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Block 121 Units 1 to 6

	SITE NAME: I	BARLA	ISSINA																DATE: Au	g-22			WINTE	ER NA	TURAL	AIR C	HANGE RATE 0.319		S ΔT °F.	. 72		CSA-F280-12
	BUILDER:	GREEN	JPARK I	HOMES					TYPE	: CHER	RY 1				GFA:	1946			LO# 986								HANGE RATE 0.085	HEAT GAIN			SB-12	PACKAGE A
	ROOM USE				MBR			ENS		T	WIC		l	BED-2			BED-3				T	BATH		T	FLE		T		T		1	A
	EXP. WALL				11			14		ł	0			10		-	10				İ	0			0				1			
	CLG. HT.				9			9		1	9			9	- 1		9				1	9			9				- 1		1	
		FACTO	RS		•			•			•			·			·					•			,				ļ		1	
GRS.V		LOSS			99			126			0			90			90				ı				0				İ		1	
J Cho.	GLAZING	LOGG	GAIN			GAIN	l	LOSS	CAIN	1	LOSS			•••											-		1		l			
			45.0				ı			١.		GAIN	ı	LOSS	- 1		oss	1				LOSS	GAIN			S GAIN						
		20.3	15.0	0	0	0	0	0	0	0	.0	0	0	0	0	0	0	0			0	0	0	0	0	0			İ			
İ	i i	20.3	40.5	0	0	0	0	0	0	0	0	0	18	365	730	16	324	649			0	0	0	0	0	0						
	- 1	20.3	23.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			0	0	0	0	0	0						
		20.3	40.5	27	547	1095	24	487	973	0	0	0	0	0	0	0	0	0			0	0	0	0	0	0					1	
	SKYLT.	35.5	99.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			0	0	0	0	0	0						
	DOORS	19.1	2.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			0	0	0	0	0	0			1		1	
NET EXPO	OSED WALL	4.3	0.5	72	306	39	102	434	55	0	0	0	72	306	39	74	315	40			0	0	0	0	0	0	1					
NET EXPOSED BSMT WA	VALL ABOVE GR	3.4	0.4	0	0	0	0	0	0	0	0	0	١٠	0	0	0	0	0			0	0	0	0	0	0					ı	
EXP	POSED CLG	1.2	0.5	300	367	158	160	196	84	60	73	32	170	208	90	180	220	95			130		68	190	-	-	1		1		1	
NO ATTIC EXP		2.6	1.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			0	0	0	0	0	0			1			
	SED FLOOR	2.4	0.3	176	428	54	١	0	0	24	58	7	٥	0	0		175	22			48	117	-	1	0	0					1	
BASEMENT/CRAWL H			5.5		720	34	້	0	U	24	20	'	້	-	١	14					40		15	0	-	U			1		1	
SLAB ON GRADE					0			Û			•			0			0	1				0		1	0				1		1	
4	1		- 1		0			0		1	0		l	0			0				1	0		1	0				1			
	AL HT LOSS				1648			1116			132			879			1034	I				276		1	232				1		1	
	AL HT GAIN					1346			1112			39			858			806					83	ľ		100						
LEVEL FACTOR / M				0.20	0.40		0.20	0.40		0.20	0.40		0.20	0.40	1	0.20	0.40				0.20	0.40		0.20	0.40	)			1		1	
AIR CHANGE	HEAT LOSS				659			446		1	53			351			413				ı	110		1	93						1	
AIR CHANGE	HEAT GAIN					87			72			3			55			52					5	1		6					1	
	DUCT LOSS				231			0			18			0			145				1	39		l	0						1	
	DUCT GAIN					250			0			4			0			168					9		-	0					1	
	AIN PEOPLE	240		2		480	0		0	0		ó	1		240	1		240			0		0	0		0			ı		1	
HEAT GAIN APPLIAN	NCES/LIGHTS					585			0	1		0			585			585			"		0	1		585			1		1	
TOTAL HT LO	- 1				2537			1562	•	1	203	Ĭ		1230			1592					424	U	1	325				İ			
TOTAL HT GAIN	1					3571	i		1540	l		59			2260			2406				727	127	1	323	899			1			
							L						L					2400					121			033	L					
																					-											
	ROOM USE										K/L/D		T		T				PI	WD	T	FOY		Т			T 1		T			BAS
	ROOM USE EXP. WALL										K/L/D 48									WD 15		FOY 30				<del> </del>						BAS 91
1																			1	15	T	30						34.00				91
1	EXP. WALL CLG. HT.	FACTO	RS								48								1													
!	EXP. WALL CLG. HT.										48								1	15 10		30 10										91 9
!	EXP. WALL CLG. HT. F WALL AREA										48 10 480	GAIN		***************************************					1	15 10 50		30 10 300	GAIN									91 9 546
!	EXP. WALL CLG. HT. F WALL AREA GLAZING	LOSS	GAIN							0	48 10 480 LOSS	,							1 1 LC	15 10 50 DSS GAII	1	30 10 300 LOSS										91 9 546 LOSS GAIN
!	EXP. WALL CLG. HT. F WALL AREA I GLAZING NORTH	20.3	GAIN 15.0							0	48 10 480 LOSS 0	0							1 LC	15 10 50 DSS GAII 0 0	0	30 10 300 LOSS 0	0								0	91 9 546 LOSS GAIN 0 0
!	EXP. WALL CLG. HT.  WALL AREA GLAZING NORTH EAST	20.3 20.3	GAIN 15.0 40.5							56	48 10 480 LOSS 0 1135	0 2270							1 LC 0	15 10 50 DSS GAII 0 0	0	30 10 300 LOSS 0	0 0								0 4	91 9 546 LOSS GAIN 0 0 81 162
!	EXP. WALL CLG. HT.  WALL AREA GLAZING NORTH EAST SOUTH	20.3 20.3 20.3 20.3	9 (GAIN 15.0 40.5 23.9							56 0	48 10 480 LOSS 0 1135 0	0 2270 0							1 LC 0 0	15 10 50 OSS GAII 0 0 0 0	0 0	30 10 300 LOSS 0 0	0 0 0								0 4 0	91 9 546 LOSS GAIN 0 0 81 162 0 0
!	EXP. WALL CLG. HT. I WALL AREA I GLAZING NORTH EAST SOUTH WEST	20.3 20.3 20.3 20.3 20.3	15.0 40.5 23.9 40.5							56 0 0	480 LOSS 0 1135 0	0 2270 0 0							1 LC 0 0 0	15 10 50 DSS GAII 0 0 0 0	0 0 0 11	30 10 300 LOSS 0 0 0	0 0 0 446								0 4 0 0	91 9 546 LOSS GAIN 0 0 81 162 0 0
!	EXP. WALL CLG. HT. WALL AREA GLAZING NORTH EAST SOUTH WEST SKYLT.	20.3 20.3 20.3 20.3 20.3 35.5	15.0 40.5 23.9 40.5 99.8							56 0 0	48 10 480 LOSS 0 1135 0 0	0 2270 0 0 0							1 LC 0 0 0 0 0 0 0	15 10 50 5SS GAII 0 0 0 0 0 0	0 0 0 11 0	30 10 300 LOSS 0 0 0 223	0 0 0 446 0								0 4 0 0	91 9 546 LOSS GAIN 0 0 81 162 0 0 0 0
GRS.W	EXP. WALL CLG. HT.  WALL AREA GLAZING NORTH EAST SOUTH WEST SKYLT. DOORS	20.3 20.3 20.3 20.3 20.3 35.5	15.0 40.5 23.9 40.5 99.8 2.4							56 0 0 0 10	48 10 480 LOSS 0 1135 0 0	0 2270 0 0 0 0							1 LC 0 0 0 0	15 10 50 DSS GAII 0 0 0 0 0 0	0 0 0 11 0 56	300 10 300 LOSS 0 0 0 223 0 1070	0 0 0 446 0 136								0 4 0 0	91 9 546 LOSS GAIN 0 0 81 162 0 0
GRS.V	EXP. WALL CLG. HT.  WALL AREA GLAZING NORTH EAST SOUTH WEST SKYLT. DOORS OSED WALL	20.3 20.3 20.3 20.3 20.3 35.5 19.1 4.3	15.0 40.5 23.9 40.5 99.8 2.4 0.5							56 0 0 0 10 414	480 LOSS 0 1135 0 0 191 1760	0 2270 0 0 0 24 224							1 LC 0 0 0 0 0 0	50 50 DSS GAII 0 0 0 0 0 0 0 0 0 0 0 0 38 81	0 0 0 11 0 56 233	30 10 300 LOSS 0 0 0 223	0 0 0 446 0								0 4 0 0	91 9 546 LOSS GAIN 0 0 81 162 0 0 0 0
GRS.VI NET EXPO NET EXPOSED BSMT WA	EXP. WALL CLG. HT. WALL AREA I GLAZING NORTH EAST SOUTH WEST SKYLT. DOORS OSED WALL VALL ABOVE GR	20.3 20.3 20.3 20.3 35.5 19.1 4.3 3.4	15.0 40.5 23.9 40.5 99.8 2.4 0.5 0.4							56 0 0 0 10 414 0	480 LOSS 0 1135 0 0 191 1760	0 2270 0 0 0 0							1 LC 0 0 0 0 0 0	15 10 50 DSS GAII 0 0 0 0 0 0	0 0 0 11 0 56	300 10 300 LOSS 0 0 0 223 0 1070	0 0 0 446 0 136								0 4 0 0 0 21	91 9 546 LOSS GAIN 0 0 81 162 0 0 0 0
GRS.W NET EXPO NET EXPOSED BSMT WA EXP	EXP. WALL CLG. HT. WALL AREA GLAZING NORTH EAST SOUTH WEST SKYLT. DOORS OSED WALL JALL ABOVE GR	20.3 20.3 20.3 20.3 35.5 19.1 4.3 3.4 1.2	15.0 40.5 23.9 40.5 99.8 2.4 0.5 0.4 0.5							56 0 0 0 10 414 0	48 10 480 LOSS 0 1135 0 0 191 1760 0	0 2270 0 0 0 24 224 0							1 LC 0 0 0 0 0 0 0 150 6 0	50 50 DSS GAII 0 0 0 0 0 0 0 0 0 0 0 0 38 81	0 0 0 11 0 56 233	300 100 300 LOSS 0 0 0 223 0 1070 991	0 0 446 0 136 126								0 4 0 0 0 21	91 9 546 LOSS GAIN 0 0 81 162 0 0 0 0 0 0 401 51 0 0
GRS.W  NET EXPO  NET EXPOSED BSMIT WA  EXP  NO ATTIC EXP	EXP. WALL CLG. HT. WALL AREA GLAZING NORTH EAST SOUTH WEST SKYLT. DOORS OSED WALL VALL ABOVE OR POSED CLG	20.3 20.3 20.3 20.3 35.5 19.1 4.3 3.4 1.2 2.6	GAIN 15.0 40.5 23.9 40.5 99.8 2.4 0.5 0.4 0.5							56 0 0 0 10 414 0	480 LOSS 0 1135 0 0 191 1760	0 2270 0 0 0 24 224							1 LC 0 0 0 0 0 0 150 6 0 0 0	50 SS GAIII 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 11 0 56 233 0	30 10 300 LOSS 0 0 0 223 0 1070 991	0 0 446 0 136 126								0 4 0 0 0 21 0 273	91 9 546 LOSS GAIN 0 0 81 162 0 0 0 0 0 0 401 51 0 0 936 119
GRS.W  NET EXPO  NET EXPOSED BSMT WA  EXP  NO ATTIC EXPOSED SECTION OF THE EXPOSED SECTION	EXP. WALL CLG. HT. WALL AREA I GLAZING NORTH EAST SOUTH WEST SKYLT. DOORS OSED WALL JALL ABOVE GR POSED CLG SED FLOOR	20.3 20.3 20.3 20.3 35.5 19.1 4.3 3.4 1.2	15.0 40.5 23.9 40.5 99.8 2.4 0.5 0.4 0.5							56 0 0 0 10 414 0	48 10 480 LOSS 0 1135 0 0 191 1760 0	0 2270 0 0 0 24 224 0							1 LC	155 50 50 50 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 11 0 56 233 0	30 10 300 LOSS 0 0 0 223 0 1070 991 0	0 0 446 0 136 126 0								0 4 0 0 0 21 0 273	91 9 546 LOSS GAIN 0 0 81 162 0 0 0 0 401 51 0 0 936 119
GRS.W  NET EXPO  NET EXPOSED BSMT WA  EXPO  NO ATTIC EXP  EXPOSE  BASEMENT/CRAWL I	EXP. WALL CLG. HT. WALL AREA GLAZING NORTH EAST SOUTH WEST SKYLT. DOORS OSED WALL VALL ABOVE GR POSED CLG POSED CLG SED FLOOR HEAT LOSS	20.3 20.3 20.3 20.3 35.5 19.1 4.3 3.4 1.2 2.6	GAIN 15.0 40.5 23.9 40.5 99.8 2.4 0.5 0.4 0.5							56 0 0 0 10 414 0 0	48 10 480 LOSS 0 1135 0 0 191 1760 0 0	0 2270 0 0 0 24 224 0 0							1 LC C C C C C C C C C C C C C C C C C C	155 100 500 500 000 000 000 000 000 000	0 0 0 11 0 56 233 0	30 10 300 LOSS 0 0 223 0 1070 991 0	0 0 446 0 136 126 0								0 4 0 0 0 21 0 273 0	91 9 546 LOSS GAIN 0 0 0 81 162 0 0 0 401 51 0 0 936 119 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
GRS.W  NET EXPO  NET EXPOSED BSMT WA  EXP  NO ATTIC EXPOSED SECTION OF THE EXPOSED SECTION	EXP. WALL CLG. HT. WALL AREA GLAZING NORTH EAST SOUTH WEST SKYLT. DOORS OSED WALL VALL ABOVE GR POSED CLG POSED CLG SED FLOOR HEAT LOSS	20.3 20.3 20.3 20.3 35.5 19.1 4.3 3.4 1.2 2.6	15.0 40.5 23.9 40.5 99.8 2.4 0.5 0.4 0.5							56 0 0 0 10 414 0 0	48 10 480 LOSS 0 1135 0 0 191 1760 0 0	0 2270 0 0 0 24 224 0 0							1 LC 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	15	0 0 0 11 0 56 233 0	30 10 300 LOSS 0 0 223 0 1070 991 0 0	0 0 446 0 136 126 0								0 4 0 0 0 21 0 273 0	91 9 546 LOSS GAIN 0 0 81 162 0 0 0 0 0 0 401 51 0 0 936 119 0 0
GRS.W  NET EXPO  NET EXPOSED BSMT WE  EXP  NO ATTIC EXP  EXPOSED  EXPOSED  BASEMENT/CRAWL. +  SLAB ON GRADE H	EXP. WALL CLG. HT. WALL AREA GLAZING NORTH EAST SOUTH WEST SKYLT. DOORS OSED WALL VALL ABOVE GR POSED CLG POSED CLG SED FLOOR HEAT LOSS	20.3 20.3 20.3 20.3 35.5 19.1 4.3 3.4 1.2 2.6	15.0 40.5 23.9 40.5 99.8 2.4 0.5 0.4 0.5							56 0 0 0 10 414 0 0	480 LOSS 0 1135 0 0 191 1760 0 0	0 2270 0 0 0 24 224 0 0							1 LC 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	155 100 500 500 500 600 600 600 600 600 600 6	0 0 0 11 0 56 233 0	30 10 300 LOSS 0 0 223 0 1070 991 0 0 0	0 0 446 0 136 126 0								0 4 0 0 0 21 0 273 0 0	91 9 546 LOSS GAIN 0 0 81 162 0 0 0 0 0 0 401 51 0 0 936 119 0 0 0 0 2758
GRS.W  NET EXPO  NET EXPOSED BSMT WA  EXP  NO ATTIC EXP  EXPOS  BASEMENT/CRAWL F  SLAB ON GRADE F  SUBTOTA	EXP. WALL CLG. HT. WALL AREA GLAZING NORTH EAST SOUTH WEST SKYLT. DOORS OSED WALL IALL ABOVE GR POSED CLG POSED CLG SED FLOOR HEAT LOSS	20.3 20.3 20.3 20.3 35.5 19.1 4.3 3.4 1.2 2.6	15.0 40.5 23.9 40.5 99.8 2.4 0.5 0.4 0.5							56 0 0 0 10 414 0 0	48 10 480 LOSS 0 1135 0 0 191 1760 0 0 0	0 2270 0 0 0 24 224 0 0							1 LC 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	15	0 0 0 11 0 56 233 0	30 10 300 LOSS 0 0 223 0 1070 991 0 0	0 0 446 0 136 126 0 0								0 4 0 0 0 21 0 273 0 0	91 9 546 LOSS GAIN 0 0 0 81 162 0 0 0 0 401 51 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
GRS.W  NET EXPO  NET EXPOSED BSMT WA  EXP  NO ATTIC EXP  EXPOS  BASEMENT/CRAWL F  SLAB ON GRADE F  SUBTOTA	EXP. WALL CLG. HT. WALL AREA I GLAZING NORTH EAST SOUTH WEST SKYLT. DOORS OSED WALL VALL ABOVE GR POSED CLG SED FLOOR HEAT LOSS HEAT LOSS HEAT LOSS ALL HT GAIN	20.3 20.3 20.3 20.3 35.5 19.1 4.3 3.4 1.2 2.6	15.0 40.5 23.9 40.5 99.8 2.4 0.5 0.4 0.5							56 0 0 0 10 414 0 0	48 10 480 LOSS 0 1135 0 0 0 191 1760 0 0 0 0 3086	0 2270 0 0 0 24 224 0 0							1 LC 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	15	0 0 0 111 0 56 233 0 0	30 10 300 LOSS 0 0 223 0 1070 991 0 0 0 0 2283	0 0 446 0 136 126 0								0 4 0 0 0 21 0 273 0 0	91 9 546 LOSS GAIN 0 0 81 162 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
GRS.W  NET EXPO  NET EXPOSED BSMT WA  EXPO  NO ATTIC EXP  EXPOSO  BASEMENT/CRAWL F  SUB TOTA  SUB TOTA  SUB TOTA  LEVEL FACTOR / M	EXP. WALL CLG. HT. WALL AREA GLAZING NORTH EAST SOUTH WEST SKYLT. DOORS OSED WALL VALL ABOVE GR POSED CLG POSED CLG SED FLOOR HEAT LOSS HEAT LOSS AL HT LOSS AL HT GAIN WULTIPLIER	20.3 20.3 20.3 20.3 35.5 19.1 4.3 3.4 1.2 2.6	15.0 40.5 23.9 40.5 99.8 2.4 0.5 0.4 0.5							56 0 0 0 10 414 0 0	48 10 480 LOSS 0 1135 0 0 191 1760 0 0 0 0 0 0	0 2270 0 0 0 24 224 0 0							1 LC 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	50 CSS GAII 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 11 0 56 233 0	300 10 3000 LOSS 0 0 0 2233 0 1070 991 0 0 0 0 2283 0 0.53	0 0 446 0 136 126 0 0								0 4 0 0 0 21 0 273 0 0	91 9 546 LOSS GAIN 0 0 81 162 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
GRS.W  NET EXPO  NET EXPOSED BSMT WA  EXP  NO ATTIC EXP  EXPOSED  BASEMENT/CRAWL,  SLAB ON GRADE F  SUBTOTA  SUB TOTA  LEVEL FACTOR / M  AIR CHANGE F	EXP. WALL CLG. HT. WALL AREA GLAZING NORTH EAST SOUTH WEST SKYLT. DOORS OSED WALL MALL ABOVE OR POSED CLG POSED CLG POSED CLG SED FLOOR HEAT LOSS AL HT LOSS AL HT GAIN WULTIPLIER HEAT LOSS	20.3 20.3 20.3 20.3 35.5 19.1 4.3 3.4 1.2 2.6	15.0 40.5 23.9 40.5 99.8 2.4 0.5 0.4 0.5							56 0 0 0 10 414 0 0	48 10 480 LOSS 0 1135 0 0 0 191 1760 0 0 0 0 3086	0 2270 0 0 24 224 0 0 0							1 LC 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	50 CSS GAIII 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 111 0 56 233 0 0	30 10 300 LOSS 0 0 223 0 1070 991 0 0 0 0 2283	0 0 446 0 136 126 0 0 0								0 4 0 0 0 21 0 273 0 0	91 9 546 LOSS GAIN 0 0 81 162 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
ORS.W  NET EXPO  NET EXPOSED BSMT WA  EXP  NO ATTIC EXP  EXPOSE  BASEMENT/CRAWL F  SLAB ON GRADE F  SUBTOTA  SUB TOTA  LEVEL FACTOR / M  AIR CHANGE F  AIR CHANGE F	EXP. WALL CLG. HT. GLAZING NORTH EAST SOUTH WEST SKYLT. DOORS OSED WALL ALL ABOVE GR POSED CLG POSED CLG SED FLOOR HEAT LOSS AL HT LOSS AL HT GAIN WILTIPLIER HEAT LOSS HEAT GAIN	20.3 20.3 20.3 20.3 35.5 19.1 4.3 3.4 1.2 2.6	15.0 40.5 23.9 40.5 99.8 2.4 0.5 0.4 0.5							56 0 0 0 10 414 0 0	480 LOSS 0 1135 0 0 191 1760 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 2270 0 0 0 24 224 0 0							1 LC 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	50	0 0 0 111 0 56 233 0 0	30 10 300 LOSS 0 0 0 223 0 1070 991 0 0 0 0 2283	0 0 446 0 136 126 0 0								0 4 0 0 0 21 0 273 0 0	91 9 546 LOSS GAIN 0 0 0 81 162 0 0 0 0 401 51 0 0 0 0 2758 4176 332 1.27 5311 21
NET EXPO  NET EXPO  NET EXPOSED BSMT WA  EXPO  NO ATTIC EXP  EXPOSO  BASEMENT/CRAWL F  SLAB ON GRADE F  SUBTOTA  SUB TOTA  LEVEL FACTOR / M  AIR CHANGE F  AIR CHANGE I	EXP. WALL CLG. HT. WALL AREA I GLAZING NORTH EAST SOUTH WEST SKYLT. DOORS OSED WALL VALL ABOVE GR POSED CLG POSED CLG SED FLOOR HEAT LOSS AL HT LOSS AL HT GAIN MULTIPLIER HEAT GAIN DUCT LOSS	20.3 20.3 20.3 20.3 35.5 19.1 4.3 3.4 1.2 2.6	15.0 40.5 23.9 40.5 99.8 2.4 0.5 0.4 0.5							56 0 0 0 10 414 0 0	48 10 480 LOSS 0 1135 0 0 191 1760 0 0 0 0 0 0	0 2270 0 0 24 224 0 0 0							1 LC 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	50 SS GAII 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 111 0 56 233 0 0	300 10 3000 LOSS 0 0 0 2233 0 1070 991 0 0 0 0 2283 0 0.53	0 0 446 0 136 126 0 0 0								0 4 0 0 0 21 0 273 0 0	91 9 546 LOSS GAIN 0 0 81 162 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
MET EXPO  NET EXPO  NET EXPOSED BSMT WA  EXPOSED  BASEMENT/CRAWL F  SUBTOTA  SUBTOTA  SUBTOTA  LEVEL FACTOR / M  AIR CHANGE F  AIR CHANGE F  D  D	EXP. WALL CLG. HT. WALL AREA GLAZING NORTH EAST SOUTH WEST SKYLT. DOORS OSED WALL VALL ABOVE GR POSED CLG POSED CLG SED FLOOR HEAT LOSS HEAT LOSS AL HT GAIN MULTIPLIER HEAT GAIN MULTIPLIER HEAT GAIN DUCT LOSS DUCT GAIN	20.3 20.3 20.3 20.3 35.5 19.1 4.3 3.4 1.2 2.6 2.4	15.0 40.5 23.9 40.5 99.8 2.4 0.5 0.4 0.5							56 0 0 10 414 0 0 0	480 LOSS 0 1135 0 0 191 1760 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 2270 0 0 24 224 0 0 0							1 LC 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	50 DSS GAII 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 111 0 56 233 0 0	30 10 300 LOSS 0 0 0 223 0 1070 991 0 0 0 0 2283	0 0 446 0 136 126 0 0 0 0								0 4 0 0 21 0 273 0 0	91 9 546 LOSS GAIN 0 0 0 162 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
GRS.W  NET EXPO  NET EXPOSED BSMT WA  EXP  NO ATTIC EXP  EXPOSED  BASEMENT/CRAWL. H  SLAB ON GRADE H  SUBTOTA  SUB TOTA  LEVEL FACTOR / M  AIR CHANGE H  AIR CHANGE H  D  I  HEAT GAI	EXP. WALL CLG. HT. GLAZING NORTH EAST SOUTH WEST SKYLT. DOORS OSED WALL IALL ABOVE OR POSED CLG POSED CLG SED FLOOR HEAT LOSS AL HT LOSS AL HT GAIN WULTIPLIER HEAT LOSS HEAT GAIN DUCT LOSS DUCT GAIN AIN PEOPLE	20.3 20.3 20.3 20.3 35.5 19.1 4.3 3.4 1.2 2.6	15.0 40.5 23.9 40.5 99.8 2.4 0.5 0.4 0.5							56 0 0 0 10 414 0 0	480 LOSS 0 1135 0 0 191 1760 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 2270 0 0 24 224 0 0 0 0 0							1 LC 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	50 SS GAII 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 111 0 56 233 0 0	30 10 300 LOSS 0 0 0 223 0 1070 991 0 0 0 0 2283	0 0 0 446 0 136 126 0 0 0 0								0 4 0 0 0 21 0 273 0 0	91 9 546 LOSS GAIN 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
NET EXPO NET EXPOSED BSMT WAR EXP NO ATTIC EXP EXPOSE BASEMENT/CRAWL H SLB ON GRADE H SUBTOTA SUB TOTA LEVEL FACTOR / M AIR CHANGE H AIR CHANGE H D L HEAT GAIN APPLIAN	EXP. WALL CLG. HT. WALL AREA I GLAZING NORTH EAST SOUTH WEST SKYLT. DOORS OSED WALL IALL ABOVE GR POSED CLG SED FLOOR HEAT LOSS HEAT LOSS HEAT LOSS HEAT LOSS HEAT LOSS HEAT LOSS HEAT GAIN DUCT LOSS DUCT GAIN AIN PEOPLE NCES/LIGHTS	20.3 20.3 20.3 20.3 35.5 19.1 4.3 3.4 1.2 2.6 2.4	15.0 40.5 23.9 40.5 99.8 2.4 0.5 0.4 0.5							56 0 0 10 414 0 0 0	48 10 480 LOSS 0 1135 0 0 0 191 1760 0 0 0 0 0 3086 0.53 1637	0 2270 0 0 24 224 0 0 0							1 LC 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	50 SS GAII 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 111 0 56 233 0 0	30 10 300 LOSS 0 0 0 223 0 1070 991 0 0 0 0 2283 0.53 1211	0 0 446 0 136 126 0 0 0 0								0 4 0 0 21 0 273 0 0	91 9 546 LOSS GAIN 0 0 81 162 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
GRS.W  NET EXPO  NET EXPOSED BSMT WA  EXP  NO ATTIC EXP  EXPOSED  BASEMENT/CRAWL. H  SLAB ON GRADE H  SUBTOTA  SUB TOTA  LEVEL FACTOR / M  AIR CHANGE H  AIR CHANGE H  D  HEAT GAI	EXP. WALL CLG. HT. WALL AREA I GLAZING NORTH EAST SOUTH WEST SKYLT. DOORS OSED WALL VALL ABOVE GR POSED CLG POSED CLG SED FLOOR HEAT LOSS AL HT LOSS AL HT GAIN MULTIPLIER HEAT LOSS DUCT GAIN ALIONS DUCT GAIN DUCT GAIN ALIONS BOUCH ENCES/LIGHTS OSS BTU/H	20.3 20.3 20.3 20.3 35.5 19.1 4.3 3.4 1.2 2.6 2.4	15.0 40.5 23.9 40.5 99.8 2.4 0.5 0.4 0.5							56 0 0 10 414 0 0 0	480 LOSS 0 1135 0 0 191 1760 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 2270 0 0 24 224 0 0 0 0 0							1 LC 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	50 DSS GAII 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 111 0 56 233 0 0 0	30 10 300 LOSS 0 0 0 223 0 1070 991 0 0 0 0 2283	0 0 0 446 0 136 126 0 0 0 0								0 4 0 0 21 0 273 0 0	91 9 546 LOSS GAIN 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

TOTAL HEAT GAIN BTU/H:

17576

TONS: 1.46

LOSS DUE TO VENTILATION LOAD BTU/H: 1243

STRUCTURAL HEAT LOSS: 26554

TOTAL COMBINED HEAT LOSS BTU/H: 27798

Muhad Okomba.



SITE NAME: BARLASSINA

B	UILDER:	GREEN	PARK HO	DMES				TYPE: CHERRY	1	DATE:	Aug-22			GFA: 1946	LO#	98649				
								furnace pressure	0.6											
HEATING CFM	614			LING CFM				furnace filter	0.05					#G	OODM	AN		AFUE =	96 %	
TOTAL HEAT LOSS				HEAT GAIN				a/c coil pressure	0.2				9	MEC960302BNA	30		INPUT	(BTU/H) =		
AIR FLOW RATE CFM	23.12	P	AIR FLOW I	RATE CFM	35.25		а	vailable pressure						FAN SPEED				(BTU/H) =		
SUN COUNT			T					for s/a & r/a	0.35					LOW						
RUN COUNT	4th	3rd	2nd	1st	Bas									MEDLOW			DES	IGN CFM =	614	
S/A	0	0	9	5	3			enum pressure s/a	0.18	r/a pressure				MEDIUM	614			CFM @ .8	3 " E.S.P.	•
R/A	0	0	3	1 1	1			s/a dif press. loss	0.02	r/a grille press. Loss	0.02			MEDIUM HIGH				_		
All S/A diffusers 4"x10" unle				out.			min adju	usted pressure s/a	0.16	adjusted pressure r/a	0.15			HIGH	895	Т	EMPERA	TURE RISE	43	°F
All S/A runs 5"Ø unless not	ed otnerv	vise on ia	ayout.					· · · · · · · · · · · · · · · · · · ·										-		
ROOM NAME	MBR	ENIC	3	4 DED 0	5	6	7	8	10		14	15	16	18	19		21	22		24
RM LOSS MBH.	1.27	ENS	WIC	BED-2	BED-3	BATH	BATH	FLEX	MBR		K/L/D	K/L/D	K/L/D	PWD	FOY		BAS	BAS		BAS
CFM PER RUN HEAT	29	1.56 36	0.20	1.23	1.59	0.21	0.21	0.33	1.27		1.57	1.57	1.57	0.98	3.49		3.16	3.16		3.16
RM GAIN MBH.	1.79		0.00	28	37	5	5	8	29		36	36	36	23	81		73	73		73
CFM PER RUN COOLING	63	1.54 54	0.06	2.26	2.41	0.06	0.06	0.90	1.79		1.42	1.42	1.42	0.11	0.98		0.41	0.41		0.41
ADJUSTED PRESSURE	0.17		0.47	80	85	2	2	32	63		50	50	50	4	35		14	14		14
ACTUAL DUCT LGH.	51	0.17	0.17	0.17	0.16	0.17	0.17	0.17	0.17		0.17	0.17	0.17	0.17	0.16		0.17	0.17		0.17
EQUIVALENT LENGTH		42 160	18 170	54 160	45	26	24	45	55		45	40	12	6	28		44	31		22
TOTAL EFFECTIVE LENGTH	231	202	188	214	130 175	150	170	170	200		120	120	90	90	120		120	130		140
ADJUSTED PRESSURE		0.09	0.09	0.08	0.09	176	194	215	255		165	160	102	96	148		164	161		162
ROUND DUCT SIZE	0.07	U.U9	0.09	0.00	0.09	0.1	0.09	0.08	0.07		0.1	0.11	0.17	0.18	0.11		0.1	0.11		0.11
HEATING VELOCITY (ft/min)	148	264	4 57	143	100	4 57	4	5	6		5	4	5	4	5		5	5		5
COOLING VELOCITY (ft/min)		204 396	23	408	189 433	57 23	57	59	148		264	413	264	264	595		536	536		536
OUTLET GRILL SIZE	4X10	3X10	23 3X10	408 4X10			23	235	321		367	574	367	46	257		103	103		103
TRUNK	4×10	2X10	B	4/10	4X10	3X10 B	3X10	3X10	4X10		3X10	3X10	3X10	3X10	3X10		3X10	3X10		3X10
IRONK				A	A		В	В	C		A	A	<u>B</u>	C	C		Α	Α		C

RUN# ROOM NAME RM LOSS MBH. CFM PER RUN HEAT RM GAIN MBH. CFM PER RUN COOLING ADJUSTED PRESSURE ACTUAL DUCT LGH. EQUIVALENT LENGTH TOTAL EFFECTIVE LENGTH ADJUSTED PRESSURE ROUND DUCT SIZE HEATING VELOCITY (ft/min) COOLING VELOCITY (ft/min) OUTLET GRILL SIZE TRUNK

NOT THE GRANTING OF A PERMIT NOR REVIEWING OF SPECS & DRAWINGS NOR INSPECTIONS MADE DURING INSTALLATION BY THE OFFICIAL HAVING JURISDICTION SHALL RELIEVE THE OWNER FROM REQUIREMENTS OF THE ONTARIO BUILDING CODE AND ANY OTHER REFERENCED REQUIREMENTS.

SUPPLY AIR TRUNK SIZE																	RETURN A	IR TRUNK	SIZE					
	TRUNK	STATIC	ROUND	RECT			VELOCITY			TRUNK	STATIC	ROUND	RECT			VELOCITY		TRUNK	STATIC	ROUND	RECT			VELOC
	CFM	PRESS.	DUCT	DUCT			(ft/min)			CFM	PRESS.	DUCT	DUCT			(ft/min)		CFM	PRESS.	DUCT	DUCT			(ft/min
TRUNK A	283	0.08	8.7	10	X	8	509		TRUNK G	0	0.00	0	0	х	8	0	TRUNK O	0	0.07	0	0		8	(IVMII)
TRUNK B	342	0.08	9.4	14	Х	8	440		TRUNK H	0	0.00	ō	ō	×	8	Õ	TRUNK P	n	0.07	0	0	X	0	0
TRUNK C	271	0.07	8.9	10	х	8	488		TRUNK I	0	0.00	Ō	ñ	x	8	Õ	TRUNK Q	n	0.07	0	0	X	0	Ü
TRUNK D	0	0.00	0	0	х	8	0		TRUNK J	Ō	0.00	Ō	ñ	Ý	8	ñ	TRUNK R	ň	0.07	0	0	X	0	0
TRUNK E	0	0.00	0	0	Х	8	0		TRUNK K	Ó	0.00	Õ	ő	Ý	8	n	TRUNK S	0	0.07	0	0	X	8	0
TRUNK F	0	0.00	0	0	х	8	Ō		TRUNK L	ó	0.00	Õ	Õ	Y	8	n	TRUNK T	0	0.07	0	0	X	8	0
											0.00	<u>_</u>		^_			TRUNK U	0		0	0	X	8	0
																	TRUNK V	0	0.07	0	0	X	8	0
RETURN AIR #	1		3	4	5											BR	TRUNK W	0	0.07 0.07	0	0	Х	8	0
	0	0	0	0	0	0	0	0	0	0	0	n	0	Λ	0	DIX	TRUNK X	614	0.07	40.4	40	Х	8	0
AIR VOLUME	85		85	85	270	Ō	ō	ō	Õ	Ô	ñ	ñ	Ô	n	Ö	89	TRUNK Y	85		12.1	18	X	8	614
PLENUM PRESSURE	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	TRUNK Z	00	0.07	5.8	8	X	8	191
ACTUAL DUCT LGH.	55	1	28	27	14	1	1	1	1	1	1	1	1	1	0.15		3	0	0.07	10.4	0	Х	. 8	0
EQUIVALENT LENGTH	145	0	175	140	180	ó	'n	'n	'n	'n	'n	'n	'n	,	,	14 180	DROP	614	0.07	12.1	24	Х	10	368
TOTAL EFFECTIVE LH	200	1	203	167	194	1	1	1	1	1	1	1	1	1	1	194								
ADJUSTED PRESSURE	0.07	14.80	0.07	0.09	0.08	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	0.08	l							
ROUND DUCT SIZE	5.8	0	5.8	5.4	8.6	0	0	0	0	0	n 7.00	0	0	14.0U	14.00									
NLET GRILL SIZE	8	0	8	8	8	Õ	Õ	ñ	ñ	Ö	ñ	ñ	0	0	0	5.7	l							
	X	X	X	X	X	X	X	x	X	~	X	X	Y	Y	~	0								
NLET GRILL SIZE	14	0	14	14	30	Ô	Ô	Ô	n	ô	n	n	^	Ô	^	14								



375 Finley Ave. Suite 202 Ajax, ON L1S 2E2 Tel: 905.619.2300 Fax: 905.619.2375 Web: www.hvacdesigns.ca E-mail: info@hvacdesigns.ca

TYPE: SITE NAME: CHERRY 1

BARLASSINA

LO# 98649

### RESIDENTIAL MECHANICAL VENTILATION DESIGN SUMMARY

COMBUSTION APPLIANCES	9.32.3.1(1)	SUPPLEMENTAL V	ENTILATION CAPACITY	VV-1	9.32.3.5.
a)		Total Ventilation Cap	pacity	148.4	_ cfm
b) Positive venting induced draft (except fireplaces)		Less Principal Ventil.	Capacity	63.6	_ cfm
c) Natural draft, B-vent or induced draft gas fireplace		Required Supplemen	ntal Capacity	84.8	_ cfm
d) Solid Fuel (including fireplaces)	,	L			
e) No Combustion Appliances		PRINCIPAL EXHAU	ST FAN CAPACITY		
		Model:	VANEE V150H	Location:	BSMT
HEATING SYSTEM		63.6	_cfm		✓ HVI Approved
Forced Air Non Forced Air		PRINCIPAL EXHAU	ST HEAT LOSS CALCULATION		
Flatin Court Hart		63.6 CFM	ΔΤ°F Χ 72 F Χ	FACTOR 1.08	% LOSS X 0.25
Electric Space Heat		SUPPLEMENTAL F	ANS BY INST	ALLING CONT	RACTOR
		Location	Model	cfm	HVI Sones
HOUSE TYPE	9.32.1(2)	ENS	BY INSTALLING CONTRACTOR	50	✓ 3.5
✓ I Type a) or b) appliance only, no solid fuel		BATH	BY INSTALLING CONTRACTOR	50	√ 3.5
Type a) or b) appliance only, no solid idel		LAUN	BY INSTALLING CONTRACTOR BY INSTALLING CONTRACTOR	50 50	✓ 3.5 ✓ 3.5
II Type I except with solid fuel (including fireplaces	s)			50	3.5
III Any Type c) appliance		HEAT RECOVERY \ Model:	/ENTILATOR VANEE V150H		9.32.3.11.
		150	cfm high	35	cfm low
IV Type I, or II with electric space heat		75	% Sensible Efficiency		✓ HVI Approved
Other: Type I, II or IV no forced air			@ 32 deg F ( 0 deg C)		
SYSTEM DESIGN OPTIONS	0 11 11 11 11	LOCATION OF INST	ALLATION		
STOTEW DESIGN OF HONS	O.N.H.W.P.	Lot:		Concession	
1 Exhaust only/Forced Air System		Township			
2 HRV with Ducting/Forced Air System		Township		Plan:	
HRV Simplified/connected to forced air system		Address			
4 HRV with Ducting/non forced air system		Roll#		Building Permit	t #
Part 6 Design		BUILDER:	GREENPARK HOMES		
		Name:			
TOTAL VENTILATION CAPACITY	9.32.3.3(1)	Address:			
Basement + Master Bedroom 2 @ 21.2 cfm 42.4	cfm	City:			
Other Bedrooms 2 @ 10.6 cfm 21.2	cfm	Telephone #:		Fax#:	
Kitchen & Bathrooms <u>4</u> @ 10.6 cfm <u>42.4</u>	_ cfm	INSTALLING CONTE	RACTOR	**************************************	
Other Rooms <u>4</u> @ 10.6 cfm <u>42.4</u>	_ cfm	Name:			
Table 9.32,3.A. TOTAL <u>148.4</u>	cfm	Address:			
		City:			
PRINCIPAL VENTILATION CAPACITY REQUIRED	9.32.3.4.(1)				
1 Bedroom 31.8	cfm	Telephone #:		Fax #:	
2 Bedroom 47.7	cfm	DESIGNER CERTIFIC I hereby certify that the	CATION is ventilation system has been de	signed	
3 Bedroom 63.6	cfm	in accordance with the Name:	e Ontario Building Code. HVAC Designs Ltd.		
4 Bedroom 79.5	cfm	Signature:		Ofmhe	
5 Bedroom 95.4	cfm	HRAI#		001820	
TOTAL 63.6 cfm		Date:		August-22	
I REVIEW AND TAKE RESPONIBILITY FOR THE DESIGN WORK AND AM QUA INDIVIDUAL BCIN: 19669 MICHAEL O'R		OPRIATE CATEGORY AS AN "	OTHER DESIGNER" UNDER DIVISION C. 3	3.2.5 OF THE BUILD	ING CODE.



			CSA F28	30-12 Residential Hea	t Loss and Heat Gain	Calculations				
			Form	ula Sheet (For Air Lea	kage / Ventiliation C	Calculation)				
LO#:	98649	Model: CHERRY 1		Builde	r: GREENPARK HOMES				Date:	2022-08-22
		Volume Calculation	1				Air Change & Delta	a T Data		
				_						
House Volume							TURAL AIR CHANG		0.319	
Level	Floor Area (ft²)	Floor Height (ft)	Volume (ft³)			SUMMER NA	TURAL AIR CHANG	SE RATE	0.085	
Bsmt	816	9	7344							
First	816	10	8160			<u></u>				<del></del>
Second	1130	9	10170					mperature Diffe		
Third	0	9	0			III'' I DTD!	Tin °C	Tout °C	ΔT °C	ΔT °F
Fourth	0	9	0			Winter DTDh	22	-18	40	72
		Total:	25,674.0 ft <sup>3</sup>			Summer DTDc	24	29	5	9
		Total:	727.0 m³	J						
	5.2.3	.1 Heat Loss due to Ai	r Leakage			6.2.6.9	Sensible Gain due	to Air Leakage	*	
	312.0	12 110dt 2000 ddc to 11	20011480							
		$V_b$	mp 40				$V_b$	4.0		
	$HL_{airb} =$	$LR_{airh} \times \frac{V_b}{3.6} \times D$	$TD_h \times 1.2$		H	$IG_{salb} = LR_{airc} \times$	$\frac{1}{3.6} \times DTD_c >$	< 1.2		
0.319	x 201.95	x 40 °C	y 12	= 3113 W	= 0.085	x201.95	0.0		= [	105 W
0.515	x <u>201.55</u>	_	X	3113 ()		_	- ^			100 **
				= 10623 Btu/h					= [	358 Btu/h
					' <b>]</b>				L	
	5.2.3.2 Hea	at Loss due to Mechan	ical Ventilation			6.2.7 Ser	sible heat Gain di	ue to Ventilatio	n	· · · · · · · · · · · · · · · · · · ·
		·····								
	$HL_{vairh} = I$	$PVC \times DTD_h \times 1$	$.08 \times (1 - E)$		HL	$_{vairb} = PVC \times DT$	$TD_h \times 1.08 \times 0$	(1-E)		
	vair b	- 1 - 11 - 11	(=)			bati b	,,			
64 CFM	x 72 °F	x 1.08	x 0.25	= 1243 Btu/h	64 CFM	x 9°F	x 1.08	v 0.25	= [	158 Btu/h
04 CFIVI	X	. x <u>1.00</u>	A			- ^	_ ^ <u> </u>	A 0.23	1	150 Bta/11
			5 2 3 3 Calcula	tion of Air Change Heat	oss for Each Room (Flor	or Multiplier Section)				
			3.2.3.3 Calcula	tion of Air Change ficat	2033 101 Each Moom (1 100	or waterplier occitory				
		$HL_{ai}$	$_{rr} = Level Factor$	or $\times$ $HL_{airbv}$ $\times$ {( $H$	$L_{aacr} + HL_{bacr}$ ) ÷	$(HL_{aaclevel} + HL_{b}$	aclevel)}			
				·		·				
				HLairve Air Leakage +	Level Conductive Heat	Air Leakage Heat Los	s Multiplier (LF x			
		Level	Level Factor (LF)	Ventilation Heat Loss	Loss: (HL <sub>clevel</sub> )	HLairby / H				
				(Btu/h)						
		1	0.5		4,176	1.27				
l		2	0.3		6,007	0.53				
		3	0.2	10,623	5,316	0.40				
		4	0		0	0.00			Michael O'Ro	
		5	0		0	0.00	0		BCIN# 19669	
		*HLairbv = A	ir leakage heat loss -	ventilation heat loss					met 1	1 Okamba.
		*For a balan	ced or supply only ve	entilation system HLairve	= 0				Mapaka	4 Mounte.



### **HEAT LOSS AND GAIN SUMMARY SHEET**

MODEL:	CHERRY 1			BUILDER: GREENPARK HOMES	
SFQT:	1946	<b>LO#</b> 98649		SITE: BARLASSINA	
DESIGN A	SSUMPTIONS				·····
	R DESIGN TEMP. DESIGN TEMP. i DATA	° F 0 72		COOLING OUTDOOR DESIGN TEMP. INDOOR DESIGN TEMP. (MAX 75°F) WINDOW SHGC	°F 84 75 0.50
ATTACHIV	IENT:	ATTAC	HED	# OF STORIES (+BASEMENT):	3
FRONT FA	CES:	1	EAST	ASSUMED (Y/N):	Y
AIR CHAN	GES PER HOUR:		3.57	ASSUMED (Y/N):	Υ
AIR TIGHT	NESS CATEGORY:	AVER	AGE	ASSUMED (Y/N):	Υ
WIND EXP	POSURE:	SHELTE	RED	ASSUMED (Y/N):	Υ
HOUSE VO	DLUME (ft³):	256	74.0	ASSUMED (Y/N):	Υ
INTERNAL	SHADING:	BLINDS/CURT	AINS	ASSUMED OCCUPANTS:	4
INTERIOR	LIGHTING LOAD (Btu/h	/ft²):	1.27	DC BRUSHLESS MOTOR (Y/N):	Υ
FOUNDAT	ION CONFIGURATION	BC	N_1	DEPTH BELOW GRADE:	6.0 ft
LENGTH:	57.0 ft	WIDTH: 17	.0 ft	EXPOSED PERIMETER:	91.0 ft

2012 OBC - COMPLIANCE PACKAGE		
	Compliand	e Package
Component		<u>A1</u>
	Nominal	Min. Eff.
Ceiling with Attic Space Minimum RSI (R)-Value	60	59.22
Ceiling Without Attic Space Minimum RSI (R)-Value	31	27.65
Exposed Floor Minimum RSI (R)-Value	31	29.80
Walls Above Grade Minimum RSI (R)-Value	22	17.03
Basement Walls Minimum RSI (R)-Value	20 ci	21.12
Below Grade Slab Entire surface > 600 mm below grade Minimum RSI (R)-Value	-	
Edge of Below Grade Slab ≤ 600 mm Below Grade Minimum RSI (R)-Value	10	10
Heated Slab or Slab ≤ 600 mm below grade Minimum RSI (R)-Value	10	11.13
Windows and Sliding Glass Doors Maximum U-Value	0.28	
Skylights Maximum U-Value	0.49	
Space Heating Equipment Minimum AFUE	96%	-
HRV/ERV Minimum Efficiency	75%	-
Domestic Hot Water Heater Minimum EF	0.8	-

INDIVIDUAL BCIN: 19669 MICHAEL O'ROURKE





## **Residential Foundation Thermal Load Calculator**

Supplemental tool for CAN/CSA-F280

	Foundati	on Loads
Heating Month	Design	Months
Fluid Temperature (°C):	33	
Heated Fraction of the Slab:	0	
	Radiar	nt Slab
Door Area (m²):	2.0	
Window Area (m²):	0.4	
Depth Below Grade (m):	1.83	Insulation Configuration
Wall Height (m):	2.7	
Exposed Perimeter (m):	27.7	
Floor Width (m):	5.2	
Floor Length (m):	17.4	
F	oundation	Dimensions
Water Table:		10 m, 23-33 ft)
Soil Conductivity:		nductivity: dry sand, loam, clay
Region:	Cambridge Site De	scription
Province:	Ontario	

**TYPE:** CHERRY 1 **LO#** 98649







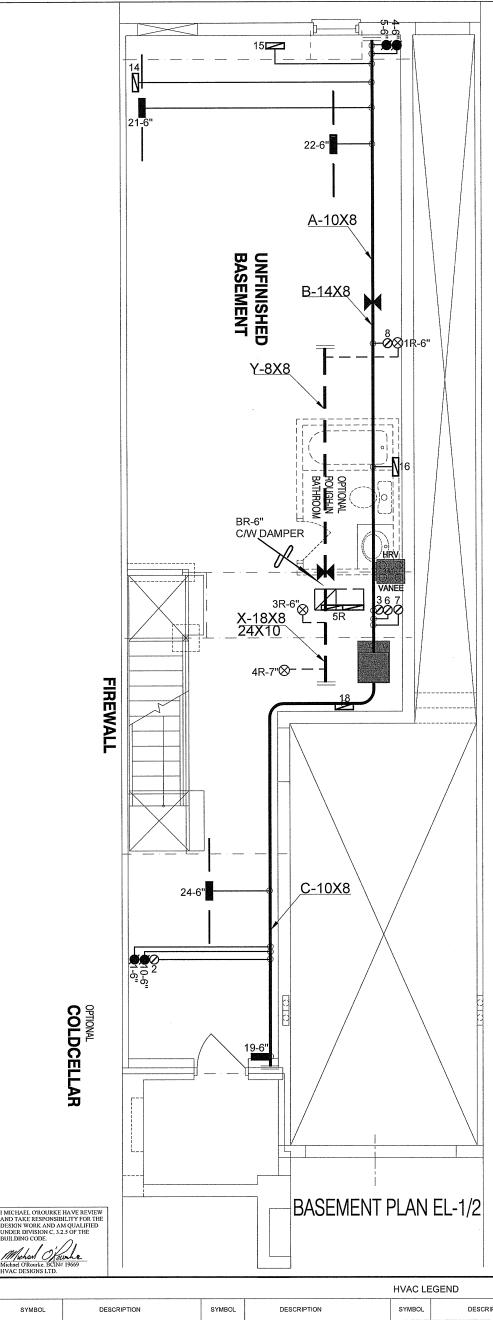
# **Air Infiltration Residential Load Calculator**

Supplemental tool for CAN/CSA-F280

Weather S	tation Description	
Province:	Ontario	
Region:	Cambridge	
Weather Station Location:	Open flat terrain, grass	
Anemometer height (m):	10	
Loca	al Shielding	
Building Site:	Suburban, forest	
Walls:	Heavy	
Flue:	Heavy	
Highest Ceiling Height (m):	6.71	
Building	Configuration	
Type:	Semi	
Number of Stories:	Two	
Foundation:	Full	
House Volume (m³):	727.0	
Air Leaka	age/Ventilation	
Air Tightness Type:	Present (1961-) (3.57 ACH)	
Custom BDT Data:	ELA @ 10 Pa. 969.1 cm	1 <sup>2</sup>
	3.57 ACH @ 50 F	
Mechanical Ventilation (L/s):	Total Supply Total Exhaust	
	30.0 30.0	
F	lue Size	
Flue #:	#1 #2 #3 #4	
Diameter (mm):	0 0 0 0	
Natural Ir	nfiltration Rates	
Heating Air Leakage Rate (ACH/	(H): 0.319	
Cooling Air Leakage Rate (ACH/	H): 0.085	

**TYPE:** CHERRY 1 **LO#** 98649





CSA-F280-12 PACKAGE A1

				HVAC LE	EGEND			3.		
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	2.		
	SUPPLY AIR GRILLE		6" SUPPLY AIR BOOT ABOVE		14"x8" RETURN AIR GRILLE		RETURN AIR STACK ABOVE	1.		
	SUPPLY AIR GRILLE 6" BOOT	0	SUPPLY AIR STACK FROM 2nd FLOOR		30"x8" RETURN AIR GRILLE	×	RETURN AIR STACK 2nd FLOOR	No.	Description	Date
Ø	SUPPLY AIR BOOT ABOVE	ø	6" SUPPLY AIR STACK 2nd FLOOR		FRA- FLOOR RETURN AIR GRILLE	X	REDUCER		REVISIONS	

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Client

### **GREENPARK HOMES**

Project Nar

BARLASSINA CAMBRIDGE, ONTARIO

Block 121 Units 1 to 6

CHERRY 1

1946 sqft

# HVA DESIGNS LTD.

375 Finley Ave. Suite 202 - Ajax, Ontario L1S 2E2 Tel. 905.619.2300 - 905.420.5300 Fax 905.619.2375 Email: info@hvacdesigns.ca

Web: www.hvacdesigns.ca Specializing in Residential Mechanical Design Services

Installation to comply with the latest Ontario Building Code. All supply branch outlets shall be equipped with a manual balancing damper.

Ductwork which passes through the garage or unheated spaces shall be adequately insulated and be gas-proofed.

	HEAT	LOSS 27798	BTU/H	# OF RUNS	S/A	R/A	FANS	She
		UNIT DATA		3RD FLOOR				
	MAKE	GOODMAN		2ND FLOOR	9	3	3	
		/IEC960302BN	A	1ST FLOOR	5	1	2	
	INPUT	30	MBTU/H	BASEMENT	3	1	0	Date
-	OUTPUT		MBTU/H	ALL S/A DIFFU	SERS	4 "x10	)"	Scal
	COOLING	29		UNLESS NOTE				
е	COOLING	1.5	TONS	ON LAYOUT. A UNLESS NOTE				
				0			.~-	

ON LAYOUT. UNDERCUT

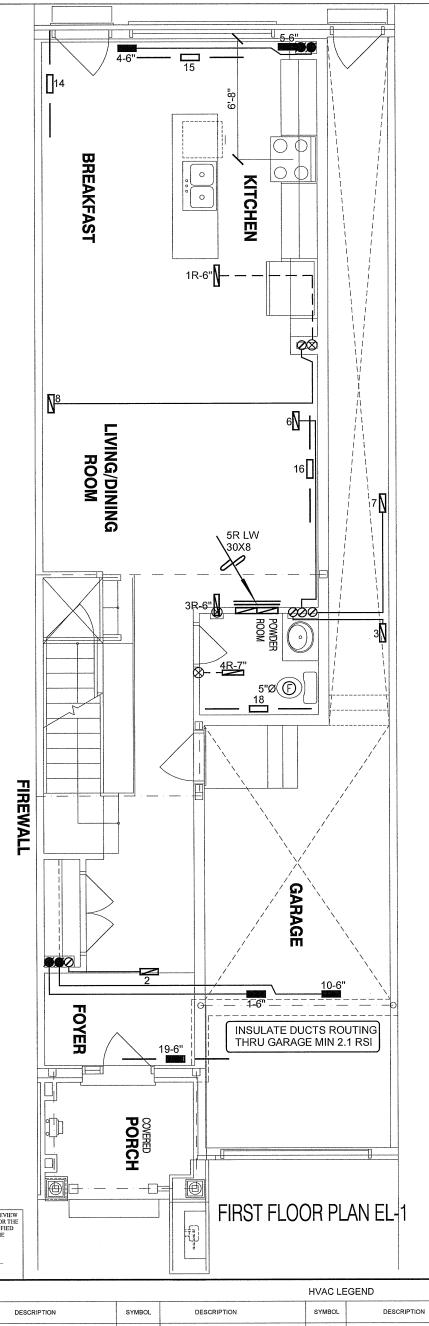
DOORS 1" min. FOR R/A

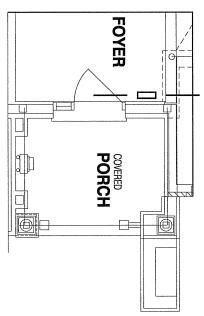
cfm @ 0.6" w.c.

735

TAND	ARDS AND/OR THE	
Sheet Ti	itle	
F	BASEMENT	
	HEATING	
	LAYOUT	
Date	AUG/2022	
Scale	3/16" = 1'-0"	
	BCIN# 19669	
		~

BCIN# 19669 LO# 98649





FIRST FLOOR PLAN EL-2

NOT THE GRANTING OF A PERMIT NOR REVIEWING OF SPECS & DRAWINGS NOR INSPECTIONS MADE DURING INSTALLATION BY THE OFFICIAL HAVING JURISDICTION SHALL RELIEVE THE OWNER FROM REQUIREMENTS OF THE ONTARIO BUILDING CODE AND ANY OTHER REFERENCED REQUIREMENTS.

CSA-F280-12 PACKAGE A1

HVAC DESIGNS LTD.										
HVAC LEGEND								3.		
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	2.		
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<b>2</b>	SUPPLY AIR BOOT ABOVE	.55	6" SUPPLY AIR STACK 2nd FLOOR		FRA- FLOOR RETURN AIR GRILLE	X	REDUCER	REVISIONS		

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Client

### **GREENPARK HOMES**

Project Name

BARLASSINA CAMBRIDGE, ONTARIO

Block 121 Units 1 to 6

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Installation to comply with the latest Ontario Building Code. All supply branch outlets shall be equipped with a manual balancing damper. Ductwork which passes through the garage or unheated spaces shall be adequately insulated and be gas-proofed.

Sheet Title

FIRST FLOOR HEATING LAYOUT

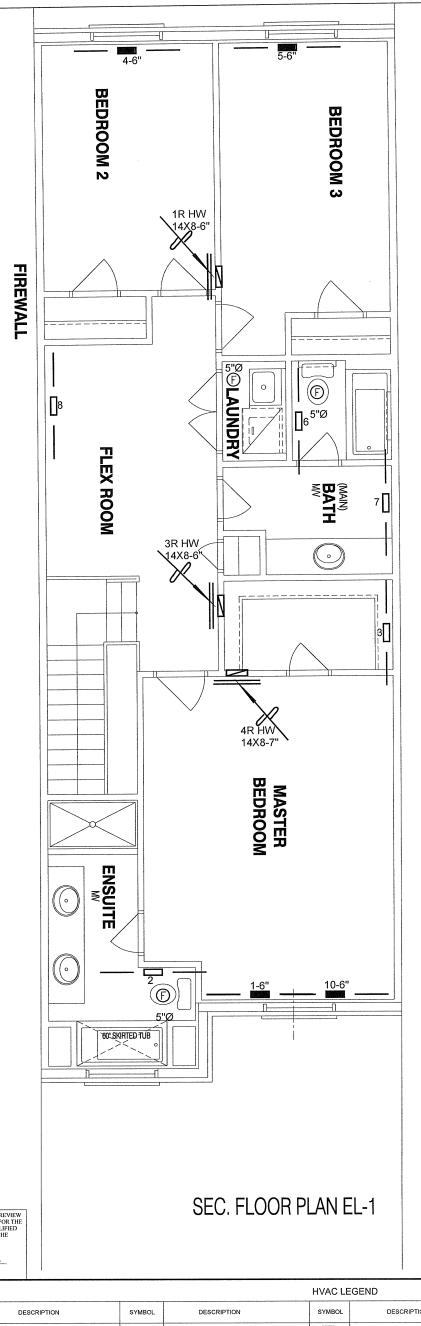
Date AUG/2022 Scale 3/16" = 1'-0"

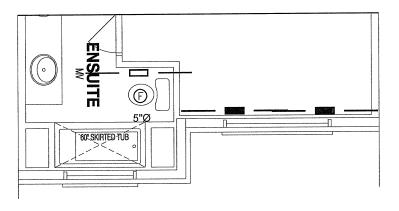
BCIN# 19669

LO# 98649

CHERRY 1

1946 sqft





SEC. FLOOR PLAN EL-2

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CSA-F280-12

HVAC LEGEND										
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	2.		
	SUPPLY AIR GRILLE		6" SUPPLY AIR BOOT ABOVE		14"x8" RETURN AIR GRILLE		RETURN AIR STACK ABOVE	1.		
	SUPPLY AIR GRILLE 6" BOOT	0	SUPPLY AIR STACK FROM 2nd FLOOR		30"x8" RETURN AIR GRILLE	×	RETURN AIR STACK 2nd FLOOR	No.	Description	Date
	SUPPLY AIR BOOT ABOVE	ø	6" SUPPLY AIR STACK 2nd FLOOR		FRA- FLOOR RETURN AIR GRILLE	X	REDUCER	REVISIONS		

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### **GREENPARK HOMES**

Project Name

**BARLASSINA** CAMBRIDGE, ONTARIO

Block 121 Units 1 to 6

CHERRY 1

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Specializing in Residential Mechanical Design Services

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SECOND FLOOR

**HEATING** LAYOUT

AUG/2022 3/16" = 1'-0"

BCIN# 19669

98649 LO#