



## Schedule 1: Designer Information

Use one form for each individual who reviews and takes responsibility for design activities with respect to the project.

<b>A. Project Information</b>					
Building number, street name <div style="text-align: center;">THWU-14</div>					Lot: <div style="text-align: center;">Lot/con.</div>
Municipality <div style="text-align: center;">Bradford</div>		Postal code	Plan number/ other description		
<b>B. Individual who reviews and takes responsibility for design activities</b>					
Name <div style="text-align: center;">David DaCosta</div>			Firm <div style="text-align: center;">gtaDesigns Inc.</div>		
Street address <div style="text-align: center;">2985 Drew Road, Suite 202</div>				Unit no.	Lot/con.
Municipality <div style="text-align: center;">Mississauga</div>		Postal code <div style="text-align: center;">L4T 0A4</div>	Province <div style="text-align: center;">Ontario</div>	E-mail <div style="text-align: center;"><a href="mailto:dave@gtadesigns.ca">dave@gtadesigns.ca</a></div>	
Telephone number <div style="text-align: center;">(905) 671-9800</div>		Fax number <div style="text-align: center;">(647) 494-9643</div>		Cell number <div style="text-align: center;">(416) 268-6820</div>	
<b>C. Design activities undertaken by individual identified in Section B. [Building Code Table 3.5.2.1 of Division C]</b>					
<input type="checkbox"/> House		<input checked="" type="checkbox"/> HVAC – House		<input type="checkbox"/> Building Structural	
<input type="checkbox"/> Small Buildings		<input type="checkbox"/> Building Services		<input type="checkbox"/> Plumbing – House	
<input type="checkbox"/> Large Buildings		<input type="checkbox"/> Detection, Lighting and Power		<input type="checkbox"/> Plumbing – All Buildings	
<input type="checkbox"/> Complex Buildings		<input type="checkbox"/> Fire Protection		<input type="checkbox"/> On-site Sewage Systems	
<b>Description of designer's work</b>			<b>Model Certification</b>		<b>Project #:</b> <div style="text-align: center;">PJ-00204</div>
					<b>Layout #:</b> <div style="text-align: center;">JB-04877</div>
Heating and Cooling Load Calculations		Main	X	Builder	Bayview Wellington
Air System Design		Alternate		Project	Green Valley
Residential mechanical ventilation Design Summary		Area Sq ft:	1832	Model	THWU-14
Residential System Design per CAN/CSA-F280-12				SB-12	Package A1
Residential New Construction - Forced Air					
<b>D. Declaration of Designer</b>					
<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> <ol style="list-style-type: none"> <li>The information contained in this schedule is true to the best of my knowledge.</li> <li>I have submitted this application with the knowledge and consent of the firm.</li> </ol>					
<u>December 12, 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.

REVIEWED

Heat loss and gain calculation summary sheet				CSA-F280-M12 Standard Form No. 1	
These documents issued for the use of <b>Bayview Wellington</b>				Layout No.	
and may not be used by any other persons without authorization. Documents for permit and/or construction are signed in red.				<b>JB-04877</b>	
Building Location					
Address (Model): <b>THWU-14</b>			Site: <b>Green Valley</b>		
Model:			Lot:		
City and Province: <b>Bradford</b>			Postal code:		
Calculations based on					
Dimensional information based on:			<b>VA3 DESIGN22/May/2018</b>		
Attachment: <b>Townhome</b>			Front facing: <b>East/West</b>		Assumed? <b>Yes</b>
No. of Levels: <b>3</b>		Ventilated? <b>Included</b>	Air tightness: <b>1961-Present (ACH=3.57)</b>		Assumed? <b>Yes</b>
Weather location: <b>Bradford</b>			Wind exposure: <b>Sheltered</b>		
HRV? <b>LifeBreath</b>		<b>RNC155</b>	Internal shading: <b>Light-translucent</b>		Occupants: <b>4</b>
Sensible Eff. at -25C <b>71%</b>		Apparent Effect. at -0C <b>84%</b>	Units: <b>Imperial</b>		Area Sq ft: <b>1832</b>
Sensible Eff. at -0C <b>75%</b>					
Heating design conditions			Cooling design conditions		
Outdoor temp <b>-9.4</b> Indoor temp: <b>72</b> Mean soil temp: <b>48</b>			Outdoor temp <b>86</b> Indoor temp: <b>75</b> Latitude: <b>44</b>		
Above grade walls			Below grade walls		
Style A: <b>As per OBC SB12 Package A1 R 22</b>			Style A: <b>As per OBC SB12 Package A1 R 20ci</b>		
Style B: <b>Existing Walls (When Applicable) R 12</b>			Style B:		
Style C:			Style C:		
Style D:			Style D:		
Floors on soil			Ceilings		
Style A: <b>As per Selected OBC SB12 Package A1</b>			Style A: <b>As per Selected OBC SB12 Package A1 R 60</b>		
Style B:			Style B: <b>As per Selected OBC SB12 Package A1 R 31</b>		
Exposed floors			Style C:		
Style A: <b>As per Selected OBC SB12 Package A1 R 31</b>			Doors		
Style B:			Style A: <b>As per Selected OBC SB12 Package A1 R 4.00</b>		
Windows			Style B:		
Style A: <b>As per Selected OBC SB12 Package A1 R 3.55</b>			Style C:		
Style B: <b>Existing Windows (When Applicable) R 1.99</b>			Skylights		
Style C:			Style A: <b>As per Selected OBC SB12 Package A1 R 2.03</b>		
Style D:			Style B:		
Attached documents: <b>As per Shedule 1</b>		<b>Heat Loss/Gain Caculations based on CSA-F280-12 Effective R-Values</b>			
Notes: <b>Residential New Construction - Forced Air</b>					
Calculations performed by					
Name: <b>David DaCosta</b>			Postal code: <b>L4T 0A4</b>		
Company: <b>gtaDesigns Inc.</b>			Telephone: <b>(905) 671-9800</b>		
Address: <b>2985 Drew Road, Suite 202</b>			Fax: <b>(416) 268-6820</b>		
City: <b>Mississauga</b>			E-mail <b>dave@gtadesigns.ca</b>		

REVIEWED

Builder: Bayview Wellington

Date: December 12, 2023

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.

Page 3

Project: Green Valley

Model: THWU-14

System 1

Individual BCIN: 32964

David DaCosta

Project # PJ-00204  
Layout # JB-04877

DESIGN LOAD SPECIFICATIONS				AIR DISTRIBUTION & PRESSURE				FURNACE/AIR HANDLER DATA:				BOILER/WATER HEATER DATA:				A/C UNIT DATA:			
Level 1 Net Load	9,826	btu/h		Equipment External Static Pressure	0.5	"w.c.		Make	Amana			Make	Type	Amana	1.5	Ton			
Level 2 Net Load	8,554	btu/h		Additional Equipment Pressure Drop	0.225	"w.c.		Model	AMEC960403ANA			Model		Cond.	-----	1.5			
Level 3 Net Load	7,520	btu/h		Available Design Pressure	0.275	"w.c.		Input Btu/h	40000			Input Btu/h		Coil	-----	1.5			
Level 4 Net Load	0	btu/h		Return Branch Longest Effective Length	300	ft		Output Btu/h	38400			Output Btu/h							
Total Heat Loss	25,900	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	15,895	btu/h		S/A Plenum Pressure	0.14	"w.c.		Water Temp		deg. F.		Blower DATA:							
Combo System HL + 10%	28,489	Btu/h		Heating Air Flow Proportioning Factor	0.0298	cfm/btuh		AFUE	96%			Blower Speed Selected:	W2			Blower Type	ECM		
Building Volume Vb	21455	ft³		Cooling Air Flow Proportioning Factor	0.0486	cfm/btuh		Aux. Heat								(Brushless DC OBC 12.3.1.5.(2))			
Ventilation Load	895	Btu/h		R/A Temp	70	deg. F.		SB-12 Package	Package A1			Heating Check	772	cfm		Cooling Check	772	cfm	
Ventilation PVC	63.6	cfm		S/A Temp	116	deg. F.													
Supply Branch and Grill Sizing				Diffuser loss	0.01	"w.c.		Temp. Rise>>>	46	deg. F.		Selected cfm>	772	cfm		Cooling Air Flow Rate	772	cfm	

	Level 1												Level 2											
	1	2	3	4									5	6	7									
S/A Outlet No.	BASE	BASE	BASE	BASE									FAM/KIT	FAM/KIT	FOY									
Room Use	2456	2456	2456	2456									2697	2697	3160									
Btu/Outlet	73	73	73	73									80	80	94									
Heating Airflow Rate CFM	38	38	38	38									111	111	42									
Cooling Airflow Rate CFM	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
Duct Design Pressure	29	19	10	16									39	28	28									
Actual Duct Length	100	90	100	110	70	70	70	70	70	70	70	70	110	120	130	70	70	70	70	70	70	70	70	70
Equivalent Length	129	109	110	126	70	70	70	70	70	70	70	70	149	148	158	70	70	70	70	70	70	70	70	70
Total Effective Length	0.10	0.12	0.12	0.10	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.09	0.09	0.08	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19
Adjusted Pressure	5	5	5	5									6	6	6									
Duct Size Round	3x10	3x10	3x10	3x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10
Outlet Size	B	A	A	C									B	B	C									
Trunk																								

	Level 3													Level 4														
S/A Outlet No.	8	9	10	11	12	13																						
Room Use	MAST	LAUN	BATH	BED 3	BED 2	ENS																						
Btu/Outlet	2021	125	113	1937	2359	965																						
Heating Airflow Rate CFM	60	4	3	58	70	29																						
Cooling Airflow Rate CFM	98	52	3	90	81	33																						
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	0.13	
Actual Duct Length	41	36	20	37	39	50																						
Equivalent Length	90	110	130	150	110	100	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70		
Total Effective Length	131	146	150	187	149	150	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70		
Adjusted Pressure	0.10	0.09	0.09	0.07	0.09	0.09	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	0.19	0.19		
Duct Size Round	6	5	2	6	6	4																						
Outlet Size	4x10	3x10	3x10	4x10	4x10	3x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10		
Trunk	B	A	C	C	C	A																						

Return Branch And Grill Sizing												Grill Pressure Loss											
												0.02 "w.c.											
R/A Inlet No.	1R	2R	3R	4R	5R	6R	7R	8R	9R	10R	11R												
Inlet Air Volume CFM	146	371	105	150																			
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												
Actual Duct Length	5	2	37	26																			
Equivalent Length	115	125	145	140	50	50	50	50	50	50	50												
Total Effective Length	120	127	182	166	50	50	50	50	50	50	50												
Adjusted Pressure	0.10	0.09	0.06	0.07	0.24	0.24	0.24	0.24	0.24	0.24	0.24												
Duct Size Round	6.0	10.0	6.0	7.5																			
Inlet Size	FLC	8	8	8																			
" "	x	x	x	x	x	x	x	x	x	x	x												
Inlet Size		30	14	14																			
Trunk	Z	Y	Y	Z																			

Return Trunk Duct Sizing					Supply Trunk Duct Sizing				
Trunk	CFM	Press.	Round	Rect. Size	Trunk	CFM	Press.	Round	Rect. Size
Drop	772	0.06	14.0	24x10	A	473	0.08	11.0	14x8 10x10
Z	772	0.06	14.0	22x8 18x10	B	294	0.08	9.5	10x8 127
Y	476	0.06	12.0	16x8 12x10	C	299	0.07	9.5	10x8 127
X					D				
W					E				
V					F				
U					G				
T					H				
S					I				
R					J				
Q					K				

Return Trunk Duct Sizing					Supply Trunk Duct Sizing				
Trunk	CFM	Press.	Round	Rect. Size	Trunk	CFM	Press.	Round	Rect. Size
Drop	772	0.06	14.0	24x10	A	473	0.08	11.0	14x8 10x10
Z	772	0.06	14.0	22x8 18x10	B	294	0.08	9.5	10x8 127
Y	476	0.06	12.0	16x8 12x10	C	299	0.07	9.5	10x8 127
X					D				
W					E				
V					F				
U					G				
T					H				
S					I				
R					J				
Q					K				

REVIEWED

2012 OBC

Builder: Bayview Wellington

Date: December 12, 2023

Project: Green Valley

Model: THWU-14

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: 1832

Project #  
Layout #

## Level 1

BASE

Run ft. exposed wall A	56 A	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	B	B
Ceiling height	3.5 AG	3.5 AG	3.5 AG	3.5 AG	3.5 AG	3.5 AG	3.5 AG	3.5 AG	3.5 AG	3.5 AG	3.5 AG	3.5 AG	3.5 AG
Floor area	757 Area	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	A
Exposed Ceilings B	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	Flr
Gross Exp Wall A	196												
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	10.91														
East/West	3.55	22.93	27.35	23	527	629											
South	3.55	22.93	20.89														
WOB Windows	3.15	25.84	28.32														
Skylight	2.03	40.10	88.23														
Doors	4.00	20.35	2.75														
Net exposed walls A	21.13	3.85	0.52	173		90											
Net exposed walls B	14.49	5.62	0.76														
Exposed Ceilings A	59.22	1.37	0.64														
Exposed Ceilings B	22.86	3.56	1.66														
Exposed Floors	29.80	2.73	0.17														
Foundation Conductive Heatloss	On Grade ( ) or Above			3936													
Total Conductive	Heat Loss			4464													
	Heat Gain				719												
Air Leakage	Heat Loss/Gain	1.1402	0.0481	5089	35												
Ventilation	Case 1	0.10	0.11														
	Case 2	14.07	11.88														
	Case 3	x	0.06	273	78												
Heat Gain People			239														
Appliances Loads	1 = .25 percent		3106	2.0		1553											
Duct and Pipe loss	10%																
Level 1 HL Total	9,826			9826													
Level 1 HG Total	3,100				3100												

## Level 2

FAM/KIT

FOY

Run ft. exposed wall A	38 A	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	B	B
Ceiling height	10.0	13.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Floor area	649 Area	105 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	A
Exposed Ceilings B	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	Flr
Gross Exp Wall A	380												
Gross Exp Wall B		234											

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	10.91														
East/West	3.55	22.93	27.35	80	1834	2188	13	298	356								
South	3.55	22.93	20.89														
Existing Windows	1.99	40.90	22.15														
Skylight	2.03	40.10	88.23														
Doors	4.00	20.35	2.75														
Net exposed walls A	17.03	4.78	0.65	300	1434	194	185	884	119								
Net exposed walls B	8.50	9.58	1.29														
Exposed Ceilings A	59.22	1.37	0.64														
Exposed Ceilings B	22.86	3.56	1.66														
Exposed Floors	29.80	2.73	0.17														
Foundation Conductive Heatloss	On Grade ( ) or Above		x														
Total Conductive	Heat Loss			3268				1915									
	Heat Gain				2382			574									
Air Leakage	Heat Loss/Gain	0.5891	0.0481	1925	115			1128	28								
Ventilation	Case 1	0.05	0.11														
	Case 2	14.07	11.88														
	Case 3	x	0.06	200	258			117	62								
Heat Gain People			239														
Appliances Loads	1 = .25 percent		3106	1.0		777											
Duct and Pipe loss	10%																
Level 2 HL Total	8,554			5394				3160									
Level 2 HG Total	5,454				4591			863									

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

*Dave DaCosta*

Dave DaCosta

SB-12 Package

Package A1

Total Heat Loss	25,900	btu/h
Total Heat Gain	15,895	btu/h

REVIEWED

2012 OBC

Builder: Bayview Wellington

Date: December 12, 2023

Project: Green Valley

Model: THWU-14

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: 1832

## Level 3

Run ft. exposed wall A	12 A	MAST	A	LAUN	A	BATH	A	BED 3	12 A	BED 2	9 A	ENS	7 A	A	A	A	A	A	A
Run ft. exposed wall B	B		B		B		B		B		B		B	B	B	B	B	B	B
Ceiling height	8.0		8.0		8.0		8.0		8.0		8.0		8.0	8.0	8.0	8.0	8.0	8.0	8.0
Floor area	349 Area		62 Area		56 Area		127 Area		230 Area		111 Area		111 Area	Area	Area	Area	Area	Area	Area
Exposed Ceilings A	349 A		62 A		56 A		127 A		230 A		111 A		111 A	A	A	A	A	A	A
Exposed Ceilings B	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	Flr
Gross Exp Wall A	96						31		148		56		56						
Gross Exp Wall B							96		72										

Components	R-Values	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain
North Shaded	3.55	22.93	10.91																
East/West	3.55	22.93	27.35	24	550	656				33	757	903	22	504	602	13	298	356	
South	3.55	22.93	20.89																
Existing Windows	1.99	40.90	22.15																
Skylight	2.03	40.10	88.23																
Doors	4.00	20.35	2.75																
Net exposed walls A	17.03	4.78	0.65	72	344	47				63	301	41	50	239	32	43	206	28	
Net exposed walls B	8.50	9.58	1.29																
Exposed Ceilings A	59.22	1.37	0.64	349	480	224	62	85	40	56	77	36	127	175	81	230	316	148	111
Exposed Ceilings B	22.86	3.56	1.66																
Exposed Floors	29.80	2.73	0.17																
Foundation Conductive Heatloss																			
Total Conductive																			
Heat Loss																			
Heat Gain				1374			85			77			1317			1464			656
Air Leakage	Heat Loss/Gain	0.4093	0.0481	562	45		35	2		32	2		539	50		599	39		269
Ventilation	Case 1		0.04																
Case 2			14.07																
Case 3	x		0.06																
Heat Gain People			239	2	84	100		5	4	5	4		81	112		90	87		40
Appliances Loads	1 =.25 percent		3106				1.0						1	239					239
Duct and Pipe loss			10%																
Level 3 HL Total	7,520		Total HL for per room	2									1	206	105				965
Level 3 HG Total	7,340		Total HG per room x 1.3	2021			125			113			1937			2359			683
				2015			1069			54			1859			1659			

## Level 4

Run ft. exposed wall A	A	A	A	A	A	A	A	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	B	B	B	B	B	B	B	B
Ceiling height																			
Floor area	Area	Area	Area	Area	Area	Area	Area	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	A	A	A	A	A	A	A
Exposed Ceilings B	B	B	B	B	B	B	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	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
North Shaded	3.55	22.93	10.91																
East/West	3.55	22.93	27.35																
South	3.55	22.93	20.89																
Existing Windows	1.99	40.90	22.15																
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	22.86	3.56	1.66																
Exposed Floors	29.80	2.73	0.17																
Foundation Conductive Heatloss																			
Total Conductive																			
Heat Loss																			
Heat Gain																			
Air Leakage	Heat Loss/Gain	0.0000	0.0481																
Ventilation	Case 1		0.00																
Case 2			14.07																
Case 3	x		0.06																
Heat Gain People			239																
Appliances Loads	1 =.25 percent		3106																
Duct and Pipe loss			10%																
Level 4 HL Total	0		Total HL for per room																
Level 4 HG Total	0		Total HG per room x 1.3																

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

*Handwritten signature*

David DaCosta

SB-12 Package

Package A1

Total Heat Loss	25,900	btu/h
Total Heat Gain	15,895	btu/h

REVIEWED

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:**
**THWU-14**

## 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	2 @ 10.6 cfm	21.2 cfm
Bathrooms & Kitchen	4 @ 10.6 cfm	42.4 cfm
Other rooms	3 @ 10.6 cfm	31.8 cfm
<b>Total</b>		<b>137.8</b>

### Principal Ventilation Capacity 9.32.3.4(1)

Master bedroom	1 @ 31.8 cfm	31.8 cfm
Other bedrooms	2 @ 15.9 cfm	31.8 cfm
<b>Total</b>		<b>63.6</b>

### Principal Exhaust Fan Capacity

Make	Model	Location
LifeBreath	RNC155	Base
132 cfm		Sones or Equiv.

### Heat Recovery Ventilator

Make	LifeBreath
Model	RNC155
132 cfm high	80 cfm low
Sensible efficiency @ -25 deg C	71%
Sensible efficiency @ 0 deg C	75%

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

### Supplemental Ventilation Capacity

Total ventilation capacity	137.8
Less principal exhaust capacity	63.6
<b>REQUIRED supplemental vent. Capacity</b>	<b>74.2 cfm</b>

### 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      December 12, 2023

REVIEWED



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-00204  
Layout # JB-04877

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 <b>THWU-14</b>		Unit number	Lot/Con
Municipality <b>Bradford</b>	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): Package A1 Table: 3.1.1.2.A

### 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>282.74</u> m <sup>2</sup> or <u>3043.4</u> ft <sup>2</sup>	W,S & G % = <u>7%</u>	<input type="checkbox"/> Log/Post&Beam <input type="checkbox"/> ICF Above Grade <input type="checkbox"/> ICF Basement <input type="checkbox"/> Slab-on-ground     Walkout Basement <input checked="" type="checkbox"/> Air Conditioning     Combo Unit
Area of W, S & G = <u>19.323</u> m <sup>2</sup> or <u>208.0</u> ft <sup>2</sup>	Utilize Window <input type="checkbox"/> Yes Averaging <input checked="" type="checkbox"/> No	<input type="checkbox"/> Air Sourced Heat Pump (ASHP) <input type="checkbox"/> Ground Source Heat Pump (GSHP)

### 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:	
Building Component	Minimum RSI/R-Values or Maximum U-Value <sup>(1)</sup>		Efficiency Ratings
<b>Thermal Insulation</b>	Nominal	Effective	<b>Windows &amp; Doors</b> Provide U-Value <sup>(1)</sup> or ER rating
Ceiling with Attic Space	60		Windows/Sliding Glass Doors 1.6
Ceiling without Attic Space	31		Skylights 2.8
Exposed Floor	31		<b>Mechanicals</b>
Walls Above Grade	22		Heating Equip.(AFUE) 96%
Basement Walls	20.0ci		HRV Efficiency (SRE% at 0°C) 75%
Slab (all >600mm below grade)	x		DHW Heater (EF) 0.80
Slab (edge only ≤600mm below grade)	10		DWHR (CSA B55.1 (min. 42% efficiency)) #Showers 2
Slab (all ≤600mm below grade, or heated)	10		Combined Heating System

(1) U value to be provided in either W/(m<sup>2</sup>·K) or Btu/(h·ft<sup>2</sup>·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 <b>David DaCosta</b>	BCIN <b>32964</b>	Signature 
------------------------------	----------------------	---------------

Package: Package A1 System: System 1  
Project: Bradford Model: THWU-14

## Air Leakage Calculations

Building Air Leakage Heat Loss				
B	LRairh	Vb	HL^T	HLleak
0.018	0.324	21455	81.4	10178

Building Air Leakage Heat Gain				
B	LRairh	Vb	HG^T	HG Leak
0.018	0.079	21455	11	335

Air Leakage Heat Loss/Gain Multiplier Table (Section 11)				
Level	Level Factor (LF)	Building Air	Level Conductive Heat Loss	Air Leakage Heat Loss Multiplier
Level 1	0.5	10178	4464	1.1402
Level 2	0.3		5183	0.5891
Level 3	0.2		4973	0.4093
Level 4	0		0	0.0000

Levels			
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

HG LEAK		Air Leakage Heat Gain	
	335		0.0481
BUILDING CONDUCTIVE HEAT GAIN			6969

Levels this Dwelling	
3	

## Ventilation Calculations

### Ventilation Heat Loss

Ventilation Heat Loss				
C	PVC	HL^T	(1-E) HRV	HLbvent
1.08	63.6	81.4	0.16	895

### Ventilation Heat Gain

Ventilation Heat Gain			
C	PVC	HG^T	HGbvent
1.1	63.6	11	756

### Case 1

#### Ventilation Heat Loss (Exhaust only Systems)

Case 1 - Exhaust Only				
Level	LF	HLbvent	LVL Cond. HL	Multiplier
Level 1	0.5	895	4464	0.10
Level 2	0.3		5183	0.05
Level 3	0.2		4973	0.04
Level 4	0		0	0.00

### Case 1

#### Ventilation Heat Gain (Exhaust Only Systems)

Case 1 - Exhaust Only		Multiplier	
HGbvent	756	0.11	
Building	6969		

### Case 2

#### Ventilation Heat Loss (Direct Ducted Systems)

C	HL^T	(1-E) HRV	Multiplier
1.08	81.4	0.16	14.07

### Case 2

#### Ventilation Heat Gain (Direct Ducted Systems)

C	HG^T	Multiplier
1.08	11	11.88

### Case 3

#### Ventilation Heat Loss (Forced Air Systems)

HLbvent		Multiplier
Total Ventilation Load	895	0.06

### Case 3

#### Ventilation Heat Gain (Forced Air Systems)

Vent Heat Gain		Multiplier
HGbvent	HG*1.3	0.11
756	1	

Foundation Conductive Heatloss Level 1

1154 Watts 3936 Btu/h

Foundation Conductive Heatloss Level 2

Watts 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):	6.55

## Building Configuration

Type:	Semi-Detached
Number of Stories:	Two
Foundation:	Shallow
House Volume (m <sup>3</sup> ):	607.59

## Air Leakage/Ventilation

Air Tightness Type:	Present (1961-) (ACH=3.57)
Custom BDT Data:	ELA @ 10 Pa. 322.44 cm <sup>2</sup>
	3.57 ACH @ 50 Pa
Mechanical Ventilation (L/s):	Total Supply: 31.8 Total Exhaust: 31.8

Flue #:	#1	#2	#3	#4
Diameter (mm):	0	0	0	0

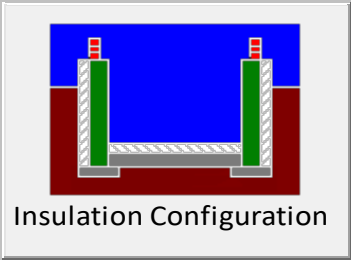
Heating Air Leakage Rate (ACH/H): 0.324

Cooling Air Leakage Rate (ACH/H): 0.079

REVIEWED

















# Residential Foundation Thermal Load Calculator

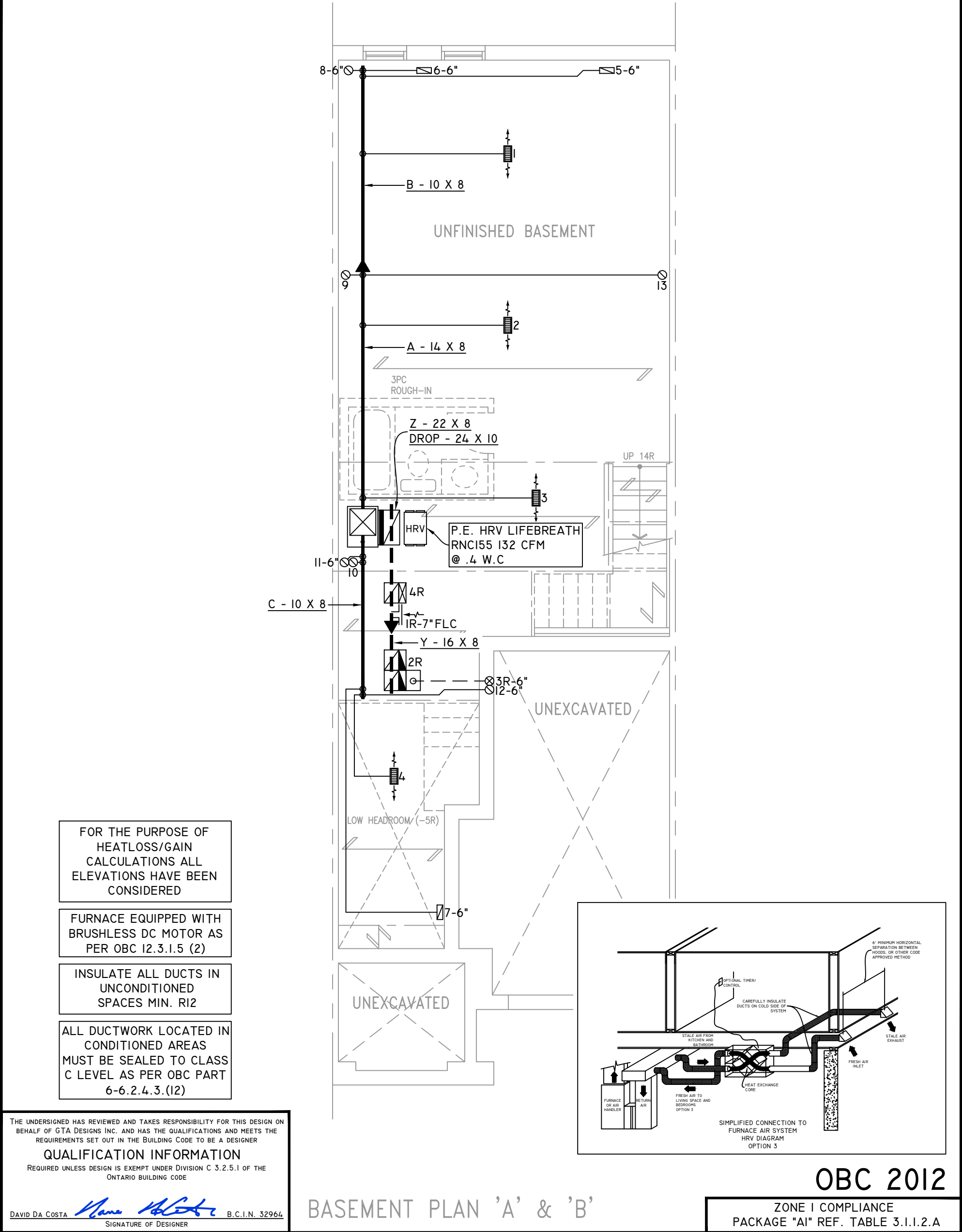
Supplemental tool for CAN/CSA-F280

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):	17.26	 <p>Insulation Configuration</p>
Floor Width (m):	4.07	
Exposed Perimeter (m):	17.07	
Wall Height (m):	2.59	
Depth Below Grade (m):	1.52	
Window Area (m <sup>2</sup> ):	2.14	
Door Area (m <sup>2</sup> ):	0.00	
Radiant Slab		
Heated Fraction of the Slab:	0	
Fluid Temperature (°C):	33	
Design Months		
Heating Month	1	
Foundation Loads		
Heating Load (Watts):		1154

REVIEWED

REVIEWED

	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



**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.

**GTADESIGNS**

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

















HEAT-LOSS	25,900	BTU/HR.
UNIT MAKE	AMANA	OR EQUAL.
UNIT MODEL	AMEC960403ANA	OR EQUAL.
UNIT HEATING INPUT	40,000	BTU/HR.
UNIT HEATING OUTPUT	38,400	BTU/HR.
A/C COOLING CAPACITY	1.5	TONS.
FAN SPEED	772	CFM

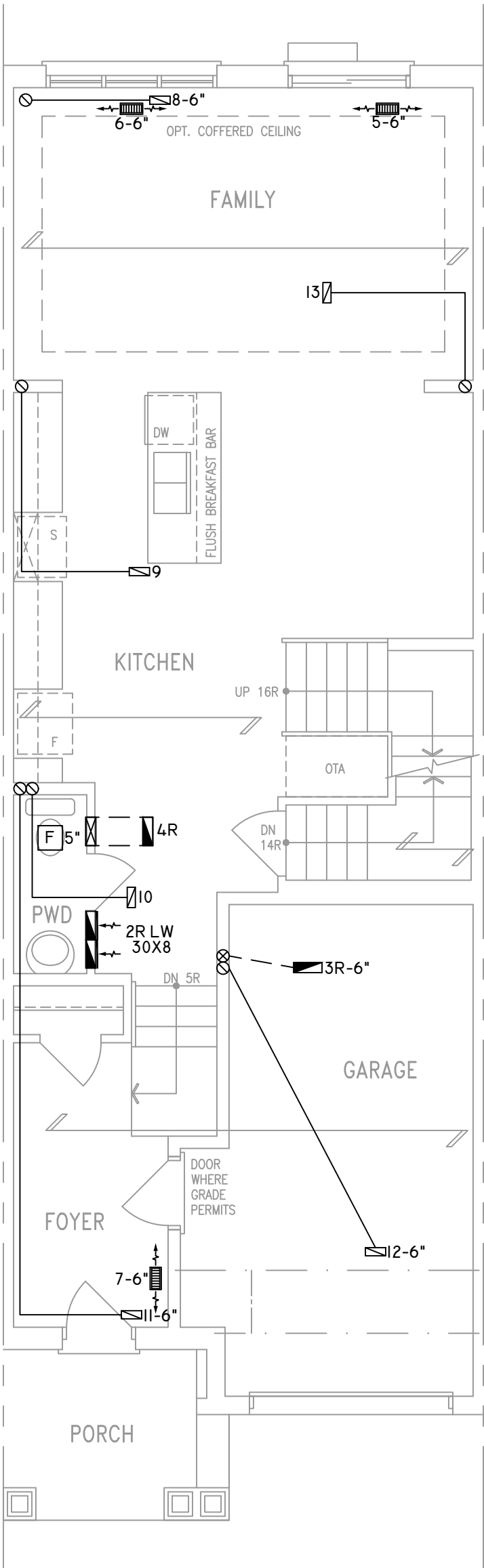
# OF RUNS	S/A	R/A	FANS
3RD FLOOR			
2ND FLOOR	6	2	3
1ST FLOOR	3	1	2
BASEMENT	4	1	

FLOOR PLAN:	BASEMENT
DRAWN BY:	JL
CHECKED:	DD
LAYOUT NO:	JB-04877
SQFT	1832
DRAWING NO.	MI

DATE:	DECEMBER 11, 2023
CLIENT:	BAYVIEW WELLINGTON
MODEL:	THWU-14
PROJECT:	GREEN VALLEY BRADFORD,ONT.
SCALE:	3/16" = 1'-0"

REVIEWED

	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



- FOR THE PURPOSE OF HEATLOSS/GAIN CALCULATIONS ALL ELEVATIONS HAVE BEEN CONSIDERED
- CIRCULATION PRINCIPAL FAN SWITCH TO BE CENTRALLY LOCATED
- INSULATE ALL DUCTS IN UNCONDITIONED SPACES MIN. R12
- 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

GROUND FLOOR PLAN 'A'

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	25,900	BTU/HR.
UNIT MAKE	AMANA	OR EQUAL.
UNIT MODEL	AMEC9604.03ANA	OR EQUAL.
UNIT HEATING INPUT	40,000	BTU/HR.
UNIT HEATING OUTPUT	38,400	BTU/HR.
A/C COOLING CAPACITY	1.5	TONS.
FAN SPEED	772	CFM

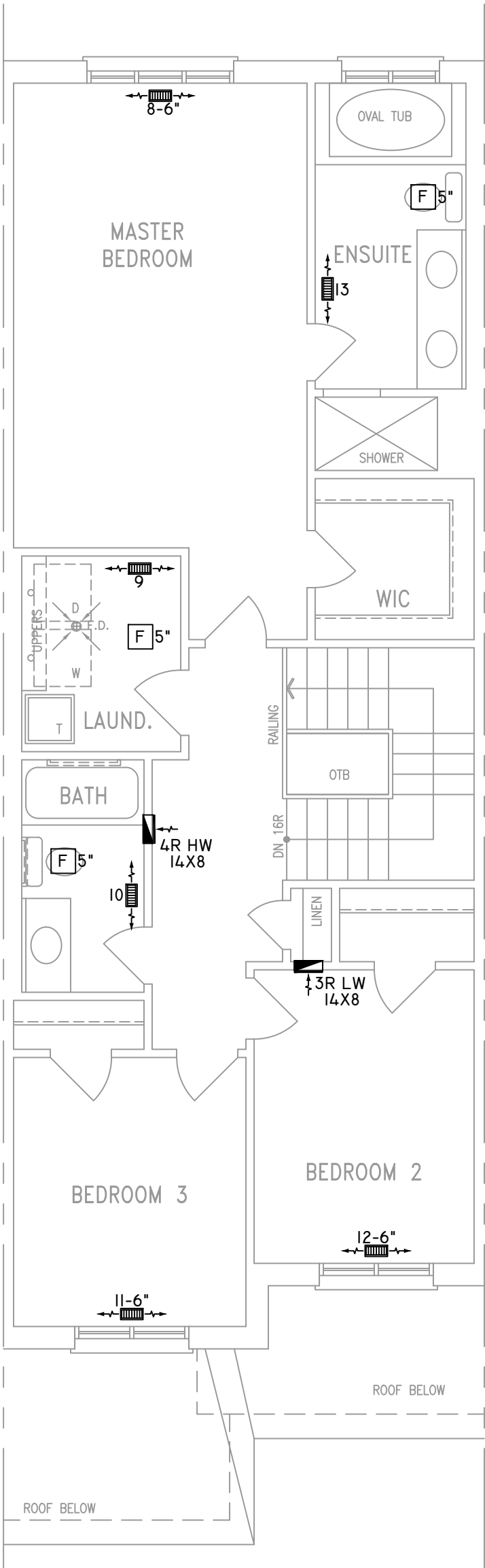
# OF RUNS	S/A	R/A	FANS
3RD FLOOR			
2ND FLOOR	6	2	3
1ST FLOOR	3	1	2
BASEMENT	4	1	

FLOOR PLAN: GROUND FLOOR		
DRAWN BY: JL	CHECKED: DD	SQFT 1832
LAYOUT NO. JB-04877	DRAWING NO. M2	

DATE:	DECEMBER 11, 2023
CLIENT:	BAYVIEW WELLINGTON
MODEL:	THWU-14
PROJECT:	GREEN VALLEY BRADFORD,ONT.
SCALE:	3/16" = 1'-0"

REVIEWED

	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



- FOR THE PURPOSE OF  
HEATLOSS/GAIN  
CALCULATIONS ALL  
ELEVATIONS HAVE BEEN  
CONSIDERED
- INSULATE ALL DUCTS IN  
UNCONDITIONED  
SPACES MIN. R12
- 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

SECOND FLOOR PLAN 'A'

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.



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L4T 0A4 TEL: 905-671-9800  
EMAIL: DAVE@GTADESIGNS.CA  
WEB: WWW.GTADESIGNS.CA



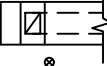














HEAT-LOSS	25,900	BTU/HR.
UNIT MAKE	AMANA	OR EQUAL.
UNIT MODEL	AMEC9604.03ANA	OR EQUAL.
UNIT HEATING INPUT	40,000	BTU/HR.
UNIT HEATING OUTPUT	38,400	BTU/HR.
A/C COOLING CAPACITY	1.5	TONS.
FAN SPEED	772	CFM

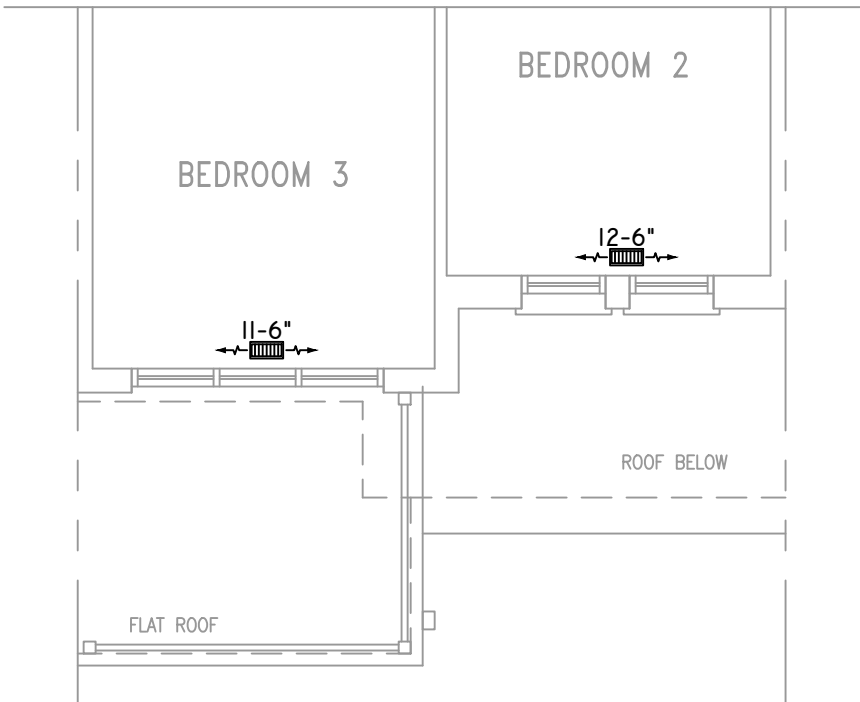
# OF RUNS	S/A	R/A	FANS
3RD FLOOR			
2ND FLOOR	6	2	3
1ST FLOOR	3	1	2
BASEMENT	4	1	

FLOOR PLAN: SECOND FLOOR		
DRAWN BY: JL	CHECKED: DD	SQFT 1832
LAYOUT NO. JB-04877	DRAWING NO. M3	

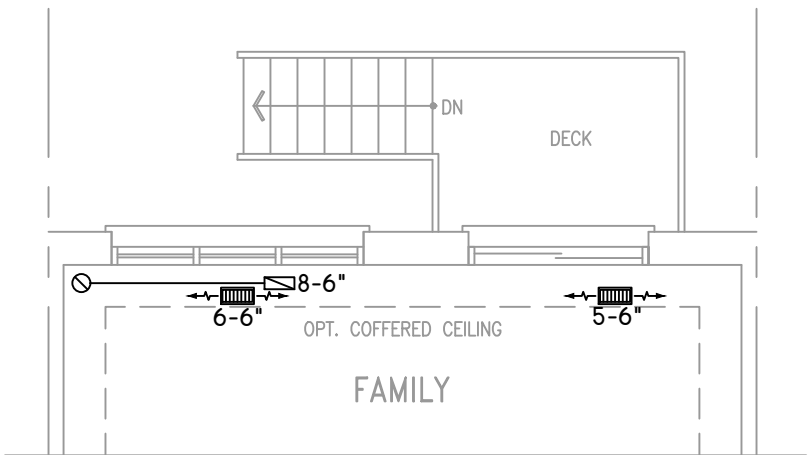
DATE:	DECEMBER 11, 2023
CLIENT:	BAYVIEW WELLINGTON
MODEL:	THWU-14
PROJECT:	GREEN VALLEY BRADFORD,ONT.
SCALE:	3/16" = 1'-0"

REVIEWED

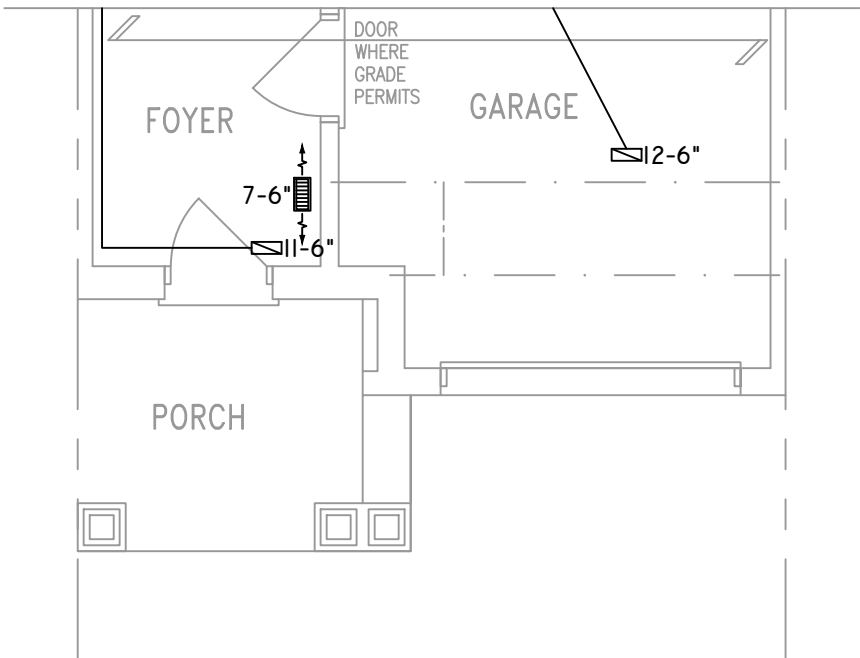
	FLEX DUCT		LOW/HIGH WALL/KICK SUPPLY DIFFUSER		DUCT CONNECTION TO JOIST LINING		RETURN AIR GRILLE (SIZE INDICATED ON DRAWING)	S.A.	SUPPLY AIR
	RIGID ROUND DUCT		HRV EXHAUST GRILLE		RETURN AIR PIPE RISER		RETURN AIR RISER UP TO FLOOR ABOVE	R.A.	RETURN AIR
	SUPPLY DIFFUSER		SUPPLY AIR PIPE RISER		RETURN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



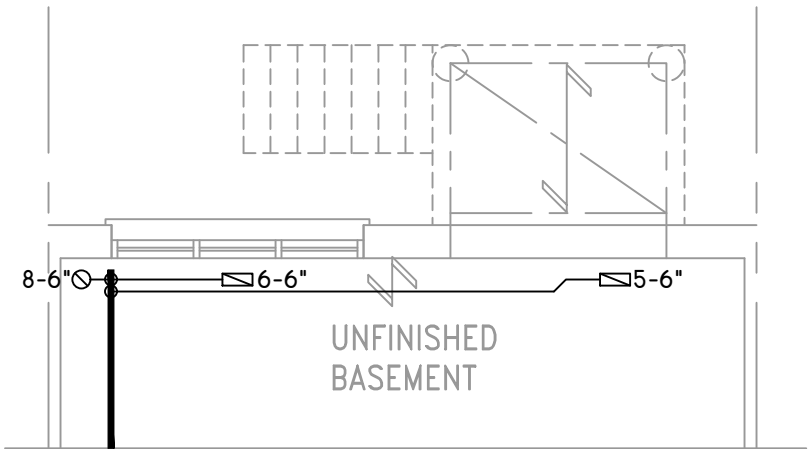
PARTIAL SECOND FLOOR PLAN 'B'



PARTIAL GROUND FLOOR PLAN  
W.O.D. CONDITION (9R OR GREATER)



PARTIAL GROUND FLOOR PLAN 'B'



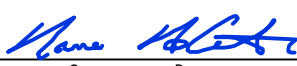
PARTIAL BASEMENT PLAN  
W.O.D. CONDITION (9R OR GREATER)

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

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

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2ND FLOOR	6	2	3
1ST FLOOR	3	1	2
BASEMENT	4	1	

FLOOR PLAN:		
PARTIAL PLAN(S)		
DRAWN BY: JL	CHECKED: DD	SQFT 1832
LAYOUT NO. JB-04877	DRAWING NO. M4	

DATE:	DECEMBER 11, 2023
CLIENT:	BAYVIEW WELLINGTON
MODEL:	THWU-14
PROJECT:	GREEN VALLEY BRADFORD,ONT.
SCALE:	3/16" = 1'-0"