

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					Lot:
	TH-8C V			Lot/d	con.
Municipality Bradford		Postal code	Plan number/ other description		
B. Individual who reviews and takes responsible	ility for desig	n activities	Ie:		
Name David Da	Costa		Firm	gtaDesigns	Inc.
Street address 2	985 Drew Road	d, Suite 202		Unit no.	Lot/con.
Municipality		Postal code	Province	E-mail	
Mississauga		L4T 0A4	Ontario		designs.ca
Telephone number (905) 671-9800		Fax number		Cell number	
C. Design activities undertaken by individual id	entified in Se	ection B. [Bui	lding Code Table	3.5.2.1 of Division C]	
☐ House ☐	X HVAC – Ho	ouse		■ Building Structural	
☐ Small Buildings	Building Ser	rvices		☐ Plumbing – House	
☐ Large Buildings	Detection, L	ighting and Pow	/er	☐ Plumbing – All Build	dings
☐ Complex Buildings	Fire Protect	ion		On-site Sewage System	stems
Description of designer's work	Mod	lel Certification		Projec	t #: PJ-00204
				Layou	
Heating and Cooling Load Calculations	Main		Builder	Bayview Wellin	
Air System Design Residential mechanical ventilation Design Summary	Alternate O.D. GFA	X 2008	Project	Green Valle	еу
Residential System Design per CAN/CSA-F280-12	O.D. OI A	2000	Model	TH-8C WO	В
Residential New Construction - Forced Air			SB-12	Package A	
D. Declaration of Designer					
	sponsibility for th	ne design work c	choose one as app on behalf of a firm reg the firm is registered,	istered under subsection 3.2 in the appropriate	
5	idividual BCIN:			TOWN OF BR BUILDING DE	ADFORD WEST GWILLIMBUR PARTMENT
	irm BCIN:			PLANS EXAM ONTARIO BUI DATE: 04/2	LDING CODE APPLIES
⊠ I review and take re designer" under sub	esponsibility for t esection 3.2.5 of	the design and a Division C, of th	ım qualified in the ap _l ne Building Code.	propriate category as an obti	
Ir	ndividual BCIN:	329	64		
В	asis for exempti	ion from registra	tion:	Division C 3.2.4.1. (4)	_
☐ The design work is e	exempt from the	registration and	qualification requirer	ments of the Building Code.	
	asis for exempti	ion from registra	tion and qualification	:	
I certify that: 1. The information contained in this schedule is true:	to the heet of m	v knowledge			
I have submitted this application with the knowledge.		,			
January 17, 2024	30 and 001100111 (o. alo milli	Mane da	blet	
Date			Signature of I	Designer	
Dato			9	g	

NOTE:

Page 1

1. 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, issed by the Ontario Associstion 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



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

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Heat loss and gain calcula	ation summary sheet CSA-F280-M12 Standard Form No. 1
These documents issued for the use of Ba	yview 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-09302
Building L	ocation
Address (Model): TH-8C WOB	Site: Green Valley
Model:	Lot:
City and Province: Bradford	Postal code:
Calculations	s based on
Dimensional information based on:	VA3 DESIGN2/Nov/2023
Attachment: Townhome	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 V150E75NS	Internal shading: Light-translucent Occupants: 5
Sensible Eff. at -25C 60% Apparent Effect. at -0C 80%	Units: Imperial Area Sq ft: 2008
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/0	Gain Caculations based on CSA-F280-12 Effective R-Values
Notes: Residential New C	Construction - Forced Air
Calculations p	erformed 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
Attached documents: As per Shedule 1 Heat Loss/G Notes: Residential New C Calculations p Name: David DaCosta Company: gtaDesigns Inc. Address: 2985 Drew Road, Suite 202	Gain Caculations based on CSA-F280-12 Effective R-Values Construction - Forced Air Performed by Postal code: L4T 0A4 Telephone: (905) 671-9800 Fax:



Bayview Wellington

Builder:

Air System Design

January 17, 2024

Date:

SB-12 Package A1 2985 Drew Road, Suite 202, Mississauga, Ontario L4T 0A4 Tel: 905-671-9800 e-mail hvac@gtadesigns.ca

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

Page 3 Project #

PJ-00204 **Building Code.** System 1 Mana Alet **Green Valley** TH-8C WOB Individual BCIN: 32964 David DaCosta Layout # JB-09302 Project: Model: BOILER/WATER HEATER DATA: DESIGN LOAD SPECIFICATIONS AIR DISTRIBUTION & PRESSURE FURNACE/AIR HANDLER DATA: A/C UNIT DATA: Level 1 Net Load 14,153 btu/h **Equipment External Static Pressure** 0.5 "w.c. Make Make 2.5 Ton Amana Type Amana AMEC960603ANA Level 2 Net Load 14,066 btu/h **Additional Equipment Pressure Drop** 0.225 "w.c. Model Model Model: Level 3 Net Load 11.188 btu/h **Available Design Pressure** 0.275 "w.c. **High Input** 60000 BTU/h Input Btu/h Cond.-2.5 Return Branch Longest Effective Length 57600 BTU/h 2.5 Level 4 Net Load 0 btu/h 300 ft **High Output** Output Btu/h Coil ---ΔWH 39.406 btu/h 0.138 "w.c. E.s.p. 0.50 " W.C. Min.Output Btu/h Total Heat Loss R/A Plenum Pressure **Total Heat Gain** 25,612 btu/h S/A Plenum Pressure 0.14 "w.c. Water Temp deg. F. Blower DATA: W2 0.0236 cfm/btuh 96% Blower Speed Selected: ECM Heating Air Flow Proportioning Factor Thermal Eff. Blower Type 22894 ft³ Cooling Air Flow Proportioning Factor (Brushless DC OBC 12.3.1.5.(2)) **Building Volume Vb** 0.0363 cfm/btuh Electric Heat Ventilation Load 1.398 Btuh. Check 929 cfm Cool. Check 929 cfm R/A Temp 70 dea. F. Ventilation PVC 79.5 cfm S/A Temp 127 deg. F. Supply Branch and Grill Sizing Diffuser loss 57 deg. F. Cooling 0.01 "w.c. Temp. Rise>>> Heat. 929 cfm 929 cfm Design Airflow 929 cfm Level 1 Level 2 S/A Outlet No. 1 2 3 5 6 10 11 Room Use BASE BASE BASE KIT KIT FAM FOY LUAN PWD MUD Btu/Outlet 3538 3538 3538 3538 2017 2017 2498 2997 2793 432 1311 **Heating Airflow Rate CFM** 83 83 83 83 48 48 59 71 66 10 31 Cooling Airflow Rate CFM 26 26 26 26 107 107 111 77 103 2 0.13 **Duct Design Pressure** 0.13 **Actual Duct Length** 15 23 24 22 13 28 21 21 36 **Equivalent Length** 90 120 110 70 70 70 70 70 70 70 70 70 70 70 90 100 110 100 140 90 70 70 70 70 70 70 70 100 Total Effective Length 105 126 133 70 70 70 70 70 70 70 70 70 70 94 112 108 123 128 161 111 70 70 70 70 70 70 70 136 **Adjusted Pressure** 0.12 0.10 0.10 0.19 0.19 0.19 0.19 0.19 0.19 0.19 0.19 0.19 0.19 0.14 0.12 0.12 0.11 0.10 0.08 0.12 0.19 0.19 0.19 0.19 0.19 0.19 0.19 0.10 **Duct Size Round** 6 3 **Outlet Size** 4x10 3x10 4x10 3x10 4x10 4x10 4x10 4x10 4x10 Trunk D В D Level 3 Level 4 S/A Outlet No. 12 13 14 15 16 18 17 Room Use MAST MAST RFD 4 RATH BFD 3 RFD 2 FNS Btu/Outlet 1552 1552 1501 1285 2208 2275 815 37 52 **Heating Airflow Rate CFM** 37 35 30 54 19 50 50 52 39 61 Cooling Airflow Rate CFM 41 19 **Duct Design Pressure** 0.13 25 45 **Actual Duct Length** 14 28 34 45 **Equivalent Length** 130 130 120 140 150 90 110 70 155 174 70 70 70 Total Effective Length 144 148 195 135 110 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 Adjusted Pressure 0.08 0.09 0.09 0.07 0.07 0.10 0.12 0.19 **Duct Size Round** 5 5 5 6 3 Outlet Size 4x10 3x10 3x10 3x10 3x10 4x10 3x10 4x10 Trunk R D Supply Trunk Duct Sizing Trunk C.CFM H.CFM Press. Round Rect. Size 496 413 0.08 11.5 14x8 12x10

Return Branch And Grill Sizing		G	rill Pressu	ire Loss		0.02 "w.c						
R/A Inlet No.	1R	2R	3R	4R	5R	6R	7R	8R	9R	10R	11R	
Inlet Air Volume CFM	167	447	105	105	105							
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	23	51	30	46							
Equivalent Length	110	160	155	180	140	50	50	50	50	50	50	
Total Effective Length	115	183	206	210	186	50	50	50	50	50	50	
Adjusted Pressure	0.10	0.06	0.06	0.06	0.06	0.24	0.24	0.24	0.24	0.24	0.24	
Duct Size Round	7.0	11.5	6.0	6.0	6.0							
Inlet Size	FLC	8	8	8	8							
	x	x	x	x	x	x	x	x	x	x	x	
Inlet Size		30	14	14	14							
Trunk	Υ	Υ		z	z							

Trunk	CFM	Press.	Round	Rect.	Size
Drop	929	0.06	15.0	24x10	
Z	824	0.06	14.5	24x8	18x10
Υ	614	0.06	13.0	18x8	14x10
Х					
W					
V					
U					
Т					
s					
R					

G

0.08

0.07

0.07

9.5

12.0

9.5

10v8

16x8

10x8

127

127

12x10

289

434

233

C

215

516

265



Total Heat Gain

25,612 btu/h

Heatloss/Gain Calculations CSA-F280-12

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

e-mail hvac@gtadesigns.ca

		Bayview Wellington		Date:		January 17, 20	24				Weather Dat		ord 44	-9.4 8	6 22	48.2				Page
	Builder: E										Weather Da	ta Bradfo	nu 44	0						
2012 OBC	Project:	Green Valley	Mc	odel:		TH-8C WOB			Syste	m 1	Heat Loss	^T 81.4 deg. F	Ht gain ^T	11 d	leg. F			Projec Layou		J-0020 B-0930
			_																	
Level 1 Run ft. exposed wall A		BAS 86 A	E			^		A	٨			^	^				^		^	
Run ft. exposed wall E		20 B		A B		A B		В	A B		A B	A B	A B		A B		A B		A B	
Ceiling heigh		5.5 AG		5.5 AG		5.5 AG		AG	5.5 AG		5.5 AG	5.5 AG	5.5 AG		5.5 AG		5.5 AG		5.5 AG	
Floor area	1	824 Area		Area		Area		Area	Area		Area	Area	Area		Area		Area		Area	
Exposed Ceilings A		Α		Α		Α		Α	Α		Α	Α	Α		Α		Α		Α	
Exposed Ceilings E		B		B		B		B	В		B	В	В		B		В		B	
Exposed Floors Gross Exp Wall A		Fir 473		Flr		Flr		Flr	Flr		Flr	Flr	Fir		Flr		Flr		Flr	
Gross Exp Wall E		170																		
	R-Values Loss		Gain	Loss	Gain	Loss G	ain	Loss Gair	Loss	Gain	Loss Gain	Loss G	ain Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain
North Shaded																				
East/Wes			8 177																	
WOB Windows Including Doors	3.55 22.9 3.55 22.9		5 1477																	
Skyligh			3 1477																	
Doors			7 58																	
Net exposed walls A		1 0.53 446	235																	
Net exposed walls E			9 76																	
Exposed Ceilings A																				
Exposed Ceilings E Exposed Floors																				
Foundation Conductive Heatloss	25.00 2.7	595	2																	
otal Conductive Heat Loss	5	829																		
Heat Gair			2023																	
Air Leakage Heat Loss/Gair			1 52																	
Ventilation Case 2																				
Ventilation Case 2			0 138																	
Heat Gain People		239																		
Heat Gain People Appliances Loads		239 3266																		
Appliances Loads Duct and Pipe loss	1 =.25 percent	3266 10%																		
Appliances Loads Duct and Pipe loss	1 =.25 percent Total HL ft Total HG per	3266 10% or per room room x 1.3	2876	FAM		FOY		LUAN	PWI	0	MUD									
Appliances Loads Duct and Pipe loss evel HL Total 14,153 evel HG Total 2,876 Level 2 Run ft. exposed wall R Ceiling heigh	total HL fr	3266 10% or per room room x 1.3 1415: 29 A B 10.0	2876	16 A B 10.0	1	19 A B 1.0	11.0	В	6 A B 11.0		11 A B 12.0	A B 10.0 Area	A B 10.0		A B 10.0		A B 10.0 Area	1	A B 0.0 Area	
Appliances Loads	t = .25 percent Total HL fr Total HG per	3266 10% or per room room x 1.3	2876	16 A B	1	19 A B	11.0 64	В	6 A B 11.0 28 Area		11 A B	В	B 10.0 Area		B 10.0 Area		B 10.0 Area	1	B 0.0 Area	
Appliances Loads Duct and Pipe loss evel HL Total 14,153 evel HG Total 2,876 Level 2 Run ft. exposed wall R Ceiling heigh	1 = .25 percent Total HL f. Total HG per	3266 10% or per room room x 1.3 KIT 29 A B 10.0 201 Area	2876	16 A B 10.0 341 Area	1	19 A B 1.0 108 Area	11.0 64	A B Area	6 A B 11.0		11 A B 12.0 71 Area	B 10.0 Area	B 10.0		B 10.0		B 10.0	1	B 0.0	
Appliances Loads Duct and Pip louct and Pip louck and Pip	total HG per	3266 10% or per room room x 1.3 KIT 29 A B 10.0 201 Area A B Fir	2876	16 A B 10.0 341 Area 5 A B Fir	1	19 A B 1.0 108 Area A B Fir	11.0 64	A B Area A B Fir	6 A B 11.0 28 Area A B Fir		11 A B 12.0 71 Area A B Fir	B 10.0 Area A	B 10.0 Area A		B 10.0 Area A		B 10.0 Area A	1	B 0.0 Area A	
Appliances Loads Duct and Pipe loads Level HL Total 14,153 Level HG Total 2,876 Run ft. exposed wall A Run ft. exposed wall B Ceiling heigh Floor area Exposed Ceilings A Exposed Ceilings A Exposed Ceilings A Exposed Floors Gross Exp Wall A	1 = .25 percent Total HL f. Total HG per	3266 10% or per room room x 1.3 1415: 29 A B 10.0 201 Area A B	2876	16 A B 10.0 341 Area 5 A B	1	19 A B 1.0 108 Area A B	11.0 64	A B Area A B Fir	6 A B 11.0 28 Area A B		11 A B 12.0 71 Area A B	B 10.0 Area A B	B 10.0 Area A B		B 10.0 Area A B		B 10.0 Area A B	1	B 0.0 Area A B	
Appliances Loads Duct and Pipe loads Duct and Pipe loads Level HL Total 14,153 Level HG Total 2,876 Run ft. exposed wall A Run ft. exposed wall A Celling heigh Floor area Exposed Cellings A Exposed Cellings A Exposed Floors Gross Exp Wall A Gross Exp Wall A	t = .25 percent Total HL ft Total HG per	3266 10% or per room room x 1.3 1415: 29 A B 10.0 201 Area A B Fir	2876	16 A B 10.0 341 Area 5 A B Fir 160	1	19 A B 1.0 108 Area A B Fir 209	11.0 64 275	A B Area A B Fir	6 A B 11.0 28 Area A B Fir 66		11 A B 12.0 71 Area A B Fir	B 10.0 Area A B B	B 10.0 Area A B Fir		B 10.0 Area A B Fir	Gain	B 10.0 Area A B Fir		B 0.0 Area A B Fir	Gain
Appliances Loads Duct and Pipe loads Level HL Total 14,153 Level HG Total 2,876 Run ft. exposed wall A Run ft. exposed wall B Ceiling heigh Floor area Exposed Ceilings A Exposed Ceilings A Exposed Ceilings A Exposed Floors Gross Exp Wall A	1 = .25 percent Total HL f. Total HG per	3266 10% per room room x 1.3	2876	16 A B 10.0 341 Area 5 A B Fir	1	19 A B 1.0 108 Area A B Fir 209	11.0 64	A B Area A B Fir	6 A B 11.0 28 Area A B Fir 66		11 A B 12.0 71 Area A B Fir	B 10.0 Area A B B	B 10.0 Area A B		B 10.0 Area A B	Gain	B 10.0 Area A B		B 0.0 Area A B	Gain
Appliances Loads Duct and Pip loads Duct and Pip loads Level HL Total 14,153 Level HG Total 2,876 Run ft. exposed wall A Run ft. exposed wall A Celling heigh Floor area Exposed Cellings A Exposed Floors Gross Exp Wall A Gross Exp Wall A Gross Exp Wall A Gross Exp Wall E Components North Shadec East/Wes	1 = .25 percent Total HL fi Total HG per Total HG ser	3266 10% 1415: or per room room x 1.3	Gain 828	16 A B 10.0 341 Area 5 A B Fir 160	1 Gain	19 A B 1.0 108 Area A B Fir 209	275 ain 1330 28	A B Area A B Fir Loss Gair	6 A B 11.0 28 Area A B Fir 66		11 A B 12.0 71 Area A B Fir	B 10.0 Area A B B	B 10.0 Area A B Fir		B 10.0 Area A B Fir	Gain	B 10.0 Area A B Fir		B 0.0 Area A B Fir	Gain
Appliances Loads Duct and Pip louct and Pip louck and Pip	1 = .25 percent Total HL f. Total HG per R	3266 10% 104151 room x 1.3 14151 29 A B 10.0 201 Area A B Fir 290 Gain 1.62 3 11.62 3 11.62 3 22.56 28 643 3 22.50 58 133	Gain 828	16 A B 10.0 341 Area 5 A B Fir 160 Loss	1 Gain	19 A B 1.0 108 Area A B Fir 209	11.0 64 275 ain	A B Area A B Fir Loss Gair	6 A B 11.0 28 Area A B Fir 66		11 A B 12.0 71 Area A B Fir	B 10.0 Area A B B	B 10.0 Area A B Fir		B 10.0 Area A B Fir	Gain	B 10.0 Area A B Fir		B 0.0 Area A B Fir	Gain
Appliances Loads Duct and Pipe loss evel HL Total 14,153 evel HG Total 2,876 Level 2 Run ft. exposed wall R Run ft. exposed wall R Ceiling heigh Floor are Exposed Ceilings E Exposed Ceilings E Exposed Floors Gross Exp Wall A Gross Exp Wall B Components North Shadec East/Wes Soutt	1 = .25 percent Total HL f. Total HG per Revalues Loss 3.55 22.9 3.55 22.9 3.55 22.9 1.99 40.9	3266 10% 1415: or per room room x 1.3 1415: a	Gain 828	16 A B 10.0 341 Area 5 A B Fir 160 Loss	1 Gain	19 A B 1.0 108 Area A B Fir 209	275 ain 1330 28	A B Area A B Fir Loss Gair	6 A B 11.0 28 Area A B Fir 66		11 A B 12.0 71 Area A B Fir	B 10.0 Area A B B	B 10.0 Area A B Fir		B 10.0 Area A B Fir	Gain	B 10.0 Area A B Fir		B 0.0 Area A B Fir	Gain
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Appliances Loads Duct and Pipe loss Level HL Total 14,153 Level HG Total 2,876 Level 12,876 Run ft. exposed wall R Run ft. exposed wall R Ceiling heigh Floor are Exposed Ceilings E Exposed Ceilings E Exposed Floors Gross Exp Wall I Gross Exp Wall E Component North Shadec East/Wes Soutt	1 = .25 percent Total HL f. Total HG per Reference	3266 10% 1415: 1445: 160m x 1.3	Gain 2 828 0 1305	16 A B 10.0 341 Area 5 A B Fir 160 Loss	Gain 1714	19 A B 1.0 108 Area A B Fir 209	275 ain 1330 28	A B Area A B Fir Loss Gair 642 : 275 :	6 A B 11.0 28 Area A B Fir 66	Gain	11 A B 12.0 71 Area A B Fir 132 Loss Gain	B 10.0 Area A B B	B 10.0 Area A B Fir		B 10.0 Area A B Fir	Gain	B 10.0 Area A B Fir		B 0.0 Area A B Fir	Gain
Appliances Loads Duct and Pip loads Duct and Pip loads Level HL Total 14,153 Level HG Total 2,876 Run ft. exposed wall A Run ft. exposed cellings A Floor area Exposed Cellings B Exposed Cellings B Exposed Floors Gross Exp Wall A Gross Exp Wall B Components North Shade East/Wes Soutt Existing Windows Skyligh Doors Net exposed walls A	1 = 25 percent 1 =	3266 10% or per room room x 1.3	Gain 2 828 0 1305	16 A B 10.0 341 Area 5 A B Fir 160 Loss 1330	Gain 1714	19 A B B 1.0 108 Area A B Fir 209 Loss G 45 1032	11.0 64 275 ain 1330 28 12	A B Area A B Fir Loss Gair 642 : 275 :	6 A B 11.0 28 Area A B Fir 66 Loss	Gain	11 A B 12.0 71 Area A B Fir 132 Loss Gain	B 10.0 Area A B Fir	B 10.0 Area A B Fir		B 10.0 Area A B Fir	Gain	B 10.0 Area A B Fir		B 0.0 Area A B Fir	Gain
Appliances Loads Duct and Pip louct and Pip louck and Pip	1 = .25 percent Total HL f. Total HG per Reference	3266 10% 1415;	Gain 2 828 0 1305	16 A B 10.0 341 Area 5 A B Fir 160 Loss 1330	Gain 1714	19 A B B 1.0 108 Area A B Fir 209 Loss G 45 1032	11.0 64 275 ain 1330 28 12	A B Area A B Fir Loss Gair 642 : 275 :	6 A B 11.0 28 Area A B Fir 66 Loss	Gain	11 A B 12.0 71 Area A B Fir 132 Loss Gain	B 10.0 Area A B Fir	B 10.0 Area A B Fir		B 10.0 Area A B Fir	Gain	B 10.0 Area A B Fir		B 0.0 Area A B Fir	Gain
Appliances Loads Duct and Pipe loss evel HL Total 14,153 evel HG Total 2,876 Level 2 Run ft. exposed wall A Run ft. exposed wall A Run ft. exposed wall B Celling heigh Floor are Exposed Ceilings A Exposed Ceilings A Gross Exp Wall A Gross Exp Wall A Gross Exp Wall B Components North Shadec East/Wes Soutt Existing Windows Skyligh Doors Net exposed walls A Net exposed walls B Net exposed walls B Exposed Ceilings A Exposed Ceilings A Exposed Ceilings A Exposed Ceilings A Ret exposed walls S Net exposed walls S Exposed Ceilings A Exposed Ceilings B Exposed Ceilings B Exposed Ceilings B	1 = .25 percent 1 = .25 pe	3266 10% 1415; 162 163 164 165 1	Gain 2 828 0 1305	16 A B 10.0 341 Area 5 A B Fir 160 Loss 1330	Gain 1714	19 A B B 1.0 108 Area A B Fir 209 Loss G 45 1032	11.0 64 275 ain 1330 28 12	A B Area A B Fir Loss Gair 642 : 275 :	6 A B 11.0 28 Area A B Fir 66 Loss	Gain	11 A B 12.0 71 Area A B Fir 132 Loss Gain	B 10.0 Area A B Fir	B 10.0 Area A B Fir		B 10.0 Area A B Fir	Gain	B 10.0 Area A B Fir		B 0.0 Area A B Fir	Gain
Appliances Loads Duct and Pip loads Duct and Pip loads Level HL Total 14,153 evel HG Total 2,876 Run ft. exposed wall A Run ft. exposed wall A Run ft. exposed wall A Exposed Ceilings E Exposed Ceilings C Gross Exp Wall A Gross Exp Wall B Components North Shadet East/Wes South Existing Windows South Existing Windows Net exposed walls A Net exposed walls A Net exposed walls A Exposed Ceilings A Exposed Ceilings B	1 = .25 percent 1 = .25 pe	3266 10% 1415; 162 163 164 165 1	Gain 2 828 0 1305	16 A B 10.0 341 Area 5 A B Fir 160 Loss 1330	Gain 1714	19 A B B 1.0 108 Area A B Fir 209 Loss G 45 1032	11.0 64 275 ain 1330 28 12	A B Area A B Fir Loss Gair 642 : 275 :	6 A B 11.0 28 Area A B Fir 66 Loss	Gain	11 A B 12.0 71 Area A B Fir 132 Loss Gain	B 10.0 Area A B Fir	B 10.0 Area A B Fir		B 10.0 Area A B Fir	Gain	B 10.0 Area A B Fir		B 0.0 Area A B Fir	Gain
Appliances Loads Duct and Pipe loss Duct and Pipe loss Level HL Total 14,153 Level HG Total 2,876 Run ft. exposed wall A Run ft. exposed wall A Run ft. exposed wall A Exposed Ceilings A Exposed Ceilings A Exposed Floors Gross Exp Wall A Gross Exp Wall A Gross Exp Wall A Gross Exp Wall B Exposed Ceilings A Exposed Ceilings A Exposed Floors Gross Exp Wall B Exposed Floors South Existing Windows Skyligh Doors Net exposed walls A Exposed Ceilings A Exposed Floors Exposed Floors Foundation Conductive Heat Loss	1 = .25 percent 1 = .25 pe	3266 10% or per room room x 1.3	Gain 2 828 0 1305 5 132	16 A B 10.0 341 Area 5 A B Fir 160 Loss 1330	Gain 1714 3 666 3 3	19 A B B 1.0 108 Area A B Fir 209 Loss G 45 1032 24 488 140 669 2189	11.0 64 275 ain 1330 28 12 66 90 235	A B Area A B B Fir Loss Gain 1123 - 1123 - 12040	6 A B 11.0 28 Area A B Fir 66 Loss 328 270 31:	Gain 5 43	11 A B 12.0 71 Area A B Fir 132 Loss Gain 21 427 111 531	B 10.0 Area A B Fir Loss G 72	B 10.0 Area A B Fir		B 10.0 Area A B Fir	Gain	B 10.0 Area A B Fir		B 0.0 Area A B Fir	Gain
Appliances Loads	3 1 = .25 percent 5 Total HL fr. Total HG per 8 R-Values Loss 1	3266 10% or per room room x 1.3	Gain 2 828 0 1305 5 132 7 2265	16 A B 10.0 341 Area 5 A B Fir 160 Loss 58 1330 102 488	Gain 1714 666 7 3 3	19 A B 1.0 1.0 Area A B Fir 2009 Loss G 45 1032 24 488 140 669	11.0 64 275 ain 1330 28 12 66 90 235	A B Area A B B Fir Loss Gain 642 : 1123 - 1123 - 12040 11:	6 A B 11.0 28 Area A B Fir 66 Loss 318 328 329 3318	Gain 5 43	11 A B 12.0 71 Area A B Fir 132 Loss Gain 21 427 111 531	B 10.0 Area A B Fir	B 10.0 Area A B Fir		B 10.0 Area A B Fir	Gain	B 10.0 Area A B Fir		B 0.0 Area A B Fir	Gain
Appliances Loads Duct and Pipe loss	1 = .25 percent Total HL f. Total HG per R-Values Loss 3.55 22.9 1.99 40.9 1.703 40.7 1.703 4.7 1.704 4.7 1.705	3266 10% 1415: 1415: 100 1415: 1	Gain 2 828 0 1305 5 132 7 2265	16 A B 10.0 341 Area 5 A B Fir 160 Loss 58 1330 102 488	Gain 1714 666 7 3 3	19 A B B 1.0 108 Area A B Fir 209 Loss G 45 1032 24 488 140 669 2189	11.0 64 275 ain 1330 28 12 66 90 235	A B Area A B B Fir Loss Gain 1123 - 1123 - 12040	6 A B 11.0 28 Area A B Fir 66 Loss 328 270 31:	Gain 5 43	11 A B 12.0 71 Area A B Fir 132 Loss Gain 21 427 111 531	B 10.0 Area A B Fir Loss G 72	B 10.0 Area A B Fir		B 10.0 Area A B Fir	Gain	B 10.0 Area A B Fir		B 0.0 Area A B Fir	Gain
Appliances Loads Duct and Pipe loads Duct and Pipe loads Level HL Total 14,153 Level HG Total 2,876 Run ft. exposed wall A Run ft. exposed wall A Run ft. exposed wall A Exposed Ceilings A Exposed Ceilings A Exposed Ceilings A Exposed Floors Gross Exp Wall A Gross Exp Wall A Gross Exp Wall A Existing Windows South Existing Windows Skyligh Doors Net exposed ceilings A Exposed Floors Foundation Conductive Heatloss total Conductive Heat Loss Heat Loss Heat Loss Heat Loss Heat Loss Heat Loss Gase Case	1 = .25 percent Total HL fr. Total HG per R-Values Loss 1 3.55 22.9 3.55 22.9 3.55 22.9 4.0.1 4.00 20.3 17.03 40.1 5 4.00 20.3 17.03 40.1 6 2.9.8 5 2.9.8 6 2.9.8 7 2.0.8 7 2.0.8 7 2.0.8 7 2.0.8 7 2.0.8 7 2.0.8 7 2.0.8	3266 10% or per room room x 1.3	Gain 2 828 0 1305 5 132 7 2265	16 A B 10.0 341 Area 5 A B Fir 160 Loss 58 1330 102 488	Gain 1714 666 7 3 3	19 A B 1.0 1.0 Area A B Fir 2009 Loss G 45 1032 24 488 140 669	11.0 64 275 ain 1330 28 12 66 90 235	A B Area A B B Fir Loss Gain 642 : 1123 - 1123 - 12040 11:	6 A B 11.0 28 Area A B Fir 66 Loss 318 328 329 3318	Gain 5 43	11 A B 12.0 71 Area A B Fir 132 Loss Gain 21 427 111 531	B 10.0 Area A B Fir Loss G 72	B 10.0 Area A B Fir		B 10.0 Area A B Fir	Gain	B 10.0 Area A B Fir		B 0.0 Area A B Fir	Gain
Appliances Loads	1 = .25 percent Total HL f. Total HG per Total HG per Reference to the service of the servic	3266 10% 1415; 10% 10% 1415; 141	Gain 2 828 0 1305 5 132 7 2265 5 58	16 A B 10.0 341 Area 5 A B Fir 160 Loss 58 1330 102 488 579	Gain 1714 666 7 3 1783 46	19 A B B 1.0 108 Area A B Fir 209 Loss G 45 1032 24 488 140 669 694	11.0 64 275 ain 1330 28 12 66 90 235	A B B Area A B B Fir Loss Gain 1123 - 1123 - 1244 124 124 125 126 126 126 126 126 126 126 126 126 126	6 A B 11.0 28 Area A B Fir 66 Loss 152 66 31:	Gain 5 43 6 43 7 1	11 A B 12.0 71 Area A B Fir 132 Loss Gain 21 427 111 531 958 1 304	B 10.0 Area A B Fir Loss G 72	B 10.0 Area A B Fir		B 10.0 Area A B Fir	Gain	B 10.0 Area A B Fir		B 0.0 Area A B Fir	Gain
Appliances Loads Duct and Pipe loads Duct and Pipe loads Level HL Total 14,153 Level HG Total 2,876 Run ft. exposed wall A Run ft. exposed wall A Run ft. exposed wall A Exposed Ceilings A Exposed Ceilings A Exposed Ceilings A Exposed Floors Gross Exp Wall A Gross Exp Wall A Gross Exp Wall A Existing Windows South Existing Windows Skyligh Doors Net exposed ceilings A Exposed Floors Foundation Conductive Heatloss total Conductive Heat Loss Heat Loss Heat Loss Heat Loss Heat Loss Heat Loss Gase Case	1 = .25 percent 1 = .25 pe	3266 10% 1415; 10% 10% 1415; 141	Gain 2 828 0 1305 5 132 7 2265 5 58	16 A B 10.0 341 Area 5 A B Fir 160 Loss 58 1330 102 488	Gain 1714 666 7 3 1783 46	19 A B 1.0 1.0 Area A B Fir 2009 Loss G 45 1032 24 488 140 669	11.0 64 275 ain 1330 28 12 66 90 235	A B B Area A B B Fir Loss Gain 1123 - 1123 - 1244 124 124 125 126 126 126 126 126 126 126 126 126 126	6 A B 11.0 28 Area A B Fir 66 Loss 318 328 329 3318	Gain 5 43 6 43 7 1	11 A B 12.0 71 Area A B Fir 132 Loss Gain 21 427 111 531	B 10.0 Area A B Fir Loss G 72	B 10.0 Area A B Fir		B 10.0 Area A B Fir	Gain	B 10.0 Area A B Fir		B 0.0 Area A B Fir	Gain
Appliances Loads Duct and Pipe loss	1 = .25 percent Total HL f. Total HG per Total HG per Reference in the service in the servic	3266 10% 1415: 1676 10% 1415: 1676	Gain 2 828 0 1305 5 132 7 2265 5 58 3 154	16 A B 10.0 341 Area 5 A B Fir 160 Loss 58 1330 102 488 579	Gain 1714 666 7 3 1783 46	19 A B B 1.0 108 Area A B Fir 209 Loss G 45 1032 24 488 140 669 694	11.0 64 275 ain 1330 28 12 66 90 235	A B Area A B B Fir Loss Gain 642 1123 1123 12040 11:06	6 A B 11.0 28 Area A B Fir 66 Loss 152 66 31:	Gain 5 43 6 43 7 1	11 A B 12.0 71 Area A B Fir 132 Loss Gain 21 427 111 531 958 1 304	B 10.0 Area A B Fir Loss G 72	B 10.0 Area A B Fir		B 10.0 Area A B Fir	Gain	B 10.0 Area A B Fir		B 0.0 Area A B Fir	Gain
Appliances Loads	1 = .25 percent 1 = .25 pe	3266 10% 1415: 1415: 10% 1415: 1	Gain 2 828 0 1305 5 132 7 2265 5 58 3 154 2042	16 A B 10.0 341 Area 5 A B Fir 160 Loss 58 1330 102 488 5 7 1824 579 95	Gain 1714 3 666 3 3 46 1783 46 122	19 A B B 1.0 1.0 108 Area A B Fir 209 Loss G 45 1032 24 488 140 669 694 114	11.0 64 275 ain 1330 28 12 66 90 235	A B Area A B B Fir Loss Gain 1123 - 1123 - 1106 1106	6 A B 11.0 28 Area A B Fir 66 Loss 152 66 31: 328 329 321 321 332 332 332 332 331 332 331	Gain 5 43 6 43 7 1	11 A B 12.0 71 Area A B Fir 132 Loss Gain 21 427 111 531 958 1 304	B 10.0 Area A B Fir Loss G 72	B 10.0 Area A B Fir		B 10.0 Area A B Fir	Gain	B 10.0 Area A B Fir		B 0.0 Area A B Fir	Gain
Appliances Loads Duct and Pipe loss	1 = .25 percent 1 = .25 pe	3266 10% 1415: 1415: 10% 1415: 1	Gain 2 828 0 1305 5 132 7 2265 5 58 3 154 2042	16 A B 10.0 341 Area 5 A B Fir 160 Loss 58 1330 102 488 57 1824 578	Gain 1714 3 666 3 3 46 1783 46 122	19 A B 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	11.0 64 275 ain 1330 28 12 66 90 235	A B Area A B B Fir Loss Gain 642 : : : : : : : : : : : : : : : : : : :	6 A B 11.0 28 Area A B Fir 66 Loss 328 3270 31: 329 321 321 332 321 332	Gain 5 43 6 43 7 1	11 A B 12.0 71 Area A B Fir 132 Loss Gain 21 427 111 531 958 1 304	B 10.0 Area A B Fir Loss G 72	B 10.0 Area A B Fir		B 10.0 Area A B Fir	Gain	B 10.0 Area A B Fir		B 0.0 Area A B Fir	Gain

Total Heat Loss 39,406 btu/h Division C subsection 3.2.5. of the Building Code. Individual BCIN: 329

pory as an "other designer" und

David DaCosta

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: E	Bayview Wellingtor	1	Date:		January 17,	2024				Weather Data	Bradford	44		22	48.2			
2012 OBC	Project:	Green Valley		Model:		TH-8C WC	ОВ		Syste	m 1	Heat Loss ^T	81.4 deg. F	Ht gain ^T	11 deg.	F			Project # Layout #	PJ-00204 JB-09302
Level 3			MAST		BED 4	ВАТН		BED 3	BED		ENS								
Run ft. exposed wall A		28		15 A		12 A		22 A	10 A	2	7 A	Α	Α		Α		Α	А	
Run ft. exposed wall B			В	В		В	_	В	В		В	В	В		В		В	В	
Ceiling height		8.0		8.0		8.0	8.	.0	10.0		8.0	8.0	8.0	8.0	0	8.0	.0	8.0	
Floor area			Area	125 Ar		89 Area		30 Area	178 Area		86 Area	Area	Area		Area		Area		rea
Exposed Ceilings A		362		125 A		89 A	13	80 A	178 A		86 A	A	A		A		A	A	
Exposed Ceilings B Exposed Floors			B Flr	B FI		B Flr	,	B 24 Flr	B 129 Flr		B Fir	B Flr	B Flr		B Flr		B Flr	B F	
Gross Exp Wall A		224		120		96	17		100		56								•
Gross Exp Wall B				.20		•		•											
	R-Values Loss		Loss Ga	in Lo	oss Gain	Loss		Loss G			Loss Gain	Loss Gain	Loss	Gain	Loss (Gain	Loss	Gain L	oss Gain
North Shaded	3.55 22.9							11 252	128 28 64	325									
East/West South	3.55 22.9 3.55 22.9			650 22 495	504 650	22 504	650 2	22 504	650		13 298 293								
Existing Windows	1.99 40.9		304	495							13 296 293								
Skylight	2.03 40.1																		
Doors	4.00 20.3																		
Net exposed walls A	17.03 4.7		860	116 98	468 63	354	48 14	13 684	92 72 34	47	43 206 28								
Net exposed walls B	8.50 9.5 59.22 1.3		498	232 125	172 80	89 122	57 13	30 179	83 178 24	114	86 118 55								
Exposed Ceilings A Exposed Ceilings B	27.65 2.9		498	232 125	1/2 80	89 122	5/ 13	30 179	83 1/8 24	114	86 118 55								
Exposed Ceilings B Exposed Floors	29.80 2.7						2	24 66	4 129 35	2 22									
Foundation Conductive Heatloss																			
Total Conductive Heat Loss			2367		1145	980		1684	158		622								
Heat Gain Air Leakage Heat Loss/Gain	0.259	2 0.0258	613	1494	297 20		755 19	437	958 25 41	508	161 10								
Case 1	0.259		013	39	297 20	234	19	437	25 41	13	161 10								
Ventilation Case 2	17.5																		
Case 3	x 0.0		123	102	59 54	51	51	87	65 8	2 35	32 26								
Case 3	X U.U	5 0.07																	
Heat Gain People		239 2		478 1	239)		1	239 1	239									
Heat Gain People Appliances Loads	1 =.25 percent	239 2 3266		478 1	239			1											
Heat Gain People Appliances Loads Duct and Pipe loss	1 =.25 percent	239 2 3266 10%	3103					2208	1 19	75	815								
Heat Gain People Appliances Loads Duct and Pipe loss Level HL Total 11,188 Level HG Total 8,596	1 =.25 percent	239 2 3266 10% or per room	3103		1501	1285	1074	2208		75	815 534								
Heat Gain People Appliances Loads Duct and Pipe loss Level HL Total 11,188 Level HG Total 8,596 Level 4 Run ft. exposed wall A Run ft. exposed wall B Ceiling height Floor area Exposed Ceilings A Exposed Ceilings A	1 =.25 percent Total HL fo	239 2 3266 10% or per room room x 1.3	A B Area A B	2746 A B Ar A B	1501 1440	A B Area A B		A B Area A B	1 199 2279 A B Area A B B	75	A B Area A B	A B Area A B Fir	A B Area A B		A B Area A B		A B Area A B	A B	rea
Heat Gain People Appliances Loads Duct and Pipe loss Level HL Total 11,188 Level HG Total 8,596 Level HG Total 8,596 Run ft. exposed wall B Ceiling height Floor area Exposed Ceilings A Exposed Ceilings B Exposed Ceilings B Exposed Floors Gross Exp Wall A	1 =.25 percent Total HL fo	239 2 3266 10% or per room room x 1.3	A B Area A	2746 A B Ar A	1501 1440	A B Area A		A B Area A	1 199 2279 A B Area A	75	A B Area A	B Area A	B Area A		B Area A B		B Area A	B A A	rea
Heat Gain People Appliances Loads Duct and Pipe loss Level HL Total 11,188 Level HG Total 8,596 Level 4 Run ft. exposed wall A Run ft. exposed wall B Ceiling height Floor area Exposed Ceilings A Exposed Ceilings A Exposed Ceilings A Gross Exp Wall A Gross Exp Wall A	1 =.25 percent Total HL fc Total HG per	239 2 3266 10% or per room room x 1.3	A B Area A B Fir	2746 A B AI A B FI	1501 1440	A B Area A B Fir	1074	A B Area A B Fir	1 1 29 227. A B Area A B Fir	75 1130	A B Area A B Fir	B Area A B FIr	B Area A B Fir		B Area A B Fir		B Area A B Fir	B A A B F	rea Ir
Heat Gain People Appliances Loads Duct and Pipe loss Level HL Total 11,188 Level HG Total 8,596 Level HG Total 8,596 Level HG Total 11,188 Celling height Floor area Exposed Cellings A Exposed Cellings B Exposed Floors Gross Exp Wall A Gross Exp Wall B Components	1 =.25 percent Total HL fc Total HG per	239 2 3266 10% or per room room x1.3	A B Area A B	2746 A B AI A B FI	1501 1440	A B Area A B Fir		A B Area A B	1 1 29 227. A B Area A B Fir	75	A B Area A B	B Area A B	B Area A B Fir	Gain	B Area A B Fir	Gain	B Area A B	B A A B F	rea
Heat Gain People Appliances Loads Duct and Pipe loss Level HL Total 11,188 Level HG Total 8,596 Level HG Total 8,596 Level HG Total 8,596 Level HG Total 8,596 Level 4 Run ft. exposed wall A Run ft. exposed wall B Ceiling height Floor area Exposed Ceilings A Exposed Ceilings A Exposed Ceilings B Exposed Floors Gross Exp Wall A Gross Exp Wall B Components North Shaded	1 =.25 percent Total HL fr. Total HG per	239 2 3266 10% or per room room x 1.3	A B Area A B Fir	2746 A B AI A B FI	1501 1440	A B Area A B Fir	1074	A B Area A B Fir	1 1 29 227. A B Area A B Fir	75 1130	A B Area A B Fir	B Area A B FIr	B Area A B Fir	Gain	B Area A B Fir	Gain	B Area A B Fir	B A A B F	rea Ir
Heat Gain People Appliances Loads Duct and Pipe loss Level HL Total 11,188 Level HG Total 8,596 Level HG Total 8,596 Level HG Total 11,188 Celling height Floor area Exposed Cellings A Exposed Cellings B Exposed Floors Gross Exp Wall A Gross Exp Wall B Components	1 =.25 percent Total HL fc Total HG per	239 2 3266 10% or per room room x 1.3 Gain 3 11.62 3 29.56	A B Area A B Fir	2746 A B AI A B FI	1501 1440	A B Area A B Fir	1074	A B Area A B Fir	1 1 29 227. A B Area A B Fir	75 1130	A B Area A B Fir	B Area A B FIr	B Area A B Fir	Gain	B Area A B Fir	Gain	B Area A B Fir	B A A B F	rea Ir
Heat Gain People Appliances Loads Duct and Pipe loss Level HL Total 11,188 Level HG Total 8,596 Level 4 Run ft. exposed wall B Ceiling height Floor area Exposed Ceilings A Exposed Ceilings A Exposed Ceilings B Exposed Floors Gross Exp Wall A Gross Exp Wall B Components North Shaded East/West South Existing Windows	1 =.25 percent Total HL fr. Total HG per R-Values Loss 3.55 22.9 3.55 22.9 3.55 22.9 1.99 40.9	239 2 3266 10% or per room room x 1.3	A B Area A B Fir	2746 A B AI A B FI	1501 1440	A B Area A B Fir	1074	A B Area A B Fir	1 1 29 227. A B Area A B Fir	75 1130	A B Area A B Fir	B Area A B FIr	B Area A B Fir	Gain	B Area A B Fir	Gain	B Area A B Fir	B A A B F	rea Ir
Heat Gain People Appliances Loads Duct and Pipe loss Level HL Total 11,188 Level HG Total 8,596 Level HG Total 8,596 Level HG Total 11,188 Level HG Total 11,188 Level HG Total 11,188 Level HG Total 11,188 Ceiling Ae Guiling Ae Guiling Ae Exposed Ceilings Ae Exposed Ceilings Ae Exposed Ceilings Ae Exposed Ceilings Ae Gross Exp Wall Agross Exp Wall Agross Exp Wall Be Components North Shaded East/West South Existing Windows Skylight	Total HL for Total	239 2 3266 10% 0 0 0 0 0 0 0 0 0	A B Area A B Fir	2746 A B AI A B FI	1501 1440	A B Area A B Fir	1074	A B Area A B	1 1 29 227. A B Area A B Fir	75 1130	A B Area A B Fir	B Area A B FIr	B Area A B Fir	Gain	B Area A B Fir	Gain	B Area A B Fir	B A A B F	rea Ir
Heat Gain People Appliances Loads Duct and Pipe loss Level HL Total 11,188 Level HG Total 8,596 Level 4 Run ft. exposed wall A Run ft. exposed wall B Ceiling height Floor area Exposed Ceilings A Exposed Ceilings B Exposed Floors Gross Exp Wall A Gross Exp Wall A Gross Exp Wall B Components North Shaded East/West South Existing Windows Skylight	1 =.25 percent Total HL ft Total HG per R-Values Loss 3.55 22.9 3.55 22.9 1.99 40.9 2.03 40.1 4.00 20.3	239 2 3266 10% or per room room x 1.3 Gain 3 11.62 3 29.56 3 29.56 0 23.66 0 23.66 0 23.66 5 2.75	A B Area A B Fir	2746 A B AI A B FI	1501 1440	A B Area A B Fir	1074	A B Area A B	1 1 29 227	75 1130	A B Area A B Fir	B Area A B FIr	B Area A B Fir	Gain	B Area A B Fir	Gain	B Area A B Fir	B A A B F	rea Ir
Heat Gain People Appliances Loads Duct and Pipe loss Level HL Total 11,188 Level HG Total 8,596 Level 4 Run ft. exposed wall A Run ft. exposed wall B Ceiling height Floor area Exposed Ceilings A Exposed Ceilings B Exposed Floors Gross Exp Wall A Gross Exp Wall B Components North Shaded East/West South Existing Windows Skylight Doors Net exposed walls A	Total HL for Total	Cain Cain	A B Area A B Fir	2746 A B AI A B FI	1501 1440	A B Area A B Fir	1074	A B Area A B	1 1 29 227	75 1130	A B Area A B Fir	B Area A B FIr	B Area A B Fir	Gain	B Area A B Fir	Gain	B Area A B Fir	B A A B F	rea Ir
Heat Gain People Appliances Loads Duct and Pipe loss Level HL Total 11,188 Level HG Total 8,596 Level 4 Run ft. exposed wall A Run ft. exposed wall B Ceiling height Floor area Exposed Ceilings A Exposed Ceilings B Exposed Floors Gross Exp Wall A Gross Exp Wall A Gross Exp Wall B Components North Shaded East/West South Existing Windows Skylight	Total HL fr Total HL fr Total HG per R-Values Loss 3.55 22.9 3.55 22.9 3.55 22.9 40.9 40.9 2.03 40.1 4.00 20.3 17.03 4.7	239 2 3266 10% 07 per room 1.3 11.62 3 29.56 3 22.50 0 23.66 0 88.23 5 2.75 8 1.29 1.29	A B Area A B Fir	2746 A B AI A B FI	1501 1440	A B Area A B Fir	1074	A B Area A B	1 1 29 227	75 1130	A B Area A B Fir	B Area A B FIr	B Area A B Fir	Gain	B Area A B Fir	Gain	B Area A B Fir	B A A B F	rea Ir
Heat Gain People Appliances Loads Duct and Pipe loss Level HL Total 11,188 Level HG Total 8,596 Level 4 Run ft. exposed wall A Run ft. exposed wall B Cellings height Floor area Exposed Cellings B Exposed Cellings B Exposed Floors Gross Exp Wall B Components North Shaded East/West South Existing Windows Skylight Doors Net exposed walls B Net exposed walls B Exposed Cellings A	Total HL fr. Total HL fr. Total HG per R-Values Loss 3.55 22.9 3.55 22.9 3.55 22.9 40.1 4.00 20.3 17.03 4.7 8.50 9.5. 59.22 1.3 27.65 2.9	Gain 3 11.62 3 29.56 3 22.50 0 23.66 0 88.23 5 8 1.29 7 7 0.64 4 1.37	A B Area A B Fir	2746 A B AI A B FI	1501 1440	A B Area A B Fir	1074	A B Area A B	1 1 29 227	75 1130	A B Area A B Fir	B Area A B FIr	B Area A B Fir	Gain	B Area A B Fir	Gain	B Area A B Fir	B A A B F	rea Ir
Heat Gain People Appliances Loads Duct and Pipe loss Level HL Total 11,188 Level HG Total 8,596 Run ft. exposed wall A Run ft. exposed wall A Run ft. exposed wall A Gross Exp Wall B Components North Shaded East/West South Existing Windows Skylight Doors Net exposed walls A Net exposed walls A Net exposed walls B Exposed Ceilings A Exposed Ceilings A Exposed Ceilings A Exposed Ceilings B Exposed Ceilings B Exposed Flors	1 =.25 percent Total HL fr Total HG per R-Values Loss 3.55 22.9 3.55 22.9 1.99 40.9 2.03 40.1 4.00 20.3 17.03 4.7 8.50 9.5 59.22 1.3	Gain 3 11.62 3 29.56 3 22.50 0 23.66 0 88.23 5 8 1.29 7 7 0.64 4 1.37	A B Area A B Fir	2746 A B AI A B FI	1501 1440	A B Area A B Fir	1074	A B Area A B	1 1 29 227	75 1130	A B Area A B Fir	B Area A B FIr	B Area A B Fir	Gain	B Area A B Fir	Gain	B Area A B Fir	B A A B F	rea Ir
Heat Gain People Appliances Loads Duct and Pipe loss Level HL Total 11,188 Level HG Total 8,596 Run ft. exposed wall A Run ft. exposed wall A Run ft. exposed wall A Gross Exp Wall B Components North Shaded East/West South Existing Windows Skylight Doors Net exposed walls A Net exposed walls B Exposed Ceilings A Exposed Ceilings B Exposed Ceilings B Exposed Ceilings B Exposed Floors Foundation Conductive Heatloss	Total HL fr. Total HL fr. Total HG per R-Values Loss 3.55 22.9 3.55 22.9 3.55 22.9 40.1 4.00 20.3 17.03 4.7 8.50 9.5. 59.22 1.3 27.65 2.9	Gain 3 11.62 3 29.56 3 22.50 0 23.66 0 88.23 5 8 1.29 7 7 0.64 4 1.37	A B Area A B Fir	2746 A B AI A B FI	1501 1440	A B Area A B Fir	1074	A B Area A B	1 1 29 227	75 1130	A B Area A B Fir	B Area A B FIr	B Area A B Fir	Gain	B Area A B Fir	Gain	B Area A B Fir	B A A B F	rea Ir
Heat Gain People Appliances Loads Duct and Pipe loss Level HL Total 11,188 Level HG Total 8,596 Level 4 Run ft. exposed wall A Run ft. exposed wall A Good Cellings A Exposed Cellings A Cellings A Gross Exp Wall A Gross Exp Wall A Gross Exp Wall B Components North Shaded East/West South Existing Windows Skylight Doors Net exposed walls A Net exposed walls A Net exposed walls B Exposed Cellings A Exposed Floors Foundation Conductive Heat Loss Total Conductive	Total HL fr. Total HL fr. Total HG per R-Values Loss 3.55 22.9 3.55 22.9 3.55 22.9 40.1 4.00 20.3 17.03 4.7 8.50 9.5. 59.22 1.3 27.65 2.9	Gain 3 11.62 3 29.56 3 22.50 0 23.66 0 88.23 5 8 1.29 7 7 0.64 4 1.37	A B Area A B Fir	2746 A B AI A B FI	1501 1440	A B Area A B Fir	1074	A B Area A B	1 1 29 227	75 1130	A B Area A B Fir	B Area A B FIr	B Area A B Fir	Gain	B Area A B Fir	Gain	B Area A B Fir	B A A B F	rea Ir
Heat Gain People Appliances Loads Duct and Pipe loss Level HL Total 11,188 Level HG Total 8,596 Run ft. exposed wall A Run ft. exposed wall A Run ft. exposed wall B Ceiling height Floor area Exposed Ceilings A Exposed Ceilings B Exposed Floors Gross Exp Wall A Gross Exp Wall A Gross Exp Wall B Components North Shaded East/West South Existing Windows Skylight Doors Net exposed walls A Net exposed walls B Exposed Ceilings A Exposed Ceilings A Exposed Ceilings B Exposed Ceilings B Exposed Floors Foundation Conductive Heatloss	Total HL fr. Total HL fr. Total HG per R-Values Loss 3.55 22.9 3.55 22.9 3.55 22.9 40.1 4.00 20.3 17.03 4.7 8.50 9.5. 59.22 1.3 27.65 2.9	Gain Gain	A B Area A B Fir	2746 A B AI A B FI	1501 1440	A B Area A B Fir	1074	A B Area A B	1 1 29 227	75 1130	A B Area A B Fir	B Area A B FIr	B Area A B Fir	Gain	B Area A B Fir	Gain	B Area A B Fir	B A A B F	rea Ir
Heat Gain People	1 =.25 percent Total HL fc Total HG per R-Values Loss 3.55 22.9 3.55 22.9 3.55 22.9 4.01 4.00 20.3 17.03 4.7 8.50 9.5 59.22 1.3 27.65 2.9 29.80 2.7	Gain Gain	A B Area A B Fir	2746 A B AI A B FI	1501 1440	A B Area A B Fir	1074	A B Area A B	1 1 29 227	75 1130	A B Area A B Fir	B Area A B Fir	B Area A B Fir	Gain	B Area A B Fir	Gain	B Area A B Fir	B A A B F	rea Ir
Heat Gain People Appliances Loads Duct and Pipe loss Level HL Total 11,188 Level HG Total 8,596 Level HG Total 8,596 Run ft. exposed wall A Run ft. exposed wall B Ceiling height Floor area Exposed Ceilings A Exposed Ceilings A Exposed Ceilings B Exposed Floors Gross Exp Wall A Gross Exp Wall A Gross Exp Wall B Components North Shaded East/West South Existing Windows Skylight Doors Net exposed walls A Net exposed walls B Exposed Ceilings A Exposed Ceilings A Exposed Ceilings A Exposed Ceilings A Exposed Ceilings B Exposed Ceilings B Exposed Ceilings B Exposed Floors Foundation Conductive Heatloss Total Conductive Heat Casn Air Leakage Heat Loss/Gain Case 1 Ventilation Case 2	R-Values Loss 3.55 22.9 3.55 22.9 3.55 22.9 1.99 40.9 2.03 40.1 4.00 20.3 17.03 4.7 8.50 9.5 59.22 1.3 27.65 2.9 29.80 2.7	Gain Gain	A B Area A B Fir	2746 A B AI A B FI	1501 1440	A B Area A B Fir	1074	A B Area A B	1 1 29 227	75 1130	A B Area A B Fir	B Area A B Fir	B Area A B Fir	Gain	B Area A B Fir	Gain	B Area A B Fir	B A A B F	rea Ir
Heat Gain People Appliances Loads Duct and Pipe loss Level HL Total 11,188 Level HG Total 8,596 Level HG Total 8,596 Run ft. exposed wall A Run ft. exposed wall B Ceiling height Floor area Exposed Ceilings A Exposed Ceilings A Exposed Ceilings A Exposed Floors Gross Exp Wall A Gross Exp Wall A Gross Exp Wall B Components North Shaded East/West South Existing Windows Skylight Doors Net exposed walls B Exposed Ceilings A Net exposed walls B Exposed Ceilings A Net exposed Ceilings A Exposed Ceilings A Net exposed Ceilings B Exposed Ceilings B Exposed Floors Foundation Conductive Heat Loss Heat Gain Air Leakage Heat Loss/Gain Ventilation Case 1 Case 2 Ventilation Case 2	1 =.25 percent Total HL fc Total HG per R-Values Loss 3.55 22.9 3.55 22.9 3.55 22.9 4.01 4.00 20.3 17.03 4.7 8.50 9.5 59.22 1.3 27.65 2.9 29.80 2.7	Gain Gain	A B Area A B Fir	2746 A B AI A B FI	1501 1440	A B Area A B Fir	1074	A B Area A B	1 1 29 227. A B Area A B Fir	75 1130	A B Area A B Fir	B Area A B Fir	B Area A B Fir	Gain	B Area A B Fir	Gain	B Area A B Fir	B A A B F	rea Ir
Heat Gain People Appliances Loads Duct and Pipe loss Level HL Total 11,188 Level HG Total 8,596 Level HG Total 8,596 Level HG Total 8,596 Level HG Total 8,596 Level HG Total 8,596 Level HG Total 8,596 Level HG Total 8,596 Level HG Total 8,596 Ceiling height Floor area Exposed Ceilings A Exposed Ceilings B Exposed Floors Gross Exp Wall A Gross Exp Wall B Components North Shaded EastWest South Existing Windows Skylight Doors Net exposed walls S A Net exposed walls B Exposed Ceilings B Exposed Ceilings B Exposed Floors Foundation Conductive Heatloss Total Conductive Heatloss Total Conductive Heat Loss Gain Air Leakage Heat Loss/Gain Case 2 Ventilation Case 3 Heat Gain People	Total HL fc Total HG per R-Values Loss 3.55 22.9 3.55 22.9 3.55 22.9 1.99 40.9 4.00 20.3 17.03 4.7 8.50 9.5 59.22 1.3 27.65 2.9 29.80 2.7 0.000 0.00 17.5 x 0.0	Gain Gain	A B Area A B Fir	2746 A B AI A B FI	1501 1440	A B Area A B Fir	1074	A B Area A B	1 1 29 227. A B Area A B Fir	75 1130	A B Area A B Fir	B Area A B Fir	B Area A B Fir	Gain	B Area A B Fir	Gain	B Area A B Fir	B A A B F	rea Ir
Heat Gain People Appliances Loads Duct and Pipe loss Level HL Total 11,188 Level HG Total 8,596 Level HG Total 8,596 Level HG Total 8,596 Run ft. exposed wall A Run ft. exposed wall B Ceiling height Floor area Exposed Ceilings A Exposed Ceilings A Exposed Ceilings B Exposed Floors Gross Exp Wall A Gross Exp Wall A Gross Exp Wall B Components North Shaded East/West South Existing Windows Skylight Doors Net exposed walls A Net exposed walls A Sexposed Ceilings A Exposed Ceilings B Exposed Floors Foundation Conductive Heatloss Total Conductive Heatloss Heat Gain Air Leakage Heat Loss/Gain Case 1 Ventilation Case 2 Case 3 Heat Gain People Appliances Loads	R-Values Loss 3.55 22.9 3.55 22.9 3.55 22.9 1.99 40.9 2.03 40.1 4.00 20.3 17.03 4.7 8.50 9.5 59.22 1.3 27.65 2.9 29.80 2.7	Gain Gain	A B Area A B Fir	2746 A B AI A B FI	1501 1440	A B Area A B Fir	1074	A B Area A B	1 1 29 227. A B Area A B Fir	75 1130	A B Area A B Fir	B Area A B Fir	B Area A B Fir	Gain	B Area A B Fir	Gain	B Area A B Fir	B A A B F	rea Ir
Heat Gain People Appliances Loads Duct and Pipe loss Level HL Total 11,188 Level HG Total 8,596 Level HG Total 9,596 Level HG Tota	Total HL fc Total HG per Total HG per Total HG per Total HG per Total HG per Total HG per Total HG per Total HG per Total HG per Total HG per Total HG per Total HC fc Total HC fc Total HC fc Total HL fc	Gain Gain	A B Area A B Fir	2746 A B AI A B FI	1501 1440	A B Area A B Fir	1074	A B Area A B	1 1 29 227. A B Area A B Fir	75 1130	A B Area A B Fir	B Area A B Fir	B Area A B Fir	Gain	B Area A B Fir	Gain	B Area A B Fir	B A A B F	rea Ir
Heat Gain People Appliances Loads Duct and Pipe loss Level HL Total 11,188 Level HG Total 8,596 Level 4 Run ft. exposed wall A Run ft. exposed wall A Goiling height Floor area Exposed Ceilings A Exposed Ceilings B Exposed Ceilings B Exposed Floors Gross Exp Wall A Gross Exp Wall A Gross Exp Wall B Components North Shaded East/West South Existing Windows Skylight Doors Net exposed walls A Net exposed walls B Exposed Ceilings A Exposed Ceilings	Total HL fr Total HL fr Total HG per R-Values Loss 3.55 22.9 3.55 22.9 3.55 22.9 3.55 22.9 3.55 22.9 3.55 22.9 3.55 22.9 3.55 22.9 3.55 22.9 3.55 22.9 3.55 22.9 3.55 22.9 3.55 22.9 3.55 22.9 3.55 22.9 3.57	Gain Gain	A B Area A B Fir	2746 A B AI A B FI	1501 1440	A B Area A B Fir	1074	A B Area A B	1 1 29 227. A B Area A B Fir	75 1130	A B Area A B Fir	B Area A B Fir	B Area A B Fir	Gain	B Area A B Fir	Gain	B Area A B Fir	B A A B F	rea Ir

ategory as an "other designer u

David DaCosta

Package A1



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

Project # Layout #

David DaCosta

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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 Mane Attet

Package: Project:	Package A1 Bradford	Model:		TH-8C WOB		
1 10,000.			DECICAL CLU			
	RESIDENTIAL MECHANICAL For systems serving one dwelling unit & co					
	Tor systems serving one arrowing arms a co	onlonning to the ontano	Bullaring Codo, C.ro.	y 332/12		
	Location of Installation	Т	Total Ventilation Ca	apacity 9.32.3.3	(1)	
Lot #	Plan #	Bsmt & Master				cfm
Township	Bradford	Other Bedroom Bathrooms & K	itchen 4	@ 10.6 cfm	42.4	cfm
Roll #	Permit #	Other rooms	3	@ 10.6 cfm Total	31.8 148.4	cfm
Address]				
		Pri	ncipal Ventilation	Capacity 9.32.3	.4(1)	
Name	Builder	Master bedroor	m 1	@ 21.9 ofm	21.0	ofm
Name	Bayview Wellington	Other bedroom				
Address	20,			Total	79.5	C
City			Principal Exhaus	et Fan Canacity		
Tel	Fax	Make		lodel	Location	
		VanE	E V150	DE75NS	Base	
	Installing Contractor]			_	
Name		127 cf	m		Sones	or Equiv.
Address			Heat Recover	v Ventilator		
		Make	1	/anEE		
City		Model		0E75NS		
Tel	Fax	Sensible efficie	127 cfm high ency @ -25 deg C	1	60%	cfm low
		Sensible efficie	ncy @ 0 deg C		75%	<u>.</u>
			r to balance HRV/EI			VC
a) x	Combustion Appliances 9.32.3.1(1) Direct vent (sealed combustion) only		Supplemental Ven	itilation Capacit	ty	
b) X	Positive venting induced draft (except fireplaces)	Total ventilation	n capacity		148.4	
c)	Natural draft, B-vent or induced draft fireplaces		exhaust capacity		79.5	
d)	Solid fuel (including fireplaces)	REQUIRED su	pplemental vent. Ca	apacity	68.9	cfm
e)	No combustion Appliances					
			Supplemental I	Fans 9.32.3.5.		
	Heating System	Location	cfm	Model	Sone	
х	Forced air	Ens	50	XB50	0.3	
	Non forced air Electric space heat (if over 10% of heat load)	Bath	50	XB50	0.3	
	Electric space fleat (ii over 10% of fleat load)]				
	House Type 9.32.3.1(2)	1				
l x	Type a) or b) appliances only, no solid fuel	all fans HVI list	ed Make	Broan	or Equiv.	
II	Type I except with solid fuel (including fireplace)				·	
III	Any type c) appliance	11. 1 22	Designer Ce			
Other	Type I or II either electric space heat Type I, II or IV no forced air		that this ventilation with the Ontario Bui		n designed	
Other	Type I, II of IV no forced alf	in accordance v	with the Ontario Bul	iuirig Code.		

Other Type I, II or IV no forced air	in accordance with the Ontario Building Code.	
System Design Option	Name David DaCosta	
1 Exhaust only / forced air system 2 HRV WITH DUCTING / forced air system	Signature Mans Ablant	
3 x HRV simplified connection to forced air system 4 HRV full ducting/not coupled to forced air system	HRAI # 5190 BÇIN # 32964	
Part 6 design	Date January 17, 2024	



Energy Efficiency Design Summary: Prescriptive Method

(Building Code Part 9, Residential)

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Project # PJ-00204 Layout # JB-09302

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

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/Cer	tification Num	nber				
A. Project Information											
Building number, street name							Unit numb	per	Lot/Con		
		•	гн-8C v	VOB							
Municipality Bradford			Postal cod	de	Reg. Plan	number / oth	er descripti	on			
Bradiord	Bradioid										
B. Prescriptive Compliance [indica	Prescriptive Compliance [indicate the building code compliance package]						he house	design]			
SB-12 Prescriptive (input design pa	SB-12 Prescriptive (input design package): Pack							Table:	3.1.1.2./	<u>A</u>	
C. Project Design Conditions											
Climatic Zone (SB-1):		Heat. E	quip. Ef	ficiency			Spac	e Heating Fu	iel Source	е	
✓ Zone 1 (< 5000 degree days)		√ ≥ 92	% AFUE		✓	Gas		Propane		Solid Fuel	
Zone 2 (≥ 5000 degree days)		_ ≥ 8	4% < 92%	6 AFUE		Oil		Electric		Earth Energy	
Ratio of Windows, Skylights & Glas	s (W, S 8	& G) to V	Vall Area	a			Other E	Building Cha	racteristi	cs	
A ()	412				☐ Log/l	Post&Beam		ICF Above	Grade	☐ ICF Basement	
Area of Walls = 328.49 m ² or 3535.9	ft²	W,S &	G % =	12.7%	☐ Slab	-on-ground	~	Walkout Ba	sement		
					☑ Air C	onditioning		Combo Unit	t		
Area of W, S & G = <u>41.805</u> m ² or <u>450.0</u>	ft²	Utilize V	Vindow	☐ Yes	☐ Air Sourced Heat Pump (ASHP)						
		Avera	ging	☑ No	☐ Grou	nd Source H	eat Pump	(GSHP)			
D. Building Specifications [provide	values an	nd ratings	of the en	ergy effici	ency comp	onents prop	osed]				
Energy Efficiency Substitutions											
☐ ICF (3.1.1.2.(5) & (6) / 3.1.1.3.(5))											
☐ Combined space heating and domestic	water hea	ating syst	ems (3.1.	1.2(7) / 3.	1.1.3.(7))						
☐ Airtightness substitution(s)		Table 3.1	.1.4.B	Required:				Permitted S	Substitution	:	
Airtightness test required		Table 3.1	140	Required:				Permitted S	Substitution	:	
(Refer to Design Guide Attached)		Table 5.1		Required:				Permitted S	Substitution	:	
Building Component			I/R-Valu U-Valu			Build	ding Con	ponent		Efficiency Ratings	
Thermal Insulation	Nom	inal	Effe	ctive	Windov	s & Door	S Provide	U-Value ⁽¹⁾ or	ER rating		
Ceiling with Attic Space	60)	59	.22	Windows	S/Sliding Gl	ass Door	3		1.6	
Ceiling without Attic Space	31		27	.65	Skylights	1				2.8	
Exposed Floor	31		29	.80	Mechan	icals					
Walls Above Grade	22		17	.03	Heating	Equip.(AFU	E)			96%	
Basement Walls	2	20.0ci	20	.84	HRV Effi	ciency (SRE	E% at 0°C)		75%	
Slab (all >600mm below grade)	X X				DHW He	ater (EF)				0.80	
Slab (edge only ≤600mm below grade)	e only ≤600mm below grade) 10 11.13					DWHR (CSA B55.1 (min. 42% efficiency)) #Shower					
Slab (all ≤600mm below grade, or heated)	o (all ≤600mm below grade, or heated) 10 11.13						System				
1) U value to be provided in either W/(m²·K) or Btu/(h·ft·F) but not both.											
E. Designer(s) [name(s) & BCIN(s), if applicable, of person(s) providing information						ein to substa	intiate that	design meets	building co	ode]	
BCIN BCIN						Signature		. 1	1 1	,	
David DaCosta	David DaCosta 32							Mane	14C=	₹ 7	

Form authorized by OHBA, OBOA, LMCBO. Revised December 1, 2016.





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

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Project # PJ-00204 Layout # JB-09302

System: Package: Package A1 System 1

Pro	ject:	ct: Bradford						lodel:			TH-8C			
					Air	Leaka	ge Ca	alculati	ons					
			Building A	ir Leakage	Heat Loss					Building	Air Leakag	ge Heat Gai	in	
		B 0.018	LRairh 0.324	Vb 22894	HL^T 81.4	HLleak 10861			B 0.018	LRairh 0.079	Vb 22894	HG^T 11	HG Leak 358	
											Le	vels		
		Air Leal	kage Heat	Loss/Gain	Multiplier T	able (Sectio	n 11)			1	2	3	4	
	Level	Level Factor (LF)	Building Air		nductive (HLclevel)		kage He Multiplie			(LF)	(LF)	(LF)	(LF)	
	Level 1 Level 2	0.5		82	92 275		0.6549 0.3171			1.0	0.6 0.4	0.5 0.3	0.4 0.3	
	Level 3 Level 4	0.2	10861	83	81 0		0.2592 0.0000					0.2	0.2 0.1	
						Air Lea	ıkage He	at Gain			Levels th	is Dwelling		
	BUILI	HG LE		T GAIN	358 13863		0.0258					3		
		Highest Ceil	ing Height		21.5	FT	6.55	M					ř	
_					Ve	entilatio	n Ca	Iculatio	ons					_
			Ventilati	ion Heat Los						Ventila	ation Heat G	ain		
ınt			Vontilation	Heat Loss]			/entilation I	Jost Gain		1	int
Vent	С	PVC	HL^T	(1-E) HRV	HLI	ovent		С	PVC	HG^T	HGI	bvent	<u></u>	Vent
	1.08	79.5	81.4	0.20	1;	398]	1.	1 79.5	11	9)44		
			Cas								Case 1			
		Ventilati	on Heat Los	is (Exnaust o	nly Systems)				venti	ation Heat G	ain (Exnaus	t Only Syste	ms)	-
1				chaust Only					ase 1 - Exh		Mult	tiplier		7
Case	Level 1	0.5	HLbvent	82	ond. HL 192	Multiplier 0.08			HGbvent Building	944 13863	0	.07		Case
	Level 2 Level 3	0.3	1398	83	275 81	0.04 0.03								
	Level 4	0		ļ	0	0.00]							
		Vonsilesi	Cas		ted Systems)				Vontil	ation Hoot C	Case 2	Sustand Sustan		_
9 2		ventilatio	on neat Los			1			ventii	ation Heat G		-	ms)	9 2
Case	C HL^T (1-E) HRV 1.08 81.4 0.20 17.58							C 1.08	HG^T		tiplier 1.88		Case	
	Case 3									Case 3				
3	Ventilation Heat Loss (Forced Air Systems)								Vent	tilation Heat	Gain (Force	d Air System	s)	3
Case 3			HLb	vent	Mult	tiplier					Vent H	eat Gain	Multiplier	
Ca	Total Ver	tilation Load	13	98	0	.05		-	HGbvent 944	HG*1.3	9)44	0.07	Case

·	-					-
Foundation Conductive Heatloss Level 1	Level 1	1654	Watts	5645	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 Watts 308 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 Shiel	ding
Building Site:	Suburban, forest
Walls:	Heavy ▼
Flue:	Heavy ▼
Highest Ceiling Height (m):	6.55
Building Confi	guration
Туре:	Semi-Detached
Number of Stories:	Two
Foundation:	Shallow
House Volume (m ³):	648.36
Air Leakage/Ve	entilation
Air Tightness Type:	Present (1961-) (ACH=3.57)
Custom DDT Data	ELA @ 10 Pa. 322.44 cm ²
Custom BDT Data:	3.57 ACH @ 50 Pa
Mechanical Ventilation (L/s):	Total Supply: Total Exhaust:
	39.75
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



Residential Foundation Thermal Load Calculator

Supplemental tool for CAN/CSA-F280

Weather Station Description				
Province:		Ontario		
Region:		Bradford ▼		
	Site D	escription		
Soil Conductivity:		High conductivity: moist soil ▼		
Water Table:		Normal (7-10 m, 23-33 Ft) ▼		
Foundation Dimensions				
Floor Length (m):	17.64			
Floor Width (m):	4.16			
Exposed Perimeter (m):	26.21			
Wall Height (m):	2.59			
Depth Below Grade (m):	0.91	Insulation Configuration		
Window Area (m²):	0.56			
Door Area (m²):	1.95			
	Radi	ant Slab		
Heated Fraction of the Slab:	0			
Fluid Temperature (°C):	33			
	Desig	n Months		
Heating Month	1			
	Founda	ation Loads		
Heating Load (Watts):		1654		

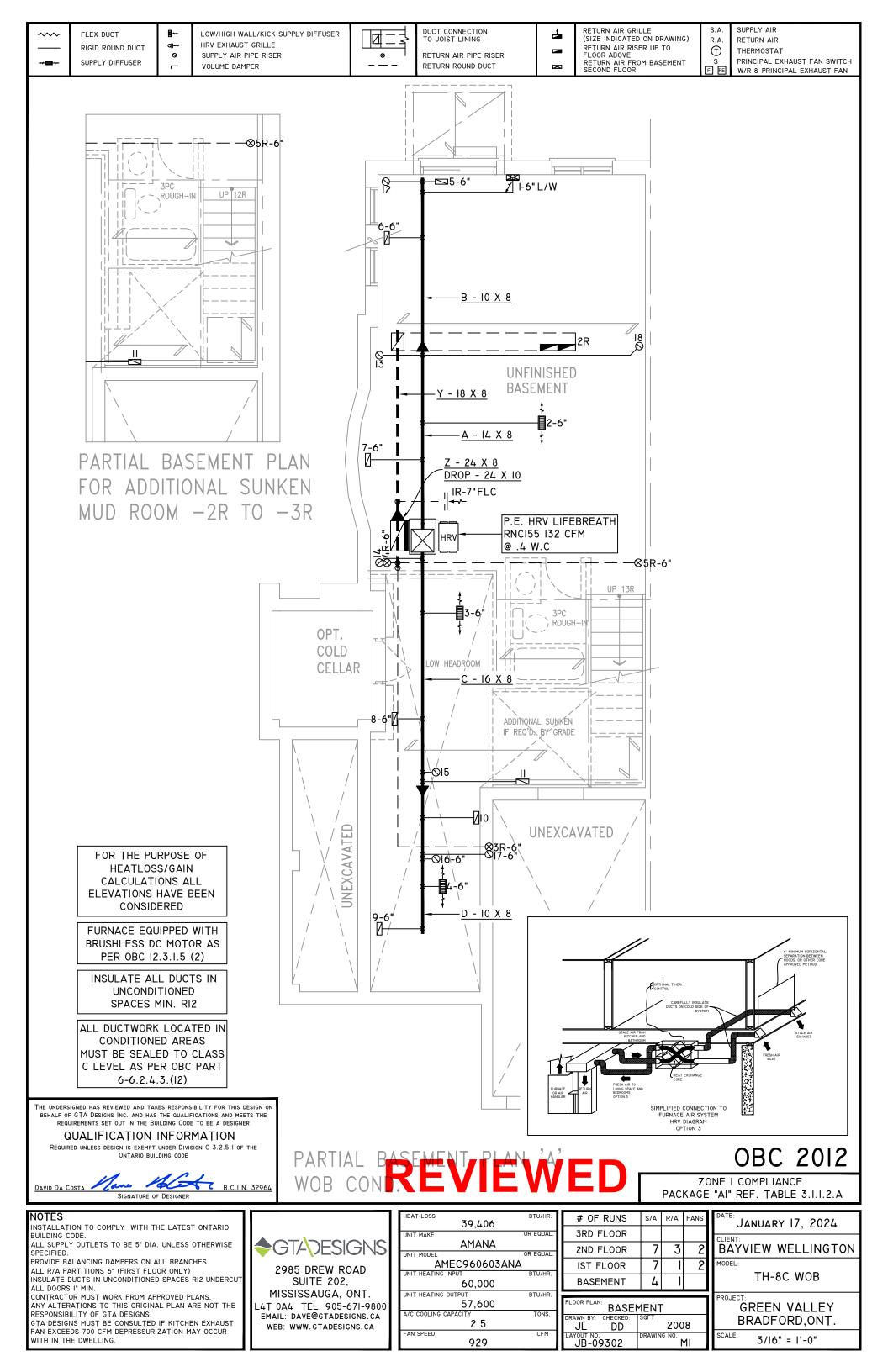


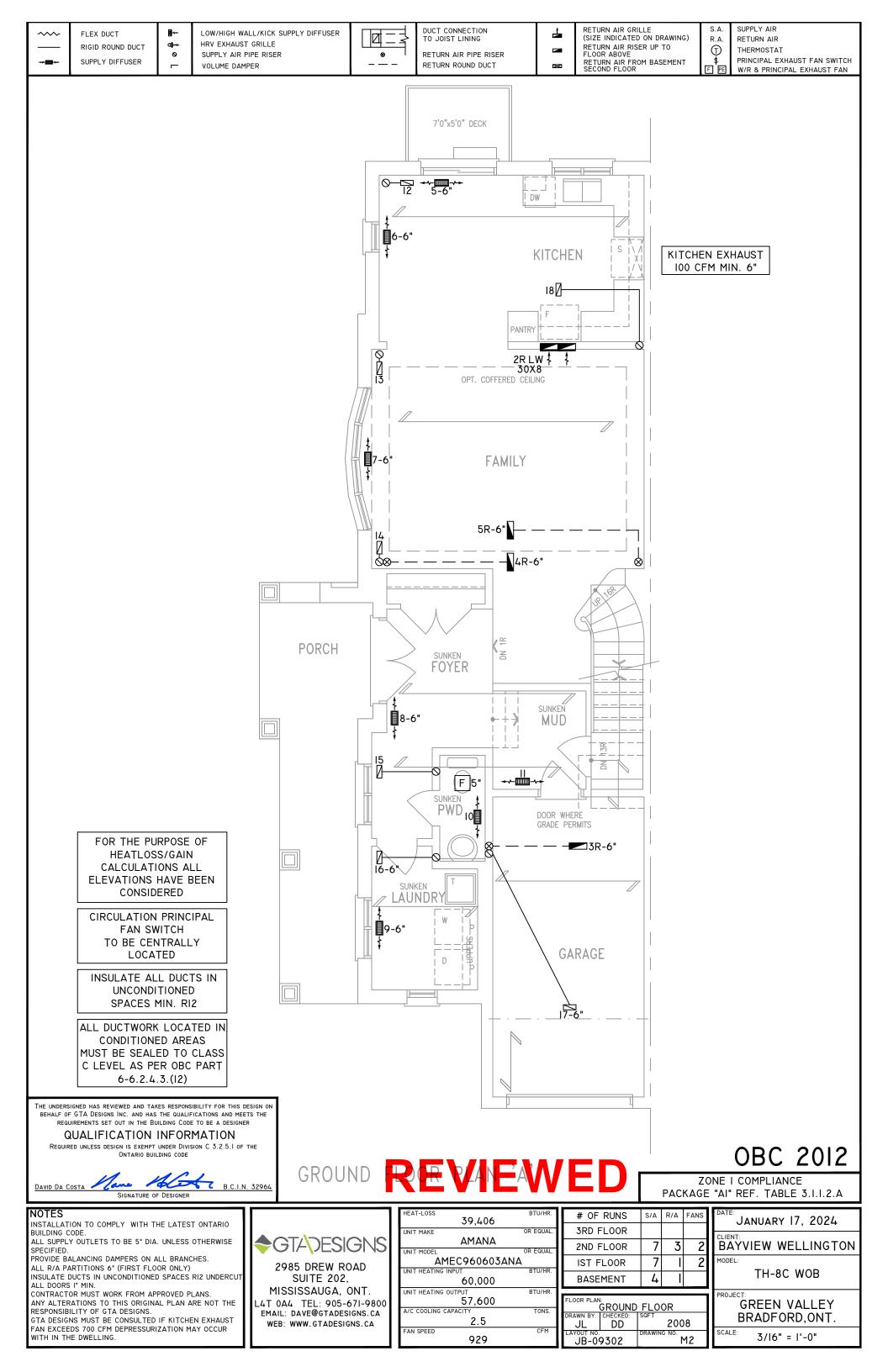
Residential Slab on Grade Thermal Load Calculator

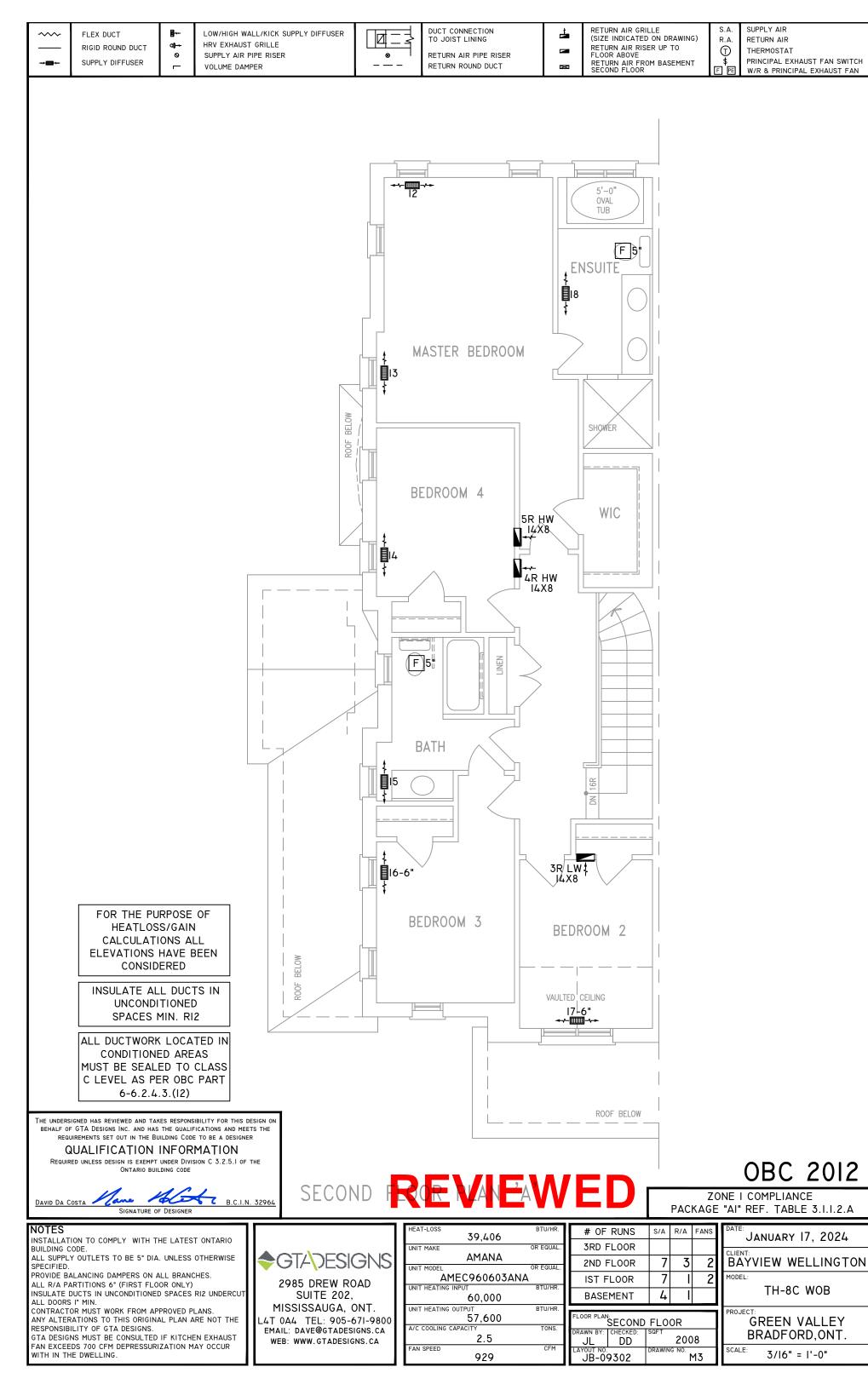
Supplemental tool for CAN/CSA-F280

Weather Station Description					
Province:		Ontario $lacksquare$			
Region:		Bradford ▼			
Site Description					
Soil Conductivity:		High conductivity: moist soil ▼			
Water Table:		Normal (7-10 m, 23-33 Ft)			
Floor Dimensions					
Length (m):	5.33				
Width (m):	0.61	3			
Exposed Perimeter (m):	6.10	Insulation Configuration			
	Radiant Slab				
Heated Fraction of the Slab:	0				
Fluid Temperature (°C):	33				
Design Months					
Heating Month	1				
Foundation Loads					
Heating Load (Watts):		90			















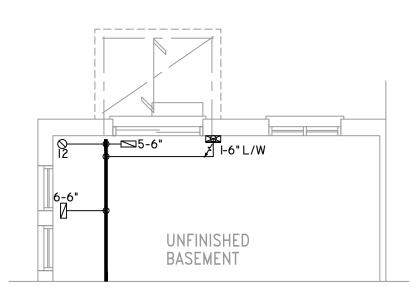
DUCT CONNECTION TO JOIST LINING

RETURN AIR PIPE RISER RETURN ROUND DUCT

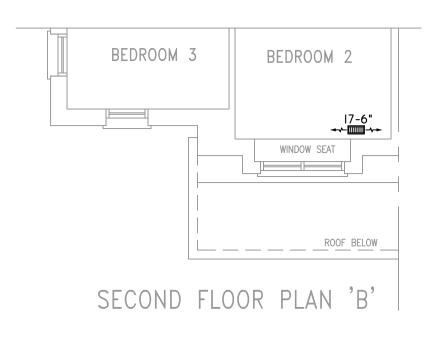
RETURN AIR GRILLE (SIZE INDICATED ON DRAWING) 4 RETURN AIR RISER UP TO FLOOR ABOVE RETURN AIR FROM BASEMENT SECOND FLOOR \boxtimes

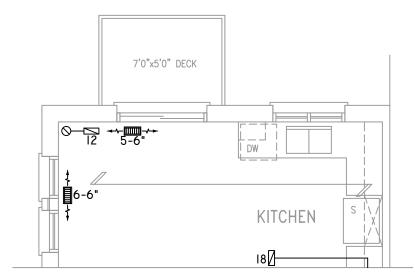
R.A 1

SUPPLY AIR RETURN AIR THERMOSTAT PRINCIPAL EXHAUST FAN SWITCH W/R & PRINCIPAL EXHAUST FAN

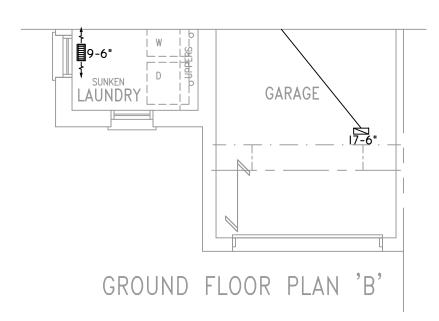


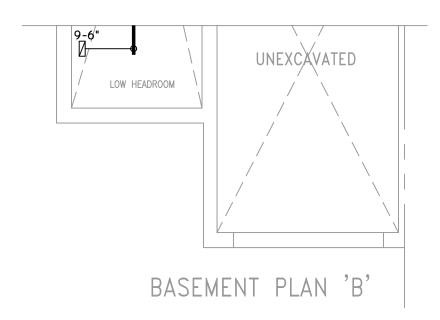
PARTIAL BASEMENT PLAN 'B' WOD COND 9R AND MORE





PARTIAL GROUND FLOOR PLAN WOD COND 9R AND MORE





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

REVIEWED

OBC 2012

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

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 RI2 UNDERCUT

ALL DOORS I" 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

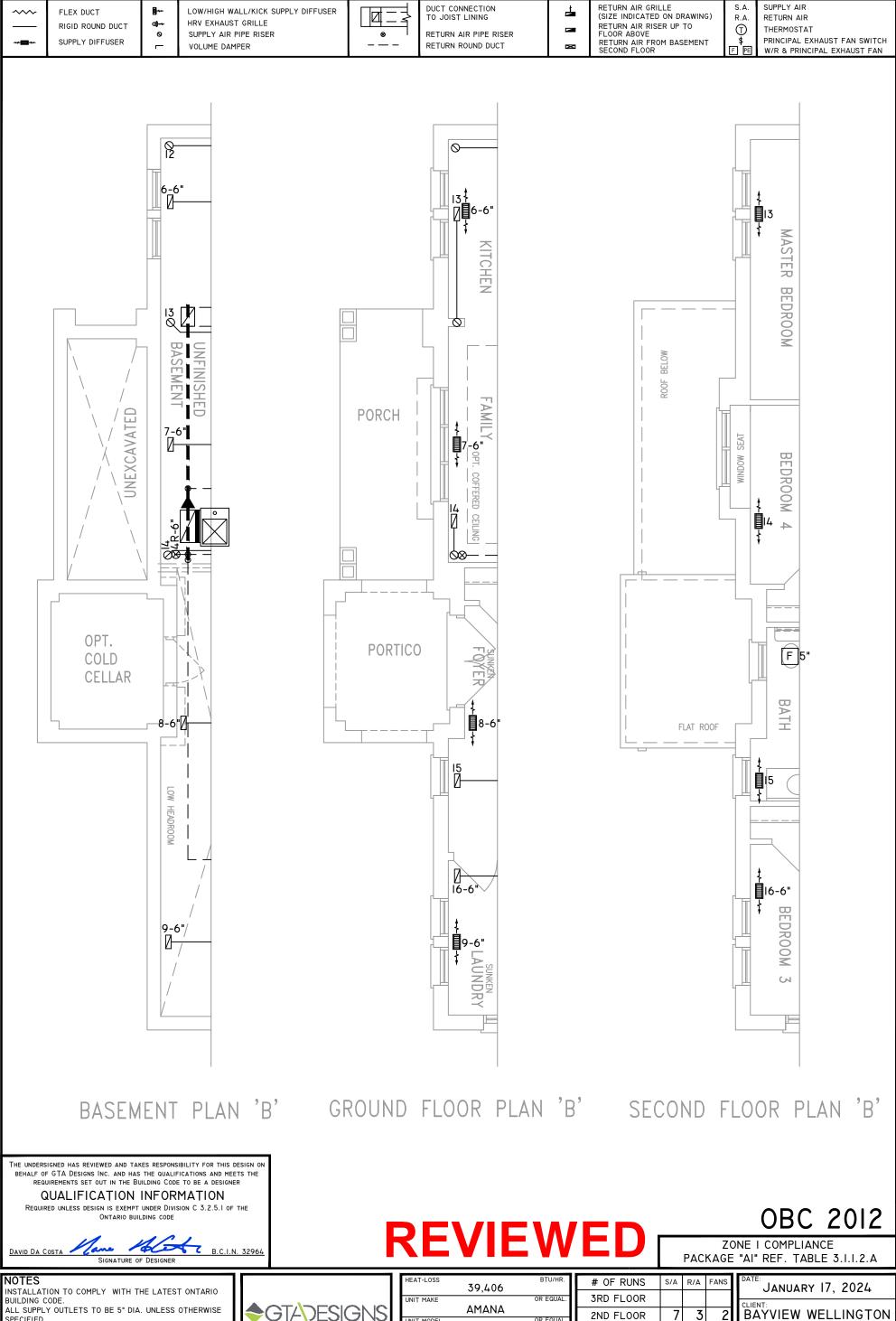
WEB: WWW.GTADESIGNS.CA

39,406	
UNIT MAKE	OR EQUAL.
AMANA	
UNIT MODEL	OR EQUAL.
AMEC960603ANA	
UNIT HEATING INPUT	BTU/HR.
60,000	
UNIT HEATING OUTPUT	BTU/HR.
57,600	
A/C COOLING CAPACITY	TONS.
2.5	
FAN SPEED	CFM
929	

DΔ	FANS	R/A	S/A	RUNS	# OF
CL				FLOOR	3RD F
Ë	2	3	7	FLOOR	2ND F
MO	2	I	7	LOOR	IST F
		I	4	MENT	BASE
PR	18	FLOOR PLAN: PARTIAL PLAN(S) DRAWN BY: CHECKED: SQFT JI DD 2008			
sc	DRAWING NO. M4				JL LAYOUT NO. JB-09

JANUARY 17, 2024 BAYVIEW WELLINGTON ODEL: TH-8C WOB

ROJECT GREEN VALLEY BRADFORD, ONT. 3/16" = 1'-0"



SPECIFIED.

PROVIDE BALANCING DAMPERS ON ALL BRANCHES. ALL R/A PARTITIONS 6" (FIRST FLOOR ONLY)

FLEX DUCT

LOW/HIGH WALL/KICK SUPPLY DIFFUSER

INSULATE DUCTS IN UNCONDITIONED SPACES RI2 UNDERCUT ALL DOORS I" 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

AMEC960603ANA BTU/HF 60,000 57,600 TONS 2.5 FAN SPEED CFM 929

# OF RUNS	S/A	R/A	FANS	C
3RD FLOOR				
2ND FLOOR	7	3	2	
IST FLOOR	7	I	2	١
BASEMENT	4	- 1		
				F
FLOOR PLAN:			1	
PARTIAL PLAN(S)				
DDAWN DV. CHECKED.				

DD

JB-09302

2008

M5

DATE:
January 17, 2024
CLIENT:
BAYVIEW WELLINGTON
MODEL:
TH-8C WOB
• • • • • • • • • • • • • • • • • • • •
PROJECT:

SUPPLY AIR

4

GREEN VALLEY BRADFORD, ONT. 3/16" = 1'-0"