

Prepared By: Harry Morley

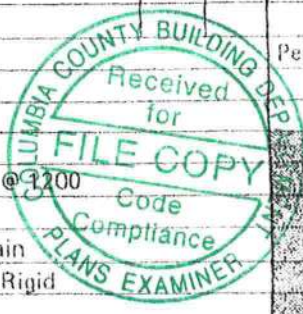
TOTAL HEATING AND COOLING REQUIREMENTS

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For: Cory Johnson
Name: Cory Johnson
Address: CP Beasley Rd
City: CP Beasley Rd

(✓) Check Constr. Type	ITEM	AREA SQUARE FEET	DESIGN TEMPERATURE DIFFERENCE					HEATING (BTUH LOSS)	DESIGN TEMP		COOLING (BTUH GAIN)
			30°	35°	40°	45°	50°		90°	95°	
	Gross Wall Area	1930									
	Glass Area (From page 1)	171						5985			6820
	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	65	70	85	95	110	120	6175	10.0	13.0	845
	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	1644	2	2	3	3	4	4932	2.5	3.0	4932
	Frame, R-14 Insulation		1.5	1.7	2	2.5	3		2	2.8	
	Other										
	Ceiling under attic										
	No Insulation		DK	LT					9	7	10
	R-11 Insulation		DK	LT					2.5	2	3
	R-19 Insulation		DK	LT					1.5	1.5	2
	R-22 Insulation		DK	LT					1.5	1.0	1.5
	R-26 Insulation		DK	LT					1.3	1	1.5
	R-30 Insulation		DK	LT					1.1	.9	1.3
	Other										
	Floor, Concrete Slab										
	No Edge Insulation								0	0	
	Other										
	Subtotal							19536			15091
	People @ 300 & Appl. @ 1200										6300
	Sensible BTUH Gain										21371
	Duct BTUH Loss & Gain										
	2 In. Flex. or 1 In. Rigid										
	1 1/2 In. Rigid										
	Total BTUH Loss							1937	10		2140
	Subtotal BTUH Gain							21473			23531
	x 1.3 = Total BTUH Gain										3059



Calculated Heating Requirements 21473 BTUH Calculated Cooling Requirements 30590 BTUH
Size of Unit Chosen BTUH Size of Unit Chosen BTUH
% Oversized
% Undersized

RESIDENTIAL HEATING AND COOLING REQUIREMENTS*

Page 1

HVAC WORKSHEET FOR WATT-WISE LIVING



HEATING AND COOLING REQUIREMENTS DUE TO GLASS AREA

HVAC WORKSHEET FOR WATT-WISE LIVING		HEATING AND COOLING REQUIREMENTS DUE TO GLASS AREA					DESIGN TEMPERATURE DIFFERENCE				
							30°	35°	40°	45°	50°
							HEATING MULTIPLIER (CIRCLE ONE)				
WINDOWS & GLASS DOORS	AREA SQUARE FEET										
Glass Doors, Infiltration less than 1.0 CFM/FT											
Single Glass		50	60	70	75	85					
Double Glass		40	45	50	55	60					
Other Sliding Glass Doors											
Single Glass		75	85	100	115	125					
Double Glass		60	70	80	90	100					
Windows, Infiltration less than 0.50 CFM/FT											
Single Glass		40	50	55	60	70					
Double Glass	171	25	30	35	40	45					
Windows, Infiltration less than 0.75 CFM/FT											
Single Glass		45	50	60	65	75					
Double Glass		30	35	40	45	50					
Other Windows											
Single Glass		75	90	105	115	130					
Double Glass		60	70	80	90	105					
Fixed or Picture Windows											
Single Glass		40	50	55	60	70					
Double Glass		25	30	35	40	45					
Other											
Total BTUH Loss (Enter on Line 2, Page 2)						5985					

[illegible]

Prepared By: Harry Morel

TOTAL HEATING AND COOLING REQUIREMENTS

Page 2

For: Cory Johnson
 Name: Cory Johnson
 Address: Ch Beasley job
 City: Ch Beasley job

() Check Constr. Type	ITEM	AREA SQUARE FEET	DESIGN TEMPERATURE DIFFERENCE					HEATING (BTUH LOSS)	DESIGN TEMP		COOLING (BTUH GAIN)
			30°	35°	40°	45°	50°		90°	95°	
	Gross Wall Area	1930									
	Glass Area (From page 1)	171						5985			6870
	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	65	70	85	95	110	120	6175	10.0	13.0	845
	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	1644	2	2	3	3	4	4932	2.5	3.0	4930
	Frame, R-14 Insulation		1.5	1.7	2	2.5	3		2	2.8	
	Other										
	Ceiling under attic										
	No Insulation		DK	LT					9	7	10
	R-11 Insulation		DK	LT					2.5	2	3
	R-19 Insulation		DK	LT					1.5	1.5	2
	R-22 Insulation		DK	LT					1.5	1.0	1.5
	R-26 Insulation		DK	LT					1.3	1	1.5
	R-30 Insulation	1880	DK	LT				2444	1.1	.9	1.3
	Other										
	Floor, Concrete Slab										
	No Edge Insulation		Perimeter Ft.						0	0	
	Other										
	Subtotal							19536			1509
	People @ 300 & Appl. @ 1200										630
	Sensible BTUH Gain										2139
	Duct BTUH Loss & Gain										
	2 In. Flex. or 1 In. Rigid							1937	.10		2140
	1 1/2 In. Rigid								.075		
	Total BTUH Loss							21423			
	Subtotal BTUH Gain										2353
	x 1.3 = Total BTUH Gain										3059

Calculated Heating Requirements 21423 BTUH
 Size of Unit Chosen
 % Oversized
 % Undersized

Calculated Cooling Requirements 30590 BTU
 Size of Unit Chosen
 % Oversized
 % Undersized

Prepared By: Harry Morel

TOTAL HEATING AND COOLING REQUIREMENTS

Page 2

For: Cary Johnson
 Name: Cary Johnson
 Address: CP Beasley Job
 City: CP Beasley Job

() Check Constr. Type	ITEM	AREA SQUARE FEET	DESIGN TEMPERATURE DIFFERENCE					HEATING (BTUH LOSS)	DESIGN TEMP		COOLING MULT. (CIRCLE)	COOLING (BTUH GAIN)	
									90°	95°			
			30°	35°	40°	45°	50°						
	Gross Wall Area	1880											
	Glass Area (From page 1)	171						5985				6870	
	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	65	70	85	95	110	120	6175		10.0	13.0	845	
	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	1644	2	2	3	3	4	4932		2.5	3.0	4932	
	Frame, R-14 Insulation		1.5	1.7	2	2.5	3			2	2.8		
	Other												
	Ceiling under attic												
	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	1	1.1	1.3	1.4	1.6	2444		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							19336				1509	
	People @ 300 & Appl. @ 1200											630	
	Sensible BTUH Gain											2139	
	Duct BTUH Loss & Gain												
	2 In. Flex. or 1 In. Rigid		.10					1937		.10		2140	
	1 1/2 In. Rigid		.075							.075			
	Total BTUH Loss							21473					
	Subtotal BTUH Gain											2353	
	x 1.3 = Total BTUH Gain											3059	

Calculated Heating Requirements 21473 BTUH
 Size of Unit Chosen
 % Oversized
 % Undersized

Calculated Cooling Requirements 30590 BTU
 Size of Unit Chosen
 % Oversized
 % Undersized