DATE 10/08/2010

Columbia County Building Permit

This Permit Must Be Prominently Posted on Premises During Construction

PERMIT
000028928

APPLICANT WILLIAM HARPER PHONE 623-3873

ADDRESS 119 SW HOBBY PLACE LAKE CITY FL 32024

OWNER SHANE & TIFFANY ROBBINS PHONE 386-867-4060

ADDRESS 247 SW HILLTOP TERR FORT WHITE FL 32038

CONTRACTOR WILLIAM HARPER PHONE 386-623-3873

LOCATION OF PROPERTY 47 S, L HERLONG RD, R HILLTOP TERR, 2ND PROPERTY ON LEFT

TYPE DEVELOPMENT MODULAR ESTIMATED COST OF CONSTRUCTION 0.00

HEATED FLOOR AREA TOTAL AREA HEIGHT 18.00 STORIES 1

FOUNDATION PIERS WALLS FRAMED ROOF PITCH 6/12 FLOOR WOOD

LAND USE & ZONING AG-3 MAX. HEIGHT 35

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

NO. EX.D.U. 0 FLOOD ZONE X DEVELOPMENT PERMIT NO.

PARCEL ID 11-6S-16-03815-158 SUBDIVISION CARDINAL FARMS

LOT 58 BLOCK PHASE UNIT TOTAL ACRES 10.01

000001850		RR28281142		
Culvert Permit No.	Culvert Waiver	Contractor's License Number		Applicant/Owner/Contractor
CULVERT	10-0374-N	BK	TC	N
Driveway Connection	Septic Tank Number	LU & Zoning checked by	Approved for Issuance	New Resident

COMMENTS: FLOOR ONE FOOT ABOVE THE ROAD

Check # or Cash 31194

FOR BUILDING & ZONING DEPARTMENT ONLY

(footer/Slab)

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

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

Framing date/app. by Insulation date/app. by

Rough-in plumbing above slab and below wood floor date/app. by Electrical rough-in date/app. by

Heat & Air Duct date/app. by Peri. beam (Lintel) date/app. by Pool date/app. by

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

Pump pole date/app. by Utility Pole date/app. by M/H tie downs, blocking, electricity and plumbing date/app. by

Reconnection date/app. by RV date/app. by Re-roof date/app. by

BUILDING PERMIT FEE $ 0.00 CERTIFICATION FEE $ 0.00 SURCHARGE FEE $ 0.00

MISC. FEES $ 350.00 ZONING CERT. FEE $ 50.00 FIRE FEE $ 0.00 WASTE FEE $

FLOOD DEVELOPMENT FEE $ FLOOD ZONE FEE $ 25.00 CULVERT FEE $ 25.00 **TOTAL FEE** 450.00

INSPECTORS OFFICE L. H. CLERKS OFFICE CH

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

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

EVERY PERMIT ISSUED SHALL BECOME INVALID UNLESS THE WORK AUTHORIZED BY SUCH PERMIT IS COMMENCED WITHIN 180 DAYS AFTER ITS ISSUANCE, OR IF THE WORK AUTHORIZED BY SUCH PERMIT IS SUSPENDED OR ABANDONED FOR A PERIOD OF 180 DAYS AFTER THE TIME THE WORK IS COMMENCED. A VALID PERMIT RECIEVES AN APPROVED INSPECTION EVERY 180 DAYS. WORK SHALL BE CONSIDERED NOT SUSPENDED, ABANDONED OR INVALID WHEN THE PERMIT HAS RECIEVED AN APPROVED INSPECTION WITHIN 180 DAYS OT THE PREVIOUS INSPECTION.

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

Prepared by:
Judi M. Lowrey
Provident Title & Mortgage, Inc.
444 SW Alachua Avenue
Lake City, Florida 32025

File Number: 07-196

Inst:200712016716 Date:8/30/2007 Time:9:48 AM
Doc Stamp-Deed:630.00
DC,P.DeWitt Cason ,Columbia County Page 1 of 2

General Warranty Deed

Made this August 17, 2007 A.D., By **Scott A. Sanford, a married man**, whose post office address is: 2660 Decker Avenue, Orlando, FL 32833, hereinafter called the grantor, to **Shane T. Robbins, an unmarried man and Tiffany French, an unmarried woman**, whose post office address is: 418 S.W. Hilltop Terrace, Fort White, FL 32038, hereinafter called the grantee:

(Whenever used herein the term "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 corporations)

Witnesseth, that the grantor, for and in consideration of the sum of Ten Dollars, ($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:

See Attached Exhibit A

Said property is not the homestead of the Grantor under the laws and constitution of the State of Florida in that neither Grantor nor any members of the household of Grantor reside thereon.

Parcel ID Number: **11-6S-16-03815-158**

Together with all the 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, 2006.

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:

Edward Sinker
Witness Printed Name Edward Sinker

Nadine D Schleske
Witness Printed Name Nadine D Schleske

Scott A. Sanford (Seal)
Address: 2660 Decker Avenue
Orlando, FL 32833

(Seal)
Address:

State of Florida
County of Orange .

The foregoing instrument was acknowledged before me this 16th day of August, 2007, by Scott A. Sanford, a married man, who is/are personally known to me or who has produced DL as identification.

NADINE D. SCHLESKE
MY COMMISSION # DD476293
EXPIRES: Sept. 27, 2009
Florida Notary Service.com
(407) 398-0153

Nadine D Schleske
Notary Public
Print Name: Nadine D Schleske
My Commission Expires: 9/27/09

Received Time Aug. 27. 8:56AM

Exhibit "A"

EXHIBIT A

Lot 58 of an unrecorded subdivision known as CARDINAL FARMS, a parcel of land in Section 10 and 11, Township 6 South, Range 16 East, Columbia County, Florida, being more particularly described as follows:

Commence at the Southeast corner of Section 11, Township 6 South, Range 16 East, Columbia County, Florida and run thence South 88 degrees 19'59" West along the South line of said Section 11, a distance of 5311.34 feet to the Southwest corner of Section 11; thence North 01 degrees 22'42" West along the West line of Section 11, being also the East line of Section 10 a distance of 1995.16 feet; thence South 88 degrees 38'56" West a distance of 60.18 feet: thence North 01 degrees 01'15' East a distance of 642.99 feet; thence North 01 degrees 21'04" West a distance of 1637.88 feet to the POINT OF BEGINNING; thence continue North 01 degrees 21'04" West a distance of 500.08 feet; thence North 77 degrees 55'23" East a distance of 32.81 feet to a point on the West line of Section 11, thence continue North 77 degrees 55'23" East a distance of 854.70 feet: thence South 01 degrees 21'04" East a distance of 500.08 feet; thence South 77 degrees 55'23" West a distance of 854.46 feet to a point on the East line of Section 10; thence continue South 77 degrees 55'23" West a distance of 33.05 feet to the Point of Beginning.

Columbia County Building Permit Application CC 31194

For Office Use Only Application # 1010-13 Date Received 10/7/10 By LH Permit # 28928/1800

Zoning Official BLK Date 08.10.10 Flood Zone X Land Use A-3 Zoning A-3

FEMA Map # N/A Elevation N/A MFE 1' above Rd River N/A Plans Examiner T.C. Date 10-8-10

Comments

☐ NOC ☑ EH ☑ Deed or PA ☑ Site Plan ☑ State Road Info ☐ Parent Parcel #

☐ Dev Permit # ☐ In Floodway ☑ Letter of Auth. from Contractor ☑ F W Comp. letter

IMPACT FEES: EMS Fire Corr Road/Code

School = TOTAL N/A Suspended ☒ Well letter

Septic Permit No. 10-0374-N Fax

Name Authorized Person Signing Permit WILLIAM L. HARPER Phone 386-623-3873

Address 119 SW HOBBY PL., LAKE CITY, FL. 32024

Owners Name SHANE AND TIFFANY ROBBINS Phone 386-867-4060

911 Address 247 SW HILLTOP TERR., FT. WHITE, FL. 32038

Contractors Name WILLIAM L. HARPER Phone 386-623-3873

Address 119 SW HOBBY PL., LAKE CITY, FL. 32024

Fee Simple Owner Name & Address

Bonding Co. Name & Address

Architect/Engineer Name & Address KBEN ENG. 9263 COUNTY RD. 417, LIVE OAK, FL. 32060

Mortgage Lenders Name & Address FIRST FEDERAL, 257 W U.S. 90, LAKE CITY, FL. 32056

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

Property ID Number 11-65-16-03815-158 Estimated Cost of Construction $162,000.00

Subdivision Name CARDINAL FARMS Lot 58 Block Unit Phase

Driving Directions GO STATE RD. 47 TO HERLONG RD., TURN LEFT, GO TO HILLTOP TERR., TURN RIGHT, 2ND PROPERTY ON LEFT

Number of Existing Dwellings on Property Ø

Construction of ONFRAME MODULAR HOME Total Acreage 10.01 Lot Size

Do you need a (Culvert Permit) or Culvert Waiver or Have an Existing Drive Total Building Height 18'

Actual Distance of Structure from Property Lines - Front 125' Side 225' Side 215' Rear 687'

Number of Stories 1 Heated Floor Area 2125 sqft Total Floor Area 2200 sqft Roof Pitch 6/12

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. **CODE:** Florida Building Code 2007 with 2009 Supplements and the 2008 National Electrical Code.

Columbia County Building Permit Application

TIME LIMITATIONS OF APPLICATION : An application for a permit for any proposed work shall be deemed to have been abandoned 180 days after the date of filing, unless such application has been pursued in good faith or a permit has been issued; except that the building official is authorized to grant one or more extensions of time for additional periods not exceeding 90 days each. The extension shall be requested in writing and justifiable cause demonstrated.

TIME LIMITATIONS OF PERMITS: Every permit issued shall become invalid unless the work authorized by such permit is commenced within 180 days after its issuance, or if the work authorized by such permit is suspended or abandoned for a period of 180 days after the time work is commenced. A valid permit receives an approved inspection every 180 days. Work shall be considered not suspended, abandoned or invalid when the permit has received an approved inspection within 180 days of the previous approved inspection.

FLORIDA'S CONSTRUCTION LIEN LAW: Protect Yourself and Your Investment: According to Florida Law, those who work on your property or provide materials, and are not paid-in-full, have a right to enforce their claim for payment against your property. This claim is known as a construction lien. If your contractor fails to pay subcontractors or material suppliers or neglects to make other legally required payments, the people who are owed money may look to your property for payment, even if you have paid your contractor in full.
This means if a lien is filed against your property, it could be sold against your will to pay for labor, materials or other services which your contractor may have failed to pay.

NOTICE OF RESPONSIBILITY TO BUILDING PERMITEE: ***YOU ARE HEREBY NOTIFIED*** as the recipient of a building permit from Columbia County, Florida, you will be held responsible to the County for any damage to sidewalks and/or road curbs and gutters, concrete features and structures, together with damage to drainage facilities, removal of sod, major changes to lot grades that result in ponding of water, or other damage to roadway and other public infrastructure facilities caused by you or your contractor, subcontractors, agents or representatives in the construction and/or improvement of the building and lot for which this permit is issued. No certificate of occupancy will be issued until all corrective work to these public infrastructures and facilities has been corrected.

WARNING TO OWNER: YOUR FAILURE TO RECORD A NOTICE OF COMMENCMENT MAY RESULT IN YOU PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. A NOTICE OF COMMENCEMENT MUST BE RECORDED AND POSTED ON THE JOB SITE BEFORE THE FIRST INSPECTION. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR ATTORNEY BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT.

OWNERS CERTIFICATION: I CERTIFY THAT ALL THE FOREGOING INFORMATION IS ACCURATE AND THAT ALL WORK WILL BE DONE IN COMPLIANCE WITH ALL APPLICABLE LAWS REGULATING CONSTRUCTION AND ZONING.

NOTICE TO OWNER: There are some properties that may have deed restrictions recorded upon them. These restrictions may limit or prohibit the work applied for in your building permit. It may be to your advantage to check and see if your property is encumbered by any restrictions.

(Owners Must Sign All Applications Before Permit Issuance.)

Tiffany Robinson

Owners Signature ****OWNER BUILDERS MUST PERSONALLY APPEAR AND SIGN THE BUILDING PERMIT.**

CONTRACTORS AFFIDAVIT: By my signature I understand and agree that I have informed and provided this written statement to the owner of all the above written responsibilities in Columbia County for obtaining this Building Permit including all application and permit time limitations.

Contractor's Signature (Permitee)

Contractor's License Number RR2828114OZ
Columbia County
Competency Card Number 000258

Affirmed under penalty of perjury to by the Contractor and subscribed before me this 6th **day of** October **20**10.

Personally Known / **or Produced Identification** _____

State of Florida Notary Signature (For the Contractor)

SEAL:

NOTARY PUBLIC STATE OF FLORIDA

WILLIAM P. CREWS
MY COMMISSION # DD 703246
EXPIRES: August 8, 2011
Bonded Thru Budget Notary Services

Columbia County Building Department
Culvert Permit

Culvert Permit No.
000001850

DATE 10/08/2010 PARCEL ID # 11-6S-16-03815-158

APPLICANT WILLIAM HARPER PHONE 623-3873

ADDRESS 119 SW HOBBY PLACE LAKE CITY FL 32024

OWNER SHANE & TIFFANY ROBBINS PHONE 386-867-4060

ADDRESS 247 SW HILLTOP TERR FORT WHITE FL 32038

CONTRACTOR WILLIAM HARPER PHONE 623-3873

LOCATION OF PROPERTY 47 S, L HERLONG, R HILLTOP TERR, 2ND PROPERTY ON LEFT

SUBDIVISION/LOT/BLOCK/PHASE/UNIT CARDINAL FARMS 58

SIGNATURE

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

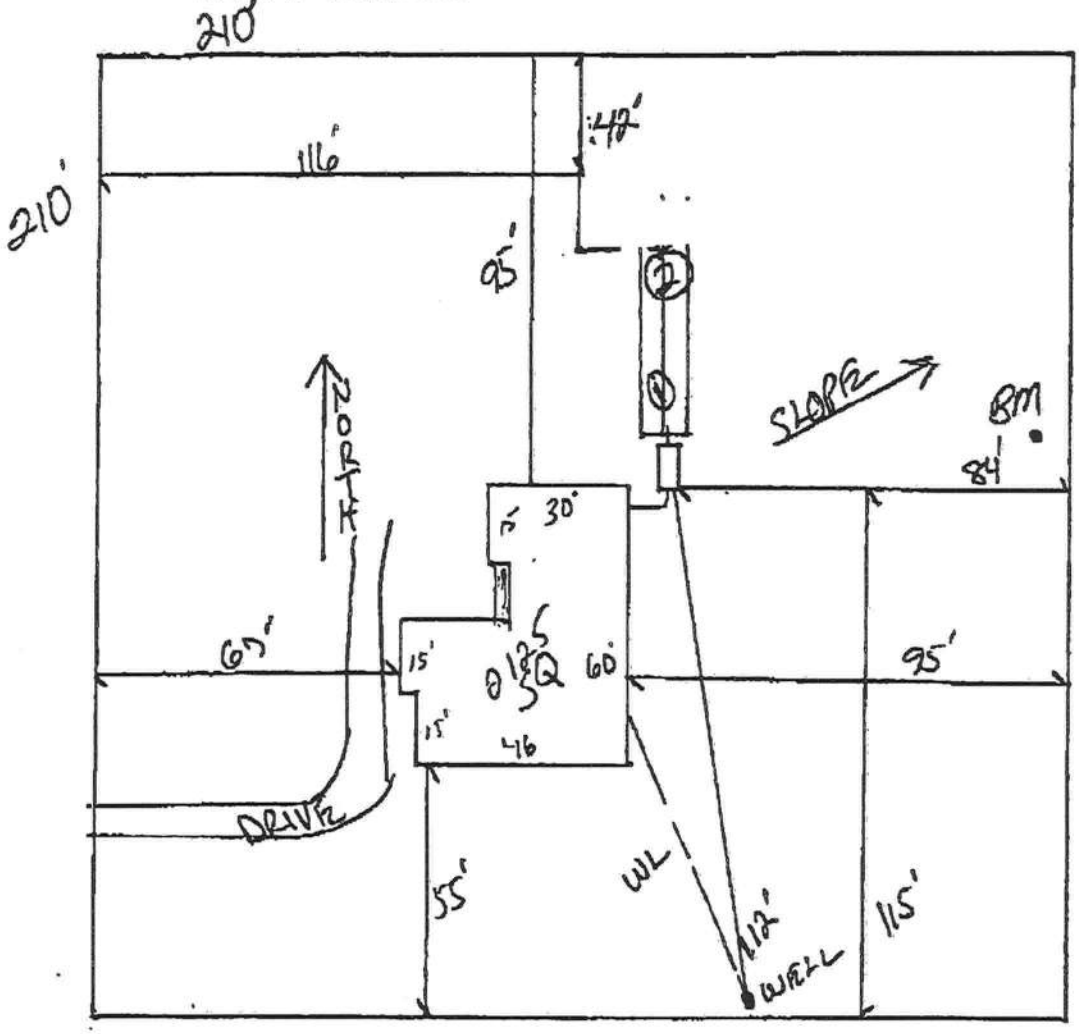
STATE OF FLORIDA
DEPARTMENT OF HEALTH
APPLICATION FOR ONSITE SEWAGE DISPOSAL SYSTEM CONSTRUCTION PERMIT

Permit Application Number 10-0374-N

Robbins

PART II - SITEPLAN

Scale: 1 Inch = 40 feet.



SEE ATTACHED

Notes: 1 of 10.01 Acres

Site Plan submitted by: [signature] MASTER CONTRACTOR

Plan Approved ✓ Not Approved ____ Date 8-9-10

By Sallie Ford - EH Director Columbia CHD County Health Department

ALL CHANGES MUST BE APPROVED BY THE COUNTY HEALTH DEPARTMENT

A & B Well Drilling, Inc.

5673 NW Lake Jeffery Road
Lake City, FL, 32055
(O) 386-758-3409
(F) 386-758-3410
(C) 386-623-3151

10/5/2010

To: Columbia **County Building Department**

Description of well to be installed for Customer: Robbins
Located at Address: Hill top TERR

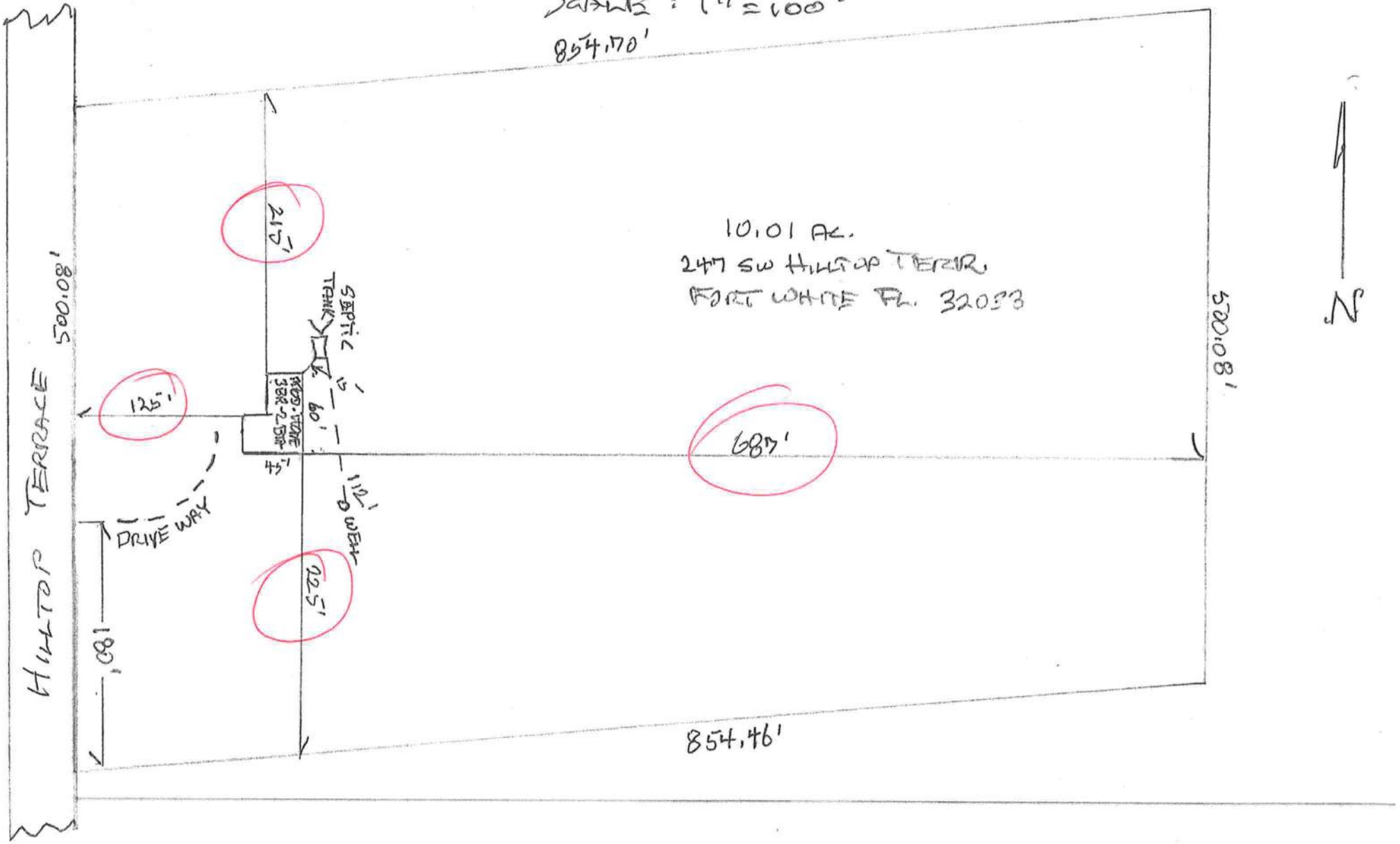
1 hp 15 GPM Submersible Pump, 1 ¼" drop pipe, 86 gallon captive tank and back flow prevention, With SRWMD permit.

Bruce Park

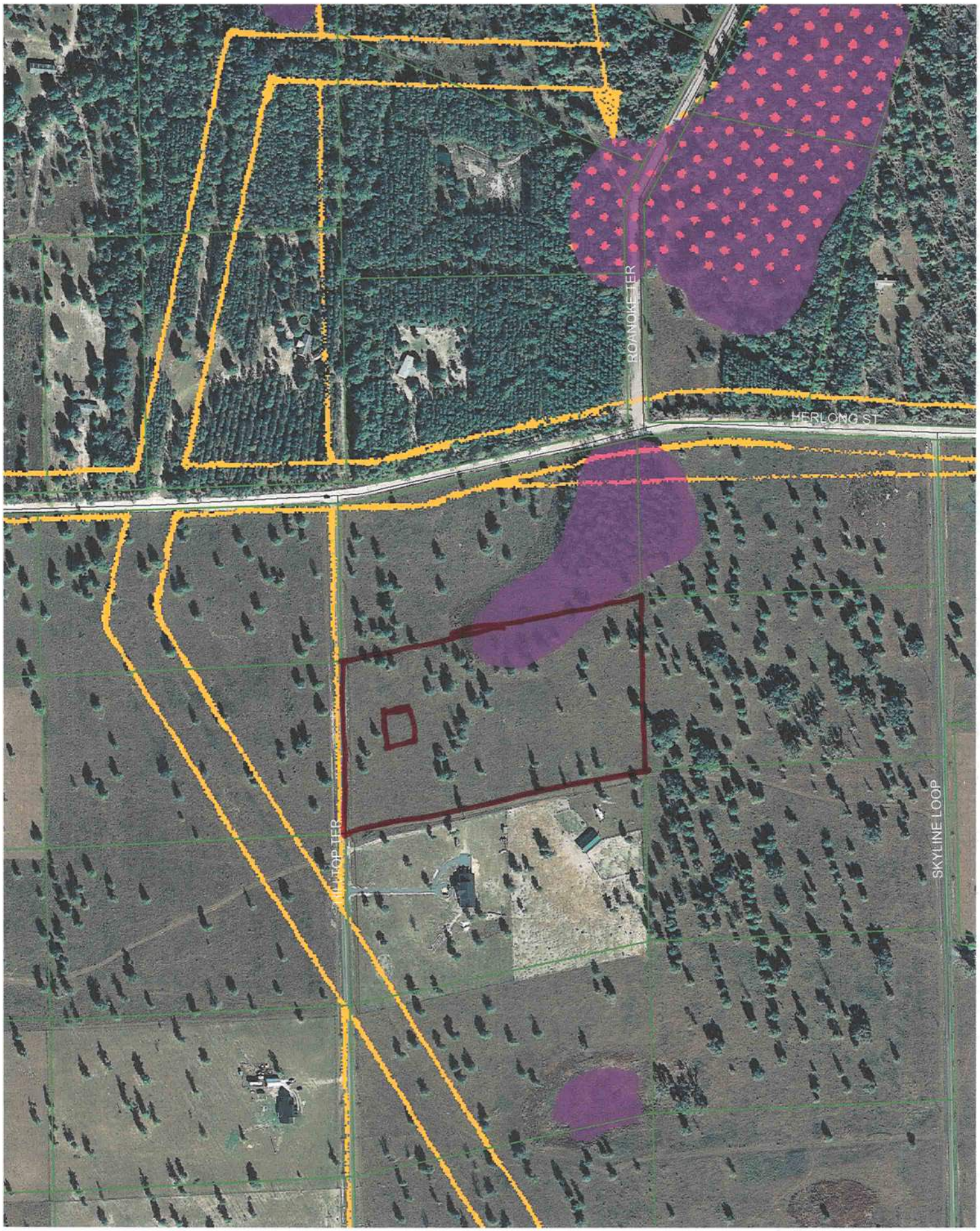
Sincerely
Bruce Park
President

SITE PLAN

OWNER: SHANE AND TIFFANY ROBBINS
CONTRACTOR: W.L. HARPER CONSTRUCTION
PROPERTY I.D.: 11-6S-16-03815-15B
DRAWN BY: WILLIAM L. HARPER
SCALE: 1" = 100'



10.01 AC.
247 SW HILLTOP TERR.
FORT WHITE FL. 32038



1010-13

All materials placed within opening or onto/into exterior walls, soffits or roofs shall have Florida product approval number and mfg. installation information submitted with the plans (see Florida product approval form)

GENERAL REQUIREMENTS: APPLICANT – PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL	Items to Include- Each Box shall be Circled as Applicable

FBCR 403: Foundation Plans

		YES	NO	N/A
29	Location of all load-bearing walls footings indicated as standard, monolithic, dimensions, size and type of reinforcing.	X		
30	All posts and/or column footing including size and reinforcing	X		
31	Any special support required by soil analysis such as piling.	X		
32	Assumed load-bearing valve of soil 2000 Pound Per Square Foot	X		
33	Location of horizontal and vertical steel, for foundation or walls (include # size and type) **For** structures with foundation which establish new electrical utility companies service connection a Concrete Encased Electrode will be required within the foundation to serve as an grounding electrode system. Per the National Electrical Code article 250.52.3	X		

FBCR 506: CONCRETE SLAB ON GRADE

34	Show Vapor retarder (6mil. Polyethylene with joints lapped 6 inches and sealed)			X
35	Show control joints, synthetic fiber reinforcement or welded fire fabric reinforcement and Supports			X

FBCR 320: PROTECTION AGAINST TERMITES

36	Indicate on the foundation plan if soil treatment is used for subterranean termite prevention or Sub mit other approved termite protection methods. **Protection shall be provided by registered termiticides**			

FBCR 606: Masonry Walls and Stem walls (load bearing & shear Walls)

37	Show all materials making up walls, wall height, and Block size, mortar type	X		
38	Show all Lintel sizes, type, spans and tie-beam sizes and spacing of reinforcement			X

Metal frame shear wall and roof systems shall be designed, signed and sealed by Florida Prof. Engineer or Architect

Floor Framing System: First and/or second story

39	Floor truss package shall including layout and details, signed and sealed by Florida Registered Professional Engineer	X		
40	Show conventional floor joist type, size, span, spacing and attachment to load bearing walls, stem walls and/or priers	X		
41	Girder type, size and spacing to load bearing walls, stem wall and/or priers	X		
42	Attachment of joist to girder	X		
43	Wind load requirements where applicable	X		
44	Show required under-floor crawl space	X		

45	Show required amount of ventilation opening for under-floor spaces	X		
46	Show required covering of ventilation opening	X		
47	Show the required access opening to access to under-floor spaces	X		
48	Show the sub-floor structural panel sheathing type, thickness and fastener schedule on the edges & inter of the areas structural panel sheathing	X		
49	Show Draftstopping, Fire caulking and Fire blocking	X		
50	Show fireproofing requirements for garages attached to living spaces, per FBCR section 309	X		
51	Provide live and dead load rating of floor framing systems (psf).	X		

FBCR CHAPTER 6 WOOD WALL FRAMING CONSTRUCTION

	GENERAL REQUIREMENTS: APPLICANT – PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL	Items to Include- Each Box shall be Circled as Applicable		
		YES	NO	N/A
52	Stud type, grade, size, wall height and oc spacing for all load bearing or shear walls	X		
53	Fastener schedule for structural members per table FBCR 602.3 are to be shown	X		
54	Show Wood structural panel's sheathing attachment to studs, joist, trusses, rafters and structural members, showing fastener schedule attachment on the edges & intermediate of the areas structural panel sheathing	X		
55	Show all required connectors with a max uplift rating and required number of connectors and oc spacing for continuous connection of structural walls to foundation and roof trusses or rafter systems	X		
56	Show sizes, type, span lengths and required number of support jack studs, king studs for shear wall opening and girder or header per FBCR Table 502.5 (1)	X		
57	Indicate where pressure treated wood will be placed	X		
58	Show all wall structural panel sheathing, grade, thickness and show fastener schedule for structural panel sheathing edges & intermediate areas	X		
59	A detail showing gable truss bracing, wall balloon framing details or/ and wall hinge bracing detail	X		

FBCR :ROOF SYSTEMS:

60	Truss design drawing shall meet section FBCR 802.10 Wood trusses	X		
61	Include a layout and truss details, signed and sealed by Florida Professional Engineer	X		
62	Show types of connector's assemblies' and resistance uplift rating for all trusses and rafters	X		
63	Show gable ends with rake beams showing reinforcement or gable truss and wall bracing details	X		
64	Provide dead load rating of trusses	X		

FBCR 802:Conventional Roof Framing Layout

65	Rafter and ridge beams sizes, span, species and spacing	X		
66	Connectors to wall assemblies' include assemblies' resistance to uplift rating	X		
67	Valley framing and support details	X		
68	Provide dead load rating of rafter system	X		

FBCR Table 602,3(2) & FBCR 803 ROOF SHEATHING

69	Include all materials which will make up the roof decking, identification of structural panel sheathing, grade, thickness	X		
70	Show fastener Size and schedule for structural panel sheathing on the edges & intermediate areas	X		

FBCR ROOF ASSEMBLIES FRC Chapter 9

71	Include all materials which will make up the roof assembles covering	X		
72	Submit Florida Product Approval numbers for each component of the roof assembles covering	X		

FBCR Chapter 11 Energy Efficiency Code for residential building

Residential construction shall comply with this code by using the following compliance methods in the FBCR chapter11 Residential buildings compliance methods. **Two of the required forms are to be submitted**, *N1100.1.1.1 As an alternative to the computerized Compliance Method A, the Alternate Residential Point System Method hand calculation, Alternate Form 600A, may be used. All requirements specific to this calculation are located in Sub appendix C to Appendix G. Buildings complying by this alternative shall meet all mandatory requirements of this chapter. Computerized versions of the Alternate Residential Point System Method shall not be acceptable for code compliance.*

	GENERAL REQUIREMENTS: APPLICANT – PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL	Items to Include- Each Box shall be Circled as Applicable		
		YES	**NO**	**N/A**
73	Show the insulation R value for the following areas of the structure	X		
74	Attic space	X		
75	Exterior wall cavity	X		
76	Crawl space	X		

HVAC information

77	Submit two copies of a Manual J sizing equipment or equivalent computation study	X		
78	Exhaust fans shown in bathrooms **Mechanical exhaust capacity of 50 cfm intermittent or 20 cfm continuous required**	X		
79	Show clothes dryer route and total run of exhaust duct	X		

Plumbing Fixture layout shown

80	All fixtures waste water lines shall be shown on the foundation plan	X		
81	Show the location of water heater	X		

Private Potable Water

82	Pump motor horse power	X		
83	Reservoir pressure tank gallon capacity	X		
84	Rating of cycle stop valve if used	X		

Electrical layout shown including

85	Show Switches, receptacles outlets, lighting fixtures and Ceiling fans	X		
86	Show all 120-volt, single phase, 15- and 20-ampere branch circuits outlets required to be protected by **Ground-Fault Circuit Interrupter (GFCI) Article 210.8 A**	X		
87	Show the location of smoke detectors & Carbon monoxide detectors	X		
88	Show service panel, sub-panel, location(s) and total ampere ratings	X		
89	On the electrical plans identify the electrical service overcurrent protection device for the main electrical service. This device shall be installed on the exterior of structures to serve as a disconnecting means for the utility company electrical service. Conductors used from the exterior disconnecting means to a panel or sub panel shall have four-wire conductors, of which one conductor shall be used as an equipment ground. Indicate if the utility company service entrance cable will be of the overhead or underground type. **For structures** with foundation which establish new electrical utility companies service connection a Concrete Encased Electrode will be required within the foundation to serve as an Grounding electrode system. Per the National Electrical Code article 250.52.3	X		
90	Appliances and HVAC equipment and disconnects	X		
91	Show all 120-volt, single phase, 15- and 20-ampere branch circuits supplying outlets installed in dwelling unit family rooms, dining rooms, living rooms, parlors, libraries, dens, bedrooms, sunrooms, recreation rooms, closets, hallways, or similar rooms or areas shall be protected by a listed **Combination arc-fault circuit interrupter,** Protection device.	X		

Disclosure Statement for Owner Builders *If you as the applicant will be acting as an owner/builder under section 489.103(7) of the Florida Statutes, submit the required owner builder disclosure statement form.*

Notice Of Commencement

A notice of commencement form **recorded** in the Columbia County Clerk Office is required to be filed with the building department Before Any Inspections can be preformed.

GENERAL REQUIREMENTS: APPLICANT – PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL	Items to Include- Each Box shall be Circled as Applicable

THE FOLLOWING ITEMS MUST BE SUBMITTED WITH BUILDING PLANS

		YES	NO	N/A
92	**Building Permit Application** A current Building Permit Application form is to be completed and submitted for all residential projects	X		
93	**Parcel Number** The parcel number (Tax ID number) from the Property Appraiser (386) 758-1084 is required. A copy of property deed is also requested	X		
94	**Environmental Health Permit or Sewer Tap Approval** A copy of a approved Columbia County Environmental Health (386) 758-1058	X		
95	**City of Lake City** A permit showing an approved waste water sewer tap			
96	**Toilet facilities shall be provided for all construction sites**			
97	**Town of Fort White** (386) 497-2321 If the parcel in the application for building permit is within the Corporate city limits of Fort White an approval land use development letter issued by the Town of Fort is required to be submitted with the application for a building permit.			

98	**Flood Information:** All projects within the Floodway of the Suwannee or Santa Fe Rivers shall require permitting through the Suwannee River Water Management District, before submitting a application to this office. Any project located within a flood zone where the base flood elevation (100 year flood) has been established shall meet the requirements of Section 8.5.2 of the Columbia County Land Development Regulations. Any project located within a flood zone where the base flood elevation has not been established (Zone A) shall meet the requirements of Section 8.5.3 of the Columbia County Land Development Regulations			
99	CERTIFIED FINISHED FLOOR ELEVATIONS will be required on any project where the base flood elevation (100 year flood) has been established			
100	A development permit will also be required. Development permit cost is **$50.00**			
101	**Driveway Connection:** If the property does not have an existing access to a public road, then an application for a culvert permit (**$25.00**) must be made. If the applicant feels that a culvert is not needed, they may apply for a culvert waiver (**$50.00**). All culvert waivers are sent to the Columbia County Public Works Department for approval or denial.	X		
102	**911 Address:** If the project is located in an area where a 911 address has not been issued, then application for a 911address must be applied for and **received** through the Columbia County Emergency Management Office of 911 Addressing Department (386) 758-1125			

Section R101.2.1 of the Florida Building Code Residential:

The provisions of Chapter 1, Florida Building Code, Building shall govern the administration and enforcement of the Florida Building Code, Residential.

Section 105 of the Florida Building Code defines the:

Time limitation of application.

An application for a permit for any proposed work shall be deemed to have been abandoned 180 days after the date of filing, unless such application has been pursued in good faith or a permit has been issued; except that the building official is authorized to grant one or more extensions of time for additional periods not exceeding 90 days each. The extension shall be requested in writing and justifiable cause demonstrated.

Single-family residential dwelling.

Section 105.3.4 A building permit for a single-family residential dwelling must be issued within 30 working days of application therefor unless unusual circumstances require a longer time for processing the application or unless the permit application fails to satisfy the Florida Building Code or the enforcing agency's laws or ordinances.

Permit intent.

Section 105.4.1: A permit issued shall be constructed to be a license to proceed with the work and not as authority to violate, cancel, alter or set aside any of the provisions of the technical codes, nor shall issuance of a permit prevent the building official from thereafter requiring a correction of errors in plans, construction or violations of this code. Every permit issued shall become invalid unless the work authorized by such permit is commenced within six months after its issuance, or if the work authorized by such permit is suspended or abandoned for a period of six months after the time the work is commenced.

FORM 1100A-08

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Community Affairs Residential Performance Method A

Project Name:	EZ-802-FL	Builder Name:	
Street:		Permit Office:	
City, State, Zip:	Tallahassee , FL ,	Permit Number:	
Owner:		Jurisdiction:	
Design Location:	FL, Tallahassee		

1. New construction or existing		New (From Plans)		
2. Single family or multiple family		Single-family		
3. Number of units, if multiple family		1		
4. Number of Bedrooms		3		
5. Is this a worst case?		No		
6. Conditioned floor area (ft²)		2250		
7. Windows	Description		Area	
a. U-Factor: SHGC:	Dbl, U=0.50 SHGC=0.60		207.83	ft²
b. U-Factor: SHGC:	N/A			ft²
c. U-Factor: SHGC:	N/A			ft²
d. U-Factor: SHGC:	N/A			ft²
e. U-Factor: SHGC:	N/A			ft²
8. Floor Types		Insulation	Area	
a. Crawlspace		R=0.0	2250.00	ft²
b. N/A		R=		ft²
c. N/A		R=		ft²

9. Wall Types	Insulation	Area
a. Frame - Wood, Exterior	R=13.0	1890.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²
d. N/A	R=	ft²
10. Ceiling Types	Insulation	Area
a. Under Attic (Vented)	R=38.0	2250.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²

11. Ducts
a. Sup: Interior Ret: Interior AH: Interior Sup. R= 6, 140 ft²

12. Cooling systems
a. Central Unit — Cap: 20.9 kBtu/hr SEER: 13

13. Heating systems
a. Electric Heat Pump — Cap: 22.1 kBtu/hr HSPF: 7.7

14. Hot water systems
a. Electric — Cap: 40 gallons EF: 0.97

b. Conservation features
None

15. Credits — None

Glass/Floor

lt Modified Loads: 41.04
l Baseline Loads: 61.45

PASS

I hereby certi y this calculatic Code.

PREPARED DATE:

I hereby certi ance with the Flori

OWNER/AC 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:

- **Compliance requires certification by the air handler unit manufacturer that the air handler enclosure qualifies as certified factory-sealed in accordance with N1110.A.3.**

COLUMBIA COUNTY BUILDING DEPARTMENT
REVIEWED FOR
FIELD COPY
CODE COMPLIANCE
PLANS EXAMINER

PROJECT

Title:	EZ-802-FL	Bedrooms:	3	Adress Type:	Street Address
Building Type:	FLAsBuilt	Bathrooms:	0	Lot #	
Owner:		Conditioned Area:	2250	SubDivision:	
# of Units:	1	Total Stories:	1	PlatBook:	
Builder Name:		Worst Case:	No	Street:	
Permit Office:		Rotate Angle:	0	County:	Leon
Jurisdiction:		Cross Ventilation:		City, State, Zip:	Tallahassee , FL ,
Family Type:	Single-family	Whole House Fan:			
New/Existing:	New (From Plans)				
Comment:					

CLIMATE

√	Design Location	TMY Site	IECC Zone	Design Temp 97.5 %	Design Temp 2.5 %	Int Design Temp Winter	Int Design Temp Summer	Heating Degree Days	Design Moisture	Daily Temp Range
____	FL, Tallahassee	FL_TALLAHASSEE_REG	2	28	94	75	70	1545	46	Medium

FLOORS

√	#	Floor Type	Exposed Perimeter	Wall Ins. R-Value	Area	Floor Joist R-Value	Tile	Wood	Carpet
____	1	Crawlspace	1 ft	0	2250 ft²	13	0	0	1

ROOF

√	#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	Tested	Deck Insul.	Pitch
____	1	Gable or shed	Composition shingles	2319 ft²	280 ft²	Medium	0.96	No	0	14 deg

ATTIC

√	#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC
____	1	Full attic	Vented	300	2250 ft²	N	N

CEILING

√	#	Ceiling Type	R-Value	Area	Framing Frac	Truss Type
____	1	Under Attic (Vented)	38	2250 ft²	0.11	Wood

WALLS

√	#	Ornt	Adjacent To	Wall Type	Cavity R-Value	Area	Sheathing R-Value	Framing Fraction	Solar Absor.
____	1	N	Exterior	Frame - Wood	13	540 ft²		0.23	0.75
____	2	S	Exterior	Frame - Wood	13	540 ft²		0.23	0.75
____	3	E	Exterior	Frame - Wood	13	405 ft²		0.23	0.75
____	4	W	Exterior	Frame - Wood					0.75

DOORS

√	#	Ornt	Door Type	Storms	U-Value	Area
____	1	E	Insulated	None	0.46	20 ft²
____	2	S	Insulated	None	0.46	20 ft²

WINDOWS

Window orientation below is as entered. Actual orientation is modified by rotate angle shown in "Project" section above.

√	#	Ornt	Frame	Panes	NFRC	U-Factor	SHGC	Storms	Area	Overhang Depth	Overhang Separation	Int Shade	Screening
____	1	N	Vinyl	Low-E Double	Yes	0.5	0.6	N	20 ft²	1 ft 0 in	0 ft 0 in	HERS 2006	None
____	2	N	Vinyl	Low-E Double	Yes	0.5	0.6	N	16.67 ft²	1 ft 0 in	0 ft 0 in	HERS 2006	None
____	3	N	Vinyl	Low-E Double	Yes	0.5	0.6	N	46.5 ft²	1 ft 0 in	0 ft 0 in	HERS 2006	None
____	4	N	Vinyl	Low-E Double	Yes	0.5	0.6	N	9 ft²	1 ft 0 in	0 ft 0 in	HERS 2006	None
____	5	S	Vinyl	Low-E Double	Yes	0.5	0.6	N	93 ft²	1 ft 0 in	0 ft 0 in	HERS 2006	None
____	6	W	Vinyl	Low-E Double	Yes	0.5	0.6	N	16.67 ft²	1 ft 0 in	0 ft 0 in	HERS 2006	None
____	7	W	Vinyl	Low-E Double	Yes	0.5	0.6	N	6 ft²	1 ft 0 in	0 ft 0 in	HERS 2006	None

INFILTRATION & VENTING

√	Method	SLA	CFM 50	ACH 50	ELA	EqLA	---- Forced Ventilation ---- Supply CFM	Exhaust CFM	Run Time Fraction	Fan Watts
____	Default	0.00036	2125	6.30	116.6	219.4	0 cfm	0 cfm	0	0

COOLING SYSTEM

√	#	System Type	Subtype	Efficiency	Capacity	Air Flow	SHR	Ductless
____	1	Central Unit	None	SEER: 13	20 kBtu/hr	600 cfm	0.75	False

HEATING SYSTEM

√	#	System Type	Subtype	Efficiency	Capacity	Ductless
____	1	Electric Heat Pump	None	HSPF: 7.7	20 kBtu/hr	False

HOT WATER SYSTEM

√	#	System Type	EF	Cap	Use	SetPnt	Conservation
____	1	Electric	0.97	40 gal	60 gal	120 deg	None

SOLAR HOT WATER SYSTEM

√	FSEC Cert #	Company Name	System Model #	Collector Model #	Collector Area	Storage Volume	FEF
____	None	None			ft²		

DUCTS

√	#	---- Supply ---- Location	R-Value	Area	---- Return ---- Location	Area	Leakage Type	Air Handler	CFM 25	Percent Leakage	QN	RLF
____	1	Interior	6	140 ft²	Interior	106.5 ft	Default Leakage	Interior				

TEMPERATURES

Programable Thermostat: None

Ceiling Fans:

Cooling	[X] Jan	[X] Feb	[X] Mar	[X] Apr	[X] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[X] Oct	[X] Nov	[X] Dec
Heating	[X] Jan	[X] Feb	[X] Mar	[X] Apr	[X] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[X] Oct	[X] Nov	[X] Dec
Venting	[X] Jan	[X] Feb	[X] Mar	[X] Apr	[X] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[X] Oct	[X] Nov	[X] Dec

Thermostat Schedule: HERS 2006 Reference

Schedule Type		Hours 1	2	3	4	5	6	7	8	9	10	11	12
Cooling (WD)	AM	78	78	78	78	78	78	78	78	78	78	78	78
	PM	78	78	78	78	78	78	78	78	78	78	78	78
Cooling (WEH)	AM	78	78	78	78	78	78	78	78	78	78	78	78
	PM	78	78	78	78	78	78	78	78	78	78	78	78
Heating (WD)	AM	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68
Heating (WEH)	AM	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68

FORM 1100A-08

Code Compliance Cheklist

Residential Whole Building Performance Method A - Details

ADDRESS:	PERMIT #:
Tallahassee, FL,	

INFILTRATION REDUCTION COMPLIANCE CHECKLIST

COMPONENTS	SECTION	REQUIREMENTS FOR EACH PRACTICE	CHECK
Exterior Windows & Doors	N1106.AB.1.1	Maximum: .3 cfm/sq.ft. window area; .5 cfm/sq.ft. door area.	
Exterior & Adjacent Walls	N1106.AB.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	N1106.AB.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	N1106.AB.1.2.3	Between walls & ceilings; penetrations of ceiling plane to 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	N1106.AB.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 with < 2.0 cfm from conditioned space, tested.	
Multi-story Houses	N1106.AB.1.2.5	Air barrier on perimeter of floor cavity between floors.	
Additional Infiltration reqts	N1106.AB.1.3	Exhaust fans vented to outdoors, dampers; combustion space heaters comply with NFPA, have combustion air.	

OTHER PRESCRIPTIVE MEASURES (must be met or exceeded by all residences.)

COMPONENTS	SECTION	REQUIREMENTS	CHECK
Water Heaters	N1112.AB.3	Comply with efficiency requirements in Table N112.ABC.3. Switch or clearly marked circuit breaker (electric) or cutoff (gas) must be provided. External or built-in heat trap required.	
Swimming Pools & Spas	N1112.AB.2.3	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%. Heat pump pool heaters shall have a minimum COP of 4.0.	
Shower heads	N1112.AB.2.4	Water flow must be restricted to no more than 2.5 gallons per minute at 80 PSIG.	
Air Dis		ll ducts, fittings, mechanical equipment and plenum chambers ıall be mechanically attached, sealed, insulated and installed in ccordance with the criteria of Section N1110.AB. ucts in unconditioned attics: R-6 min. insulation.	
HVAC		eparate readily accessible manual or automatic thermostat for ach system.	
Insulat		eilings-Min. R-19. Common walls-frame R-11 or CBS R-3 both des. Common ceiling & floors R-11.	

5/12/10

ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE INDEX* = 67

The lower the EnergyPerformance Index, the more efficient the home.

1. New construction or existing		New (From Plans)
2. Single family or multiple family		Single-family
3. Number of units, if multiple family		1
4. Number of Bedrooms		3
5. Is this a worst case?		No
6. Conditioned floor area (ft²)		2250
7. Windows**	Description	Area
a. U-Factor: SHGC:	Dbl, U=0.50 SHGC=0.60	207.83 ft²
b. U-Factor: SHGC:	N/A	ft²
c. U-Factor: SHGC:	N/A	ft²
d. U-Factor: SHGC:	N/A	ft²
e. U-Factor: SHGC:	N/A	ft²

8. Floor Types	Insulation	Area
a. Crawlspace	R=0.0	2250.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²

9. Wall Types	Insulation	Area
a. Frame - Wood, Exterior	R=13.0	1680.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²
d. N/A	R=	ft²

10. Ceiling Types	Insulation	Area
a. Under Attic (Vented)	R=38.0	2250.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²

11. Ducts
a. Sup: Interior Ret: Interior AH: Interior Sup. R= 6, 140 ft²

12. Cooling systems
a. Central Unit — Cap: 20 kBtu/hr SEER: 13

13. Heating systems
a. Electric Heat Pump — Cap: 20.7 kBtu/hr HSPF: 7.7

14. Hot water systems
a. Electric — Cap: 40 gallons EF: 0.97

b. Conservation features
None

15. Credits — None

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: _____

GREAT SEAL OF THE STATE OF FLORIDA
IN GOD WE TRUST

*Note: The home's estimated Energy Performance Index is only available through the EnergyGauge USA - FlaRes2008 computer program. This is not a Building Energy Rating. If your Index is below 100, your home may qualify for incentives if you obtain a Florida Energy Gauge Rating. Co
(321) 638-1492 or see the Energy Gauge web site at energygauge.com fo
Raters. For information about Florida's Energy Efficiency Code for Buildin
Department of Community Affairs at (850) 487-1824.

**Label required by Section 13-104.4.5 of the Florida Building Code, Buildi
of the Florida Building Code, Residential, if not DEFAULT.

FORM 1100A-08

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Community Affairs Residential Performance Method A

Project Name:	EZ-802-FL	Builder Name:	
Street:		Permit Office:	
City, State, Zip:	Orlando , FL ,	Permit Number:	
Owner:		Jurisdiction:	
Design Location:	FL, Orlando		

1. New construction or existing	New (From Plans)
2. Single family or multiple family	Single-family
3. Number of units, if multiple family	1
4. Number of Bedrooms	3
5. Is this a worst case?	No
6. Conditioned floor area (ft²)	2250

7. Windows	Description	Area
a. U-Factor: SHGC:	Dbl, U=0.50 SHGC=0.60	207.83 ft²
b. U-Factor: SHGC:	N/A	ft²
c. U-Factor: SHGC:	N/A	ft²
d. U-Factor: SHGC:	N/A	ft²
e. U-Factor: SHGC:	N/A	ft²

8. Floor Types	Insulation	Area
a. Crawlspace	R=0.0	2250.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²

9. Wall Types	Insulation	Area
a. Frame - Wood, Exterior	R=13.0	1890.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²
d. N/A	R=	ft²

10. Ceiling Types	Insulation	Area
a. Under Attic (Vented)	R=38.0	2250.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²

11. Ducts
a. Sup: Interior Ret: Interior AH: Interior Sup. R= 6, 140 ft²

12. Cooling systems
a. Central Unit — Cap: 20.2 kBtu/hr SEER: 13

13. Heating systems
a. Electric Heat Pump — Cap: 20 kBtu/hr HSPF: 7.7

14. Hot water systems
a. Electric — Cap: 40 gallons EF: 0.97

b. Conservation features
None

15. Credits — None

Glass/Floor Area:

ified Loads: 42.91
eline Loads: 59.70

PASS

I hereby certify that this calculation are Code.

PREPARED BY:
DATE: 9/22/10

I hereby certify that with the Florida En

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:

- **Compliance requires certification by the air handler unit manufacturer that the air handler enclosure qualifies as certified factory-sealed in accordance with N1110.A.3.**

PROJECT

Title:	EZ-802-FL	Bedrooms:	3	Adress Type:	Street Address
Building Type:	FLAsBuilt	Bathrooms:	0	Lot #	
Owner:		Conditioned Area:	2250	SubDivision:	
# of Units:	1	Total Stories:	1	PlatBook:	
Builder Name:		Worst Case:	No	Street:	
Permit Office:		Rotate Angle:	0	County:	Orange
Jurisdiction:		Cross Ventilation:		City, State, Zip:	Orlando , FL ,
Family Type:	Single-family	Whole House Fan:			
New/Existing:	New (From Plans)				
Comment:					

CLIMATE

√	Design Location	TMY Site	IECC Zone	Design Temp 97.5 %	Design Temp 2.5 %	Int Design Temp Winter	Int Design Temp Summer	Heating Degree Days	Design Moisture	Daily Temp Range
____	FL, Orlando	FL_ORLANDO_INTL_AR	2	41	91	75	70	526	44	Medium

FLOORS

√	#	Floor Type	Exposed Perimeter	Wall Ins. R-Value	Area	Floor Joist R-Value	Tile	Wood	Carpet
____	1	Crawlspace	1 ft	0	2250 ft²	13	0	0	1

ROOF

√	#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	Tested	Deck Insul.	Pitch
____	1	Gable or shed	Composition shingles	2319 ft²	280 ft²	Medium	0.96	No	0	14 deg

ATTIC

√	#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC
____	1	Full attic	Vented	300	2250 ft²	N	N

CEILING

√	#	Ceiling Type	R-Value	Area	Framing Frac	Truss Type
____	1	Under Attic (Vented)	38	2250 ft²	0.11	Wood

WALLS

√	#	Ornt	Adjacent To	Wall Type	Cavity R-Value	Area	Sheathing R-Value	Framing Fraction	Solar Absor.
____	1	N	Exterior	Frame - Wood	13	540 ft²		0.23	0.75
____	2	S	Exterior	Frame - Wood	13	540 ft²		0.23	0.75
____	3	E	Exterior	Frame - Wood	13	405 ft²		0.23	0.75
____	4	W	Exterior	Frame - Wood	1				0.75

9/22/10

DOORS

√	#	Ornt	Door Type	Storms	U-Value	Area
_____	1	E	Insulated	None	0.46	20 ft²
_____	2	S	Insulated	None	0.46	20 ft²

WINDOWS

Window orientation below is as entered. Actual orientation is modified by rotate angle shown in "Project" section above.

√	#	Ornt	Frame	Panes	NFRC	U-Factor	SHGC	Storms	Area	Overhang Depth	Overhang Separation	Int Shade	Screening
_____	1	N	Vinyl	Low-E Double	Yes	0.5	0.6	N	20 ft²	1 ft 0 in	0 ft 0 in	HERS 2006	None
_____	2	N	Vinyl	Low-E Double	Yes	0.5	0.6	N	16.67 ft²	1 ft 0 in	0 ft 0 in	HERS 2006	None
_____	3	N	Vinyl	Low-E Double	Yes	0.5	0.6	N	46.5 ft²	1 ft 0 in	0 ft 0 in	HERS 2006	None
_____	4	N	Vinyl	Low-E Double	Yes	0.5	0.6	N	9 ft²	1 ft 0 in	0 ft 0 in	HERS 2006	None
_____	5	S	Vinyl	Low-E Double	Yes	0.5	0.6	N	93 ft²	1 ft 0 in	0 ft 0 in	HERS 2006	None
_____	6	W	Vinyl	Low-E Double	Yes	0.5	0.6	N	16.67 ft²	1 ft 0 in	0 ft 0 in	HERS 2006	None
_____	7	W	Vinyl	Low-E Double	Yes	0.5	0.6	N	6 ft²	1 ft 0 in	0 ft 0 in	HERS 2006	None

INFILTRATION & VENTING

√	Method	SLA	CFM 50	ACH 50	ELA	EqLA	---- Forced Ventilation ---- Supply CFM	Exhaust CFM	Run Time Fraction	Fan Watts
_____	Default	0.00036	2125	6.30	116.6	219.4	0 cfm	0 cfm	0	0

COOLING SYSTEM

√	#	System Type	Subtype	Efficiency	Capacity	Air Flow	SHR	Ductless
_____	1	Central Unit	None	SEER: 13	20 kBtu/hr	600 cfm	0.75	False

HEATING SYSTEM

√	#	System Type	Subtype	Efficiency	Capacity	Ductless
_____	1	Electric Heat Pump	None	HSPF: 7.7	20 kBtu/hr	False

HOT WATER SYSTEM

√	#	System Type	EF	Cap	Use	SetPnt	Conservation
_____	1	Electric	0.97	40 gal	60 gal	120 deg	None

SOLAR HOT WATER SYSTEM

√	FSEC Cert #	Company Name	System Model #	Collector Model #	Collector Area	Storage Volume	FEF
_____	None	None			ft²		

DUCTS

√	#	---- Supply ---- Location	R-Value	Area	---- Return ---- Location	Area	Leakage Type	Air Handler	CFM 25	Percent Leakage	QN	RLF
____	1	Interior	6	140 ft²	Interior	106.5 ft	Default Leakage	Interior				

TEMPERATURES

Programable Thermostat: None

Ceiling Fans:

Cooling	[X] Jan	[X] Feb	[X] Mar	[X] Apr	[X] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[X] Oct	[X] Nov	[X] Dec
Heating	[X] Jan	[X] Feb	[X] Mar	[X] Apr	[X] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[X] Oct	[X] Nov	[X] Dec
Venting	[X] Jan	[X] Feb	[X] Mar	[X] Apr	[X] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[X] Oct	[X] Nov	[X] Dec

Thermostat Schedule: HERS 2006 Reference

Schedule Type		Hours 1	2	3	4	5	6	7	8	9	10	11	12
Cooling (WD)	AM	78	78	78	78	78	78	78	78	78	78	78	78
	PM	78	78	78	78	78	78	78	78	78	78	78	78
Cooling (WEH)	AM	78	78	78	78	78	78	78	78	78	78	78	78
	PM	78	78	78	78	78	78	78	78	78	78	78	78
Heating (WD)	AM	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68
Heating (WEH)	AM	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68

FORM 1100A-08

Code Compliance Cheklist

Residential Whole Building Performance Method A - Details

ADDRESS:	PERMIT #:
Orlando, FL,	

INFILTRATION REDUCTION COMPLIANCE CHECKLIST

COMPONENTS	SECTION	REQUIREMENTS FOR EACH PRACTICE	CHECK
Exterior Windows & Doors	N1106.AB.1.1	Maximum: .3 cfm/sq.ft. window area; .5 cfm/sq.ft. door area.	
Exterior & Adjacent Walls	N1106.AB.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	N1106.AB.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	N1106.AB.1.2.3	Between walls & ceilings; penetrations of ceiling plane to 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	N1106.AB.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 with < 2.0 cfm from conditioned space, tested.	
Multi-story Houses	N1106.AB.1.2.5	Air barrier on perimeter of floor cavity between floors.	
Additional Infiltration reqts	N1106.AB.1.3	Exhaust fans vented to outdoors, dampers; combustion space heaters comply with NFPA, have combustion air.	

OTHER PRESCRIPTIVE MEASURES (must be met or exceeded by all residences.)

COMPONENTS	SECTION	REQUIREMENTS	CHECK
Water Heaters	N1112.AB.3	Comply with efficiency requirements in Table N112.ABC.3. Switch or clearly marked circuit breaker (electric) or cutoff (gas) must be provided. External or built-in heat trap required.	
Swimming Pools & Spas	N1112.AB.2.3	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%. Heat pump pool heaters shall have a minimum COP of 4.0.	
Shower heads	N1112.AB.2.4	Water flow must be restricted to no more than 2.5 gallons per minute at 80 PSIG.	
Air Distributior		fittings, mechanical equipment and plenum chambers nechanically attached, sealed, insulated and installed in ce with the criteria of Section N1110.AB. unconditioned attics: R-6 min. insulation.	
HVAC Control		readily accessible manual or automatic thermostat for tem.	
Insulation		Min. R-19. Common walls-frame R-11 or CBS R-3 both ɔmmon ceiling & floors R-11.	

9/22/10

ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE INDEX* = 72

The lower the EnergyPerformance Index, the more efficient the home.

1. New construction or existing		New (From Plans)
2. Single family or multiple family		Single-family
3. Number of units, if multiple family		1
4. Number of Bedrooms		3
5. Is this a worst case?		No
6. Conditioned floor area (ft²)		2250
7. Windows**	Description	Area
a. U-Factor:	Dbl, U=0.50	207.83 ft²
SHGC:	SHGC=0.60	
b. U-Factor:	N/A	ft²
SHGC:		
c. U-Factor:	N/A	ft²
SHGC:		
d. U-Factor:	N/A	ft²
SHGC:		
e. U-Factor:	N/A	ft²
SHGC:		

8. Floor Types	Insulation	Area
a. Crawlspace	R=0.0	2250.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²

9. Wall Types	Insulation	Area
a. Frame - Wood, Exterior	R=13.0	1890.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²
d. N/A	R=	ft²

10. Ceiling Types	Insulation	Area
a. Under Attic (Vented)	R=38.0	2250.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²

11. Ducts
a. Sup: Interior Ret: Interior AH: Interior Sup. R= 6, 140 ft²

12. Cooling systems
a. Central Unit — Cap: 20.2 kBtu/hr, SEER: 13

13. Heating systems
a. Electric Heat Pump — Cap: 20 kBtu/hr, HSPF: 7.7

14. Hot water systems
a. Electric — Cap: 40 gallons, EF: 0.97

b. Conservation features
None

15. Credits — None

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: _____

GREAT SEAL OF THE STATE OF FLORIDA
IN GOD WE TRUST

*Note: The home's estimated Energy Performance Index is only available through the EnergyGauge USA - FlaRes2008 computer program. This is not a Building Energy Rating. If your Index is below 100, your home may qualify for 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 energygauge.com for information about Raters. For information about Florida's Energy Efficiency Code for Building Construction, contact the Department of Community Affairs at (850) 487-1824.

**Label required by Section 13-104.4.5 of the Florida Building Code, Building, or Section R303.1.3 of the Florida Building Code, Residential, if not DEFAULT.

EnergyGauge® USA - FlaRes2008

9/22/10

FORM 1100A-08

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Community Affairs Residential Performance Method A

Project Name:	EZ-802-FL	Builder Name:	
Street:		Permit Office:	
City, State, Zip:	Labell , FL ,	Permit Number:	
Owner:		Jurisdiction:	
Design Location:	FL, Lee/Collier		

1. New construction or existing		New (From Plans)		
2. Single family or multiple family		Single-family		
3. Number of units, if multiple family		1		
4. Number of Bedrooms		3		
5. Is this a worst case?		No		
6. Conditioned floor area (ft²)		2250		
7. Windows	Description		Area	
a. U-Factor: SHGC:	Dbl, U=0.50 SHGC=0.60		207.83	ft²
b. U-Factor: SHGC:	N/A			ft²
c. U-Factor: SHGC:	N/A			ft²
d. U-Factor: SHGC:	N/A			ft²
e. U-Factor: SHGC:	N/A			ft²
8. Floor Types		Insulation	Area	
a. Crawlspace		R=0.0	2250.00	ft²
b. N/A		R=		ft²
c. N/A		R=		ft²

9. Wall Types	Insulation	Area
a. Frame - Wood, Exterior	R=13.0	1890.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²
d. N/A	R=	ft²
10. Ceiling Types	Insulation	Area
a. Under Attic (Vented)	R=38.0	2250.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²
11. Ducts		
a. Sup: Interior Ret: Interior AH: Interior Sup. R= 6, 140 ft²		
12. Cooling systems		
a. Central Unit	Cap: 20.8 kBtu/hr SEER: 13	
13. Heating systems		
a. Electric Heat Pump	Cap: 20 kBtu/hr HSPF: 7.7	
14. Hot water systems		
a. Electric	Cap: 40 gallons EF: 0.97	
b. Conservation features None		
15. Credits	None	

Glass/Floor Are

odified Loads: 44.91

aseline Loads: 62.35

PASS

I hereby certify th
this calculation a
Code.

PREPARED BY
DATE:

9/22/10

I hereby certify th
with the Florida E

OWNER/AGEN
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:

- **Compliance requires certification by the air handler unit manufacturer that the air handler enclosure qualifies as certified factory-sealed in accordance with N1110.A.3.**

PROJECT

Title:	EZ-802-FL	Bedrooms:	3	Adress Type:	Street Address
Building Type:	FLAsBuilt	Bathrooms:	0	Lot #	
Owner:		Conditioned Area:	2250	SubDivision:	
# of Units:	1	Total Stories:	1	PlatBook:	
Builder Name:		Worst Case:	No	Street:	
Permit Office:		Rotate Angle:	0	County:	Hendry
Jurisdiction:		Cross Ventilation:		City, State, Zip:	Labell ,
Family Type:	Single-family	Whole House Fan:			FL ,
New/Existing:	New (From Plans)				
Comment:					

CLIMATE

√	Design Location	TMY Site	IECC Zone	Design Temp 97.5 %	Design Temp 2.5 %	Int Design Temp Winter	Int Design Temp Summer	Heating Degree Days	Design Moisture	Daily Temp Range
_____	FL, Lee/Collier	FL_SOUTHWEST_FLORI	2	46	91	75	70	321	58	Medium

FLOORS

√	#	Floor Type	Exposed Perimeter	Wall Ins. R-Value	Area	Floor Joist R-Value	Tile	Wood	Carpet
_____	1	Crawlspace	1 ft	0	2250 ft²	13	0	0	1

ROOF

√	#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	Tested	Deck Insul.	Pitch
_____	1	Gable or shed	Composition shingles	2319 ft²	280 ft²	Medium	0.96	No	0	14 deg

ATTIC

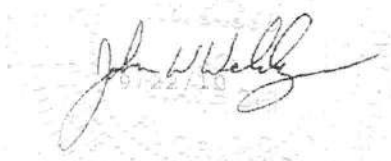
√	#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC
_____	1	Full attic	Vented	300	2250 ft²	N	N

CEILING

√	#	Ceiling Type	R-Value	Area	Framing Frac	Truss Type
_____	1	Under Attic (Vented)	38	2250 ft²	0.11	Wood

WALLS

√	#	Ornt	Adjacent To	Wall Type	Cavity R-Value	Area	Sheathing R-Value	Framing Fraction	Solar Absor.
_____	1	N	Exterior	Frame - Wood	13	540 ft²		0.23	0.75
_____	2	S	Exterior	Frame - Wood	13	540 ft²		0.23	0.75
_____	3	E	Exterior	Frame - Wood	13	405 ft²		0.23	0.75
_____	4	W	Exterior	Frame - Wood				1.23	0.75



DOORS

√	#	Ornt	Door Type	Storms	U-Value	Area
____	1	E	Insulated	None	0.46	20 ft²
____	2	S	Insulated	None	0.46	20 ft²

WINDOWS

Window orientation below is as entered. Actual orientation is modified by rotate angle shown in "Project" section above.

√	#	Ornt	Frame	Panes	NFRC	U-Factor	SHGC	Storms	Area	Overhang Depth	Overhang Separation	Int Shade	Screening
____	1	N	Vinyl	Low-E Double	Yes	0.5	0.6	N	20 ft²	1 ft 0 in	0 ft 0 in	HERS 2006	None
____	2	N	Vinyl	Low-E Double	Yes	0.5	0.6	N	16.67 ft²	1 ft 0 in	0 ft 0 in	HERS 2006	None
____	3	N	Vinyl	Low-E Double	Yes	0.5	0.6	N	46.5 ft²	1 ft 0 in	0 ft 0 in	HERS 2006	None
____	4	N	Vinyl	Low-E Double	Yes	0.5	0.6	N	9 ft²	1 ft 0 in	0 ft 0 in	HERS 2006	None
____	5	S	Vinyl	Low-E Double	Yes	0.5	0.6	N	93 ft²	1 ft 0 in	0 ft 0 in	HERS 2006	None
____	6	W	Vinyl	Low-E Double	Yes	0.5	0.6	N	16.67 ft²	1 ft 0 in	0 ft 0 in	HERS 2006	None
____	7	W	Vinyl	Low-E Double	Yes	0.5	0.6	N	6 ft²	1 ft 0 in	0 ft 0 in	HERS 2006	None

INFILTRATION & VENTING

√	Method	SLA	CFM 50	ACH 50	ELA	EqLA	---- Forced Ventilation ---- Supply CFM	Exhaust CFM	Run Time Fraction	Fan Watts
____	Default	0.00036	2125	6.30	116.6	219.4	0 cfm	0 cfm	0	0

COOLING SYSTEM

√	#	System Type	Subtype	Efficiency	Capacity	Air Flow	SHR	Ductless
____	1	Central Unit	None	SEER: 13	20 kBtu/hr	600 cfm	0.75	False

HEATING SYSTEM

√	#	System Type	Subtype	Efficiency	Capacity	Ductless
____	1	Electric Heat Pump	None	HSPF: 7.7	20 kBtu/hr	False

HOT WATER SYSTEM

√	#	System Type	EF	Cap	Use	SetPnt	Conservation
____	1	Electric	0.97	40 gal	60 gal	120 deg	None

SOLAR HOT WATER SYSTEM

√	FSEC Cert #	Company Name	System Model #	Collector Model #	Collector Area	Storage Volume	FEF
____	None	None			ft²		

DUCTS

√	#	---- Supply ---- Location	R-Value	Area	---- Return ---- Location	Area	Leakage Type	Air Handler	CFM 25	Percent Leakage	QN	RLF
____	1	Interior	6	140 ft²	Interior	106.5 ft	Default Leakage	Interior				

TEMPERATURES

Programable Thermostat: None

Ceiling Fans:

Cooling	[X] Jan	[X] Feb	[X] Mar	[X] Apr	[X] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[X] Oct	[X] Nov	[X] Dec
Heating	[X] Jan	[X] Feb	[X] Mar	[X] Apr	[X] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[X] Oct	[X] Nov	[X] Dec
Venting	[X] Jan	[X] Feb	[X] Mar	[X] Apr	[X] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[X] Oct	[X] Nov	[X] Dec

Thermostat Schedule: HERS 2006 Reference

Schedule Type		Hours 1	2	3	4	5	6	7	8	9	10	11	12
Cooling (WD)	AM	78	78	78	78	78	78	78	78	78	78	78	78
	PM	78	78	78	78	78	78	78	78	78	78	78	78
Cooling (WEH)	AM	78	78	78	78	78	78	78	78	78	78	78	78
	PM	78	78	78	78	78	78	78	78	78	78	78	78
Heating (WD)	AM	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68
Heating (WEH)	AM	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68

FORM 1100A-08

Code Compliance Cheklist

Residential Whole Building Performance Method A - Details

ADDRESS:	PERMIT #:
Labell, FL,	

INFILTRATION REDUCTION COMPLIANCE CHECKLIST

COMPONENTS	SECTION	REQUIREMENTS FOR EACH PRACTICE	CHECK
Exterior Windows & Doors	N1106.AB.1.1	Maximum: .3 cfm/sq.ft. window area; .5 cfm/sq.ft. door area.	
Exterior & Adjacent Walls	N1106.AB.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	N1106.AB.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	N1106.AB.1.2.3	Between walls & ceilings; penetrations of ceiling plane to 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	N1106.AB.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 with < 2.0 cfm from conditioned space, tested.	
Multi-story Houses	N1106.AB.1.2.5	Air barrier on perimeter of floor cavity between floors.	
Additional Infiltration reqts	N1106.AB.1.3	Exhaust fans vented to outdoors, dampers; combustion space heaters comply with NFPA, have combustion air.	

OTHER PRESCRIPTIVE MEASURES (must be met or exceeded by all residences.)

COMPONENTS	SECTION	REQUIREMENTS	CHECK
Water Heaters	N1112.AB.3	Comply with efficiency requirements in Table N112.ABC.3. Switch or clearly marked circuit breaker (electric) or cutoff (gas) must be provided. External or built-in heat trap required.	
Swimming Pools & Spas	N1112.AB.2.3	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%. Heat pump pool heaters shall have a minimum COP of 4.0	
Shower heads	N1112.AB.2.4	Water flow must be restricted to no more than 2.5 gallons per minute at 80 PSIG.	
Air Distribution Sys		igs, mechanical equipment and plenum chambers anically attached, sealed, insulated and installed in ith the criteria of Section N1110.AB. nditioned attics: R-6 min. insulation.	
HVAC Controls		dily accessible manual or automatic thermostat for	
Insulation		R-19. Common walls-frame R-11 or CBS R-3 both on ceiling & floors R-11.	

ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE INDEX* = 72

The lower the EnergyPerformance Index, the more efficient the home.

1. New construction or existing		New (From Plans)
2. Single family or multiple family		Single-family
3. Number of units, if multiple family		1
4. Number of Bedrooms		3
5. Is this a worst case?		No
6. Conditioned floor area (ft²)		2250

7. Windows**	Description	Area
a. U-Factor: SHGC:	Dbl, U=0.50 SHGC=0.60	207.83 ft²
b. U-Factor: SHGC:	N/A	ft²
c. U-Factor: SHGC:	N/A	ft²
d. U-Factor: SHGC:	N/A	ft²
e. U-Factor: SHGC:	N/A	ft²

8. Floor Types	Insulation	Area
a. Crawlspace	R=0.0	2250.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²

9. Wall Types	Insulation	Area
a. Frame - Wood, Exterior	R=13.0	1890.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²
d. N/A	R=	ft²

10. Ceiling Types	Insulation	Area
a. Under Attic (Vented)	R=38.0	2250.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²

11. Ducts
a. Sup: Interior Ret: Interior AH: Interior Sup. R= 6, 140 ft²

12. Cooling systems
a. Central Unit — Cap: 20.8 kBtu/hr SEER: 13

13. Heating systems
a. Electric Heat Pump — Cap: 20 kBtu/hr HSPF: 7.7

14. Hot water systems
a. Electric — Cap: 40 gallons EF: 0.97

b. Conservation features
None

15. Credits — None

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 Index is only available through the EnergyGauge USA - FlaRes2008 computer program. This is not a Building Energy Rating. If your Index is below 100, your home may qualify for incentives if you obtain a Florida Energy Gauge Rating. Contact the E
(321) 638-1492 or see the Energy Gauge web site at energygauge.com for informatio
Raters. For information about Florida's Energy Efficiency Code for Building Construct
Department of Community Affairs at (850) 487-1824.

**Label required by Section 13-104.4.5 of the Florida Building Code, Building, or Secti
of the Florida Building Code, Residential, if not DEFAULT.

FORM 1100A-08

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Community Affairs Residential Performance Method A

Project Name:	EZ-802-FL	Builder Name:	
Street:		Permit Office:	
City, State, Zip:	Tallahassee , FL ,	Permit Number:	
Owner:		Jurisdiction:	
Design Location:	FL, Tallahassee		

1. New construction or existing			New (From Plans)	
2. Single family or multiple family			Single-family	
3. Number of units, if multiple family			1	
4. Number of Bedrooms			3	
5. Is this a worst case?			No	
6. Conditioned floor area (ft²)			2250	
7. Windows	Description		Area	
a. U-Factor: SHGC:	Dbl, U=0.50 SHGC=0.60		207.83 ft²	
b. U-Factor: SHGC:	N/A		ft²	
c. U-Factor: SHGC:	N/A		ft²	
d. U-Factor: SHGC:	N/A		ft²	
e. U-Factor: SHGC:	N/A		ft²	
8. Floor Types		Insulation	Area	
a. Crawlspace		R=0.0	2250.00 ft²	
b. N/A		R=	ft²	
c. N/A		R=	ft²	

9. Wall Types	Insulation	Area
a. Frame - Wood, Exterior	R=13.0	1680.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²
d. N/A	R=	ft²
10. Ceiling Types	Insulation	Area
a. Under Attic (Vented)	R=38.0	2250.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²

11. Ducts
a. Sup: Interior Ret: Interior AH: Interior Sup. R= 6, 140 ft²

12. Cooling systems
a. Central Unit — Cap: 20 kBtu/hr SEER: 13

13. Heating systems
a. Electric Heat Pump — Cap: 20.7 kBtu/hr HSPF: 7.7

14. Hot water systems
a. Electric — Cap: 40 gallons EF: 0.97

b. Conservation features
None

15. Credits — None

Glass/Floor Area:

ıdified Loads: 39.98
seline Loads: 59.91

PASS

I hereby certify th
this calculation ar
Code.

PREPARED BY
DATE: 9/22/10

I hereby certify th
with the Florida E

OWNER/AGEN
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:

- **Compliance requires certification by the air handler unit manufacturer that the air handler enclosure qualifies as certified factory-sealed in accordance with N1110.A.3.**

PROJECT

Title:	EZ-802-FL	Bedrooms:	3	Adress Type:	Street Address
Building Type:	FLAsBuilt	Bathrooms:	0	Lot #	
Owner:		Conditioned Area:	2250	SubDivision:	
# of Units:	1	Total Stories:	1	PlatBook:	
Builder Name:		Worst Case:	No	Street:	
Permit Office:		Rotate Angle:	0	County:	Leon
Jurisdiction:		Cross Ventilation:		City, State, Zip:	Tallahassee , FL ,
Family Type:	Single-family	Whole House Fan:			
New/Existing:	New (From Plans)				
Comment:					

CLIMATE

√	Design Location	TMY Site	IECC Zone	Design Temp 97.5 %	Design Temp 2.5 %	Int Design Temp Winter	Int Design Temp Summer	Heating Degree Days	Design Moisture	Daily Temp Range
_____	FL, Tallahassee	FL_TALLAHASSEE_REG	2	28	94	75	70	1545	46	Medium

FLOORS

√	#	Floor Type	Exposed Perimeter	Wall Ins. R-Value	Area	Floor Joist R-Value	Tile	Wood	Carpet
_____	1	Crawlspace	1 ft	0	2250 ft²	13	0	0	1

ROOF

√	#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	Tested	Deck Insul.	Pitch
_____	1	Gable or shed	Composition shingles	2319 ft²	280 ft²	Medium	0.96	No	0	14 deg

ATTIC

√	#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC
_____	1	Full attic	Vented	300	2250 ft²	N	N

CEILING

√	#	Ceiling Type	R-Value	Area	Framing Frac	Truss Type
_____	1	Under Attic (Vented)	38	2250 ft²	0.11	Wood

WALLS

√	#	Ornt	Adjacent To	Wall Type	Cavity R-Value	Area	Sheathing R-Value	Framing Fraction	Solar Absor.
_____	1	N	Exterior	Frame - Wood	13	480 ft²		0.23	0.75
_____	2	S	Exterior	Frame - Wood	13	480 ft²		0.23	0.75
_____	3	E	Exterior	Frame - Wood	13	360 ft²		0.23	0.75
_____	4	W	Exterior	Frame - Wood	13				

DOORS

√	#	Ornt	Door Type	Storms	U-Value	Area
____	1	E	Insulated	None	0.46	20 ft²
____	2	S	Insulated	None	0.46	20 ft²

WINDOWS

Window orientation below is as entered. Actual orientation is modified by rotate angle shown in "Project" section above.

√	#	Ornt	Frame	Panes	NFRC	U-Factor	SHGC	Storms	Area	Overhang Depth	Overhang Separation	Int Shade	Screening
____	1	N	Vinyl	Low-E Double	Yes	0.5	0.6	N	20 ft²	1 ft 0 in	0 ft 0 in	HERS 2006	None
____	2	N	Vinyl	Low-E Double	Yes	0.5	0.6	N	16.67 ft²	1 ft 0 in	0 ft 0 in	HERS 2006	None
____	3	N	Vinyl	Low-E Double	Yes	0.5	0.6	N	46.5 ft²	1 ft 0 in	0 ft 0 in	HERS 2006	None
____	4	N	Vinyl	Low-E Double	Yes	0.5	0.6	N	9 ft²	1 ft 0 in	0 ft 0 in	HERS 2006	None
____	5	S	Vinyl	Low-E Double	Yes	0.5	0.6	N	93 ft²	1 ft 0 in	0 ft 0 in	HERS 2006	None
____	6	W	Vinyl	Low-E Double	Yes	0.5	0.6	N	16.67 ft²	1 ft 0 in	0 ft 0 in	HERS 2006	None
____	7	W	Vinyl	Low-E Double	Yes	0.5	0.6	N	6 ft²	1 ft 0 in	0 ft 0 in	HERS 2006	None

INFILTRATION & VENTING

√	Method	SLA	CFM 50	ACH 50	ELA	EqLA	---- Forced Ventilation ---- Supply CFM	Exhaust CFM	Run Time Fraction	Fan Watts
____	Default	0.00036	2125	7.08	116.6	219.4	0 cfm	0 cfm	0	0

COOLING SYSTEM

√	#	System Type	Subtype	Efficiency	Capacity	Air Flow	SHR	Ductless
____	1	Central Unit	None	SEER: 13	20 kBtu/hr	600 cfm	0.75	False

HEATING SYSTEM

√	#	System Type	Subtype	Efficiency	Capacity	Ductless
____	1	Electric Heat Pump	None	HSPF: 7.7	20 kBtu/hr	False

HOT WATER SYSTEM

√	#	System Type	EF	Cap	Use	SetPnt	Conservation
____	1	Electric	0.97	40 gal	60 gal	120 deg	None

SOLAR HOT WATER SYSTEM

√	FSEC Cert #	Company Name	System Model #	Collector Model #	Collector Area	Storage Volume	FEF
____	None	None			ft²		

DUCTS

√	#	Supply Location	Supply R-Value	Supply Area	Return Location	Return Area	Leakage Type	Air Handler	CFM 25	Percent Leakage	QN	RLF
____	1	Interior	6	140 ft²	Interior	106.5 ft	Default Leakage	Interior				

TEMPERATURES

Programable Thermostat: None

Ceiling Fans:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Cooling	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Heating	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Venting	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]

Thermostat Schedule: HERS 2006 Reference

Schedule Type		Hours 1	2	3	4	5	6	7	8	9	10	11	12
Cooling (WD)	AM	78	78	78	78	78	78	78	78	78	78	78	78
	PM	78	78	78	78	78	78	78	78	78	78	78	78
Cooling (WEH)	AM	78	78	78	78	78	78	78	78	78	78	78	78
	PM	78	78	78	78	78	78	78	78	78	78	78	78
Heating (WD)	AM	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68
Heating (WEH)	AM	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68

FORM 1100A-08

Code Compliance Cheklist

Residential Whole Building Performance Method A - Details

ADDRESS:	PERMIT #:
Tallahassee, FL,	

INFILTRATION REDUCTION COMPLIANCE CHECKLIST

COMPONENTS	SECTION	REQUIREMENTS FOR EACH PRACTICE	CHECK
Exterior Windows & Doors	N1106.AB.1.1	Maximum: .3 cfm/sq.ft. window area; .5 cfm/sq.ft. door area.	
Exterior & Adjacent Walls	N1106.AB.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	N1106.AB.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	N1106.AB.1.2.3	Between walls & ceilings; penetrations of ceiling plane to 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	N1106.AB.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 with < 2.0 cfm from conditioned space, tested.	
Multi-story Houses	N1106.AB.1.2.5	Air barrier on perimeter of floor cavity between floors.	
Additional Infiltration reqts	N1106.AB.1.3	Exhaust fans vented to outdoors, dampers; combustion space heaters comply with NFPA, have combustion air.	

OTHER PRESCRIPTIVE MEASURES (must be met or exceeded by all residences.)

COMPONENTS	SECTION	REQUIREMENTS	CHECK
Water Heaters	N1112.AB.3	Comply with efficiency requirements in Table N112.ABC.3. Switch or clearly marked circuit breaker (electric) or cutoff (gas) must be provided. External or built-in heat trap required.	
Swimming Pools & Spas	N1112.AB.2.3	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%. Heat pump pool heaters shall have a minimum COP of 4.0.	
Shower heads	N1112.AB.2.4	Water flow must be restricted to no more than 2.5 gallons per minute at 80 PSIG.	
Air Dist		ducts, fittings, mechanical equipment and plenum chambers all be mechanically attached, sealed, insulated and installed in cordance with the criteria of Section N1110.AB. ıcts in unconditioned attics: R-6 min. insulation.	
HVAC (		:parate readily accessible manual or automatic thermostat for ch system.	
Insulati		:ilings-Min. R-19. Common walls-frame R-11 or CBS R-3 both les. Common ceiling & floors R-11.	

ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE INDEX* = 67

The lower the EnergyPerformance Index, the more efficient the home.

1. New construction or existing		New (From Plans)
2. Single family or multiple family		Single-family
3. Number of units, if multiple family		1
4. Number of Bedrooms		3
5. Is this a worst case?		No
6. Conditioned floor area (ft²)		2250
7. Windows**	Description	Area
a. U-Factor: SHGC:	Dbl, U=0.50 SHGC=0.60	207.83 ft²
b. U-Factor: SHGC:	N/A	ft²
c. U-Factor: SHGC:	N/A	ft²
d. U-Factor: SHGC:	N/A	ft²
e. U-Factor: SHGC:	N/A	ft²

8. Floor Types	Insulation	Area
a. Crawlspace	R=0.0	2250.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²

9. Wall Types	Insulation	Area
a. Frame - Wood, Exterior	R=13.0	1680.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²
d. N/A	R=	ft²

10. Ceiling Types	Insulation	Area
a. Under Attic (Vented)	R=38.0	2250.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²

11. Ducts
a. Sup: Interior Ret: Interior AH: Interior Sup. R= 6, 140 ft²

12. Cooling systems
a. Central Unit — Cap: 20 kBtu/hr SEER: 13

13. Heating systems
a. Electric Heat Pump — Cap: 20.7 kBtu/hr HSPF: 7.7

14. Hot water systems
a. Electric — Cap: 40 gallons EF: 0.97

b. Conservation features
None

15. Credits — None

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 Index is only available through the EnergyGauge USA - FlaRes2008 computer program. This is not a Building Energy Rating. If your Index is below 100, your home may qualify for 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 energygauge.com for Raters. For information about Florida's Energy Efficiency Code for Building Department of Community Affairs at (850) 487-1824.

**Label required by Section 13-104.4.5 of the Florida Building Code, Buildir of the Florida Building Code, Residential, if not DEFAULT.

FORM 1100A-08

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Community Affairs Residential Performance Method A

Project Name:	EZ-802-FL	Builder Name:	
Street:		Permit Office:	
City, State, Zip:	Orlando , FL ,	Permit Number:	
Owner:		Jurisdiction:	
Design Location:	FL, Orlando		

1. New construction or existing		New (From Plans)		
2. Single family or multiple family		Single-family		
3. Number of units, if multiple family		1		
4. Number of Bedrooms		3		
5. Is this a worst case?		No		
6. Conditioned floor area (ft²)		2250		
7. Windows	Description		Area	
a. U-Factor: SHGC:	Dbl, U=0.50 SHGC=0.60		207.83	ft²
b. U-Factor: SHGC:	N/A			ft²
c. U-Factor: SHGC:	N/A			ft²
d. U-Factor: SHGC:	N/A			ft²
e. U-Factor: SHGC:	N/A			ft²
8. Floor Types		Insulation	Area	
a. Crawlspace		R=0.0	2250.00	ft²
b. N/A		R=		ft²
c. N/A		R=		ft²

9. Wall Types	Insulation	Area	
a. Frame - Wood, Exterior	R=13.0	1680.00	ft²
b. N/A	R=		ft²
c. N/A	R=		ft²
d. N/A	R=		ft²
10. Ceiling Types	Insulation	Area	
a. Under Attic (Vented)	R=38.0	2250.00	ft²
b. N/A	R=		ft²
c. N/A	R=		ft²

11. Ducts
a. Sup: Interior Ret: Interior AH: Interior Sup. R= 6, 140 ft²

12. Cooling systems
a. Central Unit — Cap: 20 kBtu/hr SEER: 13

13. Heating systems
a. Electric Heat Pump — Cap: 20 kBtu/hr HSPF: 7.7

14. Hot water systems
a. Electric — Cap: 40 gallons EF: 0.97
b. Conservation features
None

15. Credits — None

Glass/Floor Area

dified Loads: 42.40
seline Loads: 58.58

PASS

I hereby certify tha
this calculation are
Code.

PREPARED BY:
DATE: 9/23/10

I hereby certify tha
with the Florida En

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:

- **Compliance requires certification by the air handler unit manufacturer that the air handler enclosure qualifies as certified factory-sealed in accordance with N1110.A.3.**

PROJECT

Title:	EZ-802-FL	Bedrooms:	3	Adress Type:	Street Address
Building Type:	FLAsBuilt	Bathrooms:	0	Lot #	
Owner:		Conditioned Area:	2250	SubDivision:	
# of Units:	1	Total Stories:	1	PlatBook:	
Builder Name:		Worst Case:	No	Street:	
Permit Office:		Rotate Angle:	0	County:	Orange
Jurisdiction:		Cross Ventilation:		City, State, Zip:	Orlando , FL ,
Family Type:	Single-family	Whole House Fan:			
New/Existing:	New (From Plans)				
Comment:					

CLIMATE

√	Design Location	TMY Site	IECC Zone	Design Temp 97.5 %	Design Temp 2.5 %	Int Design Temp Winter	Int Design Temp Summer	Heating Degree Days	Design Moisture	Daily Temp Range
____	FL, Orlando	FL_ORLANDO_INTL_AR	2	41	91	75	70	526	44	Medium

FLOORS

√	#	Floor Type	Exposed Perimeter	Wall Ins. R-Value	Area	Floor Joist R-Value	Tile	Wood	Carpet
____	1	Crawlspace	1 ft	0	2250 ft²	13	0	0	1

ROOF

√	#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	Tested	Deck Insul.	Pitch
____	1	Gable or shed	Composition shingles	2319 ft²	280 ft²	Medium	0.96	No	0	14 deg

ATTIC

√	#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC
____	1	Full attic	Vented	300	2250 ft²	N	N

CEILING

√	#	Ceiling Type	R-Value	Area	Framing Frac	Truss Type
____	1	Under Attic (Vented)	38	2250 ft²	0.11	Wood

WALLS

√	#	Ornt	Adjacent To	Wall Type	Cavity R-Value	Area	Sheathing R-Value	Framing Fraction	Solar Absor.
____	1	N	Exterior	Frame - Wood	13	480 ft²		0.23	0.75
____	2	S	Exterior	Frame - Wood	13	480 ft²		0.23	0.75
____	3	E	Exterior	Frame - Wood	13	360 ft²		0.23	0.75
____	4	W	Exterior	Frame - Wood	13	[illegible]		[illegible]	0.75

DOORS

√	#	Ornt	Door Type	Storms	U-Value	Area
_____	1	E	Insulated	None	0.46	20 ft²
_____	2	S	Insulated	None	0.46	20 ft²

WINDOWS

Window orientation below is as entered. Actual orientation is modified by rotate angle shown in "Project" section above.

√	#	Ornt	Frame	Panes	NFRC	U-Factor	SHGC	Storms	Area	Overhang Depth	Overhang Separation	Int Shade	Screening
_____	1	N	Vinyl	Low-E Double	Yes	0.5	0.6	N	20 ft²	1 ft 0 in	0 ft 0 in	HERS 2006	None
_____	2	N	Vinyl	Low-E Double	Yes	0.5	0.6	N	16.67 ft²	1 ft 0 in	0 ft 0 in	HERS 2006	None
_____	3	N	Vinyl	Low-E Double	Yes	0.5	0.6	N	46.5 ft²	1 ft 0 in	0 ft 0 in	HERS 2006	None
_____	4	N	Vinyl	Low-E Double	Yes	0.5	0.6	N	9 ft²	1 ft 0 in	0 ft 0 in	HERS 2006	None
_____	5	S	Vinyl	Low-E Double	Yes	0.5	0.6	N	93 ft²	1 ft 0 in	0 ft 0 in	HERS 2006	None
_____	6	W	Vinyl	Low-E Double	Yes	0.5	0.6	N	16.67 ft²	1 ft 0 in	0 ft 0 in	HERS 2006	None
_____	7	W	Vinyl	Low-E Double	Yes	0.5	0.6	N	6 ft²	1 ft 0 in	0 ft 0 in	HERS 2006	None

INFILTRATION & VENTING

√	Method	SLA	CFM 50	ACH 50	ELA	EqLA	---- Forced Ventilation ---- Supply CFM	Exhaust CFM	Run Time Fraction	Fan Watts
_____	Default	0.00036	2125	7.08	116.6	219.4	0 cfm	0 cfm	0	0

COOLING SYSTEM

√	#	System Type	Subtype	Efficiency	Capacity	Air Flow	SHR	Ductless
_____	1	Central Unit	None	SEER: 13	20 kBtu/hr	600 cfm	0.75	False

HEATING SYSTEM

√	#	System Type	Subtype	Efficiency	Capacity	Ductless
_____	1	Electric Heat Pump	None	HSPF: 7.7	20 kBtu/hr	False

HOT WATER SYSTEM

√	#	System Type	EF	Cap	Use	SetPnt	Conservation
_____	1	Electric	0.97	40 gal	60 gal	120 deg	None

SOLAR HOT WATER SYSTEM

√	FSEC Cert #	Company Name	System Model #	Collector Model #	Collector Area	Storage Volume	FEF
_____	None	None			ft²		

DUCTS

√	#	Supply Location	Supply R-Value	Supply Area	Return Location	Return Area	Leakage Type	Air Handler	CFM 25	Percent Leakage	QN	RLF
____	1	Interior	6	140 ft²	Interior	106.5 ft	Default Leakage	Interior				

TEMPERATURES

Programable Thermostat: None

Ceiling Fans:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Cooling	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Heating	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Venting	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]

Thermostat Schedule: HERS 2006 Reference

Schedule Type		Hours 1	2	3	4	5	6	7	8	9	10	11	12
Cooling (WD)	AM	78	78	78	78	78	78	78	78	78	78	78	78
	PM	78	78	78	78	78	78	78	78	78	78	78	78
Cooling (WEH)	AM	78	78	78	78	78	78	78	78	78	78	78	78
	PM	78	78	78	78	78	78	78	78	78	78	78	78
Heating (WD)	AM	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68
Heating (WEH)	AM	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68

FORM 1100A-08

Code Compliance Cheklist

Residential Whole Building Performance Method A - Details

ADDRESS:	PERMIT #:
Orlando, FL,	

INFILTRATION REDUCTION COMPLIANCE CHECKLIST

COMPONENTS	SECTION	REQUIREMENTS FOR EACH PRACTICE	CHECK
Exterior Windows & Doors	N1106.AB.1.1	Maximum: .3 cfm/sq.ft. window area; .5 cfm/sq.ft. door area.	
Exterior & Adjacent Walls	N1106.AB.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	N1106.AB.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	N1106.AB.1.2.3	Between walls & ceilings; penetrations of ceiling plane to 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	N1106.AB.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 with < 2.0 cfm from conditioned space, tested.	
Multi-story Houses	N1106.AB.1.2.5	Air barrier on perimeter of floor cavity between floors.	
Additional Infiltration reqts	N1106.AB.1.3	Exhaust fans vented to outdoors, dampers; combustion space heaters comply with NFPA, have combustion air.	

OTHER PRESCRIPTIVE MEASURES (must be met or exceeded by all residences.)

COMPONENTS	SECTION	REQUIREMENTS	CHECK
Water Heaters	N1112.AB.3	Comply with efficiency requirements in Table N112.ABC.3. Switch or clearly marked circuit breaker (electric) or cutoff (gas) must be provided. External or built-in heat trap required.	
Swimming Pools & Spas	N1112.AB.2.3	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%. Heat pump pool heaters shall have a minimum COP of 4.0.	
Shower heads	N1112.AB.2.4	Water flow must be restricted to no more than 2.5 gallons per minute at 80 PSIG.	
Air Distribution Systems	N1110.AB	All ducts, fittings, mechanical c shall be mechanically attache accordance with the criteria of Ducts in unconditioned attics:	
HVAC Controls	N1107.AB.2	Separate readily accessible m each system.	
Insulation	N1104.AB.1 N1102.B.1.1	Ceilings-Min. R-19. Common v sides. Common ceiling & floor	

9/22/10

ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE INDEX* = 72

The lower the EnergyPerformance Index, the more efficient the home.

1. New construction or existing		New (From Plans)
2. Single family or multiple family		Single-family
3. Number of units, if multiple family		1
4. Number of Bedrooms		3
5. Is this a worst case?		No
6. Conditioned floor area (ft²)		2250
7. Windows**	Description	Area
a. U-Factor: SHGC:	Dbl, U=0.50 SHGC=0.60	207.83 ft²
b. U-Factor: SHGC:	N/A	ft²
c. U-Factor: SHGC:	N/A	ft²
d. U-Factor: SHGC:	N/A	ft²
e. U-Factor: SHGC:	N/A	ft²

8. Floor Types	Insulation	Area
a. Crawlspace	R=0.0	2250.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²

9. Wall Types	Insulation	Area
a. Frame - Wood, Exterior	R=13.0	1680.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²
d. N/A	R=	ft²

10. Ceiling Types	Insulation	Area
a. Under Attic (Vented)	R=38.0	2250.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²

11. Ducts	
a. Sup: Interior Ret: Interior AH: Interior	Sup. R= 6, 140 ft²
12. Cooling systems	
a. Central Unit	Cap: 20 kBtu/hr SEER: 13
13. Heating systems	
a. Electric Heat Pump	Cap: 20 kBtu/hr HSPF: 7.7
14. Hot water systems	
a. Electric	Cap: 40 gallons EF: 0.97
b. Conservation features None	
15. Credits	None

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 Index is only available through the EnergyGauge USA - FlaRes2008 computer program. This is not a Building Energy Rating. If your Index is below 100, your home may qualify for incentives if you obtain a Florida Energy Gauge Rating. Contact the E (321) 638-1492 or see the Energy Gauge web site at energygauge.com for informatic Raters. For information about Florida's Energy Efficiency Code for Building Construc Department of Community Affairs at (850) 487-1824.

**Label required by Section 13-104.4.5 of the Florida Building Code, Building, or Sect of the Florida Building Code, Residential, if not DEFAULT.

FORM 1100A-08

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Community Affairs Residential Performance Method A

Project Name:	EZ-802-FL	Builder Name:	
Street:		Permit Office:	
City, State, Zip:	Labell , FL ,	Permit Number:	
Owner:		Jurisdiction:	
Design Location:	FL, Lee/Collier		

1. New construction or existing		New (From Plans)	9. Wall Types	Insulation	Area
2. Single family or multiple family		Single-family	a. Frame - Wood, Exterior	R=13.0	1680.00 ft²
3. Number of units, if multiple family		1	b. N/A	R=	ft²
4. Number of Bedrooms		3	c. N/A	R=	ft²
5. Is this a worst case?		No	d. N/A	R=	ft²
6. Conditioned floor area (ft²)		2250	10. Ceiling Types	Insulation	Area
7. Windows	Description	Area	a. Under Attic (Vented)	R=38.0	2250.00 ft²
a. U-Factor: SHGC:	Dbl, U=0.50 SHGC=0.60	207.83 ft²	b. N/A	R=	ft²
b. U-Factor: SHGC:	N/A	ft²	c. N/A	R=	ft²
c. U-Factor: SHGC:	N/A	ft²	11. Ducts		
d. U-Factor: SHGC:	N/A	ft²	a. Sup: Interior Ret: Interior AH: Interior Sup. R= 6, 140 ft²		
e. U-Factor: SHGC:	N/A	ft²	12. Cooling systems		
8. Floor Types	Insulation	Area	a. Central Unit		Cap: 20 kBtu/hr SEER: 13
a. Crawlspace	R=0.0	2250.00 ft²	13. Heating systems		
b. N/A	R=	ft²	a. Electric Heat Pump		Cap: 20 kBtu/hr HSPF: 7.7
c. N/A	R=	ft²	14. Hot water systems		
			a. Electric		Cap: 40 gallons EF: 0.97
			b. Conservation features None		
			15. Credits		None

Glass/Floor Area:

lified Loads: 44.26
eline Loads: 61.07

PASS

I hereby certify that this calculation are Code.

PREPARED BY:
DATE: _____

I hereby certify that with the Florida En

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: _____

- **Compliance requires certification by the air handler unit manufacturer that the air handler enclosure qualifies as certified factory-sealed in accordance with N1110.A.3.**

PROJECT

Title:	EZ-802-FL	Bedrooms:	3	Adress Type:	Street Address
Building Type:	FLAsBuilt	Bathrooms:	0	Lot #	
Owner:		Conditioned Area:	2250	SubDivision:	
# of Units:	1	Total Stories:	1	PlatBook:	
Builder Name:		Worst Case:	No	Street:	
Permit Office:		Rotate Angle:	0	County:	Hendry
Jurisdiction:		Cross Ventilation:		City, State, Zip:	Labell ,
Family Type:	Single-family	Whole House Fan:			FL ,
New/Existing:	New (From Plans)				
Comment:					

CLIMATE

√	Design Location	TMY Site	IECC Zone	Design Temp 97.5 %	Design Temp 2.5 %	Int Design Temp Winter	Int Design Temp Summer	Heating Degree Days	Design Moisture	Daily Temp Range
_____	FL, Lee/Collier	FL_SOUTHWEST_FLORI	2	46	91	75	70	321	58	Medium

FLOORS

√	#	Floor Type	Exposed Perimeter	Wall Ins. R-Value	Area	Floor Joist R-Value	Tile	Wood	Carpet
_____	1	Crawlspace	1 ft	0	2250 ft²	13	0	0	1

ROOF

√	#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	Tested	Deck Insul.	Pitch
_____	1	Gable or shed	Composition shingles	2319 ft²	280 ft²	Medium	0.96	No	0	14 deg

ATTIC

√	#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC
_____	1	Full attic	Vented	300	2250 ft²	N	N

CEILING

√	#	Ceiling Type	R-Value	Area	Framing Frac	Truss Type
_____	1	Under Attic (Vented)	38	2250 ft²	0.11	Wood

WALLS

√	#	Ornt	Adjacent To	Wall Type	Cavity R-Value	Area	Sheathing R-Value	Framing Fraction	Solar Absor.
_____	1	N	Exterior	Frame - Wood	13	480 ft²		0.23	0.75
_____	2	S	Exterior	Frame - Wood	13	480 ft²		0.23	0.75
_____	3	E	Exterior	Frame - Wood	13	360 ft²		0.23	0.75
_____	4	W	Exterior	Frame - Wood	13				

DOORS

√	#	Ornt	Door Type	Storms	U-Value	Area
____	1	E	Insulated	None	0.46	20 ft²
____	2	S	Insulated	None	0.46	20 ft²

WINDOWS

Window orientation below is as entered. Actual orientation is modified by rotate angle shown in "Project" section above.

√	#	Ornt	Frame	Panes	NFRC	U-Factor	SHGC	Storms	Area	Overhang Depth	Overhang Separation	Int Shade	Screening
____	1	N	Vinyl	Low-E Double	Yes	0.5	0.6	N	20 ft²	1 ft 0 in	0 ft 0 in	HERS 2006	None
____	2	N	Vinyl	Low-E Double	Yes	0.5	0.6	N	16.67 ft²	1 ft 0 in	0 ft 0 in	HERS 2006	None
____	3	N	Vinyl	Low-E Double	Yes	0.5	0.6	N	46.5 ft²	1 ft 0 in	0 ft 0 in	HERS 2006	None
____	4	N	Vinyl	Low-E Double	Yes	0.5	0.6	N	9 ft²	1 ft 0 in	0 ft 0 in	HERS 2006	None
____	5	S	Vinyl	Low-E Double	Yes	0.5	0.6	N	93 ft²	1 ft 0 in	0 ft 0 in	HERS 2006	None
____	6	W	Vinyl	Low-E Double	Yes	0.5	0.6	N	16.67 ft²	1 ft 0 in	0 ft 0 in	HERS 2006	None
____	7	W	Vinyl	Low-E Double	Yes	0.5	0.6	N	6 ft²	1 ft 0 in	0 ft 0 in	HERS 2006	None

INFILTRATION & VENTING

√	Method	SLA	CFM 50	ACH 50	ELA	EqLA	---- Forced Ventilation ---- Supply CFM	Exhaust CFM	Run Time Fraction	Fan Watts
____	Default	0.00036	2125	7.08	116.6	219.4	0 cfm	0 cfm	0	0

COOLING SYSTEM

√	#	System Type	Subtype	Efficiency	Capacity	Air Flow	SHR	Ductless
____	1	Central Unit	None	SEER: 13	20 kBtu/hr	600 cfm	0.75	False

HEATING SYSTEM

√	#	System Type	Subtype	Efficiency	Capacity	Ductless
____	1	Electric Heat Pump	None	HSPF: 7.7	20 kBtu/hr	False

HOT WATER SYSTEM

√	#	System Type	EF	Cap	Use	SetPnt	Conservation
____	1	Electric	0.97	40 gal	60 gal	120 deg	None

SOLAR HOT WATER SYSTEM

√	FSEC Cert #	Company Name	System Model #	Collector Model #	Collector Area	Storage Volume	FEF
____	None	None			ft²		

DUCTS

√	#	---- Supply ---- Location	R-Value	Area	---- Return ---- Location	Area	Leakage Type	Air Handler	CFM 25	Percent Leakage	QN	RLF
____	1	Interior	6	140 ft²	Interior	106.5 ft	Default Leakage	Interior				

TEMPERATURES

Programable Thermostat: None

Ceiling Fans:

Cooling	[X] Jan	[X] Feb	[X] Mar	[X] Apr	[X] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[X] Oct	[X] Nov	[X] Dec
Heating	[X] Jan	[X] Feb	[X] Mar	[X] Apr	[X] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[X] Oct	[X] Nov	[X] Dec
Venting	[X] Jan	[X] Feb	[X] Mar	[X] Apr	[X] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[X] Oct	[X] Nov	[X] Dec

Thermostat Schedule: HERS 2006 Reference

Schedule Type		Hours 1	2	3	4	5	6	7	8	9	10	11	12
Cooling (WD)	AM	78	78	78	78	78	78	78	78	78	78	78	78
	PM	78	78	78	78	78	78	78	78	78	78	78	78
Cooling (WEH)	AM	78	78	78	78	78	78	78	78	78	78	78	78
	PM	78	78	78	78	78	78	78	78	78	78	78	78
Heating (WD)	AM	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68
Heating (WEH)	AM	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68

FORM 1100A-08

Code Compliance Cheklist

Residential Whole Building Performance Method A - Details

ADDRESS:	PERMIT #:
Labell, FL.	

INFILTRATION REDUCTION COMPLIANCE CHECKLIST

COMPONENTS	SECTION	REQUIREMENTS FOR EACH PRACTICE	CHECK
Exterior Windows & Doors	N1106.AB.1.1	Maximum: .3 cfm/sq ft. window area; .5 cfm/sq.ft. door area.	
Exterior & Adjacent Walls	N1106.AB.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	N1106.AB.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	N1106.AB.1.2.3	Between walls & ceilings; penetrations of ceiling plane to 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	N1106.AB.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 with < 2.0 cfm from conditioned space, tested.	
Multi-story Houses	N1106.AB.1.2.5	Air barrier on perimeter of floor cavity between floors.	
Additional Infiltration reqts	N1106.AB.1.3	Exhaust fans vented to outdoors, dampers; combustion space heaters comply with NFPA, have combustion air.	

OTHER PRESCRIPTIVE MEASURES (must be met or exceeded by all residences.)

COMPONENTS	SECTION	REQUIREMENTS	CHECK
Water Heaters	N1112.AB.3	Comply with efficiency requirements in Table N112.ABC.3. Switch or clearly marked circuit breaker (electric) or cutoff (gas) must be provided. External or built-in heat trap required.	
Swimming Pools & Spas	N1112.AB.2.3	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%. Heat pump pool heaters shall have a minimum COP of 4.0.	
Shower heads	N1112.AB.2.4	Water flow must be restricted to no more than 2.5 gallons per minute at 80 PSIG.	
Air Distribution Systems	N1110.AB	All ducts, fittings, mechanical e shall be mechanically attached, accordance with the criteria of S Ducts in unconditioned attics: F	
HVAC Controls	N1107.AB.2	Separate readily accessible ma each system.	
Insulation	N1104.AB.1 N1102.B.1.1	Ceilings-Min. R-19. Common w sides. Common ceiling & floors	

ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE INDEX* = 72

The lower the EnergyPerformance Index, the more efficient the home.

1. New construction or existing		New (From Plans)
2. Single family or multiple family		Single-family
3. Number of units, if multiple family		1
4. Number of Bedrooms		3
5. Is this a worst case?		No
6. Conditioned floor area (ft²)		2250
7. Windows**	Description	Area
a. U-Factor: SHGC:	Dbl, U=0.50 SHGC=0.60	207.83 ft²
b. U-Factor: SHGC:	N/A	ft²
c. U-Factor: SHGC:	N/A	ft²
d. U-Factor: SHGC:	N/A	ft²
e. U-Factor: SHGC:	N/A	ft²

8. Floor Types	Insulation	Area
a. Crawlspace	R=0.0	2250.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²

9. Wall Types	Insulation	Area
a. Frame - Wood, Exterior	R=13.0	1680.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²
d. N/A	R=	ft²

10. Ceiling Types	Insulation	Area
a. Under Attic (Vented)	R=38.0	2250.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²

11. Ducts
a. Sup: Interior Ret: Interior AH: Interior Sup. R= 6, 140 ft²

12. Cooling systems
a. Central Unit — Cap: 20 kBtu/hr SEER: 13

13. Heating systems
a. Electric Heat Pump — Cap: 20 kBtu/hr HSPF: 7.7

14. Hot water systems
a. Electric — Cap: 40 gallons EF: 0.97

b. Conservation features
None

15. Credits — None

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 Index is only available through the EnergyGauge USA - FlaRes2008 computer program. This is not a Building Energy Rating. If your Index is below 100, your home may qualify for incentives if you obtain a Florida Energy Gauge Rating. Contact the Er (321) 638-1492 or see the Energy Gauge web site at energygauge.com for informatior Raters. For information about Florida's Energy Efficiency Code for Building Constructi Department of Community Affairs at (850) 487-1824.

**Label required by Section 13-104.4.5 of the Florida Building Code, Building, or Sectic of the Florida Building Code, Residential, if not DEFAULT.

BEAM CONFIGURATION	GROUND SNOW LOAD (PSF)			
	20. PSF	30. PSF	40. PSF	50. PSF
(1) 1.5x5.5 LAM beam (see chart) LAM	8 ft 3 in	7 ft 2 in	6 ft 6 in	6 ft 0 in
(1) 1.5x7.25 LAM beam (see chart) LAM	10 ft 7 in	9 ft 4 in	8 ft 7 in	8 ft 0 in
(1) 1.5x9.25 LAM beam (see chart) LAM	13 ft 3 in	11 ft 8 in	10 ft 9 in	9 ft 8 in
(1) 1.5x12 LAM beam (see chart) LAM	16 ft 9 in	14 ft 9 in	13 ft 7 in	12 ft 3 in
(1) 1.5x16 LAM beam (see chart) LAM	21 ft 11 in	19 ft 4 in	17 ft 10 in	16 ft 1 in
(1) 1.5x20 LAM beam (see chart) LAM	27 ft 0 in	23 ft 10 in	21 ft 11 in	19 ft 9 in
(1) 1.5x24 LAM beam (see chart) LAM	32 ft 1 in	28 ft 3 in	26 ft 0 in	23 ft 5 in
(1) 2 x 6 #3 SPF	3 ft 8 in	3 ft 3 in	3 ft 2 in	2 ft 8 in
(1) 2 x 8 #3 SPF	4 ft 8 in	4 ft 2 in	4 ft 0 in	3 ft 5 in
(1) 2 x 10 #3 SPF	5 ft 9 in	5 ft 1 in	4 ft 11 in	4 ft 2 in
(1) 2 x 12 #3 SPF	6 ft 8 in	5 ft 11 in	5 ft 8 in	4 ft 11 in
(1) 2 x 6 #2 SPF	4 ft 11 in	4 ft 4 in	4 ft 2 in	3 ft 7 in
(1) 2 x 8 #2 SPF	6 ft 3 in	5 ft 6 in	5 ft 4 in	4 ft 7 in
(1) 2 x 10 #2 SPF	7 ft 8 in	6 ft 9 in	6 ft 6 in	5 ft 7 in
(1) 2 x 12 #2 SPF	8 ft 10 in	7 ft 10 in	7 ft 7 in	6 ft 6 in

MINIMUM RIDGEBEAM DEPTH AT CRITICAL SECTION OF TAPERED RIDGEBEAM

(MEMBER QTY) FULL BEAM DEPTH	20. PSF	30. PSF	40. PSF	50. PSF
(1) 1.5x5.5 LAM beam (see chart) LAM	3.45"	3.82"	4.19"	4.51"
(1) 1.5x7.25 LAM beam (see chart) LAM	4.44"	4.94"	5.52"	5.99"
(1) 1.5x9.25 LAM beam (see chart) LAM	5.52"	6.15"	6.85"	7.18"
(1) 1.5x12 LAM beam (see chart) LAM	6.98"	7.77"	8.65"	9.06"
(1) 1.5x16 LAM beam (see chart) LAM	9.1"	10.12"	11.27"	11.8"
(1) 1.5x20 LAM beam (see chart) LAM	11.18"	12.44"	13.84"	14.49"
(1) 1.5x24 LAM beam (see chart) LAM	13.22"	14.71"	16.37"	17.13"

APPROVED LAM BEAMS- WHEN USING GRADE LAM BEAM (SEE CHART)

2.0 MasterPlank

Murphy 2.0E 3100 Fb LVL

2.0e Microllam LVL

GENERAL NOTES:

1 180" MAX. UNIT.

2 WIND SPEED: 130 MPH MAX.

3 MIN. DEPTH AT CRITCAL SECTION IS MEASURED AT INSIDE FACE OF EXTERIOR WALL.

4 THIS DETAIL IS APPLICABLE TO ONLY LVL BEAMS WITH AN FV=135 PSI OR BETTER.

5 RIDGE BEAM MUST BE IN FULL WOOD TO WOOD CONTACT WITH TOP PLATE FOR SPECIFIED BEARING LENGTH.

6 SEE COLUMN DESIGNS FOR MINIMUM BEARING LENGTH OR BEAM STIFFENER REQUIREMENTS.

7 (F): INDICATES THAT BEAM MEMBERS ARE LAYED FLAT. OTHERWISE ALL BEAMS ARE ON EDGE.

8 DESIGN IN ACCORDANCE WITH THE IRC (2006)

9 DOUBLE BEAMS MAY BE STACKED VERSES DOUBLE PLY IF MEMBERS ARE SAME SIZE AND MATERIAL AND REQUIRED FASTENERS ARE EQUALLY DIVIDED BETWEEN BEAMS.

MAXIMUM LIVE AND DEAD LOADS

BOTTOM CHORD LIVE LOAD: 10 PSF

TOP CHORD DEAD: 7 PSF

BOTTOM CHORD DEAD: 8 PSF

FLOOR LIVE LOAD: 0 PSF

BEAMS SUPPORT SECOND FLOOR LIVING AREA

CMH Engineering

calc. ref. CRC-60.3.R.K.K_.20-2.20

1 STORY- W.O ATTIC

RIDGE BEAM SPAN CHART

Drawn by: jww Ver. 6.1

Date: 01/19/10

APPROVAL #:

RC-60.3.R.K.K_.20-2

APPLICATION ENGINEERING FOR HEATING AND COOLING

SOUTHERN ENERGY HOMES
Hwy 41 N., PO Box 269
Addison, AL 35540

Manufacturer's Model #: EZ-802
HVAC System Type: OVERHEAD GRAD FLEX FOR UPFLOW (SPLIT A/C)

Prepared By LaSalle Air Systems 9/7/2010 (Method & Output C 2008)

Calculations on this page are based on design parameters set forth in ASHRAE and ACCA Manuals J and D.
Design calculations are based on ACTUAL orientation. Room loads may vary based on actual conditions.

ENTIRE HOUSE VALUES - DESIGN ZONE: FL- DCA, South BLUE ORIENTATION

COOLING LOAD:	**19,694**	Btuh based on outside temp of	96	° F (35 C) with inside temp reduced to	75	°	F (23 C)
HEATING LOAD:	**20,637**	Btuh based on outside temp of	34	° F (1 C) with inside temp raised to	70	°	F (21 C)
GRAINS DIFFERENCE:	**50**	outside wet bulb	87.7	° F	outside RH:	79.7	%

CONSTRUCTION DETAILS & U FACTORS: (19-13-38)

TOTAL FLOOR AREA:	2126.06 s.f.	TRUE OUTSIDE PERIMETER:		227.33 ft			
LOW CEILING HEIGHT:	108 in.	HIGH CEILING HEIGHT:		108 in.			
NET WALL AREA:	1763.25 s.f.	ROOF:	0.027	FLOOR DUCTS (U):	0		
TOTAL Std window	217.83 s.f.	WALLS:	0.077	ATTIC DUCTS (U):	0.167		
TOTAL S.G.D.	0.00 s.f.	FLOOR:	0.054	EXT. DUCTS (U):	0.167		
TOTAL Glass Block	0.00 s.f.	Std windc	0.500	ATTIC DUCT AREA:	47.527	s.f exposed	
TOTAL Skylite	0.00 s.f.	S.G.D.	0.790	EXT. DUCT AREA:	0	s.f exposed	
TOTAL DOOR1 AREA	64.92 s.f.	Glass Blc	0.790	PEOPLE:	4		
TOTAL DOOR2 AREA:	0.00 s.f.	Skylite	0.790	FIREPLACES:	0		
WINDOW % OF FLOOR	10.25 %	DOOR1:	0.410	DUCT GAIN:	955	Btuh	
WINDOW % OF WALL	10.65 %	DOOR2:	0.410	DUCT LOSS:	923	Btuh	
LATENT GAIN:	3091 Btuh			SUMMER INFILTR:	63.9	cfm	
Mech. Ventilation :	0 cfm	Altitude:	15 ft	WINTER INFILTR:	95.9	cfm	

ROOM BY ROOM VALUES:

544.8 FPM, max velocity in trunk #: 6

	Requirements based on actual house loads without incorporating duct friction losses.			Cooling Air Values for 2 ton unit		Heating Air Values for	36 Gas/Oil	7.5 KW Elec	Maximum A/C capacity Calibrated Blower Test
ROOM NAME	HEATING LOSS (Btu)	COOLING GAIN (Btu)	CFM DIST	CFM	Btuh	CFM	Btuh	Btuh	Btuh
Bedroom #3	2,378	2,087	81	90	2,589	81	3,524	2,782	6,386
Bedroom #2	2,137	1,880	73	92	2,638	82	3,591	2,835	6,508
Utility	1,556	1,469	58	55	1,580	49	2,150	1,697	3,962
Hall Bath	1,259	1,254	50	46	1,318	41	1,794	1,416	3,251
Foyer	1,766	1,394	54	80	2,305	72	3,137	2,476	5,671
M. Bedroom	2,666	2,326	86	95	2,743	86	3,734	2,948	6,515
M. Bath	2,232	2,591	100	93	2,689	84	3,661	2,890	5,992
WIC	591	535	20	26	742	23	1,010	798	1,639
Living Rm	2,746	3,143	119	116	3,351	105	4,562	3,601	8,072
Dining	1,048	798	32	37	1,058	33	1,441	1,137	2,407
Kitchen	2,259	2,218	84	97	2,789	87	3,797	2,997	6,966
TOTALS	20,637	19,694	757	826	23,802	744	32,400	25,576	57,368

APPLICATION ENGINEERING
DUCT AIR FLOW AND SIZING WORKSHEET (MANUAL D)

Manufacturer: SOUTHERN ENERGY HOMES
Hwy 41 N., PO Box 269
Addison, AL 35540

Model #: EZ-802
HVAC System Type: OVERHEAD GRAD FLEX FOR UPFLOW (SPLIT A/C)
Design Zone: FL- DCA, South

Calculations include factors for duct air temperature change and pressure drops through ducts. All joints are tightly fitted or sealed.

Blower CFM 775 @ 0.8 E.S.P. TEL= 490.5394 FR= 0.0999 *(A/C Coil included)*
Altitude = 15 ft

BRANCH DUCT LISTING ANALYSIS

BR #		Trunk #	Metal (ft)	F. G. (ft)	Flex (ft)	Bends/ Fittings(ft	Total Eq. Length	Heat Btuh	Cool Btuh	Heat cfm	Cool cfm	Design cfm	Round Size	User Input Rectangle Size (i.d.) x (i.d.)	Final Round Size	Final Velocity fpm
1	Bedroom #3	3	0	4	17	268.309	289.309	2,378	2,087	60	81	81	5.42		7.0	302.4
2	Bedroom #2	3	0	4	14	264.516	282.516	2,137	1,880	54	73	73	5.20		7.0	271.7
3	M. Bedroom	5	0	0	49	346.151	395.151	1,318	1,150	34	47	47	4.84		6.0	237.7
4	M. Bedroom	5	0	0	43	343.709	386.709	1,348	1,176	35	48	48	4.52		6.0	242.1
5	Foyer	4	0	4	26	301.724	331.724	1,766	1,394	45	55	55	4.94		7.0	205.7
6	Hall Bath	2	0	4	17	201.262	222.262	1,259	1,254	31	47	47	4.23		5.0	346.1
7	Utility	6	0	4	7	265.71	276.71	1,556	1,469	39	57	57	4.70		6.0	288.2
8	Kitchen	6	0	4	8	266.01	278.01	756	742	19	29	29	3.51		5.0	209.8
9	M. Bath	9	0	0	47	367.395	414.395	2,232	2,591	58	106	106	6.20		8.0	303.9
10	WIC	9	0	0	36	404.539	440.539	591	535	16	22	22	3.28		5.0	162.4
11	Living Rm	8	0	0	29	325.378	354.378	1,243	1,423	32	57	57	4.87		6.0	288.7
12	Living Rm	7	0	4	21	264.544	289.544	1,503	1,720	38	67	67	5.09		6.0	339.3
13	Dining	7	0	4	16	279.741	299.741	1,048	798	26	31	31	3.76		5.0	227.6
14	Kitchen	7	0	4	18	263.644	285.644	1,503	1,475	38	57	57	4.77		6.0	290.5
N/A	Other Rooms							-	-							
								20,637	19,694	524	775	775				

TRUNK DUCT LISTING ANALYSIS

TRUNK # 1		4	90	94	20,637	19,694	775	10.53			16.0	554.8
TRUNK # 2	4		94	98	16,122	19,694	775	10.53	14	18	17.3	442.7
TRUNK # 3		12	182.916	194.916	4,515	3,968	153	6.13			9.0	347.3
TRUNK # 4		22	207.601	229.601	4,077	3,720	149	6.30			9.0	337.7
TRUNK # 5		17	279.509	296.509	2,666	2,326	94	5.61			8.0	269.9
TRUNK # 6		3	180.216	183.216	2,312	2,211	85	5.00			6.0	433.9
TRUNK # 7		6	175.695	181.695	6,877	8,541	340	8.47			12.0	432.4
TRUNK # 8		19	240.178	259.178	1,243	4,549	185	7.19			10.0	339.1
TRUNK # 9		7	302.442	309.442	2,823	3,126	128	6.61			9.0	290.3
TRUNK # 10					-	-	0		0	0		
TRUNK # 11					-	-	0		0	0		
TRUNK # 12					-	-	0		0	0		
TRUNK # 13					-	-	0		0	0		
TRUNK # 14					-	-	0		0	0		
TRUNK # 15					-	-	0		0	0		
LONGEST RETURN DUCT		0	0	50			775	9.99	19	19	20.8	309.0

APPLICATION ENGINEERING FOR HEATING AND COOLING

SOUTHERN ENERGY HOMES
Hwy 41 N., PO Box 269
Addison, AL 35540

Manufacturer's Model #: EZ-802
HVAC System Type: OVERHEAD GRAD FLEX FOR UPFLOW (SPLIT A/C)

Prepared By LaSalle Air Systems 9/7/2010 [Method & Output C 2008]

Calculations on this page are based on design parameters set forth in ASHRAE and ACCA Manuals J and D.
Design calculations are based on ACTUAL orientation. Room loads may vary based on actual conditions.

ENTIRE HOUSE VALUES - DESIGN ZONE: FL- DCA, Central BLUE ORIENTATION

COOLING LOAD:	**19,907**	Btuh based on outside temp of	97	° F (36 C) with inside temp reduced to	75	° F (23 C)
HEATING LOAD:	**26,367**	Btuh based on outside temp of	24	° F (-5 C) with inside temp raised to	70	° F (21 C)
GRAINS DIFFERENCE:	**45**	outside wet bulb	85.4	° F outside RH:	72.0	%

CONSTRUCTION DETAILS & U FACTORS: (19-13-38)

TOTAL FLOOR AREA:	2126.06 s.f.	TRUE OUTSIDE PERIMETER:		227.33 ft			
LOW CEILING HEIGHT:	108 in.	HIGH CEILING HEIGHT:		108 in.			
NET WALL AREA:	1763.25 s.f.	ROOF:	0.027	FLOOR DUCTS (U):	0		
TOTAL Std window	217.83 s.f.	WALLS:	0.077	ATTIC DUCTS (U):	0.167		
TOTAL S.G.D.	0.00 s.f.	FLOOR:	0.054	EXT. DUCTS (U):	0.167		
TOTAL Glass Block	0.00 s.f.	Std windc	0.500	ATTIC DUCT AREA:	47.527	s.f exposed	
TOTAL Skylite	0.00 s.f.	S.G.D.	0.790	EXT. DUCT AREA:	0	s.f exposed	
TOTAL DOOR1 AREA:	64.92 s.f.	Glass Blc	0.790	PEOPLE:	4		
TOTAL DOOR2 AREA:	0.00 s.f.	Skylite	0.790	FIREPLACES:	0		
WINDOW % OF FLOOR	10.25 %	DOOR1:	0.410	DUCT GAIN:	969	Btuh	
WINDOW % OF WALL	10.65 %	DOOR2:	0.410	DUCT LOSS:	1179	Btuh	
LATENT GAIN:	2873 Btuh			SUMMER INFILTR:	63.9	cfm	
Mech. Ventilation :	0 cfm	Altitude:	30 ft	WINTER INFILTR:	95.9	cfm	

ROOM BY ROOM VALUES:

544.8 FPM, max velocity in trunk # 6

	Requirements based on actual house loads without incorporating duct friction losses.			Cooling Air Values for 2 ton unit		Heating Air Values for	36 Gas/Oil	10 KW Elec	Maximum A/C capacity Calibrated Blower Test
ROOM NAME	HEATING LOSS (Btu)	COOLING GAIN (Btu)	CFM DIST	CFM	Btuh	CFM	Btuh	Btuh	Btuh
Bedroom #3	3,038	2,118	82	90	2,567	81	3,524	3,707	6,382
Bedroom #2	2,730	1,910	74	92	2,616	82	3,591	3,777	6,504
Utility	1,988	1,478	58	55	1,567	49	2,150	2,262	3,960
Hall Bath	1,608	1,259	50	46	1,307	41	1,794	1,887	3,249
Foyer	2,256	1,422	55	80	2,286	72	3,137	3,300	5,668
M. Bedroom	3,406	2,361	88	95	2,721	86	3,734	3,928	6,512
M. Bath	2,851	2,611	100	93	2,667	84	3,661	3,851	5,988
WIC	755	537	20	26	736	23	1,010	1,063	1,638
Living Rm	3,509	3,175	120	116	3,324	105	4,562	4,799	8,068
Dining	1,339	804	32	37	1,050	33	1,441	1,516	2,406
Kitchen	2,886	2,231	84	97	2,766	87	3,797	3,994	6,962
TOTALS	26,367	19,907	764	826	23,607	744	32,400	34,082	57,336

APPLICATION ENGINEERING
DUCT AIR FLOW AND SIZING WORKSHEET (MANUAL D)

Manufacturer: SOUTHERN ENERGY HOMES
Hwy 41 N., PO Box 269
Addison, AL 35540

Model #: EZ-802
HVAC System Type: OVERHEAD GRAD FLEX FOR UPFLOW (SPLIT A/C)
Design Zone: FL- DCA, Central

Calculations include factors for duct air temperature change and pressure drops through ducts. All joints are tightly fitted or sealed.

Blower CFM 787 @ 0.8 E.S.P. TEL= 490.5394 FR= 0.0999 *(A/C Coil included)*
Altitude = 30 ft

BRANCH DUCT LISTING ANALYSIS

BR #		Trunk #	Metal (ft)	F. G. (ft)	Flex (ft)	Bends/ Fittings(ft	Total Eq. Length	Heat Btuh	Cool Btuh	Heat cfm	Cool cfm	Design cfm	Round Size	User Input Rectangle Size (i.d.) x (i.d.)	Final Round Size	Final Velocity fpm
1	Bedroom #3	3	0	4	17	268.309	289.309	3,038	2,118	76	82	82	5.45		7.0	306.9
2	Bedroom #2	3	0	4	14	264.516	282.516	2,730	1,910	68	74	74	5.22		7.0	276.0
3	M. Bedroom	5	0	0	49	346.151	395.151	1,684	1,167	44	47	47	4.87		6.0	241.3
4	M. Bedroom	5	0	0	43	343.709	386.709	1,722	1,194	45	48	48	4.55		6.0	245.7
5	Foyer	4	0	4	26	301.724	331.724	2,256	1,422	57	56	57	5.03		7.0	214.8
6	Hall Bath	2	0	4	17	201.262	222.262	1,608	1,259	40	47	47	4.23		5.0	347.4
7	Utility	6	0	4	7	265.71	276.71	1,988	1,478	50	57	57	4.71		6.0	290.0
8	Kitchen	6	0	4	8	266.01	278.01	966	747	24	29	29	3.52		5.0	211.1
9	M. Bath	9	0	0	47	367.395	414.395	2,851	2,611	75	107	107	6.22		8.0	306.2
10	WIC	9	0	0	36	404.539	440.539	755	537	20	22	22	3.29		5.0	163.3
11	Living Rm	8	0	0	29	325.378	354.378	1,589	1,437	41	57	57	4.90		6.0	291.7
12	Living Rm	7	0	4	21	264.544	289.544	1,920	1,738	48	67	67	5.11		6.0	342.7
13	Dining	7	0	4	16	279.741	299.741	1,339	804	34	31	34	3.94		5.0	247.2
14	Kitchen	7	0	4	18	263.644	285.644	1,920	1,484	48	57	57	4.78		6.0	292.3
N/A	Other Rooms							-	-							
								26,367	19,907	669	783	787				

TRUNK DUCT LISTING ANALYSIS

TRUNK # 1		4	90	94	26,367	19,907		787	10.59			16.0	563.4
TRUNK # 2	4		94	98	20,598	19,907		787	10.59	14	18	17.3	449.6
TRUNK # 3		12	182.916	194.916	5,769	4,029		156	6.18			9.0	352.6
TRUNK # 4		22	207.601	229.601	5,209	3,783		153	6.37			9.0	346.4
TRUNK # 5		17	279.509	296.509	3,406	2,361		96	5.64			8.0	273.9
TRUNK # 6		3	180.216	183.216	2,954	2,225		86	5.01			6.0	436.5
TRUNK # 7		6	175.695	181.695	8,786	8,612		345	8.52			12.0	439.1
TRUNK # 8		19	240.178	259.178	1,589	4,586		186	7.21			10.0	341.8
TRUNK # 9		7	302.442	309.442	3,607	3,149		129	6.64			9.0	292.4
TRUNK # 10					-	-		0		0	0		
TRUNK # 11					-	-		0		0	0		
TRUNK # 12					-	-		0		0	0		
TRUNK # 13					-	-		0		0	0		
TRUNK # 14					-	-		0		0	0		
TRUNK # 15					-	-		0		0	0		
LONGEST RETURN DUCT		0	0	50				787	10.04	19	19	20.8	313.8

APPLICATION ENGINEERING FOR HEATING AND COOLING

SOUTHERN ENERGY HOMES
Hwy 41 N., PO Box 269
Addison, AL 35540

Manufacturer's Model #: EZ-802
HVAC System Type: OVERHEAD GRAD FLEX FOR UPFLOW (SPLIT A/C)

Prepared By LaSalle Air Systems 9/7/2010 {Method & Output C 2008}

Calculations on this page are based on design parameters set forth in ASHRAE and ACCA Manuals J and D.
Design calculations are based on ACTUAL orientation. Room loads may vary based on actual conditions.

ENTIRE HOUSE VALUES - DESIGN ZONE: FL- DCA, North BLUE ORIENTATION

COOLING LOAD:	18,400	Btuh based on outside temp of	94	° F (34 C) with inside temp reduced to	75	° F (23 C)	
HEATING LOAD:	30,377	Btuh based on outside temp of	17	° F (-9 C) with inside temp raised to	70	° F (21 C)	
GRAINS DIFFERENCE:	40	outside wet bulb	83.2	° F	outside RH:	72.8	%

CONSTRUCTION DETAILS & U FACTORS: (19-13-38)

TOTAL FLOOR AREA:	2126.06	s.f.	TRUE OUTSIDE PERIMETER:		227.33	ft	
LOW CEILING HEIGHT:	108	in.	HIGH CEILING HEIGHT:		108	in.	
NET WALL AREA:	1763.25	s.f.	ROOF:	0.027	FLOOR DUCTS (U):	0	
TOTAL Std window	217.83	s.f.	WALLS:	0.077	ATTIC DUCTS (U):	0.167	
TOTAL S.G.D.	0.00	s.f.	FLOOR:	0.054	EXT. DUCTS (U):	0.167	
TOTAL Glass Block	0.00	s.f.	Std windc	0.500	ATTIC DUCT AREA:	47.527	s.f exposed
TOTAL Skylite	0.00	s.f.	S.G.D.	0.790	EXT. DUCT AREA:	0	s.f exposed
TOTAL DOOR1 AREA:	64.92	s.f.	Glass Blc	0.790	PEOPLE:	4	
TOTAL DOOR2 AREA:	0.00	s.f.	Skylite	0.790	FIREPLACES:	0	
WINDOW % OF FLOOR	10.25	%	DOOR1:	0.410	DUCT GAIN:	928	Btuh
WINDOW % OF WALL	10.65	%	DOOR2:	0.410	DUCT LOSS:	1358	Btuh
LATENT GAIN:	2655	Btuh			SUMMER INFILTR:	63.9	cfm
Mech. Ventilation :	0	cfm	Altitude:	40 ft	WINTER INFILTR:	95.9	cfm

ROOM BY ROOM VALUES:

544.8 FPM, max velocity in trunk # 6

	Requirements based on actual house loads without incorporating duct friction losses.			Cooling Air Values for 2 ton unit		Heating Air Values for	36	10 KW	Maximum A/C capacity
	HEATING	COOLING	CFM				Gas/Oil	Elec	Calibrated Blower Test
ROOM NAME	LOSS (Btu)	GAIN (Btu)	DIST	CFM	Btuh	CFM	Btuh	Btuh	Btuh
Bedroom #3	3,501	1,935	79	90	2,632	81	3,524	3,705	6,380
Bedroom #2	3,146	1,742	71	92	2,682	82	3,591	3,776	6,502
Utility	2,290	1,367	56	55	1,606	49	2,150	2,261	3,958
Hall Bath	1,853	1,162	48	46	1,340	41	1,794	1,886	3,248
Foyer	2,599	1,287	53	80	2,343	72	3,137	3,299	5,665
M. Bedroom	3,924	2,163	84	95	2,789	86	3,734	3,927	6,509
M. Bath	3,285	2,459	99	93	2,734	84	3,661	3,849	5,986
WIC	870	498	20	26	755	23	1,010	1,062	1,638
Living Rm	4,043	2,970	118	116	3,407	105	4,562	4,797	8,065
Dining	1,542	741	31	37	1,076	33	1,441	1,515	2,405
Kitchen	3,325	2,075	82	97	2,836	87	3,797	3,992	6,960
TOTALS	30,377	18,400	742	826	24,202	744	32,400	34,070	57,315

APPLICATION ENGINEERING
DUCT AIR FLOW AND SIZING WORKSHEET (MANUAL D)

Manufacturer: SOUTHERN ENERGY HOMES
Hwy 41 N., PO Box 269
Addison, AL 35540

Model #: EZ-802
HVAC System Type: OVERHEAD GRAD FLEX FOR UPFLOW (SPLIT A/C)
Design Zone: FL- DCA, North

Calculations include factors for duct air temperature change and pressure drops through ducts. All joints are tightly fitted or sealed

Blower CFM 800 @ 0.8 E.S.P. TEL= 490.5394 FR= 0.0999 *(A/C Coil included)*
Altitude = 40 ft

BRANCH DUCT LISTING ANALYSIS

BR #		Trunk #	Metal (ft)	F. G. (ft)	Flex (ft)	Bends/ Fittings(ft	Total Eq. Length	Heat Btuh	Cool Btuh	Heat cfm	Cool cfm	Design cfm	Round Size	User Input Rectangle Size (i.d.) x (i.d.)	Final Round Size	Final Velocity fpm
1	Bedroom #3	3	0	4	17	268.309	289.309	3,501	1,935	88	75	88	5.58		7.0	328.7
2	Bedroom #2	3	0	4	14	264.516	282.516	3,146	1,742	79	67	79	5.34		7.0	294.7
3	M. Bedroom	5	0	0	49	346.151	395.151	1,940	1,069	50	43	50	5.01		6.0	256.8
4	M. Bedroom	5	0	0	43	343.709	386.709	1,984	1,093	51	44	51	4.67		6.0	261.8
5	Foyer	4	0	4	26	301.724	331.724	2,599	1,287	66	51	66	5.26		7.0	247.4
6	Hall Bath	2	0	4	17	201.262	222.262	1,853	1,162	46	44	46	4.18		5.0	333.7
7	Utility	6	0	4	7	265.71	276.71	2,290	1,367	57	53	57	4.72		6.0	291.5
8	Kitchen	6	0	4	8	266.01	278.01	1,113	695	28	27	28	3.46		5.0	204.1
9	M. Bath	9	0	0	47	367.395	414.395	3,285	2,459	86	101	101	6.07		8.0	288.4
10	WIC	9	0	0	36	404.539	440.539	870	498	23	21	23	3.34		5.0	168.4
11	Living Rm	8	0	0	29	325.378	354.378	1,830	1,345	47	54	54	4.75		6.0	272.9
12	Living Rm	7	0	4	21	264.544	289.544	2,213	1,626	56	63	63	5.00		6.0	320.6
13	Dining	7	0	4	16	279.741	299.741	1,542	741	39	29	39	4.16		5.0	284.8
14	Kitchen	7	0	4	18	263.644	285.644	2,212	1,381	55	53	55	4.71		6.0	282.4
N/A	Other Rooms							-	-							
								30,377	18,400	771	724	800				

TRUNK DUCT LISTING ANALYSIS

TRUNK # 1		4	90	94	30,377	18,400		800	10.65			16.0	572.7
TRUNK # 2	4		94	98	23,731	18,400		800	10.65	14	18	17.3	456.9
TRUNK # 3		12	182.916	194.916	6,646	3,677		167	6.37			9.0	377.1
TRUNK # 4		22	207.601	229.601	6,002	3,450		168	6.66			9.0	380.2
TRUNK # 5		17	279.509	296.509	3,924	2,163		102	5.78			8.0	291.7
TRUNK # 6		3	180.216	183.216	3,403	2,062		85	4.99			6.0	433.2
TRUNK # 7		6	175.695	181.695	10,122	8,049		334	8.42			12.0	425.8
TRUNK # 8		19	240.178	259.178	1,830	4,302		177	7.09			10.0	324.9
TRUNK # 9		7	302.442	309.442	4,155	2,957		124	6.51			9.0	279.8
TRUNK # 10					-	-		0		0	0		
TRUNK # 11					-	-		0		0	0		
TRUNK # 12					-	-		0		0	0		
TRUNK # 13					-	-		0		0	0		
TRUNK # 14					-	-		0		0	0		
TRUNK # 15					-	-		0		0	0		
LONGEST RETURN DUCT		0	0	50				800	10.10	19	19	20.8	318.9

NEC 220.82

Southern Energy
Residential Electrical Feeder
Load Calculation for 120 / 240 Volt

DATE: 09/05/10
BY: SMP

MODEL : EZ-802

(B)(1) LIGHTING LOAD

Main Floor Size =		Tag Floor Size =		2nd. Floor Size =	
length =	60.00 ft.	length =	30.00 ft	length =	0.00 ft.
width =	30.00 ft.	width =	15.00 ft	width =	0.00 ft

Total area = 2215 sq. ft.
x 3 VA
6645 VA

Minimum number of 15 Amp circuits = **4**

(B)(2) SMALL APPLIANCE LOAD

No. of circuits = 4
x 1500 VA
6000 VA

LAUNDRY LOAD

No. of circuits = 1
x 1500 VA
1500 VA

(B)(3) APPLIANCE LOAD & (B)(4) MOTOR LOAD

Electric Range =	14200 VA	
Electric Water Heater =	3800 VA	
Electric Clothes Dryer =	5600 VA	
Electric Cooktop =	0 VA	
Electric Wall Oven =	0 VA	
Trash Compactor =	0 VA	
Dishwasher =	744 VA	
Garbage Disposal =	0 VA	
Hydromassage Tub Motor =	0 VA	
Gas/Oil furnace blower motor =	0 VA	
Microwave oven =	1550 VA	
Other =	0 VA	
Exhaust Fans (total of all) =	600 VA	1 Kitchen @ 120 VA each
	26494 VA	2 Bath @ 240 VA each

TOTAL OF LOADS (B)

(1) Lighting load =	6645	VA
(2) Small appliance load =	6000	VA
(2) Laundry load =	1500	VA
(3) Appliance & (4) Motor load	26494	VA
Subtotal =	40639	VA

Demand Factor

First 10000 VA @ 100% =	10000	VA
Remaining 30639 VA @ 40% =	12256	VA
General Load Total =	22256	VA

John W Wehle
9/13/10

(C) HEATING AND AIR-CONDITIONING LOAD (USE LARGEST)

(1) Air conditioning & cooling @ 100% =	0 VA
(2) Heat pump w/o supplemental electric heating @ 100% =	0 VA
(3) Electric thermal storage @ 100% =	0 VA
(4) Heat pump @ 100% & supplemental electric heating @ 65% =	0 VA
(5) Electric space heating (less than 4 units) @ 65% =	10660 VA

Total VA = 32916 VA / 240 Volts =

TOTAL OF ALL LOADS =	137	AMPS
Minimum Main Panel Size Required =	150	AMPS
Actual Main Panel Size Installed =	**200**	**AMPS**

Service Feeder Conductor Size Required = **4/0** AWG AL or CU-Clad AL
Table 310.15(B)(6) **2/0** AWG CU

Grounding Electrode Conductor Size = **2** AWG AL or CU-Clad AL
Table 250.66 **4** AWG CU

220.61
NEUTRAL LOAD

Lighting, Small Appliance & Laundry Loads =	14145 VA
First 3000 VA @ 100% =	3000 VA
Remaining 11145 VA @ 35% =	3900.75 VA
Subtotal =	6900.75 VA
Total Cooking Appliances @ 70% =	9940 VA
Clothes Dryer @ 70% =	3920 VA
Sum of other 120 V Loads =	2894 VA
Total =	23654.75 VA / 240 V =

Neutral wire size based on amps = **99 AMPS**

Job	Truss	Truss Type	Qty	Ply	Wood Perfect SE Homes
WP08016 SE M375 AND P3~5	M375	MONO TRUSS	1	1	

P.E. Robbins Inc., Victoria, IL 61485

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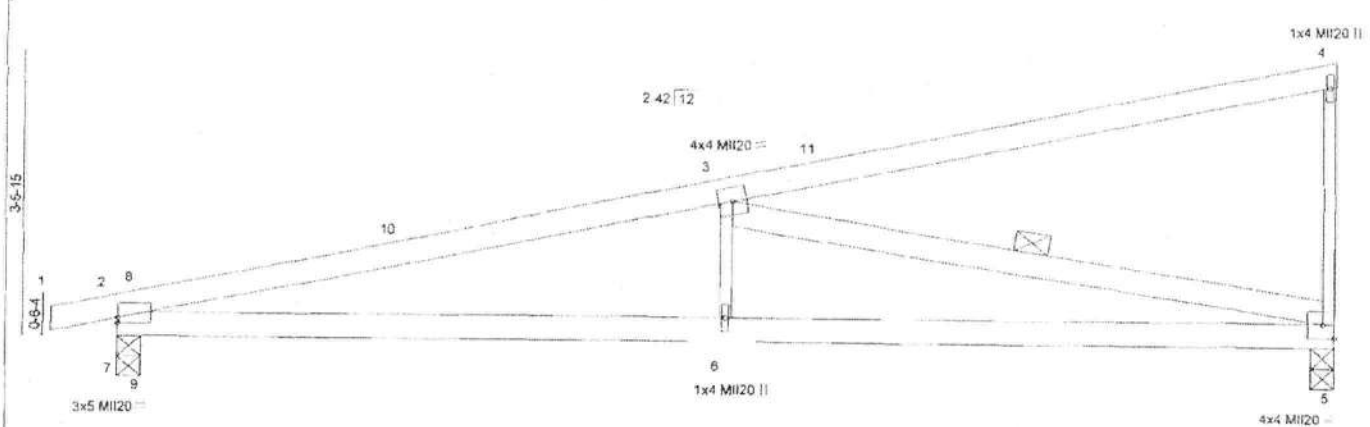
-0-10-0 / 0-10-0 — 7-4-8 / 7-4-8 — 14-9-0 / 7-4-8

Scale = 1:26.4



7-4-8 / 7-4-8 — 14-9-0 / 7-4-8

Plate Offsets (X,Y): [2:Edge,0-0-13]

SPACING: 2-0-0	SPACING: 1-4-0	SPACING 2-0-0	CSI	DEFL in (loc) l/defl L/d	PLATES GRIP
LOADING (psf)	LOADING (psf)	Plates Increase 1.15	TC 0.82	Vert(LL) 0.17 6-9 >999 240	MII20 197/144
TCLL 20.0	TCLL 30.0	Lumber Increase 1.15	BC 0.66	Vert(TL) -0.33 5-6 >533 180	
TCDL 10.0	TCDL 15.0	Rep Stress Incr YES	WB 0.56	Horz(TL) 0.04 5 n/a n/a	
BCLL 0.0 *	BCLL 0.0 *	Code FBC2007/TPI2002	(Matrix-M)		Weight: 46 lb
BCDL 10.0	BCDL 15.0				

LUMBER
TOP CHORD 2 X 4 SPF No.2
BOT CHORD 2 X 4 SPF No.2
WEBS 1-1/2 x 1-11/16 SPF No.2 *Except*
3-5: 2 X 4 SPF Stud

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-4-3 oc purlins.
BOT CHORD Rigid ceiling directly applied or 4-10-7 oc bracing.
WEBS 1 Row at midpt 3-5

REACTIONS (lb/size) 7=641/0-1-8 (input: 0-3-8), 5=584/0-1-8 (input: 0-3-8)
Max Horz 7=188(LC 4)
Max Uplift 7=-403(LC 4), 5=-289(LC 4)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/10, 2-8=-279/46, 8-10=-1558/1173, 3-10=-1484/1180, 3-11=-56/0, 4-11=-41/23
BOT CHORD 7-9=-499/338, 6-9=-1330/1490, 5-6=-1329/1495
WEBS 3-5=-1529/1358, 4-5=-179/209, 3-6=0/325, 2-7=-310/329, 8-9=-232/609, 7-8=-409/315, 2-9=-315/328

NOTES
1) Wind: ASCE 7-05; 114mph (3-second gust) @24in o.c.; TCDL=4.0psf; BCDL=4.0psf; (Alt. 140mph @16in o.c.; TCDL=6.0psf; BCDL=6.0psf); h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone and C-C Corner(3) -0-10-0 to 3-4-15, Exterior(2) 3-4-15 to 14-8-3 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
2) This truss is designed in accordance with the 2009 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 403 lb uplift at joint 7 and 289 lb uplift at joint 5.
6) This truss design conforms with Florida Building Code 2007, based on parameters indicated.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	Wood Perfect SE Homes
WP09016 SE M375 AND P3~5	P375	QUEENPOST	1	1	P375

Scale = 1:26.7

P.E. Robbins, Inc., Victoria, IL 61485

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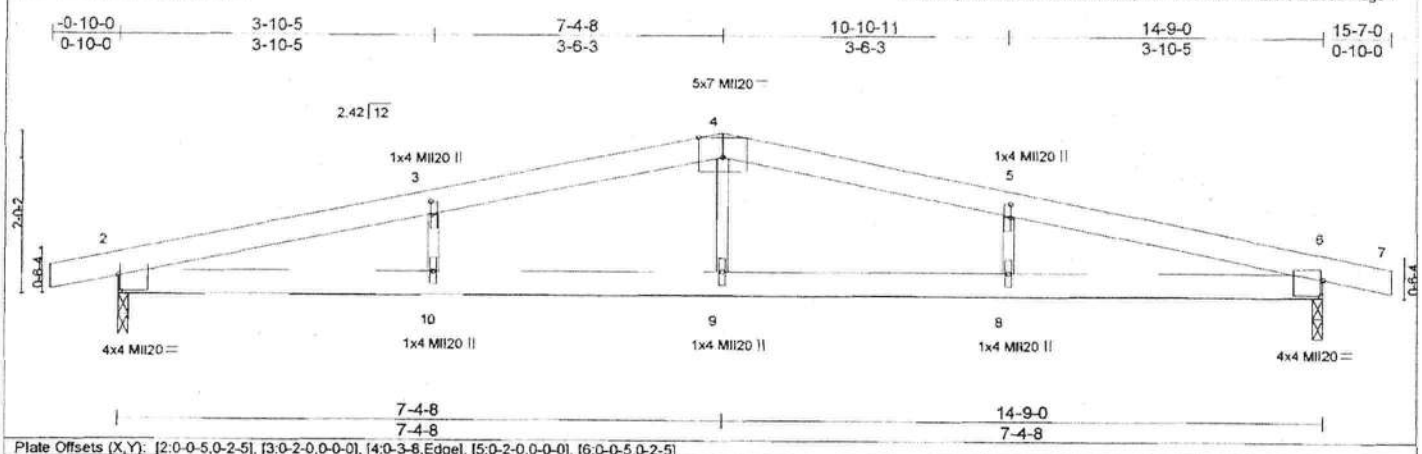

Plate Offsets (X,Y): [2:0-0-5,0-2-5], [3:0-2-0,0-0-0], [4:0-3-8,Edge], [5:0-2-0,0-0-0], [6:0-0-5,0-2-5]

LOADING (psf)		SPACING	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.15	TC	1.00	Vert(LL)	0.19	10	>908	240	MII20	197/144
TCDL	10.0	Lumber Increase	1.15	BC	0.94	Vert(TL)	-0.19	8	>920	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.08	Horz(TL)	-0.03	6	n/a	n/a		
BCDL	10.0	Code IRC2009/IRC2006/FBC2007		(Matrix)							Weight: 38 lb	

LUMBER
TOP CHORD 2 X 4 SPF Stud
BOT CHORD 2 X 4 SPF No.2
WEBS 1-1/2 x 1-11/16 SPF No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-10-2 oc purlins. [P]
BOT CHORD Rigid ceiling directly applied or 5-6-0 oc bracing.

REACTIONS (lb/size) 2=426/0-1-8 (input: 0-1-8), 6=426/0-1-8 (input: 0-1-8)
Max Horz 2=-40(LC 5)
Max Uplift2=-414(LC 6), 6=-414(LC 7)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-2/0, 2-3=-1012/1125, 3-4=-976/1157, 4-5=-976/1157, 5-6=-1012/1125, 6-7=-2/0
BOT CHORD 2-10=-1047/956, 9-10=-1043/955, 8-9=-1043/955, 6-8=-1047/956
WEBS 4-9=-106/175, 3-10=-36/123, 5-8=-36/123

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 140mph at 16" o/c; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
3) Wind: ASCE 7-05; 114mph at 24" o/c; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
4) This truss design conforms with Florida Building Code 2007, based on parameters indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 2, 6.
8) One RT7 USP connectors recommended to connect truss to bearing walls due to uplift at jt(s) 2 and 6.
9) This truss is designed in accordance with the 2009 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.15	TC	0.98	Vert(LL)	0.19	10	>913	240	MII20	197/144
TCDL	10.0	Lumber Increase	1.15	BC	0.85	Vert(TL)	-0.29	8	>613	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.12	Horz(TL)	0.04	6	n/a	n/a		
BCDL	10.0	Code IRC2009/TPI2007		(Matrix)							Weight: 38 lb	

LUMBER
TOP CHORD 2 X 4 SPF Stud
BOT CHORD 2 X 4 SPF No.2
WEBS 1-1/2 x 1-11/16 SPF No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-6-0 oc purlins. [P]
BOT CHORD Rigid ceiling directly applied or 5-11-13 oc bracing.

REACTIONS (lb/size) 2=639/0-1-8 (input: 0-1-8), 6=639/0-1-8 (input: 0-1-8)
Max Horz 2=40(LC 4)
Max Uplift2=-349(LC 6), 6=-349(LC 7)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-3/0, 2-3=-1518/970, 3-4=-1465/1005, 4-5=-1465/1005, 5-6=-1518/970, 6-7=-3/0
BOT CHORD 2-10=-896/1433, 9-10=-892/1432, 8-9=-892/1432, 6-8=-896/1433
WEBS 4-9=-75/263, 3-10=-55/126, 5-8=-55/126

Job | Truss | Truss Type | Qty | Ply | Wood Perfect LLC

WP13007 M-60 SOUTHERN - C M373-24 | HINGED DBL MONO | 1 | 1 | M373 HUD/IRC2009 24" o/c 16" o/c porch option

P.E. Robbins, Inc., Victoria, IL 61485

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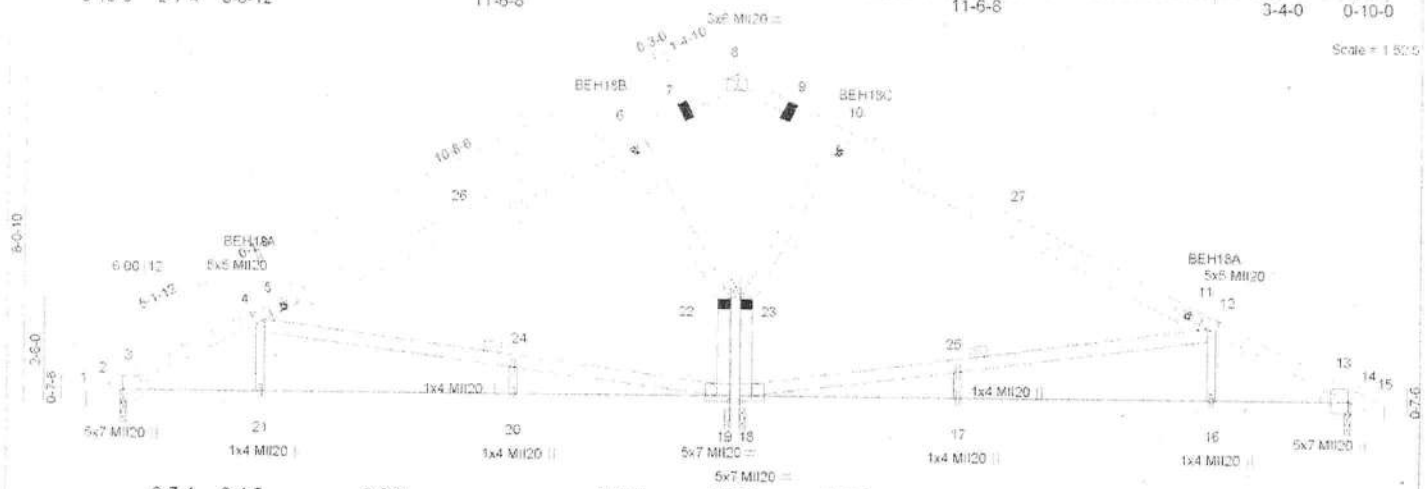
-0-10-0 2-7-4 3-4-0 | 14-10-8 | 26-5-0 | 29-9-0 30-7-0
0-10-0 2-7-4 0-8-12 | 11-6-8 | 11-6-8 | 3-4-0 0-10-0

Scale = 1:52.5



2-7-4	3-4-0	9-6-0	14-9-0	15-0-0	20-3-0	26-5-0	29-9-0
2-7-4	0-8-12	6-2-0	5-3-0	0-3-0	5-3-0	6-2-0	3-4-0

Plate Offsets (X,Y): [2:0-3-3,0-0-7], [4:0-2-8,0-3-0], [5:0-0-11,0-1-2], [6:0-0-10,0-1-2], [8:0-3-0,0-0-10], [10:0-0-10,0-1-2], [11:2-2-0,2-13-7-14], [12:0-2-8,0-3-0], [14:0-3-3,0-0-7], [18:Edge,0-1-8], [19:Edge,0-1-8]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	30.0	Plates Increase	1.15	TC	0.98	Vert(LL)	-0.39	17-18	>458	240	MII20	197/144
TCDL	10.0	Lumber Increase	1.15	BC	0.82	Vert(TL)	-0.52	16-17	>353	180	MII18	141/138
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.82	Horz(TL)	-0.03	19	n/a	n/a		
BCDL	10.0	Code IRC2009/TPI2007		(Matrix)							Weight: 146 lb	

LUMBER
TOP CHORD 2 X 4 SPF No.2 *Except*
5-7,9-11: 2 X 6 SPF No.2
BOT CHORD 2 X 4 SYP No.2
WEBS 2 X 3 SPF Stud *Except*
19-22,18-23: 2 X 4 SYP No.2, 4-19,12-18: 2 X 4 SPF No.2, 6-22,10-23: 2 X 4 SPF Stud

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-9-10 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 5-1-4 oc bracing.
WEBS 1 Row at midpt 4-19, 12-18
JOINTS 1 Brace at Jt(s): 22, 23, 8

REACTIONS (lb/size) 2=648/0-1-8 (input: 0-1-8), 19=899/0-1-8 (input: 0-1-8), 14=648/0-1-8 (input: 0-1-8), 18=899/0-1-8 (input: 0-1-8)
Max Horz 2=-276(LC 2), 14=276(LC 2)
Max Uplift2=-580(LC 6), 18=-336(LC 6), 14=-580(LC 7), 18=-336(LC 7)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/9, 2-3=-1223/998, 3-4=-1186/1040, 4-5=-456/377, 5-26=-472/466, 6-26=-321/484, 6-7=-168/478, 7-8=-103/483, 8-9=-103/483, 9-10=-168/478, 10-27=-321/484, 11-27=-472/466, 11-12=-456/377, 12-13=-1186/1040, 13-14=-1223/998, 14-15=0/9, 19-22=-399/374, 18-23=-399/374
BOT CHORD 2-21=-1090/1017, 20-21=-1090/1017, 19-20=-1090/1017, 17-18=-1090/1017, 16-17=-1090/1017, 14-16=-1090/1017
WEBS 4-24=-814/907, 19-24=-827/809, 18-25=-827/809, 12-25=-814/907, 4-21=0/323, 12-16=0/323, 20-24=-12/93, 17-25=-12/93, 6-22=-453/424, 10-23=-453/424

REQUIRED FIELD JOINT CONNECTIONS - Maximum Compression (lb)/ Maximum Tension (lb)/ Maximum Shear (lb)/ Maximum Moment (lb-in)
7=127/484/159/0, 9=127/484/159/0, 22=453/424/213/0, 23=453/424/213/0

NOTES
1) This truss has been checked for uniform roof live load only, except as noted.
2) Wind: ASCE 7-05; 140mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone and C-C Corner(3) -0-10-0 to 3-4-0, Exterior(2) 3-4-0 to 26-4-1, Corner(3) 26-4-1 to 30-7-0 zone C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for HUD WIND ZONE II at 24" o/c (39 psf uplift truss clear span, 51 psf uplift on overhangs and porches) and 6 psf dead load. This truss has been designed for HUD WIND ZONE III at 16" o/c (47 psf uplift truss clear span, 62 psf uplift on overhangs and porches) and 6 psf dead load.
4) All plates are MT20 plates unless otherwise indicated.
5) See BEH18 DETAILS for plate placement.
6) Provisions must be made to prevent lateral movement of hinged member(s) during transportation.
7) All additional member connections shall be provided by others for forces as indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 2, 19, 14, 18.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 580 lb uplift at joint 2, 336 lb uplift at joint 19, 580 lb uplift at joint 14 and 336 lb uplift at joint 18.
12) This truss is designed in accordance with the 2009 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
13) Trusses used as porch roofs shall be spaced at 16" o/c. See uplift reactions, chord forces and field connection requirements below.

REACTIONS (lb/size) 2=565/0-1-8 (input: 0-1-8), 19=467/0-1-8 (input: 0-1-8), 14=565/0-1-8 (input: 0-1-8), 18=467/0-1-8 (input: 0-1-8)
Max Horz 2=364(LC 6), 14=-364(LC 7)
Max Uplift2=-537(LC 6), 19=-551(LC 6), 14=-537(LC 7), 18=-551(LC 7)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/6, 2-3=-814/1258, 3-4=-790/1313, 4-5=-302/6, 5-26=-313/60, 6-26=-212/72, 6-7=-110/65, 7-8=-67/75, 8-9=-67/75, 9-10=-110/65, 10-27=-212/72, 11-27=-313/60, 11-12=-302/6, 12-13=-789/1313, 13-14=-814/1258, 14-15=0/6, 19-22=-267/377, 18-23=-267/377
BOT CHORD 2-21=-1536/678, 20-21=-1536/678, 19-20=-1536/678, 17-18=-1536/678, 16-17=-1536/678, 14-16=-1536/678
WEBS 4-24=-542/1347, 19-24=-551/1371, 18-25=-551/1371, 12-25=-542/1347, 4-21=-344/222, 12-16=-344/222, 20-24=-135/59, 17-25=-135/59, 6-22=-303/427, 10-23=-303/427

REQUIRED FIELD JOINT CONNECTIONS - Maximum Compression (lb)/ Maximum Tension (lb)/ Maximum Shear (lb)/ Maximum Moment (lb-in)
7=83/71/48/0, 9=83/71/48/0, 22=303/427/201/0, 23=303/427/201/0

ALABAMA LICENSED PROFESSIONAL ENGINEER PHILLIP E. ROBBINS

4/29/10

Phillip E. Robbins
1777 State Route 167, Victoria, IL
2010.04.29 09:29:40 -05'00'

Job	Truss	Truss Type	Qty	Ply	Wood Perfect, LLC
WP10067 MBO SOUTHERN - C MASTER		HINGED DBL MONO	1	1	MiTek HUC-RC2009 24" o/c 16" o/c porch option

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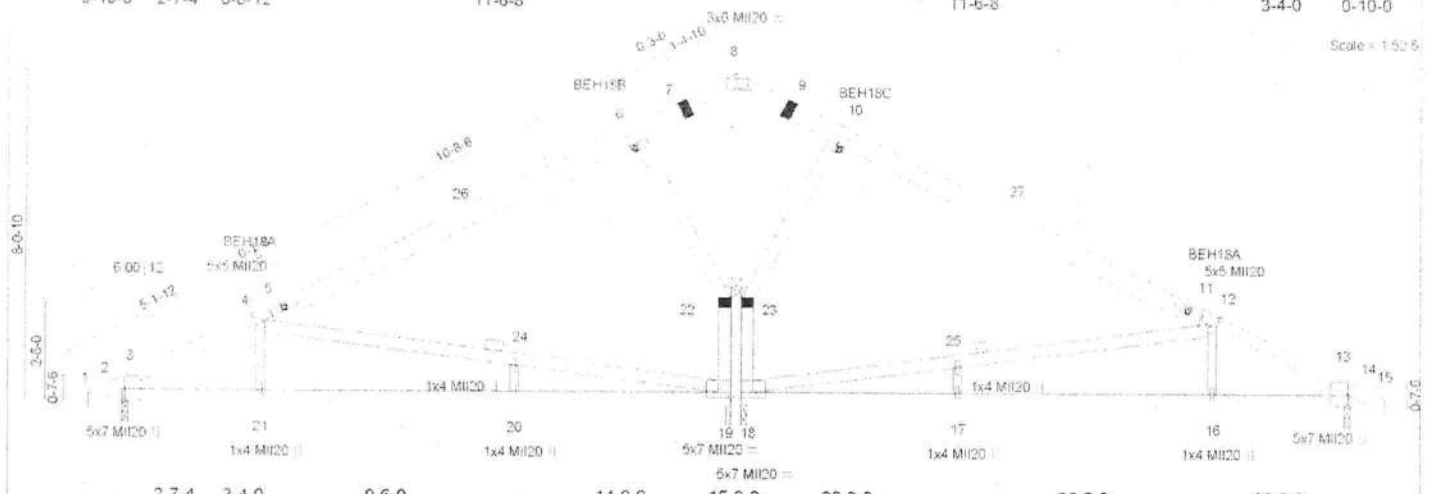
-0-10-0	2-7-4	3-4-0	14-10-8	26-5-0	29-9-0	30-7-0
0-10-0	2-7-4	0-8-12	11-6-8	11-6-8	3-4-0	0-10-0

Scale = 1:52.5



2-7-4	3-4-0	9-6-0	14-9-0	15-0-0	20-3-0	26-5-0	29-9-0
2-7-4	0-8-12	6-2-0	5-3-0	0-3-0	5-3-0	6-2-0	3-4-0

Plate Offsets (X,Y): [2:0-3-3,0-0-7], [4:0-2-8,0-3-0], [5:0-0-11,0-1-2], [8:0-0-10,0-1-2], [8:0-3-0,0-0-10], [10:0-0-10,0-1-2], [11:2-2-0,2-13-7-14], [12:0-2-8,0-3-0], [14:0-3-2,0-0-7], [18:Edge,0-1-8], [19:Edge,0-1-8]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	30.0	Plates Increase	1.15	TC	0.98	Vert(LL)	-0.36	17-18	>486	240	MII20	197/144
TCDL	10.0	Lumber Increase	1.15	BC	0.82	Vert(TL)	-0.52	16-17	>333	180	MII18	141/136
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.82	Horz(TL)	-0.03	19	n/a	n/a		
BCDL	10.0	Code IRC2009/TPI2007		(Matrix)							Weight: 146 lb	

LUMBER
TOP CHORD 2 X 4 SPF No.2 *Except*
5-7,9-11: 2 X 6 SPF No.2
BOT CHORD 2 X 4 SYP No.2
WEBS 2 X 3 SPF Stud *Except*
19-22,18-23: 2 X 4 SYP No.2, 4-19,12-18: 2 X 4 SPF No.2, 6-22,10-23: 2 X 4 SPF Stud

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-9-10 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 5-1-4 oc bracing.
WEBS 1 Row at midpt 4-19, 12-18
JOINTS 1 Brace at Jt(s): 22, 23, 8

4/29/2010

Job	Truss	Truss Type	Qty	Ply	
WP10009 26IN OVERHANG -3	M373-CUT	HINGED DBL MONO	1	1	Cavalier Cav-M157 Job Reference (optional)

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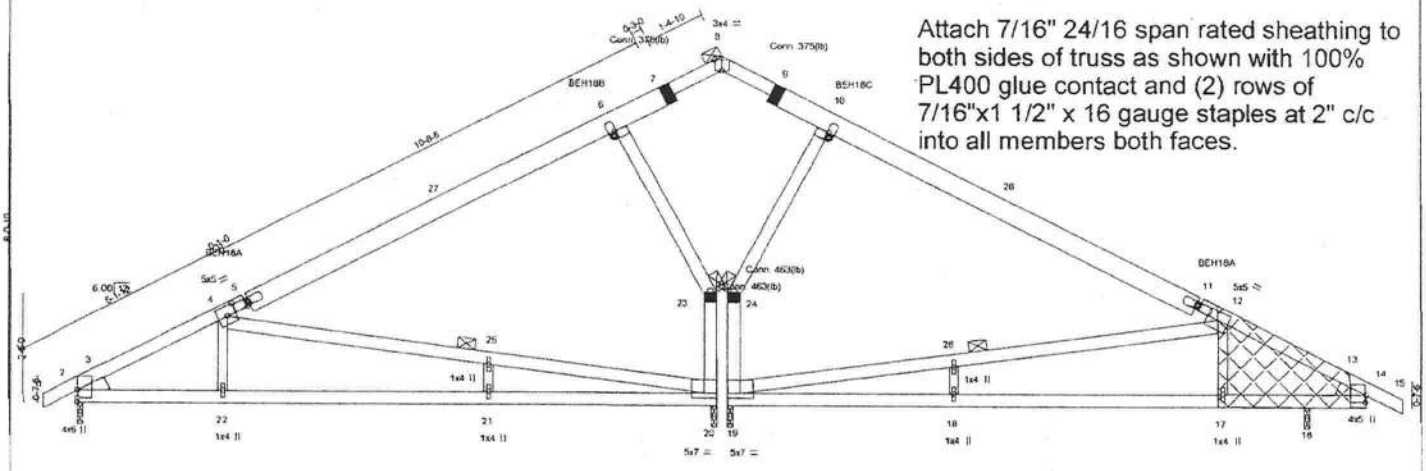
-0-10-0	2-7-4	3-4-0	14-10-8	26-5-0	29-9-0	30-7-0
0-10-0	2-7-4	0-8-12	11-6-8	11-6-8	3-4-0	0-10-0

Repair to add 16" Cantilever to M373 truss

Scale = 1:50.0



Attach 7/16" 24/16 span rated sheathing to both sides of truss as shown with 100% PL400 glue contact and (2) rows of 7/16"x1 1/2" x 16 gauge staples at 2" c/c into all members both faces.

2-7-4	3-4-0	9-6-0	14-9-0	15-0-0	20-3-0	26-5-0	28-5-0	29-9-0
2-7-4	0-8-12	6-2-0	5-3-0	0-3-0	5-3-0	6-2-0	2-0-0	1-4-0

Plate Offsets (X,Y): [2:0-2-4,0-0-0], [4:0-2-8,0-2-12], [5:0-0-11,0-1-2], [6:0-0-10,0-1-2], [8:0-2-0,Edge], [10:0-0-10,0-1-2], [11:2-2-0-12,13-7-14], [12:0-2-2,0-2-12], [14:0-2-0,0-0-4]

LOADING (psf)		SPACING	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	30.0	Plates Increase	1.15	TC	0.88	Vert(LL)	0.67	21-22	>260	240	MT20	197/144
TCDL	10.0	Lumber Increase	1.15	BC	0.86	Vert(TL)	0.53	21-22	>328	180	MII18	141/138
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.60	Horz(TL)	-0.04	20	n/a	n/a		
BCDL	10.0	Code IRC2009/TPI2007		(Matrix)							Weight: 136 lb	

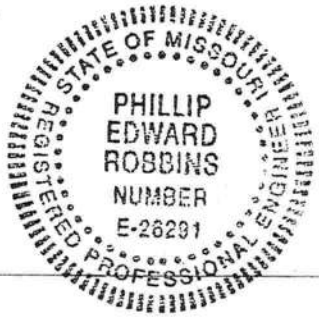
LUMBER
TOP CHORD 2 X 4 SPF No.2 *Except*
5-7,9-11: 2 X 6 SPF No.2
BOT CHORD 2 X 4 SPF No.2
WEBS 2 X 3 SPF Stud *Except*
20-23,19-24,4-20,12-19: 2 X 4 SPF No.2, 6-23,10-24: 2 X 4 SPF Stud

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-8-9 oc purlins, except end verticals[P]
BOT CHORD Rigid ceiling directly applied or 3-3-2 oc bracing.
WEBS 1 Row at midpt 4-20, 12-19
JOINTS 1 Brace at Jt(s): 23, 24, 8

REACTIONS All bearings 0-1-8.
(lb) - Max Horz 2=358(LC 6), 16=-355(LC 7)
Max Uplift All uplift 100 lb or less at joint(s) except 2=-540(LC 6), 20=-548(LC 6), 19=-497(LC 7), 16=-547(LC 7)
Max Grav All reactions 250 lb or less at joint(s) except 2=619(LC 1), 20=412(LC 1), 19=353(LC 1), 16=680(LC 1)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-929/1198, 3-4=-913/1246, 4-5=-400/56, 5-27=-413/74, 6-27=-312/105, 10-28=-312/105, 11-28=-415/74, 11-12=-409/55, 20-23=-216/408, 19-24=-216/408
BOT CHORD 2-22=-1545/673, 21-22=-1545/673, 20-21=-1545/673, 18-19=-1158/394, 17-18=-1158/394, 16-17=-1131/377, 14-16=-98/337
WEBS 4-25=-565/1341, 20-25=-568/1356, 19-26=-331/961, 12-26=-323/947, 4-22=-353/219, 12-17=-433/267, 6-23=-245/463, 10-24=-245/463, 12-16=-891/1259

NOTES
1) This truss has been checked for uniform roof live load only, except as noted.
2) Wind: ASCE 7-05; 140mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone and C-C Corner(3) -0-10-0 to 3-4-0, Exterior(2) 3-4-0 to 26-4-1, Corner(3) 26-4-1 to 30-7-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for HUD WIND ZONE II at 24" c/c (39 psf uplift truss clear span, 51 psf uplift on overhangs and porches) and 6 psf dead load. This truss has been designed for HUD WIND ZONE III at 16" c/c (47 psf uplift truss clear span, 62 psf uplift on overhangs and porches) and 6 psf dead load
4) All plates are MT20 plates unless otherwise indicated.
5) See BEH18 DETAILS for plate placement.
6) Provisions must be made to prevent lateral movement of hinged member(s) during transportation.
7) All additional member connections shall be provided by others for forces as indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 2, 20, 19, 16.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 540 lb uplift at joint 2, 548 lb uplift at joint 20, 497 lb uplift at joint 19 and 547 lb uplift at joint 16.
12) This truss is designed in accordance with the 2009 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Job	Truss	Truss Type	Qty	Ply	
MH7132	P177-GFL	HINGED COMMON	1	1	116039376

Wood Perfect Ltd. Gum, AL 35562

Job Reference (optional)
7.140 s Oct 1 2009 MiTek Industries, Inc. Fri Dec 04 11:26:01 2009 Page 1

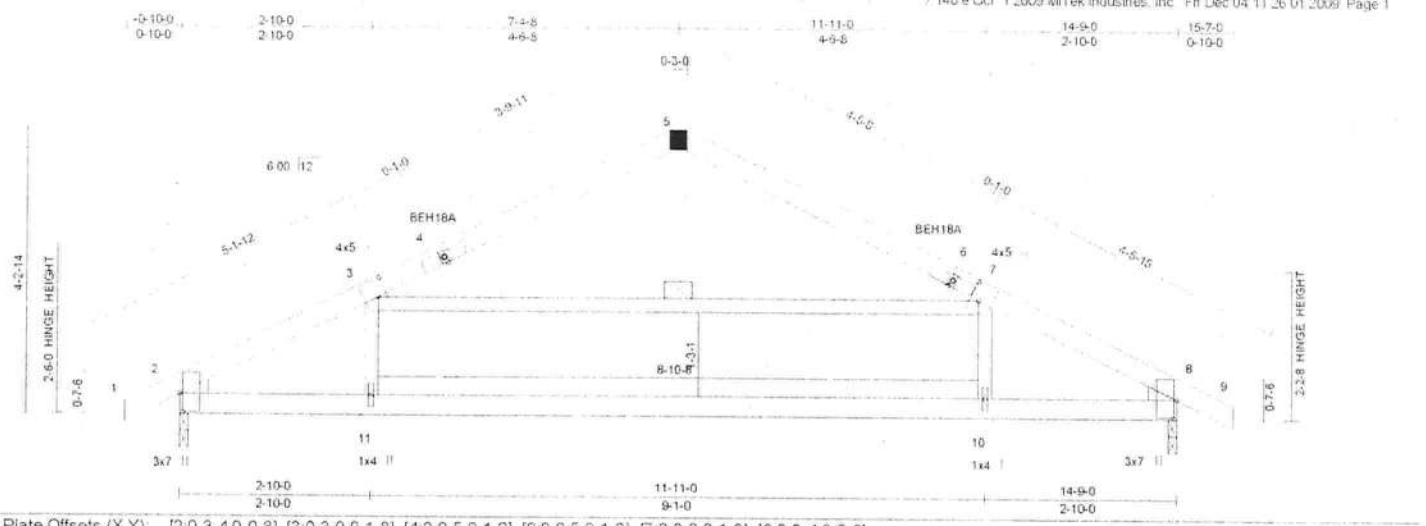


Plate Offsets (X,Y): [2:0-3-4,0-0-8], [3:0-3-0,0-1-8], [4:0-0-5,0-1-2], [6:0-0-5,0-1-2], [7:0-3-0,0-1-8], [8:0-3-4,0-0-8]

SPACING: 2-0-0		SPACING: 1-4-0		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
LOADING (psf)		LOADING (psf)		Plates Increase	1.15	TC	0.91	Vert(LL)	0.28	10-11	>632	240	MT20	197/144
TCLL	20.0	TCLL	30.0	Lumber Increase	1.15	BC	0.91	Vert(TL)	-0.40	10-11	>443	180	MII18	141/138
TCDL	10.0	TCDL	15.0	Rep Stress Incr	YES	WB	0.60	Horz(TL)	-0.03	8	n/a	n/a		
BCLL	0.0	BCLL	0.0	Code FBC2007/TPI2002		(Matrix)							Weight: 48 lb	
BCDL	10.0	BCDL	15.0											

LUMBER
TOP CHORD 2 X 4 SPF No.2
BOT CHORD 2 X 4 SPF No.2
WEBS 2 X 3 SPF Stud
WEDGE
Left: 2 X 3 SPF Stud, Right: 2 X 3 SPF Stud

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins [P]
BOT CHORD Rigid ceiling directly applied or 5-5-12 oc bracing
WEBS 1 Row at midpt 3-7

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS (lb/size) 2=639/0-1-8, 8=639/0-1-8
Max Horz 2=137(LC 6)
Max Uplift 2=-731(LC 6), 8=-732(LC 7)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-10/7, 2-3=-1042/1248, 3-5=-331/507, 5-7=-323/487, 7-8=-1065/1302, 8-9=-10/7
BOT CHORD 2-11=-988/869, 10-11=-988/869, 8-10=-988/869
WEBS 3-11=-35/319, 7-10=-98/339, 3-7=-642/935

REQUIRED FIELD JOINT CONNECTIONS - Maximum Compression (lb)/ Maximum Tension (lb)/ Maximum Shear (lb)/ Maximum Moment (lb-in)
5=209/509/268/0

NOTES
1) This truss has been checked for uniform roof live load only, except as noted.
2) Wind: ASCE 7-05; 140mph (3-second gust) @24in o.c.; TCDL=2.8psf; BCDL=3.2psf; (Alt. 150mph @16in o.c., TCDL=4.2psf; BCDL=4.8psf); h=30ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33.
3) All plates are MT20 plates unless otherwise indicated.
4) See BEH18 DETAILS for plate placement.
5) Provisions must be made to prevent lateral movement of hinged member(s) during transportation.
6) All additional member connections shall be provided by others for forces as indicated.
7) Plates checked for a plus or minus 0 degree rotation about its center.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 2, 8.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 731 lb uplift at joint 2 and 732 lb uplift at joint 8.
11) This truss meets HUD WIND ZONE II (-39 psf main body -51 psf overhang and 6 psf dead load) @ 24"oc.
12) This truss meets HUD WIND ZONE III (-47 psf main body -62 psf overhang and 6 psf dead load) @ 16"oc.

FL Cert. #6634

December 4,2009

MiTek
14515 N. Outer Forty, Suite #300
Chesterfield, MO 63017

PRODUCT APPROVAL SPECIFICATION SHEET

Manufacturer: Southern Energy Homes Plan #: 943

As required by Florida Statue 553.842 and Florida Administrative Code 9B-72, the below listed information and the product approval number(s) on these building components reflect those utilized on the manufactured building for which a DCA insignia is sought.

Category	Manufacturer	Product Description	Approval #(s)
EXTERIOR DOORS			
Swing / Patio	Dunbarton		FL2623
WINDOWS			
Single Hung	Kinro	9750	FL993.1
PANEL WALL			
Vinyl Siding	Georgia Pacific	Variform	FL2224-R3
Soffit	James Hardie	Hardie Soffit/Cem Soffit	FL13265.1
ROOFING PRODUCT			
Shingles	Owens Corning	Classic	FL10674
Underlayment	Tamko	15 UL (No. 15 Type I Asphalt Felt)	FL12328.7
Asphalt Cement	Tamko	Tam-Pro 856 Premium SBS Adhesive	FL1960.7
Asphalt Cement	Tamko	Tam-Pro Q-20 Premium SBS Flash	FL1960.10
SHUTTERS			
N/A			
SKYLIGHT			
N/A			
STRUCTURAL COMPONENTS			
Truss Plates (16, 18 & 20ga)	MiTek		FL2197-R3
Uplift Strap	SimpsonStrongTie	LSTA18, CS22, CS14	FL10852
Uplift Strap	SimpsonStrongTie	LTS18	FL10456.30
LVL	Murphy	Microlam LVL	FL13422
NEW EXTERIOR ENVELOPE PRODUCTS			
N/A			

The products listed below did not demonstrate product approval at plan review. I understand that at the time of inspection of these products, the following information must be available to the inspector at the manufacturing plant: (1) Copy of product approval from the Local or State Building Commission, or supply all of the information listed on Form No. 9B-72.130(5). (2) Copy of the applicable manufacturer's installation requirements.

I understand these products may have to be removed if approval cannot be demonstrated during inspection.

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Manufacturer's Authorized Agent Signature Printed Name Date

Southern Energy Homes, Inc.
P.O. Box 390 - 18025 Co. Rd. 41 Addison, AL 35540
Ph: (256) 747-8589 Fax: (256) 747-8586
Email: semodular@sehomes.com

APPROVAL STAMP

TITLE

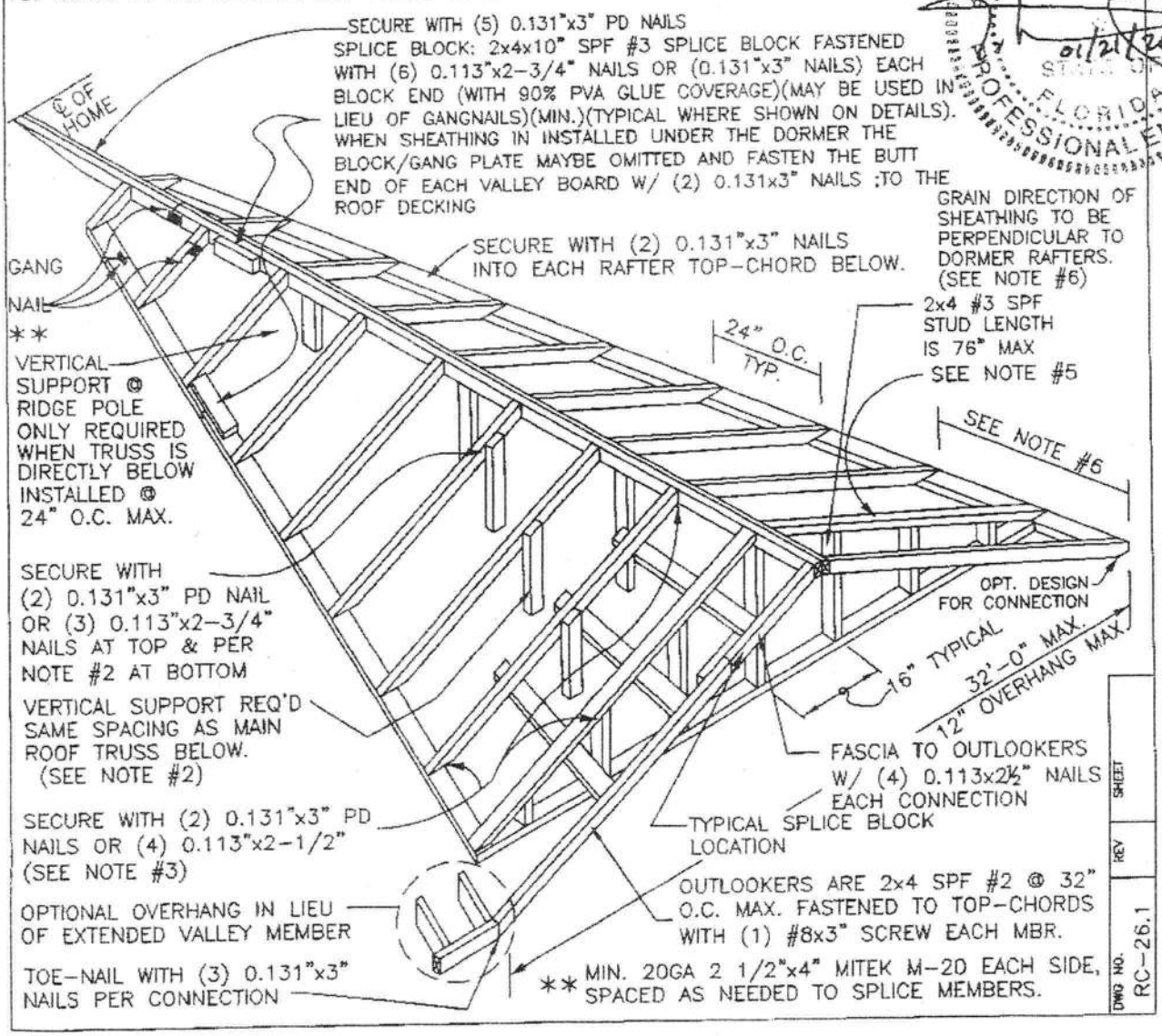
TYPICAL DORMER DETAIL UP TO 140 MPH (3 SEC. GUSTS)

BY	DATE
MDW	8-1-05

NOTES:

1. ALL WOOD TO BE #3 SPF OR BETTER 2x4 MIN. OR AS NOTED.
2. VERTICAL SUPPORT POSTS SHALL BE SECURED TO TOP CHORD OF TRUSS (16" O.C. MAX) DIRECTLY BELOW WITH (2) #8x3" SCREWS. TOENAILED ONLY.
3. FRONT DORMER TRUSS SHEATHING W/ HARDBOARD SIDING, 3/8" MIN. RATED SHEATHING (ANY INDEX) OR EQUIV. SECURED TO ALL FRAMING W/ 0.099"x1 3/4" NAILS @ 2-1/2" O.C.
4. REFERENCE OTHER DETAILS FOR LADDER OVERHANG CONSTRUCTION.
5. SECURE FRONT DORMER WALL TO ROOF BELOW WITH (2) #8x3" @ EACH TRUSS.
6. ROOF SHEATHING TO BE CONTINUOUS THRU THIS AREA. ROOF SHEATHING SHALL NOT BE JOINTED OVER FRONT DORMER TRUSS.
7. O.S.B. OR PLYWOOD SHEATHING TO BE 24/16 INDEX MIN.
8. TRUSSES BENEATH DORMER CONSTRUCTION TO BE LISTED FOR 10 PSF DEAD LOAD.
9. TOENAIL DORMER RIDGE TOGETHER WITH 0.131"x3" NAILS @ 8" O.C.
10. REFER TO RC SECTION FOR TRUSS TO SIDEWALL CONNECTION.

JOHN C. DOEDEN LICENSE No. [illegible] 01/21/2010 STATE OF FLORIDA PROFESSIONAL ENGINEER



SHEET | REV | DWG NO. RC-26.1

Southern Energy Homes, Inc.
P.O. Box 390 - 18025 Co. Rd. 41 Addison, AL 35540
Ph: (256) 747-8589 Fax: (256) 747-8586
Email: semodular@sehomes.com

APPROVAL STAMP

JOHN C. DOEDEN LICENSE No. 71484 STATE OF FLORIDA PROFESSIONAL ENGINEER 01/22/10

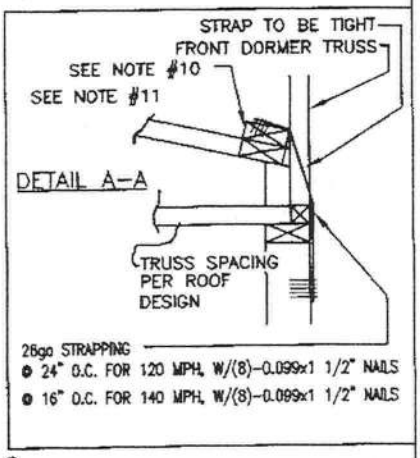
TITLE
DORMER DETAIL AT TAG COMMON WALL 120 & 140 MPH, EXP. C

BY	DATE	CHECKED	DATE
MDW	01/22/10		

184" MAX. UNIT WIDTH

NOTES;

1. ALL WOOD TO BE #3 SPF OR BETTER 2x3 MIN. OR AS NOTED.
2. VERTICAL SUPPORT POSTS SHALL BE SECURED TO TOP CHORD OF TRUSS DIRECTLY BELOW PER RC-26.1 OR RC-26.2T
3. FRONT DORMER TRUSS DOES NOT REQUIRE SHEATHING.
4. OPENINGS IN SIDEWALL (MAIN UNIT AT TAG) MUST BE HEADERED PER HEADER CHARTS OR OTHER DETAILS
5. SECURE BOTTOM PLATE OF FRONT DORMER TRUSSES TO TOP PLATE OF SIDEWALLS WITH: 0.131"x3" NAILS AT 6" OC OR #8 x 3" SCREWS AT 16" OC. FASTEN THROUGH THE BOTTOM CHORD OF THE FRONT DORMER TRUSSES TO THE HEEL OF THE ROOF TRUSSES WITH TYPICAL NUMBER OF FASTENERS (PER OTHER DETAILS).
6. O.S.B. OR PLYWOOD SHEATHING TO BE 24/16 INDEX MIN.
7. TRUSSES BENEATH DORMER CONSTRUCTION TO BE LISTED FOR 10 PSF DEAD LOAD.
8. TOENAIL DORMER RIDGE TOGETHER WITH .131 X 3" NAILS @ 8" O.C.
9. UPLIFT STRAPS ARE TO FASTEN TRUSS TOP CHORDS TO WALL STUDS OR HEADER AT FREQUENCY AND WITH FASTENERS AS NOTED IN DETAIL A-A, BUT WHEN TRUSS DOES NOT ALIGN WITH STUD, A 2x RAIL ATTACHED TO ADJACENT TRUSSES IS TO BE USED AS SHOWN IN DETAIL A-A.
10. 2x4 #3 SPF (MIN.) TRUSS-TO-TRUSS BLOCK OR CONTINUOUS RAIL, FASTEN TO TOP CHORDS w/ (5) 0.131x3" NAILS
11. 2x4 #3 SPF (MIN.) BLOCK CUT TO FIT BETWEEN TRUSSES (1/2" MAX. GAP). FASTENED EACH END WITH (2) 0.131x3" NAILS (TOED)



** MIN. 20GA 2 1/2"x4" MITEK M-20 EACH SIDE, SPACED AS NEEDED TO SPLICE MEMBERS.

SHEET	REV	DWG NO.
		RC-26.3

SUBCONTRACTOR VERIFICATION FORM

APPLICATION NUMBER 1010-13 CONTRACTOR Bill Harper PHONE 28928

THIS FORM MUST BE SUBMITTED PRIOR TO THE ISSUANCE OF A PERMIT

In Columbia County one permit will cover all trades doing work at the permitted site. It is REQUIRED that we have records of the subcontractors who actually did the trade specific work under the permit. Per Florida Statute 440 and Ordinance 88-6, a contractor shall require all subcontractors to provide evidence of workers' compensation or exemption, general liability insurance and a valid Certificate of Competency license in Columbia County.

Any changes, the permitted contractor is responsible for the corrected form being submitted to this office prior to the start of that subcontractor beginning any work. Violations will result in stop work orders and/or fines.

ELECTRICAL	Print Name: — SEE ATTACHED —	Signature:
	License #:	Phone #:
MECHANICAL/ A/C B.	Print Name: Tim Shatto	Signature: Timothy D. Shatto
	License #: CAC057875	Phone #: 386-496-8224
PLUMBING/ GAS	Print Name: Mark Barrs	Signature:
	License #:	Phone #:
ROOFING	Print Name:	Signature:
	License #:	Phone #:
SHEET METAL	Print Name:	Signature:
	License #:	Phone #:
FIRE SYSTEM/ SPRINKLER	Print Name:	Signature:
	License#:	Phone #:
SOLAR	Print Name:	Signature:
	License #:	Phone #:

MASON			
CONCRETE FINISHER			
FRAMING			
INSULATION			
STUCCO			
DRYWALL			
PLASTER			
CABINET INSTALLER			
PAINTING			
ACOUSTICAL CEILING			
GLASS			
CERAMIC TILE			
FLOOR COVERING			
ALUM/VINYL SIDING			
GARAGE DOOR			
METAL BLDG ERECTOR			

F. S. 440.103 Building permits; identification of minimum premium policy.--Every employer shall, as a condition to applying for and receiving a building permit, show proof and certify to the permit issuer that it has secured compensation for its employees under this chapter as provided in ss. 440.10 and 440.38, and shall be prepared each time the employer applies for a building permit.

TOTAL P.01

TOTAL P.01

Permit#

SUBCONTRACTOR VERIFICATION FORM

APPLICATION NUMBER D0002892B CONTRACTOR William Harper PHONE 386-623-3873

THIS FORM MUST BE SUBMITTED PRIOR TO THE ISSUANCE OF A PERMIT

In Columbia County one permit will cover all trades doing work at the permitted site. It is REQUIRED that we have records of the subcontractors who actually did the trade specific work under the permit. Per Florida Statute 440 and Ordinance 89-6, a contractor shall require all subcontractors to provide evidence of workers' compensation or exemption, general liability insurance and a valid Certificate of Competency license in Columbia County.

Any changes, the permitted contractor is responsible for the corrected form being submitted to this office prior to the start of that subcontractor beginning any work. Violations will result in stop work orders and/or fines.

ELECTRICAL 236 ✓	Print Name Perry D. Nicola License #: ER13013402	Signature Perry D Nicola Phone #: 904-364-7451
MECHANICAL/ A/C _____	Print Name License #:	Signature Phone #:
PLUMBING/ GAS	Print Name License #:	Signature Phone #:
ROOFING	Print Name License #:	Signature Phone #:
SHEET METAL	Print Name License #:	Signature Phone #:
FIRE SYSTEM/ SPRINKLER	Print Name License#:	Signature Phone #:
SOLAR	Print Name License #:	Signature Phone #:

Specialty License	License Number	Sub-Contractors Printed Name	Sub-Contractors Signature
MASON			
CONCRETE FINISHER			
FRAMING			
INSULATION			
STUCCO			
DRYWALL			
PLASTER			
CABINET INSTALLER			
PAINTING			
ACOUSTICAL CEILING			
GLASS			
CERAMIC TILE			
FLOOR COVERING			
ALUM/VINYL SIDING			
GARAGE DOOR			
METAL BLDG ERECTOR			

F. S. 440.103 Building permits; identification of minimum premium policy.--Every employer shall, as a condition to applying for and receiving a building permit, show proof and certify to the permit issuer that it has secured compensation for its employees under this chapter as provided in ss. 440.10 and 440.38, and shall be presented each time the employer applies for a building permit.

Left Message 10 20 10

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 11-6S-16-03815-158 **Building permit No.** 000028928

Use Classification MODULAR **Fire:** 70.62

Permit Holder WILLIAM HARPER **Waste:** 184.25

Owner of Building SHANE & TIFFANY ROBBINS **Total:** 254.87

Location: 247 SW HILLTOP TERR, FT WHITE, FL 32038

Date: 11/23/2010

Building Inspector

POST IN A CONSPICUOUS PLACE
(Business Places Only)