Columbia County Building Permit Application

For Office Use Only Application # 6709-80 Date R	
Application Approved by - Zoning Official Blace Date	
Flood Zone Development Permit NA Zoning	g RSF · 2 Land Use Plan Map Category Low Dev.
Comments Fixit Floor I St char Rl.	
□ NØC □ EH Ø Deed or PA □ Site Plan □ Sta	ate Road Info Development Permit
	Fax 752-22 82
Name Authorized Person Signing Permit Linda or Ma	2411C1COG2 Phone
Address 387 Sw Kemp ct (alle City 7	16181
Owners Name Buby McNeill+Nan McN	Phone 1)201
911 Address 813 AW Country Carke D	1511 50 10
Contractors Name Blake Lunde	Phone <u>754-5810</u>
Address 872 Sw Jaguar Dr Lake City t	-232023
Fee Simple Owner Name & Address NH	
Bonding Co. Name & Address No. 100500049	m-WDs of war
Architect/Eligineer Hairie & Address	Mark Disosway
Mortgage Lenders Name & Address First Federal	
Circle the correct power company -FL Fower & Light - Circle	ay Elec Suwannee Valley Elec Progressive Energy
Property ID Number 22-35-16-0267-108	_ Estimated Cost of Construction
Subdivision Name Country Lake in woodbox	
Driving Directions Huy go West, Lon La	
Lake Drive, Ron Country Lake	Drive 13rd lot down on L
	Number of Existing Dwellings on Property
Total Acreage 10 Lot Size 00 Do you need a C	livert Permit or Culvert Waiver or Have an Existing Drive
Actual Distance of Structure from Property Lines - Front	Side 16.5 Side 16.5 Rear 92
Total Building Height Number of Stories	Heated Floor Area 2879 Roof Pitch 10-12
Application is hereby made to obtain a permit to do work and	
Installation has commenced prior to the issuance of a permit	
all laws regulating construction in this jurisdiction.	Sermotion in accounts and all work will be done in
OWNERS AFFIDAVIT: I hereby certify that all the foregoing in compliance with all applicable laws and regulating constructions.	
WARNING TO OWNER: YOUR FAILURE TO RECORD A NOTICE	CE OF COMMENCHENT WAY RESULT IN YOU PAYING
TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. IF YOU I LENDER OR ATTORNEY BEFORE RECORDING YOUR NOTIC	INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR
LENDER OR ATTORNET BEFORE RECORDING TOOK NOTIC	E OF COMMENSACION
	1881 PC
Owner Builder or Authorized Person by Notarized Letter	Contractor Signature Contractors License Number CBC 1253408
STATE OF FLORIDA	Competency Card Number 1/4
COUNTY OF COLUMBIA	NOTARY STAMP/SEAL
Sworn to (or affirmed) and subscribed before me this /3th day of Quauxt 2007.	Mars Laborer
	NORAL TERRY
Personally known or Produced Identification	Notary Signature (FOUTING CONTINUE CONT

LINDA RODER

nst. Number: 2007 L2018680 Book: 1128 Page: 1356 Date: 8/17/2007 Time: 8:35:53 AM

07.299

THIS INSTRUMENT WAS PREPARED BY: FIRST FEDERAL SAVINGS BANK OF FLORIDA 4705 WEST U.S. HIGHWAY 90 P.O. BOX 2029 LAKE CITY, FLORIDA 32056

PERMIT	NO		

TAX FOLIO NO. R02267-108

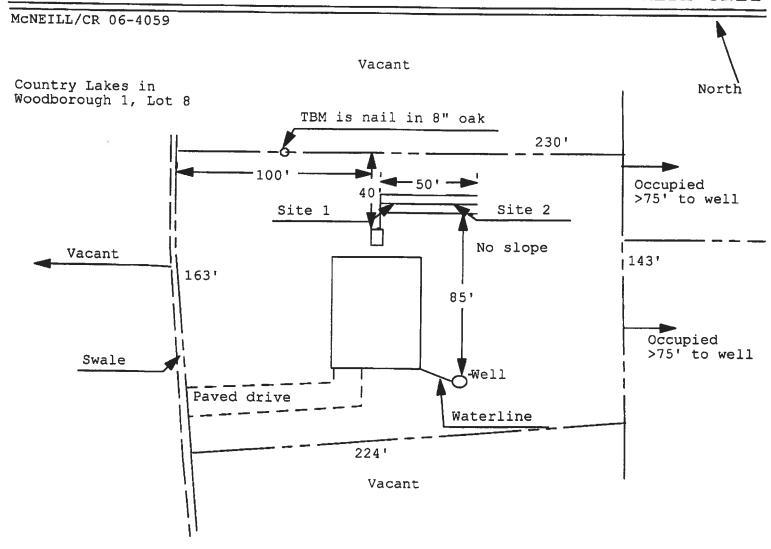
NOTICE OF COMMENCEMENT

STATE OF FLORIDA COUNTY OF Columbia
The undersigned hereby gives notice that improvement will be made to certain real property, and in accordance with Chapter 713, Florida Statutes, the following information is provided in this Notice of Commencement.
1. Description of property: Lot 8, Country Lake in Woodborough, Phase 1 a subdivision according to the plat thereof as recorded in
Plat Book 8. Pages 97-99, public records of Columbia County, FL
2. General description of Improvement: Construction of Dwelling
3. Owner information: a. Name and address: Ruby E. McNeill and Nan T. McNeill, Husband and will 532 NW Lake Valley Terrace, Lake City, FL 32055
b. Interest in property: Fee Simple
c. Name and address of fee simple title holder (if other than Owner): NONE
4. Contractor (name and address): Blake Construction Company 291 SW Sisters Welcome Road, Lake City, FL 32025
5. Surety: a. Name and address:
b. Amount of bond:
6. Lender: FIRST FEDERAL SAVINGS BANK OF FLORIDA 4705 WEST U.S. HIGHWAY 90 P. O. BOX 2029 LAKE CITY, FLORIDA 32056
 Persons within the State of Florida designated by Owner upon whom notices or other document may be served as provided by Section 713.13 (1) (a) 7., Florida Statutes: NONE
 In addition to himself, Owner designates <u>PAULA HACKER of FIRST FEDERAL SAVINGS</u> <u>BANK OF FLORIDA</u>, 4705 West U.S. <u>Highway 90 / P. O. Box 2029</u>, <u>Lake City. Florida 32056</u> to receive a copy of the Lienor's Notice as provided in Section 713.13 (1) (b), Florida Statutes.
9. Expiration date of notice of commencement (the expiration date is 1 year from the date of recording unless a different date is specified). Commencement Commenceme
Borrower Name D. M. Mail Co-Borrower Name
The foregoing instrument was acknowledged before me this 13th day of August 2007 by Ruby E. & Nan T. McNeill, who is paragraphy forom to me or who
has produced driver's license for Identification.
Notary Public My Commission Expires:
12018680 Date:8/17/2007 Time:8:35 AM

Inst 200712018680 Date:8/17/2007 Time:8:33 Am.
DC,P.DeWitt Cason ,Columbia County Page 1 of 1

MY COMMISSION # DD 500788 EXPIRES: January 16, 2010 Bonded Thru Notary Public Underwriters

ALL CHANGES MUST BE APPROVED BY THE COUNTY HEALTH UNIT



	1 inch = 50 feet
Site Plan Submitted By Out Plan Approved Not Approved Date	Date 7/17/07
By Mark & Zandr	Columbia CPHU
Notes:	_

nst. Number: 200712018414 Book: 1128 Page: 413 Date: 8/14/2007 Time: 1:01:33 PM

THIS INSTRUMENT WAS PREPARED BY:

TERRY McDAVID 07-299 POST OFFICE BOX 1328 LAKE CITY, FL 32056-1328

RETURN TO:

. 5

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

Property Appraiser's Identification Number R02267-108

Inst;200712018414 Date:8/14/2007 Time:1:01 PM
Doc Stamp-Deed:483,00
DC,P.DeWitt Cason ,Columbia County Page 1 of 2

WARRANTY DEED

This Warranty Deed, made this 13th day of August, 2007, BETWEEN MS, DM & BL, LLC, A Florida Limited Liability Company, whose post office address is 3101 US Highway 90 West, Suite 101, Lake City, Fl 32055, of the County of Columbia, State of Florida, grantor*, and RUBY E. McNEILL and NAN T. McNEILL, Husband and Wife whose post office address is Post Office Box 3697, Lake City, FL 32056-3697, of the County of Columbia, State of Florida, grantee*.

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

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:

Lot 8, COUNTRY LAKE IN WOODBOROUGH, Phase 1, a subdivision according to the plat thereof as recorded in Plat Book 8, Pages 97-99 of the public records of Columbia County, Florida.

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 subject to taxes for the current year and later years and all valid easements and restrictions of record, if any, which are not hereby reimposed; and also subject to any claim, right, title or interest arising from any recorded instrument reserving, conveying, leasing, or otherwise alienating any interest in the oil, gas and other minerals. And grantor does warrant the title to said land and will defend the same against the lawful claims of all persons whomsoever, subject only to the exceptions set forth herein.

In Witness Whereof, grantor has hereunto set grantor's hand and seal the day and year first above written.

nst. Number: 2007 L2018414 Book: 1128 Page: 414 Date: 8/14/2007 Time: 1:01:33 PM

Signed, sealed and delivered in our presence:

MS, DM & BL, LLC

By: DEBORAH S. MYLES

Managing Member

(Signature of First Witness)

Terry McDavid

(Typed Name of First Witness)

(Signature of Second Witness)
CRYSTAL L SRUNNER

(Typed Name of Second Witness)

STATE OF Florida COUNTY OF Columbia

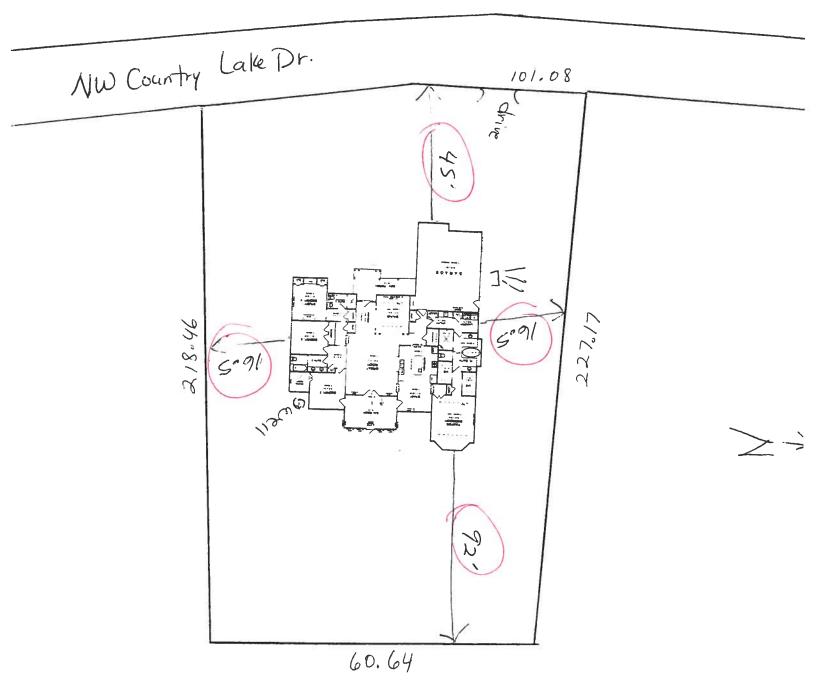
The foregoing instrument was acknowledged before me this 13th day of August, 2007, by DEBORAH S. MYLES, as Managing Member of MS, DM & BL, LLC, A Florida Limited Liability Company who is personally known to me or who has produced ______ as identification and who did not take an oath.

My Commission Expires:

Notary Public Printed, typed, or stamped name:

TERRY MCDAVID
MY COMMISSION # DD 500788
EXPIRES January 16, 2010
Bereint Thru Notary Public Undonwitters

Lot 8 Country Lake in Wood borough 22-35-16-02267-108 Ruby & Nan McNeil



Notice of Intent for Preventative Treatment for 'ermi's (As required by Florida Building Code 104.2.6)

Date: 9-21-07

(Address of Treatment or Lot/Block of Treatment)

Florida Pest Control & Chemical Co. www.flapest.com

Product to be used: Bora-Care Termiticide (Wood Treatment)

Chemical to be used: 23% Disodium Octaborate Tetrahydra endirection will be performed onto structural wood at dried-in stage of construct in Bora-Care Termiticide application shall be applied according to EPA registered lasel directions as stated in the Florida Building Code Section 1861.1.8

(Information to be provided to local building code offices prior to concrete foundation installation.)

Notice of Authorization

to be my Representative and act on my behalf in all aspectocated in Columbia Cour	ts for applying for a Building Permit to be
Contractor's Signature	8/13/07
Sworn to and Subscribed before me this 13th by Klake N. Sunde, H	day of <u>August</u> , 2007
has produced	as identification.
Notary Public	NORA L. TERRY Notary Public - State of Floride My Commission Expires Mer 24, 2009 Commission # DD 410803 Bonded By National Notary Assn. Notary Stamp

HALL'S PUMP & WELL SERVICE, INC.

SPECIALIZING IN 4"-5" WELLS



DONALD AND MARY HALL CRIMIERS PHONE (904) 782-784
FAX (904) 785-762

XAME CITY, PLORIDA 2055
904 NW Main Blvd.

June 12, 2002

NOTICE TO ALL CONTRACTORS

Please be advised that due to the new building codes we will use a large capacity diaphram tank on all new wells. This will insure a minimum of one (1) minute draw down or one (1) minute refill. If a smaller diaphram tank is used then we will install a cycle stop valve which will produce the same results.

If you have any questions please feel free to call our office anytime.

Thank, you,

Donald D. Half

DDH/jk

Project Name: Address:

Builder: BIAKE Longe

Permitting Office: (olumbia

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Community Affairs
Residential Whole Building Performance Method A

709201BlakeConstruction

Lot: 8, Sub: Woodborough, Plat:

City, State: , FL Owner: McNeill Residence Climate Zone: North	Permit Number: 24304 Jurisdiction Number: 221000
Climate Zone: North 1. New construction or existing 2. Single family or multi-family 3. Number of units, if multi-family 4. Number of Bedrooms 5. Is this a worst case? Yes 6. Conditioned floor area (ft²) 7. Glass type¹ and area: (Label reqd. by 13-104.4.5 if not default) a. U-factor: Description Area (or Single or Double DEFAULT) b. SHGC: (or Clear or Tint DEFAULT) 7b. (Clear) 465.3 ft² 8. Floor types a. Slab-On-Grade Edge Insulation b. N/A c. N/A 9. Wall types a. Frame, Wood, Exterior b. Frame, Wood, Adjacent c. N/A d. N/A e. N/A 10. Ceiling types a. Single Assembly b. N/A c. N/A 11. Ducts a. Sup: Unc. Ret: Unc. AH: Interior b. N/A Single Assembly b. N/A c. N/A	12. Cooling systems a. Central Unit Cap: 58.0 kBtu/hr SEER: 13.00 b. N/A c. N/A 13. Heating systems a. Electric Heat Pump Cap: 58.0 kBtu/hr HSPF: 7.90 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 po	

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:

1 A COMPLEX CONTROLLED TO THE CON

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.

ORINA COD WE THUS AND A COD WE

BUILDING OFFICIAL:

DATE:

SUMMER CALCULATIONS

Residential Whole Building Performance Method A - Details

	BAS	E		AS-BUILT								
GLASS TYPES .18 X Condition Floor A	ned X	BSPM =	Points	Type/SC	Ove Ornt	erhang Len		Area X	SPI	их	SOF	= Points
.18 2874	.0	20.04	10367.1	Double, Clear	SW	1.5	6.5	15.0	40.1	6	0.90	544.4
				Double, Clear	S	1.5	6.5	30.0	35.8	7	0.88	943.5
				Double, Clear	W	1.5	6.5	15.0	38.5	2	0.93	535.7
				Double, Clear	W	1.5	6.5	15.0	38.5	2	0.93	535.7
				Double, Clear	S	1.5	6.5	37.5	35.8	7	0.88	1179.3
				Double, Clear	S	1.5	1.5	7.5	35.8	7	0.52	140.0
				Double, Clear	S	1.5	0.0	72.0	35.8	7	0.43	1115.4
				Double, Clear	S	1.5	0.0	10.0	35,8	7	0.43	154.9
				Double, Clear	S	1.5	0.0	24.0	35.8	7	0.43	371.8
				Double, Clear	S	1.5	6.5	30.0	35,8	7	0.88	943.5
				Double, Clear	W	1.5	6.5	15.0	38.5	2	0.93	535.7
				Double, Clear	W	1.5	6.5	12.5	38.5	2	0.93	446.5
				Double, Clear	W	1.5	6.5	30.0	38.5	2	0.93	1071.5
				Double, Clear	W	1.5	3.5	12.0	38.5	2	0.78	359.9
			i.	Double, Clear	N	1.5	0.0	18.0	19.2	0	0.59	205.0
				Double, Clear	N	1.5	6.5	10.0	19.2	0	0.95	181.9
				Double, Clear	N	12.0	3.0	7.5	19.2	0	0.59	85.4
				Double, Clear	N	12.0	8.0	13.3	19.2	0	0.65	167.0
				Double, Clear	N	8.0	7.5	36.0	19.2	0	0.70	484.1
				Double, Clear	E	1.5	5.5	12.0	42.0	6	0.90	452.4
				Double, Clear	Ε	1.5	0.0	16.0	42.0	6	0.36	240.1
				Double, Clear	Ε	1.5	0.0	15.0	42.0	6	0.36	225.1
				Double, Clear	Е	1.5	3.5	12.0	42.0	6	0.78	391.5
				As-Built Total:				465.3				11310.5
WALL TYPES	Area	X BSPM	= Points	Туре		R-\	/alue	Area	Х	SPN	1 =	Points
Adjacent	268.0	0.70	187.6	Frame, Wood, Exterior			13.0	1545.7		1.50		2318.5
Exterior	1545.7	1.70	2627.7	Frame, Wood, Adjacent			13.0	268.0		0.60		160.8
Base Total:	1813.7	7	2815.3	As-Built Total:				1813.7				2479.3
DOOR TYPES	Area	X BSPM	= Points	Туре				Area	Х	SPM	=	Points
Adjacent	20.0	1.60	32.0	Exterior Insulated	_			10.0		4.10		41.0
Exterior	30.0	4.10	123.0	Exterior Insulated				20.0		4.10		82.0
				Adjacent Insulated				20.0		1.60		32.0
Base Total:	50.0	0	155.0	As-Built Total:				50.0				155.0

SUMMER CALCULATIONS

Residential Whole Building Performance Method A - Details

-	BASE			AS-BUILT						
CEILING TYP	PES Area X	BSPM	= Points	Type R-Value	Area X SPM X SCM =	Points				
Under Attic	2874.0	1.73	4972.0	Single Assembly 23.0	2934.0 5.13 X 1.00	15055.6				
Base Total:	2874.0		4972.0	As-Built Total:	2934.0	15055.6				
FLOOR TYPE	ES Area X	BSPM	= Points	Type R-Valu	e Area X SPM =	Points				
Slab Raised	260.0(p) 0.0	-37.0 0.00	-9620.0 0.0	Slab-On-Grade Edge Insulation 0.0	260.0(p -41.20	-10712.0				
Base Total:			-9620.0	As-Built Total:	260.0	-10712.0				
INFILTRATIO	N Area X	BSPM	= Points		Area X SPM =	Points				
	2874.0	10.21	29343.5		2874.0 10.21	29343.5				
Summer Ba	ase Points	: 3803	32.9	Summer As-Built Points:	47	7632.0				
Total Summer Points	X Systen Multiplie		Cooling Points	Total X Cap X Duct X Component Ratio Multiplier (System - Points) (DM x DSM x AHU)	System X Credit = Multiplier Multiplier	Cooling Points				
38032.9	0.4260	6 1	16224.9	(sys 1: Central Unit 58000 btuh ,SEER/EFF(13.0) Duc 47632 1.00 (1.09 x 1.147 x 0.91) 47632.0 1.00 1.138	0.263 1.000	14227.3 1227.3				

WINTER CALCULATIONS

Residential Whole Building Performance Method A - Details

	BAS	E				AS-	-BU	ILT				· .
GLASS TYPES .18 X Condition Floor A	ned X	BWPM	= Points	Type/SC	Ove Ornt	erhang Len	-	Area X	WPN	ıχ	WO	F = Point
.18 2874	.0	12.74	6590.7	Double, Clear	sw	1.5	6.5	15.0	16.74		1.05	263.8
				Double, Clear	S	1.5	6.5	30.0	13.30)	1.09	436.4
1				Double, Clear	W	1.5	6.5	15.0	20.73		1.02	317.0
l .				Double, Clear	W	1.5	6.5	15.0	20.73	i	1.02	317.0
				Double, Clear	S	1.5	6.5	37.5	13.30	ı	1.09	545.5
				Double, Clear	S	1.5	1.5	7.5	13.30	1	2.73	272.4
				Double, Clear	S	1.5	0.0	72.0	13.30		3.66	3504.2
				Double, Clear	S	1.5	0.0	10.0	13.30	1	3.66	486.7
				Double, Clear	S	1.5	0.0	24.0	13.30	ı	3.66	1168.1
				Double, Clear	S	1.5	6.5	30.0	13.30		1.09	436.4
				Double, Clear	W	1.5	6.5	15.0	20.73		1.02	317.0
				Double, Clear	W	1.5	6.5	12.5	20.73		1.02	264.2
				Double, Clear	W	1.5	6.5	30.0	20.73		1.02	634.1
				Double, Clear	W	1.5	3.5	12.0	20.73		1.07	265.2
			2	Double, Clear	N	1.5	0.0	18.0	24.58	8	1.03	454.5
				Double, Clear	N	1.5	6.5	10.0	24.58		1.00	246.3
				Double, Clear	N	12.0	3.0	7.5	24.58		1.03	189.4
				Double, Clear	N	12.0	8.0	13.3	24.58		1.02	334.3
				Double, Clear	N	8.0	7.5	36.0	24.58		1.02	901.7
				Double, Clear	Е	1.5	5.5	12.0	18.79		1.04	234.8
				Double, Clear	Е	1.5	0.0	16.0	18.79		1.51	453.1
				Double, Clear	Е	1.5	0.0	15.0	18.79		1.51	424.8
				Double, Clear	Ε	1.5	3.5	12.0	18.79		1.09	246.6
	-			As-Built Total:				465.3				12713.6
WALL TYPES	Area >	(BWPN	/I = Points	Туре		R-\	/alue	Area	x v	/PM	=	Points
Adjacent	268.0	3.60	964.8	Frame, Wood, Exterior			13.0	1545.7		3.40		5255.4
Exterior	1545.7	3.70	5719.1	Frame, Wood, Adjacent			13.0	268.0		3.30		884.4
Base Total:	1813.7		6683.9	As-Built Total:		_		1813.7				6139.8
DOOR TYPES	Area >	BWPM	1 = Points	Туре				Area	x v	/PM	=	Points
Adjacent	20.0	8.00	160.0	Exterior Insulated				10.0	8	3.40		84.0
Exterior	30.0	8.40	252.0	Exterior Insulated				20.0		3.40		168.0
				Adjacent Insulated				20.0		3.00		160.0
Base Total:	50.0		412.0	As-Built Total:				50.0				412.0

WINTER CALCULATIONS

Residential Whole Building Performance Method A - Details

	BASE			AS-BUILT						
CEILING TYPE	SArea X	BWPM	= Points	Туре	R-Value	Area X W	PM X WCM	= Points		
Under Attic	2874.0	2.05	5891.7	Single Assembly	23.0	2934.0	1.68 X 1.00	4920.7		
Base Total:	2874.0		5891.7	As-Built Total:		2934.0		4920.7		
FLOOR TYPES	Area X	BWPM	= Points	Туре	R-Valu	e Area	X WPM	= Points		
Slab Raised	260.0(p) 0.0	8.9 0.00	2314.0 0.0	Slab-On-Grade Edge Insulation	0.0	260.0(p	18.80	4888.0		
Base Total:			2314.0	As-Built Total:		260.0		4888.0		
INFILTRATION	Area X	BWPM	= Points			Area :	X WPM	= Points		
	2874.0	-0.59	-1695.7			2874.0	0.59	-1695.7		
Winter Base	Points:	2	20196.6	Winter As-Built Poi	nts:			27378.4		
Total Winter X Points	System Multiplie		eating Points	Component Ratio	(Duct X Multiplier M x DSM x AHU)	System) Multiplier	X Credit Multiplier	= Heating Points		
20196.6	0.627	4	12671.3	(sys 1: Electric Heat Pump 58 27378.4 1.000 (1. 27378.4 1.00	000 btuh ,EFF(7.9 .069 x 1.169 x 0.9 1.162		S),Unc(R),Int(A 1.000 1.000	H),R6.0 13734.4 13734.4		

WATER HEATING & CODE COMPLIANCE STATUS

Residential Whole Building Performance Method A - Details

ADDRESS: Lot: 8, Sub: Woodborough, Plat: , , FL, PERMIT #:

	В	ASE					AS-B	UIL	.Т		
WATER HEA Number of Bedrooms	TING X	Multiplier	= Total	Tank Volume	EF	Number of Bedrooms	X Tan Rat		Multiplier X	Credit Multipli	
4		2635.00	10540.0	40.0	0.93	4	1.00)	2606.67	1.00	10426.7
				As-Built To	tal:						10426.7

	CODE COMPLIANCE STATUS												
	BAS	E				AS-BUILT							
Cooling Points	+	Heating Points	+	Hot Water Points	=	Total Points	Cooling Points	+	Heating + Points	Hot Water Points	=	Total Points	
16225	12671 10540 39436 14227 13734								10427		38388		

PASS



Code Compliance Checklist

Residential Whole Building Performance Method A - Details

ADDRESS: Lot: 8, Sub: Woodborough, Plat: , , FL, PERMIT #:

6A-21 INFILTRATION REDUCTION COMPLIANCE CHECKLIST

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

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

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

ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE SCORE* = 83.4

The higher the score, the more efficient the home.

McNeill Residence, Lot: 8, Sub: Woodborough, Plat: , , FL,

					- "	
1.	New construction or existing	New			Cooling systems	
2.	Single family or multi-family	Single family	-	a.	Central Unit	Cap: 58.0 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	-		40.	_
6.	Conditioned floor area (ft²)	2874 ft²		c.	N/A	<u>-</u>
7.	Glass type 1 and area: (Label reqd.	- '				_
a.	U-factor:	Description Area			Heating systems	
	(or Single or Double DEFAULT)	7a. (Dble Default) 465.3 ft ²	-8	a.	Electric Heat Pump	Cap: 58.0 kBtu/hr
b.	SHGC:					HSPF: 7.90
	(or Clear or Tint DEFAULT)	7b. (Clear) 465.3 ft ²	_	Ъ.	N/A	_
	7.1					_
	Slab-On-Grade Edge Insulation	R=0.0, 260.0(p) ft	_	C.	N/A	
	N/A		_			_
C.	N/A		_		Hot water systems	
9.	Wall types			a.	Electric Resistance	Cap: 40.0 gallons
a.	Frame, Wood, Exterior	R=13.0, 1545.7 ft ²	-			EF: 0.93
b.	Frame, Wood, Adjacent	R=13.0, 268.0 ft ²		b.	N/A	22 2 <u></u>
C.	N/A					<u> </u>
d.	N/A			c.	Conservation credits	
e.	N/A		_		(HR-Heat recovery, Solar	
10.	Ceiling types				DHP-Dedicated heat pump)	
a.	Single Assembly	R=23.0, 2934.0 ft ²	-	15.	HVAC credits	<u></u>
Ъ.	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, 230.0 ft			MZ-C-Multizone cooling,	
b.	N/A				MZ-H-Multizone heating)	
I ce	rtify that this home has compl	lied with the Florida Energ	zy Effi	cienc	y Code For Building	THE CO.
	struction through the above e	-			•	OF THE STATE
	his home before final inspection					
	ed on installed Code complian		P1	,		5
	lder Signature:		Date:			

*NOTE: The home's estimated energy performance score is only available through the FLA/RES computer program. This is <u>not</u> a Building Energy Rating. If your score is 80 or greater (or 86 for a US EPA/DOE EnergyStdTM 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.

City/FL Zip:

Address of New Home:

Columbia County Building Department Culvert Permit

Culvert Permit No.

000001461

DATE	10/03/200	7	PARCEL I	D# <u>22-3S-16-02267-108</u>		
APPLICAN	T LIN	DA RODER		PHONE	752-2281	
ADDRESS	387	SW KEMP (Т	LAKE CITY		FL 32024
OWNER	RUBY	MCNEILL		PHONE	752-1986	
ADDRESS	813	NW COUNTR	Y LAKE DR	LAKE CITY		FL 32055
CONTRAC	TOR B	BLAKE LUNDE		PHONE	754-5810	
LOCATION	OF PR	OPERTY.	90W, TL ON LAKE J	EFFREY RD, TL ON SCENIC LA	AKE DR, TR ON	COUNTRY
LAKE DR., 3F	RD LOT C	ON LEFT				
SUBDIVISI	ON/LO	T/BLOCK/P	HASE/UNIT COL	UNTRY LAKE AT WOOD	8	
SIGNATUR	E	Judo	- Anles			
	IN	ISTALLATI	ON REQUIREM	ENTS		
X	Cu dri	Ilvert size will ving surface.	be 18 inches in dia	ameter with a total lenght of mitered 4 foot with a 4 : 1 slo	32 feet, leavin	g 24 feet of d with a 4 inch
	6	a) a majority of the driveware of the driveware of the concrete or a majority or a major	of the current and only to be served will all be concrete or paved driveway, w	will be required as follows: existing driveway turnouts ar be paved or formed with copaved a minimum of 12 feet thichever is greater. The wideconcreted turnouts.	ncrete. : wide or the w	idth of the m to the
	Cı	ılvert installa	tion shall conform	to the approved site plan st	andards.	
	De	epartment of	Transportation Per	rmit installation approved st	andards.	
	Ot	her				
		=	IENTS SHOULD BE	FOLLOWED		Sille A Sou

135 NE Hernando Ave., Suite B-21 Lake City, FL 32055

Phone: 386-758-1008 Fax: 386-758-2160

Amount Paid 25.00



Residential System Sizing Calculation

Summary Project Title:

McNeill Residence

Project Title: 709201BlakeConstruction

Class 3 Rating Registration No. 0 Climate: North

, FL

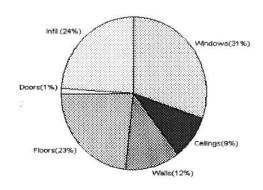
9/27/2007

				/_//_			
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 49001 Btuh		Total cooling load calculation	42969	Btuh			
Submitted heating capacity	% of calc	Btuh	Submitted cooling capacity	% of calc	Btuh		
Total (Electric Heat Pump)	118.4	58000	Sensible (SHR = 0.75)	120.8	43500		
Heat Pump + Auxiliary(0.0kW)	118.4	58000	Latent	208.4	14500		
			Total (Electric Heat Pump)	135.0	58000		

WINTER CALCULATIONS

Winter Heating Load (for 2874 sqft)

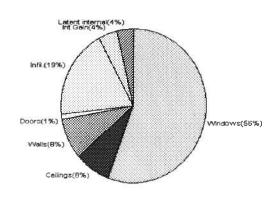
Load component			Load	
Window total	465	sqft	14978	Btuh
Wall total	1814	sqft	5956	Btuh
Door total	50	sqft	648	Btuh
Ceiling total	2934	sqft	4542	Btuh
Floor total	260	sqft	11352	Btuh
Infiltration	285	cfm	11525	Btuh
Duct loss			0	Btuh
Subtotal			49001	Btuh
Ventilation	0	cfm	0	Btuh
TOTAL HEAT LOSS			49001	Btuh



SUMMER CALCULATIONS

Summer Cooling Load (for 2874 sqft)

Load component			Load	
Window total	465	sqft	23888	Btuh
Wall total	1814	sqft	3628	Btuh
Door total	50	sqft	490	Btuh
Ceiling total	2934	sqft	3437	Btuh
Floor total			0	Btuh
Infiltration	147	cfm	2728	Btuh
Internal gain			1840	Btuh
Duct gain			0	Btuh
Sens. Ventilation	0	cfm	0	Btuh
Total sensible gain			36012	Btuh
Latent gain(ducts)			0	Btuh
Latent gain(infiltration)	5357	Btuh		
Latent gain(ventilation)	0	Btuh		
Latent gain(internal/occup	1600	Btuh		
Total latent gain	6957	Btuh		
TOTAL HEAT GAIN			42969	Btuh





For Florida residences only

EnergyGauge® System Sizing PREPARED BY:

DATE: 9-2-1-07

System Sizing Calculations - Winter

Residential Load - Whole House Component Details

McNeill Residence

Project Title: 709201BlakeConstruction

Class 3 Rating Registration No. 0 Climate: North

, FL

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

9/27/2007

Component Loads for Whole House

Window	Panes/SHGC/Frame/U	Orientation	Area(sqft) X	HTM=	Load
1	2, Clear, Metal, 0.87	N	15.0	32.2	483 Btuh
2	2, Clear, Metal, 0.87	NW	30.0	32.2	966 Btuh
3	2, Clear, Metal, 0.87	NE	15.0	32.2	483 Btuh
4	2, Clear, Metal, 0.87	NE	15.0	32.2	483 Btuh
5	2, Clear, Metal, 0.87	NW	37.5	32.2	1207 Btuh
6 7	2, Clear, Metal, 0.87	NW	7.5	32.2	241 Btuh
	2, Clear, Metal, 0.87	NW	72.0	32.2	2318 Btuh
8	2, Clear, Metal, 0.87	NW	10.0	32.2	322 Btuh
9	2, Clear, Metal, 0.87	NW	24.0	32.2	773 Btuh
10	2, Clear, Metal, 0.87	NW	30.0	32.2	966 Btuh
11	2, Clear, Metal, 0.87	NE	15.0	32.2	483 Btuh
12	2, Clear, Metal, 0.87	NE	12.5	32.2	402 Btuh
13	2, Clear, Metal, 0.87	NE	30.0	32.2	966 Btuh
14	2, Clear, Metal, 0.87	NE	12.0	32.2	386 Btuh
15	2, Clear, Metal, 0.87	SE	18.0	32.2	579 Btuh
16	2, Clear, Metal, 0.87	SE	10.0	32.2	322 Btuh
17	2, Clear, Metal, 0.87	SE	7.5	32.2	241 Btuh
18	2, Clear, Metal, 0.87	SE	13.3	32.2	428 Btuh
19	2, Clear, Metal, 0.87	SE	36.0	32.2	1159 Btuh
20	2, Clear, Metal, 0.87	SW	12.0	32.2	386 Btuh
21	2, Clear, Metal, 0.87	SW	16.0	32.2	515 Btuh
22	2, Clear, Metal, 0.87	SW	15.0	32.2	483 Btuh
23	2, Clear, Metal, 0.87	sw	12.0	32.2	386 Btuh
	Window Total		465(sqft)		14978 Btuh
Walls	Туре	R-Value	Area X	HTM=	Load
1	Frame - Wood - Ext(0.09)	13.0	1546	3.3	5076 Btuh
2	Frame - Wood - Adj(0.09)	13.0	268	3.3	880 Btuh
	Wall Total		1814		5956 Btuh
Doors	Туре		Area X	HTM=	Load
1	Insulated - Adjacent		20	12.9	259 Btuh
2	Insulated - Exterior		20	12.9	259 Btuh
3	Insulated - Exterior		10	12.9	130 Btuh
	Door Total		50		648Btuh
Ceilings	Type/Color/Surface	R-Value	Area X	HTM=	Load
1	Single Assembly/D/Shin)	23.0	2934	1.5	4542 Btuh
	Ceiling Total		2934		4542Btuh
Floors	Туре	R-Value	Size X	HTM=	Load
1	Slab On Grade	0	260.0 ft(p)	43.7	11352 Btuh
	Floor Total		260		11352 Btuh
		Z	one Envelope Su	btotal:	37476 Btuh

Manual J Winter Calculations

Residential Load - Component Details (continued) Project Title:

McNeill Residence

, FL

709201BlakeConstruction

Class 3 Rating Registration No. 0 Climate: North

9/27/2007

Infiltration	Type Natural	ACH X 0.66	Zone Volume 25866	CFM= 284.5	11525 Btuh	
Ductload	Average sealed, R6	3.0, Supply(Attic), Re	turn(Attic)	(DLM of 0.00)	0 Btuh	
Zone #1		Se	Sensible Zone Subtotal			

WHOLE HOUSE TOTALS		
	Subtotal Sensible Ventilation Sensible Total Btuh Loss	49001 Btuh 0 Btuh 49001 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 Project Title: Class 3

McNeill Residence

Project Title: 709201BlakeConstruction

Class 3 Rating Registration No. 0 Climate: North

, FL

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

9/27/2007

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	N	15.0	32.2	483 Btuh
2	2, Clear, Metal, 0.87	NW	30.0	32.2	966 Btuh
3	2, Clear, Metal, 0.87	NE	15.0	32.2	483 Btuh
4	2, Clear, Metal, 0.87	NE	15.0	32.2	483 Btuh
5	2, Clear, Metal, 0.87	NW	37.5	32.2	1207 Btuh
6	2, Clear, Metal, 0.87	NW	7.5	32.2	241 Btuh
7	2, Clear, Metal, 0.87	NW	72.0	32.2	2318 Btuh
8	2, Clear, Metal, 0.87	NW	10.0	32.2	322 Btuh
9	2, Clear, Metal, 0.87	NW	24.0	32.2	773 Btuh
10	2, Clear, Metal, 0.87	NW	30.0	32.2	966 Btuh
11	2, Clear, Metal, 0.87	NE	15.0	32.2	483 Btuh
12	2, Clear, Metal, 0.87	NE	12.5	32.2	402 Btuh
13	2, Clear, Metal, 0.87	NE	30.0	32.2	966 Btuh
14	2, Clear, Metal, 0.87	NE	12.0	32.2	386 Btuh
15	2, Clear, Metal, 0.87	SE	18.0	32.2	579 Btuh
16	2, Clear, Metal, 0.87	SE	10.0	32.2	322 Btuh
17	2, Clear, Metal, 0.87	SE	7.5	32.2	241 Btuh
18	2, Clear, Metal, 0.87	SE	13.3	32.2	428 Btuh
19	2, Clear, Metal, 0.87	SE	36.0	32.2	1159 Btuh
20	2, Clear, Metal, 0.87	SW	12.0	32.2	386 Btuh
21	2, Clear, Metal, 0.87	SW	16.0	32.2	515 Btuh
22	2, Clear, Metal, 0.87	SW	15.0	32.2	483 Btuh
23	2, Clear, Metal, 0.87	SW	12.0	32.2	386 Btuh
	Window Total		465(sqft)		14978 Btuh
Walls	Туре	R-Value	Area X	HTM=	Load
] 1	Frame - Wood - Ext(0.09)	13.0	1546	3.3	5076 Btuh
2	Frame - Wood - Adj(0.09)	13.0	268	3.3	880 Btuh
	Wall Total		1814		5956 Btuh
Doors	Туре		Area X	HTM=	Load
1	Insulated - Adjacent		20	12.9	259 Btuh
2	Insulated - Exterior		20	12.9	259 Btuh
3	Insulated - Exterior		10	12.9	130 Btuh
	Door Total		50		648Btuh
Ceilings	Type/Color/Surface	R-Value	Area X	HTM=	Load
1	Single Assembly/D/Shin)	23.0	2934	1.5	4542 Btuh
	Ceiling Total		2934		4542Btuh
Floors	Туре	R-Value	Size X	HTM=	Load
1	Slab On Grade	0	260.0 ft(p)	43.7	11352 Btuh
	Floor Total		260_		11352 Btuh
		Z	one Envelope Su	btotal:	37476 Btuh

Manual J Winter Calculations

Residential Load - Component Details (continued) Project Title:

McNeill Residence

709201BlakeConstruction

Class 3 Rating Registration No. 0 Climate: North

, FL

9/27/2007

Infiltration	Type Natural	ACH X 0.66	Zone Volume 25866	CFM= 284.5	11525 Btuh
Ductload	Average sealed, R6.0, Supply(Attic), Return(Attic) (DLM of 0.00)				0 Btuh
Zone #1	Sensible Zone Subtotal				49001 Btuh

WHOLE HOUSE TOTALS	
MUCLE HOUSE IN IALS	

	Subtotal Sensible Ventilation Sensible Total Btuh Loss	49001 Btuł 0 Btuł 49001 Btuł
A		

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

McNeill Residence

Project Title: 709201BlakeConstruction

Class 3 Rating Registration No. 0 Climate: North

, FL

Summer Temperature Difference: 17.0 F

9/27/2007

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

Component Loads for Whole House

Reference City: Gainesville (Defaults)

	Type*		Over	hang	Wind	dow Area(sqft)		НТМ		Load	
Window	Pn/SHGC/U/InSh/ExSh/IS	Ornt	Len	Hat	Gross	Shaded	Unshaded	Shaded	Unshaded		
1	2, Clear, 0.87, None,N,N	N	1.5ft.	6.5ft.	15.0	0.0	15.0	29	29	434	Btuh
2	2, Clear, 0.87, None,N,N	NW	1.5ft.	6.5ft.	30.0	0.0	30.0	29	60	1801	Btuh
3	2, Clear, 0.87, None,N,N	NE	1.5ft.	6.5ft.	15.0	0.0	15.0	29	60	901	Btuh
4	2, Clear, 0.87, None,N,N	NE	1.5ft.	6.5ft.	15.0	0.0	15.0	29	60	901	Btuh
5	2, Clear, 0.87, None,N,N	NW	1.5ft.	6.5ft.	37.5	0.0	37.5	29	60	2251	Btuh
6	2, Clear, 0.87, None,N,N	NW	1.5ft.	1.5ft.	7.5	0.0	7.5	29	60	450	
7	2, Clear, 0.87, None,N,N	NW	1.5ft.	Oft.	72.0	0.0	72.0	29	60	4323	Btuh
8	2, Clear, 0.87, None,N,N	NW	1.5ft.	Oft.	10.0	0.0	10.0	29	60	600	Btuh
9	2, Clear, 0.87, None,N,N	NW	1.5ft.	Oft.	24.0	0.0	24.0	29	60	1441	Btuh
10	2, Clear, 0.87, None,N,N	NW	1.5ft.	6.5ft.	30.0	0.0	30.0	29	60	1801	Btuh
11	2, Clear, 0.87, None,N,N	NE	1.5ft.	6.5ft.	15.0	0.0	15.0	29	60	901	Btuh
12	2, Clear, 0.87, None,N,N	NE	1.5ft.	6.5ft.	12.5	0.0	12.5	29	60	750	Btuh
13	2, Clear, 0.87, None,N,N	NE	1.5ft.	6.5ft.	30.0	0.0	30.0	29	60	1801	Btuh
14	2, Clear, 0.87, None,N,N	NE	1.5ft.	3.5ft.	12.0	0.0	12.0	29	60	720	Btuh
15	2, Clear, 0.87, None,N,N	SE	1.5ft.	Oft.	18.0	18.0	0.0	29	63	521	Btuh
16	2, Clear, 0.87, None,N,N	SE	1.5ft.	6.5ft.	10.0	2.0	8.0	29	63	557	Btuh
17	2, Clear, 0.87, None,N,N	SE	12ft.	3ft.	7.5	7.5	0.0	29 29	63	217	
18	2, Clear, 0.87, None, N, N	SE	12ft.	8ft.	13.3	13.3	0.0			385	Btuh
19	2, Clear, 0.87, None,N,N	SE	8ft.	7.5ft. 5.5ft.	36.0	36.0	0.0	29	63	1043	Btuh
20 21	2, Clear, 0.87, None,N,N 2, Clear, 0.87, None,N,N	SW SW	1.5ft. 1.5ft.	o.oit. Oft.	12.0 16.0	3.1 16.0	8.9	29 29	63 63	647 463	Btuh
22	2, Clear, 0.87, None,N,N	SW	1.5ft.	Oft.	15.0	15.0	0.0 0.0	29 29	63	403	Btuh Btuh
23	2, Clear, 0.87, None, N, N	SW	1.5ft.		12.0	6.1	5.9	29 29	63		Btuh
25	Window Total	344	1.510.	3.511.			3.5	25	03	23888	
144-11-		l	D 1/-	-1 // 1	465 (1.170.4		Dlui
Walls	Туре		R-Va	alue/U	-Value	\ \ \ /			HTM	Load	
1	Frame - Wood - Ext			13.0/0		1545.7			2.1	3224	
2	Frame - Wood - Adj			13.0/0	0.09	268			1.5	404	Btuh
	Wall Total					181	4 (sqft)			3628	Btuh
Doors	Туре					Area	rea (sqft) HTM		HTM	Load	
1	Insulated - Adjacent					20	20.0 9.8		196	Btuh	
2	Insulated - Exterior					20	.0		9.8	196	Btuh
3	Insulated - Exterior					10	.0		9.8	98	Btuh
	Door Total					5	0 (sqft)			490	Btuh
Ceilings	Type/Color/Surface		R-Va	alue		Area(НТМ	Load	
1	Single Assembly/DarkShingle			23.0		293			1.2	3437	Btuh
	Ceiling Total					293	4 (sqft)			3437	Btuh
Floors	Туре		R-Va	alue		Siz			НТМ	Load	
1	Slab On Grade			0.0		260 (ft(p))			0.0	0	Btuh
	Floor Total					260.0 (sqft)				0	Btuh
			Zone Envelope Su		ıbtotal:	31444	Btuh				

Manual J Summer Calculations

Residential Load - Component Details (continued) Project Title: Class

McNeill Residence

709201BlakeConstruction

Class 3 Rating Registration No. 0

, FL

Climate: North

9/27/2007

Infiltration	Туре	ACH		Volume(cuft)		me(cuft) CFM=		Load		
	SensibleNatural	0.34		25866		25866		146.6	2728	Btuh
Internal		Occupants	Е	Btuh/occupant		Appliance	Load			
gain		8	Х		230	+	0	1840	Btuh	
Duct load	Average sealed, R6.0	Supply(Attic), Retu	Supply(Attic), Return(Attic)				DGM = 0.00	0.0	Btuh	
		Sensible Zone Load					36012	Btuh		

Manual J Summer Calculations

Residential Load - Component Details (continued) Project Title: Class

McNeill Residence

, FL

709201BlakeConstruction

Class 3 Rating Registration No. 0 Climate: North

9/27/2007

WHOLE HOUSE TOTALS

	Sensible Envelope Load All Zones	36012	Btuh
	Sensible Duct Load	0	Btuh
	Total Sensible Zone Loads	36012	Btuh
	Sensible ventilation	0	Btuh
	Blower	0	Btuh
Whole House	Total sensible gain	36012	Btuh
Totals for Cooling	Latent infiltration gain (for 54 gr. humidity difference)	5357	Btuh
	Latent ventilation gain	0	Btuh
	Latent duct gain	0	Btuh
	Latent occupant gain (8 people @ 200 Btuh per person)	1600	Btuh
	Latent other gain	0	Btuh
	Latent total gain	6957	Btuh
	TOTAL GAIN	42969	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 ence Project Title: Class 3

McNeill Residence

709201BlakeConstruction

Class 3 Rating Registration No. 0 Climate: North

, FL

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

9/27/2007

Component Loads for Zone #1: Main

	Type*		Ove	hang	Window Area(sqft)		Н	TM	Load		
Window	Pn/SHGC/U/InSh/ExSh/IS	Ornt	Len	Hgt	Gross	Shaded	Unshaded	Shaded	Unshaded		
1	2, Clear, 0.87, None, N, N	N	1.5ft.	6.5ft.	15.0	0.0	15.0	29	29	434	Btuh
2	2, Clear, 0.87, None, N, N	NW	1.5ft.	6.5ft.	30.0	0.0	30.0	29	60	1801	Btuh
3	2, Clear, 0.87, None,N,N	NE	1.5ft.	6.5ft.	15.0	0.0	15.0	29	60	901	Btuh
4	2, Clear, 0.87, None,N,N	NE	1.5ft.	6.5ft.	15.0	0.0	15.0	29	60	901	Btuh
5	2, Clear, 0.87, None,N,N	NW	1.5ft.	6.5ft.	37.5	0.0	37.5	29	60	2251	Btuh
6	2, Clear, 0.87, None,N,N	NW	1.5ft.	1.5ft.	7.5	0.0	7.5	29	60	450	Btuh
7	2, Clear, 0.87, None,N,N	NW	1.5ft.	Oft.	72.0	0.0	72.0	29	60	4323	Btuh
8	2, Clear, 0.87, None,N,N	NW	1.5ft.	Oft.	10.0	0.0	10.0	29	60	600	Btuh
9	2, Clear, 0.87, None, N, N	NW	1.5ft.	Oft.	24.0	0.0	24.0	29	60	1441	Btuh
10	2, Clear, 0.87, None, N, N	NW	1.5ft.	6.5ft.	30.0	0.0	30.0	29	60	1801	Btuh
11	2, Clear, 0.87, None, N, N	NE	1.5ft.	6.5ft.	15.0	0.0	15.0	29	60	901	Btuh
12	2, Clear, 0.87, None,N,N	NE	1.5ft.	6.5ft.	12.5	0.0	12.5	29	60	750	Btuh
13	2, Clear, 0.87, None,N,N	NE	1.5ft.	6.5ft.	30.0	0.0	30.0	29	60	1801	Btuh
14	2, Clear, 0.87, None,N,N	NE	1.5ft.	3.5ft.	12.0	0.0	12.0	29	60	720	Btuh
15	2, Clear, 0.87, None,N,N	SE	1.5ft.	Oft.	18.0	18.0	0.0	29	63	521	Btuh
16	2, Clear, 0.87, None,N,N	SE	1.5ft.	6.5ft.	10.0	2.0	8.0	29	63	557	Btuh
17	2, Clear, 0.87, None,N,N	SE	12ft.	3ft.	7.5	7.5	0.0	29	63	217	Btuh
18	2, Clear, 0.87, None,N,N	SE	12ft.	8ft.	13.3	13.3	0.0	29	63	385	Btuh
19	2, Clear, 0.87, None,N,N	SE	8ft.	7.5ft.	36.0	36.0	0.0	29	63	1043	Btuh
20	2, Clear, 0.87, None,N,N	SW	1.5ft.	5.5ft.	12.0	3.1	8.9	29	63	647	Btuh
21	2, Clear, 0.87, None, N, N	SW	1.5ft.	Oft.	16.0	16.0	0.0	29	63	463	Btuh
22	2, Clear, 0.87, None,N,N	SW	1.5ft.	Oft.	15.0	15.0	0.0	29	63	434	Btuh
23	2, Clear, 0.87, None, N, N	SW	1.5ft.	3.5ft.	12.0	6.1	5.9	29	63		Btuh
	Window Total					465 (sqft)				23888	Btuh
Walls	Type		R-Va	alue/U	-Value	Area	(sqft)		нтм	Load	
1	Frame - Wood - Ext			13.0/0	0.09	154	5.7		2.1	3224	Btuh
2	Frame - Wood - Adj			13.0/0	0.09	268	3.0		1.5	404	Btuh
	Wall Total					181	4 (sqft)			3628	Btuh
Doors	Туре					Area	(sqft)		HTM	Load	
1	Insulated - Adjacent					20	0.0		9.8	196	Btuh
2	Insulated - Exterior					20	.0		9.8	196	Btuh
3	Insulated - Exterior					10	.0		9.8	98	Btuh
	Door Total					5	0 (sqft)			490	Btuh
Ceilings	Type/Color/Surface		R-Va	alue		Area			НТМ	Load	
1	Single Assembly/DarkShingle			23.0		293			1.2	3437	Btuh
	Ceiling Total						4 (sqft)			3437	
Floors	Туре		R-Va	alue		Si			HTM	Load	
1	Slab On Grade			0.0	260 (ft(p))			0.0	0	Btuh	
	Floor Total					260.0 (sqft)					Btuh
						Zo	one Enve	elope Su	ıbtotal:	31444	Btuh

Manual J Summer Calculations

Residential Load - Component Details (continued) Project Title: Class 3 Rating Registration No. 0

McNeill Residence

Climate: North

, FL

9/27/2007

Infiltration	Туре	ACH	Volume(cuft)		CFM=	Load		
	SensibleNatural	0.34		25866		146.6	2728	Btuh
Internal		Occupants	Btuh/occupant		Appliance	Load		
gain		8	Χ	230	+	0	1840	Btuh
Duct load	Average sealed, R6.0	, Supply(Attic), Return	(Attic)			DGM = 0.00	0.0	Btuh
	Sensible Zone Load				36012	Btuh		

Manual J Summer Calculations

Residential Load - Component Details (continued) Project Title: Class

McNeill Residence

, FL

709201BlakeConstruction

Class 3 Rating Registration No. 0 Climate: North

9/27/2007

WHOLE HOUSE TOTALS

	·		
	Sensible Envelope Load All Zones	36012	Btuh
	Sensible Duct Load	0	Btuh
	Total Sensible Zone Loads	36012	Btuh
	Sensible ventilation	0	Btuh
	Blower	0	Btuh
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	Latent duct gain	0	Btuh
	Latent occupant gain (8 people @ 200 Btuh per person)	1600	Btuh
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(ExSh - Exterior shading device: none(N) or numerical value) (BS - Insect screen: none(N), Full(F) or Half(H))

(Ornt - compass orientation)



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Residential Window Diversity

MidSummer

McNeill Residence

, FL

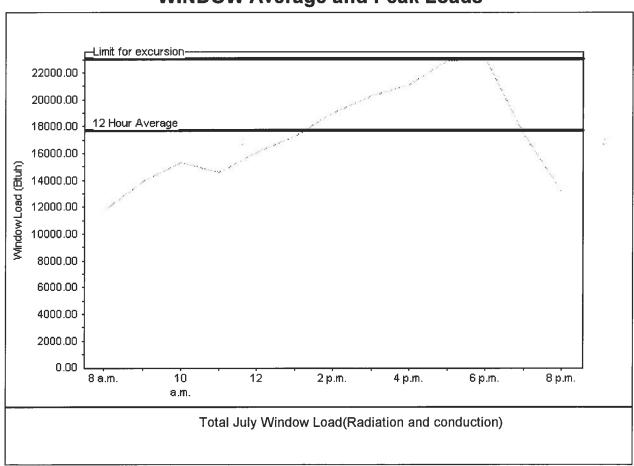
Project Title: 709201BlakeConstruction

Class 3 Rating Registration No. 0 Climate: North

9/27/2007

Weather data for: Gainesville - De	faults		
Summer design temperature	92 F	Average window load for July	17735 Btu
Summer setpoint	75 F	Peak window load for July	23033 Btu
Summer temperature difference	17 F	Excusion limit(130% of Ave.)	23056 Btu
Latitude	29 North	Window excursion (July)	None

WINDOW Average and Peak Loads



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

EnergyGauge® System Sizing for Florida residences only

D.4.T.E

PREPARED BY: 4

EnergyGauge® FLR2PB v4.1



Florida Building Code Online

Page I of 2



FLORIDA BUILDING CODE Quelvieus

Organization Aucrealitation

Select the organization type, status, or name to find an organization

Organization Product Manufacturer Type:

Approval Status: (ALL)

Buildings

Organization General American Door - Product Manufactures Name:

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Result List for Organizations

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Displaying 1-1 of 1

Org Code: PDM

System ID: 3585

She Link: www.gadco.com

General American

Montgomery <u>C</u>

James Campbell 6308593000

Product Manufecturer

01/01/2099 Expere

Applicad Status

Continue

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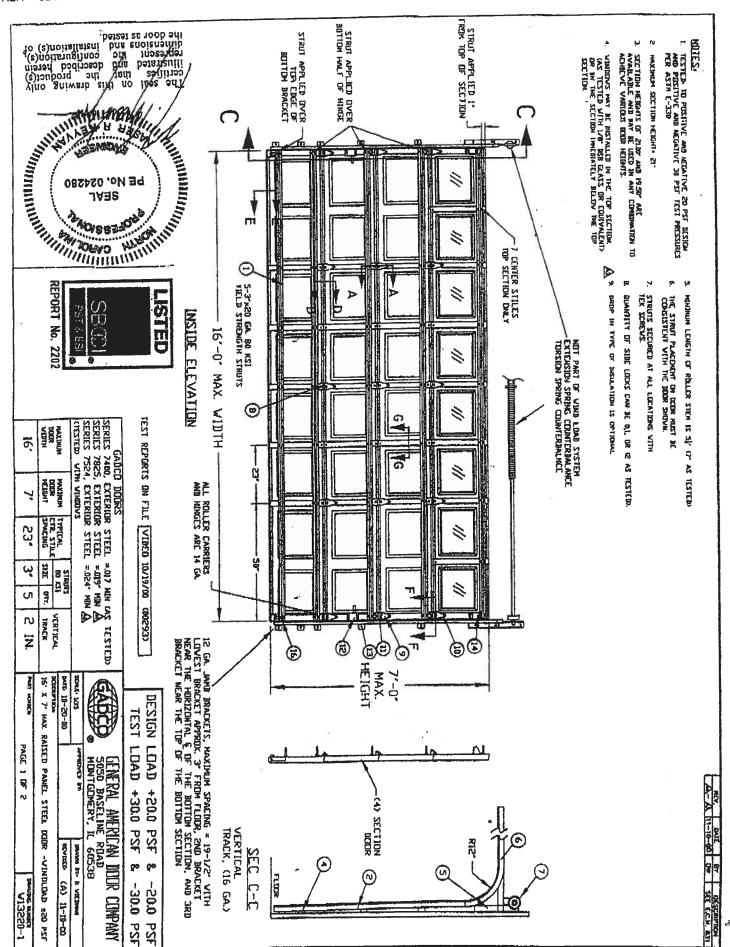
http://www.floridabuilding.org/Common/c_org_regi_SRCH_asp

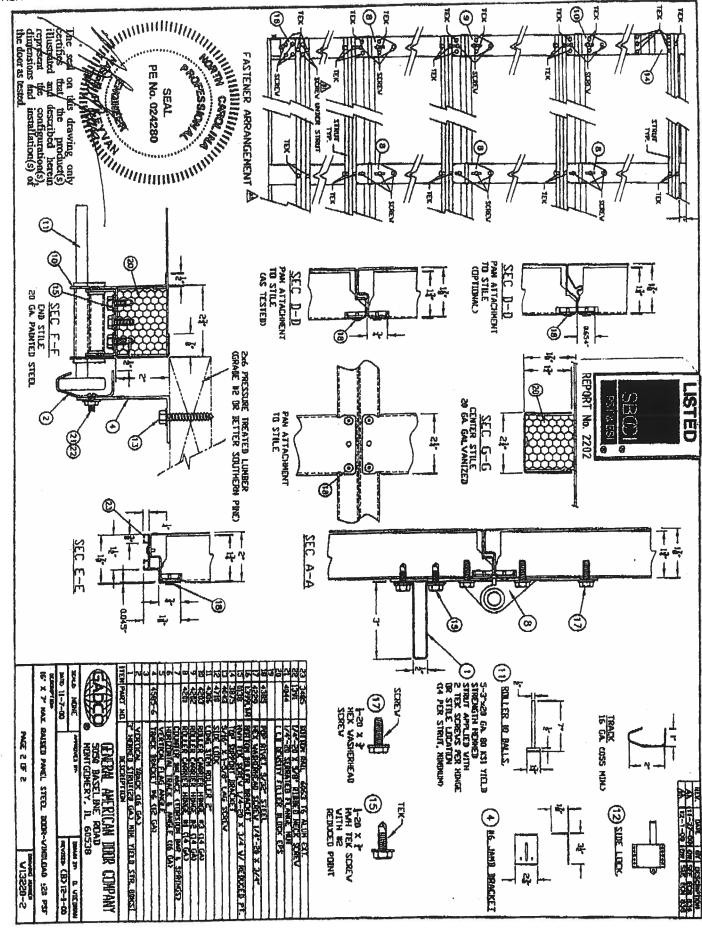
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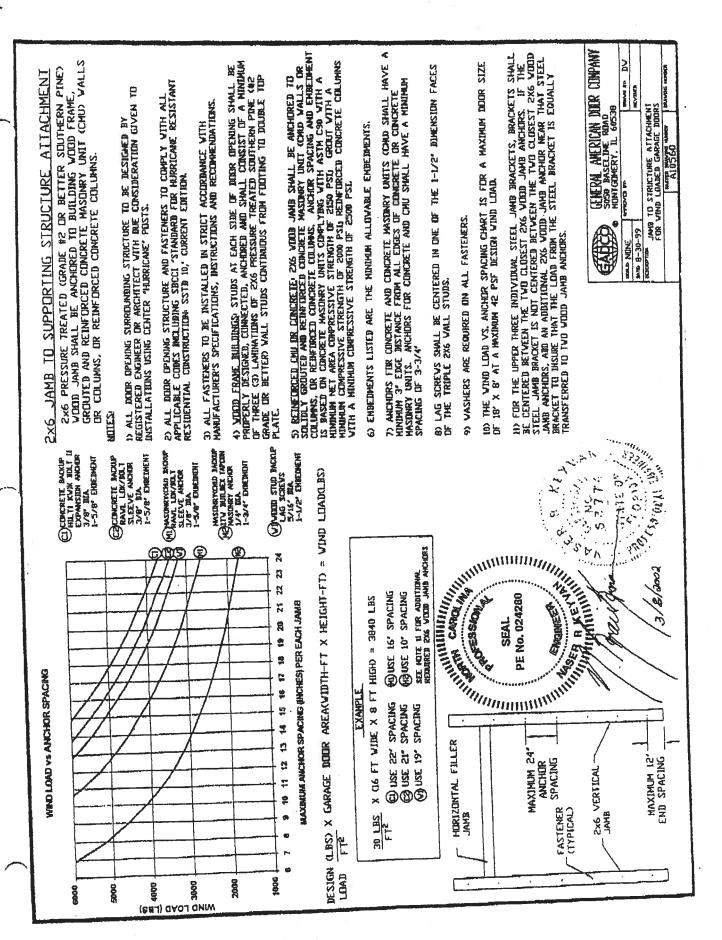




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MANAGEMENT * COMMUNITY PLANNING OFFICE OF THE HOUSING & COMMUNITY DEVELOPMENT

Product Approval
USER: Public User

Product Approval Menu > Product or Application Search > Application List > Application Detail

Application Type

Application Status

Comments

Archived Code Version

2004 Approved Revision FL1956-R1

fred_oconnor@tamko.com PO Box 1404 TAMKO Building Products, Inc. (800) 641-4691 ext 2394 Joplin, MO 64802

Address/Phone/Email Product Manufacturer

Authorized Signature

Address/Phone/Email Technical Representative

> fred_oconnor@tamko.com Frederick O'Connor

Joplin, MO 64802 PO Box 1404 Frederick J. O'Connor fred_oconnor@tamko.com (800) 641-4691

Address/Phone/Email Quality Assurance Representative

Subcategory Category **Asphalt Shingles** Roofing

Compliance Method

Certification Agency Certification Mark or Listing

Referenced Standard and Year (of Standard)

Standard

Year 2001

Underwriters Laboratories Inc.

Equivalence of Product Standards Certified By

ASTM D 3462

Method 1 Option A

Product Approval Method

Date Pending FBC Approval Date Validated Date Submitted Date Approved 06/29/2005 06/25/2005 06/20/2005 06/09/2005

Summary of Products

7 *	<u>n</u>
Model, Number or Name	
Description	

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

Next Back

DCA Administration

Department of Community Affairs Florida Building Code Online Codes and Standards

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Tallahassee, Florida 32399-2100
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Product Approval Accepts:









2/14/2007 11:22 ANA





Morthbrook Division

333 Pingsku Azar Natharak 1 60062-2006 USA www.iron: IB 1 847 P72 5500

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

P. K. Johnson



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.

I. 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 40" Statements Fasteners 17-1/2" 1-1/2" 1-1/2" 1-1/2" 1-1/2"

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)

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Central District Northeast District Southeast District Southwest District Western District 220 West 4th St., Joplin, MO 64801 4500 Tamko Dr., Frederick, MD 21701 2300 35th St., Tuscaloosa, AL 35401 7910 S. Central Exp., Dallas, TX 75216 5300 East 43rd Ave., Denver, CO 80216

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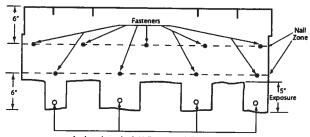


(CONTINUED from Pg. 1)

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

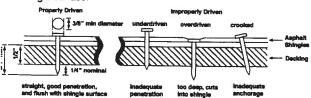
Each shingle tab must be sealed underneath with quick setting asphalt adhesive cement immediately upon installation. Spots of cement must be equivalent in size to a \$.25 piece and applied to shingles with a 5 in. exposure, use 9 fasteners per shingle.

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 <u>non-perforated</u> asphalt saturated organic felt which meets ASTM: D226, Type I or ASTM D4869, Type I
- Any TAMKO <u>non-perforated</u> 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)

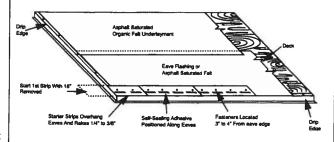
In areas where ice builds up along the eaves or a back-up of water from frozen or clogged gutters is a potential problem, TAMKO's Moisture Guard Plus® waterproofing underlayment (or any specialty eaves flashing product) may be applied to eaves, rakes, ridges, valleys, around chimneys, skylights or dormers to help prevent water damage. Contact TAMKO's Technical Services Department for more information.

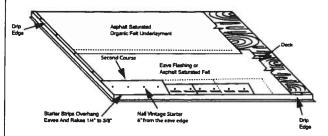
TAMKO does not recommend the use of any substitute products as shingle underlayment.

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)

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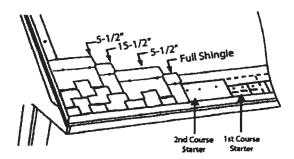
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(CONTINUED from Pg. 2)

• **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.

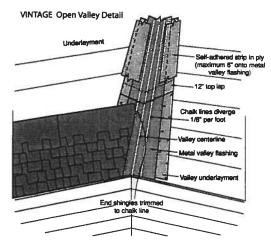
Following valley metal application; a 9" to 12" wide strip of TAMKO Moisture Guard Plus, TW Underlayment or TW Metal & Tile Underlayment should be applied along the edges of the metal valley flashing (max. 6" onto metal valley flashing) and on top of the valley underlayment. The valley will be completed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



· 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)

Visit Our Web Site at WWW.tamko.com Central District Northeast District Southeast District Southwest District Western District 220 West 4th St., Joplin, MO 64801 4500 Tamko Dr., Frederick, MD 21701 2300 35th St., Tuscaloosa, AL 35401 7910 S. Central Exp., Dallas, TX 75216 5300 East 43rd Ave., Denver, CO 80216 800-641-4691 800-368-2055 800-228-2656 800-443-1834 800-530-8868

05/06





(CONTINUED from Pg. 3)

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

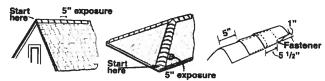
8. HIP AND RIDGE PASTENING DETAIL

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.

Direction of prevailing wind



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.

TAMKO®, Moisture Guard Plus®, Nail Fast® and Heritage® are registered trademarks and Vintage™ is a trademark of TAMKO Building Products, Inc.

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05/06



Product Approval USER: Public User

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Product Approval Menu > Product or Application Search > Application List > Application Detail

MANAGEMENT

OFFICE OF THE SECRETARY

Code Version

Application Type

Application Status

Approved

2004 New

FL5108

Comments

Archived

Product Manufacturer

Address/Phone/Email

Gratz, PA 17030 (717) 365-3300 ext 2101

surich@miwd.com

MI Windows and Doors

650 W Market St

W) indow

Authorized Signature

surich@miwd.com Steven Urich

Technical Representative Address/Phone/Email

Address/Phone/Email **Quality Assurance Representative**



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1 of 9





T-935 P.009/014 F-767

$A \cdot L \cdot I$ (Validator / Operations Administrator)

AAMA CERTIFICATION PROGRAM

<u>AUTHORIZATION FOR PRODUCT CERTIFICATION</u>

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

Attn: Bit 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.

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

SPECIFICATION					LABEL ORDER
AAMA/NWWOA 101/LS. 2-97 H-R55*-36x62	RECORD OF PRODUCT TESTED				
COMPANY AND PLANT LOCATION	CODE NO.	SERIES MODEL & PRODUCT DESCRIPTION	MAXIMUM SIZE TESTED		NO.
Mi Windows & Doors, Inc. (Oldsmer, FL) Mi Windows & Doors, Inc. (Smyrns, TN)	MTL-8 MTL-9	185/3185 SH (Fin) (AL)(O/A)(OG) (ASTM)	FRAME 30 x 52	<u>Sash</u> 210° x 27°	By Request

- This Certification will expire May 14, 2008 and requires validation until then by continued listing in the current AAMA Certified Products Directory.
- 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 UMMEDIATELY IF DATA, AS SHOWN, NEEDS CORRECTION.

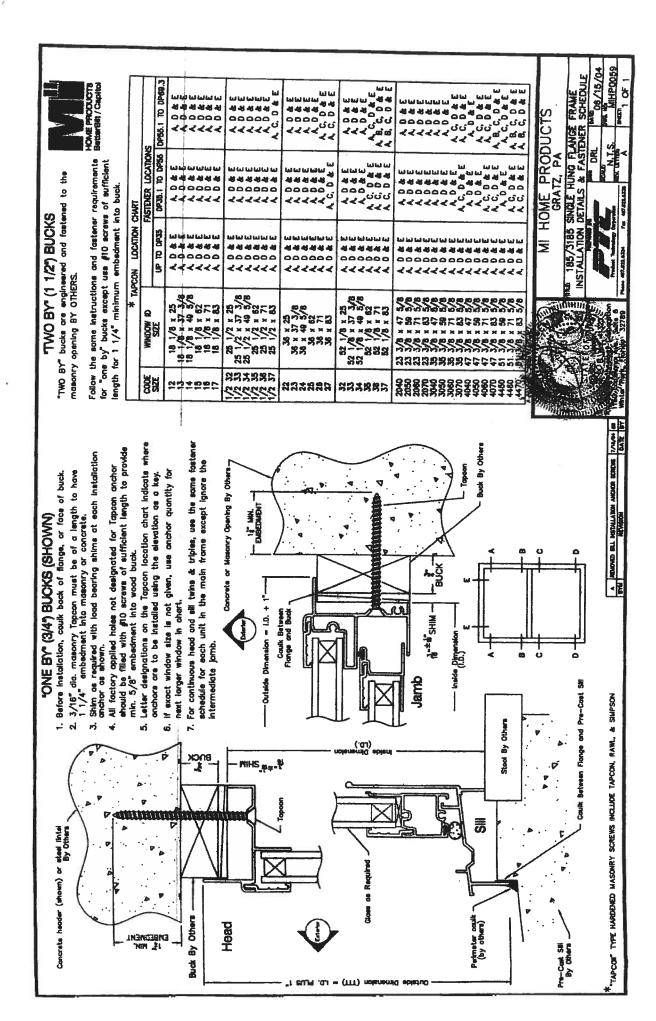
Date: August 1, 2005

CC: AAMA JGS/df ACP-04 (Rev. 5/03) Associately Laboratories, Inc.

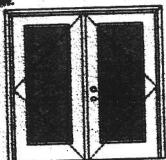
Validated for Certification:

Authorized for Certification:

American Architectural Manufacturers Association



WOOD-EDGE STEEL DOORS



Units of other sizes are covered by this report as long as the panels used do not succeed 3'0" x 5'5".

Double Door

lan Program

Hurricane protective system (shutters) is REQUIRED.

MENLY FEML

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

MANALLANGE BETAIL:

Compliance requires that minimum installation details have been followed - see MID-WL-MAGB02-02.

APPRO ER SOOR STYLES: 1/4 GL/ \$5:











1/2 St. 133:









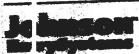








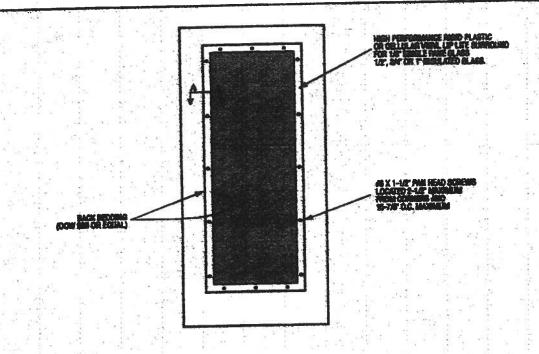
ly also be used in the following door styles: 5-passi; 5-passi with ecroit; System 5-passi; System 5-passi with ecroit.



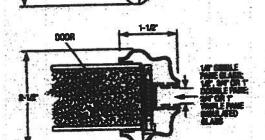


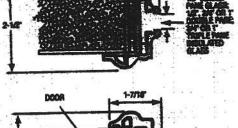


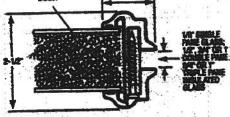
GLASS INSERT IN DOOR OR SIDELITE PANEL



TYPICAL MAND PLACED LIFE SURROUND 1-4/8* DOOR DOOR









XX Glazed (utswing Unit

WOOD-EDGE STEEL DOORS

APPROVED BOOK STYLES: 34 BLAS 1:

00



FILL GLASS:











CENTRE O WAT REPORTS:

NCTL 210-1897-7, 8, 9, 10, 11, 12; NCTL 210-1864-5, 6, 7, 8; NCTL 210-2178-1, 2, 3

Cartifying Engineer and License Number: Barry D. Portney, P.E. / 18258.

Unit Testad in Accordance with Miami-Dade BCCO PA202.

Evaluation report MCTL-210-2794-1

Door panels constructed from 26-gauge 0.017" thick steel skins. Both stiles constructed from word. Top and rails constructed of 0.041" steel. Bottom and rails constructed of 0.021" steel, interior carrily of slab filled with rigid polyurations form core. Slab plazed with insulated glass mounted in a rigid placed by lite surround.

Frame constructed of wood with an extruded aluminum bumper threshold.

PRODU TERMPLIANCE LANELING:

TESTED IN ACCORDANCE WITH MAMI-DADE BCCD PAZOZ

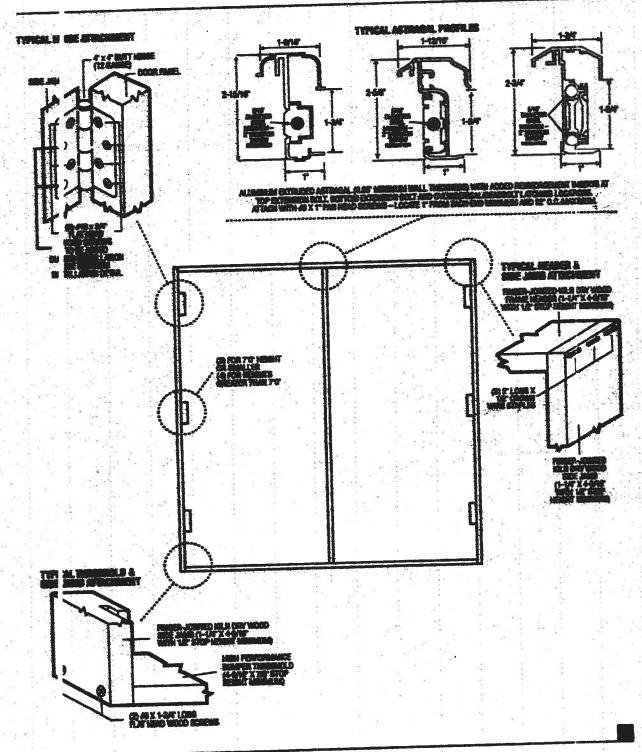
COMPANY MARKE CITY, STATE

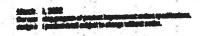
State of Rorida, Professional Engineer Kurt Balthazor, P.E. – License Humber 56533



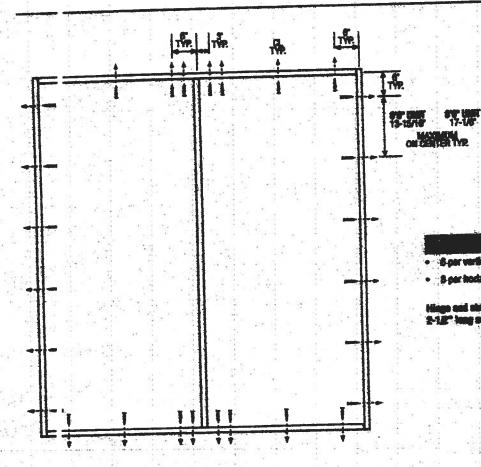


OUTSWING UNITS WITH DOUBLE DOOR









· Sper vertical framing member:

. Sper hodzontal framing member

Hingo and stellar plates require two 2-12" long during per locality.

Co utilizate requires that GRADE 2 or bother (ANGL/BHMA A156.2) cylinderical and dendlock hardware be installed.

- 1. As her calculations have been carried out with the lowest (least) featurer rating from the different featurers being considered for use. Featurers as lyand for this unit include 45 and £10 wood screens or 2/16" Tapcons.
- The wood screw single sheer design values come from Table 11.5A of AMSUAF & PA NOS for southern pine hunder with a side member thickness.
 If and achievement of minimum embedment. The 3/16" Tapoon single shear design values come from the ITW and ELCO Dade Country ap rovals respectively, each with minimum 1-1.M" embedment.
- 3. W od bushs by others, must be anchored properly to transfer loads to the structure.

Nasonite' Masonite International Corporation



CCUPANC

COLUMBIA COUNTY, FLORIDA

partment 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 22-3S-16-02267-108

Use Classification SFD, UTILITY

Building permit No. 000026304

25.68

Fire:

Waste: 67.00

Total: 92.68

Date: 06/09/2008

Location:

813 NW COUNTRY LAKE DR LAKE CITY FL

Owner of Building RUBY & NAN MCNEILL

Permit Holder BLAKE LUNDE

Building Inspector

POST IN A CONSPICUOUS PLACE (Business Places Only)