Left message w/ Awaring Martin LH 11-8-07

ck#1252

* LICENSE SUSPENDED DO NOT ISSUE

Columbia County Building Permit Application

For Office Use Only Application # 0711-09 Date Received 11/1/07 By G Permit # 26431

Application Approved by - Zoning Official afs Date 11/8/07 Plans Examiner OK JTH Date 11-5-07

Flood Zone X Development Permit N/A Zoning RSF/MH-2 Land Use Plan Map Category RLD

Comments City Water

☐ NOC ☐ EH ☐ Deed or PA ☐ Site Plan ☐ State Road Info ☐ Parent Parcel # 05371-000 ☐ Development P

Fax 752-2282

Name Authorized Person Signing Permit Linda or Melanie Roder Phone 752-2281

Address 387 SW Kemp Ct Lake City FL 32024

Owners Name Travis Williams Phone 365-4614

911 Address 237 NE Gum Swamp Rd Lake City FL 32055

Contractors Name Travis Williams Phone 365-4614

Address POB 1116 Lake City FL 32056

Fee Simple Owner Name & Address NA

Bonding Co. Name & Address NA

Architect/Engineer Name & Address Mark Disosway

Mortgage Lenders Name & Address NA

Circle the correct power company – FL Power & Light – Clay Elec. – Suwannee Valley Elec. – Progressive En

Property ID Number 20-3S-17-05371-007 Estimated Cost of Construction 100K

Subdivision Name Triangle Park Lot 11 Block ___ Unit ___ Phase ___

Driving Directions 441 N past way station, R on Gum Swamp Rd, ½ mi lot on L

Type of Construction Sfd Number of Existing Dwellings on Property 0

Total Acreage .21 ac Lot Size .21 ac Do you need a - Culvert Permit or Culvert Waiver or Have an Existing

Actual Distance of Structure from Property Lines - Front 25' Side 22.75' Side 22.75' Rear 101'

Total Building Height 15'4" Number of Stories 1 Heated Floor Area 1346 TOTAL 1366 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 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 YOU LENDER OR ATTORNEY BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT.

Owner Builder or Authorized Person by Notarized Letter

[signature]
Contractor Signature

Contractors License Number RR282811623

Competency Card Number

NOTARY STAMP/SEAL

NOTARY PUBLIC STATE OF FLORIDA
Linda R. Roder
Commission #DD303275
Expires: Mar 24, 2008
Bonded Thru
Atlantic Bonding Co., Inc.

STATE OF FLORIDA
COUNTY OF COLUMBIA

Sworn to (or affirmed) and subscribed before me

this 29 day of October 20 07.

Personally known ✓ or Produced Identification ___

[signature]
Notary Signature

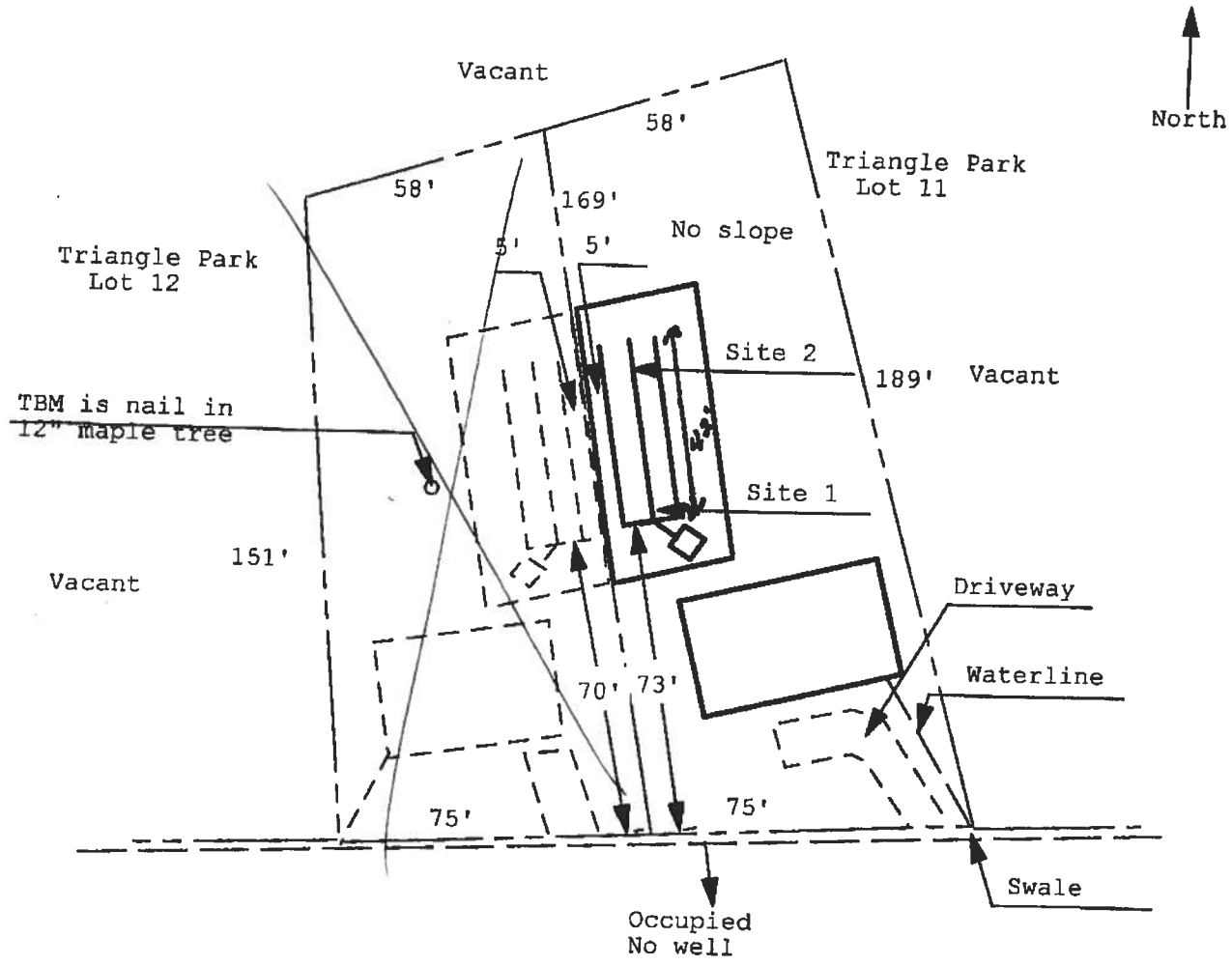
(Revised Sept. 2

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

Permit Application Number: 07-0854

ALL CHANGES MUST BE APPROVED BY THE COUNTY HEALTH UNIT

WILLIAMS/CR 07-4149



1 inch = 40 feet

Site Plan Submitted By Paul Lloyd **Date** 11/1/07

Plan Approved ✓ **Not Approved** ____ **Date** 11/15/07

By M. S. In Columbia **CPHU**

Notes:

Lot 11
Triangle Park

Notice of Authorization

I Travis Williams, hereby authorize Linda Roder or Melanie Roder to be my Representative and act on my behalf in all aspects for applying for a Building Permit to be located in Columbia County.

X _____
Contractor's Signature

10-23-07
Date

Sworn and Subscribed to me this 29 day of October, 2007
Personally known ✓
Produced Identification _____

_____
Notary Public

Linda R. Roder
Commission #DD303275
Expires: Mar 24, 2008
Bonded Thru
Atlantic Bonding Co., Inc.

Prepared by:

American Title Services of Lake City, Inc.
321 SW Main Blvd., Suite 105
Lake City, Florida 32025

File Number: 07-350

Inst:200712019843 Date:8/31/2007 Time:9:35 AM
Doc Stamp-Deed:392.00
DC,P DeWitt Cason Columbia County Page 1 of 2

Warranty Deed

Made this August 30, 2007 A.D.

By **Timothy R. Williams and Tamela H. Williams, husband and wife**, Post Office Box 1716, Lake City, Florida 32056, hereinafter called the grantor, to

Travis Clayton Williams, whose post office address is: Post Office Box 1716, Lake City, Florida 32056, hereinafter called the grantee:

(Whenever used herein the term "grantor" and "grantee" include all the parties to this instrument and the heirs, legal representatives and assigns of individuals, and the successors and assigns of corporations)

Witnesseth, that the grantor, for and in consideration of the sum of Ten Dollars, ($10.00) and other valuable considerations, receipt whereof is hereby acknowledged, hereby grants, bargains, sells, aliens, remises, releases, conveys and confirms unto the grantee, all that certain land situate in Columbia County, Florida, viz:

See Attached Schedule "A"

Parcel ID Number: **05371-000**

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

To Have and to Hold, the same in fee simple forever.

And the grantor hereby covenants with said grantee that the grantor is lawfully seized of said land in fee simple; that the grantor has good right and lawful authority to sell and convey said land; that the grantor hereby fully warrants the title to said land and will defend the same against the lawful claims of all persons whomsoever; and that said land is free of all encumbrances except taxes accruing subsequent to December 31, 2006.

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

Signed, sealed and delivered in our presence:

Megan Marable
Witness Printed Name Megan Marable

Johnny M. Hamm
Witness Printed Name Johnny M. Hamm

Timothy R. Williams (Seal)
Timothy R. Williams
Address: Post Office Box 1716, Lake City, Florida 32056

Tamela H. Williams (Seal)
Tamela H. Williams
Address:

State of Florida
County of Columbia

The foregoing instrument was acknowledged before me this 30th day of August, 2007, by Timothy R. Williams and Tamela H. Williams, husband and wife, who is/are personally known to me or who has produced drivers license as identification.

Megan M. Marable
Notary Public
Print Name:

My Commission
Expires:

MEGAN M. MARABLE
MY COMMISSION # DD 412865
EXPIRES: March 30, 2009
Bonded Thru Notary Public Underwriters

DEED Individual Warranty Deed with Legal on Schedule A
Closers' Choice

Schedule"A"

TOWNSHIP 3 SOUTH, RANGE 17 EAST

SECTION 20: Commence at the NW corner of the SE 1/4 of the SW 1/4 and run South 49° 51' East, 430.16 feet to South Right of Way of Double Run Road and Permanent records monument (PRM), Thence run North 37° 20' East along said Right of Way 150.00 feet for a Point of Beginning, Thence continue North 37° 20' East along said Right of way 375 feet to a PRM, Thence run South 36° 41' East 465 feet to a PRM, Thence run South 71 ° 46' West 375.00 feet to PRM. Thence run North 18° 14' West 128.65 feet to a PRM, Thence run North 56° 38° West 130.80 feet to the Point of Beginning.

Also Described as Lots 4, 5, 6, 7, 8, 9, 10, 11,12 and 13 of Triangle Park, A subdivision of a part of the E 1/2 of the SW 1/4 of Section 20, Township 3 South, Range 17 East. **IN COLUMBIA COUNTY, FLORIDA.**

NF Permit Service
387 SW Kempt
Lake City FL 32024

NOTICE OF COMMENCEMENT

County Clerk's Office Stamp or Seal

Tax Parcel Identification Number 20-35-17-05371-007

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 11 Triangle Park
   a) Street *(job)* Address: 237 NE Gum Swamp Rd Lake City FL 32055
2. General description of improvements: Single family dwelling
3. Owner Information
   a) Name and address: Travis Williams
   b) Name and address of fee simple titleholder (if other than owner) NA
   c) Interest in property House for Speculation
4. Contractor Information
   a) Name and address: Travis Williams
   b) Telephone No.: 365-4614
5. Surety Information
   a) Name and address: NA
   b) Amount of Bond: NA
   c) Telephone No.: _____ Fax No. (Opt.) _____
6. Lender
   a) Name and address: NA
   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: NA
   b) Telephone No.: _____ Fax No. (Opt.) _____

Inst:200712024448 Date:10/31/2007 Time:3:49 PM
DC,P.DeWitt Cason,Columbia County Page 1 of 1

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: NA
   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

10 _____
Signature of Owner or Owner's Authorized Office/Director/Partner/Manager

Travis Williams
Print Name

The foregoing instrument was acknowledged before me , a Florida Notary, this 29 day of October, 20 07, by:

Linda Roder as Notary **(type of authority, e.g. officer, trustee, attorney fact) for** Travis Williams **(name of party on behalf of whom instrument was executed).**

Personally Known ✓ OR Produced Identification ____ Type _____

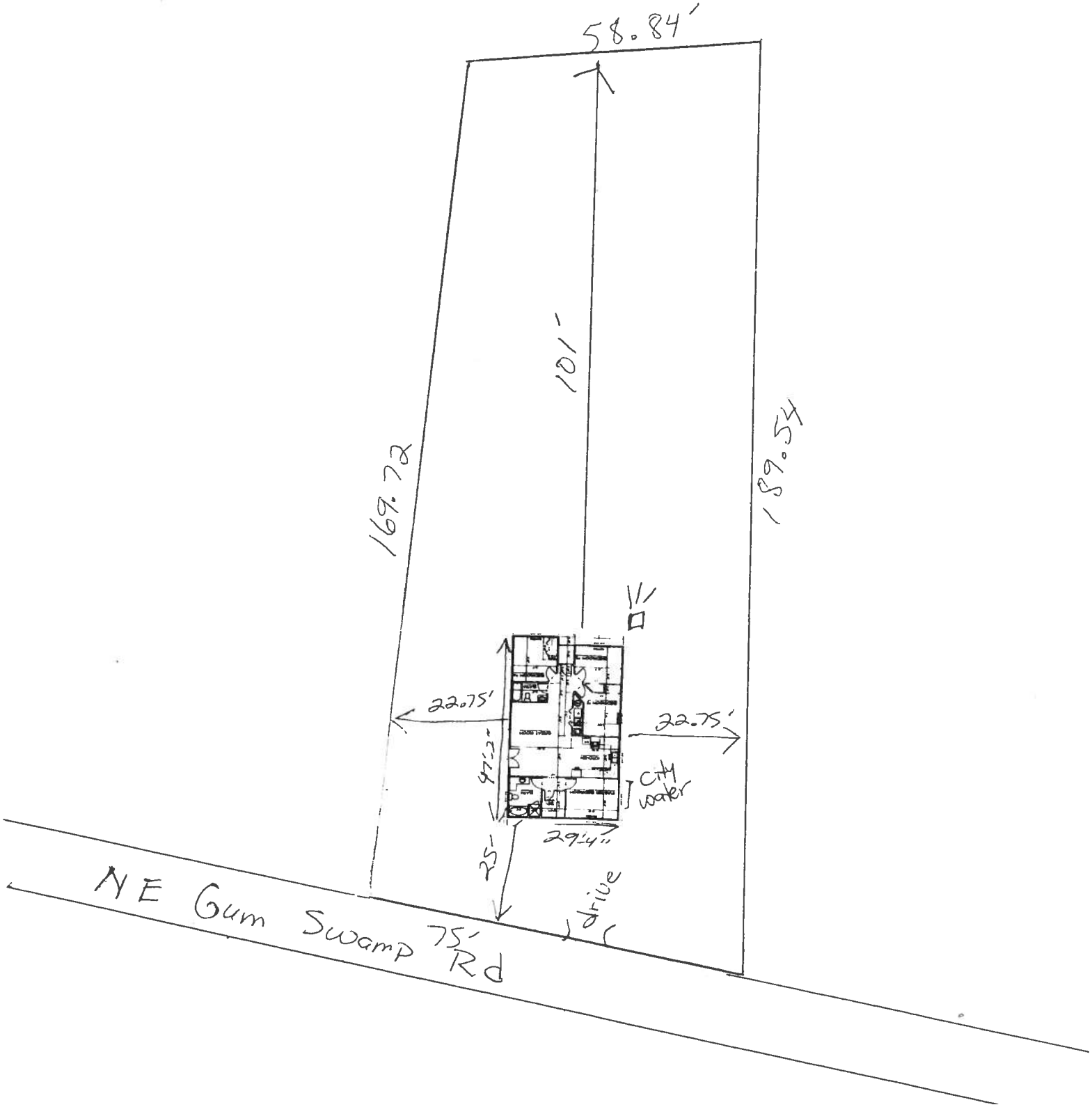
Notary Signature Linda R. Roder Notary Stamp or Seal:

Linda R. Roder
Commission #DD303275
Expires: Mar 24, 2008
Bonded Thru
Atlantic Bonding Co., Inc.

—AND—

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.

Lot 11 Triangle Park
20-35-17-05371-007
Travis Williams



FORM 600A-2004 EnergyGauge® 4.1

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Community Affairs

Residential Whole Building Performance Method A

Project Name:	**710158NorthFloridaFramersHollySpec**	Builder:	**North Florida Framers**
Address:	**223 NE Gum Swamp Rd.**	Permitting Office:	Columbia Co.
City, State:	**Lake City, FL 32055-**	Permit Number:	26431
Owner:	**Spec House**	Jurisdiction Number:	221000
Climate Zone:	**North**		

1.	New construction or existing	New	
2.	Single family or multi-family	Single family	
3.	Number of units, if multi-family	1	
4.	Number of Bedrooms	4	
5.	Is this a worst case?	Yes	
6.	Conditioned floor area (ft²)	1346 ft²	
7.	Glass type [1] and area: (Label reqd. by 13-104.4.5 if not default)		
a.	U-factor: (or Single or Double DEFAULT)	7a. Description (Dble Default) Area 158.0 ft²	
b.	SHGC: (or Clear or Tint DEFAULT)	7b. (Clear) 158.0 ft²	
8.	Floor types		
a.	Slab-On-Grade Edge Insulation	R=0.0, 163.0(p) ft	
b.	N/A		
c.	N/A		
9.	Wall types		
a.	Frame, Wood, Exterior	R=13.0, 1106.0 ft²	
b.	N/A		
c.	N/A		
d.	N/A		
e.	N/A		
10.	Ceiling types		
a.	Under Attic	R=30.0, 1346.0 ft²	
b.	N/A		
c.	N/A		
11.	Ducts		
a.	Sup: Unc. Ret: Unc. AH: Interior	Sup. R=6.0, 160.0 ft	
b.	N/A		
12.	Cooling systems		
a.	Central Unit	Cap: 28.0 kBtu/hr SEER: 13.00	
b.	N/A		
c.	N/A		
13.	Heating systems		
a.	Electric Heat Pump	Cap: 28.0 kBtu/hr HSPF: 7.50	
b.	N/A		
c.	N/A		
14.	Hot water systems		
a.	Electric Resistance	Cap: 40.0 gallons EF: 0.93	
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: 0.12

Total as-built points: 21796
Total base points: 24624

PASS

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

PREPARED BY: _____

DATE: 10/30/07

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

OWNER/AGENT: _____

DATE: 10-31-07

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

BUILDING OFFICIAL: _____

DATE: _____

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

SUMMER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: **223 NE Gum Swamp Rd., Lake City, FL, 32055-** 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	1346.0	20.04	4855.3	Double, Clear	S	1.5	6.0	15.0	35.87	0.86	460.6
				Double, Clear	W	1.5	4.0	9.0	38.52	0.82	283.5
				Double, Clear	W	1.5	7.0	20.0	38.52	0.94	723.4
				Double, Clear	W	1.5	6.0	30.0	38.52	0.91	1055.6
				Double, Clear	N	0.0	0.0	15.0	19.20	1.00	288.0
				Double, Clear	N	1.5	6.0	30.0	19.20	0.94	540.7
				Double, Clear	E	1.5	6.0	30.0	42.06	0.91	1151.8
				Double, Clear	E	1.5	4.0	9.0	42.06	0.82	308.8
				As-Built Total:				**158.0**			**4812.3**

WALL TYPES	Area X	BSPM	= Points	Type	R-Value	Area X	SPM	= Points
Adjacent	0.0	0.00	0.0	Frame, Wood, Exterior	13.0	1106.0	1.50	1659.0
Exterior	1106.0	1.70	1880.2					
Base Total:	**1106.0**		**1880.2**	**As-Built Total:**		**1106.0**		**1659.0**

DOOR TYPES	Area X	BSPM	= Points	Type	Area X	SPM	= Points
Adjacent	0.0	0.00	0.0	Exterior Insulated	20.0	4.10	82.0
Exterior	40.0	4.10	164.0	Exterior Insulated	20.0	4.10	82.0
Base Total:	**40.0**		**164.0**	**As-Built Total:**	**40.0**		**164.0**

CEILING TYPES	Area X	BSPM	= Points	Type	R-Value	Area X	SPM X SCM	= Points
Under Attic	1346.0	1.73	2328.6	Under Attic	30.0	1346.0	1.73 X 1.00	2328.6
Base Total:	**1346.0**		**2328.6**	**As-Built Total:**		**1346.0**		**2328.6**

FLOOR TYPES	Area X	BSPM	= Points	Type	R-Value	Area X	SPM	= Points
Slab	163.0(p)	-37.0	-6031.0	Slab-On-Grade Edge Insulation	0.0	163.0(p	-41.20	-6715.6
Raised	0.0	0.00	0.0					
Base Total:			**-6031.0**	**As-Built Total:**		**163.0**		**-6715.6**

INFILTRATION	Area X	BSPM	= Points	Area X	SPM	= Points
	1346.0	10.21	13742.7	1346.0	10.21	13742.7

SUMMER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: **223 NE Gum Swamp Rd., Lake City, FL, 32055-** PERMIT #:

BASE			AS-BUILT						
Summer Base Points: 16939.7			**Summer As-Built Points:**						**15990.9**
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 28000 btuh ,SEER/EFF(13.0) Ducts:Unc(S),Unc(R),Int(AH),R6.0(INS)						
			15991	1.00	(1.09 x 1.147 x 0.91)	0.263	1.000	4776.4	
16939.7	**0.4266**	**7226.5**	**15990.9**	**1.00**	**1.138**	**0.263**	**1.000**	**4776.4**	

WINTER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: **223 NE Gum Swamp Rd., Lake City, FL, 32055-** 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	1346.0	12.74	3086.6	Double, Clear	S	1.5	6.0	15.0	13.30	1.12	222.9
				Double, Clear	W	1.5	4.0	9.0	20.73	1.05	196.4
				Double, Clear	W	1.5	7.0	20.0	20.73	1.02	421.4
				Double, Clear	W	1.5	6.0	30.0	20.73	1.02	636.4
				Double, Clear	N	0.0	0.0	15.0	24.58	1.00	368.7
				Double, Clear	N	1.5	6.0	30.0	24.58	1.00	739.1
				Double, Clear	E	1.5	6.0	30.0	18.79	1.04	583.8
				Double, Clear	E	1.5	4.0	9.0	18.79	1.07	181.7
				As-Built Total:				**158.0**			**3350.4**
WALL TYPES	Area X	BWPM =	Points	Type			R-Value	Area X	WPM =		Points
Adjacent	0.0	0.00	0.0	Frame, Wood, Exterior			13.0	1106.0	3.40		3760.4
Exterior	1106.0	3.70	4092.2								
Base Total:	**1106.0**		**4092.2**	**As-Built Total:**				**1106.0**			**3760.4**
DOOR TYPES	Area X	BWPM =	Points	Type				Area X	WPM =		Points
Adjacent	0.0	0.00	0.0	Exterior Insulated				20.0	8.40		168.0
Exterior	40.0	8.40	336.0	Exterior Insulated				20.0	8.40		168.0
Base Total:	**40.0**		**336.0**	**As-Built Total:**				**40.0**			**336.0**
CEILING TYPES	Area X	BWPM =	Points	Type			R-Value	Area X	WPM X WCM =		Points
Under Attic	1346.0	2.05	2759.3	Under Attic			30.0	1346.0	2.05 X 1.00		2759.3
Base Total:	**1346.0**		**2759.3**	**As-Built Total:**				**1346.0**			**2759.3**
FLOOR TYPES	Area X	BWPM =	Points	Type			R-Value	Area X	WPM =		Points
Slab	163.0(p)	8.9	1450.7	Slab-On-Grade Edge Insulation			0.0	163.0(p	18.80		3064.4
Raised	0.0	0.00	0.0								
Base Total:			**1450.7**	**As-Built Total:**				**163.0**			**3064.4**
INFILTRATION	Area X	BWPM =	Points					Area X	WPM =		Points
	1346.0	-0.59	-794.1					1346.0	-0.59		-794.1

WINTER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: **223 NE Gum Swamp Rd., Lake City, FL, 32055-** PERMIT #:

BASE			AS-BUILT					
Winter Base Points:		**10930.7**	**Winter As-Built Points:**					**12476.4**
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 28000 btuh ,EFF(7.5) Ducts:Unc(S),Unc(R),Int(AH),R6.0					
10930.7	0.6274	6857.9	12476.4	1.000	(1.069 x 1.169 x 0.93)	0.455	1.000	6592.6
			12476.4	**1.00**	**1.162**	**0.455**	**1.000**	**6592.6**

WATER HEATING & CODE COMPLIANCE STATUS

Residential Whole Building Performance Method A - Details

ADDRESS: **223 NE Gum Swamp Rd., Lake City, FL, 32055-** 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
4		2635.00	10540.0	40.0	0.93	4		1.00	2606.67	1.00	10426.7
				As-Built Total:							**10426.7**

CODE COMPLIANCE STATUS

BASE				AS-BUILT			
Cooling Points +	Heating Points +	Hot Water Points =	Total Points	Cooling Points +	Heating Points +	Hot Water Points =	Total Points
7226	**6858**	**10540**	**24624**	**4776**	**6593**	**10427**	**21796**

PASS

Code Compliance Checklist

Residential Whole Building Performance Method A - Details

ADDRESS: **223 NE Gum Swamp Rd., 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. EXCEPTION: Frame walls where a continuous infiltration barrier is installed that extends from, and is sealed to, the foundation to the top plate.	
Floors	606.1.ABC.1.2.2	Penetrations/openings >1/8" sealed unless backed by truss or joint members. EXCEPTION: Frame floors where a continuous infiltration barrier is installed that is sealed to the perimeter, penetrations and seams.	
Ceilings	606.1.ABC.1.2.3	Between walls & ceilings; penetrations of ceiling plane of top floor; around shafts, chases, soffits, chimneys, cabinets sealed to continuous air barrier; gaps in gyp board & top plate; attic access. EXCEPTION: Frame ceilings where a continuous infiltration barrier is installed that is sealed at the perimeter, at penetrations and seams.	
Recessed Lighting Fixtures	606.1.ABC.1.2.4	Type IC rated with no penetrations, sealed; or Type IC or non-IC rated, installed inside a sealed box with 1/2" clearance & 3" from insulation; or Type IC rated with < 2.0 cfm from conditioned space, tested.	
Multi-story Houses	606.1.ABC.1.2.5	Air barrier on perimeter of floor cavity between floors.	
Additional Infiltration reqts	606.1.ABC.1.3	Exhaust fans vented to outdoors, dampers; combustion space heaters comply with NFPA, have combustion air.	

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

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

ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE SCORE* = 85.4

The higher the score, the more efficient the home.

Spec House, 223 NE Gum Swamp Rd., 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: 28.0 kBtu/hr
3.	Number of units, if multi-family	1			SEER: 13.00
4.	Number of Bedrooms	4		b. N/A	
5.	Is this a worst case?	Yes			
6.	Conditioned floor area (ft²)	1346 ft²		c. N/A	
7.	Glass type [1] and area: (Label reqd. by 13-104.4.5 if not default)				
	a. U-factor:	Description Area	13.	Heating systems	
	(or Single or Double DEFAULT) 7a.	(Dble Default) 158.0 ft²		a. Electric Heat Pump	Cap: 28.0 kBtu/hr
	b. SHGC:				HSPF: 7.50
	(or Clear or Tint DEFAULT) 7b.	(Clear) 158.0 ft²		b. N/A	
8.	Floor types				
	a. Slab-On-Grade Edge Insulation	R=0.0, 163.0(p) ft		c. N/A	
	b. N/A				
	c. N/A		14.	Hot water systems	
9.	Wall types			a. Electric Resistance	Cap: 40.0 gallons
	a. Frame, Wood, Exterior	R=13.0, 1106.0 ft²			EF: 0.93
	b. N/A			b. N/A	
	c. N/A				
	d. N/A			c. Conservation credits	
	e. N/A			(HR-Heat recovery, Solar	
10.	Ceiling types			DHP-Dedicated heat pump)	
	a. Under Attic	R=30.0, 1346.0 ft²	15.	HVAC credits	
	b. N/A			(CF-Ceiling fan, CV-Cross ventilation,	
	c. N/A			HF-Whole house fan,	
11.	Ducts			PT-Programmable Thermostat,	
	a. Sup: Unc. Ret: Unc. AH: Interior	Sup. R=6.0, 160.0 ft		MZ-C-Multizone cooling,	
	b. N/A			MZ-H-Multizone heating)	

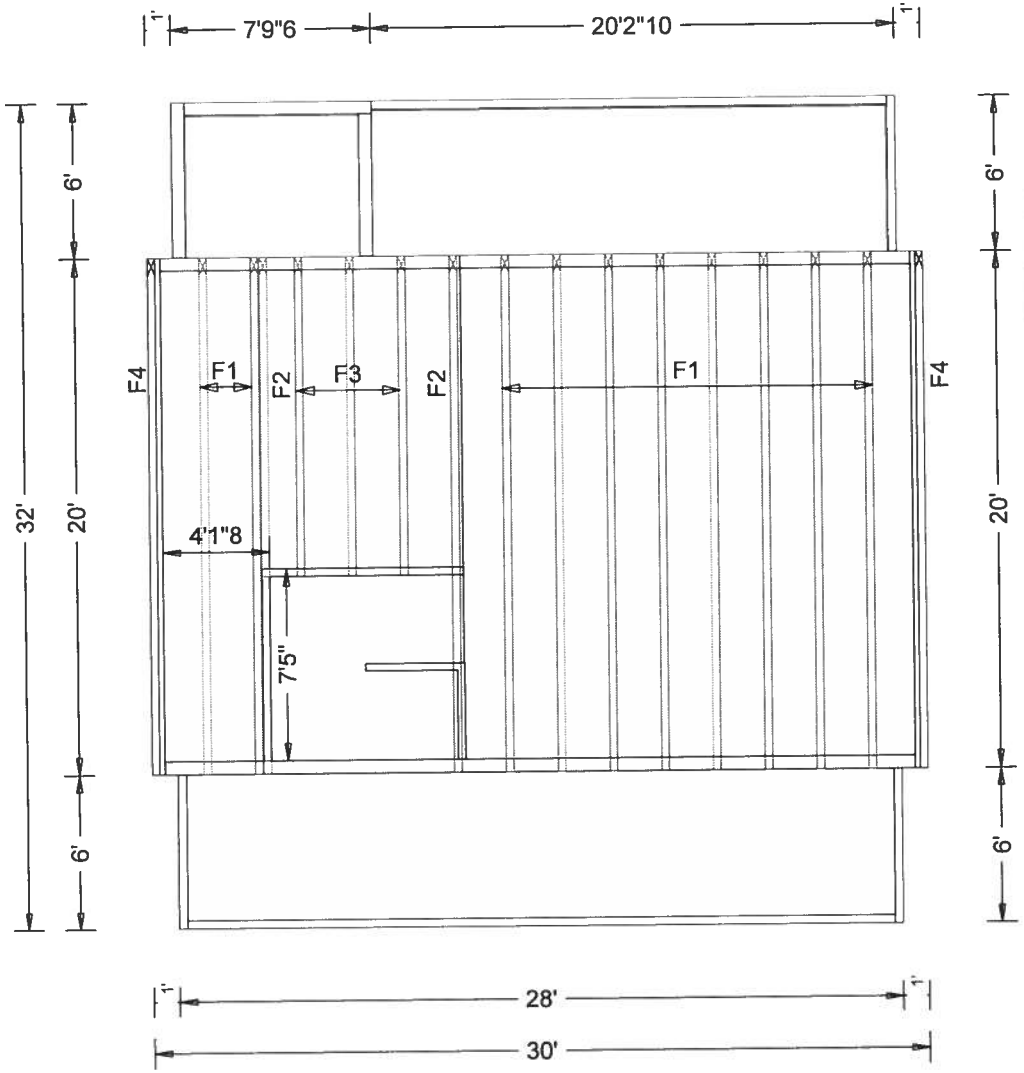
I certify that this home has complied with the Florida Energy Efficiency Code For Building Construction through the above energy saving features which will be installed (or exceeded) in this home before final inspection. Otherwise, a new EPL Display Card will be completed based on installed Code compliant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



W.B. Howland Truss Co.
P.O. Box 700
Live Oak, FL 32064
(386) 362-1235
(386) 362-7124 (fax)

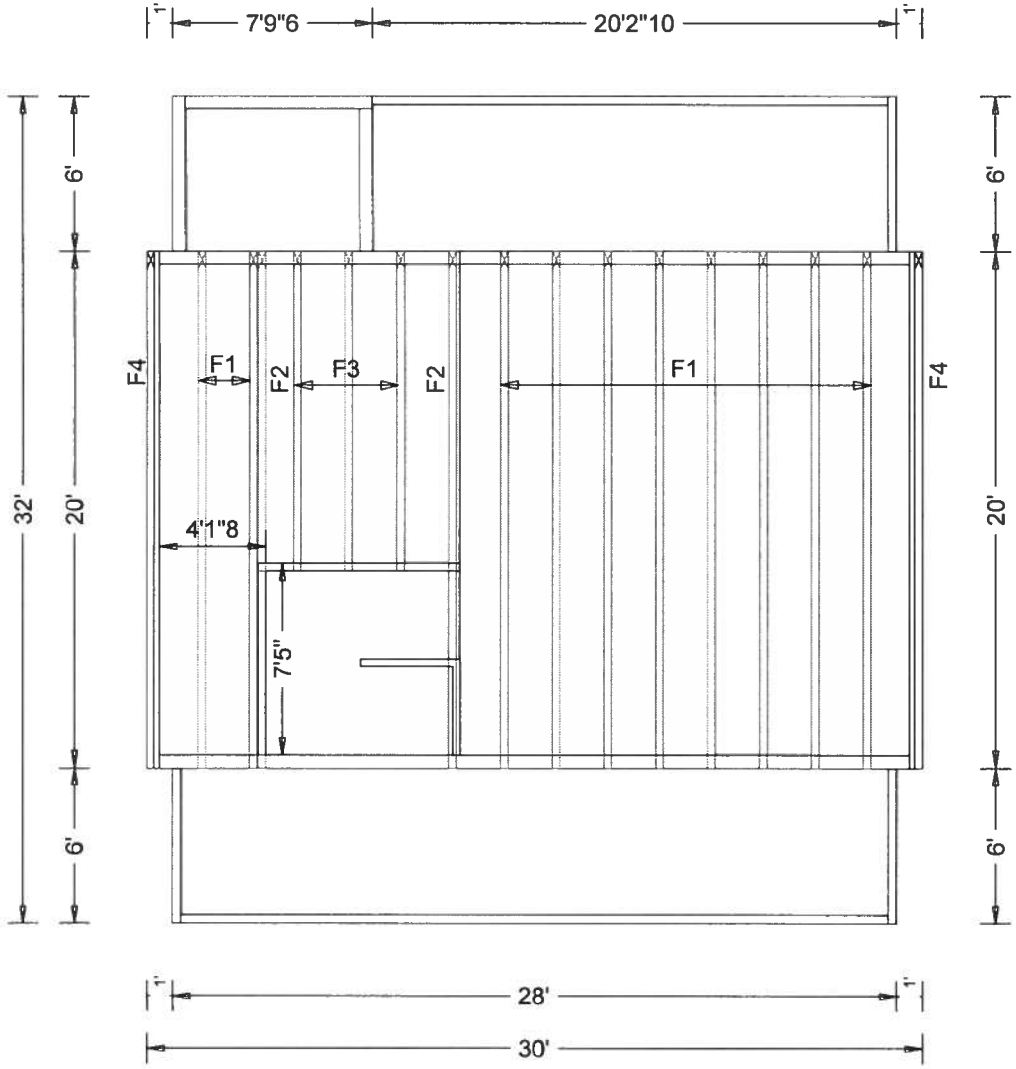
SY42 FLOOR SYSTEM

DEPTH:	1'6"
SPACING:	24" O.C.
LOADING:	55 PSF T.L./STANDARD
WIND LOAD:	N/A
EXT WALLS:	2x6 FRAMING
DATE:	10-23-07

Job Name: BROOKS
Customer: North Florida Framers
Designer: Chris McCall

JOB NO:
4995F

PAGE NO:
1 OF 1



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EXT WALLS:	2x6 FRAMING
DATE:	10-23-07

Job Name: BROOKS
Customer: North Florida Framers
Designer: Chris McCall

JOB NO:
4995F

Prepared by:

American Title Services of Lake City, Inc.
321 SW Main Blvd., Suite 105
Lake City, Florida 32025

File Number: 07-350

Inst.200712019843 Date:8/31/2007 Time:9:35 AM
Doc Stamp-Deed:392.00
DC,P DeWitt Cason Columbia County Page 1 of 2

Warranty Deed

Made this August 30, 2007 A.D.

By **Timothy R. Williams and Tamela H. Williams, husband and wife**, Post Office Box 1716, Lake City, Florida 32056, hereinafter called the grantor, to

Travis Clayton Williams, whose post office address is: Post Office Box 1716, Lake City, Florida 32056, hereinafter called the grantee:

(Whenever used herein the term "grantor" and "grantee" include all the parties to this instrument and the heirs, legal representatives and assigns of individuals, and the successors and assigns of corporations)

Witnesseth, that the grantor, for and in consideration of the sum of Ten Dollars, ($10.00) and other valuable considerations, receipt whereof is hereby acknowledged, hereby grants, bargains, sells, aliens, remises, releases, conveys and confirms unto the grantee, all that certain land situate in Columbia County, Florida, viz:

See Attached Schedule "A"

Parcel ID Number: **05371-000**

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

To Have and to Hold, the same in fee simple forever.

And the grantor hereby covenants with said grantee that the grantor is lawfully seized of said land in fee simple; that the grantor has good right and lawful authority to sell and convey said land; that the grantor hereby fully warrants the title to said land and will defend the same against the lawful claims of all persons whomsoever; and that said land is free of all encumbrances except taxes accruing subsequent to December 31, 2006.

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

Signed, sealed and delivered in our presence:

Witness Printed Name Megan Marable

Witness Printed Name Johnny M. Hamm

Timothy R. Williams (Seal)
Address: Post Office Box 1716, Lake City, Florida 32056

Tamela H. Williams (Seal)
Address:

State of Florida
County of Columbia

The foregoing instrument was acknowledged before me this 30th day of August, 2007, by Timothy R. Williams and Tamela H. Williams, husband and wife, who is/are personally known to me or who has produced drivers license as identification.

Notary Public
Print Name:

My Commission
Expires:

MEGAN M. MARABLE
MY COMMISSION # DD 412865
EXPIRES: March 30, 2009
Bonded Thru Notary Public Underwriters

DEED Individual Warranty Deed with Legal on Schedule A
Closers' Choice

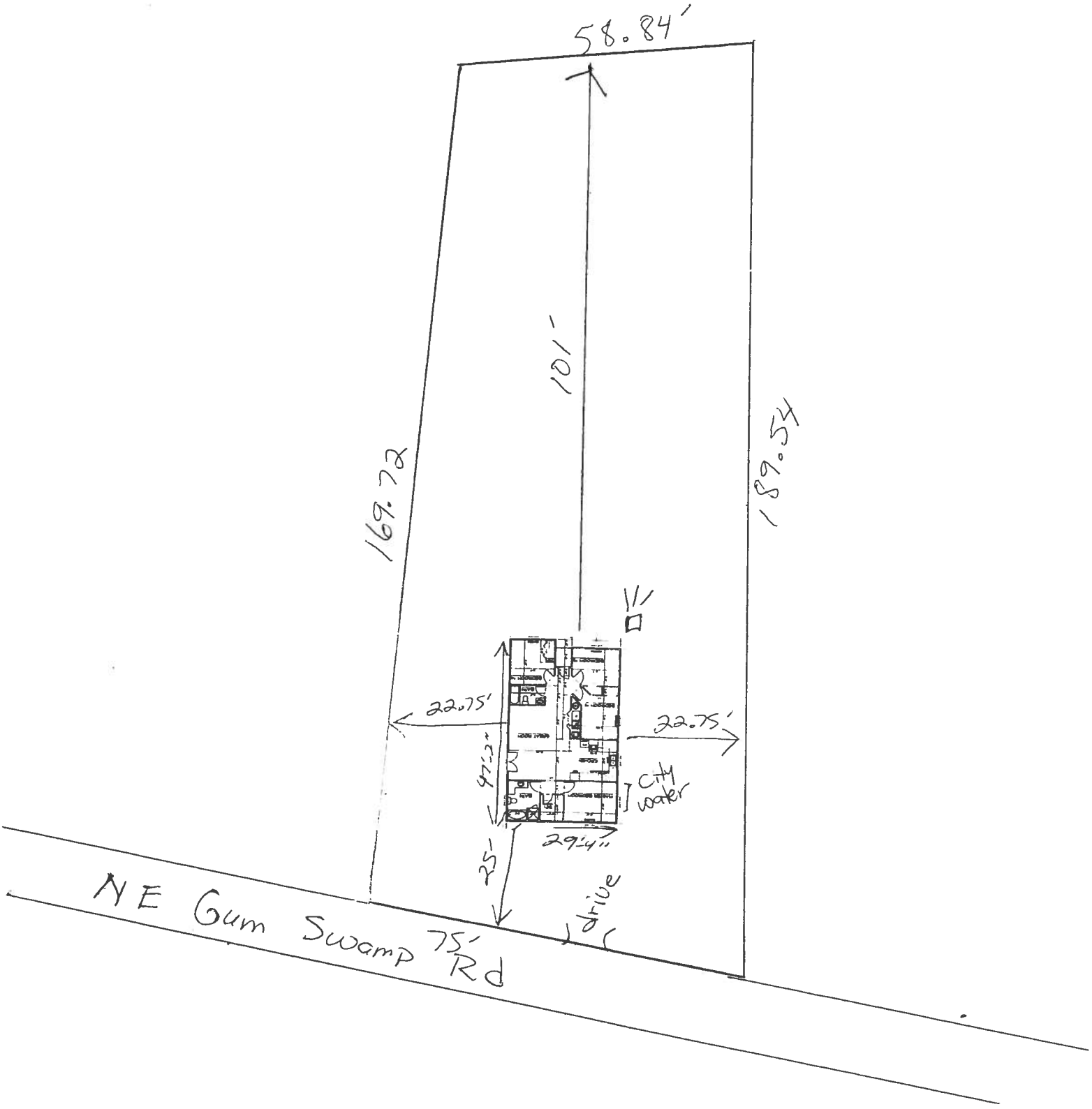
Schedule"A"

TOWNSHIP 3 SOUTH, RANGE 17 EAST

SECTION 20: Commence at the NW corner of the SE 1/4 of the SW 1/4 and run South 49° 51' East, 430.16 feet to South Right of Way of Double Run Road and Permanent records monument (PRM), Thence run North 37° 20' East along said Right of Way 150.00 feet for a Point of Beginning, Thence continue North 37° 20' East along said Right of way 375 feet to a PRM, Thence run South 36° 41' East 465 feet to a PRM, Thence run South 71 ° 46' West 375.00 feet to PRM. Thence run North 18° 14' West 128.65 feet to a PRM, Thence run North 56° 38° West 130.80 feet to the Point of Beginning.

Also Described as Lots 4, 5, 6, 7, 8, 9, 10, 11,12 and 13 of Triangle Park, A subdivision of a part of the E 1/2 of the SW 1/4 of Section 20, Township 3 South, Range 17 East. **IN COLUMBIA COUNTY, FLORIDA.**

Lot 11 Triangle Park
20-35-17-05371-007
Travis Williams



FORM 600A-2004 EnergyGauge® 4.1

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Community Affairs

Residential Whole Building Performance Method A

Project Name:	**710171North FloridaFramersBrooksSpec**	Builder:	**North Florida Framers**
Address:	**223 NE Gum Swamp Rd**	Permitting Office:	
City, State:	**Lake City, FL 32055-**	Permit Number:	
Owner:	**Spec House**	Jurisdiction Number:	
Climate Zone:	**North**		

1.	New construction or existing	New	
2.	Single family or multi-family	Single family	
3.	Number of units, if multi-family	1	
4.	Number of Bedrooms	3	
5.	Is this a worst case?	Yes	
6.	Conditioned floor area (ft²)	1187 ft²	
7.	Glass type[1] and area: (Label reqd. by 13-104.4.5 if not default)		
a.	U-factor: (or Single or Double DEFAULT)	7a. Description Area (Dble Default) 192.0 ft²	
b.	SHGC: (or Clear or Tint DEFAULT)	7b. (Clear) 192.0 ft²	
8.	Floor types		
a.	Slab-On-Grade Edge Insulation	R=0.0, 112.0(p) ft	
b.	N/A		
c.	N/A		
9.	Wall types		
a.	Frame, Wood, Exterior	R=13.0, 1604.0 ft²	
b.	N/A		
c.	N/A		
d.	N/A		
e.	N/A		
10.	Ceiling types		
a.	Under Attic	R=30.0, 647.0 ft²	
b.	N/A		
c.	N/A		
11.	Ducts		
a.	Sup: Unc. Ret: Unc. AH: Interior	Sup. R=6.0, 180.0 ft	
b.	N/A		
12.	Cooling systems		
a.	Central Unit	Cap: 27.0 kBtu/hr SEER: 13.00	
b.	N/A		
c.	N/A		
13.	Heating systems		
a.	Electric Heat Pump	Cap: 27.0 kBtu/hr HSPF: 7.50	
b.	N/A		
c.	N/A		
14.	Hot water systems		
a.	Electric Resistance	Cap: 40.0 gallons EF: 0.93	
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: 0.16

Total as-built points: 19659
Total base points: 21575

PASS

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

PREPARED BY: _____

DATE: 10/30/07

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

OWNER/AGENT: _____

DATE: 10-31-07

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

BUILDING OFFICIAL: _____

DATE: _____

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

SUMMER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: **223 NE Gum Swamp Rd, Lake City, FL, 32055-** 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	1187.0	20.04	4281.7	Double, Clear	N	7.5	2.0	4.0	19.20	0.59	45.6	
				Double, Clear	N	7.5	4.0	9.0	19.20	0.63	108.6	
				Double, Clear	N	7.5	7.0	10.0	19.20	0.70	134.3	
				Double, Clear	S	7.5	6.0	30.0	35.87	0.49	526.7	
				Double, Clear	W	0.0	0.0	30.0	38.52	1.00	1155.7	
				Double, Clear	N	1.5	6.0	30.0	19.20	0.94	540.7	
				Double, Clear	N	1.5	2.0	4.0	19.20	0.76	58.1	
				Double, Clear	E	0.0	0.0	15.0	42.06	1.00	631.0	
				Double, Clear	S	1.5	6.0	45.0	35.87	0.86	1381.9	
				Double, Clear	W	0.0	0.0	15.0	38.52	1.00	577.9	
				As-Built Total:				**192.0**			**5160.3**	

WALL TYPES	Area X	BSPM	= Points	Type	R-Value	Area X	SPM	= Points
Adjacent	0.0	0.00	0.0	Frame, Wood, Exterior	13.0	1604.0	1.50	2406.0
Exterior	1604.0	1.70	2726.8					
Base Total:	**1604.0**		**2726.8**	**As-Built Total:**		**1604.0**		**2406.0**

DOOR TYPES	Area X	BSPM	= Points	Type	Area X	SPM	= Points
Adjacent	0.0	0.00	0.0	Exterior Insulated	40.0	4.10	164.0
Exterior	50.0	4.10	205.0	Exterior Insulated	10.0	4.10	41.0
Base Total:	**50.0**		**205.0**	**As-Built Total:**	**50.0**		**205.0**

CEILING TYPES	Area X	BSPM	= Points	Type	R-Value	Area X	SPM X SCM	= Points
Under Attic	647.0	1.73	1119.3	Under Attic	30.0	647.0	1.73 X 1.00	1119.3
Base Total:	**647.0**		**1119.3**	**As-Built Total:**		**647.0**		**1119.3**

FLOOR TYPES	Area X	BSPM	= Points	Type	R-Value	Area X	SPM	= Points
Slab	112.0(p)	-37.0	-4144.0	Slab-On-Grade Edge Insulation	0.0	112.0(p	-41.20	-4614.4
Raised	0.0	0.00	0.0					
Base Total:			**-4144.0**	**As-Built Total:**		**112.0**		**-4614.4**

INFILTRATION	Area X	BSPM	= Points		Area X	SPM	= Points
	1187.0	10.21	12119.3		1187.0	10.21	12119.3

SUMMER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: **223 NE Gum Swamp Rd, Lake City, FL, 32055-** PERMIT #:

BASE			AS-BUILT					
Summer Base Points: 16308.1			**Summer As-Built Points:**					**16395.5**
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 27000 btuh ,SEER/EFF(13.0) Ducts:Unc(S),Unc(R),Int(AH),R6.0(INS)					
			16396	1.00	(1.09 x 1.147 x 0.91)	0.263	1.000	4897.2
16308.1	**0.4266**	**6957.0**	**16395.5**	**1.00**	**1.138**	**0.263**	**1.000**	**4897.2**

WINTER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: **223 NE Gum Swamp Rd, Lake City, FL, 32055-** 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	1187.0	12.74	2722.0	Double, Clear	N	7.5	2.0	4.0	24.58	1.03	101.0	
				Double, Clear	N	7.5	4.0	9.0	24.58	1.02	226.7	
				Double, Clear	N	7.5	7.0	10.0	24.58	1.02	250.5	
				Double, Clear	S	7.5	6.0	30.0	13.30	3.09	1231.3	
				Double, Clear	W	0.0	0.0	30.0	20.73	1.00	621.8	
				Double, Clear	N	1.5	6.0	30.0	24.58	1.00	739.1	
				Double, Clear	N	1.5	2.0	4.0	24.58	1.01	99.8	
				Double, Clear	E	0.0	0.0	15.0	18.79	1.00	281.9	
				Double, Clear	S	1.5	6.0	45.0	13.30	1.12	668.7	
				Double, Clear	W	0.0	0.0	15.0	20.73	1.00	310.9	
				As-Built Total:				**192.0**			**4531.7**	
WALL TYPES	Area X	BWPM =	Points	Type			R-Value	Area X	WPM =		Points	
Adjacent	0.0	0.00	0.0	Frame, Wood, Exterior			13.0	1604.0	3.40		5453.6	
Exterior	1604.0	3.70	5934.8									
Base Total:	**1604.0**		**5934.8**	**As-Built Total:**				**1604.0**			**5453.6**	
DOOR TYPES	Area X	BWPM =	Points	Type				Area X	WPM =		Points	
Adjacent	0.0	0.00	0.0	Exterior Insulated				40.0	8.40		336.0	
Exterior	50.0	8.40	420.0	Exterior Insulated				10.0	8.40		84.0	
Base Total:	**50.0**		**420.0**	**As-Built Total:**				**50.0**			**420.0**	
CEILING TYPES	Area X	BWPM =	Points	Type			R-Value	Area X	WPM X	WCM =	Points	
Under Attic	647.0	2.05	1326.3	Under Attic			30.0	647.0	2.05 X	1.00	1326.3	
Base Total:	**647.0**		**1326.3**	**As-Built Total:**				**647.0**			**1326.3**	
FLOOR TYPES	Area X	BWPM =	Points	Type			R-Value	Area X	WPM =		Points	
Slab	112.0(p)	8.9	996.8	Slab-On-Grade Edge Insulation			0.0	112.0(p	18.80		2105.6	
Raised	0.0	0.00	0.0									
Base Total:			**996.8**	**As-Built Total:**				**112.0**			**2105.6**	
INFILTRATION	Area X	BWPM =	Points					Area X	WPM =		Points	
	1187.0	-0.59	-700.3					1187.0	-0.59		-700.3	

WINTER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: **223 NE Gum Swamp Rd, Lake City, FL, 32055-** PERMIT #:

BASE			AS-BUILT					
Winter Base Points:		**10699.6**	**Winter As-Built Points:**					**13136.9**
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 27000 btuh ,EFF(7.5) Ducts:Unc(S),Unc(R),Int(AH),R6.0					
			13136.9	1.000	(1.069 x 1.169 x 0.93)	0.455	1.000	6941.6
10699.6	**0.6274**	**6713.0**	**13136.9**	**1.00**	**1.162**	**0.455**	**1.000**	**6941.6**

WATER HEATING & CODE COMPLIANCE STATUS

Residential Whole Building Performance Method A - Details

ADDRESS: **223 NE Gum Swamp Rd, Lake City, FL, 32055-** PERMIT #:

BASE				AS-BUILT							
WATER HEATING											
Number of Bedrooms	X	Multiplier	= Total	Tank Volume	EF	Number of Bedrooms	X Tank Ratio	X Multiplier	X Credit Multiplier	= Total	
3		2635.00	7905.0	40.0	0.93	3	1.00	2606.67	1.00	7820.0	
				As-Built Total:						**7820.0**	

CODE COMPLIANCE STATUS

BASE				AS-BUILT			
Cooling Points +	Heating Points +	Hot Water Points =	Total Points	Cooling Points +	Heating Points +	Hot Water Points =	Total Points
6957	**6713**	**7905**	**21575**	**4897**	**6942**	**7820**	**19659**

PASS

Code Compliance Checklist

Residential Whole Building Performance Method A - Details

ADDRESS: **223 NE Gum Swamp Rd, 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. EXCEPTION: Frame walls where a continuous infiltration barrier is installed that extends from, and is sealed to, the foundation to the top plate.	
Floors	606.1.ABC.1.2.2	Penetrations/openings >1/8" sealed unless backed by truss or joint members. EXCEPTION: Frame floors where a continuous infiltration barrier is installed that is sealed to the perimeter, penetrations and seams.	
Ceilings	606.1.ABC.1.2.3	Between walls & ceilings; penetrations of ceiling plane of top floor; around shafts, chases, soffits, chimneys, cabinets sealed to continuous air barrier; gaps in gyp board & top plate; attic access. EXCEPTION: Frame ceilings where a continuous infiltration barrier is installed that is sealed at the perimeter, at penetrations and seams.	
Recessed Lighting Fixtures	606.1.ABC.1.2.4	Type IC rated with no penetrations, sealed; or Type IC or non-IC rated, installed inside a sealed box with 1/2" clearance & 3" from insulation; or Type IC rated with < 2.0 cfm from conditioned space, tested.	
Multi-story Houses	606.1.ABC.1.2.5	Air barrier on perimeter of floor cavity between floors.	
Additional Infiltration reqts	606.1.ABC.1.3	Exhaust fans vented to outdoors, dampers; combustion space heaters comply with NFPA, have combustion air.	

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

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

ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE SCORE* = 84.4

The higher the score, the more efficient the home.

Spec House, 223 NE Gum Swamp Rd, 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: 27.0 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			
6.	Conditioned floor area (ft²)	1187 ft²		c. N/A	
7.	Glass type [1] and area: (Label reqd. by 13-104.4.5 if not default)				
	a. U-factor:	Description Area	13.	Heating systems	
	(or Single or Double DEFAULT) 7a.	(Dble Default) 192.0 ft²		a. Electric Heat Pump	Cap: 27.0 kBtu/hr
	b. SHGC:				HSPF: 7.50
	(or Clear or Tint DEFAULT) 7b.	(Clear) 192.0 ft²		b. N/A	
8.	Floor types				
	a. Slab-On-Grade Edge Insulation	R=0.0, 112.0(p) ft		c. N/A	
	b. N/A				
	c. N/A		14.	Hot water systems	
9.	Wall types			a. Electric Resistance	Cap: 40.0 gallons
	a. Frame, Wood, Exterior	R=13.0, 1604.0 ft²			EF: 0.93
	b. N/A			b. N/A	
	c. N/A				
	d. N/A			c. Conservation credits	
	e. N/A			(HR-Heat recovery, Solar	
10.	Ceiling types			DHP-Dedicated heat pump)	
	a. Under Attic	R=30.0, 647.0 ft²	15.	HVAC credits	
	b. N/A			(CF-Ceiling fan, CV-Cross ventilation,	
	c. N/A			HF-Whole house fan,	
11.	Ducts			PT-Programmable Thermostat,	
	a. Sup: Unc. Ret: Unc. AH: Interior	Sup. R=6.0, 180.0 ft		MZ-C-Multizone cooling,	
	b. N/A			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.

Residential System Sizing Calculation

Summary

Spec House
223 NE Gum Swamp Rd
Lake City, FL 32055-

Project Title:
710171North FloridaFramersBrooksSpec

Class 3 Rating
Registration No. 0
Climate: North

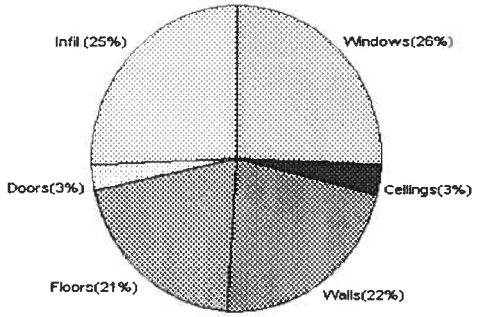
10/30/2007

Location for weather data: Gainesville - Defaults: Latitude(29) Altitude(152 ft.) Temp Range(M) Humidity data: Interior RH (50%) Outdoor wet bulb (77F) Humidity difference(54gr.)					
Winter design temperature	33	F	Summer design temperature	92	F
Winter setpoint	70	F	Summer setpoint	75	F
Winter temperature difference	37	F	Summer temperature difference	17	F
Total heating load calculation	**23774**	**Btuh**	**Total cooling load calculation**	**22124**	**Btuh**
Submitted heating capacity	% of calc	Btuh	Submitted cooling capacity	% of calc	Btuh
Total (Electric Heat Pump)	113.6	27000	Sensible (SHR = 0.75)	111.9	20250
Heat Pump + Auxiliary(0.0kW)	113.6	27000	Latent	167.3	6750
			Total (Electric Heat Pump)	122.0	27000

WINTER CALCULATIONS

Winter Heating Load (for 1187 sqft)

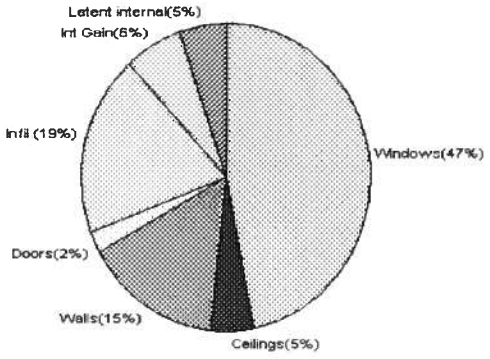
Load component			Load	
Window total	192	sqft	6180	Btuh
Wall total	1604	sqft	5268	Btuh
Door total	50	sqft	648	Btuh
Ceiling total	647	sqft	762	Btuh
Floor total	112	sqft	4890	Btuh
Infiltration	149	cfm	6026	Btuh
Duct loss			0	Btuh
Subtotal			**23774**	**Btuh**
Ventilation	0	cfm	0	Btuh
TOTAL HEAT LOSS			**23774**	**Btuh**



SUMMER CALCULATIONS

Summer Cooling Load (for 1187 sqft)

Load component			Load	
Window total	192	sqft	10359	Btuh
Wall total	1604	sqft	3346	Btuh
Door total	50	sqft	490	Btuh
Ceiling total	647	sqft	1071	Btuh
Floor total			0	Btuh
Infiltration	78	cfm	1443	Btuh
Internal gain			1380	Btuh
Duct gain			0	Btuh
Sens. Ventilation	0	cfm	0	Btuh
Total sensible gain			**18090**	**Btuh**
Latent gain(ducts)			0	Btuh
Latent gain(infiltration)			2834	Btuh
Latent gain(ventilation)			0	Btuh
Latent gain(internal/occupants/other)			1200	Btuh
Total latent gain			**4034**	**Btuh**
TOTAL HEAT GAIN			**22124**	**Btuh**



For Florida residences only

EnergyGauge® System Sizing
PREPARED BY:
DATE: 10/30/07

System Sizing Calculations - Winter

Residential Load - Whole House Component Details

Spec House
223 NE Gum Swamp Rd
Lake City, FL 32055-

Project Title:
710171North FloridaFramersBrooksSpec

Class 3 Rating
Registration No. 0
Climate: North

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

10/30/2007

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

Component Loads for Whole House

Window	Panes/SHGC/Frame/U	Orientation	Area(sqft) X	HTM=	Load
1	2, Clear, Metal, 0.87	NW	4.0	32.2	129 Btuh
2	2, Clear, Metal, 0.87	NW	9.0	32.2	290 Btuh
3	2, Clear, Metal, 0.87	NW	10.0	32.2	322 Btuh
4	2, Clear, Metal, 0.87	SE	30.0	32.2	966 Btuh
5	2, Clear, Metal, 0.87	SW	30.0	32.2	966 Btuh
6	2, Clear, Metal, 0.87	NW	30.0	32.2	966 Btuh
7	2, Clear, Metal, 0.87	NW	4.0	32.2	129 Btuh
8	2, Clear, Metal, 0.87	NE	15.0	32.2	483 Btuh
9	2, Clear, Metal, 0.87	SE	45.0	32.2	1449 Btuh
10	2, Clear, Metal, 0.87	SW	15.0	32.2	483 Btuh
	Window Total		192(sqft)		6180 Btuh
Walls	Type	R-Value	Area X	HTM=	Load
1	Frame - Wood - Ext(0.09)	13.0	1604	3.3	5268 Btuh
	Wall Total		1604		5268 Btuh
Doors	Type		Area X	HTM=	Load
1	Insulated - Exterior		10	12.9	130 Btuh
2	Insulated - Exterior		40	12.9	518 Btuh
	Door Total		50		648Btuh
Ceilings	Type/Color/Surface	R-Value	Area X	HTM=	Load
1	Vented Attic/D/Shin)	30.0	647	1.2	762 Btuh
	Ceiling Total		647		762Btuh
Floors	Type	R-Value	Size X	HTM=	Load
1	Slab On Grade	0	112.0 ft(p)	43.7	4890 Btuh
	Floor Total		112		4890 Btuh
			Zone Envelope Subtotal:		17748 Btuh
Infiltration	Type	ACH X	Zone Volume	CFM=	
	Natural	0.94	9496	148.8	6026 Btuh
Ductload	Partially sealed, R6.0, Supply(Attic), Return(Attic)			(DLM of 0.00)	0 Btuh
Zone #1			**Sensible Zone Subtotal**		**23774 Btuh**

Manual J Winter Calculations

Residential Load - Component Details (continued)

Spec House
223 NE Gum Swamp Rd
Lake City, FL 32055-

Project Title:
710171North FloridaFramersBrooksSpec

Class 3 Rating
Registration No. 0
Climate: North

10/30/2007

WHOLE HOUSE TOTALS

	Subtotal Sensible	23774 Btuh
	Ventilation Sensible	0 Btuh
	Total Btuh Loss	23774 Btuh

Key: Window types (SHGC - Shading coefficient of glass as SHGC numerical value or as clear or tint)
(Frame types - metal, wood or insulated metal)
(U - Window U-Factor or 'DEF' for default)
(HTM - ManualJ Heat Transfer Multiplier)
Key: Floor size (perimeter(p) for slab-on-grade or area for all other floor types)

For Florida residences only

System Sizing Calculations - Winter

Residential Load - Room by Room Component Details

Spec House
223 NE Gum Swamp Rd
Lake City, FL 32055-

Project Title:
710171North FloridaFramersBrooksSpec

Class 3 Rating
Registration No. 0
Climate: North

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

10/30/2007

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

Component Loads for Zone #1: Main

Window	Panes/SHGC/Frame/U	Orientation	Area(sqft) X	HTM=	Load
1	2, Clear, Metal, 0.87	NW	4.0	32.2	129 Btuh
2	2, Clear, Metal, 0.87	NW	9.0	32.2	290 Btuh
3	2, Clear, Metal, 0.87	NW	10.0	32.2	322 Btuh
4	2, Clear, Metal, 0.87	SE	30.0	32.2	966 Btuh
5	2, Clear, Metal, 0.87	SW	30.0	32.2	966 Btuh
6	2, Clear, Metal, 0.87	NW	30.0	32.2	966 Btuh
7	2, Clear, Metal, 0.87	NW	4.0	32.2	129 Btuh
8	2, Clear, Metal, 0.87	NE	15.0	32.2	483 Btuh
9	2, Clear, Metal, 0.87	SE	45.0	32.2	1449 Btuh
10	2, Clear, Metal, 0.87	SW	15.0	32.2	483 Btuh
	Window Total		192(sqft)		6180 Btuh
Walls	Type	R-Value	Area X	HTM=	Load
1	Frame - Wood - Ext(0.09)	13.0	1604	3.3	5268 Btuh
	Wall Total		1604		5268 Btuh
Doors	Type		Area X	HTM=	Load
1	Insulated - Exterior		10	12.9	130 Btuh
2	Insulated - Exterior		40	12.9	518 Btuh
	Door Total		50		648Btuh
Ceilings	Type/Color/Surface	R-Value	Area X	HTM=	Load
1	Vented Attic/D/Shin)	30.0	647	1.2	762 Btuh
	Ceiling Total		647		762Btuh
Floors	Type	R-Value	Size X	HTM=	Load
1	Slab On Grade	0	112.0 ft(p)	43.7	4890 Btuh
	Floor Total		112		4890 Btuh
			Zone Envelope Subtotal:		17748 Btuh
Infiltration	Type	ACH X	Zone Volume	CFM=	
	Natural	0.94	9496	148.8	6026 Btuh
Ductload	Partially sealed, R6.0, Supply(Attic), Return(Attic)			(DLM of 0.00)	0 Btuh
Zone #1			**Sensible Zone Subtotal**		**23774 Btuh**

Manual J Winter Calculations

Residential Load - Component Details (continued)

Spec House
223 NE Gum Swamp Rd
Lake City, FL 32055-

Project Title:
710171North FloridaFramersBrooksSpec

Class 3 Rating
Registration No. 0
Climate: North

10/30/2007

WHOLE HOUSE TOTALS

	Subtotal Sensible	23774 Btuh
	Ventilation Sensible	0 Btuh
	Total Btuh Loss	23774 Btuh

Key: Window types (SHGC - Shading coefficient of glass as SHGC numerical value or as clear or tint)
(Frame types - metal, wood or insulated metal)
(U - Window U-Factor or 'DEF' for default)
(HTM - ManualJ Heat Transfer Multiplier)
Key: Floor size (perimeter(p) for slab-on-grade or area for all other floor types)

For Florida residences only

System Sizing Calculations - Summer

Residential Load - Whole House Component Details

Spec House
223 NE Gum Swamp Rd
Lake City, FL 32055-

Project Title:
710171North FloridaFramersBrooksSpec

Class 3 Rating
Registration No. 0
Climate: North

Reference City: Gainesville (Defaults) Summer Temperature Difference: 17.0 F 10/30/2007

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

Component Loads for Whole House

Window	Type* Pn/SHGC/U/InSh/ExSh/IS	Ornt	Overhang Len	Hgt	Window Area(sqft) Gross	Shaded	Unshaded	HTM Shaded	Unshaded	Load
1	2, Clear, 0.87, None,N,N	NW	7.5ft.	2ft.	4.0	0.0	4.0	29	60	240 Btuh
2	2, Clear, 0.87, None,N,N	NW	7.5ft.	4ft.	9.0	0.0	9.0	29	60	540 Btuh
3	2, Clear, 0.87, None,N,N	NW	7.5ft.	7ft.	10.0	0.0	10.0	29	60	600 Btuh
4	2, Clear, 0.87, None,N,N	SE	7.5ft.	6ft.	30.0	30.0	0.0	29	63	869 Btuh
5	2, Clear, 0.87, None,N,N	SW	0ft.	0ft.	30.0	0.0	30.0	29	63	1876 Btuh
6	2, Clear, 0.87, None,N,N	NW	1.5ft.	6ft.	30.0	0.0	30.0	29	60	1801 Btuh
7	2, Clear, 0.87, None,N,N	NW	1.5ft.	2ft.	4.0	0.0	4.0	29	60	240 Btuh
8	2, Clear, 0.87, None,N,N	NE	0ft.	0ft.	15.0	0.0	15.0	29	60	901 Btuh
9	2, Clear, 0.87, None,N,N	SE	1.5ft.	6ft.	45.0	13.7	31.3	29	63	2354 Btuh
10	2, Clear, 0.87, None,N,N	SW	0ft.	0ft.	15.0	0.0	15.0	29	63	938 Btuh
	Window Total				192 (sqft)					10359 Btuh

Walls	Type	R-Value/U-Value	Area(sqft)	HTM	Load
1	Frame - Wood - Ext	13.0/0.09	1604.0	2.1	3346 Btuh
	Wall Total		1604 (sqft)		3346 Btuh

Doors	Type	Area (sqft)	HTM	Load
1	Insulated - Exterior	10.0	9.8	98 Btuh
2	Insulated - Exterior	40.0	9.8	392 Btuh
	Door Total	50 (sqft)		490 Btuh

Ceilings	Type/Color/Surface	R-Value	Area(sqft)	HTM	Load
1	Vented Attic/DarkShingle	30.0	647.0	1.7	1071 Btuh
	Ceiling Total		647 (sqft)		1071 Btuh

Floors	Type	R-Value	Size	HTM	Load
1	Slab On Grade	0.0	112 (ft(p))	0.0	0 Btuh
	Floor Total		112.0 (sqft)		0 Btuh

			Load
	Zone Envelope Subtotal:		15266 Btuh

Infiltration	Type	ACH	Volume(cuft)	CFM=	Load
	SensibleNatural	0.49	9496	77.6	1443 Btuh

Internal gain	Occupants	Btuh/occupant	Appliance	Load
	6	X 230 +	0	1380 Btuh

Duct load			
	Partially sealed, R6.0, Supply(Attic), Return(Attic)	DGM = 0.00	0.0 Btuh

	Sensible Zone Load	**18090 Btuh**

Manual J Summer Calculations

Residential Load - Component Details (continued)

Spec House
223 NE Gum Swamp Rd
Lake City, FL 32055-

Project Title:
710171North FloridaFramersBrooksSpec

Class 3 Rating
Registration No. 0
Climate: North

10/30/2007

WHOLE HOUSE TOTALS

	Sensible Envelope Load All Zones	**18090 Btuh**
	Sensible Duct Load	0 Btuh
	Total Sensible Zone Loads	**18090 Btuh**
	Sensible ventilation	0 Btuh
	Blower	0 Btuh
Whole House	**Total sensible gain**	**18090 Btuh**
Totals for Cooling	Latent infiltration gain (for 54 gr. humidity difference)	2834 Btuh
	Latent ventilation gain	0 Btuh
	Latent duct gain	0 Btuh
	Latent occupant gain (6 people @ 200 Btuh per person)	1200 Btuh
	Latent other gain	0 Btuh
	Latent total gain	**4034 Btuh**
	TOTAL GAIN	**22124 Btuh**

*Key: Window types (Pn - Number of panes of glass)
(SHGC - Shading coefficient of glass as SHGC numerical value or as clear or tint)
(U - Window U-Factor or 'DEF' for default)
(InSh - Interior shading device: none(N), Blinds(B), Draperies(D) or Roller Shades(R))
(ExSh - Exterior shading device: none(N) or numerical value)
(BS - Insect screen: none(N), Full(F) or Half(H))
(Ornt - compass orientation)

For Florida residences only

System Sizing Calculations - Summer

Residential Load - Room by Room Component Details

Spec House
223 NE Gum Swamp Rd
Lake City, FL 32055-

Project Title:
710171North FloridaFramersBrooksSpec

Class 3 Rating
Registration No. 0
Climate: North

Reference City: Gainesville (Defaults) Summer Temperature Difference: 17.0 F 10/30/2007
This calculation is for Worst Case. The house has been rotated 315 degrees.

Component Loads for Zone #1: Main

Window	Type* Pn/SHGC/U/InSh/ExSh/IS	Ornt	Overhang Len	Hgt	Window Area(sqft) Gross	Shaded	Unshaded	HTM Shaded	Unshaded	Load
1	2, Clear, 0.87, None,N,N	NW	7.5ft.	2ft.	4.0	0.0	4.0	29	60	240 Btuh
2	2, Clear, 0.87, None,N,N	NW	7.5ft.	4ft.	9.0	0.0	9.0	29	60	540 Btuh
3	2, Clear, 0.87, None,N,N	NW	7.5ft.	7ft.	10.0	0.0	10.0	29	60	600 Btuh
4	2, Clear, 0.87, None,N,N	SE	7.5ft.	6ft.	30.0	30.0	0.0	29	63	869 Btuh
5	2, Clear, 0.87, None,N,N	SW	0ft.	0ft.	30.0	0.0	30.0	29	63	1876 Btuh
6	2, Clear, 0.87, None,N,N	NW	1.5ft.	6ft.	30.0	0.0	30.0	29	60	1801 Btuh
7	2, Clear, 0.87, None,N,N	NW	1.5ft.	2ft.	4.0	0.0	4.0	29	60	240 Btuh
8	2, Clear, 0.87, None,N,N	NE	0ft.	0ft.	15.0	0.0	15.0	29	60	901 Btuh
9	2, Clear, 0.87, None,N,N	SE	1.5ft.	6ft.	45.0	13.7	31.3	29	63	2354 Btuh
10	2, Clear, 0.87, None,N,N	SW	0ft.	0ft.	15.0	0.0	15.0	29	63	938 Btuh
	Window Total				192 (sqft)					10359 Btuh

Walls	Type	R-Value/U-Value	Area(sqft)	HTM	Load
1	Frame - Wood - Ext	13.0/0.09	1604.0	2.1	3346 Btuh
	Wall Total		1604 (sqft)		3346 Btuh
Doors	Type		Area (sqft)	HTM	Load
1	Insulated - Exterior		10.0	9.8	98 Btuh
2	Insulated - Exterior		40.0	9.8	392 Btuh
	Door Total		50 (sqft)		490 Btuh
Ceilings	Type/Color/Surface	R-Value	Area(sqft)	HTM	Load
1	Vented Attic/DarkShingle	30.0	647.0	1.7	1071 Btuh
	Ceiling Total		647 (sqft)		1071 Btuh
Floors	Type	R-Value	Size	HTM	Load
1	Slab On Grade	0.0	112 (ft(p))	0.0	0 Btuh
	Floor Total		112.0 (sqft)		0 Btuh
			Zone Envelope Subtotal:		15266 Btuh

Infiltration	Type	ACH		Volume(cuft)		CFM=	Load
	SensibleNatural	0.49		9496		77.6	1443 Btuh
Internal gain		Occupants		Btuh/occupant		Appliance	Load
		6	X	230	+	0	1380 Btuh
Duct load	Partially sealed, R6.0, Supply(Attic), Return(Attic)					DGM = 0.00	0.0 Btuh
					Sensible Zone Load		**18090 Btuh**

Manual J Summer Calculations

Residential Load - Component Details (continued)

Spec House
223 NE Gum Swamp Rd
Lake City, FL 32055-

Project Title:
710171North FloridaFramersBrooksSpec

Class 3 Rating
Registration No. 0
Climate: North

10/30/2007

WHOLE HOUSE TOTALS

	Sensible Envelope Load All Zones	**18090 Btuh**
	Sensible Duct Load	0 Btuh
	Total Sensible Zone Loads	**18090 Btuh**
	Sensible ventilation	0 Btuh
	Blower	0 Btuh
Whole House	**Total sensible gain**	**18090 Btuh**
Totals for Cooling	Latent infiltration gain (for 54 gr. humidity difference)	2834 Btuh
	Latent ventilation gain	0 Btuh
	Latent duct gain	0 Btuh
	Latent occupant gain (6 people @ 200 Btuh per person)	1200 Btuh
	Latent other gain	0 Btuh
	Latent total gain	**4034 Btuh**
	TOTAL GAIN	**22124 Btuh**

*Key: Window types (Pn - Number of panes of glass)
(SHGC - Shading coefficient of glass as SHGC numerical value or as clear or tint)
(U - Window U-Factor or 'DEF' for default)
(InSh - Interior shading device: none(N), Blinds(B), Draperies(D) or Roller Shades(R))
(ExSh - Exterior shading device: none(N) or numerical value)
(BS - Insect screen: none(N), Full(F) or Half(H))
(Ornt - compass orientation)

For Florida residences only

Residential Window Diversity

MidSummer

Spec House
223 NE Gum Swamp Rd
Lake City, FL 32055-

Project Title:
710171North FloridaFramersBrooksSpec

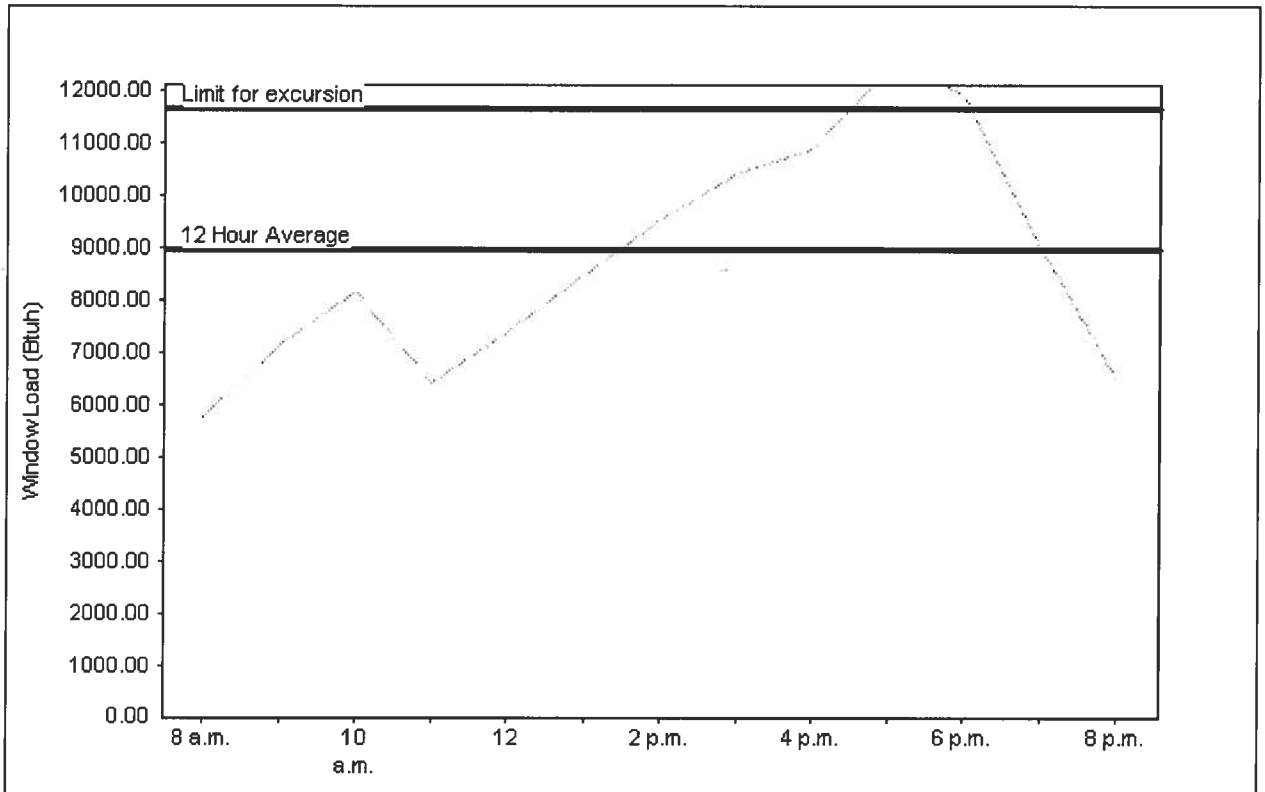
Class 3 Rating
Registration No. 0
Climate: North

10/30/2007

Weather data for: Gainesville - Defaults

Summer design temperature	92 F	Average window load for July	8981 Btuh
Summer setpoint	75 F	Peak window load for July	12512 Btu
Summer temperature difference	17 F	Excusion limit(130% of Ave.)	11675 Btu
Latitude	29 North	Window excursion (July)	837 Btuh

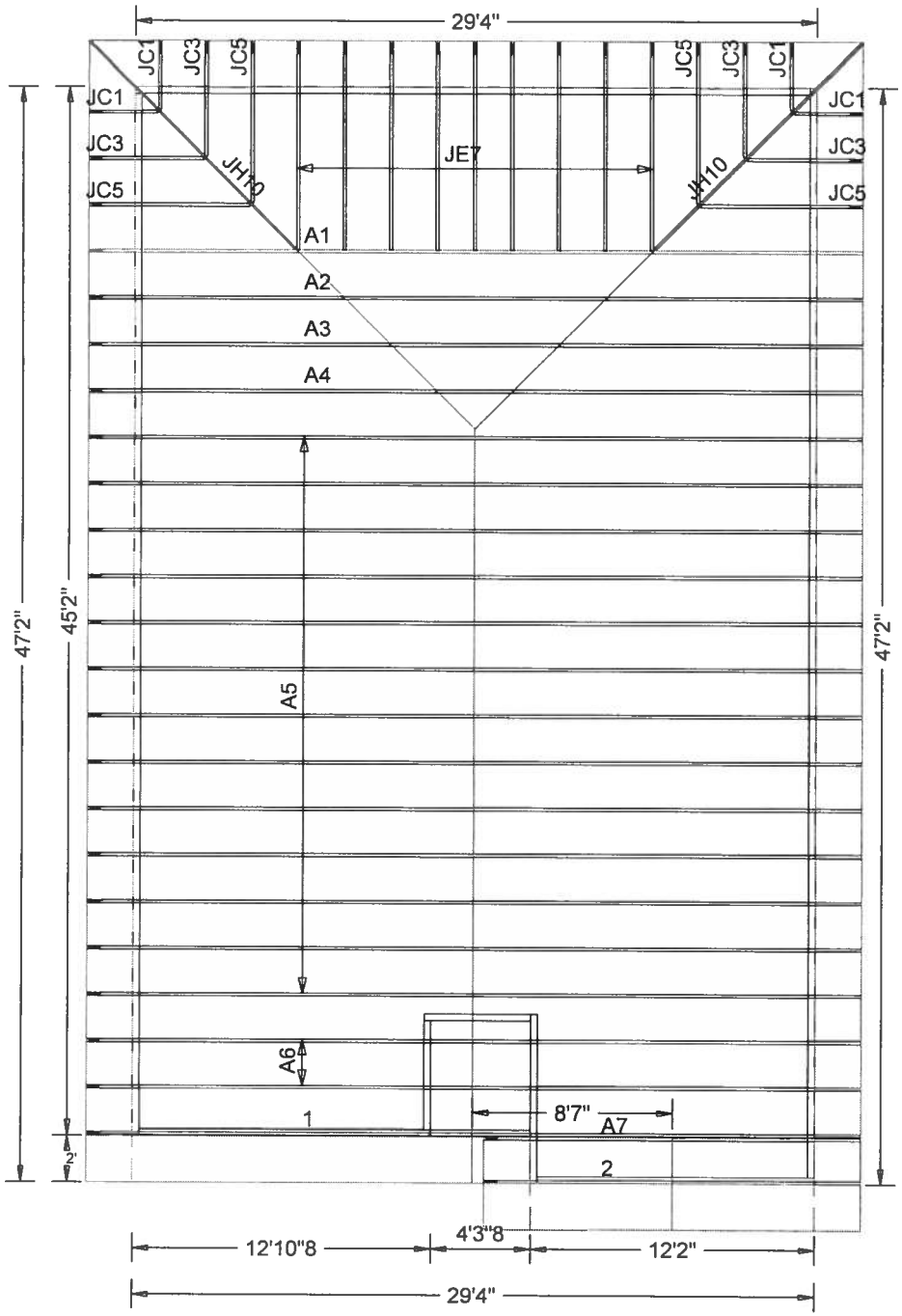
WINDOW Average and Peak Loads



Total July Window Load(Radiation and conduction)

Warning: This application has glass areas that produce relatively large heat gains for part of the day. Variable air volume devices may be required to overcome spikes in solar gain for one or more rooms. A zoned system may be required or some rooms may require zone control.

EnergyGauge® System Sizing for Florida residences only
PREPARED BY:
DATE: 10/30/07



W.B. HOWLAND
Office:(386)362-1235
Fax: (386)362-7124

DATE:10/23/07
ROOF PITCH:6/12
CLG. PITCH:FLAT
OVERHANG:2'
LOADING:40#s PSF
WIND LOAD:110 MPH
EXT. WALLS:2 X 4

ROOF & FLOOR TRUSS QUOTES DO NOT INCLUDE BEAMS, LVLS, AND/OR GLULAMS.

Roof Plane Sheathing Area = 1887 sq. ft
Gable Sheathing Area = 127 sq. ft
Total Sheathing Area = 2013 sq. ft
Fascia Material = 184 linear ft
Ridge Cap Material = 39 linear ft
Hip Ridge Material = 50 linear ft

Job Name: HOLLY
Customer: North Florida Framers
Designer: Lynn Bell

JOB NO:
4996

PAGE NO:
1 OF 1

Product Approval
USER: Public User

FL #	FL1956-R1
Application Type	Revision
Code Version	2004
Application Status	Approved
Comments	
Archived	

Product Manufacturer Address/Phone/Email	TAMKO Building Products, Inc. PO Box 1404 Joplin, MO 64802 (800) 641-4691 ext 2394 fred_oconnor@tamko.com
Authorized Signature	Frederick O'Connor fred_oconnor@tamko.com
Technical Representative Address/Phone/Email	Frederick J. O'Connor PO Box 1404 Joplin, MO 64802 (800) 641-4691 fred_oconnor@tamko.com

Quality Assurance Representative Address/Phone/Email	
Category	Roofing
Subcategory	Asphalt Shingles
Compliance Method	Certification Mark or Listing
Certification Agency	Underwriters Laboratories Inc.

Referenced Standard and Year (of Standard)	**Standard**	**Year**
	ASTM D 3462	2001

Equivalence of Product Standards Certified By	
Product Approval Method	Method 1 Option A
Date Submitted	06/09/2005
Date Validated	06/20/2005
Date Pending FBC Approval	06/25/2005
Date Approved	06/29/2005

Summary of Products

FL #	Model, Number or Name	Description

slopes of 2:12 or greater. Not approved for use in HVHZ.	

Back Next

DCA Administration
Department of Community Affairs
Florida Building Code Online
Codes and Standards
2555 Shumard Oak Boulevard
Tallahassee, Florida 32399-2100
(850) 487-1824, Suncom 277-1824, Fax (850) 414-8436

Product Approval Accepts:

4

Underwriters Laboratories Inc.®

Northbrook Division
333 Pfingsten Road
Northbrook, IL 60062-2096 USA
www.ul.com
tel 1 847 272 8800

June 17, 2005

Tamko Roofing Products
Ms. Kerri Eden
P.O. Box 1404
220 W. 4th Street
Joplin, MO 64802-1404

Our Reference: R2919

This is to confirm that "Elite Glass-Seal AR", "Heritage 30 AR", "Heritage 50 AR", "Glass-Seal AR" manufactured at Tuscaloosa, AL and "Elite Glass-Seal AR", "Heritage 30 AR", "Heritage XL AR", "Heritage 50 AR" manufactured at Frederick, MD and "Heritage 30 AR", "Heritage XL AR", and "Heritage 50 AR" manufactured in Dallas, TX are UL Listed asphalt glass mat shingles and have been evaluated in accordance with ANSI/UL 790, Class A (ASTM E108), ASTM D3462, ASTM D3161 or UL 997 modified to 110 mph when secured with four nails.

Let me know if you have any further questions.

Very truly yours,

Alpesh Patel (Ext. 42522)
Engineer Project
Fire Protection Division

Reviewed by,

Randall K. Laymon (Ext. 42687)
Engineer Sr Staff
Fire Protection Division

4

TAMKO BUILDING PRODUCTS

Application Instructions for

• HERITAGE® VINTAGE™ AR – Phillipsburg, KS
LAMINATED ASPHALT SHINGLES

THESE ARE THE MANUFACTURER'S APPLICATION INSTRUCTIONS FOR THE ROOFING CONDITIONS DESCRIBED. TAMKO BUILDING PRODUCTS, INC. ASSUMES NO RESPONSIBILITY FOR LEAKS OR OTHER ROOFING DEFECTS RESULTING FROM FAILURE TO FOLLOW THE MANUFACTURER'S INSTRUCTIONS.

THIS PRODUCT IS COVERED BY A LIMITED WARRANTY, THE TERMS OF WHICH ARE PRINTED ON THE WRAPPER.

IN COLD WEATHER (BELOW 40°F), CARE MUST BE TAKEN TO AVOID DAMAGE TO THE EDGES AND CORNERS OF THE SHINGLES.

IMPORTANT: It is not necessary to remove the plastic strip from the back of the shingles.

1. ROOF DECK

These shingles are for application to roof decks capable of receiving and retaining fasteners, and to inclines of not less than 2 in. per foot. For roofs having pitches 2 in. per foot to less than 4 in. per foot, refer to special instructions titled "Low Slope Application". Shingles must be applied properly. TAMKO assumes no responsibility for leaks or defects resulting from improper application, or failure to properly prepare the surface to be roofed over.

NEW ROOF DECK CONSTRUCTION: Roof deck must be smooth, dry and free from warped surfaces. It is recommended that metal drip edges be installed at eaves and rakes.

PLYWOOD: All plywood shall be exterior grade as defined by the American Plywood Association. Plywood shall be a minimum of 3/8 in. thickness and applied in accordance with the recommendations of the American Plywood Association.

SHEATHING BOARDS: Boards shall be well-seasoned tongue-and-groove boards and not over 6 in. nominal width. Boards shall be a 1 in. nominal minimum thickness. Boards shall be properly spaced and nailed.

TAMKO does not recommend re-roofing over existing roof.

2. VENTILATION

Inadequate ventilation of attic spaces can cause accumulation of moisture in winter months and a build up of heat in the summer. These conditions can lead to:

1. Vapor Condensation
2. Buckling of shingles due to deck movement.
3. Rotting of wood members.
4. Premature failure of roof.

To insure adequate ventilation and circulation of air, place louvers of sufficient size high in the gable ends and/or install continuous ridge and soffit vents. FHA minimum property standards require one square foot of net free ventilation area to each 150 square feet of space to be vented, or one square foot per 300 square feet if a vapor barrier is installed on the warm side of the ceiling or if at least one half of the ventilation is provided near the ridge. If the ventilation openings are screened, the total area should be doubled.

IT IS PARTICULARLY IMPORTANT TO PROVIDE ADEQUATE VENTILATION.

3. FASTENERS

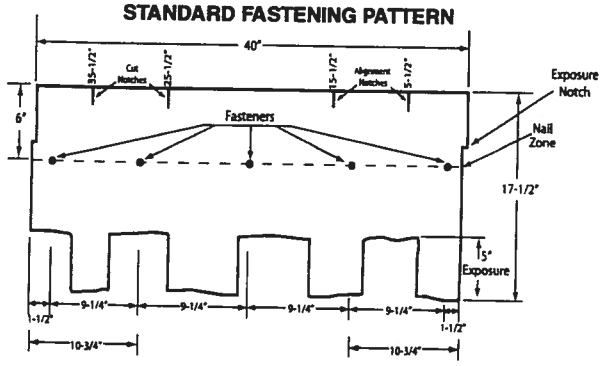
WIND CAUTION: Extreme wind velocities can damage these shingles after application when proper sealing of the shingles does not occur. This can especially be a problem if the shingles are applied in cooler months or in areas on the roof that do not receive direct sunlight. These conditions may impede the sealing of the adhesive strips on the shingles. The inability to seal down may be compounded by prolonged cold weather conditions and/or blowing dust. In these situations, hand sealing of the shingles is recommended. Shingles must also be fastened according to the fastening instructions described below.

Correct placement of the fasteners is critical to the performance of the shingle. If the fasteners are not placed as shown in the diagram and described below, this will result in the termination of TAMKO's liabilities under the limited warranty. TAMKO will not be responsible for damage to shingles caused by winds in excess of the applicable miles per hour as stated in the limited warranty. See limited warranty for details.

FASTENING PATTERNS: Fasteners must be placed 6 in. from the top edge of the shingle located horizontally as follows:

1) Standard Fastening Pattern. (For use on decks with slopes 2 in. per foot to 21 in. per foot.) One fastener 1-1/2 in. back from each end, one 10-3/4 in. back from each end and one 20 in. from one end of the shingle for a total of 5 fasteners. (See standard fastening pattern illustrated below).

STANDARD FASTENING PATTERN



2) Mansard or Steep Slope Fastening Pattern. (For use on decks with slopes greater than 21 in. per foot.) Use standard nailing instructions with four additional nails placed 6 in. from the butt edge of the shingle making certain nails are covered by the next (successive) course of shingles.

(Continued)

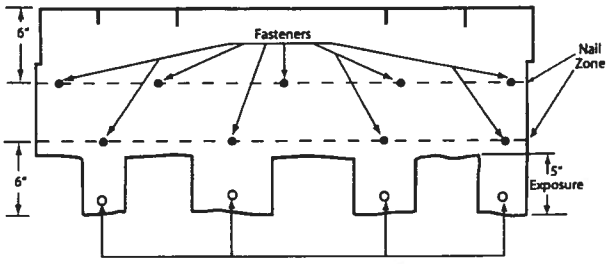
TAMKO BUILDING PRODUCTS

(CONTINUED from Pg. 1)

• HERITAGE® VINTAGE™ AR – Phillipsburg, KS
LAMINATED ASPHALT SHINGLES

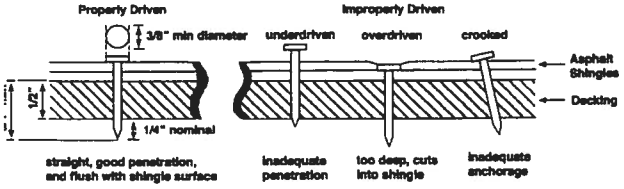
Each shingle tab must be sealed underneath with quick setting asphalt adhesive cement immediately upon installation. Spots of cement must be equivalent in size to a $.25 piece and applied to shingles with a 5 in. exposure, use 9 fasteners per shingle.

MANSARD FASTENING PATTERN



Apply under each tab 1" diameter asphalt adhesive cement.

NAILS: TAMKO recommends the use of nails as the preferred method of application. Standard type roofing nails should be used. Nail shanks should be made of minimum 12 gauge wire, and a minimum head diameter of 3/8 in. Nails should be long enough to penetrate 3/4 in. into the roof deck. Where the deck is less than 3/4 in. thick, the nails should be long enough to penetrate completely through plywood decking and extend at least 1/8 in. through the roof deck. Drive nail head flush with the shingle surface.



4. UNDERLAYMENT

UNDERLAYMENT: An underlayment consisting of asphalt saturated felt must be applied over the entire deck before the installation of TAMKO shingles. Failure to add underlayment can cause premature failure of the shingles and leaks which are not covered by TAMKO's limited warranty. Apply the felt when the deck is dry. On roof decks 4 in. per foot and greater apply the felt parallel to the eaves lapping each course of the felt over the lower course at least 2 in. Where ends join, lap the felt 4 in. If left exposed, the underlayment felt may be adversely affected by moisture and weathering. Laying of the underlayment and the shingle application must be done together.

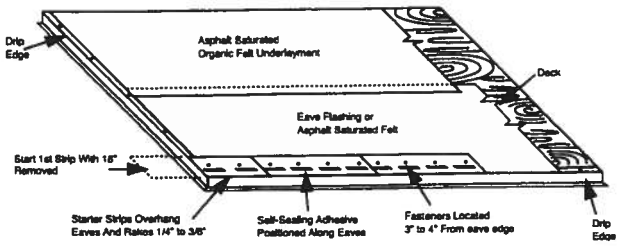
Products which are acceptable for use as underlayment are:

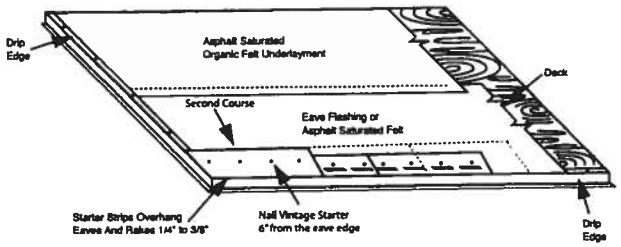
- TAMKO No. 15 Asphalt Saturated Organic Felt
- A non-perforated asphalt saturated organic felt which meets ASTM: D226, Type I or ASTM D4869, Type I
- Any TAMKO non-perforated asphalt saturated organic felt
- TAMKO TW Metal and Tile Underlayment, TW Underlayment and Moisture Guard Plus® (additional ventilation maybe required. Contact TAMKO's technical services department for more information)

In areas where ice builds up along the eaves or a back-up of water from frozen or clogged gutters is a potential problem, TAMKO's Moisture Guard Plus® waterproofing underlayment (or any specialty eaves flashing product) may be applied to eaves, rakes, ridges, valleys, around chimneys, skylights or dormers to help prevent water damage. Contact TAMKO's Technical Services Department for more information. TAMKO does not recommend the use of any substitute products as shingle underlayment.

5. APPLICATION INSTRUCTIONS

STARTER COURSE: Two starter course layers must be applied prior to application of Heritage Vintage AR Shingles.
The first starter course may consist of TAMKO Shingle Starter, three tab self-sealing type shingles or a 9 inch wide strip of mineral surface roll roofing. If three tab self-sealing shingles are used, remove the exposed tab portion and install with the factory applied adhesive adjacent to the eaves. If using three tab self-sealing shingles or shingle starter, remove 18 in. from first shingle to offset the end joints of the Vintage Starter. Attach the first starter course with approved fasteners along a line parallel to and 3 in. to 4 in. above the eave edge. The starter course should overhang both the eave and rake edge 1/4 in. to 3/8 in. Over the first starter course, install Heritage Vintage Starter AR and begin at the left rake edge with a full size shingle and continue across the roof nailing the Heritage Vintage Starter AR along a line parallel to and 6 in. from the eave edge.





Note: Do not allow Vintage Starter AR joints to be visible between shingle tabs. Cutting of the starter may be required.

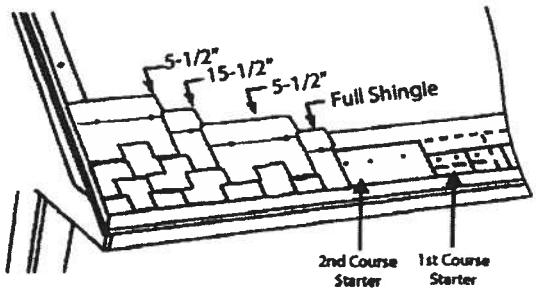
HERITAGE VINTAGE STARTER AR
12 1/2" x 36" 20 PIECES PER BUNDLE
60 LINEAL FT. PER BUNDLE

(Continued)

TAMKO BUILDING PRODUCTS

• HERITAGE® VINTAGE™ AR – Phillipsburg, KS
LAMINATED ASPHALT SHINGLES

SHINGLE APPLICATION: Start the first course at the left rake edge with a full size shingle and overhang the rake edge 1/4 in. to 3/8 in.. To begin the second course, align the right side of the shingle with the 5-1/2 in. alignment notch on the first course shingle making sure to align the exposure notch. (See shingle illustration on next page) Cut the appropriate amount from the rake edge so the overhang is 1/4" to 3/8". For the third course, align the shingle with the 15-1/2 in. alignment notch at the top of the second course shingle, again being sure to align the exposure notch. Cut the appropriate amount from the rake edge. To begin the fourth course, align the shingle with the 5-1/2 in. alignment notch from the third course shingle while aligning the exposure notch. Cut the appropriate amount from the rake edge. Continue up the rake in as many rows as necessary using the same formula as outlined above. Cut pieces may be used to complete courses at the right side. As you work across the roof, install full size shingles taking care to align the exposure notches. Shingle joints should be no closer than 4 in.



6. LOW SLOPE APPLICATION

On pitches 2 in. per foot to 4 in. per foot cover the deck with two layers of underlayment. Begin by applying the underlayment in a 19 in. wide strip along the eaves and overhanging the drip edge by 1/4 to 3/4 in. Place a full 36 in. wide sheet over the 19 in. wide starter piece, completely overlapping it. All succeeding courses will be positioned to overlap the preceding course by 19 in. If winter temperatures average 25°F or less, thoroughly cement the laps of the entire underlayment to each other with plastic cement from eaves and rakes to a point of a least 24 in. inside the interior wall line of the building. As an alternative, TAMKO's Moisture Guard Plus self-adhering waterproofing underlayment may be used in lieu of the cemented felts.

7. VALLEY APPLICATION

TAMKO recommends an open valley construction with Heritage Vintage AR shingles.

To begin, center a sheet of TAMKO Moisture Guard Plus, TW Underlayment or TW Metal & Tile Underlayment in the valley.

After the underlayment has been secured, install the recommended corrosion resistant metal (26 gauge galvanized metal or an equivalent) in the valley. Secure the valley metal to the roof deck. Overlaps should be 12" and cemented.

Following valley metal application; a 9" to 12" wide strip of TAMKO Moisture Guard Plus, TW Underlayment or TW Metal & Tile Underlayment should be applied along the edges of the metal valley flashing (max. 6" onto metal valley flashing) and on top of the valley underlayment. The valley will be completed with shingle application.

SHINGLE APPLICATION INSTRUCTIONS (OPEN VALLEY)

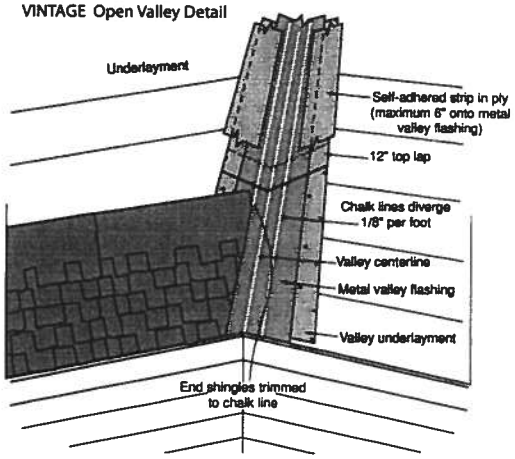
- Snap two chalk lines, one on each side of the valley centerline over the full length of the valley flashing. Locate the upper ends of the chalk lines 3" to either side of the valley centerline.
- The lower end should diverge from each other by 1/8" per foot. Thus, for an 8' long valley, the chalk lines should be 7" either side of the centerline at the eaves and for a 16' valley 8".

As shingles are applied toward the valley, trim the last shingle in each course to fit on the chalk line. Never use a shingle trimmed to less than 12" in length to finish a course running into a valley. If necessary, trim the adjacent shingle in the course to allow a longer portion to be used.

- Clip 1" from the upper corner of each shingle on a 45° angle to direct water into the valley and prevent it from penetrating between the courses.

- Form a tight seal by cementing the shingle to the valley lining with a 3" width of asphalt plastic cement (conforming to ASTM D 4586).

VINTAGE Open Valley Detail



• **CAUTION:**
Adhesive must be applied in smooth, thin, even layers.

Excessive use of adhesive will cause blistering to this product.

TAMKO assumes no responsibility for blistering.

(Continued)

TAMKO BUILDING PRODUCTS

(CONTINUED from Pg. 3)

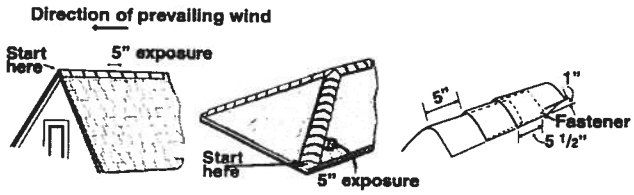
• HERITAGE® VINTAGE™ AR – Phillipsburg, KS
LAMINATED ASPHALT SHINGLES

8. HIP AND RIDGE FASTENING DETAIL

Apply the shingles with a 5 in. exposure beginning at the bottom of the hip or from the end of the ridge opposite the direction of the prevailing winds. Secure each shingle with one fastener on each side, 5-1/2 in. back from the exposed end and 1 in. up from the edge. TAMKO recommends the use of TAMKO Heritage Vintage Hip & Ridge shingle products.

Fasteners should be 1/4 in. longer than the ones used for shingles.

IMPORTANT: PRIOR TO INSTALLATION, CARE NEEDS TO BE TAKEN TO PREVENT DAMAGE WHICH CAN OCCUR WHILE BENDING SHINGLE IN COLD WEATHER.



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FLORIDA DEPARTMENT OF Community Affairs

Community Affairs

Product Approval
USER: Public User

FL #	FL5108
Application Type	New
Code Version	2004
Application Status	Approved
Comments	
Archived	
Product Manufacturer	MI Windows and Doors
Address/Phone/Email	650 W Market St Gratz, PA 17030 (717) 365-3300 ext 2101 surich@miwd.com
Authorized Signature	Steven Urich surich@miwd.com
Technical Representative	
Address/Phone/Email	
Quality Assurance Representative	
Address/Phone/Email	

W) in door

A·L·I
(Validator / Operations Administrator)

AAMA
CERTIFICATION PROGRAM

AUTHORIZATION FOR PRODUCT CERTIFICATION

MI Windows & Doors, Inc.
P.O. Box 370
Gratz, PA 17030-0370

Attn: Bill Emley

The product described below is hereby approved for listing in the next issue of the AAMA Certified Products Directory. The approval is based on successful completion of tests, and the reporting to the Administrator of the results of tests, accompanied by related drawings, by an AAMA Accredited Laboratory.

1. The listing below will be added to the next published AAMA Certified Products Directory.

SPECIFICATION	RECORD OF PRODUCT TESTED				LABEL ORDER NO.
AAMA/NWWDA 101/I.S. 2-97 H-R55*-36x62					
COMPANY AND PLANT LOCATION	CODE NO.	SERIES MODEL & PRODUCT DESCRIPTION	MAXIMUM SIZE TESTED		
			FRAME	SASH	
MI Windows & Doors, Inc. (Oldsmar, FL) MI Windows & Doors, Inc. (Smyrna, TN)	MTL-8 MTL-9	185/3185 SH (Fin) (AL)(O/O)(OG) (ASTM)	3'0" x 5'2"	2'10" x 4'7"	By Request

2. This Certification will expire May 14, 2008 and requires validation until then by continued listing in the current AAMA Certified Products Directory.

3. Product Tested and Reported by: Architectural Testing, Inc.

   Report No.: 01-50360.02

   Date of Report: June 14, 2004

NOTE: PLEASE REVIEW, AND ADVISE ALI IMMEDIATELY IF DATA, AS SHOWN, NEEDS CORRECTION.

Date: August 1, 2005

Validated for Certification:

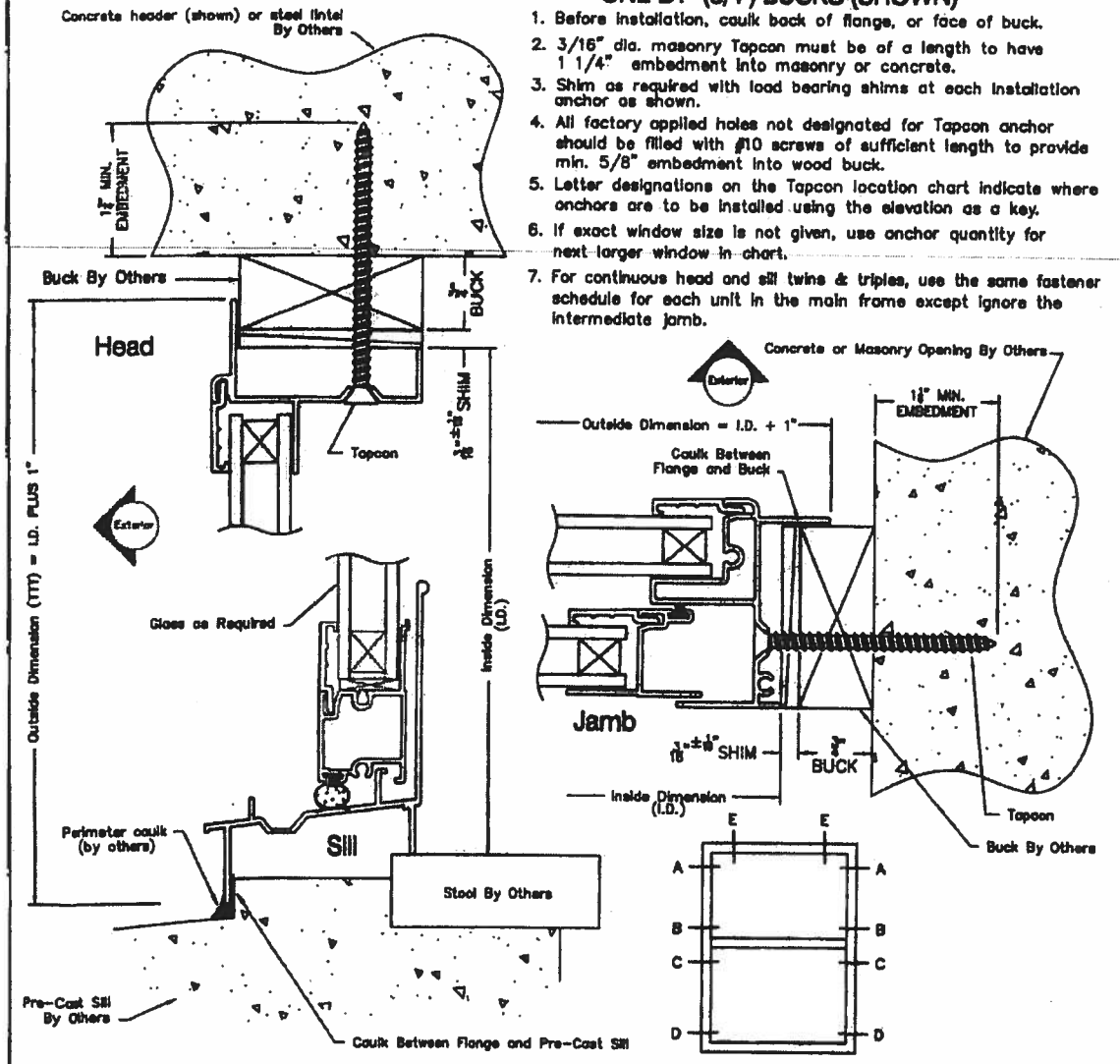
Associated Laboratories, Inc.

Authorized for Certification:

American Architectural Manufacturers Association

cc: AAMA
JGS/df
ACP-04 (Rev. 5/03)

"ONE BY" (3/4") BUCKS (SHOWN)



1. Before installation, caulk back of flange, or face of buck.
2. 3/16" dia. masonry Tapcon must be of a length to have 1 1/4" embedment into masonry or concrete.
3. Shim as required with load bearing shims at each installation anchor as shown.
4. All factory applied holes not designated for Tapcon anchor should be filled with #10 screws of sufficient length to provide min. 5/8" embedment into wood buck.
5. Letter designations on the Tapcon location chart indicate where anchors are to be installed using the elevation as a key.
6. If exact window size is not given, use anchor quantity for next larger window in chart.
7. For continuous head and sill twins & triples, use the same fastener schedule for each unit in the main frame except ignore the intermediate jamb.

"TWO BY" (1 1/2") BUCKS

"TWO BY" bucks are engineered and fastened to the masonry opening BY OTHERS.

Follow the same instructions and fastener requirements for "one by" bucks except use #10 screws of sufficient length for 1 1/4" minimum embedment into buck.

MI HOME PRODUCTS
BetterBilt / Capitol

* TAPCON LOCATION CHART

CODE SIZE	WINDOW ID SIZE	FASTENER LOCATIONS		
		UP TO DP35	DP36.1 TO DP55	DP55.1 TO DP69.3
12	18 1/8 x 25	A, D & E	A, D & E	A, D & E
13	18 1/8 x 37 3/8	A, D & E	A, D & E	A, D & E
14	18 1/8 x 49 5/8	A, D & E	A, D & E	A, D & E
15	18 1/8 x 62	A, D & E	A, D & E	A, D & E
16	18 1/8 x 71	A, D & E	A, D & E	A, D & E
17	18 1/8 x 83	A, D & E	A, D & E	A, D & E
1/2 32	25 1/2 x 25	A, D & E	A, D & E	A, D & E
1/2 33	25 1/2 x 37 3/8	A, D & E	A, D & E	A, D & E
1/2 34	25 1/2 x 49 5/8	A, D & E	A, D & E	A, D & E
1/2 35	25 1/2 x 62	A, D & E	A, D & E	A, D & E
1/2 36	25 1/2 x 71	A, D & E	A, D & E	A, D & E
1/2 37	25 1/2 x 83	A, D & E	A, D & E	A, C, D & E
22	36 x 25	A, D & E	A, D & E	A, D & E
23	36 x 37 3/8	A, D & E	A, D & E	A, D & E
24	36 x 49 5/8	A, D & E	A, D & E	A, D & E
25	36 x 62	A, D & E	A, D & E	A, D & E
26	36 x 71	A, D & E	A, D & E	A, C, D & E
27	36 x 83	A, D & E	A, C, D & E	A, C, D & E
32	52 1/8 x 25	A, D & E	A, D & E	A, D & E
33	52 1/8 x 37 3/8	A, D & E	A, D & E	A, D & E
34	52 1/8 x 49 5/8	A, D & E	A, D & E	A, D & E
35	52 1/8 x 62	A, D & E	A, C, D & E	A, C, D & E
36	52 1/8 x 71	A, D & E	A, C, D & E	A, B, C, D & E
37	52 1/8 x 83	A, D & E	A, C, D & E	A, B, C, D & E
2040	23 3/8 x 47 5/8	A, D & E	A, D & E	A, D & E
2050	23 3/8 x 59 5/8	A, D & E	A, D & E	A, D & E
2060	23 3/8 x 71 5/8	A, D & E	A, D & E	A, D & E
2070	23 3/8 x 83 5/8	A, D & E	A, D & E	A, D & E
3040	35 3/8 x 47 5/8	A, D & E	A, D & E	A, D & E
3050	35 3/8 x 59 5/8	A, D & E	A, D & E	A, D & E
3060	35 3/8 x 71 5/8	A, D & E	A, D & E	A, C, D & E
3070	35 3/8 x 83 5/8	A, D & E	A, C, D & E	A, C, D & E
4040	47 3/8 x 47 5/8	A, D & E	A, D & E	A, D & E
4050	47 3/8 x 59 5/8	A, D & E	A, D & E	A, C, D & E
4060	47 3/8 x 71 5/8	A, D & E	A, C, D & E	A, C, D & E
4070	47 3/8 x 83 5/8	A, D & E	A, C, D & E	A, B, C, D & E
4450	51 3/8 x 59 5/8	A, D & E	A, D & E	A, C, D & E
4460	51 3/8 x 71 5/8	A, D & E	A, C, D & E	A, B, C, D & E
4470	51 3/8 x 83 5/8	A, D & E	A, C, D & E	A, B, C, D & E

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

SYM	REVISION	DATE	BY
A	REMOVED SILL INSTALLATION ANCHOR SCREWS	7/15/04	SS

STATE OF FLORIDA
Certificate of Authorization
Winter Park, Florida 32789

MI HOME PRODUCTS
GRATZ, PA

TITLE: 185/3185 SINGLE HUNG FLANGE FRAME INSTALLATION DETAILS & FASTENER SCHEDULE

PREPARED BY: PTC Product Technology Corporation Phone 407.622.6334 Fax 407.622.6336

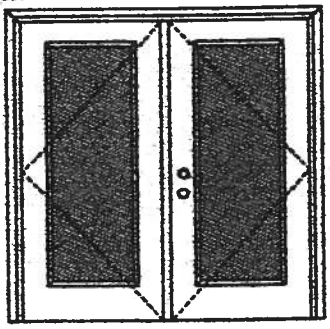
DRN: DRL | DATE: 06/15/04
SCALE: N.T.S. | DWG. NO.: MIHP0059
REV. LETTER: A | SHEET: 1 OF 1

XX
Glazed Outswing Unit

COP-WL-JH4162-02

WOOD-EDGE STEEL DOORS

APPROVED ARRANGEMENT:



Double Door
Maximum unit size = 6'0" x 6'8"

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

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

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

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

MINIMUM ASSEMBLY DETAIL:

Compliance requires that minimum assembly details have been followed – see MAD-WL-MA0012-02 and MAD-WL-MA0041-02.

MINIMUM INSTALLATION DETAIL:

Compliance requires that minimum installation details have been followed – see MID-WL-MA0002-02.

APPROVED DOOR STYLES:

1/4 GLASS:


100 Series


133, 135 Series


136 Series


600 Series


822 Series

1/2 GLASS:


105 Series*

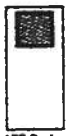

106, 160 Series*


129 Series*


200 Series*


12 RA, 23 RA, 24 RA Series*


107 Series*


108 Series


304 Series

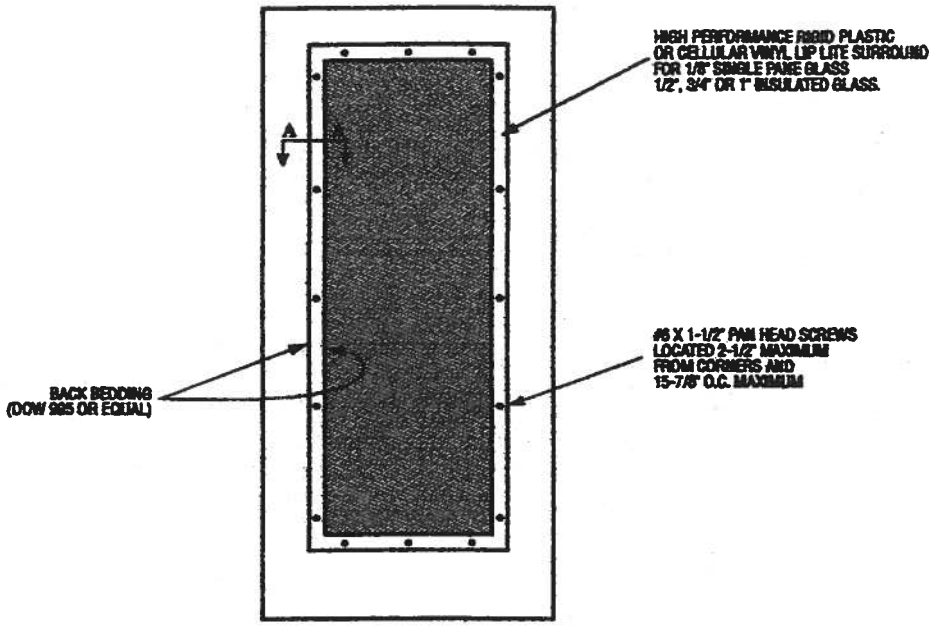
*This glass kit may also be used in the following door styles: 6-panel; 5-panel with scroll; Eyebrow 6-panel; Eyebrow 5-panel with scroll.

Johnson EntrySystems

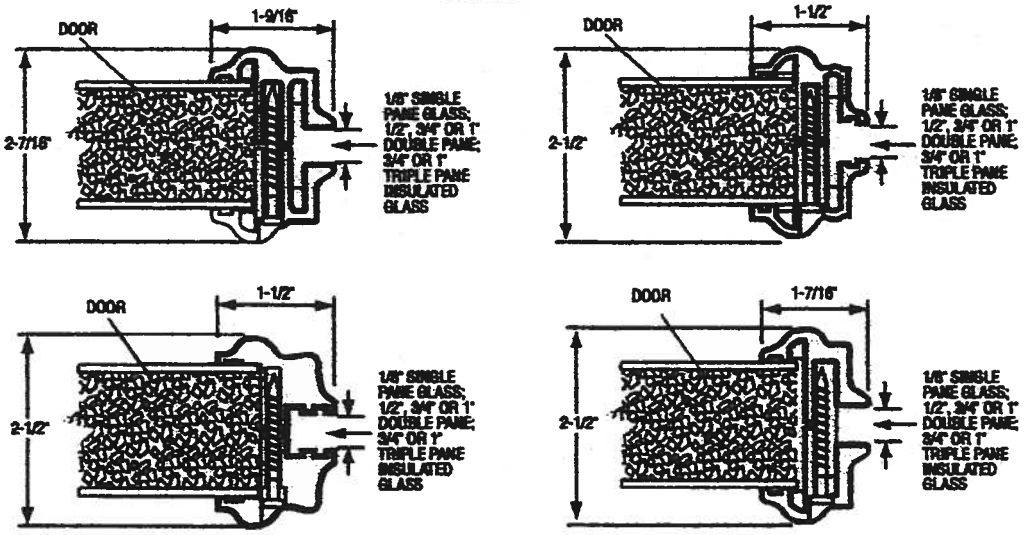
March 29, 2002
Our continuing program of product improvement makes specifications, design and product detail subject to change without notice.

PREMDOR Collection Premium Quality Doors
Exclusively from Masonite®
Masonite International Corporation

GLASS INSERT IN DOOR OR SIDELITE PANEL



SECTION A-A
TYPICAL RIGID PLASTIC LIP LITE SURROUND

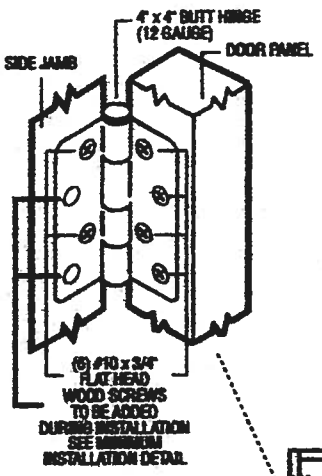


XX
Unit

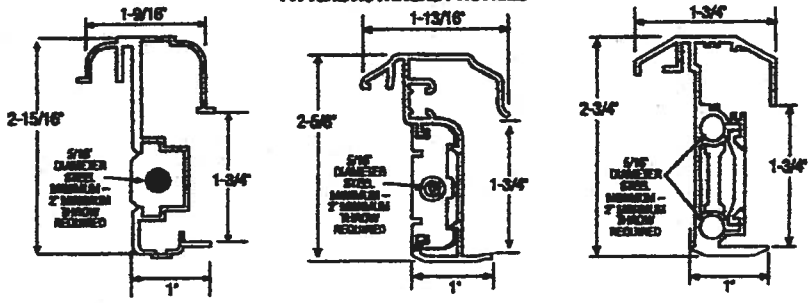
MAD-WL-MA8012-02

OUTSWING UNITS WITH DOUBLE DOOR

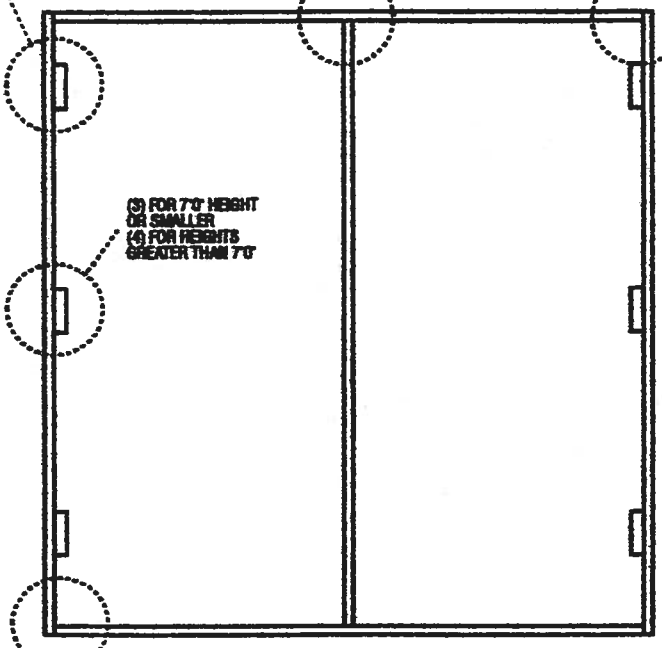
TYPICAL HINGE ATTACHMENT



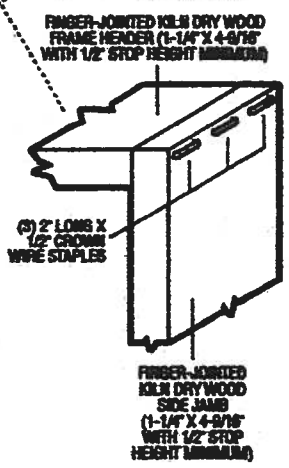
TYPICAL ASTRAGAL PROFILES



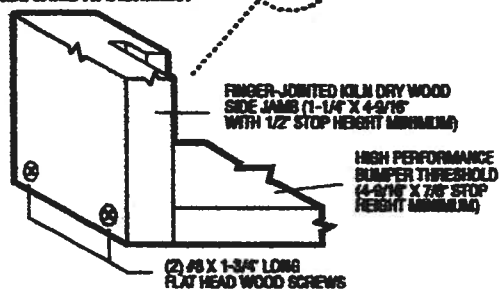
ALUMINUM EXTRUDED ASTRAGAL (0.06" MINIMUM WALL THICKNESS) WITH ADDED REINFORCEMENT INSERTS AT TOP EXTENSION BOLT, BOTTOM EXTENSION BOLT AND CYLINDERICAL/DEADBOLT LATCHING LOCATIONS. ATTACH WITH #8 X 1" PAN HEAD SCREWS – LOCATE 1" FROM EACH END MINIMUM AND 22" O.C. MAXIMUM.



TYPICAL HEADER & SIDE JAMB ATTACHMENT



TYPICAL THRESHOLD & SIDE JAMB ATTACHMENT



March 29, 2002
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XX
Glazed Outswing Unit

COP-WL-JH4162-02

WOOD-EDGE STEEL DOORS

APPROVED DOOR STYLES:

3/4 GLASS:


404 Series


416 Series


450 Series

FULL GLASS:


109 Series


114, 120, 122 Series


152 Series


149 Series


300 Series

CERTIFIED TEST REPORTS:

NCTL 210-1897-7, 8, 9, 10, 11, 12; NCTL 210-1884-5, 6, 7, 8; NCTL 210-2178-1, 2, 3

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

Unit Tested in Accordance with Miami-Dade BCCO PA202.

Evaluation report NCTL-210-2794-1

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

Frame constructed of wood with an extruded aluminum bumper threshold.

PRODUCT COMPLIANCE LABELING:

TESTED IN
ACCORDANCE WITH
MIAMI-DADE BCCO PA202

COMPANY NAME
CITY, STATE

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

Kurt L Balthy

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

Johnson EntrySystems

March 29, 2002
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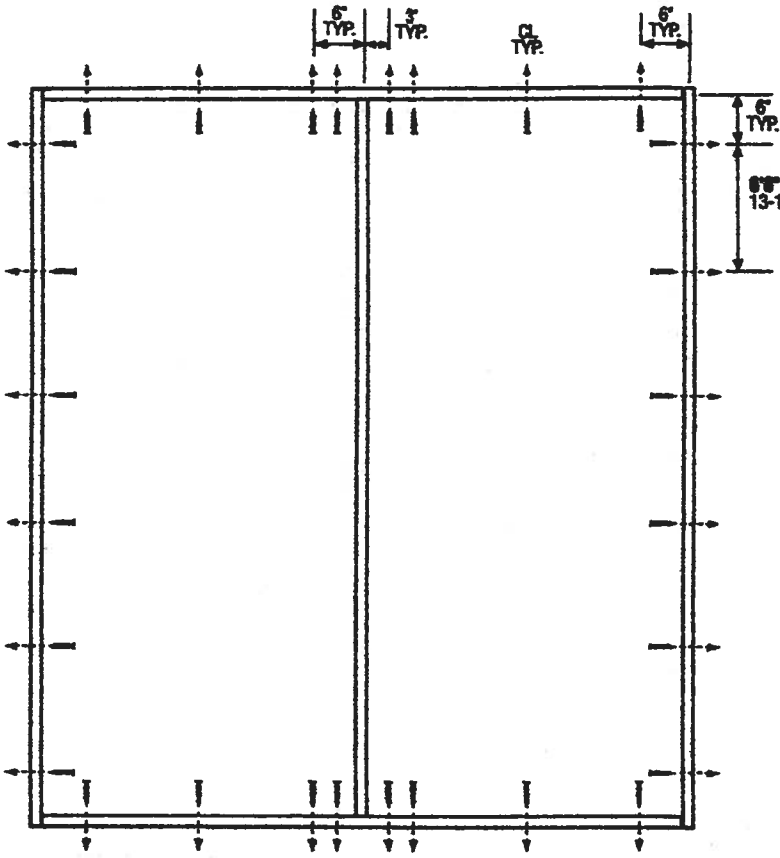
PREMDOR Collection Premium Quality Doors

Exclusively from Masonite®
Masonite International Corporation

XX
Unit

MID-WL-MA0002-02

DOUBLE DOOR



Minimum Fastener Count

- 6 per vertical framing member
- 8 per horizontal framing member

Hinge and strike plates require two 2-1/2" long screws per location.

Latching Hardware:

- Compliance requires that GRADE 2 or better (ANSI/BHMA A156.2) cylinderical and deadlock hardware be installed.

Notes:

1. Anchor calculations have been carried out with the lowest (least) fastener rating from the different fasteners being considered for use. Fasteners analyzed for this unit include #8 and #10 wood screws or 3/16" Tapcons.
2. The wood screw single shear design values come from Table 11.3A of ANSI/AF & PA NDS for southern pine lumber with a side member thickness of 1-1/4" and achievement of minimum embedment. The 3/16" Tapcon single shear design values come from the ITW and ELCO Dade Country approvals respectively, each with minimum 1-1/4" embedment.
3. Wood bucks by others, must be anchored properly to transfer loads to the structure.

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

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

JOB NO.: 07-601
DATE TESTED: 11/29/07

REPORT OF IN-PLACE DENSITY TEST

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

PROJECT: Holly Residence Permit # 26431 OK WR

CLIENT: Innovative Home Builders

GENERAL CONTRACTOR: SAC EARTHWORK CONTRACTOR: SAC

SOIL USE (SEE NOTE): 7 / footing SPECIFICATION REQUIREMENTS: 95%

TECHNICIAN: C. Day

MODIFIED (ASTM D-1557): X X X STANDARD (ASTM D-698): _____

TEST NO.	TEST LOCATION	TEST: DEPTH / ELEV. / LIFT	PROCTOR NO.	WET DENS. LBS.CU.FT.	DRY DENS. LBS.CU.FT.	MOIST PERCENT	% MAX. DENS.
1	North footing Approximate Center	12"	X	113.0	99.4	13.7	95%
2	East footing Approximate Center	12"	X	121.1	105.1	15.2	100
3	South end of pad Approximate center 12' North	12"	X	112.5	107.4	4.7	102
4	North end of pad Approximate Center 10' South	12"	X	113.1	107.5	5.2	102
5	West footing Approx. Center	12"	X	114.1	101.2	12.8	96

REMARKS: _____

PROCTOR NO.	SOIL DESCRIPTION	PROCTOR VALUE	OPT. MOIST.
X	Brian Timmerman Pit Tan Sand	105.2	12.4

NOTE: 1. Building Fill 2. Trench Backfill 3. Base Course 4. Subbase/Stabilized Subgrade 5. Embankment 6. Subgrade/Natural Soil 7. Other