DATE 05/30/2007

# Columbia County Building Permit

**This Permit Expires One Year From the Date of Issue**

**PERMIT**
**000025857**

APPLICANT STEPHEN CRAWFORD PHONE 755-5068

ADDRESS 11736 S US HWY 441 LAKE CITY FL 32025

OWNER JAMES RIGSBY PHONE 755-2423

ADDRESS 201 SE BEECH STREET LAKE CITY FL 32055

CONTRACTOR STEPHEN CRAWFORD PHONE 755-5068

LOCATION OF PROPERTY BAYA EAST R DEFENDER AVE ON RIGHT CORNER OF DEFENDER AND BEECH STREET

TYPE DEVELOPMENT INTERIOR REMODEL ESTIMATED COST OF CONSTRUCTION 125000.00

HEATED FLOOR AREA _____ TOTAL AREA _____ HEIGHT ____ STORIES ____

FOUNDATION _____ WALLS _____ ROOF PITCH _____ FLOOR _____

LAND USE & ZONING CI MAX. HEIGHT 35

Minimum Set Back Requirments: STREET-FRONT _____ REAR _____ SIDE _____

NO. EX.D.U. 1 FLOOD ZONE X DEVELOPMENT PERMIT NO. _____

PARCEL ID 34-3S-17-07082-000 SUBDIVISION BEECH STREET APARTMENTS

LOT ____ BLOCK ____ PHASE ____ UNIT ____ TOTAL ACRES _____

| | | RR0067266 | | |
|---|---|---|---|---|
| Culvert Permit No. | Culvert Waiver | Contractor's License Number | | Applicant/Owner/Contractor |
| | X07-121 | BK | JH | N |
| Driveway Connection | Septic Tank Number | LU & Zoning checked by | Approved for Issuance | New Resident |

COMMENTS: INSIDE REMODEL, NOC ON FILE

Check # or Cash 8095

## FOR BUILDING & ZONING DEPARTMENT ONLY

(footer/Slab)

Temporary Power _____ date/app. by

Foundation _____ date/app. by

Monolithic _____ date/app. by

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

Slab _____ date/app. by

Sheathing/Nailing _____ date/app. by

Framing _____ date/app. by

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

Electrical rough-in _____ date/app. by

Heat & Air Duct _____ date/app. by

Peri. beam (Lintel) _____ date/app. by

Permanent power _____ date/app. by

C.O. Final _____ date/app. by

Culvert _____ date/app. by

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

Pool _____ date/app. by

Reconnection _____ date/app. by

Pump pole _____ date/app. by

Utility Pole _____ date/app. by

M/H Pole _____ date/app. by

Travel Trailer _____ date/app. by

Re-roof _____ date/app. by

BUILDING PERMIT FEE $ 625.00 CERTIFICATION FEE $ 0.00 SURCHARGE FEE $ 0.00

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

FLOOD DEVELOPMENT FEE $ _____ FLOOD ZONE FEE $ _____ CULVERT FEE $ _____ **TOTAL FEE** 675.00

INSPECTORS OFFICE _____ CLERKS OFFICE CH

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

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

## This Permit Must Be Prominently Posted on Premises During Construction

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

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

THIS INSTRUMENT WAS PREPARED BY:

TERRY McDAVID
POST OFFICE BOX 1328
LAKE CITY, FL 32056-1328

RETURN TO:

TERRY McDAVID
POST OFFICE BOX 1328
LAKE CITY, FL 32056-1328
04-558
Property Appraiser's
Parcel Identification No.
07082-000

Recording Fee $ 18.50
Documentary Stamp $ 700.00

Inst:2004018209 Date:08/09/2004 Time:09:44
Doc Stamp-Deed : 700.00
DC,P.DeWitt Cason,Columbia County B:1022 P:2783

## WARRANTY DEED

THIS INDENTURE, made this 30th day of July, 2004, BETWEEN CYNTHIA L. LOUDERMILK, DEBORAH S. OWENS and JANET S. RIVERS, who do not reside on the property described below, whose post office address is Post Office Box 2817, Lake City, Florida 32056, of the County of Columbia, State of Florida, grantor*, and JAMES W. RIGSBY, whose post office address is 351 SE Lake Forest Place, Lake City, Florida 32025, of the County of Columbia, State of Florida, grantee*.

WITNESSETH: that said grantor, for and in consideration of the sum of Ten Dollars ($10.00), and other good and valuable considerations to said grantor in hand paid by said grantee, the receipt whereof is hereby acknowledged, has granted, bargained and sold to the said grantee, and grantee's heirs and assigns forever, the following described land, situate, lying and being in Columbia County, Florida, to-wit:

That part of Block 12, COUNTRY CLUB ESTATES, described as follows: The South 35.00 feet of the West 33.00 feet of Lot 7; the West 33.00 feet and the South 35.00 feet of the East 92.00 feet of Lot 8; Lot 9; and Lot 10, all being in Block 12, COUNTRY CLUB ESTATES, as recorded in Plat Book 1, Page 7 of the public records of Columbia County, Florida.

LESS & EXCEPT that part, if any, described in Warranty Deed recorded in Official Records Book 957, Page 904 of the public records of Columbia County, Florida.

SUBJECT TO: Restrictions, easements and outstanding mineral rights of record, if any, and taxes for the current year.

N.B. None of the Grantors nor any member of their families live or reside on the property described herein or any land adjacent thereto or claim any part thereof or any land adjacent thereto as their homestead.

and said grantor does hereby fully warrant the title to said land, and will defend the same against the lawful claims of all persons whomsoever.

*"Grantor" and "grantee" are used for singular or plural, as context requires.

IN WITNESS WHEREOF, grantor has hereunto set grantor's hand and seal the day and year first above written.

Signed, sealed and delivered
in our presence:

DeEtte F. Brown
(First Witness)
DeEtte F. Brown
Printed Name

Crystal L. Brunner
(Second Witness)
Crystal L. Brunner
Printed Name

Cynthia L. Loudermilk (SEAL)
CYNTHIA L. LOUDERMILK

Deborah S. Owens (SEAL)
DEBORAH S. OWENS

Janet S. Rivers (SEAL)
JANET S. RIVERS

STATE OF FLORIDA
COUNTY OF COLUMBIA

The foregoing instrument was acknowledged before me this 30th day of July, 2004, by CYNTHIA L. LOUDERMILK, DEBORAH S. OWENS and JANET S. RIVERS, who are personally known to me and who did not take an oath.

DeEtte F. Brown
Notary Public

My Commission Expires:

DE ETTE F. BROWN
MY COMMISSION # DD 149049
EXPIRES: October 22, 2006
Bonded Thru Notary Public Underwriters

Inst:2004018209 Date:08/09/2004 Time:09:44
Doc Stamp-Deed : 700.00
DC,P.DeWitt Cason,Columbia County B:1022 P:2784

(25621 up) 675.00

# Columbia County Building Permit Application

**For Office Use Only** Application # 0705-68 Date Received 5/23/07 By LH Permit # 25857

Application Approved by - Zoning Official BLK Date 24.05.07 Plans Examiner OKJTH Date 5-24-07

Flood Zone X Development Permit N/A Zoning CI Land Use Plan Map Category Commercial

Comments Section 2.3.2 Non-Conforming Use of Land

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

Name Authorized Person Signing Permit Stephen Crawford Phone 755-5068 Fax 758-9500

Address 11736 S. Us Hwy 441 Lake City, FL 32025

Owners Name James Rigsby Phone 755-2423

911 Address 201 SE Beech St. Lake City, FL 32055

Contractors Name Stephen Crawford Phone 755-5068

Address 11736 S US Hwy 441 Lake City, FL 32025

Fee Simple Owner Name & Address

Bonding Co. Name & Address N/A

Architect/Engineer Name & Address N/A

Mortgage Lenders Name & Address N/A

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

Property ID Number 34-3S-17-07082-000 Estimated Cost of Construction 125,000.00

Subdivision Name N/A Lot ____ Block ____ Unit ____ Phase ____

Driving Directions Baya East. Turn L onto Defender Ave. Property on ~~Right~~ Left corner of Defender and Beech St.

Type of Construction Remodel Inside Only Number of Existing Dwellings on Property 1

Total Acreage 0.236 acres Lot Size ____ Do you need a - Culvert Permit or Culvert Waiver or Have an Existing Drive

Actual Distance of Structure from Property Lines - Front ____ Side ____ Side ____ Rear ____

Total Building Height 23' Number of Stories 2 Heated Floor Area 6828 Roof Pitch 4/12

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

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

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

Owner Builder or Authorized Person by Notarized Letter

Contractor Signature

Contractors License Number

Competency Card Number

STATE OF FLORIDA
COUNTY OF COLUMBIA

LAURIE HODSON
MY COMMISSION # DD 333503
EXPIRES: June 28, 2008
Bonded Thru Notary Public Underwriters

NOTARY STAMP/SEAL

Sworn to (or affirmed) and subscribed before me this 5 day of 23 20 07.

Personally known ✓ or Produced Identification ____

Notary Signature

(Revised Sept. 2006)

**NOTICE OF COMMENCEMENT FORM**
**COLUMBIA COUNTY, FLORIDA**

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

**THE UNDERSIGNED hereby gives notice that improvement will be made to certain real property, and inaccordance with Chapter 713, Florida Statutes, the following information is provided in this Notice of Commencement.**
**IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR AN ATTORNEY BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT.**

Tax Parcel ID Number 34-3S-17-07082-000 Permit Number _____

1. Description of property: (legal description of the property and street address or 911 address)
The S 35ft of W 33ft of Lot 7 + W 33ft + S 35ft of E 92ft of Lot 8 + Lots 9 + 10 Blk 12 Country Club Estates S/D. ORB 652-301, 771-578 (1/3 int each) WD 1022-2783, Cor WD 1115-1954

2. General description of improvement: renovation

3. Owner Name & Address James W Rigsby 781 SE Church Ave, Lake City FL 32025 Interest in Property owner

4. Name & Address of Fee Simple Owner (if other than owner): NA

5. Contractor Name Stephen Crawford Construction Phone Number (386) 755-8068
Address 11736 S US Hwy 441 Lake City, FL 32025

6. Surety Holders Name W.L. Hunter Ins Phone Number (386) 752-6550
Address _____
Amount of Bond _____

7. Lender Name Peoples State Bank Phone Number 754-2002
Address 350 SW Main Blvd 32056

8. Persons within the State of Florida designated by the Owner upon whom notices or other documents may be served as provided by section 718.13 (1)(a) 7; Florida Statutes:
Name James W Rigsby Phone Number 755-2423
Address 781 SE Church Ave, Lake City FL 32025

9. In addition to himself/herself the owner designates _____ of _____ to receive a copy of the Lien Notice as provided in Section 713.13 (1) –
(a) 7. Phone Number of the designee _____

10. Expiration date of the Notice of Commencement (the expiration date is 1 (one) year from the date of recording, (Unless a different date is specified) _____

**THE OWNER MUST SIGN THE NOTICE OF COMMENCEMENT AND NO ONE ELSE MAY BE PERMITTED TO SIGN IN HIS/HER STEAD.**

James W Rigsby
Signature of Owner

Sworn to (or affirmed) and subscribed before day of May 15, 2007.

Sonja A. Markham
Signature of Notary

NOTARY STAMP/SEAL

SONJA A. MARKHAM
MY COMMISSION #DD487198
EXPIRES: OCT 31, 2009
Bonded through 1st State Insurance

STATE OF FLORIDA, COUNTY OF COLUMBIA
I HEREBY CERTIFY, that the above and foregoing is a true copy of the original filed in this office.
P. DeWitt Cason, CLERK CIRCUIT COURT
By _____ Deputy Clerk
Date 5-15-07

CLERK CIRCUIT COURT COLUMBIA COUNTY, FLORIDA

Inst:2007010768 Date:05/15/2007 Time:12:04
DC,P.DeWitt Cason,Columbia County B:1119 P:608

FORM 600A-2004R

EnergyGauge® 4.5

# FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

## Florida Department of Community Affairs

## Residential Whole Building Performance Method A

| | | | |
|---|---|---|---|
| Project Name: | Crawford- LL interior unit | Builder: | Stephen Crawford |
| Address: | | Permitting Office: | |
| City, State: | , | Permit Number: | |
| Owner: | | Jurisdiction Number: | |
| Climate Zone: | North | | |

| | | | |
|---|---|---|---|
| 1. | New construction or existing | New | |
| 2. | Single family or multi-family | Multi-family | |
| 3. | Number of units, if multi-family | 3 | |
| 4. | Number of Bedrooms | 2 | |
| 5. | Is this a worst case? | Yes | |
| 6. | Conditioned floor area (ft²) | 684 ft² | |
| 7. | Glass type[1] and area: (Label reqd. by 13-104.4.5 if not default) | | |
| | a. U-factor: | Description Area | |
| | (or Single or Double DEFAULT) | 7a. (Dbl: Default) 68.0 ft² | |
| | b. SHGC: | | |
| | (or Clear or Tint DEFAULT) | 7b. (Clear) 68.0 ft² | |
| 8. | Floor types | | |
| | a. Slab-On-Grade Edge Insulation | R=0.0, 44.0(p) ft | |
| | b. N/A | | |
| | c. N/A | | |
| 9. | Wall types | | |
| | a. Concrete, Int Insul, Exterior | R=4.1, 240.0 ft² | |
| | b. N/A | | |
| | c. N/A | | |
| | d. N/A | | |
| | e. N/A | | |
| 10. | Ceiling types | | |
| | a. Under Attic | R=19.0, 684.0 ft² | |
| | b. N/A | | |
| | c. N/A | | |
| 11. | Ducts | | |
| | a. Sup: Con. Ret: Con. AH: Interior | Sup. R=6.0, 69.0 ft | |
| | b. N/A | | |

| | | | |
|---|---|---|---|
| 12. | Cooling systems | | |
| | a. Central Unit | Cap: 18.0 kBtu/hr | |
| | | SEER: 13.00 | |
| | b. N/A | | |
| | c. N/A | | |
| 13. | Heating systems | | |
| | a. Electric Heat Pump | Cap: 18.0 kBtu/hr | |
| | | HSPF: 7.70 | |
| | b. N/A | | |
| | c. N/A | | |
| 14. | Hot water systems | | |
| | a. Electric Resistance | Cap: 40.0 gallons | |
| | | EF: 0.92 | |
| | b. N/A | | |
| | c. Conservation credits (HR-Heat recovery, Solar DHP-Dedicated heat pump) | | |
| 15. | HVAC credits (CF-Ceiling fan, CV-Cross ventilation, HF-Whole house fan, PT-Programmable Thermostat, MZ-C-Multizone cooling, MZ-H-Multizone heating) | | |

Glass/Floor Area: 0.10

Total as-built points: 10419

Total base points: 11226

PASS

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

PREPARED BY: _____

DATE: _____

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

OWNER/AGENT: _____

DATE: _____

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

BUILDING OFFICIAL: _____

DATE: _____

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

FORM 600A-2004R EnergyGauge® 4.5

# SUMMER CALCULATIONS

## Residential Whole Building Performance Method A - Details

ADDRESS: , , , PERMIT #:

| BASE | | | | AS-BUILT | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **GLASS TYPES** .18 X Conditioned Floor Area | X BSPM | = Points | | Type/SC | Overhang Ornt | Len | Hgt | Area X | SPM X | SOF | = Points | |
| .18 | 684.0 | 18.58 | 2289.0 | 1.Double, Clear | NW | 2.0 | 5.0 | 34.0 | 25.97 | 0.84 | 738.0 | |
| | | | | 2.Double, Clear | NE | 2.0 | 5.0 | 34.0 | 29.56 | 0.82 | 823.0 | |
| | | | | As-Built Total: | | | | 68.0 | | | 1561.0 | |
| **WALL TYPES** | Area X | BSPM | = Points | Type | | | R-Value | Area X | SPM | = | Points | |
| Adjacent | 0.0 | 0.00 | 0.0 | 1. Concrete, Int Insul, Exterior | | | 4.1 | 240.0 | 1.13 | | 272.4 | |
| Exterior | 240.0 | 1.70 | 408.0 | | | | | | | | | |
| Base Total: | 240.0 | | 408.0 | As-Built Total: | | | | 240.0 | | | 272.4 | |
| **DOOR TYPES** | Area X | BSPM | = Points | Type | | | | Area X | SPM | = | Points | |
| Adjacent | 0.0 | 0.00 | 0.0 | 1.Exterior Insulated | | | | 36.0 | 4.10 | | 147.6 | |
| Exterior | 36.0 | 6.10 | 219.6 | | | | | | | | | |
| Base Total: | 36.0 | | 219.6 | As-Built Total: | | | | 36.0 | | | 147.6 | |
| **CEILING TYPES** | Area X | BSPM | = Points | Type | | | R-Value | Area X | SPM X SCM | = | Points | |
| Under Attic | 684.0 | 1.73 | 1183.3 | 1. Under Attic | | | 19.0 | 684.0 | 2.34 X 1.00 | | 1600.6 | |
| Base Total: | 684.0 | | 1183.3 | As-Built Total: | | | | 684.0 | | | 1600.6 | |
| **FLOOR TYPES** | Area X | BSPM | = Points | Type | | | R-Value | Area X | SPM | = | Points | |
| Slab | 44.0(p) | -37.0 | -1628.0 | 1. Slab-On-Grade Edge Insulation | | | 0.0 | 44.0(p) | -41.20 | | -1812.8 | |
| Raised | 0.0 | 0.00 | 0.0 | | | | | | | | | |
| Base Total: | | | -1628.0 | As-Built Total: | | | | 44.0 | | | -1812.8 | |
| **INFILTRATION** | Area X | BSPM | = Points | | | | | Area X | SPM | = | Points | |
| | 684.0 | 10.21 | 6983.6 | | | | | 684.0 | 10.21 | | 6983.6 | |
| **Summer Base Points:** | | | 9455.6 | **Summer As-Built Points:** | | | | | | | | 8752.4 |
| Total Summer Points | X System Multiplier | = Cooling Points | | Total Component (System - Points) | X Cap Ratio | X Duct Multiplier (DM x DSM x AHU) | | X System Multiplier | X Credit Multiplier | = Cooling Points | | |
| | | | | (sys 1: Central Unit 18000btuh ,SEER/EFF(13.0) Ducts:Con(S),Con(R),Int(AH),R8.0(INS) | | | | | | | | |
| 9455.6 | 0.3250 | 3073.1 | | 8752 8752.4 | 1.00 1.00 | (1.00 x 1.147 x 0.91) 1.044 | | 0.260 0.260 | 1.000 1.000 | | 2375.2 2375.2 | |

FORM 600A-2004R

EnergyGauge® 4.5

# WINTER CALCULATIONS

## Residential Whole Building Performance Method A - Details

ADDRESS: , , , PERMIT #:

| BASE | | | | AS-BUILT | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **GLASS TYPES** .18 X Conditioned Floor Area | X BWPM | = Points | | Type/SC | Overhang Ornt | Len | Hgt | Area X | WPM X | WOF | = Points |
| .18 | 684.0 | 20.17 | 2483.0 | 1.Double, Clear | NW | 2.0 | 5.0 | 34.0 | 24.30 | 1.01 | 833.0 |
| | | | | 2.Double, Clear | NE | 2.0 | 5.0 | 34.0 | 23.67 | 1.02 | 815.0 |
| | | | | As-Built Total: | | | | 68.0 | | | 1648.0 |
| **WALL TYPES** | Area X | BWPM | = Points | Type | | | R-Value | Area X | WPM | | = Points |
| Adjacent | 0.0 | 0.00 | 0.0 | 1. Concrete, Int Insul, Exterior | | | 4.1 | 240.0 | 6.42 | | 1540.8 |
| Exterior | 240.0 | 3.70 | 886.0 | | | | | | | | |
| Base Total: | 240.0 | | 886.0 | As-Built Total: | | | | 240.0 | | | 1540.8 |
| **DOOR TYPES** | Area X | BWPM | = Points | Type | | | | Area X | WPM | | = Points |
| Adjacent | 0.0 | 0.00 | 0.0 | 1.Exterior Insulated | | | | 36.0 | 8.40 | | 302.4 |
| Exterior | 36.0 | 12.30 | 442.8 | | | | | | | | |
| Base Total: | 36.0 | | 442.8 | As-Built Total: | | | | 36.0 | | | 302.4 |
| **CEILING TYPES** | Area X | BWPM | = Points | Type | | | R-Value | Area X | WPM X | WCM | = Points |
| Under Attic | 684.0 | 2.05 | 1402.2 | 1. Under Attic | | | 19.0 | 684.0 | 2.70 X | 1.00 | 1846.8 |
| Base Total: | 684.0 | | 1402.2 | As-Built Total: | | | | 684.0 | | | 1846.8 |
| **FLOOR TYPES** | Area X | BWPM | = Points | Type | | | R-Value | Area X | WPM | | = Points |
| Slab | 44.0(p) | 8.9 | 391.6 | 1. Slab-On-Grade Edge Insulation | | | 0.0 | 44.0(p) | 18.80 | | 827.2 |
| Raised | 0.0 | 0.00 | 0.0 | | | | | | | | |
| Base Total: | | | 391.6 | As-Built Total: | | | | 44.0 | | | 827.2 |
| **INFILTRATION** | Area X | BWPM | = Points | | | | | Area X | WPM | | = Points |
| | 684.0 | -0.59 | -403.6 | | | | | 684.0 | -0.59 | | -403.6 |
| **Winter Base Points:** | | | 5204.0 | **Winter As-Built Points:** | | | | | | | 5761.6 |
| Total Winter Points | X System Multiplier | = Heating Points | | Total Component (System + Points) | X Cap Ratio | X Duct Multiplier (DM x DSM x AHU) | X System Multiplier | X Credit Multiplier | = Heating Points | | |
| | | | | (sys 1: Electric Heat Pump 18000 btuh ,EFF(7.7) Ducts:Con(S),Con(R),Int(AH),R6.0 | | | | | | | |
| | | | | 5761.6 | 1.000 | (1.000 x 1.169 x 0.93) | 0.443 | 1.000 | 2774.0 | | |
| 5204.0 | 0.5640 | 2883.0 | | 5761.6 | 1.00 | 1.087 | 0.443 | 1.000 | 2774.0 | | |

FORM 600A-2004R

EnergyGauge® 4.5

# WATER HEATING & CODE COMPLIANCE STATUS

## Residential Whole Building Performance Method A - Details

ADDRESS: , , , PERMIT #:

| BASE | | | AS-BUILT | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **WATER HEATING** | | | | | | | | | |
| Number of Bedrooms | X Multiplier | = Total | Tank Volume | EF | Number of Bedrooms | X Tank Ratio | X Multiplier | X Credit Multiplier | = Total |
| 2 | 2635.00 | 5270.0 | 40.0 | 0.92 | 2 | 1.00 | 2635.00 | 1.00 | 5270.0 |
| | | | As-Built Total: | | | | | | 5270.0 |

## CODE COMPLIANCE STATUS

| BASE | | | | AS-BUILT | | | |
|---|---|---|---|---|---|---|---|
| Cooling Points | + Heating Points | + Hot Water Points | = Total Points | Cooling Points | + Heating Points | + Hot Water Points | = Total Points |
| 3073 | 2883 | 5270 | 11226 | 2375 | 2774 | 5270 | 10419 |

**PASS**

FORM 600A-2004R EnergyGauge® 4.5

# Code Compliance Checklist

## Residential Whole Building Performance Method A - Details

| ADDRESS: , , , | PERMIT #: |
|---|---|

### 6A-21 INFILTRATION REDUCTION COMPLIANCE CHECKLIST

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

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

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

# ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

**ESTIMATED ENERGY PERFORMANCE SCORE* = 84.9**

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

| | | | |
|---|---|---|---|
| 1. | New construction or existing | New | |
| 2. | Single family or multi-family | Multi-family | |
| 3. | Number of units, if multi-family | 3 | |
| 4. | Number of Bedrooms | 2 | |
| 5. | Is this a worst case? | Yes | |
| 6. | Conditioned floor area (ft²) | 684 ft² | |
| 7. | Glass type[1] and area: (Label reqd. by 13-1(4.4.5 if not default) | | |
| | a. U-factor: (or Single or Double DEFAULT) | 7a. Description (Dble Default) | Area 68.0 ft² |
| | b. SHGC: (or Clear or Tint DEFAULT) | 7b. (Clear) | 68.0 ft² |
| 8. | Floor types | | |
| | a. Slab-On-Grade Edge Insulation | | R=0.0, 44.0(p) ft |
| | b. N/A | | |
| | c. N/A | | |
| 9. | Wall types | | |
| | a. Concrete, Int Insul, Exterior | | R=4.1, 240.0 ft² |
| | b. N/A | | |
| | c. N/A | | |
| | d. N/A | | |
| | e. N/A | | |
| 10. | Ceiling types | | |
| | a. Under Attic | | R=19.0, 684.0 ft² |
| | b. N/A | | |
| | c. N/A | | |
| 11. | Ducts | | |
| | a. Sup: Con. Ret: Con. AH: Interior | | Sup. R=6.0, 69.0 ft |
| | b. N/A | | |

| | | |
|---|---|---|
| 12. | Cooling systems | |
| | a. Central Unit | Cap: 18.0 kBtu/hr<br>SEER: 13.00 |
| | b. N/A | |
| | c. N/A | |
| 13. | Heating systems | |
| | a. Electric Heat Pump | Cap: 18.0 kBtu/hr<br>HSPF: 7.70 |
| | b. N/A | |
| | c. N/A | |
| 14. | Hot water systems | |
| | a. Electric Resistance | Cap: 40.0 gallons<br>EF: 0.92 |
| | b. N/A | |
| | c. Conservation credits (HR-Heat recovery, Solar DHP-Dedicated heat pump) | |
| 15. | HVAC credits (CF-Ceiling fan, CV-Cross ventilation, HF-Whole house fan, PT-Programmable Thermostat, MZ-C-Multizone cooling, MZ-H-Multizone heating) | |

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

Builder Signature: _____ Date: _____

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

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

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

Fax to 755-6284

Ken Roche Plumbing, Inc.

Plumbing now™

3/37/07
To: Rigsby Rentals
Re: Information for the building department with respect to plumbing work done at 201 SE Beech

First of all I am familiar with the history of the bldg. doing service work for D. Crapps 15 yrs ago plus.

1. All water is new—interior water is cpvc
2. shut offs for indiv. Apt. are out back
3. Heaters have pans
4. fixtures other than tubs are new
5. bathroom fixture locations have not changed
6. Kitchen sink waste arms were adjusted at 2nd rough –pvc—although main stacks and sewer is cast iron-all waste arms are less than 3 ft.
7. Camera shot the main sewer and jetted ( I had always remembered a bad spot in the sewer and it looked as though the floor had been chopped in that area....in any case the sewer looked ok.

Ken Roche
Plumbing Now

Ken Roche

High Springs Plumbing & Electric, Inc.
Phone 386 454-1407
Fax 386 454-8351
20605 N HWY 441
High Springs, Fl 32643

April 30, 2007

To: John Kearse
Columbia County Bldg Dept.
Job: Rigsby Townhomes

Mr. Kearse,
This letter is to inform you of the electrical work we completed at the townhomes owned by Will Rigsby, at the corner of Beech and Defender. As you know we were not the first electrical contractor on this job, from what I have heard we were about the third. That being the case we removed all wire previously ran and started over. We wired it completely by the N.E.C. We placed GFI receptacles in kitchens and baths, arch – fault breakers for all bedrooms and interconnected smoke detectors in all bedrooms and living areas.
The electrical service was a 1200 amp service but was changed to a 1000 amp after meeting with the building dept. Each unit is supplied with a meter and a 150 amp panel. There is a house panel that serves a sump pump and walkway lighting. If you have any further questions please feel free to call me. Thank you for your cooperation in this matter.

Donnie Davis
386 623-0499

**Stephen Crawford Construction, Inc.**
**11736 S Us Hwy 441**
**Lake City, FL 32025**

**Telephone: (386) 755-5068**
**Fax (386) 758-9500**

April 30th, 2007

Columbia County Building Dept.
135 NE Hernando
Suite B 21
Lake City, FL 32055

**RE: EAST SIDE PROJECT**

To Whom it may concern,

This letter is to inform you of a list of activities that where performed by Stephen Crawford Construction, Inc. at East Side Villages for Rigsby Rentals. This list of Items included:

* New Hardi-Panel siding on rear of building
* New Vinyl Soffit & Fascia
* Patch minor Drywall repairs
* Coordinate w/ Rigsby Rentals painter to paint interior & exterior of building
* Coordinate w/ Electrician, Plumber and HVAC contractors that Mr. Rigsby had already hired.
* Install new cabinets and counter tops in Kitchen only.
* Finish remaining 25% of interior trim work.

If you have any questions about the list of activities performed please feel free to contact me at my office: (386) 755-5068 or on my cell phone: (386) 867-0127.

Thank You,

Stephen Crawford
President/Owner

bryant®
Heating & Cooling Systems
PREMIER DEALER

# Harry's Heating & Air Conditioning, Inc.

P.O. BOX 1321
LAKE CITY, FLORIDA 32056-1321
PHONE (904) 752-2308 FAX (904) 752-7003

Heating Air Conditioning

May 4, 2007

Fax to:
John Kerce
758-2160

Columbia County Building Dept.
Attn: John Kerce

Job at 201 SE Beach Street Apartment Complex
Will Rigsby – Owner
10 Apartments

All air handlers , condensing units and duct systems changed out. All work was done to code.

Thanks,

Harry Moseley
President & Owner.

Harry Moseley

bryant
Heating & Cooling Systems
PREMIER DEALER

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Will Rigsby – Owner
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All air handlers , condensing units and duct systems changed out. All work was done to code.

Thanks,

Harry Moseley
President & Owner.

Harry Moseley

Architectural Testing

# AAMA/WDMA/CSA 101/I.S.2/A440-05
# TEST REPORT

**Rendered to:**

**MI WINDOWS AND DOORS, INC.**

**SERIES/MODEL: 165/3000 (Oriel)**
**PRODUCT TYPE: Aluminum Single Hung Window**
**(Fin and Flange)**

| | |
|---|---|
| **Report No.:** | **67708.01-109-47** |
| **Revision 1:** | **12/15/06** |
| **Test Dates:** | **09/19/06** |
| **Through:** | **09/22/06** |
| **Report Date:** | **10/12/06** |
| **Expiration Date:** | **09/22/10** |

130 Derry Court
York, PA 17406-8405
phone: 717-764-7700
fax: 717-764-4129
www.archtest.com

Architectural Testing

## Summary of Results

| Title | Summary of Results | |
|---|---|---|
| | **Test Specimen #1** | **Test Specimen #2** |
| Primary Product Designator | H-R25 1219 x 2286 (48 x 90) | H-R25 1219 x 2286 (48 x 90) |
| Design Pressure* | 1200 Pa (25.08 psf) | 1200 Pa (25.08 psf) |
| Negative Design Pressure* | 1440 Pa (30.09 psf) | 1200 Pa (25.08 psf) |
| Operating Force (in motion) | 53.4 N (12.0 lbf) | N/A |
| Air Infiltration | 0.76 L/s/m$^2$ (0.15 cfm/ft$^2$) | N/A |
| Water Penetration Resistance Test Pressure* | 290 Pa (6.06 psf) | 290 Pa (6.06 psf) |
| Uniform Load Structural Test Pressure | +1800 Pa (37.62 psf) -2160 Pa (45.14 psf) | ±1800 Pa (37.62 psf) |
| Forced Entry Resistance | Grade 10 | N/A |

| Title | Summary of Results | |
|---|---|---|
| | **Test Specimen #3** | **Test Specimen #4** |
| Primary Product Designator | H-R40* 1016 x 2286 (40 x 90) | H-R35* 1016 x 2286 (40 x 90) |
| Design Pressure* | 1920 Pa (40.13 psf) | 1689 Pa (35.3 psf) |
| Negative Design Pressure* | 2259 Pa (47.2 psf) | 2160 Pa (45.14 psf) |
| Operating Force (in motion) | N/A | N/A |
| Air Infiltration | N/A | N/A |
| Water Penetration Resistance Test Pressure* | N/A | N/A |
| Uniform Load Structural Test Pressure | +2880 Pa (60.19 psf) -3388 Pa (70.8 psf) | +2536 Pa (53.0 psf) -3240 Pa (67.71 psf) |
| Forced Entry Resistance | N/A | N/A |

*-Optional Secondary Designators

**Test Completion Date:** 09/22/06

Reference must be made to Report No. 67708.01-109-47, dated 12/15/06 for complete test specimen description and data.

Architectural Testing

# AAMA/WDMA/CSA 101/I.S.2/A440-05 TEST REPORT

Rendered to:

MI WINDOWS AND DOORS, INC.
P.O. Box 370
650 West Market Street
Gratz, Pennsylvania 17030-0370

| | |
|---|---|
| Report No.: | 67708.01-109-47 |
| Revision 1: | 12/15/06 |
| Test Dates: | 09/19/06 |
| Through: | 09/22/06 |
| Report Date: | 10/12/06 |
| Expiration Date: | 09/22/10 |

**Project Summary**: Architectural Testing, Inc. (ATI) was contracted by MI Windows and Doors, Inc. to witness testing on four Series/Model 165/3000, single hung windows at the MI Windows and Doors, Inc. test facility in Elizabethville, Pennsylvania. The samples tested successfully met the performance requirements for the following ratings: Test Specimen #1: H-R25 1219 x 2286 (48 x 90); Test Specimen #2: H-R25 1219 x 2286 (48 x 90); Test Specimen #3: H-R40* 1016 x 2286 (40 x 90); Test Specimen #4: H-R35* 1016 x 2286 (40 x 90). Test specimen description and results are reported herein.

***General Note**: An asterisk (*) next to the performance grade indicates that the size tested for optional performance was smaller than the Gateway test size for the product type and class.*

**Test Specification**: The test specimen was evaluated in accordance with AAMA/WDMA/CSA 101/I.S.2/A440-05, *Standard/Specification for Windows, Doors, and Unit Skylights.*

**Test Specimen Description**:

**Series/Model**: 165/3000 (Oriel)

**Product Type**: Aluminum Single Hung Window

**Test Specimen #1**: H-R25 1219 x 2286 (48 x 90) (Fin)

**Overall Size**: 1219 mm (48") wide by 2286 mm (90") high

**Sash Size**: 1183 mm (46-9/16") wide by 914 mm (36") high

130 Derry Court
York, PA 17406-8405
phone: 717-764-7700
fax: 717-764-4129
www.archtest.com

**Test Specimen Description**: (Continued)

**Test Specimen #1**: H-R25 1219 x 2286 (48 x 90) (Fin) (Continued)

**Screen Size**: 1168 mm (46") wide by 902 mm (35-1/2") high

**Overall Area**: 2.8 $m^2$ (30.0 $ft^2$)

**Test Specimen #2**: H-R25 1219 x 2286 (48 x 90) (Flange)

**Overall Size**: 1219 mm (48") wide by 2286 mm (90") high

**Sash Size**: 1183 mm (46-9/16") wide by 914 mm (36") high

**Screen Size**: 1168 mm (46") wide by 902 mm (35-1/2") high

**Overall Area**: 2.8 $m^2$ (30 $ft^2$)

**Test Specimen #3**: H-R40* 1016 x 2286 (40 x 90) (Fin)

**Overall Size**: 1016 mm (40") wide by 2286 mm (90") high

**Sash Size**: 979 mm (38-9/16") wide by 914 mm (36") high

**Overall Area**: 2.3 $m^2$ (25.0 $ft^2$)

**Test Specimen #4**: H-R35* 1016 x 2286 (40 x 90) (Flange)

**Overall Size**: 1016 mm (40") wide by 2286 mm (90") high

**Sash Size**: 979 mm (38-9/16") wide by 914 mm (36") high

**Overall Area**: 2.3 $m^2$ (25.0 $ft^2$)

***The following descriptions apply to all specimens.***

**Finish**: All aluminum was painted white.

**Frame Construction**: The frame was constructed of extruded aluminum. The corners were coped, butted, sealed, and secured with two #6 x 3/4" long pan head screws. The fixed meeting rail was secured with a plastic clip that was secured to the frame with two #6 x 5/8" long self-tapping screws and secured to the fixed meeting rail with two #6 x 1/2" long self-tapping screws.

**Test Specimen Description**: (Continued)

**Sash Construction**: The sash were constructed from extruded aluminum. The corners of sash were coped, butted, and secured with one #6 x 1" long pan head screw at each corner.

**Weatherstripping**:

| Description | Quantity | Location |
|---|---|---|
| 0.187" backed by 0.210" polypile with center fin | 1 Row | Meeting rail |
| 0.187" backed by 0.425" two leaf foam bulb seal | 1 Row | Bottom rail |
| 0.187" backed by 0.250" polypile with center fin | 2 Rows | Sash stiles |

**Glazing Details**: The window utilized a 1/2" thick sealed insulating glass constructed from two sheets of 1/8" thick clear annealed glass and a metal reinforced butyl spacer system. The glass was set onto silicone and secured with PVC snap-in glazing beads.

**Drainage**: A sloped sill was utilized.

**Hardware**:

| Description | Quantity | Location |
|---|---|---|
| Plastic tilt latches | 2 | Ends of meeting rail |
| Metal sweep lock | 2 | 6" from each end of meeting rail |
| Spiral balance system | 2 | One per jamb |

**Reinforcement**: No reinforcement was utilized.

**Screen Construction**: The screen was constructed from roll-formed aluminum, the corners were square-cut and keyed with plastic keys. The fiberglass mesh was secured with a flexible vinyl spline.

**Fin Installation**: The window was installed into a Spruce-Pine-Fir wood buck. The fin was set onto a bead of silicone and secured with #8 x 1-5/8" screws spaced 3" from ends and 12" on center through fin into wood buck.

**Test Results**: (Continued)

| Paragraph | Title of Test - Test Method | Results | Allowed |
|---|---|---|---|
| **Test Specimen #1**: H-R25 1219 x 2286 (48 x 90) (Fin) (Continued) | | | |
| 5.3.5 | Forced Entry Resistance per ASTM F 588 | | |
| | Type: A | Grade: 10 | |
| | Test Disassembly | No entry | No entry |
| | Test A1 through A7 | No entry | No entry |
| | Lock Hardware Manipulation Test | No entry | No entry |
| | Sash Manipulation Test | No entry | No entry |
| 5.3.6.3 | Deglazing Test | | |
| | In operating direction - 320 N (70 lbs) | | |
| | Top rail | 3.3 mm (0.13") | 11.4 mm (0.45") |
| | Bottom rail | 3.3 mm (0.13") | 11.4 mm (0.45") |
| | In remaining direction - 230 N (50 lbs) | | |
| | Right stile | 2.0 mm (0.08") | 11.4 mm (0.45") |
| | Left stile | 2.0 mm (0.08") | 11.4 mm (0.45") |
| Optional Performance | | | |
| 4.4.2.6 | Water Penetration Resistance per ASTM E 547 (with and without insect screen) | | |
| | 2.90 Pa (6.06 psf) | No leakage | No leakage |
| 4.4.2.6 | Uniform Load Deflection per ASTM E 330 | | |
| | (Deflections were taken on the meeting rail) | | |
| | (Loads were held for 52 seconds) | | |
| | 1200 Pa (25.08 psf) (positive) | 19.1 mm (0.75") | See Note #2 |
| | 1440 Pa (30.09 psf) (negative) | 17.5 mm (0.69") | See Note #2 |

**Test Specimen Description**: (Continued)

**Flange Installation**: The window was installed into a Spruce-Pine-Fir wood buck. The window was secured with nine total #8 x 1-1/4" long pan head screws at the head and the jambs. The screws at the head were located 3-1/2" from ends and 19-1/2" on center. The screws at the jambs were located 5" from ends and 45" on center of both jambs. The window was then sealed with silicone.

**Test Results**: The results are tabulated as follows:

| Paragraph | Title of Test - Test Method | Results | Allowed |
|---|---|---|---|
| **Test Specimen #1**: H-R25 1219 x 2286 (48 x 90) (Fin) | | | |
| 5.3.1 | Operating Force per ASTM E 2068 | | |
| | Initiate motion | 84.5 N (19.0 lbf) | Report Only |
| | Maintain motion | 57.8 N (13.0 lbf) | 135 N (30 lbf) |
| 5.3.2.1 | Air Leakage Resistance per ASTM E 283 | | |
| | 75 Pa (1.6 psf) | 0.76 L/s/m$^2$ (0.15 cfm/ft$^2$) | 1.5 L/s/m$^2$ (0.3 cfm/ft$^2$ max.) |
| 5.3.3.1 | Water Penetration Resistance per ASTM E 547 (with and without insect screen) | | |
| | 140 Pa (2.93 psf) | No leakage | No leakage |
| 5.3.4.2 | Uniform Load Deflection per ASTM E 330 (Deflections were taken on the meeting rail) (Loads were held for 52 seconds) | | |
| | 720 Pa (15.05 psf) (positive) | 9.7 mm (0.38") | See Note #2 |
| | 720 Pa (15.05 psf) (negative) | 9.1 mm (0.36") | See Note #2 |
| 5.3.4.3 | Uniform Load Structural per ASTM E 330 (Permanent sets were taken on the meeting rail) (Loads were held for 10 seconds) | | |
| | 1080 Pa (22.57 psf) (positive) | 0.51 mm (0.02") | 4.6 mm (0.18") |
| | 1080 Pa (22.57 psf) (negative) | 1.0 mm (0.04") | 4.6 mm (0.18") |

***Note #1**: The tested specimen meets (or exceeds) the performance levels specified in AAMA/WDMA/CSA 101/I.S.2/A440-05 for air leakage resistance.*

***Note #2**: The deflections reported are not limited by AAMA/WDMA/CSA 101/I.S.2/A440-05 for this product designation. The deflection data is recorded in this report for special code compliance and information only.*

**Test Results:** (Continued)

| Paragraph | Title of Test - Test Method | Results | Allowed |
|---|---|---|---|
| | **Test Specimen #1**: H-R25 1219 x 2286 (48 x 90) (Fin) (Continued) | | |
| | Optional Performance: (Continued) | | |
| 4.4.2.6 | Uniform Load Structural per ASTM E 330<br>(Permanent sets were taken on the meeting rail)<br>(Loads were held for 10 seconds) | | |
| | 1800 Pa (37.62 psf) (positive) | 3.8 mm (0.15") | 4.6 mm (0.18") max. |
| | 2160 Pa (45.14 psf) (negative) | 4.6 mm (0.18") | 4.6 mm (0.18") max. |
| | **Test Specimen #2**: H-R25 1219 x 2286 (48 x 90) (Flange) | | |
| | Optional Performance | | |
| 4.4.2.6 | Water Penetration Resistance per ASTM E 547<br>(with and without insect screen) | | |
| | 290 Pa (6.06 psf) | No leakage | No leakage |
| 4.4.2.6 | Uniform Load Deflection per ASTM E 330<br>(Deflections were taken on the meeting rail)<br>(Loads were held for 52 seconds) | | |
| | 1200 Pa (25.08 psf) (positive) | 15.7 mm (0.62") | See Note #2 |
| | 1200 Pa (25.08 psf) (negative) | 14.2 mm (0.56") | See Note #2 |
| 4.4.2.6 | Uniform Load Structural per ASTM E 330<br>(Permanent sets were taken on the meeting rail)<br>(Loads were held for 10 seconds) | | |
| | 1800 Pa (37.62 psf) (positive) | 3.0 mm (0.12") | 4.6 mm (0.18") max. |
| | 1800 Pa (37.62 psf) (negative) | 2.0 mm (0.08") | 4.6 mm (0.18") max. |
| | **Test Specimen #3**: H-R40* 1016 x 2286 (40 x 90) (Fin) | | |
| | Optional Performance | | |
| 4.4.2.6 | Uniform Load Deflection per ASTM E 330<br>(Deflections were taken on the meeting rail)<br>(Loads were held for 52 seconds) | | |
| | 1920 Pa (40.13 psf) (positive) | 13.2 mm (0.52") | See Note #2 |
| | 2259 Pa (47.2 psf) (negative) | 13.2 mm (0.52") | See Note #2 |

**Test Results**: (Continued)

| Paragraph | Title of Test - Test Method | Results | Allowed |
|---|---|---|---|
| | **Test Specimen #3**: H-R40* 1016 x 2286 (40 x 90) (Fin) (Continued) | | |
| | Optional Performance: (Continued) | | |
| 4.4.2.6 | Uniform Load Structural per ASTM E 330<br>(Permanent sets were taken on the meeting rail)<br>(Loads were held for 52 seconds) | | |
| | 2880 Pa (60.19 psf) (positive) | 3.6 mm (0.14") | 3.8 mm (0.15") max. |
| | 3388 Pa (70.8 psf) (negative) | 2.3 mm (0.09") | 3.8 mm (0.15") max. |
| | **Test Specimen #4**: H-R35* 1016 x 2286 (40 x 90) (Flange) | | |
| | Optional Performance | | |
| 4.4.2.6 | Uniform Load Deflection per ASTM E 330<br>(Deflections were taken on the meeting rail)<br>(Loads were held for 52 seconds) | | |
| | 1689 Pa (35.3 psf) (positive) | 9.9 mm (0.39") | See Note #2 |
| | 2160 Pa (45.14 psf) (negative) | 14.0 mm (0.55") | See Note #2 |
| 4.4.2.6 | Uniform Load Structural per ASTM E 330<br>(Permanent sets were taken on the meeting rail)<br>(Loads were held for 10 seconds) | | |
| | 2536 Pa (53.0 psf) (positive) | 1.5 mm (0.06") | 3.8 mm (0.15") max. |
| | 3240 Pa (67.71 psf) (negative) | 3.0 mm (0.12") | 3.8 mm (0.15") max. |

**Drawing Reference**: The test specimen drawings have been reviewed by Architectural Testing, Inc. and are representative of the test specimen reported herein.

Detailed drawings, representative samples of the test specimen, and a copy of this report will be retained by ATI for a period of four years from the original test date. The above results were secured by using the designated test methods and they indicate compliance with the performance requirements of the above referenced specification. This report does not constitute certification of this product, which may only be granted by the certification program administrator. This report may not be reproduced, except in full, without the approval of Architectural Testing, Inc.

For ARCHITECTURAL TESTING, INC.

Digitally Signed by: Jeremy R. Bender

Jeremy R. Bender
Technician

Digitally Signed by: Michael D. Stremmel

Michael D. Stremmel, P.E.
Senior Project Engineer

JRB:vlm/cmd

Attachments (pages):
Appendix-A: Alteration Addendum (1)

## Revision Log

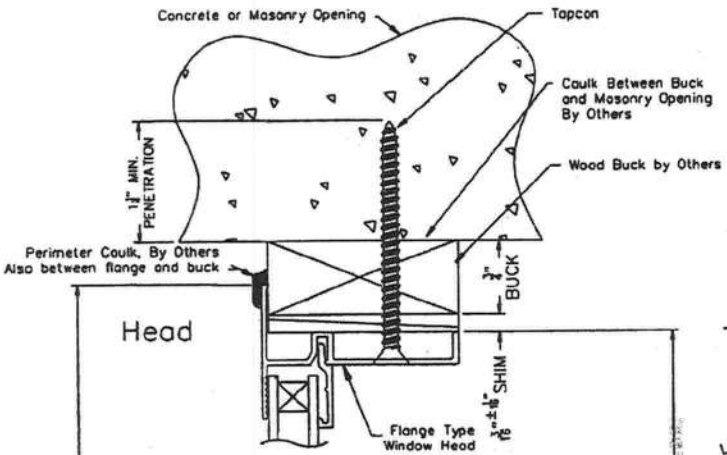
| Rev. # | Date | Page(s) | Revision(s) |
|---|---|---|---|
| 0 | 10/12/06 | N/A | Original report issue |
| 1 | 12/15/06 | Cover page and Page 1 | Changed Product Type from "PVC" to "Aluminum" Single Hung Window |
| | | Page 5 | Removed Thermoplastic Corner Weld Test from results for Test Specimen #1 |

Architectural Testing

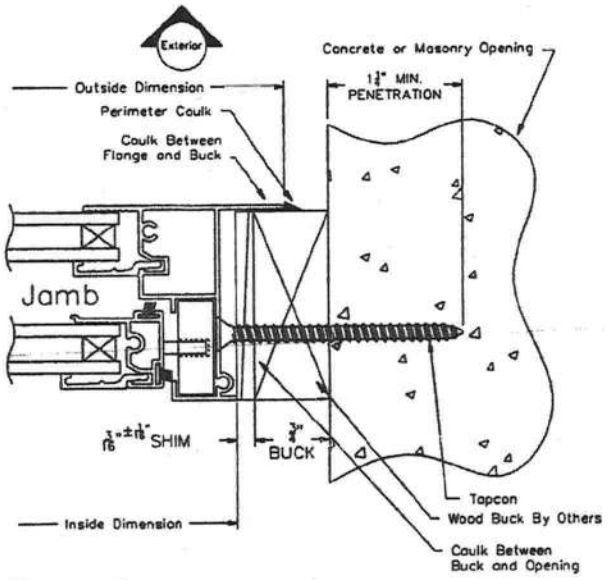
## Appendix A

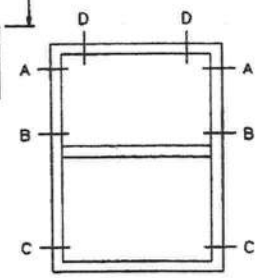
## Alteration Addendum

***Note**: No alterations were required.*




1. Shim as required at each installation anchor as shown, with load bearing shim.
2. Anchor must be of sufficient length to provide 1 1/4" min. embedment into masonry or concrete.
3. Caulk between window flange and buck.
4. Caulk full perimeter of window.
5. If exact window size is not given, use anchor quantity for next larger window in chart.
6. Glass thickness will vary with window size and design load, and must comply with ASTM E1300.
7. Letter designations on the tapcon* location chart indicate where anchors are to be installed using the elevation as a key.
8. All factory applied holes not designated for tapcon* should be filled with #8 screws of sufficient lth. to provide 5/8" min. embedment into wood buck.




EXTERIOR ELEVATION

| TAPCON * LOCATION CHART | | | |
|---|---|---|---|
| CODE SIZE | WINDOW ID SIZE | TAPCON* LOCATIONS | |
| | | UP TO DP35 | DP35.1 TO DP50 |
| 12 | 18 1/8 x 25 | C, D | C, D |
| 13 | 18 1/8 x 37 3/8 | C, D | C, D |
| 14 | 18 1/8 x 49 5/8 | C, D | C, D |
| 15 | 18 1/8 x 62 | C, D | C, D |
| 16 | 18 1/8 x 71 1/4 | C, D | C, D |
| 1/2 32 | 25 1/2 x 25 | C, D | C, D |
| 1/2 33 | 25 1/2 x 37 3/8 | C, D | C, D |
| 1/2 34 | 25 1/2 x 49 5/8 | C, D | C, D |
| 1/2 35 | 25 1/2 x 62 | C, D | C, D |
| 1/2 36 | 25 1/2 x 71 1/4 | C, D | B, C, D |
| 22 | 36 x 25 | C, D | C, D |
| 23 | 36 x 37 3/8 | C, D | C, D |
| 24 | 36 x 49 5/8 | C, D | C, D |
| 245 | 36 x 55 1/4 | A, D | B, C, D |
| 25 | 36 x 62 | C, D | B, C, D |
| 26 | 36 x 71 1/4 | B, C, D | A, C, D |
| 32 | 52 1/8 x 25 | C, D | C, D |
| 33 | 52 1/8 x 37 3/8 | C, D | C, D |
| 34 | 52 1/8 x 49 5/8 | C, D | B, C, D |
| 345 | 52 1/8 x 55 1/4 | B, C, D | B, C, D |
| 35 | 52 1/8 x 62 | B, C, D | A, C, D |
| 36 | 52 1/8 x 71 1/4 | B, C, D | A, B, C, D |
| 2050 | 24 1/2 x 60 13/16 | C, D | C, D |
| 3040 | 36 1/2 x 48 13/16 | C, D | C, D |
| 3050 | 36 1/2 x 60 13/16 | C, D | B, C, D |
| 3060 | 36 1/2 x 72 13/16 | B, C, D | B, C, D |
| 4050 | 48 1/2 x 60 13/16 | B, C, D | B, C, D |

*"TAPCON" TYPE HARDENED MASONRY SCREWS INCLUDE TAPCON, RAWL, & SIMPSON

Design Pressure values listed above are in PSF

BetterBilt

| | |
|---|---|
| TITLE: INSTALLATION INSTRUCTIONS & FASTENER SCHEDULE | DRAWN BY: S.W. DATE: 1/15/02 |
| PRODUCT: 165 FLANGE SINGLE HUNG | CHECKED: DATE: |
| | SCALE: NONE SHEET: 1 OF 1 |
| | DWG. NO. INST165 REV. - |

03-02-02

| | | |
|---|---|---|
| 675.2 | 165 | Flange Frame 53x73 R-35 DP+35/-47.2 |
| **Limits of Use** (See Other)<br>**Approved for use in HVHZ:**<br>**Approved for use outside HVHZ:**<br>**Impact Resistant:**<br>**Design Pressure:** +/-<br>**Other:** Per manufacturer''s installation instructions. More information available at: www.mihp.com | | **Certification Agency Certificate**<br>**Installation Instructions**<br>Verified By |

Masonite®

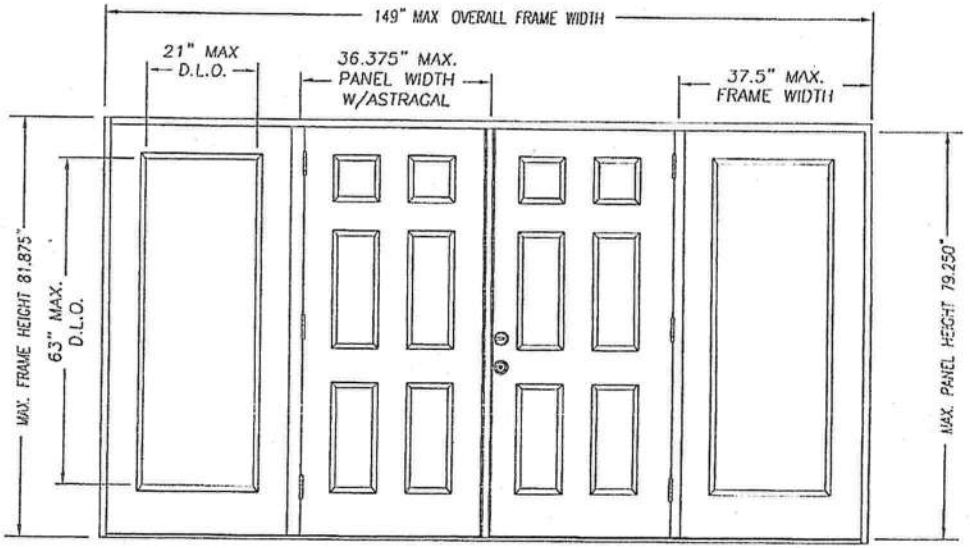
# SIDE-HINGED WOOD-EDGE STEEL DOOR UNIT
## 6'-8" DOUBLE DOOR WITH / WITHOUT SIDELITES

GENERAL NOTES

1. EVALUATED FOR USE IN LOCATIONS ADHERING TO THE FLORIDA BUILDING CODE AND WHERE PRESSURE REQUIREMENTS AS DETERMINED BY ASCE 7, MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES, DOES NOT EXCEED THE DESIGN PRESSURES LISTED
2. HURRICANE PROTECTIVE SYSTEM (SHUTTERS) IS NOT REQUIRED ON OPAQUE PANELS, BUT IS REQUIRED ON GLAZED SIDELITES
3. POLYURETHANE CORE FLAME SPREAD INDEX OF 50 AND SMOKE DEVELOPED INDEX OF 60 PER ASTM E84
4. PLASTICS TESTING OF LITE FRAME MATERIAL:

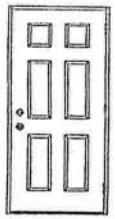
| TEST DESCRIPTION | DESIGNATION | RESULT |
|---|---|---|
| SELF IGNITION TEMP | ASTM D1929 | 680 °F > 650 °F |
| RATE OF BURNING | ASTM D635 | 1.10 IN/MIN |
| SMOKE DENSITY | ASTM D2843 | 69.6% |
| TENSILE STRENGTH* | ASTM D638 | -7.48% DIFF |

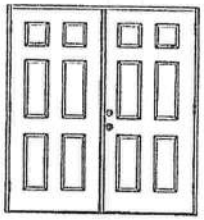
* COMPARATIVE TENSILE STRENGTH AFTER WEATHERING 4500 HOURS XENON ARC METHOD 1

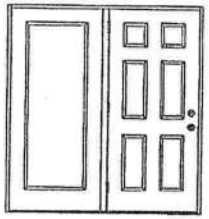


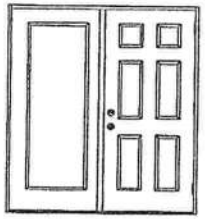

DOUBLE INSWING UNIT W/SIDELITES

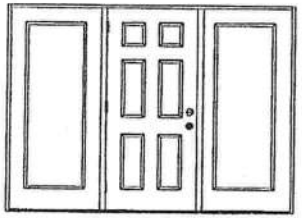
Addendum to NAMI
Certification No.: NI006110
Reviewed By:
Date Reviewed: 8/10/05


SINGLE DOOR UNIT


DOUBLE DOOR UNIT


SINGLE DOOR UNIT WITH SIDELITE


SINGLE DOOR UNIT WITH SIDELITE


SINGLE DOOR UNIT W/SIDELITES

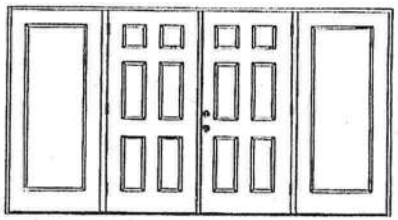

DOUBLE DOOR UNIT W/SIDELITES

TABLE OF CONTENTS



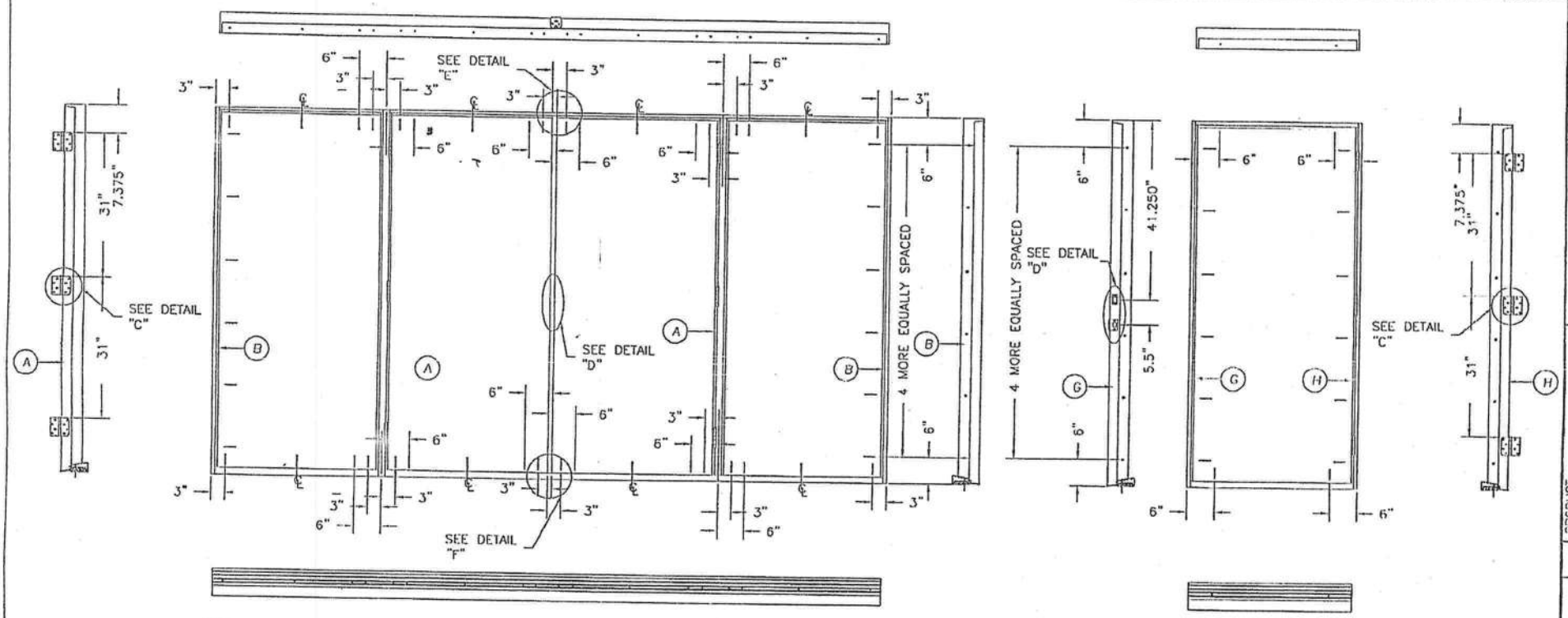
| CONFIG | MAX WIDTH | DESIGN PRESSURE RATING | | WHERE WATER INFILTRATION PERFORMANCE IS REQUIRED TO BE 15% OF DESIGN PRESSURE | |
|---|---|---|---|---|---|
| | | INSWING | OUTSWING | INSWING | OUTSWING |
| X | 37.5" | +76.0 / -76.0 | +76.0 / -76.0 | +19.0 / -19.0 | +55.0 / -55.0 |
| XX | 74" | +55.0 / -55.0 | +55.0 / -55.0 | +19.0 / -19.0 | +55.0 / -55.0 |
| OX or XO | 75" | +55.0 / -55.0 | +55.0 / -55.0 | +19.0 / -19.0 | +55.0 / -55.0 |
| OXO | 112.5" | +55.0 / -55.0 | +55.0 / -55.0 | +19.0 / -19.0 | +55.0 / -55.0 |
| OXXO | 149" | +55.0 / -55.0 | +55.0 / -55.0 | +19.0 / -19.0 | +55.0 / -55.0 |

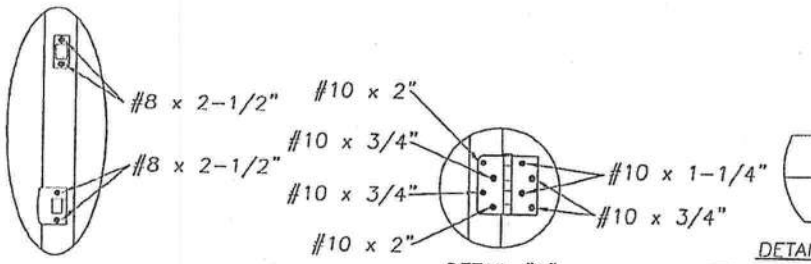

MASONITE INTERNATIONAL CORP.
7300 REAMES RD.
CHARLOTTE, NC 28216


PRODUCT: EXTERIOR DOOR PRODUCT DOUBLE 68" OPAQUE WOOD-EDGE STEEL DOOR
PART OR ASSEMBLY: TYPICAL ELEVATIONS & GENERAL NOTES

| NO. | DATE | BY | REVISIONS |
|---|---|---|---|

DATE: 7/11/05
SCALE: N.T.S.
DWG. BY: SWS
CHK. BY:
DRAWING NO: DWG-MA-FLO128-05
SHEET 1 OF 3

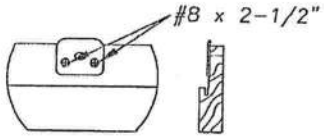



DETAIL "D"

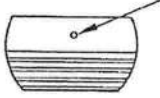



DETAIL "C"



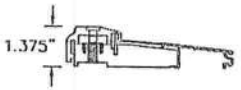

DETAIL "E" ASTRAGAL

ATTACH ASTRAGAL RETAINER BOLT STRIKE PLATE TO FRAME AS SHOWN.



ASTRAGAL RETAINER BOLT HOLE MUST BE DRILLED THROUGH THE THRESHOLD & INTO THE STRUCTURE DEEP ENOUGH FOR A 1.375" THROW

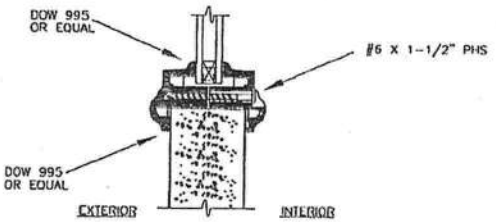
DETAIL "F" ASTRAGAL




INSWING THRESHOLD


OUTSWING THRESHOLD

Addendum to NAMI
Certification No: NI006110
Reviewed By:
Date Reviewed: 8/10/05




TYPICAL GLAZING DETAIL

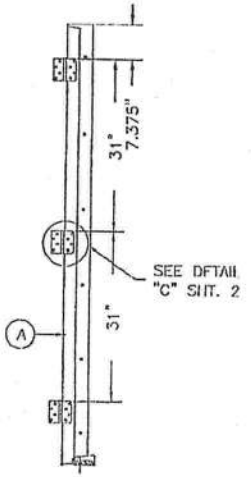
MASONITE INTERNATIONAL CORP.
7300 REAMES RD.
CHARLOTTE, NC 28216

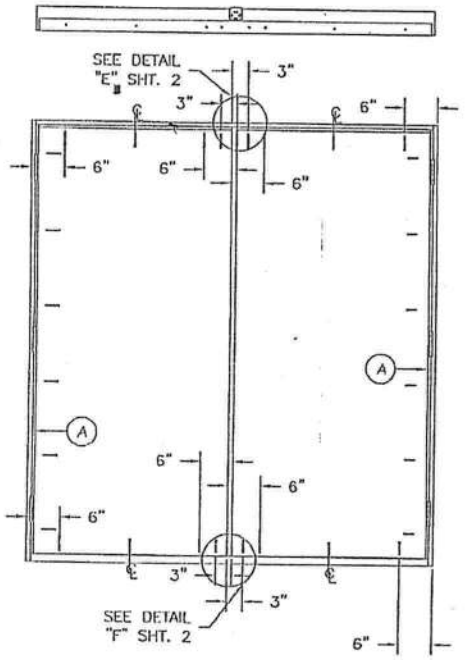
PRODUCT: "EXTERIOR DOOR PRODUCT" DOUBLE 6'-8" OPAQUE WOOD-EDGE STEEL DOOR

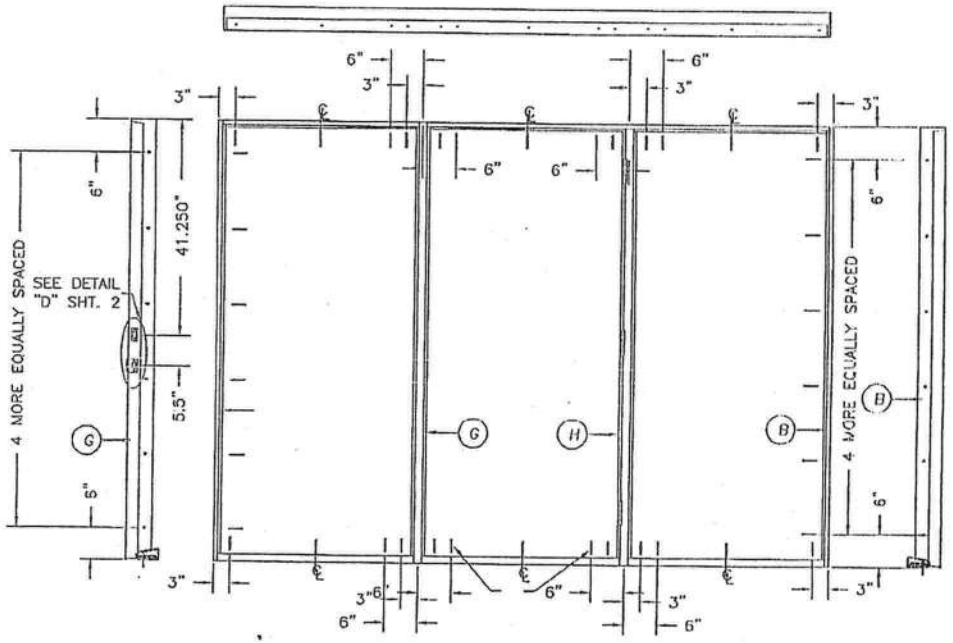
PART OR ASSEMBLY: ANCHORING LOCATIONS & DETAILS

| NO. | DATE | REVISIONS | BY |
|---|---|---|---|

DATE: 7/11/05
SCALE: N.T.S.
DWG. BY: SWS
CHK. BY:
DRAWING NO.: DWG-MA-F10128-05
SHEET 2 OF 3

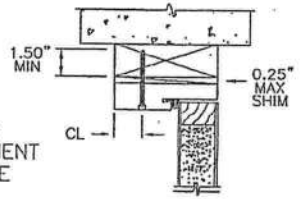



ATTACHMENT DETAIL

1. ANCHOR ANALYSIS FOR LOADING CONDITIONS PREPARED, SIGNED AND SEALED BY HAROLD E. RUPP, PE (FLORIDA #15935) WITH THE LOWEST (LEAST) FASTENER RATING FROM THE DIFFERENT FASTENERS BEING CONSIDERED FOR USE. JAMB, HEAD, AND THRESHOLD FASTENERS ANALYZED FOR THIS UNIT INCLUDE #10 WOOD SCREWS OR 3/16" TAPCONS. A PHYSICAL SHIM MUST BE PLACED IN SHIM SPACE AT EACH ANCHOR LOCATION.
2. THE WOOD SCREW SINGLE SHEAR DESIGN VALUES COME FROM ANSI/AF&PA NDA FOR SOUTHERN PINE LUMBER AND ACHEIVEMENT OF 1-1/2" MINIMUM EMBEDMENT. THE TAPCON MUST ACHIEVE MINIMUM EMBEDMENT OF 1-1/4".
3. WOOD BUCKS BY OTHERS MUST BE ANCHORED PROPERLY TO TRANSFER LOADS TO STRUCTURE.
4. MINIMUM DESIGN VALUE STRENGTH OF ANCHORS 171 LBS.




TYPICAL
ANCHOR INSTALLATION

HARDWARE SCHEDULE

| | |
|---|---|
| 1. | KWIKSET OR SCHLEGE ANSI/BHMA GRADE 3 OR BETTER CYLINDRICAL AND DEADLOCK HARDWARE TO BE INSTALLED AT 5-1/2" CENTERLINE. |
| 2. | 4" X 4" FULL MORTISE BUTT HINGES |

Addendum to NAMI
Certification No.: NT006110
Reviewed By:
Date Reviewed: 8/10/05

MASONITE INTERNATIONAL CORP.
7300 REAMES RD.
CHARLOTTE, NC 28216

PRODUCT: EXTERIOR DOOR PRODUCT 6'-8" WOOD-EDGE STEEL ORNATE DOUBLE DOOR UNIT

PART OR ASSEMBLY: ANCHORING LOCATIONS & DETAILS

| NO. | DATE | BY |
|---|---|---|
| REVISIONS | | |

DATE: 7/11/05
SCALE: N.T.S.
DWG. BY: SWS
CHK. BY:
DRAWING NO.: DWG--MA--FL0128--05
SHEET 3 OF 3

| | | |
|---|---|---|
| 18.1 | Wood-Edge Steel Door Units | |
| **Limits of Use** (See Other)<br>**Approved for use in HVHZ:**<br>**Approved for use outside HVHZ:**<br>**Impact Resistant:**<br>**Design Pressure:** +/-<br>**Other:** None Known | | **Certification Agency Certificate**<br>**Installation Instructions**<br>Verified By: |

HARRY'S HEATING & AIR CONDITIONING, INC.
P.O. BOX 1321
LAKE CITY, FL 32056
386-752-2308
FAX# 386-752-7003

DATE: 17 MAY 07
TO: Stephen Crawford Const
FAX# 755-6284
FROM: Ronnie
SUBJECT: MANUAL J

MESSAGE: Att. Will

NUMBER OF PAGES INCLUDING COVER SHEET 3

# RESIDENTIAL HEATING AND COOLING REQUIREMENTS*

HVAC WORKSHEET FOR WATT-WISE LIVING



## HEATING AND COOLING REQUIREMENTS DUE TO GLASS AREA

| WINDOWS & GLASS DOORS | AREA SQUARE FEET | DESIGN TEMPERATURE DIFFERENCE 30° | 35° | 40° | 45° | 50° | HEATING (BTUH LOSS) |
|---|---|---|---|---|---|---|---|
| Glass Doors, Infiltration less than 1.0 CFM/FT | | | | | | | |
| Single Glass | | 50 | 60 | 70 | 75 | 85 | |
| Double Glass | | 40 | 45 | 50 | 55 | 60 | |
| Other Sliding Glass Doors | | | | | | | |
| Single Glass | | 75 | 86 | 100 | 115 | 125 | |
| Double Glass | | 60 | 70 | 80 | 90 | 100 | |
| Windows, Infiltration less than 0.50 CFM/FT | | | | | | | |
| Single Glass | | | | | | | |
| Double Glass | 78.32 | 40 | 50 | 60 | 60 | 70 | 2741 |
| Windows, Infiltration less than 0.75 CFM/FT | | 25 | 30 | 35 | 40 | 45 | |
| Single Glass | | | | | | | |
| Double Glass | | 45 | 50 | 60 | 65 | 75 | |
| Other Windows | | 30 | 35 | 40 | 45 | 50 | |
| Single Glass | | | | | | | |
| Double Glass | | 75 | 90 | 105 | 115 | 130 | |
| Fixed or Picture Windows | | 60 | 70 | 80 | 90 | 105 | |
| Single Glass | | | | | | | |
| Double Glass | | 40 | 50 | 56 | 60 | 70 | |
| Other | | 25 | 30 | 35 | 40 | 45 | |
| Total BTUH Loss (Enter on Line 2, Page 2) | | | | | | | 2741 |

| WINDOWS & GLASS DOORS | AREA SQUARE FEET | COOLING MULTIPLIER (CIRCLE) SINGLE GLASS 90° C | T | R | 95° C | T | R | DOUBLE GLASS 90° C | T | R | 95° C | T | R | COOLING (BTUH GAIN) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| No Shading | | | | | | | | | | | | | | |
| N | 9 | 30 | 22 | 20 | 30 | 26 | 25 | 20 | 14 | 13 | 25 | 17 | 16 | 225 |
| NE & NW | | 60 | 41 | 36 | 65 | 45 | 41 | 50 | 29 | 24 | 60 | 32 | 27 | |
| E & W | 34.66 | 85 | 60 | 53 | 90 | 64 | 57 | 70 | 44 | 36 | 75 | 47 | 39 | 2600 |
| SE & SW | | 75 | 51 | 45 | 80 | 55 | 50 | 60 | 37 | 30 | 65 | 40 | 33 | |
| S | 34.66 | 45 | 31 | 28 | 50 | 35 | 33 | 35 | 21 | 18 | 40 | 24 | 21 | 1386 |
| Draperies or Blinds | | | | | | | | | | | | | | |
| N | | 20 | 17 | 16 | 25 | 21 | 20 | 15 | 11 | 11 | 20 | 14 | 14 | |
| NE & NW | | 35 | 33 | 30 | 40 | 37 | 34 | 30 | 22 | 21 | 35 | 25 | 24 | |
| E & W | | 55 | 48 | 43 | 55 | 52 | 47 | 45 | 32 | 30 | 50 | 35 | 33 | |
| SE & SW | | 45 | 39 | 35 | 50 | 43 | 39 | 40 | 26 | 25 | 40 | 29 | 28 | |
| S | | 30 | 26 | 24 | 30 | 30 | 28 | 25 | 17 | 16 | 25 | 20 | 19 | |
| Roller Shades | | | | | | | | | | | | | | |
| N | | 25 | 19 | 17 | 25 | 23 | 22 | 20 | 12 | 11 | 20 | 15 | 14 | |
| NE & NW | | 45 | 36 | 32 | 50 | 40 | 37 | 40 | 26 | 22 | 45 | 29 | 25 | |
| E & W | | 65 | 53 | 47 | 70 | 57 | 51 | 55 | 37 | 32 | 60 | 40 | 35 | |
| SE & SW | | 55 | 44 | 39 | 60 | 48 | 44 | 50 | 32 | 27 | 50 | 35 | 30 | |
| S | | 35 | 28 | 25 | 40 | 32 | 30 | 30 | 20 | 16 | 35 | 23 | 19 | |
| Awnings, Porches, Etc. | | | | | | | | | | | | | | |
| All Directions | | 25 | 22 | 20 | 30 | 26 | 25 | 15 | 14 | 13 | 20 | 17 | 16 | |
| Other | | | | | | | | | | | | | | |
| Total BTUH Gain (Line 2, Page 2) | | | | | | | | | | | | | | 4311 |

*REFERENCE A.C.C.A. MANUAL "J"

(C - Clear T - Tinted R - Reflective)

Prepared By: HARRY'S HTG + AIR INC

# TOTAL HEATING AND COOLING REQUIREMENTS

Page 2

or:

Name: Stephen Crawford Const

Address:

City:

| ITEM | AREA SQUARE FEET | HEATING MULTIPLIER (CIRCLE ONE) DESIGN TEMPERATURE DIFFERENCE 30° | 35° | 40° | 45° | 50° | HEATING (BTUH LOSS) | COOLING MULT. (CIRCLE) DESIGN TEMP 90° | 95° | COOLING (BTUH GAIN) |
|---|---|---|---|---|---|---|---|---|---|---|
| Gross Wall Area | 600 | | | | | | | | | |
| Glass Area (From page 1) | 78 | | | | | | 2741 | | | 4811 |
| Partitions, Frame | | | | | | | | | | |
| Finished 1 side, No Insulation | | 17 | 19 | 22 | 25 | 28 | | 6.5 | 10.0 | |
| Finished 2 sides, No Insulation | | 9 | 11 | 12 | 14 | 16 | | 4.5 | 6.0 | |
| Finished 2 sides, R-5 | | 4 | 5 | 5.5 | 6 | 7 | | 2.5 | 3.5 | |
| Finished 2 sides, R-11 | | 2 | 3 | 3 | 4 | 4 | | 2.0 | 2.5 | |
| Other | | | | | | | | | | |
| Doors (Excluding glass) | | | | | | | | | | |
| No weatherstripping | | 135 | 160 | 180 | 200 | 225 | | 10.0 | 13.0 | |
| Weatherstripped | | 70 | 85 | 95 | 110 | 120 | | 10.0 | 13.0 | |
| R-5 Insulation, No weatherstripping | | 123 | 144 | 164 | 185 | 205 | | 4.3 | 5.5 | |
| R-5 Insulation, weatherstripping | 40 | 68 | 79 | (90) | 101 | 113 | 3600 | 4.0 | (5.0) | 200 |
| Other | | | | | | | | | | |
| Net Exterior Walls | | | | | | | | | | |
| CBS Furred, No Insulation | | 9 | 10 | 12 | 13 | 14 | | 4.5 | 6.0 | |
| CBS Furred, R-3 Insulation | | 5 | 6 | 7 | 8 | 8 | | 3.0 | 4.2 | |
| CBS Furred, R-4 Insulation | | 4 | 5 | 6 | 6 | 7 | | 2.7 | 3.8 | |
| CBS Furred, R-5 Insulation | 522 | 4 | 5 | (5) | 6 | 6 | 2610 | 2.5 | (3.5) | 1827 |
| Frame, No Insulation | | 8 | 9 | 10 | 11 | 13 | | 5.5 | 7.0 | |
| Frame, R-11 Insulation | | 2 | 2 | 3 | 3 | 4 | | 2.5 | 3.0 | |
| Frame, R-14 Insulation | | 1.6 | 1.7 | 2 | 2.5 | 3 | | 2 | 2.8 | |
| Other | | | | | | | | | | |
| Ceiling under attic — Roof | | | | | | | | | | |
| No Insulation DK / LT | | 18 | 21 | 24 | 27 | 30 | | 9 / 7 | 10 / 9.5 | |
| R-11 Insulation DK / LT | | 2.4 | 2.8 | 3.2 | 3.6 | 3.9 | | 2.5 / 2 | 3 / 2.5 | |
| R-19 Insulation DK / LT | | 1.5 | 1.7 | 1.9 | 2.2 | 2.4 | | 1.5 / 1.5 | 2 / 1.5 | |
| R-22 Insulation DK / LT | | 1.2 | 1.5 | 1.7 | 1.9 | 2.1 | | 1.5 / 1.0 | 1.5 / 1.5 | |
| R-26 Insulation DK / LT | | 1.1 | 1.3 | 1.4 | 1.6 | 1.8 | | 1.3 / 1 | 1.6 / 1.2 | |
| R-30 Insulation DK / LT | 682 | 1 | 1.1 | (1.3) | 1.4 | 1.6 | 887 | 1.1 / .9 | 1.3 / 1.0 | 689 |
| Other | | | | | | | | | | |
| Floor, Concrete Slab | Perimeter Ft. | | | | | | | | | |
| No Edge Insulation | 75 | 35 | 40 | (40) | 45 | 45 | 3000 | 0 | 0 | |
| Other | | | | | | | | | | |
| Subtotal | | | | | | | 12838 | | | 6720 |
| People @ 300 & Appl. @ 1200 | | | | | | | | | | 4500 |
| Sensible BTUH Gain | | | | | | | | | | |
| Duct BTUH Loss & Gain | | | | | | | 12838 | | | 11420 |
| 2 In. Flex. or 1 In. Rigid | | | .10 | | | | 1284 | .10 | | 1142 |
| 1½ In. Rigid | | | .075 | | | | | .075 | | |
| Total BTUH Loss | | | | | | | 14122 | | | |
| Subtotal BTUH Gain | | | | | | | | | | 18562 |
| x 1.3 = Total BTUH Gain | | | | | | | | | | 16331 |

Calculated Heating Requirements 14122 BTUH

Size of Unit Chosen 18,000 BTUH

% Oversized

% Undersized

Calculated Cooling Requirements 16331 BTUH

Size of Unit Chosen 18,000 BTUH

% Oversized

% Undersized

HARRY'S HEATING & AIR CONDITIONING, INC.
P.O. BOX 1321
LAKE CITY, FL 32056
386-752-2308
FAX# 386-752-7003

DATE: 17 MAY 07
TO: Stephen Crawford Const
FAX# 755-6284
FROM: Ronnie
SUBJECT: MANUAL J

MESSAGE: Att. Will

NUMBER OF PAGES INCLUDING COVER SHEET 3

# RESIDENTIAL HEATING AND COOLING REQUIREMENTS*

HVAC WORKSHEET FOR WATT-WISE LIVING



## HEATING AND COOLING REQUIREMENTS DUE TO GLASS AREA

| WINDOWS & GLASS DOORS | AREA SQUARE FEET | HEATING MULTIPLIER (CIRCLE ONE) DESIGN TEMPERATURE DIFFERENCE 30° | 35° | 40° | 45° | 50° | HEATING (BTUH LOSS) |
|---|---|---|---|---|---|---|---|
| Glass Doors, Infiltration less than 1.0 CFM/FT | | | | | | | |
| Single Glass | | 50 | 60 | 70 | 75 | 85 | |
| Double Glass | | 40 | 45 | 50 | 55 | 60 | |
| Other Sliding Glass Doors | | | | | | | |
| Single Glass | | 75 | 85 | 100 | 115 | 125 | |
| Double Glass | | 60 | 70 | 80 | 90 | 100 | |
| Windows, Infiltration less than 0.50 CFM/FT | | | | | | | |
| Single Glass | 78.32 | 40 | 50 | (55) | 60 | 70 | 2741 |
| Double Glass | | 25 | 30 | 35 | 40 | 45 | |
| Windows, Infiltration less than 0.75 CFM/FT | | | | | | | |
| Single Glass | | 45 | 50 | 60 | 65 | 75 | |
| Double Glass | | 30 | 35 | 40 | 45 | 50 | |
| Other Windows | | | | | | | |
| Single Glass | | 75 | 90 | 105 | 115 | 130 | |
| Double Glass | | 60 | 70 | 80 | 90 | 105 | |
| Fixed or Picture Windows | | | | | | | |
| Single Glass | | 40 | 50 | 55 | 60 | 70 | |
| Double Glass | | 25 | 30 | 35 | 40 | 45 | |
| Other | | | | | | | |
| Total BTUH Loss (Enter on Line 2, Page 2) | | | | | | | 2741 |

| WINDOWS & GLASS DOORS | AREA SQUARE FEET | COOLING MULTIPLIER (CIRCLE) SINGLE GLASS 90° C | T | R | 95° C | T | R | DOUBLE GLASS 90° C | T | R | 95° C | T | R | COOLING (BTUH GAIN) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| No Shading | | | | | | | | | | | | | | |
| N | 9 | 30 | 22 | 20 | 30 | 26 | 25 | 20 | 14 | 13 | (25) | 17 | 16 | 225 |
| NE & NW | | 60 | 41 | 36 | 65 | 45 | 41 | 50 | 29 | 24 | 60 | 32 | 27 | |
| E & W | 34.66 | 85 | 60 | 53 | 90 | 64 | 57 | 70 | 44 | 36 | (75) | 47 | 39 | 2600 |
| SE & SW | | 75 | 51 | 45 | 80 | 55 | 50 | 60 | 37 | 30 | 65 | 40 | 33 | |
| S | 34.66 | 45 | 31 | 28 | 50 | 35 | 33 | 35 | 21 | 18 | (40) | 24 | 21 | 1386 |
| Draperies or Blinds | | | | | | | | | | | | | | |
| N | | 20 | 17 | 16 | 25 | 21 | 20 | 15 | 11 | 11 | 20 | 14 | 14 | |
| NE & NW | | 35 | 33 | 30 | 40 | 37 | 34 | 30 | 22 | 21 | 35 | 25 | 24 | |
| E & W | | 55 | 48 | 43 | 55 | 52 | 47 | 45 | 32 | 30 | 50 | 35 | 33 | |
| SE & SW | | 45 | 39 | 35 | 50 | 43 | 39 | 40 | 26 | 25 | 40 | 29 | 28 | |
| S | | 30 | 26 | 24 | 30 | 30 | 28 | 25 | 17 | 16 | 25 | 20 | 19 | |
| Roller Shades | | | | | | | | | | | | | | |
| N | | 25 | 19 | 17 | 25 | 23 | 22 | 20 | 12 | 11 | 20 | 16 | 14 | |
| NE & NW | | 45 | 36 | 32 | 50 | 40 | 37 | 40 | 26 | 22 | 45 | 29 | 25 | |
| E & W | | 65 | 53 | 47 | 70 | 57 | 51 | 55 | 37 | 32 | 60 | 40 | 35 | |
| SE & SW | | 55 | 44 | 39 | 60 | 48 | 44 | 50 | 32 | 27 | 50 | 35 | 30 | |
| S | | 35 | 28 | 25 | 40 | 32 | 30 | 30 | 20 | 16 | 35 | 23 | 19 | |
| Awnings, Porches, Etc. | | | | | | | | | | | | | | |
| All Directions | | 25 | 22 | 20 | 30 | 26 | 25 | 15 | 14 | 13 | 20 | 17 | 16 | |
| Other | | | | | | | | | | | | | | |
| Total BTUH Gain (Line 2, Page 2) | | | | | | | | | | | | | | 4211 |

*REFERENCE A.C.C.A. MANUAL "J"

(C - Clear T - Tinted R - Reflective)

Prepared By: HARRY'S HTG + AIR INC

# TOTAL HEATING AND COOLING REQUIREMENTS

Page 2

or:

lame: Stephen Crawford Const

ddress:

ity:

| If Known Constr. Type | ITEM | | | AREA SQUARE FEET | DESIGN TEMPERATURE DIFFERENCE 30° | 35° | 40° | 45° | 50° | HEATING (BTUH LOSS) | DESIGN TEMP 90° | 95° | COOLING (BTUH GAIN) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Gross Wall Area | | | 600 | | | | | | | | | |
| | Glass Area (From page 1) | | | 78 | | | | | | 2741 | | | 4911 |
| | Partitions, Frame | | | | | | | | | | | | |
| | Finished 1 side, No Insulation | | | | 17 | 19 | 22 | 25 | 28 | | 6.5 | 10.0 | |
| | Finished 2 sides, No Insulation | | | | 9 | 11 | 12 | 14 | 16 | | 4.5 | 6.0 | |
| | Finished 2 sides, R-5 | | | | 4 | 5 | 5.5 | 6 | 7 | | 2.5 | 3.5 | |
| | Finished 2 sides, R-11 | | | | 2 | 3 | 3 | 4 | 4 | | 2.0 | 2.5 | |
| | Other | | | | | | | | | | | | |
| | Doors (Excluding glass) | | | | | | | | | | | | |
| | No weatherstripping | | | | 135 | 160 | 180 | 200 | 225 | | 10.0 | 13.0 | |
| | Weatherstripped | | | | 70 | 85 | 95 | 110 | 120 | | 10.0 | 13.0 | |
| | R-5 Insulation, No weatherstripping | | | | 123 | 144 | 164 | 185 | 205 | | 4.3 | 5.5 | |
| | R-5 Insulation, weatherstripping | | | 40 | 68 | 79 | (90) | 101 | 113 | 3600 | 4.0 | (5.0) | 200 |
| | Other | | | | | | | | | | | | |
| | Net Exterior Walls | | | | | | | | | | | | |
| | CBS Furred, No Insulation | | | | 9 | 10 | 12 | 13 | 14 | | 4.5 | 6.0 | |
| | CBS Furred, R-3 Insulation | | | | 5 | 6 | 7 | 8 | 8 | | 3.0 | 4.2 | |
| | CBS Furred, R-4 Insulation | | | | 4 | 5 | 6 | 6 | 7 | | 2.7 | 3.8 | |
| | CBS Furred, R-5 Insulation | | | 522 | 4 | 5 | (5) | 6 | 6 | 2610 | 2.5 | (3.5) | 1827 |
| | Frame, No Insulation | | | | 8 | 9 | 10 | 11 | 13 | | 5.5 | 7.0 | |
| | Frame, R-11 Insulation | | | | 2 | 2 | 3 | 3 | 4 | | 2.5 | 3.0 | |
| | Frame, R-14 Insulation | | | | 1.6 | 1.7 | 2 | 2.5 | 3 | | 2 | 2.8 | |
| | Other | | | | | | | | | | | | |
| | Ceiling under attic | Roof | | | | | | | | | | | |
| | No Insulation | DK | LT | | 18 | 21 | 24 | 27 | 30 | | 9 / 7 | 10 / 8.5 | |
| | R-11 Insulation | DK | LT | | 2.4 | 2.8 | 3.2 | 3.6 | 3.9 | | 2.5 / 2 | 3 / 2.5 | |
| | R-19 Insulation | DK | LT | | 1.5 | 1.7 | 1.9 | 2.2 | 2.4 | | 1.5 / 1.5 | 2 / 1.5 | |
| | R-22 Insulation | DK | LT | | 1.2 | 1.5 | 1.7 | 1.9 | 2.1 | | 1.5 / 1.0 | 1.5 / 1.5 | |
| | R-26 Insulation | DK | LT | | 1.1 | 1.3 | 1.4 | 1.6 | 1.8 | | 1.3 / 1 | 1.5 / 1.2 | |
| | R-30 Insulation | DK | LT | 682 | 1 | 1.1 | (1.3) | 1.4 | 1.6 | 887 | 1.1 / .9 | 1.3 / 1.0 | 689 |
| | Other | | | | | | | | | | | | |
| | Floor, Concrete Slab | | | Perimeter Ft. | | | | | | | | | |
| | No Edge Insulation | | | 75 | 35 | 40 | (40) | 45 | 45 | 3000 | 0 | 0 | |
| | Other | | | | | | | | | | | | |
| | Subtotal | | | | | | | | | 12838 | | | 6936 |
| | People @ 300 & Appl. @ 1200 | | | | | | | | | | | | 4500 |
| | Sensible BTUH Gain | | | | | | | | | | | | |
| | Duct BTUH Loss & Gain | | | | | | | | | 12838 | | | 11420 |
| | 2 In. Flex. or 1 In. Rigid | | | | | | .10 | | | 1284 | | .10 | 1142 |
| | 1½ In. Rigid | | | | | | .075 | | | | | .075 | |
| | Total BTUH Loss | | | | | | | | | 14122 | | | |
| | Subtotal BTUH Gain | | | | | | | | | | | | 12562 |
| | x 1.3 = Total BTUH Gain | | | | | | | | | | | | 16331 |

Calculated Heating Requirements 14122 BTUH

Size of Unit Chosen 18,000 BTUH

% Oversized

% Undersized

Calculated Cooling Requirements 16331 BTUH

Size of Unit Chosen 18,000 BTUH

% Oversized

% Undersized

Need Fire Dept letter before releasing per HO

# CERTIFICATE OF

# OCCUPANCY

## COLUMBIA COUNTY, FLORIDA

## Department of Building and Zoning Inspection

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

**Parcel Number** 34-3S-17-07082-000 **Building permit No.** 000025857

**Use Classification** INTERIOR REMODEL **Fire:** 0.00

**Permit Holder** STEPHEN CRAWFORD **Waste:**

**Owner of Building** JAMES RIGSBY **Total:** 0.00

**Location:** 201 SE BEECH STREET, LAKE CITY, FL

**Date:** 06/28/2007

Harry Dicks

**Building Inspector**

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