2825

Columbia County Building Permit Application

Revised 9-23-04

For Office Use Only Application # 0610-05 Date Received 10/3/06 By G Permit # 1233/25105

Application Approved by - Zoning Official BLK Date 06.10.06 Plans Examiner OK JTH Date 10-6-06

Flood Zone X per plat Development Permit N/A Zoning RSF-2 Land Use Plan Map Category RES. Low Dev.

Comments Plat Requires 1st Floor Elevation to be 109.0' Elevation Letter Required

~~*NOC*~~

Applicants Name ~~Linda Poder~~ ~~Aaron Cady~~ Aaron Cady Phone 752-2878 ~~752-2281~~ (867-1458)

Address 122 S.W. Midtown Place Lake City, FL

Owners Name KENNETH & DAWN KELLAM Phone 752-2878

911 Address 173 S.W. Buttercup Dr Lake City FL 32024

Contractors Name Cady Homes & Associates Phone 752-2878

Address 122 S.W. Midtown Place, Lake City, FL. 32026

Fee Simple Owner Name & Address NA

Bonding Co. Name & Address NA

Architect/Engineer Name & Address Will Myers - Mark Disosway

Mortgage Lenders Name & Address Coast Bank

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

Property ID Number 15-4S-16-03023-549 Estimated Cost of Construction 200K

Subdivision Name Rolling Meadows Lot 49 Block ____ Unit ____ Phase ____

Driving Directions Sisters Welcome Rd, R on Hope Henry, R on SW Morning Glory Dr, R on SW Buttercup Dr, Lot is 3rd Down on R

Type of Construction SFD FRAME Number of Existing Dwellings on Property 0

Total Acreage .5 Lot Size .5 Do you need a - (Culvert Permit) or Culvert Waiver or Have an Existing Drive

Actual Distance of Structure from Property Lines - Front 50 Side 33.5 Side 33.5 Rear 58'

Total Building Height 19' Number of Stories 1 Heated Floor Area 2088 TOTAL 2,928 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 COMMENCMENT 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 Agent (Including Contractor) ____

Contractor Signature Aaron M. Cady V.P.

Contractors License Number CBC1508421

Competency Card Number ____

STATE OF FLORIDA
COUNTY OF COLUMBIA

NOTARY STAMP/SEAL

Sworn to (or affirmed) and subscribed before me

this 1 day of Oct 2006.

Personally known X or Produced Identification ____

Caroleann Ruth Hayhurst

Notary Signature

NOTARY PUBLIC STATE OF FLORIDA
Caroleann Ruth Hayhurst
Commission #DD547714
Expires: MAY 02, 2010
www.AaronNotary.com

JW called Linda

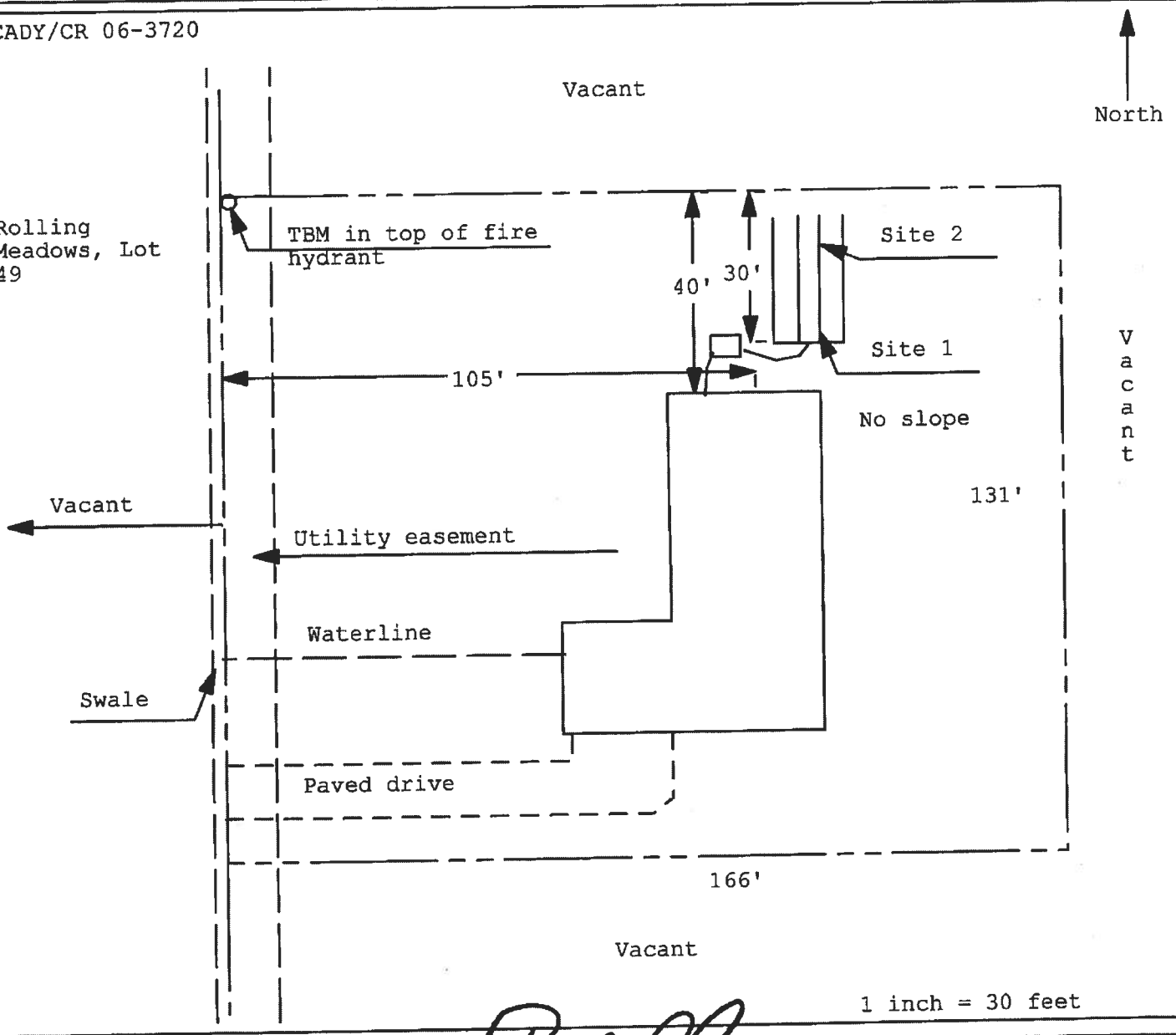
Kellam

Application for Onsite Sewage Disposal System Construction Permit. Part II Site Plan

Permit Application Number: 06-0890N

ALL CHANGES MUST BE APPROVED BY THE COUNTY HEALTH UNIT

CADY/CR 06-3720



1 inch = 30 feet

Site Plan Submitted By Paul Lloyd **Date** 10/3/06

Plan Approved X **Not Approved** ____ **Date** 10-10-06

By Sallie Goolsby ES II **CPHU**

Notes:

Columbia CHD

Notice of Authorization

I Aaron Cady, do hereby authorize Linda Roder or Melanie Roder,

to be my representative and act on my behaf in all aspects of applying for any

_____ permit to be located in Columbia county.

Any homeowner and legal description

X _____

Contractor's signature

Oct 1, 2006

Date

Sworn and subscribed before me this 1 day of October, 2004.

Caroleann Ruth Hayhurst

Notary Public

Caroleann Ruth Hayhurst
Commission #DD547714
Expires: MAY 02, 2010
www.AaronNotary.com

My commision expires: May 2, 2010
Commision No. DD547714
Personally known Aaron Cady
Produced ID (Type): _____

ATS# 15992

This Instrument Prepared By:
Michael H. Harrell
Abstract & Title Services, Inc.
283 NW Cole Terrace
Lake City, Florida 32055

CORPORATE WARRANTY DEED

Corporation to Individual

THIS WARRANTY DEED made this 22nd day of August, 2006, by Cady Homes & Associates, Inc., a Corporation existing under the laws of the State of Florida, whose principle place of business is 122 SW Midtown Place, Suite 106, Lake City, FL 32025, hereinafter called the Grantor, to Kenneth Kellam, and his wife, Dawn Kellam whose post office address is: PO Box 1255, Lake City, FL 32056 hereinafter called the Grantee:

(Wherever used herein the terms "Grantor" and "Grantee" include all the parties to this instrument and the heirs, legal representatives and assigns of individuals, and the successors and assigns of corporation)

WITNESSETH that the Grantor, for and in consideration of the sum of $10.00 and other valuable considerations, receipt whereof is hereby acknowledged, hereby grants, bargains, sells, aliens, remises, releases, conveys, and confirms unto the Grantee, all that certain land situate in COLUMBIA County, Florida, viz: Parcel ID# R03023-549

LOT 49, OF ROLLING MEADOWS, A SUBDIVISION ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 8, PAGES 45 AND 46, OF THE PUBLIC RECORDS OF COLUMBIA COUNTY, FLORIDA.

TOGETHER with all tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining.

TO HAVE AND TO HOLD, the same in fee simple forever.

AND the Grantor hereby covenants with said Grantee that the Grantor is lawfully seized of said land in fee simple; that the Grantor has good right and lawful authority to sell and convey said land; that the Grantor hereby fully warrants the title to said land and will defend the same against the lawful claims of all persons whomsoever; and that said land is free of all encumbrances, except taxes accruing subsequent to December 31, 2005.

IN WITNESS WHEREOF, the said grantor has signed and sealed these presents the day and year first above written.

Signed, sealed and delivered in our presence:

Cheryl Beaty
WITNESS
Cheryl Beaty
PRINTED NAME

Jessica Newsome
WITNESS
Jessica Newsome
PRINTED NAME

Cady Homes & Associates, Inc.
BY: Aaron M. Cady V.P.
Aaron M. Cady, Vice President

Inst:2006020177 Date:08/24/2006 Time:14:25
Doc Stamp-Deed : 346.50
DC,P.DeWitt Cason,Columbia County B:1093 P:2344

STATE OF FLORIDA
COUNTY OF COLUMBIA

The foregoing instrument was acknowledged before me this 22nd day of August, 2006 by Aaron M .Cady, as Vice President of Cady Homes & Associates, Inc, personally known to me or, if not personally known to me, who produced a drivers license for identification and who did not take an oath.

(SEAL)

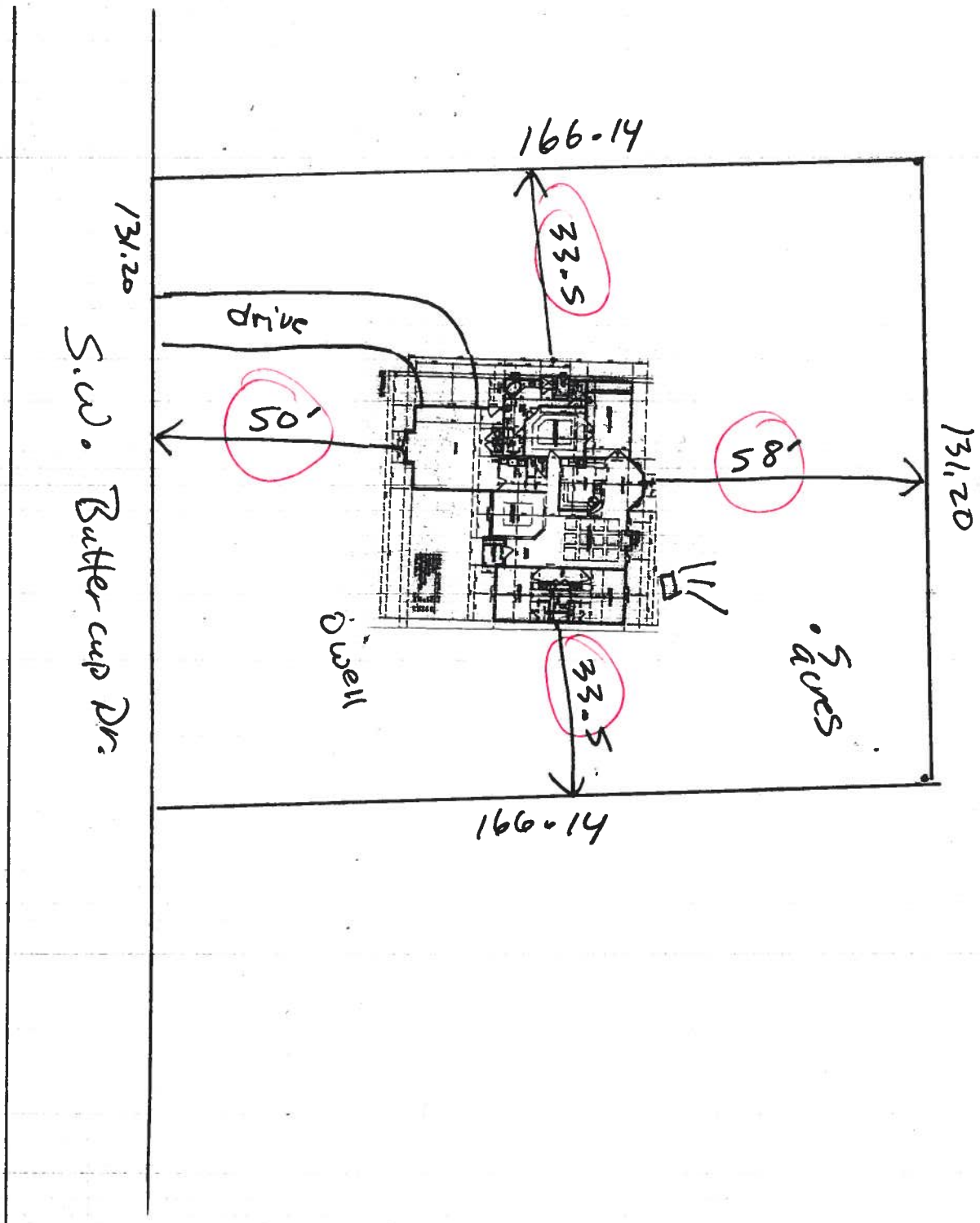
NOTARY PUBLIC

My Commission Expires:

DORIS M DRAKE
MY COMMISSION # DD537517
EXPIRES: Apr. 5, 2010
(407) 398-0153 Florida Notary Service.com

Site Plan

Lot 49 Rolling Meadows



ASPEN
PEST CONTROL, INC.

Phone (386) 755-36
Fax (386) 755-38
Toll Free 1-800-616-47

Notice of Intent for Preventative Treatment for Termites

(As required by Florida Building Code (FBC) 104.2.6)

Aspen Pest Control, Inc.
(386) 755-3611
State License # - JB109476
State Certification # - JF104376

Kellam WD 1063-1963-WD1069-1519-WD1077-1343
Parcel #15-4S-16-03023-549

Address of Treatment or Lot/Block of Treatment

Bora-Care Wood Treatment – 23% Disodium Octaborate Tetrahydrate

Method of Termite Prevention Treatment – Soil Barrier, Wood Treatment, Bait System, Other

Application onto Structural Wood

Description of Treatment

The above named structure will receive a complete treatment for the prevention of subterranean termites at the dried-in stage of construction. Treatment is done in accordance with the rules and laws established by the Florida Department of Agriculture and Consumer Services and according to EPA registered label directions as stated in Florida Building Code Section 1861.1.8.

Celia Snyder
Authorized Signature

9-7-06
Date

Inst:2006023148 Date:09/27/2006 Time:16:29
DC,P.DeWitt Cason,Columbia County B:1097 P:887

LOAN NUMBER: 701012746

NOTICE OF COMMENCEMENT

STATE OF Florida **, COUNTY OF Columbia**

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.

1. **Description of property:** LOT 49 OF ROLLING MEADOWS, A SUBDIVISION ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 8, PAGES 45 AND 46, OF THE PUBLIC RECORDS OF COLUMBIA COUNTY, FLORIDA.
XXX ROLLING MEADOWS, LAKE CITY, FL 32024

2. **General description of improvements:** Single Family Residence

3. **Owner information:**
   a. Name(s): DAWN KELLAM and KENNETH KELLAM
   b. Address: 236 SW EMERALD ST, LAKE CITY, FL 32024
   c. Interest in property: Fee Simple
   d. Name and address of fee simple titleholder (if other than Owner): N/A

COPY

4. **Contractor:** CADY HOMES & ASSOC, INC.
PO BOX 123, LAKE CITY, FL 32056

5. **Surety**
   a. Name and address: None
   b. The amount of bond: N/A

6. Lender COAST BANK OF FLORIDA – P. O. BOX 150, BRADENTON, FLORIDA 34206-0150

7. Persons within the State of Florida designated by Owner upon whom notices or other documents may be served as provided by Section 713.13(1)(a)7, Florida Statutes: N/A

8. In addition to himself, Owner designates ** to receive a copy of the Lienor's Notice as provided in Section 713.13(1)(b), Florida Statutes.
****COAST BANK OF FLORIDA – Attn: Wanda M. Farr - P. O. Box 150, Bradenton, Florida 34206-0150 (941-345-1473)**

9. Expiration date of notice of commencement (the expiration date is 2 year from the date of recording unless a different date is specified)_____.

Borrower: DAWN KELLAM

Borrower: KENNETH KELLAM

Borrower:

Borrower:

STATE OF Florida

COUNTY SS/

The forgoing instrument was acknowledge before me this 25 day of September, 2006 by DAWN KELLAM and KENNETH KELLAM who is personally known to me or has produced DL as identification and who did _____ take an oath.
My Commission expires:

Notary Public

Notary Public State of Florida
Matthew Rocco
My Commission DD578349
Expires 09/17/2010

STATE OF FLORIDA, COUNTY OF COLUMBIA
I HEREBY CERTIFY, that the above and foregoing is a true copy of the original filed in this office.
P. DeWITT CASON, CLERK OF COURTS
By _____ Deputy Clerk
Date Sept 29, 2006

CLERK CIRCUIT COURT
COLUMBIA COUNTY, FLORIDA

FORM 600A-2004 Tested sealed ducts must be certified in this house. EnergyGauge® 4.1

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Community Affairs

Residential Whole Building Performance Method A

Project Name:	**Cady Homes - Kellam Res.**	Builder:	**Cady Homes & Assoc.**
Address:	**Lot: 49, Sub: Rolling Meadow, Plat:**	Permitting Office:	Columbia
City, State:	**Lake City, Fl 32025-**	Permit Number:	25-105
Owner:	**Kenneth & Drawn Kellam**	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: 47.0 kBtu/hr
3. Number of units, if multi-family	1		SEER: 12.00
4. Number of Bedrooms	3	b. N/A	
5. Is this a worst case?	No		
6. Conditioned floor area (ft²)	2088 ft²	c. N/A	
7. Glass type[1] and area: (Label reqd. by 13-104.4.5 if not default)			
a. U-factor:	Description Area	13. Heating systems	
(or Single or Double DEFAULT)	7a (Sngle Default) 268.0 ft²	a. Electric Heat Pump	Cap: 47.0 kBtu/hr
b. SHGC:			HSPF: 6.80
(or Clear or Tint DEFAULT)	7b. (Clear) 268.0 ft²	b. N/A	
8. Floor types			
a. Slab-On-Grade Edge Insulation	R=0.0, 215.0(p) ft	c. N/A	
b. N/A			
c. N/A		14. Hot water systems	
9. Wall types		a. Electric Resistance	Cap: 50.0 gallons
a. Frame, Wood, Exterior	R=13.0, 1428.0 ft²		EF: 0.90
b. Frame, Wood, Adjacent	R=13.0, 164.0 ft²	b. N/A	
c. N/A			
d. N/A		c. Conservation credits	
e. N/A		(HR-Heat recovery, Solar	
10. Ceiling types		DHP-Dedicated heat pump)	
a. Under Attic	R=30.0, 2200.0 ft²	15. HVAC credits	PT,
b. N/A		(CF-Ceiling fan, CV-Cross ventilation,	
c. N/A		HF-Whole house fan,	
11. Ducts(Leak Free)		PT-Programmable Thermostat,	
a. Sup: Unc. Ret: Unc. AH: Garage	Sup. R=6.0, 65.0 ft	MZ-C-Multizone cooling,	
b. N/A		MZ-H-Multizone heating)	

Glass/Floor Area: 0.13 Total as-built points: 27858 Total base points: 29502 **PASS**

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

PREPARED BY: _____

DATE: 10.6.06

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: **Lot: 49, Sub: Rolling Meadow, Plat: , Lake City, Fl, 32025-** PERMIT #:

BASE				AS-BUILT							
GLASS TYPES .18 X Conditioned Floor Area	X BSPM	= Points		Type/SC	Overhang Ornt	Len	Hgt	Area X	SPM X	SOF	= Points
.18	2088.0	20.04	7531.8	Single, Clear	W	1.5	10.0	75.0	43.84	0.98	3218.6
				Single, Clear	SW	1.5	10.0	15.0	45.75	0.98	669.3
				Single, Clear	NW	1.5	10.0	15.0	29.42	0.98	433.3
				Single, Clear	E	1.5	10.0	45.0	47.92	0.98	2109.5
				Single, Clear	E	1.5	8.0	16.0	47.92	0.96	734.2
				Single, Clear	S	1.5	8.0	16.0	40.81	0.92	602.9
				Single, Clear	E	1.5	8.0	6.0	47.92	0.96	275.3
				Single, Clear	W	13.5	10.0	40.0	43.84	0.47	817.5
				Single, Clear	S	20.7	8.0	40.0	40.81	0.44	711.7
				As-Built Total:				**268.0**			**9572.3**

WALL TYPES	Area X	BSPM	= Points	Type	R-Value	Area X	SPM	= Points
Adjacent	164.0	0.70	114.8	Frame, Wood, Exterior	13.0	1428.0	1.50	2142.0
Exterior	1428.0	1.70	2427.6	Frame, Wood, Adjacent	13.0	164.0	0.60	98.4
Base Total:	**1592.0**		**2542.4**	**As-Built Total:**		**1592.0**		**2240.4**

DOOR TYPES	Area X	BSPM	= Points	Type	Area X	SPM	= Points
Adjacent	20.0	1.60	32.0	Exterior Insulated	20.0	4.10	82.0
Exterior	20.0	4.10	82.0	Adjacent Insulated	20.0	1.60	32.0
Base Total:	**40.0**		**114.0**	**As-Built Total:**	**40.0**		**114.0**

CEILING TYPES	Area X	BSPM	= Points	Type	R-Value	Area X	SPM X SCM	= Points
Under Attic	2088.0	1.73	3612.2	Under Attic	30.0	2200.0	1.73 X 1.00	3806.0
Base Total:	**2088.0**		**3612.2**	**As-Built Total:**		**2200.0**		**3806.0**

FLOOR TYPES	Area X	BSPM	= Points	Type	R-Value	Area X	SPM	= Points
Slab	215.0(p)	-37.0	-7955.0	Slab-On-Grade Edge Insulation	0.0	215.0(p	-41.20	-8858.0
Raised	0.0	0.00	0.0					
Base Total:			**-7955.0**	**As-Built Total:**		**215.0**		**-8858.0**

INFILTRATION	Area X	BSPM	= Points	Area X	SPM	= Points
	2088.0	10.21	21318.5	2088.0	10.21	21318.5

SUMMER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: **Lot: 49, Sub: Rolling Meadow, Plat: , Lake City, Fl, 32025-** PERMIT #:

BASE			AS-BUILT					
Summer Base Points: 27164.0			**Summer As-Built Points: 28193.2**					
Total Summer Points	X System Multiplier	= Cooling Points	Total Component (System - Points)	X Cap Ratio	X Duct Multiplier (DM x DSM x AHU)	X System Multiplier	X Credit Multiplier	= Cooling Points
			(sys 1: Central Unit 47000 btuh ,SEER/EFF(12.0) Ducts:Unc(S),Unc(R),Gar(AH),R6.0(INS)					
			28193	1.00	(1.09 x 1.000 x 1.00)	0.284	0.950	8303.3
27164.0	**0.4266**	**11588.1**	**28193.2**	**1.00**	**1.090**	**0.284**	**0.950**	**8303.3**

WINTER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: **Lot: 49, Sub: Rolling Meadow, Plat: , Lake City, Fl, 32025-** PERMIT #:

BASE				AS-BUILT							
GLASS TYPES .18 X Conditioned Floor Area	X BWPM	= Points		Type/SC	Overhang Ornt	Len	Hgt	Area X	WPM X	WOF	= Points
.18	2088.0	12.74	4788.2	Single, Clear	W	1.5	10.0	75.0	28.84	1.01	2175.4
				Single, Clear	SW	1.5	10.0	15.0	24.09	1.02	366.9
				Single, Clear	NW	1.5	10.0	15.0	32.93	1.00	493.7
				Single, Clear	E	1.5	10.0	45.0	26.41	1.01	1203.5
				Single, Clear	E	1.5	8.0	16.0	26.41	1.02	430.9
				Single, Clear	S	1.5	8.0	16.0	20.24	1.04	337.1
				Single, Clear	E	1.5	8.0	6.0	26.41	1.02	161.6
				Single, Clear	W	13.5	10.0	40.0	28.84	1.20	1379.8
				Single, Clear	S	20.7	8.0	40.0	20.24	3.63	2936.7
				As-Built Total:				**268.0**			**9485.7**
WALL TYPES	Area X	BWPM =	Points	Type			R-Value	Area X	WPM =		Points
Adjacent	164.0	3.60	590.4	Frame, Wood, Exterior			13.0	1428.0	3.40		4855.2
Exterior	1428.0	3.70	5283.6	Frame, Wood, Adjacent			13.0	164.0	3.30		541.2
Base Total:	**1592.0**		**5874.0**	**As-Built Total:**				**1592.0**			**5396.4**
DOOR TYPES	Area X	BWPM =	Points	Type				Area X	WPM =		Points
Adjacent	20.0	8.00	160.0	Exterior Insulated				20.0	8.40		168.0
Exterior	20.0	8.40	168.0	Adjacent Insulated				20.0	8.00		160.0
Base Total:	**40.0**		**328.0**	**As-Built Total:**				**40.0**			**328.0**
CEILING TYPES	Area X	BWPM =	Points	Type			R-Value	Area X	WPM X	WCM =	Points
Under Attic	2088.0	2.05	4280.4	Under Attic			30.0	2200.0	2.05 X	1.00	4510.0
Base Total:	**2088.0**		**4280.4**	**As-Built Total:**				**2200.0**			**4510.0**
FLOOR TYPES	Area X	BWPM =	Points	Type			R-Value	Area X	WPM =		Points
Slab	215.0(p)	8.9	1913.5	Slab-On-Grade Edge Insulation			0.0	215.0(p	18.80		4042.0
Raised	0.0	0.00	0.0								
Base Total:			**1913.5**	**As-Built Total:**				**215.0**			**4042.0**
INFILTRATION	Area X	BWPM =	Points					Area X	WPM =		Points
	2088.0	-0.59	-1231.9					2088.0	-0.59		-1231.9

WINTER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: **Lot: 49, Sub: Rolling Meadow, Plat: , Lake City, Fl, 32025-** PERMIT #:

BASE			AS-BUILT						
Winter Base Points:		**15952.2**	**Winter As-Built Points:**						**22530.2**
Total Winter Points	X System Multiplier	= Heating Points	Total Component (System - Points)	X Cap Ratio	X Duct Multiplier (DM x DSM x AHU)	X System Multiplier	X Credit Multiplier	= Heating Points	
			(sys 1: Electric Heat Pump 47000 btuh ,EFF(6.8) Ducts:Unc(S),Unc(R),Gar(AH),R6.0						
			22530.2	1.000	(1.069 x 1.000 x 1.00)	0.501	0.950	11473.9	
15952.2	**0.6274**	**10008.4**	**22530.2**	**1.00**	**1.069**	**0.501**	**0.950**	**11473.9**	

WATER HEATING & CODE COMPLIANCE STATUS

Residential Whole Building Performance Method A - Details

ADDRESS: **Lot: 49, Sub: Rolling Meadow, Plat: , Lake City, Fl, 32025-** PERMIT #:

BASE				AS-BUILT						
WATER HEATING										
Number of Bedrooms	X	Multiplier	= Total	Tank Volume	EF	Number of Bedrooms	X Tank Ratio	X Multiplier	X Credit Multiplier	= Total
3		2635.00	7905.0	50.0	0.90	3	1.00	2693.56	1.00	8080.7
				As-Built Total:						**8080.7**

CODE COMPLIANCE STATUS

BASE				AS-BUILT			
Cooling Points	Heating Points	Hot Water Points	Total Points	Cooling Points	Heating Points	Hot Water Points	Total Points
11588	**10008**	**7905**	**29502**	**8303**	**11474**	**8081**	**27858**

PASS

Code Compliance Checklist

Residential Whole Building Performance Method A - Details

ADDRESS: **Lot: 49, Sub: Rolling Meadow, Plat: , Lake City, Fl, 32025-** 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 cir 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.	

Tested sealed ducts must be certified in this house.

ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE SCORE* = 84.4

The higher the score, the more efficient the home.

Kenneth & Drawn Kellam, Lot: 49, Sub: Rolling Meadow, Plat: , Lake City, Fl, 32025-

1.	New construction or existing	New	__
2.	Single family or multi-family	Single family	__
3.	Number of units, if multi-family	1	__
4.	Number of Bedrooms	3	__
5.	Is this a worst case?	No	__
6.	Conditioned floor area (ft²)	2088 ft²	__
7.	Glass type[1] and area: (Label reqd. by 13-104.4.5 if not default)		
a.	U-factor: (or Single or Double DEFAULT)	7a (Sngle Default) 268.0 ft²	__
b.	SHGC: (or Clear or Tint DEFAULT)	7b. (Clear) 268.0 ft²	__
8.	Floor types		
a.	Slab-On-Grade Edge Insulation	R=0.0, 215.0(p) ft	__
b.	N/A		__
c.	N/A		__
9.	Wall types		
a.	Frame, Wood, Exterior	R=13.0, 1428.0 ft²	__
b.	Frame, Wood, Adjacent	R=13.0, 164.0 ft²	__
c.	N/A		__
d.	N/A		__
e.	N/A		__
10.	Ceiling types		
a.	Under Attic	R=30.0, 2200.0 ft²	__
b.	N/A		__
c.	N/A		__
11.	Ducts(Leak Free)		
a.	Sup: Unc. Ret: Unc. AH: Garage	Sup. R=6.0, 65.0 ft	__
b.	N/A		__

12.	Cooling systems		
a.	Central Unit	Cap: 47.0 kBtu/hr	__
		SEER: 12.00	__
b.	N/A		__
			__
c.	N/A		__
			__
13.	Heating systems		
a.	Electric Heat Pump	Cap: 47.0 kBtu/hr	__
		HSPF: 6.80	__
b.	N/A		__
			__
c.	N/A		__
			__
14.	Hot water systems		
a.	Electric Resistance	Cap: 50.0 gallons	__
		EF: 0.90	__
b.	N/A		__
			__
c.	Conservation credits (HR-Heat recovery, Solar DHP-Dedicated heat pump)		__
15.	HVAC credits (CF-Ceiling fan, CV-Cross ventilation, HF-Whole house fan, PT-Programmable Thermostat, MZ-C-Multizone cooling, MZ-H-Multizone heating)	PT,	__

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 EnergyStar™ 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.

Energy Code Compliance

Duct System Performance Report

Project Name:	Cady Homes - Kellam Res.	Builder:	Cady Homes & Assoc.
Address:		Permitting Office:	
City, State:	Lake City, Fl 32025-	Permit Number:	
Owner:	Kenneth & Drawn Kellam	Jurisdiction Number:	
Climate Zone:	North		

Total Duct System Leakage Test Results

CFM25 Total Duct Leakage Test Values			
Line	System	Duct Leakage Total	Duct Leakage to Outdoors
1	System1	_____ cfm25(tot)	_____ cfm25(out)
2	System2	_____ cfm25(tot)	_____ cfm25(out)
3	System3	_____ cfm25(tot)	_____ cfm25(out)
4	System4	_____ cfm25(tot)	_____ cfm25(out)
5	**Total House Duct System Leakage**	Sum lines 1-4 _____ Divide by _____ (Total Conditioned Floor Area) = _____ **(Q_n,tot)** ☐ **Receive credit if Q_n,tot≤ 0.03**	Sum lines 1-4 _____ Divide by _____ (Total Conditioned Floor Area) = _____ **(Q_n,out)** ☐ **Receive credit if Q_n,out≤ 0.03 AND Q_n,tot≤ 0.09**

I hereby certify that the above duct testing performance results demonstrate compliance with the Florida Energy Code requirements in accordance with Section 610.1.A.1, Florida Building Code, Building Volume, Chapter 13 for leak free duct system credit.

Signature: _____

Printed Name: _____

Florida Rater Certification #: _____

DATE: _____

Florida Building Code requires that testing to confirm leak free duct systems be performed by a Class 1 Florida Energy Gauge Certified Energy Rater. Certified Florida Class 1 raters can be found at: http://energygauge.com/search.htp

BUILDING OFFICIAL: _____

DATE: _____

FROM : FAX NO. : 386-755-7022 Sep. 17 2002 01:52PM P1

HALL'S PUMP & WELL SERVICE, INC.

SPECIALIZING IN 4-6" WELLS

[redacted]

DONALD AND MARY HALL
OWNERS

[illegible]
904 NW Main Blvd.

June 12, 2002

NOTICE TO ALL CONTRACTORS

Please be advised that due to the new building codes we will use a large capacity diaphram tank on all new wells. This will insure a minimum of one (1) minute draw down of one (1) minute refill. If a smaller diaphram tank is used then we will install a cycle stop valve which will produce the same results.

If you have any questions please feel free to call our office anytime.

Thank you,

Donald O. Hall
DOH/jk

Residential System Sizing Calculation

Summary

Kenneth & Drawn Kellam

Lake City, Fl 32025-

Project Title:
Cady Homes - Kellam Res.

Code Only
Professional Version
Climate: North

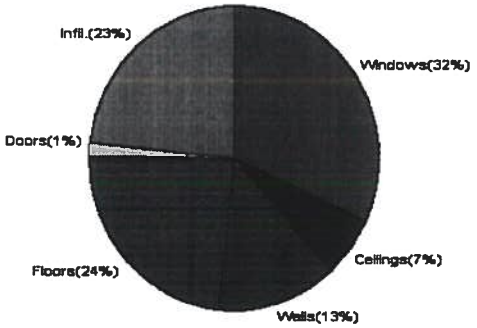
10/6/2006

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	**39340**	**Btuh**	**Total cooling load calculation**	**42149**	**Btuh**
Submitted heating capacity	% of calc	Btuh	Submitted cooling capacity	% of calc	Btuh
Total (Electric Heat Pump)	119.5	47000	Sensible (SHR = 0.75)	104.2	35250
Heat Pump + Auxiliary(0.0kW)	119.5	47000	Latent	141.2	11750
			Total (Electric Heat Pump)	111.5	47000

WINTER CALCULATIONS

Winter Heating Load (for 2088 sqft)

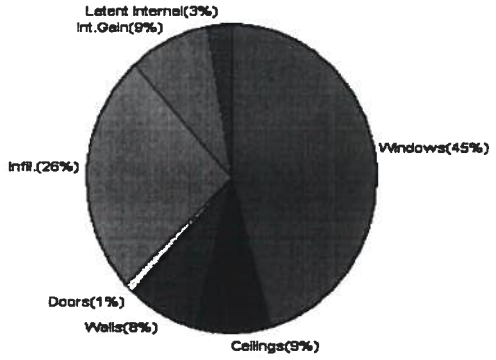
Load component			Load	
Window total	268	sqft	12593	Btuh
Wall total	1592	sqft	5228	Btuh
Door total	40	sqft	518	Btuh
Ceiling total	2200	sqft	2592	Btuh
Floor total	215	sqft	9387	Btuh
Infiltration	223	cfm	9022	Btuh
Duct loss			0	Btuh
Subtotal			**39340**	**Btuh**
Ventilation	0	cfm	0	Btuh
TOTAL HEAT LOSS			**39340**	**Btuh**



SUMMER CALCULATIONS

Summer Cooling Load (for 2088 sqft)

Load component			Load	
Window total	268	sqft	19159	Btuh
Wall total	1592	sqft	3226	Btuh
Door total	40	sqft	392	Btuh
Ceiling total	2200	sqft	3643	Btuh
Floor total			0	Btuh
Infiltration	195	cfm	3627	Btuh
Internal gain			3780	Btuh
Duct gain			0	Btuh
Sens. Ventilation	0	cfm	0	Btuh
Total sensible gain			**33827**	**Btuh**
Latent gain(ducts)			0	Btuh
Latent gain(infiltration)			7122	Btuh
Latent gain(ventilation)			0	Btuh
Latent gain(internal/occupants/other)			1200	Btuh
Total latent gain			**8322**	**Btuh**
TOTAL HEAT GAIN			**42149**	**Btuh**



For Florida residences only

EnergyGauge® System Sizing
PREPARED BY: _____
DATE: 10.6.06

System Sizing Calculations - Winter

Residential Load - Whole House Component Details

Kenneth & Drawn Kellam

Lake City, Fl 32025-

Project Title:
Cady Homes - Kellam Res.

Code Only
Professional Version
Climate: North

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

10/6/2006

Component Loads for Whole House

Window	Panes/SHGC/Frame/U	Orientation	Area(sqft) X	HTM=	Load
1	1, Clear, Metal, 1.27	W	75.0	47.0	3524 Btuh
2	1, Clear, Metal, 1.27	SW	15.0	47.0	705 Btuh
3	1, Clear, Metal, 1.27	NW	15.0	47.0	705 Btuh
4	1, Clear, Metal, 1.27	E	45.0	47.0	2115 Btuh
5	1, Clear, Metal, 1.27	E	16.0	47.0	752 Btuh
6	1, Clear, Metal, 1.27	S	16.0	47.0	752 Btuh
7	1, Clear, Metal, 1.27	E	6.0	47.0	282 Btuh
8	1, Clear, Metal, 1.27	W	40.0	47.0	1880 Btuh
9	1, Clear, Metal, 1.27	S	40.0	47.0	1880 Btuh
	Window Total		268(sqft)		12593 Btuh
Walls	Type	R-Value	Area X	HTM=	Load
1	Frame - Wood - Ext(0.09)	13.0	1428	3.3	4690 Btuh
2	Frame - Wood - Adj(0.09)	13.0	164	3.3	539 Btuh
	Wall Total		1592		5228 Btuh
Doors	Type		Area X	HTM=	Load
1	Insulated - Adjacent		20	12.9	259 Btuh
2	Insulated - Exterior		20	12.9	259 Btuh
	Door Total		40		518Btuh
Ceilings	Type/Color/Surface	R-Value	Area X	HTM=	Load
1	Vented Attic/D/Shin)	30.0	2200	1.2	2592 Btuh
	Ceiling Total		2200		2592Btuh
Floors	Type	R-Value	Size X	HTM=	Load
1	Slab On Grade	0	215.0 ft(p)	43.7	9387 Btuh
	Floor Total		215		9387 Btuh
			Zone Envelope Subtotal:		30319 Btuh
Infiltration	Type	ACH X	Zone Volume	CFM=	
	Natural	0.80	16704	222.7	9022 Btuh
Ductload	Proposed leak free, R6.0, Supply(Attic), Return(Attic)			(DLM of 0.00)	0 Btuh
Zone #1			**Sensible Zone Subtotal**		**39340 Btuh**

Manual J Winter Calculations

Residential Load - Component Details (continued)

Kenneth & Drawn Kellam

Lake City, Fl 32025-

Project Title:
Cady Homes - Kellam Res.

Code Only
Professional Version
Climate: North

10/6/2006

WHOLE HOUSE TOTALS

	Subtotal Sensible	39340 Btuh
	Ventilation Sensible	0 Btuh
	Total Btuh Loss	39340 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)

Approved by ACCA MANUAL J

For Florida residences only

System Sizing Calculations - Winter

Residential Load - Room by Room Component Details

Kenneth & Drawn Kellam

Lake City, Fl 32025-

Project Title:
Cady Homes - Kellam Res.

Code Only
Professional Version
Climate: North

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

10/6/2006

Component Loads for Zone #1: Main

Window	Panes/SHGC/Frame/U	Orientation	Area(sqft) X	HTM=	Load
1	1, Clear, Metal, 1.27	W	75.0	47.0	3524 Btuh
2	1, Clear, Metal, 1.27	SW	15.0	47.0	705 Btuh
3	1, Clear, Metal, 1.27	NW	15.0	47.0	705 Btuh
4	1, Clear, Metal, 1.27	E	45.0	47.0	2115 Btuh
5	1, Clear, Metal, 1.27	E	16.0	47.0	752 Btuh
6	1, Clear, Metal, 1.27	S	16.0	47.0	752 Btuh
7	1, Clear, Metal, 1.27	E	6.0	47.0	282 Btuh
8	1, Clear, Metal, 1.27	W	40.0	47.0	1880 Btuh
9	1, Clear, Metal, 1.27	S	40.0	47.0	1880 Btuh
	Window Total		268(sqft)		12593 Btuh
Walls	Type	R-Value	Area X	HTM=	Load
1	Frame - Wood - Ext(0.09)	13.0	1428	3.3	4690 Btuh
2	Frame - Wood - Adj(0.09)	13.0	164	3.3	539 Btuh
	Wall Total		1592		5228 Btuh
Doors	Type		Area X	HTM=	Load
1	Insulated - Adjacent		20	12.9	259 Btuh
2	Insulated - Exterior		20	12.9	259 Btuh
	Door Total		40		518Btuh
Ceilings	Type/Color/Surface	R-Value	Area X	HTM=	Load
1	Vented Attic/D/Shin)	30.0	2200	1.2	2592 Btuh
	Ceiling Total		2200		2592Btuh
Floors	Type	R-Value	Size X	HTM=	Load
1	Slab On Grade	0	215.0 ft(p)	43.7	9387 Btuh
	Floor Total		215		9387 Btuh
			Zone Envelope Subtotal:		30319 Btuh
Infiltration	Type	ACH X	Zone Volume	CFM=	
	Natural	0.80	16704	222.7	9022 Btuh
Ductload	Proposed leak free, R6.0, Supply(Attic), Return(Attic)			(DLM of 0.00)	0 Btuh
Zone #1			**Sensible Zone Subtotal**		**39340 Btuh**

Manual J Winter Calculations

Residential Load - Component Details (continued)

Kenneth & Drawn Kellam

Lake City, Fl 32025-

Project Title:
Cady Homes - Kellam Res.

Code Only
Professional Version
Climate: North

10/6/2006

WHOLE HOUSE TOTALS

	Subtotal Sensible	39340 Btuh
	Ventilation Sensible	0 Btuh
	Total Btuh Loss	39340 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)

Approved by ACCA MANUAL J

For Florida residences only

System Sizing Calculations - Summer

Residential Load - Whole House Component Details

Kenneth & Drawn Kellam

Lake City, Fl 32025-

Project Title:
Cady Homes - Kellam Res.

Code Only
Professional Version
Climate: North

Reference City: Gainesville (Defaults) Summer Temperature Difference: 17.0 F

10/6/2006

Component Loads for Whole House

Window	Type* Pn/SHGC/U/InSh/ExSh/IS	Ornt	Overhang Len	Hgt	Window Area(sqft) Gross	Shaded	Unshaded	HTM Shaded	Unshaded	Load
1	1, Clear, 1.27, None,N,N	W	1.5ft	10ft.	75.0	0.0	75.0	37	94	7053 Btuh
2	1, Clear, 1.27, None,N,N	SW	1.5ft	10ft.	15.0	0.0	15.0	37	75	1125 Btuh
3	1, Clear, 1.27, None,N,N	NW	1.5ft	10ft.	15.0	0.0	15.0	37	72	1084 Btuh
4	1, Clear, 1.27, None,N,N	E	1.5ft	10ft.	45.0	0.0	45.0	37	94	4232 Btuh
5	1, Clear, 1.27, None,N,N	E	1.5ft	8ft.	16.0	0.0	16.0	37	94	1505 Btuh
6	1, Clear, 1.27, None,N,N	S	1.5ft	8ft.	16.0	16.0	0.0	37	43	599 Btuh
7	1, Clear, 1.27, None,N,N	E	1.5ft	8ft.	6.0	0.0	6.0	37	94	564 Btuh
8	1, Clear, 1.27, None,N,N	W	13.5f	10ft.	40.0	40.0	0.0	37	94	1498 Btuh
9	1, Clear, 1.27, None,N,N	S	20.6	8ft.	40.0	40.0	0.0	37	43	1498 Btuh
	Window Total				268 (sqft)					19159 Btuh

Walls	Type	R-Value/U-Value	Area(sqft)	HTM	Load
1	Frame - Wood - Ext	13.0/0.09	1428.0	2.1	2979 Btuh
2	Frame - Wood - Adj	13.0/0.09	164.0	1.5	247 Btuh
	Wall Total		1592 (sqft)		3226 Btuh

Doors	Type	Area (sqft)	HTM	Load
1	Insulated - Adjacent	20.0	9.8	196 Btuh
2	Insulated - Exterior	20.0	9.8	196 Btuh
	Door Total	40 (sqft)		392 Btuh

Ceilings	Type/Color/Surface	R-Value	Area(sqft)	HTM	Load
1	Vented Attic/DarkShingle	30.0	2200.0	1.7	3643 Btuh
	Ceiling Total		2200 (sqft)		3643 Btuh

Floors	Type	R-Value	Size	HTM	Load
1	Slab On Grade	0.0	215 (ft(p))	0.0	0 Btuh
	Floor Total		215.0 (sqft)		0 Btuh

			Zone Envelope Subtotal:		26420 Btuh
Infiltration	Type	ACH	Volume(cuft)	CFM=	Load
	SensibleNatural	0.70	16704	194.9	3627 Btuh
Internal gain		Occupants	Btuh/occupant	Appliance	Load
		6	X 230 +	2400	3780 Btuh
Duct load	Proposed leak free, R6.0, Supply(Attic), Return(Attic)			DGM = 0.00	0.0 Btuh
			Sensible Zone Load		**33827 Btuh**

Manual J Summer Calculations

Residential Load - Component Details (continued)

Kenneth & Drawn Kellam

Lake City, Fl 32025-

Project Title:
Cady Homes - Kellam Res.

Code Only
Professional Version
Climate: North

10/6/2006

WHOLE HOUSE TOTALS

	Sensible Envelope Load All Zones	**33827 Btuh**
	Sensible Duct Load	0 Btuh
	Total Sensible Zone Loads	**33827 Btuh**
	Sensible ventilation	0 Btuh
	Blower	0 Btuh
Whole House	**Total sensible gain**	**33827 Btuh**
Totals for Cooling	Latent infiltration gain (for 54 gr. humidity difference)	7122 Btuh
	Latent ventilation gain	0 Btuh
	Latent duct gain	0 Btuh
	Latent occupant gain (6 people @ 200 Btuh per person)	1200 Btuh
	Latent other gain	0 Btuh
	Latent total gain	**8322 Btuh**
	TOTAL GAIN	**42149 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

Kenneth & Drawn Kellam
Lake City, Fl 32025-

Project Title:
Cady Homes - Kellam Res.

Code Only
Professional Version
Climate: North

Reference City: Gainesville (Defaults) Summer Temperature Difference: 17.0 F

10/6/2006

Component Loads for Zone #1: Main

Window	Type* Pn/SHGC/U/InSh/ExSh/IS	Ornt	Overhang Len	Hgt	Window Area(sqft) Gross	Shaded	Unshaded	HTM Shaded	Unshaded	Load
1	1, Clear, 1.27, None,N,N	W	1.5ft	10ft.	75.0	0.0	75.0	37	94	7053 Btuh
2	1, Clear, 1.27, None,N,N	SW	1.5ft	10ft.	15.0	0.0	15.0	37	75	1125 Btuh
3	1, Clear, 1.27, None,N,N	NW	1.5ft	10ft.	15.0	0.0	15.0	37	72	1084 Btuh
4	1, Clear, 1.27, None,N,N	E	1.5ft	10ft.	45.0	0.0	45.0	37	94	4232 Btuh
5	1, Clear, 1.27, None,N,N	E	1.5ft	8ft.	16.0	0.0	16.0	37	94	1505 Btuh
6	1, Clear, 1.27, None,N,N	S	1.5ft	8ft.	16.0	16.0	0.0	37	43	599 Btuh
7	1, Clear, 1.27, None,N,N	E	1.5ft	8ft.	6.0	0.0	6.0	37	94	564 Btuh
8	1, Clear, 1.27, None,N,N	W	13.5f	10ft.	40.0	40.0	0.0	37	94	1498 Btuh
9	1, Clear, 1.27, None,N,N	S	20.6	8ft.	40.0	40.0	0.0	37	43	1498 Btuh
	Window Total				268 (sqft)					19159 Btuh

Walls	Type	R-Value/U-Value	Area(sqft)	HTM	Load
1	Frame - Wood - Ext	13.0/0.09	1428.0	2.1	2979 Btuh
2	Frame - Wood - Adj	13.0/0.09	164.0	1.5	247 Btuh
	Wall Total		1592 (sqft)		3226 Btuh

Doors	Type	Area (sqft)	HTM	Load
1	Insulated - Adjacent	20.0	9.8	196 Btuh
2	Insulated - Exterior	20.0	9.8	196 Btuh
	Door Total	40 (sqft)		392 Btuh

Ceilings	Type/Color/Surface	R-Value	Area(sqft)	HTM	Load
1	Vented Attic/DarkShingle	30.0	2200.0	1.7	3643 Btuh
	Ceiling Total		2200 (sqft)		3643 Btuh

Floors	Type	R-Value	Size	HTM	Load
1	Slab On Grade	0.0	215 (ft(p))	0.0	0 Btuh
	Floor Total		215.0 (sqft)		0 Btuh

	Zone Envelope Subtotal:		26420 Btuh

Infiltration	Type	ACH	Volume(cuft)	CFM=	Load
	SensibleNatural	0.70	16704	194.9	3627 Btuh

Internal gain	Occupants	Btuh/occupant		Appliance	Load
	6	X 230	+	2400	3780 Btuh

Duct load			
	Proposed leak free, R6.0, Supply(Attic), Return(Attic)	DGM = 0.00	0.0 Btuh
		Sensible Zone Load	**33827 Btuh**

Manual J Summer Calculations

Residential Load - Component Details (continued)

Kenneth & Drawn Kellam

Lake City, Fl 32025-

Project Title:
Cady Homes - Kellam Res.

Code Only
Professional Version
Climate: North

10/6/2006

WHOLE HOUSE TOTALS

	Sensible Envelope Load All Zones	**33827 Btuh**
	Sensible Duct Load	0 Btuh
	Total Sensible Zone Loads	**33827 Btuh**
	Sensible ventilation	0 Btuh
	Blower	0 Btuh
Whole House	**Total sensible gain**	**33827 Btuh**
Totals for Cooling	Latent infiltration gain (for 54 gr. humidity difference)	7122 Btuh
	Latent ventilation gain	0 Btuh
	Latent duct gain	0 Btuh
	Latent occupant gain (6 people @ 200 Btuh per person)	1200 Btuh
	Latent other gain	0 Btuh
	Latent total gain	**8322 Btuh**
	TOTAL GAIN	**42149 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

Kenneth & Drawn Kellam

Lake City, Fl 32025-

Project Title:
Cady Homes - Kellam Res.

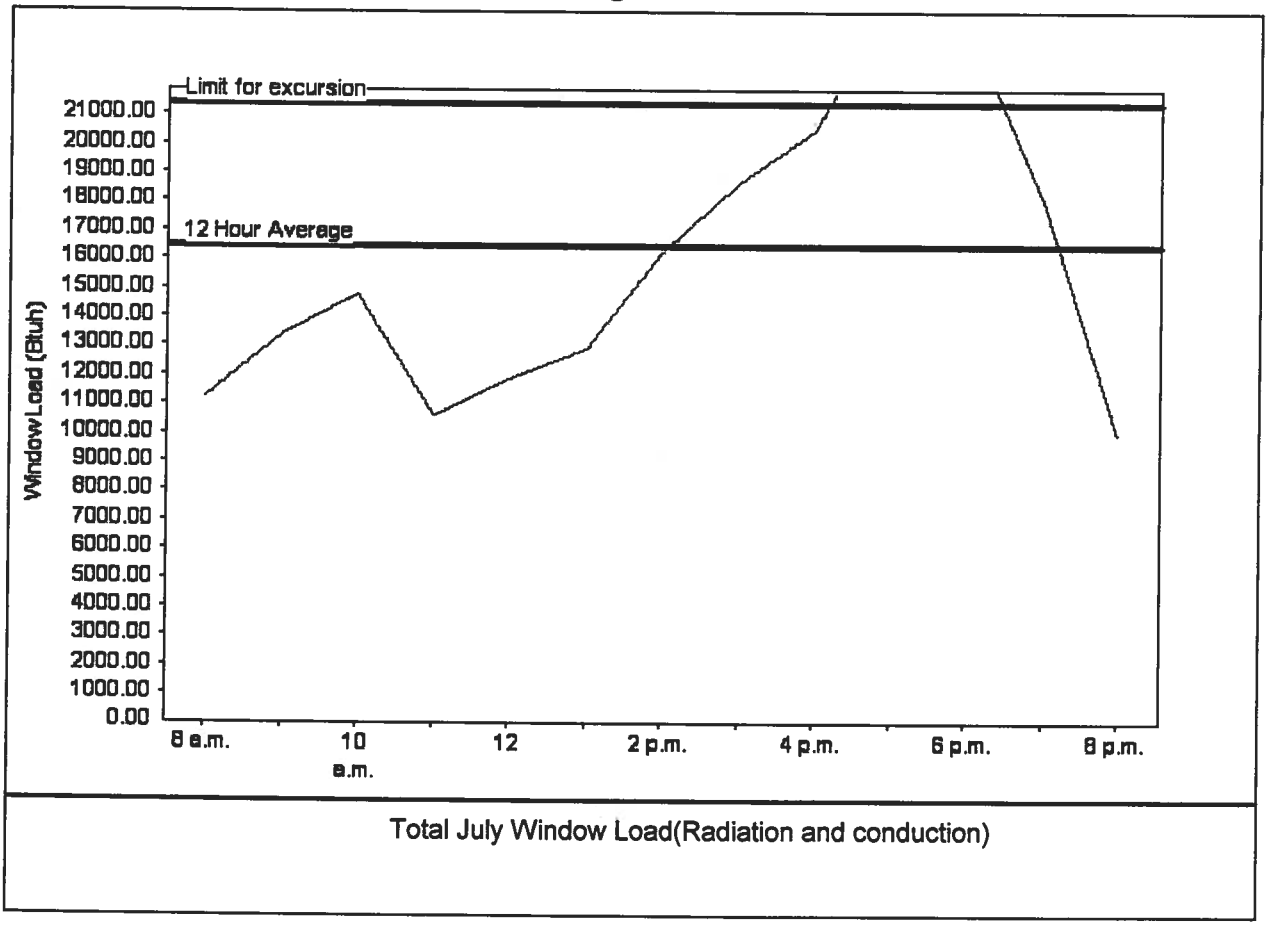
Code Only
Professional Version
Climate: North

10/6/2006

Weather data for: Gainesville - Defaults

Summer design temperature	92 F	Average window load for July	16418 Btu
Summer setpoint	75 F	Peak window load for July	25024 Btu
Summer temperature difference	17 F	Excusion limit(130% of Ave.)	21344 Btu
Latitude	29 North	Window excursion (July)	3680 Btuh

WINDOW Average and Peak Loads



Total July Window Load(Radiation and conduction)

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: _____

DATE: _____

Columbia County Building Department
Culvert Permit

Culvert Permit No.
000001233

DATE 10/11/2006 PARCEL ID # 15-4S-16-03023-549

APPLICANT AARON CADY PHONE 752-2878

ADDRESS 122 SW MIDTOWN PLACE LAKE CITY FL 32055

OWNER KENNETH & DAWN KELLAM PHONE 752-2878

ADDRESS 173 SW BUTERCUP DR LAKE CITY FL 32024

CONTRACTOR AARON CADY PHONE 752-2878

LOCATION OF PROPERTY 341, R HOPE HENRY, R SW MORNING GLORY, R BUTTERCUP DR,
3RD LOT ON RIGHT

SUBDIVISION/LOT/BLOCK/PHASE/UNIT ROLLING MEADOWS 49

SIGNATURE Aaron M. Cady

INSTALLATION REQUIREMENTS

[X] Culvert size will be 18 inches in diameter with a total lenght of 32 feet, leaving 24 feet of driving surface. Both ends will be mitered 4 foot with a 4 : 1 slope and poured with a 4 inch thick reinforced concrete slab.

INSTALLATION NOTE: Turnouts will be required as follows:
a) a majority of the current and existing driveway turnouts are paved, or;
b) the driveway to be served will be paved or formed with concrete.
Turnouts shall be concrete or paved a minimum of 12 feet wide or the width of the concrete or paved driveway, whichever is greater. The width shall conform to the current and existing paved or concreted turnouts.

[ ] Culvert installation shall conform to the approved site plan standards.

[ ] Department of Transportation Permit installation approved standards.

[ ] Other _____

ALL PROPER SAFETY REQUIREMENTS SHOULD BE FOLLOWED DURING THE INSTALATION OF THE CULVERT.

135 NE Hernando Ave., Suite B-21
Lake City, FL 32055
Phone: 386-758-1008 Fax: 386-758-2160

Amount Paid 25.00

COLUMBIA COUNTY
GATEWAY TO FLORIDA

25105

WILLIAM N. KITCHEN

PROFESSIONAL SURVEYOR AND MAPPER
152 N. MARION AVENUE
LAKE CITY, FLORIDA 32055
PHONE (386) 755-7786 FAX (386) 755-5506
E-MAIL BSSK@BELLSOUTH.NET

DATE : 6/12/2007

To Whom It May Concern:

RE: CADY HOMES
LOT 49 ROLLING MEADOWS

SUBJECT PARCEL # 15-4S-16-03023-549 KELLAM KENNETH & DAWN

IS NOT IN A FLOOD ZONE ACCORDING TO FEMA FLOOD INSURANCE RATE MAP NO. 120070 0175 B DATED JANUARY 6, 1988.
AND THE TOP OF FINISH FLOOR = ELEVATION 109.7 FEET.
LOT 49 PER PLAT SHOWS A MINIMUM FLOOR ELEVATION OF 109.0 FEET.

Thank you,
WILLIAM N. KITCHEN PSM # 5490

William N. Kitchen
6-12-2007

CERTIFICATE OF 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 15-4S-16-03023-549 **Building permit No.** 000025105

Use Classification SFD,UTILITY **Fire:** 22.32

Permit Holder AARON CADY **Waste:** 67.00

Owner of Building KENNETH & DAWN KELLAM **Total:** 89.32

Location: 173 SW BUTTERCUP DR(ROLLING MEADOWS,LOT 49)

Date: 06/25/2007

John D. Kerce

Building Inspector

POST IN A CONSPICUOUS PLACE
(Business Places Only)

ELK

**PRESTIQUE®
HIGH DEFINITION®**

RAISED PROFILE®

Prestique Plus *High Definition* and Prestique Gallery Collection™

Product size	13¼"x 39⅜"
Exposure	5⅝"
Pieces/Bundle	16
Bundles/Square	4/98.5 sq.ft.
Squares/Pallet	11

50-year limited warranty period: 5-7**years non-prorated coverage for shingles and application labor with prorated coverage for remainder of limited warranty period, plus an option for transferability*. 5-year limited wind warranty*. Wind Coverage: standard 80 mph, extended 110 mph***

Prestique I *High Definition*

Product size	13¼"x 39⅜"
Exposure	5⅝"
Pieces/Bundle	16
Bundles/Square	4/98.5 sq.ft.
Squares/Pallet	14

40-year limited warranty period: 5-7**years non-prorated coverage for shingles and application labor with prorated coverage for remainder of limited warranty period, plus an option for transferability*. 5-year limited wind warranty*. Wind Coverage: standard 80 mph, extended 90 mph***

Prestique *High Definition*

Product size	13¼"x 36⅜"
Exposure	5⅝"
Pieces/Bundle	22
Bundles/Square	3/100 sq.ft.
Squares/Pallet	18

30-year limited warranty period: 5-7**years non-prorated coverage for shingles and application labor with prorated coverage for remainder of limited warranty period, plus an option for transferability*. 5-year limited wind warranty*. Wind Coverage: standard 80 mph.

Raised Profile

Product size	13¼"x 38⅝"
Exposure	5⅝"
Pieces/Bundle	22
Bundles/Square	3/100 sq.ft.
Squares/Pallet	16

30-year limited warranty period: 5-7**years non-prorated coverage for shingles and application labor with prorated coverage for remainder of limited warranty period, plus an option for transferability*. 5-year limited wind warranty*. Wind Coverage: standard 70 mph.

HIP AND RIDGE SHINGLES

Seal-A-Ridge® w/*FLX*™

Size: 12"x 12"
Exposure: 6⅝"
Pieces/Bundle: 45
Coverage: 4 Bundles = 100 linear feet

Vented RidgeCrest™ w/*FLX*™

Size: 13"x13¼"
Exposure: 9¼"
Pieces/Box: 26
Coverage: 5 boxes = 100 linear feet

Elk Starter Strip

52 Bundles/Pallet
18 Pallets/Truck
936 Bundles/Truck
18 Pieces/Bundle
1 Bundle = 120.33 linear feet

Available Colors (Check Availability): Antique Slate, Weatheredwood, Shakewood, Sablewood, Hickory, Barkwood, Forest Green, Wedgewood, Birchwood, Sandalwood.
Gallery Collection: Balsam Forest™, Weathered Sage™, Sienna Sunset™.

All Prestique, Raised Profile and Seal-A-Ridge, and Prestique Starter Strip roofing products contain sealant which activates with the sun's heat, bonding shingles into a wind and weather resistant cover that resists blow-offs and leaks.

Check for availability with built-in StainGuard® treatment to inhibit the discoloration of roofing granules caused by the growth of certain types of algae.

All Prestique and Raised Profile shingles meet UL® Wind Resistant (UL 997) and Class "A" Fire Ratings (UL 790); and ASTM Specifications D 3018, Type-I; D 3161, Type-I; E 108 and the requirements of ASTM D 3462.

All Prestique and Raised Profile shingles have approval from the Florida Building Code Commission, Metro-Dade County, ICBO, and Texas Department of Insurance.

*See actual limited warranty for conditions and limitations.
** Effective January 1, 2004, the seven year non-prorated Underside Coverage Period applies only when a full Elk Roof System is installed with the original installation of the Elk shingles, all in accordance with Elk's application instructions for such products. A full Elk roof system includes Elk Hip and Ridge shingles on all hips and ridges, Elk Starter Strip along all rake and eave edges, all Elk ventilation systems, and Elk All-Climate Self-Adhering Underlayment in all valleys. Additionally, Elk All-Climate Self-Adhering Underlayment is required along the rake and eave edges of the roof in and north of the states of WA, NY, MN, NH, CO, UT, WI & OR.
***For a Rated Wind Warranty up to 110 mph for Prestique Gallery Collection, Prestique Plus, or 90 mph for Prestique I or Grande, at least six (6) properly placed NAILS and Elk Starter Strip shingles are required. See application instructions printed on the shingle wrapper for additional requirements.

SPECIFICATIONS

Scope: Work includes furnishing all labor, materials and equipment necessary to complete installation of (name) shingles specified herein. Color shall be (name of color). Hip and ridge type to be Elk Seal-A-Ridge with formula *FLX*.

All exposed metal surfaces (flashing, vents, etc.) to be painted with matching Elk roof accessory paint.

Preparation of Roof Deck: Roof deck to be dry, well-seasoned 1" x 6" (25.4mm x 152.4mm) boards; exterior-grade plywood (exposure 1 rated sheathing) at least 3/8" (9.525mm) thick conforming to the specifications of the American Plywood Association; 7/16" (11.074mm) oriented strandboard; or chipboard. Most fire retardent plywood decks are NOT approved substrates for Elk shingles. Consult Elk Field Service for application specifications over other decks and other slopes.

Materials: Underlayment for standard roof slopes, 4" per foot (101.6/304.8mm) or greater: apply non-perforated No. 15 or 30 asphalt-saturated felt underlayment. For Low slopes(4" per foot (101.6/304.8mm) to a minimum of 2" per foot (50.8/304.8mm)), use two plies of underlayment overlapped a minimum of 19". Fasteners shall be of sufficient length and holding power for securing material as required by the application instructions printed on shingle wrapper.

For areas where algae is a problem, shingles shall be (name) with StainGuard treatment, as manufactured by the Elk Tuscaloosa plant. Hip and ridge type to be Seal-A-Ridge with formula *FLX* with StainGuard treatment.

Complete application instructions are published by Elk and printed on the back of every shingle bundle. All warranties are contingent upon the correct installation as shown on the instructions. These instructions are the minimum required to meet Elk application requirements. In some areas, building codes may require additional application techniques or methods beyond our instructions. In these cases, the local code must be followed. Under no circumstances will Elk accept application requirements less than those contained in its application instructions.

For specifications in CSI format, call 800.354.SPEC (7732) or e-mail specinfo@elkcorp.com.

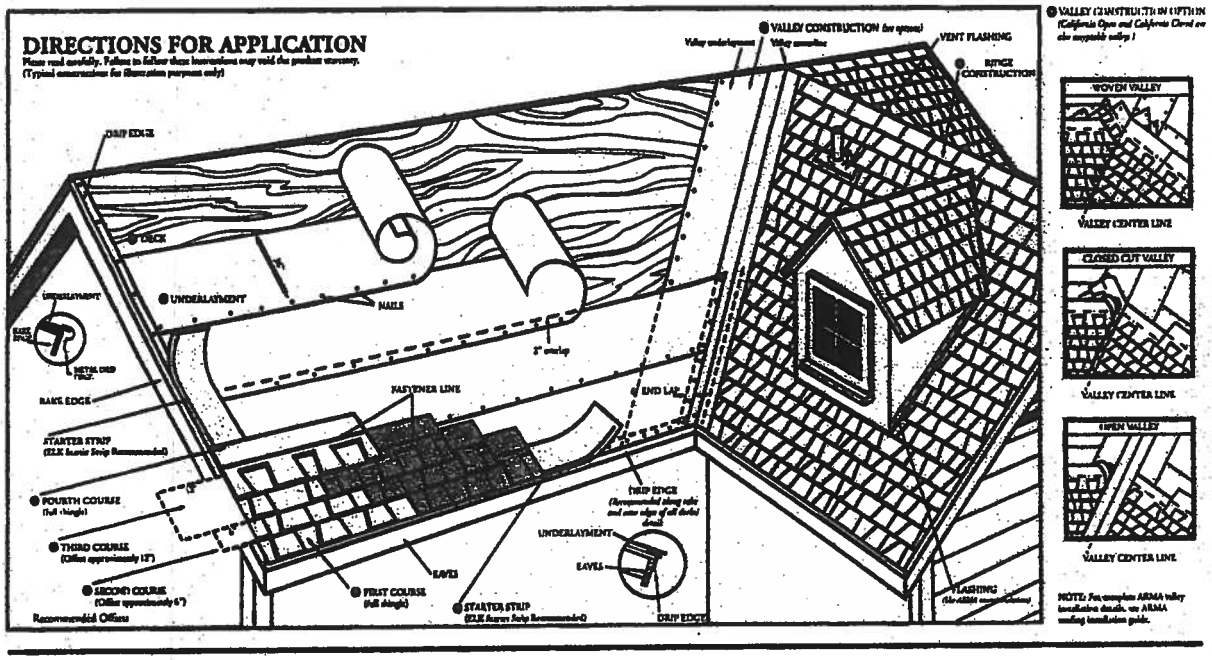
SOUTHEAST & ATLANTIC OFFICE:
800.945.5551

CORPORATE HEADQUARTERS:
800.354.7732

PLANT LOCATION:
800.945.5545

ELK
The Premium Choice®
www.elkcorp.com

SS08IT 06/04



DIRECTIONS FOR APPLICATION

These application instructions are the minimum required to meet Elk's application requirements. Your failure to follow these instructions may void the product warranty. In some areas, the building codes may require additional application techniques or methods beyond our instructions. In these cases, the local code must be followed. Under no circumstances will Elk accept application requirements that are less than those printed here. Shingles should not be jammed tightly together. All soles should be properly ventilated. Note: It is not necessary to remove tape on back of shingle.

❶ DECK PREPARATION

Roof decks should be dry, well-seasoned 1" x 6" boards or exterior grade plywood minimum 3/8" thick and conform to the specifications of the American Plywood Association or 7/16" oriented strandboard, or 7/16" chipboard.

❷ UNDERLAYMENT

Apply underlayment (Non-Perforated No. 15 or 30 asphalt saturated felt). Elk Versashield® or self adhering underlayment is also acceptable. Cover drip edge at eaves only.

For low slope(2/12 up to 4/12), completely cover the deck with two plies of underlayment overlapping a minimum of 19". Begin by fastening a 19" wide strip of underlayment placed along the eaves. Place a full 36" wide sheet over the starter, horizontally placed along the eaves and completely overlapping the starter strip.

EAVE FLASHING FOR ICE DAMS (ASK A ROOFING CONTRACTOR, REFER TO ARMA MANUAL OR CHECK LOCAL CODES)

For standard slope (4/12 to less than 21/12), use coated roll roofing of no less than 50 pounds over the felt underlayment extending from the eave edge to a point at least 24" beyond the inside wall of the living space below or one layer of a self-adhered eave and flashing membrane.

For low slope (2/12 up to 4/12), use a continuous layer of asphalt plastic cement between the two plies of underlayment from the eave edge up roof to a point at least 24" beyond the inside wall of the living space below or one layer of a self-adhered eave and flashing membrane.

Consult the Elk Technical Services Department for application specifications over other decks and other slopes.

❸ STARTER SHINGLE COURSE

USE AN ELK STARTER STRIP OR THE HEADLAP OF A STRIP SHINGLE WITH THE ADHESIVE STRIP POSITIONED AT THE EAVE EDGE. With at least 3" trimmed from the end of the first shingle, start at the rake edge overhanging the eave and rake edges 1/2" to 3/4". Fasten 2" from the lower edge and 1" from each side.

❹ FIRST COURSE

Start at rake and continue course with full shingles laid flush with the starter course. Shingles may be applied with a course alignment of 45° on the roof

❺ SECOND COURSE

Offset the second course of shingles with respect to the first by approximately 6". Other offsets are approved if greater than 4".

❻ THIRD COURSE

Offset the next course by 6" with respect to the second course, or consistent with the original offset.

❼ FOURTH COURSE

Start at the rake and continue with full shingles across roof.

FIFTH AND SUCCEEDING COURSES.

Repeat application as shown for second, third, and fourth courses. Do not rack shingles straight up the roof. Offsets may be adjusted around valleys and penetrations.

❽ VALLEY CONSTRUCTION

Open, woven and closed cut valleys are acceptable when applied by Asphalt Roofing Manufacturing Association (ARMA) recommended procedures. For metal valleys, use 36" wide vertical underlayment prior to applying metal flashing (secure edge with nails). No nails are to be within 6" of valley center.

❾ RIDGE CONSTRUCTION

For ridge construction Elk recommends Class "A" Z®Ridge or Seal-A-Ridge® with formula *FLX*™ or RidgeCrest® with *FLX* (See ridge package for installation instructions). Vented RidgeCrest or 3-tab shingles are also approved.

FASTENERS

While nailing is the preferred method for Elk shingles, Elk will accept fastening methods according to the following instructions.

Using the fastener line as a reference, nail or staple the shingle in the double thickness common bond area. For shingles without a fastener line, nails or staples must be placed between and/or in the sealant dots.

NAILS: Corrosive resistant, 3/8" head, minimum 12-gauge roofing nails. Elk recommends 1-1/4" for new roofs and 1-1/2" for re-covers. In cases where you are applying shingles to a roof that has an exposed overhang, for new roofs only, 3/4" ring shank nails are allowed to be used from the eave's edge to a point up the roof that is past the outside wall line. 1" ring shank nails allowed for re-roof.

STAPLES: Corrosive resistant, 16-gauge minimum, crown width minimum of 15/16". Note: An improperly adjusted staple gun can result in raised staples that can cause a fish-mouthed appearance and can prevent sealing.

Fasteners should be long enough to obtain 3/4" deck penetration or penetration through deck, whichever is less. This product meets the requirements of the IRC 2003 code when fastened with 4 nails.

MANSARD APPLICATIONS

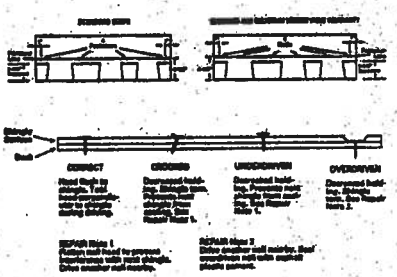
Correct fastening is critical to the performance of the roof. For slopes exceeding 60° (or 21/12) use six fasteners per shingle. Locate fasteners in the fastener area 1" from each side edge with the remaining four fasteners equally spaced along the length of the double thickness (laminated) area. Only fastening methods according to the above instructions are acceptable.

LIMITED WIND WARRANTY

- For a Limited Wind Warranty, all Prestique and Raised Profile™ shingles must be applied with 4 properly placed fasteners, or in the case of mansard applications, 6 properly placed fasteners per shingle.
- For a Limited Wind Warranty up to 110 MPH for Prestique Gallery Collection or Prestique Plus or 90 MPH for Prestique I, shingles must be applied with 6 properly placed NAILS per shingle. **SHINGLES APPLIED WITH STAPLES WILL NOT QUALIFY FOR THIS ENHANCED LIMITED WIND WARRANTY.** Also, Elk Starter Strip shingles must be applied at the eaves and rake edges to qualify Prestique Plus, Prestique Gallery Collection and Prestique I shingles for this enhanced Limited Wind Warranty. Under no circumstances should the Elk Shingles or the Elk Starter Strip overhang the eaves or rake edge more than 3/4 of an inch.

HELP STOP BLOW-OFFS AND CALL-BACKS

A minimum of four fasteners must be driven into the DOUBLE THICKNESS (laminated) area of the shingle. Nails or staples must be placed along – and through – the "fastener line" or on products without fastener lines, nail or staple between and in line with sealant dots. CAUTION: Do not use fastener line for shingle alignment.



Refer to local codes which in some areas may require specific application techniques beyond those Elk has specified.
All Prestique and Raised Profile shingles have a U.L.® Wind Resistance Rating when applied in accordance with these instructions using nails or staples on re-roofs as well as new construction.

CAUTION TO YARD/DEALER: Careless and improper storage or handling can harm fiberglass shingles. Keep these shingles completely covered, dry, reasonably cool, and protected from the weather. Do not store near various sources of heat. Do not store in direct sunlight until applied. DO NOT DOUBLE STACK. Systematically rotate all stock so that the material that has been stored the longest will be the first to be moved out.

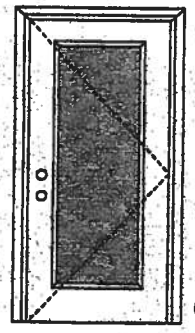
ELK
The Premium Choice
www.elkcorp.com

X
Glazed Inswing Unit

COP-WL-JH4141-02

WOOD-EDGE STEEL DOORS

APPROVED ARRANGEMENT:



Note:
Units of other sizes are covered by this report as long as the panel used does not exceed 3'0" x 6'8".

Warnock Hersey

Test Data Review Certificate #3026447A and COP/Test Report Validation Matrix #3026447A-001 provides additional information - available from the ITS/WH website (www.etsemko.com), the Masonite website (www.masonite.com) or the Masonite technical center.

Single Door
Maximum unit size = 3'0" x 6'8"

Design Pressure
+40.5/-40.5
Limited water unless special threshold design is used.

Large Missile Impact Resistance
Hurricane protective system (shutters) is REQUIRED.

Actual design pressure and impact resistant requirements for a specific building design and geographic location is determined by ASCE 7-national, state or local building codes specify the edition required.

MINIMUM ASSEMBLY DETAIL:

Compliance requires that minimum assembly details have been followed – see MAD-WL-MA0001-02 and MAD-WL-MA0041-02.

MINIMUM INSTALLATION DETAIL:

Compliance requires that minimum installation details have been followed – see MID-WL-MA0001-02.

APPROVED DOOR STYLES:

1/4 GLASS:


100 Series


133, 135 Series


136 Series


680 Series


822 Series

1/2 GLASS:


105 Series*


108, 160 Series*


129 Series*


200 Series*


12 R/L, 23 R/L, 24 R/L Series*


107 Series*


108 Series


304 Series

*This glass kit may also be used in the following door styles: 5-panel; 5-panel with scroll; Eyebrow 5-panel; Eyebrow 5-panel with scroll.

Johnson™ EntrySystems

June 17, 2002
Our continuing program of product improvement makes specifications, design and product detail subject to change without notice.

PREMDOR Collection Premium Quality Doors

Exclusively from Masonite®
Masonite International Corporation

Y
Glazed Inswing Unit

COP-WL-JH4141-02

WOOD-EDGE STEEL DOORS

APPROVED DOOR STYLES:

3/4 GLASS:


404 Series


410 Series


450 Series

FULL GLASS:


109 Series


114, 120, 122 Series


152 Series


149 Series


300 Series

CERTIFIED TEST REPORTS:

NCTL 210-1897-7, 8, 9, 10, 11, 12; NCTL 210-1861-4, 5, 6, 10, 11, 12; NCTL 210-2185-1, 2, 3

Certifying Engineer and License Number: Barry D. Portney, P.E. / 16258.

Unit Tested in Accordance with Miami-Dade BCCO PA202.

Evaluation report NCTL-210-2794-1

Door panels constructed from 26-gauge 0.017" thick steel skins. Both stiles constructed from wood. Top end rails constructed of 0.041" steel. Bottom end rails constructed of 0.021" steel. Interior cavity of slab filled with rigid polyurethane foam core. Slab glazed with insulated glass mounted in a rigid plastic lip lite surround.

Frame constructed of wood with an extruded aluminum threshold.

PRODUCT COMPLIANCE LABELING:

TESTED IN
ACCORDANCE WITH
MIAMI-DADE BCCO PA202

COMPANY NAME
CITY, STATE

To the best of my knowledge and ability the above side-hinged exterior door unit conforms to the requirements of the 2001 Florida Building Code, Chapter 17 (Structural Tests and Inspections).

Kurt L Balthazor

State of Florida, Professional Engineer
Kurt Balthazor, P.E. – License Number 56533

Test Data Review Certificate #3028447A and COP/Test Report Validation Matrix #3028447A-001 provides additional information - available from the ITS/WH website (www.atsemko.com), the Masonite website (www.masonite.com) or the Masonite technical center.

Johnson EntrySystems

June 17, 2002
Our continuing program of product improvement makes specifications, design and product detail subject to change without notice.

PREMDOR Collection Premium Quality Doors

Exclusively from Masonite

Masonite International Corporation

AAMA/NWWDA 101/I.S.2-97
TEST REPORT SUMMARY

Rendered to:

MI HOME PRODUCTS, INC.

SERIES/MODEL: 650 Fin
TYPE: Aluminum Single Hung Window

Title of Test	Results
Rating	H-R40 52 x 72
Overall Design Pressure	+45.0 psf -47.2 psf
Operating Force	11 lb max.
Air Infiltration	0.13 cfm/ft^2
Water Resistance	6.00 psf
Structural Test Pressure	+67.5 psf -70.8 psf
Deglazing	Passed
Forced Entry Resistance	Grade 10

Reference should be made to Report No. 01-41134.01 dated 03/26/02 for complete test specimen description and data.

For ARCHITECTURAL TESTING, INC.

Mark A. Hess, Technician

MAH:mlb

ALLEN M. REEVES
CERTIFICATE NO. 15354
STATE OF FLORIDA
PROFESSIONAL ENGINEER

1 APRIL 2002

Architectural Testing

AAMA/NWWDA 101/I.S.2-97 TEST REPORT

Rendered to:

MI HOME PRODUCTS, INC.
650 West Market Street
P.O. Box 370
Gratz, Pennsylvania 17030-0370

Report No: 01-41134.01
Test Date: 03/07/02
Report Date: 03/26/02
Expiration Date: 03/07/06

Project Summary: Architectural Testing, Inc. (ATI) was contracted by MI Home Products, Inc. to perform tests on Series/Model 650 Fin, aluminum single hung window at their facility located in Elizabethville, Pennsylvania. The samples tested successfully met the performance requirements for a H-R40 52 x 72 rating.

Test Specification: The test specimen was evaluated in accordance with AAMA/NWWDA 101/I.S.2-97, *Voluntary Specifications for Aluminum, Vinyl (PVC) and Wood Windows and Glass Doors.*

Test Specimen Description:

Series/Model: 650 Fin

Type: Aluminum Single Hung Window

Overall Size: 4' 4-1/4" wide by 6' 0-3/8" high

Active Sash Size: 4' 1-3/4" wide by 3' 0-5/8" high

Daylight Opening Size: 3' 11-3/8" wide by 2' 9-1/2" high

Screen Size: 4' 0-1/4" wide by 2' 11-1/8" high

Finish: All aluminum was white.

Glazing Details: The active and fixed lites utilized 5/8" thick, sealed insulating glass constructed from two sheets of 1/8" thick, clear annealed glass and a metal reinforced butyl spacer system. The active sash was channel glazed utilizing a flexible vinyl wrap around gasket. The fixed lite was interior glazed against double-sided adhesive foam tape and secured with PVC snap-in glazing beads.

130 Derry Court
York, PA 17402-9405
phone: 717.764.7700
fax: 717.764.4129
www.architest.com

Allen N. Reeves
1 APRIL 2002

ALLEN N. REEVES
No. 18854
STATE OF FLORIDA
PROFESSIONAL ENGINEER

Test Specimen Description: (Continued)

Weatherstripping:

Description	Quantity	Location
0.230" high by 0.270" backed polypile with center fin	1 Row	Fixed meeting rail
0.250" high by 0.187" backed polypile with center fin	2 Rows	Active sash stiles
1/2" x 1/2" dust plug	4 Pieces	Active sash, top and bottom of stiles
1/4" foam-filled vinyl bulb seal	1 Row	Active sash, bottom rail

Frame Construction: The frame was constructed of extruded aluminum with coped, butted, and sealed corners fastened with two #8 x 1" screws through the head and sill into each jamb screw boss. End caps were utilized on the ends of the fixed meeting rail and secured with two 1-1/4" screws per cap. Meeting rail was secured to the frame utilizing two 1-1/4" screws.

Sash Construction: The sash was constructed of extruded aluminum with coped, butted, and sealed corners fastened with two #8 x 1-1/2" screws through the rails into each jamb screw boss.

Screen Construction: The screen was constructed from roll-formed aluminum with keyed corners. The fiberglass mesh was secured with a flexible spline.

Hardware:

Description	Quantity	Location
Metal cam lock with keeper		Midspan, active meeting rail with keeper adjacent on fixed meeting rail
Plastic tilt latch	2	Active sash, meeting rail ends
Metal tilt pin	2	Active sash, bottom rail ends
Balance assembly	2	One in each jamb
Screen plunger	2	4" from rail ends on top rail

ALLEN N. REEVES
CERTIFICATE NO. 1[illegible]
STATE OF FLORIDA
PROFESSIONAL ENGINEER

Allen N. Reeves
1 APRIL 2002

Test Specimen Description: (Continued)

Drainage: Sloped sill

Reinforcement: No reinforcement was utilized.

Installation: The test specimen was installed into a 2 x 8 #2 Spruce-Pine-Fir wood test buck with #8 x 1-5/8" drywall screws every 8" on center around the nail fin. Polyurethane was used as a sealant under the nail fin and around the exterior perimeter.

Test Results:

The results are tabulated as follows:

Paragraph	Title of Test - Test Method	Results	Allowed
2.2.1.6.1	Operating Force	11 lbs	30 lbs max.
	Air Infiltration (ASTM E 283-91) @ 1.57 psf (25 mph)	0.13 cfm/ft^2	0.3 cfm/ft^2 max.
	Water Resistance (ASTM E 547-00) (with and without screen) WTP = 2.86 psf	No leakage	No leakage
2.1.4.1	Uniform Load Deflection (ASTM E 330-97) (Measurements reported were taken on the meeting rail) (Loads were held for 33 seconds)		
	@ 25.9 psf (positive)	0.42"*	0.26" max.
	@ 34.7 psf (negative)	0.43"*	0.26" max.
2.1.4.2	Uniform Load Structural (ASTM E 330-97) (Measurements reported were taken on the meeting rail) (Loads were held for 10 seconds)		
	@ 38.9 psf (positive)	0.02"	0.18" max.
	@ 52.1 psf (negative)	0.02"	0.18" max.

Exceeds L/175 for deflection, but passes all other test requirements.

Allen H. Reeves
1 APRIL 2002

ALLEN H. REEVES
CERTIFICATE
NO. 1[illegible]
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

Test Specimen Description: (Continued)

Paragraph	Title of Test - Test Method	Results	Allowed
2.2.1.6.2	Deglazing Test (ASTM E 987)		
	In operating direction at 70 lbs		
	Meeting rail	0.12"/25%	0.50"/100%
	Bottom rail	0.12"/25%	0.50"/100%
	In remaining direction at 50 lbs		
	Left stile	0.06"/12%	0.50"/100%
	Right stile	0.06"/12%	0.50"/100%
	Forced Entry Resistance (ASTM F 588-97)		
	Type: A		
	Grade: 10		
	Lock Manipulation Test	No entry	No entry
	Tests A1 through A5	No entry	No entry
	Test A7	No entry	No entry
	Lock Manipulation Test	No entry	No entry
Optional Performance			
4.3	Water Resistance (ASTM E 547-00) (with and without screen) WTP = 6.00 psf	No leakage	No leakage
	Uniform Load Deflection (ASTM E 330-97) (Measurements reported were taken on the meeting rail) (Loads were held for 33 seconds)		
	@ 45.0 psf (positive)	0.47"*	0.26" max.
	@ 47.2 psf (negative)	0.46"*	0.26" max.

**Exceeds L/175 for deflection, but passes all other test requirements.*

	Uniform Load Structural (ASTM E 330-97) (Measurements reported were taken on the meeting rail) (Loads were held for 10 seconds)		
	@ 67.5 psf (positive)	0.05"	0.18" max.
	@ 70.8 psf (negative)	0.05"	0.18" max.

1 APRIL 2002

ALLEN N. REEVES
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No. 19834
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

Detailed drawings, representative samples of the test specimen, and a copy of this report will be retained by ATI for a period of four years. The above results were secured by using the designated test methods and they indicate compliance with the performance requirements of the above referenced specification. This report does not constitute certification of this product, which may only be granted by the certification program administrator.

For ARCHITECTURAL TESTING, INC:

Mark A. Hess
Technician

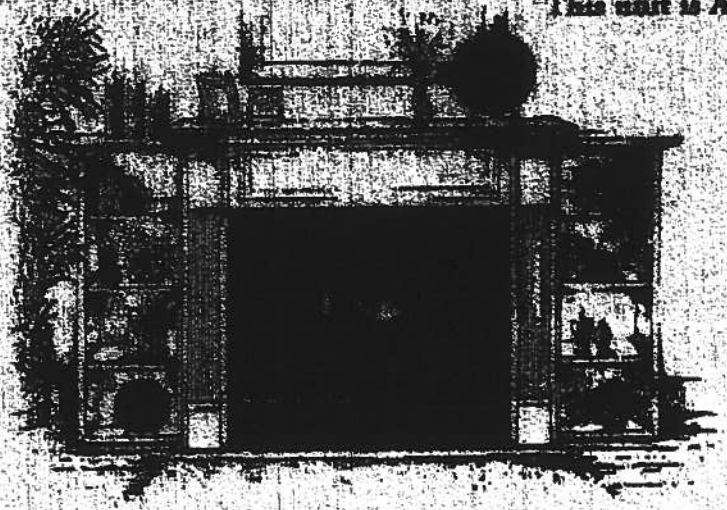
Allen N. Reeves, P.E.
Director - Engineering Services
1 APRIL 2002

MAH:mlb
01-41134.01

ALLEN N. REEVES
CERTIFICATE
NO. 19304
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

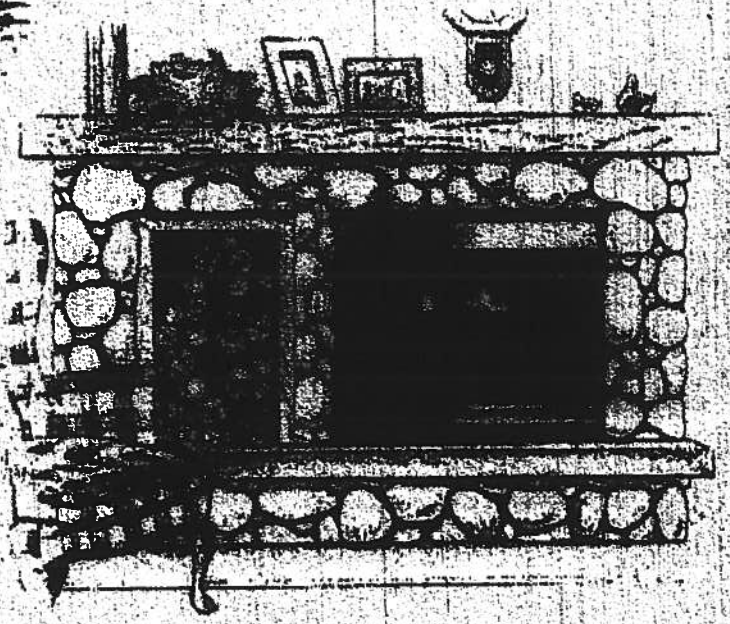
VENT-FREE

This unit is A.G.A. certified as a heater with 99% heat efficiency
No chimney or flue system required
Wide selection of factory installed options offered



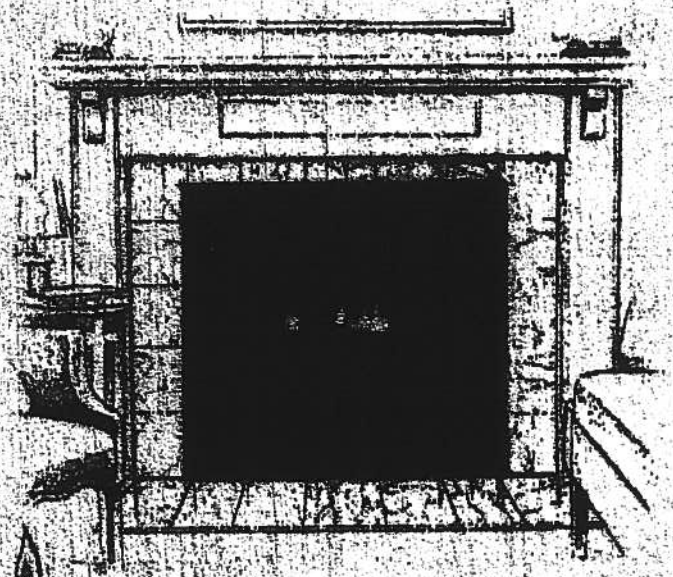
VF-4000

- 14,000 – 25,000 Btu/hr with manual control valve
- 19,500 – 25,000 Btu/hr with millivolt control valve
- Fully assembled and ready to install
- Attractive wood surrounds available
- 15" x 30" fixed or operable screen opening



VF-5000

- 25,000 Btu/hr millivolt variable heat output
- 15" X 30" glass or screen viewing area
- Clean burning, safe and easy to install
- Realistic charred oak logs with glowing embers

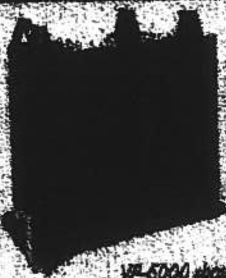


VF-6000

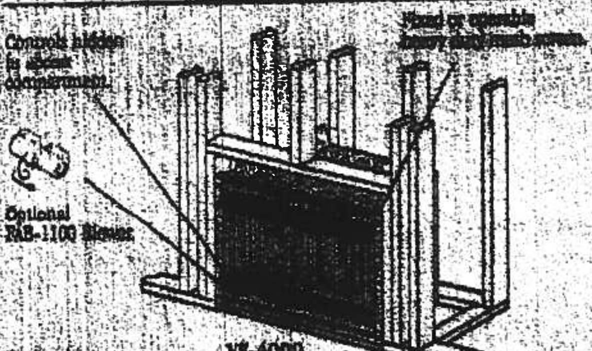
- 32,000 Btu/hr millivolt variable heat output
- Beautiful 20" X 34" glass or screen viewing area
- Will operate during a power failure
- Designed for large rooms

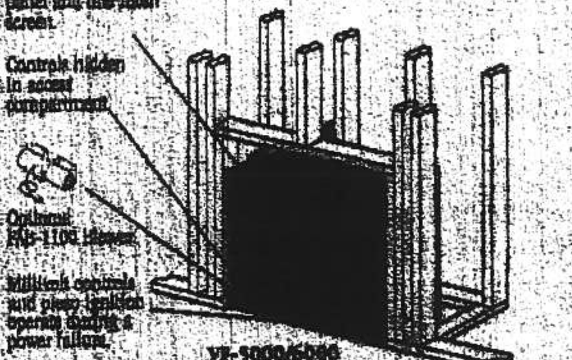
SUPERIOR

VF-4000/5000/6000



VF-6000 shown.





SURROUNDS

The Charleston Poplar Surround is hand crafted using a combination of solid Poplar and Poplar veneer. Using the unique wood type of Poplar allows you the option to paint or stain this elegantly detailed surround. The surround is constructed using easy to assemble cam locks, and available in corner and wall units.

Distributed by:

Refractory tan brick panels

Gas flue liner kit.

Square brass trim kit.

Brass Louver kit (For VF-4 only)

Screen panel kit. (For VF-5 & VF6 only)

Arch kit. (For VF-5 & VF6 only)

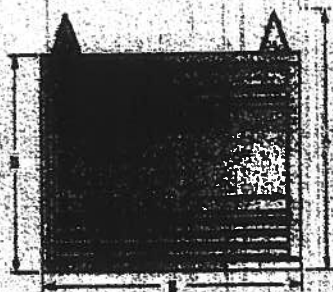
Glass door kit. (For VF-5 & VF6 only)

Brass hood. (For VF-5 & VF6 only)

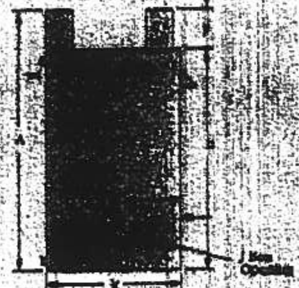
Wall switch or optional wireless remote available. (For VF-4MV, VF-5 & VF-6)

Wall thermostat. (For VF-4MV, VF-5 & VF-6)

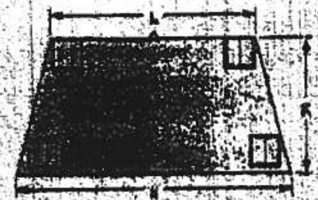
Front View



Left Side View



Top View



Vent-Free Product Dimensions

	VF-4000/5000C	VF-6000C
[illegible]	[illegible]	[illegible]
B	41-1/2"	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	3-1/2"
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	27"	[illegible]

Btu Chart

Model	Natural	Propane
VF-4000 manual	14,000 – 25,000	14,000 – 25,000
VF-4000/5000 millivolt	19,500 – 25,000	19,500 – 25,000
VF-6000	25,000 – 32,000	25,000 – 32,000

Framing Dimension

Model	Width	Height	Depth
VF-4000/5000	37"	37-3/4"	15-1/2"
VF-6000	41"	43-3/8"	[illegible]

NOTE: Diagrams and illustrations are not to scale. Product designs, materials, dimensions, specifications, colors and prices subject to change or discontinuation without notice. Built to ANSI Z21.11.2 standard and approved by A.G.A. (report # 12870017).

Consult your distributor for local fireplace code information.

SUPERIOR

www.LennoxHearthProducts.com

P/N 901464 REV E 2/00

Residential System Sizing Calculation

Summary

Kenneth & Drawn Kellam

Lake City, Fl 32025-

Project Title:
Cady Homes - Kellam Res.

Code Only
Professional Version
Climate: North

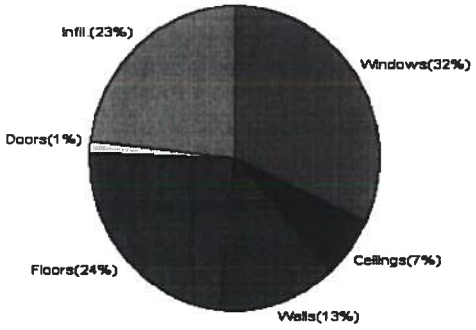
10/2/2006

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	**39245**	**Btuh**	**Total cooling load calculation**	**45716**	**Btuh**
Submitted heating capacity	% of calc	Btuh	Submitted cooling capacity	% of calc	Btuh
Total (Electric Heat Pump)	119.8	47000	Sensible (SHR = 0.75)	94.1	35250
Heat Pump + Auxiliary(0.0kW)	119.8	47000	Latent	142.5	11750
			Total (Electric Heat Pump)	102.8	47000

WINTER CALCULATIONS

Winter Heating Load (for 2066 sqft)

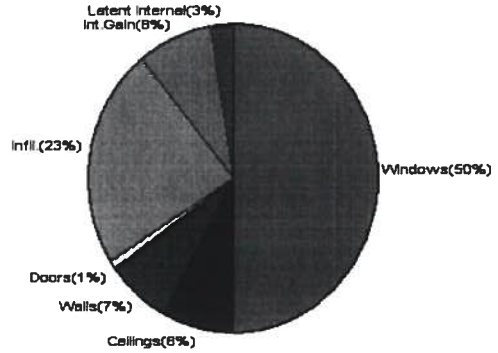
Load component			Load	
Window total	268	sqft	12593	Btuh
Wall total	1592	sqft	5228	Btuh
Door total	40	sqft	518	Btuh
Ceiling total	2200	sqft	2592	Btuh
Floor total	215	sqft	9387	Btuh
Infiltration	220	cfm	8927	Btuh
Duct loss			0	Btuh
Subtotal			**39245**	**Btuh**
Ventilation	0	cfm	0	Btuh
TOTAL HEAT LOSS			**39245**	**Btuh**



SUMMER CALCULATIONS

Summer Cooling Load (for 2066 sqft)

Load component			Load	
Window total	268	sqft	22839	Btuh
Wall total	1592	sqft	3226	Btuh
Door total	40	sqft	392	Btuh
Ceiling total	2200	sqft	3643	Btuh
Floor total			0	Btuh
Infiltration	193	cfm	3589	Btuh
Internal gain			3780	Btuh
Duct gain			0	Btuh
Sens. Ventilation	0	cfm	0	Btuh
Total sensible gain			**37469**	**Btuh**
Latent gain(ducts)			0	Btuh
Latent gain(infiltration)			7047	Btuh
Latent gain(ventilation)			0	Btuh
Latent gain(internal/occupants/other)			1200	Btuh
Total latent gain			**8247**	**Btuh**
TOTAL HEAT GAIN			**45716**	**Btuh**



For Florida residences only

EnergyGauge® System Sizing
PREPARED BY: _____
DATE: 10.2.06

System Sizing Calculations - Winter

Residential Load - Whole House Component Details

Kenneth & Drawn Kellam

Lake City, Fl 32025-

Project Title:
Cady Homes - Kellam Res.

Code Only
Professional Version
Climate: North

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

10/2/2006

Component Loads for Whole House

Window	Panes/SHGC/Frame/U	Orientation	Area(sqft) X	HTM=	Load
1	1, Clear, Metal, 1.27	W	75.0	47.0	3524 Btuh
2	1, Clear, Metal, 1.27	SW	15.0	47.0	705 Btuh
3	1, Clear, Metal, 1.27	NW	15.0	47.0	705 Btuh
4	1, Clear, Metal, 1.27	E	45.0	47.0	2115 Btuh
5	1, Clear, Metal, 1.27	E	16.0	47.0	752 Btuh
6	1, Clear, Metal, 1.27	S	16.0	47.0	752 Btuh
7	1, Clear, Metal, 1.27	E	6.0	47.0	282 Btuh
8	1, Clear, Metal, 1.27	W	40.0	47.0	1880 Btuh
9	1, Clear, Metal, 1.27	S	40.0	47.0	1880 Btuh
	Window Total		268(sqft)		12593 Btuh
Walls	Type	R-Value	Area X	HTM=	Load
1	Frame - Wood - Ext(0.09)	13.0	1428	3.3	4690 Btuh
2	Frame - Wood - Adj(0.09)	13.0	164	3.3	539 Btuh
	Wall Total		1592		5228 Btuh
Doors	Type		Area X	HTM=	Load
1	Insulated - Adjacent		20	12.9	259 Btuh
2	Insulated - Exterior		20	12.9	259 Btuh
	Door Total		40		518Btuh
Ceilings	Type/Color/Surface	R-Value	Area X	HTM=	Load
1	Vented Attic/D/Shin)	30.0	2200	1.2	2592 Btuh
	Ceiling Total		2200		2592Btuh
Floors	Type	R-Value	Size X	HTM=	Load
1	Slab On Grade	0	215.0 ft(p)	43.7	9387 Btuh
	Floor Total		215		9387 Btuh
			Zone Envelope Subtotal:		30319 Btuh
Infiltration	Type	ACH X	Zone Volume	CFM=	
	Natural	0.80	16528	220.4	8927 Btuh
Ductload	Proposed leak free, R6.0, Supply(Attic), Return(Attic)			(DLM of 0.00)	0 Btuh
Zone #1			**Sensible Zone Subtotal**		**39245 Btuh**

Manual J Winter Calculations

Residential Load - Component Details (continued)

Kenneth & Drawn Kellam

Lake City, Fl 32025-

Project Title:
Cady Homes - Kellam Res.

Code Only
Professional Version
Climate: North

10/2/2006

WHOLE HOUSE TOTALS

	Subtotal Sensible	39245 Btuh
	Ventilation Sensible	0 Btuh
	Total Btuh Loss	39245 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 - Winter

Residential Load - Room by Room Component Details

Kenneth & Drawn Kellam
Lake City, Fl 32025-

Project Title:
Cady Homes - Kellam Res.

Code Only
Professional Version
Climate: North

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

10/2/2006

Component Loads for Zone #1: Main

Window	Panes/SHGC/Frame/U	Orientation	Area(sqft) X	HTM=	Load
1	1, Clear, Metal, 1.27	W	75.0	47.0	3524 Btuh
2	1, Clear, Metal, 1.27	SW	15.0	47.0	705 Btuh
3	1, Clear, Metal, 1.27	NW	15.0	47.0	705 Btuh
4	1, Clear, Metal, 1.27	E	45.0	47.0	2115 Btuh
5	1, Clear, Metal, 1.27	E	16.0	47.0	752 Btuh
6	1, Clear, Metal, 1.27	S	16.0	47.0	752 Btuh
7	1, Clear, Metal, 1.27	E	6.0	47.0	282 Btuh
8	1, Clear, Metal, 1.27	W	40.0	47.0	1880 Btuh
9	1, Clear, Metal, 1.27	S	40.0	47.0	1880 Btuh
	Window Total		268(sqft)		12593 Btuh
Walls	Type	R-Value	Area X	HTM=	Load
1	Frame - Wood - Ext(0.09)	13.0	1428	3.3	4690 Btuh
2	Frame - Wood - Adj(0.09)	13.0	164	3.3	539 Btuh
	Wall Total		1592		5228 Btuh
Doors	Type		Area X	HTM=	Load
1	Insulated - Adjacent		20	12.9	259 Btuh
2	Insulated - Exterior		20	12.9	259 Btuh
	Door Total		40		518Btuh
Ceilings	Type/Color/Surface	R-Value	Area X	HTM=	Load
1	Vented Attic/D/Shin)	30.0	2200	1.2	2592 Btuh
	Ceiling Total		2200		2592Btuh
Floors	Type	R-Value	Size X	HTM=	Load
1	Slab On Grade	0	215.0 ft(p)	43.7	9387 Btuh
	Floor Total		215		9387 Btuh
			Zone Envelope Subtotal:		30319 Btuh
Infiltration	Type	ACH X	Zone Volume	CFM=	
	Natural	0.80	16528	220.4	8927 Btuh
Ductload	Proposed leak free, R6.0, Supply(Attic), Return(Attic)			(DLM of 0.00)	0 Btuh
Zone #1			**Sensible Zone Subtotal**		**39245 Btuh**

Manual J Winter Calculations

Residential Load - Component Details (continued)

Kenneth & Drawn Kellam

Lake City, Fl 32025-

Project Title:
Cady Homes - Kellam Res.

Code Only
Professional Version
Climate: North

10/2/2006

WHOLE HOUSE TOTALS

	Subtotal Sensible	39245 Btuh
	Ventilation Sensible	0 Btuh
	Total Btuh Loss	39245 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

Kenneth & Drawn Kellam
Lake City, Fl 32025-

Project Title:
Cady Homes - Kellam Res.

Code Only
Professional Version
Climate: North

Reference City: Gainesville (Defaults) Summer Temperature Difference: 17.0 F

10/2/2006

Component Loads for Whole House

Window	Type* Pn/SHGC/U/InSh/ExSh/IS	Ornt	Overhang Len	Hgt	Window Area(sqft) Gross	Shaded	Unshaded	HTM Shaded	Unshaded	Load
1	1, Clear, 1.27, None,N,N	W	1.5ft	10ft.	75.0	0.0	75.0	37	94	7053 Btuh
2	1, Clear, 1.27, None,N,N	SW	1.5ft	10ft.	15.0	0.0	15.0	37	75	1125 Btuh
3	1, Clear, 1.27, None,N,N	NW	1.5ft	10ft.	15.0	0.0	15.0	37	72	1084 Btuh
4	1, Clear, 1.27, None,N,N	E	1.5ft	10ft.	45.0	0.0	45.0	37	94	4232 Btuh
5	1, Clear, 1.27, None,N,N	E	1.5ft	8ft.	16.0	0.0	16.0	37	94	1505 Btuh
6	1, Clear, 1.27, None,N,N	S	1.5ft	8ft.	16.0	16.0	0.0	37	43	599 Btuh
7	1, Clear, 1.27, None,N,N	E	1.5ft	8ft.	6.0	0.0	6.0	37	94	564 Btuh
8	1, Clear, 1.27, None,N,N	W	13.5f	10ft.	40.0	40.0	0.0	37	94	1498 Btuh
9	1, Clear, 1.27, None,N,N	S	20.6	8ft.	40.0	40.0	0.0	37	43	1498 Btuh
	Excursion									3680 Btuh
	Window Total				268 (sqft)					22839 Btuh

Walls	Type	R-Value/U-Value	Area(sqft)	HTM	Load
1	Frame - Wood - Ext	13.0/0.09	1428.0	2.1	2979 Btuh
2	Frame - Wood - Adj	13.0/0.09	164.0	1.5	247 Btuh
	Wall Total		1592 (sqft)		3226 Btuh

Doors	Type	Area (sqft)	HTM	Load
1	Insulated - Adjacent	20.0	9.8	196 Btuh
2	Insulated - Exterior	20.0	9.8	196 Btuh
	Door Total	40 (sqft)		392 Btuh

Ceilings	Type/Color/Surface	R-Value	Area(sqft)	HTM	Load
1	Vented Attic/DarkShingle	30.0	2200.0	1.7	3643 Btuh
	Ceiling Total		2200 (sqft)		3643 Btuh

Floors	Type	R-Value	Size	HTM	Load
1	Slab On Grade	0.0	215 (ft(p))	0.0	0 Btuh
	Floor Total		215.0 (sqft)		0 Btuh

			Zone Envelope Subtotal:		30101 Btuh
Infiltration	Type	ACH	Volume(cuft)	CFM=	Load
	SensibleNatural	0.70	16528	192.8	3589 Btuh
Internal gain		Occupants	Btuh/occupant	Appliance	Load
		6	X 230 +	2400	3780 Btuh
Duct load	Proposed leak free, R6.0, Supply(Attic), Return(Attic)			DGM = 0.00	0.0 Btuh
			Sensible Zone Load		**37469 Btuh**

Manual J Summer Calculations

Residential Load - Component Details (continued)

Kenneth & Drawn Kellam

Lake City, Fl 32025-

Project Title:
Cady Homes - Kellam Res.

Code Only
Professional Version
Climate: North

10/2/2006

WHOLE HOUSE TOTALS

Whole House Totals for Cooling	**Sensible Envelope Load All Zones**	**37469 Btuh**
	Sensible Duct Load	0 Btuh
	Total Sensible Zone Loads	**37469 Btuh**
	Sensible ventilation	0 Btuh
	Blower	0 Btuh
	Total sensible gain	**37469 Btuh**
	Latent infiltration gain (for 54 gr. humidity difference)	7047 Btuh
	Latent ventilation gain	0 Btuh
	Latent duct gain	0 Btuh
	Latent occupant gain (6 people @ 200 Btuh per person)	1200 Btuh
	Latent other gain	0 Btuh
	Latent total gain	**8247 Btuh**
	TOTAL GAIN	**45716 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)

Approved by ACCA MANUAL J

For Florida residences only

System Sizing Calculations - Summer

Residential Load - Room by Room Component Details

Kenneth & Drawn Kellam

Lake City, Fl 32025-

Project Title:
Cady Homes - Kellam Res.

Code Only
Professional Version
Climate: North

Reference City: Gainesville (Defaults) Summer Temperature Difference: 17.0 F 10/2/2006

Component Loads for Zone #1: Main

Window	Type* Pn/SHGC/U/InSh/ExSh/IS	Ornt	Overhang Len	Hgt	Window Area(sqft) Gross	Shaded	Unshaded	HTM Shaded	Unshaded	Load
1	1, Clear, 1.27, None,N,N	W	1.5ft	10ft.	75.0	0.0	75.0	37	94	7053 Btuh
2	1, Clear, 1.27, None,N,N	SW	1.5ft	10ft.	15.0	0.0	15.0	37	75	1125 Btuh
3	1, Clear, 1.27, None,N,N	NW	1.5ft	10ft.	15.0	0.0	15.0	37	72	1084 Btuh
4	1, Clear, 1.27, None,N,N	E	1.5ft	10ft.	45.0	0.0	45.0	37	94	4232 Btuh
5	1, Clear, 1.27, None,N,N	E	1.5ft	8ft.	16.0	0.0	16.0	37	94	1505 Btuh
6	1, Clear, 1.27, None,N,N	S	1.5ft	8ft.	16.0	16.0	0.0	37	43	599 Btuh
7	1, Clear, 1.27, None,N,N	E	1.5ft	8ft.	6.0	0.0	6.0	37	94	564 Btuh
8	1, Clear, 1.27, None,N,N	W	13.5f	10ft.	40.0	40.0	0.0	37	94	1498 Btuh
9	1, Clear, 1.27, None,N,N	S	20.6	8ft.	40.0	40.0	0.0	37	43	1498 Btuh
	Excursion									3680 Btuh
	Window Total				268 (sqft)					22839 Btuh

Walls	Type	R-Value/U-Value	Area(sqft)	HTM	Load
1	Frame - Wood - Ext	13.0/0.09	1428.0	2.1	2979 Btuh
2	Frame - Wood - Adj	13.0/0.09	164.0	1.5	247 Btuh
	Wall Total		1592 (sqft)		3226 Btuh

Doors	Type	Area (sqft)	HTM	Load
1	Insulated - Adjacent	20.0	9.8	196 Btuh
2	Insulated - Exterior	20.0	9.8	196 Btuh
	Door Total	40 (sqft)		392 Btuh

Ceilings	Type/Color/Surface	R-Value	Area(sqft)	HTM	Load
1	Vented Attic/DarkShingle	30.0	2200.0	1.7	3643 Btuh
	Ceiling Total		2200 (sqft)		3643 Btuh

Floors	Type	R-Value	Size	HTM	Load
1	Slab On Grade	0.0	215 (ft(p))	0.0	0 Btuh
	Floor Total		215.0 (sqft)		0 Btuh

			Zone Envelope Subtotal:		30101 Btuh
Infiltration	Type	ACH	Volume(cuft)	CFM=	Load
	SensibleNatural	0.70	16528	192.8	3589 Btuh
Internal gain		Occupants	Btuh/occupant	Appliance	Load
		6	X 230 +	2400	3780 Btuh
Duct load	Proposed leak free, R6.0, Supply(Attic), Return(Attic)			DGM = 0.00	0.0 Btuh
				Sensible Zone Load	**37469 Btuh**

Manual J Summer Calculations

Residential Load - Component Details (continued)

Kenneth & Drawn Kellam

Lake City, Fl 32025-

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Code Only
Professional Version
Climate: North

10/2/2006

WHOLE HOUSE TOTALS

	Sensible Envelope Load All Zones	**37469**	**Btuh**
	Sensible Duct Load	0	Btuh
	Total Sensible Zone Loads	**37469**	**Btuh**
	Sensible ventilation	0	Btuh
	Blower	0	Btuh
Whole House	**Total sensible gain**	**37469**	**Btuh**
Totals for Cooling	Latent infiltration gain (for 54 gr. humidity difference)	7047	Btuh
	Latent ventilation gain	0	Btuh
	Latent duct gain	0	Btuh
	Latent occupant gain (6 people @ 200 Btuh per person)	1200	Btuh
	Latent other gain	0	Btuh
	Latent total gain	**8247**	**Btuh**
	TOTAL GAIN	**45716**	**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

Kenneth & Drawn Kellam

Lake City, Fl 32025-

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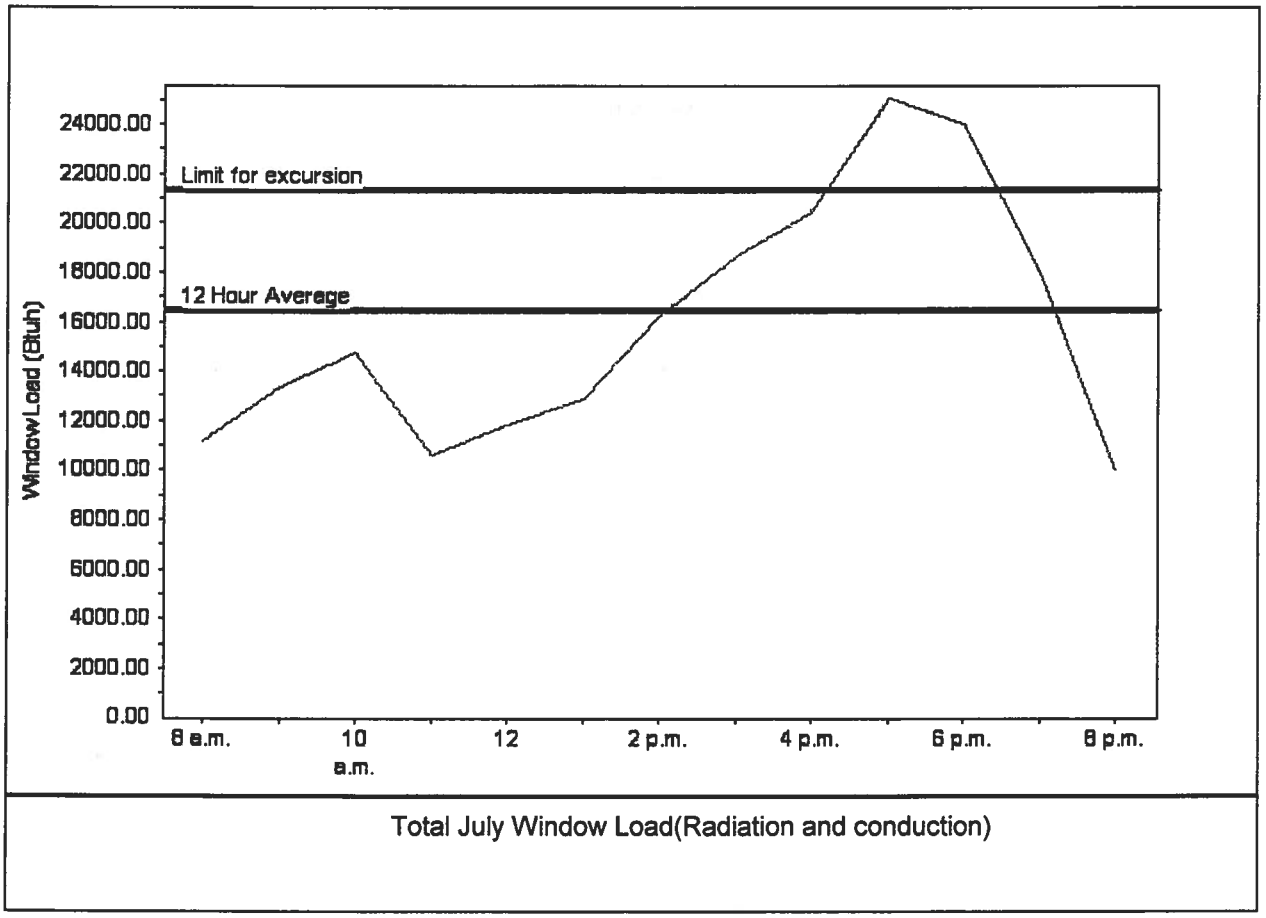
Weather data for: Gainesville - Defaults

Summer design temperature	92 F	Average window load for July	16418 Btu
Summer setpoint	75 F	Peak window load for July	25024 Btu
Summer temperature difference	17 F	Excusion limit(130% of Ave.)	21344 Btu
Latitude	29 North	Window excursion (July)	3680 Btuh

WINDOW Average and Peak Loads



Total July Window Load(Radiation and conduction)

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: _____

DATE: _____