

SITE NAM	E: LECC	O RIDG	E						WUP									DATE:	Feb-17			,	WINTE	ER NAT	TURAL	AIR C	HANGE RATE 0.307	H	EAT LOS	SAT	F 72	,		CSA-F	
BUILDE				ES			-		JUNIF	PER 11				GFA:	2961				72388								HANGE RATE 0.105		EAT GAI				-	ENERG	
ROOM US				MBR			ENS		T	WIC		l	BED-2			BED-3			BED-4			BATH			ENS-4		1	Γ	5,111	Ť		·	Т-		
EXP. WAI	.L			37			24			7			12			25			36			7			8										
CLG. H	т.			10			9			9			9			9			10			9		1	9			1		1					
	FACT	ors																															T		
GRS.WALL ARE	A LOSS	GAIN		370			216			63			108			225			360			63			72										
GLAZIN	G			LOSS	GAIN		LOSS	GAIN		Loss	GAIN		LOSS	GAIN		LOSS	GAIN		LOSS	GAIN		LOSS	GAIN		Loss	GAIN									
NORT	H 17.9	15.8	0	0	0	9	161	143	0	0	0	17	303	269	0	0	0	0	0	0	7	125	111	0	0	0				1					
EAS	T 17.9	41.4	0	0	0	0	0	0	0	0	0	0	0	0	20	357	828	36	643	1491	0	0	0	16	286	663		l					1.:		
SOUT	H 17.9	24.8	36	643	892	0	0	0	0	0	0	0	0	0	0	0	0	36	643	892	0	0	0	0	0	0		- 41		•	TO\	NN (	OF N	<b>JILT</b>	NC
WES		41.4	22	393	911	21		870	11	196	456	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			ΡΙ ΔΝ					OPME	
SKYL		101.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		MILTON	LAN	I VIII V				MOE	
DOOF		4.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0								IVIOL	
NET EXPOSED WAL		0.5	312	816	158	186	487	94	52	136	26	91	238	46	205	536	104	288	754	146	56	147	28	56	147	28		BUILD	ING: F	REVI	EWE	ΞD			
NET EXPOSED BSMT WALL ABOVE		0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		SCOT	T SHE	RRII	FFS		APR	11, 2	017
EXPOSED CL		0.7	304	419	208	113	156	77	112	154	77	203	280	139	185	255	127	191	263	131	154	212	105	90	124	62		PLANS E	=XAMINI	FR				D	ATE
NO ATTIC EXPOSED CL		1.1	0	0	0	30	67	33	0	0	0	0	0	0	20	45	22	40	90	45	0	0	0	0	0	0		Neither t			a perr	mit nor	carrying		···-
EXPOSED FLOO		0.4	0	0	0	0	0	0	0	0	0	0	0	ň	193	423	82	0	0	0	133	292	56	70	153	30		inspectio							from
BASEMENT/CRAWL HEAT LOS			-	0	-	1	0	1	ľ	0	•	۱	0	-		0		-	0	-		0	50	"	0	30		full respo	nsibility t	for cor	mplian	ce with	the pro	ovisions	of
SLAB ON GRADE HEAT LOS			1	ō			0			0			0			0			0			0			0			the Onta							
SUBTOTAL HT LOS				2271		1	1245		1	487			821			1616			2392			775			710			Code, bo							
SUB TOTAL HT GA					2169			1217	1		559			454			1163			2704			301	1		782		statutes : By-laws :							
LEVEL FACTOR / MULTIPLIE			0.20	0.27		0.20			0.20	0.27		0.20	0.27		0.20	0.27		0.20		,	0.20	0.27		0.20	0.27	.02		by-laws	or tile Re	gion	or Fraill	on and	TOWIT C	A WIIIIOH	
AIR CHANGE HEAT LOS				619		1	339			133			224			441			652			211			193		1						0=::	<b>7</b> ==	
AIR CHANGE HEAT GA					147	1		83			38			31			79			183			20			53	1			1	1			VED	
DUCT LOS	s			0			0		ĺ	0			0			206			0			99			90						T	<b>NWO</b>	I OF I	MILTC	NC
DUCT GA	N				0			0			0			0			226			0			32		- 7	84						NAAI	20	2017	
HEAT GAIN PEOPL	E 240		2		480	1		240	0		0	1		240	1		240	1		240	0		0	0		0								2017	
HEAT GAIN APPLIANCES/LIGHT	rs				775			0			0			775			775			775			0			0					1	JUN	NIPEF	R 11F	
TOTAL HT LOSS BTU	H			2890			1585			619			1045			2263			3044			1085			993						ы	I III DI	NC F	oivisi	ON
TOTAL HT GAIN x 1.3 BTU	н		1			1			ı			i .																					INCL	יוטו עונ	
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	1		L			L		2002	L					1951			3228			5074			460	<u> </u>		1195		L		<u> </u>		OILDI			
a surroom us	E 1	-	L	LV/DN				2002	 	KT/FM				1951		LAUN	3228		W/R	5074		FOY	460	<u> </u>		1195	I			<u> </u>	WU	IP.	l	BAS	
⊕ 9.√ROOM US EXP. WAL	E a. a.			50				2002		76				1951		21	3228		W/R 26	5074		30	460		<u> </u>	1195				1	WU 19	IP	and a second	177	
a surroom us	E L T.							2002						1951			3228		W/R	5074			460		S	1195					WU	IP			
EXP. WAL	E L T. FACT			50 10				2002		76 10				1951		21 9	3228		W/R 26 11	5074		30 10	460		×.	1195					WU 19 10	IP )		177 10	
. 5. ROOM US EXP. WAI CLG. H GRS.WALL ARE	E L T. FACT	ORS GAIN		50 10 500	J			2002		76 10 760				1951		21 9 189			W/R 26 11			30 10 300			×.	1195					WU 19 10	IP ) )		177 10 1151	
. S. ROOM US EXP. WAI CLG. H GRS.WALL ARE GLAZIN	E L L T. FACTO A LOSS	GAIN		50 10 500 LOSS	N G GAIN			2002		76 10 760 LOSS	GAIN			1951		21 9 189 LOSS	GAIN		W/R 26 11 286 LOSS	GAIN		30 10 300 LOSS	GAIN			1195					WU 19 10 18 <sup>2</sup> LOS	IP ) ) 1 SS GAII		177 10 1151 LOSS	
. 9. ROOM US EXP. WAI CLG. H GRS.WALL ARE GLAZIN NORT	FACTO A LOSS G	GAIN 15.8	0	50 10 500 LOSS 0	S GAIN			2002	0	76 10 760 LOSS 0	GAIN 0			1951	0	21 9 189 LOSS 0	GAIN 0	11	W/R 26 11 286 LOSS 196	GAIN 174	0	30 10 300 LOSS 0	GAIN 0		<u> </u>	1195				0	WU 19 10 18 LOS	IP ) ) 1 SS GAII 0	V 9	177 10 1151 LOSS 161	143
. 9. ROOM US EXP. WAI CLG. H GRS.WALL ARE GLAZIN NORT EAS	FACTO A LOSS G H 17.9	15.8 41.4	0 50	50 10 500 LOSS 0 893	S GAIN 0 2071			2002	0	76 10 760 LOSS 0	GAIN 0 0			1951	0	21 9 189 LOSS 0	GAIN 0 0	11 0	W/R 26 11 286 LOSS 196 0	GAIN 174 0	0 0	30 10 300 LOSS 0 0	GAIN 0 0		<u> </u>	1195				0	WU 19 10 18 LOS 0	IP ) ) 1 SS GAII 0	9 0	177 10 1151 LOSS 161 0	143 0
GRS.WALL ARE GLAZIN NORT	FACTO A LOSS G H 17.9 H 17.9 H 17.9	15.8 41.4 24.8	0 50 50	50 10 500 LOSS 0 893 893	GAIN 0 2071 1238			2002	0 0 50	76 10 760 LOSS 0 0 893	GAIN 0 0 1238			1951	0 0 42	21 9 189 LOSS 0 0 750	GAIN 0 0 1040	11 0 0	W/R 26 11 286 LOSS 196 0	GAIN 174 0	0 0 56	30 10 300 LOSS 0 0 1000	GAIN 0 0 1387			1195				0	WU 19 10 18 LOS 0 0	IP 0 1 1 SS GAII 0 0	9 0	177 10 1151 LOSS 161 0	143 0 0
GRS.WALL ARE GRS.WALL ARE GLAZIN NORT EAS	FACTO T. FACTO A LOSS G H 17.9 iT 17.9 iT 17.9	15.8 41.4 24.8 41.4	0 50 50	50 10 500 LOSS 0 893 893	G GAIN 0 2071 1238 0			2002	0 0 50 95	76 10 760 LOSS 0 0 893 1696	GAIN 0 0 1238 3935			1951	0 0 42 0	21 9 189 LOSS 0 0 750	GAIN 0 0 1040	11 0 0 0	W/R 26 11 286 LOSS 196 0	GAIN 174 0	0 0 56 0	30 10 300 LOSS 0 0 1000	GAIN 0 0 1387 0		N.	1195				0 0	18° LOS 0 0 0 0 0	1P 3) 1 1 SS GAII 0 0 0	9 0 0	177 10 1151 LOSS 161 0 0	143 0 0 0
GRS.WALL ARE GRS.WALL ARE GLAZIN NORT EAS	FACTO A LOSS G H 17.9 FT 17.9 T 17.9 T 17.9 T 30.6	15.8 41.4 24.8 41.4 101.2	0 50 50 0	50 10 500 LOSS 0 893 893 0	G GAIN 0 2071 1238 0			2002	0 0 50 95	76 10 760 LOSS 0 0 893 1696	GAIN 0 0 1238 3935 0			1951	0 0 42 0	21 9 189 LOSS 0 0 750 0	GAIN 0 0 1040 0	11 0 0 0 0	W/R 26 11 286 LOSS 196 0 0	GAIN 174 0 0 0	0 0 56 0	30 10 300 LOSS 0 0 1000 0	GAIN 0 0 1387 0		<u>N</u>	1195				0 0	WU 19 10 18- LOS 0 0 0	11 1 SSS GAII 0 0 0 0	9 0 0	177 10 1151 LOSS 161 0 0	143 0 0 0 0
GRS.WALL ARE GRS.WALL ARE GLAZIN NORT EAS FINE SOUT	FACTO A LOSS G H 17.9 FT 17.9 FT 17.9 TT 30.6 S 24.1	15.8 41.4 24.8 41.4 101.2 4.7	0 50 50 0 0	50 10 500 LOSS 0 893 893 0 0	G GAIN 0 2071 1238 0 0	-		2002	0 0 50 95 0	76 10 760 LOSS 0 0 893 1696 0	GAIN 0 0 1238 3935 0			1951	0 0 42 0 0	21 9 189 LOSS 0 0 750 0	GAIN 0 0 1040 0 0	11 0 0 0 0 0	W/R 26 11 286 LOSS 196 0 0 0	GAIN 174 0 0 0 0	0 0 56 0 0	30 10 300 LOSS 0 0 1000 0 0	GAIN 0 0 1387 0 0		<u>S</u>	1195				0 0 0 0 20	WU 19 10 18 LOS 0 0 0 0 0 48 0	11 11 SSS GAII 0 0 0 0 0	9 0 0 0	177 10 1151 LOSS 161 0 0 0	143 0 0 0 0 0 93
GRS.WALL ARE GRS.WALL ARE GLAZIN NORT EAS APPLASOUT ATTAL WES	E L T. FACTURE A LOSS G H 17.9 17.9 17. 30.6 S 24.1 L 2.6	15.8 41.4 24.8 41.4 101.2 4.7 0.5	0 50 50 0 0	50 10 500 LOSS 0 893 893 0 0	G GAIN 0 2071 1238 0 0 0			2002	0 0 50 95 0 0 615	76 10 760 LOSS 0 0 893 1696 0 0 1609	GAIN 0 0 1238 3935 0 0			1951	0 0 42 0 0 0	21 9 189 LOSS 0 0 750 0 0 385	GAIN 0 0 1040 0 0 0	11 0 0 0 0 20 255	W/R 26 11 286 LOSS 196 0 0	GAIN 174 0 0 0	0 0 56 0 0 20 224	30 10 300 LOSS 0 0 1000 0 0 481 586	GAIN 0 0 1387 0 0 93 113			1195				0 0 0 0 20	WU 19 10 18: LOS 0 0 0 0 0 48:	1P 3 3 1 1 5 5 5 6 6 7 7 8 8 9 1 9 1 9 1 9 1 9 1 9 1 9 1 9 1 9 1	9 0 0 0 0 0 20	177 10 1151 LOSS 161 0 0 0 481	143 0 0 0 0 0 93
GRS.WALL ARE GLAZIN NORT EAS. PAGE SOUT FINE WES FINE SKYL NET EXPOSED WALL NET EXPOSED BMIL AROUSE	E L T. FACTU 17.9 17.9 17. 30.6 S 24.1 L 2.6 SR 3.3	15.8 41.4 24.8 41.4 101.2 4.7 0.5 0.6	0 50 50 0 0 0 400	50 10 500 LOSS 0 893 893 0 0 0 1047	S GAIN 0 2071 1238 0 0 202			2002	0 0 50 95 0 0 615	76 10 760 LOSS 0 0 893 1696 0 0 1609	GAIN 0 0 1238 3935 0 0 311			1951	0 0 42 0 0 0 147	21 9 189 LOSS 0 0 750 0 0 385	GAIN 0 0 1040 0 0 0 74	11 0 0 0 0 20 255 0	W/R 26 11 286 LOSS 196 0 0 0 481 667 0	GAIN 174 0 0 0 0 93 129 0	0 0 56 0 0 20 224	30 10 300 LOSS 0 0 1000 0 0 481 586 0	GAIN 0 0 1387 0 0 93 113			1195				0 0 0 20 16	WU 19 10 18: LOS 0 0 0 0 0 48: 1 42:0	1P 3) 1 1 0 0 0 0 0 0 1 93 0 81	9 0 0 0 20 0	177 10 1151 LOSS 161 0 0 0 481 0	143 0 0 0 0 0 93 0 343
GRS.WALL ARE GRS.WALL ARE GLAZIN NORT EAS PLACE WES KALL SKYL TOO DOOR NET EXPOSED WAL NET EXPOSED BMT WALL ABOVE C	E L T. FACT A LOSS G H 17.9 17. 17.9 17. 17.9 17. 130.6 S 24.1 L 2.6 GR 3.3 G 1.4	15.8 41.4 24.8 41.4 101.2 4.7 0.5 0.6 0.7	0 50 50 0 0 400 0	50 10 500 LOSS 0 893 893 0 0 1047 0	S GAIN 0 2071 1238 0 0 202 0			2002	0 50 95 0 615 0	76 10 760 LOSS 0 0 893 1696 0 1609 0	GAIN 0 0 1238 3935 0 0 311 0 4			1951	0 0 42 0 0 0 147 0	21 9 189 LOSS 0 0 750 0 0 385 0 331	GAIN 0 0 1040 0 0 74 0	11 0 0 0 0 20 255 0	W/R 26 11 286 LOSS 196 0 0 0 481 667 0	GAIN 174 0 0 0 0 93 129 0	0 0 56 0 0 20 224 0	30 10 300 LOSS 0 0 1000 0 0 481 586 0	GAIN 0 0 1387 0 0 93 113 0		***	1195				0 0 0 20 16	WU 19 10 18- LOS 0 0 0 0 0 48- 1 420 0	11 SS GAII 0 0 0 0 0 1 93 0 81 0	9 0 0 0 20 0 531	177 10 1151 LOSS 161 0 0 0 481 0	143 0 0 0 0 0 93 0 343 0
GRS.WALL ARE GRS.WALL ARE GLAZIN NORT EAS APPLASON WES AFFECTION NET EXPOSED WAL NET EXPOSED SAM WALLARDED EXPOSED CL	E L T. FACTO A LOSS G H 17.9 17.9 17.9 17.1 30.6 S 24.1 L 2.6 GR 3.3 G 1.4 G 2.2	15.8 41.4 24.8 41.4 101.2 4.7 0.5 0.6 0.7 1.1	0 50 50 0 0 400 0 12	50 10 500 LOSS 0 893 893 0 0 1047 0 17	G GAIN 0 2071 1238 0 0 202 0 8			2002	0 50 95 0 615 0	76 10 760 LOSS 0 0 893 1696 0 1609 0 8	GAIN 0 0 1238 3935 0 0 311 0 4			1951	0 0 42 0 0 0 147 0 240	21 9 189 LOSS 0 0 750 0 0 385 0 331	GAIN 0 0 1040 0 0 74 0 164	11 0 0 0 0 20 255 0 0	W/R 26 11 286 LOSS 196 0 0 481 667 0 0	GAIN 174 0 0 0 0 93 129 0	0 0 56 0 0 20 224 0 0	30 10 300 LOSS 0 0 1000 0 0 481 586 0 0	GAIN 0 0 1387 0 93 113 0			1195				0 0 0 0 20 16 <sup>-</sup> 0 0	WU 19 10 18- LOS 0 0 0 0 0 48- 1 420 0 0	11 6SS GAII 0 0 0 0 0 1 93 0 81 0	9 0 0 0 20 0 531	177 10 1151 LOSS 161 0 0 0 481 0 1772 0	143 0 0 0 0 93 0 343 0
GRS.WALL ARE GRS.WALL ARE GLAZIN NORT EAS APPL SOUT AT MY WES AND DOOR NET EXPOSED WALL NO ATTIC EXPOSED CL EXPOSED FLOO	FACTU A LOSS G H 17.9 FT 17.9 FT 17.9 TT 30.6 S 24.1 L 2.6 SR 3.3 G 1.4 G 2.2 R 2.2	15.8 41.4 24.8 41.4 101.2 4.7 0.5 0.6 0.7	0 50 50 0 0 400 0	500 100 500 LOSS 0 893 893 0 0 1047 0 17 0	S GAIN 0 2071 1238 0 0 202 0			2002	0 50 95 0 615 0	76 10 760 LOSS 0 0 893 1696 0 1609 0 8 0 0	GAIN 0 0 1238 3935 0 0 311 0 4			1951	0 0 42 0 0 0 147 0	21 9 189 LOSS 0 0 750 0 0 385 0 331 0	GAIN 0 0 1040 0 0 74 0	11 0 0 0 0 20 255 0	W/R 26 11 286 LOSS 196 0 0 0 481 667 0 0	GAIN 174 0 0 0 0 93 129 0	0 0 56 0 0 20 224 0	30 10 300 LOSS 0 0 1000 0 481 586 0 0	GAIN 0 0 1387 0 0 93 113 0			1195				0 0 0 20 16	WU 19 10 18- LOS 0 0 0 0 0 48- 1 420 0	11 6SS GAII 0 0 0 0 0 1 93 0 81 0	9 0 0 0 20 0 531	177 10 1151 LOSS 161 0 0 481 0 1772 0	143 0 0 0 0 0 93 0 343 0
GRS.WALL ARE GLAZIN  ORT  EAS  POSSIVE  METEROSED WALL  NOT EXPOSED CL  EXPOSED CL  NO ATTIC EXPOSED FLOO  BASEMENT/CRAWL HEAT LOS  BASEMENT/CRAWL HEAT LOS	FACTI LOSS GH 17.9 17.9 17. 30.6 S. 24.1 L. 2.6 S.R 3.3 G. 1.4 G. 2.2 R. 2.2	15.8 41.4 24.8 41.4 101.2 4.7 0.5 0.6 0.7 1.1	0 50 50 0 0 400 0 12	500 100 500 LOSS 0 893 893 0 0 1047 0 17 0	G GAIN 0 2071 1238 0 0 202 0 8			2002	0 50 95 0 615 0	76 10 760 LOSS 0 0 893 1696 0 1609 0 8	GAIN 0 0 1238 3935 0 0 311 0 4			1951	0 0 42 0 0 0 147 0 240	21 9 189 LOSS 0 0 750 0 0 385 0 331	GAIN 0 0 1040 0 0 74 0 164	11 0 0 0 0 20 255 0 0	W/R 26 11 286 LOSS 196 0 0 481 667 0 0	GAIN 174 0 0 0 0 93 129 0	0 0 56 0 0 20 224 0 0	30 10 300 LOSS 0 0 1000 0 481 586 0 0	GAIN 0 0 1387 0 93 113 0			1195				0 0 0 0 20 16 <sup>-</sup> 0 0	WUU 199 100 188 100 00 00 00 00 00 00 00 00 00 00 00 00	11 6SS GAII 0 0 0 0 0 1 93 0 81 0	9 0 0 0 20 0 531	177 10 1151 LOSS 161 0 0 0 481 0 1772 0	143 0 0 0 0 93 0 343 0
GRS.WALL ARE GLAZIN  ORS.WALL ARE GLAZIN  NORT EAS PARESOUT  WES ARE SKYL  NET EXPOSED UND  NET EXPOSED CL  NO ATTIC EXPOSED CL  EXPOSED CL  EXPOSED LO  EXPOSED LO  SASEMENTIC RAWL HEAT LOS  SLAB ON GRADE HEAT LOS	ELL. T. FACTT A LOSS G H 17.9 17.9 17.9 17.30.6 S 24.1 L 2.6 SR 3.3 G 1.4 C 2.2 S SS	15.8 41.4 24.8 41.4 101.2 4.7 0.5 0.6 0.7 1.1	0 50 50 0 0 400 0 12	500 100 500 LOSS 0 893 0 0 0 1047 0 17 0 0 0	G GAIN 0 2071 1238 0 0 202 0 8			2002	0 50 95 0 615 0	76 10 760 LOSS 0 893 1696 0 1609 0 8 0 0	GAIN 0 0 1238 3935 0 0 311 0 4			1951	0 0 42 0 0 0 147 0 240	21 9 189 LOSS 0 0 750 0 0 385 0 331 0 0	GAIN 0 0 1040 0 0 74 0 164	11 0 0 0 0 20 255 0 0	W/R 26 11 286 LOSS 196 0 0 0 481 6667 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	GAIN 174 0 0 0 0 93 129 0	0 0 56 0 20 224 0 0	30 10 300 LOSS 0 0 1000 0 0 481 586 0 0 0	GAIN 0 0 1387 0 93 113 0			1195				0 0 0 0 20 16 <sup>-</sup> 0 0	WUU 199 100 100 100 100 100 100 100 100 100	1P	9 0 0 0 20 0 531	177 10 1151 LOSS 161 0 0 0 481 0 1772 0 0 0	143 0 0 0 0 93 0 343 0
GRS.WALL ARE GRS.WALL ARE GLAZIN NORT EAS APPLASON NET EXPOSED WALL NET EXPOSED BAND NET EXPOSED CL EXPOSED CL EXPOSED CL EXPOSED CL SEXPOSED FLOO BASEMENT/GRAWL HEAT LOS SUBTOTAL HT LOS SUBTOTAL HT LOS	FACT' LOSS G H 17.9 iT 17.9 iT 17.9 30.6 S 24.1 Ls 3 3 3 3 G 1.4 G 2.2 R 2.2 S S S S	15.8 41.4 24.8 41.4 101.2 4.7 0.5 0.6 0.7 1.1	0 50 50 0 0 400 0 12	500 100 5000 LOSS 0 893 893 0 0 1047 0 17 0 0	S GAIN 0 2071 1238 0 0 202 0 8 0 0			2002	0 50 95 0 615 0	76 10 760 LOSS 0 0 893 1696 0 1609 0 8 0 0	GAIN 0 0 1238 3935 0 0 3111 0 4 0			1951	0 0 42 0 0 0 147 0 240	21 9 189 LOSS 0 0 750 0 0 385 0 331 0	GAIN 0 1040 0 0 74 0 164 0	11 0 0 0 0 20 255 0 0	W/R 26 11 286 LOSS 196 0 0 0 481 667 0 0	GAIN 174 0 0 0 93 129 0 0	0 0 56 0 20 224 0 0	30 10 300 LOSS 0 0 1000 0 481 586 0 0	GAIN 0 0 1387 0 93 113 0 0			1195			2	0 0 0 0 20 16 <sup>-</sup> 0 0	WUU 199 100 188 100 00 00 00 00 00 00 00 00 00 00 00 00	1P	9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	177 10 1151 LOSS 161 0 0 481 0 1772 0	143 0 0 0 0 93 0 343 0 0
GRS.WALL ARE GLAZIN NORT EAS APPL SOUT AT MY WES AT JOOOR NET EXPOSED WAL NET EXPOSED CL EXPOSED FLOO BASEMENT/CRAWL HEAT LOS SUB TOTAL HT CAS SUB TOTAL HT CAS	ELL. T. FACT. A LOSS G 17.9 17.9 17.9 17.9 17. 30.6 S 24.1 L. 2.6 SR 3.3 G 1.4 G 2.2 R 2.2 SS SS N	15.8 41.4 24.8 41.4 101.2 4.7 0.5 0.6 0.7 1.1	0 50 50 0 0 400 0 12 0	500 10 5000 LOSS 0 893 893 0 0 1047 0 17 0 0 0 2848	G GAIN 0 2071 1238 0 0 202 0 8			2002	0 0 50 95 0 615 0 6	76 10 760 LOSS 0 893 1696 0 1609 0 8 0 0 4206	GAIN 0 0 1238 3935 0 0 311 0 4			1951	0 0 42 0 0 0 147 0 240 0	21 9 189 LOSS 0 0 750 0 0 385 0 0 0 0 1465	GAIN 0 0 1040 0 0 74 0 164	11 0 0 0 0 20 255 0 0	W/R 26 11 286 LOSS 196 0 0 0 481 667 0 0 0 1345	GAIN 174 0 0 0 0 93 129 0	0 0 56 0 20 224 0 0	30 10 300 LOSS 0 0 1000 0 0 481 586 0 0 0 0 0	GAIN 0 0 1387 0 93 113 0			1195				0 0 0 0 20 16 <sup>-</sup> 0 0	WUU 199 100 100 100 100 100 100 100 100 100	1P	9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	177 10 1151 LOSS 161 0 0 0 481 0 1772 0 0 5819	143 0 0 0 0 93 0 343 0
GRS.WALL ARE GLG. H  GRS.WALL ARE GLAZIN  NORT EAS  PROSOUT  WES  WES  WES  WES  WES  WES  WES  WE	ELL T. FACT' LOSS G H 17.9 iT 17.9 iT 17.9 iT. 30.6 S 24.1 L 2.6 S 3.3 G 1.4 2.2 C 2.2 S S S S S S S S S S S S S S S S S S S	15.8 41.4 24.8 41.4 101.2 4.7 0.5 0.6 0.7 1.1	0 50 50 0 0 400 0 12 0	500 10 5000 LOSS 0 893 893 0 0 1047 0 17 0 0 0 2848	S GAIN 0 2071 1238 0 0 202 0 8 0 0			2002	0 50 95 0 615 0	760 10 760 LOSS 0 0 893 1696 0 0 1609 0 8 0 0 0 4206	GAIN 0 0 1238 3935 0 0 3111 0 4 0			1951	0 0 42 0 0 0 147 0 240 0	21 9 189 LOSS 0 0 750 0 0 385 0 331 0 0 0 1465 0.27	GAIN 0 1040 0 0 74 0 164 0	11 0 0 0 0 20 255 0 0	W/R 26 11 286 LOSS 196 0 0 481 667 0 0 0 1345 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	GAIN 174 0 0 0 93 129 0 0	0 0 56 0 20 224 0 0	300 100 300 LOSS 0 0 1000 0 0 481 586 0 0 0 0 0 0 2067	GAIN 0 0 1387 0 93 113 0 0			1195				0 0 0 0 20 16 <sup>-</sup> 0 0	WUU 199 100 100 100 100 100 100 100 100 100	1P	9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	177 10 1151 LOSS 161 0 0 481 0 1772 0 0 5819	143 0 0 0 0 93 0 343 0 0
GRS.WALL ARE GLAZIN  ORT GRS.WALL ARE GLAZIN  NORT GEAS PROSED VAL  NET EXPOSED WALL  NO ATTIC EXPOSED CL  EXPOSED FLOO  BASEMENT/GRAWL HEAT LOS SUBTOTAL HT LOS SUB TOTAL HT GAI  LEVEL FACTOR / MULTIPLIEL  AIR CHANGE HEAT LOS	E L L T FACTI FACTI T17.9 A LOSS G H 17.9 9 T 17.9 30.6 A S 24.1 A S E L 2.6 B R 3.3 A S E L 2.5 S S S S S S S S S S S S S S S S S S S	15.8 41.4 24.8 41.4 101.2 4.7 0.5 0.6 0.7 1.1	0 50 50 0 0 400 0 12 0	500 10 5000 LOSS 0 893 893 0 0 1047 0 17 0 0 0 2848	0 GAIN 0 2071 1238 0 0 202 0 8 0 0 0			2002	0 0 50 95 0 615 0 6	76 10 760 LOSS 0 893 1696 0 1609 0 8 0 0 4206	GAIN 0 0 1238 3935 0 0 3111 0 4 0			1951	0 0 42 0 0 0 147 0 240 0	21 9 189 LOSS 0 0 750 0 0 385 0 0 0 0 1465	GAIN 0 0 1040 0 0 74 0 164 0	11 0 0 0 0 20 255 0 0	W/R 26 11 286 LOSS 196 0 0 0 481 667 0 0 0 1345	GAIN 174 0 0 0 93 129 0 0 0	0 0 56 0 20 224 0 0	30 10 300 LOSS 0 0 1000 0 0 481 586 0 0 0 0 0	GAIN 0 0 1387 0 0 93 113 0 0 0 1593			1195				0 0 0 0 20 16 <sup>-</sup> 0 0	WUU 199 100 100 100 100 100 100 100 100 100	1P	9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	177 10 1151 LOSS 161 0 0 0 481 0 1772 0 0 5819	143 0 0 0 0 93 0 343 0 0
ROOM US EXP. WAI CLG. H GRS.WALL ARE GLAZIN NORT EAS PARESOLU WES ARE SKYL WES ARE SKYL NET EXPOSED CL NO ATTIC EXPOSED CL NO ATTIC EXPOSED CL EXPOSED CL SUBTOTAL HT LOS SUBTOTAL HT LOS SUB TOTAL HT GAI LEVEL FACTOR / MULTIPLIE AIR CHANGE HEAT LOS	E L L T FACTI FACT	15.8 41.4 24.8 41.4 101.2 4.7 0.5 0.6 0.7 1.1	0 50 50 0 0 400 0 12 0	500 10 5000 LOSS 0 893 893 0 0 0 1047 0 17 0 0 0 2848 0.46 1311	S GAIN 0 2071 1238 0 0 202 0 8 0 0			2002	0 0 50 95 0 615 0 6	76 10 760 LOSS 0 0 893 1696 0 0 0 1609 0 0 4206	GAIN 0 0 1238 3935 0 0 3111 0 4 0			1951	0 0 42 0 0 0 147 0 240 0	21 9 189 LOSS 0 0 750 0 0 385 0 331 0 0 0 1465 0.27	GAIN 0 1040 0 0 74 0 164 0	11 0 0 0 0 20 255 0 0	W/R 26 11 286 LOSS 196 0 0 481 667 0 0 0 1345 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	GAIN 174 0 0 0 93 129 0 0	0 0 56 0 20 224 0 0	300 100 300 LOSS 0 0 1000 0 0 481 586 0 0 0 0 0 0 2067	GAIN 0 0 1387 0 93 113 0 0			1195				0 0 0 0 20 16 <sup>-</sup> 0 0	WUU 199 100 100 100 100 100 100 100 100 100	1P	9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	177 10 1151 LOSS 161 0 0 481 0 1772 0 0 5819 8233 0.88	143 0 0 0 0 93 0 343 0 0
GRS.WALL ARE GRS.WALL ARE GRS.WALL ARE GLAZIN NORT EAS APPL SOUT AND WES AND DOOR NET EXPOSED WAL NET EXPOSED CL EXPOSED FLOO BASEMENTICRAWL HEAT LOS SUB TOTAL HT LOS SUB TOTAL HT GAI LEVEL FACTOR / MULTIPLIE AIR CHANGE HEAT LOS AIR CHANGE HEAT LOS AIR CHANGE HEAT LOS AIR CHANGE HEAT CAS DUCT LOS	E L L L L A L L L L L L L L L L L L L L	15.8 41.4 24.8 41.4 101.2 4.7 0.5 0.6 0.7 1.1	0 50 50 0 0 400 0 12 0	500 10 5000 LOSS 0 893 893 0 0 1047 0 17 0 0 0 2848	0 GAIN 0 2071 1238 0 0 202 0 8 0 0 0			2002	0 0 50 95 0 615 0 6	760 10 760 LOSS 0 0 893 1696 0 0 1609 0 8 0 0 0 4206	GAIN 0 0 1238 3935 0 0 3111 0 4 0			1951	0 0 42 0 0 0 147 0 240 0	21 9 189 LOSS 0 0 750 0 0 385 0 3311 0 0 0 1465 0.27 399	GAIN 0 0 1040 0 0 74 0 164 0	11 0 0 0 0 20 255 0 0	W/R 26 11 286 LOSS 196 0 0 481 667 0 0 0 1345 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	GAIN 174 0 0 0 93 129 0 0 0	0 0 56 0 20 224 0 0	30 10 300 LOSS 0 0 1000 0 0 481 586 0 0 0 0 0 2067	GAIN 0 0 1387 0 0 93 113 0 0 0 1593			1195				0 0 0 0 20 16 <sup>-</sup> 0 0	WUU 199 100 100 100 100 100 100 100 100 100	1P	9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	177 10 1151 LOSS 161 0 0 481 0 1772 0 0 5819	143 0 0 0 0 93 0 343 0 0
GRS.WALL ARE GLAZIN  GRS.WALL ARE GLAZIN  NORT  EAS  PARENTE SOUT  TANA WES  AND DOOR  NET EXPOSED WALL  NO ATTIC EXPOSED CL  EXPOSED FLOO  BASEMENT/GRAWL HEAT LOS  SUBTOTAL HT GAS  SUB TOTAL HT GAS  LEVEL FACTOR / MULTIPLIE  AIR CHANGE HEAT LOS  AIR CHANGE HEAT LOS  AIR CHANGE HEAT GAS  DUCT GAS  DUCT GAS	E L L	15.8 41.4 24.8 41.4 101.2 4.7 0.5 0.6 0.7 1.1	0 50 50 0 0 0 400 0 12 0	500 10 5000 LOSS 0 893 893 0 0 0 1047 0 17 0 0 0 2848 0.46 1311	N 6 GAIN 0 2071 1238 0 0 0 2022 0 8 0 0 0 3520 239			2002	0 0 50 95 0 615 0 6	76 10 760 LOSS 0 0 893 1696 0 0 0 1609 0 0 4206	GAIN 0 0 1238 3935 0 0 3111 0 4 0 0 5489			1951	0 0 42 0 0 0 147 0 240 0	21 9 189 LOSS 0 0 750 0 0 385 0 3311 0 0 0 1465 0.27 399	GAIN 0 1040 0 0 0 164 0 1279	11 0 0 0 0 20 255 0 0	W/R 26 11 286 LOSS 196 0 0 481 667 0 0 0 1345 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	GAIN 174 0 0 0 93 129 0 0 0	0 0 56 0 20 224 0 0	30 10 300 LOSS 0 0 1000 0 0 481 586 0 0 0 0 0 2067	GAIN 0 0 1387 0 93 113 0 0 0			1195				0 0 0 0 20 16- 0 0 0	WUU 199 100 100 100 100 100 100 100 100 100	11 SS GAII 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	177 10 1151 LOSS 161 0 0 481 0 1772 0 0 5819 8233 0.88	143 0 0 0 0 93 0 343 0 0 0
GRS.WALL ARE GLAZIN  GRS.WALL ARE GLAZIN  NORT  EAS  POSOUT  TABLE WES  ALCOMORDOR  NET EXPOSED WALL  NO ATTIC EXPOSED CL  EXPOSED FLOO  BASEMENT/CRAWL HEAT LOS  SUB TOTAL HT GAI  LEVEL FACTOR / MULTIPLIE  AIR CHANGE HEAT LOS  AIR CHANGE HEAT LOS  AIR CHANGE HEAT GAI  DUCT CAS  DUCT CAS  LEXPOSED  LEVEL FACTOR / MULTIPLIE  AIR CHANGE HEAT GAI  DUCT LOS  DUCT GA  HEAT GAIN PEOPL	E L L T FACT 1 FACT 1 T 17.9 G G FACT 1 T 17.9 G G FACT 1 T 17.9 G G G FACT 1 T 17.9 G G G G G G G G G G G G G G G G G G G	15.8 41.4 24.8 41.4 101.2 4.7 0.5 0.6 0.7 1.1	0 50 50 0 0 400 0 12 0	500 10 5000 LOSS 0 893 893 0 0 0 1047 0 17 0 0 0 2848 0.46 1311	0 GAIN 0 2071 1238 0 0 0 2022 0 8 0 0 0 239			2002	0 0 50 95 0 0 615 0 6 0	76 10 760 LOSS 0 0 893 1696 0 0 0 1609 0 0 4206	GAIN 0 0 1238 3935 0 0 3111 0 4 0 0 5489			1951	0 0 42 0 0 0 147 0 240 0	21 9 189 LOSS 0 0 750 0 0 385 0 3311 0 0 0 1465 0.27 399	GAIN 0 1040 0 0 0 74 0 164 0 0	11 0 0 0 0 20 255 0 0 0	W/R 26 11 286 LOSS 196 0 0 481 667 0 0 0 1345 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	GAIN 174 0 0 0 93 129 0 0 0	0 0 56 0 0 20 2224 0 0 0	30 10 300 LOSS 0 0 1000 0 0 481 586 0 0 0 0 0 2067	GAIN 0 0 1387 0 93 113 0 0 0			1195				0 0 0 0 20 16 <sup>-</sup> 0 0	WUU 199 100 100 100 100 100 100 100 100 100	1P	9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	177 10 1151 LOSS 161 0 0 481 0 1772 0 0 5819 8233 0.88	143 0 0 0 0 93 0 343 0 0 0 578
GRS.WALL ARE GLAZIN  GRS.WALL ARE GLAZIN  NORT  EAS  PARENTE SOUT  TANA WES  AND DOOR  NET EXPOSED WALL  NO ATTIC EXPOSED CL  EXPOSED FLOO  BASEMENT/GRAWL HEAT LOS  SUBTOTAL HT GAS  SUB TOTAL HT GAS  LEVEL FACTOR / MULTIPLIE  AIR CHANGE HEAT LOS  AIR CHANGE HEAT LOS  AIR CHANGE HEAT GAS  DUCT GAS  DUCT GAS	E L L	15.8 41.4 24.8 41.4 101.2 4.7 0.5 0.6 0.7 1.1	0 50 50 0 0 0 400 0 12 0	500 10 5000 LOSS 0 893 893 0 0 0 1047 0 17 0 0 0 2848 0.46 1311	0 GAIN 0 0 2071 1238 0 0 0 0 0 3520 239 0 0 775			2002	0 0 50 95 0 0 615 0 6 0	76 10 760 LOSS 0 0 893 1696 0 0 0 1609 0 0 4206	GAIN 0 0 1238 3935 0 0 3111 0 4 0 0 5489			1951	0 0 42 0 0 0 147 0 240 0	21 9 189 LOSS 0 0 750 0 0 385 0 3311 0 0 0 1465 0.27 399	GAIN 0 1040 0 0 0 164 0 1279	11 0 0 0 0 20 255 0 0 0	W/R 26 11 286 LOSS 196 0 0 481 667 0 0 0 1345 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	GAIN 174 0 0 0 93 129 0 0 0 0	0 0 56 0 0 20 2224 0 0 0 0	30 10 300 LOSS 0 0 1000 0 0 481 586 0 0 0 0 0 2067	GAIN 0 0 1387 0 0 93 113 0 0 0 0			1195				0 0 0 0 20 16- 0 0 0	WUU 199 100 100 100 100 100 100 100 100 100	11 SS GAINE 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	177 10 1151 LOSS 161 0 0 481 0 1772 0 0 5819 8233 0.88	143 0 0 0 0 93 0 343 0 0 0
GRS.WALL ARE GLAZIN  GRS.WALL ARE GLAZIN  NORT  EAS  PASSANT  NET EXPOSED WALL  NET EXPOSED WALL  NET EXPOSED BALL  NO ATTIC EXPOSED CL  EXPOSED CL  EXPOSED CL  EXPOSED LOO  BASEMENT/CRAWL HEAT LOS  SUB TOTAL HT LOS  SUB TOTAL HT GALL  LEVEL FACTOR / MULTIPLIE  AIR CHANGE HEAT LOS  AIR CHANGE HEAT COS  AIR CHANGE HEAT GOL  DUCT LOS  DUCT LOS  HEAT GAIN PEOPLE  HEAT GAIN PEOPLE  HEAT GAIN PEOPLE  HEAT GAIN PEOPLE  HEAT GAIN PEOPLE	E L L	15.8 41.4 24.8 41.4 101.2 4.7 0.5 0.6 0.7 1.1	0 50 50 0 0 0 400 0 12 0	50 10 500 LOSS 0 893 893 0 0 1047 0 0 0 2848 0.46 1311	0 GAIN 0 0 2071 1238 0 0 0 0 0 3520 239 0 0 775			2002	0 0 50 95 0 0 615 0 6 0	76 10 760 0 0 893 1696 0 0 0 4206 0.46 1936	GAIN 0 0 1238 3935 0 0 3111 0 4 0 0 5489			1951	0 0 42 0 0 0 147 0 240 0	21 9 189 LOSS 0 0 750 0 0 385 0 0 0 1465 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	GAIN 0 1040 0 0 0 74 0 164 0 0	11 0 0 0 0 20 255 0 0 0	W/R 26 111 286 LOSS 196 0 0 0 481 667 0 0 0 1345 0.46 619 0	GAIN 174 0 0 0 93 129 0 0 0 0	0 0 56 0 0 20 2224 0 0 0 0	30 10 300 LOSS 0 0 1000 0 0 481 586 0 0 0 0 2067	GAIN 0 0 1387 0 0 93 113 0 0 0 0			1195				0 0 0 0 20 16- 0 0 0	WU 199 100 100 100 100 100 100 100 100 100	11 SS GAINE 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	9 0 0 0 0 0 5311 0	177 10 1151 LOSS 161 0 0 481 0 0 1772 0 0 5819 8233 0.88 8030	143 0 0 0 0 93 0 343 0 0 0

TOTAL HEAT GAIN BTU/H:

41519

TONS: 3.46

LOSS DUE TO VENTILATION LOAD BTU/H: 2354

STRUCTURAL HEAT LOSS: 47836

TOTAL COMBINED HEAT LOSS BTU/H: 50190

Mahad Oktomba.



	ITE NAME BUILDER			OMES					WUP JUNIPER				DATE:	Feb-17			GFA:	2961	LO#	72388			
HEATING CFN TOTAL HEAT LOS AIR FLOW RATE CFN	ss 47,836 M 27.51		TOTAL H	PLING CFM HEAT GAIN RATE CFM	41,064 32.05		а	furr a/c coil vailable į	pressure nace filter pressure pressure s/a & r/a	0.6 0.05 0.2 0.35								804CNA SPEED LOW			OUTPUT	AFUE = 96.0 % (BTU/H) = 80,000 (BTU/H) = <b>76,800</b>	
RUN COUNT	4th	3rd 0	2nd 11	1st 7	Bas 5					0.40				0.17				EDLOW	0		DES	IGN CFM = 1316	
S/A R/A	0	0	5	2	1				ssure s/a ess. loss	0.18 0.02	r/s	i/a grille pre	pressure	0.17				MEDIUM IM HIGH				CFM @ .6 " E.S.P	
All S/A diffusers 4"x10" u					·				ssure s/a	0.16		usted pre		0.15			WILDIO	HIGH	1396		EMPERAT	TURE RISE 54	°F
All S/A runs 5"Ø unless r	noted other	wise on la	ayout.																				
RUN		2	3	4	5	6	7	8		10	11	12	13	14	15	16	17	18	19		21	22 23	24
ROOM NAM RM LOSS MBI		ENS 1.58	WIC 0.62	BED-2 1.05	BED-3 2.26	BED-4 1.52	BATH 1.09	BED-4 1.52		MBR 1.44	ENS-4 0.99	LV/DN 2.08	LV/DN 2.08	KT/FM 2.05	KT/FM 2.05	KT/FM 2.05	LAUN 1.86	W/R 1.96	FOY 3.02		BAS	BAS BAS	BAS
CFM PER RUN HEA		44	17	29	62	42	30	42		40	27	2.06 57	2.06 57	2.05 56	2.05 56	2.05 56	51	54	3.02 83		3.43 94	3.43 3.43 94 94	3.43 94
RM GAIN MBI		2.00	0.78	1.95	3.23	2.54	0.46	2.54		2.32	1.19	2.95	2.95	2.98	2.98	2.98	3.10	0.55	2.21		0.21	0.21 0.21	0.21
CFM PER RUN COOLIN		64	25	63	103	81	15	81		74	38	94	94	96	96	96	99	18	71		7	7 7	7
ADJUSTED PRESSUR		0.17	0.17	0.17	0.16	0.16	0.17	0.16		0.17	0.17	0.16	0.16	0.16	0.16	0.16	0.16	0.17	0.16		0.16	0.16 0.16	0.16
ACTUAL DUCT LG		40	34	33	42	58	34	47		43	35	37	33	26	20	32	36	27	19		23	44 12	27
EQUIVALENT LENGT		120	160	100	130	130	140	130		130	120	130	130	120	130	100	120	100	120		110	160 130	140
TOTAL EFFECTIVE LENGT		160	194	133	172	188	174	177		173	155	167	163	146	150	132	156	127	139		133	204 142	167
ADJUSTED PRESSUR		0.11	0.09	0.13	0.09	0.09	0.1	0.09		0.1	0.11	0.1	0.1	0.11	0.11	0.12	0.1	0.14	0.12		0.12	0.08 0.11	0.1
ROUND DUCT SIZ		5	4	4	6	5	4	5		5	4	5	5	5	5	5	6	4	5		5	6 5	5
HEATING VELOCITY (ft/mi	n) 294	323	195	333	316	308	344	308		294	310	419	419	411	411	411	260	620	609		690	479 690	690
COOLING VELOCITY (ft/mi	n) 543	470	287	723	525	595	172	595		543	436	690	690	705	705	705	505	207	521		51	36 51	51
OUTLET GRILL SIZ		3X10	3X10	3X10	4X10	3X10	3X10	3X10		3X10	4X10	3X10	3X10		3X10	4X10 👫 3X10	3X10						
TRUN	ik B	A	В	A	E	E	E	D		В	E	D	D	A	A	В	В	Α	<u> </u>		Α	B E	D
	#I 05																			.,			
RUN																							
ROOM NAM																							
RM LOSS MBI CFM PER RUN HEA																						8	
RM GAIN MBI																							
CFM PER RUN COOLIN																							
ADJUSTED PRESSUR																							
ACTUAL DUCT LGI																							
EQUIVALENT LENGT																						RECEIVE	ם:
TOTAL EFFECTIVE LENGT																						TOWN OF MIL	
ADJUSTED PRESSUR																						TOVVIA OF WILL	LION
ROUND DUCT SIZ	E 5																					MAR 29, 20	)17
HEATING VELOCITY (ft/mi	n) 690																					JUNIPER 1	4E
COOLING VELOCITY (ft/mi	n) 51																	. 3				JUNIFER	11
OUTLET GRILL SIZ																					3.4	BUILDING DIV	'ISION
TRUN	ık∣ D				-																. B# <mark></mark>		
OUDDLY AID TRUME OF																	RETURN A	UD TOUR	/ CI7E	~			
SUPPLY AIR TRUNK SIZE	TRUNK	STATIC	ROUND	RECT			VELOCITY			TRUNK	STATIC	ROUND	RECT			VELOCITY	RETURNA	TRUNK	STATIC	ROUND	RECT	0.14 (1)	VELOCITY
pro i	CFM	PRESS.	DUCT	DUCT			(ft/min)			CFM	PRESS.	DUCT	DUCT			(ft/min)	1	CFM	PRESS.	DUCT	DUĈT	4 4 4	(ft/min)
TRUNK		0.11	8.6	10	x	8	599		TRUNK G	0	0.00	0	0	x	8	0	TRUNK O	0	0.05	0	:00	x 8	(1011111)
TRUNK		0.11	8.9	10	X	8	536		TRUNK H	Ö	0.00	0	0	X	8	0	TRUNK P	0	0.05	0	0	x 8	0
TRUNK		0.08	11.8	18	x	8	631		TRUNK I	ő	0.00	ő	ő	x	8	ő	TRUNK Q	o ·	0.05	Ö	Ö	x 8	ő
TRUNK		0.09	9.1	10	x	8	619		TRUNK J	ő	0.00	ő	ő	x	8	ő	TRUNK R	ő	0.05	Ö	Ö	x 8	ő
TRUNK		0.09	11.8	18	X	8	682		TRUNK K	ō	0.00	ō	Ö	x	8	ō	TRUNK S	0	0.05	Ō	0.0	x 8	ō
	- 002		0	0	X	8	0		TRUNK L	0	0.00	0	Ō	X	8	0	TRUNK T	0	0.05	ō	0;	x 8	Ō
TRUNK		0.00															TRUNK U	0	0.05	0	•		
		0.00															1				0	x 8	0
TRÜNK	F O																TRUNK V	0	0.05	0	0	x 8	0 .
TRÜNK	F 0	2	3	4	5	6	7									BR	TRUNK W	0 270	0.05 0.05	0 9.7	0 12	x 8 x 8	0 405
TRUNK RETURN AIR #	f 0	2	3 0	Ó	0	0	Ö	0	0	0	0	0	0	0	0		TRUNK W TRUNK X	0 270 1316	0.05 0.05 0.05	0 9.7 17.5	0 12 28	x 8 x 8 x 10	0 405 677
TRUNK RETURN AIR # AIR VOLUME	1 0 155	2 0 85	3 0 75	0 135	0 390	0 135	0 135	0	0	ō	Ö	0	Ö	ő	Ó	206	TRUNK W TRUNK X TRUNK Y	0 270 1316 1110	0.05 0.05 0.05 0.05	0 9.7 17.5 16.4	0 12 28 32	x 8 x 8 x 10 x 8	0 405 677 624
TRUNK RETURN AIR # AIR VOLUME PLENUM PRESSURE	1 0 155 0.15	2 0 85 0.15	3 0 75 0.15	0 135 0.15	0 390 0.15	0 135 0.15	0 135 0.15	0 0.15	0 0.15	0 0.15	-		-	•	0 0.15	206 0.15	TRUNK W TRUNK X TRUNK Y TRUNK Z	0 270 1316 1110 565	0.05 0.05 0.05 0.05 0.05	0 9.7 17.5 16.4 12.7	0 12 28 32 18	X 8 X 8 X 10 X 8 X 8	0 405 677 624 565
TRUNK RETURN AIR #  AIR VOLUME PLENUM PRESSURE ACTUAL DUCT LGH.	1 0 155 0.15 52	2 0 85 0.15 63	3 0 75 0.15 60	0 135 0.15 67	0 390 0.15 33	0 135 0.15 46	0 135 0.15 62	0 0.15 1	0 0.15 1	0 0.15 1	0 0.15 1	0	0 0.15 1	ő	0 0.15 1	206 0.15 16	TRUNK W TRUNK X TRUNK Y	0 270 1316 1110	0.05 0.05 0.05 0.05	0 9.7 17.5 16.4	0 12 28 32	x 8 x 8 x 10 x 8	0 405 677 624
TRUNK  RETURN AIR #  AIR VOLUME  PLENUM PRESSURE  ACTUAL DUCT LGH.  EQUIVALENT LENGTH	1 0 155 0.15 52 200	2 0 85 0.15 63 205	3 0 75 0.15 60 215	0 135 0.15 67 230	0 390 0.15 33 185	0 135 0.15 46 225	0 135 0.15 62 235	0 0.15	0 0.15	0 0.15	Ö	0 0.15 1	Ö	0 0.15 1	0 0.15 1 0	206 0.15 16 145	TRUNK W TRUNK X TRUNK Y TRUNK Z	0 270 1316 1110 565	0.05 0.05 0.05 0.05 0.05	0 9.7 17.5 16.4 12.7	0 12 28 32 18	X 8 X 8 X 10 X 8 X 8	0 405 677 624 565
TRUNK  RETURN AIR #  AIR VOLUME PLENUM PRESSURE ACTUAL DUCT LGH. EQUIVALENT LENGTH TOTAL EFFECTIVE LH	1 0 155 0.15 52 200 252	2 0 85 0.15 63 205 268	3 0 75 0.15 60 215 275	0 135 0.15 67 230 297	0 390 0.15 33 185 218	0 135 0.15 46 225 271	0 135 0.15 62 235 297	0 0.15 1 0	0 0.15 1 0 1	0 0.15 1 0	0 0.15 1 0	0 0.15 1 0	0 0.15 1 0	0 0.15 1 0	0 0.15 1 0	206 0.15 16 145 161	TRUNK W TRUNK X TRUNK Y TRUNK Z	0 270 1316 1110 565	0.05 0.05 0.05 0.05 0.05	0 9.7 17.5 16.4 12.7	0 12 28 32 18	X 8 X 8 X 10 X 8 X 8	0 405 677 624 565
TRUNK  RETURN AIR #  AIR VOLUME PLENUM PRESSURE  ACTUAL DUCT LGH.  EQUIVALENT LENGTH  TOTAL EFFECTIVE LH  ADJUSTED PRESSURE	1 0 155 0.15 52 200 252 0.06	2 0 85 0.15 63 205 268 0.06	3 0 75 0.15 60 215 275 0.05	0 135 0.15 67 230 297 0.05	0 390 0.15 33 185 218 0.07	0 135 0.15 46 225 271 0.05	0 135 0.15 62 235 297 0.05	0 0.15 1 0	0 0.15 1 0	0 0.15 1 0	0 0.15 1 0	0 0.15 1 0	0 0.15 1 0	0 0.15 1 0	0 0.15 1 0	206 0.15 16 145 161 0.09	TRUNK W TRUNK X TRUNK Y TRUNK Z	0 270 1316 1110 565	0.05 0.05 0.05 0.05 0.05	0 9.7 17.5 16.4 12.7	0 12 28 32 18	X 8 X 8 X 10 X 8 X 8	0 405 677 624 565
TRUNK  RETURN AIR #  AIR VOLUME PLENUM PRESSURE ACTUAL DUCT LGH. EQUIVALENT LENGTH TOTAL EFFECTIVE LH	1 0 155 0.15 52 200 252	2 0 85 0.15 63 205 268	3 0 75 0.15 60 215 275	0 135 0.15 67 230 297	0 390 0.15 33 185 218	0 135 0.15 46 225 271	0 135 0.15 62 235 297	0 0.15 1 0 1 14.80	0 0.15 1 0 1 14.80	0 0.15 1 0 1 14.80	0 0.15 1 0 1 14.80	0 0.15 1 0 1 14.80	0 0.15 1 0 1 14.80	0 0.15 1 0 1 14.80	0 0.15 1 0 1 14.80	206 0.15 16 145 161	TRUNK W TRUNK X TRUNK Y TRUNK Z	0 270 1316 1110 565	0.05 0.05 0.05 0.05 0.05	0 9.7 17.5 16.4 12.7	0 12 28 32 18	X 8 X 8 X 10 X 8 X 8	0 405 677 624 565
TRUNK  RETURN AIR #  AIR VOLUME PLENUM PRESSURE ACTUAL DUCT LGH. EQUIVALENT LENGTH TOTAL EFFECTIVE LH ADJUSTED PRESSURE ROUND DUCT SIZE	1 0 155 0.15 52 200 252 0.06 7.5	2 0 85 0.15 63 205 268 0.06 6	3 0 75 0.15 60 215 275 0.05 6	0 135 0.15 67 230 297 0.05 7.5	0 390 0.15 33 185 218 0.07 10.2	0 135 0.15 46 225 271 0.05 7.5	0 135 0.15 62 235 297 0.05 7.5	0 0.15 1 0 1 14.80	0 0.15 1 0 1 14.80	0 0.15 1 0 1 14.80	0 0.15 1 0 1 14.80	0 0.15 1 0 1 14.80	0 0.15 1 0 1 14.80	0 0.15 1 0 1 14.80	0 0.15 1 0 1 14.80	206 0.15 16 145 161 0.09 7.5	TRUNK W TRUNK X TRUNK Y TRUNK Z	0 270 1316 1110 565	0.05 0.05 0.05 0.05 0.05	0 9.7 17.5 16.4 12.7	0 12 28 32 18	X 8 X 8 X 10 X 8 X 8	0 405 677 624 565



TYPE: SITE NAME: JUNIPER 11

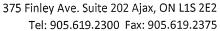
LECCO RIDGE

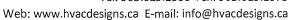
LO#

72388 WUP

#### RESIDENTIAL MECHANICAL VENTILATION DESIGN SUMMARY

da dipanjipani	COMBUSTION APPLIANCES 9.32.3.1(1)	SUPPLEMENTAL VENTILATION CAPACITY 9.32.3.5.
1 4 5 m 1	3.32.3.1(1)	3.52.5.5.
	a) Direct vent (sealed combustion) only	Total Ventilation Capacity 169.6 cfm
	b) Positive venting induced draft (except fireplaces)	Less Principal Ventil. Capacity86 cfm
	c) Natural draft, B-vent or induced draft gas fireplace	Required Supplemental Capacity 1.1 a serious 83.6 cfm 1.2 cfm
	d) Solid Fuel (including fireplaces)	A CARL STATE OF THE STATE OF TH
	e) No Combustion Appliances	PRINCIPAL EXHAUST FAN CAPACITY  Model: VANEE 40H+ Location: BSMT
	HEATING SYSTEM	86.0 cfm 3.0 sones HVI Approved
	✓ Forced Air Non Forced Air	PRINCIPAL EXHAUST HEAT LOSS CALCULATION
	Notificited All	CFM ΔT °F FACTOR % LOSS
	Electric Space Heat	86.0 CFM X 72 F X 1.08 X 0.35
		SUPPLEMENTAL FANS NUTONE  Location Model cfm HVI Sones
	HOUSE TYPE 9.32.1(2)	ENS QTXEN050C 50 ✓ 0.3
	Tura a) ash) asalisasa ash, na aslida ad	BATH QTXEN050C 50 ✓ 0.3
	I Type a) or b) appliance only, no solid fuel	ENS-4         QTXEN050C         50         ✓         0.3           W/R         QTXEN050C         50         ✓         0.3
	II Type I except with solid fuel (including fireplaces)	
	III Any Type c) appliance	HEAT RECOVERY VENTILATOR 9.32.3.11.  Model: VANEE 40H+
		86 cfm high 37 cfm low
	IV Type I, or II with electric space heat	65 % Sensible Efficiency
	Other: Type I, II or IV no forced air	@ 32 deg F ( 0 deg C)
		LOCATION OF INSTALLATION
	SYSTEM DESIGN OPTIONS O.N.H.W.P.	RECEIVED TOWN OF MILTON
	1 Exhaust only/Forced Air System	Lot: C 10WH of MILE ON MAR 29, 2017
	2 HRV with Ducting/Forced Air System	Township P JUNIPER 11F
		Address BUILDING DIVISION
	✓ 3 HRV Simplified/connected to forced air system	Roll# TOWN OF MILTON
	4 HRV with Ducting/non forced air system	PLANNING AND DEVELOPMENT
	Part 6 Design	BUILDER: JUNIPER 11F MODEL  Name: BUILDING: REVIEWED
	TOTAL VENTU ATION CARDANY	SCOTT SHERRIFFS APR 11, 2017
	TOTAL VENTILATION CAPACITY 9.32.3.3(1)	Neither the issuance of a permit nor carrying out of
	Basement + Master Bedroom 2 @ 21.2 cfm 42.4 cfm	City: inspections by the Town of Milton relives the owner from full responsibility for compliance with the provisions of the Ontario Building Code Act and the Ontario Building
	Other Bedrooms <u>3</u> @ 10.6 cfm <u>31.8</u> cfm	Telephone #:  Code, both as amended, as well as other applicable statutes and regulations of the Province on Ontario,
	Kitchen & Bathrooms5 @ 10.6 cfm53 cfm	INSTALLING CONTRACTOR  By-laws of the Region of Halton and Town of Milton
	Other Rooms <u>4</u> @ 10.6 cfm <u>42.4</u> cfm	Name:
	Table 9.32.3.A. TOTAL <u>169.6</u> cfm	Address:
	PRINCIPAL VENTILATION CAPACITY REQUIRED 9.32.3.4.(1)	City:
		Telephone #: Fax #:
	1 Bedroom 31.8 cfm	DESIGNER CERTIFICATION
	2 Bedroom 47.7 cfm	I hereby certify that this ventilation system has been designed in accordance with the Ontario Building Code.
	3 Bedroom 63.6 cfm	Name: HVAC Designs Ltd.
	4 Bedroom 79.5 cfm	Signature: Mehad Office
	5 Bedroom 95.4 cfm	HRAI# 32 4 95 001820 5 15 15 15 15 15 15 15 15 15 15 15 15 1
	More than 5 - Part 6 TOTAL 79.5 cfm  I REVIEW AND TAKE RESPONIBILITY FOR THE DESIGN WORK AND AM QUALIFIED IN THE APP	Date: February-17 PROPRIATE CATEGORY AS AN "OTHER DESIGNER" UNDER DIVISION C, 3.2.5 OF THE BUILDING CODE
	INDIVIDUAL BOIN: 10660 A MICHAEL O'BOURKE	







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

MODEL: JU	JNIPER 11		WUP	:	BUILDER: GREENPARK HOMES							
SFQT: 2	961	LO#	72388	Andrew Comme	SITE:	LECCO RIDGE >>>						
DESIGN ASSU	JMPTIONS			jar ing salah	randa ya kabupatan baran ba		·					
HEATING			°F		COOLING		°F					
OUTDOOR D	ESIGN TEMP.	* 1	0		OUTDOOR DESIGN TEN	1P.	86					
INDOOR DES			72		INDOOR DESIGN TEMP		72					
BUILDING DA	<b>NTA</b>			×.								
ATTACHMEN	T:		DETACHE	D '	# OF STORIES (+BASEM	ENT):	3					
FRONT FACES	S:		EAS	Т	ASSUMED (Y/N):		Υ					
AIR CHANGES	S PER HOUR:		3.5	7	ASSUMED (Y/N):		Υ					
AIR TIGHTNE	SS CATEGORY:		AVERAG	E	ASSUMED (Y/N):		Υ					
WIND EXPOS	URE:		SHELTERE	D	ASSUMED (Y/N):		Υ					
HOUSE VOLU	IME (ft³):		40435.	5	ASSUMED (Y/N):		Υ					
INTERNAL SH	IADING:	BLIND	S/CURTAIN	S	ASSUMED OCCUPANTS	:	5					
INTERIOR LIG	GHTING LOAD (Btu/l	n/ft²):	1.2	7	DC BRUSHLESS MOTOR	(Y/N):	Υ					
FOUNDATION	N CONFIGURATION		BCIN_	1	DEPTH BELOW GRADE:		6.5 ft					
LENGTH:	38.5 ft	WIDTH:	50.0 f	ft	EXPOSED PERIMETER:		177.0 ft					

2012 OBC - COMPLIANCE PACKAGE		
Component		Compliance Package ENERGYSTAR
Ceiling with Attic Space Minimum RSI (R)-Value		50
Ceiling Without Attic Space Minimum RSI (R)-Value		31
Exposed Floor Minimum RSI (R)-Value		31
Walls Above Grade Minimum RSI (R)-Value		20 + 5
Basement Walls Minimum RSI (R)-Value		20
Below Grade Slab Entire surface > 600 mm below grade Minimum RSI (I	R)-Value	<u>-</u>
Edge of Below Grade Slab ≤ 600 mm Below Grade Minimum RSI (R)-Value	uer dia la	10
Heated Slab or Slab ≤ 600 mm below grade Minimum RSI (R)-Value		10
Windows and Sliding Glass Doors Maximum U-Value	RECEIVED	ZONE 2
Skylights Maximum U-Value	TOWN OF MILTON	ZONE 2
Space Heating Equipment Minimum AFUE	MAR 29, 2017	0.95
HRV Minimum Efficiency	JUNIPER 11F	65%
Domestic Hot Water Heater Minimum EF	BUILDING DIVISION	90% TE

INDIVIDUAL BCIN: 19669 MICHAEL O'ROURKE







## **Residential Foundation Thermal Load Calculator**

Supplemental tool for CAN/CSA-F280

water	eather Stati	on Description
Province:	Ontario	
Region:	Milton	
	Site De	scription
Soil Conductivity:	Normal co	nductivity: dry dand, loam, clay
Water Table:	Normal (7	-10 m, 23-33 ft)
	Foundation	Dimensions
Floor Length (m):	11.7	
Floor Width (m):	15.2	
Exposed Perimeter (m):	0.0	
Wall Height (m):	2.9	
Depth Below Grade (m):	2.0	Insulation Configuration
Window Area (m²):	0.8	
Door Area (m²):	3.7	
	Radia	nt Slab
Heated Fraction of the Slab:	О	
Fluid Temperature (°C):	33	
	Design	Months
Heating Month	1	
	Foundat	ion Loads
Heating Load (Watts):		1705

TYPE: JUNIPER 11

**LO#** 72388

WUP

RECEIVED TOWN OF MILTON MAR 29, 2017 JUNIPER 11F BUILDING DIVISION



HVAC Designs Ltd. 375 Finley Ave, Suite 202 Ajax ON, L1S 2E2 905-619-2300

## **Air Infiltration Residential Load Calculator**

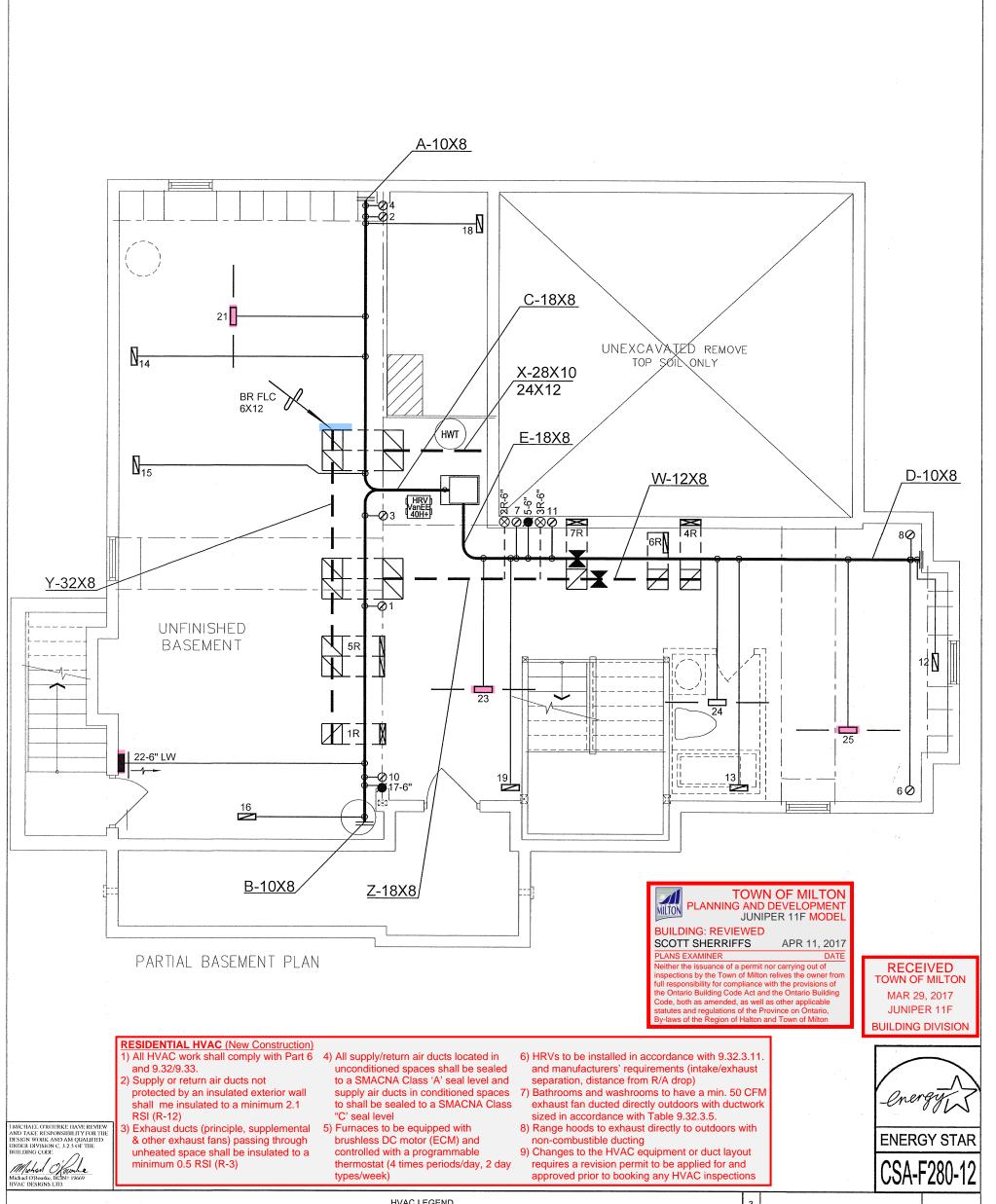
Supplemental tool for CAN/CSA-F280

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an, fo		rass		
an, fo		rass		
ion	rest			
ion	rest			
ion	rest			
ed				
tion				
(196	1-) (3.	57 ACH	⊣)	
10 Pa.			1526.3 c	m²
			ACH @ 50	Pa
l Supp	oly		Total Exhaust	
40.6			40.6	
#2	#3	#4		
0	0	0		
lates	5			
0.	.30	7	No. 1	
^	.10	5		
	#2 0 Rates	#2 #3 0 0 Rates	#2 #3 #4 0 0 0	#2 #3 #4 0 0 0 0 Rates

**TYPE:** JUNIPER 11 **LO#** 72388

WUP

RECEIVED TOWN OF MILTON MAR 29, 2017 JUNIPER 11F BUILDING DIVISION



	# 1 Section 1	3.								
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	2.		
	FLOOR SUPPLY AIR GRILLE		6" SUPPLY AIR BOOT ABOVE		14"x8" RETURN AIR GRILLE	_	RETURN AIR STACK ABOVE	1.		
R281	FLOOR SUPPLY AIR GRILLE 6" BOOT	0	SUPPLY AIR STACK FROM 2nd FLOOR		30"x8" RETURN AIR GRILLE	<b>⊳</b> ⊠	RETURN AIR STACK 2nd FLOOR	No.	Description	Date
	SUPPLY AIR BOOT ABOVE		6" SUPPLY AIR STACK 2nd FLOOR	(Control of the Control of the Contr	FRA- FLOOR RETURN AIR GRILLE	X	REDUCER	Г	REVISIONS	<del></del>

ALL DRAWINGS, CALCULATIONS AND SPECIFICATIONS ARE THE PROPERTY OF HVAC DESIGNS LTD.® AND MAY NOT BE REPRODUCED, MODIFIED OR ALTERED WITHOUT EXPRESSED WRITTEN CONSENT. THE DRAWINGS ARE DATED AND USE OF THESE DRAWINGS AFTER ONE YEAR FROM THE DATED NOTED IS NOT AUTHORIZED. CONTRACTOR SHALL CHECK ALL CONDITIONS BEFORE PROCEEDING WITH WORK. LATEST MUNICIPAL APPROVED DRAWINGS ONLY TO BE USED DURING INSTALLATION OF HEATING SYSTEM. HVAC DESIGNS LTD. IS NOT LIABLE FOR ANY CLAIMS ARISING FROM UNAUTHORIZED USE OF THE DRAWINGS OR FROM ANY CHANGES TO ACCEPTED STANDARDS AND/OR THE ONTARIO BUILDING CODE.

Client

## GREENPARK HOMES

Project Name
LECCO RIDGE
MILTON, ONTARIO

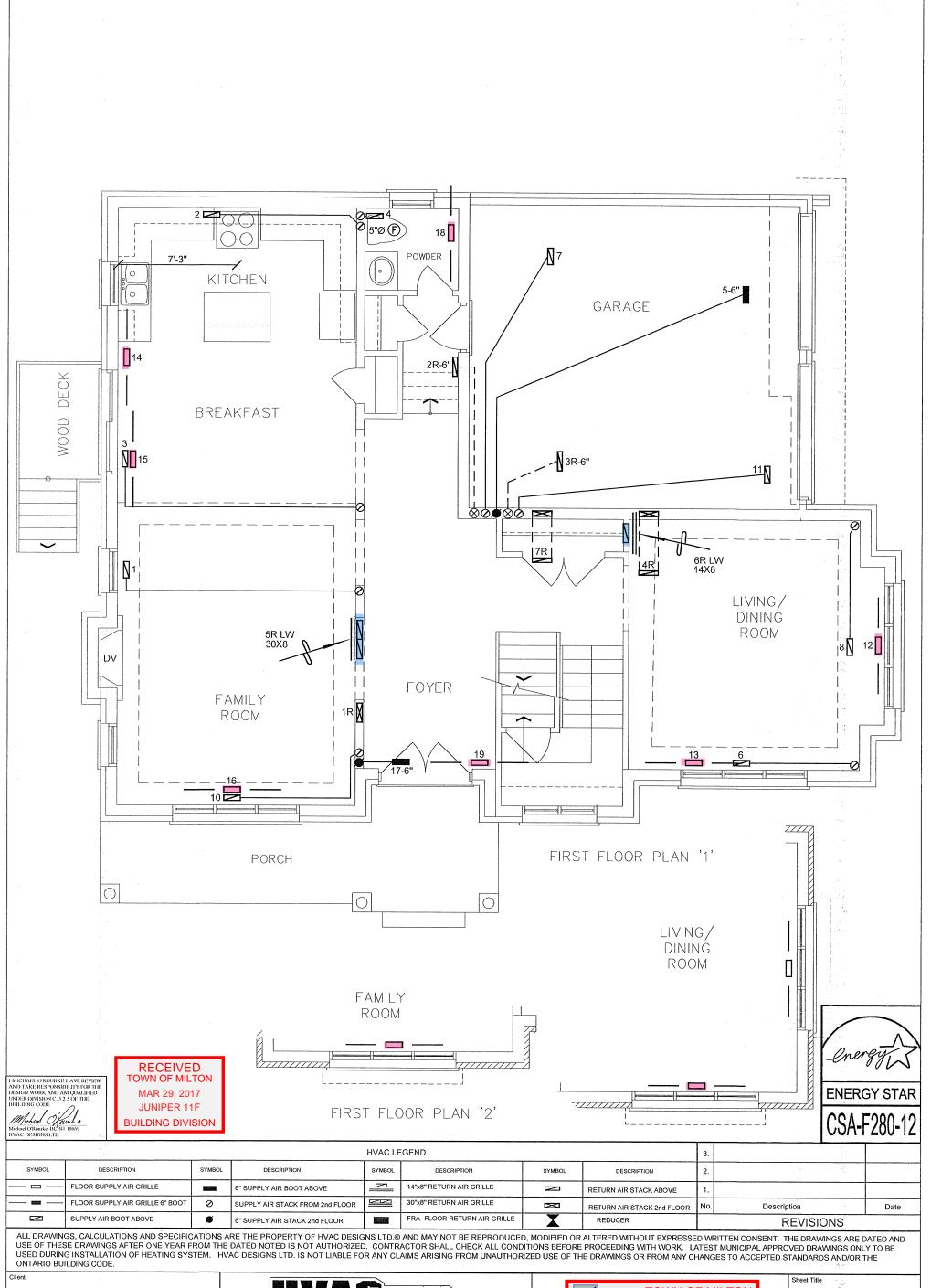
# HVA DESIGNS LTD.

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 LO	SS 50190	BTU/H	# OF RUNS	S/A	R/A	FANS			
		INIT DATA		3RD FLOOR	Γ			BA	SEMENT	
	MAKE	AMANA		2ND FLOOR	11	5	3	Н	EATING	
	MODEL AMVO	0960804CN	1ST FLOOR	7	2	2	L	AYOUT		
	INPUT	80	MBTU/H	BASEMENT	5	1	0	Date	FEB/2017	
-	OUTPUT	70.0	MBTU/H	ALL S/A DIFFUS	SERS	4 "x10	"	Scale	3/16" = 1'-0"	
_	COOLING	76.8	TONS	UNLESS NOTE ON LAYOUT. A	LL S/A	RUNS	5 5"Ø	BCIN# 19669		
5	FAN SPEED cfm (			UNLESS NOTE ON LAYOUT. U DOORS 1" min.	NDER	CUT	SE	LO# 72388		

JUNIPER 11 WUP 2961 sqft



### **GREENPARK HOMES**

Project Name

LECCO RIDGE MILTON, ONTARIO

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BUILDING: REVIEWED
SCOTT SHERRIFFS APR 11, 2017

Neither the issuance of a permit nor carrying out of inspections by the Town of Milton relives the owner from full responsibility for compliance with the provisions of the Ontario Building Code Act and the Ontario Building Code, both as amended, as well as other applicable statutes and regulations of the Province on Ontario, By-laws of the Region of Halton and Town of Milton

FIRST FLOOR HEATING LAYOUT

Date FEB/2017
Scale 3/16" = 1'-0"

BCIN# 19669 LO# 72388

JUNIPER 11 WUP 2961 sqft adequately insulated and be gas-proofed.

By-laws of the Region of Halton and Town of Milton

