

DATE 10/02/2008

Columbia County Building Permit

PERMIT

This Permit Must Be Prominently Posted on Premises During Construction

000027390

APPLICANT DANIEL ZWICKEL PHONE 386.344.3279  
ADDRESS 4914 US HWY 441-N LAKE CITY FL 32055  
OWNER DANIEL ZWICKEL PHONE 386.344.3279  
ADDRESS 760 SW MEADOWLANDS DRIVE LAKE CITY FL 32024  
CONTRACTOR MICHAEL MEDDERS PHONE 904.705.9278  
LOCATION OF PROPERTY 41-S TO C-131.TR TO MEADOWLANDS,TR AND IT'S THE 9TH LOT ON L.  
TYPE DEVELOPMENT SFD/UTILITY ESTIMATED COST OF CONSTRUCTION 109700.00  
HEATED FLOOR AREA 1531.00 TOTAL AREA 2194.00 HEIGHT 18.00 STORIES 1  
FOUNDATION CONC WALLS FRAMED ROOF PITCH 6'12 FLOOR CONC  
LAND USE & ZONING A-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 06-6S-17-09617-104 SUBDIVISION MEADOWLANDS  
LOT 9 BLOCK PHASE 1 UNIT TOTAL ACRES 5.31

CGC060658  
Culvert Permit No. Culvert Waiver Contractor's License Number Applicant/Owner/Contractor  
EXISTING 08-0602-N BLK WR Y  
Driveway Connection Septic Tank Number LU & Zoning checked by Approved for Issuance New Resident

COMMENTS: NOC ON FILE. 1 FOOT ABOVE ROAD.

Check # or Cash 1739

FOR BUILDING & ZONING DEPARTMENT ONLY

(footer/Slab)

Temporary Power Foundation Monolithic  
date/app. by date/app. by date/app. by  
Under slab rough-in plumbing Slab Sheathing/Nailing  
date/app. by date/app. by date/app. by  
Framing Rough-in plumbing above slab and below wood floor  
date/app. by date/app. by  
Electrical rough-in Heat & Air Duct Peri. beam (Lintel)  
date/app. by date/app. by date/app. by  
Permanent power C.O. Final Culvert  
date/app. by date/app. by date/app. by  
M/H tie downs, blocking, electricity and plumbing Pool  
date/app. by date/app. by  
Reconnection Pump pole Utility Pole  
date/app. by date/app. by date/app. by  
M/H Pole Travel Trailer Re-roof  
date/app. by date/app. by date/app. by

BUILDING PERMIT FEE \$ 550.00 CERTIFICATION FEE \$ 10.97 SURCHARGE FEE \$ 10.97  
MISC. FEES \$ 0.00 ZONING CERT. FEE \$ 50.00 FIRE FEE \$ 0.00 WASTE FEE \$  
FLOOD DEVELOPMENT FEE \$ FLOOD ZONE FEE \$ 25.00 CULVERT FEE \$ TOTAL FEE 646.94  
INSPECTORS OFFICE CLERKS OFFICE

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 TO BE IN ACTIVE PROGRESS WHEN THE PERMIT HAS RECIEVED AN APPROVED INSPECTION WITHIN 180 DAYS.

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

# Columbia County Building Permit Application

For Office Use Only Application # 0809-53 Date Received 9/25/08 By G Permit # 27390  
 Zoning Official BKX Date 01.10.08 Flood Zone X Land Use A-3 Zoning A3  
 FEMA Map # N/A Elevation N/A MFE 1st Above Rd River N/A Plans Examiner WR Date 9/29/08  
 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 \$29.88 Fire \$78.63 Corr \$409.16 Road/Code \$1,046.00 / 210  
 School \$1,500.00 = TOTAL \$3,063.67 - 1738 + 1739

Septic Permit No. 08-0602 Fax \_\_\_\_\_  
 Name Authorized Person Signing Permit DANIEL ZWICKEL Phone 344-3279  
 Address 1004 EASTPORT RD JACKSONVILLE FL 32226 - 4914 US Hwy 441-N. L.C 71 3201  
 Owners Name Daniel Zwickel Phone 386-344-3279  
 911 Address 760 SW Meadowlands Dr, Lake City, FL 32024  
 Contractors Name AMEZIA SEWER INC. - MICHAEL MEDDEAS Phone 904-705-9728  
 Address 1004 EASTPORT RD JACKSONVILLE FL 32218

Fee Simple Owner Name & Address \_\_\_\_\_  
 Bonding Co. Name & Address \_\_\_\_\_  
 Architect/Engineer Name & Address Michael Madden 1004 Eastport Rd Jax FL 32226  
 Mortgage Lenders Name & Address B B T

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

Property ID Number 06-65-17-09617-109 Estimated Cost of Construction 70K  
 Subdivision Name MEADOWLAND Lot 9 Block \_\_\_\_\_ Unit 1 Phase \_\_\_\_\_  
 Driving Directions South on 131 (R) right on meadowlands dr left at 760 9th on left

Number of Existing Dwellings on Property 1  
 Construction of Single Family Dwelling Total Acreage 5.31 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 138 Side 118 Side 358 Rear 340  
 Number of Stories 1 Heated Floor Area 1534 Total Floor Area 2194 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.

- TW called & spoke w/ DANIEL -



## 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.

### **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 COMMENCEMENT 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 hereby certify that all the foregoing information is accurate and all work will be done in compliance with all applicable laws and regulating construction and zoning. I further understand the above written responsibilities in Columbia County for obtaining this Building Permit.

  
\_\_\_\_\_  
Owners Signature

2240-161-74-100-0

**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.

  
\_\_\_\_\_  
Contractor's Signature (Permitee)  
M362-545-51-469-0

Contractor's License Number CC-060658  
Columbia County  
Competency Card Number \_\_\_\_\_

Affirmed under penalty of perjury to by the Contractor and subscribed before me this 25 day of September 2008.  
Personally known \_\_\_\_\_ or Produced Identification DL

  
\_\_\_\_\_  
State of Florida Notary Signature (For the Contractor)

SEAL:



## NOTICE OF COMMENCEMENT

County Clerk's Office Stamp or Seal

Tax Parcel Identification Number 06-65-17-09617-109

THE UNDERSIGNED hereby gives notice that improvements will be made to certain real property, and in accordance with Section 713.13 of the Florida Statutes, the following information is provided in this NOTICE OF COMMENCEMENT.

1. Description of property (legal description): Lot 9 Meadowlands S/D Phase I  
a) Street (job) Address: 7605W Meadowlands Dr Lake City, FL 32024
2. General description of improvements: NEW HOME
3. Owner Information  
a) Name and address: Daniel Zwickel 4914 US Hwy 441 N Lake City, FL 32055  
b) Name and address of fee simple titleholder (if other than owner) \_\_\_\_\_  
c) Interest in property \_\_\_\_\_
4. Contractor Information  
a) Name and address: AMBIA SERVIC INC 1004 BRISTOL RD SMC FL 32026  
b) Telephone No.: \_\_\_\_\_ Fax No. (Opt.) \_\_\_\_\_
5. Surety Information  
a) Name and address: \_\_\_\_\_  
b) Amount of Bond: \_\_\_\_\_  
c) Telephone No.: \_\_\_\_\_ Fax No. (Opt.) \_\_\_\_\_
6. Lender  
a) Name and address: BB&T  
b) Phone No. \_\_\_\_\_
7. Identity of person within the State of Florida designated by owner upon whom notices or other documents may be served:  
a) Name and address: \_\_\_\_\_  
b) Telephone No.: \_\_\_\_\_ Fax No. (Opt.) \_\_\_\_\_
8. In addition to himself, owner designates the following person to receive a copy of the Lienor's Notice as provided in Section 713.13(l)(b). Florida Statutes:  
a) Name and address: \_\_\_\_\_  
b) Telephone No.: \_\_\_\_\_ Fax No. (Opt.) \_\_\_\_\_
9. Expiration date of Notice of Commencement (the expiration date is one year from the date of recording unless a different date is specified): \_\_\_\_\_

**WARNING TO OWNER:** ANY PAYMENTS MADE BY THE OWNER AFTER THE EXPIRATION OF THE NOTICE OF COMMENCEMENT ARE CONSIDERED IMPROPER PAYMENTS UNDER CHAPTER 713, PART I, SECTION 713.13, FLORIDA STATUTES, AND CAN RESULT IN YOUR 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 YOUR LENDER OR AN ATTORNEY BEFORE COMMENCING WORK OR RECORDING YOUR NOTICE OF COMMENCEMENT.

STATE OF FLORIDA  
COUNTY OF COLUMBIA

2240-1161-74-100-0

10. Daniel A. Zwickel  
Signature of Owner or Owner's Authorized Officer/Director/Partner/Manager  
Daniel A. Zwickel  
Print Name

The foregoing instrument was acknowledged before me, a Florida Notary, this 25 day of September, 2008, by:

Daniel Zwickel as \_\_\_\_\_ (type of authority, e.g. officer, trustee, attorney  
fact) for \_\_\_\_\_ (name of party on behalf of whom instrument was executed).

Personally Known \_\_\_\_\_ OR Produced Identification X Type DL

Notary Signature Lisa Huchingson Notary Stamp or Seal:



11. Verification pursuant to Section 92.525, Florida Statutes. Under penalties of perjury, I declare that I have read the foregoing and that the facts stated in it are true to the best of my knowledge and belief.

Daniel A. Zwickel  
Signature of Natural Person Signing (in line #10 above.)



Prepared by:  
Judi M. Lowrey  
Provident Title & Mortgage, Inc.  
206 S. Marion Avenue  
Lake City, Florida 32025

File Number: 08-046

## General Warranty Deed

Made this May 8, 2008 A.D. By **Michael C. Chandler and Alicia P. Chandler, husband and wife**, 4914 S. Greenland Hideaway Drive, Jacksonville, FL 32258, hereinafter called the grantor, to **Daniel A. Zwickel, an unmarried man**, whose post office address is: 4914 US Highway 441 N., Lake City, FL 32055, 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:

Lot 9, MEADOWLANDS PHASE 1, as per plat thereof recorded in Plat Book 7, Pages 139 and 140, of the Public Records of Columbia County, Florida.

Said property is not the homestead of the Grantor(s) under the laws and constitution of the State of Florida in that neither Grantor(s) or any members of the household of Grantor(s) reside thereon.

Parcel ID Number: **06-6S-17-09617-109**

**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, 2007.

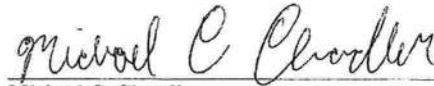
**In Witness Whereof**, the said grantor has signed and sealed these presents the day and year first above written.

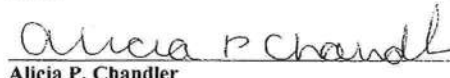
*Signed, sealed and delivered in our presence:*


  
\_\_\_\_\_  
Witness Printed Name L. Taylor Goes

\_\_\_\_\_  
Witness Printed Name Jamie Barrington

State of Florida  
County of Columbia

  
\_\_\_\_\_  
**Michael C. Chandler** (Seal)  
Address: 4914 S. Greenland Hideaway Drive, Jacksonville, FL 32258

  
\_\_\_\_\_  
**Alicia P. Chandler** (Seal)  
Address: 4914 S. Greenland Hideaway Drive, Jacksonville, FL 32258

The foregoing instrument was acknowledged before me this 8th day of May, 2008, by Michael C. Chandler and Alicia P. Chandler, husband and wife, who is/are personally known to me or who has produced  as identification.

\_\_\_\_\_  
Notary Public  
Print Name: Judi M. Lowrey

My Commission Expires: October 2, 2009

**A & B Well Drilling, Inc.**  
**5673 NW Lake Jeffery Road**  
**Lake City, FL, 32055**  
**386-758-3409**

9/25/2008

**To: Columbia County Building Department**

**Description of well to be installed for Customer:** Dan Jurick  
**Located at Address:** 760 S.W. Meadowlands Drive

**1 hp 20 gpm- 1 1/4" drop over 82 gallon equivalent captive tank with cycle stop and back flow prevention. With SRWM permit.**

William Bias  
**William Bias**

Application #:  
0809-53

*Faxed on 9-25-08*



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

# COLUMBIA COUNTY 9-1-1 ADDRESSING

P. O. Box 1787, Lake City, FL 32056-1787  
PHONE: (386) 758-1125 \* FAX: (386) 758-1365 \* Email: ron\_croft@columbiacountyfla.com

## Addressing Maintenance

To maintain the Countywide Addressing Policy you must make application for a 9-1-1 Address at the time you apply for a building permit. The established standards for assigning and posting numbers to all principal buildings, dwellings, businesses and industries are contained in Columbia County Ordinance 2001-9. The addressing system is to enable Emergency Service Agencies to locate you in an emergency, and to assist the United States Postal Service and the public in the timely and efficient provision of services to residents and businesses of Columbia County.

DATE REQUESTED: 9/2/2008 DATE ISSUED: 9/4/2008

### ENHANCED 9-1-1 ADDRESS:

760 SW MEADOWLANDS DR  
LAKE CITY FL 32024


### PROPERTY APPRAISER PARCEL NUMBER:

06-6S-17-09617-109

### Remarks:

LOT 9 MEADOWLANDS S/D PHS 1

Address Issued By:



Columbia County 9-1-1 Addressing / GIS Department

**NOTICE: THIS ADDRESS WAS ISSUED BASED ON LOCATION INFORMATION RECEIVED FROM THE REQUESTER. SHOULD, AT A LATER DATE, THE LOCATION INFORMATION BE FOUND TO BE IN ERROR, THIS ADDRESS IS SUBJECT TO CHANGE.**



LETTER OF AUTHORIZATION

Date: 9/25/08

Columbia County Building Department  
P.O. Drawer 1529  
Lake City, FL 32056

I MICHAEL MEDDERE, License No. CGP-0606RV do hereby

Authorize DAN ZWICKEL to pull and sign permits on my  
behalf.

Sincerely,

Michael Meddere

Sworn to and subscribed before me this 25<sup>th</sup> day of Sept, 2008.

Notary Public: Gale Tedder

My commission expires: \_\_\_\_\_

Personally Known \_\_\_\_\_

Produced Valid Identification: DL



**STATE OF FLORIDA**

DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION

CONSTRUCTION INDUSTRY LICENSING BOARD  
1940 NORTH MONROE STREET  
TALLAHASSEE FL 32399-0783

(850) 487-1395

MEDDERS, MICHAEL EDWIN  
AMELIA JEWEL INC  
1004 EASTPORT RD  
JACKSONVILLE FL 32218

Congratulations! With this license you become one of the nearly one million Floridians licensed by the Department of Business and Professional Regulation. Our professionals and businesses range from architects to yacht brokers, from boxers to barbeque restaurants, and they keep Florida's economy strong.

Every day we work to improve the way we do business in order to serve you better. For information about our services, please log onto [www.myfloridalicense.com](http://www.myfloridalicense.com). There you can find more information about our divisions and the regulations that impact you, subscribe to department newsletters and learn more about the Department's initiatives.

Our mission at the Department is: License Efficiently, Regulate Fairly. We constantly strive to serve you better so that you can serve your customers. Thank you for doing business in Florida, and congratulations on your new license!

STATE OF FLORIDA AC# 382554  
DEPARTMENT OF BUSINESS AND  
PROFESSIONAL REGULATION

CGC060658 06/22/08 070527042

CERTIFIED GENERAL CONTRACTOR  
MEDDERS, MICHAEL EDWIN  
AMELIA JEWEL INCIS CERTIFIED under the provisions of Ch.489 FS  
Expiration date: AUG 31, 2010 L08062200050

DETACH HERE

AC# 3825543

**STATE OF FLORIDA**DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION  
CONSTRUCTION INDUSTRY LICENSING BOARD

SEQ# L08062200050

| DATE       | BATCH NUMBER | LICENSE NBR |
|------------|--------------|-------------|
| 06/22/2008 | 070527042    | CGC060658   |

The GENERAL CONTRACTOR  
Named below IS CERTIFIED  
Under the provisions of Chapter 489 FS.  
Expiration date: AUG 31, 2010

MEDDERS, MICHAEL EDWIN  
AMELIA JEWEL INC  
1004 EASTPORT RD  
JACKSONVILLE FL 32218CHARLIE CRIST  
GOVERNOR

DISPLAY AS REQUIRED BY LAW

CHUCK DRAGO  
INTERIM SECRETARY



# FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Community Affairs  
Residential Whole Building Performance Method A

|               |  |                      |                     |
|---------------|--|----------------------|---------------------|
| Project Name: | <b>ZWICKEL RES.</b>                    | Builder:             | <b>AMELIA JEWEL</b> |
| Address:      | <b>Lot: 9, Sub: MEADOWLANDS, Plat:</b> | Permitting Office:   | <b>LAKE CITY</b>    |
| City, State:  | <b>LAKE CITY, FL 32055-</b>            | Permit Number:       | <b>27390</b>        |
| Owner:        | <b>DAN ZWICKEL</b>                     | Jurisdiction Number: | <b>221000</b>       |
| Climate Zone: | <b>North</b>                           |                      |                     |

|   |                                |  |                   |
|---|--------------------------------|--|-------------------|
| 1. New construction or existing   | New                            | 12. Cooling systems                    |                   |
| 2. Single family or multi-family  | Single family                  | a. Central Unit                        | Cap: 30.0 kBtu/hr |
| 3. Number of units, if multi-family   | 1                              |  | SEER: 13.00       |
| 4. Number of Bedrooms   | 3                              | b. N/A                                 |                   |
| 5. Is this a worst case?  | Yes                            | c. N/A                                 |                   |
| 6. Conditioned floor area (ft <sup>2</sup> )                                    | 1520 ft <sup>2</sup>           |  |                   |
| 7. Glass type <sup>1</sup> and area: (Label reqd. by 13-104.4.5 if not default) |                                | 13. Heating systems                    |                   |
| a. U-factor:  | Description Area               | a. Electric Heat Pump/Split            | Cap: 30.0 kBtu/hr |
| (or Single or Double DEFAULT) 7a. (Dble Default)                                | 63.0 ft <sup>2</sup>           |  | HSPF: 7.80        |
| b. SHGC:  |                                | b. N/A                                 |                   |
| (or Clear or Tint DEFAULT) 7b. (Clear)  | 63.0 ft <sup>2</sup>           | c. N/A                                 |                   |
| 8. Floor types  |                                |  |                   |
| a. Slab-On-Grade Edge Insulation  | R=0.0, 175.5(p) ft             | 14. Hot water systems                  |                   |
| b. N/A  |                                | a. Electric Resistance                 | Cap: 50.0 gallons |
| c. N/A  |                                |  | EF: 0.90          |
| 9. Wall types   |                                | b. N/A                                 |                   |
| a. Frame, Wood, Exterior  | R=11.0, 959.5 ft <sup>2</sup>  | c. Conservation credits                |                   |
| b. Frame, Wood, Adjacent  | R=11.0, 290.0 ft <sup>2</sup>  | (HR-Heat recovery, Solar               |                   |
| c. N/A  |                                | DHP-Dedicated heat pump)               |                   |
| d. N/A  |                                | 15. HVAC credits                       |                   |
| e. N/A  |                                | (CF-Ceiling fan, CV-Cross ventilation, |                   |
| 10. Ceiling types   |                                | HF-Whole house fan,                    |                   |
| a. Under Attic  | R=30.0, 1520.0 ft <sup>2</sup> | PT-Programmable Thermostat,            |                   |
| b. N/A  |                                | MZ-C-Multizone cooling,                |                   |
| c. N/A  |                                | MZ-H-Multizone heating)                |                   |
| 11. Ducts   |                                |  |                   |
| a. Sup: Unc. Ret: Unc. AH: Garage   | Sup. R=6.0, 150.0 ft           |  |                   |
| b. N/A  |                                |  |                   |

Glass/Floor Area: 0.04

Total as-built points: 19679

Total base points: 22257

## PASS

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

PREPARED BY: Keith Murray

DATE: 09-09-2004

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

OWNER/AGENT: M.E. Meddens

DATE: \_\_\_\_\_

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

BUILDING OFFICIAL: \_\_\_\_\_

DATE: \_\_\_\_\_



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

**SUMMER CALCULATIONS****Residential Whole Building Performance Method A - Details**

ADDRESS: Lot: 9, Sub: MEADOWLANDS, Plat: , LAKE CITY, FL, 32055-

PERMIT #:

| BASE   |          |       |         | AS-BUILT                         |                          |     |                           |             |         |      |         |        |
|--|----------|-------|---------|----------------------------------|--------------------------|-----|---------------------------|-------------|---------|------|---------|--------|
| GLASS TYPES<br>.18 X Conditioned X BSPM = Points<br>Floor Area |          |       |         | Type/SC                          | Overhang<br>Ornt Len Hgt |     | Area X SPM X SOF = Points |             |         |      |         |        |
| .18  | 1520.0   | 18.59 | 5086.0  | 1.Double, Clear                  | E                        | 1.0 | 6.0                       | 24.0        | 42.06   | 0.97 | 978.0   |        |
|  |          |       |         | 2.Double, Clear                  | S                        | 1.0 | 1.0                       | 9.0         | 35.87   | 0.52 | 168.0   |        |
|  |          |       |         | 3.Double, Clear                  | W                        | 1.0 | 7.0                       | 30.0        | 38.52   | 0.98 | 1135.0  |        |
|  |          |       |         | As-Built Total:                  |                          |     |                           |             |         |      | 63.0    | 2281.0 |
| WALL TYPES Area X BSPM = Points                                |          |       |         | Type                             | R-Value                  |     | Area X SPM = Points       |             |         |      |         |        |
| Adjacent   | 290.0    | 0.70  | 203.0   | 1. Frame, Wood, Exterior         | 11.0                     |     | 959.5                     | 1.70        | 1631.2  |      |         |        |
| Exterior   | 959.5    | 1.70  | 1631.2  | 2. Frame, Wood, Adjacent         | 11.0                     |     | 290.0                     | 0.70        | 203.0   |      |         |        |
| Base Total:  |          |       |         | 1249.5                           |                          |     |                           |             |         |      | 1834.2  |        |
| DOOR TYPES Area X BSPM = Points                                |          |       |         | Type                             | Area X SPM = Points      |     |                           |             |         |      |         |        |
| Adjacent   | 17.5     | 2.40  | 42.0    | 1.Exterior Insulated             |                          |     | 21.0                      | 4.10        | 86.1    |      |         |        |
| Exterior   | 56.0     | 6.10  | 341.6   | 2.Exterior Insulated             |                          |     | 35.0                      | 4.10        | 143.5   |      |         |        |
|  |          |       |         | 3.Adjacent Insulated             |                          |     | 17.5                      | 1.60        | 28.0    |      |         |        |
| Base Total:  |          |       |         | 73.5                             |                          |     |                           |             |         |      | 383.6   |        |
|  |          |       |         | As-Built Total:                  |                          |     |                           |             |         |      | 73.5    | 257.6  |
| CEILING TYPES Area X BSPM = Points                             |          |       |         | Type                             | R-Value                  |     | Area X SPM X SCM = Points |             |         |      |         |        |
| Under Attic  | 1520.0   | 1.73  | 2629.6  | 1. Under Attic                   | 30.0                     |     | 1520.0                    | 1.73 X 1.00 | 2629.6  |      |         |        |
| Base Total:  |          |       |         | 1520.0                           |                          |     |                           |             |         |      | 2629.6  |        |
| FLOOR TYPES Area X BSPM = Points                               |          |       |         | Type                             | R-Value                  |     | Area X SPM = Points       |             |         |      |         |        |
| Slab   | 175.5(p) | -37.0 | -6493.5 | 1. Slab-On-Grade Edge Insulation | 0.0                      |     | 175.5(p)                  | -41.20      | -7230.6 |      |         |        |
| Raised   | 0.0      | 0.00  | 0.0     |                                  |                          |     |                           |             |         |      |         |        |
| Base Total:  |          |       |         | 175.5                            |                          |     |                           |             |         |      | -7230.6 |        |
| INFILTRATION Area X BSPM = Points                              |          |       |         | Area X SPM = Points              |                          |     |                           |             |         |      |         |        |
| 1520.0 10.21 15519.2   |          |       |         | 1520.0 10.21 15519.2             |                          |     |                           |             |         |      |         |        |



**SUMMER CALCULATIONS****Residential Whole Building Performance Method A - Details**

ADDRESS: Lot: 9, Sub: MEADOWLANDS, Plat: , LAKE CITY, FL, 32055-

PERMIT #:

| BASE                               |                           |   |                   | AS-BUILT   |                                       |   |                           |                           |   |                   |
|------------------------------------|---------------------------|---|-------------------|--|---------------------------------------|---|---------------------------|---------------------------|---|-------------------|
| <b>Summer Base Points: 18959.1</b> |                           |   |                   | <b>Summer As-Built Points: 15291.0</b>   |                                       |   |                           |                           |   |                   |
| Total Summer<br>Points             | X<br>System<br>Multiplier | = | Cooling<br>Points | Total<br>Component<br>(System - Points)  | X<br>Cap<br>Ratio<br>(DM x DSM x AHU) | X<br>Duct<br>Multiplier<br>(DM x DSM x AHU) | X<br>System<br>Multiplier | X<br>Credit<br>Multiplier | = | Cooling<br>Points |
| 18959.1                            | 0.3250                    |   | 6161.7            | <small>(sys 1: Central Unit 30000btuh ,SEER/EFF(13.0) Ducts:Unc(S),Unc(R),Gar(AH),R6.0(INS)</small><br>15291      1.00      (1.09 x 1.147 x 1.00)      0.260      1.000      4970.5<br><b>15291.0      1.00      1.250      0.260      1.000      4970.5</b> |                                       |   |                           |                           |   |                   |

# WINTER CALCULATIONS

## Residential Whole Building Performance Method A - Details

ADDRESS: Lot: 9, Sub: MEADOWLANDS, Plat: , LAKE CITY, FL, 32055-

PERMIT #:

| BASE  |          |       |        | AS-BUILT                         |                          |     |                     |                           |             |        |       |
|---|----------|-------|--------|----------------------------------|--------------------------|-----|---------------------|---------------------------|-------------|--------|-------|
| <b>GLASS TYPES</b>                              |          |       |        |                                  |                          |     |                     |                           |             |        |       |
| .18 X Conditioned X BWPM = Points<br>Floor Area |          |       |        | Type/SC                          | Overhang<br>Ornt Len Hgt |     |                     | Area X WPM X WOF = Points |             |        |       |
| .18   | 1520.0   | 20.17 | 5519.0 | 1.Double, Clear                  | E                        | 1.0 | 6.0                 | 24.0                      | 18.79       | 1.02   | 458.0 |
|   |          |       |        | 2.Double, Clear                  | S                        | 1.0 | 1.0                 | 9.0                       | 13.30       | 2.73   | 326.0 |
|   |          |       |        | 3.Double, Clear                  | W                        | 1.0 | 7.0                 | 30.0                      | 20.73       | 1.00   | 624.0 |
|   |          |       |        | <b>As-Built Total:</b>           |                          |     | 63.0                |                           |             | 1408.0 |       |
| <b>WALL TYPES</b> Area X BWPM = Points          |          |       |        | Type                             | R-Value                  |     |                     | Area X WPM = Points       |             |        |       |
| Adjacent  | 290.0    | 3.60  | 1044.0 | 1. Frame, Wood, Exterior         | 11.0                     |     |                     | 959.5                     | 3.70        | 3550.2 |       |
| Exterior  | 959.5    | 3.70  | 3550.2 | 2. Frame, Wood, Adjacent         | 11.0                     |     |                     | 290.0                     | 3.60        | 1044.0 |       |
| <b>Base Total:</b>                              |          |       |        | <b>1249.5</b>                    |                          |     | <b>4594.2</b>       |                           |             |        |       |
|   |          |       |        | <b>As-Built Total:</b>           |                          |     | 1249.5              |                           |             | 4594.2 |       |
| <b>DOOR TYPES</b> Area X BWPM = Points          |          |       |        | Type                             |                          |     |                     | Area X WPM = Points       |             |        |       |
| Adjacent  | 17.5     | 11.50 | 201.3  | 1.Exterior Insulated             |                          |     |                     | 21.0                      | 8.40        | 176.4  |       |
| Exterior  | 56.0     | 12.30 | 688.8  | 2.Exterior Insulated             |                          |     |                     | 35.0                      | 8.40        | 294.0  |       |
|   |          |       |        | 3.Adjacent Insulated             |                          |     |                     | 17.5                      | 8.00        | 140.0  |       |
| <b>Base Total:</b>                              |          |       |        | <b>73.5</b>                      |                          |     | <b>890.1</b>        |                           |             |        |       |
|   |          |       |        | <b>As-Built Total:</b>           |                          |     | 73.5                |                           |             | 610.4  |       |
| <b>CEILING TYPES</b> Area X BWPM = Points       |          |       |        | Type                             | R-Value                  |     |                     | Area X WPM X WCM = Points |             |        |       |
| Under Attic                                     | 1520.0   | 2.05  | 3116.0 | 1. Under Attic                   | 30.0                     |     |                     | 1520.0                    | 2.05 X 1.00 | 3116.0 |       |
| <b>Base Total:</b>                              |          |       |        | <b>1520.0</b>                    |                          |     | <b>3116.0</b>       |                           |             |        |       |
|   |          |       |        | <b>As-Built Total:</b>           |                          |     | 1520.0              |                           |             | 3116.0 |       |
| <b>FLOOR TYPES</b> Area X BWPM = Points         |          |       |        | Type                             | R-Value                  |     |                     | Area X WPM = Points       |             |        |       |
| Slab  | 175.5(p) | 8.9   | 1561.9 | 1. Slab-On-Grade Edge Insulation | 0.0                      |     |                     | 175.5(p)                  | 18.80       | 3299.4 |       |
| Raised  | 0.0      | 0.00  | 0.0    |                                  |                          |     |                     |                           |             |        |       |
| <b>Base Total:</b>                              |          |       |        | <b>1561.9</b>                    |                          |     | <b>175.5</b>        |                           |             | 3299.4 |       |
|   |          |       |        | <b>As-Built Total:</b>           |                          |     | 175.5               |                           |             | 3299.4 |       |
| <b>INFILTRATION</b> Area X BWPM = Points        |          |       |        |                                  |                          |     | Area X WPM = Points |                           |             |        |       |
| 1520.0 -0.59 -896.8                             |          |       |        |                                  |                          |     | 1520.0 -0.59 -896.8 |                           |             |        |       |

# WINTER CALCULATIONS

## Residential Whole Building Performance Method A - Details

ADDRESS: Lot: 9, Sub: MEADOWLANDS, Plat: , LAKE CITY, FL, 32055-

PERMIT #:

| BASE                        |                     |                  | AS-BUILT  |                              |                   |                     |                     |                  |
|-----------------------------|---------------------|------------------|---|------------------------------|-------------------|---------------------|---------------------|------------------|
| Winter Base Points: 14784.4 |                     |                  | Winter As-Built Points: 12131.2   |                              |                   |                     |                     |                  |
| Total Winter Points         | X System Multiplier | = Heating Points | Total Component (System - Points)   | X Cap Ratio (DM x DSM x AHU) | X Duct Multiplier | X System Multiplier | X Credit Multiplier | = Heating Points |
| 14784.4                     | 0.5540              | 8190.5           | (sys 1: Electric Heat Pump 30000 btuh ,EFF(7.8) Ducts:Unc(S),Unc(R),Gar(AH),R6.0<br>12131.2 1.000 (1.069 x 1.169 x 1.00)0.437 1.000 6627.6<br>12131.2 1.00 1.250 0.437 1.000 6627.6 |                              |                   |                     |                     |                  |



**WATER HEATING & CODE COMPLIANCE STATUS**

## Residential Whole Building Performance Method A - Details

ADDRESS: Lot: 9, Sub: MEADOWLANDS, Plat: , LAKE CITY, FL, 32055-

PERMIT #:

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

**CODE COMPLIANCE STATUS**

| BASE              |   |                   |                   | AS-BUILT          |   |                   |                   |
|-------------------|---|-------------------|-------------------|-------------------|---|-------------------|-------------------|
| Cooling<br>Points | + | Heating<br>Points | = Total<br>Points | Cooling<br>Points | + | Heating<br>Points | = Total<br>Points |
| 6162              |   | 8191              | 7905              | 4970              |   | 6628              | 8081              |
|                   |   |                   |                   |                   |   |                   |                   |

**PASS**

# Code Compliance Checklist

## Residential Whole Building Performance Method A - Details

ADDRESS: Lot: 9, Sub: MEADOWLANDS, Plat: , LAKE CITY, FL, 32055-

PERMIT #:

**6A-21 INFILTRATION REDUCTION COMPLIANCE CHECKLIST**

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

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

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

# ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

**ESTIMATED ENERGY PERFORMANCE SCORE\* = 86.6**

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

DAN ZWICKEL, Lot: 9, Sub: MEADOWLANDS, Plat: , LAKE CITY, FL, 32055-

|   |   |     |  |                   |
|---|---|-----|--|-------------------|
| 1. New construction or existing   | New                                     | ___ | 12. Cooling systems                    |                   |
| 2. Single family or multi-family  | Single family                           | ___ | a. Central Unit                        | Cap: 30.0 kBtu/hr |
| 3. Number of units, if multi-family   | 1                                       | ___ |  | SEER: 13.00       |
| 4. Number of Bedrooms   | 3                                       | ___ | b. N/A                                 | ___               |
| 5. Is this a worst case?  | Yes                                     | ___ | c. N/A                                 | ___               |
| 6. Conditioned floor area (ft <sup>2</sup> )                                    | 1520 ft <sup>2</sup>                    | ___ |  | ___               |
| 7. Glass type <sup>1</sup> and area: (Label reqd. by 13-104.4.5 if not default) |   | ___ | 13. Heating systems                    |                   |
| a. U-factor:  | Description Area                        | ___ | a. Electric Heat Pump/Split            | Cap: 30.0 kBtu/hr |
| (or Single or Double DEFAULT)   | 7a. (Dble Default) 63.0 ft <sup>2</sup> | ___ |  | HSPF: 7.80        |
| b. SHGC:  |   | ___ | b. N/A                                 | ___               |
| (or Clear or Tint DEFAULT)  | 7b. (Clear) 63.0 ft <sup>2</sup>        | ___ | c. N/A                                 | ___               |
| 8. Floor types  |   | ___ |  | ___               |
| a. Slab-On-Grade Edge Insulation  | R=0.0, 175.5(p) ft                      | ___ | 14. Hot water systems                  |                   |
| b. N/A  |   | ___ | a. Electric Resistance                 | Cap: 50.0 gallons |
| c. N/A  |   | ___ |  | EF: 0.90          |
| 9. Wall types   |   | ___ | b. N/A                                 | ___               |
| a. Frame, Wood, Exterior  | R=11.0, 959.5 ft <sup>2</sup>           | ___ | c. Conservation credits                | ___               |
| b. Frame, Wood, Adjacent  | R=11.0, 290.0 ft <sup>2</sup>           | ___ | (HR-Heat recovery, Solar               | ___               |
| c. N/A  |   | ___ | DHP-Dedicated heat pump)               | ___               |
| d. N/A  |   | ___ | 15. HVAC credits                       | ___               |
| e. N/A  |   | ___ | (CF-Ceiling fan, CV-Cross ventilation, | ___               |
| 10. Ceiling types   |   | ___ | HF-Whole house fan,                    | ___               |
| a. Under Attic  | R=30.0, 1520.0 ft <sup>2</sup>          | ___ | PT-Programmable Thermostat,            | ___               |
| b. N/A  |   | ___ | MZ-C-Multizone cooling,                | ___               |
| c. N/A  |   | ___ | MZ-H-Multizone heating)                | ___               |
| 11. Ducts   |   | ___ |  | ___               |
| a. Sup: Unc. Ret: Unc. AH: Garage   | Sup. R=6.0, 150.0 ft                    | ___ |  | ___               |
| b. N/A  |   | ___ |  | ___               |

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

Builder Signature: M. E. McCallum Date: 9-9-08

Address of New Home: 760 SW MEADOWLANDS City/FL Zip: LAKE CITY FL 32024



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

1 Predominant glass type. For actual glass type and areas, see Summer & Winter Glass output on pages 2&4.  
EnergyGauge® (Version: FLRCPB v4.5.2)



# BUILDING INPUT SUMMARY REPORT

|                          |   |                               |   |                      |   |               |
|--------------------------|---|-------------------------------|---|----------------------|---|---------------|
| <b>PROJECT</b>           | <b>Title:</b> ZWICKEL RES.                |                               | <b>Family Type:</b> Single                |                      | <b>Address Type:</b> Lot Information        |               |
|                          | <b>Owner:</b> DAN ZWICKEL                 |                               | <b>New/Existing:</b> New                  |                      | <b>Lot #:</b> 9                             |               |
|                          | <b># of Units:</b> 1                      |                               | <b>Bedrooms:</b> 3                        |                      | <b>Subdivision:</b> MEADOWLANDS             |               |
|                          | <b>Builder Name:</b> AMELIA JEWEL         |                               | <b>Conditioned Area:</b> 1520             |                      | <b>Platbook:</b> (blank)                    |               |
|                          | <b>Climate:</b> North                     |                               | <b>Total Stories:</b> 1                   |                      | <b>Street:</b> N/A                          |               |
|                          | <b>Permit Office:</b> LAKE CITY           |                               | <b>Worst Case:</b> Yes                    |                      | <b>County:</b> COLUMBIA                     |               |
|                          | <b>Jurisdiction #:</b> (blank)            |                               | <b>Rotate Angle:</b> 90                   |                      | <b>City, St, Zip:</b> LAKE CITY, FL, 32055- |               |
| <b>FLOORS</b>            | #   | Floor Type                    | R-Val                                     | Area/Perimeter       | Units                                       |               |
|                          | 1   | Slab-On-Grade Edge Insulation | 0.0                                       | 175.5(p) ft          | 1   |               |
| <b>CEILINGS</b>          | #   | Ceiling Type                  | R-Val                                     | Area                 | Base Area                                   | Units         |
|                          | 1   | Under Attic                   | 30.0                                      | 1520.0 ft²           | 1520.0 ft²                                  | 1             |
| Credit Multipliers: None |   |                               |   |                      |   |               |
| <b>WALLS</b>             | #   | Wall Type                     | Location                                  | R-Val                | Area  | Units         |
|                          | 1   | Frame - Wood                  | Exterior                                  | 11.0                 | 959.5 ft²                                   | 1             |
|                          | 2   | Frame - Wood                  | Adjacent                                  | 11.0                 | 290.0 ft²                                   | 1             |
| Credit Multipliers: None |   |                               |   |                      |   |               |
| <b>DUCTS</b>             | #   | Supply Location               | Return Location                           | Air Handler Location | Supply R-Val                                | Supply Length |
|                          | 1   | Uncond.                       | Uncond.                                   | Garage               | 6.0   | 150.0 ft      |
| Credit Multipliers: None |   |                               |   |                      |   |               |
| <b>WATER</b>             | #   | System Type                   | EF  | Cap.                 | Conservation Type                           | Con. EF       |
|                          | 1   | Electric Resistance           | 0.90                                      | 50.0                 | None  | 0.00          |
| <b>REFR.</b>             | #   | Use Default?                  | Annual Operating Cost                     | Electric Rate        |   |               |
|                          | 1   | Yes                           | N/A                                       | N/A                  |   |               |
| <b>MISC</b>              | <b>Rater Name:</b> CodeOnlyPro            |                               | <b>Class #:</b> 3                         |                      | <b>Pool Size:</b> 0                         |               |
|                          | <b>Rater Certification #:</b> CodeOnlyPro |                               | <b>Duct Leakage Type:</b> N/A             |                      | <b>Pump Size:</b> 0.00 hp                   |               |
|                          | <b>Area Under Fluorescent:</b> 0.0        |                               | <b>Visible Duct Disconnects:</b> N/A      |                      | <b>Dryer Type:</b> Electric                 |               |
|                          | <b>Area Under Incandescent:</b> 1520.0    |                               | <b>Leak Free Duct System Proposed:</b> No |                      | <b>Stove Type:</b> Electric                 |               |
|                          | <b>NOTE: Not all Rating info shown</b>    |                               | <b>HRV/ERV System Present?:</b> No        |                      | <b>Avg Ceil Hgt:</b>                        |               |
|                          |   |                               |   |                      |   |               |

# Residential System Sizing Calculation

## Summary

DAN ZWICKEL

Project Title:  
ZWICKEL RES.

Code Only  
Professional Version  
Climate: North

LAKE CITY, FL 32055-

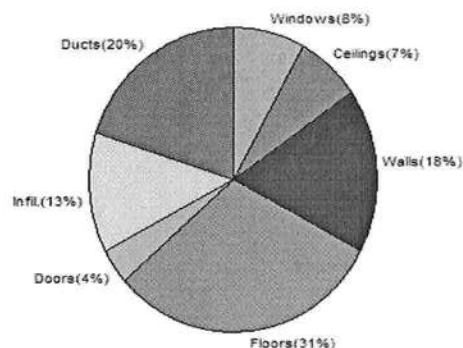
9/9/2008

|   |                   |                                       |                   |
|---|-------------------|---------------------------------------|-------------------|
| Location for weather data: Jacksonville - Defaults: Latitude(30) Altitude(26 ft.) Temp Range(M) |                   |                                       |                   |
| Humidity data: Interior RH (50%) Outdoor wet bulb (77F) Humidity difference(53gr.)              |                   |                                       |                   |
| Winter design temperature   | 32 F              | Summer design temperature             | 93 F              |
| Winter setpoint   | 70 F              | Summer setpoint                       | 75 F              |
| Winter temperature difference   | 38 F              | Summer temperature difference         | 18 F              |
| <b>Total heating load calculation</b>   | <b>25648 Btuh</b> | <b>Total cooling load calculation</b> | <b>27959 Btuh</b> |
| Submitted heating capacity  | % of calc Btuh    | Submitted cooling capacity            | % of calc Btuh    |
| Total (Electric Heat Pump)  | 117.0 30000       | Sensible (SHR = 0.75)                 | 97.8 22500        |
| Heat Pump + Auxiliary(10.0kW)   | 250.0 64130       | Latent                                | 151.6 7500        |
|   |                   | Total (Electric Heat Pump)            | 107.3 30000       |

## WINTER CALCULATIONS

Winter Heating Load (for 1520 sqft)

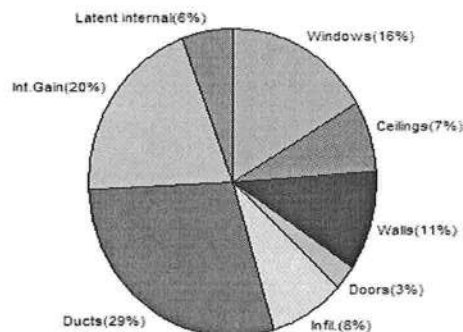
| Load component         |           |  | Load         |             |
|------------------------|-----------|--|--------------|-------------|
| Window total           | 63 sqft   |  | 2083         | Btuh        |
| Wall total             | 1250 sqft |  | 4504         | Btuh        |
| Door total             | 74 sqft   |  | 978          | Btuh        |
| Ceiling total          | 1520 sqft |  | 1839         | Btuh        |
| Floor total            | 176 sqft  |  | 7869         | Btuh        |
| Infiltration           | 77 cfm    |  | 3217         | Btuh        |
| Duct loss              |           |  | 5158         | Btuh        |
| <b>Subtotal</b>        |           |  | <b>25648</b> | <b>Btuh</b> |
| Ventilation            | 0 cfm     |  | 0            | Btuh        |
| <b>TOTAL HEAT LOSS</b> |           |  | <b>25648</b> | <b>Btuh</b> |



## SUMMER CALCULATIONS

Summer Cooling Load (for 1520 sqft)

| Load component                        |           |  | Load         |             |
|---------------------------------------|-----------|--|--------------|-------------|
| Window total                          | 63 sqft   |  | 4598         | Btuh        |
| Wall total                            | 1250 sqft |  | 2962         | Btuh        |
| Door total                            | 74 sqft   |  | 746          | Btuh        |
| Ceiling total                         | 1520 sqft |  | 2082         | Btuh        |
| Floor total                           |           |  | 0            | Btuh        |
| Infiltration                          | 41 cfm    |  | 802          | Btuh        |
| Internal gain                         |           |  | 5650         | Btuh        |
| Duct gain                             |           |  | 6173         | Btuh        |
| Sens. Ventilation                     | 0 cfm     |  | 0            | Btuh        |
| <b>Total sensible gain</b>            |           |  | <b>23012</b> | <b>Btuh</b> |
| Latent gain(ducts)                    |           |  | 1887         | Btuh        |
| Latent gain(infiltration)             |           |  | 1460         | Btuh        |
| Latent gain(ventilation)              |           |  | 0            | Btuh        |
| Latent gain(internal/occupants/other) |           |  | 1600         | Btuh        |
| <b>Total latent gain</b>              |           |  | <b>4946</b>  | <b>Btuh</b> |
| <b>TOTAL HEAT GAIN</b>                |           |  | <b>27959</b> | <b>Btuh</b> |



Version 8  
For Florida residences only

EnergyGauge® System Sizing

PREPARED BY: *Keith Murray*

DATE: *09-09-2008*

# System Sizing Calculations - Winter

## Residential Load - Whole House Component Details

DAN ZWICKEL

Project Title:  
ZWICKEL RES.

Code Only  
Professional Version  
Climate: North

LAKE CITY, FL 32055-

Reference City: Jacksonville (Defaults) Winter Temperature Difference: 38.0 F

9/9/2008

This calculation is for Worst Case. The house has been rotated 270 degrees.

### Component Loads for Whole House

| Window       | Panes/SHGC/Frame/U       | Orientation        | Area(sqft) X | HTM=                        | Load       |
|--------------|--------------------------|--------------------|--------------|-----------------------------|------------|
| 1            | 2, Clear, Metal, 0.87    | W                  | 24.0         | 33.1                        | 793 Btuh   |
| 2            | 2, Clear, Metal, 0.87    | N                  | 9.0          | 33.1                        | 298 Btuh   |
| 3            | 2, Clear, Metal, 0.87    | E                  | 30.0         | 33.1                        | 992 Btuh   |
|              | Window Total             |                    | 63(sqft)     |                             | 2083 Btuh  |
| Walls        | Type                     | R-Value            | Area X       | HTM=                        | Load       |
| 1            | Frame - Wood - Ext(0.09) | 11.0               | 960          | 3.6                         | 3459 Btuh  |
| 2            | Frame - Wood - Adj(0.09) | 11.0               | 290          | 3.6                         | 1045 Btuh  |
|              | Wall Total               |                    | 1250         |                             | 4504 Btuh  |
| Doors        | Type                     |                    | Area X       | HTM=                        | Load       |
| 1            | Insulated - Exterior     |                    | 21           | 13.3                        | 279 Btuh   |
| 2            | Insulated - Exterior     |                    | 35           | 13.3                        | 466 Btuh   |
| 3            | Insulated - Adjacent     |                    | 18           | 13.3                        | 233 Btuh   |
|              | Door Total               |                    | 74           |                             | 978Btuh    |
| Ceilings     | Type/Color/Surface       | R-Value            | Area X       | HTM=                        | Load       |
| 1            | Vented Attic/L/Shin      | 30.0               | 1520         | 1.2                         | 1839 Btuh  |
|              | Ceiling Total            |                    | 1520         |                             | 1839Btuh   |
| Floors       | Type                     | R-Value            | Size X       | HTM=                        | Load       |
| 1            | Slab On Grade            | 0                  | 175.5 ft(p)  | 44.8                        | 7869 Btuh  |
|              | Floor Total              |                    | 176          |                             | 7869 Btuh  |
|              | Envelope Subtotal:       |                    |              |                             | 17274 Btuh |
| Infiltration | Type                     | ACH X Volume(cuft) | walls(sqft)  | CFM=                        |            |
|              | Natural                  | 0.38               | 12160        | 1250                        | 77.0       |
|              |                          |                    |              |                             | 3217 Btuh  |
| Ductload     |                          |                    |              | (DLM of 0.252)              | 5158 Btuh  |
| All Zones    |                          |                    |              | Sensible Subtotal All Zones | 25648 Btuh |

### WHOLE HOUSE TOTALS

|  |                      |            |
|--|----------------------|------------|
|  | Subtotal Sensible    | 25648 Btuh |
|  | Ventilation Sensible | 0 Btuh     |
|  | Total Btuh Loss      | 25648 Btuh |



# Manual J Winter Calculations

## Residential Load - Component Details (continued)

DAN ZWICKEL

Project Title:  
ZWICKEL RES.

Code Only  
Professional Version  
Climate: North

LAKE CITY, FL 32055-

9/9/2008

### EQUIPMENT

|                             |  |            |
|-----------------------------|--|------------|
| 1. Electric Heat Pump/Split | ICP #WCH3302(Outside)ICP #WAHM302(Insi | 30000 Btuh |
|-----------------------------|--|------------|

Key: Window types (SHGC - Shading coefficient of glass as SHGC numerical value or as clear or tint)  
(Frame types - metal, wood or insulated metal)  
(U - Window U-Factor or 'DEF' for default)  
(HTM - ManualJ Heat Transfer Multiplier)

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



Version 8  
For Florida residences only

# System Sizing Calculations - Winter

## Residential Load - Room by Room Component Details

DAN ZWICKEL

Project Title:  
ZWICKEL RES.

Code Only  
Professional Version  
Climate: North

LAKE CITY, FL 32055-

Reference City: Jacksonville (Defaults) Winter Temperature Difference: 38.0 F  
This calculation is for Worst Case. The house has been rotated 270 degrees.

9/9/2008

### Component Loads for Zone #1: Main

| Window                  | Panes/SHGC/Frame/U  | Orientation        | Area(sqft)  | X    | HTM= | Load       |
|-------------------------|---|--------------------|-------------|------|------|------------|
| 1                       | 2, Clear, Metal, 0.87   | W                  | 24.0        |      | 33.1 | 793 Btuh   |
| 2                       | 2, Clear, Metal, 0.87   | N                  | 9.0         |      | 33.1 | 298 Btuh   |
| 3                       | 2, Clear, Metal, 0.87   | E                  | 30.0        |      | 33.1 | 992 Btuh   |
| Window Total            |   |                    | 63(sqft)    |      |      | 2083 Btuh  |
| Walls                   | Type  | R-Value            | Area        | X    | HTM= | Load       |
| 1                       | Frame - Wood - Ext(0.09)  | 11.0               | 960         |      | 3.6  | 3459 Btuh  |
| 2                       | Frame - Wood - Adj(0.09)  | 11.0               | 290         |      | 3.6  | 1045 Btuh  |
| Wall Total              |   |                    | 1250        |      |      | 4504 Btuh  |
| Doors                   | Type  |                    | Area        | X    | HTM= | Load       |
| 1                       | Insulated - Exterior  |                    | 21          |      | 13.3 | 279 Btuh   |
| 2                       | Insulated - Exterior  |                    | 35          |      | 13.3 | 466 Btuh   |
| 3                       | Insulated - Adjacent  |                    | 18          |      | 13.3 | 233 Btuh   |
| Door Total              |   |                    | 74          |      |      | 978Btuh    |
| Ceilings                | Type/Color/Surface  | R-Value            | Area        | X    | HTM= | Load       |
| 1                       | Vented Attic/L/Shin   | 30.0               | 1520        |      | 1.2  | 1839 Btuh  |
| Ceiling Total           |   |                    | 1520        |      |      | 1839Btuh   |
| Floors                  | Type  | R-Value            | Size        | X    | HTM= | Load       |
| 1                       | Slab On Grade   | 0                  | 175.5 ft(p) |      | 44.8 | 7869 Btuh  |
| Floor Total             |   |                    | 176         |      |      | 7869 Btuh  |
| Zone Envelope Subtotal: |   |                    |             |      |      | 17274 Btuh |
| Infiltration            | Type  | ACH X Volume(cuft) | walls(sqft) | CFM= |      |            |
|                         | Natural   | 0.38               | 12160       | 1250 | 77.0 | 3217 Btuh  |
| Ductload                | Average sealed, Supply(R6.0-Attic), Return(R6.0-Attic) (DLM of 0.252) |                    |             |      |      | 5158 Btuh  |
| Zone #1                 | Sensible Zone Subtotal  |                    |             |      |      | 25648 Btuh |

### WHOLE HOUSE TOTALS

|  |                      |            |
|--|----------------------|------------|
|  | Subtotal Sensible    | 25648 Btuh |
|  | Ventilation Sensible | 0 Btuh     |
|  | Total Btuh Loss      | 25648 Btuh |

# Manual J Winter Calculations

## Residential Load - Component Details (continued)

DAN ZWICKEL

Project Title:  
ZWICKEL RES.

Code Only  
Professional Version  
Climate: North

LAKE CITY, FL 32055-

9/9/2008

### EQUIPMENT

|                             |  |            |
|-----------------------------|--|------------|
| 1. Electric Heat Pump/Split | ICP #WCH3302(Outside)ICP #WAHM302(Insi | 30000 Btuh |
|-----------------------------|--|------------|

Key: Window types (SHGC - Shading coefficient of glass as SHGC numerical value or as clear or tint)  
(Frame types - metal, wood or insulated metal)  
(U - Window U-Factor or 'DEF' for default)  
(HTM - ManualJ Heat Transfer Multiplier)

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



Version 8  
For Florida residences only



# System Sizing Calculations - Summer

## Residential Load - Whole House Component Details

DAN ZWICKEL

Project Title:  
ZWICKEL RES.

Code Only  
Professional Version  
Climate: North

LAKE CITY, FL 32055-

Reference City: Jacksonville (Defaults) Summer Temperature Difference: 18.0 F

9/9/2008

This calculation is for Worst Case. The house has been rotated 270 degrees.

### Component Loads for Whole House

| Window                  | Type*                      | Ornt            | Overhang |      | Window Area(sqft) |              |          | HTM             |           | Load       |           |
|-------------------------|----------------------------|-----------------|----------|------|-------------------|--------------|----------|-----------------|-----------|------------|-----------|
|                         | Pn/SHGC/U/InSh/ExSh/IS     |                 | Len      | Hgt  | Gross             | Shaded       | Unshaded | Shaded          | Unshaded  |            |           |
| 1                       | 2, Clear, 0.87, None,N,N   | W               | 1ft.     | 6ft. | 24.0              | 0.0          | 24.0     | 30              | 80        | 1925 Btuh  |           |
| 2                       | 2, Clear, 0.87, None,N,N   | N               | 1ft.     | 1ft. | 9.0               | 0.0          | 9.0      | 30              | 30        | 267 Btuh   |           |
| 3                       | 2, Clear, 0.87, None,N,N   | E               | 1ft.     | 7ft. | 30.0              | 0.0          | 30.0     | 30              | 80        | 2406 Btuh  |           |
| Window Total            |                            |                 |          |      | 63 (sqft)         |              |          |                 |           | 4598 Btuh  |           |
| Walls                   | Type                       | R-Value/U-Value |          |      | Area(sqft)        |              |          | HTM             |           | Load       |           |
| 1                       | Frame - Wood - Ext         | 11.0/0.09       |          |      | 959.5             |              |          | 2.6             |           | 2467 Btuh  |           |
| 2                       | Frame - Wood - Adj         | 11.0/0.09       |          |      | 290.0             |              |          | 1.7             |           | 495 Btuh   |           |
| Wall Total              |                            |                 |          |      |                   | 1250 (sqft)  |          |                 | 2962 Btuh |            |           |
| Doors                   | Type                       |                 |          |      | Area (sqft)       |              |          | HTM             |           | Load       |           |
| 1                       | Insulated - Exterior       |                 |          |      | 21.0              |              |          | 10.1            |           | 213 Btuh   |           |
| 2                       | Insulated - Exterior       |                 |          |      | 35.0              |              |          | 10.1            |           | 355 Btuh   |           |
| 3                       | Insulated - Adjacent       |                 |          |      | 17.5              |              |          | 10.1            |           | 178 Btuh   |           |
| Door Total              |                            |                 |          |      |                   | 74 (sqft)    |          |                 | 746 Btuh  |            |           |
| Ceilings                | Type/Color/Surface         | R-Value         |          |      | Area(sqft)        |              |          | HTM             |           | Load       |           |
| 1                       | Vented Attic/Light/Shingle | 30.0            |          |      | 1520.0            |              |          | 1.4             |           | 2082 Btuh  |           |
| Ceiling Total           |                            |                 |          |      |                   | 1520 (sqft)  |          |                 | 2082 Btuh |            |           |
| Floors                  | Type                       | R-Value         |          |      | Size              |              |          | HTM             |           | Load       |           |
| 1                       | Slab On Grade              | 0.0             |          |      | 176 (ft(p))       |              |          | 0.0             |           | 0 Btuh     |           |
| Floor Total             |                            |                 |          |      |                   | 175.5 (sqft) |          |                 | 0 Btuh    |            |           |
| Envelope Subtotal:      |                            |                 |          |      |                   |              |          |                 |           | 10388 Btuh |           |
| Infiltration            | Type                       | ACH             |          |      | Volume(cuft)      |              |          | wall area(sqft) |           | CFM=       | Load      |
|                         | SensibleNatural            | 0.20            |          |      | 12160             |              |          | 1250            |           | 77.0       | 802 Btuh  |
| Internal gain           |                            | Occupants       |          |      | Btuh/occupant     |              |          | Appliance       |           | Load       |           |
|                         |                            | 5               |          |      | X 230             |              |          | + 4500          |           | 5650 Btuh  |           |
| Sensible Envelope Load: |                            |                 |          |      |                   |              |          |                 |           | 16840 Btuh |           |
| Duct load               | (DGM of 0.367)             |                 |          |      |                   |              |          |                 |           |            | 6173 Btuh |
| Sensible Load All Zones |                            |                 |          |      |                   |              |          |                 |           | 23012 Btuh |           |

# Manual J Summer Calculations

## Residential Load - Component Details (continued)

DAN ZWICKEL

Project Title:  
ZWICKEL RES.

Code Only  
Professional Version  
Climate: North

LAKE CITY, FL 32055-

9/9/2008

### WHOLE HOUSE TOTALS

|   |   |                   |
|---|---|-------------------|
| <b>Whole House<br/>Totals for Cooling</b> | <b>Sensible Envelope Load All Zones</b>                   | <b>16840 Btuh</b> |
|   | Sensible Duct Load  | 6173 Btuh         |
|   | <b>Total Sensible Zone Loads</b>                          | <b>23012 Btuh</b> |
|   | Sensible ventilation                                      | 0 Btuh            |
|   | Blower  | 0 Btuh            |
|   | <b>Total sensible gain</b>                                | <b>23012 Btuh</b> |
|   | Latent infiltration gain (for 53 gr. humidity difference) | 1460 Btuh         |
|   | Latent ventilation gain                                   | 0 Btuh            |
|   | Latent duct gain  | 1887 Btuh         |
|   | Latent occupant gain (5 people @ 200 Btuh per person)     | 1000 Btuh         |
|   | Latent other gain   | 600 Btuh          |
|   | <b>Latent total gain</b>                                  | <b>4946 Btuh</b>  |
|   | <b>TOTAL GAIN</b>   | <b>27959 Btuh</b> |

### EQUIPMENT

|                 |              |            |
|-----------------|--------------|------------|
| 1. Central Unit | ICP #WCH3302 | 30000 Btuh |
|-----------------|--------------|------------|

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

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

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

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

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

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

(Ornt - compass orientation)



Version 8  
For Florida residences only

# System Sizing Calculations - Summer

## Residential Load - Room by Room Component Details

DAN ZWICKEL

Project Title:  
ZWICKEL RES.

Code Only  
Professional Version  
Climate: North

LAKE CITY, FL 32055-

Reference City: Jacksonville (Defaults) Summer Temperature Difference: 18.0 F  
This calculation is for Worst Case. The house has been rotated 270 degrees.

9/9/2008

### Component Loads for Zone #1: Main

| Window                  | Type*   | Ornt | Overhang        |      | Window Area(sqft) |        |          | HTM             |           | Load       |           |
|-------------------------|---|------|-----------------|------|-------------------|--------|----------|-----------------|-----------|------------|-----------|
|                         | Pn/SHGC/U/InSh/ExSh/IS  |      | Len             | Hgt  | Gross             | Shaded | Unshaded | Shaded          | Unshaded  |            |           |
| 1                       | 2, Clear, 0.87, None,N,N  | W    | 1ft.            | 6ft. | 24.0              | 0.0    | 24.0     | 30              | 80        | 1925 Btuh  |           |
| 2                       | 2, Clear, 0.87, None,N,N  | N    | 1ft.            | 1ft. | 9.0               | 0.0    | 9.0      | 30              | 30        | 267 Btuh   |           |
| 3                       | 2, Clear, 0.87, None,N,N  | E    | 1ft.            | 7ft. | 30.0              | 0.0    | 30.0     | 30              | 80        | 2406 Btuh  |           |
| Window Total            |   |      |                 |      | 63 (sqft)         |        |          |                 |           | 4598 Btuh  |           |
| Walls                   | Type  |      | R-Value/U-Value |      | Area(sqft)        |        |          | HTM             |           | Load       |           |
| 1                       | Frame - Wood - Ext  |      | 11.0/0.09       |      | 959.5             |        |          | 2.6             |           | 2467 Btuh  |           |
| 2                       | Frame - Wood - Adj  |      | 11.0/0.09       |      | 290.0             |        |          | 1.7             |           | 495 Btuh   |           |
| Wall Total              |   |      |                 |      | 1250 (sqft)       |        |          |                 |           | 2962 Btuh  |           |
| Doors                   | Type  |      |                 |      | Area (sqft)       |        |          | HTM             |           | Load       |           |
| 1                       | Insulated - Exterior  |      |                 |      | 21.0              |        |          | 10.1            |           | 213 Btuh   |           |
| 2                       | Insulated - Exterior  |      |                 |      | 35.0              |        |          | 10.1            |           | 355 Btuh   |           |
| 3                       | Insulated - Adjacent  |      |                 |      | 17.5              |        |          | 10.1            |           | 178 Btuh   |           |
| Door Total              |   |      |                 |      | 74 (sqft)         |        |          |                 |           | 746 Btuh   |           |
| Ceilings                | Type/Color/Surface  |      | R-Value         |      | Area(sqft)        |        |          | HTM             |           | Load       |           |
| 1                       | Vented Attic/Light/Shingle  |      | 30.0            |      | 1520.0            |        |          | 1.4             |           | 2082 Btuh  |           |
| Ceiling Total           |   |      |                 |      | 1520 (sqft)       |        |          |                 |           | 2082 Btuh  |           |
| Floors                  | Type  |      | R-Value         |      | Size              |        |          | HTM             |           | Load       |           |
| 1                       | Slab On Grade   |      | 0.0             |      | 176 (ft(p))       |        |          | 0.0             |           | 0 Btuh     |           |
| Floor Total             |   |      |                 |      | 175.5 (sqft)      |        |          |                 |           | 0 Btuh     |           |
| Zone Envelope Subtotal: |   |      |                 |      |                   |        |          |                 |           | 10388 Btuh |           |
| Infiltration            | Type  |      | ACH             |      | Volume(cuft)      |        |          | wall area(sqft) |           | CFM=       | Load      |
|                         | SensibleNatural   |      | 0.20            |      | 12160             |        |          | 1250            |           | 40.5       | 802 Btuh  |
| Internal gain           |   |      | Occupants       |      | Btuh/occupant     |        |          | Appliance       |           | Load       |           |
|                         |   |      | 5               |      | X 230             |        |          | +               |           | 4500       | 5650 Btuh |
| Sensible Envelope Load: |   |      |                 |      |                   |        |          |                 |           | 16840 Btuh |           |
| Duct load               | Average sealed, Supply(R6.0-Attic), Return(R6.0-Attic) (DGM of 0.367) |      |                 |      |                   |        |          |                 | 6173 Btuh |            |           |
| Sensible Zone Load      |   |      |                 |      |                   |        |          |                 |           | 23012 Btuh |           |

# Manual J Summer Calculations

## Residential Load - Component Details (continued)

DAN ZWICKEL

Project Title:  
ZWICKEL RES.

Code Only  
Professional Version  
Climate: North

LAKE CITY, FL 32055-

9/9/2008

### WHOLE HOUSE TOTALS

|   |   |                   |
|---|---|-------------------|
| <b>Whole House<br/>Totals for Cooling</b> | <b>Sensible Envelope Load All Zones</b>                   | <b>16840 Btuh</b> |
|   | Sensible Duct Load  | 6173 Btuh         |
|   | <b>Total Sensible Zone Loads</b>                          | <b>23012 Btuh</b> |
|   | Sensible ventilation                                      | 0 Btuh            |
|   | Blower  | 0 Btuh            |
|   | <b>Total sensible gain</b>                                | <b>23012 Btuh</b> |
|   | Latent infiltration gain (for 53 gr. humidity difference) | 1460 Btuh         |
|   | Latent ventilation gain                                   | 0 Btuh            |
|   | Latent duct gain  | 1887 Btuh         |
|   | Latent occupant gain (5 people @ 200 Btuh per person)     | 1000 Btuh         |
|   | Latent other gain   | 600 Btuh          |
|   | <b>Latent total gain</b>                                  | <b>4946 Btuh</b>  |
|   | <b>TOTAL GAIN</b>   | <b>27959 Btuh</b> |

### EQUIPMENT

|                 |              |            |
|-----------------|--------------|------------|
| 1. Central Unit | ICP #WCH3302 | 30000 Btuh |
|-----------------|--------------|------------|

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

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

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

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

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

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

(Ornt - compass orientation)



Version 8  
For Florida residences only



# Residential Window Diversity

## MidSummer

DAN ZWICKEL

LAKE CITY, FL 32055-

Project Title:  
ZWICKEL RES.

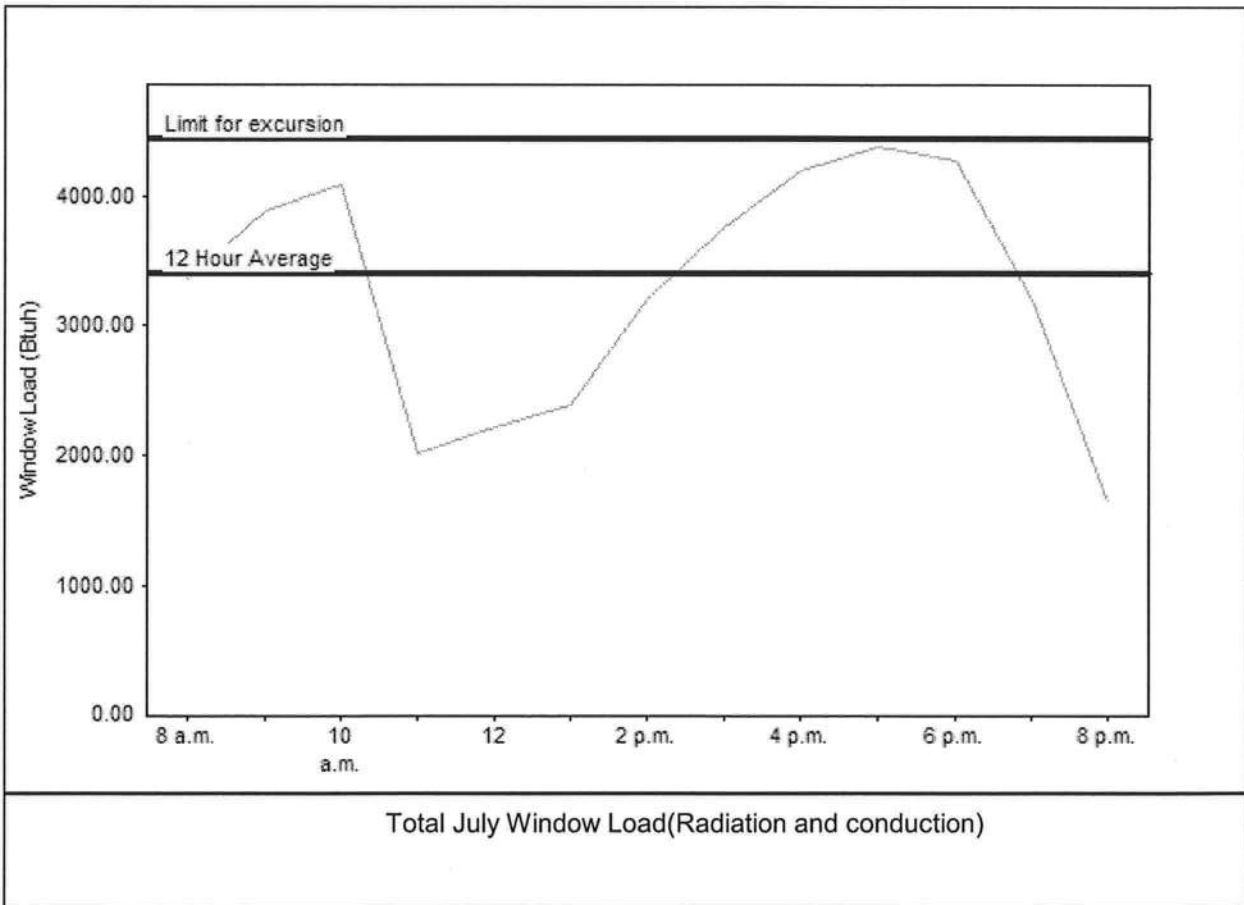
Code Only  
Professional Version  
Climate: North

9/9/2008

Weather data for: Jacksonville - Defaults

|                               |          |                               |           |
|-------------------------------|----------|-------------------------------|-----------|
| Summer design temperature     | 93 F     | Average window load for July  | 3414 Btuh |
| Summer setpoint               | 75 F     | Peak window load for July     | 4375 Btuh |
| Summer temperature difference | 18 F     | Excursion limit(130% of Ave.) | 4438 Btuh |
| Latitude                      | 30 North | Window excursion (July)       | None      |

## WINDOW Average and Peak Loads



The midsummer window load for this house does not exceed the window load excursion limit.  
This house has adequate midsummer window diversity.

EnergyGauge® System Sizing for Florida residences only

PREPARED BY: *St. John Murray*

DATE: *09-09-08*



EnergyGauge® FLRCPB v4.5.2

27390

**David M. Winsberg, P.E.**

PO Box 2815, Lake City, FL 32056 - Phone 386-752-1895 - Email [davidwinsberg@bellsouth.net](mailto:davidwinsberg@bellsouth.net)

## Finish Floor Elevation Requirement\Exemption

**Client:** Will Myers  
**Contractor:** Michael Medders  
**Description:** Zwickel Residence for Building Permit #27390  
**Parcel ID#:** 06-6S-17-09617-109

### Foundation Requirements:

For protection against water damage during the 100 year storm event, the minimum finish floor elevation of the proposed structure shall be 12 inches above the existing ground at any point along the perimeter of the proposed structure. In no case shall the finish floor elevation be more than 12 inches below the centerline of the adjacent roadway.

The ground around the proposed structure shall be graded such as to convey all stormwater runoff away from the proposed structure.

Please note that this certification letter also serves as a request for exemption from the elevation requirements for areas where no base flood data has been provided. This is because the above elevations are based on an engineering analysis of flood hazards at the structure's current location, approximately +/-80 feet South from the adjacent graded road.



David M. Winsberg  
P.E. License Number: 68463  
October 16, 2008



# 27390

**WILLIAM N. KITCHEN**

PROFESSIONAL SURVEYOR AND MAPPER

152 N. MARION AVENUE

LAKE CITY, FLORIDA 32055

PHONE (386) 755-7786 FAX (386) 755-5506

E-MAIL BSSK@BELLSOUTH.NET



DATE : 10/16/2008

TO WHOM IT MAY CONCERN:

RE: DAN ZWICKEL

SUBJECT **Parcel:** 06-6S-17-09617-109 , LOT 9 , MEADOWLANDS,  
NO. 760 SW MEADOWLAND DRIVE, LAKE CITY, FL. 32024

IS NOT IN A FLOOD ZONE ACCORDING TO FEMA FLOOD INSURANCE RATE  
MAP NO. 120070 0225 B DATED JANUARY 6, 1988.

THE TOP OF FORMS ARE 7 INCHES BELOW THE CENTERLINE OF ADJACENT  
PLATTED PAVED ROAD.

THE TOP OF FORMS ARE 12 INCHES ABOVE THE EXSITING GROUND AT ANY  
POINT.

REFERENCE; RESIDENTAIL FINISH FLOOR ELEVATION LETTER PER  
DAVID M. WINSBERG, P.E., DATED OCTOBER 16, 2008,

THANK YOU

WILLIAM N. KITCHEN PSM # 5490

*William N. Kitchen*  
*10-16-2008*

**David M. Winsberg, P.E.**

PO Box 2815, Lake City, FL 32056 - Phone 386-752-1895 - Email [davidwinsberg@bellsouth.net](mailto:davidwinsberg@bellsouth.net)

**Finish Floor Elevation Requirement\Exemption**

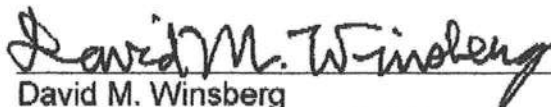
**Client:** Will Myers  
**Contractor:** Michael Medders  
**Description:** Zwickel Residence for Building Permit #27390  
**Parcel ID#:** 06-6S-17-09617-109

**Foundation Requirements:**

For protection against water damage during the 100 year storm event, the minimum finish floor elevation of the proposed structure shall be 12 inches above the existing ground at any point along the perimeter of the proposed structure. In no case shall the finish floor elevation be more than 12 inches below the centerline of the adjacent roadway.

The ground around the proposed structure shall be graded such as to convey all stormwater runoff away from the proposed structure.

Please note that this certification letter also serves as a request for exemption from the elevation requirements for areas where no base flood data has been provided. This is because the above elevations are based on an engineering analysis of flood hazards at the structure's current location, approximately +/-80 feet South from the adjacent graded road.



David M. Winsberg  
P.E. License Number: 68463  
October 16, 2008

David Winsberg  
Oct 16, 2008





# CAL-TECH TESTING, INC.

## ENGINEERING & TESTING LABORATORY

P.O. Box 1625, Lake City, FL 32056-1625  
4784 Rosselle St. • Jacksonville, FL 32254  
2230 Greensboro Hwy., Quincy, FL 32351

Lake City • (386) 755-3633  
Fax • (386) 752-5456

Jacksonville • (904) 381-8901  
Fax • (904) 381-8902

Quincy • (850) 442-3495  
Fax • (850) 442-4008

JOB NO.: 08-523  
DATE TESTED:

10-16-08

## REPORT OF IN-PLACE DENSITY TEST

ASTM METHOD: ✓ (D-2922) Nuclear            (D-2937) Drive Cylinder            Other

PROJECT: Daniel Zurichel Residence Permit # 000027390

CLIENT: Daniel Zurichel

GENERAL CONTRACTOR: N/A EARTHWORK CONTRACTOR: Bubba's Site Prep

SOIL USE (SEE NOTE): 1 - Subgrade SPECIFICATION REQUIREMENTS: 95%

TECHNICIAN: C. Day

MODIFIED (ASTM D-1557): ✓ STANDARD (ASTM D-698):           

| TEST NO. | TEST LOCATION   | TEST DEPTH | PROCTOR NO. | WET DENS. LBS./CU. FT. | DRY DENS. LBS./CU. FT. | MOIST PERCENT | % MAX. DENS. |
|----------|---|------------|-------------|------------------------|------------------------|---------------|--------------|
|          |   | ELEV. LIFT |             |                        |                        |               |              |
| 1        | North end approx. center 15' S. from porch form boards. | 12"        | *           | 108.6                  | 102.7                  | 5.8           | 96           |
| 2        | S.E. Corner 10' W x 8' N.                               | 12"        | *           | 110.0                  | 104.6                  | 5.2           | 98           |
| 3        | S.W. Corner 15' E x 6' N.                               | 12"        | *           | 106.8                  | 102.6                  | 4.1           | 96           |
|          |   |            |             |                        |                        |               |              |
|          |   |            |             |                        |                        |               |              |
|          |   |            |             |                        |                        |               |              |
|          |   |            |             |                        |                        |               |              |
|          |   |            |             |                        |                        |               |              |
|          |   |            |             |                        |                        |               |              |
|          |   |            |             |                        |                        |               |              |

REMARKS:           

| PROCTOR NO. | SOIL DESCRIPTION                          | PROCTOR VALUE | OPT. MOIST. |
|-------------|---|---------------|-------------|
| *           | Watson's Site Prep - Suwannee Valley, Put | 106.5         |             |
|             |   |               |             |
|             |   |               |             |

NOTE: 1. Building Fill 2. Trench Backfill 3. Base Course 4. Subbase/Stabilized Subgrade 5. Embankment 6. Subgrade/Natural Soil 7. Other  
The test results presented in this report are specific only to the samples tested at the time of testing. The tests were performed in accordance with generally accepted methods and standards. Since material conditions can vary between test location and change with time, sound judgement should be exercised with regard to the use and interpretation of the data.



**COLUMBIA COUNTY BUILDING DEPARTMENT  
RESIDENTIAL MINIMUM PLAN REQUIREMENTS AND CHECKLIST  
FOR THE FLORIDA RESIDENTIAL BUILDING CODE 2004 with 2005 & 2006  
Supplements and One (1) and Two (2) Family Dwellings**

ALL REQUIREMENTS ARE SUBJECT TO CHANGE

**ALL BUILDING PLANS MUST INDICATE COMPLIANCE with the Current FLORIDA BUILDING CODES and the Current FLORIDA RESIDENTIAL CODE. ALL PLANS OR DRAWING SHALL PROVIDED CALCULATIONS AND DETAILS THAT HAVE THE SEAL AND SIGNATURE OF A CERTIFIED ARCHITECT OR ENGINEER REGISTERED IN THE STATE OF FLORIDA, OR ALTERNATE METHODOLOGIES, APPROVED BY THE STATE OF FLORIDA BUILDING COMMISSION FOR ONE- AND-TWO FAMILY DWELLINGS.**

**FOR DESIGN PURPOSES THE FOLLOWING BASIC WIND SPEEDS ARE PER FIGURE R301.2(4) of the Residential Code (Florida Wind speed map) SHALL BE USED.**

WIND SPEED LINE SHALL BE DEFINED AS FOLLOWS: THE CENTERLINE OF INTERSTATE 75.

1. ALL BUILDINGS CONSTRUCTED EAST OF SAID LINE SHALL BE ----- 100 MPH
2. ALL BUILDINGS CONSTRUCTED WEST OF SAID LINE SHALL BE -----110 MPH
3. NO AREA IN COLUMBIA COUNTY IS IN A WIND BORNE DEBRIS REGION

**GENERAL REQUIREMENTS:**

- ☒ Two (2) complete sets of plans containing the following:
- ☒ All drawings must be clear, concise and drawn to scale, details that are not used shall be marked void
- ☒ Condition space (Sq. Ft.) and total (Sq. Ft.) under roof shall be shown on the plans.
- ☒ Designers name and signature shall be on all documents and a licensed architect or engineer, signature and official embossed seal shall be affixed to the plans and documents per FBC 106.1.

**Site-Plan information including:**

- ☒ Dimensions of lot or parcel of land
- ☒ Dimensions of all building set backs
- ☒ Location of all other structures (include square footage of structures) on parcel, existing or proposed well and septic tank and all utility easements.
- ☒ Provide a full legal description of property.

**Wind-load Engineering Summary, calculations and any details required:**

- ☒ Plans or specifications must meet state compliance with FRC Chapter 3
- ☒ The following information must be shown as per section FRC
- ☒ Basic wind speed (3-second gust), miles per hour
- ☒ Wind importance factor and nature of occupancy
- ☒ Wind exposure – if more than one wind exposure is used, the wind exposure and applicable wind direction shall be indicated
- ☒ The applicable internal pressure coefficient, Components and Cladding The design wind pressure in terms of psf (kN/m<sup>2</sup>), to be used for the design of exterior component and cladding materials not specifically designed by the registered design professional.

**Elevations Drawing including:**

- ☒ All side views of the structure
- ☒ Roof pitch
- ☒ Overhang dimensions and detail with attic ventilation
- ☒ Location, size and height above roof of chimneys
- ☒ Location and size of skylights with Florida Product Approval
- ☒ Number of stories
- ☒ e) Building height from the established grade to the roofs highest peak

### **Floor Plan including:**

- Dimensioned area plan showing rooms, attached garage, breeze ways, covered porches, deck, balconies and raised floor surfaces located more than 30 inches above the floor or grade
- All exterior and interior shear walls indicated
- Shear wall opening shown (Windows, Doors and Garage doors)
- Emergency escape and rescue opening in each bedroom (net clear opening shown)
- Safety glazing of glass where needed
- Fireplaces types (gas appliance) (vented or non-vented) or wood burning with Hearth (see chapter 10 of FRC)
- Stairs with dimensions (width, tread and riser and total run) details of guardrails, Handrails (see FRC 311)
- Plans must show and identify accessibility of bathroom (see FRC 322)

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

### **Foundation Plans Per FRC 403:**

- a) Location of all load-bearing walls footings indicated as standard, monolithic, dimensions, size and type of reinforcing.
- b) All posts and/or column footing including size and reinforcing
- c) Any special support required by soil analysis such as piling.
- d) Assumed load-bearing value of soil 2500 (psf)
- e) Location of horizontal and vertical steel, for foundation or walls (include # size and type)

### **CONCRETE SLAB ON GRADE Per FRC R506**

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

### **PROTECTION AGAINST TERMITES Per FRC 320:**

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

### **Masonry Walls and Stem walls (load bearing & shear Walls) FRC Section R606**

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

**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**

- Floor truss package shall including layout and details, signed and sealed by Florida Registered Professional Engineer
- Show conventional floor joist type, size, span, spacing and attachment to load bearing walls, stem walls and/or piers
- Girder type, size and spacing to load bearing walls, stem wall and/or piers
- Attachment of joist to girder
- Wind load requirements where applicable
- Show required under-floor crawl space
- Show required amount of ventilation opening for under-floor spaces
- Show required covering of ventilation opening.
- Show the required access opening to access to under-floor spaces
- Show the sub-floor structural panel sheathing type, thickness and fastener schedule on the edges & intermediate of the areas structural panel sheathing
- Show Draft stopping, Fire caulking and Fire blocking
- Show fireproofing requirements for garages attached to living spaces, per FRC section R309
- Provide live and dead load rating of floor framing systems (psf).



## **WOOD WALL FRAMING CONSTRUCTION FRC CHAPTER 6**

- Stud-type, grade, size, wall height and oc spacing for all load bearing or shear walls.
- Fastener schedule for structural members per table R602.3 (1) are to be shown.
- 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
- 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.
- Show sizes, type, span lengths and required number of support jack studs, king studs for shear wall opening and girder or header per FRC Table R502.5 (1)
- Indicate where pressure treated wood will be placed.
- Show all wall structural panel sheathing, grade, thickness and show fastener schedule for structural panel sheathing edges & intermediate areas
- A detail showing gable truss bracing, wall balloon framing details or/ and wall hinge bracing detail

## **ROOF SYSTEMS:**

- Truss design drawing shall meet section FRC R802.10 Wood trusses. Include a layout and truss details and be signed and sealed by Fl. Pro. Eng.
- Show types of connector's assemblies' and resistance uplift rating for all trusses and rafters
- Show gable ends with rake beams showing reinforcement or gable truss and wall bracing details
- Provide dead load rating of trusses

## **Conventional Roof Framing Layout Per FRC 802:**

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

## **ROOF SHEATHING FRC Table R602,3(2) FRC 803**

- Include all materials which will make up the roof decking, identification of structural panel sheathing, grade, thickness and show fastener schedule for structural panel sheathing on the edges & intermediate areas

## **ROOF ASSEMBLIES FRC Chapter 9**

- Include all materials which will make up the roof assemblies covering; with Florida Product Approval numbers for each component of the roof assemblies covering.

## **FCB-Chapter 13 Florida Energy Efficiency Code for Building Construction**

- Residential construction shall comply with this code by using the following compliance methods in the FBC Subchapter 13-6, Residential buildings compliance methods. Two of the required forms are to be submitted, showing dimensions condition area equal to the total condition living space area
- Show the insulation R value for the following areas of the structure: Attic space, Exterior wall cavity and Crawl space (if applicable)

## **HVAC information shown**

- Manual J sizing equipment or equivalent computation
- Exhaust fans locations in bathrooms

## **Plumbing Fixture layout shown**

- All fixtures waste water lines shall be shown on the foundation plan

## **Electrical layout shown including:**

- Switches, outlets receptacles, lighting and all required GFCI outlets identified
- Ceiling fans
- Smoke detectors
- Service panel, sub-panel, location(s) and total ampere ratings



- 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.
- Appliances and HVAC equipment and disconnects
- Arc Fault Circuits (AFCI) in bedrooms
- Notarized Disclosure Statement for Owner Builders
- Notice of Commencement Recorded (in the Columbia County Clerk Office) Notice Of Commencement is required to be filed with the building department Before Any Inspections Will Be Done.

#### **Private Potable Water**

- Size of pump motor
- Size of pressure tank
- Cycle stop valve if used

#### **THE FOLLOWING ITEMS MUST BE SUBMITTED WITH BUILDING PLANS**

- Building Permit Application: A current Building Permit Application form is to be completed and submitted for all residential projects.
- 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.
- Environmental Health Permit or Sewer Tap Approval: A copy of the Environmental Health permit, existing septic approval or sewer tap approval is required before a building permit can be issued. (386) 758-1058 (Toilet facilities shall be provided for construction workers)
- City Approval: If the project is to be located within the city limits of the Town of Fort White, prior approval is required. The Town of Fort White approval letter is required to be submitted by the owner or contractor to this office when applying for a Building Permit. (386) 497-2321
- 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 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 8.8 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 8.7 of the Columbia County Land Development Regulations. **CERTIFIED FINISHED FLOOR ELEVATIONS WILL BE REQUIRED ON ANY PROJECT WHERE THE BASE FLOOD ELEVATION (100 YEAR FLOOD) HAS BEEN ESTABLISHED.** A development permit will also be required. The permit cost is \$50.00.
- 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.
- 911 Address: If the project is located in an area where the 911 address has been issued, then the proper Paper work from the 911 Addressing Departments must be submitted. (386) 758-1125

ALL REQUIRED INFORMATION IS TO BE SUBMITTED FOR REVIEW. NOTIFICATION WILL BE GIVEN WHEN THE APPLICATION AND PLANS ARE APPROVED AND READY TO PERMIT.

## PRODUCT APPROVAL SPECIFICATION SHEET

**Location:** \_\_\_\_\_ **Project Name:** \_\_\_\_\_

As required by Florida Statute 553.842 and Florida Administrative Code 9B-72, please provide the information and the product approval number(s) on the building components listed below if they will be utilized on the construction project for which you are **applying for a building permit on or after April 1, 2004**. We recommend you contact your local product supplier should you not know the product approval number for any of the applicable listed products. More information about statewide product approval can be obtained at [www.floridapba.com](http://www.floridapba.com)

| Category/Subcategory       | Manufacturer | Product Description | Approval Number(s) |
|----------------------------|--------------|---------------------|--------------------|
| <b>A. EXTERIOR DOORS</b>   |              |                     |                    |
| 1. Swinging                |              |                     |                    |
| 2. Sliding                 |              |                     |                    |
| 3. Sectional               |              |                     |                    |
| 4. Roll up                 |              |                     |                    |
| 5. Automatic               |              |                     |                    |
| 6. Other                   |              |                     |                    |
| <b>B. WINDOWS</b>          |              |                     |                    |
| 1. Single hung             |              |                     |                    |
| 2. Horizontal Slider       |              |                     |                    |
| 3. Casement                |              |                     |                    |
| 4. Double Hung             |              |                     |                    |
| 5. Fixed                   |              |                     |                    |
| 6. Awning                  |              |                     |                    |
| 7. Pass-through            |              |                     |                    |
| 8. Projected               |              |                     |                    |
| 9. Mullion                 |              |                     |                    |
| 10. Wind Breaker           |              |                     |                    |
| 11. Dual Action            |              |                     |                    |
| 12. Other                  |              |                     |                    |
| <b>C. PANEL WALL</b>       |              |                     |                    |
| 1. Siding                  |              |                     |                    |
| 2. Soffits                 |              |                     |                    |
| 3. EIFS                    |              |                     |                    |
| 4. Storefronts             |              |                     |                    |
| 5. Curtain walls           |              |                     |                    |
| 6. Wall louver             |              |                     |                    |
| 7. Glass block             |              |                     |                    |
| 8. Membrane                |              |                     |                    |
| 9. Greenhouse              |              |                     |                    |
| 10. Other                  |              |                     |                    |
| <b>D. ROOFING PRODUCTS</b> |              |                     |                    |
| 1. Asphalt Shingles        |              |                     |                    |
| 2. Underlayments           |              |                     |                    |
| 3. Roofing Fasteners       |              |                     |                    |
| 4. Non-structural Metal Rf |              |                     |                    |
| 5. Built-Up Roofing        |              |                     |                    |
| 6. Modified Bitumen        |              |                     |                    |
| 7. Single Ply Roofing Sys  |              |                     |                    |
| 8. Roofing Tiles           |              |                     |                    |
| 9. Roofing Insulation      |              |                     |                    |
| 10. Waterproofing          |              |                     |                    |
| 11. Wood shingles /shakes  |              |                     |                    |
| 12. Roofing Slate          |              |                     |                    |

| Category/Subcategory (cont.)             | Manufacturer | Product Description | Approval Number(s) |
|--|--------------|---------------------|--------------------|
| 13. Liquid Applied Roof Sys              |              |                     |                    |
| 14. Cements-Adhesives – Coatings         |              |                     |                    |
| 15. Roof Tile Adhesive                   |              |                     |                    |
| 16. Spray Applied Polyurethane Roof      |              |                     |                    |
| 17. Other                                |              |                     |                    |
| <b>E. SHUTTERS</b>                       |              |                     |                    |
| 1. Accordion                             |              |                     |                    |
| 2. Bahama                                |              |                     |                    |
| 3. Storm Panels                          |              |                     |                    |
| 4. Colonial                              |              |                     |                    |
| 5. Roll-up                               |              |                     |                    |
| 6. Equipment                             |              |                     |                    |
| 7. Others                                |              |                     |                    |
| <b>F. SKYLIGHTS</b>                      |              |                     |                    |
| 1. Skylight                              |              |                     |                    |
| 2. Other                                 |              |                     |                    |
| <b>G. STRUCTURAL COMPONENTS</b>          |              |                     |                    |
| 1. Wood connector/anchor                 |              |                     |                    |
| 2. Truss plates                          |              |                     |                    |
| 3. Engineered lumber                     |              |                     |                    |
| 4. Railing                               |              |                     |                    |
| 5. Coolers-freezers                      |              |                     |                    |
| 6. Concrete Admixtures                   |              |                     |                    |
| 7. Material                              |              |                     |                    |
| 8. Insulation Forms                      |              |                     |                    |
| 9. Plastics                              |              |                     |                    |
| 10. Deck-Roof                            |              |                     |                    |
| 11. Wall                                 |              |                     |                    |
| 12. Sheds                                |              |                     |                    |
| 13. Other                                |              |                     |                    |
| <b>H. NEW EXTERIOR ENVELOPE PRODUCTS</b> |              |                     |                    |
| 1.                                       |              |                     |                    |
| 2.                                       |              |                     |                    |

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

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

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Contractor or Contractor's Authorized Agent Signature

Print Name

Date

Location

Permit # (FOR STAFF USE ONLY)



## PRODUCT APPROVAL SPECIFICATION SHEET

**Location:** 760 SW MEMPHIS DR

**Project Name:** \_\_\_\_\_

As required by Florida Statute 553.842 and Florida Administrative Code 9B-72, please provide the information and the product approval number(s) on the building components listed below if they will be utilized on the construction project for which you are **applying for a building permit on or after April 1, 2004**. We recommend you contact your local product supplier should you not know the product approval number for any of the applicable listed products. More information about statewide product approval can be obtained at [www.floridabuilding.org](http://www.floridabuilding.org)

| Category/Subcategory       | Manufacturer  | Product Description    | Approval Number(s) |
|----------------------------|---------------|------------------------|--------------------|
| <b>A. EXTERIOR DOORS</b>   |               |                        |                    |
| 1. Swinging                | MI PRODUCTS   | EXTERIOR SWINGING      | 7628.1             |
| 2. Sliding                 | MI PRODUCTS   | SLIDER                 | 8767.1             |
| 3. Sectional               | CLOPPY GARAGE | GARAGE DOOR            | 3026.15            |
| 4. Roll up                 |               |                        |                    |
| 5. Automatic               |               |                        |                    |
| 6. Other                   |               |                        |                    |
| <b>B. WINDOWS</b>          |               |                        |                    |
| 1. Single hung             | KINCO         | ALUMIN. FIN WINDOW S/H | 123.2              |
| 2. Horizontal Slider       |               |                        |                    |
| 3. Casement                |               |                        |                    |
| 4. Double Hung             |               |                        |                    |
| 5. Fixed                   |               |                        |                    |
| 6. Awning                  |               |                        |                    |
| 7. Pass-through            |               |                        |                    |
| 8. Projected               |               |                        |                    |
| 9. Mullion                 |               |                        |                    |
| 10. Wind Breaker           |               |                        |                    |
| 11. Dual Action            |               |                        |                    |
| 12. Other                  |               |                        |                    |
| <b>C. PANEL WALL</b>       |               |                        |                    |
| 1. Siding                  | KAYCAN LTD    | VINYL SIDING           | 496.2              |
| 2. Soffits                 | KAYCAN LTD    | SOFFITS                | 4899.6             |
| 3. EIFS                    |               |                        |                    |
| 4. Storefronts             |               |                        |                    |
| 5. Curtain walls           |               |                        |                    |
| 6. Wall louver             |               |                        |                    |
| 7. Glass block             |               |                        |                    |
| 8. Membrane                |               |                        |                    |
| 9. Greenhouse              |               |                        |                    |
| 10. Other                  |               |                        |                    |
| <b>D. ROOFING PRODUCTS</b> |               |                        |                    |
| 1. Asphalt Shingles        | PERTAINTECH   | SHINGLES               | 5444.1             |
| 2. Underlayments           |               |                        |                    |
| 3. Roofing Fasteners       |               |                        |                    |
| 4. Non-structural Metal Rf |               |                        |                    |
| 5. Built-Up Roofing        |               |                        |                    |
| 6. Modified Bitumen        |               |                        |                    |
| 7. Single Ply Roofing Sys  |               |                        |                    |
| 8. Roofing Tiles           |               |                        |                    |
| 9. Roofing Insulation      |               |                        |                    |
| 10. Waterproofing          |               |                        |                    |
| 11. Wood shingles /shakes  |               |                        |                    |
| 12. Roofing Slate          |               |                        |                    |

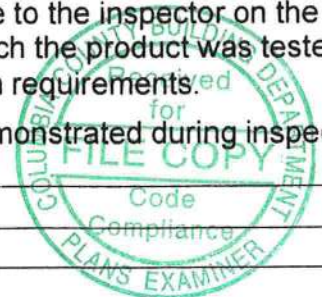




| Category/Subcategory (cont.)             | Manufacturer | Product Description | Approval Number(s) |
|--|--------------|---------------------|--------------------|
| 13. Liquid Applied Roof Sys              |              |                     |                    |
| 14. Cements-Adhesives – Coatings         |              |                     |                    |
| 15. Roof Tile Adhesive                   |              |                     |                    |
| 16. Spray Applied Polyurethane Roof      |              |                     |                    |
| 17. Other                                |              |                     |                    |
| <b>E. SHUTTERS</b>                       |              |                     |                    |
| 1. Accordion                             |              |                     |                    |
| 2. Bahama                                |              |                     |                    |
| 3. Storm Panels                          |              |                     |                    |
| 4. Colonial                              |              |                     |                    |
| 5. Roll-up                               |              |                     |                    |
| 6. Equipment                             |              |                     |                    |
| 7. Others                                |              |                     |                    |
| <b>F. SKYLIGHTS</b>                      |              |                     |                    |
| 1. Skylight                              |              |                     |                    |
| 2. Other                                 |              |                     |                    |
| <b>G. STRUCTURAL COMPONENTS</b>          |              |                     |                    |
| 1. Wood connector/anchor                 | SIMPSON      | H2.5 / H16S         | 503.5              |
| 2. Truss plates                          |              |                     |                    |
| 3. Engineered lumber                     |              |                     |                    |
| 4. Railing                               |              |                     |                    |
| 5. Coolers-freezers                      |              |                     |                    |
| 6. Concrete Admixtures                   |              |                     |                    |
| 7. Material                              |              |                     |                    |
| 8. Insulation Forms                      |              |                     |                    |
| 9. Plastics                              |              |                     |                    |
| 10. Deck-Roof                            |              |                     |                    |
| 11. Wall                                 |              |                     |                    |
| 12. Sheds                                |              |                     |                    |
| 13. Other                                |              |                     |                    |
| <b>H. NEW EXTERIOR ENVELOPE PRODUCTS</b> |              |                     |                    |
| 1.                                       |              |                     |                    |
| 2.                                       |              |                     |                    |

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

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



*Michael Medders*

Contractor or Contractor's Authorized Agent Signature

760 SW MEADOWLANDS DR.

Location LAKE CITY FL 32024

02/02/04 – 2 of 2

Website: www.thefirstfloridain.com

MICHAEL MEDDERS

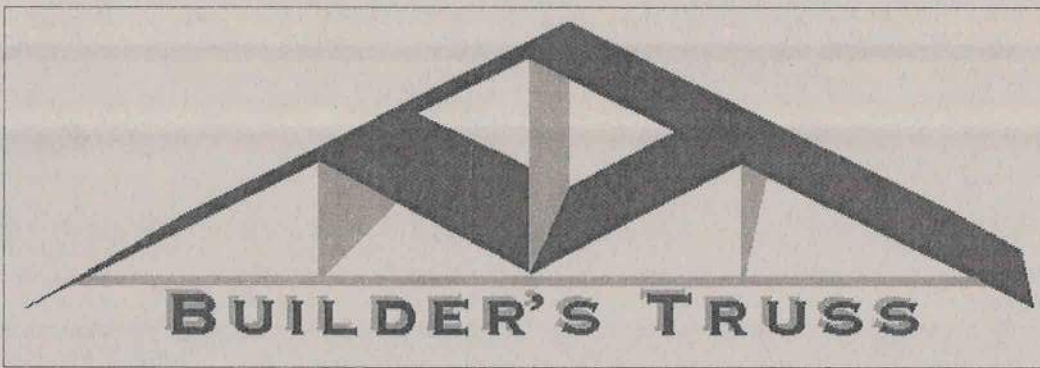
Print Name

9-12-08

Date

Permit # (FOR STAFF USE ONLY)

Effective April 1, 2004



***Builders Truss Manufacturing***

***1506 Bedell Avenue, Woodbine, Ga***

***(800) 443-9652 (F) 912-729-2284***

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***Job No. 11783***

***Company: Amelia Jewel Custom Home***

***Job Name: Lot 9 Meadowlands S. D. P***

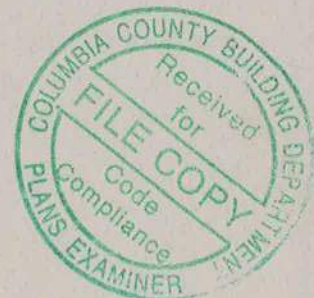
***Phone Number: (904) 696-9708***

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***TRUSS ENGINEERING PACKET***

***SEALED ENGINEERING***

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RE: 11783 - Amelia Jewel; L9 Meadowlands

**MiTek Industries, Inc.**

14515 North Outer Forty Drive  
Suite 300  
Chesterfield, MO 63017-5746

**Site Information:**

Project Customer: Amelia Jewel Inc Project Name: L9 Meadowlands  
Lot/Block: 9 Subdivision: Meadowlands PI  
Address:  
City: Columbia County State: FL

**Name Address and License # of Structural Engineer of Record, If there is one, for the building.**

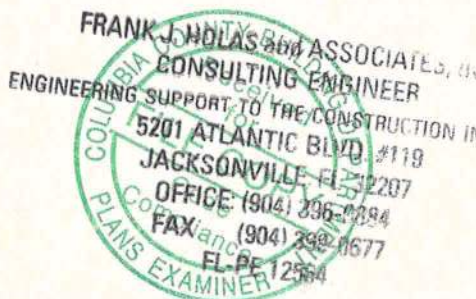
Name: License #:  
Address:  
City: State:

**General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):**

Design Code: FBC2004/TPI2002 Design Program: MiTek 20/20 6.5  
Wind Code: ASCE 7-02 Wind Speed: 120 mph Floor Load: N/A psf  
Roof Load: 50.0 psf

This package includes 22 individual, dated Truss Design Drawings and 0 Additional Drawings.  
With my seal affixed to this sheet, I hereby certify that I am the Truss Design Engineer and this index sheet conforms to 61G15-31.003, section 5 of the Florida Board of Professional Engineers Rules.  
This document processed per section 16G15-23.003 of the Florida Board of Professionals Rules

| No. | Seal#     | Truss Name | Date    | No. | Seal#     | Truss Name | Date    |
|-----|-----------|------------|---------|-----|-----------|------------|---------|
| 1   | I14424959 | A01        | 8/26/08 | 18  | I14424976 | J01        | 8/26/08 |
| 2   | I14424960 | A02        | 8/26/08 | 19  | I14424977 | J03        | 8/26/08 |
| 3   | I14424961 | A02A       | 8/26/08 | 20  | I14424978 | J05        | 8/26/08 |
| 4   | I14424962 | A03        | 8/26/08 | 21  | I14424979 | J07        | 8/26/08 |
| 5   | I14424963 | A03A       | 8/26/08 | 22  | I14424980 | JC09       | 8/26/08 |
| 6   | I14424964 | A04        | 8/26/08 |     |           |            |         |
| 7   | I14424965 | A04A       | 8/26/08 |     |           |            |         |
| 8   | I14424966 | A05        | 8/26/08 |     |           |            |         |
| 9   | I14424967 | A05A       | 8/26/08 |     |           |            |         |
| 10  | I14424968 | A06        | 8/26/08 |     |           |            |         |
| 11  | I14424969 | A06A       | 8/26/08 |     |           |            |         |
| 12  | I14424970 | A07        | 8/26/08 |     |           |            |         |
| 13  | I14424971 | A07A       | 8/26/08 |     |           |            |         |
| 14  | I14424972 | B01        | 8/26/08 |     |           |            |         |
| 15  | I14424973 | B01A       | 8/26/08 |     |           |            |         |
| 16  | I14424974 | C01        | 8/26/08 |     |           |            |         |
| 17  | I14424975 | C01A       | 8/26/08 |     |           |            |         |



REVIEWED BY  
FRANK HOLAS & ASSOC.  
☒ APPROVED  
☒ APPROVED AS NOTED  
☐ REJECTED - RESUBMIT  
DATED 8/26/08

The truss drawing(s) referenced above have been prepared by MiTek Industries, Inc. under my direct supervision based on the parameters provided by Builders Truss Manufacturing.

Truss Design Engineer's Name: Fox, Steve

My license renewal date for the state of Florida is FEBRUARY 28, 2009

**NOTE:** The seal on these drawings indicate acceptance of professional engineering responsibility solely for the truss components shown. The suitability and use of this component for any particular building is the responsibility of the building designer, per ANSI/TPI-1 Chapter 2.



Steven E. Fox, FL Lic #044975  
MiTek Industries, Inc.  
14515 North Outer Forty Drive  
Suite 300  
Chesterfield, MO 63017  
FL Cert.#6634

August 26, 2008

# INSTALLATION GUIDE FOR PLATED TRUSS CONNECTORS

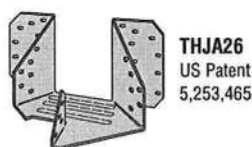
**SIMPSON**  
**Strong-Tie**

## MULTIPLE TRUSS HANGERS

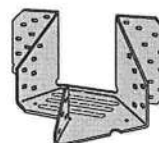
### THJA26/LTHJA26

| Model No. | Fasteners (Quantity & Size) |                  |             |
|-----------|-----------------------------|------------------|-------------|
|           | Carrying Member             | Carried Member   |             |
|           |                             | Hip <sup>1</sup> | Jack        |
| THJA26    | (20)-.162x3½                | (6)-.148x1½      | (4)-.148x1½ |
| LTHJA26   | (20)-.148x3                 | (7)-.148x1½      | (4)-.148x1½ |

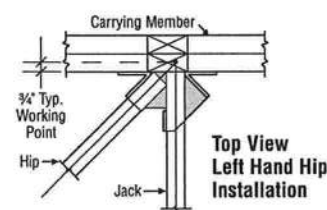
1. For the LTHJA26, one .148x1½ nail must be installed into the bottom of each hip through bottom of hanger seat.



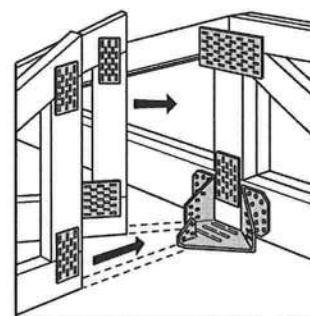
**THJA26**  
US Patent  
5,253,465



**LTHJA26**  
US Patent  
5,253,465



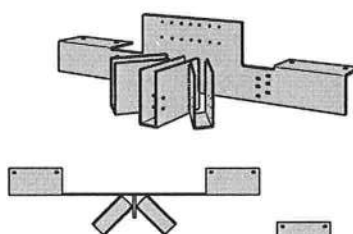
**Top View  
Left Hand Hip  
Installation**



**Typical THJA26 Installation  
(LTHJA26 Similar)**

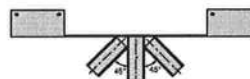
### MSCPT

| Model No. | Fasteners (Quantity & Size) |                |
|-----------|-----------------------------|----------------|
|           | Carrying Member             | Carried Member |
| MSCPT2    | (26)-.162x3½                | (18)-.148x1½   |
| MSCPT2N   | (26)-.162x3½                | (14)-.148x1½   |
| MSCPT2-2  | (30)-.162x3½                | (20)-.148x3    |
| MSCPT2-2N | (30)-.162x3½                | (14)-.148x3    |

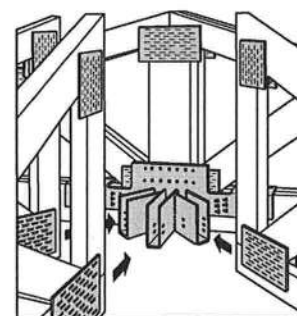


**MSCPT2**  
(MSCPT2-2 similar)

**MSCPT2N Top View  
(MSCPT2-2N similar)**



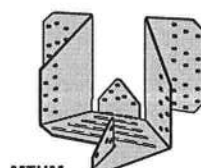
**MSCPT2 Top View  
(MSCPT2-2 similar)**



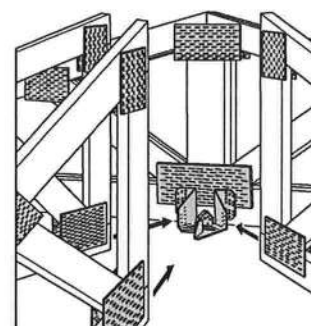
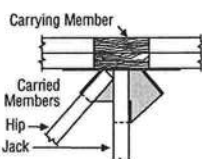
**Typical MSCPT2 Installation**

### MTHM/MTHM-2

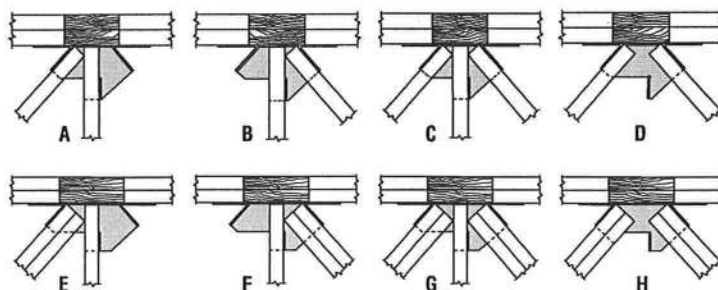
| Detail | Model No. | 2-Ply Bottom Chord | Fasteners (Quantity & Size) |                |             |
|--------|-----------|--------------------|-----------------------------|----------------|-------------|
|        |           |                    | Carrying Member             | Carried Member |             |
|        |           |                    |                             | R/L Hip        | Jack        |
| A - B  | MTHM      | 2x4                | (22)-.162x3½                | (8)-.148x1½    | (4)-.148x1½ |
|        |           | 2x6                | (34)-.162x3½                | (8)-.148x1½    | (4)-.148x1½ |
|        |           | 2x8                | (42)-.162x3½                | (8)-.148x1½    | (4)-.148x1½ |
| C      | MTHM      | 2x4                | (22)-.162x3½                | (16)-.148x1½   | (4)-.148x1½ |
|        |           | 2x6                | (34)-.162x3½                | (16)-.148x1½   | (4)-.148x1½ |
|        |           | 2x8                | (42)-.162x3½                | (16)-.148x1½   | (4)-.148x1½ |
| D      | MTHM      | 2x4                | (22)-.162x3½                | (16)-.148x1½   | —           |
|        |           | 2x6                | (34)-.162x3½                | (16)-.148x1½   | —           |
|        |           | 2x8                | (42)-.162x3½                | (16)-.148x1½   | —           |
| E - F  | MTHM-2    | 2x4                | (39)-.162x3½                | (8)-.148x1½    | (4)-.148x1½ |
|        |           | 2x6                | (47)-.162x3½                | (8)-.148x1½    | (4)-.148x1½ |
| G      | MTHM-2    | 2x8                | (39)-.162x3½                | (16)-.148x1½   | (4)-.148x1½ |
|        |           | 2x4                | (47)-.162x3½                | (16)-.148x1½   | (4)-.148x1½ |
| H      | MTHM-2    | 2x6                | (39)-.162x3½                | (16)-.148x1½   | —           |
|        |           | 2x8                | (47)-.162x3½                | (16)-.148x1½   | —           |



**MTHM**  
(MTHM-2 similar)



**Typical MTHM Installation**





**CERTIFICATE OF OCCUPANCY**

**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 06-6S-17-09617-104

Building permit No. 000027390

Use Classification SFD/UTILITY

Fire: 38.52

Permit Holder MICHAEL MEDDERS

Waste: 100.50

Owner of Building DANIEL ZWICKEL

Total: 139.02

Location: 760 SW MEADOWLANDS DR., LAKE CITY, FL

Date: 04/13/2009

Wayne H. Russ

Building Inspector

**POST IN A CONSPICUOUS PLACE**  
*(Business Places Only)*



## Notice of Treatment

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

**Address:** 536 SE BAY AVE

**City:** L. C. **Phone:** 752 1703

**Site Location:** Subdivision Meadowlands

**Lot #** 9 **Block#**  **Permit #** 27390

**Address**

### Product used

### Active Ingredient

### % Concentration

☐ Premise Imidacloprid 0.1%

☒ Termidor Fipronil 0.12%

☐ Bora-Care Disodium Octaborate Tetrahydrate 23.0%

### **Type treatment:**

☒ Soil

☐ Wood

### Area Treated

### Square feet

### Linear feet

### Gallons Applied

DWL (+ FRONT BACK PORCHES) 2234 215 250

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

If this notice is for the final exterior treatment, initial this line \_\_\_\_\_.

10/22/08 0800 GUNNY F254

Date

Time

Print Technician's Name

**Remarks:** \_\_\_\_\_

Applicator - White

Permit File - Canary

Permit Holder - Pink

10/05

