


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 Barossa 1 S38-1 WOB				Lot: Lot/con.: 	
Municipality Bradford		Postal code	Plan number/ other description		
B. Individual who reviews and takes responsibility for design activities					
Name David DaCosta			Firm gtaDesigns Inc.		
Street address 2985 Drew Road, Suite 202				Unit no.	Lot/con.
Municipality Mississauga		Postal code L4T 0A4	Province Ontario	E-mail hvac@gtadesigns.ca	
Telephone number (905) 671-9800		Fax number		Cell number	
C. Design activities undertaken by individual identified in Section B. [Building Code Table 3.5.2.1 of Division C]					
<input type="checkbox"/> House <input type="checkbox"/> Small Buildings <input type="checkbox"/> Large Buildings <input type="checkbox"/> Complex Buildings		<input checked="" type="checkbox"/> HVAC – House <input type="checkbox"/> Building Services <input type="checkbox"/> Detection, Lighting and Power <input type="checkbox"/> Fire Protection		<input type="checkbox"/> Building Structural <input type="checkbox"/> Plumbing – House <input type="checkbox"/> Plumbing – All Buildings <input type="checkbox"/> On-site Sewage Systems	
Description of designer's work		Model Certification		Project #:	PJ-00041
				Layout #:	JB-08734
Heating and Cooling Load Calculations		Main	X	Builder	Bayview Wellington
Air System Design		Alternate		Project	Green Valley East
Residential mechanical ventilation Design Summary		Area Sq ft:	2228	Model	Barossa 1
Residential System Design per CAN/CSA-F280-12					S38-1 WOB
Residential New Construction - Forced Air				SB-12	Package A1
D. Declaration of Designer					
<p>I, <u>David DaCosta</u> declare that (choose one as appropriate):</p> <p style="text-align: center;">(print name)</p> <p><input type="checkbox"/> I review and take responsibility for the design work on behalf of a firm registered under subsection 3.2.4 Division C of the Building Code. I am qualified, and the firm is registered, in the appropriate classes/categories.</p> <p style="margin-left: 150px;">Individual BCIN: _____</p> <p style="margin-left: 150px;">Firm BCIN: _____</p> <p><input checked="" type="checkbox"/> 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.</p> <p style="margin-left: 150px;">Individual BCIN: <u>32964</u></p> <p style="margin-left: 150px;">Basis for exemption from registration: <u>Division C 3.2.4.1. (4)</u></p> <p><input type="checkbox"/> The design work is exempt from the registration and qualification requirements of the Building Code.</p> <p style="margin-left: 150px;">Basis for exemption from registration and qualification:</p>					
<p>I certify that:</p> <p>1. The information contained in this schedule is true to the best of my knowledge.</p> <p>2. I have submitted this application with the knowledge and consent of the firm.</p>					
<u>January 11, 2023</u> Date			 Signature of Designer		

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 qualifications under Subsections 3.2.4 . and 3.2.5. of Division C.
- Schedule 1 does not require to be completed 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 licence to practise, or a certificate of authorization, issued by the Association of Professional Engineers of Ontario.

Heat loss and gain calculation summary sheet				CSA-F280-M12 Standard Form No. 1	
These documents issued for the use of Bayview Wellington				Layout No.	
and may not be used by any other persons without authorization. Documents for permit and/or construction are signed in red.				JB-08734	
Building Location					
Address (Model): S38-1 WOB			Site: Green Valley East		
Model: Barossa 1			Lot:		
City and Province: Bradford			Postal code:		
Calculations based on					
Dimensional information based on:			VA3 Design13/May/2021		
Attachment: Detached		Front facing: East/West		Assumed? Yes	
No. of Levels: 3 Ventilated? Included		Air tightness: 1961-Present (ACH=3.57)		Assumed? Yes	
Weather location: Bradford		Wind exposure: Sheltered			
HRV? VanEE V150H75NS		Internal shading: Light-translucent		Occupants: 5	
Sensible Eff. at -25C 60%		Apparent Effect. at -0C 83%		Units: Imperial Area Sq ft: 2228	
Sensible Eff. at -0C 75%					
Heating design conditions			Cooling design conditions		
Outdoor temp -9.4 Indoor temp: 72 Mean soil temp: 48			Outdoor temp 86 Indoor temp: 75 Latitude: 44		
Above grade walls			Below grade walls		
Style A: As per OBC SB12 Package A1 R 22			Style A: As per OBC SB12 Package A1 R 20ci		
Style B:			Style B:		
Style C:			Style C:		
Style D:			Style D:		
Floors on soil			Ceilings		
Style A: As per Selected OBC SB12 Package A1			Style A: As per Selected OBC SB12 Package A1 R 60		
Style B:			Style B: As per Selected OBC SB12 Package A1 R 31		
Exposed floors			Style C:		
Style A: As per Selected OBC SB12 Package A1 R 31			Doors		
Style B:			Style A: As per Selected OBC SB12 Package A1 R 4.00		
Windows			Style B:		
Style A: As per Selected OBC SB12 Package A1 R 3.55			Style C:		
Style B:			Skylights		
Style C:			Style A: As per Selected OBC SB12 Package A1 R 2.03		
Style D:			Style B:		
Attached documents: As per Shedule 1		Heat Loss/Gain Caculations based on CSA-F280-12 Effective R-Values			
Notes:		Residential New Construction - Forced Air			
Calculations performed by					
Name: David DaCosta			Postal code: L4T 0A4		
Company: gtaDesigns Inc.			Telephone: (905) 671-9800		
Address: 2985 Drew Road, Suite 202			Fax:		
City: Mississauga			E-mail hvac@gtadesigns.ca		



Air System Design

2985 Drew Road, Suite 202, Mississauga, Ontario L4T 0A4 Tel: 905-671-9800
e-mail hvac@gtdesigns.ca

Builder: Bayview Wellington

Date: January 11, 2023

Project: Green Valley East

Model: Barossa 1
S38-1 WOB

System 1

I review and take responsibility for the design work and am qualified in the appropriate category as an "other designer" under Division C subsection 3.2.5. of the Building Code.
Individual BCIN: 32964 *David DaCosta* David DaCosta

Page 3
Project # PJ-00041
Layout # JB-08734

DESIGN LOAD SPECIFICATIONS		AIR DISTRIBUTION & PRESSURE		FURNACE/AIR HANDLER DATA:			BOILER/WATER HEATER DATA:		A/C UNIT DATA:		
Level 1 Net Load	20,525 btu/h	Equipment External Static Pressure	0.5 "w.c.	Make	Amana		Make	Type	Amana	2.5 Ton	
Level 2 Net Load	18,344 btu/h	Additional Equipment Pressure Drop	0.225 "w.c.	Model	AMEC960603ANA		Model		Cond.-----	2.5	
Level 3 Net Load	16,835 btu/h	Available Design Pressure	0.275 "w.c.	Input Btu/h	60000		Input Btu/h		Coil -----	2.5	
Level 4 Net Load	0 btu/h	Return Branch Longest Effective Length	300 ft	Output Btu/h	57600		Output Btu/h				
Total Heat Loss	55,703 btu/h	R/A Plenum Pressure	0.138 "w.c.	E.s.p.	0.50	" W.C.	Min.Output Btu/h	AWH			
Total Heat Gain	28,089 btu/h	S/A Plenum Pressure	0.14 "w.c.	Water Temp		deg. F.	Blower DATA:				
		Heating Air Flow Proportioning Factor	0.0167 cfm/btuh	AFUE	96%		Blower Speed Selected:	W2	Blower Type	ECM	
Building Volume Vb	28501 ft³	Cooling Air Flow Proportioning Factor	0.0331 cfm/btuh	Aux. Heat					(Brushless DC OBC 12.3.1.5.(2))		
Ventilation Load	1,188 Btuh.	R/A Temp	70 deg. F.	SB-12 Package	Package A1		Heating Check	<u>929</u> cfm	Cooling Check	<u>929</u> cfm	
Ventilation PVC	79.5 cfm	S/A Temp	127 deg. F.								
Supply Branch and Grill Sizing		Diffuser loss	<u>0.01</u> "w.c.	Temp. Rise>>>	<u>57</u> deg. F.		Selected cfm>	<u>929</u> cfm	Cooling Air Flow Rate	<u>929</u> cfm	

	Level 1														Level 2														
S/A Outlet No.	1	2	3	4											5	6	7	8	9	10	11								
Room Use	BASE	BASE	BASE	BASE											KIT	KIT	MUD	FOY	PWD	GRT	GRT								
Btu/Outlet	5131	5131	5131	5131											2846	2846	851	2971	1127	3851	3851								
Heating Airflow Rate CFM	86	86	86	86											47	47	14	50	19	64	64								
Cooling Airflow Rate CFM	30	30	30	30											93	93	4	38	21	94	94								
Duct Design Pressure	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13			
Actual Duct Length	34	30	19	15											33	43	19	20	13	5	39								
Equivalent Length	120	100	110	70	70	70	70	70	70	70	70	70	70	70	100	110	140	100	90	100	90	70	70	70	70	70			
Total Effective Length	154	130	129	85	70	70	70	70	70	70	70	70	70	70	133	153	159	120	103	105	129	70	70	70	70	70			
Adjusted Pressure	0.08	0.10	0.10	0.15	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.10	0.08	0.08	0.11	0.13	0.12	0.10	0.19	0.19	0.19	0.19	0.19			
Duct Size Round	6	6	6	6											6	6	3	5	3	6	6								
Outlet Size	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	3x10	3x10	3x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10			
Trunk	B	A	A	C											B	B	A	D	C	C	A								

	Level 3								Level 4																			
S/A Outlet No.	12	13	14	15	16	17	18																					
Room Use	MAST	LAUND	BED 2	BED 3	BATH	BED 4	ENS																					
Btu/Outlet	3451	902	4250	3839	994	1201	2198																					
Heating Airflow Rate CFM	58	15	71	64	17	20	37																					
Cooling Airflow Rate CFM	78	30	80	86	19	33	45																					
Duct Design Pressure	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13		
Actual Duct Length	47	56	44	38	22	31	46																					
Equivalent Length	160	130	110	120	100	150	150	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70			
Total Effective Length	207	186	154	158	122	181	196	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70			
Adjusted Pressure	0.06	0.07	0.08	0.08	0.11	0.07	0.07	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19			
Duct Size Round	6	4	6	6	3	4	5																					
Outlet Size	4x10	3x10	4x10	4x10	3x10	3x10	3x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10			
Trunk	B	D	D	D	C	A	B																					

Return Branch And Grill Sizing		Grill Pressure Loss					0.02 "w.c					Return Trunk Duct Sizing						Supply Trunk Duct Sizing					
R/A Inlet No.	1R	2R	3R	4R	5R	6R	7R	8R	9R	10R	11R	Trunk	CFM	Press.	Round	Rect. Size	Trunk	CFM	Press.	Round	Rect. Size		
Inlet Air Volume CFM	171	398	105	105	150							Drop	929	0.06	15.0	24x10	A	545	0.06	12.5	18x8 14x10		
Duct Design Pressure	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	Z	719	0.06	14.0	22x8 18x10	B	275	0.06	9.5	10x8 127		
Actual Duct Length	5	14	53	35	33							Y					C	384	0.07	10.5	12x8 10x10		
Equivalent Length	185	165	150	145	140	50	50	50	50	50	50	X					D	199	0.07	8.5	8x8 107		
Total Effective Length	190	179	203	180	173	50	50	50	50	50	50	W					E						
Adjusted Pressure	0.06	0.07	0.06	0.07	0.07	0.24	0.24	0.24	0.24	0.24	0.24	V					F						
Duct Size Round	7.0	11.0	6.0	6.0	7.5							U					G						
Inlet Size	FLC	8	8	8	8							T					H						
" "	x	x	x	x	x	x	x	x	x	x	x	S					I						
Inlet Size		30	14	14	14							R					J						
Trunk	Z	Z			Z							Q					K						

2012 OBC
Builder: Bayview Wellington
Project: Green Valley East
Model: Barossa 1 S38-1 WOB
System 1

Weather Data
Bradford
44
-9.4
86
22
48.2
Heat Loss ^T
81.4 deg. F
Ht gain ^T
11 deg. F
GTA:
2228
Project #
PJ-00041
Layout #
JB-08734

Level 1				BASE																							
Run ft. exposed wall A	104	A																									
Run ft. exposed wall B	46	B																									
Ceiling height	7.0	AG		7.0	AG		7.0	AG		7.0	AG		7.0	AG		7.0	AG		7.0	AG		7.0	AG		7.0	AG	
Floor area	731	Area		Area		Area		Area		Area		Area		Area		Area		Area		Area		Area		Area			
Exposed Ceilings A	A			A		A		A		A		A		A		A		A		A		A		A			
Exposed Ceilings B	B			B		B		B		B		B		B		B		B		B		B		B			
Exposed Floors	Flr			Flr		Flr		Flr		Flr		Flr		Flr		Flr		Flr		Flr		Flr		Flr			
Gross Exp Wall A	728																										
Gross Exp Wall B	460																										
Components	R-Values	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain		
North Shaded	3.55	22.93	11.62																								
East/West	3.55	22.93	29.56																								
South	3.55	22.93	22.50	3	69	68																					
WOB Windows	3.55	22.93	27.86	64	1467	1783																					
Skylight	2.03	40.10	88.23																								
Doors	4.00	20.35	2.75	21	427	58																					
Net exposed walls A	21.12	3.85	0.52	704		367																					
Net exposed walls B	17.03	4.78	0.65	396	1893	256																					
Exposed Ceilings A	59.22	1.37	0.64																								
Exposed Ceilings B	27.65	2.94	1.37																								
Exposed Floors	29.80	2.73	0.17																								
Foundation Conductive Heatloss				7089																							
Total Conductive	Heat Loss			10945																							
	Heat Gain					2531																					
Air Leakage	Heat Loss/Gain	0.8416	0.0406	9211	103																						
Ventilation	Case 1	0.05	0.06																								
	Case 2	14.95	11.88																								
	Case 3	x	0.03	0.06	368	159																					
Heat Gain People			239																								
Appliances Loads		1 =.25 percent	3439																								
Duct and Pipe loss			10%																								
Level HL Total	20,525	Total HL for per room		20525																							
Level HG Total	3,630	Total HG per room x 1.3			3630																						

Level 2				KIT		MUD		FOY		PWD		GRT		A		A		A		A		A		A				
Run ft. exposed wall A				43 A		4 A		20 A		10 A		72 A		A		A		A		A		A		A				
Run ft. exposed wall B				B		B		B		B		B		B		B		B		B		B		B				
Ceiling height				11.0		13.0		12.0		11.0		11.0		11.0		11.0		11.0		11.0		11.0		11.0				
Floor area				291 Area		23 Area		47 Area		35 Area		493 Area		Area		Area		Area		Area		Area		Area				
Exposed Ceilings A				58 A		A		A		A		4 A		A		A		A		A		A		A				
Exposed Ceilings B				B		B		B		B		B		B		B		B		B		B		B				
Exposed Floors				Flr		Flr		Flr		Flr		Flr		Flr		Flr		Flr		Flr		Flr		Flr				
Gross Exp Wall A				473		52		240		110		792																
Gross Exp Wall B																												
Components				R-Values	Loss	Gain	Loss		Gain	Loss		Gain	Loss		Gain	Loss		Gain	Loss		Gain	Loss		Gain	Loss		Gain	
North Shaded				3.55	22.93	11.62				20		459	591	13		298	384	26		596	769							
East/West				3.55	22.93	29.56	83		1903	2453																		
South				3.55	22.93	22.50																						
Existing Windows				1.99	40.90	23.66																						
Skylight				2.03	40.10	88.23																						
Doors				4.00	20.35	2.75																						
Net exposed walls A				17.03	4.78	0.65	390		1864	252	31		148	20	188	899	121	97		464	63	714		3413	461			
Net exposed walls B				8.50	9.58	1.29																						
Exposed Ceilings A				59.22	1.37	0.64	58		80	37							4		5	3								
Exposed Ceilings B				27.65	2.94	1.37																						
Exposed Floors				29.80	2.73	0.17																						
Foundation Conductive Heatloss						x																						
Total Conductive		Heat Loss					3847				576			2008			762			5207								
		Heat Gain								78			801			447						2402						
Air Leakage		Heat Loss/Gain			0.4457	0.0406	1715		111		257		3	895		33	340		18	2321		98						
Ventilation		Case 1			0.03	0.06																						
		Case 2			14.95	11.88																						
		Case 3		x	0.03	0.06	130		172		19		5	68		50	26		28			175	151					
Heat Gain People						239																						
Appliances Loads				1 =.25 percent		3439	1.5			1290						2.0					1720							
Duct and Pipe loss						10%																						
Level HL Total		18,344				Total HL for per room		5691			851			2971			1127			7703								
Level HG Total		13,193				Total HG per room x 1.3				5611			112			1148			641			5682						

Total Heat Loss	55,703	btu/h
Total Heat Gain	28,089	btu/h

I review and take responsibility for the design work and am qualified in the appropriate category as an "other designer" under Division C subsection 3.2.5. of the Building Code. Individual BCIN: 32964

David DaCosta

SB-12 Package

Package A1



Heatloss/Gain Calculations CSA-F280-12

2985 Drew Road, Suite 202, Mississauga, Ontario L4T 0A4 Tel: 905-671-9800

e-mail hvac@gtadesigns.ca

Builder: Bayview Wellington

Date: January 11, 2023

Weather Data Bradford 44 -9.4 86 22 48.2

Page 5

2012 OBC

Project: Green Valley East

Model: Barossa 1 S38-1 WOB

System 1

Heat Loss ^T 81.4 deg. F Ht gain ^T 11 deg. F GTA: 2228

Project # PJ-00041
Layout # JB-08734

Level 3				MAST		LAUND		BED 2		BED 3		BATH		BED 4		ENS		A		A		A		A	
Run ft. exposed wall A				32	A	7	A	32	A	26	A	10	A	10	A	22	A	A		A		A		A	
Run ft. exposed wall B				B		B		B		B		B		B		B		B		B		B		B	
Ceiling height				11.0		9.0		9.0		12.0		9.0		9.0		9.0		9.0		9.0		9.0		9.0	
Floor area				277	Area	78	Area	233	Area	169	Area	84	Area	127	Area	120	Area	Area		Area		Area		Area	
Exposed Ceilings A				277	A	78	A	233	A	169	A	84	A	127	A	120	A	A		A		A		A	
Exposed Ceilings B				B		B		B		B		B		B		B		B		B		B		B	
Exposed Floors				Flr		15	Flr	176	Flr	64	Flr	5	Flr	Flr		Flr		Flr		Flr		Flr		Flr	
Gross Exp Wall A				352		63		288		312		90		90		198									
Gross Exp Wall B																									
Components	R-Values	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain
North Shaded	3.55	22.93	11.62			9	206	105	9	206	105					16	367	473							
East/West	3.55	22.93	29.56	28	642	828			30	688	887	39	894	1153	10	229	296								
South	3.55	22.93	22.50												16	367	360	13	298	293					
Existing Windows	1.99	40.90	23.66																						
Skylight	2.03	40.10	88.23																						
Doors	4.00	20.35	2.75																						
Net exposed walls A	17.03	4.78	0.65	324	1549	209	54	258	35	249	1190	161	273	1305	176	80	382	52	74	354	48	169	808	109	
Net exposed walls B	8.50	9.58	1.29																						
Exposed Ceilings A	59.22	1.37	0.64	277	381	178	78	107	50	233	320	150	169	232	108	84	115	54	127	175	81	120	165	77	
Exposed Ceilings B	27.65	2.94	1.37																						
Exposed Floors	29.80	2.73	0.17				15	41	3	176	481	30	64	175	11	5	14	1							
Foundation Conductive Heatloss																									
Total Conductive	Heat Loss																								
	Heat Gain																								
Air Leakage	Heat Loss/Gain		0.3083	0.0406																					
	Case 1		0.02	0.06																					
Ventilation	Case 2		14.95	11.88																					
	Case 3	x	0.03	0.06																					
Heat Gain People				239	2					1		239	1		239	1			1		239				
Appliances Loads	1 =.25 percent			3439			0.5		430																
Duct and Pipe loss				10%			1		80	62	1	378	157	1	341	169									
Level HL Total	16,835			Total HL for per room	3451			902		4250			3839		994				1201		2198				
Level HG Total	11,266			Total HG per room x 1.3		2364			915		2424			2608					1013		1365				

Level 4				A		A		A		A		A		A		A		A		A		A		A	
Run ft. exposed wall A				A		A		A		A		A		A		A		A		A		A		A	
Run ft. exposed wall B				B		B		B		B		B		B		B		B		B		B		B	
Ceiling height																									
Floor area				Area		Area		Area		Area		Area		Area		Area		Area		Area		Area		Area	
Exposed Ceilings A				A		A		A		A		A		A		A		A		A		A		A	
Exposed Ceilings B				B		B		B		B		B		B		B		B		B		B		B	
Exposed Floors				Flr		Flr		Flr		Flr		Flr		Flr		Flr		Flr		Flr		Flr		Flr	
Gross Exp Wall A																									
Gross Exp Wall B																									
Components	R-Values	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain
North Shaded	3.55	22.93	11.62																						
East/West	3.55	22.93	29.56																						
South	3.55	22.93	22.50																						
Existing Windows	1.99	40.90	23.66																						
Skylight	2.03	40.10	88.23																						
Doors	4.00	20.35	2.75																						
Net exposed walls A	17.03	4.78	0.65																						
Net exposed walls B	8.50	9.58	1.29																						
Exposed Ceilings A	59.22	1.37	0.64																						
Exposed Ceilings B	27.65	2.94	1.37																						
Exposed Floors	29.80	2.73	0.17																						
Foundation Conductive Heatloss																									
Total Conductive	Heat Loss																								
	Heat Gain																								
Air Leakage	Heat Loss/Gain		0.0000	0.0406																					
	Case 1		0.00	0.06																					
Ventilation	Case 2		14.95	11.88																					
	Case 3	x	0.03	0.06																					
Heat Gain People				239																					
Appliances Loads	1 =.25 percent			3439																					
Duct and Pipe loss				10%																					
Level HL Total	0			Total HL for per room																					
Level HG Total	0			Total HG per room x 1.3																					

Total Heat Loss	55,703	btu/h
Total Heat Gain	28,089	btu/h

I review and take responsibility for the design work and am qualified in the appropriate category as an "other designer" under

Division C subsection 3.2.5. of the Building Code. Individual BCIN:

32964

David DaCosta

SB-12 Package

Package A1

I review and take responsibility for the design work and am qualified in the appropriate category as an "other designer" under Division C subsection 3.2.5. of the Building Code.

Individual BCIN: 32964



David DaCosta

Package: Package A1
Project: Bradford
Model: S38-1 WOB

RESIDENTIAL MECHANICAL VENTILATION DESIGN SUMMARY

For systems serving one dwelling unit & conforming to the Ontario Building Code, O.reg 332/12

Location of Installation	
Lot #	Plan #
Township	Bradford
Roll #	Permit #
Address	

Builder	
Name	Bayview Wellington
Address	
City	
Tel	Fax

Installing Contractor	
Name	
Address	
City	
Tel	Fax

Combustion Appliances 9.32.3.1(1)		
a)	<input checked="" type="checkbox"/>	Direct vent (sealed combustion) only
b)	<input type="checkbox"/>	Positive venting induced draft (except fireplaces)
c)	<input type="checkbox"/>	Natural draft, B-vent or induced draft fireplaces
d)	<input type="checkbox"/>	Solid fuel (including fireplaces)
e)	<input type="checkbox"/>	No combustion Appliances

Heating System	
<input checked="" type="checkbox"/>	Forced air
<input type="checkbox"/>	Non forced air
<input type="checkbox"/>	Electric space heat (if over 10% of heat load)

House Type 9.32.3.1(2)		
I	<input checked="" type="checkbox"/>	Type a) or b) appliances only, no solid fuel
II	<input type="checkbox"/>	Type I except with solid fuel (including fireplace)
III	<input type="checkbox"/>	Any type c) appliance
IV	<input type="checkbox"/>	Type I or II either electric space heat
Other	<input type="checkbox"/>	Type I, II or IV no forced air

System Design Option		
1	<input type="checkbox"/>	Exhaust only / forced air system
2	<input type="checkbox"/>	HRV WITH DUCTING / forced air system
3	<input checked="" type="checkbox"/>	HRV simplified connection to forced air system
4	<input type="checkbox"/>	HRV full ducting/not coupled to forced air system
Part 6 design		

Total Ventilation Capacity 9.32.3.3(1)			
Bsmt & Master Bdrm	2 @ 21.2 cfm	42.4 cfm	
Other Bedrooms	3 @ 10.6 cfm	31.8 cfm	
Bathrooms & Kitchen	4 @ 10.6 cfm	42.4 cfm	
Other rooms	3 @ 10.6 cfm	31.8 cfm	
Total		148.4	

Principal Ventilation Capacity 9.32.3.4(1)			
Master bedroom	1 @ 31.8 cfm	31.8 cfm	
Other bedrooms	3 @ 15.9 cfm	47.7 cfm	
Total		79.5	

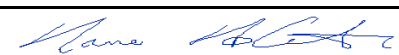
Principal Exhaust Fan Capacity			
Make	Model	Location	
VanEE	V150H75NS	Base	
140 cfm		Sones	or Equiv.

Heat Recovery Ventilator			
Make	VanEE		
Model	V150H75NS		
	140 cfm high	80 cfm low	
Sensible efficiency @ -25 deg C		60%	
Sensible efficiency @ 0 deg C		75%	

Note: Installer to balance HRV/ERV to within 10 percent of PVC

Supplemental Ventilation Capacity			
Total ventilation capacity		148.4	
Less principal exhaust capacity		79.5	
REQUIRED supplemental vent. Capacity		68.9 cfm	

Supplemental Fans 9.32.3.5.			
Location	cfm	Model	Sones
Ens	50	XB50	0.3
Bath	50	XB50	0.3
all fans HVI listed			
	Make	Broan	or Equiv.

Designer Certification			
I hereby certify that this ventilation system has been designed in accordance with the Ontario Building Code.			
Name	David DaCosta		
Signature			
HRAI #	5190	BCIN #	32964
Date	January 11, 2023		



2985 Drew Road, Suite 202, Mississauga, Ontario
L4T 0A4 Tel: 905-671-9800 Fax: 647-494-9643
e-mail dave@gtadesigns.ca

Energy Efficiency Design Summary: Prescriptive Method (Building Code Part 9, Residential)

Page 7
Project # PJ-00041
Layout # JB-08734

This form is used by a designer to demonstrate that the energy efficiency design of a house complies with the building code using the prescriptive method described in Subsection 3.1.1. of SB-12. This form is applicable where the ratio of gross area of windows/sidelights/skylights/glazing in doors and sliding glass doors to the gross area of peripheral walls is not more than 22%.

For use by Principal Authority

Application No:	Model/Certification Number
-----------------	----------------------------

A. Project Information

Building number, street name	Barossa 1 S38-1 WOB	Unit number	Lot/Con
Municipality	Bradford	Postal code	Reg. Plan number / other description

B. Prescriptive Compliance [indicate the building code compliance package being employed in the house design]

SB-12 Prescriptive (input design package):	<u>Package A1</u>	Table: <u>3.1.1.2.A</u>
--	-------------------	-------------------------

C. Project Design Conditions

Climatic Zone (SB-1):	Heat. Equip. Efficiency	Space Heating Fuel Source
<input checked="" type="checkbox"/> Zone 1 (< 5000 degree days) <input type="checkbox"/> Zone 2 (≥ 5000 degree days)	<input checked="" type="checkbox"/> ≥ 92% AFUE <input type="checkbox"/> ≥ 84% < 92% AFUE	<input checked="" type="checkbox"/> Gas <input type="checkbox"/> Propane <input type="checkbox"/> Solid Fuel <input type="checkbox"/> Oil <input type="checkbox"/> Electric <input type="checkbox"/> Earth Energy
Ratio of Windows, Skylights & Glass (W, S & G) to Wall Area		Other Building Characteristics
Area of Walls = <u>394.64</u> m ² or <u>4247.9</u> ft ²	W, S & G % = <u>10.1%</u>	<input type="checkbox"/> Log/Post&Beam <input type="checkbox"/> ICF Above Grade <input type="checkbox"/> ICF Basement <input type="checkbox"/> Slab-on-ground <input checked="" type="checkbox"/> Walkout Basement <input checked="" type="checkbox"/> Air Conditioning <input type="checkbox"/> Combo Unit <input type="checkbox"/> Air Sourced Heat Pump (ASHP) <input type="checkbox"/> Ground Source Heat Pump (GSHP)
Area of W, S & G = <u>40.04</u> m ² or <u>431.0</u> ft ²	Utilize Window Averaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	

D. Building Specifications [provide values and ratings of the energy efficiency components proposed]

Energy Efficiency Substitutions				
<input type="checkbox"/> ICF (3.1.1.2.(5) & (6) / 3.1.1.3.(5)) <input type="checkbox"/> Combined space heating and domestic water heating systems (3.1.1.2(7) / 3.1.1.3.(7))				
<input type="checkbox"/> Airtightness substitution(s) Airtightness test required (Refer to Design Guide Attached)	<input type="checkbox"/> Table 3.1.1.4.B	Required:	Permitted Substitution:	
	<input type="checkbox"/> Table 3.1.1.4.C	Required:	Permitted Substitution:	
		Required:	Permitted Substitution:	
Building Component	Minimum RSI/R-Values or Maximum U-Value ¹		Building Component	Efficiency Ratings
Thermal Insulation	Nominal	Effective	Windows & Doors Provide U-Value ⁽¹⁾ or ER rating	
Ceiling with Attic Space	60	59.22	Windows/Sliding Glass Doors	1.6
Ceiling without Attic Space	31	27.65	Skylights	2.8
Exposed Floor	31	29.80	Mechanicals	
Walls Above Grade	22	17.03	Heating Equip.(AFUE)	96%
Basement Walls	20.0ci	21.12	HRV Efficiency (SRE% at 0°C)	75%
Slab (all >600mm below grade)	x	x	DHW Heater (EF)	0.80
Slab (edge only ≤600mm below grade)	10	11.13	DWHR (CSA B55.1 (min. 42% efficiency))	#Showers 2
Slab (all ≤600mm below grade, or heated)	10	11.13	Combined Heating System	

(1) U value to be provided in either W/(m²·K) or Btu/(h·ft²·F) but not both.

E. Designer(s) [name(s) & BCIN(s), if applicable, of person(s) providing information herein to substantiate that design meets building code]

Name	BCIN	Signature
David DaCosta	32964	

Package: **Package A1** System: **System 1**
Project: **Bradford** Model: **S38-1 WOB**

Air Leakage Calculations

<div>Building Air Leakage Heat Loss</div> <table><tr><td>B</td><td>LRairh</td><td>Vb</td><td>HL^T</td><td>HLleak</td></tr><tr><td>0.018</td><td>0.441</td><td>28501</td><td>81.4</td><td>18423</td></tr></table>					B	LRairh	Vb	HL^T	HLleak	0.018	0.441	28501	81.4	18423	<div>Building Air Leakage Heat Gain</div> <table><tr><td>B</td><td>LRairh</td><td>Vb</td><td>HG^T</td><td>HG Leak</td></tr><tr><td>0.018</td><td>0.108</td><td>28501</td><td>11</td><td>610</td></tr></table>					B	LRairh	Vb	HG^T	HG Leak	0.018	0.108	28501	11	610
B	LRairh	Vb	HL^T	HLleak																									
0.018	0.441	28501	81.4	18423																									
B	LRairh	Vb	HG^T	HG Leak																									
0.018	0.108	28501	11	610																									

<div>Air Leakage Heat Loss/Gain Multiplier Table (Section 11)</div> <table><tr><td>Level</td><td>Level Factor (LF)</td><td>Building Air</td><td>Level Conductive Heat Loss (HLclevel)</td><td>Air Leakage Heat Loss Multiplier</td></tr><tr><td>Level 1</td><td>0.5</td><td rowspan="4">18423</td><td>10945</td><td>0.8416</td></tr><tr><td>Level 2</td><td>0.3</td><td>12399</td><td>0.4457</td></tr><tr><td>Level 3</td><td>0.2</td><td>11949</td><td>0.3083</td></tr><tr><td>Level 4</td><td>0</td><td>0</td><td>0.0000</td></tr></table>					Level	Level Factor (LF)	Building Air	Level Conductive Heat Loss (HLclevel)	Air Leakage Heat Loss Multiplier	Level 1	0.5	18423	10945	0.8416	Level 2	0.3	12399	0.4457	Level 3	0.2	11949	0.3083	Level 4	0	0	0.0000	<div>Levels</div> <table><tr><td>1</td><td>2</td><td>3</td><td>4</td></tr><tr><td>(LF)</td><td>(LF)</td><td>(LF)</td><td>(LF)</td></tr><tr><td>1.0</td><td>0.6</td><td>0.5</td><td>0.4</td></tr><tr><td></td><td>0.4</td><td>0.3</td><td>0.3</td></tr><tr><td></td><td></td><td>0.2</td><td>0.2</td></tr><tr><td></td><td></td><td></td><td>0.1</td></tr></table>				1	2	3	4	(LF)	(LF)	(LF)	(LF)	1.0	0.6	0.5	0.4		0.4	0.3	0.3			0.2	0.2				0.1
Level	Level Factor (LF)	Building Air	Level Conductive Heat Loss (HLclevel)	Air Leakage Heat Loss Multiplier																																																		
Level 1	0.5	18423	10945	0.8416																																																		
Level 2	0.3		12399	0.4457																																																		
Level 3	0.2		11949	0.3083																																																		
Level 4	0		0	0.0000																																																		
1	2	3	4																																																			
(LF)	(LF)	(LF)	(LF)																																																			
1.0	0.6	0.5	0.4																																																			
	0.4	0.3	0.3																																																			
		0.2	0.2																																																			
			0.1																																																			
<div>HG LEAK</div> <div>610</div>			<div>Air Leakage Heat Gain</div> <div>0.0406</div>																																																			
<div>BUILDING CONDUCTIVE HEAT GAIN</div> <div>15030</div>																																																						

<div>Levels this Dwelling</div> <div>3</div>			
--	--	--	--

Ventilation Calculations

Ventilation Heat Loss					Ventilation Heat Gain			
C	PVC	HL^T	(1-E) HRV	HLbvent	C	PVC	HG^T	HGbvent
1.08	79.5	81.4	0.17	1188	1.1	79.5	11	944

Case 1					Case 1			
Ventilation Heat Loss (Exhaust only Systems)					Ventilation Heat Gain (Exhaust Only Systems)			
Case 1 - Exhaust Only					Case 1 - Exhaust Only		Multiplier	
Level	LF	HLbvent	LVL Cond. HL	Multiplier	HGbvent	944	0.06	
Level 1	0.5	1188	10945	0.05	Building	15030		
Level 2	0.3		12399	0.03				
Level 3	0.2		11949	0.02				
Level 4	0		0	0.00				

Case 2					Case 2			
Ventilation Heat Loss (Direct Ducted Systems)					Ventilation Heat Gain (Direct Ducted Systems)			
Multiplier				14.95	Multiplier			11.88
C	HL^T	(1-E) HRV			C	HG^T		
1.08	81.4	0.17			1.08	11		

Case 3					Case 3			
Ventilation Heat Loss (Forced Air Systems)					Ventilation Heat Gain (Forced Air Systems)			
HLbvent		Multiplier			Vent Heat Gain		Multiplier	
Total Ventilation Load		1188			HGbvent	HG*1.3	0.06	
					944	1		

Foundation Conductive Heatloss Level 1	Level 1	1863	Watts	6356	Btu/h
Foundation Conductive Heatloss Level 2	Level 2		Watts		Btu/h
Slab on Grade Foundation Conductive Heatloss			Watts		Btu/h
Walk Out Basement Foundation Conductive Heatloss		215	Watts	732	Btu/h

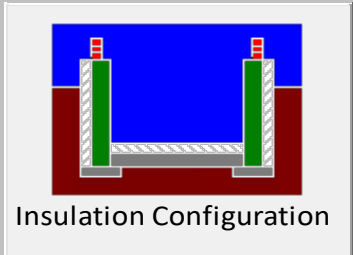
Envelope Air Leakage Calculator

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):	10.06			
Building Configuration				
Type:	Detached			
Number of Stories:	Two			
Foundation:	Shallow			
House Volume (m ³):	807.15			
Air Leakage/Ventilation				
Air Tightness Type:	Present (1961-) (ACH=3.57)			
Custom BDT Data:	ELA @ 10 Pa. ▼ 322.44 cm ²			
	3.57 ACH @ 50 Pa			
Mechanical Ventilation (L/s):	Total Supply:		Total Exhaust:	
	39.75		39.75	
Flue #:	#1	#2	#3	#4
Diameter (mm):	0	0	0	0
Heating Air Leakage Rate (ACH/H):		0.441		
Cooling Air Leakage Rate (ACH/H):		0.108		

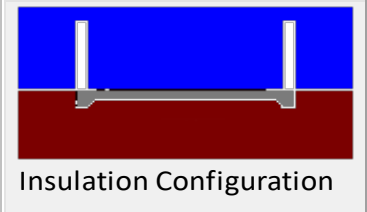
Residential Foundation Thermal Load Calculator

















Supplemental tool for CAN/CSA-F280

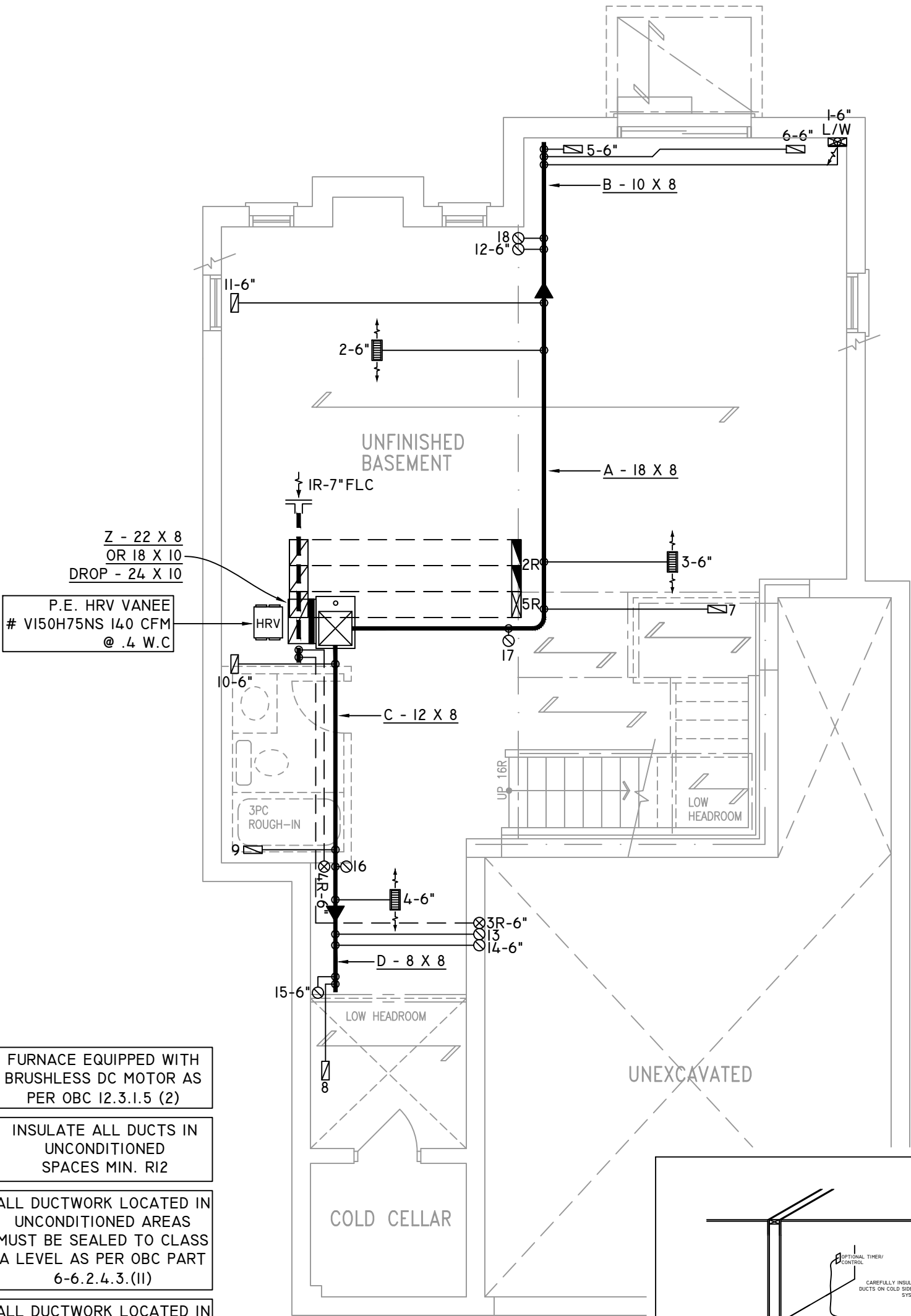
Weather Station Description		
Province:	Ontario	▼
Region:	Bradford	▼
Site Description		
Soil Conductivity:	High conductivity: moist soil	▼
Water Table:	Normal (7-10 m, 23-33 Ft)	▼
Foundation Dimensions		
Floor Length (m):	15.83	 <p>Insulation Configuration</p>
Floor Width (m):	4.29	
Exposed Perimeter (m):	31.70	
Wall Height (m):	3.05	
Depth Below Grade (m):	0.91	
Window Area (m ²):	0.28	
Door Area (m ²):	1.95	
Radiant Slab		
Heated Fraction of the Slab:	0	
Fluid Temperature (°C):	33	
Design Months		
Heating Month	1	
Foundation Loads		
Heating Load (Watts):		1863

Residential Slab on Grade Thermal Load Calculator

Supplemental tool for CAN/CSA-F280

Weather Station Description		
Province:	Ontario	▼
Region:	Bradford	▼
Site Description		
Soil Conductivity:	High conductivity: moist soil	▼
Water Table:	Normal (7-10 m, 23-33 Ft)	▼
Floor Dimensions		
Length (m):	9.73	 Insulation Configuration
Width (m):	1.55	
Exposed Perimeter (m):	14.02	
Radiant Slab		
Heated Fraction of the Slab:	0	
Fluid Temperature (°C):	33	
Design Months		
Heating Month	1	
Foundation Loads		
Heating Load (Watts):		215

	FLEX DUCT		LOW/HIGH WALL/KICK SUPPLY DIFFUSER		DUCT CONNECTION TO JOIST LINING		RETURN AIR GRILLE (SIZE INDICATED ON DRAWING)	S.A.	SUPPLY AIR
	RIGID ROUND DUCT		HRV EXHAUST GRILLE		RETURN AIR PIPE RISER		RETURN AIR RISER UP TO FLOOR ABOVE	R.A.	RETURN AIR
	SUPPLY DIFFUSER		SUPPLY AIR PIPE RISER		RETURN ROUND DUCT		RETURN AIR FROM BASEMENT SECOND FLOOR		THERMOSTAT
			VOLUME DAMPER						PRINCIPAL EXHAUST FAN SWITCH
									W/R & PRINCIPAL EXHAUST FAN



FURNACE EQUIPPED WITH
BRUSHLESS DC MOTOR AS
PER OBC 12.3.1.5 (2)

INSULATE ALL DUCTS IN
UNCONDITIONED
SPACES MIN. R12


ALL DUCTWORK LOCATED IN
UNCONDITIONED AREAS
MUST BE SEALED TO CLASS
A LEVEL AS PER OBC PART
6-6.2.4.3.(11)

ALL DUCTWORK LOCATED IN
CONDITIONED AREAS
MUST BE SEALED TO CLASS
C LEVEL AS PER OBC PART
6-6.2.4.3.(12)

THE UNDERSIGNED HAS REVIEWED AND TAKES RESPONSIBILITY FOR THIS DESIGN ON BEHALF OF GTA DESIGNS INC. AND HAS THE QUALIFICATIONS AND MEETS THE REQUIREMENTS SET OUT IN THE BUILDING CODE TO BE A DESIGNER

QUALIFICATION INFORMATION

REQUIRED UNLESS DESIGN IS EXEMPT UNDER DIVISION C 3.2.5.1 OF THE ONTARIO BUILDING CODE

DAVID DA COSTA  B.C.I.N. 32964
SIGNATURE OF DESIGNER

PARTIAL BASEMENT PLAN 'A' - W.O.B.
CONDITION

OBC 2012

ZONE I COMPLIANCE
PACKAGE "A1" REF. TABLE 3.1.1.2.A

NOTES

INSTALLATION TO COMPLY WITH THE LATEST ONTARIO BUILDING CODE.

ALL SUPPLY OUTLETS TO BE 5" DIA. UNLESS OTHERWISE SPECIFIED.

PROVIDE BALANCING DAMPERS ON ALL BRANCHES.

ALL R/A PARTITIONS 6" (FIRST FLOOR ONLY)

INSULATE DUCTS IN UNCONDITIONED SPACES R12 UNDERCUT ALL DOORS 1" MIN.

CONTRACTOR MUST WORK FROM APPROVED PLANS.

ANY ALTERATIONS TO THIS ORIGINAL PLAN ARE NOT THE RESPONSIBILITY OF GTA DESIGNS.

GTA DESIGNS MUST BE CONSULTED IF KITCHEN EXHAUST FAN EXCEEDS 700 CFM DEPRESSURIZATION MAY OCCUR WITH IN THE DWELLING.





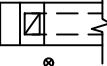














2985 DREW ROAD
SUITE 202,
MISSISSAUGA, ONT.
L4T 0A4 TEL: 905-671-9800
EMAIL: DAVE@GTADESIGNS.CA
WEB: WWW.GTADESIGNS.CA

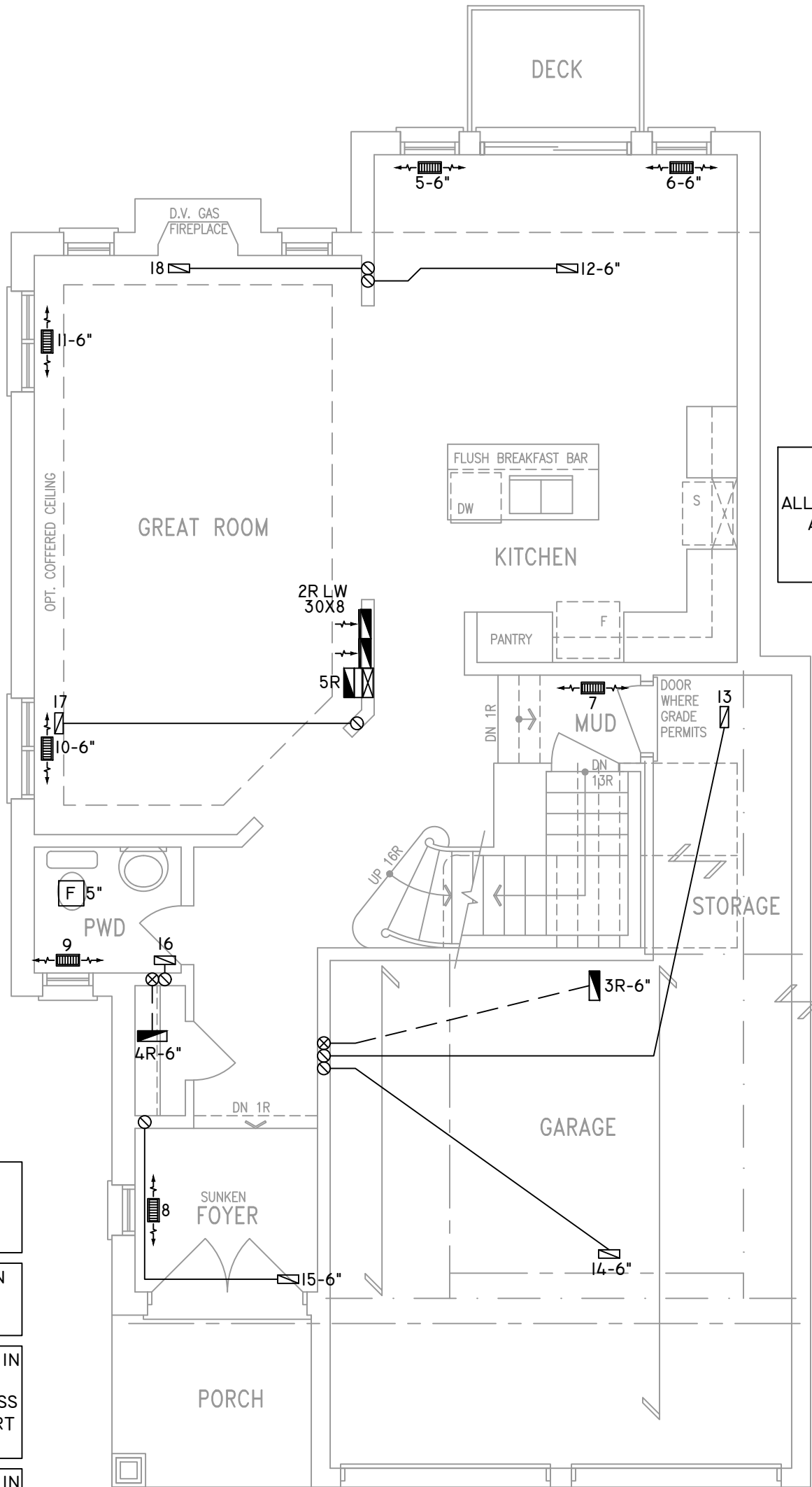
HEAT-LOSS	55,703	BTU/HR.
UNIT MAKE	AMANA	OR EQUAL.
UNIT MODEL	AMEC960603ANA	OR EQUAL.
UNIT HEATING INPUT	60,000	BTU/HR.
UNIT HEATING OUTPUT	57,600	BTU/HR.
A/C COOLING CAPACITY	2.5	TONS.
FAN SPEED	929	CFM

# OF RUNS	S/A	R/A	FANS
3RD FLOOR			
2ND FLOOR	7	3	2
1ST FLOOR	7	1	2
BASEMENT	4	1	

FLOOR PLAN:	BASEMENT
DRAWN BY:	JL
CHECKED:	DD
SQFT	2228
LAYOUT NO.	JB-08734
DRAWING NO.	MI

DATE:	JANUARY 11, 2023
CLIENT:	BAYVIEW WELLINGTON
MODEL:	S38-I WOB BAROSSA I
PROJECT:	GREEN VALLEY EAST BRADFORD,ONT.
SCALE:	3/16" = 1'-0"

	FLEX DUCT		LOW/HIGH WALL/KICK SUPPLY DIFFUSER		DUCT CONNECTION TO JOIST LINING		RETURN AIR PIPE RISER		RETURN ROUND DUCT		RETURN AIR GRILLE (SIZE INDICATED ON DRAWING)	S.A.	SUPPLY AIR
	RIGID ROUND DUCT		HRV EXHAUST GRILLE		SUPPLY AIR PIPE RISER		RETURN AIR RISER UP TO FLOOR ABOVE		RETURN AIR FROM BASEMENT		RETURN AIR FROM BASEMENT SECOND FLOOR	R.A.	RETURN AIR
	SUPPLY DIFFUSER		VOLUME DAMPER										THERMOSTAT
													PRINCIPAL EXHAUST FAN SWITCH
													W/R & PRINCIPAL EXHAUST FAN



CIRCULATION PRINCIPAL
FAN SWITCH
TO BE CENTRALLY
LOCATED

INSULATE ALL DUCTS IN
UNCONDITIONED
SPACES MIN. R12

ALL DUCTWORK LOCATED IN
UNCONDITIONED AREAS
MUST BE SEALED TO CLASS
A LEVEL AS PER OBC PART
6-6.2.4.3.(II)


ALL DUCTWORK LOCATED IN
CONDITIONED AREAS
MUST BE SEALED TO CLASS
C LEVEL AS PER OBC PART
6-6.2.4.3.(I2)

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QUALIFICATION INFORMATION

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DAVID DA COSTA



B.C.I.N. 32964

SIGNATURE OF DESIGNER

PARTIAL GROUND FLOOR PLAN 'A' – W.O.B. CONDITION

OBC 2012

ZONE I COMPLIANCE
PACKAGE "AI" REF. TABLE 3.1.1.2.A

NOTES
INSTALLATION TO COMPLY WITH THE LATEST ONTARIO BUILDING CODE.
ALL SUPPLY OUTLETS TO BE 5" DIA. UNLESS OTHERWISE SPECIFIED.
PROVIDE BALANCING DAMPERS ON ALL BRANCHES.
ALL R/A PARTITIONS 6" (FIRST FLOOR ONLY)
INSULATE DUCTS IN UNCONDITIONED SPACES R12 UNDERCUT ALL DOORS 1" MIN.
CONTRACTOR MUST WORK FROM APPROVED PLANS.
ANY ALTERATIONS TO THIS ORIGINAL PLAN ARE NOT THE RESPONSIBILITY OF GTA DESIGNS.
GTA DESIGNS MUST BE CONSULTED IF KITCHEN EXHAUST FAN EXCEEDS 700 CFM DEPRESSURIZATION MAY OCCUR WITH IN THE DWELLING.





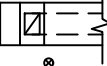







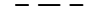





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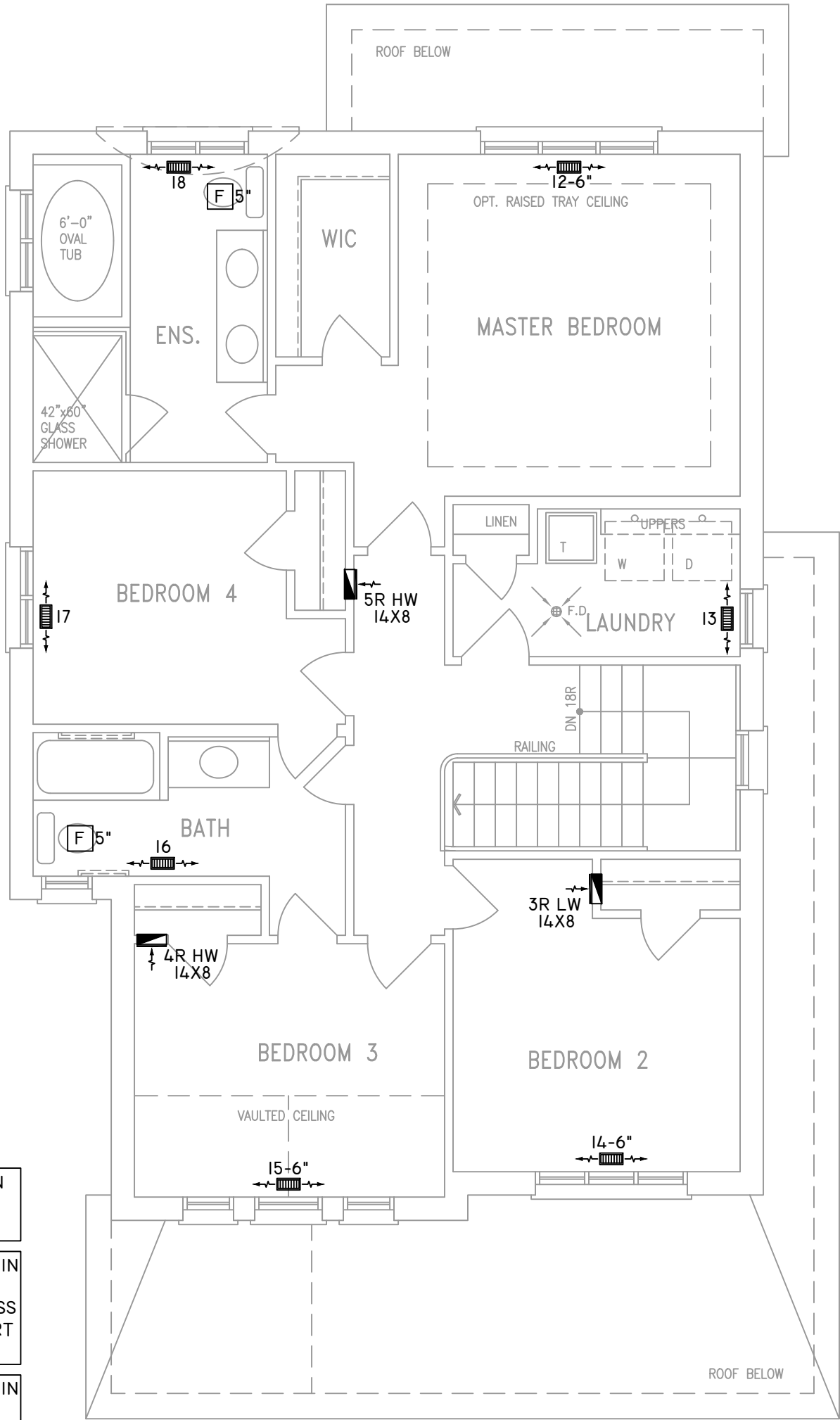
HEAT-LOSS	55,703	BTU/HR.
UNIT MAKE	AMANA	OR EQUAL.
UNIT MODEL	AMEC960603ANA	OR EQUAL.
UNIT HEATING INPUT	60,000	BTU/HR.
UNIT HEATING OUTPUT	57,600	BTU/HR.
A/C COOLING CAPACITY	2.5	TONS.
FAN SPEED	929	CFM

# OF RUNS	S/A	R/A	FANS
3RD FLOOR			
2ND FLOOR	7	3	2
1ST FLOOR	7	1	2
BASEMENT	4	1	

FLOOR PLAN: GROUND FLOOR		
DRAWN BY: JL	CHECKED: DD	SQFT 2228
LAYOUT NO. JB-08734	DRAWING NO. M2	

DATE:	JANUARY 11, 2023
CLIENT:	BAYVIEW WELLINGTON
MODEL:	S38-I WOB BAROSSA I
PROJECT:	GREEN VALLEY EAST BRADFORD,ONT.
SCALE:	3/16" = 1'-0"

	FLEX DUCT		LOW/HIGH WALL/KICK SUPPLY DIFFUSER		DUCT CONNECTION TO JOIST LINING		RETURN AIR GRILLE (SIZE INDICATED ON DRAWING)	S.A.	SUPPLY AIR
	RIGID ROUND DUCT		HRV EXHAUST GRILLE		RETURN AIR PIPE RISER		RETURN AIR RISER UP TO FLOOR ABOVE	R.A.	RETURN AIR
	SUPPLY DIFFUSER		SUPPLY AIR PIPE RISER		RETURN ROUND DUCT		RETURN AIR FROM BASEMENT SECOND FLOOR		THERMOSTAT
			VOLUME DAMPER						PRINCIPAL EXHAUST FAN SWITCH W/R & PRINCIPAL EXHAUST FAN




- INSULATE ALL DUCTS IN UNCONDITIONED SPACES MIN. R12
- ALL DUCTWORK LOCATED IN UNCONDITIONED AREAS MUST BE SEALED TO CLASS A LEVEL AS PER OBC PART 6-6.2.4.3.(II)
- ALL DUCTWORK LOCATED IN CONDITIONED AREAS MUST BE SEALED TO CLASS C LEVEL AS PER OBC PART 6-6.2.4.3.(I2)

THE UNDERSIGNED HAS REVIEWED AND TAKES RESPONSIBILITY FOR THIS DESIGN ON BEHALF OF GTA DESIGNS INC. AND HAS THE QUALIFICATIONS AND MEETS THE REQUIREMENTS SET OUT IN THE BUILDING CODE TO BE A DESIGNER

QUALIFICATION INFORMATION

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DAVID DA COSTA  B.C.I.N. 32964

SIGNATURE OF DESIGNER

SECOND FLOOR PLAN 'A'

OBC 2012

ZONE I COMPLIANCE
PACKAGE "AI" REF. TABLE 3.1.1.2.A

NOTES

INSTALLATION TO COMPLY WITH THE LATEST ONTARIO BUILDING CODE.

ALL SUPPLY OUTLETS TO BE 5" DIA. UNLESS OTHERWISE SPECIFIED.

PROVIDE BALANCING DAMPERS ON ALL BRANCHES.

ALL R/A PARTITIONS 6" (FIRST FLOOR ONLY)

INSULATE DUCTS IN UNCONDITIONED SPACES R12 UNDERCUT ALL DOORS 1" MIN.

CONTRACTOR MUST WORK FROM APPROVED PLANS.

ANY ALTERATIONS TO THIS ORIGINAL PLAN ARE NOT THE RESPONSIBILITY OF GTA DESIGNS.

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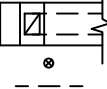



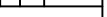










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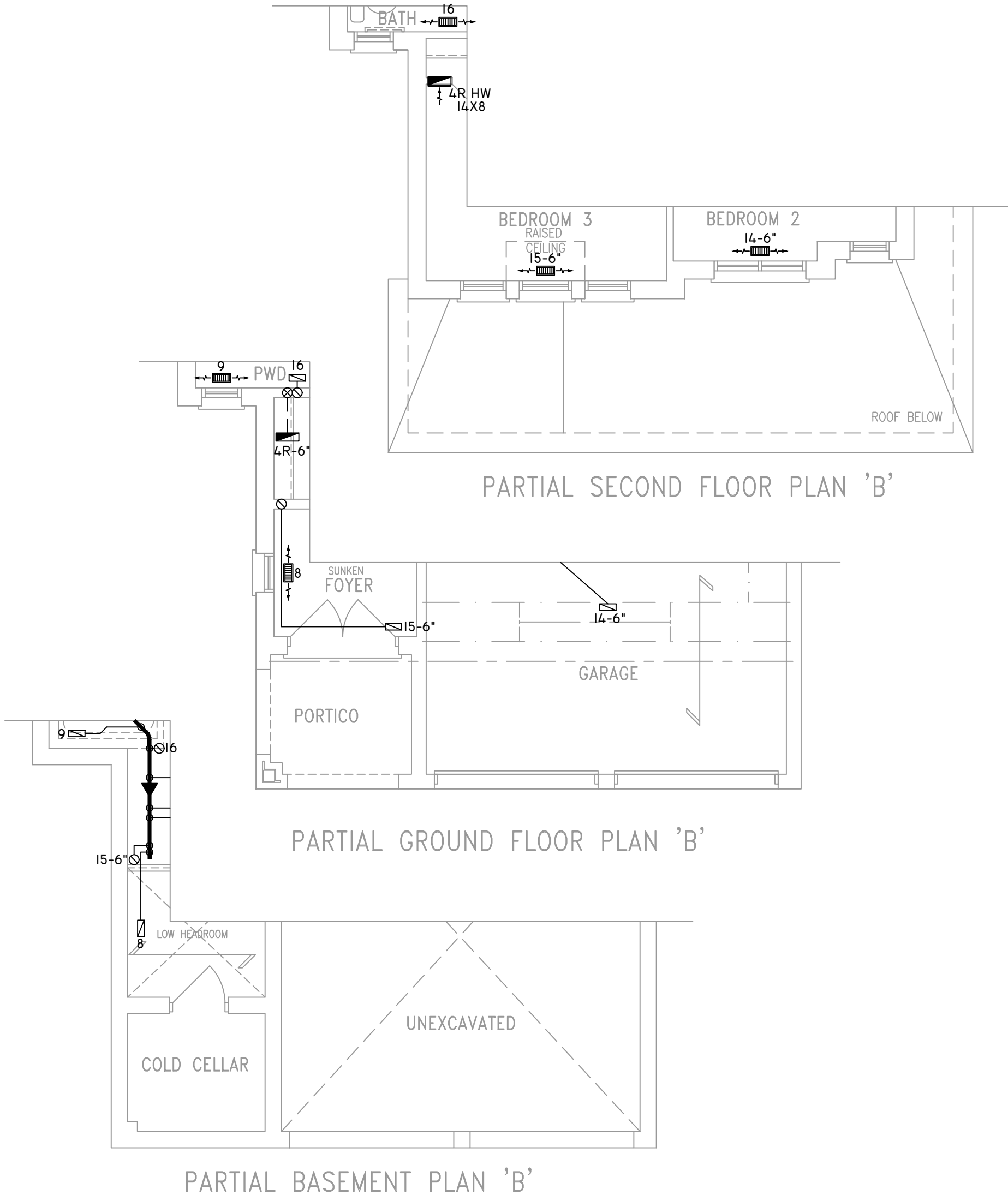
HEAT-LOSS	55,703	BTU/HR.
UNIT MAKE	AMANA	OR EQUAL.
UNIT MODEL	AMEC960603ANA	OR EQUAL.
UNIT HEATING INPUT	60,000	BTU/HR.
UNIT HEATING OUTPUT	57,600	BTU/HR.
A/C COOLING CAPACITY	2.5	TONS.
FAN SPEED	929	CFM

# OF RUNS	S/A	R/A	FANS
3RD FLOOR			
2ND FLOOR	7	3	2
1ST FLOOR	7	1	2
BASEMENT	4	1	

FLOOR PLAN: SECOND FLOOR		
DRAWN BY: JL	CHECKED: DD	SQFT 2228
LAYOUT NO. JB-08734	DRAWING NO. M3	

DATE:	JANUARY 11, 2023
CLIENT:	BAYVIEW WELLINGTON
MODEL:	S38-I WOB BAROSSA I
PROJECT:	GREEN VALLEY EAST BRADFORD,ONT.
SCALE:	3/16" = 1'-0"

	FLEX DUCT		LOW/HIGH WALL/KICK SUPPLY DIFFUSER		DUCT CONNECTION TO JOIST LINING		RETURN AIR GRILLE (SIZE INDICATED ON DRAWING)	S.A.	SUPPLY AIR
	RIGID ROUND DUCT		HRV EXHAUST GRILLE		RETURN AIR PIPE RISER		RETURN AIR RISER UP TO FLOOR ABOVE	R.A.	RETURN AIR
	SUPPLY DIFFUSER		SUPPLY AIR PIPE RISER		RETURN ROUND DUCT		RETURN AIR FROM BASEMENT SECOND FLOOR		THERMOSTAT
			VOLUME DAMPER						PRINCIPAL EXHAUST FAN SWITCH
									W/R & PRINCIPAL EXHAUST FAN



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DAVID DA COSTA



B.C.I.N. 32964

SIGNATURE OF DESIGNER

OBC 2012

ZONE I COMPLIANCE
PACKAGE "A1" REF. TABLE 3.1.1.2.A

NOTES
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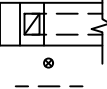













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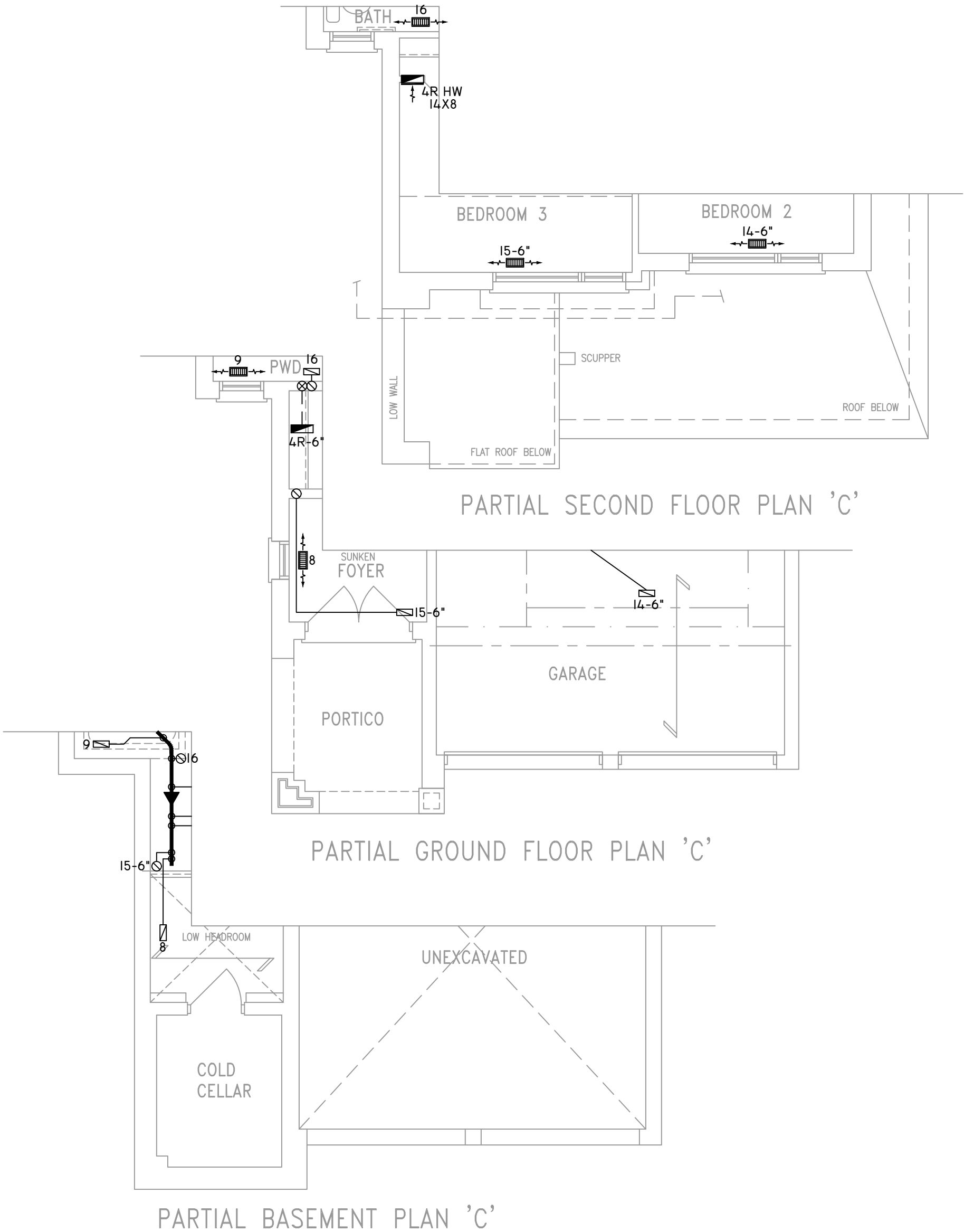
HEAT-LOSS	55,703	BTU/HR.
UNIT MAKE	AMANA	OR EQUAL.
UNIT MODEL	AMEC960603ANA	OR EQUAL.
UNIT HEATING INPUT	60,000	BTU/HR.
UNIT HEATING OUTPUT	57,600	BTU/HR.
A/C COOLING CAPACITY	2.5	TONS.
FAN SPEED	929	CFM

# OF RUNS	S/A	R/A	FANS
3RD FLOOR			
2ND FLOOR	7	3	2
1ST FLOOR	7	1	2
BASEMENT	4	1	

FLOOR PLAN: PARTIAL PLAN(S)		
DRAWN BY: JL	CHECKED: DD	SQFT 2228
LAYOUT NO. JB-08734	DRAWING NO. M4	

DATE:	JANUARY 11, 2023
CLIENT:	BAYVIEW WELLINGTON
MODEL:	S38-I WOB BAROSSA I
PROJECT:	GREEN VALLEY EAST BRADFORD,ONT.
SCALE:	3/16" = 1'-0"

	FLEX DUCT		LOW/HIGH WALL/KICK SUPPLY DIFFUSER		DUCT CONNECTION TO JOIST LINING		RETURN AIR GRILLE (SIZE INDICATED ON DRAWING)	S.A.	SUPPLY AIR
	RIGID ROUND DUCT		HRV EXHAUST GRILLE		RETURN AIR PIPE RISER		RETURN AIR RISER UP TO FLOOR ABOVE	R.A.	RETURN AIR
	SUPPLY DIFFUSER		SUPPLY AIR PIPE RISER		RETURN ROUND DUCT		RETURN AIR FROM BASEMENT SECOND FLOOR		THERMOSTAT
			VOLUME DAMPER						PRINCIPAL EXHAUST FAN SWITCH
									W/R & PRINCIPAL EXHAUST FAN



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DAVID DA COSTA



B.C.I.N. 32964

SIGNATURE OF DESIGNER

OBC 2012

ZONE I COMPLIANCE
PACKAGE "A1" REF. TABLE 3.1.1.2.A

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UNIT MAKE	AMANA	OR EQUAL.
UNIT MODEL	AMEC960603ANA	OR EQUAL.
UNIT HEATING INPUT	60,000	BTU/HR.
UNIT HEATING OUTPUT	57,600	BTU/HR.
A/C COOLING CAPACITY	2.5	TONS.
FAN SPEED	929	CFM

# OF RUNS	S/A	R/A	FANS
3RD FLOOR			
2ND FLOOR	7	3	2
1ST FLOOR	7	1	2
BASEMENT	4	1	

FLOOR PLAN: PARTIAL PLAN(S)		
DRAWN BY: JL	CHECKED: DD	SQFT 2228
LAYOUT NO. JB-08734	DRAWING NO. M5	

DATE:	JANUARY 11, 2023
CLIENT:	BAYVIEW WELLINGTON
MODEL:	S38-I WOB BAROSSA I
PROJECT:	GREEN VALLEY EAST BRADFORD,ONT.
SCALE:	3/16" = 1'-0"