

Mechanical Heat Load Work Sheet

Room ID	Size	1 Ext Wall	2 Ext Wall	3 Ext Wall	Add Roof	(x2) Sun Wdws	(x1) Shade Wdws	(x1) Doors	(x6) Sun Sldr.	(x3) Shade Sldr.	Skylight	Load Total
	12x16	6	9	11	2							
Living	15x20	6	10	12	3							
	16x25	7	10	13	4							
	12x16	6	9	11	2							
Family	15x20	6	10	12	3							
	16x25	7	10	13	4							
	6x10	7	2	9	1							
Kitchen	9x13	7	3	10	2							
	10x15	7	3	11	3							
	9x12	1	2	3	1							
Dining	11x16	2	3	4	2							
	12x20	2	3	5	3							
Foyer												
Utility		1	2	3	1							
Bath #1		1	3	4	1							
Bath #2		1	3	4	1							
Bath #3		1	3	4	1							

RESIDENTIAL HEAT LOAD ESTIMATION (BTU/HOUR OUTPUT)

UNITS	TYPE OF DWELLING								
	SINGLE STORY			TWO STORY			SPLIT LEVEL		
	WALL AND CEILING INSULATION								
	HIGH	AVERAGE	LOW	HIGH	AVERAGE	LOW	HIGH	AVERAGE	LOW
40	32000	37000	40000						
50	39000	44000	57000						
60	44000	50000	65000	45000	52000	72000	45000	52000	70000
70	49000	57000	74000	50000	57000	79000	50000	57000	76000
80	56000	63000	81000	54000	62000	85000	54000	61000	83000
90	61000	70000	89000	59000	66000	92000	58000	66000	86000
100	66000	76000	97000	63000	71000	98000	62000	70000	94000
110	72000	83000	105000	67000	76000	103000	66000	75000	101000
120	77000	89000	112000	72000	81000	111000	70000	79000	106000
130	83000	95000	121000	76000	87000	117000	74000	84000	112000
140	89000	102000	129000	81000	92000	124000	78000	89000	119000
150	94000	108000	137000	85000	97000	130000	81000	95000	125000

HIGH INSULATION - 4" WALL / 6" CEILING AVE. INSULATION - 2" WALL / 4" CEILING LOW INSULATION - 0" WALL / 2" CEILING

SYSTEMS SHALL BE SIZED A MINIMUM 15% OVER REQUIRED

RESIDENTIAL COOLING LOAD ESTIMATION (INSTANTANIOUS RATING)

UNITS	TYPE OF DWELLING								
	SINGLE STORY			TWO STORY			SPLIT LEVEL		
	WALL AND CEILING INSULATION								
	HIGH	AVERAGE	LOW	HIGH	AVERAGE	LOW	HIGH	AVERAGE	LOW
40	20000	22000	27000						
50	23000	26000	31000						
60	27000	30000	36000	28000	33000	41000	27000	31000	41000
70	29000	33000	41000	31000	37000	46000	30000	34000	45000
80	33000	38000	45000	34000	41000	51000	34000	39000	48000
90	36000	42000	50000	37000	44000	54000	36000	42000	53000
100	39000	46000	54000	41000	48000	59000	40000	45000	56000
110	43000	51000	60000	45000	52000	63000	43000	49000	61000
120	46000	55000	64000	47000	54000	67000	46000	53000	65000
130	50000	59000	70000	51000	58000	71000	49000	56000	69000
140	53000	62000	75000	53000	62000	76000	53000	60000	73000
150	56000	67000	79000	57000	65000	81000	55000	63000	77000

HIGH INSULATION - 4" WALL / 6" CEILING

AVE. INSULATION - 2" WALL / 4" CEILING

LOW INSULATION - 0" WALL / 2" CEILING

SYSTEMS SHALL BE SIZED A MINIMUM 15% OVER REQUIRED