

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 RICHMOND HILL	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@hvacdesigns.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: 2009 END FIN BSMT Project: CENTREFIELD (WEST GORMLEY)		
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.				
September 10, 2021		 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

SITE NAME: CENTREFIELD (WEST GORMLEY)
BUILDER: ROYAL PINE HOMES

FIN BSMT

DATE: Sep-21

GFA: 1700 LO# 87537

TYPE: 2009 END

HEATING CFM 820 COOLING CFM 820
TOTAL HEAT LOSS 32,342 TOTAL HEAT GAIN 24,468
AIR FLOW RATE CFM 25.35 AIR FLOW RATE CFM 33.51

**CARRIER

AFUE = 97 %
INPUT (BTU/H) = 60,000
OUTPUT (BTU/H) = 58,000

RUN COUNT	4th	3rd	2nd	1st	Bas
SIA	0	0	8	6	4
R/A	0	0	4	1	1

furnace 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

All SIA diffusers 4"x10" unless noted otherwise on layout.

ROOM NAME	1	2	3	4	5	6	7	8	10	13	14	15	18	19	20	21	22	23	24
MBR	0.92	1.55	2.17	1.07	2.17	2.17	0.32	1.07	0.92	2.01	2.01	2.01	1.30	2.26	2.26	3.25	0.53	3.25	BAS
RM LOSS MBH	23	39	55	27	55	55	8	27	23	51	51	51	33	57	57	82	13	82	3.25
CFM PER RUN HEAT	1.90	0.79	2.53	1.88	2.53	2.53	0.10	1.88	1.90	2.59	2.59	2.59	0.22	1.04	1.04	0.30	0.00	0.30	0.30
RM GAIN MBH	64	26	85	63	85	85	3	63	64	87	87	87	7	35	35	10	0	10	10
CFM PER RUN COOLING	0.17	0.17	0.16	0.17	0.16	0.16	0.17	0.17	0.17	0.16	0.16	0.16	0.17	0.17	0.17	0.16	0.17	0.16	0.16
ADJUSTED PRESSURE	28	38	53	52	53	50	30	47	34	4	23	19	22	36	39	31	11	24	33
ACTUAL DUCT LGH.	110	170	150	150	190	180	140	130	140	150	170	150	160	110	110	110	140	180	120
EQUIVALENT LENGTH	138	208	243	202	243	230	170	177	174	154	193	169	182	146	149	191	151	204	153
TOTAL EFFECTIVE LENGTH	0.12	0.08	0.07	0.09	0.07	0.07	0.1	0.1	0.1	0.11	0.08	0.1	0.09	0.12	0.12	0.08	0.11	0.08	0.11
ADJUSTED PRESSURE	5	4	6	5	6	6	4	5	5	6	6	6	4	5	5	6	4	6	6
ROUND DUCT SIZE	3X10	3X10	4X10	3X10	4X10	4X10	3X10	3X10	3X10	4X10	4X10	4X10	3X10	3X10	3X10	4X10	3X10	4X10	4X10
HEATING VELOCITY (ft/min)	169	447	280	198	280	280	92	198	169	260	260	260	379	419	419	418	149	418	418
COOLING VELOCITY (ft/min)	470	298	433	463	433	433	34	463	470	444	444	444	80	257	257	51	0	51	51
OUTLET GRILL SIZE	C	C	A	B	A	A	B	B	C	B	C	C	B	A	A	C	B	C	A

ROOM NAME	1	2	3	4	5	6	7	8	10	13	14	15	18	19	20	21	22	23	24
MBR	0.92	1.55	2.17	1.07	2.17	2.17	0.32	1.07	0.92	2.01	2.01	2.01	1.30	2.26	2.26	3.25	0.53	3.25	BAS
RM LOSS MBH	23	39	55	27	55	55	8	27	23	51	51	51	33	57	57	82	13	82	3.25
CFM PER RUN HEAT	1.90	0.79	2.53	1.88	2.53	2.53	0.10	1.88	1.90	2.59	2.59	2.59	0.22	1.04	1.04	0.30	0.00	0.30	0.30
RM GAIN MBH	64	26	85	63	85	85	3	63	64	87	87	87	7	35	35	10	0	10	10
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OUTLET GRILL SIZE	C	C	A	B	A	A	B	B	C	B	C	C	B	A	A	C	B	C	A

TYPE: 2009 END
SITE NAME: CENTREFIELD (WEST GORMLEY)

LO # 87537
FIN BSMT

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	6 @ 10.6 cfm	63.6 cfm
Other Rooms	2 @ 10.6 cfm	21.2 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 65H	Location: BSMT
63.6 cfm	☒ HVI Approved

PRINCIPAL EXHAUST HEAT LOSS CALCULATION				
CFM	ΔT °F	FACTOR	% LOSS	
63.6 CFM	X 78 F	X 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
PWD	BY INSTALLING CONTRACTOR	50	☒	3.5
B-BATH	BY INSTALLING CONTRACTOR	50	☒	3.5

HEAT RECOVERY VENTILATOR		9.32.3.11.
Model: VANEE 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: ROYAL PINE 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:	September-21

CSA F280-12 Residential Heat Loss and Heat Gain Calculations																													
Formula Sheet (For Air Leakage / Ventilation Calculation)																													
LO#: 87537	Model: 2009 END																												
Builder: ROYAL PINE HOMES																													
Date: 9/10/2021																													
Air Change & Delta T Data																													
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">WINTER NATURAL AIR CHANGE RATE</td> <td style="width: 50%;">0.284</td> </tr> <tr> <td>SUMMER NATURAL AIR CHANGE RATE</td> <td>0.086</td> </tr> </table>		WINTER NATURAL AIR CHANGE RATE	0.284	SUMMER NATURAL AIR CHANGE RATE	0.086																								
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			13																										
6.2.6 Sensible Gain due to Air Leakage																													
$HG_{salb} = LR_{airc} \times \frac{V_b}{3.6} \times DTD_c \times 1.2$																													
0.284	$= 0.086 \times 186.74 \times 7 \times 1.2 = 137 \text{ W}$																												
	$= 9370 \text{ Btu/h}$																												
6.2.7 Sensible heat Gain due to Ventilation																													
$HL_{vairb} = PVC \times DTD_h \times 1.08 \times (1 - E)$																													
64 CFM	$= 64 \times 13 \times 1.08 \times 0.25 = 220 \text{ Btu/h}$																												
5.2.3.3 Calculation of Air Change Heat Loss for Each Room (Floor Multiplier Section)																													
$HL_{airrr} = Level Factor \times HL_{airbv} \times \{(HL_{agcr} + HL_{bgr}) \div (HL_{aglevel} + HL_{bglevel})\}$																													
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Level</th> <th>Level Factor (LF)</th> <th>HLaive Air Leakage + Ventilation Heat Loss (Btu/h)</th> <th>Level Conductive Heat Loss: (HL_{clvel})</th> <th>Air Leakage Heat Loss Multiplier (LF x HL_{airbv} / HL_{level})</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>0.5</td> <td rowspan="5" style="text-align: center; vertical-align: middle;">9,370</td> <td>5,598</td> <td>0.837</td> </tr> <tr> <td>2</td> <td>0.3</td> <td>9,059</td> <td>0.310</td> </tr> <tr> <td>3</td> <td>0.2</td> <td>7,698</td> <td>0.243</td> </tr> <tr> <td>4</td> <td>0</td> <td>0</td> <td>0.000</td> </tr> <tr> <td>5</td> <td>0</td> <td>0</td> <td>0.000</td> </tr> </tbody> </table>		Level	Level Factor (LF)	HLaive Air Leakage + Ventilation Heat Loss (Btu/h)	Level Conductive Heat Loss: (HL _{clvel})	Air Leakage Heat Loss Multiplier (LF x HL _{airbv} / HL _{level})	1	0.5	9,370	5,598	0.837	2	0.3	9,059	0.310	3	0.2	7,698	0.243	4	0	0	0.000	5	0	0	0.000		
Level	Level Factor (LF)	HLaive Air Leakage + Ventilation Heat Loss (Btu/h)	Level Conductive Heat Loss: (HL _{clvel})	Air Leakage Heat Loss Multiplier (LF x HL _{airbv} / HL _{level})																									
1	0.5	9,370	5,598	0.837																									
2	0.3		9,059	0.310																									
3	0.2		7,698	0.243																									
4	0		0	0.000																									
5	0		0	0.000																									
*HL_{airbv} = Air leakage heat loss + ventilation heat loss *For a balanced or supply only ventilation system HL_{airve} = 0																													

HEAT LOSS AND GAIN SUMMARY SHEET

MODEL: 2009 END	FIN BSMT	BUILDER: ROYAL PINE HOMES
SFQT: 1700	LO# 87537	SITE: CENTREFIELD (WEST GORMLEY)

DESIGN ASSUMPTIONS

HEATING	°F	COOLING	°F
OUTDOOR DESIGN TEMP.	-6	OUTDOOR DESIGN TEMP.	88
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):	23741.4	ASSUMED (Y/N):	Y
INTERNAL SHADING:	BLINDS/CURTAINS	ASSUMED OCCUPANTS:	4
INTERIOR LIGHTING LOAD (Btu/h/ft²):	1.50	DC BRUSHLESS MOTOR (Y/N):	Y
FOUNDATION CONFIGURATION	BCIN_1	DEPTH BELOW GRADE:	7.0 ft
LENGTH: 52.0 ft	WIDTH: 20.0 ft	EXPOSED PERIMETER:	112.0 ft

2012 OBC - COMPLIANCE PACKAGE

Component	Compliance Package SB-12 PERFORMANCE	
	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	22+1.5	18.50
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	0.96	-
HRV Minimum Efficiency	75%	-
Domestic Hot Water Heater Minimum EF	TE=94%	-

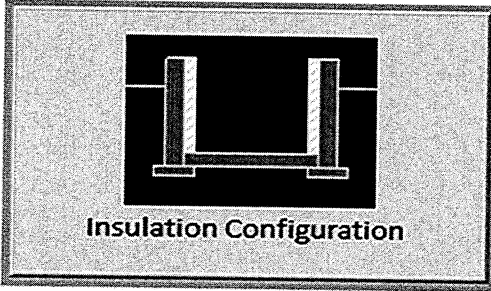
INDIVIDUAL BCIN: 19669

MICHAEL O'ROURKE



Residential Foundation Thermal Load Calculator

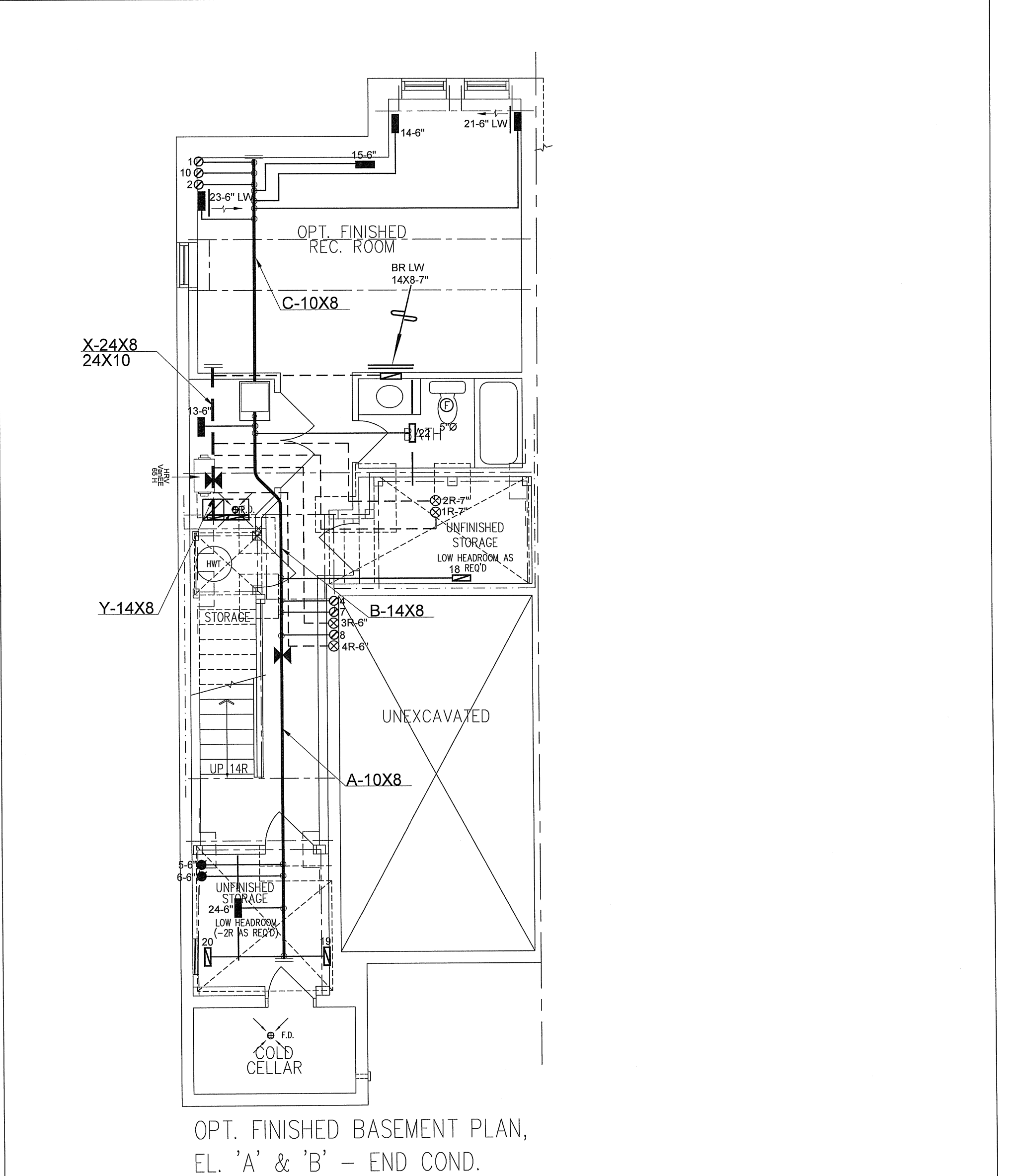
Supplemental tool for CAN/CSA-F280

Weather Station Description		
Province:	Ontario	
Region:	Richmond Hill	
Site Description		
Soil Conductivity:	Normal conductivity: dry sand, loam, clay	
Water Table:	Normal (7-10 m, 23-33 ft)	
Foundation Dimensions		
Floor Length (m):	15.8	 Insulation Configuration
Floor Width (m):	6.1	
Exposed Perimeter (m):	34.1	
Wall Height (m):	3.0	
Depth Below Grade (m):	2.13	
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):	1062	

Air Infiltration Residential Load Calculator

Supplemental tool for CAN/CSA-F280

Weather Station Description			
Province:	Ontario		
Region:	Richmond Hill		
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):	6.74		
Building Configuration			
Type:	Semi		
Number of Stories:	Two		
Foundation:	Full		
House Volume (m ³):	672.3		
Air Leakage/Ventilation			
Air Tightness Type:	Energy Star Attached (3.0 ACH)		
Custom BDT Data:	ELA @ 10 Pa. 3.00	753.1 cm ² ACH @ 50 Pa	
Mechanical Ventilation (L/s):	Total Supply 30.0	Total Exhaust 30.0	
Flue Size			
Flue #:	#1	#2	#3 #4
Diameter (mm):	0	0	0 0
Natural Infiltration Rates			
Heating Air Leakage Rate (ACH/H):	0.284		
Cooling Air Leakage Rate (ACH/H):	0.086		



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.

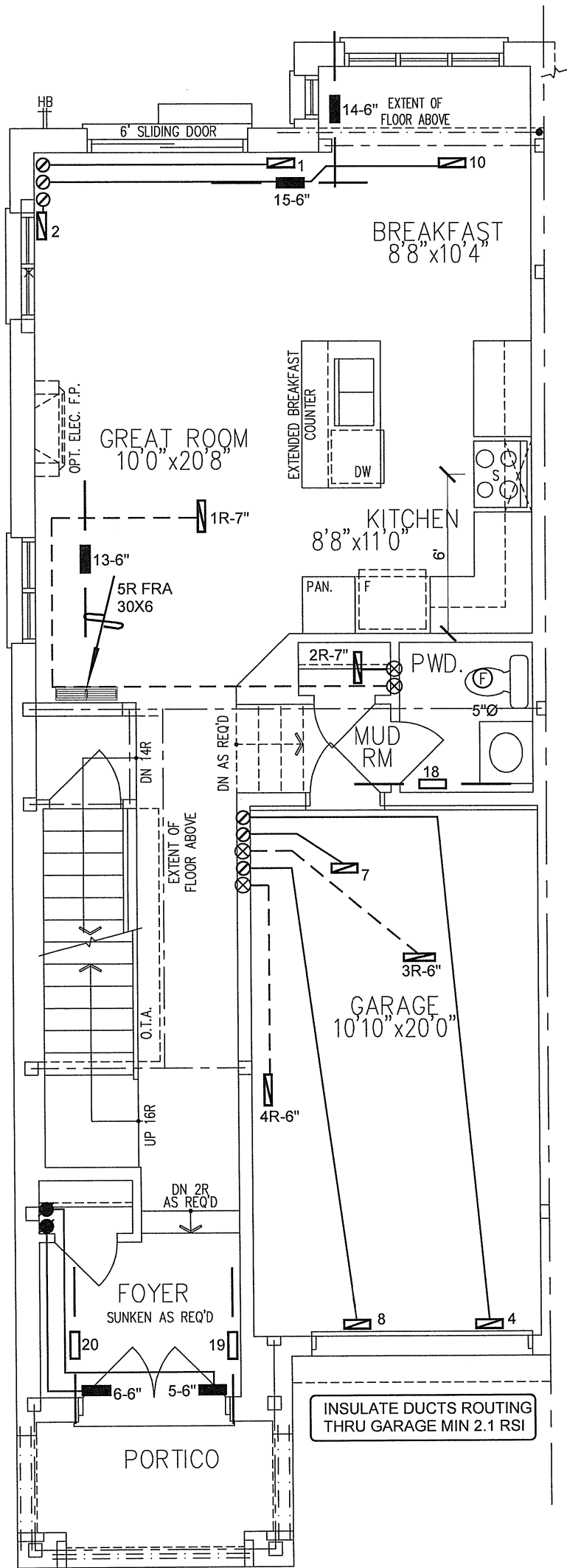
CSA-F280-12

SB-12 PERFORMANCE

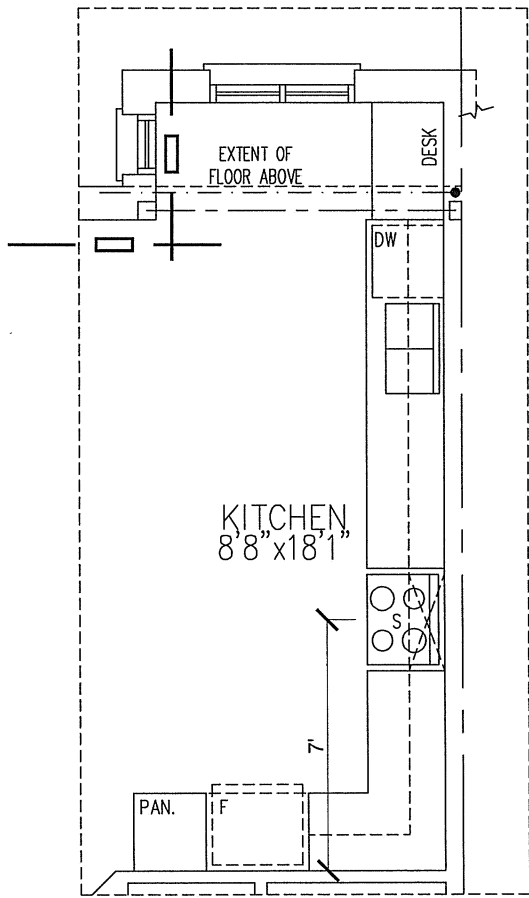
HVAC DESIGNS LTD.		HVAC LEGEND						3.	REVISED ACH	SEPT/2021
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	2.	REVISED AS PER ARCHITECTURALS	APR/2021
	SUPPLY AIR GRILLE		6" SUPPLY AIR BOOT ABOVE		14"x8" RETURN AIR GRILLE		RETURN AIR STACK ABOVE	1.	REVISED TO PERFORMANCE	SEPT/2020
	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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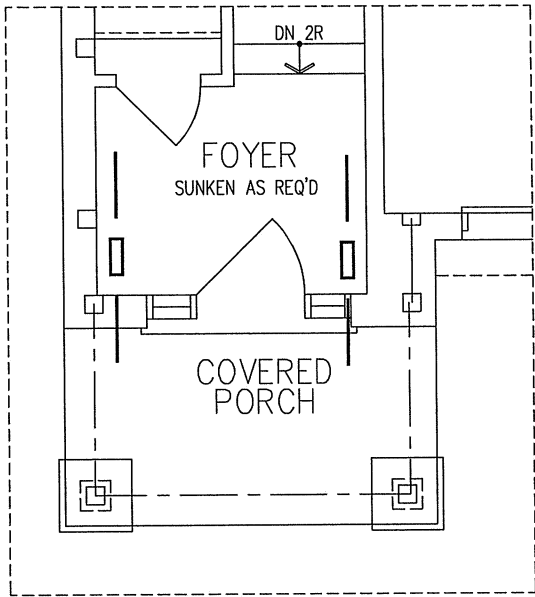
Client		HVACDESIGNS LTD. 375 Finley Ave. Suite 202 - Ajax, Ontario L1S 2E2 Tel. 905.619.2300 - 905.420.5300 Fax 905.619.2375 Email: info@hvacdesigns.ca Web: www.hvacdesigns.ca Specializing in Residential Mechanical Design Services Installation to comply with the latest Ontario Building Code. All supply 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 33678 BTU/H UNIT DATA		# OF RUNS S/A R/A FANS			Sheet Title			
ROYAL PINE HOMES			MAKE	CARRIER	3RD FLOOR				BASEMENT HEATING LAYOUT		
Project Name			MODEL	59TN6A-060-14V	2ND FLOOR	8	4	2			
CENTREFIELD (WEST GORMLEY) RICHMOND HILL, ONTARIO			INPUT	60 MBTU/H	1ST FLOOR	6	1	2			
FIN BSMT 2009 END			OUTPUT	58 MBTU/H	BASEMENT	4	1	1	Date	SEPT/2020	
1700 sqft			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	820 cfm @ 0.6" w.c.						BCIN# 19669	
								LO#	87537		



GROUND FLOOR PLAN,
EL. 'A' – END



PART. GROUND FLOOR PLAN
– OPT. KITCHEN LAYOUT



GROUND FLOOR PLAN, EL.
'B' – END

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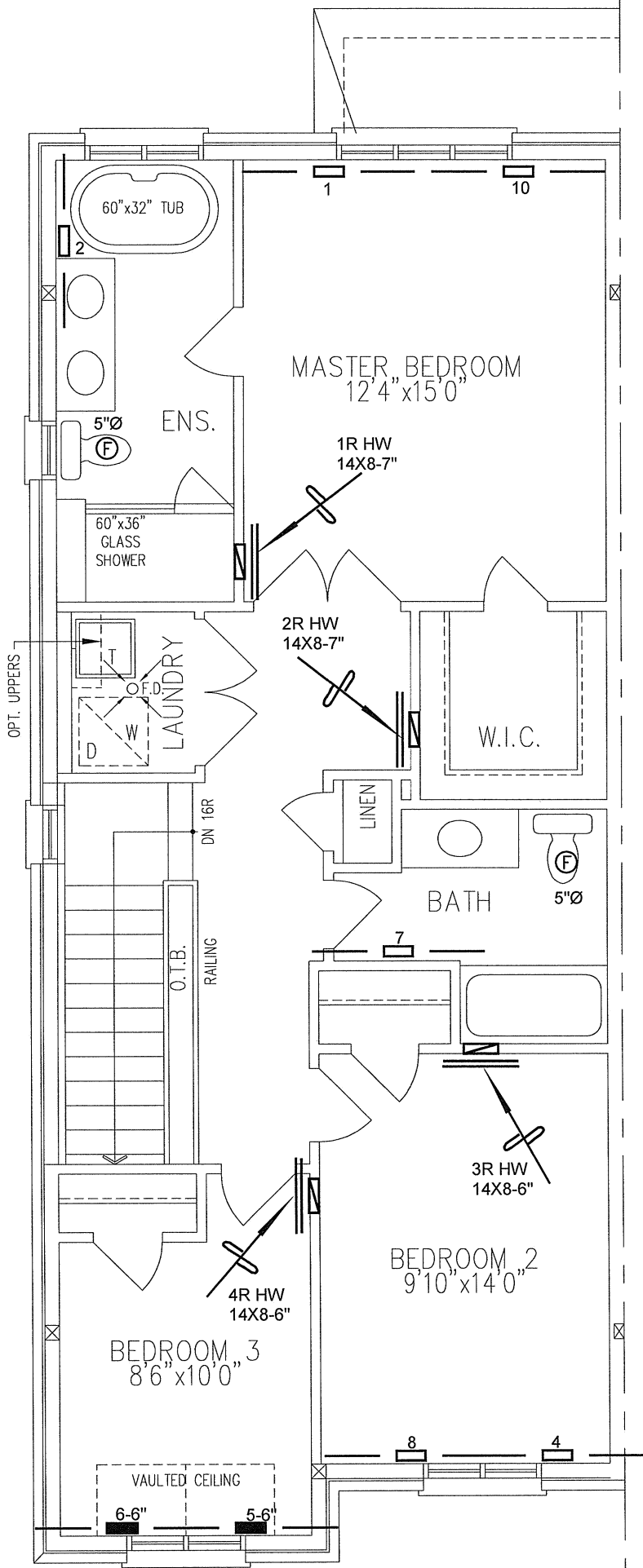
CSA-F280-12

SB-12 PERFORMANCE

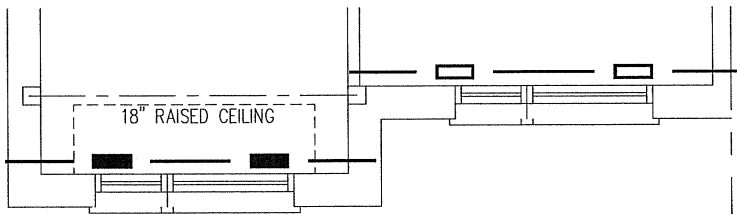
HVAC LEGEND								3.	REVISED ACH	SEPT/2021
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	2.	REVISED AS PER ARCHITECTURALS	APR/2021
	SUPPLY AIR GRILLE		6" SUPPLY AIR BOOT ABOVE		14"x8" RETURN AIR GRILLE		RETURN AIR STACK ABOVE	1.	REVISED TO PERFORMANCE	SEPT/2020
	SUPPLY 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 ROYAL PINE 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 FIRST FLOOR HEATING LAYOUT	
Project Name CENTREFIELD (WEST GORMLEY) RICHMOND HILL, ONTARIO			Date SEPT/2020	
FIN BSMT 2009 END			Scale 3/16" = 1'-0"	
1700 sqft			BCIN# 19669	
		LO#	87537	



SECOND FLOOR PLAN, EL.
'A1/A2' - END



SECOND FLOOR PLAN, EL.
'B' - END

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SB-12 PERFORMANCE

HVAC LEGEND						3.	REVISED ACH	SEPT/2021
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.
						REVISIONS		
						Description		Date

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ROYAL PINE HOMES			SECOND FLOOR HEATING LAYOUT	
Project Name			Date	SEPT/2020
CENTREFIELD (WEST GORMLEY) RICHMOND HILL, ONTARIO			Scale	3/16" = 1'-0"
FIN BSMT			BCIN# 19669	
2009 END			LO#	87537
1700 sqft				