

DATE 01/08/2007

Columbia County Building Permit**PERMIT**

This Permit Expires One Year From the Date of Issue

000025379

APPLICANT DAVID F. BLACK PHONE 386.961.0359

ADDRESS 255 SW AURORA WAY LAKE CITY FL 32025

OWNER DAVID A. LUANN BLACK PHONE 386.961.0359

ADDRESS 570 SW BLANTON LANE LAKE CITY FL 32024

CONTRACTOR DAVID & LUANN BLACK PHONE 386.961.0359

LOCATION OF PROPERTY SR 247-S TO C-242, TR TO SABRE, TR TO WEIRS DALE, TR TO BUMSTEAD, TL TO BLANTON LN, TR. 2ND DRIVEWAY

TYPE DEVELOPMENT SFD/UTILITY ESTIMATED COST OF CONSTRUCTION 132450.00

HEATED FLOOR AREA 2649.00 TOTAL AREA 3601.00 HEIGHT 20.00 STORIES 1

FOUNDATION CONC WALLS FRAMED ROOF PITCH 8/12 FLOOR CONC

LAND USE & ZONING A-3 MAX. HEIGHT 35

Minimum Set Back Requirements: STREET-FRONT 30.00 REAR 25.00 SIDE 25.00

NO. EX.D.U. 0 FLOOD ZONE XPP DEVELOPMENT PERMIT NO. _____

PARCEL ID 14-4S-15-00363-215 SUBDIVISION PINEMOUNT MEADOWS

LOT 15 BLOCK _____ PHASE _____ UNIT _____ TOTAL ACRES 5.01

Culvert Permit No. _____ Culvert Waiver _____ Contractor's License Number BLK JTH N

EXISTING 06-01106N BLK JTH N

Driveway Connection _____ Septic Tank Number _____ LU & Zoning checked by _____ Approved for Issuance _____ New Resident _____

COMMENTS: 1 FOOT ABOVE ROAD.Check # or Cash 502**FOR BUILDING & ZONING DEPARTMENT ONLY**

(footer Slab)

Temporary Power _____ Foundation _____ Monolithic _____
date/app. by _____ date/app. by _____ date/app. by _____

Under slab rough-in plumbing _____ Slab _____ Sheathing/Nailing _____
date/app. by _____ date/app. by _____ date/app. by _____

Framing _____ Rough-in plumbing above slab and below wood floor _____
date/app. by _____ date/app. by _____

Electrical rough-in _____ Heat & Air Duct _____ Peri. beam (Lintel) _____
date/app. by _____ date/app. by _____ date/app. by _____

Permanent power _____ C.O. Final _____ Culvert _____
date/app. by _____ date/app. by _____ date/app. by _____

M/H tie downs, blocking, electricity and plumbing _____ Pool _____
date/app. by _____ date/app. by _____

Reconnection _____ Pump pole _____ Utility Pole _____
date/app. by _____ date/app. by _____ date/app. by _____

M/H Pole _____ Travel Trailer _____ Re-roof _____
date/app. by _____ date/app. by _____ date/app. by _____

BUILDING PERMIT FEE \$ 665.00 CERTIFICATION FEE \$ 18.00 SURCHARGE FEE \$ 18.00

MISC. FEES \$ 0.00 ZONING CERT. FEE \$ 50.00 FIRE FEE \$ 0.00 WASTE FEE \$ _____

FLOOD DEVELOPMENT FEE \$ 25.00 FLOOD ZONE FEE \$ 25.00 CULVERT FEE \$ _____ TOTAL FEE 776.00

INSPECTORS OFFICE CH CLERKS OFFICE CH

NOTICE: IN ADDITION TO THE REQUIREMENTS OF THIS PERMIT, THERE MAY BE ADDITIONAL RESTRICTIONS APPLICABLE TO THIS PROPERTY THAT MAY BE FOUND IN THE PUBLIC RECORDS OF THIS COUNTY, AND THERE MAY BE ADDITIONAL PERMITS REQUIRED FROM OTHER GOVERNMENTAL ENTITIES SUCH AS WATER MANAGEMENT DISTRICTS, STATE AGENCIES, OR FEDERAL AGENCIES

"WARNING TO OWNER: YOUR FAILURE TO RECORD A NOTICE OF COMMENCEMENT MAY RESULT IN YOUR PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR AN ATTORNEY BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT."

This Permit Must Be Prominently Posted on Premises During Construction

PLEASE NOTIFY THE COLUMBIA COUNTY BUILDING DEPARTMENT AT LEAST 24 HOURS IN ADVANCE OF EACH INSPECTION, IN ORDER THAT IT MAY BE MADE WITHOUT DELAY OR INCONVENIENCE. PHONE 758-1008. THIS PERMIT IS NOT VALID UNLESS THE WORK AUTHORIZED BY IT IS COMMENCED WITHIN 6 MONTHS AFTER ISSUANCE.

The Issuance of this Permit Does Not Waive Compliance by Permittee with Deed Restrictions.

Columbia County Building Permit Application

For Office Use Only Application # 0612-29 Date Received 12/29 By JW Permit # 25379
Application Approved by - Zoning Official BLK Date 05.01.07 Plans Examiner OK JTH Date 1-8-7
Flood Zone X Flood Development Permit N/A Zoning A-3 Land Use Plan Map Category A-3
Comments CK# 502

☒ NOC ☒ EH ☒ Deed or PA ☒ Site Plan ☒ State Road Info ☐ Parent Parcel # ☐ Development Permit

Name Authorized Person Signing Permit DAVID F. BLACK Fax _____
Address 255 SW AURORA WAY LAKE CITY FL 32025 Phone 386-961-0359
CALL 678-427-0870

Owners Name DAVID F. BLACK Phone _____

911 Address 570 SW BLANTON LN, LAKE CITY FL 32024

Contractors Name DAVID F. BLACK Phone _____

Address 255 SW AURORA WAY, LAKE CITY FL 32025

Fee Simple Owner Name & Address _____

Bonding Co. Name & Address N/A

Architect/Engineer Name & Address MARK DISNEY PO BOX 868, LAKE CITY, FL 32050

Mortgage Lenders Name & Address CAMPUS USA, 183 BACON HAVENS, LAKE CITY FL 32055

Circle the correct power company - FL Power & Light - Clay Elec. - Suwannee Valley Elec. - Progressive Energy

Property ID Number 14 45 15 00363-215 Estimated Cost of Construction \$ 225,000

Subdivision Name PINEMOUNT MEADOWS Lot 15 Block _____ Unit _____ Phase _____

Driving Directions 247 SOUTH TO 242 WEST (R) TO SABLE RD

M/R, 1 MILE M/R ONTO WEIRDALE, NEXT M/L ONTO

BUMSTEAD, M/R ONTO BLANTON LANE, 2ND DRIVEWAY.

Type of Construction 1 STORY HOME Number of Existing Dwellings on Property 0

Total Acreage 5.01 Lot Size _____ Do you need a - Culvert Permit or Culvert Waiver or Have an Existing Drive

Actual Distance of Structure from Property Lines - Front 200 Side 150 Side 100 Rear 450

Total Building Height 20' Number of Stories 1 Heated Floor Area 2600 Roof Pitch 8/12

Application is hereby made to obtain a permit to do work and installations as indicated. I certify that no work or installation has commenced prior to the issuance of a permit and that all work be performed to meet the standards of all laws regulating construction in this jurisdiction.

OWNERS AFFIDAVIT: I hereby certify that all the foregoing information is accurate and all work will be done in compliance with all applicable laws and regulating construction and zoning.

WARNING TO OWNER: YOUR FAILURE TO RECORD A NOTICE OF COMMENCEMENT MAY RESULT IN YOU PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR ATTORNEY BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT.

Owner Builder or Authorized Person by Notarized Letter _____

STATE OF FLORIDA
COUNTY OF COLUMBIA

Sworn to (or affirmed) and subscribed before me
this 22 day of December 2006

Personally known _____ or Produced Identification ☒

Contractor Signature _____

Contractors License Number _____

Competency Card Number _____

NOTARY STAMP/SEAL
MY COMMISSION # 0048682
EXPIRES: December 6, 2009
Bonded Thru Notary Public Underwriters

Notary Signature _____

NOTICE OF COMMENCEMENT FORM
COLUMBIA COUNTY, FLORIDA

*****THIS DOCUMENT MUST BE RECORDED AT THE COUNTY
CLERKS OFFICE BEFORE YOUR FIRST INSPECTION.*****

THE UNDERSIGNED hereby gives notice that improvement will be made to certain real property, and in accordance with Chapter 713, Florida Statutes, the following information is provided in this Notice of Commencement.

Tax Parcel ID Number 14 4S 15 60363-215

PERMIT NUMBER _____

1. Description of property: (legal description of the property and street address or 911 address)
570 SW BLANTON LN, LAKE CITY, FL 32024
2. General description of improvement: NEW 1 STORY 2,600 HOME
3. Owner Name & Address DAVID & LOUANN BLACK - CURRENT ADDRESS
255 SW AURORA WAY, LAKE CITY 32025 Interest in Property OWNER
4. Name & Address of Fee Simple Owner (if other than owner): _____
5. Contractor Name DAVID F. BLACK Phone Number 386-961-0359
Address 255 SW AURORA WAY, LAKE CITY, FL 32025
6. Surety Holders Name NONE Phone Number _____
Address _____ Amount of Bond _____
7. Lender Name CAMPUS USA Phone Number 386-754-9088 x10205
Address 193 SW BASCOM NORRIS, SUITE 105, LAKE CITY, FL 32025
8. Persons within the State of Florida designated by the Owner upon whom notices or other documents may be served as provided by section 718.13 (1)(a) 7; Florida Statutes:
Name _____ Phone Number _____
Address _____
9. In addition to himself/herself the owner designates _____
_____ to receive a copy of the Lienor's Notice as provided in Section 713.13 (1) -
(a) 7. Phone Number of the designee _____
10. Expiration date of the Notice of Commencement (the expiration date is 1 (one) year from the date of recording,
(Unless a different date is specified) _____

NOTICE AS PER CHAPTER 713, Florida Statutes:

The owner must sign the notice of commencement and no one else may be permitted to sign in his/her stead.

Sworn to (or affirmed) and subscribed before
day of 22 December, 2006

NOTARY STAMP/SEAL



Nicole Storer
Signature of Notary

@ CAM112M01 S CamaUSA Appraisal System
 12/29/2006 9:29 Legal Description Maintenance
 Year T Property Sel
 2007 R 14-4S-15-00363-215

Columbia County
 42500 Land 001
 AG 000
 Bldg 000
 Xfea 000
 42500 TOTAL B*

BLACK DAVID & LUANN

1	LOT 15 PINEMOUNT MEADOWS S/D . . AFD 1030-1132,, WD 1104-1921 . . .	2
3	WD 1104-1922	4
5	. . . . .	6
7	. . . . .	8
9	. . . . .	10
11	. . . . .	12
13	. . . . .	14
15	. . . . .	16
17	. . . . .	18
19	. . . . .	20
21	. . . . .	22
23	. . . . .	24
25	. . . . .	26
27	. . . . .	28

Mnt 12/27/2006 THRESA

F1=Task F3=Exit F4=Prompt F10=GoTo PgUp/PgDn F24=More



STATE OF FLORIDA
DEPARTMENT OF HEALTH

APPLICATION FOR ONSITE SEWAGE DISPOSAL SYSTEM CONSTRUCTION PERMIT

Permit Application Number 06-01106011

PART II - SITE PLAN

Scale: Each block represents 5 feet and 1 inch = 50 feet.

See Attached

Notes:

Site Plan submitted by: DJRC

Signature

Dwyer

Title

Plan Approved ☒

Not Approved ☐

Date 12/24/06

by Ma om Columbia County Health Department

ALL CHANGES MUST BE APPROVED BY THE COUNTY HEALTH DEPARTMENT

337.65'

* SITE PLAN *

SCALE : 1" = 40'-0"

PINE MOUNT HEIGHTS
LOT #15

FOR
DAVID & LOUANN BLACK
570 SW BLANTON LANE
LAKE CITY, FLORIDA 32024



356'

WORKSHOP

SEPTIC

75'

SEPTIC TANK AND
DRAINFIELD

2,647 SF
4 BR / 2 1/2 BATH
NEW

NEW
1-STORY
FRAME/SIDING
RESIDENCE

50' x 113'

POTABLE
WATER

WELL

CULVERT & SWALE

20' UTILITY
EASEMENT

JABLL
12/15/06

NOTORIZED DISCLOSURE STATEMENT

FOR OWNER/BUILDER WHEN ACTING AS THEIR OWN CONTRACTOR AND CLAIMING EXEMPTION OF CONTRACTOR LICENSING REQUIREMENTS IN ACCORDANCE WITH FLORIDA STATUTES, ss. 489.103(7).

State law requires construction to be done by licensed contractors. You have applied for a permit under an exemption to that law. The exemption allows you, as the owner of your property, to act as your own contractor with certain restrictions even though you do not have a license. You must provide direct, onsite supervision of the construction yourself. You may build or improve a one-family or two-family residence or a farm outbuilding. You may also build or improve a commercial building, provided your costs do not exceed \$75,000. The building or residence must be for your own use or occupancy. It may not be built or substantially improved for sale or lease. If you sell or lease a building you have built or substantially improved yourself within 1 year after the construction is complete, the law will presume that you built or substantially improved it for sale or lease, which is a violation of this exemption. You may not hire an unlicensed person to act as your contractor or to supervise people working on your building. It is your responsibility to make sure that people employed by you have licenses required by state law and by county or municipal licensing ordinances. You may not delegate the responsibility for supervising work to a licensed contractor who is not licensed to perform the work being done. Any person working on your building who is not licensed must work under your direct supervision and must be employed by you, which means that you must deduct F.I.C.A. and withholding tax and provide workers' compensation for that employee, all as prescribed by law. Your construction must comply with all applicable laws, ordinances, building codes, and zoning regulations.

TYPE OF CONSTRUCTION

☒ Single Family Dwelling
☐ Farm Outbuilding

☐ Two-Family Residence
☐ Other _____

NEW CONSTRUCTION OR IMPROVEMENT

☒ New Construction

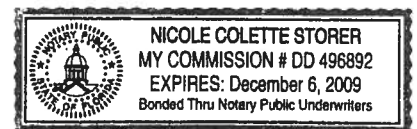
☐ Addition, Alteration, Modification or other Improvement

I DAVID F. BLACK, have been advised of the above disclosure statement for exemption from contractor licensing as an owner/builder. I agree to comply with all requirements provided for in Florida Statutes ss.489.103(7) allowing this exception for the construction permitted by Columbia County Building Permit Number _____

[Signature] 12/22/06
Owner Builder Signature Date

The above signer is personally known to me or produced identification FL Drivers

Notary Signature [Signature] Date 12-22-06



(Stamp / Seal)

FOR BUILDING USE ONLY

I hereby certify that the above listed owner/builder has been notified of the disclosure statement in Florida Statutes ss 489.103(7).

Date _____ Building Official/Representative _____

AKA
0612-79

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Community Affairs
Residential Whole Building Performance Method A

Project Name:	612077aBlack,David&Louann	Builder:	
Address:		Permitting Office:	Columbia
City, State:	, FL	Permit Number:	
Owner:	Black, David & Louann	Jurisdiction Number:	221000
Climate Zone:	North		

1. New construction or existing	New	12. Cooling systems	
2. Single family or multi-family	Single family	a. Central Unit	Cap: 58.0 kBtu/hr
3. Number of units, if multi-family	1		SEER: 13.00
4. Number of Bedrooms	4	b. N/A	
5. Is this a worst case?	Yes	c. N/A	
6. Conditioned floor area (ft²)	2649 ft²	13. Heating systems	
7. Glass type ¹ and area: (Label reqd. by 13-104.4.5 if not default)		a. Electric Heat Pump	Cap: 58.0 kBtu/hr
a. U-factor:	Description Area		HSPF: 7.90
(or Single or Double DEFAULT) 7a. (Dble Default) 439.0 ft²		b. N/A	
b. SHGC:	7b. (Clear) 439.0 ft²	c. N/A	
(or Clear or Tint DEFAULT)		14. Hot water systems	
8. Floor types		a. Electric Resistance	Cap: 40.0 gallons
a. Slab-On-Grade Edge Insulation	R=0.0, 278.0(p) ft		EF: 0.93
b. N/A		b. N/A	
c. N/A		c. Conservation credits	
9. Wall types		(HR-Heat recovery, Solar	
a. Frame, Wood, Exterior	R=13.0, 1801.0 ft²	DHP-Dedicated heat pump)	
b. Frame, Wood, Adjacent	R=13.0, 450.0 ft²	15. HVAC credits	
c. N/A		(CF-Ceiling fan, CV-Cross ventilation,	
d. N/A		HF-Whole house fan,	
e. N/A		PT-Programmable Thermostat,	
10. Ceiling types		MZ-C-Multizone cooling,	
a. Under Attic	R=30.0, 2805.0 ft²	MZ-H-Multizone heating)	
b. N/A			
c. N/A			
11. Ducts			
a. Sup: Unc. Ret: Unc. AH: Interior	Sup. R=6.0, 240.0 ft		
b. N/A			

Glass/Floor Area: 0.17

Total as-built points: 35280

Total base points: 38754

PASS

I hereby certify that the plans and specifications covered by this calculation are in compliance with the Florida Energy Code.

PREPARED BY: [Signature]DATE: 1-3-07

I hereby certify that this building, as designed, is in compliance with the Florida Energy Code.

OWNER/AGENT: _____

DATE: _____

Review of the plans and specifications covered by this calculation indicates compliance with the Florida Energy Code. Before construction is completed this building will be inspected for compliance with Section 553.908 Florida Statutes.

BUILDING OFFICIAL: _____

DATE: _____



¹ Predominant glass type. For actual glass type and areas, see Summer & Winter Glass output on pages 2&4.

SUMMER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: , , FL,	PERMIT #:
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BASE				AS-BUILT							
GLASS TYPES .18 X Conditioned X BSPM = Points Floor Area											
				Type/SC	Overhang Ornt Len Hgt			Area X SPM X SOF = Points			
.18	2649.0	20.04	9555.5	Double, Clear	W	1.5	8.0	144.0	38.52	0.96	5315.0
				Double, Clear	W	8.0	8.0	54.0	38.52	0.53	1103.3
				Double, Clear	SW	8.0	7.0	10.0	40.16	0.46	185.6
				Double, Clear	S	21.0	8.0	18.0	35.87	0.43	280.8
				Double, Clear	S	1.5	8.0	20.0	35.87	0.92	662.3
				Double, Clear	S	1.5	3.5	9.0	35.87	0.70	227.1
				Double, Clear	W	1.5	6.0	16.0	38.52	0.91	563.0
				Double, Clear	N	1.5	6.0	16.0	19.20	0.94	288.4
				Double, Clear	E	1.5	5.0	6.0	42.06	0.87	220.7
				Double, Clear	E	8.0	8.0	72.0	42.06	0.52	1568.3
				Double, Clear	E	8.0	8.7	20.0	42.06	0.54	451.8
				Double, Clear	E	1.5	8.0	36.0	42.06	0.96	1450.0
				Double, Clear	S	1.5	3.5	18.0	35.87	0.70	454.2
				As-Built Total:			439.0			12770.4	
WALL TYPES Area X BSPM = Points				Type		R-Value		Area X SPM		= Points	
Adjacent	450.0	0.70	315.0	Frame, Wood, Exterior		13.0		1801.0	1.50	2701.5	
Exterior	1801.0	1.70	3061.7	Frame, Wood, Adjacent		13.0		450.0	0.60	270.0	
Base Total:		2251.0	3376.7	As-Built Total:				2251.0		2971.5	
DOOR TYPES Area X BSPM = Points				Type				Area X SPM		= Points	
Adjacent	20.0	1.60	32.0	Exterior Insulated				30.0	4.10	123.0	
Exterior	70.0	4.10	287.0	Exterior Insulated				40.0	4.10	164.0	
				Adjacent Insulated				20.0	1.60	32.0	
Base Total:		90.0	319.0	As-Built Total:				90.0		319.0	
CEILING TYPES Area X BSPM = Points				Type		R-Value		Area X SPM X SCM		= Points	
Under Attic	2649.0	1.73	4582.8	Under Attic		30.0		2805.0	1.73 X 1.00	4852.6	
Base Total:		2649.0	4582.8	As-Built Total:				2805.0		4852.6	
FLOOR TYPES Area X BSPM = Points				Type		R-Value		Area X SPM		= Points	
Slab	278.0(p)	-37.0	-10286.0	Slab-On-Grade Edge Insulation		0.0		278.0(p)	-41.20	-11453.6	
Raised	0.0	0.00	0.0								
Base Total:			-10286.0	As-Built Total:				278.0		-11453.6	

SUMMER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: , , FL,

PERMIT #:

BASE				AS-BUILT			
INFILTRATION Area X BSPM = Points				Area X SPM = Points			
2649.0 10.21 27046.3				2649.0 10.21 27046.3			
Summer Base Points: 34594.2				Summer As-Built Points: 36506.2			
Total Summer X System = Cooling Points Multiplier Points				Total X Cap X Duct X System X Credit = Cooling Component Ratio Multiplier Multiplier Multiplier Points (System - Points) (DM x DSM x AHU)			
34594.2 0.4266 14757.9				(sys 1: Central Unit 58000 btuh ,SEER/EFF(13.0) Ducts:Unc(S),Unc(R),Int(AH),R6.0(INS) 36506 1.00 (1.09 x 1.147 x 0.91) 0.263 1.000 10904.1 36506.2 1.00 1.138 0.263 1.000 10904.1			

WINTER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: , , FL,

PERMIT #:

BASE				AS-BUILT							
GLASS TYPES .18 X Conditioned X BWPM = Points Floor Area				Overhang Type/SC Ornt Len Hgt Area X WPM X WOF = Points							
.18	2649.0	12.74	6074.7	Double, Clear	W	1.5	8.0	144.0	20.73	1.01	3018.1
				Double, Clear	W	8.0	8.0	54.0	20.73	1.17	1306.0
				Double, Clear	SW	8.0	7.0	10.0	16.74	1.68	281.3
				Double, Clear	S	21.0	8.0	18.0	13.30	3.64	870.3
				Double, Clear	S	1.5	8.0	20.0	13.30	1.04	276.9
				Double, Clear	S	1.5	3.5	9.0	13.30	1.47	175.5
				Double, Clear	W	1.5	6.0	16.0	20.73	1.02	339.4
				Double, Clear	N	1.5	6.0	16.0	24.58	1.00	394.2
				Double, Clear	E	1.5	5.0	6.0	18.79	1.05	118.4
				Double, Clear	E	8.0	8.0	72.0	18.79	1.29	1739.6
				Double, Clear	E	8.0	8.7	20.0	18.79	1.26	475.3
				Double, Clear	E	1.5	8.0	36.0	18.79	1.02	690.0
				Double, Clear	S	1.5	3.5	18.0	13.30	1.47	351.0
				As-Built Total: 439.0 10036.1							
WALL TYPES Area X BWPM = Points				Type R-Value Area X WPM = Points							
Adjacent	450.0	3.60	1620.0	Frame, Wood, Exterior			13.0	1801.0	3.40		6123.4
Exterior	1801.0	3.70	6663.7	Frame, Wood, Adjacent			13.0	450.0	3.30		1485.0
Base Total: 2251.0 8283.7				As-Built Total: 2251.0 7608.4							
DOOR TYPES Area X BWPM = Points				Type Area X WPM = Points							
Adjacent	20.0	8.00	160.0	Exterior Insulated				30.0	8.40		252.0
Exterior	70.0	8.40	588.0	Exterior Insulated				40.0	8.40		336.0
				Adjacent Insulated				20.0	8.00		160.0
Base Total: 90.0 748.0				As-Built Total: 90.0 748.0							
CEILING TYPESArea X BWPM = Points				Type R-Value Area X WPM X WCM = Points							
Under Attic	2649.0	2.05	5430.4	Under Attic			30.0	2805.0	2.05 X 1.00		5750.3
Base Total: 2649.0 5430.4				As-Built Total: 2805.0 5750.3							
FLOOR TYPES Area X BWPM = Points				Type R-Value Area X WPM = Points							
Slab	278.0(p)	8.9	2474.2	Slab-On-Grade Edge Insulation			0.0	278.0(p)	18.80		5226.4
Raised	0.0	0.00	0.0								
Base Total: 2474.2				As-Built Total: 278.0 5226.4							

WINTER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: , , FL,

PERMIT #:

BASE				AS-BUILT			
INFILTRATION Area X BWPM = Points				Area X WPM = Points			
2649.0	-0.59	-1562.9		2649.0	-0.59	-1562.9	
Winter Base Points:		21448.1		Winter As-Built Points:		27806.2	
Total Winter Points	X System Multiplier	= Heating Points		Total Component (System - Points)	X Cap Ratio (DM x DSM x AHU)	X Duct Multiplier	X System Multiplier X Credit Multiplier = Heating Points
21448.1	0.6274	13456.6		(sys 1: Electric Heat Pump 58000 btuh ,EFF(7.9) Ducts:Unc(S),Unc(R),Int(AH),R6.0 27806.2 1.000 (1.069 x 1.169 x 0.93) 0.432 1.000 13949.0	1.00	1.162	0.432 1.000 13949.0

WATER HEATING & CODE COMPLIANCE STATUS

Residential Whole Building Performance Method A - Details

ADDRESS: , , FL,

PERMIT #:

BASE					AS-BUILT					
WATER HEATING										
Number of Bedrooms	X	Multiplier	=	Total	Tank Volume	EF	Number of Bedrooms	X	Tank X Ratio	Credit = Total Multiplier
4		2635.00		10540.0	40.0	0.93	4		1.00	2606.67
					As-Built Total:					10426.7

CODE COMPLIANCE STATUS

BASE							AS-BUILT						
Cooling Points	+	Heating Points	+	Hot Water Points	=	Total Points	Cooling Points	+	Heating Points	+	Hot Water Points	=	Total Points
14758		13457		10540		38754	10904		13949		10427		35280

PASS

Code Compliance Checklist

Residential Whole Building Performance Method A - Details

ADDRESS: , , FL,

PERMIT #:

6A-21 INFILTRATION REDUCTION COMPLIANCE CHECKLIST

COMPONENTS	SECTION	REQUIREMENTS FOR EACH PRACTICE	CHECK
Exterior Windows & Doors	606.1.ABC.1.1	Maximum: .3 cfm/sq.ft. window area; .5 cfm/sq.ft. door area.	
Exterior & Adjacent Walls	606.1.ABC.1.2.1	Caulk, gasket, weatherstrip or seal between: windows/doors & frames, surrounding wall; foundation & wall sole or sill plate; joints between exterior wall panels at corners; utility penetrations; between wall panels & top/bottom plates; between walls and floor. EXCEPTION: Frame walls where a continuous infiltration barrier is installed that extends from, and is sealed to, the foundation to the top plate.	
Floors	606.1.ABC.1.2.2	Penetrations/openings >1/8" sealed unless backed by truss or joint members. EXCEPTION: Frame floors where a continuous infiltration barrier is installed that is sealed to the perimeter, penetrations and seams.	
Ceilings	606.1.ABC.1.2.3	Between walls & ceilings; penetrations of ceiling plane of top floor; around shafts, chases, soffits, chimneys, cabinets sealed to continuous air barrier; gaps in gyp board & top plate; attic access. EXCEPTION: Frame ceilings where a continuous infiltration barrier is installed that is sealed at the perimeter, at penetrations and seams.	
Recessed Lighting Fixtures	606.1.ABC.1.2.4	Type IC rated with no penetrations, sealed; or Type IC or non-IC rated, installed inside a sealed box with 1/2" clearance & 3" from insulation; or Type IC rated with < 2.0 cfm from conditioned space, tested.	
Multi-story Houses	606.1.ABC.1.2.5	Air barrier on perimeter of floor cavity between floors.	
Additional Infiltration reqts	606.1.ABC.1.3	Exhaust fans vented to outdoors, dampers; combustion space heaters comply with NFPA, have combustion air.	

6A-22 OTHER PRESCRIPTIVE MEASURES (must be met or exceeded by all residences.)

COMPONENTS	SECTION	REQUIREMENTS	CHECK
Water Heaters	612.1	Comply with efficiency requirements in Table 612.1.ABC.3.2. Switch or clearly marked circuit breaker (electric) or cutoff (gas) must be provided. External or built-in heat trap required.	
Swimming Pools & Spas	612.1	Spas & heated pools must have covers (except solar heated). Non-commercial pools must have a pump timer. Gas spa & pool heaters must have a minimum thermal efficiency of 78%.	
Shower heads	612.1	Water flow must be restricted to no more than 2.5 gallons per minute at 80 PSIG.	
Air Distribution Systems	610.1	All ducts, fittings, mechanical equipment and plenum chambers shall be mechanically attached, sealed, insulated, and installed in accordance with the criteria of Section 610. Ducts in unconditioned attics: R-6 min. insulation.	
HVAC Controls	607.1	Separate readily accessible manual or automatic thermostat for each system.	
Insulation	604.1, 602.1	Ceilings-Min. R-19. Common walls-Frame R-11 or CBS R-3 both sides. Common ceiling & floors R-11.	

ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE SCORE* = 84.7

The higher the score, the more efficient the home.

Black, David & Louann, , , FL,

1. New construction or existing	New	12. Cooling systems	
2. Single family or multi-family	Single family	a. Central Unit	Cap: 58.0 kBtu/hr
3. Number of units, if multi-family	1		SEER: 13.00
4. Number of Bedrooms	4	b. N/A	
5. Is this a worst case?	Yes	c. N/A	
6. Conditioned floor area (ft ²)	2649 ft ²		
7. Glass type ¹ and area: (Label reqd. by 13-104.4.5 if not default)		13. Heating systems	
a. U-factor:	Description Area	a. Electric Heat Pump	Cap: 58.0 kBtu/hr
(or Single or Double DEFAULT)	7a. (Dble Default) 439.0 ft ²		HSPF: 7.90
b. SHGC:		b. N/A	
(or Clear or Tint DEFAULT)	7b. (Clear) 439.0 ft ²	c. N/A	
8. Floor types			
a. Slab-On-Grade Edge Insulation	R=0.0, 278.0(p) ft	14. Hot water systems	
b. N/A		a. Electric Resistance	Cap: 40.0 gallons
c. N/A			EF: 0.93
9. Wall types		b. N/A	
a. Frame, Wood, Exterior	R=13.0, 1801.0 ft ²	c. Conservation credits	
b. Frame, Wood, Adjacent	R=13.0, 450.0 ft ²	(HR-Heat recovery, Solar	
c. N/A		DHP-Dedicated heat pump)	
d. N/A		15. HVAC credits	
e. N/A		(CF-Ceiling fan, CV-Cross ventilation,	
10. Ceiling types		HF-Whole house fan,	
a. Under Attic	R=30.0, 2805.0 ft ²	PT-Programmable Thermostat,	
b. N/A		MZ-C-Multizone cooling,	
c. N/A		MZ-H-Multizone heating)	
11. Ducts			
a. Sup: Unc. Ret: Unc. AH: Interior	Sup. R=6.0, 240.0 ft		
b. N/A			

I certify that this home has complied with the Florida Energy Efficiency Code For Building Construction through the above energy saving features which will be installed (or exceeded) in this home before final inspection. Otherwise, a new EPL Display Card will be completed based on installed Code compliant features.

Builder Signature: _____ Date: _____

Address of New Home: _____ City/FL Zip: _____



**NOTE: The home's estimated energy performance score is only available through the FLA/RES computer program. This is not a Building Energy Rating. If your score is 80 or greater (or 86 for a US EPA/DOE EnergyStarTM designation), your home may qualify for energy efficiency mortgage (EEM) incentives if you obtain a Florida Energy Gauge Rating. Contact the Energy Gauge Hotline at 321/638-1492 or see the Energy Gauge web site at www.fsec.ucf.edu for information and a list of certified Raters. For information about Florida's Energy Efficiency Code For Building Construction, contact the Department of Community Affairs at 850/487-1824.*

¹ Predominant glass type. For actual glass type and areas, see Summer & Winter Glass output on pages 2&4.
EnergyGauge[®] (Version: FLR2PB v4.1)

PRODUCT APPROVAL SPECIFICATION SHEET

As required by Florida Statute 553.842 and Florida Administrative Code 9B-72, please provide the information and approval numbers on the building components listed below if they will be utilized on the construction project for which you are applying for a building permit. We recommend you contact your local product supplier should you not know the product approval number for any of the applicable listed products. Statewide approved products are listed online @ www.floridabuilding.org

Category/Subcategory	Manufacturer	Product Description	Approval Number(s)
1. EXTERIOR DOORS			
A. SWINGING			
B. SLIDING			
C. SECTIONAL/ROLL UP			
D. OTHER			
2. WINDOWS			
A. SINGLE/DOUBLE HUNG			
B. HORIZONTAL SLIDER			
C. CASEMENT			
D. FIXED			
E. MULLION			
F. SKYLIGHTS			
G. OTHER			
3. PANEL WALL			
A. SIDING			
B. SOFFITS			
C. STOREFRONTS			
D. GLASS BLOCK			
E. OTHER			
4. ROOFING PRODUCTS			
A. ASPHALT SHINGLES			
B. NON-STRUCT METAL			
C. ROOFING TILES			
D. SINGLE PLY ROOF			
E. OTHER			
5. STRUCT COMPONENTS			
A. WOOD CONNECTORS			
B. WOOD ANCHORS			
C. TRUSS PLATES			
D. INSULATION FORMS			
E. LINTELS			
F. OTHERS			
6. NEW EXTERIOR ENVELOPE PRODUCTS			
A.			

The products listed below did not demonstrate product approval at plan review. I understand that at the time of inspection of these products, the following information must be available to the inspector on the jobsite; 1) copy of the product approval, 2) performance characteristics which the product was tested and certified to comply with, 3) copy of the applicable manufacturers installation requirements. Further, I understand these products may have to be removed if approval cannot be demonstrated during inspection.


APPLICANT SIGNATURE

12.29.2006
DATE

Residential System Sizing Calculation

Summary

Black, David & Louann
, FL

Project Title:
612077aBlack,David&Louann

Class 3 Rating
Registration No. 0
Climate: North

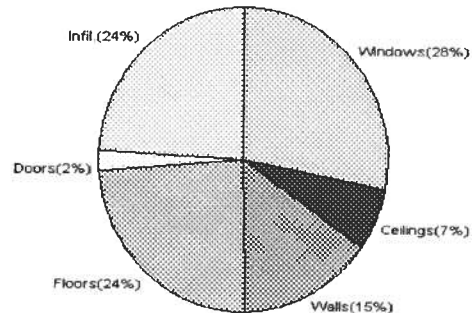
1/3/2007

Location for weather data: Gainesville - Defaults: Latitude(29) Altitude(152 ft.) Temp Range(M)			
Humidity data: Interior RH (50%) Outdoor wet bulb (77F) Humidity difference(54gr.)			
Winter design temperature	33 F	Summer design temperature	92 F
Winter setpoint	70 F	Summer setpoint	75 F
Winter temperature difference	37 F	Summer temperature difference	17 F
Total heating load calculation	49935 Btuh	Total cooling load calculation	44111 Btuh
Submitted heating capacity	% of calc Btuh	Submitted cooling capacity	% of calc Btuh
Total (Electric Heat Pump)	116.2 58000	Sensible (SHR = 0.75)	117.5 43500
Heat Pump + Auxiliary(0.0kW)	116.2 58000	Latent	204.6 14500
		Total (Electric Heat Pump)	131.5 58000

WINTER CALCULATIONS

Winter Heating Load (for 2649 sqft)

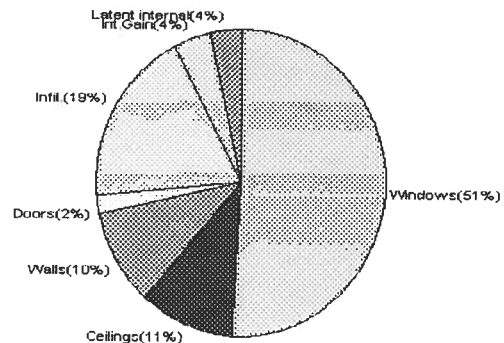
Load component		Load	
Window total	439 sqft	14131	Btuh
Wall total	2251 sqft	7392	Btuh
Door total	90 sqft	1166	Btuh
Ceiling total	2805 sqft	3305	Btuh
Floor total	278 sqft	12137	Btuh
Infiltration	291 cfm	11803	Btuh
Duct loss		0	Btuh
Subtotal		49935	Btuh
Ventilation	0 cfm	0	Btuh
TOTAL HEAT LOSS		49935	Btuh



SUMMER CALCULATIONS

Summer Cooling Load (for 2649 sqft)

Load component		Load	
Window total	439 sqft	22429	Btuh
Wall total	2251 sqft	4436	Btuh
Door total	90 sqft	882	Btuh
Ceiling total	2805 sqft	4645	Btuh
Floor total		0	Btuh
Infiltration	150 cfm	2794	Btuh
Internal gain		1840	Btuh
Duct gain		0	Btuh
Sens. Ventilation	0 cfm	0	Btuh
Total sensible gain		37026	Btuh
Latent gain(ducts)		0	Btuh
Latent gain(infiltration)		5486	Btuh
Latent gain(ventilation)		0	Btuh
Latent gain(internal/occupants/other)		1600	Btuh
Total latent gain		7086	Btuh
TOTAL HEAT GAIN		44111	Btuh



For Florida residences only

EnergyGauge® System Sizing

PREPARED BY: *Ben [Signature]*
DATE: 1-3-07

System Sizing Calculations - Winter

Residential Load - Whole House Component Details

Black, David & Louann

Project Title:

612077aBlack,David&Louann

Class 3 Rating

Registration No. 0

Climate: North

, FL

Reference City: Gainesville (Defaults) Winter Temperature Difference: 37.0 F

1/3/2007

This calculation is for Worst Case. The house has been rotated 315 degrees.

Component Loads for Whole House

Window	Panes/SHGC/Frame/U	Orientation	Area(sqft)	X	HTM=	Load
1	2, Clear, Metal, 0.87	NW	144.0		32.2	4635 Btuh
2	2, Clear, Metal, 0.87	NW	54.0		32.2	1738 Btuh
3	2, Clear, Metal, 0.87	W	10.0		32.2	322 Btuh
4	2, Clear, Metal, 0.87	SW	18.0		32.2	579 Btuh
5	2, Clear, Metal, 0.87	SW	20.0		32.2	644 Btuh
6	2, Clear, Metal, 0.87	SW	9.0		32.2	290 Btuh
7	2, Clear, Metal, 0.87	NW	16.0		32.2	515 Btuh
8	2, Clear, Metal, 0.87	NE	16.0		32.2	515 Btuh
9	2, Clear, Metal, 0.87	SE	6.0		32.2	193 Btuh
10	2, Clear, Metal, 0.87	SE	72.0		32.2	2318 Btuh
11	2, Clear, Metal, 0.87	SE	20.0		32.2	644 Btuh
12	2, Clear, Metal, 0.87	SE	36.0		32.2	1159 Btuh
13	2, Clear, Metal, 0.87	SW	18.0		32.2	579 Btuh
Window Total			439(sqft)			14131 Btuh
Walls	Type	R-Value	Area	X	HTM=	Load
1	Frame - Wood - Ext(0.09)	13.0	1801		3.3	5915 Btuh
2	Frame - Wood - Adj(0.09)	13.0	450		3.3	1478 Btuh
Wall Total			2251			7392 Btuh
Doors	Type		Area	X	HTM=	Load
1	Insulated - Adjacent		20		12.9	259 Btuh
2	Insulated - Exterior		40		12.9	518 Btuh
3	Insulated - Exterior		30		12.9	388 Btuh
Door Total			90			1166Btuh
Ceilings	Type/Color/Surface	R-Value	Area	X	HTM=	Load
1	Vented Attic/D/Shin)	30.0	2805		1.2	3305 Btuh
Ceiling Total			2805			3305Btuh
Floors	Type	R-Value	Size	X	HTM=	Load
1	Slab On Grade	0	278.0	ft(p)	43.7	12137 Btuh
Floor Total			278			12137 Btuh
Zone Envelope Subtotal:						38132 Btuh
Infiltration	Type	ACH X	Zone Volume	CFM=		
	Natural	0.66	26490	291.4		11803 Btuh
Ductload	Average sealed, R6.0, Supply(Attic), Return(Attic) (DLM of 0.00)					0 Btuh
Zone #1	Sensible Zone Subtotal					49935 Btuh

Manual J Winter Calculations

Residential Load - Component Details (continued)

Black, David & Louann

Project Title:

Class 3 Rating

612077aBlack,David&Louann

Registration No. 0

Climate: North

1/3/2007

WHOLE HOUSE TOTALS

	Subtotal Sensible Ventilation Sensible Total Btuh Loss	49935 Btuh 0 Btuh 49935 Btuh
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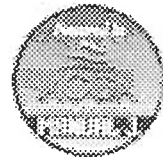
Key: Window types (SHGC - Shading coefficient of glass as SHGC numerical value or as clear or tint)

(Frame types - metal, wood or insulated metal)

(U - Window U-Factor or 'DEF' for default)

(HTM - ManualJ Heat Transfer Multiplier)

Key: Floor size (perimeter(p) for slab-on-grade or area for all other floor types)



For Florida residences only

System Sizing Calculations - Winter

Residential Load - Room by Room Component Details

Black, David & Louann

Project Title:

612077aBlack,David&Louann

Class 3 Rating

Registration No. 0

Climate: North

, FL

Reference City: Gainesville (Defaults) Winter Temperature Difference: 37.0 F

1/3/2007

This calculation is for Worst Case. The house has been rotated 315 degrees.

Component Loads for Zone #1: Main

Window	Panes/SHGC/Frame/U	Orientation	Area(sqft)	X	HTM=	Load
1	2, Clear, Metal, 0.87	NW	144.0		32.2	4635 Btuh
2	2, Clear, Metal, 0.87	NW	54.0		32.2	1738 Btuh
3	2, Clear, Metal, 0.87	W	10.0		32.2	322 Btuh
4	2, Clear, Metal, 0.87	SW	18.0		32.2	579 Btuh
5	2, Clear, Metal, 0.87	SW	20.0		32.2	644 Btuh
6	2, Clear, Metal, 0.87	SW	9.0		32.2	290 Btuh
7	2, Clear, Metal, 0.87	NW	16.0		32.2	515 Btuh
8	2, Clear, Metal, 0.87	NE	16.0		32.2	515 Btuh
9	2, Clear, Metal, 0.87	SE	6.0		32.2	193 Btuh
10	2, Clear, Metal, 0.87	SE	72.0		32.2	2318 Btuh
11	2, Clear, Metal, 0.87	SE	20.0		32.2	644 Btuh
12	2, Clear, Metal, 0.87	SE	36.0		32.2	1159 Btuh
13	2, Clear, Metal, 0.87	SW	18.0		32.2	579 Btuh
Window Total			439(sqft)			14131 Btuh
Walls	Type	R-Value	Area	X	HTM=	Load
1	Frame - Wood - Ext(0.09)	13.0	1801		3.3	5915 Btuh
2	Frame - Wood - Adj(0.09)	13.0	450		3.3	1478 Btuh
Wall Total			2251			7392 Btuh
Doors	Type		Area	X	HTM=	Load
1	Insulated - Adjacent		20		12.9	259 Btuh
2	Insulated - Exterior		40		12.9	518 Btuh
3	Insulated - Exterior		30		12.9	388 Btuh
Door Total			90			1166Btuh
Ceilings	Type/Color/Surface	R-Value	Area	X	HTM=	Load
1	Vented Attic/D/Shin)	30.0	2805		1.2	3305 Btuh
Ceiling Total			2805			3305Btuh
Floors	Type	R-Value	Size	X	HTM=	Load
1	Slab On Grade	0	278.0	ft(p)	43.7	12137 Btuh
Floor Total			278			12137 Btuh
Zone Envelope Subtotal:						38132 Btuh
Infiltration	Type	ACH X	Zone Volume	CFM=		
	Natural	0.66	26490	291.4		11803 Btuh
Ductload	Average sealed, R6.0, Supply(Attic), Return(Attic) (DLM of 0.00)					0 Btuh
Zone #1	Sensible Zone Subtotal					49935 Btuh

Manual J Winter Calculations

Residential Load - Component Details (continued)

Black, David & Louann

Project Title:

Class 3 Rating

612077aBlack,David&Louann

Registration No. 0

Climate: North

1/3/2007

WHOLE HOUSE TOTALS

	Subtotal Sensible Ventilation Sensible Total Btuh Loss	49935 Btuh 0 Btuh 49935 Btuh
--	--	------------------------------------

Key: Window types (SHGC - Shading coefficient of glass as SHGC numerical value or as clear or tint)

(Frame types - metal, wood or insulated metal)

(U - Window U-Factor or 'DEF' for default)

(HTM - ManualJ Heat Transfer Multiplier)

Key: Floor size (perimeter(p) for slab-on-grade or area for all other floor types)



For Florida residences only

System Sizing Calculations - Summer

Residential Load - Whole House Component Details

Black, David & Louann

Project Title:

612077aBlack,David&Louann

Class 3 Rating

Registration No. 0

Climate: North

, FL

Reference City: Gainesville (Defaults)

Summer Temperature Difference: 17.0 F

1/3/2007

This calculation is for Worst Case. The house has been rotated 315 degrees.

Component Loads for Whole House

Window	Type*		Overhang		Window Area(sqft)			HTM		Load	
	Pn/SHGC/U/InSh/ExSh/IS	Ornt	Len	Hgt	Gross	Shaded	Unshaded	Shaded	Unshaded		
1	2, Clear, 0.87, None,N,N	NW	1.5ft.	8ft.	144.0	0.0	144.0	29	60	8645	Btuh
2	2, Clear, 0.87, None,N,N	NW	8ft.	8ft.	54.0	0.0	54.0	29	60	3242	Btuh
3	2, Clear, 0.87, None,N,N	W	8ft.	7ft.	10.0	9.3	0.7	29	80	326	Btuh
4	2, Clear, 0.87, None,N,N	SW	21ft.	8ft.	18.0	18.0	0.0	29	63	521	Btuh
5	2, Clear, 0.87, None,N,N	SW	1.5ft.	8ft.	20.0	0.0	20.0	29	63	1251	Btuh
6	2, Clear, 0.87, None,N,N	SW	1.5ft.	3.5ft.	9.0	3.1	5.9	29	63	457	Btuh
7	2, Clear, 0.87, None,N,N	NW	1.5ft.	6ft.	16.0	0.0	16.0	29	60	961	Btuh
8	2, Clear, 0.87, None,N,N	NE	1.5ft.	6ft.	16.0	0.0	16.0	29	60	961	Btuh
9	2, Clear, 0.87, None,N,N	SE	1.5ft.	5ft.	6.0	1.0	5.0	29	63	340	Btuh
10	2, Clear, 0.87, None,N,N	SE	8ft.	8ft.	72.0	72.0	0.0	29	63	2085	Btuh
11	2, Clear, 0.87, None,N,N	SE	8ft.	8.66	20.0	20.0	0.0	29	63	579	Btuh
12	2, Clear, 0.87, None,N,N	SE	1.5ft.	8ft.	36.0	3.1	32.9	29	63	2146	Btuh
13	2, Clear, 0.87, None,N,N	SW	1.5ft.	3.5ft.	18.0	6.3	11.7	29	63	915	Btuh
Window Total					439 (sqft)					22429 Btuh	
Walls	Type	R-Value/U-Value			Area(sqft)			HTM		Load	
1	Frame - Wood - Ext	13.0/0.09			1801.0			2.1		3757 Btuh	
2	Frame - Wood - Adj	13.0/0.09			450.0			1.5		679 Btuh	
Wall Total					2251 (sqft)					4436 Btuh	
Doors	Type				Area (sqft)			HTM		Load	
1	Insulated - Adjacent				20.0			9.8		196 Btuh	
2	Insulated - Exterior				40.0			9.8		392 Btuh	
3	Insulated - Exterior				30.0			9.8		294 Btuh	
Door Total					90 (sqft)					882 Btuh	
Ceilings	Type/Color/Surface	R-Value			Area(sqft)			HTM		Load	
1	Vented Attic/DarkShingle	30.0			2805.0			1.7		4645 Btuh	
Ceiling Total					2805 (sqft)					4645 Btuh	
Floors	Type	R-Value			Size			HTM		Load	
1	Slab On Grade	0.0			278 (ft(p))			0.0		0 Btuh	
Floor Total					278.0 (sqft)					0 Btuh	
	Zone Envelope Subtotal:									32392 Btuh	
Infiltration	Type	ACH			Volume(cuft)			CFM=		Load	
	SensibleNatural	0.34			26490			150.1		2794 Btuh	
Internal gain	Occupants			Btuh/occupant			Appliance		Load		
	8			X 230 +			0		1840 Btuh		
Duct load	Average sealed, R6.0, Supply(Attic), Return(Attic)							DGM = 0.00		0.0 Btuh	
	Sensible Zone Load									37026 Btuh	

Manual J Summer Calculations

Residential Load - Component Details (continued)

Black, David & Louann

Project Title:

612077aBlack,David&Louann

Class 3 Rating

Registration No. 0

Climate: North

, FL

1/3/2007

WHOLE HOUSE TOTALS

Whole House Totals for Cooling	Sensible Envelope Load All Zones	37026 Btuh
	Sensible Duct Load	0 Btuh
	Total Sensible Zone Loads	37026 Btuh
	Sensible ventilation	0 Btuh
	Blower	0 Btuh
	Total sensible gain	37026 Btuh
	Latent infiltration gain (for 54 gr. humidity difference)	5486 Btuh
	Latent ventilation gain	0 Btuh
	Latent duct gain	0 Btuh
	Latent occupant gain (8 people @ 200 Btuh per person)	1600 Btuh
	Latent other gain	0 Btuh
	Latent total gain	7086 Btuh
	TOTAL GAIN	44111 Btuh

*Key: Window types (Pn - Number of panes of glass)

(SHGC - Shading coefficient of glass as SHGC numerical value or as clear or tint)

(U - Window U-Factor or 'DEF' for default)

(InSh - Interior shading device: none(N), Blinds(B), Draperies(D) or Roller Shades(R))

(ExSh - Exterior shading device: none(N) or numerical value)

(BS - Insect screen: none(N), Full(F) or Half(H))

(Ornt - compass orientation)



For Florida residences only

System Sizing Calculations - Summer

Residential Load - Room by Room Component Details

Black, David & Louann

Project Title:

612077aBlack,David&Louann

Class 3 Rating

Registration No. 0

Climate: North

, FL

Reference City: Gainesville (Defaults)

Summer Temperature Difference: 17.0 F

1/3/2007

This calculation is for Worst Case. The house has been rotated 315 degrees.

Component Loads for Zone #1: Main

Window	Type*		Overhang		Window Area(sqft)			HTM		Load	
	Pn/SHGC/U/InSh/ExSh/IS	Ornt	Len	Hgt	Gross	Shaded	Unshaded	Shaded	Unshaded		
1	2, Clear, 0.87, None,N,N	NW	1.5ft.	8ft.	144.0	0.0	144.0	29	60	8645	Btuh
2	2, Clear, 0.87, None,N,N	NW	8ft.	8ft.	54.0	0.0	54.0	29	60	3242	Btuh
3	2, Clear, 0.87, None,N,N	W	8ft.	7ft.	10.0	9.3	0.7	29	80	326	Btuh
4	2, Clear, 0.87, None,N,N	SW	21ft.	8ft.	18.0	18.0	0.0	29	63	521	Btuh
5	2, Clear, 0.87, None,N,N	SW	1.5ft.	8ft.	20.0	0.0	20.0	29	63	1251	Btuh
6	2, Clear, 0.87, None,N,N	SW	1.5ft.	3.5ft.	9.0	3.1	5.9	29	63	457	Btuh
7	2, Clear, 0.87, None,N,N	NW	1.5ft.	6ft.	16.0	0.0	16.0	29	60	961	Btuh
8	2, Clear, 0.87, None,N,N	NE	1.5ft.	6ft.	16.0	0.0	16.0	29	60	961	Btuh
9	2, Clear, 0.87, None,N,N	SE	1.5ft.	5ft.	6.0	1.0	5.0	29	63	340	Btuh
10	2, Clear, 0.87, None,N,N	SE	8ft.	8ft.	72.0	72.0	0.0	29	63	2085	Btuh
11	2, Clear, 0.87, None,N,N	SE	8ft.	8.66	20.0	20.0	0.0	29	63	579	Btuh
12	2, Clear, 0.87, None,N,N	SE	1.5ft.	8ft.	36.0	3.1	32.9	29	63	2146	Btuh
13	2, Clear, 0.87, None,N,N	SW	1.5ft.	3.5ft.	18.0	6.3	11.7	29	63	915	Btuh
	Window Total				439 (sqft)					22429 Btuh	
Walls	Type	R-Value/U-Value			Area(sqft)			HTM		Load	
1	Frame - Wood - Ext	13.0/0.09			1801.0			2.1		3757 Btuh	
2	Frame - Wood - Adj	13.0/0.09			450.0			1.5		679 Btuh	
	Wall Total				2251 (sqft)					4436 Btuh	
Doors	Type				Area (sqft)			HTM		Load	
1	Insulated - Adjacent				20.0			9.8		196 Btuh	
2	Insulated - Exterior				40.0			9.8		392 Btuh	
3	Insulated - Exterior				30.0			9.8		294 Btuh	
	Door Total				90 (sqft)					882 Btuh	
Ceilings	Type/Color/Surface	R-Value			Area(sqft)			HTM		Load	
1	Vented Attic/DarkShingle	30.0			2805.0			1.7		4645 Btuh	
	Ceiling Total				2805 (sqft)					4645 Btuh	
Floors	Type	R-Value			Size			HTM		Load	
1	Slab On Grade	0.0			278 (ft(p))			0.0		0 Btuh	
	Floor Total				278.0 (sqft)					0 Btuh	
	Zone Envelope Subtotal:									32392 Btuh	
Infiltration	Type	ACH			Volume(cuft)			CFM=		Load	
	SensibleNatural	0.34			26490			150.1		2794 Btuh	
Internal gain	Occupants			Btuh/occupant			Appliance		Load		
	8			X 230 +			0		1840 Btuh		
Duct load	Average sealed, R6.0, Supply(Attic), Return(Attic)							DGM = 0.00		0.0 Btuh	
	Sensible Zone Load									37026 Btuh	

Manual J Summer Calculations

Residential Load - Component Details (continued)

Black, David & Louann

Project Title:

612077aBlack,David&Louann

Class 3 Rating
Registration No. 0
Climate: North

, FL

1/3/2007

WHOLE HOUSE TOTALS

Whole House Totals for Cooling	Sensible Envelope Load All Zones	37026 Btuh
	Sensible Duct Load	0 Btuh
	Total Sensible Zone Loads	37026 Btuh
	Sensible ventilation	0 Btuh
	Blower	0 Btuh
	Total sensible gain	37026 Btuh
	Latent infiltration gain (for 54 gr. humidity difference)	5486 Btuh
	Latent ventilation gain	0 Btuh
	Latent duct gain	0 Btuh
	Latent occupant gain (8 people @ 200 Btuh per person)	1600 Btuh
	Latent other gain	0 Btuh
	Latent total gain	7086 Btuh
	TOTAL GAIN	44111 Btuh

*Key: Window types (Pn - Number of panes of glass)

(SHGC - Shading coefficient of glass as SHGC numerical value or as clear or tint)

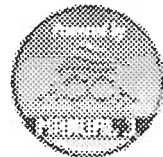
(U - Window U-Factor or 'DEF' for default)

(InSh - Interior shading device: none(N), Blinds(B), Draperies(D) or Roller Shades(R))

(ExSh - Exterior shading device: none(N) or numerical value)

(BS - Insect screen: none(N), Full(F) or Half(H))

(Ornt - compass orientation)



For Florida residences only

Residential Window Diversity

MidSummer

Black, David & Louann
, FL

Project Title:
612077aBlack,David&Louann

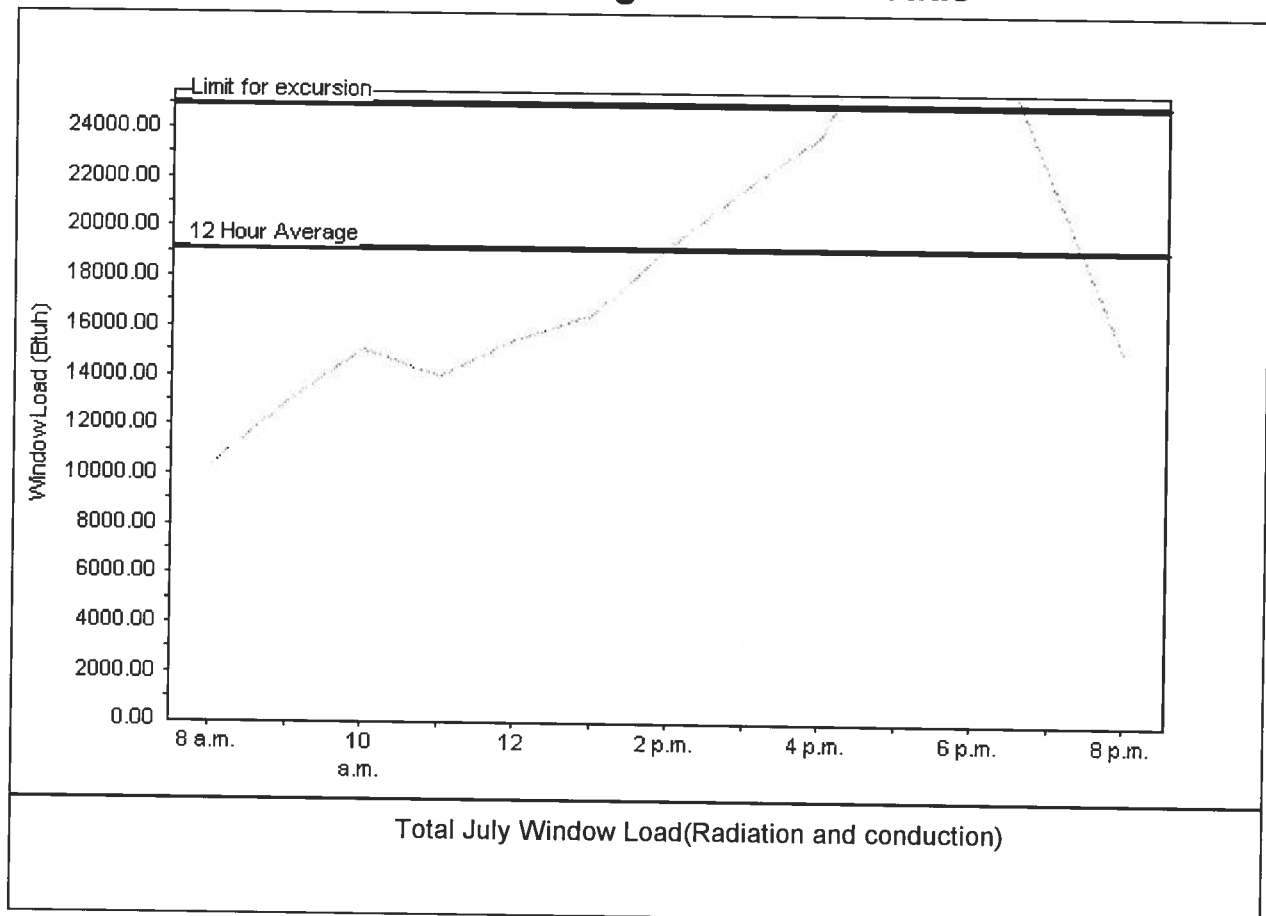
Class 3 Rating
Registration No. 0
Climate: North

1/3/2007

Weather data for: Gainesville - Defaults

Summer design temperature	92 F	Average window load for July	19181 Btu
Summer setpoint	75 F	Peak window load for July	30056 Btu
Summer temperature difference	17 F	Excursion limit(130% of Ave.)	24936 Btu
Latitude	29 North	Window excursion (July)	5120 Btuh

WINDOW Average and Peak Loads



This application has glass areas that produce large heat gains for part of the day. Variable air volume devices are required to overcome spikes in solar gain for one or more rooms. Install a zoned system or provide zone control for problem rooms. Single speed equipment may not be suitable for the application.

EnergyGauge® System Sizing for Florida residences only

PREPARED BY: *[Signature]*

DATE: 1-3-07

EnergyGauge® FLR2PB v4.1



Heating and Air Conditioning Economic Analysis

For Future / Existing Home Of

David Black

Lake City, Fl

Conducted By

Country Comfort Heating & A. C.

Lake City, Fl 32025

386-752-5841

Wrightsoft Corporation

Note: Actual costs and savings may differ due to weather, operating conditions, maintenance, and construction.



Calculation Procedures A, B, C, D

Entire House

Country Comfort Heating & A. C.

Job: Black
Date: 12-22-07
By: AW

Lake City, FL 32025 Phone: 386-752-5841

Procedure A - Winter Infiltration HTM Calculation*

- | | | | | | | |
|-----------------------------|-------|-----|-------|-----------------|------------------|---------------------------|
| 1. Winter infiltration AVF | | | | | | |
| 0.70 | ach | x | 37372 | ft ³ | x 0.0167 | = 436 cfm |
| | | | | | Isolated zones = | 0 cfm |
| | | | | | Total = | 436 cfm |
| 2. Winter infiltration load | | | | | | |
| 1.1 | x 436 | cfm | x 45 | °F | Winter TD = | 21583 Btuh |
| 3. Winter infiltration HTM | | | | | | |
| 21583 | Btuh | / | 333 | ft ² | Total window = | 64.7 Btuh/ft ² |
| | | | | | and door area | |

Procedure B - Summer Infiltration HTM Calculation

- | | | | | | | |
|-----------------------------|-------|-----|-------|-----------------|------------------|---------------------------|
| 1. Summer infiltration AVF | | | | | | |
| 0.40 | ach | x | 37372 | ft ³ | x 0.0167 | = 249 cfm |
| | | | | | Isolated zones = | 0 cfm |
| | | | | | Total = | 249 cfm |
| 2. Summer infiltration load | | | | | | |
| 1.1 | x 249 | cfm | x 19 | °F | Summer TD = | 5207 Btuh |
| 3. Summer infiltration HTM | | | | | | |
| 5207 | Btuh | / | 333 | ft ² | Total window = | 15.6 Btuh/ft ² |
| | | | | | and door area | |

Procedure C - Latent Infiltration Gain

0.68	x 30	gr/lb	moist.diff.	x	249 cfm	=	5065 Btuh
------	------	-------	-------------	---	---------	---	-----------

Procedure D - Equipment Sizing Loads

- | | | | | | | |
|---|------|-------------------|-----------|---|-------|--------|
| 1. Sensible sizing load | | | | | | |
| Sensible ventilation load | | | | | | |
| 1.1 x 0 cfm vent. | x 19 | °F | Summer TD | = | | 0 Btuh |
| Sensible load for structure (Line 19) | | | | + | 38580 | Btuh |
| Vent + structure + other equip loads | | | | = | 38580 | Btuh |
| Rating and temperature swing multiplier | | | | x | 1.02 | |
| Equipment sizing load - sensible | | | | = | 39352 | Btuh |
| 2. Latent sizing load | | | | | | |
| Latent ventilation load | | | | | | |
| 0.68 x 0 cfm vent. | x 30 | gr/lb moist.diff. | | = | | 0 Btuh |
| Internal loads = 230 Btuh | x 24 | people | | + | 5520 | Btuh |
| Infiltration load from Procedure C | | | | + | 5065 | Btuh |
| Equipment sizing load - latent | | | | = | 10585 | Btuh |

*Construction Quality is: a

No. of Fireplaces is: 0

Printout certified by ACCA to meet all requirements of Manual J 7th Ed.



Calculation Procedures A, B, C, D

Master Suite end

Country Comfort Heating & A. C.

Job: Black
Date: 12-22-07
By: AW

Lake City, FI32025 Phone: 386-752-5841

Procedure A - Winter Infiltration HTM Calculation*

1. Winter infiltration AVF									
0.88	ach	x	11331	ft ³	x	0.0167	=	167	cfm
2. Winter infiltration load									
1.1	x	167	cfm	x	45	°F	Winter TD =	8249	Btuh
3. Winter infiltration HTM									
8249	Btuh	/	127	ft ²	Total window =			64.7	Btuh/ft ²
					and door area				

Procedure B - Summer Infiltration HTM Calculation

1. Summer infiltration AVF									
0.50	ach	x	11331	ft ³	x	0.0167	=	95	cfm
2. Summer infiltration load									
1.1	x	95	cfm	x	19	°F	Summer TD =	1990	Btuh
3. Summer infiltration HTM									
1990	Btuh	/	127	ft ²	Total window =			15.6	Btuh/ft ²
					and door area				

Procedure C - Latent Infiltration Gain

0.68	x	30	gr/lb	moist.diff.	x	95	cfm	=	1936	Btuh
------	---	----	-------	-------------	---	----	-----	---	------	------

Procedure D - Equipment Sizing Loads

1. Sensible sizing load									
Sensible ventilation load									
1.1	x	0	cfm	vent.	x	19	°F	Summer TD	= 0 Btuh
Sensible load for structure (Line 19)									+ 9635 Btuh
Vent + structure + other equip loads									= 9635 Btuh
Rating and temperature swing multiplier									x 1.02
Equipment sizing load - sensible									= 9827 Btuh
2. Latent sizing load									
Latent ventilation load									
0.68	x	0	cfm	vent.	x	30	gr/lb	moist.diff.	= 0 Btuh
Internal loads =									+ 230 Btuh
Infiltration load from Procedure C									+ 1936 Btuh
Equipment sizing load - latent									= 2856 Btuh

*Construction Quality is:

a

No. of Fireplaces is:

0

Printout certified by ACCA to meet all requirements of Manual J 7th Ed.



Calculation Procedures A, B, C, D BR3, BR2, Game R Country Comfort Heating & A. C.

Job: Black
Date: 12-22-07
By: AW

Lake City, FL 32025 Phone: 386-752-5841

Procedure A - Winter Infiltration HTM Calculation*

1. Winter infiltration AVF
 $0.62 \text{ ach} \times 26041 \text{ ft}^3 \times 0.0167 = 269 \text{ cfm}$
2. Winter infiltration load
 $1.1 \times 269 \text{ cfm} \times 45 \text{ }^\circ\text{F Winter TD} = 13334 \text{ Btuh}$
3. Winter infiltration HTM
 $13334 \text{ Btuh} / 206 \text{ ft}^2 \text{ Total window and door area} = 64.7 \text{ Btuh/ft}^2$

Procedure B - Summer Infiltration HTM Calculation

1. Summer infiltration AVF
 $0.35 \text{ ach} \times 26041 \text{ ft}^3 \times 0.0167 = 154 \text{ cfm}$
2. Summer infiltration load
 $1.1 \times 154 \text{ cfm} \times 19 \text{ }^\circ\text{F Summer TD} = 3217 \text{ Btuh}$
3. Summer infiltration HTM
 $3217 \text{ Btuh} / 206 \text{ ft}^2 \text{ Total window and door area} = 15.6 \text{ Btuh/ft}^2$

Procedure C - Latent Infiltration Gain

$$0.68 \times 30 \text{ gr/lb moist.diff.} \times 154 \text{ cfm} = 3129 \text{ Btuh}$$

Procedure D - Equipment Sizing Loads

1. Sensible sizing load
Sensible ventilation load
 $1.1 \times 0 \text{ cfm vent.} \times 19 \text{ }^\circ\text{F Summer TD} = 0 \text{ Btuh}$
Sensible load for structure (Line 19) $= 28946 \text{ Btuh}$
Vent + structure + other equip loads $= 28946 \text{ Btuh}$
Rating and temperature swing multiplier $\times 1.02$
Equipment sizing load - sensible $= 29525 \text{ Btuh}$
2. Latent sizing load
Latent ventilation load
 $0.68 \times 0 \text{ cfm vent.} \times 30 \text{ gr/lb moist.diff.} = 0 \text{ Btuh}$
Internal loads $= 230 \text{ Btuh} \times 20 \text{ people} = 4600 \text{ Btuh}$
Infiltration load from Procedure C $= 3129 \text{ Btuh}$
Equipment sizing load - latent $= 7729 \text{ Btuh}$

*Construction Quality is: a

No. of Fireplaces is: 0

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Project Summary

Entire House

Country Comfort Heating & A. C.

Job: Black
Date: 12-22-07
By: AW

Lake City, FL 32025 Phone: 386-752-5841

Project Information

For: David Black
Lake City, FL

Notes: New Home

Design Information

Weather: Jacksonville, Cecil Field NAS, FL, US

Winter Design Conditions

Outside db 25 °F
Inside db 70 °F
Design TD 45 °F

Summer Design Conditions

Outside db 97 °F
Inside db 78 °F
Design TD 19 °F
Daily range M
Relative humidity 50 %
Moisture difference 30 gr/lb

Heating Summary

Structure 47701 Btuh
Ducts 2385 cfm
Central vent (0 cfm) 0 Btuh
Humidification 0 Btuh
Piping 0 Btuh
Equipment load 50086 Btuh

Sensible Cooling Equipment Load Sizing

Structure 35073 Btuh
Ducts 3507 Btuh
Central vent (0 cfm) 0 Btuh
Blower 0 Btuh

Infiltration

Method Simplified
Construction quality Average
Fireplaces 0

	Heating	Cooling
Area (ft²)	3150	3150
Volume (ft³)	37372	37372
Air changes/hour	0.70	0.40
Equiv. AVF (cfm)	436	249

Use manufacturer's data n
Rate/swing multiplier 1.02
Equipment sensible load 39352 Btuh

Latent Cooling Equipment Load Sizing

Structure 10585 Btuh
Ducts 0 Btuh
Central vent (0 cfm) 0 Btuh
Equipment latent load 10585 Btuh

Equipment total load 49937 Btuh
Req. total capacity at 0.70 SHR 4.7 ton

Heating Equipment Summary

Make n/a
Trade n/a
Model n/a

Efficiency n/a
Heating input
Heating output 0 Btuh
Temperature rise 0 °F
Actual air flow 0 cfm
Air flow factor 0.000 cfm/Btuh
Static pressure 0.00 in H2O
Space thermostat n/a

Cooling Equipment Summary

Make n/a
Trade n/a
Cond n/a
Coil n/a

Efficiency n/a
Sensible cooling 0 Btuh
Latent cooling 0 Btuh
Total cooling 0 Btuh
Actual air flow 0 cfm
Air flow factor 0.000 cfm/Btuh
Static pressure 0.00 in H2O
Load sensible heat ratio 0.00

Bold/italic values have been manually overridden

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Project Summary Master Suite end Country Comfort Heating & A. C.

Job: Black
Date: 12-22-07
By: AW

Lake City, FL 32025 Phone: 386-752-5841

Project Information

For: David Black
Lake City, FL

Notes: New Home

Design Information

Weather: Jacksonville, Cecil Field NAS, FL, US

Winter Design Conditions

Outside db 25 °F
Inside db 70 °F
Design TD 45 °F

Summer Design Conditions

Outside db 97 °F
Inside db 78 °F
Design TD 19 °F
Daily range M
Relative humidity 50 %
Moisture difference 30 gr/lb

Heating Summary

Structure 18156 Btuh
Ducts 908 cfm
Central vent (0 cfm) 0 Btuh
Humidification 0 Btuh
Piping 0 Btuh
Equipment load 19064 Btuh

Sensible Cooling Equipment Load Sizing

Structure 8759 Btuh
Ducts 876 Btuh
Central vent (0 cfm) 0 Btuh
Blower 0 Btuh

Infiltration

Method Construction quality Simplified Average
Fireplaces 0

	Heating	Cooling
Area (ft²)	944	944
Volume (ft³)	11331	11331
Air changes/hour	0.88	0.50
Equiv. AVF (cfm)	167	95

Use manufacturer's data n
Rate/swing multiplier 1.02
Equipment sensible load 9827 Btuh

Latent Cooling Equipment Load Sizing

Structure 2856 Btuh
Ducts 0 Btuh
Central vent (0 cfm) 0 Btuh
Equipment latent load 2856 Btuh

Equipment total load 12683 Btuh
Req. total capacity at 0.70 SHR 1.2 ton

Heating Equipment Summary

Make AmStd
Trade Heritage 12
Model 2A6H2018A1

Efficiency 7.3 HSPF
Heating input
Heating output 16100 Btuh @ 47°F
Temperature rise 35 °F
Actual air flow 417 cfm
Air flow factor 0.022 cfm/Btuh
Static pressure 0.00 in H2O
Space thermostat

Cooling Equipment Summary

Make AmStd
Trade Heritage 12
Cond 2A6H2018A1
Coil TWE031E13

Efficiency 13 SEER
Sensible cooling 12740 Btuh
Latent cooling 5460 Btuh
Total cooling 18200 Btuh
Actual air flow 417 cfm
Air flow factor 0.043 cfm/Btuh
Static pressure 0.00 in H2O
Load sensible heat ratio 0.77

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Project Summary

BR3, BR2, Game R

Country Comfort Heating & A. C.

Job: Black
Date: 12-22-07
By: AW

Lake City, FL 32025 Phone: 386-752-5841

Project Information

For: David Black
Lake City, FL

Notes: New Home

Design Information

Weather: Jacksonville, Cecil Field NAS, FL, US

Winter Design Conditions

Outside db 25 °F
Inside db 70 °F
Design TD 45 °F

Summer Design Conditions

Outside db 97 °F
Inside db 78 °F
Design TD 19 °F
Daily range M
Relative humidity 50 %
Moisture difference 30 gr/lb

Heating Summary

Structure 29545 Btuh
Ducts 1477 cfm
Central vent (0 cfm) 0 Btuh
Humidification 0 Btuh
Piping 0 Btuh
Equipment load 31022 Btuh

Infiltration

Method Simplified
Construction quality Average
Fireplaces 0

	Heating	Cooling
Area (ft²)	2206	2206
Volume (ft³)	26041	26041
Air changes/hour	0.62	0.35
Equiv. AVF (cfm)	269	154

Heating Equipment Summary

Make AmStd
Trade Heritage 12
Model 2A6H2042A1

Efficiency 8.4 HSPF
Heating input 38500 Btuh @ 47°F
Heating output 28 °F
Temperature rise
Actual air flow 1253 cfm
Air flow factor 0.040 cfm/Btuh
Static pressure 0.00 in H2O
Space thermostat

Sensible Cooling Equipment Load Sizing

Structure 26314 Btuh
Ducts 2631 Btuh
Central vent (0 cfm) 0 Btuh
Blower 0 Btuh

Use manufacturer's data n
Rate/swing multiplier 1.02
Equipment sensible load 29525 Btuh

Latent Cooling Equipment Load Sizing

Structure 7729 Btuh
Ducts 0 Btuh
Central vent (0 cfm) 0 Btuh
Equipment latent load 7729 Btuh

Equipment total load 37254 Btuh
Req. total capacity at 0.70 SHR 3.5 ton

Cooling Equipment Summary

Make AmStd
Trade Heritage 12
Cond 2A6H2042A1
Coil TWE040E13

Efficiency 13 SEER
Sensible cooling 29750 Btuh
Latent cooling 12750 Btuh
Total cooling 42500 Btuh
Actual air flow 1253 cfm
Air flow factor 0.043 cfm/Btuh
Static pressure 0.00 in H2O
Load sensible heat ratio 0.79

Bold/italic values have been manually overridden

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Window Data

Job: Black
Date: 12-22-07
By: AW

Country Comfort Heating & A. C.

Lake City, FL 32025 Phone: 386-752-5841

W N D W	S K Y	O R I	G L A Z	L O W E	S T R M	S H A D	N G L Z	I N C L	S H C O	O V R X	O V R Y	W H G T	C H T M	W N A R	S H A R
Study															
3F0	n	s	c	y	n	d	2	90.0	1.0	1.6	1.0	6.0	19.8	36.0	36.0
Master Bath															
3F0	n	s	c	y	n	n	2	90.0	1.0	1.6	1.0	2.0	31.8	8.0	8.0
Master Suite															
3F0	n	n	c	y	n	d	2	90.0	1.0	1.6	1.0	7.0	11.8	28.0	0.0
3F0	n	nw	c	y	n	d	2	90.0	1.0	1.6	1.0	7.0	26.8	18.1	0.0
3F0	n	w	c	y	n	d	2	90.0	1.0	1.6	1.0	7.0	37.8	37.3	1.7
WIC 1															
3F0	n	w	c	y	n	n	2	90.0	1.0	1.6	1.0	2.0	63.8	12.0	2.0
Dining Rm															
3F0	n	s	c	y	n	d	2	90.0	1.0	1.6	1.0	6.0	19.8	54.0	54.0
Laundry															
3F0	n	e	c	y	n	n	2	90.0	1.0	1.6	1.0	5.4	63.8	10.8	0.7
Bed Rm 3															
3F0	n	e	c	y	n	d	2	90.0	1.0	1.6	1.0	6.0	37.8	34.0	1.9
Bed Rm 2															
3F0	n	e	c	y	n	d	2	90.0	1.0	1.6	1.0	6.0	37.8	24.0	1.3
Game Rm															
3F0	n	e	c	y	n	d	2	90.0	1.0	1.6	1.0	7.0	37.8	17.5	0.8
3F0	n	ne	c	y	n	d	2	90.0	1.0	1.6	1.0	7.0	26.8	36.2	0.0
3F0	n	n	c	y	n	d	2	90.0	1.0	1.6	1.0	7.0	11.8	17.5	0.0



Right-J Worksheet Entire House Country Comfort Heating & A. C.

Job: Black
Date: 12-22-07
By: AW

Lake City, FL 32025 Phone: 386-752-5841

MANUAL J: 7th Ed.																	
1	Name of room				Entire House 199.3 ft			Master Suite end 78.2 ft			BR3, BR2, Game R 121.2 ft						
2	Length of exposed wall																
3	Room dimensions																
4	Ceilings	Condit. Option			11.9 ft heat/cool d			12.0 ft d n			11.8 ft d n						
	TYPE OF EXPOSURE	CST NO.	HTM Htg	HTM Clg	Area (ft²)	Load (Btuh) Htg	Clg	Area (ft²)	Load (Btuh) Htg	Clg	Area (ft²)	Load (Btuh) Htg	Clg	Area	Htg	Clg	
5	Gross Exposed walls and partitions	a 12D2	3.6	1.8	2291	0	0	942	0	0	1349	0	0		0	0	
		b	0.0	0.0	0	0	0	0	0	0	0	0	0		0	0	
		c	0.0	0.0	0	0	0	0	0	0	0	0	0		0	0	
		d	0.0	0.0	0	0	0	0	0	0	0	0	0		0	0	
		e	0.0	0.0	0	0	0	0	0	0	0	0	0		0	0	
		f	0.0	0.0	0	0	0	0	0	0	0	0	0		0	0	
6	Windows and glass doors Heating	a 3F0	21.4	**	333	7126	0	127	2724	0	206	4403	0		0	0	
		b	0.0	**	0	0	0	0	0	0	0	0	0		0	0	
		c	0.0	**	0	0	0	0	0	0	0	0	0		0	0	
		d	0.0	**	0	0	0	0	0	0	0	0	0		0	0	
		e	0.0	**	0	0	0	0	0	0	0	0	0		0	0	
		f	0.0	**	0	0	0	0	0	0	0	0	0		0	0	
7	Windows and glass doors Cooling	North NE/NW			3.5	152	1866	74	926	78	940	940				0	0
		E/W			26.8	54	1454	18	485	36	969	969				0	0
		SE/SW			40.0	127	5335	36	1345	92	3990	3990				0	0
		South			0.0	0	0	0	0	0	0	0				0	0
		Horz			0.0	0	0	0	0	0	0	0				0	0
8	Other doors	a	0.0	0.0	0	0	0	0	0	0	0	0	0		0	0	
		b	0.0	0.0	0	0	0	0	0	0	0	0	0		0	0	
		c	0.0	0.0	0	0	0	0	0	0	0	0	0		0	0	
9	Net exposed walls and partitions	a 12D2	3.6	1.8	1958	7048	3540	815	2932	1473	1143	4116	2067		0	0	
		b	0.0	0.0	0	0	0	0	0	0	0	0	0		0	0	
		c	0.0	0.0	0	0	0	0	0	0	0	0	0		0	0	
		d	0.0	0.0	0	0	0	0	0	0	0	0	0		0	0	
		e	0.0	0.0	0	0	0	0	0	0	0	0	0		0	0	
		f	0.0	0.0	0	0	0	0	0	0	0	0	0		0	0	
10	Ceilings	a 16G0	1.5	1.4	3150	4678	4470	944	1402	1340	2206	3276	3130		0	0	
		b	0.0	0.0	0	0	0	0	0	0	0	0	0		0	0	
		c	0.0	0.0	0	0	0	0	0	0	0	0	0		0	0	
		d	0.0	0.0	0	0	0	0	0	0	0	0	0		0	0	
		e	0.0	0.0	0	0	0	0	0	0	0	0	0		0	0	
		f	0.0	0.0	0	0	0	0	0	0	0	0	0		0	0	
11	Floors (Note: room perimeter is displ. for slab floors)	a 22A0	36.5	0.0	199	7268	0	78	2849	0	121	4417	0		0	0	
		b	0.0	0.0	0	0	0	0	0	0	0	0	0		0	0	
		c	0.0	0.0	0	0	0	0	0	0	0	0	0		0	0	
		d	0.0	0.0	0	0	0	0	0	0	0	0	0		0	0	
		e	0.0	0.0	0	0	0	0	0	0	0	0	0		0	0	
		f	0.0	0.0	0	0	0	0	0	0	0	0	0		0	0	
12	Infiltration Ventilation	a	64.7	15.6	333	21583	5207	127	8249	1990	206	13334	3217		0	0	
						0	0		0	0		0	0				
13	Subtotal loss=6+8.+11+12					47701			18156			29545					
	Less external heating					0			0			0					
	Less transfer					0			0			0					
	Heating redistribution					0			0			0					
14	Duct loss				5%	2385		5%	908		5%	1477		%			
15	Total loss = 13+14					50086			19064			31022					
16	Int. gains: People @		300		24	7200		4	1200		20	6000					
	Appl. @		1200		5	6000		0	0		5	6000					
17	Subtot RSH gain=7+8.+12+16					35073			8759			26314					
	Less external cooling					0			0			0					
	Less transfer					0			0			0					
	Cooling redistribution					0			0			0					
18	Duct gain				10 %	3507		10 %	876		10 %	2631		%			
19	Total RSH gain=(17+18)*PLF				1.00	38580		1.00	9635		1.00	28946					
20	Air required (cfm)					1670			417			1253					

Printout certified by ACCA to meet all requirements of Manual J 7th Ed.



Right-J Worksheet Master Suite end Country Comfort Heating & A. C.

Job: Black
Date: 12-22-07
By: AW

Lake City, FL 32025 Phone: 386-752-5841

MANUAL J: 7th Ed.																
1	Name of room				Master Suite end			Study			Living Rm			Master Bath		
2	Length of exposed wall				78.2 ft			10.0 ft			0.0 ft			35.5 ft		
3	Room dimensions				12.0 ft			1.0 x 153.0 ft			1.0 x 151.0 ft			1.0 x 235.3 ft		
4	Ceilings	Condit. Option		12.0 ft			12.0 ft			12.0 ft			12.0 ft			
	TYPE OF EXPOSURE	CST NO.	HTM Htg	HTM Clg	Area (ft²)	Load (Btuh) Htg	Load (Btuh) Clg	Area (ft²)	Load (Btuh) Htg	Load (Btuh) Clg	Area (ft²)	Load (Btuh) Htg	Load (Btuh) Clg	Area (ft²)	Load (Btuh) Htg	Load (Btuh) Clg
5	Gross Exposed walls and partitions	a 12D2	3.6	1.8	942	***	***	120	***	***	0	***	***	428	***	***
	b		0.0	0.0	0	***	***	0	***	***	0	***	***	0	***	***
	c		0.0	0.0	0	***	***	0	***	***	0	***	***	0	***	***
	d		0.0	0.0	0	***	***	0	***	***	0	***	***	0	***	***
	e		0.0	0.0	0	***	***	0	***	***	0	***	***	0	***	***
	f		0.0	0.0	0	***	***	0	***	***	0	***	***	0	***	***
6	Windows and glass doors Heating	a 3F0	21.4	**	127	2724	***	36	770	***	0	0	***	8	171	***
	b		0.0	**	0	0	***	0	0	***	0	0	***	0	0	***
	c		0.0	**	0	0	***	0	0	***	0	0	***	0	0	***
	d		0.0	**	0	0	***	0	0	***	0	0	***	0	0	***
	e		0.0	**	0	0	***	0	0	***	0	0	***	0	0	***
	f		0.0	**	0	0	***	0	0	***	0	0	***	0	0	***
7	Windows and glass doors Cooling	North NE/NW	12.6	74	***	926	36	***	425	***	0	0	***	8	***	150
		E/W	26.8	18	***	485	0	***	0	***	0	0	***	0	***	0
		SE/SW	37.8	36	***	1345	0	***	0	***	0	0	***	0	***	0
		South	0.0	0	***	0	0	***	0	***	0	0	***	0	***	0
		Horz	0.0	0	***	0	0	***	0	***	0	0	***	0	***	0
8	Other doors	a	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0
	b		0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0
	c		0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0
9	Net exposed walls and partitions	a 12D2	3.6	1.8	815	2932	1473	84	302	152	0	0	0	420	1512	759
	b		0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0
	c		0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0
	d		0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0
	e		0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0
	f		0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0
10	Ceilings	a 16G0	1.5	1.4	944	1402	1340	153	227	217	151	224	214	235	349	334
	b		0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0
	c		0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0
	d		0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0
	e		0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0
	f		0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0
11	Floors (Note: room perimeter is displ. for slab floors)	a 22A0	36.5	0.0	78	2849	0	10	365	0	0	0	0	36	1294	0
	b		0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0
	c		0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0
	d		0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0
	e		0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0
	f		0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0
12	Infiltration Ventilation	a	64.7	15.6	127	8249	1990	36	2331	562	0	0	0	8	518	125
					0	0	0	0	0	0	0	0	0	0	0	0
13	Subtotal loss=6+8.+11+12				***	18156	***	***	3994	***	***	224	***	***	3844	***
	Less external heating				***	0	***	***	0	***	***	0	***	***	0	***
	Less transfer				***	0	***	***	0	***	***	0	***	***	0	***
	Heating redistribution				***	0	***	***	0	***	***	0	***	***	0	***
14	Duct loss				5%	908	***	5%	200	***	5%	11	***	5%	192	***
15	Total loss = 13+14				***	19064	***	***	4194	***	***	235	***	***	4036	***
16	Int. gains: People @	300	4	***	1200	2	***	600	0	***	0	***	0	0	***	0
	Appl. @	1200	0	***	0	0	***	0	0	***	0	***	0	0	***	0
17	Subtot RSH gain=7+8.+12+16				***	8759	***	***	1956	***	***	214	***	***	1369	***
	Less external cooling				***	0	***	***	0	***	***	0	***	***	0	***
	Less transfer				***	0	***	***	0	***	***	0	***	***	0	***
	Cooling redistribution				***	0	***	***	0	***	***	0	***	***	0	***
18	Duct gain				10 %	876	10 %	***	196	10 %	***	21	10 %	***	137	***
19	Total RSH gain=(17+18)*PLF				1.00	9635	1.00	***	2152	1.00	***	236	1.00	***	1505	***
20	Air required (cfm)				***	417	***	***	92	***	***	5	***	***	88	***

Printout certified by ACCA to meet all requirements of Manual J 7th Ed.



Right-J Worksheet Master Suite end Country Comfort Heating & A. C.

Job: Black
Date: 12-22-07
By: AW

Lake City, FL 32025 Phone: 386-752-5841

MANUAL J: 7th Ed.																					
1 Name of room		2 Length of exposed wall		3 Room dimensions		4 Ceilings		5 Condil. Option		6 Bath 2 0.0 ft 6.0 x 6.0 ft 12.0 ft heat/cool			7 Master Suite 32.7 ft 1.0 x 369.0 ft 12.0 ft heat/cool								
TYPE OF EXPOSURE		CST NO.	HTM Htg	HTM Clg	Area (ft ²)	Load (Btuh) Htg	Load (Btuh) Clg	Area (ft ²)	Load (Btuh) Htg	Load (Btuh) Clg	Area	Htg	Clg	Area	Htg	Clg					
5	Gross Exposed walls and partitions	a 12D2	3.6	1.8	0	0	0	394	0	0											
	b		0.0	0.0	0	0	0	0	0	0											
	c		0.0	0.0	0	0	0	0	0	0											
	d		0.0	0.0	0	0	0	0	0	0											
	e		0.0	0.0	0	0	0	0	0	0											
	f		0.0	0.0	0	0	0	0	0	0											
6	Windows and glass doors Heating	a 3F0	21.4	**	0	0	0	83	1783	0											
	b		0.0	**	0	0	0	0	0	0											
	c		0.0	**	0	0	0	0	0	0											
	d		0.0	**	0	0	0	0	0	0											
	e		0.0	**	0	0	0	0	0	0											
	f		0.0	**	0	0	0	0	0	0											
7	Windows and glass doors Cooling	North	12.6	0	0	0	30	351	0	0											
	NE/NW	26.8	0	0	0	18	485	0	0	0											
	E/W	37.8	0	0	0	36	1345	0	0	0											
	SE/SW	0.0	0	0	0	0	0	0	0	0											
	South	0.0	0	0	0	0	0	0	0	0											
	Horz	0.0	0	0	0	0	0	0	0	0											
8	Other doors	a	0.0	0.0	0	0	0	0	0	0											
	b		0.0	0.0	0	0	0	0	0	0											
	c		0.0	0.0	0	0	0	0	0	0											
9	Net exposed walls and partitions	a 12D2	3.6	1.8	0	0	0	311	1118	561											
	b		0.0	0.0	0	0	0	0	0	0											
	c		0.0	0.0	0	0	0	0	0	0											
	d		0.0	0.0	0	0	0	0	0	0											
	e		0.0	0.0	0	0	0	0	0	0											
	f		0.0	0.0	0	0	0	0	0	0											
10	Ceilings	a 16G0	1.5	1.4	36	53	51	369	548	524											
	b		0.0	0.0	0	0	0	0	0	0											
	c		0.0	0.0	0	0	0	0	0	0											
	d		0.0	0.0	0	0	0	0	0	0											
	e		0.0	0.0	0	0	0	0	0	0											
	f		0.0	0.0	0	0	0	0	0	0											
11	Floors (Note: room perimeter is displ. for slab floors)	a 22A0	36.5	0.0	0	0	0	33	1191	0											
	b		0.0	0.0	0	0	0	0	0	0											
	c		0.0	0.0	0	0	0	0	0	0											
	d		0.0	0.0	0	0	0	0	0	0											
	e		0.0	0.0	0	0	0	0	0	0											
	f		0.0	0.0	0	0	0	0	0	0											
12	Infiltration Ventilation	a	64.7	15.6	0	0	0	83	5400	1303											
					0	0	0	0	0	0											
13	Subtotal loss=6+8.+11+12					53			10040												
	Less external heating					0			0												
	Less transfer					0			0												
	Heating redistribution					0			0												
14	Duct loss				5%	3		5%	502		%		%								
15	Total loss = 13+14					56			10542												
16	Int. gains: People @ 300				0	0	0	2	600												
	Appl. @ 1200				0	0	0	0	0												
17	Subtot RSH gain=7+8.+12+16					51			5169												
	Less external cooling					0			0												
	Less transfer					0			0												
	Cooling redistribution					0			0												
18	Duct gain				10%	5		10%	517		%		%								
19	Total RSH gain=(17+18)*PLF				1.00	56		1.00	5686												
20	Air required (cfm)					1			231												

Printout certified by ACCA to meet all requirements of Manual J 7th Ed.



Right-J Worksheet BR3, BR2, Game R Country Comfort Heating & A. C.

Job: Black
Date: 12-22-07
By: AW

Lake City, FL 32025 Phone: 386-752-5841

MANUAL J: 7th Ed.														
1	Name of room				BR3, BR2, Game R				WIC 1			WIC 2		
2	Length of exposed wall				121.2 ft				14.2 ft			0.0 ft		
3	Room dimensions				11.8 ft x 12.0 ft				1.0 x 51.1 ft			1.0 x 34.5 ft		
4	Ceilings				11.8 ft x 12.0 ft				12.0 ft x 51.1 ft			12.0 ft x 34.5 ft		
	Condil. Option				11.8 ft x 12.0 ft				12.0 ft x 51.1 ft			12.0 ft x 34.5 ft		
	TYPE OF EXPOSURE				Area (ft²)				Area (ft²)			Area (ft²)		
		CST NO.	HTM Htg	HTM Clg	Area (ft²)	Load (Btuh) Htg	Load (Btuh) Clg	Area (ft²)	Load (Btuh) Htg	Load (Btuh) Clg	Area (ft²)	Load (Btuh) Htg	Load (Btuh) Clg	Area (ft²)
5	Gross Exposed walls and partitions	a 12D2	3.6	1.8	1349	0	0	170	0	0	0	0	0	156
		b	0.0	0.0	0	0	0	0	0	0	0	0	0	0
		c	0.0	0.0	0	0	0	0	0	0	0	0	0	0
		d	0.0	0.0	0	0	0	0	0	0	0	0	0	0
		e	0.0	0.0	0	0	0	0	0	0	0	0	0	0
		f	0.0	0.0	0	0	0	0	0	0	0	0	0	0
6	Windows and glass doors Heating	a 3F0	21.4	0.0	206	4403	0	12	257	0	0	0	0	54
		b	0.0	0.0	0	0	0	0	0	0	0	0	0	0
		c	0.0	0.0	0	0	0	0	0	0	0	0	0	0
		d	0.0	0.0	0	0	0	0	0	0	0	0	0	0
		e	0.0	0.0	0	0	0	0	0	0	0	0	0	0
		f	0.0	0.0	0	0	0	0	0	0	0	0	0	0
7	Windows and glass doors Cooling	a North	12.0	0.0	78	0	940	2	0	37	0	0	0	54
		b NE/NW	26.8	0.0	36	0	969	0	0	0	0	0	0	0
		c E/W	43.5	0.0	92	0	3990	10	0	640	0	0	0	0
		d SE/SW	0.0	0.0	0	0	0	0	0	0	0	0	0	0
		e South	0.0	0.0	0	0	0	0	0	0	0	0	0	0
		f Horz	0.0	0.0	0	0	0	0	0	0	0	0	0	0
8	Other doors	a	0.0	0.0	0	0	0	0	0	0	0	0	0	0
		b	0.0	0.0	0	0	0	0	0	0	0	0	0	0
		c	0.0	0.0	0	0	0	0	0	0	0	0	0	0
9	Net exposed walls and partitions	a 12D2	3.6	1.8	1143	4116	2067	158	570	286	0	0	0	102
		b	0.0	0.0	0	0	0	0	0	0	0	0	0	0
		c	0.0	0.0	0	0	0	0	0	0	0	0	0	0
		d	0.0	0.0	0	0	0	0	0	0	0	0	0	0
		e	0.0	0.0	0	0	0	0	0	0	0	0	0	0
		f	0.0	0.0	0	0	0	0	0	0	0	0	0	0
10	Ceilings	a 16G0	1.5	1.4	2206	3276	3130	51	76	72	35	51	49	210
		b	0.0	0.0	0	0	0	0	0	0	0	0	0	0
		c	0.0	0.0	0	0	0	0	0	0	0	0	0	0
		d	0.0	0.0	0	0	0	0	0	0	0	0	0	0
		e	0.0	0.0	0	0	0	0	0	0	0	0	0	0
		f	0.0	0.0	0	0	0	0	0	0	0	0	0	0
11	Floors (Note: room perimeter is displ. for slab floors)	a 22A0	36.5	0.0	121	4417	0	14	516	0	0	0	0	13
		b	0.0	0.0	0	0	0	0	0	0	0	0	0	0
		c	0.0	0.0	0	0	0	0	0	0	0	0	0	0
		d	0.0	0.0	0	0	0	0	0	0	0	0	0	0
		e	0.0	0.0	0	0	0	0	0	0	0	0	0	0
		f	0.0	0.0	0	0	0	0	0	0	0	0	0	0
12	Infiltration Ventilation	a	64.7	15.6	206	13334	3217	12	777	187	0	0	0	54
						0	0		0	0				0
13	Subtotal loss=6+8.+11+12					29545			2196			51		5803
	Less external heating					0			0			0		0
	Less transfer					0			0			0		0
	Heating redistribution					0			0			0		0
14	Duct loss				5%	1477		5%	110		5%	3		290
15	Total loss = 13+14					31022			2306			54		6093
16	Int. gains: People @		300		20	6000		0	0			0		1200
	Appl. @		1200		5	6000		0	0			0		0
17	Subtot RSH gain=7+8.+12+16					26314			1223			49		3163
	Less external cooling					0			0			0		0
	Less transfer					0			0			0		0
	Cooling redistribution					0			0			0		0
18	Duct gain				10%	2631		10%	122		10%	5		316
19	Total RSH gain=(17+18)*PLF				1.00	28946		1.00	1346		1.00	54		3479
20	Air required (cfm)					1253			93			2		246

Printout certified by ACCA to meet all requirements of Manual J 7th Ed.



Right-J Worksheet BR3, BR2, Game R Country Comfort Heating & A. C.

Job: Black
Date: 12-22-07
By: AW

Lake City, FL 32025 Phone: 386-752-5841

MANUAL J: 7th Ed.																
1	Name of room			Nook 0.0 ft			Kitchen 0.0 ft			Laundry 9.0 ft			Bed Rm 3 19.0 ft			
2	Length of exposed wall			1.0 x 61.8 ft			1.0 x 247.0 ft			1.0 x 129.0 ft			1.0 x 204.0 ft			
3	Room dimensions			12.0 ft			12.0 ft			10.0 ft			10.0 ft			
4	Ceilings	Condit. Option		heat/cool			heat/cool			heat/cool			heat/cool			
	TYPE OF EXPOSURE	CST NO.	HTM Htg	HTM Clg	Area (ft²)	Load (Btuh) Htg	Load (Btuh) Clg	Area (ft²)	Load (Btuh) Htg	Load (Btuh) Clg	Area (ft²)	Load (Btuh) Htg	Load (Btuh) Clg	Area (ft²)	Load (Btuh) Htg	Load (Btuh) Clg
5	Gross Exposed walls and partitions	a 12D2	3.6	1.8	0	***	***	0	***	***	90	***	***	190	***	***
		b	0.0	0.0	0	***	***	0	***	***	0	***	***	0	***	***
		c	0.0	0.0	0	***	***	0	***	***	0	***	***	0	***	***
		d	0.0	0.0	0	***	***	0	***	***	0	***	***	0	***	***
		e	0.0	0.0	0	***	***	0	***	***	0	***	***	0	***	***
		f	0.0	0.0	0	***	***	0	***	***	0	***	***	0	***	***
6	Windows and glass doors Heating	a 3F0	21.4	**	0	0	***	0	0	***	11	231	***	34	727	***
		b	0.0	**	0	0	***	0	0	***	0	0	***	0	0	***
		c	0.0	**	0	0	***	0	0	***	0	0	***	0	0	***
		d	0.0	**	0	0	***	0	0	***	0	0	***	0	0	***
		e	0.0	**	0	0	***	0	0	***	0	0	***	0	0	***
		f	0.0	**	0	0	***	0	0	***	0	0	***	0	0	***
7	Windows and glass doors Cooling	North NE/NW		12.0	0	***	0	0	***	0	1	***	12	2	***	22
		E/W		26.8	0	***	0	0	***	0	0	***	0	0	***	0
		SE/SW		43.5	0	***	0	0	***	0	10	647	32	1215	0	0
		South		0.0	0	***	0	0	***	0	0	***	0	0	***	0
		Horz		0.0	0	***	0	0	***	0	0	***	0	0	***	0
8	Other doors	a	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0
		b	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0
		c	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0
9	Net exposed walls and partitions	a 12D2	3.6	1.8	0	0	0	0	0	0	79	285	143	156	562	282
		b	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0
		c	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0
		d	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0
		e	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0
		f	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0
10	Ceilings	a 16G0	1.5	1.4	62	92	88	247	367	350	129	192	183	204	303	289
		b	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0
		c	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0
		d	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0
		e	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0
		f	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0
11	Floors (Note: room perimeter is displ. for slab floors)	a 22A0	36.5	0.0	0	0	0	0	0	0	9	328	0	19	693	0
		b	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0
		c	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0
		d	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0
		e	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0
		f	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0
12	Infiltration Ventilation	a	64.7	15.6	0	0	0	0	0	0	11	699	169	34	2201	531
					0	0	0	0	0	0	0	0	0	0	0	0
13	Subtotal loss=6+8.+11+12				***	92	***	***	367	***	***	1735	***	***	4485	***
	Less external heating				***	0	***	***	0	***	***	0	***	***	0	***
	Less transfer				***	0	***	***	0	***	***	0	***	***	0	***
	Heating redistribution				***	0	***	***	0	***	***	0	***	***	0	***
14	Duct loss				5%	5	***	5%	18	***	5%	87	***	5%	224	***
15	Total loss = 13+14				***	96	***	***	385	***	***	1821	***	***	4709	***
16	Int. gains: People @		300	0	***	0	1	***	300	0	***	0	2	***	600	***
	Appl. @		1200	0	***	0	3	***	3600	2	***	2400	0	***	0	***
17	Subtot RSH gain=7+8.+12+16				***	88	***	***	4250	***	***	3554	***	***	2939	***
	Less external cooling				***	0	***	***	0	***	***	0	***	***	0	***
	Less transfer				***	0	***	***	0	***	***	0	***	***	0	***
	Cooling redistribution				***	0	***	***	0	***	***	0	***	***	0	***
18	Duct gain				10%	9	***	10%	425	***	10%	355	***	10%	294	***
19	Total RSH gain=(17+18)*PLF				1.00	97	***	1.00	4676	***	1.00	3910	***	1.00	3233	***
20	Air required (cfm)					4	***		16	***		74	***		190	***

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Right-J Worksheet BR3, BR2, Game R

Country Comfort Heating & A. C.

Job: Black
Date: 12-22-07
By: AW

Lake City, FL 32025 Phone: 386-752-5841

MANUAL J: 7th Ed.																
1	Name of room				Bath 3			Bed Rm 2			Game Rm			Family Center		
2	Length of exposed wall				7.0 ft			12.0 ft			33.0 ft			0.0 ft		
3	Room dimensions				1.0 x 103.0 ft			1.0 x 196.0 ft			1.0 x 307.5 ft			1.0 x 482.2 ft		
4	Ceilings				10.0 ft heat/cool			10.0 ft heat/cool			12.0 ft heat/cool			14.0 ft heat/cool		
TYPE OF EXPOSURE		CST NO.	HTM Htg	HTM Clg	Area (ft²)	Load (Btuh) Htg	Load (Btuh) Clg	Area (ft²)	Load (Btuh) Htg	Load (Btuh) Clg	Area (ft²)	Load (Btuh) Htg	Load (Btuh) Clg	Area (ft²)	Load (Btuh) Htg	Load (Btuh) Clg
5	Gross Exposed walls and partitions	a 12D2	3.6	1.8	70	***	***	120	***	***	397	***	***	0	***	***
	b		0.0	0.0	0	***	***	0	***	***	0	***	***	0	***	***
	c		0.0	0.0	0	***	***	0	***	***	0	***	***	0	***	***
	d		0.0	0.0	0	***	***	0	***	***	0	***	***	0	***	***
	e		0.0	0.0	0	***	***	0	***	***	0	***	***	0	***	***
	f		0.0	0.0	0	***	***	0	***	***	0	***	***	0	***	***
6	Windows and glass doors Heating	a 3F0	21.4	**	0	0	***	24	513	***	71	1521	***	0	0	***
	b		0.0	**	0	0	***	0	0	***	0	0	***	0	0	***
	c		0.0	**	0	0	***	0	0	***	0	0	***	0	0	***
	d		0.0	**	0	0	***	0	0	***	0	0	***	0	0	***
	e		0.0	**	0	0	***	0	0	***	0	0	***	0	0	***
	f		0.0	**	0	0	***	0	0	***	0	0	***	0	0	***
7	Windows and glass doors Cooling	North NE/NW	12.0	0	***	0	***	1	***	15	18	***	216	0	***	0
		E/W	26.8	0	***	0	***	0	***	0	36	***	969	0	***	0
		SE/SW	43.5	0	***	0	***	23	***	858	17	***	631	0	***	0
		South	0.0	0	***	0	***	0	***	0	0	***	0	0	***	0
		Horz	0.0	0	***	0	***	0	***	0	0	***	0	0	***	0
			0.0	0	***	0	***	0	***	0	0	***	0	0	***	0
8	Other doors	a	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0
	b		0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0
	c		0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0
9	Net exposed walls and partitions	a 12D2	3.6	1.8	70	252	127	96	346	174	326	1172	589	0	0	0
	b		0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0
	c		0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0
	d		0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0
	e		0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0
	f		0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0
10	Ceilings	a 16G0	1.5	1.4	103	153	146	196	291	278	308	457	436	482	716	684
	b		0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0
	c		0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0
	d		0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0
	e		0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0
	f		0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0
11	Floors (Note: room perimeter is displ. for slab floors)	a 22A0	36.5	0.0	7	255	0	12	437	0	33	1203	0	0	0	0
	b		0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0
	c		0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0
	d		0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0
	e		0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0
	f		0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0
12	Infiltration Ventilation	a	64.7	15.6	0	0	0	24	1554	375	71	4607	1112	0	0	0
						0	0		0	0		0	0			
13	Subtotal loss=6+8.+11+12				***	660	***	***	3141	***	***	8960	***	***	716	***
	Less external heating				***	0	***	***	0	***	***	0	***	***	0	***
	Less transfer				***	0	***	***	0	***	***	0	***	***	0	***
	Heating redistribution				***	0	***	***	0	***	***	0	***	***	0	***
14	Duct loss				5%	33	***	5%	157	***	5%	448	***	5%	36	***
15	Total loss = 13+14				***	693	***	***	3298	***	***	9408	***	***	752	***
16	Int. gains: People @		300	0	***	0	0	2	***	600	4	***	1200	6	***	1800
	Appl. @		1200	0	***	0	0	0	***	0	0	***	0	0	***	0
17	Subtot RSH gain=7+8.+12+16				***	***	273	***	***	2300	***	***	5153	***	***	2484
	Less external cooling				***	***	0	***	***	0	***	***	0	***	***	0
	Less transfer				***	***	0	***	***	0	***	***	0	***	***	0
	Cooling redistribution				***	***	0	***	***	0	***	***	0	***	***	0
18	Duct gain				10%	***	27	10%	***	230	10%	***	515	10%	***	248
19	Total RSH gain=(17+18)*PLF				1.00	***	300	1.00	***	2530	1.00	***	5668	1.00	***	2733
20	Air required (cfm)					28	13		133	110		380	245		30	118

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Right-J Worksheet BR3, BR2, Game R Country Comfort Heating & A. C.

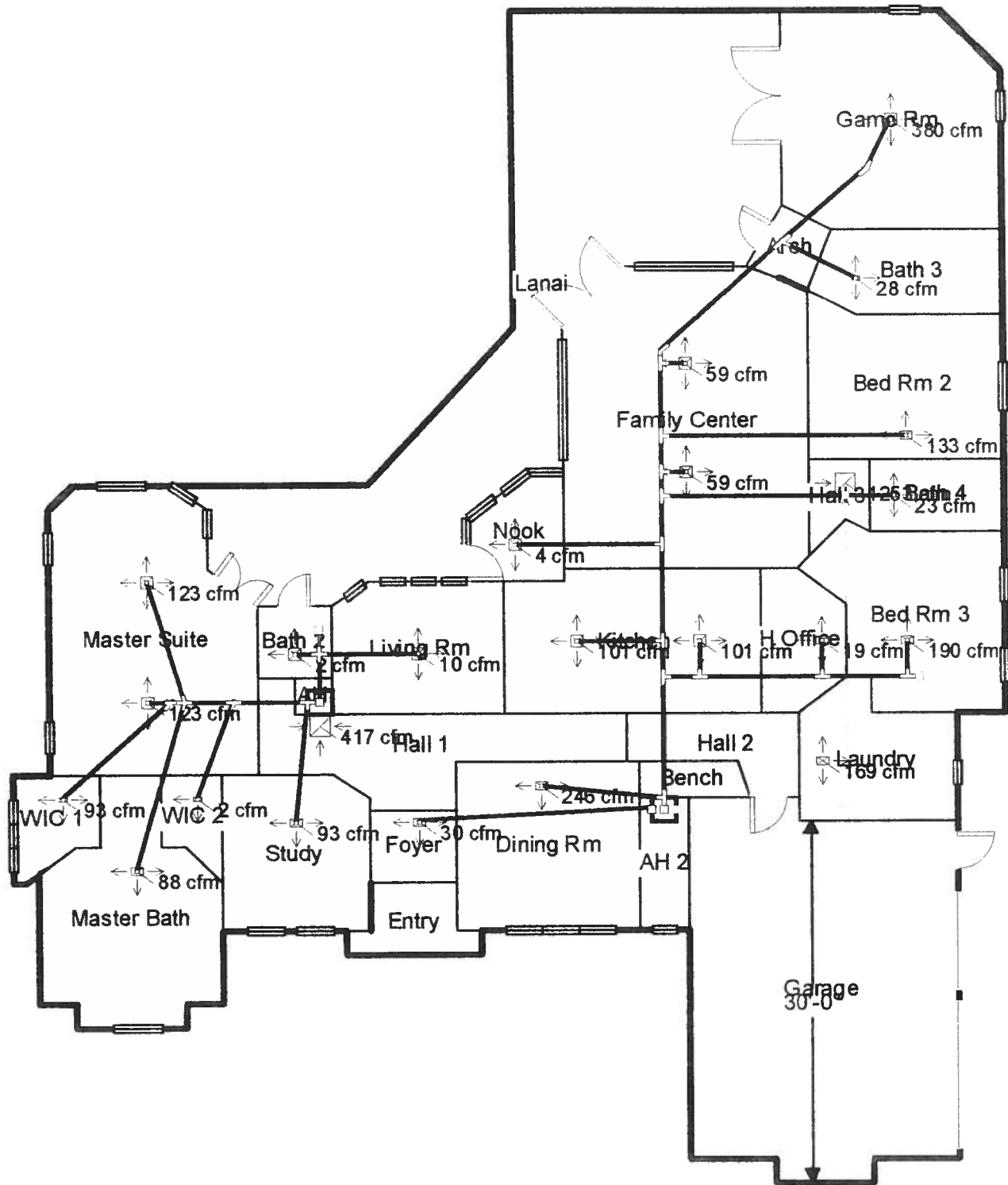
Job: Black
Date: 12-22-07
By: AW

Lake City, FL 32025 Phone: 386-752-5841

MANUAL J: 7th Ed.																
1	Name of room				Bath 4			H Office			Foyer					
2	Length of exposed wall				6.0 ft			0.0 ft			8.0 ft					
3	Room dimensions				11.0 x 6.0 ft			1.0 x 72.0 ft			1.0 x 42.0 ft					
4	Ceilings				10.0 ft heat/cool			12.0 ft heat/cool			12.0 ft heat/cool					
TYPE OF EXPOSURE		CST NO.	HTM Htg	HTM Clg	Area (ft²)	Load (Btuh) Htg	Clg	Area (ft²)	Load (Btuh) Htg	Clg	Area (ft²)	Load (Btuh) Htg	Clg	Area	Htg	Clg
5	Gross Exposed walls and partitions	a 12D2	3.6	1.8	60	0	0	0	0	0	96	0	0		0	0
	b		0.0	0.0	0	0	0	0	0	0	0	0	0		0	0
	c		0.0	0.0	0	0	0	0	0	0	0	0	0		0	0
	d		0.0	0.0	0	0	0	0	0	0	0	0	0		0	0
	e		0.0	0.0	0	0	0	0	0	0	0	0	0		0	0
	f		0.0	0.0	0	0	0	0	0	0	0	0	0		0	0
6	Windows and glass doors Heating	a 3F0	21.4	**	0	0	0	0	0	0	0	0	0		0	0
	b		0.0	**	0	0	0	0	0	0	0	0	0		0	0
	c		0.0	**	0	0	0	0	0	0	0	0	0		0	0
	d		0.0	**	0	0	0	0	0	0	0	0	0		0	0
	e		0.0	**	0	0	0	0	0	0	0	0	0		0	0
	f		0.0	**	0	0	0	0	0	0	0	0	0		0	0
7	Windows and glass doors Cooling	North NE/NW E/W SE/SW South Horiz	12.0 26.8 43.5 0.0 0.0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0		0 0 0 0 0	
8	Other doors	a b c	0.0 0.0 0.0	0.0 0.0 0.0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0			
9	Net exposed walls and partitions	a 12D2	3.6	1.8	60	216	108	0	0	0	96	346	174			
	b		0.0	0.0	0	0	0	0	0	0	0	0	0			
	c		0.0	0.0	0	0	0	0	0	0	0	0	0			
	d		0.0	0.0	0	0	0	0	0	0	0	0	0			
	e		0.0	0.0	0	0	0	0	0	0	0	0	0			
	f		0.0	0.0	0	0	0	0	0	0	0	0	0			
10	Ceilings	a 16G0	1.5	1.4	86	98	94	72	107	102	42	62	60			
	b		0.0	0.0	0	0	0	0	0	0	0	0	0			
	c		0.0	0.0	0	0	0	0	0	0	0	0	0			
	d		0.0	0.0	0	0	0	0	0	0	0	0	0			
	e		0.0	0.0	0	0	0	0	0	0	0	0	0			
	f		0.0	0.0	0	0	0	0	0	0	0	0	0			
11	Floors (Note: room perimeter is displ. for slab floors)	a 22A0	36.5	0.0	6	219	0	0	0	0	8	292	0			
	b		0.0	0.0	0	0	0	0	0	0	0	0	0			
	c		0.0	0.0	0	0	0	0	0	0	0	0	0			
	d		0.0	0.0	0	0	0	0	0	0	0	0	0			
	e		0.0	0.0	0	0	0	0	0	0	0	0	0			
	f		0.0	0.0	0	0	0	0	0	0	0	0	0			
12	Infiltration Ventilation	a	64.7	15.6	0	0	0	0	0	0	0	0	0			
13	Subtotal loss=6+8.+11+12				0	533	0	0	107	0	0	700	0	0	0	0
	Less external heating				0	0	0	0	0	0	0	0	0	0	0	0
	Less transfer				0	0	0	0	0	0	0	0	0	0	0	0
	Heating redistribution				0	0	0	0	0	0	0	0	0	0	0	0
14	Duct loss				5%	27	5%	5	5%	35	5%	35	5%	35	5%	35
15	Total loss = 13+14				0	559	0	0	112	0	0	735	0	0	0	0
16	Int. gains: People @	300	0	0	0	0	1	0	300	0	0	0	0	0	0	0
	Appl. @	1200	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	Subtot RSH gain=7+8.+12+16				0	202	0	0	402	0	0	233	0	0	0	0
	Less external cooling				0	0	0	0	0	0	0	0	0	0	0	0
	Less transfer				0	0	0	0	0	0	0	0	0	0	0	0
	Cooling redistribution				0	0	0	0	0	0	0	0	0	0	0	0
18	Duct gain				10%	20	10%	40	10%	40	10%	23	10%	23	10%	23
19	Total RSH gain=(17+18)*PLF				1.00	222	1.00	442	1.00	442	1.00	256	1.00	256	1.00	256
20	Air required (cfm)				23	10	5	19	30	11	30	11	30	11	30	11

Printout certified by ACCA to meet all requirements of Manual J 7th Ed.

Total Home



Job #: Black
Performed by AW for:
 David Black
 Lake City, Fl

Country Comfort Heating & A. C.

Lake City, Fl 32025
 Phone: 386-752-5841

Scale: 1 : 151

Page 1
 Right-Suite Residential
 5.9.51 RSR26315
 2006-Dec-22 16:06:22
 C:\My Documents\Wrightsoft HVA...

March 19, 2007

Columbia County Building & Zoning Department
135 Hernando Ave.
Lake City, FL 32055

**Re: David & Louann Black Home Construction
570 SW Blanton Ln, Lake City, FL
Permit # 25379**

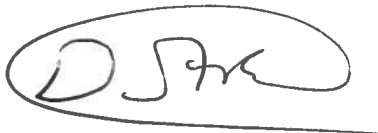
To Whom It May Concern:

During the initial inspection for the footings, clay was encountered. We hired Cal-Tech Testing, Inc to complete an subsurface investigation and engineering evaluation. They completed their report and we submitted it to the CCBD.

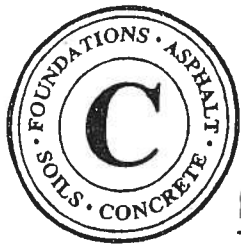
To summarize, the clay had to removed to a depth of 6' below the final grade and extend 5 feet beyond the building perimeter. The area that was excavated would than be backfilled and compacted in 12" lifts.

First we removed and stockpiled the existing fill until we encountered clay. Using a 5cyd loader and small dozer we removed the clay and stockpiled this material. We than placed the clean fill into the excavation in approximately 12" lifts and compacted the material using the loader with the bucket full of material. We made 4 passes over the area with the loader. I have done this performance method before while backfilling UST excavations across the south while working for Anderson Columbia Environmental, Inc. and achieved over 95% density each time.

Yours truly,

A handwritten signature in black ink, appearing to read 'D F Black', enclosed within a hand-drawn oval.

David F. Black



Cal-Tech Testing, Inc.

- Engineering
- Geotechnical
- Environmental

LABORATORIES

P.O. Box 1625 • Lake City, FL 32056-1625
6919 Distribution Avenue S., Unit #5 • Jacksonville, FL 32257

Tel. (386) 755-3633 • Fax (386) 752-5456
Tel. (904) 262-4046 • Fax (904) 262-4047

February 21, 2007

David Black
255 SW Aurora Way
Lake City, Florida 32025

Reference: Black Residence
Blanton Road
Lake City, Florida
Cal-Tech Project No. 07-072

Dear Mr. Black :

Cal-Tech Testing, Inc. has completed a subsurface investigation and engineering evaluation of the site for the proposed residence in Lake City, Florida. Our work was authorized by you.

Introduction

We understand that a single-story, wood frame residential structure, with a total plan area of about 3,600 square feet will be constructed. We further understand that the structure will be supported by shallow spread footings. At the time of our exploration, the site had been cleared; the limits of the structure delineated and some excavations had taken place. Clayey soils were exposed in the excavations, and we were asked to evaluate the underlying soils to determine if they were expansive.

Site Investigation

Subsurface conditions were investigated by performing six (6) auger borings advanced to a depth of 3½ to 6 feet. The borings were performed at the approximate location indicated on the attached Report of Soil Borings. The borings were located in the field by us.

The auger borings were performed manually by the use of a post-hole auger and in general accordance with ASTM D 1452-80 "Soil Investigation and Sampling by Auger Borings." Representative samples of the soils brought to the ground surface by the augering process were sealed, and transported to our laboratory where they were examined to verify the driller's field classification.

Laboratory Testing

In order to classify the clay material encountered, a total of three samples were selected from the borings for laboratory testing. The testing included fines content and Atterberg Limits.

Findings

In general, the soil borings initially encountered a thin layer of fine sands (SC). This was underlain by clayey fine sands and sandy clays (SC,CL and CH) to the termination depths.

Groundwater was encountered at a depth of 3 feet in Borings A-4 and A-5. However, the other borings encountered no groundwater to the maximum depth drilled.

For a more detailed description of the subsurface conditions encountered, please refer to the attached Boring Logs. Note specifically the transition between soil layers may be gradual and not abrupt as indicated by the logs; therefore, the thickness of soil layers should be considered approximate.

Samples of the clayey sands/sandy clays were obtained from Borings A-1, A-3, and A-5 at a depth of one to two feet. A fines content and Atterberg Limits test was performed on each. The samples contained 43 to 74 percent passing the number 200 mesh sieve, with Liquid Limits of 37 to 61 percent and a Plasticity Index of 21 to 30.

Discussion and Recommendations

Based upon our evaluation of soil samples from the borings, we believe the clayey soils encountered at depths of about one to two feet are active, implying they shrink or swell with changes in their moisture content. The structure supported on conventional, shallow spread footings could experience detrimental foundation movements following construction. These foundations may be lifted or subside with normal seasonal changes in soil moisture.

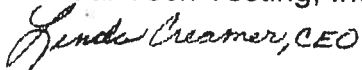
The local standard-of-care for using conventional foundations over active clay soils is to excavate and replace the active soils to depths of about five to six feet below the bottom of the foundations. Therefore, we recommend that the building area be overexcavated to a depth of six feet below final site grades and backfilled with compacted structural fill. The excavation should also extend at least five feet beyond the building perimeter. We further recommend that once the structure is completed, storm water is directed away from the foundation areas. Simple modifications typically include storm gutters and down spouts to collect and divert storm water away from foundation areas and/or contouring the ground surface to promote surface runoff.

Backfill should consist of relatively clean, fine sand containing less than 10% passing the No. 200 sieve. Fill should be placed in maximum 12-inch, loose lifts, and each lift should be proof-compacted to a minimum of 95% of the Modified Proctor maximum dry density. Field density testing should be performed in the compacted subgrade, in each lift of fill, and in foundation excavations to verify the recommended compaction has been achieved.

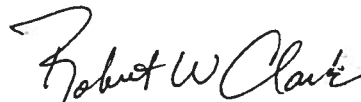
Our recommendations are based upon our findings as described in this report; however, subsurface conditions may exist that were not encountered in the soil test borings. Cal-Tech Testing, Inc. should be notified immediately if different soil conditions are encountered during construction. It may be necessary to reevaluate this site and revise our recommendations.

We appreciate the opportunity to be of service on this project and look forward to a continued association. Please do not hesitate to contact us should you have questions concerning this report or if we may be of further assistance.

Respectfully submitted,
Cal-Tech Testing, Inc.



Linda Creamer
President-CEO



Robert W. Clark, P.E. 2/23/07
Geotechnical Engineer

COLUMBIA COUNTY FLORIDA DEPARTMENT OF BUILDING AND ZONING

OCCUPANCY

COLUMBIA COUNTY, FLORIDA

Department of Building and Zoning Inspection

This Certificate of Occupancy is issued to the below named permit holder for the building and premises at the below named location, and certifies that the work has been completed in accordance with the Columbia County Building Code.

Parcel Number 14-4S-15-00363-215

Building permit No. 000025379

Use Classification SFD/UTILITY

Fire: 70.62

Permit Holder DAVID & LUANN BLACK

Waste: 184.25

Owner of Building DAVID A. LUANN BLACK

Total: 254.87

Location: 570 SW BLANTON LANE

Date: 11/21/2007



Building Inspector

POST IN A CONSPICUOUS PLACE
(Business Places Only)

Notice of Treatment

Applicator: Florida Pest Control & Chemical Co. (www.flapest.com)

Address: 536 SE Bay Dr

City: Lake City **Phone:** 752-1703

Site Location: Subdivision _____

Lot # _____ **Block #** _____ **Permit #** 25379

Address: 570 SW Blanton Ln, L.C.

<u>Product used</u>	<u>Active Ingredient</u>	<u>% Concentration</u>
<input checked="" type="checkbox"/> Premise	Imidacloprid	0.1%
<input type="checkbox"/> Termidor	Fipronil	0.12%
<input type="checkbox"/> Bora Care	Disodium Octaborate Tetrahydrate	23.0%

Type treatment:

☒ Soil

☐ Wood

<u>Area Treated</u>	<u>Square feet</u>	<u>Linear feet</u>	<u>Gallons Applied</u>
<u>Main Back Porches</u>	<u>3600</u>	<u>782</u>	<u>250</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

As per Florida Building Code 104.2.6 – If soil chemical barrier method for termite prevention is used, final exterior treatment shall be completed prior to final building approval.

If this notice is for the final exterior treatment, initial this line _____

3/22/07
Date

1:17
Time

Noel
Print Technician's Name

Remarks: _____

Applicator - White

Permit File - Canary

Permit Holder - Pink

10/05



25379

















