

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

A. Project Information					
Building number, street name Barossa 8				Lot: _____	
S38-8C Elev. C Alt. 2nd FLR				Lot/con. _____	
Municipality Bradford		Postal code	Plan number/ other description		
B. Individual who reviews and takes responsibility for design activities					
Name David DaCosta			Firm gtaDesigns Inc.		
Street address 2985 Drew Road, Suite 202			Unit no.	Lot/con.	
Municipality Mississauga		Postal code L4T 0A4	Province Ontario	E-mail dave@gtadesigns.ca	
Telephone number (905) 671-9800		Fax number (647) 494-9643	Cell number (416) 268-6820		
C. Design activities undertaken by individual identified in Section B. [Building Code Table 3.5.2.1 of Division C]					
☐ House		☒ HVAC – House		☐ Building Structural	
☐ Small Buildings		☐ Building Services		☐ Plumbing – House	
☐ Large Buildings		☐ Detection, Lighting and Power		☐ Plumbing – All Buildings	
☐ Complex Buildings		☐ Fire Protection		☐ On-site Sewage Systems	
Description of designer's work			Model Certification		Project #:
					PJ-00204
					Layout #:
					JB-04553
Heating and Cooling Load Calculations		Main		Builder	Bayview Wellington
Air System Design		Alternate x		Project	Green Valley East
Residential mechanical ventilation Design Summary		Area Sq ft: 3180		Model	Barossa 8
Residential System Design per CAN/CSA-F280-12					S38-8C Elev. C Alt. 2nd FLR
Residential New Construction - Forced Air				SB-12	Package A1
D. Declaration of Designer					
I, <u>David DaCosta</u> declare that (choose one as appropriate): (print name) ☐ 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. Individual BCIN: _____ Firm BCIN: _____ ☒ I review and take responsibility for the design and am qualified in the appropriate category as an "other designer" under subsection 3.2.5 of Division C, of the Building Code. Individual BCIN: <u>32964</u> Basis for exemption from registration: <u>Division C 3.2.4.1. (4)</u> ☐ The design work is exempt from the registration and qualification requirements of the Building Code. Basis for exemption from registration and qualification:					
I certify that: - The information contained in this schedule is true to the best of my knowledge. - I have submitted this application with the knowledge and consent of the firm.					
<u>March 13, 2018</u> Date			 Signature of Designer		

NOTE:

- For the purposes of this form, "individual" means the "person" referred to in Clause 3.2.4.7(1) d), of Division C, Article 3.2.5.1. of Division C and all other persons who are exempt from qualifications under Subsections 3.2.4 . and 3.2.5. of Division C.
- Schedule 1 does not require to be completed a holder of a license, temporary license, or a certificate of authorization, issued by the Ontario Association of Architects. Schedule 1 is also not required to be completed by a holder of a license to practise, a limited licence to practise, or a certificate of authorization, issued by the Association of Professional Engineers of Ontario.

Heat loss and gain calculation summary sheet				CSA-F280-M12 Standard Form No. 1	
These documents issued for the use of Bayview Wellington				Layout No.	
and may not be used by any other persons without authorization. Documents for permit and/or construction are signed in red.				JB-04553	
Building Location					
Address (Model): S38-8C Elev. C Alt. 2nd FLR			Site: Green Valley East		
Model: Barossa 8			Lot:		
City and Province: Bradford			Postal code:		
Calculations based on					
Dimensional information based on:			VA3 Design Jan/2018		
Attachment: Detached			Front facing: East/West		Assumed? Yes
No. of Levels: 3 Ventilated? Included			Air tightness: 1961-Present (ACH=3.57)		Assumed? Yes
Weather location: Bradford			Wind exposure: Sheltered		
HRV? LifeBreath RNC155			Internal shading: Light-translucent		Occupants: 6
Sensible Eff. at -25C 71%		Apparent Effect. at -0C 84%		Units: Imperial Area Sq ft: 3180	
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: Existing Walls (When Applicable) R 12			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: Existing Windows (When Applicable) R 1.99			Skylights		
Style C:			Style A: As per Selected OBC SB12 Package A1 R 2.03		
Style D:			Style B:		
Attached documents: As per Shedule 1		Heat Loss/Gain Caculations based on CSA-F280-12 Effective R-Values			
Notes: Residential New Construction - Forced Air					
Calculations performed by					
Name: David DaCosta			Postal code: L4T 0A4		
Company: gtaDesigns Inc.			Telephone: (905) 671-9800		
Address: 2985 Drew Road, Suite 202			Fax: (416) 268-6820		
City: Mississauga			E-mail dave@gtadesigns.ca		

Builder: **Bayview Wellington**

Date: **March 13, 2018**

Project: **Green Valley East**

Model: **S38-8C Elev. C Alt. 2nd FLR**

System 1

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

Individual BCIN: 32964

David DaCosta

David DaCosta

Project # **PJ-00204**
Layout # **JB-04553**

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DESIGN LOAD SPECIFICATIONS		AIR DISTRIBUTION & PRESSURE		FURNACE/AIR HANDLER DATA:		BOILER/WATER HEATER DATA:		A/C UNIT DATA:	
Level 1 Net Load	17,322 btu/h	Equipment External Static Pressure	0.5 "w.c.	Make	Amana	Make	Type	Amana	3.0 Ton
Level 2 Net Load	21,594 btu/h	Additional Equipment Pressure Drop	0.225 "w.c.	Model	AMEC960803BNA	Model		Cond.-----	3.0
Level 3 Net Load	20,137 btu/h	Available Design Pressure	0.275 "w.c.	Input Btu/h	80000	Input Btu/h		Coil -----	3.0
Level 4 Net Load	0 btu/h	Return Branch Longest Effective Length	300 ft	Output Btu/h	76800	Output Btu/h			
Total Heat Loss	59,053 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	33,925 btu/h	S/A Plenum Pressure	0.14 "w.c.	Water Temp	deg. F.	Blower DATA:			
Combo System HL + 10%	64,958 Btu/h	Heating Air Flow Proportioning Factor	0.0198 cfm/btuh	AFUE	96%	Blower Speed Selected:	W2	Blower Type	ECM
Building Volume Vb	37357 ft³	Cooling Air Flow Proportioning Factor	0.0345 cfm/btuh	Aux. Heat				(Brushless DC OBC 12.3.1.5.(2))	
Ventilation Load	1,342 Btu/h.	R/A Temp	70 deg. F.	SB-12 Package	Package A1	Heating Check	1172 cfm	Cooling Check	1172 cfm
Ventilation PVC	95.4 cfm	S/A Temp	131 deg. F.						
Supply Branch and Grill Sizing		Diffuser loss	0.01 "w.c.	Temp. Rise>>>	61 deg. F.	Selected cfm>	1172 cfm	Cooling Air Flow Rate	1172 cfm

	Level 1														Level 2										
S/A Outlet No.	1	2	3	4										5	6	7	8	9	10	11	12	13	14	15	
Room Use	BASE	BASE	BASE	BASE										GRT	GRT	KIT	KIT	LAUN	LIV	LIV	PWD	FOY	DIN	DIN	
Btu/Outlet	4330	4330	4330	4330										1987	1987	2313	2313	3015	2477	2477	848	1960	1108	1108	
Heating Airflow Rate CFM	86	86	86	86										39	39	46	46	60	49	49	17	39	22	22	
Cooling Airflow Rate CFM	8	8	8	8										85	85	82	82	79	56	56	4	27	54	54	
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	
Actual Duct Length	36	32	29	57										37	39	36	35	53	61	66	49	40	34	31	
Equivalent Length	120	100	110	140	70	70	70	70	70	70	70	70	70	130	130	110	110	120	140	120	120	140	75	70	
Total Effective Length	156	132	139	197	70	70	70	70	70	70	70	70	70	167	169	146	145	173	201	186	169	160	174	106	
Adjusted Pressure	0.08	0.10	0.09	0.07	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.08	0.08	0.09	0.09	0.08	0.06	0.07	0.08	0.08	0.07	0.12	
Duct Size Round	6	6	6	6										6	6	6	6	6	6	6	3	5	5	5	
Outlet Size	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	3x10	3x10	3x10	3x10	
Trunk	G	F	B	D										G	G	F	F	B	D	D	C	B	B	E	

	Level 3													Level 4										
S/A Outlet No.	16	17	18	19	20	21	22	23	24	25	26	27												
Room Use	MAST	BED 2	BATH	BED 3	BED 3	WIC	BED 4	BED 4	BED 5	WIC 2	ENS	BATH 2												
Btu/Outlet	2845	1108	892	1917	1917	911	2412	2412	1805	1206	1097	1615												
Heating Airflow Rate CFM	56	22	18	38	38	18	48	48	36	24	22	32												
Cooling Airflow Rate CFM	81	29	10	37	37	15	65	65	60	18	31	28												
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
Actual Duct Length	51	60	62	73	71	73	84	76	63	47	66	65												
Equivalent Length	110	180	190	190	170	160	160	150	160	140	150	180	70	70	70	70	70	70	70	70	70	70	70	70
Total Effective Length	161	240	252	263	241	233	244	226	223	187	216	245	70	70	70	70	70	70	70	70	70	70	70	70
Adjusted Pressure	0.08	0.05	0.05	0.05	0.05	0.06	0.05	0.06	0.06	0.07	0.06	0.05	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19
Duct Size Round	6	4	4	5	5	4	6	6	6	4	4	5												
Outlet Size	4x10	3x10	3x10	3x10	3x10	3x10	4x10	4x10	4x10	3x10	3x10	3x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10
Trunk	F	B	C	C	C	C	D	C	B	G	G	C												

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	170	490	155	155	101	101					
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	7	28	41	42	55	75					
Equivalent Length	115	125	155	195	185	175	50	50	50	50	50
Total Effective Length	122	153	196	237	240	250	50	50	50	50	50
Adjusted Pressure	0.10	0.08	0.06	0.05	0.05	0.05	0.24	0.24	0.24	0.24	0.24
Duct Size Round	7.0	11.5	8.0	8.0	6.0	6.0					
Inlet Size	FLC	8	8	8	8	8					
" "	x	x	x	x	x	x	x	x	x	x	x
Inlet Size		30	14	14	14	14					
Trunk	Z	Z	Z	Z	Y	Y					

Return Trunk Duct Sizing	Trunk	CFM	Press.	Round	Rect. Size
Drop		1172	0.05	17.0	24x12
Z		1172	0.05	17.0	26x10 22x12
Y		202	0.05	9.0	8x8 10x7
X					
W					
V					
U					
T					
S					
R					
Q					

Supply Trunk Duct Sizing	Trunk	CFM	Press.	Round	Rect. Size
A		1172	0.05	17.0	26x10 22x12
B		705	0.05	14.0	22x8 18x10
C		441	0.05	12.0	16x8 12x10
D		232	0.05	9.5	10x8
E		467	0.06	11.5	14x8 12x10
F		234	0.08	8.5	8x8
G		211	0.06	9.0	8x8 10x7
H					
I					
J					
K					

2012 OBC

Builder: Bayview Wellington

Date: March 13, 2018

Project: Green Valley East

Model: Barossa 8 S38-8C Elev. C Alt. 2nd FLR

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: 3180

Project # PJ-00204
Layout # JB-04553

Level 1

Run ft. exposed wall A	182 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	3.8 AG	3.8 AG	3.8 AG	3.8 AG	3.8 AG	3.8 AG	3.8 AG	3.8 AG	3.8 AG	3.8 AG	3.8 AG	3.8 AG	3.8 AG
Floor area	1305 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	688												
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	3	69	33											
East/West	3.55	22.93	27.35	3	69	82											
South	3.55	22.93	20.89	6	138	125											
WOB Windows	3.15	25.84	28.32														
Skylight	2.03	40.10	88.23														
Doors	4.00	20.35	2.75	21	427	58											
Net exposed walls A	21.12	3.85	0.52	655		341											
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 ()			7597													
Total Conductive	Heat Loss			8299													
	Heat Gain				639												
Air Leakage	Heat Loss/Gain	1.0535	0.0335	8743	21												
Ventilation	Case 1	0.08	0.06														
	Case 2	14.07	11.88														
	Case 3	x	0.03	280	41												
	Heat Gain People																
Appliances Loads	1 = .25 percent		5311														
Duct and Pipe loss			10%														
Level 1 HL Total	17,322		Total HL for per room	17322													
Level 1 HG Total	912		Total HG per room x 1.3		912												

Level 2

Run ft. exposed wall A	29 A	GRT	39 A	KIT	29 A	LAUN	44 A	LIV	13 A	PWD	13 A	FOY	18 A	DIN	A	A	A	A
Run ft. exposed wall B	B		B		B		B		B		B		B		B	B	B	B
Ceiling height	10.0		10.0		12.0		10.0		10.0		11.0		10.0		10.0	10.0	10.0	10.0
Floor area	210 Area		322 Area		184 Area		183 Area		58 Area		105 Area		236 Area		Area	Area	Area	Area
Exposed Ceilings A	A		A		A		A		A		A		A		Area	Area	Area	Area
Exposed Ceilings B	B		B		B		B		B		B		B		B	B	B	B
Exposed Floors	Flr		Flr		Flr		Flr		Flr		Flr		Flr		Flr	Flr	Flr	Flr
Gross Exp Wall A	290		390		348		440		130		143		180					
Gross Exp Wall B																		

Components	R-Values	Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain</
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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

Dave DaCosta

Dave DaCosta

SB-12 Package

Package A1

Total Heat Loss	59,053	btu/h
Total Heat Gain	33,925	btu/h

2012 OBC	Builder: Bayview Wellington	Date: March 13, 2018	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: 3180	Project #	PJ-00204
	Project: Green Valley East	Model: Barossa 8 S38-8C Elev. C Alt. 2nd FLR														Layout #	JB-04553

Level 3		MAST		BED 2		BATH		BED 3		WIC		BED 4		BATH 2		BED 5		WIC 2		ENS													
Run ft. exposed wall A		31 A		6 A		12 A		31 A		6 A		40 A		21 A		10 A		17 A		8 A		A											
Run ft. exposed wall B		B		B		B		B		B		B		B		B		B		B		B											
Ceiling height		9.0		8.0		8.0		9.0		9.0		9.0		8.0		9.0		8.0		8.0		8.0											
Floor area		241 Area		237 Area		77 Area		243 Area		42 Area		246 Area		87 Area		204 Area		80 Area		122 Area		Area											
Exposed Ceilings A		241 A		237 A		77 A		243 A		42 A		96 A		87 A		204 A		80 A		122 A		A											
Exposed Ceilings B		B		B		B		B		B		150 B		B		B		B		B		B											
Exposed Floors		Flr		Flr		Flr		208 Flr		73 Flr		Flr		Flr		Flr		Flr		Flr		Flr											
Gross Exp Wall A		279		48		96		279		54		360		168		90		136		64													
Gross Exp Wall B																																	
Components	R-Values	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain										
North Shaded	3.55	22.93	10.91																														
East/West	3.55	22.93	27.35	33	757	903				30	688	821	8	183	219	40	917	1094															
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	246	1176	159	30	143	19	88	421	57	249	1190	161	46	220	30	280	1338	181	148	707	96	50	239	32	125	597	81	42	201	27
Net exposed walls B	8.50	9.58	1.29																														
Exposed Ceilings A	59.22	1.37	0.64	241	331	155	237	326	152	77	106	49	243	334	156	42	58	27	96	132	62	87	120	56	204	280	131	80	110	51	122	168	78
Exposed Ceilings B	22.86	3.56	1.66																														
Exposed Floors	29.80	2.73	0.17																														
Foundation Conductive Heatloss																																	
Total Conductive	Heat Loss			2264			882		710		2780		660		3839		1286		1437		960		873										
	Heat Gain				1216		368		194		1172		288		2421		569		999		362		636										
Air Leakage	Heat Loss/Gain	0.2229	0.0335	505	41		197	12	158	6	620	39	147	10	856	81	287	19	320	33	214	12	195	21									
Ventilation	Case 1	0.02	0.06																														
	Case 2	14.07	11.88																														
	Case 3	x	0.03	76	79		30	24	24	13		94	76	22	19		129	157		43	37		48	65		32	23		29	41			
Heat Gain People			239	2	478	1		239		1		239		1					1														
Appliances Loads		1 =.25 percent	5311																														
Duct and Pipe loss			10%							1	340	141	1	81	29		4824		1615		1805		1206										
Level 3 HL Total		20,137		2845			1108		892		3834		1	81	29		4824		1615		1805		1206										
Level 3 HG Total		13,830			2358			836		276		2168			448				813														

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	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	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	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	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	B	B	B	
Exposed Floors	Flr	Flr	Flr	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	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	0.0335																				
Ventilation	Case 1	0.00	0.06																				
	Case 2	14.07	11.88																				
	Case 3	x	0.03	0.06																			
Heat Gain People			239																				
Appliances Loads	1 =.25 percent		5311																				
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																					

Total Heat Loss	59,053	btu/h
Total Heat Gain	33,925	btu/h

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

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

32964

David DaCosta

David DaCosta

SB-12 Package

Package A1

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

Individual BCIN: 32964



David DaCosta

Package: Package A1
Project: Bradford
Model: S38-8C Elev. C Alt. 2nd FLR

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)	☒	Direct vent (sealed combustion) only
b)	☐	Positive venting induced draft (except fireplaces)
c)	☐	Natural draft, B-vent or induced draft fireplaces
d)	☐	Solid fuel (including fireplaces)
e)	☐	No combustion Appliances

Heating System	
☒	Forced air
☐	Non forced air
☐	Electric space heat (if over 10% of heat load)

House Type 9.32.3.1(2)		
I	☒	Type a) or b) appliances only, no solid fuel
II	☐	Type I except with solid fuel (including fireplace)
III	☐	Any type c) appliance
IV	☐	Type I or II either electric space heat
Other	☐	Type I, II or IV no forced air

System Design Option		
1	☐	Exhaust only / forced air system
2	☐	HRV WITH DUCTING / forced air system
3	☒	HRV simplified connection to forced air system
4	☐	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	4 @ 10.6 cfm	42.4 cfm	
Bathrooms & Kitchen	5 @ 10.6 cfm	53 cfm	
Other rooms	5 @ 10.6 cfm	53 cfm	
Total		190.8	

Principal Ventilation Capacity 9.32.3.4(1)			
Master bedroom	1 @ 31.8 cfm	31.8 cfm	
Other bedrooms	4 @ 15.9 cfm	63.6 cfm	
Total		95.4	

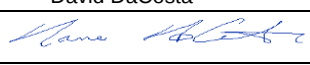
Principal Exhaust Fan Capacity			
Make	Model	Location	
LifeBreath	RNC155	Base	
132 cfm		Sones	or Equiv.

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	190.8
Less principal exhaust capacity	95.4
REQUIRED supplemental vent. Capacity	95.4 cfm

Supplemental Fans 9.32.3.5.			
Location	cfm	Model	Sones
Ens	50	XB50	0.3
Bath	50	XB50	0.3
Ens 4	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	March 13, 2018		



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)

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 Project # PJ-00204
 Layout # JB-04553

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

For use by Principal Authority

Application No:

Model/Certification Number

A. Project Information

Building number, street name Barossa 8		Unit number	Lot/Con
S38-8C Elev. C Alt. 2nd FLR			
Municipality Bradford	Postal code	Reg. Plan number / other description	

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

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

C. Project Design Conditions

Climatic Zone (SB-1):	Heat. Equip. Efficiency	Space Heating Fuel Source		
☒ Zone 1 (< 5000 degree days)	☒ ≥ 92% AFUE	☒ Gas	☐ Propane	☐ Solid Fuel
☐ Zone 2 (≥ 5000 degree days)	☐ ≥ 84% < 92% AFUE	☐ Oil	☐ Electric	☐ Earth Energy
Ratio of Windows, Skylights & Glass (W, S & G) to Wall Area		Other Building Characteristics		
Area of Walls = <u>388.6</u> m ² or <u>4182.9</u> ft ²	W,S & G % = <u>15%</u>	☐ Log/Post&Beam	☐ ICF Above Grade	☐ ICF Basement
Area of W, S & G = <u>56.483</u> m ² or <u>608.0</u> ft ²	Utilize Window ☐ Yes Averaging ☒ No	☐ Slab-on-ground	☐ Walkout Basement	☒ Air Conditioning
		☐ Air Sourced Heat Pump (ASHP)	☐ Combo Unit	
		☐ Ground Source Heat Pump (GSHP)		

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

Energy Efficiency Substitutions			
☐ ICF (3.1.1.2.(5) & (6) / 3.1.1.3.(5)) ☐ Combined space heating and domestic water heating systems (3.1.1.2(7) / 3.1.1.3.(7))			
☐ Airtightness substitution(s) Airtightness test required (Refer to Design Guide Attached)	☐ Table 3.1.1.4.B Required:		Permitted Substitution:
	☐ Table 3.1.1.4.C Required:		Permitted Substitution:
Building Component	Minimum RSI/R-Values or Maximum U-Value ¹		Efficiency Ratings
Thermal Insulation	Nominal	Effective	Windows & Doors Provide U-Value ⁽¹⁾ 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		Mechanicals
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/(m²·K) or Btu/(h·ft²·F) but not both.

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

Name David DaCosta	BCIN 32964	Signature
------------------------------	----------------------	---------------

Package: Package A1 System: System 1
Project: Bradford Model: S38-8C Elev. C Alt. 2nd FLR

Air Leakage Calculations

<table><tr><th colspan="5">Building Air Leakage Heat Loss</th></tr><tr><th>B</th><th>LRairh</th><th>Vb</th><th>HL^T</th><th>HLleak</th></tr><tr><td>0.018</td><td>0.319</td><td>37357</td><td>81.4</td><td>17486</td></tr></table>					Building Air Leakage Heat Loss					B	LRairh	Vb	HL^T	HLleak	0.018	0.319	37357	81.4	17486	<table><tr><th colspan="5">Building Air Leakage Heat Gain</th></tr><tr><th>B</th><th>LRairh</th><th>Vb</th><th>HG^T</th><th>HG Leak</th></tr><tr><td>0.018</td><td>0.079</td><td>37357</td><td>11</td><td>586</td></tr></table>					Building Air Leakage Heat Gain					B	LRairh	Vb	HG^T	HG Leak	0.018	0.079	37357	11	586
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Levels this Dwelling											
3											

Ventilation Calculations

Vent	Ventilation Heat Loss					Ventilation Heat Gain				Vent	
	Ventilation Heat Loss					Ventilation Heat Gain					
	C	PVC	HL^T	(1-E) HRV	HLbvent	C	PVC	HG^T	HGbvent		
	1.08	95.4	81.4	0.16	1342	1.1	95.4	11	1133		
Case 1						Case 1					
Case 1	Ventilation Heat Loss (Exhaust only Systems)					Ventilation Heat Gain (Exhaust Only Systems)					Case 1
	Case 1 - Exhaust Only					Case 1 - Exhaust Only		Multiplier			
	Level	LF	HLbvent	LVL Cond. HL	Multiplier	HGbvent	1133	0.06			
	Level 1	0.5	1342	8299	0.08	Building	17462				
	Level 2	0.3		15815	0.03						
	Level 3	0.2		15690	0.02						
Level 4	0	0		0.00							
Case 2						Case 2					
Case 2	Ventilation Heat Loss (Direct Ducted Systems)					Ventilation Heat Gain (Direct Ducted Systems)					Case 2
				Multiplier				Multiplier			
	C	HL^T	(1-E) HRV	14.07	C	HG^T	11.88				
	1.08	81.4	0.16		1.08	11					
Case 3						Case 3					
Case 3	Ventilation Heat Loss (Forced Air Systems)					Ventilation Heat Gain (Forced Air Systems)					Case 3
			HLbvent	Multiplier				Vent Heat Gain	Multiplier		
	Total Ventilation Load		1342	0.03		HGbvent 1133		HG*1.3 1	1133	0.06	

Foundation Conductive Heatloss Level 1

2226

Watts

7597

Btu/h

Foundation Conductive Heatloss Level 2

Watts

Btu/h

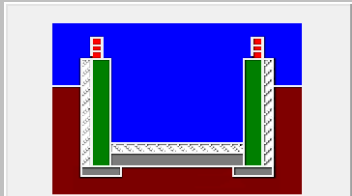
Envelope Air Leakage Calculator

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):	6.64			
Building Configuration				
Type:	Detached			
Number of Stories:	Two			
Foundation:	Full			
House Volume (m ³):	1057.95			
Air Leakage/Ventilation				
Air Tightness Type:	Present (1961-) (ACH=3.57)			
Custom BDT Data:	ELA @ 10 Pa. ▼ 322.44 cm ²			
	3.57 ACH @ 50 Pa			
Mechanical Ventilation (L/s):	Total Supply:		Total Exhaust:	
	47.7		47.7	
Flue #:	#1	#2	#3	#4
Diameter (mm):	0	0	0	0
Heating Air Leakage Rate (ACH/H):		0.319		
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 Description		
Soil Conductivity:	High conductivity: moist soil ▼	
Water Table:	Normal (7-10 m, 23-33 Ft) ▼	
Foundation Dimensions		
Floor Length (m):	22.30	 Insulation Configuration
Floor Width (m):	5.44	
Exposed Perimeter (m):	55.47	
Wall Height (m):	2.74	
Depth Below Grade (m):	1.59	
Window Area (m ²):	1.11	
Door Area (m ²):	1.95	
Radiant Slab		
Heated Fraction of the Slab:	0	
Fluid Temperature (°C):	33	
Design Months		
Heating Month	1	
Foundation Loads		
Heating Load (Watts):		2226

MECHANICAL PLAN 'C'

UNFINISHED BASEMENT

COLD CELLAR

UNEXCAVATED (REMOVE TOP SOIL ONLY)

LOW HEADROOM

P.E. HRV - LIFE BREATH RNC155 132 CFM @ .4 W.C.

HRV

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

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

INSULATE ALL DUCTS IN UNCONDITIONED SPACES MIN. R12

FOR THE PURPOSE OF HEATLOSS/GAIN CALCULATIONS ALL ELEVATIONS HAVE BEEN CONSIDERED

DUCTWORK SIZES:

- F - 8 X 8
- G - 8 X 8
- E - 4 X 8
- A - 26 X 10 OR 22 X 12
- B - 22 X 8 OR 18 X 10
- C - 16 X 8
- D - 10 X 8
- Z - 26 X 10 OR 22 X 12
- DROP - 24 X 12
- Y - 8 X 8

Other Labels:

- 16-6"
- 7-6"
- 2-6"
- 8-6"
- 5-6"
- 1-6"
- 25
- 26
- 6-6"
- 3R
- 4R
- 24-6"
- 3PC ROUGH-IN
- 5R-6"
- 13
- 14
- 15
- 12
- 23-6"
- 11-6"
- 4-6"
- 22-6"
- 10-6"
- 18
- 19
- 20
- 21
- 16R-6"
- 14R
- UP
- IR-7" FLC
- STALE AIR FROM KITCHEN AND BATHROOM
- STALE AIR EXHAUST
- FRESH AIR INLET
- FRESH AIR TO LIVING SPACE AND BEDROOMS OPTION 3
- HEAT EXCHANGE CORE
- OPTIONAL TIMER/CONTROL
- CAREFULLY INSULATE DUCTS ON COLD SIDE OF SYSTEM
- 6" MINIMUM HORIZONTAL SEPARATION BETWEEN HOODS, OR OTHER CODE APPROVED METHOD
- SIMPLIFIED CONNECTION TO FURNACE AIR SYSTEM HRV DIAGRAM OPTION 3

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 *David Da Costa* B.C.I.N. 32964

SIGNATURE OF DESIGNER

BASEMENT PLAN 'C'

OBC 2012

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

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

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	59,053	BTU/HR.
UNIT MAKE	AMANA	OR EQUAL.
UNIT MODEL	AMEC960803BNA	OR EQUAL.
UNIT HEATING INPUT	80,000	BTU/HR.
UNIT HEATING OUTPUT	76,800	BTU/HR.
A/C COOLING CAPACITY	3.0	TONS.
FAN SPEED	1172	CFM

# OF RUNS	S/A	R/A	FANS
3RD FLOOR			
2ND FLOOR	12	4	4
1ST FLOOR	11	1	2
BASEMENT	4	1	

FLOOR PLAN:		
BASEMENT		
DRAWN BY: AM	CHECKED: DD	SQFT 3180
LAYOUT NO. JB-04552		DRAWING NO. MI

DATE:	MARCH 13, 2018
CLIENT:	BAYVIEW WELLINGTON
MODEL:	S38-8C ELEV. C BAROSSA 8
PROJECT:	GREEN VALLEY EAST BRADFORD, ONT.
SCALE:	3/16" = 1'-0"

MECHANICAL FLOOR PLAN - FIRST FLOOR

ROOMS: GREAT ROOM, DINING, KITCHEN, PANTRY, SUNKEN LAUNDRY, SUNKEN FOYER, LIVING, PORTICO.

EQUIPMENT: D.V. GAS FIREPLACE, OPT. WAFFLE CEILING, OPT. COFFERED CEILING, 2R LW 30X8, DW, S, F, D, P, PWD.

DUCTWORK: 16-6", 7-6", 8-6", 24-6", 15, 3R, 4R, 5R, 13, 17, 9-6", 18, 6R-7", 21, 20, 19, 23-6", 11-6", 10-6", 22-6".

NOTES:

- KITCHEN EXHAUST 100 CFM MIN. 6"
- CIRCULATION PRINCIPAL FAN SWITCH TO BE CENTRALLY LOCATED
- ALL DUCTWORK LOCATED IN CONDITIONED AREAS MUST BE SEALED TO CLASS C LEVEL AS PER OBC PART 6-6.2.4.3.(12)
- INSULATE ALL DUCTS IN UNCONDITIONED SPACES MIN. R12
- FOR THE PURPOSE OF HEATLOSS/GAIN CALCULATIONS ALL ELEVATIONS HAVE BEEN CONSIDERED

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

OBC 2012

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

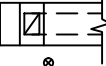
 **GTADESIGNS**

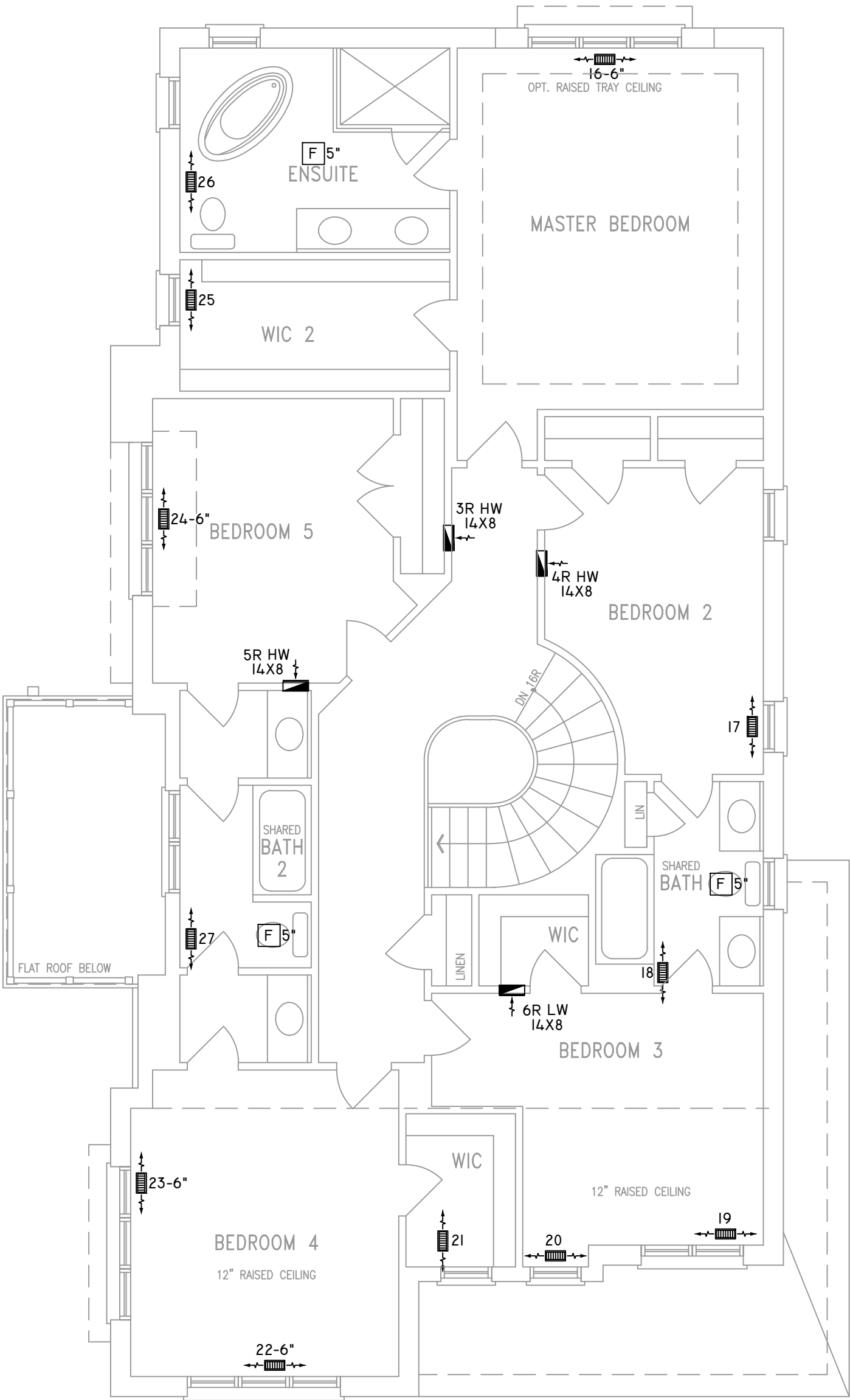
2985 DREW ROAD
SUITE 202,
MISSISSAUGA, ONT.
L4T 0A4 TEL: 905-671-9800
EMAIL: DAVE@GTADESIGNS.CA
WEB: WWW.GTADESIGNS.CA

# OF RUNS	S/A	R/A	FANS
3RD FLOOR			
2ND FLOOR	12	4	4
1ST FLOOR	11	1	2
BASEMENT	4	1	

FLOOR PLAN:		
GROUND FLOOR		
DRAWN BY: AM	CHECKED: DD	SQFT 3180
LAYOUT NO. JB-04552	DRAWING NO. M2	

DATE:	MARCH 13, 2018
CLIENT:	BAYVIEW WELLINGTON
MODEL:	S38-8C ELEV. C BAROSSA 8
PROJECT:	GREEN VALLEY EAST BRADFORD, ONT.
SCALE:	3/16" = 1'-0"

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



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

INSULATE ALL DUCTS IN
UNCONDITIONED
SPACES MIN. R12

FOR THE PURPOSE OF
HEATLOSS/GAIN
CALCULATIONS ALL
ELEVATIONS HAVE BEEN
CONSIDERED

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

ALT. SECOND FLOOR PLAN 'C'

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.



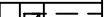
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L4T 0A4 TEL: 905-671-9800
EMAIL: DAVE@GTADESIGNS.CA
WEB: WWW.GTADESIGNS.CA

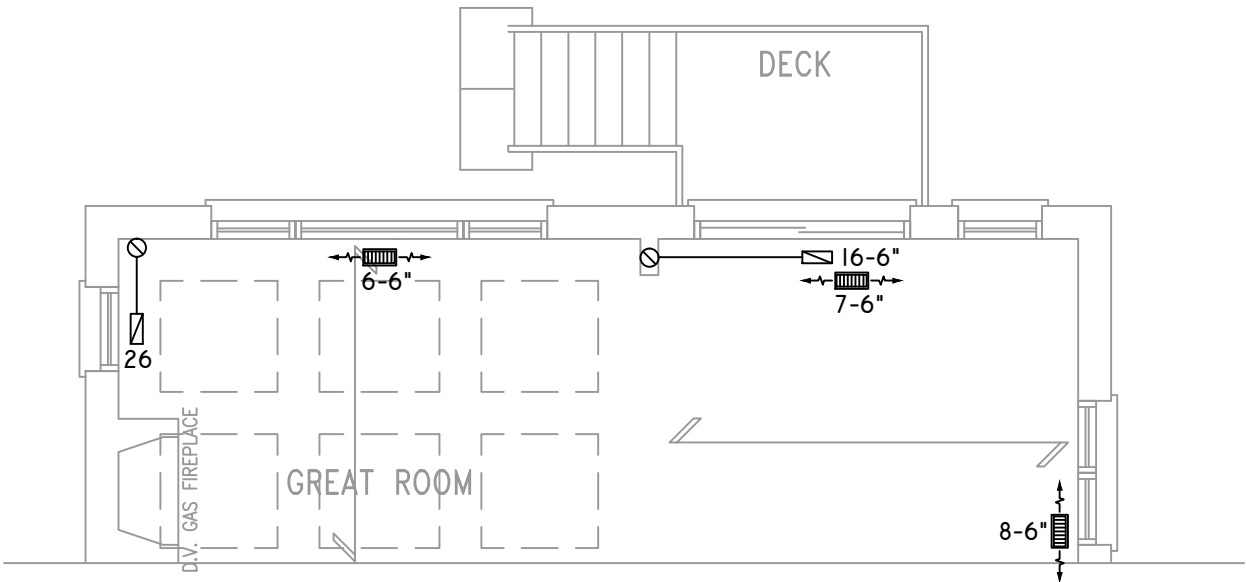
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UNIT MAKE	AMANA	OR EQUAL.
UNIT MODEL	AMEC960803BNA	OR EQUAL.
UNIT HEATING INPUT	80,000	BTU/HR.
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A/C COOLING CAPACITY	3.0	TONS.
FAN SPEED	1172	CFM

# OF RUNS	S/A	R/A	FANS
3RD FLOOR			
2ND FLOOR	12	4	4
1ST FLOOR	11	1	2
BASEMENT	4	1	

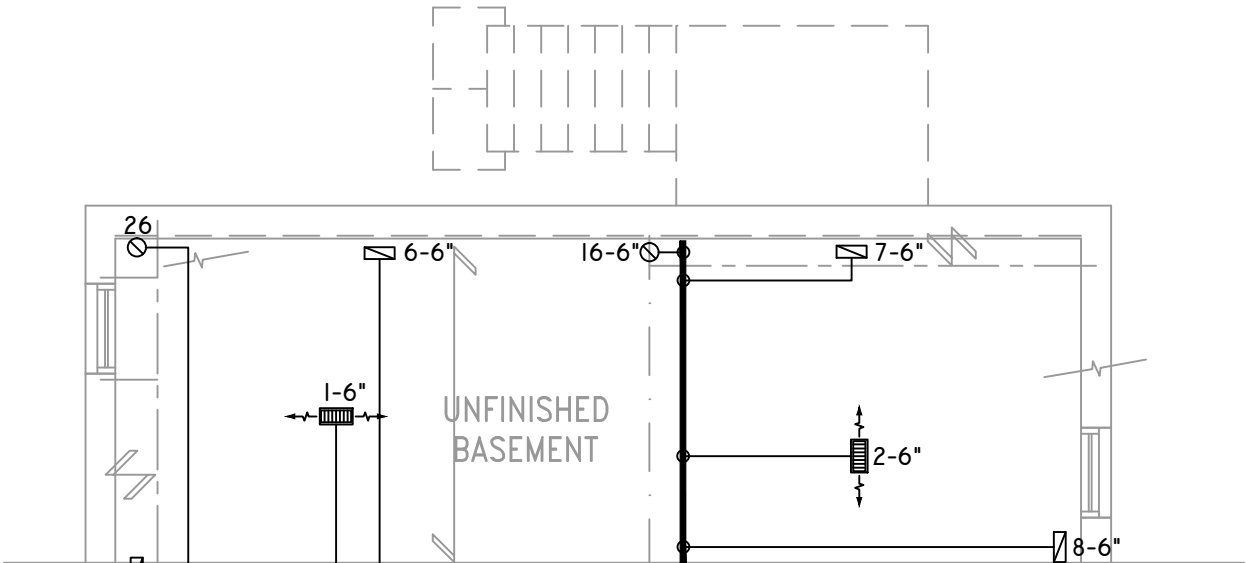
FLOOR PLAN: SECOND FLOOR		
DRAWN BY: AM	CHECKED: DD	SQFT 3180
LAYOUT NO. JB-04552	DRAWING NO. M3	

DATE:	MARCH 13, 2018
CLIENT:	BAYVIEW WELLINGTON
MODEL:	S38-8C ELEV. C BAROSSA 8
PROJECT:	GREEN VALLEY EAST BRADFORD,ONT.
SCALE:	3/16" = 1'-0"

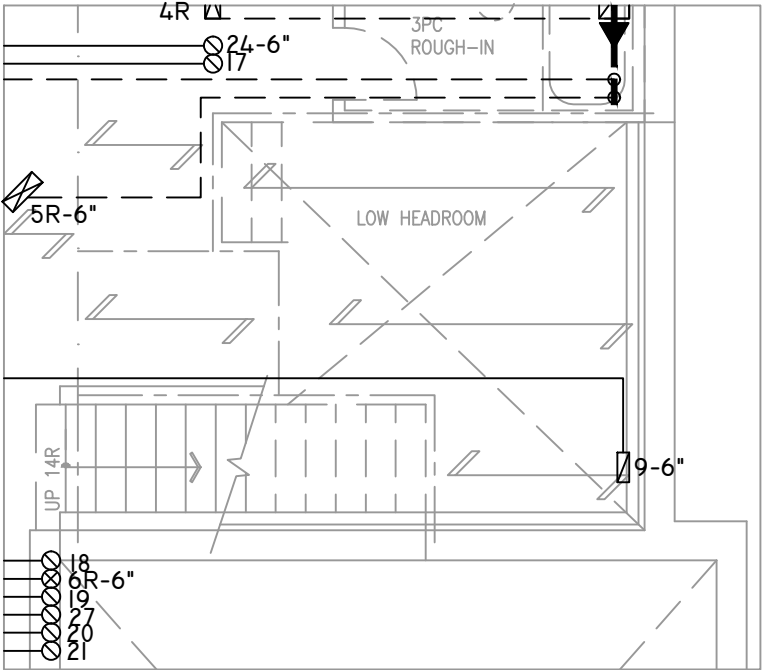
	FLEX DUCT		LOW/HIGH WALL/KICK SUPPLY DIFFUSER		DUCT CONNECTION TO JOIST LINING		RETURN AIR GRILLE (SIZE INDICATED ON DRAWING)	S.A.	SUPPLY AIR
	RIGID ROUND DUCT		HRV EXHAUST GRILLE		RETURN AIR PIPE RISER		RETURN AIR RISER UP TO FLOOR ABOVE	R.A.	RETURN AIR
	SUPPLY DIFFUSER		VOLUME DAMPER		RETURN ROUND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



PART. GROUND FLOOR PLAN 'C' – W.O.D. CONDITION



PART. BASEMENT PLAN 'C' – W.O.D. CONDITION



PART. BASEMENT PLAN W/ SUNKEN LAUNDRY (-2R TO -3R COND.)

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@GTADDESIGNS.CA
WEB: WWW.GTADDESIGNS.CA

HEAT-LOSS	59,053	BTU/HR.
UNIT MAKE	AMANA	OR EQUAL.
UNIT MODEL	AMEC960803BNA	OR EQUAL.
UNIT HEATING INPUT	80,000	BTU/HR.
UNIT HEATING OUTPUT	76,800	BTU/HR.
A/C COOLING CAPACITY	3.0	TONS.
FAN SPEED	1172	CFM

# OF RUNS	S/A	R/A	FANS
3RD FLOOR			
2ND FLOOR	12	4	4
1ST FLOOR	11	1	2
BASEMENT	4	1	

FLOOR PLAN:		
PARTIAL PLAN(S)		
DRAWN BY:	CHECKED:	SQFT
AM	DD	3180
LAYOUT NO.	DRAWING NO.	
JB-04552	M4	

DATE:	MARCH 13, 2018
CLIENT:	BAYVIEW WELLINGTON
MODEL:	S38-8C ELEV. C BAROSSA 8
PROJECT:	GREEN VALLEY EAST BRADFORD,ONT.
SCALE:	3/16" = 1'-0"