> cfm low	
<u>75</u> % 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:	
HRAI #	001820
Date:	November-17

HEAT LOSS AND GAIN SUMMARY SHEET

MODEL: HOLLAND 14

BUILDER: GREENPARK HOMES

SFQT: 1472

LO# 76861

SITE: SECONDO

DESIGN ASSUMPTIONS

HEATING	°F	COOLING	°F
OUTDOOR DESIGN TEMP.	-9	OUTDOOR DESIGN TEMP.	86
INDOOR DESIGN TEMP.	72	INDOOR DESIGN TEMP. (MAX 75°F)	71

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):	20728.0	ASSUMED (Y/N):	Y
INTERNAL SHADING:	BLINDS/CURTAINS	ASSUMED OCCUPANTS:	4
INTERIOR LIGHTING LOAD (Btu/h/ft²):	2.00	DC BRUSHLESS MOTOR (Y/N):	Y
FOUNDATION CONFIGURATION	BCIN_1	DEPTH BELOW GRADE:	6.0 ft
LENGTH: 42.0 ft	WIDTH: 19.0 ft	EXPOSED PERIMETER:	80.0 ft

2012 OBC - COMPLIANCE PACKAGE

Component

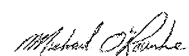
Compliance Package ENERGYSTAR

Nominal Min. Eff.

Ceiling with Attic Space Minimum RSI (R)-Value	50	50.72
Ceiling Without Attic Space Minimum RSI (R)-Value	31	20.54
Exposed Floor Minimum RSI (R)-Value	31	24.58
Walls Above Grade Minimum RSI (R)-Value	20 + 5	15.12
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	0.95	-
HRV Minimum Efficiency	65%	-
Domestic Hot Water Heater Minimum EF	0.75	-

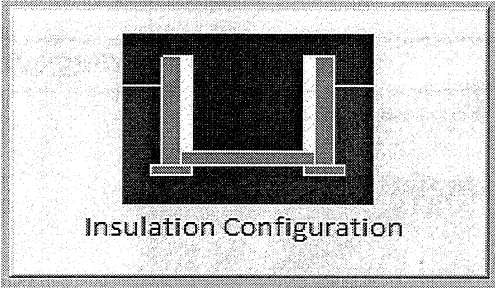
INDIVIDUAL BCIN: 19669

MICHAEL O'ROURKE



Residential Foundation Thermal Load Calculator

Supplemental tool for CAN/CSA-F280

Weather Station Description		
Province:	Ontario	
Region:	Bradford	
Site Description		
Soil Conductivity:	Normal conductivity: dry sand, loam, clay	
Water Table:	Normal (7-10 m, 23-33 ft)	
Foundation Dimensions		
Floor Length (m):	12.8	 Insulation Configuration
Floor Width (m):	5.8	
Exposed Perimeter (m):	24.4	
Wall Height (m):	2.7	
Depth Below Grade (m):	1.83	
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):		764

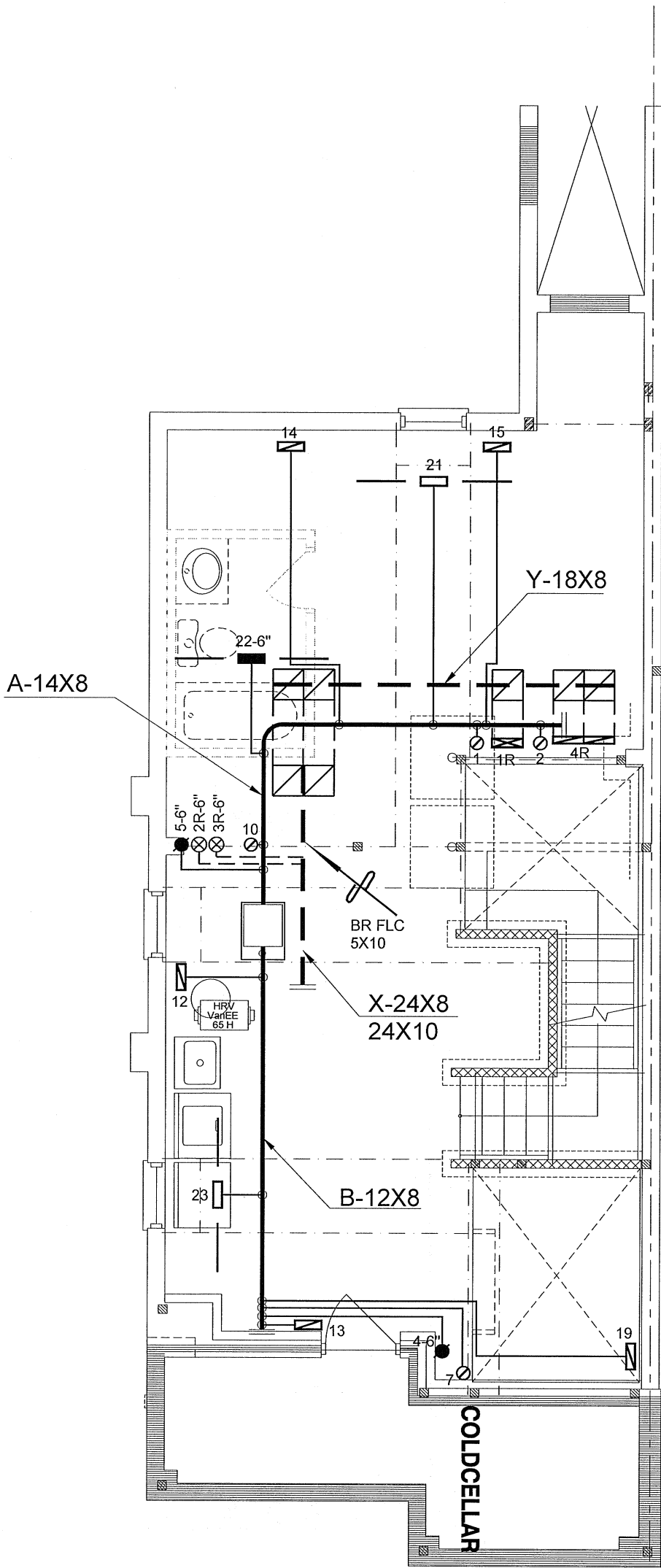
TYPE: HOLLAND 14
LO# 76861

Air Infiltration Residential Load Calculator

Supplemental tool for CAN/CSA-F280

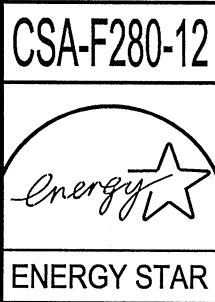
Weather Station Description				
Province:	Ontario			
Region:	Bradford			
Weather Station Location:	Open flat terrain, grass			
Anemometer height (m):	10			
Local Shielding				
Building Site:	Suburban, forest			
Walls:	Heavy			
Flue:	Heavy			
Highest Ceiling Height (m):	6.71			
Building Configuration				
Type:	Semi			
Number of Stories:	Two			
Foundation:	Full			
House Volume (m ³):	587.0			
Air Leakage/Ventilation				
Air Tightness Type:	Energy Star Attached (3.0 ACH)			
Custom BDT Data:	ELA @ 10 Pa.	657.5 cm ²		
	3.00	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):	0.286			
Cooling Air Leakage Rate (ACH/H):	0.090			

TYPE: HOLLAND 14
LO# 76861



HOLLAND 14
ELEV-1
TH 51-1

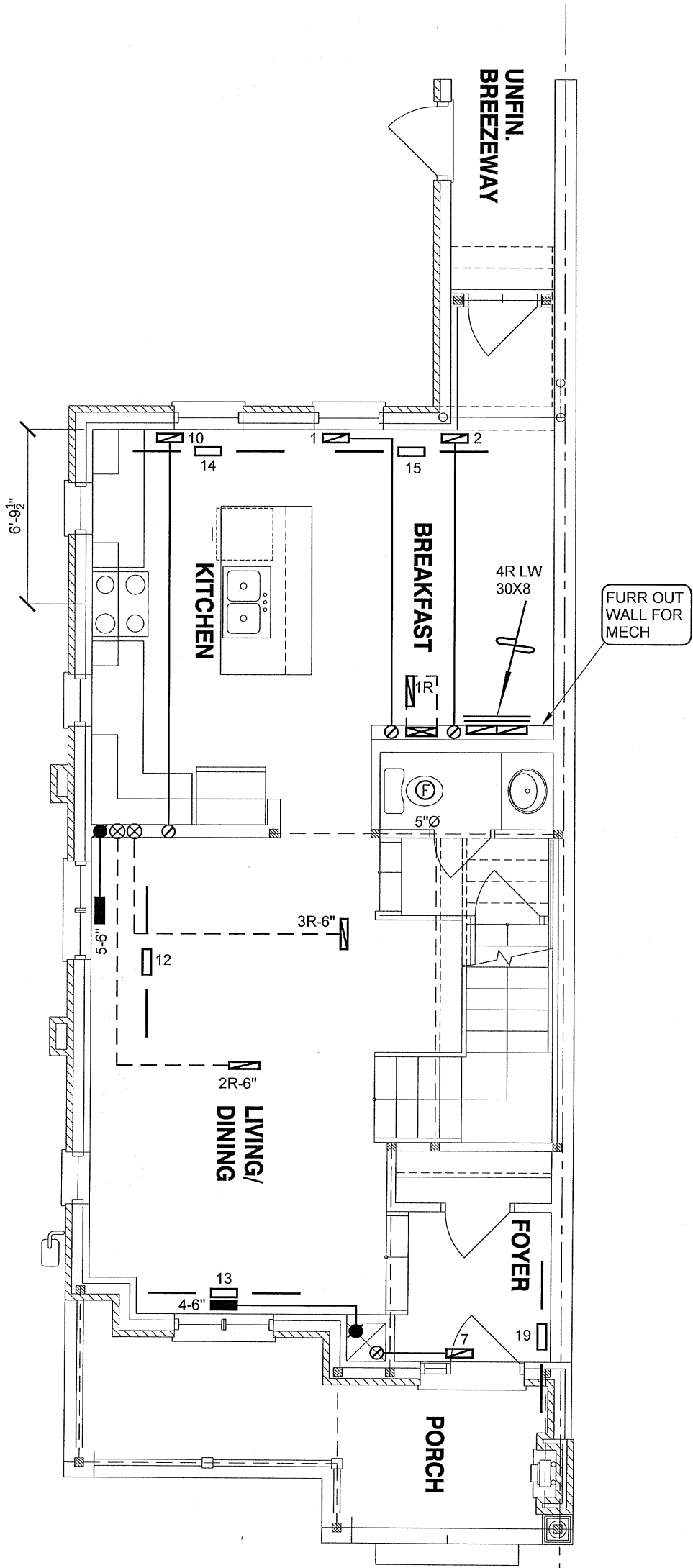
I MICHAEL O'ROURKE HAVE REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK AND AM QUALIFIED UNDER DIVISION C, 3.2.5 OF THE BUILDING CODE.
Michael O'Rourke
Michael O'Rourke, BCIN# 19669
HVAC DESIGNS LTD.



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

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Client GREENPARK HOMES	 375 Finley Ave. Suite 202 - Ajax, Ontario L1S 2E2 Tel. 905.619.2300 - 905.420.5300 Fax 905.619.2375 Email: info@hvacdsgns.ca Web: www.hvacdsgns.ca Specializing in Residential Mechanical Design Services	HEAT LOSS 30116 BTU/H UNIT DATA MAKE GOODMAN MODEL GMEC960402BNA INPUT 40 MBTU/H OUTPUT 38.4 MBTU/H COOLING 2.0 TONS FAN SPEED 890 cfm @ 0.6" w.c.	# OF RUNS S/A R/A FANS 3RD FLOOR 2ND FLOOR 6 3 2 1ST FLOOR 5 2 2 BASEMENT 3 1 0	Sheet Title BASEMENT HEATING LAYOUT Date NOV/2017 Scale 3/16" = 1'-0" BCIN# 19669
Project Name SECONDO EAST GWILLIMBURY, ONTARIO	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.	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	LO#	76861
HOLLAND 14 1472 sqft				



HOLLAND 14
ELEV-1
TH 51-1

I MICHAEL O'ROURKE HAVE REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK AND AM QUALIFIED UNDER DIVISION C. 12.3 OF THE BUILDING CODE.
Michael O'Rourke
Michael O'Rourke, BCIN# 19669
HVAC DESIGNS LTD.

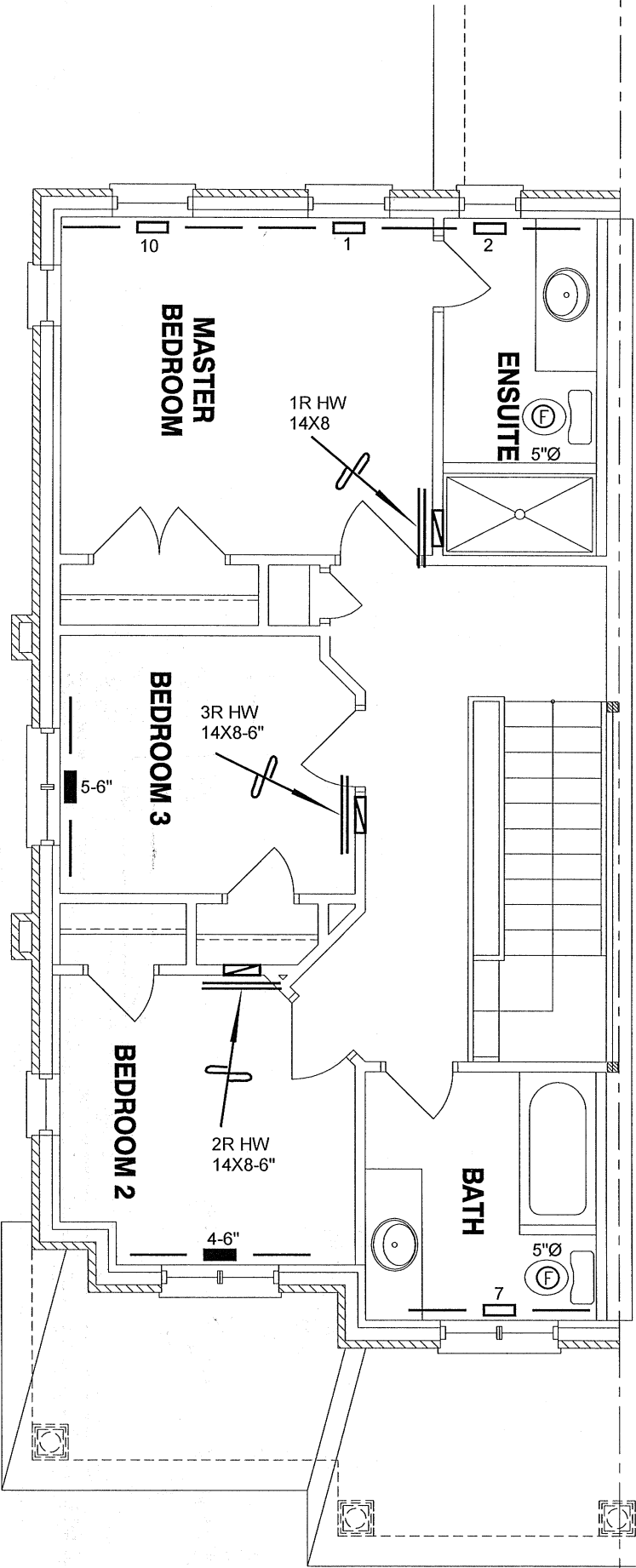
CSA-F280-12

ENERGY STAR

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 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	
GREENPARK HOMES			FIRST FLOOR HEATING LAYOUT	
Project Name			Date	NOV/2017
SECONDO EAST GWILLIMBURY, ONTARIO			Scale	3/16" = 1'-0"
HOLLAND 14			BCIN# 19669	
1472 sqft		LO#	76861	



HOLLAND 14
ELEV-1
TH 51-1

CSA-F280-12



ENERGY STAR

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.	
	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 GREENPARK 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 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 SECOND FLOOR HEATING LAYOUT	
Project Name SECONDO EAST GWILLIMBURY, ONTARIO			Date NOV/2017	
HOLLAND 14 1472 sqft			Scale 3/16" = 1'-0"	
			BCIN# 19669	
			LO# 76861	