Prepared By: Harry Moseley

TOTAL HEATING AND COOLING REQUIREMENTS

For:

Name: Hudson

Address: 872 SW County Road 18

City: High Springs

(√) Check Constr. Type	ITEM			AREA SQUARE FEET	DESIGN TEMPERATURE DIFFERENCE 30°	35°	40°	45°	50°	HEATING (BTUH LOSS)	DESIGN TEMP 90°	95°	COOLING MULT. (CIRCLE)		COOLING (BTUH GAIN)
	Gross Wall Area			896											
	Glass Area (From page 1)			63						3465					2150
	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			51	70	85	95	110	120	4845			10.0	13.0	663
	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				2	2	3	3	4				2.5	3.0	
	Frame, R-14 Insulation			782	1.5	1.7	2	2.5	3	1564			2	2.8	2197
	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	768	1	1.1	1.3	1.4	1.6	9944	1.1	.9	1.3	1.0	999
	Other														
	Floor, Concrete Slab			Perimeter Ft.											
	No Edge Insulation				35	40	40	45	45		0		0		
	Other														
	Subtotal									19866					5961
	People @ 300 & Appl. @ 1200														4200
	Sensible BTUH Gain														10161
	Duct BTUH Loss & Gain														
	2 In. Flex. or 1 In. Rigid				.10					0	.10				0
	1½ In. Rigid				.075						.075				
	Total BTUH Loss									19866					
	Subtotal BTUH Gain														10161
	x 1.3 = Total BTUH Gain														132093

Calculated Heating Requirements _____ BTUH

Size of Unit Chosen . . . . . _____ BTUH

% Oversized . . . . . _____

% Undersized . . . . . _____

Calculated Cooling Requirements _____ BTUH

Size of Unit Chosen . . . . . _____ BTUH

% Oversized . . . . . _____

% Undersized . . . . . _____

RESIDENTIAL HEATING AND COOLING REQUIREMENTS*

HVAC WORKSHEET FOR WATT-WISE LIVING

HEATING AND COOLING REQUIREMENTS DUE TO GLASS AREA

WINDOWS & GLASS DOORS	AREA SQUARE FEET	DESIGN TEMPERATURE DIFFERENCE 30°	35°	40°	45°	50°	HEATING (BTUH LOSS)
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							
Double Glass	63	40	50	55	60	70	3465
Windows, Infiltration less than 0.75 CFM/FT		25	30	35	40	45	
Single Glass							
Double Glass		45	50	60	65	75	
Other Windows		30	35	40	45	50	
Single Glass							
Double Glass		75	90	105	115	130	
Fixed or Picture Windows		60	70	80	90	105	
Single Glass							
Double Glass		40	50	55	60	70	
Other		25	30	35	40	45	
Total BTUH Loss (Enter on Line 2, Page 2)							

WINDOWS & GLASS DOORS	AREA SQUARE FEET	COOLING MULTIPLIER (CIRCLE) SINGLE GLASS 90° C	T	R	95° C	T	R	DOUBLE GLASS 90° C	T	R	95° C	T	R	COOLING (BTUH GAIN)
No Shading														
N		30	22	20	30	26	25	20	14	13	25	17	16	
NE & NW		60	41	36	65	45	41	50	29	24	50	32	27	
E & W		85	60	53	90	64	57	70	44	36	75	47	39	
SE & SW		75	51	45	80	55	50	60	37	30	65	40	33	
S		45	31	28	50	35	33	35	21	18	40	24	21	
Draperies or Blinds														
N	30	20	17	16	25	21	20	15	11	11	20	14	14	750
NE & NW		35	33	30	40	37	34	30	22	21	35	25	24	
E & W	18	55	48	43	55	52	47	45	32	30	50	35	33	990
SE & SW		45	39	35	50	43	39	40	26	25	40	29	28	
S	15	30	26	24	30	30	28	25	17	16	25	20	19	450
Roller Shades														
N		25	19	17	25	23	22	20	12	11	20	15	14	
NE & NW		45	36	32	50	40	37	40	26	22	45	29	25	
E & W		65	53	47	70	57	51	55	37	32	60	40	35	
SE & SW		55	44	39	60	48	44	50	32	27	50	35	30	
S		35	28	25	40	32	30	30	20	16	35	23	19	
Awnings, Porches, Etc.														
All Directions		25	22	20	30	26	25	15	14	13	20	17	16	
Other														
Total BTUH Gain (Line 2, Page 2)	63													2190