



Project Report

General Project Information

Project Title: Smith Residence
 Designed By: Matthew Holtkamp
 Project Date: Friday, January 30, 2009
 Client Name: Tony Smith
 Client City: Flowery Branch
 Company Name: Holtkamp Heating & A/C Inc.
 Company Representative: Matthew Holtkamp
 Company Address: 4979 Bristol Industrial Way
 Company City: Buford, GA 30518
 Company Phone: 770-271-7511
 Company Comment:

Design Data

Reference City: Gainesville, Georgia
 Daily Temperature Range: Medium
 Latitude: 34 Degrees
 Elevation: 50 ft.
 Altitude Factor: 0.998
 Elevation Sensible Adj. Factor: 1.000
 Elevation Total Adj. Factor: 1.000
 Elevation Heating Adj. Factor: 1.000
 Elevation Heating Adj. Factor: 1.000

	Outdoor Dry Bulb	Outdoor Wet Bulb	Indoor Rel.Hum	Indoor Dry Bulb	Grains Difference
Winter:	21	0	50	72	46
Summer:	91	74	50	75	34

Check Figures

Total Building Supply CFM:	903	CFM Per Square ft.:	0.373
Square ft. of Room Area:	2,422	Square ft. Per Ton:	1,199
Volume (ft ³) of Cond. Space:	19,376		

Building Loads

Total Heating Required Including Ventilation Air:	34,700 Btuh	34.700 MBH
Total Sensible Gain:	18,665 Btuh	84 %
Total Latent Gain:	3,425 Btuh	16 %
Total Cooling Required Including Ventilation Air:	22,091 Btuh	2.02 Tons (Based On 77% Sensible Capacity)

Notes

Calculations are based on 8th edition of ACCA Manual J.
 All computed results are estimates as building use and weather may vary.
 Be sure to select a unit that meets both sensible and latent loads.



Load Preview Report

Scope	Has AED	Net Ton	Rec Ton	ft. ² /Ton	Area	Sen Gain	Lat Gain	Net Gain	Sen Loss	Sys Htg CFM	Sys Clg CFM	Sys Act CFM	Duct Size
Building		1.84	2.02	1,199	2,422	18,665	3,425	22,091	34,700	903	850	903	
System 1	No	1.84	2.02	1,199	2,422	18,665	3,425	22,091	34,700	903	850	903	18
Duct Latent							994	994					
Humidification									2,211				
Zone 1					1,085	8,807	1,146	9,953	15,755	438	401	438	12
1-Main Floor					1,085	8,807	1,146	9,953	15,755	438	401	438	4-6
Zone 2					1,085	7,918	744	8,662	10,706	298	361	298	10
2-2nd Floor					1,085	7,918	744	8,662	10,706	298	361	298	3-6
Zone 3					252	3,812	541	4,353	6,028	168	174	168	8
3-Rear Addition					252	3,812	541	4,353	6,028	168	174	168	2-5
<p>Sum of room airflows may be greater than system airflow because system has multiple zones.</p>													