

365-8264

Prepared By: Harry Mowley

TOTAL HEATING AND COOLING REQUIREMENTS

For:

Name: Mike Mathis

Address: _____

City: _____

() Check Constr. Type	ITEM	AREA SQUARE FEET	DESIGN TEMPERATURE DIFFERENCE					DESIGN TEMP		HEATING (BTUH LOSS)	COOLING MULT. (CIRCLE)	COOLING (BTUH GAIN)					
			30°	35°	40°	45°	50°	90°	95°								
			HEATING MULTIPLIER (CIRCLE ONE)														
	Gross Wall Area	1152															
	Glass Area (From page 1)	124								6820		5140					
	Partitions, Frame																
	Finished 1 side, No Insulation		17	19	22	25	28			6.5	10.0						
	Finished 2 sides, No Insulation		9	11	12	14	16			4.5	6.0						
	Finished 2 sides, R-5		4	5	5.5	6	7			2.5	3.5						
	Finished 2 sides, R-11		2	3	3	4	4			2.0	2.5						
	Other																
	Doors (Excluding glass)																
	No weatherstripping		135	160	180	200	225			10.0	13.0						
	Weatherstripped	36	70	85	95	110	120			3420	10.0	13.0	468				
	R-5 Insulation, No weatherstripping		123	144	164	185	205			4.3	5.5						
	R-5 Insulation, weatherstripping		68	79	90	101	113			4.0	5.0						
	Other																
	Net Exterior Walls																
	CBS Furred, No Insulation		9	10	12	13	14			4.5	6.0						
	CBS Furred, R-3 Insulation		5	6	7	8	8			3.0	4.2						
	CBS Furred, R-4 Insulation		4	5	6	6	7			2.7	3.8						
	CBS Furred, R-5 Insulation		4	5	5	6	6			2.5	3.5						
	Frame, No Insulation		8	9	10	11	13			5.5	7.0						
	Frame, R-11 Insulation	992	2	2	3	3	4			2976	2.5	3.0	2976				
	Frame, R-14 Insulation		1.5	1.7	2	2.5	3			2	2.8						
	Other																
	Ceiling under attic		Roof														
	No Insulation		DK	LT	18	21	24	27	30			9	7	10	8.5		
	R-11 Insulation		DK	LT	2.4	2.8	3.2	3.5	3.9			2.5	2	3	2.5		
	R-19 Insulation		DK	LT	1.5	1.7	1.9	2.2	2.4			1.5	1.5	2	1.5		
	R-22 Insulation		DK	LT	1.2	1.5	1.7	1.9	2.1			1.5	1.0	1.5	1.5		
	R-26 Insulation		DK	LT	1.1	1.3	1.4	1.6	1.8			1.3	1	1.5	1.2		
	R-30 Insulation	1232	DK	LT	1	1.1	1.3	1.4	1.6			1602	1.1	.9	1.3	1.0	1602
	Other																
	Floor, Concrete Slab		Perimeter Ft.														
	No Edge Insulation		35	40	40	45	45			0	0						
	Other																
	Subtotal									14818		10186					
	People @ 300 & Appl. @ 1200											9500					
	Sensible BTUH Gain											17686					
	Duct BTUH Loss & Gain																
	2 In. Flex. or 1 In. Rigid									.10	1482	.10	1769				
	1 1/2 In. Rigid									.075		.075					
	Total BTUH Loss									16300							
	Subtotal BTUH Gain											19455					
	x 1.3 = Total BTUH Gain											25251					

Calculated Heating Requirements 16300 BTUH
 Size of Unit Chosen 24000 BTUH
 % Oversized _____
 % Undersized _____

Calculated Cooling Requirements 252915 BTUH
 Size of Unit Chosen 24000 BTUH
 % Oversized _____
 % Undersized _____