

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:	
S38-			Lot/con.	
Municipality Bradford	Postal code	Plan number/ other description		
B. Individual who reviews and takes responsibility for desi	gn activities	T		
Name David DaCosta		Firm	gtaDesigns Inc.	
Street address 2985 Drew Roa		T	Unit no.	Lot/con.
Municipality Mississauga	Postal code L4T 0A4	Province Ontario	E-mail <u>hvac@gtades</u>	igns.ca
Telephone number (905) 671-9800	Fax number		Cell number	
C. Design activities undertaken by individual identified in S	Section B. [Bu	ilding Code Table :	3.5.2.1 of Division C]	
☐ House ☑ HVAC – H	House		■ Building Structural	
☐ Small Buildings ☐ Building S	ervices		☐ Plumbing – House	
	Lighting and Po	wer	☐ Plumbing – All Buildings	S
☐ Complex Buildings ☐ Fire Prote			☐ On-site Sewage System	
Description of designer's work Mo	del Certification	1	Project #:	PJ-00041
Heating and Cooling Load Calculations Main	X	Builder	Layout #: Bayview Wellington	JB-08345
Air System Design Alternate		Project	Green Valley Eas	
Residential mechanical ventilation Design Summary Area Sq ft: Residential System Design per CAN/CSA-F280-12	3460	Model	S38-21	
Residential New Construction - Forced Air		SB-12	Package A1	
D. Declaration of Designer				
David DaCosta (print name) I review and take responsibility for	•	choose one as appro		
3.2.4 Division C of the Building Co classes/categories. Individual BCIN	•	-	ered, in the appropriate TOWN OF BRADFORD WEST GWI BUILDING DEPARTMENT	LLIMBURY
Firm BCIN:			PLANS EXAMINED ONTARIO BUILDING CODE APPLII DATE: 2022-09-01	ES
☑ I review and take responsibility fo "other designer" under subsection				
Individual BCIN	329	54		
Basis for exemp	otion from registr	ation: [Division C 3.2.4.1. (4)	
☐ The design work is exempt from th	e registration an	d qualification requiren	nents of the Building Code.	
Basis for exemp	otion from registr	ation and qualification:		
I certify that:				
The information contained in this schedule is true to the best of r	,			
I have submitted this application with the knowledge and consen	t of the firm.			
July 19, 2022		Mare 16	Contraction	
Date		Signature of De	signer	

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.

2. Schedule 1 does not require to be completed a holder of a license, temporay license, or a certificate of authorization, issed by the Ontario Association of Architects. Schedule 1 is also not required to be completed by a holder of a license to practise, a limited licence to practise, or a certificate of authorization, issued by the Association of Professional Engineers of Ontario.

REVIEWED



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

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	Heat I	oss an	d gain	calcul	ation s	sumr	mary she	et	CSA-F280-M		andard n No. 1
These documents	issued for the use of			Ва	yview Well	ington			Lay	out No	0.
and may not be us	ed by any other perso	ons without a	uthorization.	Document	for permit	and/or c	onstruction are	signed in red.	JB-	0834	5
			В	uilding	Locatio	า			•		
Address (Model):	S38-21				Site:	Gre	en Valley East	:			
Model:					Lot:						
City and Province:	Bradford				Postal co	de:					
			Cald	culation	s based	on					
Dimensional inform	nation based on:				VA3	Desigr	nOct/2021				
Attachment:	Detached				Front faci	ng:	East/West		Assume	ed?	Yes
No. of Levels:	3	Ventilated?	Included		Air tightne	ess:	1961-Present	(ACH=3.57)	Assume	ed?	Yes
Weather location:	Bradford				Wind exp	osure:	Sheltered				
HRV?	VanEE		V150H75	5NS	Internal s	hading:	Light-translu	cent Occ	upants:	6	
Sensible Eff. at -25	60%	Apparent E	ffect. at -0C	80%	Units:		Imperi	al Area	Sq ft:	346	0
Sensible Eff. at -00	75%										
	Heating desig	n condition	ons				Cooling de	esign cond	itions		
Outdoor temp -	9.4 Indoor temp:	72 Mear	n soil temp:	48	Outdoor t	emp (86 Indoor te	mp: 75 La	atitude:	44	
	Above gra	ade walls					Below	grade wal	ls		
Style A: As pe	r OBC SB12 Pa	ackage A1	R 22		Style A:	As pe	r OBC SB12	Package A	1	R	20ci
Style B:					Style B:						
Style C:					Style C:						
Style D:					Style D:						
	Floors	on soil					C	eilings			
Style A: As pe	er Selected OBC SB	12 Pa	ackage A1		Style A:	As pe	er Selected OE	SC SB12	Package A1	R	60
Style B:					Style B:	As pe	er Selected OE	SC SB12	Package A1	R	31
	Exposed	d floors			Style C:						
Style A: As pe	er Selected OBC SB	12 Pa	ackage A1	R 3	1			Doors			
Style B:					Style A:	As pe	er Selected OE	SC SB12	Package A1	R	4.00
	Wind	ows			Style B:						
Style A: As pe	er Selected OBC SB	12 Pa	ackage A1	R 3.5	Style C:						
Style B:							S	kylights			
Style C:					Style A:	As pe	er Selected OE	SC SB12	Package A1	R	2.03
Style D:					Style B:						
Attached documen	ts: As per	Shedule 1		Heat Loss	Gain Cacul	ations b	pased on CSA-	F280-12 Effe	ctive R-Value	S	
Notes:			Reside	ential New	Construction	on - For	ced Air				
			Calcu	ulations	performe	d by					
Name:	David DaCosta				Postal co	de:	L4T 0A4				
Company:	gtaDesigns Inc.				Telephon	e:	(905) 671-980	00			
Address:	2985 Drew Road	, Suite 202			Fax:						
City:	Mississauga				E-mail		hvac@gtades	nigna ag			



Cooling Airflow Rate CFM

16

16

16

16

16

Air System Design

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

51

13

73

73

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

Builder: **Bayview Wellington** Date: July 19, 2022 Page 3 PJ-00041 **Building Code.** Project # System 1 Marie Alex JB-08345 **Green Valley East** Model: S38-21 Individual BCIN: 32964 David DaCosta Layout # Project: DESIGN LOAD SPECIFICATIONS AIR DISTRIBUTION & PRESSURE BOILER/WATER HEATER DATA: A/C UNIT DATA: FURNACE/AIR HANDLER DATA: Level 1 Net Load 24,676 btu/h **Equipment External Static Pressure** 0.5 "w.c. Make Amana Make Туре Amana 3.0 Ton Level 2 Net Load 22,971 btu/h 0.225 "w.c. Model AMEC960803BNA Model **Additional Equipment Pressure Drop** Cond.---3.0 Input Btu/h Level 3 Net Load 13,587 btu/h **Available Design Pressure** 0.275 "w.c. Input Btu/h 80000 Coil ---3.0 Level 4 Net Load 9,096 btu/h Return Branch Longest Effective Length Output Btu/h 76800 Output Btu/h 300 ft 70,331 btu/h 0.50 " W.C. Min.Output Btu/h AWH Total Heat Loss R/A Plenum Pressure 0.138 "w.c. E.s.p. Blower DATA: **Total Heat Gain** 33,268 btu/h S/A Plenum Pressure 0.14 "w.c. Water Temp deg. F. W2 Heating Air Flow Proportioning Factor 0.0167 cfm/btuh AFUE 96% Blower Speed Selected: ECM Blower Type Cooling Air Flow Proportioning Facter **Building Volume Vb** 44824 ft³ 0.0352 cfm/btuh (Brushless DC OBC 12.3.1.5.(2)) Aux. Heat Ventilation Load 1.677 Btuh. 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. 2 3 5 9 10 11 12 13 14 Room Use BASE BASE BASE BASE BASE KIT KIT GRT STUDY MUD FOY PWD LIV/DIN LIV/DIN Btu/Outlet 4935 4935 4935 4935 4935 2455 2455 3740 2337 2001 4455 790 2369 2369 **Heating Airflow Rate CFM** 82 82 82 82 82 41 41 62 39 33 74 13 39 39

105

105

88

87

Duct Design Pressure	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
Actual Duct Length	41	43	37	18	16										39	41	52	39	14	29	18	13	28					
Equivalent Length	110	80	100	100	100	70	70	70	70	70	70	70	70	70	120	120	100	100	90	100	110	90	70	70	70	70	70	70
Total Effective Length	151	123	137	118	116	70	70	70	70	70	70	70	70	70	159	161	152	139	104	129	128	103	98	70	70	70	70	70
Adjusted Pressure	0.09	0.11	0.09	0.11	0.11	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	0.13	0.10	0.10	0.13	0.13	0.19	0.19	0.19	0.19	0.19
Duct Size Round	6	6	6	6	6										6	6	6	6	4	5	3	5	5					
Outlet Size	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	3x10	3x10	3x10	3x10	3x10	4x10	4x10	4x10	4x10	4x10
Trunk	В	В	D	Α	F										D	В	С	В	PTO	F	Е	Α	Α					
							Leve	el 3													Leve	13						
S/A Outlet No.	15	16	17	18	19	20	21	22	23						24	25	26	27	28	29								
Room Use	P.BED	P.BED	WIC	LOFT	LAUND	ENS 2	BED 2	BED 2	ENS 3						BED 3	BED 4	ENS 4	BED 5	wc	ENS								
Btu/Outlet	1770	1770	699	1648	631	873	2328	2328	1541						3242	1496	662	1314	508	1874								
Heating Airflow Rate CFM	29	29	12	27	11	15	39	39	26						54	25	11	22	8	31								
Cooling Airflow Rate CFM	45	45	6	21	5	5	54	54	29						92	38	12	37	10	34								
Duct Design Pressure	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
Actual Duct Length	53	62	49	48	31	38	41	38	37						42	26	35	43	47	51								
Equivalent Length	130	140	110	130	130	120	110	100	90	70	70	70	70	70	130	150	150	100	110	130	70	70	70	70	70	70	70	70
Total Effective Length	183	202	159	178	161	158	151	138	127	70	70	70	70	70	172	176	185	143	157	181	70	70	70	70	70	70	70	70
Adjusted Pressure	0.07	0.06	0.08	0.07	0.08	0.08	0.09	0.09	0.10	0.19	0.19	0.19	0.19	0.19	0.08	0.07	0.07	0.09	0.08	0.07	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19
Duct Size Round	5	5	3	4	3	3	5	5	4						6	5	3	4	3	4								
Outlet Size	3x10	3x10	3x10	3x10	3x10	3x10	3x10	3x10	3x10	4x10	4x10	4x10	4x10	4x10	4x10	3x10	3x10	3x10	3x10	3x10	4x10							
Trunk	В	С	C	C	PTO	F	F	F	F						F	F	F	D	D	D								

Return Branch And Grill Sizing		G.	Frill Pressu	re Loss		0.02 "w	w.c					Return Trun	nk Duct Sizing				
R/A Inlet No.	1R	2R	3R	4R	5R	6R	7R	8R	9R	10R	11R	Trunk	CFM	Press.	Round	Rect.	Size
Inlet Air Volume CFM	206	366	180	105	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	Drop	1172	2 0.05	5 17.0	24x12	
Actual Duct Length	25	32	12	40	36	42	45					Z	1172	2 0.05	5 17.0	26x10	22x12
Equivalent Length	115	90	125	180	180	185	140	50	50	50	50	Υ	285	5 0.05	5 10.0	12x8	10x10
Total Effective Length	140	122	137	220	216	227	185	50	50	50	50	x	521	1 0.05	5 12.5	18x8	14x10
Adjusted Pressure	0.08	0.10	0.09	0.05	0.05	0.05	0.06	0.24	0.24	0.24	0.24	w					
Duct Size Round	8.0	9.5	7.5	6.0	6.0	6.0	6.0					V					
Inlet Size	FLC	8	8	8	8	8	8					U					
	OR	x	x	x	x	x	x	x	x	x	x	т					
Inlet Size	9x6	30	14	14	14	14	14					s					
												R					
Trunk	Х	z	Υ	Υ	х	х	х					Q					

_		k Duct Sizing				
	Trunk	CFM	Press.	Round	Rect.	Size
	Α	751	0.06	14.0	22x8	18x10
12	В	405	0.06	11.0	14x8	10x10
10	С	131	0.06	7.5	8x8	87
10	D	185	0.07	8.0	8x8	8x7
	E	378	0.07	10.5	12x8	10x10
	F	211	0.08	8.5	8x8	107
	G					
	н					
					_	
	J			1 A A	7 E	
	К				7 -	_



Heatloss/Gain Calculations CSA-F280-12

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

e-mail hvac@gtadesigns.ca

	Builder:	Bayview Well	ington	_	Date:		July 19, 2	2022				Weather	Data	Bradford	44	-9.4	86 22	48.2				Page 4
2012 OBC	Project:	Green Valle	y East		lodel:		S38-2	1		Syste	em 1	Heat Lo	ss ^T 81.4	deg. F	Ht gain ^T	11	deg. F	GTA:	3460		Project # Layout #	PJ-00041 JB-08345
Level 1			BAS	_																		
Run ft. exposed wall A			182 A	_	А				Α	Α		Α					Α		А		4	
Run π. exposed wall F			182 A B		В		A B		B	B		В		A B	A B		В		В		, , , , , , , , , , , , , , , , , , ,	
Ceiling heigh			7.0 AG		7.0 AG		7.0 AG		7.0 AG	7.0 AG		7.0 AG	7.0	AG	7.0 AG		7.0 AG		7.0 AG		7.0 A	
Floor area			1383 Area		7.0 AG	_	7.0 AG Area		Area	7.0 AG Area		Area	7.0	Area	7.0 AG		7.0 AG		7.0 Ac			rea
Exposed Ceilings A			A A		Ale	d	Area		A	A A		A		Alea	A A		Area		A		, A	
			В				В		B										В		E	
Exposed Ceilings E Exposed Floors			Fir		B Flr		Fir		Fir	B Flr		B Fir		B Fir	B Fir		B Fir		Fir		F	
Gross Exp Wall A			1274		FIF		FIF		FIF	FIF		FIF		FIF	FIF		FIF		FII		-	ır
Gross Exp Wall F			12/4																			
		Loss Gain	1 1000	Gain	1.00	s Gain	Lann	Gain	Loss Gair	n Loss	Gain	1000 0	ain	Laca Cair	n Loss	Gain	Loss	Gain		ss Gain		ann Cain
Components North Shaded		22.93 11.62	Loss	Gain	Los	S Gain	Loss	Gain	LUSS Gall	II LUSS	Gain	Loss G	ain	Loss Gair	LUSS	Gain	LUSS	Gain	T [iss Gain		oss Gain
		22.93 29.56		0 709																		
East/Wes Souti		22.93 29.56																				
WOB Windows		22.93 27.86		0 133																		
		40.10 88.23																				
Skyligh		20.35 2.75		7 58																		
Doors																						
Net exposed walls A Net exposed walls B		3.85 0.52 4.78 0.65		637																		
Exposed Ceilings A	59.22	1.37 0.64																				
Exposed Ceilings E	27.65	2.94 1.37 2.73 0.17																				
Exposed Floors	29.80	2.73 0.17	989																			
Foundation Conductive Heatloss Total Conductive Heat Loss			1101																			
Total Conductive Heat Gair			1101	1539																		
		4 0000 0 0544	4004																			
		1.2002 0.0544 0.08 0.07		9 84																		
Ventilation Case 2		0.08 0.07 17.58 11.88																				
Ventilation Case 2		17.58 11.88 0.04 0.07		4 108																		
		239		4 108																		
Heat Gain People																						
Appliances Loads																						
Duct and Pipe loss		10% otal HL for per room		_																		
Level HL Total 24,676	1 10																					
Level HG Total 2 250				2250																		
Level HG Total 2,250		HG per room x 1.3		2250																		
Level HG Total 2,250				2250																		
Level HG Total 2,250				2250																		
	Total			2250		irt.	STUE	DY.	MUD	FO	Υ	PWD		LIV/DIN								
Level 2	Tota		КІТ	2250		GRT	STUI	DΥ	MUD 15 A	FC 34 A	Y	PWD 6 A	36	LIV/DIN	A				A			
Level 2	Tota		KIT 36 A	2250	35 A	GRT	19 A	DΥ	15 A	34 A	Y	6 A	36	5 A	A B		A B		A		A	
Run ft. exposed wall /	Tota		KIT 36 A B	2250	35 A B	GRT	19 A B	ργ	15 A B	34 A B		6 A B		B B	В		В		В		В	
Run ft. exposed wall / Run ft. exposed wall / Celling heigh	Total		КПТ 36 А В 11.0	2250	35 A B 11.0		19 A B 11.0	ργ	15 A B 13.0	34 A B 12.0	1	6 A B 11.0	11.0	6 A B	B 11.0		B 11.0		B 11.0	ea	11.0	
Run ft. exposed wall / Run ft. exposed wall E Ceiling heigh Floor are:	Total		KIT 36 A B 11.0 322 Area	2250	35 A B 11.0 223 Are		19 A B 11.0 169 Area	ÞΥ	15 A B 13.0 42 Area	34 A B 12.0 129 Area	1	6 A B 11.0 37 Area	11.0	SA B SArea	B 11.0 Area		11.0 Area		11.0 Ar	ea	11.0 A	rea
Run ft. exposed wall A Run ft. exposed wall E Celling heigh Floor are Exposed Cellings A	Total		KIT 36 A B 11.0 322 Area A	2250	35 A B 11.0 223 Are 4 A		19 A B 11.0 169 Area A	ÞΥ	15 A B 13.0 42 Area A	34 A B 12.0 129 Area A	1	6 A B 11.0 37 Area A	11.0	SAB B SArea A	B 11.0 Area A		11.0 Area A		11.0 Ar A		11.0 A	rea
Run ft. exposed wall / Run ft. exposed wall / Ceiling heigh Floor are: Exposed Ceilings / Exposed Ceilings /	Total		KIT 36 A B 11.0 322 Area A B	2250	35 A B 11.0 223 Are 4 A B		19 A B 11.0 169 Area A B	ργ	15 A B 13.0 42 Area A B	34 A B 12.0 129 Area A B	1	6 A B 11.0 37 Area A B	11.0	B B J Area A B	B 11.0 Area A B		B 11.0 Area A B		B 11.0 Ar A B		11.0 A A B	rea
Run ft. exposed wall / Run ft. exposed wall / Ceiling heigh Floor are: Exposed Ceilings / Exposed Ceilings Exposed Ceilings /	Total		36 A B 11.0 322 Area A B Fir	2250	35 A B 11.0 223 Are 4 A B Fir		19 A B 11.0 169 Area A B Fir	DΥ	15 A B 13.0 42 Area A B Fir	34 A B 12.0 129 Area A B Fir	1	6 A B 11.0 37 Area A B Fir	11.0 454	B B Area A B Fir	B 11.0 Area A		11.0 Area A		11.0 Ar A		11.0 A	rea
Run ft. exposed wall A Run ft. exposed wall A Celling heigh Floor are Exposed Cellings E Exposed Floors Gross Exp Wall A	Tota		KIT 36 A B 11.0 322 Area A B	2250	35 A B 11.0 223 Are 4 A B		19 A B 11.0 169 Area A B	ργ	15 A B 13.0 42 Area A B	34 A B 12.0 129 Area A B	1	6 A B 11.0 37 Area A B	11.0	B B Area A B Fir	B 11.0 Area A B		B 11.0 Area A B		B 11.0 Ar A B		11.0 A A B	rea
Run ft. exposed wall / Run ft. exposed wall / Run ft. exposed wall / Ceiling heigh Floor are: Exposed Ceilings / Exposed Ceilings Exposed Floor: Gross Exp Wall / Gross Exp Wall /	Total	I HG per room x 1.3	36 A B 11.0 322 Area A B Fir 396	2250	35 A B 11.0 223 Are 4 A B Fir 385	a	19 A B 11.0 169 Area A B Fir 209		15 A B 13.0 42 Area A B Fir 195	34 A B 12.0 129 Area A B Fir 408	1	6 A B 11.0 37 Area A B Fir	11.0 454 396	S A B S Area A B FIr	B 11.0 Area A B Fir	Gain	B 11.0 Area A B Fir	Gain	B 11.0 Ar A B Fir	,	11.0 A A E F	rea Ir
Run ft. exposed wall / Run ft. exposed wall / Run ft. exposed wall / Celling heigh Floor are: Exposed Cellings / Exposed Cellings Exposed Cellings Gross Exp Wall / Gross Exp Wall / Components	Tota	I HG per room x 1.3	36 A B 11.0 322 Area A B Fir 396	2250	35 A B 11.0 223 Are 4 A B Fir	a	19 A B 11.0 169 Area A B Fir 209	Gain	15 A B 13.0 42 Area A B FIr 195	34 A B 12.0 129 Area A B Fir 408	1	6 A B 11.0 37 Area A B Fir	11.0 454	B B Area A B Fir	B 11.0 Area A B Fir	Gain	B 11.0 Area A B	Gain	B 11.0 Ar A B Fir		11.0 A A E F	rea
Run ft. exposed wall A Run ft. exposed wall A Run ft. exposed wall B Ceiling heigh Floor are Exposed Ceilings E Exposed Ceilings E Exposed Floor Gross Exp Wall I Gross Exp Wall I Component North Shaded	Total	Loss Gain 22.93 11.62	36 A B 11.0 322 Area A B Fir 396	2250	35 A B 11.0 223 Are 4 A B Fir 385	s Gain	19 A B 11.0 169 Area A B Fir 209 Loss 26 59	Gain	15 A B 13.0 42 Area A B FIr 195	34 A B 12.0 129 Area A B Fir 408	Gain	6 A B 11.0 37 Area A B Fir	11.0 454 396	S A B S Area A B FIr	B 11.0 Area A B Fir	Gain	B 11.0 Area A B Fir	Gain	B 11.0 Ar A B Fir	,	11.0 A A E F	rea Ir
Run ft. exposed wall / Run ft. exposed wall / Run ft. exposed wall / Ceiling heigh Floor are: Exposed Ceilings & Exposed Ceilings & Exposed Floor Gross Exp Wall / Gross Exp Wall & Component North Shadee	Total	Loss Gain 22.93 11.62 22.93 29.56	36 A B 11.0 322 Area A B Fir 396 Loss	2250	35 A B 11.0 223 Are 4 A B Fir 385	a	19 A B 11.0 169 Area A B Fir 209 Loss 26 59	Gain	15 A B 13.0 42 Area A B FIr 195	34 A B 12.0 129 Area A B Fir 408	Gain	6 A B 11.0 37 Area A B Fir 66	11.0 454 396	A A B A A A B B Fir B B C B B B B Fir B B B B B B B B B B B B B B B B B B B	B 11.0 Area A B Fir	Gain	B 11.0 Area A B Fir	Gain	B 11.0 Ar A B Fir	,	11.0 A A E F	rea Ir
Run ft. exposed wall / Run ft. exposed wall / Run ft. exposed wall / Ceiling heigh Floor are: Exposed Ceilings / Exposed Ceilings Exposed Ceilings / Gross Exp Wall / Gross Exp Wall / Component North Shade East/Wes	Total 8	Loss Gain 22.93 11.62 22.93 22.50 22.93 22.50	36 A B 11.0 322 Area A B Fir 396 Loss	2250	35 A B 11.0 223 Are 4 A B Fir 385	s Gain	19 A B 11.0 169 Area A B Fir 209 Loss 26 59	Gain	15 A B 13.0 42 Area A B FIr 195	34 A B 12.0 129 Area A B Fir 408	Gain	6 A B 11.0 37 Area A B Fir	11.0 454 396	A A B A A A B B Fir B B C B B B B Fir B B B B B B B B B B B B B B B B B B B	B 11.0 Area A B Fir	Gain	B 11.0 Area A B Fir	Gain	B 11.0 Ar A B Fir	,	11.0 A A E F	rea Ir
Run ft. exposed wall A Run ft. exposed wall A Run ft. exposed wall A Ceiling heigh Floor are Exposed Ceilings E Exposed Ceilings E Exposed Floor Gross Exp Wall I Gross Exp Wall I Component North Shaded East/Wes Soutt	Tota R-Values 3.55 3.55 3.55 3.55 1.99	Loss Gain 22.93 11.62 22.93 29.55 22.93 22.50 40.90 23.66	KIT 36 A B 11.0 322 Area A B Fir 396 Loss	2250	35 A B 11.0 223 Are 4 A B Fir 385	s Gain	19 A B 11.0 169 Area A B Fir 209 Loss 26 59	Gain	15 A B 13.0 42 Area A B FIr 195	34 A B 12.0 129 Area A B Fir 408	Gain	6 A B 11.0 37 Area A B Fir 66	11.0 454 396	A A B A A A B B Fir B B C B B B B Fir B B B B B B B B B B B B B B B B B B B	B 11.0 Area A B Fir	Gain	B 11.0 Area A B Fir	Gain	B 11.0 Ar A B Fir	,	11.0 A A E F	rea Ir
Run ft. exposed wall / Run ft. exposed wall / Run ft. exposed wall / Ceiling heigh Floor are: Exposed Ceilings E Exposed Ceilings E Exposed Floor: Gross Exp Wall I Gross Exp Wall I Component: North Shaded East/Wes Soutt Existing Window: Skyligh	Total	Loss Gain 22.93 11.62 22.93 22.50 22.93 22.50 40.90 23.66 40.10 88.23	36 A B 11.0 322 Area A B Fir 396 Loss 66 151:	2250	35 A B 11.0 223 Are 4 A B Fir 385	s Gain	19 A B 11.0 169 Area A B Fir 209 Loss 26 59	Gain	15 A B 13.0 42 Area A B Fir 195 Loss Gain	34 A B 12.0 129 Area A B Fir 408 n Loss 5:	Gain :7 680	6 A B 11.0 37 Area A B Fir 66	11.0 454 396	A A B A A A B B Fir B B C B B B B Fir B B B B B B B B B B B B B B B B B B B	B 11.0 Area A B Fir	Gain	B 11.0 Area A B Fir	Gain	B 11.0 Ar A B Fir	,	11.0 A A E F	rea Ir
Run ft. exposed wall / Run ft. exposed wall / Run ft. exposed wall / Ceiling heigh Floor are: Exposed Ceilings / Exposed Ceilings / Exposed Floor: Gross Exp Wall / Gross Exp Wall / Component North Shade: East/Wes Soutl	Total R-Values R-Values 3.55 3.55 3.55 1.99 2.03	Loss Gain 22.93 11.62 22.93 29.56 22.93 22.50 40.90 23.66 40.10 88.23 20.35 2.75	KIT 36 A B 11.0 322 Area A B Fir 396 Loss	Gain 1951	35 A B 11.0 223 Are 4 A B Fir 385 Los	s Gain 642 828	19 A B 11.0 169 Area A B Fir 209 Loss 59	Gain 6 302	15 A B 13.0 42 Area A B Fir 195 Loss Gain	34 A B 12.0 129 Area A B Fir 408 n Loss 58 28 5	Gain -7 680	6 A B B111.0 37 Area A B Fir 66 Loss G	11.0 454 396 ain	A B Area A B Fir Si S Gain	B 11.0 Area A B Fir TI Loss	Gain	B 11.0 Area A B Fir	Gain	B 11.0 Ar A B Fir	,	11.0 A A E F	rea Ir
Run ft. exposed wall A Run ft. exposed wall A Run ft. exposed wall B Ceiling heigh Floor are Exposed Ceilings E Exposed Ceilings E Exposed Floor Gross Exp Wall I Gross Exp Wall I Component North Shaded East/Wes Soutt Existing Windows Skyligh Doort Net exposed walls V	Total R-Values R-	Loss Gain 22.93 11.62 22.93 29.56 22.93 22.50 40.90 23.66 40.10 88.23 20.35 2.75 4.78 0.65	36 A B 11.0 322 Area A B Fir 396 Loss 66 151:	Gain 1951	35 A B 11.0 223 Are 4 A B Fir 385 Los	s Gain	19 A B 11.0 169 Area A B Fir 209 Loss 59	Gain 6 302	15 A B 13.0 42 Area A B Fir 195 Loss Gain	34 A B 12.0 129 Area A B Fir 408 n Loss 5:	Gain -7 680	6 A B 11.0 37 Area A B Fir 66	11.0 454 396	A B Area A B Fir Si S Gain	B 11.0 Area A B Fir	Gain	B 11.0 Area A B Fir	Gain	B 11.0 Ar A B Fir	,	11.0 A A E F	rea Ir
Run ft. exposed wall / Run ft. exposed wall / Run ft. exposed wall / Celling heigh Floor are: Exposed Cellings / Exposed Cellings / Exposed Floor Gross Exp Wall / Gross Exp Wall / Gross Exp Wall / Existing Window: Skylingh Doort Net exposed walls / Net exposed walls /	Total R-Values R-Values 3.55 3.55 3.55 1.39 2.03 4.00 17.03	Loss Gain 22.93 11.62 22.93 29.56 22.93 22.50 40.90 23.66 40.10 88.23 20.35 2.75 4.78 0.65 9.58 1.29	36 A B 11.0 322 Area A B Fir 396 Loss 66 151:	Gain 1951	35 A B 11.0 223 Are 4 A B Fir 385 Los	s <u>Gain</u> 642 828	19 A B 11.0 169 Area A B Fir 209 Loss 26 59	Gain 6 302	15 A B 13.0 42 Area A B Fir 195 Loss Gain	34 A B 12.0 129 Area A B Fir 408 n Loss 58 28 5	Gain -7 680	6 A B B111.0 37 Area A B Fir 66 Loss G	11.0 454 396 ain	A B Area A B Fir Si S Gain	B 11.0 Area A B Fir TI Loss	Gain	B 11.0 Area A B Fir	Gain	B 11.0 Ar A B Fir	,	11.0 A A E F	rea Ir
Run ft. exposed wall A Run ft. exposed wall A Run ft. exposed wall A Celling heigh Floor are Exposed Ceilings E Exposed Ceilings E Exposed Floors Gross Exp Wall I Gross Exp Wall E Components North Shade East/Wes Soutt Existing Windows Skyligh Doors Net exposed walls A Net exposed Ceilings Y	Total 8 R-Values 1 3.55 1 3.55 1 3.99 1 2.03 4 4.00 1 17.03 8 8.50 5 9.22	Loss Gain 22.93 11.62 22.93 22.50 40.90 23.66 40.10 88.23 20.35 2.75 4.78 0.65 9.58 1.29 1.37 0.64	KIT 36 A B 11.0 322 Area A B Fir 396 Loss 66 151:	Gain 1951	35 A B 11.0 223 Are 4 A B Fir 385 Los	s Gain 642 828	19 A B 11.0 169 Area A B Fir 209 Loss 26 59	Gain 6 302	15 A B 13.0 42 Area A B Fir 195 Loss Gain	34 A B 12.0 129 Area A B Fir 408 n Loss 58 28 5	Gain -7 680	6 A B B111.0 37 Area A B Fir 66 Loss G	11.0 454 396 ain	A B Area A B Fir Si S Gain	B 11.0 Area A B Fir TI Loss	Gain	B 11.0 Area A B Fir	Gain	B 11.0 Ar A B Fir	,	11.0 A A E F	rea Ir
Run ft. exposed wall A Run ft. exposed wall A Run ft. exposed wall A Celling heigh Floor are Exposed Cellings E Exposed Cellings E Exposed Floor Gross Exp Wall I Gross Exp Wall I Component North Shadee East/Wes Soutl Existing Windows Skyligh Doors Net exposed walls I Net exposed walls I Exposed Cellings A Exposed Cellings A	Total R-Values 1	Loss Gain 22.93 11.62 22.93 29.56 22.93 22.50 24.93 23.66 40.10 88.23 20.35 2.75 9.58 1.29 1.37 0.64 2.94 1.37	36 A B 11.0 322 Area A B Fir 396 Loss 66 151:	Gain 1951	35 A B 11.0 223 Are 4 A B Fir 385 Los	s <u>Gain</u> 642 828	19 A B 11.0 169 Area A B Fir 209 Loss 26 59	Gain 6 302	15 A B 13.0 42 Area A B Fir 195 Loss Gain	34 A B 12.0 129 Area A B Fir 408 n Loss 58 28 5	Gain -7 680	6 A B B111.0 37 Area A B Fir 66 Loss G	11.0 454 396 ain	A B Area A B Fir Si S Gain	B 11.0 Area A B Fir TI Loss	Gain	B 11.0 Area A B Fir	Gain	B 11.0 Ar A B Fir	,	11.0 A A E F	rea Ir
Run ft. exposed wall / Run ft. exposed wall / Run ft. exposed wall / Celling heigh Floor are: Exposed Cellings / Exposed Cellings / Exposed Floor Gross Exp Wall / Gross Exp Wall / Gross Exp Wall / Existing Window: South Existing Window: Skyligh Door Net exposed walls / Net exposed walls / Exposed Cellings / Exposed Cellings / Exposed Cellings /	Total R-Values 1	Loss Gain 22.93 11.62 22.93 29.56 22.93 22.50 40.90 23.66 40.10 88.23 20.35 2.75 4.78 0.65 4.78 0.62 1.37 0.64 2.94 1.37	36 A B 11.0 322 Area A B Fir 396 Loss 66 151:	Gain 1951	35 A B 11.0 223 Are 4 A B Fir 385 Los	s <u>Gain</u> 642 828	19 A B 11.0 169 Area A B Fir 209 Loss 26 59	Gain 6 302	15 A B 13.0 42 Area A B Fir 195 Loss Gain	34 A B 12.0 129 Area A B Fir 408 n Loss 58 28 5	Gain -7 680	6 A B B111.0 37 Area A B Fir 66 Loss G	11.0 454 396 ain	A B Area A B Fir Si S Gain	B 11.0 Area A B Fir TI Loss	Gain	B 11.0 Area A B Fir	Gain	B 11.0 Ar A B Fir	,	11.0 A A E F	rea Ir
Run ft. exposed wall / Run ft. exposed wall / Run ft. exposed wall / Ceiling heigh Floor are: Exposed Ceilings / Exposed Ceilings / Exposed Floor: Gross Exp Wall / Gross Exp Wall / Component: North Shadee East/Wes Soutt Existing Window: Skyligh Door: Net exposed walls / Net exposed walls / Exposed Ceilings / Exposed Ceilings / Exposed Ceilings / Exposed Ceilings / Exposed Floor: Foundation Conductive Heatloss	Total 8 R-Values 1 3.55 3.55 3.55 3.55 4.00 17.03 4.00 17.03 59.22 27.65 29.80	Loss Gain 22.93 11.62 22.93 29.56 22.93 22.50 24.93 23.66 40.10 88.23 20.35 2.75 9.58 1.29 1.37 0.64 2.94 1.37	KIT 36 A B 11.0 322 Area A B Fir 396 Loss 66 151:	Gain 1951 7 213	35 A B 11.0 223 Are 4 A B Fir 385 Los 28	s Gain 642 828 706 231	19 A B 11.0 169 Area A B Fir 209 Loss 26 59	Gain 6 302 55 118	15 A B 13.0 42 Area A B FIr 195 Loss Gain 21 427 174 832	34 A B 12.0 129 Area A B Fir 408 n Loss 5.8 28 5.112 357 176	Gain Gain 77 680 0 77 16 231	6 A B B 11.0 37 Area A B FIr 66 Loss G 10 229	11.0 454 396 ain	Area A B B FIr S S Gain 1376 1	B 11.0 Area A B Fir TI Loss	Gain	B 11.0 Area A B Fir	Gain	B 11.0 Ar A B Fir	,	11.0 A A E F	rea Ir
Run ft. exposed wall / Run ft. exposed wall / Run ft. exposed wall / Ceiling heigh Floor are: Exposed Ceilings / Exposed Ceilings / Exposed Floor' Gross Exp Wall / Gross Exp Wall / Gross Exp Wall / Exposed Floor' Soutt Existing Window: Skyligh Door: Net exposed walls / Net exposed walls / Exposed Ceilings / Exposed Ceilings / Exposed Ceilings / Exposed Floor: Foundation Conductive Heatloss Total Conductive	Total 8 R-Values 8 R-Values 9 3.55 1.99 1 2.03 1 7.03 1 7.03 1 7.03 2 27.65 2 27.65 2 29.80 6	Loss Gain 22.93 11.62 22.93 29.56 22.93 22.50 40.90 23.66 40.10 88.23 20.35 2.75 4.78 0.65 4.78 0.62 1.37 0.64 2.94 1.37	36 A B 11.0 322 Area A B Fir 396 Loss 66 151:	Gain 3 1951 7 213	35 A B 11.0 223 Are 4 A B Fir 385 Los 28	s Gain 642 828 706 231 5 3	19 A B 11.0 169 Area A B Fir 209 Loss 26 59	Gain 302 5 118	15 A B 13.0 42 Area A B Fir 195 Loss Gain 21 427 174 832	34 A B 12.0 129 Area A B Fir 408	Gain	6 A B B111.0 37 Area A B Fir 66 Loss G	11.0 454 396 ain 225 60 36 336	Area A B B Fir 1376 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	B 11.0 Area A B Fir Loss 217	Gain	B 11.0 Area A B Fir	Gain	B 11.0 Ar A B Fir	,	11.0 A A E F	rea Ir
Run ft. exposed wall a Run ft. exposed wall a Run ft. exposed wall a Celling heigh Floor are: Exposed Ceilings a Exposed Ceilings a Exposed Ceilings a Exposed Floor Gross Exp Wall a Gross Exp Wall a Component: North Shade East/Wes Soutt Existing Window: Skyligh Door: Net exposed walls a Net exposed walls a Exposed Ceilings a Exposed Ceilings a Exposed Ceilings a Exposed Ceilings a Exposed Floor: Foundation Conductive Heatloss Total Conductive Heat Losi	Total R-Values 3.55 3.55 3.55 3.55 4.00 17.03 8.50 59.22 27.65 29.80	Loss Gain 22.93 11.62 22.93 29.56 22.93 22.50 40.90 88.23 20.35 2.75 4.78 0.65 2.94 1.37 2.73 0.17 x	KIT 36 A B 11.0 322 Area A B Fir 396 Loss 66 151:	Gain 1951 7 213	35 A B 11.0 223 Are 4 A B Fir 385 Los 28 357 1	s Gain 642 828 706 231 5 3 354	19 A B 11.0 169 Area A B Fir 209 Loss 26 59 183 87	Gain 302 5 118 1 420	15 A B 13.0 42 Area A B Fir 195 Loss Gain 21 427 174 832	34 A B 12.0 129 Area A B Fir 408 n Loss 58 28 5 112 357 170 28	Gain 7 680 0 77 6 231	6 A B B 11.0 37 Area A B Fir 66 Loss G 10 229	11.0 454 396 325 600 36 336	Loss Gaii 1376 1 1606	B 11.0 Area A B Fir 11.0 Loss 217	Gain	B 11.0 Area A B Fir	Gain	B 11.0 Ar A B Fir	,	11.0 A A E F	rea Ir
Run ft. exposed wall A Run ft. exposed wall A Run ft. exposed wall A Celling heigh Floor are: Exposed Ceilings E Exposed Ceilings E Exposed Floor: Gross Exp Wall A Gross Exp Wall E Components North Shadee East/Wes Soutt Existing Window: Skyligh Door: Net exposed walls A Net exposed Ceilings E Exposed Ceilings E Exposed Ceilings E Exposed Floor: Foundation Conductive Heatloss Total Conductive Heat Loss/Gail Air Leakage Heat Loss/Gail	Total 8 R-Values 1 3.55 1 3.55 1 .99 1 2.03 1 7.03 8 8.50 1 7.03 8 8.50 2 7.65 2 2 7.65	Loss Gain 22.93 11.62 22.93 29.56 22.93 22.50 24.94 0.35 4.78 0.65 9.58 1.29 1.37 0.64 2.73 0.17 x 0.5486 0.05446 0.0544	36 A B 11.0 322 Area A B Fir 396 Loss 66 151:	Gain 1951 7 213	35 A B 11.0 223 Are 4 A B Fir 385 Los 28 357 1	s Gain 642 828 706 231 5 3	19 A B 11.0 169 Area A B Fir 209 Loss 26 59 183 87	Gain 302 5 118 1 420	15 A B 13.0 42 Area A B Fir 195 Loss Gain 21 427 174 832	34 A B 12.0 129 Area A B Fir 408	Gain 7 680 0 77 6 231	6 A B B 11.0 37 Area A B FIr 66 Loss G 10 229	11.0 454 396 ain 225 60 36 336	Loss Gair 1376 1 1606	B 11.0 Area A B Fir Loss 217	Gain	B 11.0 Area A B Fir	Gain	B 11.0 Ar A B Fir	,	11.0 A A E F	rea Ir
Run ft. exposed wall I Run ft. exposed wall I Run ft. exposed wall I Celling heigh Floor are: Exposed Ceilings I Exposed Ceilings I Exposed Ceilings I Gross Exp Wall I Gross Exp Wall I Gross Exp Wall I South Existing Windows South Existing Windows Skyligh Doors Net exposed walls I Exposed Ceilings I Exposed Floors Foundation Conductive Heatloss Total Conductive Heat Loss/Gail Air Leakage Heat Loss/Gail	Total 8 R-Values 8 R-Values 9 3.55 1.99 1.203 1.703 1.703 1.805 1.90 1.703	Loss Gain 22.93 11.62 22.93 29.56 22.93 22.50 40.90 23.66 40.10 88.23 20.35 2.75 4.78 0.65 9.58 1.29 1.37 0.64 2.94 1.37 2.73 0.17 x 0.5486 0.0544 0.03 0.07	36 A B 11.0 322 Area A B Fir 396 Loss 66 1513	Gain 1951 7 213	35 A B 11.0 223 Are 4 A B Fir 385 Los 28 357 1	s Gain 642 828 706 231 5 3 354	19 A B 11.0 169 Area A B Fir 209 Loss 26 59 183 87	Gain 302 5 118 1 420	15 A B 13.0 42 Area A B Fir 195 Loss Gain 21 427 174 832	34 A B 12.0 129 Area A B Fir 408 n Loss 58 28 5 112 357 170 28	Gain 7 680 0 77 6 231	6 A B B 11.0 37 Area A B Fir 66 Loss G 10 229	11.0 454 396 325 600 36 336	Loss Gaii 1376 1 1606	B 11.0 Area A B Fir 11.0 Loss 217	Gain	B 11.0 Area A B Fir	Gain	B 11.0 Ar A B Fir	,	11.0 A A E F	rea Ir
Run ft. exposed wall a Run ft. exposed wall a Run ft. exposed wall a Celling heigh Floor are: Exposed Ceilings a Exposed Ceilings a Exposed Ceilings a Exposed Floor Gross Exp Wall a Gross Exp Wall a Component: North Shade East/Wes Soutt Existing Window: Skyligh Door: Net exposed walls a Exposed Ceilings a Exposed Floor: Foundation Conductive HeatLoss Total Conductive Heat Loss Air Leakage Heat Loss/Gai Air Leakage Case Ventilation Case	Total R-Values 3.55 3.55 3.55 3.55 4.00 17.03 8.50 59.22 27.65 29.80	Loss Gain 22.93 11.62 22.93 22.50 40.90 23.66 40.10 88.23 20.35 2.75 4.78 0.65 2.94 1.37 2.73 0.17 x 0.5486 0.0544 0.03 0.07 17.58 11.88	KIT 36 A B 11.0 322 Area A B Fir 396 Loss 66 151:	Gain 7 213 1 2164 6 118	35 A B 11.0 223 Are 4 A B Fir 385 Los 28 357 1	s Gain 8 828 706 231 5 3 1061 291 58	19 A B 11.0 169 Area A B Fir 209 Loss 26 59 183 87	Gain 302 55 118 1 420 7 23	15 A B 13.0 42 Area A B Fir 195 Loss Gain 21 427 174 832	34 A B 12.0 129 Area A B Fir 408	Gain 7 680 0 77 6 231 4 987 8 54	6 A B B 11.0 37 Area A B Fir 66 Loss G 10 229 56 268	11.0 454 396 396 36 336 261 14	Loss Gali 1376 1 1606 2982 1 1636	B 11.0 Area A B Fir TI Loss 2567 85	Gain	B 11.0 Area A B Fir	Gain	B 11.0 Ar A B Fir	,	11.0 A A E F	rea Ir
Run ft. exposed wall A Run ft. exposed wall A Run ft. exposed wall A Celling heigh Floor are Exposed Ceilings E Exposed Ceilings E Exposed Floor Gross Exp Wall I Gross Exp Wall I Component North Shade East/Wes Soutu Existing Windows Skyligh Doors Net exposed deilings I Exposed Ceilings E Exposed Ceilings E Exposed Ceilings I Exposed Ceilings I Exposed Ceilings I Exposed Floor Foundation Conductive Heatloss Total Conductive Heat Loss/Gail Air Leakage Heat Loss/Gail Losse Case : Ventilation Case :	Total 8 R-Values 1 3.55 1 3.55 3.55 3.55 1.99 1 2.03 4.00 1 7.03 8 8.50 2 7.65 2 29.80	Loss Gain 22.93 11.62 22.93 29.56 22.93 22.50 24.93 22.50 40.90 23.66 40.10 88.23 20.35 2.75 4.78 0.65 9.58 1.29 1.37 0.64 2.94 1.37 2.73 0.17 x 0.5486 0.0544 0.03 0.07 17.58 11.88	36 A B 11.0 322 Area A B Fir 396 Loss 66 151: 330 1577 309 1694	Gain 1951 7 213 1 2164 6 118	35 A B 11.0 223 Are 4 A B Fir 385 Los 28 357 1	s Gain 642 828 706 231 5 3 354	19 A B 11.0 169 Area A B Fir 209 Loss 26 59 183 87	Gain 302 55 118 1 420 7 23	15 A B 13.0 42 Area A B Fir 195 Loss Gain 21 427 174 832	34 A B 12.0 129 Area A B Fir 408 n Loss 58 28 5 112 357 170 28	Gain 7 680 0 77 6 231 4 987 8 54	6 A B B 11.0 37 Area A B Fir 66 Loss G 10 229	11.0 454 396 325 600 36 336	Loss Gali 1376 1 1606 2982 1 1636	B 11.0 Area A B Fir 11.0 Loss 217	Gain	B 11.0 Area A B Fir	Gain	B 11.0 Ar A B Fir	,	11.0 A A E F	rea Ir
Run ft. exposed wall / Run ft. exposed wall / Run ft. exposed wall / Celling heigh Floor are: Exposed Ceilings / Exposed Ceilings / Exposed Ceilings / Gross Exp Wall / Gross Exp Wall / Gross Exp Wall / Gross Exp Wall / South Existing Window: Skyligh Door Net exposed walls / Net exposed walls / Exposed Ceilings / Exposed Ceilings / Exposed Ceilings / Exposed Ceilings / Exposed Floor: Total Conductive HeatLos Heat Los Heat Gail Air Leakage Heat Loss/Gail Ventilation Case : Case : Ventilation Case : Case : Leilings / Case :	Total 8 R-Values 3.55 3.5	Loss Gain 22.93 11.62 22.93 29.56 22.93 22.50 40.90 23.66 40.10 88.23 20.35 2.75 4.78 0.65 4.78	KIT 36 A B 11.0 322 Area A B Fir 396 Loss 66 151:	Gain 3 1951 7 213 1 2164 6 118 5 152	35 A B 11.0 223 Are 4 A B Fir 385 Los 28 357 1 4	s Gain 642 828 706 231 5 3 354 1061 291 58	19 A B 11.0 169 Area A B Fir 209 Loss 26 59 183 87	Gain 6 302 5 118 1 420 7 23 9 30	15 A B 13.0 42 Area A B FIr 195 Loss Gain 21 427 174 832	34 A B 12.0 129 Area A B Fir 408	Gain 7 680 0 77 6 231 4 987 8 54	6 A B B 11.0 37 Area A B Fir 66 Loss G 10 229 56 268	11.0 454 396 396 325 60 36 336 261 14 18	Area A B B Fir 1376 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	B 11.0 Area A B Fir Constitution	Gain	B 11.0 Area A B Fir	Gain	B 11.0 Ar A B Fir	,	11.0 A A E F	rea Ir
Run ft. exposed wall / Run ft. exposed wall / Run ft. exposed wall / Celling heigh Floor are: Exposed Ceilings E Exposed Ceilings E Exposed Floor: Gross Exp Wall / Gross Exp Wall / Gross Exp Wall E Component: North Shadee East/Wes Soutt Existing Window: Skyligh Door: Net exposed walls / Exposed Ceilings E Exposed Ceilings E Exposed Ceilings E Exposed Ceilings E Exposed Floor: Foundation Conductive Heatloss Total Conductive Heat Loss/Gail Air Leakage Heat Loss/Gail Case : Case : Case Heat Gain People Appliances Loads	Total R-Values 3 R-Values 4 3.55 5 3.55 5 3.55 6 1.99 7 2.03 8 4.00 17.03 8 8.50 8 59.22 9 27.65 29.80 1 = 25 p	Loss Gain 22.93 11.62 22.93 22.50 40.90 23.66 40.10 88.23 20.35 2.75 4.78 0.65 2.94 1.37 2.73 0.17 2.73 0.17 2.73 0.17 17.58 11.88 0.04 0.07 17.58 11.88 0.04 0.07 percent 5742	KIT 36 A B 11.0 322 Area A B Fir 396 Loss 66 151: 330 1577 309 1694 12: 1.5	Gain 7 213 1 2164 6 118	35 A B 11.0 223 Are 4 A B Fir 385 Los 28 357 1 4	s Gain 8 828 706 231 5 3 1061 291 58	19 A B 11.0 169 Area A B Fir 209 Loss 26 59 183 87	Gain 302 55 118 1 420 7 23	15 A B 13.0 42 Area A B FIr 195 Loss Gain 21 427 174 832	34 A B 12.0 129 Area A B Fir 408	Gain 7 680 0 77 6 231 4 987 8 54	6 A B B 11.0 37 Area A B Fir 66 Loss G 10 229 56 268	11.0 454 396 396 36 336 261 14	Area A B B Fir 1376 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	B 11.0 Area A B Fir TI Loss 2567 85	Gain	B 11.0 Area A B Fir	Gain	B 11.0 Ar A B Fir	,	11.0 A A E F	rea Ir
Run ft. exposed wall I Run ft. exposed wall I Run ft. exposed wall I Ceiling heigh Floor are: Exposed Ceilings I Exposed Ceilings I Exposed Floor' Gross Exp Wall I Gross Exp Wall I Component: North Shadee East/Wes Soutt Existing Window: Skyligh Door: Net exposed walls I Exposed Ceilings I Exposed Floor: Foundation Conductive Heatloss Total Conductive Heat Loss/Gail Air Leakage Heat Loss/Gail Case: Ventilation Case: Heat Gain People Appliances Load: Duct and Pipe loss Callen Case I Case I Case I Case I Duct and Pipe loss	Total R-Values 1	Loss Gain 22.93 11.62 22.93 29.56 22.93 29.56 22.93 22.50 40.90 23.66 40.10 88.23 20.35 2.75 9.58 1.29 1.37 0.64 2.94 1.37 2.73 0.17 x 0.5486 0.0544 0.03 0.07 17.58 11.88 0.04 0.07 239 ercent 5742	36 A B 11.0 322 Area A B Fir 396 Loss 66 151: 330 157	Gain 1951 7 213 1 2164 6 118 5 152 2153	35 A B 11.0 223 Are 4 A B Fir 385 Los 28 357 1 4 0.5	s Gain 642 828 706 231 5 3 354 1061 291 56 95 74 718	19 A B 11.0 169 Area A B Fir 209 Loss 59 183 87 80 59 1.0	Gain 6 302 5 118 1 420 7 23 9 30 1435	15 A B 13.0 42 Area A B FIr 195 Loss Gain 21 427 174 832 1259 691	34 A B 12.0 129 Area A B Fir 408	Gain	6 A B B 11.0 37 Area A B FIr 66 Loss G 10 229 56 268	11.0 454 396 396 325 60 36 336 261 14 18	Area A B B Fir 1376 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	B 11.0 Area A B Fir Constitution	Gain	B 11.0 Area A B Fir	Gain	B 11.0 Ar A B Fir	,	11.0 A A E F	rea Ir
Run ft. exposed wall a Run ft. exposed wall a Run ft. exposed wall a Celling heigh Floor area Exposed Cellings a Exposed Cellings a Exposed Cellings a Exposed Cellings a Exposed Floor Gross Exp Wall a Gross Exp Wall a Gross Exp Wall a Existing Windows South Existing Windows Skyligh Doors Net exposed walls a Exposed Cellings a Exposed Floor Foundation Conductive Heat Loss Total Conductive Heat Loss Air Leakage Heat Loss (Case a Case a Heat Gain People Appliances Load Duct and Pipe loss Level HL Total 22,971	Total 8 R-Values 3.55 3.5	Loss Gain 22.93 11.62 22.93 29.56 22.93 29.56 22.93 22.50 40.90 23.66 40.10 88.23 20.35 2.75 4.78 0.65 4.78 0.65 2.73 0.77 2.74 0.75 2.75 0.75 2.7	KIT 36 A B 11.0 322 Area A B Fir 396 Loss 66 151: 330 157: 309 1691 12: 1.5	Gain 3 1951 7 213 1 2164 118 5 152 2153	35 A B 11.0 223 Are 4 A B Fir 385 Los 28 357 1 4 0.5	s Gain S Gain S Gain C S S S S S S S S S S S S S S S S S S	19 A B 11.0 169 Area A B Fir 209 Loss 26 59 183 87	Gain 6 302 5 118 1 420 7 23 9 30 1435	15 A B 13.0 42 Area A B Fir 195 Loss Gain 21 427 174 832 1259 691 51	34 A B 12.0 129 Area A B Fir 408 5 5 5 5 5 5 5 5 7 17 17 17 17 17 17 17 17 17 17 17 17 1	Gain 7 680 7 680 7 77 6 231 4 987 5 4 3 69	6 A B B 11.0 37 Area A B Fir 66 Loss G 10 229 56 268	396 396 325 60 36 336 261 14	Area A B Fir 1376 1 1 1606 14738	B 11.0 Area A B Fir 11.0 Loss 250 217 5667 85 110 435	Gain	B 11.0 Area A B Fir	Gain	B 11.0 Ar A B Fir	,	11.0 A A E F	rea Ir
Run ft. exposed wall I Run ft. exposed wall I Run ft. exposed wall I Ceiling heigh Floor are: Exposed Ceilings I Exposed Ceilings I Exposed Floor' Gross Exp Wall I Gross Exp Wall I Component: North Shadee East/Wes Soutt Existing Window: Skyligh Door: Net exposed walls I Exposed Ceilings I Exposed Floor: Foundation Conductive Heatloss Total Conductive Heat Loss/Gail Air Leakage Heat Loss/Gail Case: Ventilation Case: Heat Gain People Appliances Load: Duct and Pipe loss Callen Case I Case I Case I Case I Duct and Pipe loss	Total 8 R-Values 3.55 3.5	Loss Gain 22.93 11.62 22.93 29.56 22.93 29.56 22.93 22.50 40.90 23.66 40.10 88.23 20.35 2.75 9.58 1.29 1.37 0.64 2.94 1.37 2.73 0.17 x 0.5486 0.0544 0.03 0.07 17.58 11.88 0.04 0.07 239 ercent 5742	KIT 36 A B 11.0 322 Area A B Fir 396 Loss 66 151: 330 157: 309 1691 12: 1.5	Gain 1951 7 213 1 2164 6 118 5 152 2153	35 A B 11.0 223 Are 4 A B Fir 385 Los 28 357 1 4 0.5	s Gain 642 828 706 231 5 3 354 1061 291 56 95 74 718	19 A B 11.0 169 Area A B Fir 209 Loss 26 59 183 87	Gain 6 302 5 118 1 420 7 23 9 30 1435	15 A B 13.0 42 Area A B Fir 195 Loss Gain 21 427 174 832 1259 691 51	34 A B 12.0 129 Area A B Fir 408	Gain	6 A B B 11.0 37 Area A B FIr 66 Loss G 10 229 56 268	11.0 454 396 396 325 60 36 336 261 14 18	Area A B Fir 1376 1 1 1606 14738	B 11.0 Area A B Fir Constitution	Gain	B 11.0 Area A B Fir	Gain	B 11.0 Ar A B Fir	,	11.0 A A E F	rea Ir

 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:





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:	Bayv	iew Wellir	ngton			Date:			July	19, 202	2		_			Weath	ner Data	Bradford	44	-9.4	86 22	48.2				Page 5
2012 OBC		Project:	Gre	en Valley	East		N	lodel:			s	38-21			_	Systen	n 1	Heat	Loss ^T	81.4 deg. F	Ht gain ^T	11	deg. F	GTA:	3460	Proj Lay	ect#F out#J	PJ-00041 JB-08345
	Level 3					P.BED)		wic			LOFT		LAUN	D	ENS 2	2	BED :	2	ENS 3								
	ft. exposed wall A				31 /			9 /			13 A			8 A		9 A		26 A		10 A	A		A		A		A	
Run	ft. exposed wall B					В			В		В			В		В		В		В	В		В		В		В	
	Ceiling height				11.0			9.0			9.0			9.0		9.0		11.0		11.0	9.0		9.0		9.0		9.0	
_	Floor area				274			90 A			258 A			85 Area		50 Area		218 Area		60 Area	Area		Area		Area		Area	
	Exposed Ceilings A				274			90 A			258 A			85 A		50 A		218 A		60 A	Α		Α		Α		Α	
E	xposed Ceilings B				E			Е			В			В		В		В		В	В		В		В		В	
	Exposed Floors					Fir			Flr		F	lr		Flr		46 Flr		213 Flr		60 Fir	Flr		Fir		Flr		Flr	
	Gross Exp Wall A				341			81			117			72		81		286		110								
	Gross Exp Wall B																											
	Components			iain	Ļ	Loss	Gain	, <u>L</u>	Loss	Gain			Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain
	North Shaded	3.55	22.93	11.62							16	367	186															
	East/West	3.55	22.93	29.56	32	734	946											47 1078	1389	14 321 4	14							
	South	3.55	22.93	22.50																								
	Existing Windows	1.99	40.90	23.66																								
	Skylight	2.03	40.10	88.23																								
	Doors	4.00	20.35	2.75																								
	et exposed walls A	17.03	4.78	0.65	309	1477	200	81	387	52	101	483	65	72 34	47	81 387	52	239 1142	154	96 459	62							
Ne	et exposed walls B	8.50	9.58	1.29																								
E	xposed Ceilings A	59.22	1.37	0.64	274	377	176	90	124	58	258	355	166	85 117	55	50 69	32	218 300	140	60 82	39							
E	xposed Ceilings B	27.65	2.94	1.37																								
	Exposed Floors	29.80	2.73	0.17												46 126	8	213 582	36	60 164	10							
Foundation Cond																												
Total Conductive	Heat Loss					2587			511			1204		46		582		3102		1026								
	Heat Gain						1321			110			417		101		92		1719		24							
Air Leakage	Heat Loss/Gain		0.3280	0.0544		849	72		168	6		395	23	15	5	191	5	1017	94	337	29							
	Case 1		0.02	0.07																								
Ventilation	Case 2		17.58	11.88																								
	Case 3	x	0.04	0.07		104	93		21	8		49	29	19	7	23	6	125		41	37							
	Heat Gain People			239	2		478											1	239									
	Appliances Loads	1 =.25 pc	ercent	5742																								
	Duct and Pipe loss			10%												1 77	9	1 412			52							
Level HL Total	13,587		tal HL for p			3540			699			1648		63		873		4656		1541								
Level HG Total	7,531	Total	HG per roo	m x 1.3	L		2553	L		161			609		148	. L	147		3079	8	35							
	Lovel 2					DED 2			DED 4			ENC 4		BED		wc		ENC										
	Level 3				24	BED 3	.	44.4	BED 4			ENS 4		BED	5	wc		ENS										
	ft. exposed wall A				24 /	Α	.	14 /	A		6 A			11 A	5	5 A		21 A		A	A		A		A		A	
	ft. exposed wall A ft. exposed wall B				E		3	E	A		6 A B			11 A B	5	5 A B		21 A B		В	В		В		В		В	
	ft. exposed wall A ft. exposed wall B Ceiling height				9.0	A B	1	9.0	A B		6 A B 9.0			11 A B 9.0	5	5 A B 9.0		21 A B 9.0		B 9.0	9.0		B 9.0		B 9.0		9.0	
Run	n ft. exposed wall A n ft. exposed wall B Ceiling height Floor area				9.0 217 <i>A</i>	A B Area	3	9.0 146 <i>A</i>	A B Area		6 A B 9.0 72 A	rea		11 A B 9.0 143 Area	5	5 A B 9.0 21 Area		21 A B 9.0 128 Area		B 9.0 Area	B 9.0 Area		9.0 Area		B 9.0 Area		B 9.0 Area	
Run	n ft. exposed wall A n ft. exposed wall B Ceiling height Floor area Exposed Ceilings A				9.0 217 A 217 A	A B Area A	3	9.0 146 <i>A</i> 146 <i>A</i>	A B Area A		6 A B 9.0 72 A 72 A	rea		11 A B 9.0 143 Area 143 A	5	5 A B 9.0 21 Area 21 A		21 A B 9.0 128 Area 128 A		B 9.0 Area A	B 9.0 Area A		9.0 Area A		9.0 Area A		B 9.0 Area A	
Run	n ft. exposed wall A n ft. exposed wall B Ceiling height Floor area Exposed Ceilings A Exposed Ceilings B				9.0 217 / 217 /	A B Area A B	3	9.0 146 A 146 A	A B Area A B		6 A B 9.0 72 A 72 A B	rea		11 A B 9.0 143 Area 143 A	5	5 A B 9.0 21 Area 21 A B		21 A B 9.0 128 Area 128 A		B 9.0 Area A B	B 9.0 Area A B		B 9.0 Area A B		B 9.0 Area A B		B 9.0 Area A B	
Run	of ft. exposed wall A of ft. exposed wall B Ceiling height Floor area Exposed Ceilings A Exposed Ceilings B Exposed Floors				9.0 217 / 217 / 68 F	A B Area A B	3	9.0 146 A 146 A E	A B Area A		6 A B 9.0 72 A 72 A B	rea		11 A B 9.0 143 Area 143 A B Fir	5	5 A B 9.0 21 Area 21 A B Fir		21 A B 9.0 128 Area 128 A B Fir		B 9.0 Area A	B 9.0 Area A		9.0 Area A		9.0 Area A		B 9.0 Area A	
Run E E	off. exposed wall A off. exposed wall B Ceiling height Floor area Exposed Ceilings A Exposed Ceilings B Exposed Floors Gross Exp Wall A				9.0 217 / 217 /	A B Area A B	3	9.0 146 A 146 A	A B Area A B		6 A B 9.0 72 A 72 A B	rea		11 A B 9.0 143 Area 143 A	5	5 A B 9.0 21 Area 21 A B		21 A B 9.0 128 Area 128 A		B 9.0 Area A B	B 9.0 Area A B		B 9.0 Area A B		B 9.0 Area A B		B 9.0 Area A B	
Run E E	off. exposed wall A off. exposed wall B Ceiling height Floor area Exposed Ceilings A Exposed Ceilings B Exposed Floors Gross Exp Wall A Gross Exp Wall A	B. Values II	10	-ain	9.0 217 / 217 / 217 / 68 F 216	A B Area A B Fir		9.0 146 A 146 A E F 126	A B Area A B Fir	Coin	6 A B 9.0 72 A 72 A B F1	rea Ir	Cala	11 A B 9.0 143 Area 143 A B Fir 99		5 A B 9.0 21 Area 21 A B Fir 45	Cala	21 A B 9.0 128 Area 128 A B Fir 189		B 9.0 Area A B Fir	B 9.0 Area A B Fir	Cala	B 9.0 Area A B Fir	Cale	B 9.0 Area A B Fir	Cale	B 9.0 Area A B Fir	Colo
Run E E	nft. exposed wall A ft. exposed wall B Ceiling height Floor area Exposed Ceilings A Exposed Floors Gross Exp Wall A Gross Exp Wall A Cross Exp Wall B Components			iain 11.62	9.0 217 / 217 / 217 / 68 F 216	A B Area A B Fir	Gain	9.0 146 A 146 A E F 126	A B Area A B Fir	Gain	6 A B 9.0 72 A 72 A B F1	rea Ir	Gain	11 A B 9.0 143 Area 143 A B Fir	5 Gain	5 A B 9.0 21 Area 21 A B Fir 45	Gain	21 A B 9.0 128 Area 128 A B Fir	Gain	B 9.0 Area A B	B 9.0 Area A B	Gain	B 9.0 Area A B	Gain	B 9.0 Area A B	Gain	B 9.0 Area A B	Gain
Run E E	ft. exposed wall A ft. exposed wall B Ceiling height Floor area Exposed Ceilings B Exposed Floors Gross Exp Wall A Gross Exp Wall B Components North Shaded	3.55	22.93	11.62	9.0 217 / 217 / 68 F 216	A B Area A B B Fir	Gain	9.0 146 A 146 A E F 126	A B Area A B Fir	Gain	6 A B 9.0 72 A 72 A B F1	rea Ir	Gain	11 A B 9.0 143 Area 143 A B Fir 99		5 A B 9.0 21 Area 21 A B Fir 45	Gain	21 A B 9.0 128 Area 128 A B Fir 189	Gain	B 9.0 Area A B Fir	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain
Run E E	ift. exposed wall A ift. 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	3.55 3.55	22.93 22.93	11.62 29.56	9.0 217 / 217 / 217 / 68 F 216	A B Area A B Fir Loss	Gain 1035	9.0 146 A 146 A E F 126	A B Area A B B Fir		6 A B 9.0 72 A 72 A B F 54	rea		11 A B 9.0 143 Area 143 A B Fir 99	Gain	5 A B 9.0 21 Area 21 A B Fir 45		21 A B 9.0 128 Area 128 A B Fir 189	Gain	B 9.0 Area A B Fir	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain
Run	ft. exposed wall A ft. exposed wall A ft. exposed wall B Ceiling height Floor area Exposed Ceilings B Exposed Floors Gross Exp Wall A Gross Exp Wall B Components North Shaded East/West South	3.55 3.55 3.55	22.93 22.93 22.93	11.62 29.56 22.50	9.0 217 / 217 / 68 F 216	A B Area A B B Fir	Gain 1035	9.0 146 A 146 A E F 126	A B Area A B Fir	Gain 360	6 A B 9.0 72 A 72 A B F1	rea Ir	Gain 158	11 A B 9.0 143 Area 143 A B Fir 99	Gain	5 A B 9.0 21 Area 21 A B Fir 45		21 A B 9.0 128 Area 128 A B Fir 189	Gain	B 9.0 Area A B Fir	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain
Run	aft. exposed wall A ft. exposed wall A 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	3.55 3.55 3.55 1.99	22.93 22.93 22.93 40.90	11.62 29.56 22.50 23.66	9.0 217 / 217 / 217 / 68 F 216	A B Area A B Fir Loss	Gain 1035	9.0 146 A 146 A E F 126	A B Area A B B Fir		6 A B 9.0 72 A 72 A B F 54	rea		11 A B 9.0 143 Area 143 A B Fir 99	Gain	5 A B 9.0 21 Area 21 A B Fir 45		21 A B 9.0 128 Area 128 A B Fir 189	Gain	B 9.0 Area A B Fir	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain
Run	ft. exposed wall A ft. exposed wall B Celling height Floor area 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	3.55 3.55 3.55 1.99 2.03	22.93 22.93 22.93 40.90 40.10	11.62 29.56 22.50 23.66 88.23	9.0 217 / 217 / 217 / 68 F 216	A B Area A B Fir Loss	Gain 1035	9.0 146 A 146 A E F 126	A B Area A B B Fir		6 A B 9.0 72 A 72 A B F 54	rea		11 A B 9.0 143 Area 143 A B Fir 99	Gain	5 A B 9.0 21 Area 21 A B Fir 45		21 A B 9.0 128 Area 128 A B Fir 189	Gain	B 9.0 Area A B Fir	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain
Run	aft. exposed wall A aft. exposed wall B Ceiling height Floor area Exposed Ceilings A Exposed Floors Gross Exp Wall B Components North Shaded East/West South Existing Windows Skylight Doors	3.55 3.55 3.55 1.99 2.03 4.00	22.93 22.93 22.93 40.90 40.10 20.35	11.62 29.56 22.50 23.66 88.23 2.75	9.0 217 / 217 / 68 F 216	A B Area A B Fir Loss 803 275	Gain 1035 270	9.0 146 A 146 A 146 A E F 126	A B Area A B B Fir Loss	360	6 A B 9.0 72 A 72 A B F 1 54 L 1	rea	158	11 A B 9.0 143 Area 143 A B Fir 99 Loss	Gain 360	5 A B 9.0 21 Area 21 A B Fir 45 Loss	158	21 A B 9.0 128 Area 128 A B Fir 189 Loss	Gain 473	B 9.0 Area A B Fir	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain
Run	a ft. exposed wall A tf. exposed wall A tf. exposed wall B Ceiling height Floor area Exposed Ceilings B Exposed Floors Gross Exp Wall A Gross Exp Wall B Components North Shaded East/West South Existing Windows Skylight Doors et exposed walls A	3.55 3.55 3.55 1.99 2.03 4.00 17.03	22.93 22.93 22.93 40.90 40.10 20.35 4.78	11.62 29.56 22.50 23.66 88.23 2.75 0.65	9.0 217 / 217 / 217 / 68 F 216	A B Area A B Fir Loss	Gain 1035 270	9.0 146 A 146 A 146 A E F 126	A B Area A B B Fir		6 A B 9.0 72 A 72 A B F 54	rea		11 A B 9.0 143 Area 143 A B Fir 99	Gain 360	5 A B 9.0 21 Area 21 A B Fir 45 Loss	158	21 A B 9.0 128 Area 128 A B Fir 189	Gain 473	B 9.0 Area A B Fir	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain
Run E E	aft. exposed wall A aft. exposed wall B Ceiling height Floor area Exposed Ceilings A Exposed Floors Gross Exp Wall A Gross Exp Wall B Components North Shaded East/West South Existing Windows Skylight Doors et exposed walls B	3.55 3.55 3.55 1.99 2.03 4.00 17.03 8.50	22.93 22.93 22.93 40.90 40.10 20.35 4.78 9.58	11.62 29.56 22.50 23.66 88.23 2.75 0.65 1.29	9.0 217 / 217 / 68 F 216	A B Area A B Fir Loss 803 275	Gain 1035 270 109	9.0 146 A 146 A E F 126 L	A B Area A B Fir Loss 367	360	6 A B 9.0 72 A 72 A B F 54 L C	rea Ir oss (158	11 A B 9.0 143 Area 143 A B Fir 99 Loss 16 36	Gain 7 360	5 A B 9.0 21 Area 21 A B Fir 45 Loss	158	21 A B 9.0 128 Area 128 A B Fir 189 Loss 16 367	Gain 473	B 9.0 Area A B Fir	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain
Run E E No.	a ft. exposed wall A ft. exposed wall B Ceiling height Floor area Exposed Ceilings A Exposed Ceilings B Exposed Floors Gross Exp Wall B Components North Shaded East/West South Existing Windows Skylight Doors et exposed walls A et exposed walls B Exposed Veilings A	3.55 3.55 3.55 1.99 2.03 4.00 17.03 8.50 59.22	22.93 22.93 22.93 40.90 40.10 20.35 4.78 9.58 1.37	11.62 29.56 22.50 23.66 88.23 2.75 0.65 1.29	9.0 217 / 217 / 68 F 216	A B Area A B Fir Loss 803 275	Gain 1035 270 109	9.0 146 A 146 A E F 126 L	A B Area A B B Fir Loss	360	6 A B 9.0 72 A 72 A B F 1 54 L 1	rea	158	11 A B 9.0 143 Area 143 A B Fir 99 Loss	Gain 7 360	5 A B 9.0 21 Area 21 A B Fir 45 Loss	158	21 A B 9.0 128 Area 128 A B Fir 189 Loss	Gain 473	B 9.0 Area A B Fir	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain
Run E E No.	aft. exposed wall A aft. exposed wall A 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 et exposed walls A et exposed walls A et exposed Ceilings A exposed Ceilings A	3.55 3.55 3.55 1.99 2.03 4.00 17.03 8.50 59.22 27.65	22.93 22.93 22.93 40.90 40.10 20.35 4.78 9.58 1.37 2.94	11.62 29.56 22.50 23.66 88.23 2.75 0.65 1.29 0.64 1.37	9.0 217 / 217 / 68 F 216 1 35 12	A B Area A B B Fir Loss 803 275 808 298	Gain 1035 270 109 139	9.0 146 A 146 A E F 126 L	A B Area A B Fir Loss 367	360	6 A B 9.0 72 A 72 A B F 54 L C	rea Ir oss (158	11 A B 9.0 143 Area 143 A B Fir 99 Loss 16 36	Gain 7 360	5 A B 9.0 21 Area 21 A B Fir 45 Loss	158	21 A B 9.0 128 Area 128 A B Fir 189 Loss 16 367	Gain 473	B 9.0 Area A B Fir	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain
Run E E Note Note Note E E	aft. exposed wall A aft. exposed wall B Celling height Floor area Exposed Ceilings A Exposed Floors Gross Exp Wall B Components North Shaded East/West South Existing Windows Skylight Doors et exposed walls A et exposed walls B Exposed Ceilings A Exposed Ceilings B	3.55 3.55 3.55 1.99 2.03 4.00 17.03 8.50 59.22	22.93 22.93 22.93 40.90 40.10 20.35 4.78 9.58 1.37	11.62 29.56 22.50 23.66 88.23 2.75 0.65 1.29	9.0 217 / 217 / 68 F 216	A B Area A B Fir Loss 803 275	Gain 1035 270 109 139	9.0 146 A 146 A E F 126 L	A B Area A B Fir Loss 367	360	6 A B 9.0 72 A 72 A B F 54 L C	rea Ir oss (158	11 A B 9.0 143 Area 143 A B Fir 99 Loss 16 36	Gain 7 360	5 A B 9.0 21 Area 21 A B Fir 45 Loss	158	21 A B 9.0 128 Area 128 A B Fir 189 Loss 16 367	Gain 473	B 9.0 Area A B Fir	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain
Run E E Net Net E Foundation Cond	a ft. exposed wall A ft. exposed wall A celling 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 et exposed walls A et exposed walls A et exposed Ceilings B Exposed Ceilings B Exposed Ceilings B Exposed Floors	3.55 3.55 3.55 1.99 2.03 4.00 17.03 8.50 59.22 27.65	22.93 22.93 22.93 40.90 40.10 20.35 4.78 9.58 1.37 2.94	11.62 29.56 22.50 23.66 88.23 2.75 0.65 1.29 0.64 1.37	9.0 217 / 217 / 68 F 216 1 35 12	A B Area A B Fir Loss 803 275 808 298 186	Gain 1035 270 109 139	9.0 146 A 146 A E F 126 L	A B Area A B Fir Loss 367 526 201	360	6 A B 9.0 72 A 72 A B F 54 L C	rea Ir oss (161 161 225 99	158	11 A B 9.0 143 Area 143 A B Fir 99 Loss 16 36: 83 39: 143 19:	Gain 360 54	5 A B 9.0 21 Area 21 A B Fir 45 Loss 7 161 29	158	21 A B 9.0 128 Area 128 A B Fir 189 Loss 16 367 173 827 128 176	Gain 473 112 82	B 9.0 Area A B Fir	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain
Run E E Note Note Note E E	aft. exposed wall A aft. exposed wall B Celling height Floor area Exposed Cellings A Exposed Floors Gross Exp Wall A Gross Exp Wall B Components North Shaded East/West South Existing Windows Skylight Doors et exposed walls A et exposed Cellings A Exposed Cellings B Exposed Floors Exposed Floors Exposed Floors Suttive HeatLoss	3.55 3.55 3.55 1.99 2.03 4.00 17.03 8.50 59.22 27.65	22.93 22.93 22.93 40.90 40.10 20.35 4.78 9.58 1.37 2.94	11.62 29.56 22.50 23.66 88.23 2.75 0.65 1.29 0.64 1.37	9.0 217 / 217 / 68 F 216 1 35 12	A B Area A B B Fir Loss 803 275 808 298	Gain 1035 270 109 139	9.0 146 A 146 A E F 126 L	A B Area A B Fir Loss 367	360 71 94	6 A B 9.0 72 A 72 A B F 54 L C	rea Ir oss (30 46	11 A B 9.0 143 Area 143 A B Fir 99 Loss 16 36	Gain 7 360 7 54	5 A B 9.0 21 Area 21 A B Fir 45 Loss	158 25 13	21 A B 9.0 128 Area 128 A B Fir 189 Loss 16 367	Gain 473	B 9.0 Area A B Fir	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain
Run E E Note Note Foundation Cond Total Conductive	Aft. exposed wall A Aft. exposed wall B Celling height Floor area Exposed Ceilings A Exposed Floors Gross Exp Wall B Components North Shaded East/West South Existing Windows Skylight Doors et exposed walls A et exposed Walls B Exposed Ceilings A Exposed Ceilings B Exposed Ceilings B Exposed Floors Juctive Heat Loss Heat Loss Heat Loss	3.55 3.55 3.55 1.99 2.03 4.00 17.03 8.50 59.22 27.65	22.93 22.93 22.93 40.90 40.10 20.35 4.78 9.58 1.37 2.94 2.73	11.62 29.56 22.50 23.66 88.23 2.75 0.65 1.29 0.64 1.37	9.0 217 / 217 / 68 F 216 1 35 12	A B B Area A B B Fir Loss 803 275 808 298 186 2369	Gain 1035 270 109 139 11	9.0 146 A 146 A E F 126 L	A B Area A B Fir Loss 367 526 201 1093	360 71 94 525	6 A B 9.0 72 A 72 A B F 54 L C	rea lir 161 225 99 484	30 46	11 A B 9.0 143 Area 143 A B Fir 99 Loss 16 366	Gain 360 54 92 505	5 A B 9.0 21 Area 21 A B Fir 45 Loss 21 29 371	158 25 13	21 A B 9.0 128 Area 128 A B Fir 189 Loss 16 367 173 827 128 176	Gain 473 112 82 6667	B 9.0 Area A B Fir	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain
Run E E Net Net E Foundation Cond	aft. exposed wall A ft. exposed wall A ft. exposed wall B Ceiling height Floor area exposed Ceilings B Exposed Floors Gross Exp Wall A Gross Exp Wall B Components North Shaded East/West South Existing Windows Skylight Doors et exposed walls A et exposed walls A et exposed floors Exposed Ceilings A Exposed Floors Exposed Geilings A Exposed Heat Loss Heat Loss Heat Gain	3.55 3.55 3.55 1.99 2.03 4.00 17.03 8.50 59.22 27.65	22.93 22.93 22.93 40.90 40.10 20.35 4.78 9.58 1.37 2.94 2.73	11.62 29.56 22.50 23.66 88.23 2.75 0.65 1.29 0.64 1.37 0.17	9.0 217 / 217 / 68 F 216 1 35 12	A B Area A B Fir Loss 803 275 808 298 186	Gain 1035 270 109 139	9.0 146 A 146 A E F 126 L	A B Area A B Fir Loss 367 526 201	360 71 94	6 A B 9.0 72 A 72 A B F 54 L C	rea Ir oss (161 161 225 99	30 46	11 A B 9.0 143 Area 143 A B Fir 99 Loss 16 36: 83 39: 143 19:	Gain 360 54 92 505	5 A B 9.0 21 Area 21 A B Fir 45 Loss 7 161 29	158 25 13	21 A B 9.0 128 Area 128 A B Fir 189 Loss 16 367 173 827 128 176	Gain 473 112 82 6667	B 9.0 Area A B Fir	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain
Ne Ne Ne Foundation Cond Total Conductive Air Leakage	aft. exposed wall A aft. exposed wall A aft. 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 et exposed walls A et exposed ceilings A et exposed Ceilings A et exposed Ceilings B Exposed Floors suctive Heatloss Heat Gain Heat Loss/Gain Case 1	3.55 3.55 3.55 1.99 2.03 4.00 17.03 8.50 59.22 27.65	22.93 22.93 40.90 40.10 20.35 4.78 9.58 1.37 2.94 2.73	11.62 29.56 22.50 23.66 88.23 2.75 0.65 1.29 0.64 1.37 0.17	9.0 217 / 217 / 68 F 216 1 35 12	A B B Area A B B Fir Loss 803 275 808 298 186 2369	Gain 1035 270 109 139 11	9.0 146 A 146 A E F 126 L	A B Area A B Fir Loss 367 526 201 1093	360 71 94 525	6 A B 9.0 72 A 72 A B F 54 L C	rea lir 161 225 99 484	30 46	11 A B 9.0 143 Area 143 A B Fir 99 Loss 16 366	Gain 360 54 92 505	5 A B 9.0 21 Area 21 A B Fir 45 Loss 21 29 371	158 25 13	21 A B 9.0 128 Area 128 A B Fir 189 Loss 16 367 173 827 128 176	Gain 473 112 82 6667	B 9.0 Area A B Fir	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain
Run E E Note Note Foundation Cond Total Conductive	Aft. exposed wall A Aft. exposed wall B Celling height Floor area Exposed Ceilings A Exposed Floors Gross Exp Wall B Components North Shaded East/West South Existing Windows Skylight Doors et exposed walls A et exposed Ceilings A Exposed Ceilings A Exposed Ceilings B Exposed Veilings B Exposed Veilings B Exposed Floors Juctive Heat Loss Heat Loss Heat Loss Heat Loss Loss 1 Loss 2	3.55 3.55 3.55 1.99 2.03 4.00 17.03 8.50 59.22 27.65 29.80	22.93 22.93 22.93 22.93 40.90 40.10 20.35 4.78 9.58 1.37 2.94 2.73	11.62 29.56 22.50 23.66 88.23 2.75 0.65 1.29 0.64 1.37 0.17	9.0 217 / 217 / 68 F 216 1 35 12	A B B Area A B B Fir Loss 803 275 808 298 2369 777	1035 270 109 139 11 1564 85	9.0 146 A 146 A E F 126 L	A B B Area A A B B Fir S S S S S S S S S S S S S S S S S S S	360 71 94 525 29	6 A B 9.0 72 A 72 A B F 54 L C	rea 161 225 99 484 159	158 30 46 234 13	11 A B 9.0 143 Area 143 A B Fir 99 Loss 16 363 83 393 143 193	Gain 360 54 92 555 5 27	5 A B 9.0 21 Area 21 A B Fir 45 Loss 7 161 38 182 21 29 371 122	158 25 13	21 A B 9.0 128 Area 128 A B Fir 189 Loss 16 367 173 827 128 176 449	Gain 473 112 82 667 36	B 9.0 Area A B Fir	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain
Ne Ne Ne Foundation Cond Total Conductive Air Leakage	aft. exposed wall A aft. exposed wall A aft. exposed wall B Ceiling height Floor area exposed Ceilings B Exposed Floors Gross Exp Wall A Gross Exp Wall B Components North Shaded East/West South Existing Windows Skylight Doors et exposed walls A et exposed walls A et exposed walls A et exposed walls A et exposed ceilings B Exposed Floors suctive Heatloss Heat Loss Heat Gain Heat Loss/Gain Loss/Gain Case 1 Case 2 Case 3	3.55 3.55 3.55 1.99 2.03 4.00 17.03 8.50 59.22 27.65	22.93 22.93 40.90 40.10 20.35 4.78 9.58 1.37 2.94 2.73	11.62 29.56 22.50 23.66 88.23 2.75 0.65 1.29 0.64 1.37 0.17	9.0 217 / 217 / 68 F 216 1 35 12	A B B Area A B B Fir Loss 803 275 808 298 186 2369	1035 270 109 139 11 1564 85	9.0 146 <i>A</i> 146 <i>A</i> 126 126 110 146 146 146 146	A B Area A B Fir Loss 367 526 201 1093	360 71 94 525 29	6 A B 9.0 72 A 72 A B F 54 L C	rea lir 161 225 99 484	30 46	11 A B 9.0 143 Area 143 A B Fir 99 Loss 16 36: 83 39: 143 19: 966 31!	Gain 360 92 92 92 97 97 97 97 97 97 97 97 97 97 97 97 97	5 A B 9.0 21 Area 21 A B Fir 45 Loss 21 29 371	158 25 13	21 A B 9.0 128 Area 128 A B Fir 189 Loss 16 367 173 827 128 176	Gain 473 112 82 667 36	B 9.0 Area A B Fir	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain
Net	Aft. exposed wall A Aft. exposed wall B Celling height Floor area Exposed Ceilings A Exposed Floors Gross Exp Wall A Gross Exp Wall B Components North Shaded East/West South Existing Windows Skylight Doors et exposed walls B Exposed Ceilings A et exposed Walls B Exposed Floors Juctive Heatloss Heat Gain Heat Loss/Gain Heat Loss/Gain Case 1 Case 2 Case 3 Heat Gain People	3.55 3.55 3.55 3.55 1.99 2.03 4.00 17.03 8.50 59.22 27.65 29.80	22.93 22.93 22.93 40.90 40.10 20.35 4.78 9.58 1.37 2.94 2.73 0.3280 0.02 17.58	11.62 29.56 22.50 23.66 88.23 2.75 0.65 1.29 0.64 1.37 0.17	9.0 217 / 217 / 68 F 216 1 35 12	A B B Area A B B Fir Loss 803 275 808 298 2369 777	1035 270 109 139 11 1564 85	9.0 146 <i>A</i> 146 <i>A</i> 126 126 110 146 146 146 146	A B B Area A A B B Fir S S S S S S S S S S S S S S S S S S S	360 71 94 525 29	6 A B 9.0 72 A 72 A B F 54 L C	rea 161 225 99 484 159	158 30 46 234 13	11 A B 9.0 143 Area 143 A B Fir 99 Loss 16 363 83 393 143 193	Gain 360 54 92 555 5 27	5 A B 9.0 21 Area 21 A B Fir 45 Loss 7 161 38 182 21 29 371 122	158 25 13	21 A B 9.0 128 Area 128 A B Fir 189 Loss 16 367 173 827 128 176 449	Gain 473 112 82 667 36	B 9.0 Area A B Fir	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain
Run E E Note Note E E Foundation Cond Total Conductive Air Leakage Ventilation	aft. exposed wall A ft. exposed wall A ft. exposed wall B Ceiling height Floor area exposed Ceilings B Exposed Floors Gross Exp Wall B Components North Shaded East/West South Existing Windows Skylight Doors et exposed walls A et exposed walls A et exposed Ceilings A Exposed Ceilings A Exposed Floors United State State Heat Loss Heat Gain Heat Loss/Gain Case 1 Case 2 Case 3 Heat Gain People	3.55 3.55 3.55 1.99 2.03 4.00 17.03 8.50 59.22 27.65 29.80	22.93 22.93 22.93 40.90 40.10 20.35 4.78 9.58 1.37 2.94 2.73 0.3280 0.02 17.58	11.62 29.56 22.50 23.66 88.23 2.75 0.65 1.29 0.64 1.37 0.17 0.0544 0.07 11.88 0.07 239 5742	9.0 217 / 217 / 68 F 216 1 35 12	A B B Area A B B Fir Loss 803 275 808 298 2369 777	1035 270 109 139 11 1564 85	9.0 146 <i>A</i> 146 <i>A</i> 126 126 110 146 146 146 146	A B B Area A A B B Fir S S S S S S S S S S S S S S S S S S S	360 71 94 525 29	6 A B 9.0 72 A 72 A B F 54 L C	rea 161 225 99 484 159	158 30 46 234 13	11 A B 9.0 143 Area 143 A B Fir 99 Loss 16 36: 83 39: 143 19: 966 31!	Gain 360 92 92 92 97 97 97 97 97 97 97 97 97 97 97 97 97	5 A B 9.0 21 Area 21 A B Fir 45 Loss 7 161 38 182 21 29 371 122	158 25 13	21 A B 9.0 128 Area 128 A B Fir 189 Loss 16 367 173 827 128 176 449	Gain 473 112 82 667 36	B 9.0 Area A B Fir	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain
Run E E No. No. No. E E Foundation Conductive Air Leakage Ventilation	aft. exposed wall A aft. exposed wall A aft. exposed wall B Ceiling height Floor area exposed Ceilings B Exposed Floors Gross Exp Wall A Gross Exp Wall B Components North Shaded East/West South Existing Windows Skylight Doors et exposed walls A et exposed walls A et exposed walls A et exposed valls B Exposed Ceilings A exposed Ceilings B Exposed Floors stuctive Heatloss Heat Loss Heat Gain Case 1 Case 2 Case 3 Het Gain People Appliances Loads Duct and Pipe loss	3.55 3.55 3.55 1.99 2.03 4.00 17.03 8.50 59.22 27.65 29.80	22.93 22.93 22.93 40.90 40.10 20.35 4.78 9.58 1.37 2.94 2.73 0.3280 0.02 17.58 0.04	11.62 29.56 22.50 23.66 88.23 2.75 0.65 1.29 0.64 1.37 0.17 0.0544 0.07 11.88 0.07 239 5742 10%	9.0 217 / 217 / 68 F 216 1 35 12	A B B Area A B B Fir Loss 803 275 808 298 186 2369 777 96	1035 270 109 139 11 1564 85	9.0 146 <i>A</i> 146 <i>A</i> 126 126 110 146 146 146 146	A B B Area A A B B Fir Loss 367 201 1093 359 444	360 71 94 525 29	6 A B 9.0 72 A 72 A B F 54 L C	rea	158 30 46 234 13	11 A B 9.0 143 Area 143 A B Fir 99 Loss 16 367 83 397 143 197	Gain 3600 92 92 505 5 27 5 239	5 A B B 9.0 21 Area 21 A B Fir 45 Loss 7 161 38 182 21 29 371 122	158 25 13	21 A B B 9.0 128 Area 128 A B Fir 189 Loss 16 367 173 827 128 176 1370 449	Gain 473 112 82 82 667 36 47	B 9.0 Area A B Fir	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain
Run E Net Note Foundation Cond Total Conductive Air Leakage Ventilation	Aft. exposed wall A Aft. exposed wall B Celling height Floor area Exposed Ceilings A Exposed Floors Gross Exp Wall A Gross Exp Wall B Components North Shaded East/West South Existing Windows Skylight Doors et exposed Walls B Exposed Floors et exposed walls A et exposed Ceilings A Exposed Ceilings A Exposed Floors suctive Heatloss Heat Coss Heat Gain Heat Loss/Gain Heat Loss/Gain Heat Agin Heat Gase 1 Case 2 Case 3 Heat Gain People Appliances Loads Suct and Pipe loss 9,096	3.55 3.55 3.55 1.99 2.03 4.00 17.03 8.50 59.22 27.65 29.80	22.93 22.93 22.93 40.90 40.10 20.35 4.78 9.58 1.37 2.94 2.73 0.3280 0.02 17.58 0.04 ercent	11.62 29.56 22.50 23.66 88.23 2.75 0.65 1.29 0.64 1.37 0.17 0.0544 0.07 11.88 0.07 239 5742 10% eer room	9.0 217 / 217 / 68 F 216 1 35 12	A B B Area A B B Fir Loss 803 275 808 298 2369 777	Gain 1035 270 109 139 11 1564 85	9.0 146 / 146 / E 126 16 110 146	A B B Area A A B B Fir S S S S S S S S S S S S S S S S S S S	360 71 94 525 29 37 239	6 A B 9.0 72 A 72 A B F 54 L C	rea 161 225 99 484 159	158 30 46 234 13	11 A B 9.0 143 Area 143 A B Fir 99 Loss 16 36: 83 39: 143 19: 966 31!	Gain 7 360 7 54 7 92 8 505 8 27 9 335	5 A B B 9.0 21 Area 21 A B Fir 45 Loss 7 161 229 371 122 5508	158 25 13 196 11	21 A B 9.0 128 Area 128 A B Fir 189 Loss 16 367 173 827 128 176 449	Gain 473 112 112 82 6667 36 647	B 9.0 Area A B Fir Loss Gain	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain
Run E E No. No. No. E E Foundation Cond Total Conductive Air Leakage Ventilation	aft. exposed wall A aft. exposed wall A aft. exposed wall B Ceiling height Floor area exposed Ceilings B Exposed Floors Gross Exp Wall A Gross Exp Wall B Components North Shaded East/West South Existing Windows Skylight Doors et exposed walls A et exposed walls A et exposed walls A et exposed valls B Exposed Ceilings A exposed Ceilings B Exposed Floors stuctive Heatloss Heat Loss Heat Gain Case 1 Case 2 Case 3 Het Gain People Appliances Loads Duct and Pipe loss	3.55 3.55 3.55 1.99 2.03 4.00 17.03 8.50 59.22 27.65 29.80	22.93 22.93 22.93 40.90 40.10 20.35 4.78 9.58 1.37 2.94 2.73 0.3280 0.02 17.58 0.04	11.62 29.56 22.50 23.66 88.23 2.75 0.65 1.29 0.64 1.37 0.17 0.0544 0.07 11.88 0.07 239 5742 10% eer room	9.0 217 / 217 / 68 F 216 1 35 12	A B B Area A B B Fir Loss 803 275 808 298 186 2369 777 96	1035 270 109 139 11 1564 85	9.0 146 / 14	A B B Area A A B B Fir Loss 367 201 1093 359 444	360 71 94 525 29	6 A B 9.0 72 A 72 A B F 54 L C	rea	158 30 46 234 13	11 A B 9.0 143 Area 143 A B Fir 99 Loss 16 367 83 397 143 197	Gain 3600 92 92 505 5 27 5 239	5 A B B 9.0 21 Area 21 A B Fir 45 Loss 7 161 229 371 122 5508	158 25 13	21 A B B 9.0 128 Area 128 A B Fir 189 Loss 16 367 173 827 128 176 1370 449	Gain 473 112 82 82 667 36 47	B 9.0 Area A B Fir Loss Gain	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain	B 9.0 Area A B Fir	Gain

| Total Heat Loss | 70,331 | btu/h | Total Heat Gain | 33,268 | 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:





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Part 6 design

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 State

Package:	Package A1			
Project:	Bradford	Model:	S38-21	
	RESIDENTIAL MECHANICAL	VENTILATION DES	IGN SUMMARY	
	For systems serving one dwelling unit & co	onforming to the Ontario Building	g Code, O.reg 332/12	
		1		(0)
Lot #	Location of Installation Plan #	Total Ve	entilation Capacity 9.32.3.3	(1)
LOI #	Pidii #	Bsmt & Master Bdrm	2 @ 21.2 cfm	42.4 cfm
Township	Bradford	Other Bedrooms Bathrooms & Kitchen	4 @ 10.6 cfm 6 @ 10.6 cfm	42.4 cfm
Roll #	Permit #	Other rooms	6 @ 10.6 cfm Total	63.6 cfm
Address				
		Principal	Ventilation Capacity 9.32.3	3.4(1)
	Builder			
Name		Master bedroom	1 @ 31.8 cfm	
Address	Bayview Wellington	Other bedrooms	4 @ 15.9 cfm Total	63.6 cfm 95.4
City				
- .			cipal Exhaust Fan Capacity	
Tel	Fax	Make	Model	Location
	Installing Contractor	VanEE	V150H75NS	Base
Name	instaining Contractor	127 cfm		Sones or Equiv.
Address			eat Recovery Ventilator	
0:1		Make	VanEE	
City		Model	V150H75NS 127 cfm high	80 cfm low
Tel	Fax	Sensible efficiency @ Sensible efficiency @	-25 deg C	60% 75%
			ance HRV/ERV to within 10 p	percent of PVC
	Combustion Appliances 9.32.3.1(1)	Supple	emental Ventilation Capaci	ty
a) x b) c) d) e)	Direct vent (sealed combustion) only Positive venting induced draft (except fireplaces) Natural draft, B-vent or induced draft fireplaces Solid fuel (including fireplaces) No combustion Appliances	Total ventilation capac Less principal exhaust REQUIRED suppleme	capacity	212.0 95.4 116.6 cfm
			onlaws and all Fours 0.20.2.F	
			oplemental Fans 9.32.3.5.	
	Heating System	I OCATION		Sones
x	Heating System Forced air	Location Ens	cfm Model 50 XB50	Sones 0.3
X				
X	Forced air	Ens	50 XB50	0.3
X	Forced air Non forced air Electric space heat (if over 10% of heat load)	Ens Ens 2	50 XB50 50 XB50	0.3 0.3
X	Forced air Non forced air Electric space heat (if over 10% of heat load) House Type 9.32.3.1(2)	Ens Ens 2	50 XB50 50 XB50	0.3 0.3
	Forced air Non forced air Electric space heat (if over 10% of heat load)	Ens Ens 2 Ens 3	50 XB50 50 XB50 50 XB50	0.3 0.3 0.3
1 x	Forced air Non forced air Electric space heat (if over 10% of heat load) House Type 9.32.3.1(2) Type a) or b) appliances only, no solid fuel	Ens Ens 2 Ens 3 all fans HVI listed	50 XB50 50 XB50 50 XB50	0.3 0.3 0.3 or Equiv.

System Design Option Name David DaCosta Exhaust only / forced air system HRV WITH DUCTING / forced air system Signature HRV simplified connection to forced air system HRV full ducting/not coupled to forced air system HRAI# Date

♦GTA\DESIGNS

Energy Efficiency Design Summary: Prescriptive Method

(Building Code Part 9, Residential)

Page 7

Project # PJ-00041 Layout # JB-08345

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 Princip	oal Authority			
Application No:				Model/Certification	Number		
A. Project Information							
Building number, street name					Unit number	Lot/Con	
			S38-21				
Municipality Bradford			Postal code	Reg. Plan number	other description	1	
B. Prescriptive Compliance [indica	ate the bu	ilding cod	le compliance packa	ge being employed	I in the house design]		
SB-12 Prescriptive (input design pa	ickage):		Pack	age A1	Table	3.1.1.2.A	1
C. Project Design Conditions							
Climatic Zone (SB-1):		Heat. E	quip. Efficiency		Space Heating F	uel Source	•
Zone 1 (< 5000 degree days)		√ ≥ 9:	2% AFUE		☐ Propane		Solid Fuel
Zone 2 (≥ 5000 degree days)		_ ≥8	34% < 92% AFUE	☐ Oil	☐ Electric		Earth Energy
Ratio of Windows, Skylights & Glas	s (W, S	& G) to	Wall Area		Other Building Ch	aracteristi	cs
470.002 5445.0	612			Log/Post&Bea	am	Grade	☐ ICF Basement
Area of Walls = $\frac{478.06}{100}$ m ² or $\frac{5145.9}{100}$	ft ²	W,S &	G % = <u>9.0%</u>	☐ Slab-on-grou	nd Walkout Ba	sement	
		İ		☑ Air Conditioni	ng Combo Uni	t	
Area of W, S & G = <u>42.827</u> m ² or <u>461.0</u>	ft²	Utilize \	Window ☐ Yes	☐ Air Sourced H	Heat Pump (ASHP)		
		Aver	aging 🔽 No	☐ Ground Sour	ce Heat Pump (GSHP)		
D. Building Specifications [provide	e values a	nd ratings	s of the energy effici	ency components p	proposed]		
Energy Efficiency Substitutions							
☐ ICF (3.1.1.2.(5) & (6) / 3.1.1.3.(5))							
☐ Combined space heating and domestic	water he	eating sys	tems (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.	Required:		Permitted S	Substitution:	
(Refer to Design Guide Attached)		rable 3.	Required:		Permitted S	Substitution:	
Building Component			SI/R-Values or	В	uilding Component		Efficiency Ratings
			n U-Value¹				
Thermal Insulation		ninal	Effective		oors Provide U-Value ⁽¹⁾ o	r ER rating	1 10
Ceiling with Attic Space		60	59.22	Windows/Sliding	g Glass Doors		1.6
Ceiling without Attic Space	_	31	27.65	Skylights			2.8
Exposed Floor		31	29.80	Mechanicals			000/
Walls Above Grade	22		17.03	Heating Equip.(/	· · · · · · · · · · · · · · · · · · ·		96%
Basement Walls		20.0ci	21.12	HRV Efficiency			75%
Slab (all >600mm below grade)		X	X	DHW Heater (El	*		0.80
Slab (edge only ≤600mm below grade)		0	11.13	,	5.1 (min. 42% efficiency))		#Showers 2
Slab (all ≤600mm below grade, or heated)		0	11.13	Combined Heati	ng System		
(1) U value to be provided in either W/(m²·K) or Bt	u/(h·ft·F) l	out not bo	th.				
E. Designer(s) [name(s) & BCIN(s), if	applicable	e, of perso				ts building c	ode]
Name			BCIN	Signati		110	,
David DaCosta			329	964	Mane	14C=	₹ 7
Form authorized by OHRA OROA IMCRO Revised December 1 20							

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

Page 8 PJ-00041 Project # Layout # JB-08345

Vent

Case

Case

Case

System 1 Package: Package A1 System: Project: Bradford Model: S38-21

Air Leakage Calculations

	Building Air Leakage Heat Loss											
В	LRairh	Vb	HL^T	HLleak								
0.018	0.403	44824	81.4	26437								

	Building Air Leakage Heat Gain												
В	LRairh	Vb	HG^T	HG Leak									
0.018	0.099	44824	11	878									

	Air Lea	kage Heat	Loss/Gain Multiplier T	able (Section 11)
Level	Level	Building	Level Conductive	Air Leakage Heat Loss
Level	Factor (LF)	Air	Heat Loss	Multiplier
Level 1	0.5		11014	1.2002
Level 2	0.3	26437	14457	0.5486
Level 3	0.2	20437	16121	0.3280
Level 3	0.2		16121	0.3280

		Air Leakage Heat Gain
HG LEAK	878	0.0544
BUILDING CONDUCTIVE HEAT GAIN	16146	0.0344

	Levels			
1	2	3	4	
(LF)	(LF)	(LF)	(LF)	
1.0	0.6	0.5	0.4	
	0.4	0.3	0.3	
		0.2	0.2	
			0.1	

Levels this Dwelling	
3	

Ventilation Calculations

			ventilat	ion neat Loss	1
			Ventilation	n Heat Loss	
-	С	PVC	HL^T	(1-E) HRV	HLbvent
	1.08	95.4	81.4	0.20	1677

Ventilation Heat Lace

	v	entilation l	Heat Gain
С	PVC	HG^T	HGbvent
1.1	95.4	11	1133

Ventilation Heat Gain

Case 1

Ventilation Heat Gain (Exhaust Only Systems)

Case 1		

Heat Loss	(Exhaust only	Systems)	

Case 1 - Exhaust Only		Multiplier
HGbvent	1133	0.07
Building	16146	0.07

Case 1 - Exhaust Only				
Level	LF	HLbvent	LVL Cond. HL	Multiplier
Level 1	0.5		11014	0.08
Level 2	0.3	1677	14457	0.03
Level 3	0.2	1077	16121	0.02
Level 3	0.2	•	16121	0.02

Case 2

Ventilation Heat Loss	

Multiplia	-

			Multiplier
С	HL^T	(1-E) HRV	17.58
1.08	81.4	0.20	17.30

Ventilation

Ventilation Heat Gain (Direct Ducted Systems)

Case 2

	Multiplier
HG^T	11.88
11	11.00
	HG^T

ilation	Heat	l occ	(Earcad	Air Sycto	mc۱

Ventilation Heat Loss (Forced Air Systems)	

	HLbvent	Multiplier
Total Ventilation Load	1677	0.04

Case 3

Case 3	
Ventilation Heat Gain (Forced Air Systems)	

		Vent Heat Gain	Multiplier
HGbvent	HG*1.3	1133	0.07
1133	1	1133	0.07

Foundation Conductive Heatloss Level 1	Level 1	2901	Watts	9898	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

Foundation Conductive Heatloss Level 2

Watts

Btu/h



Envelope Air Leakage Calculator

Supplemental tool for CAN/CSA-F280

Weather Station Description						
Province:	Ontario T					
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):	8.84					
Building Confi	guration					
Type:	Detached					
Number of Stories:	Two					
Foundation:	Shallow					
House Volume (m³):	1269.42					
Air Leakage/Ve	entilation					
Air Tightness Type:	Present (1961-) (ACH=3.57)					
Custom BDT Data:	ELA @ 10 Pa. 322.44 cm ²					
Custom but Data.	3.57 ACH @ 50 Pa					
Mechanical Ventilation (L/s):	Total Supply: Total Exhaust:					
	47.7					
Flue #:	#1 #2 #3 #4					
Diameter (mm):	0 0 0 0					
Heating Air Leakage Rate (ACH/H):	0.403					
Cooling Air Leakage Rate (ACH/H):	0.099					

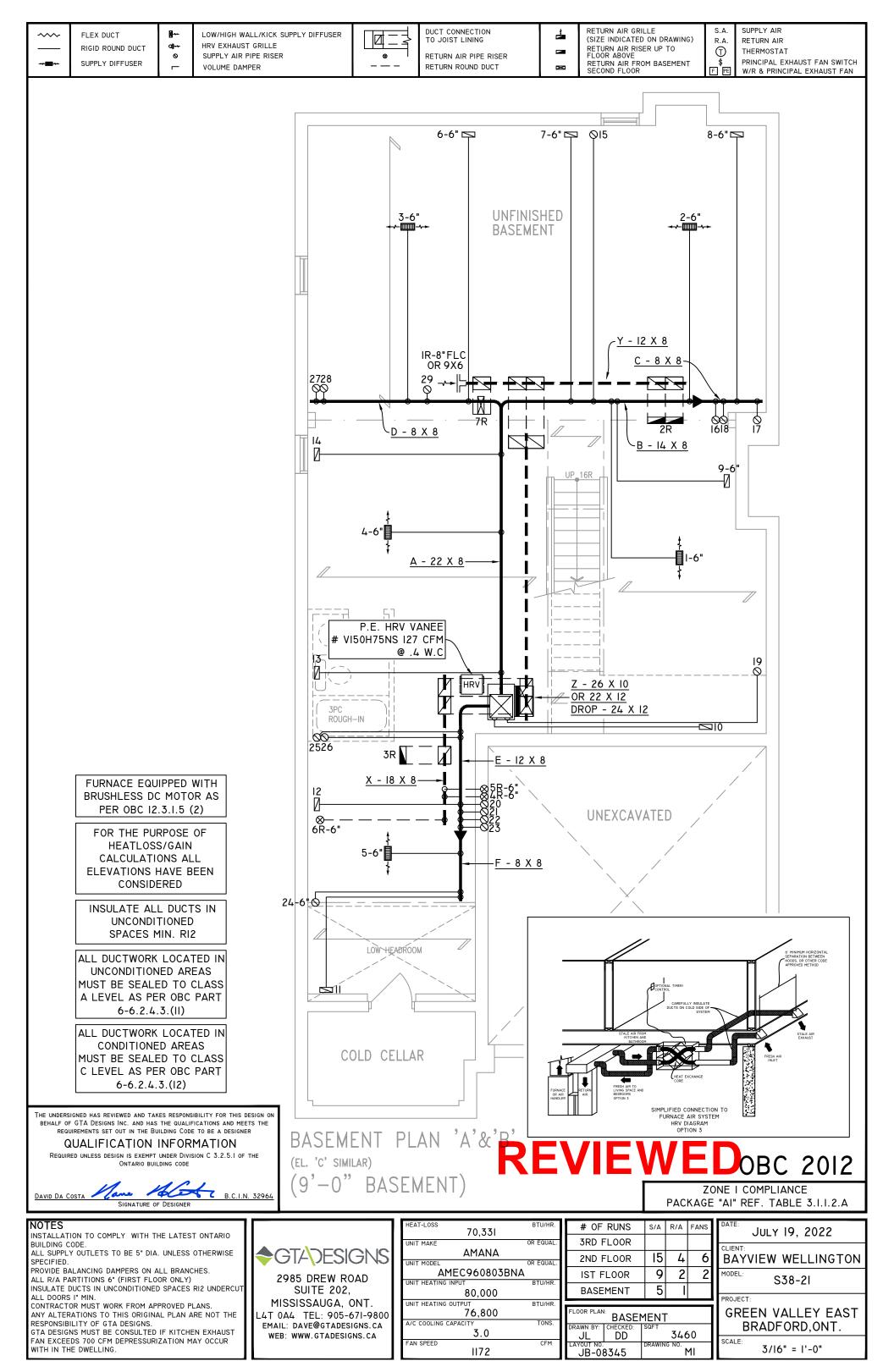


Residential Foundation Thermal Load Calculator

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) ▼		
Fou	ındatio	on Dimensions		
Floor Length (m):	21.86			
Floor Width (m):	5.88			
Exposed Perimeter (m):	55.47			
Wall Height (m):	3.05			
Depth Below Grade (m):	0.91	Insulation Configuration		
Window Area (m²):	2.79			
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): 2901				





RETURN AIR GRILLE (SIZE INDICATED ON DRAWING) SUPPLY AIR DUCT CONNECTION TO JOIST LINING LOW/HIGH WALL/KICK SUPPLY DIFFUSER FLEX DUCT j R.A RETURN AIR HRV EXHAUST GRILLE RETURN AIR RISER UP TO FLOOR ABOVE RIGID ROUND DUCT 1 THERMOSTAT 0 SUPPLY AIR PIPE RISER RETURN AIR PIPE RISER 8 RETURN AIR FROM BASEMENT SECOND FLOOR PRINCIPAL EXHAUST FAN SWITCH SUPPLY DIFFUSER **VOLUME DAMPER** RETURN ROUND DUCT D.V. GAS_16 🕎 15 🖂 29 ⋝ ----FIREPLACE ~**~** ------DW 6-6" 8-6' GREAT ROOM KITCHEN KITCHEN EXHUST 100 CFM MIN. 6" ALL OTHER FANS SHALL BE A MIN. OF 50 CFM OR ISLAND OTHERWISE NOTED AS PER 9.32.3.5 84"x36" 28 Ø **PANTRY** 17 2R LW 30X8 0 ∞ 7R 🛭 | | | | | | Ø 14 T-UP 18R LIVING/DINING UP 16R STUDY **-**□ 26 DN 14R ₂₅||13 MUD И Ø 19 10 ------00 3R LW ₹ F 5" 5R-6" CIRCULATION PRINCIPAL FAN SWITCH 12 4R-6" TO BE CENTRALLY **PWD** 6R-6" LOCATED 20 FOR THE PURPOSE OF WIC 4 HEATLOSS/GAIN CALCULATIONS ALL **GARAGE ELEVATIONS HAVE BEEN CONSIDERED** DN 1R INSULATE ALL DUCTS IN UNCONDITIONED SUNKEN SPACES MIN. RI2 **FOYER** ALL DUCTWORK LOCATED IN UNCONDITIONED AREAS 1 24-6 MUST BE SEALED TO CLASS A LEVEL AS PER OBC PART 6-6.2.4.3.(II) ALL DUCTWORK LOCATED IN **≥** 21 CONDITIONED AREAS MUST BE SEALED TO CLASS PORTICO C LEVEL AS PER OBC PART 6-6.2.4.3.(12) THE UNDERSIGNED HAS REVIEWED AND TAKES RESPONSIBILITY FOR THIS DESIGN ON BEHALF OF GTA DESIGNS INC. AND HAS THE QUALIFICATIONS AND MEETS THE REQUIREMENTS SET OUT IN THE BUILDING CODE TO BE A DESIGNER REVIEWED OBC 2012 QUALIFICATION INFORMATION REQUIRED UNLESS DESIGN IS EXEMPT UNDER DIVISION C 3.2.5.1 OF THE ONTARIO BUILDING CODE GROUND FLOOR PLAN 'A' ZONE I COMPLIANCE B.C.I.N. 32964 PACKAGE "AI" REF. TABLE 3.1.1.2.A # OF RUNS S/A R/A FANS 70,331 JULY 19, 2022 INSTALLATION TO COMPLY WITH THE LATEST ONTARIO 3RD FLOOR BUILDING CODE. ALL SUPPLY OUTLETS TO BE 5" DIA. UNLESS OTHERWISE UNIT MAKE CLIENT GTADESIGNS **AMANA** 15 4 **BAYVIEW WELLINGTON** 2ND FLOOR 6 PROVIDE BALANCING DAMPERS ON ALL BRANCHES. AMEC960803BNA 9 2 2 IST FLOOR MODEL 2985 DREW ROAD ALL R/A PARTITIONS 6" (FIRST FLOOR ONLY) S38-21 INSULATE DUCTS IN UNCONDITIONED SPACES RIZ UNDERCUT ALL DOORS I* MIN. SUITE 202, 5 **BASEMENT** 80,000 PROJECT: MISSISSAUGA, ONT. CONTRACTOR MUST WORK FROM APPROVED PLANS. ANY ALTERATIONS TO THIS ORIGINAL PLAN ARE NOT THE 76,800 GREEN VALLEY EAST L4T 0A4 TEL: 905-671-9800 EMAIL: DAVE@GTADESIGNS.CA GROUND FLOOR RESPONSIBILITY OF GTA DESIGNS. BRADFORD, ONT. GTA DESIGNS MUST BE CONSULTED IF KITCHEN EXHAUST FAN EXCEEDS 700 CFM DEPRESSURIZATION MAY OCCUR 3.0 3460 WEB: WWW.GTADESIGNS.CA DD FAN SPEED

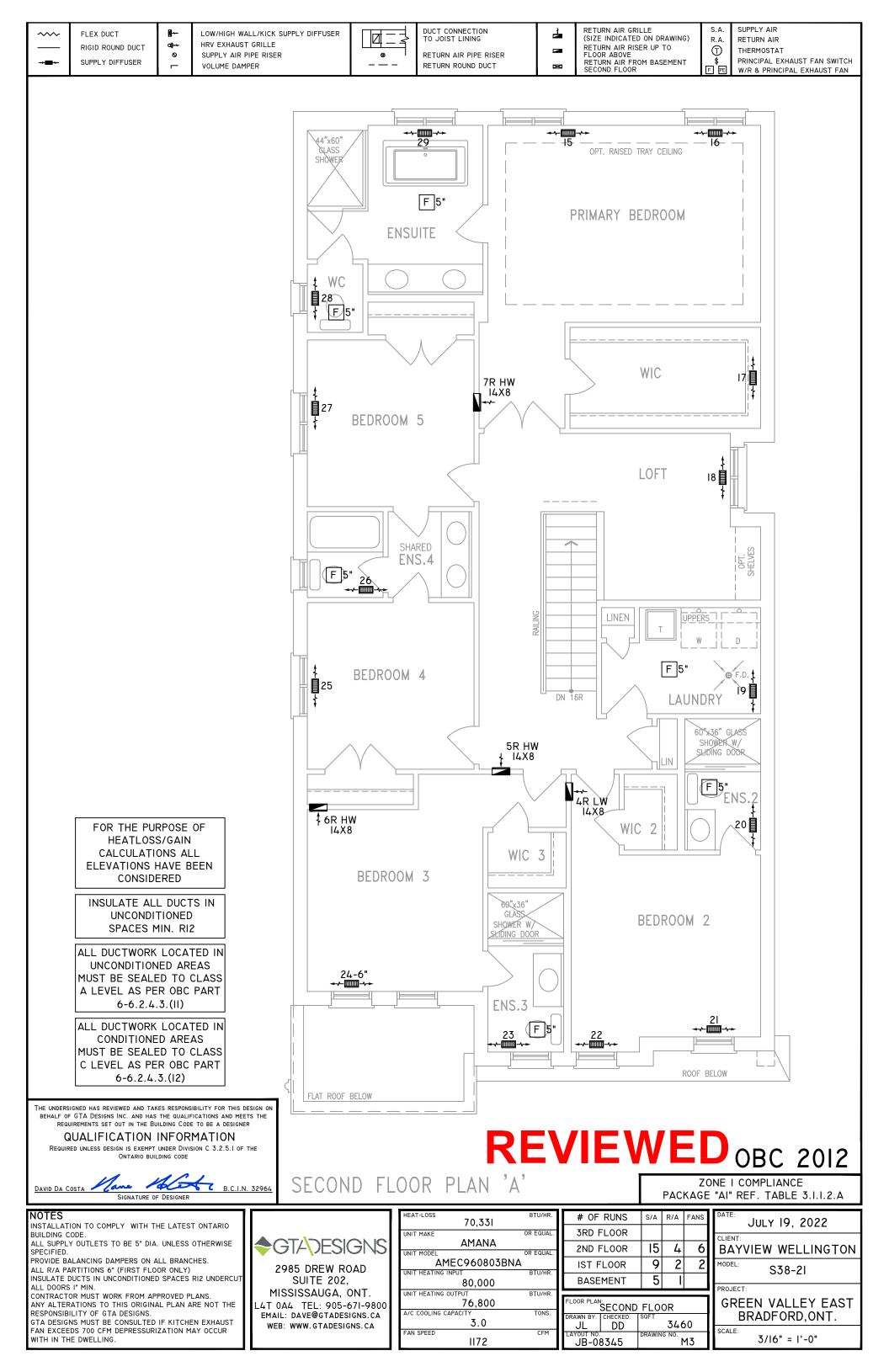
1172

WITH IN THE DWELLING.

3/16" = 1'-0"

M2

JB-08345



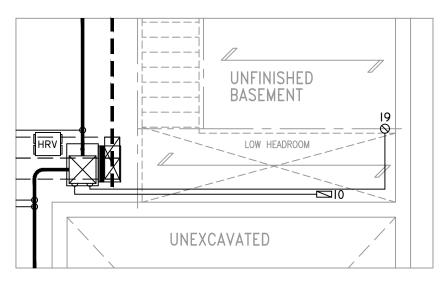
DUCT CONNECTION TO JOIST LINING RETURN AIR PIPE RISER

RETURN ROUND DUCT

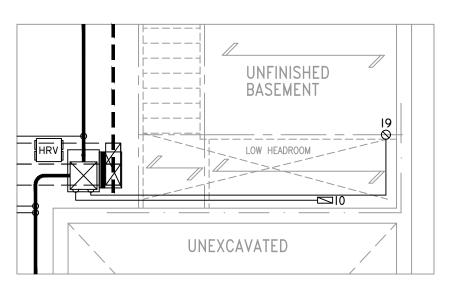
RETURN AIR GRILLE (SIZE INDICATED ON DRAWING) Ġ RETURN AIR RISER UP TO FLOOR ABOVE RETURN AIR FROM BASEMENT SECOND FLOOR

R.A 1

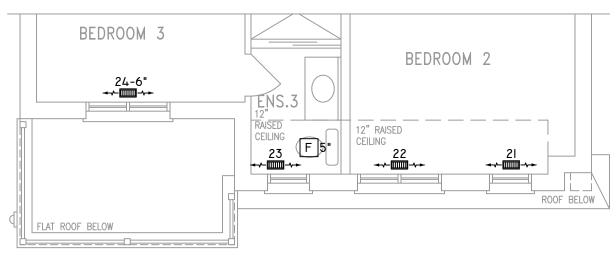
SUPPLY AIR RETURN AIR THERMOSTAT PRINCIPAL EXHAUST FAN SWITCH W/R & PRINCIPAL EXHAUST FAN



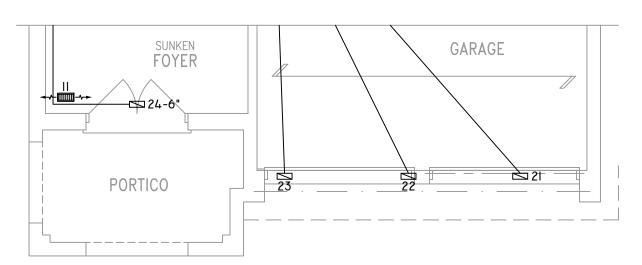
PARTIAL BASEMENT PLAN W/ 1R SUNKEN AREA ABOVE CONDITION



PARTIAL BASEMENT PLAN W/ >1R SUNKEN AREA ABOVE CONDITION



PART. SECOND FLOOR PLAN 'B'



PART. GROUND FLOOR PLAN 'B'

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

NOTES

INSTALLATION TO COMPLY WITH THE LATEST ONTARIO BUILDING CODE. ALL SUPPLY OUTLETS TO BE 5" DIA. UNLESS OTHERWISE

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: 905-67I-9800 EMAIL: DAVE@GTADESIGNS.CA

WEB: WWW.GTADESIGNS.CA

70,331	B TO/HK.
UNIT MAKE	OR EQUAL.
AMANA	
UNIT MODEL	OR EQUAL.
AMEC960803BNA	
UNIT HEATING INPUT	BTU/HR.
80,000	
UNIT HEATING OUTPUT	BTU/HR.
76,800	
A/C COOLING CAPACITY	TONS.
3.0	
FAN SPEED	CFM
1172	

HEAT-LOSS

				_
# OF RUNS	S/A	R/A	FANS	1
3RD FLOOR				H
2ND FLOOR	15	4	6	
IST FLOOR	9	2	2	Ī
BASEMENT	5	-		l I.
				Ή.
FLOOR PLAN: PARTIAL PLAN(S)				Н

DD

JB-08345

3460

M4

ł	JULY 19, 2022
┨	CLIENT:
1	BAYVIEW WELLINGTON
$\ $	MODEL: S38-21
Į	PROJECT:
	GREEN VALLEY EAST BRADFORD,ONT.
ı	BRADI SILD, SITT.

3/16" = 1'-0"

FLEX DUCT RIGID ROUND DUCT SUPPLY DIFFUSER

LOW/HIGH WALL/KICK SUPPLY DIFFUSER HRV EXHAUST GRILLE **a}**→ ⊗ SUPPLY AIR PIPE RISER VOLUME DAMPER



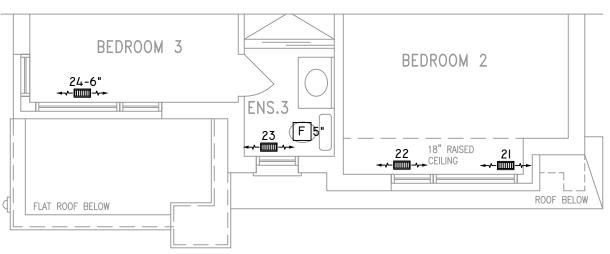
DUCT CONNECTION TO JOIST LINING RETURN AIR PIPE RISER RETURN ROUND DUCT

4

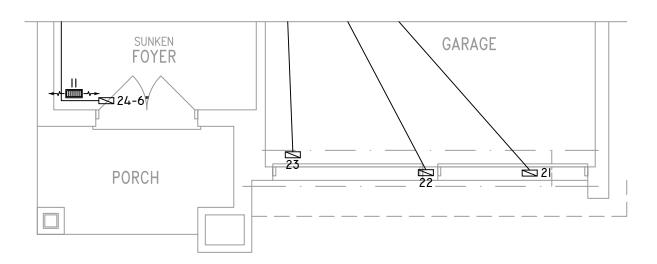
RETURN AIR GRILLE (SIZE INDICATED ON DRAWING) RETURN AIR RISER UP TO FLOOR ABOVE RETURN AIR FROM BASEMENT SECOND FLOOR

R.A 1

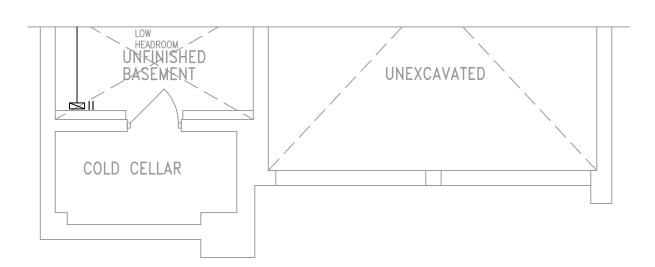
SUPPLY AIR RETURN AIR THERMOSTAT PRINCIPAL EXHAUST FAN SWITCH



PART. SECOND FLOOR PLAN 'C'



PART. GROUND FLOOR PLAN 'C'



PART. BASEMENT PLAN 'C'



REVIEWED OBC 2012

3460

DRAWING NO. M5

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

PROVIDE BALANCING DAMPERS ON ALL BRANCHES. ALL R/A PARTITIONS 6" (FIRST FLOOR ONLY) INSULATE DUCTS IN UNCONDITIONED SPACES RIZ 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.



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HEAT-LUSS		BIU/HK.
/	0,331	
UNIT MAKE		OR EQUAL.
Al	ANA	
UNIT MODEL		OR EQUAL.
AMEC9	60803BN	IA
UNIT HEATING INPUT		BTU/HR.
8	0,000	
UNIT HEATING OUTPUT		BTU/HR.
7	6,800	
A/C COOLING CAPACITY	1	TONS.
	3.0	
FAN SPEED		CFM
	1172	

# OF RUNS	S/A	R/A	FANS
3RD FLOOR			
2ND FLOOR	15	4	6
IST FLOOR	9	2	2
BASEMENT	5		
FLOOR PLAN: PARTIAL PLAN(S)			
DRAWN BY: CHECKED: SQFT			

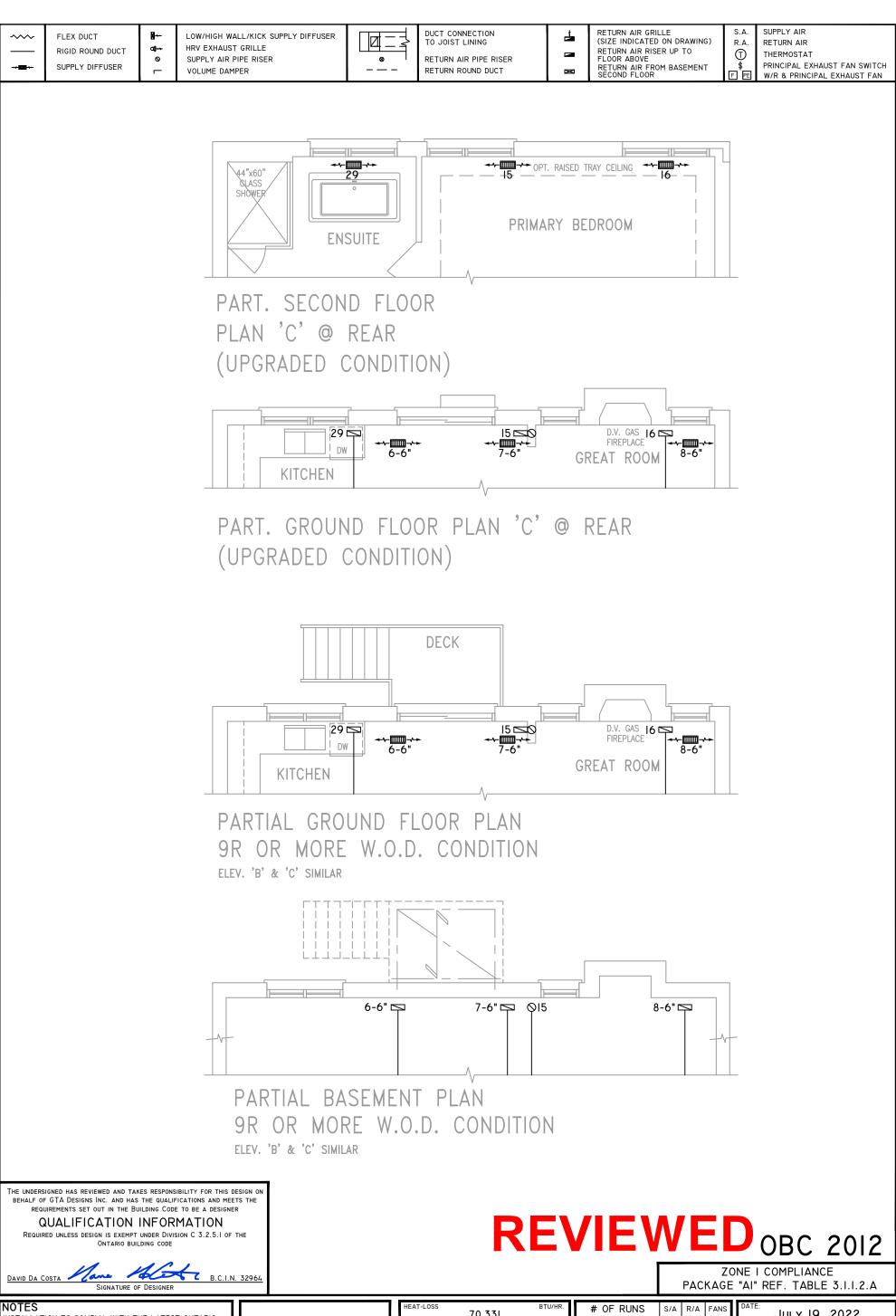
DD

JB-08345

	· ·
l	CLIENT: BAYVIEW WELLINGTON
	MODEL: S38-2I
l	PROJECT:
	GREEN VALLEY EAST BRADFORD,ONT.

3/16" = 1'-0"

JULY 19, 2022



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

HEAT-LOSS	BTU/HR.
70,331	
UNIT MAKE	OR EQUAL.
AMANA	
UNIT MODEL	OR EQUAL.
AMEC960803BNA	
UNIT HEATING INPUT	BTU/HR.
80,000	
UNIT HEATING OUTPUT	BTU/HR.
76,800	
A/C COOLING CAPACITY	TONS.
3.0	
FAN SPEED	CFM
1172	

# OF RUNS	S/A	R/A	FANS	Ī
3RD FLOOR				
2ND FLOOR	15	4	6	
IST FLOOR	9	2	2	l
BASEMENT	5	-		
FLOOR PLAN: PARTIAL PLAN(S)				

DD

JB-08345

3460

M6

JULY 19, 2022

CLIENT:
BAYVIEW WELLINGTON

MODEL:
S38-21

PROJECT:
GREEN VALLEY EAST

BRADFORD,ONT.

SCALE: 3/16" = 1'-0"