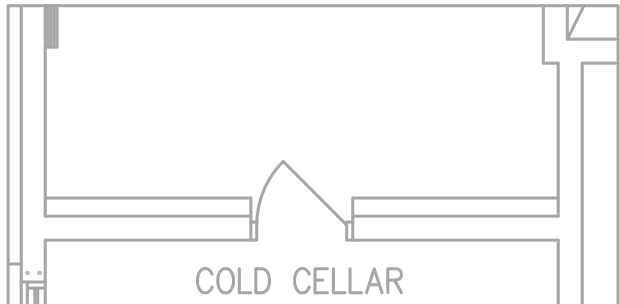
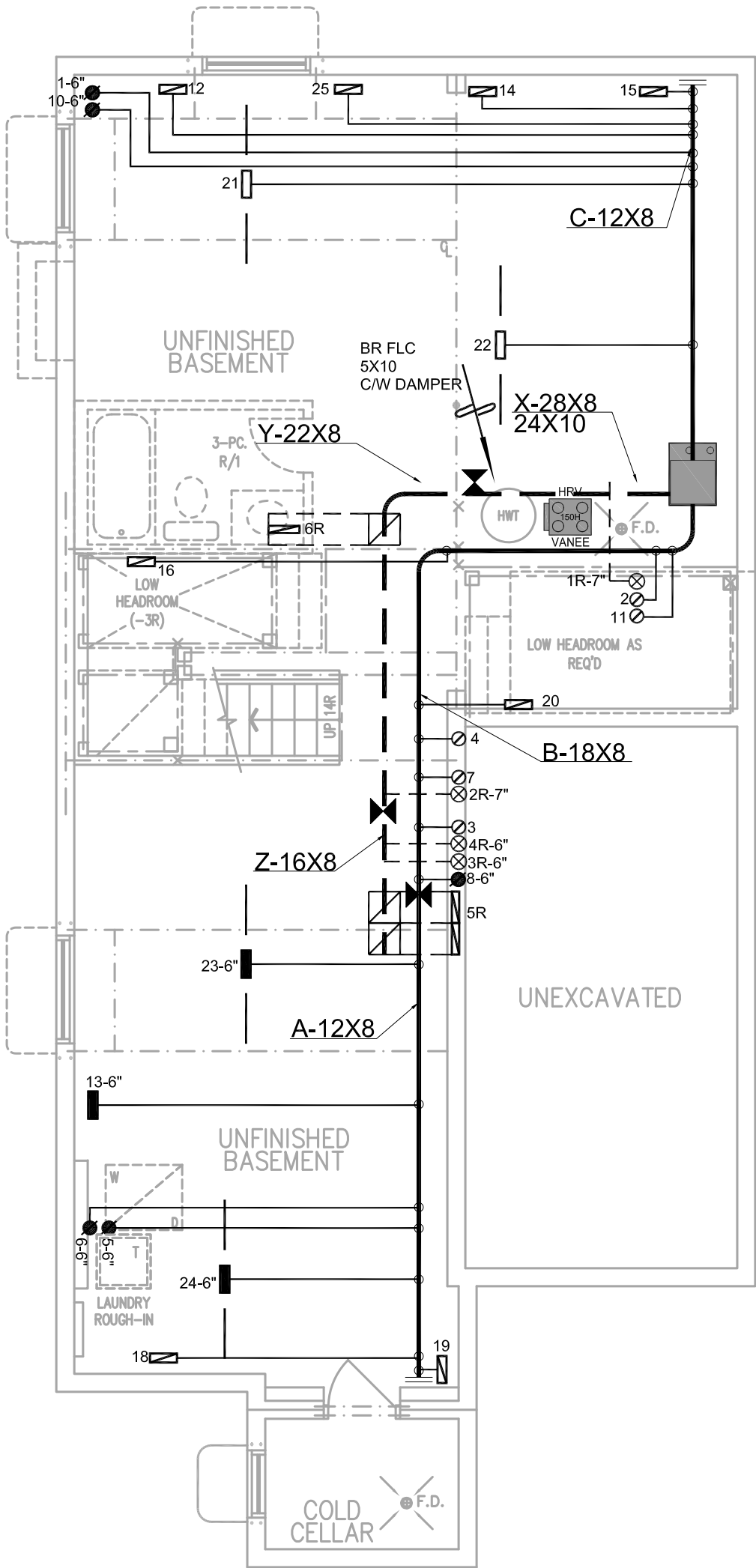


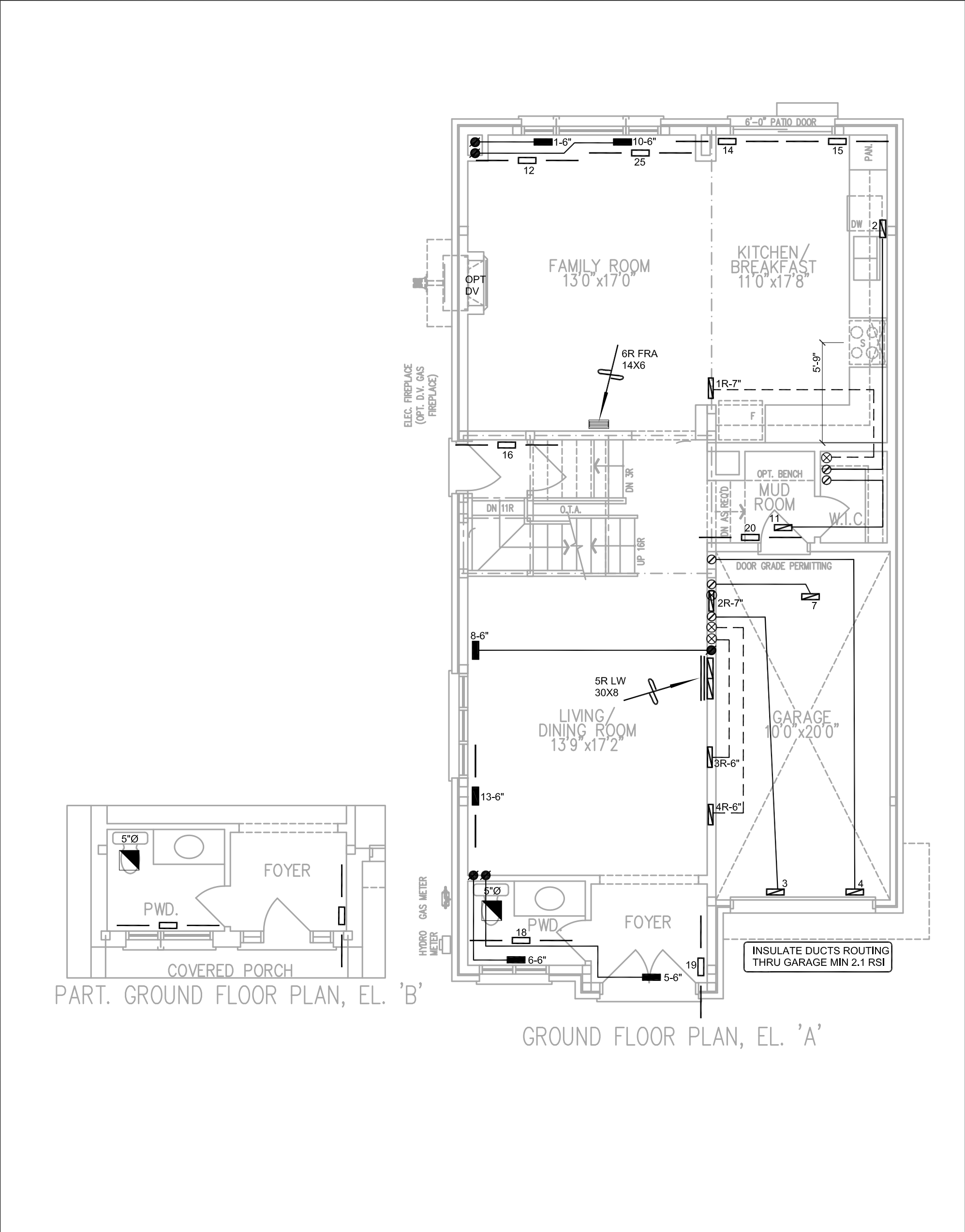


PART. BASEMENT PLAN, EL. 'B'

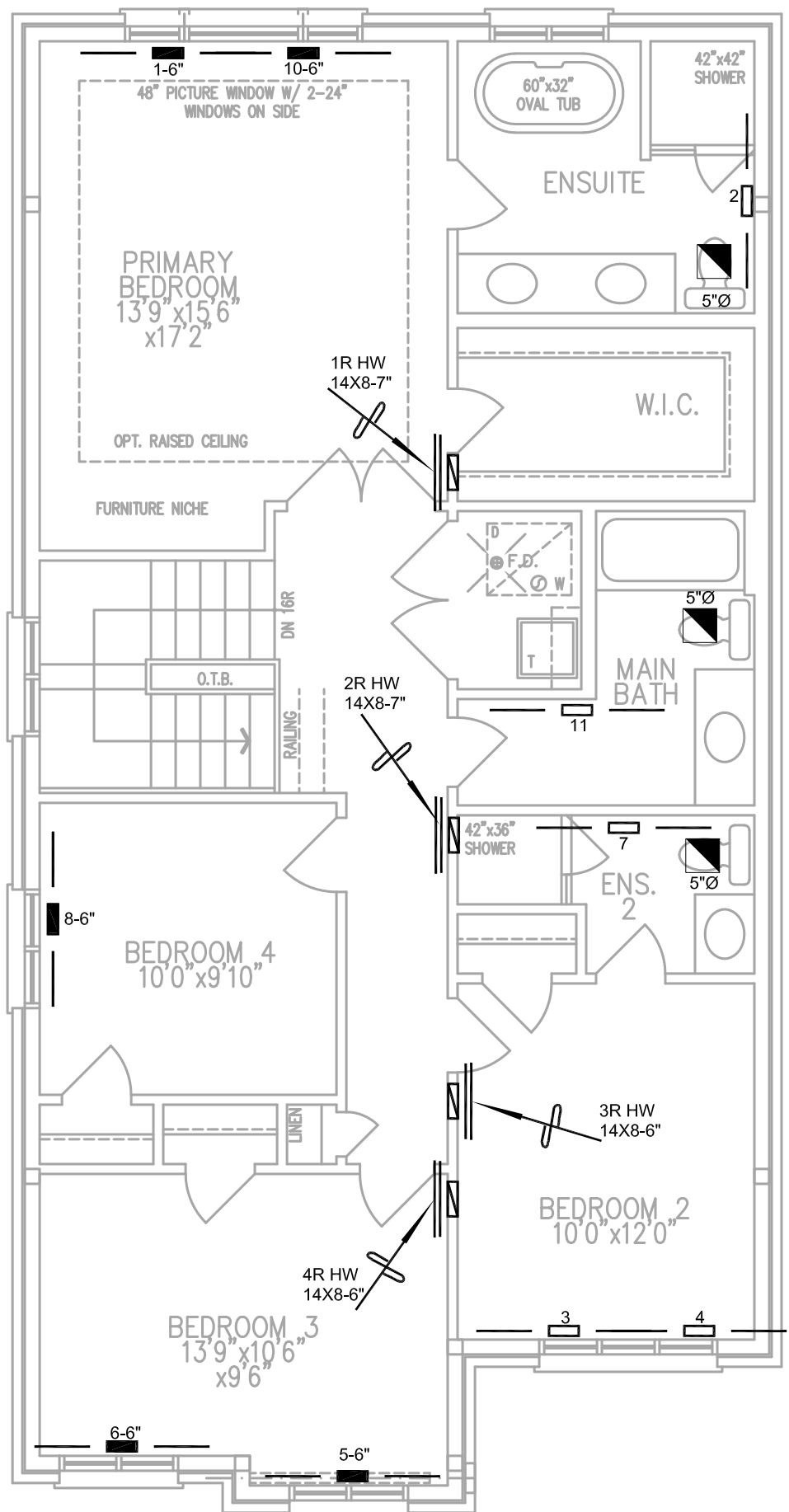
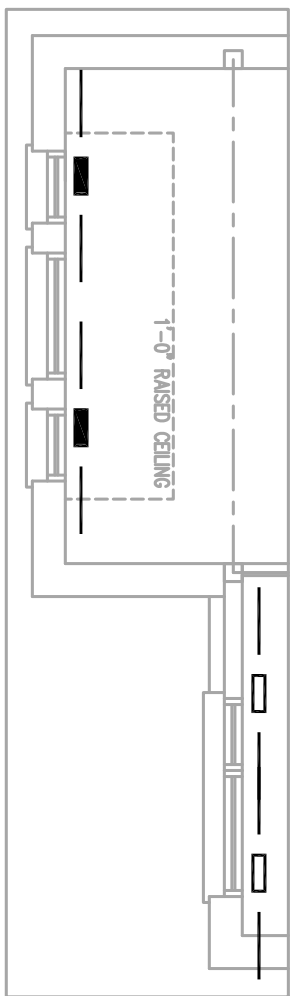


BASEMENT PLAN, EL. 'A'

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.						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 BCIN # 19669 HVAC Designs Ltd.		PERFORMANCE	
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				HEAT LOSS 37239 BTU/H		# OF RUNS S/A R/A FANS		Sheet Title	
ROYAL PINE HOMES						UNIT DATA		3RD FLOOR		BASEMENT HEATING LAYOUT	
Project Name						CARRIER		2ND FLOOR		10 4 3	
SUMMER RIDGE ESTATES						MODEL		1ST FLOOR		9 2 2	
BRAMPTON, ONTARIO						59SC6A040M14--10		BASEMENT		4 1 0	
						INPUT		40 MBTU/H			
						OUTPUT		39 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		925 cfm @ 0.6" w.c.			
OPT 4 BED		2275 sqft		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.							
3202						LO# 105070					



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.	DescriptionDate
	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.						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 BCIN # 19669 HVAC Designs Ltd.	
Client		ROYAL PINE HOMES		Project Name		SUMMER RIDGE ESTATES BRAMPTON, ONTARIO		PERFORMANCE	
OPT 4 BED 3202		2275 sqft		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 FIRST FLOOR HEATING LAYOUT	
								Date MAY/2024	
								Scale 3/16" = 1'-0"	
								BCIN# 19669	
								LO# 105070	



OPT. SECOND FLOOR PLAN, EL. 'A'
W/ 4 BEDROOMS

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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	Sheet Title	
ROYAL PINE HOMES		SECOND FLOOR HEATING LAYOUT	
Project Name		Date	MAY/2024
SUMMER RIDGE ESTATES BRAMPTON, ONTARIO		Scale	3/16" = 1'-0"
		BCIN# 19669	
OPT 4 BED 3202	2275 sqft	LO# 105070	

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 BRAMPTON	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@hvacdsgns.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]				
☐ House ☐ Small Buildings ☐ Large Buildings ☐ Complex Buildings ☒ HVAC – House ☐ Building Services ☐ Detection, Lighting and Power ☐ Fire Protection ☐ Building Structural ☐ Plumbing – House ☐ Plumbing – All Buildings ☐ 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: 3202 OPT 4 BED Project: SUMMER RIDGE ESTATES		
D. Declaration of Designer				
I, <u>MICHAEL O'ROURKE</u> (print name)		declare that (choose one as appropriate):		
☐ 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: _____				
☒ 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>				
☐ 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.				
May 17, 2024		 Signature of Designer		
Date				

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.

Application for a Permit Construct or Demolish – Effective January 1, 2015

TOTAL HEAT GAIN BTU/H:	29502	TONS: 2.46	LOSS DUE TO VENTILATION LOAD BTU/H: 1593	STRUCTURAL HEAT LOSS: 35647	TOTAL COMBINED HEAT LOSS BTU/H: 37239
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SITE NAME: SUMMER RIDGE ESTATES
BUILDER: ROYAL PIE HOMES

OPT 4 BED
TYPE: 3202

DATE: May-24

GFA: 2275 LO# 105070

HEATING CFM 925 COOLING CFM 925
TOTAL HEAT LOSS 35,647 TOTAL HEAT GAIN 29,266
AIR FLOW RATE CFM 25.95 AIR FLOW RATE CFM 31.61

furnace pressure 0.6
furnace filter 0.00
a/c coil pressure 0.26
available pressure for s/a & r/a 0.34

FACTORY INSTALLED

59SC6A040M14--10 CARRIER

AFUE = 96 %
INPUT (BTU/H) = 40,000
OUTPUT (BTU/H) = 39,000

RUN COUNT	4th	3rd	2nd	1st	Bas
S/A	0	0	10	9	4
R/A	0	0	4	2	1

plenium pressure s/a 0.18 r/a pressure 0.16
max s/a dif press. loss 0.01 r/a grille press. Loss 0.02
min adjusted pressure s/a 0.17 adjusted pressure r/a 0.14

FAN SPEED 40
LOW 0
MEDLOW 0
MEDIUM 0
MEDIUM HIGH 925
HIGH 0
DESIGN CFM = 925
CFM @ .6" E.S.P.
TEMPERATURE RISE 39 °F

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	11	12	13	14	15	16	18	19	20	21	22	23	24
ROOM NAME	MBR	ENS	BED-2	BED-2	BED-3	BED-3	ENS-2	BED-4	MBR	BATH	FAM	LV/DN	KT/BF	KT/BF	LAND	W/R	FOY	MUD	BAS	BAS	BAS	BAS
RM LOSS MBH.	1.43	1.63	1.17	1.17	1.48	1.48	0.59	1.26	1.43	0.68	1.19	2.31	1.19	1.19	0.34	1.23	1.67	1.22	2.95	2.95	2.95	2.95
CFM PER RUN HEAT	37	42	30	30	38	38	15	33	37	18	31	60	31	31	9	32	43	32	76	76	76	76
RM GAIN MBH.	2.09	1.15	1.72	1.72	2.22	2.22	0.14	2.35	2.09	0.35	1.69	2.32	1.73	1.73	0.05	1.41	0.47	0.19	0.48	0.48	0.48	0.48
CFM PER RUN COOLING	66	36	54	54	70	70	5	74	66	11	54	73	55	55	2	45	15	6	15	15	15	15
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	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
ACTUAL DUCT LGH.	48	33	51	56	74	65	38	50	53	28	34	41	23	16	24	53	44	22	28	13	35	47
EQUIVALENT LENGTH	170	230	130	160	200	200	140	120	200	220	120	160	100	100	180	140	110	0	140	150	170	130
TOTAL EFFECTIVE LENGTH	218	263	181	216	274	265	178	170	253	248	154	201	123	116	204	193	154	22	168	163	205	177
ADJUSTED PRESSURE	0.08	0.06	0.09	0.08	0.06	0.06	0.09	0.1	0.07	0.07	0.11	0.08	0.14	0.14	0.08	0.09	0.11	0.76	0.1	0.1	0.08	0.09
ROUND DUCT SIZE	6	5	5	5	6	6	4	5	6	4	5	5	5	5	4	5	4	4	5	5	6	6
HEATING VELOCITY (ft/min)	189	308	220	220	194	194	172	242	189	207	228	441	228	228	103	235	493	367	558	558	388	388
COOLING VELOCITY (ft/min)	337	264	396	396	357	357	57	543	337	126	396	536	404	404	23	330	172	69	110	110	76	76
OUTLET GRILL SIZE	4X10	3X10	3X10	3X10	4X10	4X10	3X10	3X10	4X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	4X10	4X10
TRUNK	C	B	B	B	A	A	B	B	C	B	C	A	C	C	B	A	A	B	C	C	A	A

RUN #	25
ROOM NAME	FAM
RM LOSS MBH.	1.19
CFM PER RUN HEAT	31
RM GAIN MBH.	1.69
CFM PER RUN COOLING	54
ADJUSTED PRESSURE	0.17
ACTUAL DUCT LGH.	27
EQUIVALENT LENGTH	110
TOTAL EFFECTIVE LENGTH	137
ADJUSTED PRESSURE	0.12
ROUND DUCT SIZE	5
HEATING VELOCITY (ft/min)	228
COOLING VELOCITY (ft/min)	396
OUTLET GRILL SIZE	3X10
TRUNK	C

SUPPLY AIR TRUNK SIZE										RETURN AIR TRUNK SIZE																
TRUNK		STATIC	ROUND	RECT				VELOCITY	TRUNK		STATIC	ROUND	RECT				VELOCITY	TRUNK		STATIC	ROUND	RECT				VELOCITY
	CFM	PRESS.	DUCT	DUCT			(ft/min)		CFM	PRESS.	DUCT	DUCT				(ft/min)		CFM	PRESS.	DUCT	DUCT				(ft/min)	
TRUNK A	363	0.06	10.3	12	x	8	545	TRUNK G	0	0.00	0	0	x	8	0	TRUNK O	0	0.05	0	0	x	8	0			
TRUNK B	572	0.06	12.2	18	x	8	572	TRUNK H	0	0.00	0	0	x	8	0	TRUNK P	0	0.05	0	0	x	8	0			
TRUNK C	350	0.07	9.8	12	x	8	525	TRUNK I	0	0.00	0	0	x	8	0	TRUNK Q	0	0.05	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	0.05	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	0.05	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	0.05	0	0	x	8	0			

RETURN AIR #	1	2	3	4	5	6	BR									
FLOOR	2	2	2	2	1	1	B									
AIR VOLUME	115	115	75	85	260	130	0	0	0	0	0	0	0	0	0	145
PLENUM PRESSURE	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14
ACTUAL DUCT LGH.	47	50	61	64	40	26	1	1	1	1	1	1	1	1	1	14
EQUIVALENT LENGTH	225	215	245	205	220	165	0	0	0	0	0	0	0	0	0	135
TOTAL EFFECTIVE LH	272	265	306	269	260	191	1	1	1	1	1	1	1	1	1	149
ADJUSTED PRESSURE	0.05	0.05	0.05	0.05	0.06	0.07	14.32	14.32	14.32	14.32	14.32	14.32	14.32	14.32	14.32	0.10
ROUND DUCT SIZE	7	7	6	6	9.1	6.8	0	0	0	0	0	0	0	0	0	6.4
INLET GRILL SIZE	8	8	8	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	X
INLET GRILL SIZE	14	14	14	14	30	14	0	0	0	0	0	0	0	0	0	14

TYPE: 3202
SITE NAME: SUMMER RIDGE ESTATES

LO # 105070
OPT 4 BED

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>3</u> @ 10.6 cfm	<u>31.8</u> cfm
Kitchen & Bathrooms	<u>5</u> @ 10.6 cfm	<u>53</u> cfm
Other Rooms	<u>4</u> @ 10.6 cfm	<u>42.4</u> cfm
Table 9.32.3.A.	TOTAL	<u>169.6</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		<u>79.5</u> cfm

SUPPLEMENTAL VENTILATION CAPACITY		9.32.3.5.
Total Ventilation Capacity	<u>169.6</u>	cfm
Less Principal Ventil. Capacity	<u>79.5</u>	cfm
Required Supplemental Capacity	<u>90.1</u>	cfm

PRINCIPAL EXHAUST FAN CAPACITY	
Model: VANEE V150H	Location: BSMT
<u>79.5</u> cfm	☒ HVI Approved

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

SUPPLEMENTAL FANS		BY INSTALLING CONTRACTOR		
Location	Model	cfm	HVI	Sones
ENS	BY INSTALLING CONTRACTOR	50	☒	3.5
ENS-2	BY INSTALLING CONTRACTOR	50	☒	3.5
BATH	BY INSTALLING CONTRACTOR	50	☒	3.5
W/R	BY INSTALLING CONTRACTOR	50	☒	3.5

HEAT RECOVERY VENTILATOR		9.32.3.11.
Model: VANEE V150H		
<u>150</u> cfm high	<u>35</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:	
ROYAL PIE 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:	May-24

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

CSA F280-12 Residential Heat Loss and Heat Gain Calculations																																																																	
Formula Sheet (For Air Leakage / Ventilation Calculation)																																																																	
LO#: 105070		Model: 3202		Builder: ROYAL PIE HOMES			Date: 2024-05-17																																																										
Volume Calculation					Air Change & Delta T Data																																																												
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5.2.3.2 Heat Loss due to Mechanical Ventilation					6.2.7 Sensible heat Gain due to Ventilation																																																												
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*HLairbv = Air leakage heat loss + ventilation heat loss *For a balanced or supply only ventilation system HLairve = 0																																																																	
								Michael O'Rourke BCIN# 19669 																																																									

HEAT LOSS AND GAIN SUMMARY SHEET

MODEL: 3202	OPT 4 BED	BUILDER: ROYAL PIE HOMES
SFQT: 2275	LO# 105070	SITE: SUMMER RIDGE ESTATES

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
		WINDOW SHGC	0.60

BUILDING DATA

ATTACHMENT:	DETACHED	# OF STORIES (+BASEMENT):	3
FRONT FACES:	EAST	ASSUMED (Y/N):	Y
AIR CHANGES PER HOUR:	2.50	ASSUMED (Y/N):	Y
AIR TIGHTNESS CATEGORY:	TIGHT	ASSUMED (Y/N):	Y
WIND EXPOSURE:	SHELTERED	ASSUMED (Y/N):	Y
HOUSE VOLUME (ft ³):	29468.2	ASSUMED (Y/N):	Y
INTERNAL SHADING:	BLINDS/CURTAINS	ASSUMED OCCUPANTS:	5
INTERIOR LIGHTING LOAD (Btu/h/ft ²):	2.20	DC BRUSHLESS MOTOR (Y/N):	Y
FOUNDATION CONFIGURATION	BCIN_1	DEPTH BELOW GRADE:	5.6 ft
LENGTH: 51.0 ft	WIDTH: 26.0 ft	EXPOSED PERIMETER:	154.0 ft

2012 OBC - COMPLIANCE PACKAGE

Component	Compliance Package PERFORMANCE	
	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+1.5	21.40
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	1.6	-
Skylights Maximum U-Value	2.6	-
Space Heating Equipment Minimum AFUE	96%	-
HRV/ERV Minimum Efficiency	75%	-
Domestic Hot Water Heater Minimum EF	0.9	-

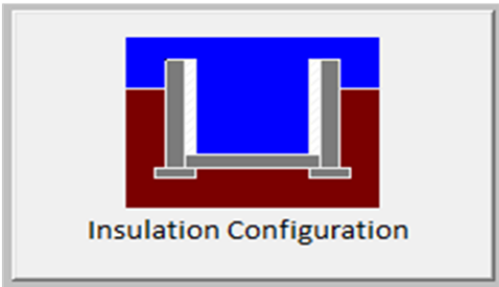
INDIVIDUAL BCIN: 19669

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):	15.5	 Insulation Configuration
Floor Width (m):	7.9	
Exposed Perimeter (m):	0.0	
Wall Height (m):	2.6	
Depth Below Grade (m):	1.71	
Window Area (m ²):	0.9	
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):		1532

TYPE: 3202
LO# 105070

OPT 4 BED

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):	6.46			
Building Configuration				
Type:	Detached			
Number of Stories:	Two			
Foundation:	Full			
House Volume (m ³):	834.4			
Air Leakage/Ventilation				
Air Tightness Type:	Detached (2.5 ACH)			
Custom BDT Data:	ELA @ 10 Pa.	779.0 cm ²		
	2.50	ACH @ 50 Pa		
Mechanical Ventilation (L/s):	Total Supply	Total Exhaust		
	37.5	37.5		
Flue Size				
Flue #:	#1	#2	#3	#4
Diameter (mm):	0	0	0	0
Natural Infiltration Rates				
Heating Air Leakage Rate (ACH/H):	0.222			
Cooling Air Leakage Rate (ACH/H):	0.072			

TYPE: 3202
LO# 105070

OPT 4 BED