

SITE NAME:	BOHNE	EI HO	MES IN	r				Lot	91									DATE:	May.21				AUNITE	-		AID OI		DATE	0.050					~~		_	
BUILDER:									TERRA	COTA 2	s			GFA:	3394			LO#										RATE				LOSS /					SA-F280-12 CKAGE A
ROOM USE				MBR			ENS			WIC			BED-2	0.7.1	-	BED-3			BED-4			ENS-3/4	OMMINIC.	IX IVA	FLEX		ANGL	WIC-3			ENS-2		Δ1 F.	13		3D-12 FA	CKAGE A
EXP. WALL	1			34			31			7			26			36			12			6			11			5			6	'					
CLG. HT.	l			9			9			9			9			9			9			9			9			9			9				l		
	FACTO	RS									- 1											•			•						•						
GRS.WALL AREA	LOSS	GAIN		306			279			63	- 1		234			324			108			54			99			45			54						
GLAZING	l			LOSS	GAIN		LOSS	GAIN	L	oss o	AIN	1	Loss	GAIN		LOSS	GAIN		Loss	GAIN			GAIN		LOSS	GAIN		LOSS	GAIN		LOSS	GAIN			- 1		
NORTH	21.8	14.9	0	0	0	14	305	209	0	0	0	16	349	239	0	0	0	0	0	0	0	0	0	13	283	194	0	0	0	7	152	105					
EAST	21.8	38.4	0	0	0	0	0	0	0	0	0	53	1155	2035	60	1307	2303	0	0	0	0	0	0	0	0	0	9	196	345	0	0	0					
SOUTH	21.8	23.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	349	370	7	152	162	0	0	0	0	0	0	0	0	0					
WEST	21.8	38.4	32	697	1228	14	305	537	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
SKYLT.	38.1	101.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
DOORS	25.8	4.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
NET EXPOSED WALL	4.6	0.8	274	1252	206	251	1147	189	63	288	47	165	754	124	264	1206	198	92	420	69	47	215	35	86	393	65	36	164	27	47	215	35					
NET EXPOSED BSMT WALL ABOVE GR	3.7	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	0	0	0	0	0	0					
EXPOSED CLG	1.3	0.6	299	393	176	234	307	138	147	193	86	233	306	137	176	231	103	195	256	115	78	102	46	231	303	136	40	53	24	72	95	42					
NO ATTIC EXPOSED CLG	2.8	1.3	0	0	0	0	0	0	0	0	0	16	45	20	45	127	57	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			- 1		
EXPOSED FLOOR	2.6	0.4	0	0	0	0	0	0	0	0	0	241	629	104	0	0	0	0	0	0	0	0	0	69	180	30	40	104	17	72	188	31					
BASEMENT/CRAWL HEAT LOSS	l			0			0			0			0			0			0			0			0			0			0	- 1					
SLAB ON GRADE HEAT LOSS	l			0			0			0			0			0			0			0			0		l	0			0	- 1					
SUBTOTAL HT LOSS	l			2342			2064			481			3237			2871			1025			470			1160		l	517			650						
SUB TOTAL HT GAIN	i				1610			1073			134			2658	١.		2662			554			243			424			413			213			- 1		
LEVEL FACTOR / MULTIPLIER	l		0.20	0.28		0.20			0.20	0.28		0.20	0.28		0.20	0.28		0.20	0.28		0.20	0.28		0.20			0.20	0.28		0.20							
AIR CHANGE HEAT LOSS	l			645			569			132			892			791			282			129			319			143			179				- 1		
AIR CHANGE HEAT GAIN	l				119		_	79			10			196		_	196			41		_	18			31			30			16			I		
DUCT LOSS DUCT GAIN	l			0			0			0	.		413			0			0			0			148			66			83				ľ		
HEAT GAIN PEOPLE	240		2		0	0		0			0			372			0			0	_		0			46			44			23			1		
HEAT GAIN APPLIANCES/LIGHTS	240		2		480	١ '		0	0		0	1		240	1		240	1		240	0		0	U		0	0		0	0		0			- 1		
TOTAL HT LOSS BTU/H	l			2987	622		2633	U		613	ויי		4542	622		3662	622		1307	622		599	0		4007	U		700	U			0			ŀ		
TOTAL HT GAIN x 1.3 BTU/H	l			2301	3681		2000	1498			187			5315		3002	4837		1307	1894		333	339		1627	651		726	635		912	327					
TO TALL IT CAME X 110 B 10/11					3001	L		1430			107			3313			4037			1034			335			001	L		635			321					
ROOM USE				FAM			LV/DN			KIT			LIB			LAUN			W/R			FOY			MUD									WOD		E	AS
EXP. WALL	l			36			30			37			19			12			18			18			30									48			86
CLG. HT.	l			10			10			10			10			9			10			10			11									8	- 1		8
	FACTO	RS																																			
GRS.WALL AREA																																		384		1	143
	LOSS	GAIN		360			300			370			190			108			180			180			330		1									1.	
GLAZING				Loss	GAIN		Loss	GAIN		LOSS	GAIN		LOSS	GAIN		LOSS	GAIN		LOSS	GAIN		Loss	GAIN		LOSS	GAIN								Loss o			DSS GAIN
NORTH	21.8	14.9	0	LOSS 0	0	0	LOSS 0	0	0	LOSS (	0	0	LOSS 0	0	0	LOSS 0	0	0	LOSS 0	0	0	LOSS 0	0	7	LOSS 152	105	;						0	LOSS (	0		955 GAIN 87 60
NORTH EAST	21.8 21.8	14.9 38.4	0	LOSS 0 0	0 0	0	LOSS 0 0	0	0 0	LOSS (	0	0 0	LOSS 0 0	0	0	LOSS 0 0	0 0	0 26	LOSS	0 998	6	LOSS 0 131	0 230	0	LOSS 152 0								0		0	4 0	87 60 0 0
NORTH EAST SOUTH	21.8 21.8 21.8	14.9 38.4 23.1	0	LOSS 0 0 0	0 0 0	0 28	0 0 610	0 0 647	0 0 0	LOSS ( 0 0 0	0 0 0	0 0 14	0 0 0 305	0 0 324	0 7	LOSS 0 0 152	0 0 162	0 26 0	LOSS 0 566 0	0 998 0	6	LOSS 0 131 0	0 230 0	0	LOSS 152 0 0	105 0 0							0 0 0	0 0 0	0 0	4 0 8	87 60 0 0 74 185
NORTH EAST SOUTH WEST	21.8 21.8 21.8 21.8 21.8	14.9 38.4 23.1 38.4	0 0 28	0 0 0 0 610	0 0 0 1075	0 28 0	0 0 610 0	0 0 647 0	0 0 0 61	0 0 0 0 1329	0 0 0 2342	0 0 14 0	0 0 0 305 0	0 0 324 0	0 7 0	0 0 152 0	0 0 162 0	0 26 0 0	0 566 0	0 998 0 0	6 0 0	LOSS 0 131 0 0	0 230 0 0	0	LOSS 152 0 0	105 0 0 0							0 0 0 14	0 0 0 305	0 0 0 537	4 0 8 0	87 60 0 0 74 185 0 0
NORTH EAST SOUTH WEST SKYLT.	21.8 21.8 21.8 21.8 38.1	14.9 38.4 23.1 38.4 101.5	0 0 28 0	0 0 0 0 610 0	0 0 0	0 28 0 0	0 0 610 0	0 0 647 0	0 0 0 61 0	0 0 0 0 1329	0 0 0 2342 0	0 0 14 0	0 0 305 0	0 0 324 0	0 7 0	LOSS 0 0 152 0	0 0 162 0	0 26 0 0	0 566 0 0	0 998 0 0	6 0 0	0 131 0 0	0 230 0 0	0 0 0	LOSS 152 0 0 0	105 0 0 0 0							0 0 0 14 0	0 0 0 305 0	0 0 0 537 0	4 0 8 0	87 60 0 0 74 185 0 0
NORTH EAST SOUTH WEST SKYLT. DOORS	21.8 21.8 21.8 21.8 38.1 25.8	14.9 38.4 23.1 38.4 101.5 4.3	0 0 28 0	0 0 0 0 610 0	0 0 0 1075 0	0 28 0 0	LOSS 0 0 610 0 0	0 0 647 0 0	0 0 0 61 0	0 0 0 0 1329 0	0 0 0 2342 0	0 0 14 0 0	0 0 305 0 0	0 0 324 0 0	0 7 0 0	LOSS 0 0 152 0 0	0 0 162 0 0	0 26 0 0 0	LOSS 0 566 0 0 0	0 998 0 0 0	6 0 0 0 40	0 131 0 0 0 1034	0 230 0 0 0 0 170	0 0 0	LOSS 152 0 0 0 0	105 0 0 0 0 0							0 0 0 14 0	0 0 0 305 0	0 0 0 537 0	4 0 8 0 0 20	87 60 0 0 74 185 0 0 0 0
NORTH EAST SOUTH WEST SKYLT. DOORS NET EXPOSED WALL	21.8 21.8 21.8 21.8 38.1 25.8 4.6	14.9 38.4 23.1 38.4 101.5 4.3 0.8	0 0 28 0 0 332	LOSS 0 0 0 610 0 0 1517	0 0 0 1075 0 0	0 28 0 0 0 272	LOSS 0 0 610 0 0 1243	0 0 647 0 0 0 204	0 0 0 61 0 0 309	0 0 0 1329 0 0	0 0 0 2342 0 0 232	0 0 14 0 0 0	0 0 305 0 0 0	0 0 324 0 0 0 132	0 7 0 0 0	LOSS 0 0 152 0 0 0 461	0 0 162 0 0 0	0 26 0 0 0 0	0 566 0 0 0 0 0 704	0 998 0 0 0 0	6 0 0 0 40 134	0 131 0 0 0 1034 612	0 230 0 0 0 170 101	0 0 0 0 0 0 323	LOSS 152 0 0 0 0 0 1476	105 0 0 0 0 0 0 243							0 0 14 0 0	0 0 0 305 0 0	0 0 0 537 0 0	4 0 8 0 0 0 20	87 60 0 0 74 185 0 0 0 0 617 85 0 0
NORTH EAST SOUTH WEST SKYLT. DOORS NET EXPOSED WALL NET EXPOSED WALL	21.8 21.8 21.8 21.8 38.1 25.8 4.6 3.7	14.9 38.4 23.1 38.4 101.5 4.3 0.8 0.6	0 0 28 0 0 332	0 0 0 0 610 0	0 0 0 1075 0	0 28 0 0 0 272 0	LOSS 0 0 610 0 0 0 1243	0 0 647 0 0 0 204	0 0 61 0 0 309	0 0 0 1329 0 0 1412	0 0 0 2342 0 0 232	0 0 14 0 0 0 176	LOSS 0 0 305 0 0 0 804	0 0 324 0 0 0 132	0 7 0 0 0 101	LOSS 0 0 152 0 0 0 461	0 0 162 0 0 0 76	0 26 0 0 0 0 0 154	LOSS 0 566 0 0 0	0 998 0 0 0	6 0 0 0 40 134	LOSS 0 131 0 0 0 1034 612 0	0 230 0 0 0 170 101	0 0 0 0 0 0 323	LOSS 152 0 0 0 0 0 1476	105 0 0 0 0 0 243							0 0 14 0 0 0	0 0 0 305 0 0 0	0 0 537 0 0 0	4 0 8 0 0 20 20 345	87 60 0 0 74 185 0 0 0 0 117 85 0 0 271 209
NORTH EAST SOUTH WEST SKYLT. DOORS NET EXPOSED WALL NET EXPOSED BSMT WALL ABOVE GR EXPOSED CLG	21.8 21.8 21.8 21.8 38.1 25.8 4.6 3.7 1.3	14.9 38.4 23.1 38.4 101.5 4.3 0.8 0.6	0 0 28 0 0 332 0	LOSS 0 0 0 610 0 0 1517 0	0 0 1075 0 0 250 0	0 28 0 0 0 272 0	LOSS 0 0 610 0 0 0 1243 0	0 0 647 0 0 0 204 0	0 0 61 0 0 309 0	LOSS (0 0 0 1329 0 0 1412 0 0 0	0 0 0 2342 0 0 232 0	0 0 14 0 0 0 0 176 0	LOSS 0 0 305 0 0 0 804 0	0 0 324 0 0 0 132 0	0 7 0 0 0 101 0 192	LOSS 0 0 152 0 0 0 461 0 252	0 0 162 0 0 0 76 0	0 26 0 0 0 0 0 154	LOSS 0 566 0 0 0 704 0	0 998 0 0 0 0 116 0	6 0 0 0 40 134 0	LOSS 0 131 0 0 0 1034 612 0	0 230 0 0 0 170 101 0	0 0 0 0 0 323 0	LOSS 152 0 0 0 0 0 1476 0	105 0 0 0 0 0 243 0							0 0 0 14 0 0 0 274	0 0 0 305 0 0 0 1009	0 0 0 537 0 0 0 166	4 0 8 0 0 20 20 345 1	87 60 0 0 74 185 0 0 0 0 617 85 0 0 271 209 0 0
NORTH EAST SOUTH WEST SKYLT. DOORS NET EXPOSED WALL NET EXPOSED CEG NO ATTIC EXPOSED CLG	21.8 21.8 21.8 21.8 38.1 25.8 4.6 3.7 1.3 2.8	14.9 38.4 23.1 38.4 101.5 4.3 0.8 0.6 0.6 1.3	0 0 28 0 0 332 0 0	LOSS 0 0 610 0 0 1517 0 0	0 0 0 1075 0 0	0 28 0 0 0 272 0 0	LOSS 0 0 610 0 0 0 1243 0 0	0 0 647 0 0 0 204	0 0 61 0 0 309 0	LOSS (0 0 0 1329 0 0 1412 0 0 0 0	0 0 0 2342 0 0 232	0 0 14 0 0 0 176 0	LOSS 0 0 305 0 0 0 804 0	0 0 324 0 0 0 132 0 0	0 7 0 0 0 101	LOSS 0 0 152 0 0 0 461 0 252 0	0 0 162 0 0 0 76 0 113	0 26 0 0 0 0 0 154 0	LOSS 0 566 0 0 0 704 0	0 998 0 0 0 0 116 0	6 0 0 0 40 134 0	LOSS 0 131 0 0 0 1034 612 0 0	0 230 0 0 0 170 101 0 0	0 0 0 0 0 323 0	LOSS 152 0 0 0 0 1476 0	105 0 0 0 0 0 243 0							0 0 14 0 0 0 274	0 0 0 305 0 0 0 1009	0 0 0 537 0 0 0 166 0	4 0 8 0 0 20 20 345 1 0	87 60 0 0 74 185 0 0 0 0 617 85 0 0 271 209 0 0
NORTH EAST SOUTH WEST SKYLT. DOORS NET EXPOSED WALL NET EXPOSED BSMT WALL ABOVE GR EXPOSED CLG NO ATTIC EXPOSED CLG EXPOSED FLOOR	21.8 21.8 21.8 21.8 38.1 25.8 4.6 3.7 1.3	14.9 38.4 23.1 38.4 101.5 4.3 0.8 0.6	0 0 28 0 0 332 0	LOSS 0 0 0 610 0 0 1517 0	0 0 1075 0 0 250 0	0 28 0 0 0 272 0	LOSS 0 0 610 0 0 0 1243 0	0 0 647 0 0 0 204 0	0 0 61 0 0 309 0	LOSS (0 0 0 1329 0 0 1412 0 0 0	0 0 0 2342 0 0 232 0	0 0 14 0 0 0 0 176 0	LOSS 0 0 305 0 0 0 804 0	0 0 324 0 0 0 132 0	0 7 0 0 0 101 0 192	LOSS 0 0 152 0 0 0 461 0 252	0 0 162 0 0 0 76 0	0 26 0 0 0 0 0 154	LOSS 0 566 0 0 0 704 0	0 998 0 0 0 0 116 0	6 0 0 0 40 134 0	LOSS 0 131 0 0 0 1034 612 0	0 230 0 0 0 170 101 0	0 0 0 0 0 323 0	LOSS 152 0 0 0 0 0 1476 0 0	105 0 0 0 0 0 243 0							0 0 0 14 0 0 0 274	0 0 0 305 0 0 0 1009	0 0 0 537 0 0 0 166	4 0 8 0 0 20 20 345 1 0	87 60 0 0 74 185 0 0 0 0 617 85 0 0 271 209 0 0 0 0
NORTH EAST SOUTH WEST SKYLT. DOORS NET EXPOSED WALL NET EXPOSED BSMT WALL ABOVE GR EXPOSED CLG NO ATTIC EXPOSED CLG EXPOSED FLOOR BASEMENT/CRAWL HEAT LOSS	21.8 21.8 21.8 21.8 38.1 25.8 4.6 3.7 1.3 2.8	14.9 38.4 23.1 38.4 101.5 4.3 0.8 0.6 0.6 1.3	0 0 28 0 0 332 0 0	LOSS 0 0 610 0 0 1517 0 0	0 0 1075 0 0 250 0	0 28 0 0 0 272 0 0	LOSS 0 0 610 0 0 1243 0 0 0	0 0 647 0 0 0 204 0	0 0 61 0 0 309 0	LOSS (0 0 0 0 1329 0 0 1412 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 2342 0 0 232 0	0 0 14 0 0 0 176 0	LOSS 0 0 305 0 0 0 804 0	0 0 324 0 0 0 132 0 0	0 7 0 0 0 101 0 192	LOSS 0 0 152 0 0 0 461 0 252 0	0 0 162 0 0 0 76 0 113	0 26 0 0 0 0 0 154 0	LOSS 0 566 0 0 0 704 0 0	0 998 0 0 0 0 116 0	6 0 0 0 40 134 0	LOSS 0 131 0 0 0 1034 612 0 0	0 230 0 0 0 170 101 0 0	0 0 0 0 0 323 0	LOSS 152 0 0 0 0 1476 0	105 0 0 0 0 0 243 0							0 0 14 0 0 0 274	0 0 0 305 0 0 0 1009 0	0 0 0 537 0 0 0 166 0	4 0 8 0 0 20 20 345 1 0	87 60 0 0 74 185 0 0 0 0 617 85 0 0 271 209 0 0
NORTH EAST SOUTH WEST SKYLT. DOORS NET EXPOSED WALL NET EXPOSED BSMT WALL ABOVE GR EXPOSED CLG NO ATTIC EXPOSED CLG EXPOSED FLOOR	21.8 21.8 21.8 21.8 38.1 25.8 4.6 3.7 1.3 2.8	14.9 38.4 23.1 38.4 101.5 4.3 0.8 0.6 0.6 1.3	0 0 28 0 0 332 0 0	LOSS 0 0 0 0 610 0 0 1517 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 1075 0 0 250 0	0 28 0 0 0 272 0 0	LOSS 0 0 610 0 0 0 1243 0 0 0 0 0 0 0 0	0 0 647 0 0 0 204 0	0 0 61 0 0 309 0 0	LOSS (0 0 0 1329 0 0 1412 0 0 0 0 0 0 0 0	0 0 0 2342 0 0 232 0	0 0 14 0 0 0 176 0	LOSS 0 0 305 0 0 0 804 0 0 0 0 0 0 0 0 0	0 0 324 0 0 0 132 0 0	0 7 0 0 0 101 0 192	LOSS 0 0 152 0 0 461 0 252 0 0	0 0 162 0 0 0 76 0 113	0 26 0 0 0 0 0 154 0	LOSS 0 566 0 0 0 704 0 0 0	0 998 0 0 0 0 116 0	6 0 0 0 40 134 0	LOSS 0 131 0 0 0 1034 612 0 0 0 0 0 0 0 0 0	0 230 0 0 0 170 101 0 0	0 0 0 0 0 323 0	LOSS 152 0 0 0 0 1476 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	105 0 0 0 0 243 0 0							0 0 14 0 0 0 274 0	0 0 0 305 0 0 0 1009 0	0 0 0 537 0 0 0 166 0	4 0 8 0 0 20 5 0 345 1 0 0	87 60 0 0 74 185 0 0 0 0 117 85 0 0 271 209 0 0 0 0
NORTH EAST SOUTH WEST SKYLT. DOORS NET EXPOSED WALL NET EXPOSED BSMT WALL ABOVE GR EXPOSED CLG NO ATTIC EXPOSED CLG EXPOSED FLOOR BASEMENTICRAWL HEAT LOSS SLAB ON GRADE HEAT LOSS	21.8 21.8 21.8 21.8 38.1 25.8 4.6 3.7 1.3 2.8	14.9 38.4 23.1 38.4 101.5 4.3 0.8 0.6 0.6 1.3	0 0 28 0 0 332 0 0	LOSS 0 0 0 0 610 0 0 1517 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 1075 0 0 250 0	0 28 0 0 0 272 0 0	LOSS 0 0 610 0 0 0 1243 0 0 0 0 0 0	0 0 647 0 0 0 204 0	0 0 61 0 0 309 0 0	LOSS (0 0 0 1329 0 0 1412 0 0 0 0 0 0 2740	0 0 0 2342 0 0 232 0	0 0 14 0 0 0 176 0	LOSS 0 0 305 0 0 0 804 0 0 0 0 0 0	0 0 324 0 0 0 132 0 0	0 7 0 0 0 101 0 192	LOSS 0 0 152 0 0 0 461 0 252 0	0 0 162 0 0 0 76 0 113	0 26 0 0 0 0 0 154 0	LOSS 0 566 0 0 0 704 0 0 0	0 998 0 0 0 0 116 0	6 0 0 0 40 134 0	LOSS 0 131 0 0 0 1034 612 0 0 0 0 0 0 0 0	0 230 0 0 0 170 101 0 0	0 0 0 0 0 323 0	LOSS 152 0 0 0 0 0 1476 0 0	105 0 0 0 0 243 0 0							0 0 14 0 0 0 274 0	0 0 0 305 0 0 0 1009 0 0	0 0 537 0 0 166 0	4 0 8 0 0 20 5 0 345 1 0 0	87 60 0 0 74 185 0 0 0 0 117 85 0 0 2271 209 0 0 0 0 0 0
NORTH EAST SOUTH WEST SKYLT. DOORS NET EXPOSED WALL NET EXPOSED BSMT WALL ABOVE GR EXPOSED CLG NO ATTIC EXPOSED CLG EXPOSED FLOOR BASEMENT/CRAWL HEAT LOSS SLAB ON GRADE HEAT LOSS	21.8 21.8 21.8 21.8 38.1 25.8 4.6 3.7 1.3 2.8	14.9 38.4 23.1 38.4 101.5 4.3 0.8 0.6 0.6 1.3	0 0 28 0 0 332 0 0	LOSS 0 0 0 0 610 0 0 1517 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 1075 0 0 250 0 0	0 28 0 0 0 272 0 0	LOSS 0 0 610 0 0 0 1243 0 0 0 0 1853	0 0 647 0 0 0 204 0 0	0 0 61 0 0 309 0 0	0 0 0 1329 0 0 1412 0 0 0 0 0 0 0 0 2740	0 0 0 2342 0 0 232 0 0	0 0 14 0 0 0 176 0 0	LOSS 0 0 305 0 0 0 804 0 0 0 0 0 0 0 0 0	0 0 324 0 0 0 132 0 0	0 7 0 0 0 101 0 192	LOSS 0 0 152 0 0 461 0 252 0 0	0 0 162 0 0 0 76 0 113 0	0 26 0 0 0 0 154 0 0	LOSS 0 566 0 0 0 704 0 0 0	0 998 0 0 0 116 0 0	6 0 0 0 40 134 0	LOSS 0 131 0 0 0 1034 612 0 0 0 0 1777	0 230 0 0 0 170 101 0 0	0 0 0 0 0 323 0 0	LOSS 152 0 0 0 0 1476 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	105 0 0 0 0 243 0 0 0							0 0 14 0 0 0 274 0	0 0 0 305 0 0 0 1009 0 0	0 0 0 537 0 0 0 166 0	4 0 8 0 0 20 20 345 1 0 0 0	87 60 0 0 74 185 0 0 0 0 117 85 0 0 271 209 0 0 0 0
NORTH EAST SOUTH WEST SKYLT. DOORS NET EXPOSED WALL NET EXPOSED BMT WALL ABOVE GR EXPOSED CLG EXPOSED CLG EXPOSED FLOOR BASEMENT/CRAWL HEAT LOSS SLAB ON GRADE HEAT LOSS SUBTOTAL HT GAIN	21.8 21.8 21.8 21.8 38.1 25.8 4.6 3.7 1.3 2.8	14.9 38.4 23.1 38.4 101.5 4.3 0.8 0.6 0.6 1.3	0 0 28 0 0 332 0 0 0	LOSS 0 0 0 610 0 0 1517 0 0 0 0 0 2127	0 0 1075 0 0 250 0 0	0 28 0 0 0 272 0 0 0	LOSS 0 0 610 0 0 0 1243 0 0 0 0 1853	0 0 647 0 0 0 204 0 0	0 0 0 61 0 0 309 0 0 0	0 0 0 1329 0 0 1412 0 0 0 0 0 0 0 0 2740	0 0 0 2342 0 0 232 0 0	0 0 14 0 0 0 176 0 0	LOSS 0 0 305 0 0 0 804 0 0 0 0 0 1109	0 0 324 0 0 0 132 0 0	0 7 0 0 101 0 192 0	LOSS 0 0 152 0 0 0 461 0 252 0 0 0 866	0 0 162 0 0 0 76 0 113 0	0 26 0 0 0 0 154 0 0	LOSS 0 566 0 0 0 704 0 0 0 0 1270	0 998 0 0 0 116 0 0	6 0 0 40 134 0 0	LOSS 0 131 0 0 0 1034 612 0 0 0 0 1777	0 230 0 0 0 170 101 0 0	0 0 0 0 0 323 0 0	LOSS 152 0 0 0 1476 0 0 0 1476 1 0 1628	105 0 0 0 0 243 0 0 0							0 0 14 0 0 0 274 0	0 0 0 305 0 0 0 1009 0 0	0 0 537 0 0 166 0	4 0 8 0 0 20 20 345 1 0 0 0 8 8	87 60 0 0 74 185 0 0 0 0 117 85 0 0 271 209 0 0 0 0 0 0
NORTH EAST SOUTH WEST SKYLT. DOORS NET EXPOSED WALL NET EXPOSED WALL NET EXPOSED CLG EXPOSED FLOOR BASEMENT/CRAWL HEAT LOSS SLAB ON GRADE HEAT LOSS SUBTOTAL HT LOSS SUBTOTAL HT GAIN LEVEL FACTOR / MULTIPLIER	21.8 21.8 21.8 21.8 38.1 25.8 4.6 3.7 1.3 2.8	14.9 38.4 23.1 38.4 101.5 4.3 0.8 0.6 0.6 1.3	0 0 28 0 0 332 0 0 0	LOSS 0 0 0 0 610 0 0 1517 0 0 0 0 2127 0.52	0 0 1075 0 0 250 0 0	0 28 0 0 0 272 0 0 0	LOSS 0 0 0 610 0 0 0 1243 0 0 0 0 1853 0.52	0 0 647 0 0 0 204 0 0	0 0 0 61 0 0 309 0 0 0	0 0 0 1329 0 0 1412 0 0 0 0 0 2740 0.52 1420	0 0 0 2342 0 0 232 0 0	0 0 14 0 0 0 176 0 0	LOSS 0 0 305 0 0 0 804 0 0 0 0 1109 0.52	0 0 324 0 0 0 132 0 0	0 7 0 0 101 0 192 0	LOSS 0 0 152 0 0 0 461 0 252 0 0 0 0 866 0.28	0 0 162 0 0 0 76 0 113 0	0 26 0 0 0 0 154 0 0	LOSS 0 566 0 0 0 704 0 0 0 0 0 0 0	0 998 0 0 0 116 0 0	6 0 0 40 134 0 0	LOSS 0 131 0 0 0 1034 612 0 0 0 0 0 1777 0.52	0 230 0 0 0 170 101 0 0	0 0 0 0 0 323 0 0	LOSS 152 0 0 0 1476 0 0 0 1628	105 0 0 0 0 243 0 0 0							0 0 14 0 0 0 274 0	0 0 0 305 0 0 0 1009 0 0	0 0 537 0 0 166 0	4 0 8 0 0 20 20 345 1 0 0 0 8 8	87 60 0 0 74 185 0 0 0 0 117 85 0 0 271 209 0 0 0 0 0 0 0 0 0 0 1271 209 0 0 0 0 0 0 137 339 138 339
NORTH EAST SOUTH WEST SKYLT. DOORS NET EXPOSED WALL NET EXPOSED BSMT WALL ABOVE GR EXPOSED CLG NO ATTIC EXPOSED CLOR BASEMENTICRAWL HEAT LOSS SLAB ON GRADE HEAT LOSS SUBTOTAL HT LOSS SUBTOTAL HT GAIN LEVEL FACTOR / MULTIPLIER AIR CHANGE HEAT LOSS	21.8 21.8 21.8 21.8 38.1 25.8 4.6 3.7 1.3 2.8	14.9 38.4 23.1 38.4 101.5 4.3 0.8 0.6 0.6 1.3	0 0 28 0 0 332 0 0 0	LOSS 0 0 0 0 610 0 0 1517 0 0 0 0 2127 0.52	0 0 1075 0 0 250 0 0 0	0 28 0 0 0 272 0 0 0	LOSS 0 0 0 610 0 0 0 1243 0 0 0 0 1853 0.52	0 0 647 0 0 0 204 0 0 0	0 0 0 61 0 0 309 0 0 0	0 0 0 1329 0 0 1412 0 0 0 0 0 2740 0.52 1420	0 0 0 2342 0 0 232 0 0 0	0 0 14 0 0 0 176 0 0	LOSS 0 0 305 0 0 0 804 0 0 0 0 1109 0.52	0 0 324 0 0 0 132 0 0 0	0 7 0 0 101 0 192 0	LOSS 0 0 152 0 0 0 461 0 252 0 0 0 0 866 0.28	0 0 162 0 0 0 76 0 113 0	0 26 0 0 0 0 154 0 0	LOSS 0 566 0 0 0 704 0 0 0 0 0 0 0	0 998 0 0 0 116 0 0	6 0 0 40 134 0 0	LOSS 0 131 0 0 0 1034 612 0 0 0 0 0 1777 0.52	0 230 0 0 0 170 101 0 0 0	0 0 0 0 0 323 0 0	LOSS 152 0 0 0 1476 0 0 0 1628	105 0 0 0 0 0 243 0 0 0							0 0 14 0 0 0 274 0	0 0 0 305 0 0 0 1009 0 0	0 0 537 0 0 166 0	4 0 8 0 0 20 20 345 1 0 0 0 8 8	87 60 0 0 74 185 0 0 0 0 0 0 117 85 0 0 0 2271 209 0 0 0 0 0 0 0 0 0
NORTH EAST SOUTH WEST SKYLT. DOORS NET EXPOSED WALL NET EXPOSED WALL NET EXPOSED ED CLG NO ATTIC EXPOSED CLG EXPOSED FLOOR BASEMENT/CRAWL HEAT LOSS SLAB ON GRADE HEAT LOSS SUBTOTAL HT GAIN LEVEL FACTOR / MULTIPLIER AIR CHANGE HEAT LOSS	21.8 21.8 21.8 21.8 38.1 25.8 4.6 3.7 1.3 2.8	14.9 38.4 23.1 38.4 101.5 4.3 0.8 0.6 0.6 1.3	0 0 28 0 0 332 0 0 0	LOSS 0 0 610 0 1517 0 0 0 2127	0 0 1075 0 0 250 0 0 0	0 28 0 0 0 272 0 0 0	LOSS 0 0 610 0 0 1243 0 0 0 1853	0 0 647 0 0 0 204 0 0 0	0 0 0 61 0 0 309 0 0 0	0 0 0 1329 0 0 1412 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 2342 0 0 232 0 0 0	0 0 14 0 0 0 176 0 0	LOSS 0 0 305 0 0 804 0 0 1109 0.52 575	0 0 324 0 0 0 132 0 0 0	0 7 0 0 101 0 192 0	LOSS 0 0 152 0 0 0 461 0 252 0 0 0 866 0.28 239	0 0 162 0 0 0 76 0 113 0	0 26 0 0 0 0 154 0 0	LOSS 0 566 0 0 0 704 0 0 0 0 1270 0.52 658	0 998 0 0 0 116 0 0	6 0 0 40 134 0 0	LOSS 0 131 0 0 1034 612 0 0 0 0 1777 0.52 921	0 230 0 0 0 170 101 0 0 0	0 0 0 0 0 323 0 0	LOSS 152 0 0 0 0 1476 0 0 0 1482 0.52	105 0 0 0 0 0 243 0 0 0							0 0 14 0 0 0 274 0	0 0 0 305 0 0 0 1009 0 0	0 0 537 0 0 166 0	4 0 8 0 0 20 20 345 1 0 0 0 8 8	87 60 0 0 0 74 185 0 0 0 0 0 0 0 0 271 209 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
NORTH EAST SOUTH WEST SKYLT. DOORS NET EXPOSED WALL NET EXPOSED BSMT WALL ABOVE GR EXPOSED CLG NO ATTIC EXPOSED CLO EXPOSED FLOOR BASEMENT/CRAWL HEAT LOSS SLAB ON GRADE HEAT LOSS SUBTOTAL HT LOSS SUBTOTAL HT GAIN LEVEL FACTOR / MULTIPLIER AIR CHANGE HEAT LOSS AIR CHANGE HEAT GAIN DUCT LOSS DUCT GAIN HEAT GAIN PEOPLE	21.8 21.8 21.8 38.1 25.8 4.6 3.7 1.3 2.8 2.6	14.9 38.4 23.1 38.4 101.5 4.3 0.8 0.6 0.6 1.3	0 0 28 0 0 332 0 0 0	LOSS 0 0 610 0 1517 0 0 0 2127	0 0 0 1075 0 0 250 0 0 0 0 0	0 28 0 0 0 272 0 0 0	LOSS 0 0 610 0 0 1243 0 0 0 1853	0 0 647 0 0 0 204 0 0 0 0 0 852	0 0 0 61 0 0 309 0 0 0	0 0 0 1329 0 0 14412 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 2342 0 0 232 0 0 0 0	0 0 14 0 0 0 176 0 0	LOSS 0 0 305 0 0 804 0 0 1109 0.52 575	0 0 324 0 0 0 132 0 0 0 0 456	0 7 0 0 101 0 192 0	LOSS 0 0 152 0 0 0 461 0 252 0 0 0 866 0.28 239	0 0 162 0 0 0 76 0 113 0 0	0 26 0 0 0 0 154 0 0	LOSS 0 566 0 0 0 704 0 0 0 0 1270 0.52 658	0 998 0 0 0 116 0 0 0	6 0 0 40 134 0 0	LOSS 0 131 0 0 1034 612 0 0 0 0 1777 0.52 921	0 230 0 0 0 170 101 0 0 0	0 0 0 0 0 323 0 0	LOSS 152 0 0 0 0 1476 0 0 0 1482 0.52	105 0 0 0 0 0 243 0 0 0 0							0 0 14 0 0 0 274 0	0 0 0 305 0 0 0 1009 0 0	0 0 537 0 0 166 0	4 0 8 0 0 20 20 345 1 0 0 0 8 8	87 60 0 0 7 74 185 0 0 0 0 0 0 117 85 0 0 0 271 209 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
NORTH EAST SOUTH WEST SKYLT. DOORS NET EXPOSED WALL NET EXPOSED WALL NET EXPOSED ESMT WALL ABOVE GR EXPOSED CLG NO ATTIC EXPOSED CLG EXPOSED FLOOR BASEMENT/CRAWL HEAT LOSS SLAB ON GRADE HEAT LOSS SUBTOTAL HT GAIN LEVEL FACTOR / MULTIPLIER AIR CHANGE HEAT LOSS AIR CHANGE HEAT GAIN DUCT LOSS DUCT GAIN HEAT GAIN PEOPLE HEAT GAIN APPLIANCES/LIGHTS	21.8 21.8 21.8 38.1 25.8 4.6 3.7 1.3 2.8 2.6	14.9 38.4 23.1 38.4 101.5 4.3 0.8 0.6 0.6 1.3	0 0 28 0 0 3332 0 0 0	LOSS 0 0 0 610 0 0 1517 0 0 0 0 2127 0.52 1102 0	0 0 1075 0 0 250 0 0 0	0 28 0 0 0 272 0 0 0	LOSS 0 0 0 610 0 0 0 1243 0 0 0 0 1853 0.52 960 0	0 0 647 0 0 0 204 0 0 0 0 852	0 0 0 61 0 0 309 0 0 0	0 0 0 1329 0 0 1412 0 0 0 0 0 0 0 0 0 0 0 0 1442 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 2342 0 0 232 0 0 0 0	0 0 14 0 0 0 176 0 0 0	LOSS 0 0 0 305 0 0 0 804 0 0 0 0 1109 0.52 575 0	0 0 324 0 0 0 132 0 0 0 0 456	0 7 0 0 0 101 0 192 0 0	LOSS 0 0 152 0 0 0 461 0 252 0 0 0 866 0 0.28 239 0	0 0 162 0 0 0 76 0 113 0 0	0 26 0 0 0 0 154 0 0 0	LOSS 0 5566 0 0 0 0 704 0 0 0 0 1270 0.52 658 0	0 998 0 0 0 0 116 0 0 0	6 0 0 40 134 0 0 0	LOSS 0 131 0 0 0 1034 612 0 0 0 17777 0.52 921	0 230 0 0 0 170 101 0 0 0 501	0 0 0 0 0 323 0 0 0	LOSS 152 0 0 0 0 1476 0 0 0 1428 0.52 844	105 0 0 0 0 0 243 0 0 0 0							0 0 14 0 0 0 274 0 0	0 0 0 305 0 0 0 1009 0 0	0 0 537 0 0 0 166 0 0	4 0 8 0 0 20 20 345 1 0 0 0 8 8	87 60 0 0 7 74 185 0 0 0 0 0 117 85 0 0 0 271 209 0
NORTH EAST SOUTH WEST SKYLT. DOORS NET EXPOSED WALL NET EXPOSED BSMT WALL ABOVE GR EXPOSED CLG NO ATTIC EXPOSED CLO EXPOSED FLOOR BASEMENT/CRAWL HEAT LOSS SLAB ON GRADE HEAT LOSS SUBTOTAL HT LOSS SUBTOTAL HT GAIN LEVEL FACTOR / MULTIPLIER AIR CHANGE HEAT LOSS AIR CHANGE HEAT GAIN DUCT LOSS DUCT GAIN HEAT GAIN PEOPLE	21.8 21.8 21.8 38.1 25.8 4.6 3.7 1.3 2.8 2.6	14.9 38.4 23.1 38.4 101.5 4.3 0.8 0.6 0.6 1.3	0 0 28 0 0 3332 0 0 0	LOSS 0 0 610 0 1517 0 0 0 2127	0 0 0 1075 0 0 250 0 0 0 0 0	0 28 0 0 0 272 0 0 0	LOSS 0 0 610 0 0 1243 0 0 0 1853	0 0 647 0 0 0 204 0 0 0 0 0 852	0 0 0 61 0 0 309 0 0 0	0 0 1329 0 0 1412 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 2342 0 0 232 0 0 0 0	0 0 14 0 0 0 176 0 0 0	LOSS 0 0 305 0 0 804 0 0 1109 0.52 575	0 0 324 0 0 0 132 0 0 0 0 456	0 7 0 0 0 101 0 192 0 0	LOSS 0 0 152 0 0 0 461 0 252 0 0 0 866 0.28 239	0 0 162 0 0 0 76 0 113 0 0	0 26 0 0 0 0 154 0 0 0	LOSS 0 566 0 0 0 704 0 0 0 0 1270 0.52 658	0 998 0 0 0 0 116 0 0 0 11114 82 0 0 0	6 0 0 40 134 0 0 0	LOSS 0 131 0 0 1034 612 0 0 0 0 1777 0.52 921	0 230 0 0 0 170 101 0 0 0 0	0 0 0 0 0 323 0 0 0	LOSS 152 0 0 0 0 1476 0 0 0 1482 0.52	105 0 0 0 0 0 243 0 0 0 0							0 0 14 0 0 0 274 0 0	0 0 0 305 0 0 0 1009 0 0 0 1314	0 0 537 0 0 166 0 0	4 0 8 0 0 0 20 345 1 0 0 0 8 8 0.50 1	87 60 0 0 7 74 185 0 0 0 0 0 0 117 85 0 0 2 271 209 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

TOTAL HEAT GAIN BTU/H:

36722

TONS: 3.06

LOSS DUE TO VENTILATION LOAD BTU/H: 1670

STRUCTURAL HEAT LOSS: 59880

TOTAL COMBINED HEAT LOSS BTU/H: 61550

Mhehad Fourte Individual BCIN: 19669 MICHAEL O'ROURKE



			EL HOME PARK HO					TYPE:	TERRAC	OTA 2S			DATE:	May-21			GFA;	3394	LO#	90745				
HEATING CFM TOTAL HEAT LOSS AIR FLOW RATE CFM	59,880	Д	TOTAL H	LING CFM EAT GAIN RATE CFM	36,447		а	furr a/c coil vailable	pressure nace filter pressure pressure	0.6 0.05 0.2				•		(	GMEC9608	#0 803BNA SPEED	GOODMA 80			AFUE = ! (BTU/H) = ! (BTU/H) = !	80,000	
RUN COUNT	4th	3rd	2nd	1st	Bas				· s/a & r/a	0.35							ME	LOW			DESI	GN CFM =	1122	
S/A R/A	0	0	15 6	8 2	4				ssure s/a ress. loss	0.18 0.02	r/s		pressure ess. Loss	0.17 0.02				MEDIUM M HIGH	885 1005			CFM @ .ē	6 " E.S.P.	-
All S/A diffusers 4"x10" unl	less note	dotherwis	se on layo			ļ			ssure s/a	0.16			ssure r/a	0.15			WILDIO	HIGH	1122	т	EMPERAT	URE RISE_	63	°F
All S/A runs 5"Ø unless no		wise on la 2	ayout. 3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	22	24
ROOM NAME	1	ENS	wic	BED-2	BED-3	BED-4		-	WIC-3	MBR	ENS-2	FAM	LV/DN	KIT	KIT	LIB	LAUN	W/R	FOY	MUD	BAS	22 BAS	23 BAS	24 BAS
RM LOSS MBH.	1	1.32	0.61	2.27	1.83	1.31	0.60	1.63	0.73	1.49	0.91	3.23	2.81	2.08	2.08	1.68	1.10	1.93	2.70	2.47	5.05	5.05	5.05	5.05
CFM PER RUN HEAT	1	25	11	43	34	25	11	30	14	28	17	61	53	39	39	32	21	36	51	46	95	95	95	95
RM GAIN MBH.	1	0.75	0.19	2.66	2.42	1.89	0.34	0.65	0.63	1.84	0.33	2.66	2.00	2.20	2.20	1.45	1.30	1.55	0.70	0.48	0.64	0.64	0.64	0.64
CFM PER RUN COOLING ADJUSTED PRESSURE	1	23	6	82	74	58 0.17	10	20	20	57	10	82	62	68	68	44	40	48	22	15	20	20	20	20
ACTUAL DUCT LGH.	0.17	0.17 56	0.17 39	0.16 59	0.17 56	0.17 34	0.17 34	0.17 51	0.17 45	0.17 39	0.17 39	0.16 22	0.17 10	0.17 40	0.17 31	0.17 27	0.17 20	0.17 33	0.17 41	0.17 44	0.16 38	0.16 19	0.16 5	0.16 31
EQUIVALENT LENGTH		160	150	130	170	200	220	160	110	130	150	140	130	150	160	140	180	110	90	140	140	120	140	130
TOTAL EFFECTIVE LENGTH		216	189	189	226	234	254	211	155	169	189	162	140	190	191	167	200	143	131	184	178	139	145	161
ADJUSTED PRESSURE	1	0.08	0.09	0.09	0.08	0.07	0.07	0.08	0.11	0.1	0.09	0.1	0.12	0.09	0.09	0.1	0.09	0.12	0.13	0.09	0.09	0.12	0.11	0.1
ROUND DUCT SIZE	5	4	4	6	6	6	4	6	4	5	4	6	5	5	5	4	4	4	4	4	6	6	6	6
HEATING VELOCITY (ft/min)		287	126	219	173	127	126	153	161	206	195	311	389	286	286	367	241	413	585	528	484	484	484	484
COOLING VELOCITY (ft/min)		264	69	418	377	296	115	102	229	419	115	418	455	499	499	505	459	551	252	172	102	102	102	102
OUTLET GRILL SIZE TRUNK		3X10 A	3X10 B	4X10 D	4X10 C	4X10 C	3X10 C	4X10 A	3X10 D	3X10 B	3X10 D	4X10 B	3X10 D	3X10 A	3X10	3X10 C	3X10 B	3X10 C	3X10 C	3X10 A	4X10	4X10 B	4X10 D	4X10 C
IKONK	,I														Α		<u> </u>				Α	ь	<u> </u>	
RUN#	25	26	27																					
ROOM NAME	BED-2	BED-3	ENS																					
RM LOSS MBH.		1.83	1.32																					
CFM PER RUN HEAT		34	25																					
RM GAIN MBH.	1	2.42	0.75																					
CFM PER RUN COOLING ADJUSTED PRESSURE	1	74 0.17	23 0.17																					
ACTUAL DUCT LGH.	1	48	52																					
EQUIVALENT LENGTH		170	130																					
TOTAL EFFECTIVE LENGTH		218	182																					
ADJUSTED PRESSURE	0.09	0.08	0.09																					
ROUND DUCT SIZE		5	4																					
HEATING VELOCITY (ft/min)		250	287																					
COOLING VELOCITY (ft/min)		543	264																					
OUTLET GRILL SIZE TRUNK	1	3X10 C	3X10 A																					
TRONK	<u> </u>																		·····					
SUPPLY AIR TRUNK SIZE					***************************************												RETURN A	AIR TRUNK	SIZE					
	TRUNK	STATIC	ROUND	RECT			VELOCITY			TRUNK	STATIC	ROUND	RECT			VELOCITY		TRUNK	STATIC	ROUND	RECT			VELOCITY
	CFM	PRESS.	DUCT	DUCT		_	(ft/min)		TOUR OF C	CFM	PRESS.	DUCT	DUCT		•	(ft/min)		CFM	PRESS.	DUCT	DUCT		_	(ft/min)
TRUNK A		0.08 0.08	8.9 11.2	10 14	X	8 8	538 698		TRUNK G	0	0.00 0.00	0 0	0 0	X	8 8	0	TRUNK O	0	0.05 0.05	0	0	X	8 8	0
TRUNK C		0.08	9.4	10	X X	8	572		TRUNK I	Ö	0.00	Ö	0	X X	8	0	TRUNK Q	0	0.05	0	0	X X	8	0
TRUNK D		0.07	11.8	16	X	8	656		TRUNK J	ŏ	0.00	ő	ő	x	8	ŏ	TRUNK R	ő	0.05	ő	ő	x	8	Ö
TRUNK E		0.00	0	0	x	8	0		TRUNK K	ō	0.00	ō	ō	x	8	ō	TRUNK S	Ö	0.05	ō	ŏ	x	8	ŏ
TRUNK F	0	0.00	0	0	X	8	00		TRUNK L	0	0.00	0	0	x	88	0	TRUNK T	0	0.05	0	0	x	8	0
																	TRUNK U	0	0.05 0.05	0	0	X	8 8	0
RETURN AIR #	1	2	3	4	5	6	7	8								BR	TRUNK W	0	0.05	0	0	X	8 8	0
	Ó	Ó	0	Ō	ő	Ö	ó	Ö	0	0	0	0	0	0	0	21	TRUNK X	1032	0.05	16	30	X	8	619
NETONIC AIR IF		85	90	90	85	75	360	85	Ö	ŏ	ŏ	Ö	Ö	ŏ	ŏ	162	TRUNK Y	695	0.05	13.8	22	x	8	569
AIR VOLUME	90	00				0.45	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	TRUNK Z	445	0.05	11.6	16			
AIR VOLUME PLENUM PRESSURE	0.15	0.15	0.15	0.15	0.15	0.15	0.10												0.00		10	х	8	501
AIR VOLUME PLENUM PRESSURE ACTUAL DUCT LGH.	0.15 41	0.15 52	53	58	53	59	45	41	1	1	1	1	1	1	1	15	DROP	1122	0.05	16.5	24	X X	8 10	501 673
AIR VOLUME PLENUM PRESSURE ACTUAL DUCT LGH. EQUIVALENT LENGTH	0.15 41 185	0.15 52 195	53 165	58 165	53 215	59 265	45 165	41 190	0	1	1	0	Ö	1	Ó	150								
AIR VOLUME PLENUM PRESSURE ACTUAL DUCT LGH. EQUIVALENT LENGTH TOTAL EFFECTIVE LH	0.15 41 185 226	0.15 52 195 247	53 165 218	58 165 223	53 215 268	59 265 324	45 165 210	41 190 231	0	1	1	0	0 1	1	0	150 165								
AIR VOLUME PLENUM PRESSURE ACTUAL DUCT LGH. EQUIVALENT LENGTH TOTAL EFFECTIVE LH ADJUSTED PRESSURE	0.15 41 185 226 0.07	0.15 52 195 247 0.06	53 165 218 0.07	58 165 223 0.07	53 215 268 0.06	59 265 324 0.05	45 165 210 0.07	41 190 231 0.06	0 1 14.80	1 14.80	1 14.80	0 1 14.80	0 1 14.80	1 14.80	0 1 14.80	150 165 0.09								
AIR VOLUME PLENUM PRESSURE ACTUAL DUCT LGH. EQUIVALENT LENGTH TOTAL EFFECTIVE LH	0.15 41 185 226	0.15 52 195 247	53 165 218	58 165 223	53 215 268	59 265 324	45 165 210	41 190 231	0	1	1	0	0 1	1	0	150 165								
AIR VOLUME PLENUM PRESSURE ACTUAL DUCT LGH. EQUIVALENT LENGTH TOTAL EFFECTIVE LH ADJUSTED PRESSURE ROUND DUCT SIZE	0.15 41 185 226 0.07 5.9	0.15 52 195 247 0.06 6	53 165 218 0.07 5.9	58 165 223 0.07 5.9	53 215 268 0.06 6	59 265 324 0.05 6	45 165 210 0.07 9.9	41 190 231 0.06 6	0 1 14.80 0	1 14.80 0	1 14.80 0	0 1 14.80 0	0 1 14.80 0	1 14.80 0	0 1 14.80 0	150 165 0.09 6.9								



TYPE: SITE NAME: TERRACOTA 2S

ROUNDEL HOMES INC

LO# 90745

#### RESIDENTIAL MECHANICAL VENTILATION DESIGN SUMMARY

COMBUSTION APPLIANCES	9.32.3.1(1)	SUPPLEMENTAL VENTILATION CAPACITY 9.32.3.5.
a) Direct vent (sealed combustion) only		Total Ventilation Capacity
b) Positive venting induced draft (except fireplaces)		Less Principal Ventil. Capacity
c) Natural draft, B-vent or induced draft gas fireplace		Required Supplemental Capacity 121.9 cfm
d) Solid Fuel (including fireplaces)		
e) No Combustion Appliances		PRINCIPAL EXHAUST FAN CAPACITY
		Model: VANEE V150H Location: BSMT
HEATING SYSTEM		
Forced Air Non Forced Air		PRINCIPAL EXHAUST HEAT LOSS CALCULATION  CFM
Electric Space Heat		CFM ΔT F FACTOR % LOSS 79.5 CFM X 78 F X 1.08 X 0.25
		SUPPLEMENTAL FANS PANASONIC
HOUSE TYPE	9.32.1(2)	Location         Model         cfm         HVI         Sones           ENS         FV-05-11VK1         50         ✓         0.3
	3.32.1(2)	ENS FV-05-11VK1 50
✓ I Type a) or b) appliance only, no solid fuel		ENS-2 FV-05-11VK1 50 V 0.3
		W/R FV-05-11VK1 50 ✓ 0.3
II Type I except with solid fuel (including fireplaces)		
		HEAT RECOVERY VENTILATOR 9.32.3.11.
III Any Type c) appliance		Model:         VANEE V150H           150         cfm high         35         cfm low
IV Type I, or II with electric space heat		
Other: Type I, II or IV no forced air		75 % Sensible Efficiency HVI Approved @ 32 deg F ( 0 deg C)
		LOCATION OF INSTALLATION
SYSTEM DESIGN OPTIONS	O.N.H.W.P.	Lot: Concession
1 Exhaust only/Forced Air System		
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 #
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 3 @ 10.6 cfm 31.8	cfm	Telephone #: Fax #:
Kitchen & Bathrooms 5 @ 10.6 cfm 53	cfm	INSTALLING CONTRACTOR
Other Rooms 7 @ 10.6 cfm 74.2	cfm	Name:
Table 9.32.3,A. TOTAL <u>201.4</u>	cfm	Address:
PRINCIPAL VENTILATION CAPACITY REQUIRED	9.32.3.4.(1)	City:
1 Bedroom 31.8	cfm	Telephone #: Fax #:
2 Bedroom 47.7	cfm	DESIGNER CERTIFICATION I hereby certify that this ventilation system has been designed
		in accordance with the Ontario Building Code.
	cfm	Name: HVAC Designs Ltd.
4 Bedroom 79.5	cfm	Signature: Misharl Oxfornse.
5 Bedroom 95.4	cfm	HRAI # 001820
TOTAL 79.5 cfm	FIED IN THE ADD	Date:  PROPRIATE CATEGORY AS AN "OTHER DESIGNER" UNDER DIVISION C, 3.2.5 OF THE BUILDING CODE.
INDIVIDUAL BCIN: 19689 Maked (Konhe. MICHAEL O'ROL	JRKE	THE BUILDING CODE.



			CSA F2	80-12 Residential Hea	t Loss and Heat Gain	Calculations							
			Form	nula Sheet (For Air Lea	akage / Ventiliation C	Calculation)							
LO#:	90745	Model: TERRACOTA	2S	Builde	der: GREENPARK HOMES Date: 2021-05-11								
		Volume Calculatio	n				Air Change & Delt	a T Data					
				-									
louse Volume		T	T	1			URAL AIR CHANG		0.352				
Level	Floor Area (ft²)	Floor Height (ft)	Volume (ft³)	_		SUMMER NA	TURAL AIR CHANG	SE RATE	0.110				
Bsmt First	1506 1506	8	12048 15060	_									
Second	1888	9	16992	-			Design To	managatura Diff					
Third	0	9	0	-			Tin °C	mperature Diff Tout °C	erence ΔT°C	ΔT °F			
Fourth	0	9	0	1		Winter DTDh	22	-21	43	78			
		Total:	44,100.0 ft <sup>3</sup>			Summer DTDc	24	31	7	13			
		Total:	1248.8 m³	]			lumina i anno anno anno anno anno anno anno						
	5.2.3	.1 Heat Loss due to Ai	r Leaкage			6.2.6 S	ensible Gain due	to Air Leakage					
	111	$LR_{airh} \times \frac{V_b}{3.6} \times L$	ATD4.2				$V_b$						
	$HL_{airb} =$	$LR_{airh} \times \frac{1}{3.6} \times L$	$D_h \times 1.2$		H	$IG_{salb} = LR_{airc} \times$	$\frac{1}{3.6} \times DTD_c$	× 1.2					
0.352 x 346.88 x 43 °C x 1.2 = 6330 W					0.110	x <u>346.88</u>	x 7°C	x 1.2	=	325 W			
									-				
				= 21599 Btu/h					=	1109 Btu/h			
	5.2.3.2 Hea	at Loss due to Mechan	ical Ventilation			6.2.7 Sen	sible heat Gain d	ue to Ventilatio	n				
	$\mathit{HL}_{vairb} =$	$PVC \times DTD_h \times 1$	$.08 \times (1-E)$		$HL_{\tau}$	$_{vairb} = PVC \times DT$	$CD_h \times 1.08 \times 10^{-3}$	(1 - E)					
80 CFM	x <u>78 °F</u>	x <u>1.08</u>	x <u>0.25</u>	= 1670 Btu/h	80 CFM	x <u>13 °F</u>	x1.08	x <u>0.25</u>	=	275 Btu/h			
			5.2.3.3 Calcula	tion of Air Change Heat	Loss for Each Room (Floo	or Multiplier Section)							
		$HL_{a}$		or $\times$ $HL_{airbv}$ $\times$ {(H			gclevel)						
		Level	Level Factor (LF)	HLairve Air Leakage + Ventilation Heat Loss (Btu/h)	Level Conductive Heat Loss: (HL <sub>clevel</sub> )	Air Leakage Heat Los HLairbv / H							
		1	0.5		9,385	1.151	L						
		2	0.3	]	12,503	0.518	3						
		3	0.2	21,599	15,683	0.275							
		4	0	-	0	0.000							
		5	0		0	0.000	)						
			-	+ ventilation heat loss entilation system HLairve	= 0								



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

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

MODEL:	TERRACOTA 2S		BUILDER: GREENPARK HOME	S
SFQT:	3394	<b>LO#</b> 90745	SITE: ROUNDEL HOMES	INC
DESIGN A	SSUMPTIONS			
HEATING		°F	COOLING	°F
OUTDOO	R DESIGN TEMP.	-6	OUTDOOR DESIGN TEMP.	88
INDOOR E	DESIGN TEMP.	72	INDOOR DESIGN TEMP. (MAX 75°F)	75
BUILDING	i DATA			
ATTACHM	IENT:	DETACHED	# OF STORIES (+BASEMENT):	3
FRONT FA	CES:	EAST	ASSUMED (Y/N):	Υ
AIR CHAN	GES PER HOUR:	3.57	ASSUMED (Y/N):	Υ
AIR TIGHT	NESS CATEGORY:	AVERAGE	ASSUMED (Y/N):	Υ
WIND EXP	POSURE:	SHELTERED	ASSUMED (Y/N):	Υ
HOUSE VO	DLUME (ft³):	44100.0	ASSUMED (Y/N):	Υ
INTERNAL	SHADING:	BLINDS/CURTAINS	ASSUMED OCCUPANTS:	5
INTERIOR	LIGHTING LOAD (Btu/	h/ft²): 1.27	DC BRUSHLESS MOTOR (Y/N):	Υ
FOUNDAT	ION CONFIGURATION	BCIN_1	DEPTH BELOW GRADE:	5.5 ft
LENGTH:	55.0 ft	WIDTH: 38.0 ft	EXPOSED PERIMETER:	186.0 ft

2012 OBC - COMPLIANCE PACKAGE		
	Compliance	Package
Component		\1
	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	0.96	-
HRV Minimum Efficiency	75%	-
Domestic Hot Water Heater Minimum EF	0.8	-

INDIVIDUAL BCIN: 19669 MICHAEL O'ROURKE

DESIGNS LTD.





## **Residential Foundation Thermal Load Calculator**

Supplemental tool for CAN/CSA-F280

W	eather Stat	ion Description							
Province:	Ontario								
Region:	Richmond	l Hill							
	Site De	escription							
Soil Conductivity:	Normal co	Normal conductivity: dry sand, loam, clay							
Water Table:	Normal (7	7-10 m, 23-33 ft)							
	Foundation	Dimensions							
Floor Length (m):	16.8								
Floor Width (m):	11.6								
Exposed Perimeter (m):	0.0								
Wall Height (m):	2.4								
Depth Below Grade (m):	1.68	Insulation Configuration							
Window Area (m²):	2.4	The second section of a contract of the second seco							
Door Area (m²):	1.9								
	Radia	nt Slab							
Heated Fraction of the Slab:	0								
Fluid Temperature (°C):	33								
	Design	Months							
Heating Month	1								
	Foundat	ion Loads							
Heating Load (Watts):		1764							

**TYPE:** TERRACOTA 2S

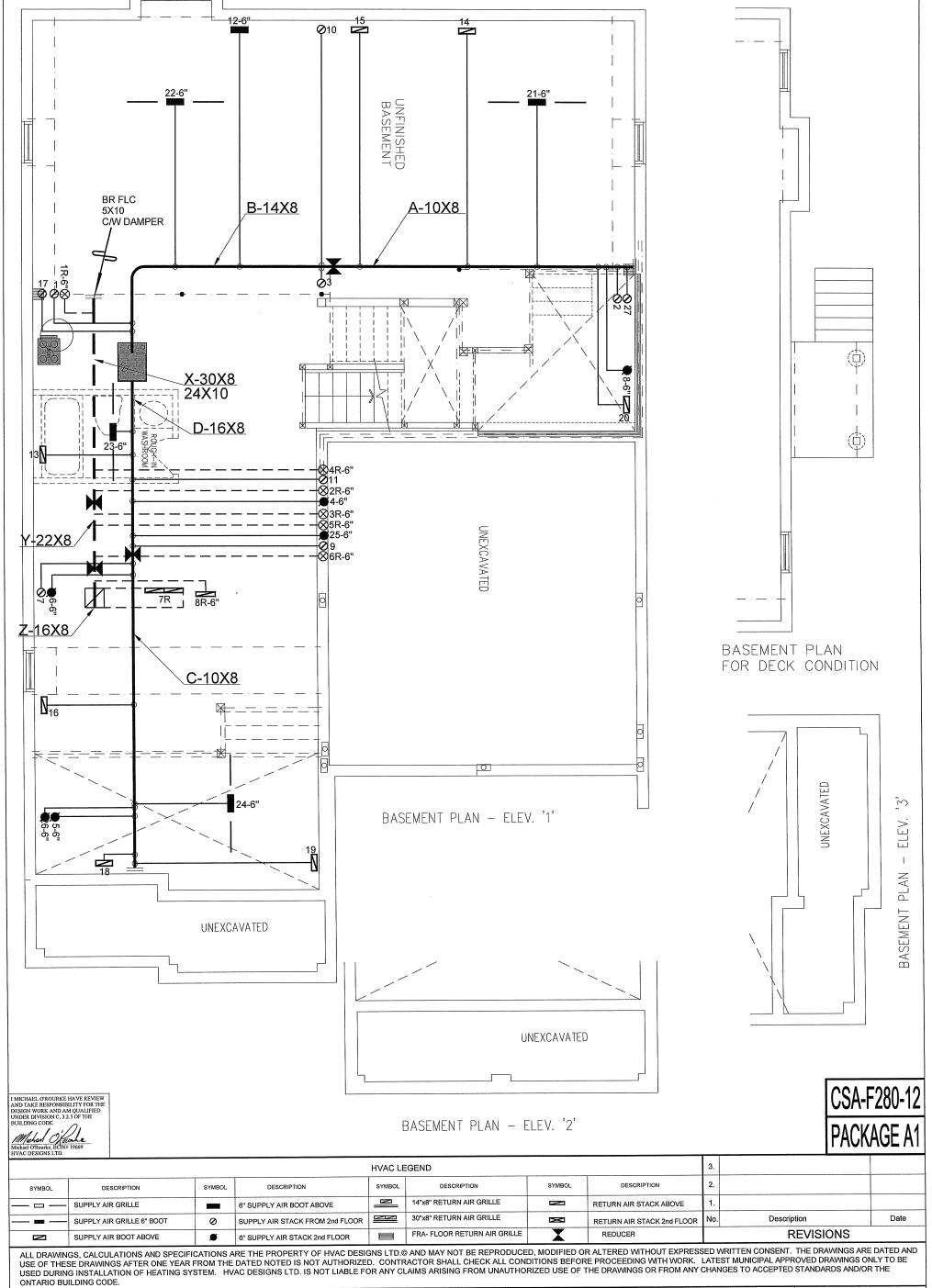


# **Air Infiltration Residential Load Calculator**

Supplemental tool for CAN/CSA-F280

Weather Sta	ation D	es	cript	ion					
Province:	On <sup>.</sup>	ar	io						
Region:	Ric	Richmond Hill							
Weather Station Location:	Ор	Open flat terrain, grass							
Anemometer height (m):	10								
Local	Shield	n	g						
Building Site:	Suk	ur	ban, f	orest					
Walls:	Hea	ivy	/						
Flue: Heavy									
Highest Ceiling Height (m):	7.6	2							
Building (	Configu	ra	ation						
Type:	Det	ac	hed						
Number of Stories:	Two	)							
Foundation:	Full								
House Volume (m³):	8								
Air Leakag	ge/Ven	til	atior	)					
Air Tightness Type:	Pre	sei	nt (196	51-) (3	.57 ACI	Н)			
Custom BDT Data:	ELA	@	10 Pa	€.		1664.7 cm²			
	3.5	7				ACH @ 50 Pa			
Mechanical Ventilation (L/s):		То	tal Sup	ply		Total Exhaust			
			37.5			37.5			
Flu	ue Size								
Flue #:	#1		#2	#3	#4				
Diameter (mm):	0		0	0	0				
Natural Inf	filtratio	n	Rate	:S					
Heating Air Leakage Rate (ACH/H	Ⅎ)։		0	.35	2				
Cooling Air Leakage Rate (ACH/H	i):		0	.11	0				

**TYPE:** TERRACOTA 2S



GREENPARK HOMES

Project Name

ROUNDEL HOMSE INC RICHMOND HILL, ONTARIO

Lot 91

TERRACOTA 2S 3394 sqft

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.

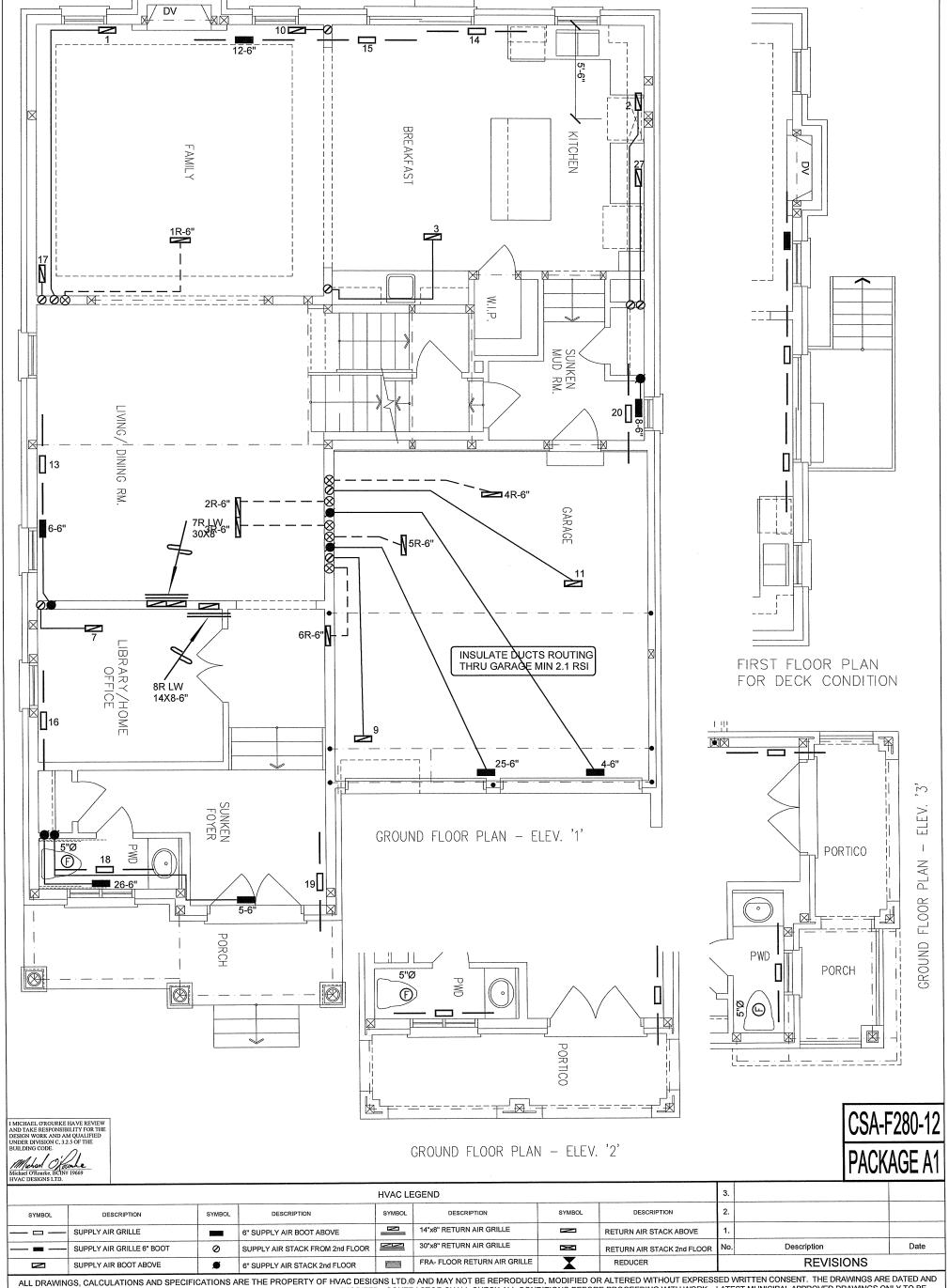
	HEAT L	OSS 61550	BTU/H	# OF	RUNS	S/A	R/A	FANS	5
		UNIT DATA		3RD	FLOOR				ĺ
	MAKE	GOODMAN		2ND	FLOOR	15	6	4	
	MODEL GM	EC960803BN	A	1ST	FLOOR	8	2	3	L
	INPUT	80	мвти/н	BAS	EMENT	4	1	0	1
-	OUTPUT	70.0	MBTU/H	ALL S	S/A DIFFU	SERS	4 "x10	)"	5
	COOLING	76.8			SS NOTE				
Э		3.0	TONS		AYOUT. A SS NOTE				-

FAN SPEED

1122

ON LAYOUT. UNDERCUT DOORS 1" min. FOR R/A

s	Sheet Title	
	BΑ	SEMENT
	Н	EATING
	L	AYOUT
	Date	MAY/2021
	Scale :	3/16" = 1'-0"
ð	В	CIN# 19669
	LO#	90745



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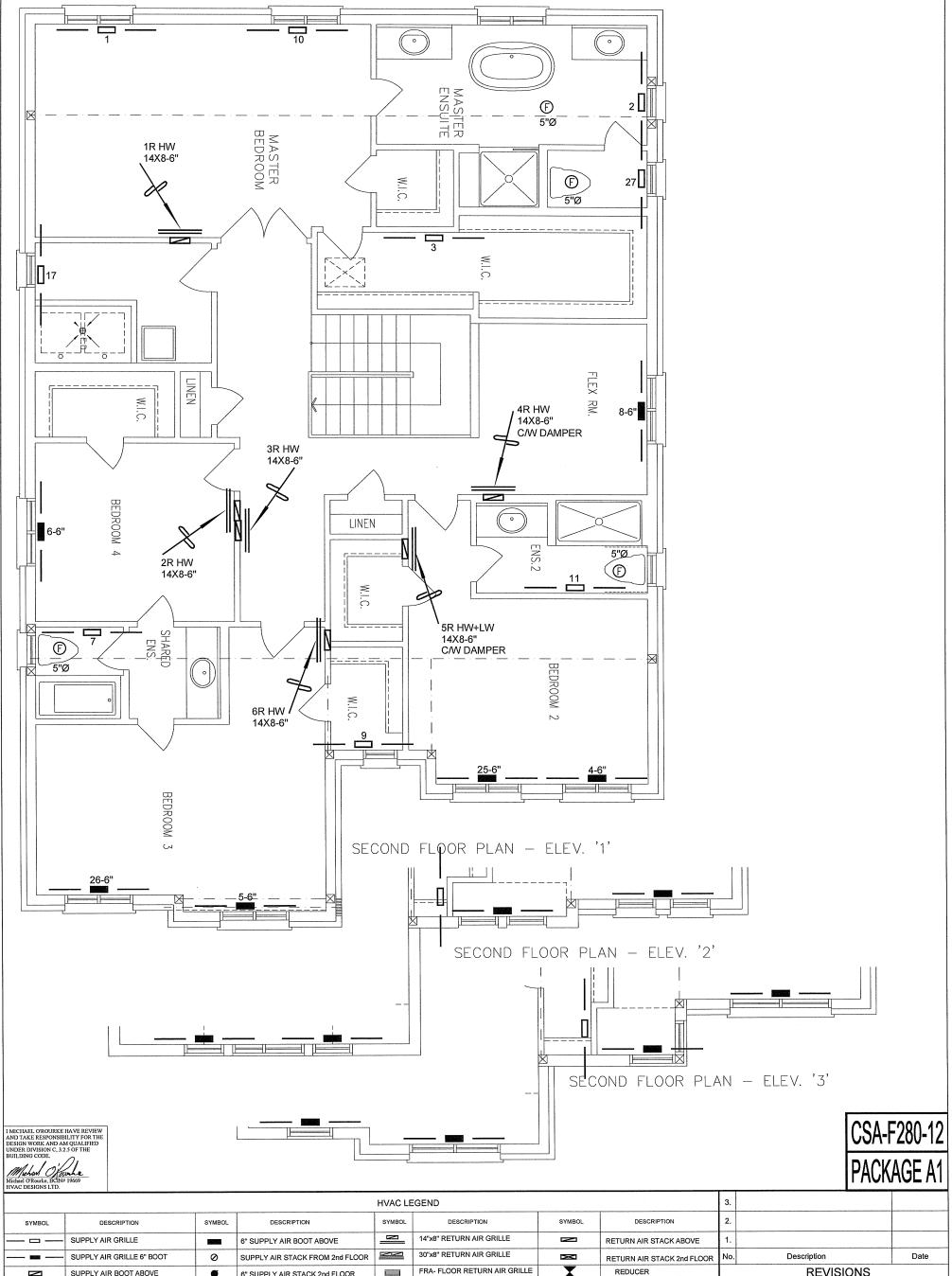
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## FIRST FLOOR HEATING

LAYOUT

MAY/2021

3/16" = 1'-0" BCIN# 19669



SUPPLY AIR BOOT ABOVE

6" SUPPLY AIR STACK 2nd FLOOR

FRA- FLOOR RETURN AIR GRILLE

REDUCER

REDUCER

REDUCER

REDUCER

REDUCER

REPUREN

### GREENPARK HOMES

ONTARIO BUILDING CODE.

Project Name

ROUNDEL HOMSE INC RICHMOND HILL, ONTARIO

Lot 91

TERRACOTA 2S 3394 sqff

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

neet Title

### SECOND FLOOR HEATING LAYOUT

MAY/2021 3/16" = 1'-0"

BCIN# 19669