

123-4914

Prepared By:

Harry Morley

TOTAL HEATING AND COOLING REQUIREMENTS

Page 2

For:

Name:

Amber Willis

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	1458								6930			6450		
	Glass Area (From page 1)	126													
	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	54	70	85	95	110	120			5130	10.0	13.0	702		
	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	1278	2	2	3	3	4			3834	2.5	3.0	3834		
	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	DK LT	1530	1	1.1	1.3	1.4	1.6			1989	1.1	.9	1.3	1.0
	Other														
	Floor, Concrete Slab	Perimeter Ft.													
	No Edge Insulation		35	40	40	45	45				0	0			
	Other														
	Subtotal									19883			12975		
	People @ 300 & Appl. @ 1200												6900		
	Sensible BTUH Gain												19875		
	Duct BTUH Loss & Gain														
	2 In. Flex. or 1 In. Rigid									1788	.10		1988		
	1 1/2 In. Rigid										.075				
	Total BTUH Loss									19671					
	Subtotal BTUH Gain												21363		
	x 1.3 = Total BTUH Gain												28421		

Calculated Heating Requirements

19671

Size of Unit Chosen

% Oversized

% Undersized

BTUH
BTUH

Calculated Cooling Requirements

28421

Size of Unit Chosen

% Oversized

% Undersized

BTUH
BTUH