

## Columbia County Building Permit Application

Revised 9-23-04

For Office Use Only Application # 0605-31 Date Received 5/10/06 By LT Permit # 1075/24511  
Application Approved by - Zoning Official BLK Date 12.05.06 Plans Examiner OK JTH Date 5-10-06  
Flood Zone x Per Plat Development Permit N/A Zoning RSF-2 Land Use Plan Map Category Res. Low Den.  
Comments M.F.E 99.5 & Elevation Letter Required

Applicants Name Justin J Jenkins Phone 386 719 2240 FAX 719-2234  
Address 694 SW Main Blvd, Lake City, FL 32025  
Owners Name James C. + Susan D. Sparks Phone 386 752-9589  
911 Address 172 SW Wise Dr., Lake City, FL 32024  
Contractors Name Jenkins Contracting, LLC - Michael Jenkins Phone 386 719 2240  
Address 694 SW Main Blvd, Lake City, FL 32025  
Fee Simple Owner Name & Address James C. + Susan D. Sparks 314 SW Rose Creek Dr Lake City, FL 32025  
Bonding Co. Name & Address NONE  
Architect/Engineer Name & Address Mark Disosway P.E., 163 SW Midtown Pl. St 103, Lake City, FL 32025  
Mortgage Lenders Name & Address NONE

Circle the correct power company - FL Power & Light Clay Elec. Suwannee Valley Elec. - Progressive Energy  
Property ID Number 23-45-16-03113-103 Estimated Cost of Construction \$ 82,850.00  
Subdivision Name Wise Estates Lot 3 Block A Unit \_\_\_\_\_ Phase \_\_\_\_\_  
Driving Directions SR 475, Right on CR 242, Right on Wise Dr, Property is 3rd lot on left.

Type of Construction Single Family Residential Number of Existing Dwellings on Property 0  
Total Acreage .52 Lot Size 225125 Do you need a Culvert Permit or Culvert Waiver or Have an Existing Drive  
Actual Distance of Structure from Property Lines - Front 30' Side 30' Side 60' Rear 40'  
Total Building Height 17'8" Number of Stories 1 Heated Floor Area 1657 sf Roof Pitch 6/12  
DOCK 145 GARAGE 132 TOTAL 2234

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.

[Signature]  
Owner Builder or Agent (Including Contractor)

STATE OF FLORIDA  
COUNTY OF COLUMBIA

Sworn to (or affirmed) and subscribed before me  
this 09 day of 05 2006.  
Personally known X or Produced Identification \_\_\_\_\_

[Signature]  
Contractor Signature  
Contractors License Number C6C1507486  
Competency Card Number \_\_\_\_\_  
NOTARY STAMP/SEAL

[Signature]  
Notary Signature



**M. L. Church**  
Commission # DD42525  
Expires May 3, 2009  
Bonded Troy Fain - Insurance, Inc. 800-385-70

JW called 5.12.06 - talked w Justin.

**Columbia County Building Department  
Culvert Permit**

**Culvert Permit No.  
000001075**

DATE 05/15/2006 PARCEL ID # 23-4S-16-03113-103  
APPLICANT JUSTIN JENKINS PHONE 719-2240  
ADDRESS 694 SW MAIN BLVD LAKE CITY FL 32025  
OWNER JAMES & SUSAN SPARKS PHONE 752-9589  
ADDRESS 172 SW WISE DRIVE LAKE CITY FL 32024  
CONTRACTOR MICHAEL JENKINS PHONE 719-2240  
LOCATION OF PROPERTY 47S, TR ON 242, TR ON WISE DR, 3RD LOT ON LEFT

SUBDIVISION/LOT/BLOCK/PHASE/UNIT WISE ESTATES 3

SIGNATURE 

**INSTALLATION REQUIREMENTS**



Culvert size will be 18 inches in diameter with a total length 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 INSTALLATION 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





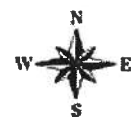
### Columbia County Property Appraiser

J. Doyle Crews, CFA - Lake City, Florida - 386-758-1083

#### PARCEL: 23-4S-16-03113-103 - VACANT (000000)

Name: SPARKS JAMES CLAYTON JR &	LandVal	\$25,500.00
Site: WISE	BldgVal	\$0.00
SUSAN DIANNE SPARKS	ApprVal	\$25,500.00
Mail: 394 SW ROSE CREEK DR	JustVal	\$25,500.00
LAKE CITY, FL 320249518	Assd	\$25,500.00
Sales 3/14/2006 \$53,100.00 V / Q	Exmpt	\$0.00
Info 7/22/2004 \$22,900.00 V / Q	Taxable	\$25,500.00

0 100 200 300 ft



This information, GIS Map Updated: 5/5/2006, was derived from data which was compiled by the Columbia County Property Appraiser Office solely for the governmental purpose of property assessment. This information should not be relied upon by anyone as a determination of the ownership of property or market value. No warranties, expressed or implied, are provided for the accuracy of the data herein, its use, or its interpretation. Although it is periodically updated, this information may not reflect the data currently on file in the Property Appraiser's office. The assessed values are NOT certified values and therefore are subject to change before being finalized for ad valorem assessment purposes.

RECEIVED

APR 26 2006

Jenkins Contracting LLC  
Lake City  
AT# 18895

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

COPY

## Warranty Deed

Individual to Individual

THIS WARRANTY DEED made the 14th day of March, 2006, Martin D. Shelbo, and his wife, Kimberly J. Shelbo, hereinafter called the grantor, to James Clayton Sparks, Jr., and his wife, Susan Diane Sparks whose post office address is: 394 SW Rose Creek Drive, Lake City, FL 32024-9518 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# R03113-103

Lot 3, Block A, of Wise Estates, a subdivision according to plat thereof recorded in Plat Book 7, Pages 164-167, 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:

Witness: \_\_\_\_\_

\_\_\_\_\_  
Martin D. Shelbo

Printed Name: \_\_\_\_\_

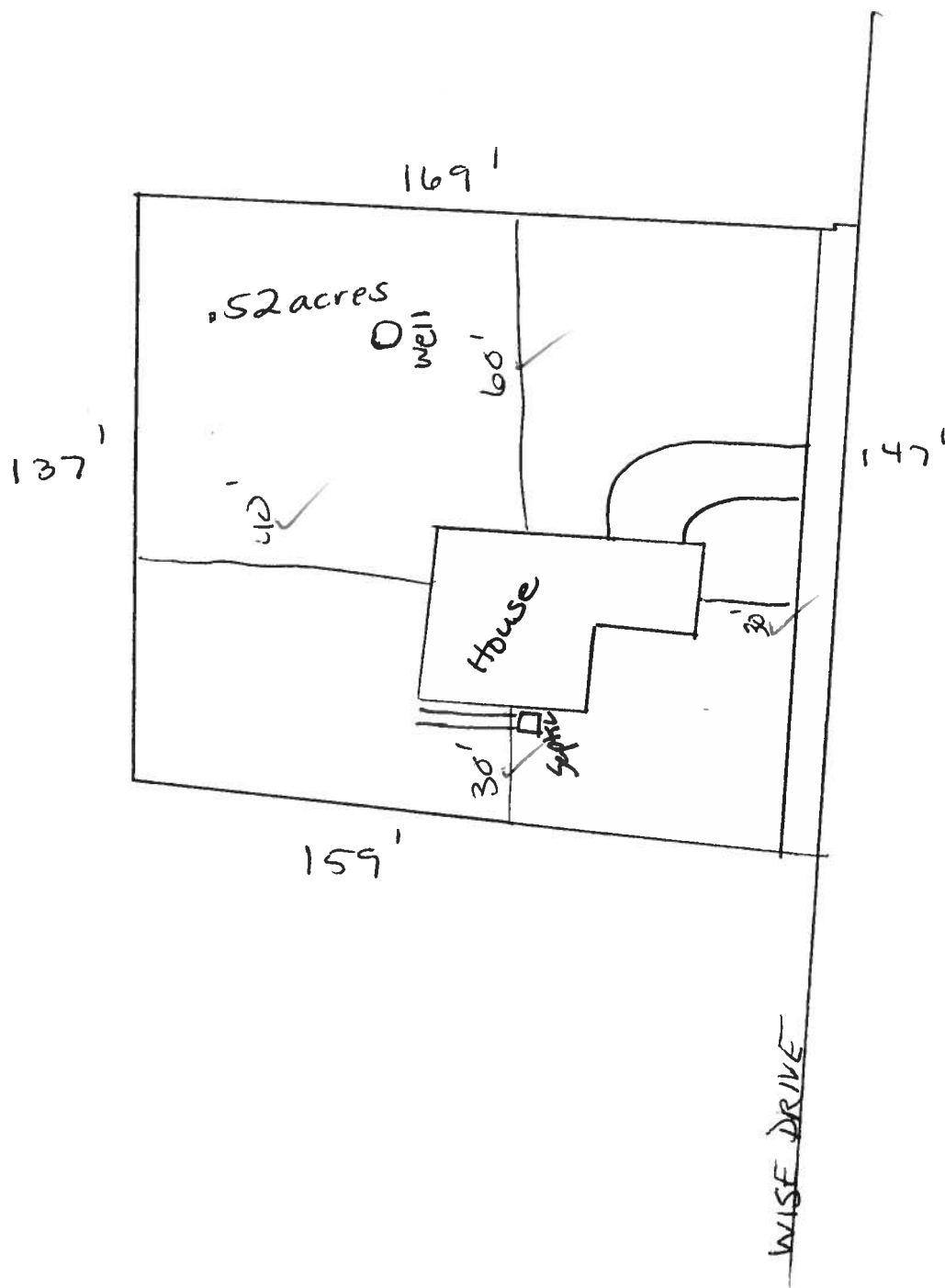
Witness: \_\_\_\_\_

\_\_\_\_\_  
Kimberly J. Shelbo

Printed Name: \_\_\_\_\_

STATE OF FLORIDA  
COUNTY OF COLUMBIA

The foregoing instrument was acknowledged

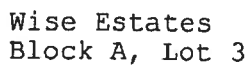


SPARKS PLOT PLAN  
LOT 3 Wise Estates

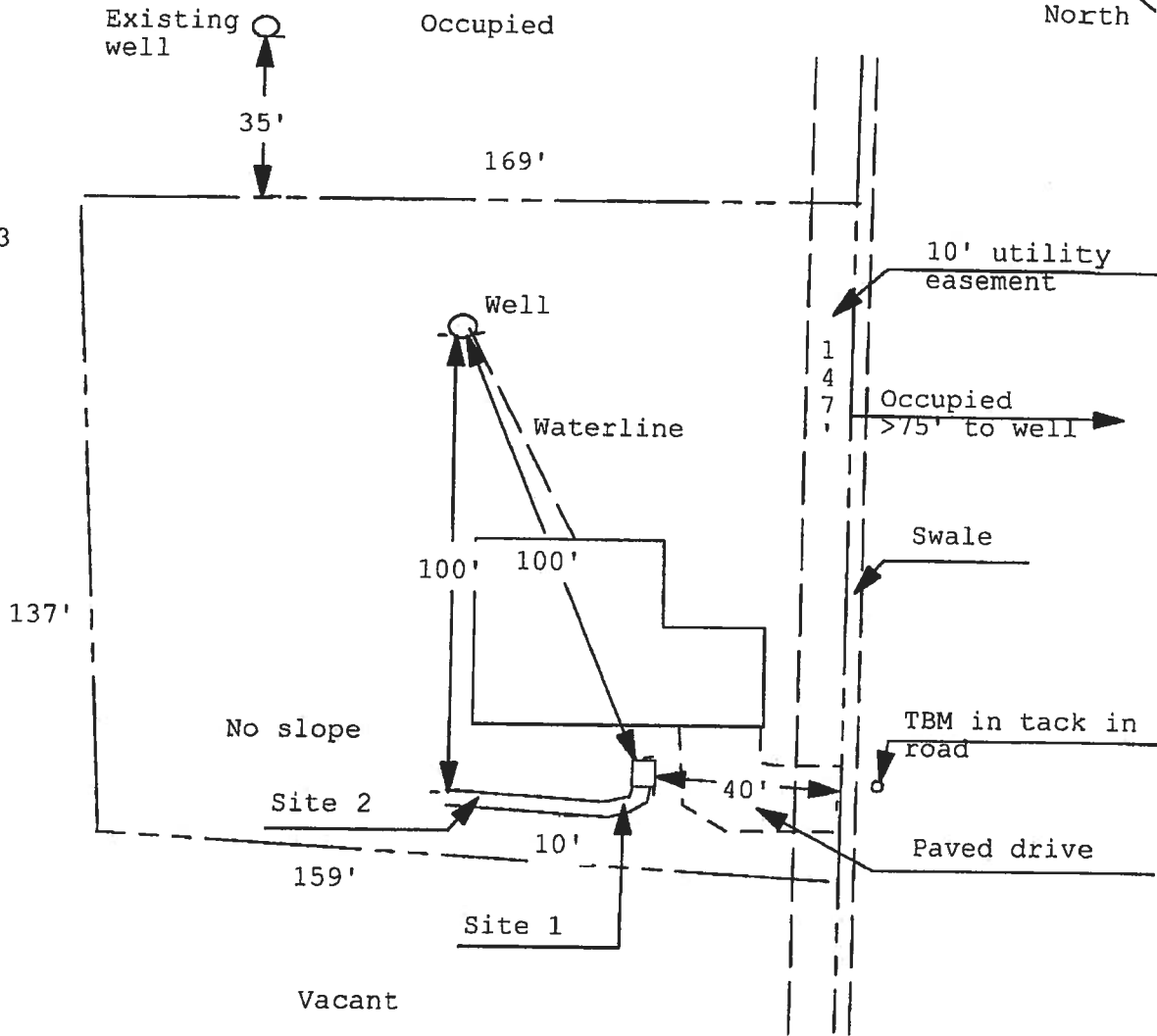
**Application for Onsite Sewage Disposal System  
Construction Permit. Part II Site Plan**

Permit Application Number: 06-0452N

SPARKS/CR 05-3506



Occupied  
>75' to well



1 inch = 40 feet

Site Plan Submitted By Tammy L. Hays Date 5/3/06  
Plan Approved X Not Approved \_\_\_\_\_ Date 5-9-06  
By [Signature] Columbia CPHU

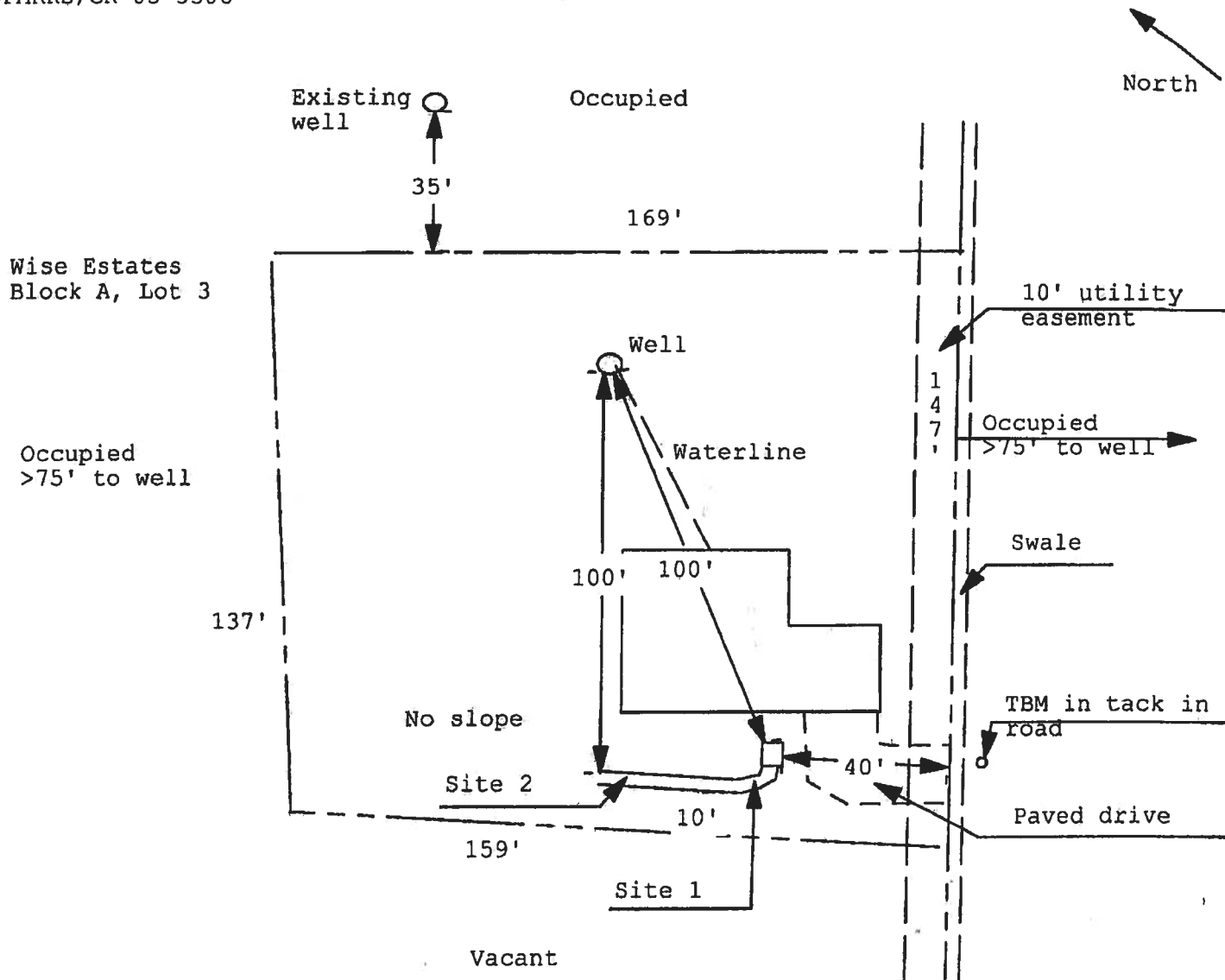
### Notes:

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

Permit Application Number: 06-0452N

**ALL CHANGES MUST BE APPROVED BY THE COUNTY HEALTH UNIT**

SPARKS/CR 05-3506



1 inch = 40 feet

Site Plan Submitted By Paul Lopez Date 5/3/06  
 Plan Approved X Not Approved \_\_\_\_\_ Date 5-9-06  
 By [Signature] Columbia CPHU

Notes: \_\_\_\_\_

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 23-4S-16-0313-103

1. Description of property: (legal description of the property and street address or 911 address)  
LOT 3 BLOCK A WISE ESTATE SID WD 1022-91. WD 1077-1340. LOT 3 BLOCK A WISE ESTATE SID WD 1022-191. WD 1077-1340. 172 SW Wise Drive, Lake City, FL 32024
2. General description of improvement: Construction of Dwelling
3. Owner Name & Address James C. and Susan D. Sparks, 394 SW Rose Creek Dr., Lake City, FL 32024 Interest in Property FEE SIMPLE
4. Name & Address of Fee Simple Owner (if other than owner): NONE
5. Contractor Name Jenkins Contracting, LLC Phone Number (386) 719-2240  
Address 694 SW main Blvd Lake City, FL 32025
6. Surety Holders Name NONE Phone Number \_\_\_\_\_  
Address \_\_\_\_\_  
Amount of Bond \_\_\_\_\_
7. Lender Name NONE Phone Number \_\_\_\_\_  
Address \_\_\_\_\_
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 NONE Phone Number \_\_\_\_\_  
Address \_\_\_\_\_
9. In addition to himself/herself the owner designates NONE of \_\_\_\_\_  
\_\_\_\_\_ 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 (if) \_\_\_\_\_  
(Unless a different date is specified) \_\_\_\_\_

Inst: 2006011004 Date: 05/04/2006 Time: 16:44  
DC, P. DeWitt Cason, Columbia County B: 1082 P: 2286

**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.

James C. Sparks  
Susan D. Sparks  
Signature of Owner

Sworn to (or affirmed) and subscribed before  
day of 05/03/, 2006

RECEIVED

MAY 04 2006

Jenkins Contracting LLC  
Lake City

NOTARY STAMP/SEAL



M. L. Church  
Commission # DD425257  
Expires May 3, 2009  
Bonded Tray Pahn - Insurance, Inc. 800-365-7010

M. L. Church  
Signature of Notary



# FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Community Affairs  
Residential Whole Building Performance Method A

Project Name:	<b>604051 Jenkins Contracting</b>	Builder:	
Address:	<b>Lot: 3, Sub: Wise Estates, Plat:</b>	Permitting Office:	<i>Columbia</i>
City, State:	<b>, FL</b>	Permit Number:	<b>24511</b>
Owner:	<b>Sparks Spec House</b>	Jurisdiction Number:	<b>221000</b>
Climate Zone:	<b>North</b>		

1. New construction or existing	New	12. Cooling systems	
2. Single family or multi-family	Single family	a. Central Unit	Cap: 36.0 kBtu/hr
3. Number of units, if multi-family	1		SEER: 11.00
4. Number of Bedrooms	3	b. N/A	
5. Is this a worst case?	Yes	c. N/A	
6. Conditioned floor area (ft <sup>2</sup> )	1657 ft <sup>2</sup>		
7. Glass type <sup>1</sup> 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: 36.0 kBtu/hr
(or Single or Double DEFAULT)	7a. (Dble Default) 258.3 ft <sup>2</sup>		HSPF: 7.30
b. SHGC:		b. N/A	
(or Clear or Tint DEFAULT)	7b. (Clear) 258.3 ft <sup>2</sup>	c. N/A	
8. Floor types			
a. Slab-On-Grade Edge Insulation	R=0.0, 192.0(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, 1015.7 ft <sup>2</sup>	c. Conservation credits	
b. Frame, Wood, Exterior	R=13.0, 172.0 ft <sup>2</sup>	(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, 1685.0 ft <sup>2</sup>	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, 170.0 ft		
b. N/A			

Glass/Floor Area: 0.16

Total as-built points: 24327

Total base points: 24922

## PASS

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

PREPARED BY: *Wen Sparks*

DATE: 5-5-06

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: \_\_\_\_\_



<sup>1</sup> 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: 3, Sub: Wise Estates, Plat: , , FL,

PERMIT #:

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	1657.0	20.04	5977.1	Double, Clear	SE	1.5	5.5	60.0	42.75	0.86	2208.6				
				Double, Clear	S	99.0	5.5	20.0	35.87	0.43	309.8				
				Double, Clear	SE	6.4	8.0	30.0	42.75	0.54	688.5				
				Double, Clear	E	4.0	8.0	40.0	42.06	0.73	1220.6				
				Double, Clear	SE	1.5	5.5	20.0	42.75	0.86	736.2				
				Double, Clear	SW	1.5	4.5	16.0	40.16	0.80	517.2				
				Double, Clear	NW	1.5	0.0	15.0	25.97	0.52	200.9				
				Double, Clear	NW	1.5	5.5	20.0	25.97	0.91	473.6				
				Double, Clear	NW	7.0	8.0	13.3	25.97	0.66	228.2				
				Double, Clear	NE	1.5	5.5	15.0	29.56	0.91	401.5				
				Double, Clear	SE	1.5	3.5	9.0	42.75	0.72	277.9				
				As-Built Total:				258.3				7262.9			
				WALL TYPES Area X BSPM = Points				Type R-Value Area X SPM = Points							
Adjacent	0.0	0.00	0.0	Frame, Wood, Exterior			13.0	1015.7	1.50	1523.6					
Exterior	1187.7	1.70	2019.1	Frame, Wood, Exterior			13.0	172.0	1.50	258.0					
Base Total: 1187.7 2019.1				As-Built Total: 1187.7				1781.6							
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	50.0	4.10	205.0	Adjacent Insulated				20.0	1.60	32.0					
				Exterior Insulated				30.0	4.10	123.0					
Base Total: 70.0 237.0				As-Built Total: 70.0				237.0							
CEILING TYPES Area X BSPM = Points				Type R-Value Area X SPM X SCM = Points											
Under Attic	1657.0	1.73	2866.6	Under Attic			30.0	1685.0	1.73 X 1.00	2915.1					
Base Total: 1657.0 2866.6				As-Built Total: 1685.0				2915.1							
FLOOR TYPES Area X BSPM = Points				Type R-Value Area X SPM = Points											
Slab	192.0(p)	-37.0	-7104.0	Slab-On-Grade Edge Insulation			0.0	192.0(p)	-41.20	-7910.4					
Raised	0.0	0.00	0.0												
Base Total: -7104.0				As-Built Total: 192.0				-7910.4							

# SUMMER CALCULATIONS

## Residential Whole Building Performance Method A - Details

ADDRESS: Lot: 3, Sub: Wise Estates, Plat: , , FL,

PERMIT #:

BASE				AS-BUILT			
INFILTRATION Area X BSPM = Points				Area X SPM = Points			
1657.0	10.21	16918.0		1657.0	10.21	16918.0	
<b>Summer Base Points: 20913.8</b>				<b>Summer As-Built Points: 21204.1</b>			
Total Summer Points	X System Multiplier	= Cooling Points		Total Component (System - Points)	X Cap Ratio (DM x DSM x AHU)	X Duct Multiplier	X System Multiplier X Credit Multiplier = Cooling Points
20913.8	0.4266	8921.8		21204.1	1.00	1.138	0.310 1.000 7485.1

# WINTER CALCULATIONS

## Residential Whole Building Performance Method A - Details

ADDRESS: Lot: 3, Sub: Wise Estates, Plat: , , 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	1657.0	12.74	3799.8	Double, Clear	SE	1.5	5.5	60.0	14.71	1.11	983.1
				Double, Clear	S	99.0	5.5	20.0	13.30	3.66	973.4
				Double, Clear	SE	6.4	8.0	30.0	14.71	1.74	768.7
				Double, Clear	E	4.0	8.0	40.0	18.79	1.12	841.8
				Double, Clear	SE	1.5	5.5	20.0	14.71	1.11	327.7
				Double, Clear	SW	1.5	4.5	16.0	16.74	1.11	298.1
				Double, Clear	NW	1.5	0.0	15.0	24.30	1.04	377.6
				Double, Clear	NW	1.5	5.5	20.0	24.30	1.00	487.9
				Double, Clear	NW	7.0	8.0	13.3	24.30	1.02	330.5
				Double, Clear	NE	1.5	5.5	15.0	23.57	1.01	356.3
				Double, Clear	SE	1.5	3.5	9.0	14.71	1.28	169.8
				As-Built Total:		258.3			5914.9		
WALL TYPES Area X BWPM = Points				Type		R-Value		Area X WPM = Points			
Adjacent	0.0	0.00	0.0	Frame, Wood, Exterior		13.0		1015.7	3.40		3453.4
Exterior	1187.7	3.70	4394.5	Frame, Wood, Exterior		13.0		172.0	3.40		584.8
Base Total:		1187.7	4394.5	As-Built Total:		1187.7			4038.2		
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	50.0	8.40	420.0	Adjacent Insulated				20.0	8.00		160.0
				Exterior Insulated				30.0	8.40		252.0
Base Total:		70.0	580.0	As-Built Total:		70.0			580.0		
CEILING TYPESArea X BWPM = Points				Type		R-Value		Area X WPM X WCM = Points			
Under Attic	1657.0	2.05	3396.8	Under Attic		30.0		1685.0	2.05 X 1.00		3454.3
Base Total:		1657.0	3396.8	As-Built Total:		1685.0			3454.3		
FLOOR TYPES Area X BWPM = Points				Type		R-Value		Area X WPM = Points			
Slab	192.0(p)	8.9	1708.8	Slab-On-Grade Edge Insulation		0.0		192.0(p)	18.80		3609.6
Raised	0.0	0.00	0.0								
Base Total:		1708.8		As-Built Total:		192.0			3609.6		

# WINTER CALCULATIONS

## Residential Whole Building Performance Method A - Details

ADDRESS: Lot: 3, Sub: Wise Estates, Plat: , , FL,

PERMIT #:

BASE				AS-BUILT			
INFILTRATION Area X BWPM = Points				Area X WPM = Points			
1657.0 -0.59 -977.6				1657.0 -0.59 -977.6			
<b>Winter Base Points: 12902.3</b>				<b>Winter As-Built Points: 16619.3</b>			
Total Winter X System = Heating Points Multiplier Points				Total X Cap X Duct X System X Credit = Heating Component Ratio Multiplier Multiplier Multiplier Points (System - Points) (DM x DSM x AHU)			
12902.3 0.6274 8094.9				(sys 1: Electric Heat Pump 36000 btuh ,EFF(7.3) Ducts:Unc(S),Unc(R),Int(AH),R6.0 16619.3 1.000 (1.069 x 1.169 x 0.93) 0.467 1.000 9022.3 <b>16619.3 1.00 1.162 0.467 1.000 9022.3</b>			

## Residential Whole Building Performance Method A - Details

PERMIT #:

CODE COMPLIANCE STATUS											
BASE						AS-BUILT					
Cooling Points	+	Heating Points	+	Hot Water Points	= Total Points	Cooling Points	+	Heating Points	+	Hot Water Points	= Total Points
8922		8095		7905	24922	7485		9022		7820	24327

# PASS



# Code Compliance Checklist

## Residential Whole Building Performance Method A - Details

ADDRESS: Lot: 3, Sub: Wise Estates, Plat: , , 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\* = 83.4**

**The higher the score, the more efficient the home.**

Sparks Spec House, Lot: 3, Sub: Wise Estates, Plat: , , FL,

1. New construction or existing	New	12. Cooling systems	
2. Single family or multi-family	Single family	a. Central Unit	Cap: 36.0 kBtu/hr
3. Number of units, if multi-family	1		SEER: 11.00
4. Number of Bedrooms	3	b. N/A	
5. Is this a worst case?	Yes	c. N/A	
6. Conditioned floor area (ft <sup>2</sup> )	1657 ft <sup>2</sup>		
7. Glass type <sup>1</sup> 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: 36.0 kBtu/hr
(or Single or Double DEFAULT)	7a. (Dble Default) 258.3 ft <sup>2</sup>		HSPF: 7.30
b. SHGC:		b. N/A	
(or Clear or Tint DEFAULT)	7b. (Clear) 258.3 ft <sup>2</sup>	c. N/A	
8. Floor types			
a. Slab-On-Grade Edge Insulation	R=0.0, 192.0(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, 1015.7 ft <sup>2</sup>	c. Conservation credits	
b. Frame, Wood, Exterior	R=13.0, 172.0 ft <sup>2</sup>	(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, 1685.0 ft <sup>2</sup>	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, 170.0 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: \_\_\_\_\_

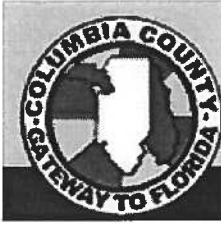
Address of New Home: \_\_\_\_\_ City/FL Zip: \_\_\_\_\_



\*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 EnergyStar<sup>TM</sup> 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](http://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.

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





From: The Columbia County Building & Zoning Department  
Plan Review  
135 NE Hernando Av.  
P.O. Box 1529  
Lake City Florida 32056-1529

Reference to a building permit application Number: **0605-31**  
Contractor Justin Jenkins Owner James & Susan Sparks 172 SW Wise Dr.

On the date of May 10, 2006 application 0605-31 and plans for construction of a single family dwelling were reviewed and the following information or alteration to the plans will be required to continue processing this application. If you should have any question please contact the above address, or contact phone number (386) 758-1163 or fax any information to (386) 754-7088.

**Please include application number 0605-31 when making reference to this application.**

1. In the garage area show compliance with the FRC-2004 sections R309  
R309.1 Opening protection: Openings from a private garage directly into a room used for sleeping purposes shall not be permitted. Other openings between the garage and residence shall be equipped with solid wood doors not less than 13/8 inches (35 mm) in thickness, solid or honeycomb core steel doors not less than 13/8 inches (35 mm) thick, or 20-minute fire-rated doors.

2. R309.1.1 Duct penetration: Ducts in the garage and ducts penetrating the walls or ceilings separating the dwelling from the garage shall be constructed of a minimum No. 26 gage (0.48 mm) sheet steel or other approved material and shall have no openings into the garage. R309.2 Separation required: The garage shall be separated from the residence and its attic area by not less than ½-inch (12.7 mm) gypsum board applied to the garage side. Garages beneath habitable rooms shall be separated from all habitable rooms above by not less than 5/8-inch (15.9 mm) Type X gypsum board or equivalent. Where the separation is a floor-ceiling assembly, the structure supporting the separation shall also be protected by not less than ½-inch (12.7 mm) gypsum board or equivalent.
3. R309.1 Opening protection. Openings from a private garage directly into a room used for sleeping purposes shall not be permitted. Other openings between the garage and residence shall be equipped with solid wood doors not less than 13/8 inches (35 mm) in thickness, solid or honeycomb core steel doors not less than 13/8 inches (35 mm) thick, or 20-minute fire-rated doors.
4. The attic access opening (pull down ladder type attic egress door) in the garage ceiling shall have the same protection requirements of FRC-2004 C: R309.2 Separation required. The garage shall be separated from the residence and its attic area by not less than ½-inch (12.7 mm) gypsum board applied to the garage side. Garages beneath habitable rooms shall be separated from all habitable rooms above by not less than 5/8-inch (15.9 mm) Type X gypsum board or

equivalent. Where the separation is a floor-ceiling assembly, the structure supporting the separation shall also be protected by not less than ½-inch (12.7 mm) gypsum board or equivalent. Other openings between the garage and residence shall be equipped with solid wood doors not less than 13/8 inches (35 mm) in thickness, solid or honeycomb core steel doors not less than 13/8 inches (35 mm) thick, or 20-minute fire-rated doors.

Thank you,



Joe Haltiwanger  
Plan Examiner  
Columbia County Building Department

# Residential System Sizing Calculation

## Summary

Sparks Spec House

Project Title:  
604051JenkinsContracting

Class 3 Rating  
Registration No. 0  
Climate: North

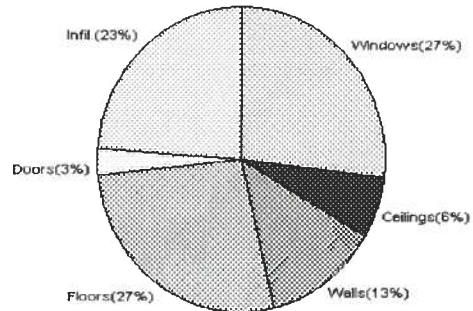
5/5/2006

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
<b>Total heating load calculation</b>	<b>30649 Btuh</b>	<b>Total cooling load calculation</b>	<b>27447 Btuh</b>
Submitted heating capacity	% of calc Btuh	Submitted cooling capacity	% of calc Btuh
Total (Electric Heat Pump)	117.5 36000	Sensible (SHR = 0.75)	118.1 27000
Heat Pump + Auxiliary(0.0kW)	117.5 36000	Latent	196.0 9000
		Total (Electric Heat Pump)	131.2 36000

## WINTER CALCULATIONS

Winter Heating Load (for 1657 sqft)

Load component		Load
Window total	258 sqft	8315 Btuh
Wall total	1188 sqft	3900 Btuh
Door total	70 sqft	907 Btuh
Ceiling total	1685 sqft	1986 Btuh
Floor total	192 sqft	8383 Btuh
Infiltration	177 cfm	7159 Btuh
Duct loss		0 Btuh
<b>Subtotal</b>		<b>30649 Btuh</b>
Ventilation	0 cfm	0 Btuh
<b>TOTAL HEAT LOSS</b>		<b>30649 Btuh</b>



RECEIVED

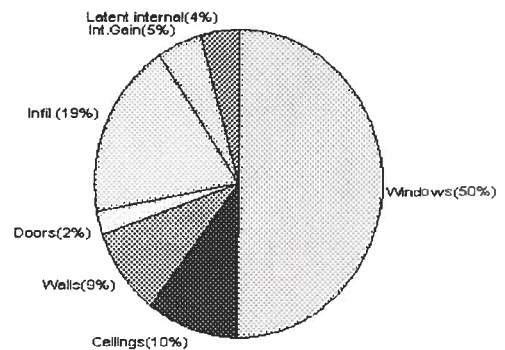
MAY 05 2006

Jenkins Contracting LLC  
Lake City

## SUMMER CALCULATIONS

Summer Cooling Load (for 1657 sqft)

Load component		Load
Window total	258 sqft	13795 Btuh
Wall total	1188 sqft	2477 Btuh
Door total	70 sqft	686 Btuh
Ceiling total	1685 sqft	2790 Btuh
Floor total		0 Btuh
Infiltration	93 cfm	1727 Btuh
Internal gain		1380 Btuh
Duct gain		0 Btuh
Sens. Ventilation	0 cfm	0 Btuh
<b>Total sensible gain</b>		<b>22856 Btuh</b>
Latent gain(ducts)		0 Btuh
Latent gain(infiltration)		3391 Btuh
Latent gain(ventilation)		0 Btuh
Latent gain(internal/occupants/other)		1200 Btuh
<b>Total latent gain</b>		<b>4591 Btuh</b>
<b>TOTAL HEAT GAIN</b>		<b>27447 Btuh</b>



For Florida residences only

EnergyGauge® System Sizing

PREPARED BY: *[Signature]*

DATE: 5-5-06

# System Sizing Calculations - Winter

## Residential Load - Whole House Component Details

Sparks Spec House

Project Title:  
604051JenkinsContracting

Class 3 Rating  
Registration No. 0  
Climate: North

, FL

Reference City: Gainesville (Defaults) Winter Temperature Difference: 37.0 F  
This calculation is for Worst Case. The house has been rotated 315 degrees.

5/5/2006

Component Loads for Whole House					
Window	Panes/SHGC/Frame/U	Orientation	Area(sqft)	X	HTM=
1	2, Clear, Metal, 0.87	NW	60.0		32.2
2	2, Clear, Metal, 0.87	N	20.0		32.2
3	2, Clear, Metal, 0.87	NW	30.0		32.2
4	2, Clear, Metal, 0.87	W	40.0		32.2
5	2, Clear, Metal, 0.87	NW	20.0		32.2
6	2, Clear, Metal, 0.87	NE	16.0		32.2
7	2, Clear, Metal, 0.87	SE	15.0		32.2
8	2, Clear, Metal, 0.87	SE	20.0		32.2
9	2, Clear, Metal, 0.87	SE	13.3		32.2
10	2, Clear, Metal, 0.87	SW	15.0		32.2
11	2, Clear, Metal, 0.87	NW	9.0		32.2
Window Total			258(sqft)		
8315 Btuh					
Walls	Type	R-Value	Area	X	HTM=
1	Frame - Wood - Ext(0.09)	13.0	1016		3.3
2	Frame - Wood - Ext(0.09)	13.0	172		3.3
Wall Total			1188		
3900 Btuh					
Doors	Type		Area	X	HTM=
1	Insulated - Exterior		30		12.9
2	Insulated - Adjacent		20		12.9
3	Insulated - Exterior		20		12.9
Door Total			70		
907Btuh					
Ceilings	Type/Color/Surface	R-Value	Area	X	HTM=
1	Vented Attic/D/Shin)	30.0	1685		1.2
Ceiling Total			1685		
1986Btuh					
Floors	Type	R-Value	Size	X	HTM=
1	Slab On Grade	0	192.0 ft(p)		43.7
Floor Total			192		
8383 Btuh					
Zone Envelope Subtotal:					23490 Btuh
Infiltration	Type	ACH X	Zone Volume	CFM=	
	Natural	0.80	13256	176.7	7159 Btuh
Ductload	Unsealed, R6.0, Supply(Attic), Return(Attic) (DLM of 0.00)				0 Btuh
Zone #1	Sensible Zone Subtotal				30649 Btuh

# Manual J Winter Calculations

## Residential Load - Component Details (continued)

Sparks Spec House

Project Title:  
604051JenkinsContracting

Class 3 Rating  
Registration No. 0  
Climate: North

5/5/2006

### WHOLE HOUSE TOTALS

	Subtotal Sensible Ventilation Sensible Total Btuh Loss	30649 Btuh 0 Btuh 30649 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

Sparks Spec House

Project Title:  
604051JenkinsContracting

Class 3 Rating  
Registration No. 0  
Climate: North

Reference City: Gainesville (Defaults) Winter Temperature Difference: 37.0 F  
This calculation is for Worst Case. The house has been rotated 315 degrees.

5/5/2006

### Component Loads for Zone #1: Main

Window	Panes/SHGC/Frame/U	Orientation	Area(sqft)	X	HTM=	Load
1	2, Clear, Metal, 0.87	NW	60.0		32.2	1931 Btuh
2	2, Clear, Metal, 0.87	N	20.0		32.2	644 Btuh
3	2, Clear, Metal, 0.87	NW	30.0		32.2	966 Btuh
4	2, Clear, Metal, 0.87	W	40.0		32.2	1288 Btuh
5	2, Clear, Metal, 0.87	NW	20.0		32.2	644 Btuh
6	2, Clear, Metal, 0.87	NE	16.0		32.2	515 Btuh
7	2, Clear, Metal, 0.87	SE	15.0		32.2	483 Btuh
8	2, Clear, Metal, 0.87	SE	20.0		32.2	644 Btuh
9	2, Clear, Metal, 0.87	SE	13.3		32.2	428 Btuh
10	2, Clear, Metal, 0.87	SW	15.0		32.2	483 Btuh
11	2, Clear, Metal, 0.87	NW	9.0		32.2	290 Btuh
Window Total			258(sqft)			8315 Btuh
Walls	Type	R-Value	Area	X	HTM=	Load
1	Frame - Wood - Ext(0.09)	13.0	1016		3.3	3336 Btuh
2	Frame - Wood - Ext(0.09)	13.0	172		3.3	565 Btuh
Wall Total			1188			3900 Btuh
Doors	Type		Area	X	HTM=	Load
1	Insulated - Exterior		30		12.9	388 Btuh
2	Insulated - Adjacent		20		12.9	259 Btuh
3	Insulated - Exterior		20		12.9	259 Btuh
Door Total			70			907Btuh
Ceilings	Type/Color/Surface	R-Value	Area	X	HTM=	Load
1	Vented Attic/D/Shin)	30.0	1685		1.2	1986 Btuh
Ceiling Total			1685			1986Btuh
Floors	Type	R-Value	Size	X	HTM=	Load
1	Slab On Grade	0	192.0 ft(p)		43.7	8383 Btuh
Floor Total			192			8383 Btuh
Zone Envelope Subtotal:						23490 Btuh
Infiltration	Type	ACH X	Zone Volume	CFM=		
	Natural	0.80	13256	176.7		7159 Btuh
Ductload	Unsealed, R6.0, Supply(Attic), Return(Attic) (DLM of 0.00)					0 Btuh
Zone #1	Sensible Zone Subtotal					30649 Btuh

# Manual J Winter Calculations

## Residential Load - Component Details (continued)

Sparks Spec House  
 , FL

Project Title:  
 604051JenkinsContracting

Class 3 Rating  
 Registration No. 0  
 Climate: North

5/5/2006

### WHOLE HOUSE TOTALS

	Subtotal Sensible	30649 Btuh
	Ventilation Sensible	0 Btuh
	Total Btuh Loss	30649 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

Sparks Spec House

Project Title:  
604051JenkinsContracting

Class 3 Rating  
Registration No. 0  
Climate: North

, FL

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

5/5/2006

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

### Component Loads for Whole House

Window	Type*	Ornt	Overhang		Window Area(sqft)			HTM		Load	
	Pn/SHGC/U/InSh/ExSh/IS		Len	Hgt	Gross	Shaded	Unshaded	Shaded	Unshaded		
1	2, Clear, 0.87, None,N,N	NW	1.5ft.	5.5ft.	60.0	0.0	60.0	29	60	3602	Btuh
2	2, Clear, 0.87, None,N,N	N	99ft.	5.5ft.	20.0	0.0	20.0	29	29	579	Btuh
3	2, Clear, 0.87, None,N,N	NW	6.41	8ft.	30.0	0.0	30.0	29	60	1801	Btuh
4	2, Clear, 0.87, None,N,N	W	4ft.	8ft.	40.0	11.9	28.1	29	80	2578	Btuh
5	2, Clear, 0.87, None,N,N	NW	1.5ft.	5.5ft.	20.0	0.0	20.0	29	60	1201	Btuh
6	2, Clear, 0.87, None,N,N	NE	1.5ft.	4.5ft.	16.0	0.0	16.0	29	60	961	Btuh
7	2, Clear, 0.87, None,N,N	SE	1.5ft.	0ft.	15.0	15.0	0.0	29	63	434	Btuh
8	2, Clear, 0.87, None,N,N	SE	1.5ft.	5.5ft.	20.0	8.1	11.9	29	63	979	Btuh
9	2, Clear, 0.87, None,N,N	SE	7ft.	8ft.	13.3	13.3	0.0	29	63	385	Btuh
10	2, Clear, 0.87, None,N,N	SW	1.5ft.	5.5ft.	15.0	6.1	8.9	29	63	734	Btuh
11	2, Clear, 0.87, None,N,N	NW	1.5ft.	3.5ft.	9.0	0.0	9.0	29	60	540	Btuh
	Window Total				258 (sqft)					13795 Btuh	
Walls	Type	R-Value/U-Value			Area(sqft)		HTM		Load		
1	Frame - Wood - Ext	13.0/0.09			1015.7		2.1		2119 Btuh		
2	Frame - Wood - Ext	13.0/0.09			172.0		2.1		359 Btuh		
	Wall Total					1188 (sqft)				2477 Btuh	
Doors	Type				Area (sqft)		HTM		Load		
1	Insulated - Exterior				30.0		9.8		294 Btuh		
2	Insulated - Adjacent				20.0		9.8		196 Btuh		
3	Insulated - Exterior				20.0		9.8		196 Btuh		
	Door Total					70 (sqft)				686 Btuh	
Ceilings	Type/Color/Surface	R-Value			Area(sqft)		HTM		Load		
1	Vented Attic/DarkShingle	30.0			1685.0		1.7		2790 Btuh		
	Ceiling Total					1685 (sqft)				2790 Btuh	
Floors	Type	R-Value			Size		HTM		Load		
1	Slab On Grade	0.0			192 (ft(p))		0.0		0 Btuh		
	Floor Total					192.0 (sqft)				0 Btuh	
	Zone Envelope Subtotal:									19749 Btuh	
Infiltration	Type	ACH			Volume(cuft)		CFM=		Load		
	SensibleNatural	0.42			13256		92.8		1727 Btuh		
Internal gain	Occupants			Btuh/occupant		Appliance		Load			
	6			X 230 +		0		1380 Btuh			
Duct load	Unsealed, R6.0, Supply(Attic), Return(Attic)							DGM = 0.00		0.0 Btuh	
	Sensible Zone Load									22856 Btuh	

# Manual J Summer Calculations

## Residential Load - Component Details (continued)

Sparks Spec House  
 , FL

Project Title:  
 604051JenkinsContracting

Class 3 Rating  
 Registration No. 0  
 Climate: North

5/5/2006

### WHOLE HOUSE TOTALS

<b>Whole House Totals for Cooling</b>	<b>Sensible Envelope Load All Zones</b>	<b>22856 Btuh</b>
	Sensible Duct Load	0 Btuh
	<b>Total Sensible Zone Loads</b>	<b>22856 Btuh</b>
	Sensible ventilation	0 Btuh
	Blower	0 Btuh
	<b>Total sensible gain</b>	<b>22856 Btuh</b>
	Latent infiltration gain (for 54 gr. humidity difference)	3391 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
	<b>Latent total gain</b>	<b>4591 Btuh</b>
	<b>TOTAL GAIN</b>	<b>27447 Btuh</b>

\*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

Sparks Spec House

Project Title:  
604051JenkinsContracting

Class 3 Rating  
Registration No. 0  
Climate: North

, FL

Reference City: Gainesville (Defaults) Summer Temperature Difference: 17.0 F  
This calculation is for Worst Case. The house has been rotated 315 degrees.

5/5/2006

### 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.	5.5ft.	60.0	0.0	60.0	29	60	3602 Btuh
2	2, Clear, 0.87, None,N,N	N	99ft.	5.5ft.	20.0	0.0	20.0	29	29	579 Btuh
3	2, Clear, 0.87, None,N,N	NW	6.41	8ft.	30.0	0.0	30.0	29	60	1801 Btuh
4	2, Clear, 0.87, None,N,N	W	4ft.	8ft.	40.0	11.9	28.1	29	80	2578 Btuh
5	2, Clear, 0.87, None,N,N	NW	1.5ft.	5.5ft.	20.0	0.0	20.0	29	60	1201 Btuh
6	2, Clear, 0.87, None,N,N	NE	1.5ft.	4.5ft.	16.0	0.0	16.0	29	60	961 Btuh
7	2, Clear, 0.87, None,N,N	SE	1.5ft.	0ft.	15.0	15.0	0.0	29	63	434 Btuh
8	2, Clear, 0.87, None,N,N	SE	1.5ft.	5.5ft.	20.0	8.1	11.9	29	63	979 Btuh
9	2, Clear, 0.87, None,N,N	SE	7ft.	8ft.	13.3	13.3	0.0	29	63	385 Btuh
10	2, Clear, 0.87, None,N,N	SW	1.5ft.	5.5ft.	15.0	6.1	8.9	29	63	734 Btuh
11	2, Clear, 0.87, None,N,N	NW	1.5ft.	3.5ft.	9.0	0.0	9.0	29	60	540 Btuh
Window Total					258 (sqft)					13795 Btuh
Walls	Type	R-Value/U-Value		Area(sqft)		HTM		Load		
1	Frame - Wood - Ext	13.0/0.09		1015.7		2.1		2119 Btuh		
2	Frame - Wood - Ext	13.0/0.09		172.0		2.1		359 Btuh		
Wall Total					1188 (sqft)			2477 Btuh		
Doors	Type			Area (sqft)		HTM		Load		
1	Insulated - Exterior			30.0		9.8		294 Btuh		
2	Insulated - Adjacent			20.0		9.8		196 Btuh		
3	Insulated - Exterior			20.0		9.8		196 Btuh		
Door Total					70 (sqft)			686 Btuh		
Ceilings	Type/Color/Surface	R-Value		Area(sqft)		HTM		Load		
1	Vented Attic/DarkShingle	30.0		1685.0		1.7		2790 Btuh		
Ceiling Total					1685 (sqft)			2790 Btuh		
Floors	Type	R-Value		Size		HTM		Load		
1	Slab On Grade	0.0		192 (ft(p))		0.0		0 Btuh		
Floor Total					192.0 (sqft)			0 Btuh		
	Zone Envelope Subtotal:								19749 Btuh	
Infiltration	Type	ACH		Volume(cuft)		CFM=		Load		
	SensibleNatural	0.42		13256		92.8		1727 Btuh		
Internal gain	Occupants		Btuh/occupant		Appliance		Load			
	6		X 230 +		0		1380 Btuh			
Duct load	Unsealed, R6.0, Supply(Attic), Return(Attic)							DGM = 0.00		0.0 Btuh
	Sensible Zone Load								22856 Btuh	

# Manual J Summer Calculations

## Residential Load - Component Details (continued)

Sparks Spec House  
 , FL

Project Title:  
 604051JenkinsContracting

Class 3 Rating  
 Registration No. 0  
 Climate: North

5/5/2006

### WHOLE HOUSE TOTALS

<b>Whole House Totals for Cooling</b>	<b>Sensible Envelope Load All Zones</b>	<b>22856 Btuh</b>
	Sensible Duct Load	0 Btuh
	<b>Total Sensible Zone Loads</b>	<b>22856 Btuh</b>
	Sensible ventilation	0 Btuh
	Blower	0 Btuh
	<b>Total sensible gain</b>	<b>22856 Btuh</b>
	Latent infiltration gain (for 54 gr. humidity difference)	3391 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
	<b>Latent total gain</b>	<b>4591 Btuh</b>
	<b>TOTAL GAIN</b>	<b>27447 Btuh</b>

\*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

Sparks Spec House  
, FL

Project Title:  
604051JenkinsContracting

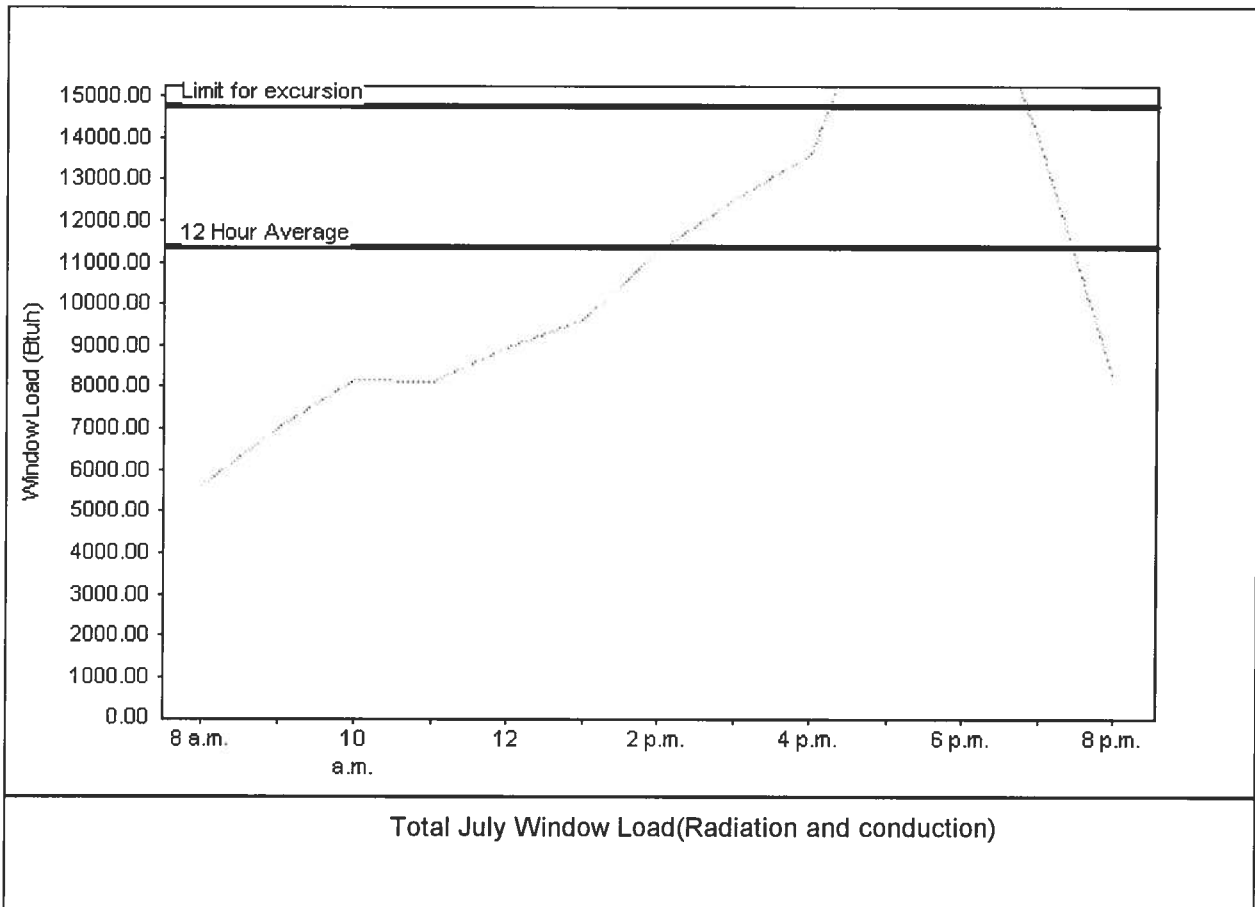
Class 3 Rating  
Registration No. 0  
Climate: North

5/5/2006

Weather data for: Gainesville - Defaults

Summer design temperature	92 F	Average window load for July	11363 Btu
Summer setpoint	75 F	Peak window load for July	19025 Btu
Summer temperature difference	17 F	Excursion limit(130% of Ave.)	14772 Btu
Latitude	29 North	Window excursion (July)	4253 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: Ben Spaulding

DATE: 5-5-06



Pieces/Bundle 22  
Bundles/Square 3/100 sq. ft.  
Squares/Pallet 16

non-perforated coverage for  
shingles and application labor for  
the initial 5 years, plus an option  
for transferability; perforated  
coverage for application labor and  
shingles for balance of limited  
warranty period; 5-year limited  
wind warranty.

Elk Starter Strip  
52 Bundles/Pallet  
18 Pallets/Truck  
936 Bundles/Truck  
19 Pieces/Bundle  
1 Bundle = 120.33 linear feet

Available Colors: Antique Slate, Weatheredwood, Shakeswood, Sablewood, Hickory, Barkwood\*\*, Forest Green, Wedgewood\*\*, Birchwood\*\*, Sandalwood.  
Gallery Collection: Balsam Forest\*\*, Weathered Sage\*\*, Sienna Sunset\*\*.

All Prestique, Raised Profile and Seal-A-Ridge roofing products contain Elk WindGuard® sealant. WindGuard 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. Not available in Sablewood.

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 meet the latest Metro Dade building code requirements.

\*See actual limited warranty for conditions and limitations.  
\*\*Check for product availability.

## 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 retardant 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 Tugaloosa 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 (17732) or e-mail specinfo@elkcorp.com.

SOUTHEAST &  
ATLANTIC OFFICE:  
800.945.5551

CORPORATE HEADQUARTERS:  
800.354.7732

PLANT LOCATION:  
800.945.5545

**ELK**  
www.elkcorp.com

SSOOT 01/02

Michael Jenkins

From : Ed Gutin - Lake City Industries

