Project Information

For: Cross Church
Lake city, FL

		Htg	Clg			Htg	Clg
Outside db	(°F)	33	90	Inside db	(°F)	70	75
Outside RH	(%)	-	49	Inside RH	(%)	-	50
Outside wb	(°F)	-	75	Inside wb	(°F)	-	63
Daily range	(°F)	-	23	Design TD	(°F)	37	15
Moisture diff.	(gr/lb)	-	40				

Heating Equipment

Make	Rheem	
Model	RP1460AJ1NA	
Type	Split ASHP	
Efficiency	9 HSPF	
Heating Input		
Heating Output	60.0	MBtuh @ 47°F
Humidifier	21.7	gpd
Leaving Air Temp	99.1	°F
Actual Heating Fan	1883	cfm

Cooling Equipment

Make	Rheem	
Model	RP1460AJ1NA	
Type	Split ASHP	
COP / EER / SEER	14.0	
Sensible Cooling	46.8	MBtuh
Latent Cooling	13.2	MBtuh
Total Cooling	60.0	MBtuh
Leaving Air Temp	55.0	°F
Actual Cooling Fan	1883	cfm

Equipment Location	Manual N	
System Type	PEAKCV	
Fan Motor Heat Type	PACKAGE	
Fan & Motor Combined Efficiency	0	%
Static Pressure Across Fan	0	in H2O

NAME	Area ft²	Heat Loss	Sensible Gain	Latent Gain	Htg cfm	Clg cfm	Time
Church	2000	44112	46303	12612	1883	1883	Jun 1900 LDT
Manual N	2000	44112	46303	12612	1883	1883	Jun 1900 LDT

Project Information

For: Cross Church
Lake city, FL

Zone: Manual N

COOLING LOAD

1.	**DESIGN CONDITIONS**	at Jun 1900 LDT		Peak load at Jun 1900 LDT		
	Inside: 75 °F	Outside: 90 °F		TD: 15 °F		
	RH: 49 %	MoistDiff: 40.2 gr/lb		Mult: 1.0	Ins.wb	63 °F
					Sensible	Latent
2.	**SOLAR RADIATION THROUGH GLASS**				0	-
3.	**TRANSMISSION GAINS**	Sensible			10144	-
	Walls:	5510			-	-
	Glass:	0			-	-
	Doors:	342			-	-
	Partitions:	0			-	-
	Floors:	0			-	-
	Ceilings:	4291			-	-
4.	**INTERNAL HEAT GAIN**	Sensible	Latent		29566	2000
	Occupants:	4835	2000		-	-
	Lights:	23611	-		-	-
	Motors:	0	-		-	-
	Appliances:	1120	0		-	-
5.	**INFILTRATION:**	Outside air cfm:	0		0	0
6.	**SUBTOTAL:**	Space load Sensible	Latent		39710	2000
	Envelope	39710	2000		-	-
	Less external	0	-		-	-
	Redistribution	0	0		-	-
7.	**SUPPLY DUCT**				0	-
8.	**SUBTOTAL:**	Space load + supply duct			39710	-
	Actual cfm:	1883 at supply TD:	20		-	-
9.	**VENTILATION:**	Make-up air cfm:	390		6593	10612
10.	**RETURN AIR LOAD:**	Lighting + plenum (net)			0	-
11.	**RETURN DUCT**				0	-
12.	**TOTAL LOADS ON EQUIPMENT**				46303	12612

HEATING LOAD

13.	**DESIGN CONDITIONS**			Mult: 1.0	
	Inside: 70 °F	Outside: 33 °F		TD: 37 °F	
14.	**TRANSMISSION LOSSES**				16653
	Walls:	7076			-
	Glass:	0			-
	Doors:	510			-
	Partitions:	0			-
	Floors:	6551			-
	Ceilings:	2516			-
15.	**INFILTRATION:**	Outside air cfm:	90		3627
16.	**SUBTOTAL:**	Space load			20280
	Envelope	20280			-
	Less external	0			-
	Less transfer	0			-
	Redistribution	0			-
17.	**SUPPLY DUCT:**				0
18.	**VENTILATION:**	Make-up air cfm:	390		15717
19.	**HUMIDIFICATION**				8115
	Piping				0
20.	**RETURN DUCT**				0
21.	**TOTAL HEATING LOAD ON EQUIPMENT**				44112