



SITE NAME: ENCORE LOT 63R DATE: Aug-17 WINTER NATURAL AIR CHANGE RATE 0.323 HEAT LOSS ΔT\*F. 74 CSA-F280-12  
 BUILDER: GOLD PARK HOMES TYPE: SD-7 LO# 75589 SUMMER NATURAL AIR CHANGE RATE 0.111 HEAT GAIN ΔT\*F. 14 SB-12 PACKAGE A1

ROOM USE	EXP. WALL CLG. HT.	GRS.WALL AREA GLAZING	FACTORS	ENS	WIC	BED-2	BED-3	BED-4	BATH	WINTER NATURAL AIR CHANGE RATE	HEAT LOSS ΔT*F.
EXP. WALL CLG. HT.	14	22	9	9	9	12	17	13	0	0.323	74
GRS.WALL AREA GLAZING	126	198	0	0	108	153	130	0	0	0.111	14
NORTH	0	0	0	0	0	0	0	0	0		
EAST	0	0	0	0	0	0	0	0	0		
SOUTH	0	0	0	0	0	0	0	0	0		
WEST	24	499	1005	14	291	586	0	0	0		
SKYLT.	0	0	0	0	0	0	0	0	0		
DOORS	0	0	0	0	0	0	0	0	0		
NET EXPOSED WALL	4.4	0.8	102	444	84	175	762	144	0		
NET EXPOSED BSMT WALL ABOVE GR	3.5	0.7	0	0	0	0	0	0	0		
EXPOSED CLG	1.3	0.6	268	333	162	120	160	73	98		
NO ATTIC EXPOSED CLG	2.7	1.3	0	0	0	0	0	0	0		
EXPOSED FLOOR	2.5	0.5	0	0	0	0	0	0	0		
BASEMENT/CRAWL HEAT LOSS	0	0	0	0	0	0	0	0	0		
SLAB ON GRADE HEAT LOSS	0	0	0	0	0	0	0	0	0		
SUBTOTAL HT LOSS	1276	1391	1030	75	616	947	1366	909	270		
SUB TOTAL HT GAIN	0.20	0.28	0.20	0.28	0.20	0.28	0.20	0.28	0.20	0.28	0.28
LEVEL FACTOR / MULTIPLIER	362	395	86	6	52	76	160	180	35		
AIR CHANGE HEAT LOSS	0	0	0	0	0	0	0	0	0		
AIR CHANGE HEAT GAIN	0	0	0	0	0	0	0	0	0		
DUCT LOSS	0	0	0	0	0	0	0	0	0		
DUCT GAIN	0	0	0	0	0	0	0	0	0		
HEAT GAIN PEOPLE	240	480	0	0	240	1	240	0	0		
HEAT GAIN APPLIANCES/LIGHTS	557	557	0	0	557	557	557	557	557		
TOTAL HT LOSS BTU/H	1639	1785	1452	116	1215	1904	1753	2317	381		
TOTAL HT GAIN x 1.3 BTU/H	3111	3111	1452	116	1904	1904	2317	2317	127		

ROOM USE	EXP. WALL CLG. HT.	GRS.WALL AREA GLAZING	FACTORS	FORM	KTRM	LAUN	PWD	FOY	BAS	WINTER NATURAL AIR CHANGE RATE	HEAT LOSS ΔT*F.
EXP. WALL CLG. HT.	31	10	10	56	10	17	12	27	148	0.323	74
GRS.WALL AREA GLAZING	304	304	0	549	0	163	118	508	1082	0.111	14
NORTH	0	0	0	0	0	0	0	0	0		
EAST	0	0	0	0	0	0	0	0	0		
SOUTH	36	748	908	24	489	606	11	229	461		
WEST	0	0	0	82	1704	3435	12	249	303		
SKYLT.	0	0	0	0	0	0	0	0	0		
DOORS	0	0	0	0	0	0	0	0	0		
NET EXPOSED WALL	4.4	0.8	268	1167	364	125	95	412	78		
NET EXPOSED BSMT WALL ABOVE GR	3.5	0.7	0	0	0	0	0	0	0		
EXPOSED CLG	1.3	0.6	0	0	0	0	0	0	0		
NO ATTIC EXPOSED CLG	2.7	1.3	0	0	0	0	0	0	0		
EXPOSED FLOOR	2.5	0.5	0	0	0	0	0	0	0		
BASEMENT/CRAWL HEAT LOSS	0	0	0	0	0	0	0	0	0		
SLAB ON GRADE HEAT LOSS	0	0	0	0	0	0	0	0	0		
SUBTOTAL HT LOSS	1915	1915	1129	4132	4404	1209	890	4354	1961		
SUB TOTAL HT GAIN	0.30	0.32	0.30	0.32	0.30	0.32	0.30	0.32	0.30	0.32	0.32
LEVEL FACTOR / MULTIPLIER	620	620	85	1338	369	343	288	1411	164		
AIR CHANGE HEAT LOSS	0	0	0	0	0	0	0	0	0		
AIR CHANGE HEAT GAIN	0	0	0	0	0	0	0	0	0		
DUCT LOSS	0	0	0	0	0	0	0	0	0		
DUCT GAIN	0	0	0	0	0	0	0	0	0		
HEAT GAIN PEOPLE	240	480	0	240	1	240	0	0	0		
HEAT GAIN APPLIANCES/LIGHTS	557	557	557	557	557	557	557	557	557		
TOTAL HT LOSS BTU/H	2535	2535	2315	6470	7242	1552	1178	5765	11523		
TOTAL HT GAIN x 1.3 BTU/H	3115	3115	2315	7242	7242	2468	1185	2763	686		

TOTAL HEAT GAIN BTU/H: 3030 TONS: 2.53 LOSS DUE TO VENTILATION LOAD BTU/H: 2785 STRUCTURAL HEAT LOSS: 37808 TOTAL COMBINED HEAT LOSS BTU/H: 40693

*Michael O'Rourke*

SITE NAME: ENCORE BUILDER: GOLD PARK HOMES TYPE: SD-7 LOT 63R DATE: Aug-17 GFA: 2009 LO# 75559

HEATING CFM 950 COOLING CFM 950  
 TOTAL HEAT LOSS 37,808 TOTAL HEAT GAIN 29,776  
 AIR FLOW RATE CFM 25.13 AIR FLOW RATE CFM 31.9

HEATING PRESSURE 0.6  
 furnace filter 0.05  
 a/c coil pressure 0.2  
 available pressure for s/a & r/a 0.35  
 plenum pressure s/a 0.18  
 max s/a diff press. loss 0.02  
 min adjusted pressure s/a 0.16  
 r/a pressure 0.17  
 r/a grille press. loss 0.02  
 adjusted pressure r/a 0.15

AFUE = 96 %  
 INPUT (BTU/H) = 44,000  
 OUTPUT (BTU/H) = 43,000  
 DESIGN CFM = 950  
 CFM @ .8" E.S.P.

TEMPERATURE RISE 42 °F

RUN #	ROOM NAME	1	2	3	4	5	6	7	8	12	14	15	16	17	18	19	20	21	22	23	24
1	MBR	1.64	1.79	0.29	1.75	1.36	0.38	BED-4	BED-4	FORM	KT/FM	KT/FM	KT/FM	KT/FM	LAUN	PWD	FOY	FOY	BAS	BAS	BAS
2	RM LOSS MBH	41	45	7	31	44	34	BATH	BED-4	2.54	46	46	46	39	30	72	72	72	72	72	72
3	CFM PER RUN HEAT	3.11	1.45	0.12	1.90	2.32	2.04	0.13	2.04	2.31	2.41	2.41	2.41	2.47	1.19	1.38	1.38	1.38	1.38	1.38	1.38
4	RM GAIN MBH	99	46	4	61	74	65	4	65	74	77	77	77	79	38	44	44	44	44	44	44
5	CFM PER RUN COOLING	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
6	ADJUSTED PRESSURE	41	51	30	35	27	34	23	41	16	32	29	34	42	30	32	26	24	17	25	14
7	EQUIVALENT LENGTH	140	170	160	150	140	120	130	140	120	130	110	150	150	130	120	160	100	120	140	120
8	TOTAL EFFECTIVE LENGTH	181	221	190	185	167	154	153	181	136	162	139	184	192	160	152	186	124	137	165	134
9	ADJUSTED PRESSURE	0.09	0.08	0.09	0.1	0.11	0.11	0.11	0.1	0.13	0.11	0.12	0.09	0.09	0.11	0.11	0.09	0.14	0.13	0.1	0.13
10	ROUND DUCT SIZE	6	4	4	5	5	4	5	5	5	5	5	5	5	4	5	5	5	5	5	5
11	HEATING VELOCITY (ft/min)	209	516	80	228	323	250	115	250	470	338	338	338	286	344	529	529	529	529	529	529
12	COOLING VELOCITY (ft/min)	505	528	46	448	543	477	46	477	543	565	565	565	580	436	323	323	323	323	323	323
13	OUTLET GRILL SIZE	4X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10
14	TRUNK	A	A	B	B	D	D	D	D	D	A	A	A	C	C	C	C	C	B	B	C

ROOM NAME	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	224	0.08	8	8	504	0	0.00	0	0	0	0	0.06	0	0	8
TRUNK B	406	0.08	10	12	609	0	0.00	0	0	0	0	0.06	0	0	8
TRUNK C	285	0.09	8.5	8	641	0	0.00	0	0	0	0	0.06	0	0	8
TRUNK D	543	0.09	10.8	16	811	0	0.00	0	0	0	0	0.06	0	0	8
TRUNK E	0	0.00	0	0	0	0	0.00	0	0	0	0	0.06	0	0	8
TRUNK F	0	0.00	0	0	0	0	0.00	0	0	0	0	0.06	0	0	8

RETURN AIR #	TRUNK CFM	STATIC PRESS.	ROUND DUCT	RECT DUCT	VELOCITY (ft/min)	TRUNK CFM	STATIC PRESS.	ROUND DUCT	RECT DUCT	VELOCITY (ft/min)
1	0	0.00	0	0	0	0	0.06	0	0	8
2	185	0.15	95	405	0.15	0	0.06	0	0	8
3	0.15	0.15	0.15	0.15	0.15	950	0.06	14.8	26	8
4	48	36	40	15	1	0	0.06	0	0	8
5	180	160	165	135	0	0	0.06	0	0	8
6	228	196	205	150	1	0	0.06	0	0	8
7	0.06	0.08	0.07	0.10	14.80	0	0.06	0	0	8
8	6.9	7.5	6	9.5	0	0	0.06	0	0	8
9	8	8	8	8	0	0	0.06	0	0	8
10	X	X	X	X	X	0	0.06	0	0	8
11	14	14	14	30	0	950	0.06	14.8	24	10

*Michael O'Rourke*

TYPE: SD-7  
 SITE NAME: ENCORE

LO # 75559  
 LOT 63R

**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	3	@ 10.6 cfm	31.8	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	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
<b>TOTAL</b>	<b>79.5</b>	<b>cfm</b>

**SUPPLEMENTAL VENTILATION CAPACITY** 9.32.3.5.

Total Ventilation Capacity	159	cfm
Less Principal Ventil. Capacity	139	cfm
Required Supplemental Capacity	20.0	cfm

**PRINCIPAL EXHAUST FAN CAPACITY**

Model: VANEE 60H-V+ Location: BSMT

139.0 cfm 3.0 sones  HVI Approved

**PRINCIPAL EXHAUST HEAT LOSS CALCULATION**

CFM	ΔT °F	FACTOR	% LOSS
139.0 CFM	74 F	1.08	0.25

**SUPPLEMENTAL FANS** NUTONE

Location	Model	cfm	HVI	Sones
ENS	QTXEN050C	50	<input checked="" type="checkbox"/>	0.3
BATH	QTXEN050C	50	<input checked="" type="checkbox"/>	0.3
PWD	QTXEN050C	50	<input checked="" type="checkbox"/>	0.3

**HEAT RECOVERY VENTILATOR** 9.32.3.11.

Model: VANEE 60H-V+

139 cfm high 50 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:** 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: *Michael O'Rourke*

HRAI # 001820

Date: August-17

### HEAT LOSS AND GAIN SUMMARY SHEET

<b>MODEL:</b> SD-7	<b>LOT 63R</b>	<b>BUILDER:</b> GOLD PARK HOMES
<b>SFQT:</b> 2009	<b>LO#</b> 75559	<b>SITE:</b> ENCORE

#### DESIGN ASSUMPTIONS

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

#### BUILDING DATA

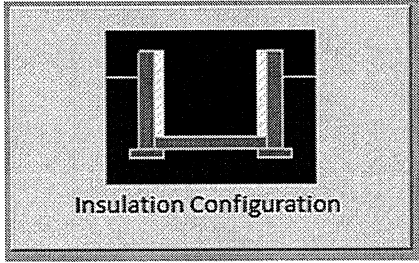
ATTACHMENT:	ATTACHED	# OF STORIES (+BASEMENT):	3
FRONT FACES:	EAST	ASSUMED (Y/N):	Y
AIR CHANGES PER HOUR:	3.57	ASSUMED (Y/N):	Y
AIR TIGHTNESS CATEGORY:	AVERAGE	ASSUMED (Y/N):	Y
WIND EXPOSURE:	SHELTERED	ASSUMED (Y/N):	Y
HOUSE VOLUME (ft <sup>3</sup> ):	28399.8	ASSUMED (Y/N):	Y
INTERNAL SHADING:	BLINDS/CURTAINS	ASSUMED OCCUPANTS:	5
INTERIOR LIGHTING LOAD (Btu/h/ft <sup>2</sup> ):	1.27	DC BRUSHLESS MOTOR (Y/N):	Y
FOUNDATION CONFIGURATION	BCIN_1	DEPTH BELOW GRADE:	7.0 ft
LENGTH: 49.0 ft	WIDTH: 25.0 ft	EXPOSED PERIMETER:	125.0 ft

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	29.8
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:	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):	14.9	 <p style="text-align: center; font-size: small;">Insulation Configuration</p>
Floor Width (m):	7.6	
Exposed Perimeter (m):	38.1	
Wall Height (m):	2.7	
Depth Below Grade (m):	2.1	
Window Area (m <sup>2</sup> ):	1.3	
Door Area (m <sup>2</sup> ):	1.9	
Radiant Slab		
Heated Fraction of the Slab:	0	
Fluid Temperature (°C):	33	
Design Months		
Heating Month	1	
Foundation Loads		
<b>Heating Load (Watts):</b>	<b>1103</b>	

 TYPE: SD-7  
 LO# 75559

LOT 63R

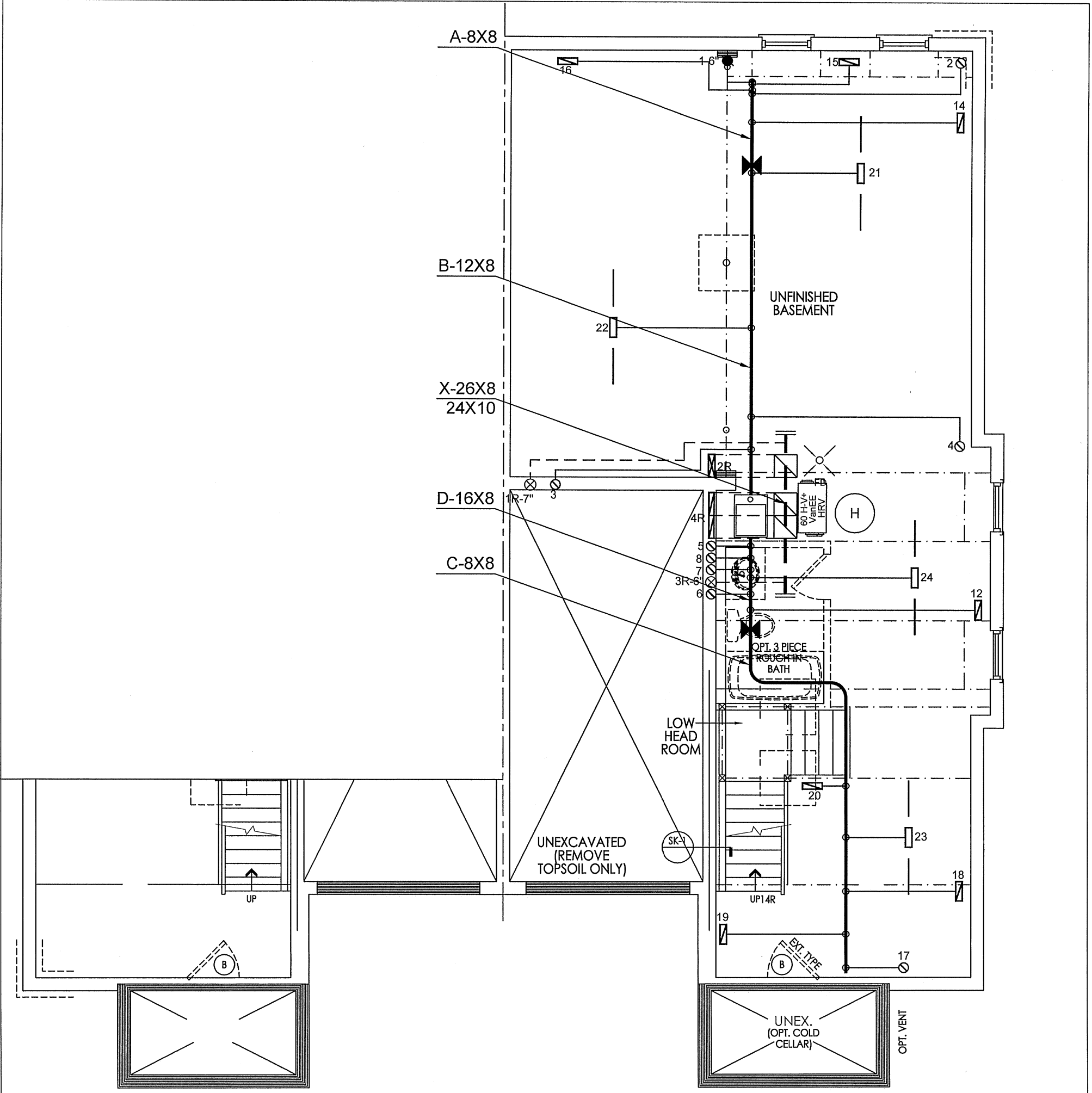
# Air Infiltration Residential Load Calculator

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):	6.34			
Building Configuration				
Type:	Semi			
Number of Stories:	Two			
Foundation:	Full			
House Volume (m <sup>3</sup> ):	804.2			
Air Leakage/Ventilation				
Air Tightness Type:	Present (1961-) (3.57 ACH)			
Custom BDT Data:	ELA @ 10 Pa. 3.57	1072.0 cm <sup>2</sup> ACH @ 50 Pa		
Mechanical Ventilation (L/s):	Total Supply 65.6	Total Exhaust 65.6		
Flue Size				
Flue #:	#1	#2	#3	#4
Diameter (mm):	0	0	0	0
Natural Infiltration Rates				
Heating Air Leakage Rate (ACH/H):	<b>0.323</b>			
Cooling Air Leakage Rate (ACH/H):	<b>0.111</b>			

TYPE: SD-7  
 LO# 75559

LOT 63R



PART. BASEMENT FL. ELEV. 'C'

PART. BASEMENT FL. ELEV. 'D' - LOT 63R

**LOT 63R**  
**CSA-F280-12**  
**PACKAGE A1**

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.

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

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Client  
**GOLD PARK HOMES**

Project Name  
**ENCORE  
 BRAMPTON, ONTARIO**

SD-7 - LOT 63R    2009 sqft

**HVACDESIGNS LTD.**  
 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.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	40593 BTU/H	# OF RUNS	S/A	R/A	FANS
UNIT DATA		3RD FLOOR			
MAKE	LENNOX	2ND FLOOR	9	3	2
MODEL	EL296UH045XE36B	1ST FLOOR	7	1	2
INPUT	44 MBTU/H	BASEMENT	4	1	0
OUTPUT	43 MBTU/H	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			
COOLING	2.5 TONS				
FAN SPEED	950 cfm @ 0.6" w.c.				

Sheet Title  
**BASEMENT HEATING LAYOUT**

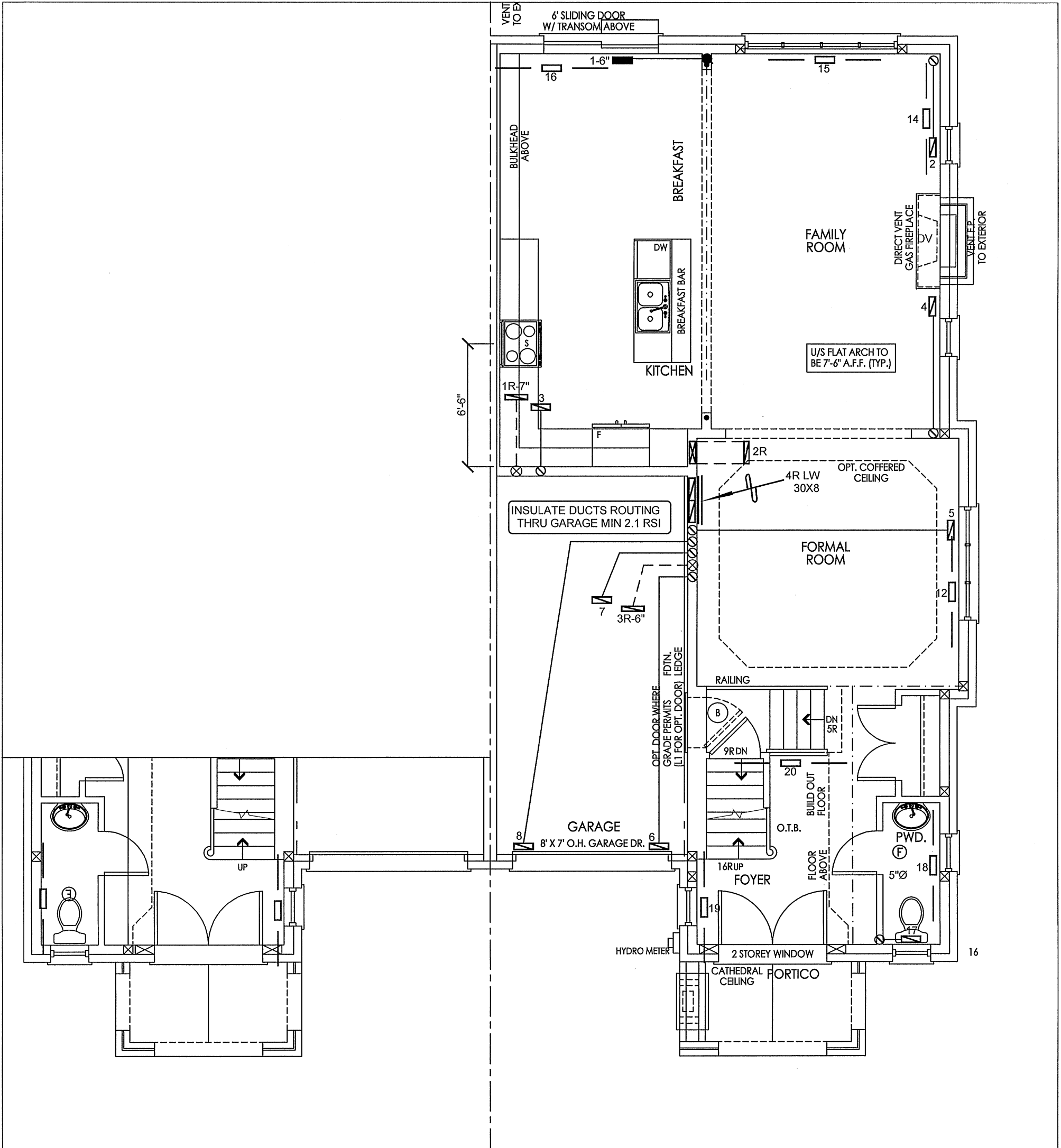
Date  
**AUG/2017**

Scale  
**3/16" = 1'-0"**

BCIN# 19669

LO# **75559**





PART. GROUND FLOOR ELEV. 'D' - LOT 63R

PART. GROUND FLOOR ELEV. 'C'

**LOT 63R**  
**CSA-F280-12**  
**PACKAGE A1**

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							REVISIONS			
— □ —	FLOOR SUPPLY AIR GRILLE	— ■ —	6" SUPPLY AIR BOOT ABOVE	— ▨ —	14"x8" RETURN AIR GRILLE	— ▩ —	RETURN AIR STACK ABOVE	No.	Description	Date
— ■ —	FLOOR 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	2.		
								3.		

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Client  
**GOLD PARK HOMES**

Project Name  
**ENCORE BRAMPTON, ONTARIO**

SD-7 - LOT 63R    2009 sqft

  
 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

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  
**FIRST FLOOR HEATING LAYOUT**

Date    **AUG/2017**

Scale    **3/16" = 1'-0"**

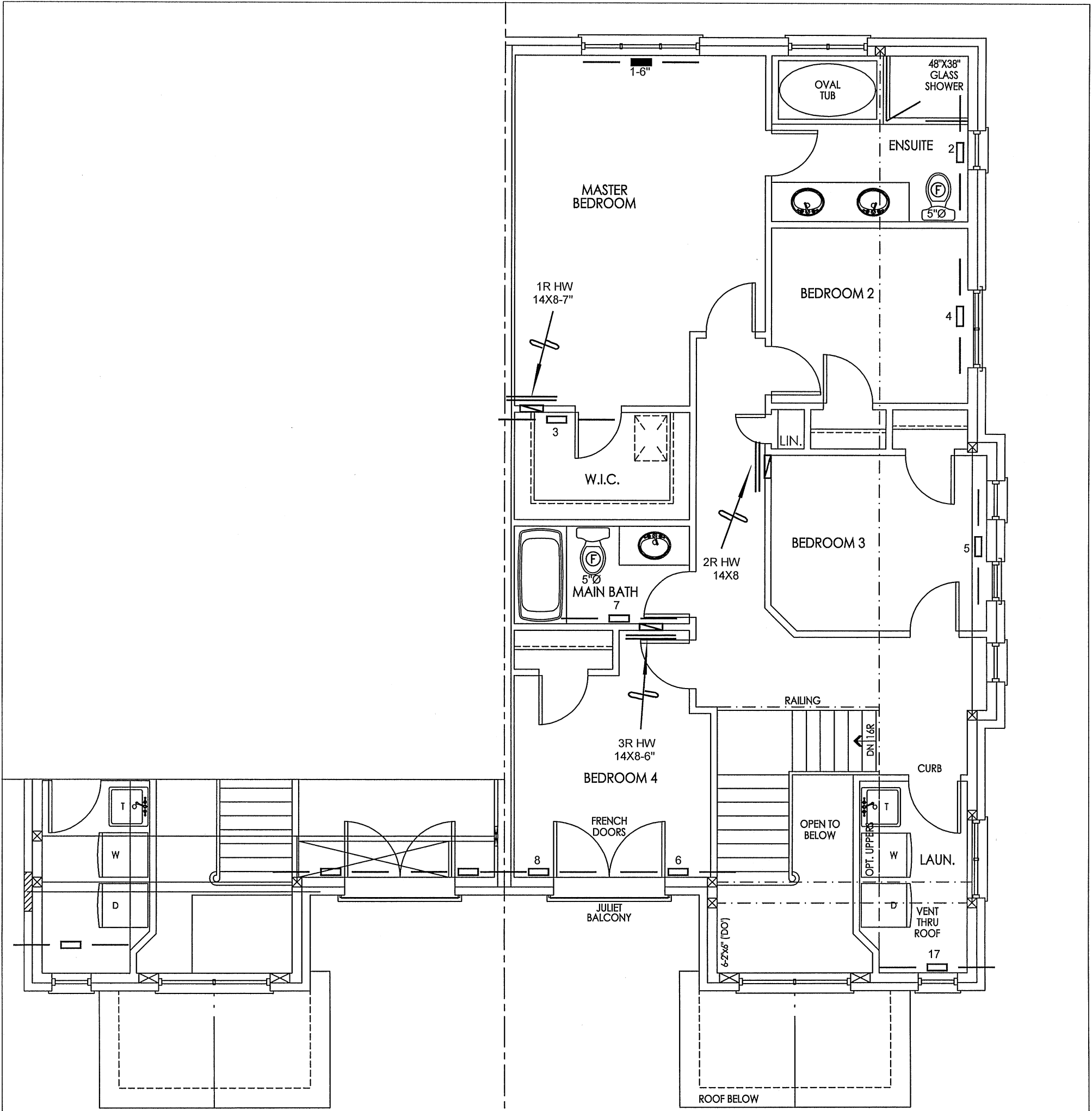
BCIN# 19669

LO#    **75559**

Client  
**GOLD PARK HOMES**

Project Name  
**ENCORE BRAMPTON, ONTARIO**

SD-7 - LOT 63R    2009 sqft



PART. SECOND FLOOR ELEV. 'C'

PART. SECOND FLOOR ELEV. 'D' - LOT 63R

**LOT 63R**  
**CSA-F280-12**  
**PACKAGE A1**

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							REVISIONS			
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	No.	Description	Date
	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.		
	SUPPLY AIR BOOT ABOVE		6" SUPPLY AIR STACK 2nd FLOOR		FRA- FLOOR RETURN AIR GRILLE		REDUCER			

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Client  
**GOLD PARK HOMES**

Project Name  
**ENCORE  
 BRAMPTON, ONTARIO**

SD-7 - LOT 63R    2009 sqft

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Sheet Title  
**SECOND FLOOR  
 HEATING  
 LAYOUT**

Date    **AUG/2017**

Scale    **3/16" = 1'-0"**

BCIN# 19669

LO#    **75559**