Columbia County Building Permit Application

For Office Use Only Application # 0711-38 Date Received 11/16 By JW Permit # 26453

Application Approved by - Zoning Official BLK Date 21.11.07 Plans Examiner OK JTH Date 11-21-07

Flood Zone X (Survey plat) Development Permit N/A Zoning A-3 Land Use Plan Map Category A-3

Comments Driveway to be in NW Corner per plat see attached

NOC EH Deed or PA Site Plan State Road Info Parent Parcel # Development P

Name Authorized Person Signing Permit Linda or Melanie Roder Fax 752-2283

Address 387 SW Kemp Ct Lake City FL 32024 Phone 752-2281

Owners Name Richard + Ann Carey Phone 321-537-6947

911 Address 5718 SW CR 240, Lake City, FL 32024

Contractors Name Josh Sparks Phone 623-0575

Address POB 1479 Lake City FL 32056

Fee Simple Owner Name & Address NA

Bonding Co. Name & Address NA

Architect/Engineer Name & Address Will Myers / Nick Geisler

Mortgage Lenders Name & Address

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

Property ID Number 11-5S-16-03570-105 Estimated Cost of Construction 220K

Subdivision Name Wilson Place Lot 5 Block B Unit ___ Phase

Driving Directions 47 S, L on Hwy 240, past Butzer see Sparks construction sign on R into lot

Type of Construction Std Number of Existing Dwellings on Property 0

Total Acreage 5 Lot Size ___ Do you need a - Culvert Permit or Culvert Waiver or Have an Existing

Actual Distance of Structure from Property Lines - Front 100' Side 123.75' Side 123.75 Rear 459'

Total Building Height 20'6 Number of Stories 1 Heated Floor Area 1940 TOTAL 2938 Roof Pitch 4/12

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

STATE OF FLORIDA
COUNTY OF COLUMBIA

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

Sworn to (or affirmed) and subscribed before me this 1 day of November 2007.

Personally known ✓ or Produced Identification ___

Contractor Signature

Contractors License Number CBC 1252264

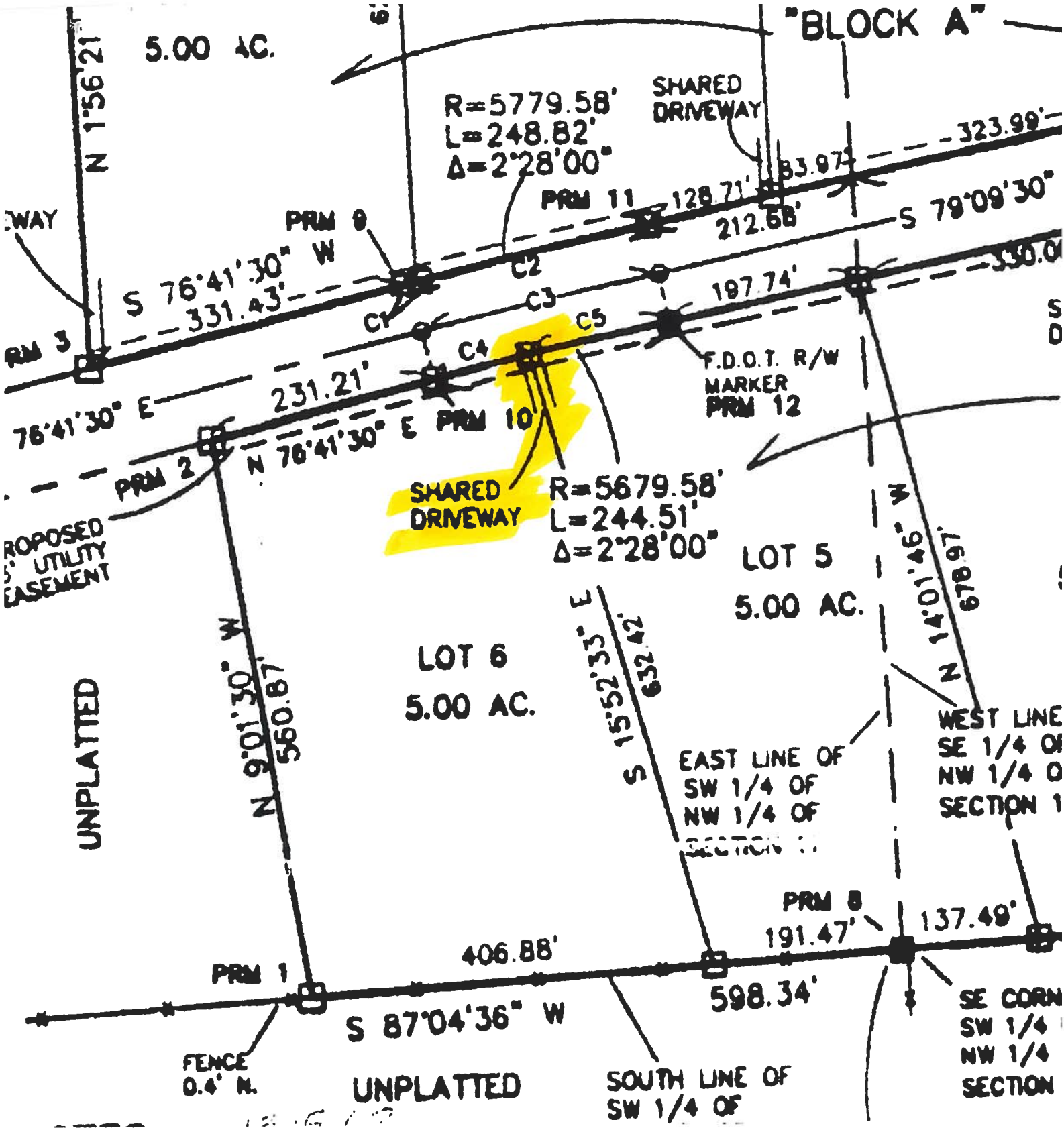
Competency Card Number ___

NOTARY STAMP/SEAL

Notary Signature 11/26/07

(Revised Sept. 2

Left message


"BLOCK A"
5.00 AC.
N 1°56'21"
R=5779.58'
L=248.82'
Δ=2°28'00"
SHARED DRIVEWAY
323.99'
PRM 11
128.71'
83.97'
212.68'
S 79°09'30"
PRM 9
S 76°41'30" W
331.43'
C2
C3
197.74'
C1
C4
C5
PRM 3
F.D.O.T. R/W MARKER PRM 12
231.21'
76°41'30" E
N 76°41'30" E
PRM 10
PRM 2
SHARED DRIVEWAY
R=5679.58'
L=244.51'
Δ=2°28'00"
PROPOSED 5' UTILITY EASEMENT
LOT 5
5.00 AC.
LOT 6
5.00 AC.
UNPLATTED
N 9°01'30" W
560.87'
S 15°52'33" E
632.42'
N 14°01'49" W
678.67'
EAST LINE OF SW 1/4 OF NW 1/4 OF SECTION 1
WEST LINE SE 1/4 OF NW 1/4 OF SECTION 1
PRM 8
191.47'
137.49'
406.88'
PRM 1
598.34'
S 87°04'36" W
FENCE 0.4' N.
UNPLATTED
SOUTH LINE OF SW 1/4 OF
SE CORN SW 1/4 NW 1/4 SECTION

Notice of Authorization

I Josh Sparks, 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

11-1-07
Date

Sworn and Subscribed to me this 1 day of November, 2007
Personally known ✓
Produced Identification _____

_____
Notary Public

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

Inst:2004020255 Date:09/01/2004 Time:14:26
Doc Stamp-Deed : 339.50
DC,P.DeWitt Cason,Columbia County B:1025 P:137

Prepared by:
Rhonda B. Green
Abstract & Title Services, Inc.
382 SW Baya Drive
Lake City, Florida 32025

Warranty Deed

Individual to Individual

THIS WARRANTY DEED made the 27th day of August, 2004 by

Richard Philpot, and his wife, Leanne B. Philpot
hereinafter called the grantor, to

Richard A. Carey and Ann L. Carey, his wife
whose post office address is: XXXX Wilson Place (Lot 5), Lake City, FL 32025
hereinafter called the grantee:

(Wherever 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 corporation)

Witnesseth: That the grantor, for and in consideration of the sum of $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: Parcel ID#

Lot 5, Wilson Place, a subdivision according to the plat thereof, recorded in Plat Book 7, Page 86, of the Public Records of Columbia County, Florida.

TOGETHER with all 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, 2003.

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

Witness Rhonda B. Green

Richard Philpot

Leanne B. Philpot

STATE OF FLORIDA
COUNTY OF COLUMBIA

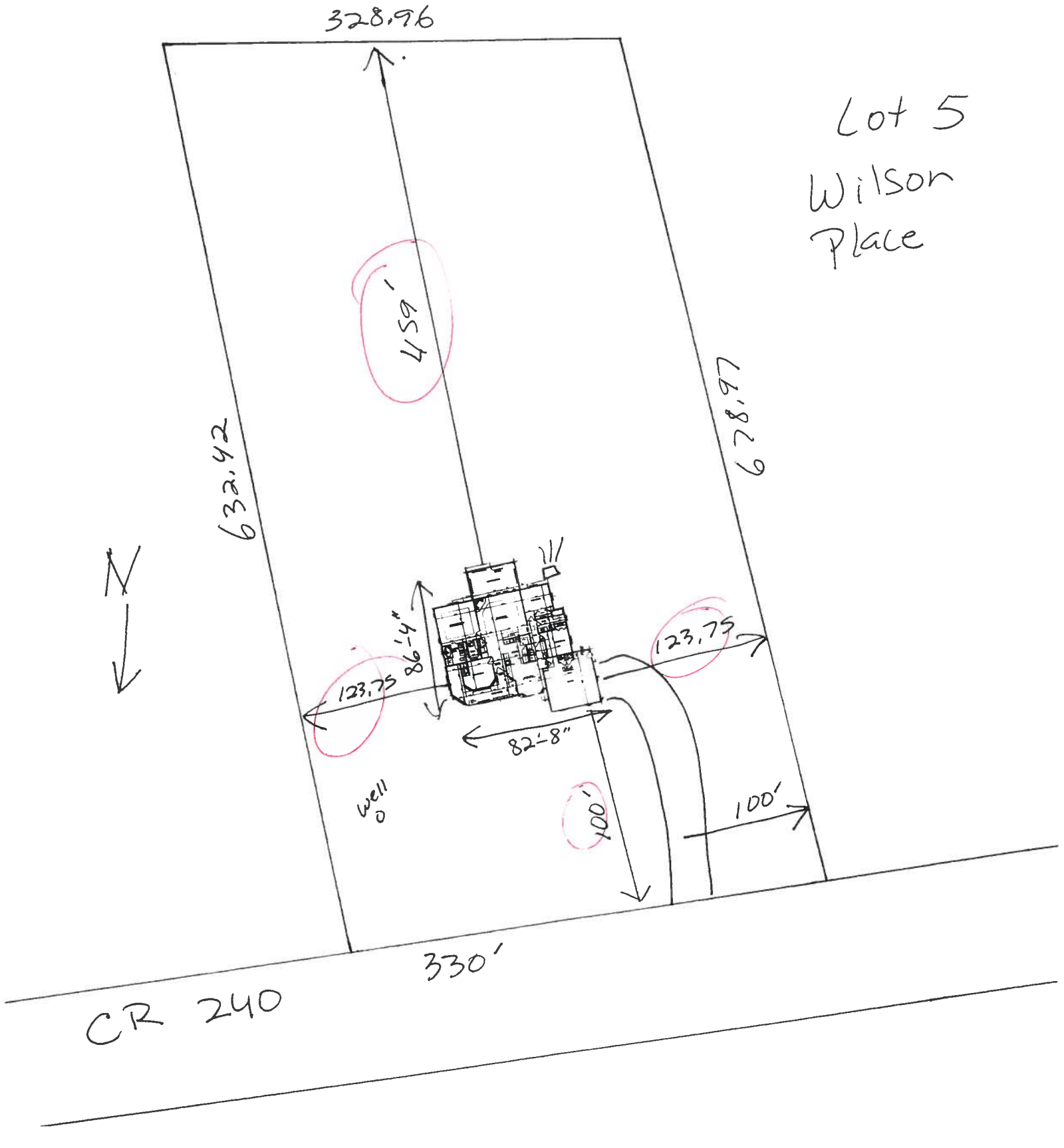
The foregoing instrument was acknowledged before me this 27th day of August, 2004 by Richard Philpot, and his wife, Leanne B. Philpot personally known to me or, if not personally known to me, who produced Driver's License No. ___ _____ for identification and who did not take an oath.

(SEAL)

RHONDA B. GREEN
MY COMMISSION # DD 064637
EXPIRES February 12, 2008

Notary Public

Richard & Ann Carey
11-55-16-03570-105



HALL'S PUMP & WELL SERVICE, INC.

SPECIALIZING IN 4"-6" WELLS

DONALD AND MARY HALL
OWNERS

PHONE (904) 755-
FAX (904) 755-7
LAKE CITY, FLORIDA
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. Hall
DDH/jk

FORM 600A-2004R

EnergyGauge® 4.5.2

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Community Affairs

Residential Whole Building Performance Method A

Project Name:	**Sparks Construction - Carey Residence**	Builder:	**Sparks Construction**
Address:	**Highway 240**	Permitting Office:	Columbia
City, State:	**Columbia City, FL 32024-**	Permit Number:	26453
Owner:	**Rick & Ann Carey**	Jurisdiction Number:	221000
Climate Zone:	**North**		

1. New construction or existing	New	12. Cooling systems	
2. Single family or multi-family	Single family	a. Central Unit	Cap: 40.0 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?	No	c. N/A	
6. Conditioned floor area (ft²)	1940 ft²		
7. Glass type[1] and area: (Label reqd. by 13-104.4.5 if not default)		13. Heating systems	
a. U-factor: (or Single or Double DEFAULT)	Description Area 7a. (Dble Default) 307.0 ft²	a. Electric Heat Pump	Cap: 40.0 kBtu/hr
b. SHGC: (or Clear or Tint DEFAULT)	7b. (Clear) 307.0 ft²		HSPF: 7.70
8. Floor types		b. N/A	
a. Slab-On-Grade Edge Insulation	R=5.0, 202.0(p) ft	c. N/A	
b. N/A			
c. N/A		14. Hot water systems	
9. Wall types		a. Electric Resistance	Cap: 80.0 gallons
a. Frame, Wood, Exterior	R=13.0, 1065.0 ft²		EF: 0.90
b. Frame, Wood, Adjacent	R=13.0, 204.0 ft²	b. N/A	
c. N/A		c. Conservation credits (HR-Heat recovery, Solar DHP-Dedicated heat pump)	
d. N/A		15. HVAC credits (CF-Ceiling fan, CV-Cross ventilation, HF-Whole house fan, PT-Programmable Thermostat, MZ-C-Multizone cooling, MZ-H-Multizone heating)	PT,
e. N/A			
10. Ceiling types			
a. Under Attic	R=30.0, 2050.0 ft²		
b. N/A			
c. N/A			
11. Ducts			
a. Sup: Unc. Ret: Unc. AH: Garage	Sup. R=6.0, 50.0 ft		
b. N/A			

Glass/Floor Area: 0.16

Total as-built points: 27220

Total base points: 27760

PASS

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

PREPARED BY: _____

DATE: 10.11.07

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

OWNER/AGENT: _____

DATE: _____

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

BUILDING OFFICIAL: _____

DATE: _____

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

SUMMER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: **Highway 240, Columbia City, FL, 32024-** 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	1940.0	18.59	6492.0	1.Double, Clear	W	1.5	8.0	45.0	38.52	0.96	1660.0	
				2.Double, Clear	W	13.5	8.0	30.0	38.52	0.43	493.0	
				3.Double, Clear	W	13.5	8.0	40.0	38.52	0.43	657.0	
				4.Double, Clear	N	1.5	8.0	30.0	19.20	0.97	557.0	
				5.Double, Clear	N	1.5	8.0	6.0	19.20	0.97	111.0	
				6.Double, Clear	E	1.5	8.0	25.0	42.06	0.96	1006.0	
				7.Double, Clear	E	1.5	8.0	15.0	42.06	0.96	604.0	
				8.Double, Clear	S	3.5	8.0	15.0	35.87	0.70	375.0	
				9.Double, Clear	SE	7.5	8.0	30.0	42.75	0.51	649.0	
				10.Double, Clear	NE	7.5	8.0	15.0	29.56	0.60	265.0	
				11.Double, Clear	E	7.5	8.0	30.0	42.06	0.53	673.0	
				12.Double, Clear	S	1.5	8.0	16.0	35.87	0.92	529.0	
				13.Double, Clear	S	1.5	8.0	10.0	35.87	0.92	331.0	
				As-Built Total:				**307.0**			**7910.0**	

WALL TYPES	Area X	BSPM	= Points	Type	R-Value	Area X	SPM	= Points
Adjacent	204.0	0.70	142.8	1. Frame, Wood, Exterior	13.0	1065.0	1.50	1597.5
Exterior	1065.0	1.70	1810.5	2. Frame, Wood, Adjacent	13.0	204.0	0.60	122.4
Base Total:	**1269.0**		**1953.3**	**As-Built Total:**		**1269.0**		**1719.9**

DOOR TYPES	Area X	BSPM	= Points	Type	Area X	SPM	= Points
Adjacent	20.0	2.40	48.0	1.Exterior Insulated	20.0	4.10	82.0
Exterior	20.0	6.10	122.0	2.Adjacent Insulated	20.0	1.60	32.0
Base Total:	**40.0**		**170.0**	**As-Built Total:**	**40.0**		**114.0**

CEILING TYPES	Area X	BSPM	= Points	Type	R-Value	Area X	SPM X SCM =	Points
Under Attic	1940.0	1.73	3356.2	1. Under Attic	30.0	2050.0	1.73 X 1.00	3546.5
Base Total:	**1940.0**		**3356.2**	**As-Built Total:**		**2050.0**		**3546.5**

FLOOR TYPES	Area X	BSPM	= Points	Type	R-Value	Area X	SPM	= Points
Slab	202.0(p)	-37.0	-7474.0	1. Slab-On-Grade Edge Insulation	5.0	202.0(p	-36.20	-7312.4
Raised	0.0	0.00	0.0					
Base Total:			**-7474.0**	**As-Built Total:**		**202.0**		**-7312.4**

SUMMER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: **Highway 240, Columbia City, FL, 32024-** PERMIT #:

BASE				AS-BUILT						
INFILTRATION	Area X	BSPM	= Points		Area X	SPM	= Points			
	1940.0	10.21	19807.4		1940.0	10.21	19807.4			
Summer Base Points: 24304.9				**Summer As-Built Points:**						**25785.4**
Total Summer Points	X	System Multiplier	= Cooling Points	Total Component (System - Points)	X	Cap Ratio	X Duct Multiplier (DM x DSM x AHU)	X System Multiplier	X Credit Multiplier	= Cooling Points
				(sys 1: Central Unit 40000btuh ,SEER/EFF(13.0) Ducts:Unc(S),Unc(R),Gar(AH),R6.0(INS)						
24304.9		**0.3250**	**7899.1**	25785 **25785.4**		1.00 **1.00**	(1.09 x 1.147 x 1.00) **1.250**	0.260 **0.260**	0.950 **0.950**	7962.7 **7962.7**

WINTER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: **Highway 240, Columbia City, FL, 32024-** 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	1940.0	20.17	7043.0	1.Double, Clear	W	1.5	8.0	45.0	20.73	1.01	943.0	
				2.Double, Clear	W	13.5	8.0	30.0	20.73	1.21	755.0	
				3.Double, Clear	W	13.5	8.0	40.0	20.73	1.21	1006.0	
				4.Double, Clear	N	1.5	8.0	30.0	24.58	1.00	737.0	
				5.Double, Clear	N	1.5	8.0	6.0	24.58	1.00	147.0	
				6.Double, Clear	E	1.5	8.0	25.0	18.79	1.02	479.0	
				7.Double, Clear	E	1.5	8.0	15.0	18.79	1.02	287.0	
				8.Double, Clear	S	3.5	8.0	15.0	13.30	1.49	296.0	
				9.Double, Clear	SE	7.5	8.0	30.0	14.71	1.88	828.0	
				10.Double, Clear	NE	7.5	8.0	15.0	23.57	1.04	368.0	
				11.Double, Clear	E	7.5	8.0	30.0	18.79	1.27	715.0	
				12.Double, Clear	S	1.5	8.0	16.0	13.30	1.04	221.0	
				13.Double, Clear	S	1.5	8.0	10.0	13.30	1.04	138.0	
				As-Built Total:				**307.0**			**6920.0**	

WALL TYPES	Area X	BWPM	= Points	Type	R-Value	Area X	WPM	= Points
Adjacent	204.0	3.60	734.4	1. Frame, Wood, Exterior	13.0	1065.0	3.40	3621.0
Exterior	1065.0	3.70	3940.5	2. Frame, Wood, Adjacent	13.0	204.0	3.30	673.2
Base Total:	**1269.0**		**4674.9**	**As-Built Total:**		**1269.0**		**4294.2**

DOOR TYPES	Area X	BWPM	= Points	Type	Area X	WPM	= Points
Adjacent	20.0	11.50	230.0	1.Exterior Insulated	20.0	8.40	168.0
Exterior	20.0	12.30	246.0	2.Adjacent Insulated	20.0	8.00	160.0
Base Total:	**40.0**		**476.0**	**As-Built Total:**	**40.0**		**328.0**

CEILING TYPES	Area X	BWPM	= Points	Type	R-Value	Area X	WPM X WCM	= Points
Under Attic	1940.0	2.05	3977.0	1. Under Attic	30.0	2050.0	2.05 X 1.00	4202.5
Base Total:	**1940.0**		**3977.0**	**As-Built Total:**		**2050.0**		**4202.5**

FLOOR TYPES	Area X	BWPM	= Points	Type	R-Value	Area X	WPM	= Points
Slab	202.0(p)	8.9	1797.8	1. Slab-On-Grade Edge Insulation	5.0	202.0(p	7.60	1535.2
Raised	0.0	0.00	0.0					
Base Total:			**1797.8**	**As-Built Total:**		**202.0**		**1535.2**

WINTER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: **Highway 240, Columbia City, FL, 32024-** PERMIT #:

BASE				AS-BUILT						
INFILTRATION	Area X	BWPM	= Points				Area X	WPM	=	Points
	1940.0	-0.59	-1144.6				1940.0	-0.59		-1144.6
Winter Base Points:			**16824.1**	**Winter As-Built Points:**						**16135.3**
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
16824.1		**0.5540**	**9320.6**	(sys 1: Electric Heat Pump 40000 btuh ,EFF(7.7) Ducts:Unc(S),Unc(R),Gar(AH),R6.0						
				16135.3		1.000	(1.069 x 1.169 x 1.00)	0.443	0.950	8483.1
				16135.3		**1.00**	**1.250**	**0.443**	**0.950**	**8483.1**

WATER HEATING & CODE COMPLIANCE STATUS

Residential Whole Building Performance Method A - Details

ADDRESS: **Highway 240, Columbia City, FL, 32024-** 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	80.0	0.90	4	1.00	2693.56	1.00	10774.2	
				As-Built Total:						**10774.2**	

CODE COMPLIANCE STATUS

BASE				AS-BUILT			
Cooling Points	+ Heating Points	+ Hot Water Points	= Total Points	Cooling Points	+ Heating Points	+ Hot Water Points	= Total Points
7899	**9321**	**10540**	**27760**	**7963**	**8483**	**10774**	**27220**

PASS

ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE SCORE* = 84.8

The higher the score, the more efficient the home.

Rick & Ann Carey, Highway 240, Columbia City, FL, 32024-

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?	No		
6. Conditioned floor area (ft²)	1940 ft²		
7. Glass type[1] and area: (Label reqd. by 13-104.4.5 if not default)			
a. U-factor:	Description	Area	
(or Single or Double DEFAULT)	7a. (Dble Default)	307.0 ft²	
b. SHGC:			
(or Clear or Tint DEFAULT)	7b. (Clear)	307.0 ft²	
8. Floor types			
a. Slab-On-Grade Edge Insulation	R=5.0, 202.0(p) ft		
b. N/A			
c. N/A			
9. Wall types			
a. Frame, Wood, Exterior	R=13.0, 1065.0 ft²		
b. Frame, Wood, Adjacent	R=13.0, 204.0 ft²		
c. N/A			
d. N/A			
e. N/A			
10. Ceiling types			
a. Under Attic	R=30.0, 2050.0 ft²		
b. N/A			
c. N/A			
11. Ducts			
a. Sup: Unc. Ret: Unc. AH: Garage	Sup. R=6.0, 50.0 ft		
b. N/A			

12. Cooling systems		
a. Central Unit	Cap: 40.0 kBtu/hr	
	SEER: 13.00	
b. N/A		
c. N/A		
13. Heating systems		
a. Electric Heat Pump	Cap: 40.0 kBtu/hr	
	HSPF: 7.70	
b. N/A		
c. N/A		
14. Hot water systems		
a. Electric Resistance	Cap: 80.0 gallons	
	EF: 0.90	
b. N/A		
c. Conservation credits		
(HR-Heat recovery, Solar DHP-Dedicated heat pump)		
15. HVAC credits	PT,	
(CF-Ceiling fan, CV-Cross ventilation, HF-Whole house fan, PT-Programmable Thermostat, MZ-C-Multizone cooling, MZ-H-Multizone heating)		

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

Builder Signature: _____ Date: _____

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

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

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

Code Compliance Checklist

Residential Whole Building Performance Method A - Details

ADDRESS: **Highway 240, Columbia City, FL, 32024-** PERMIT #:

6A-21 INFILTRATION REDUCTION COMPLIANCE CHECKLIST

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

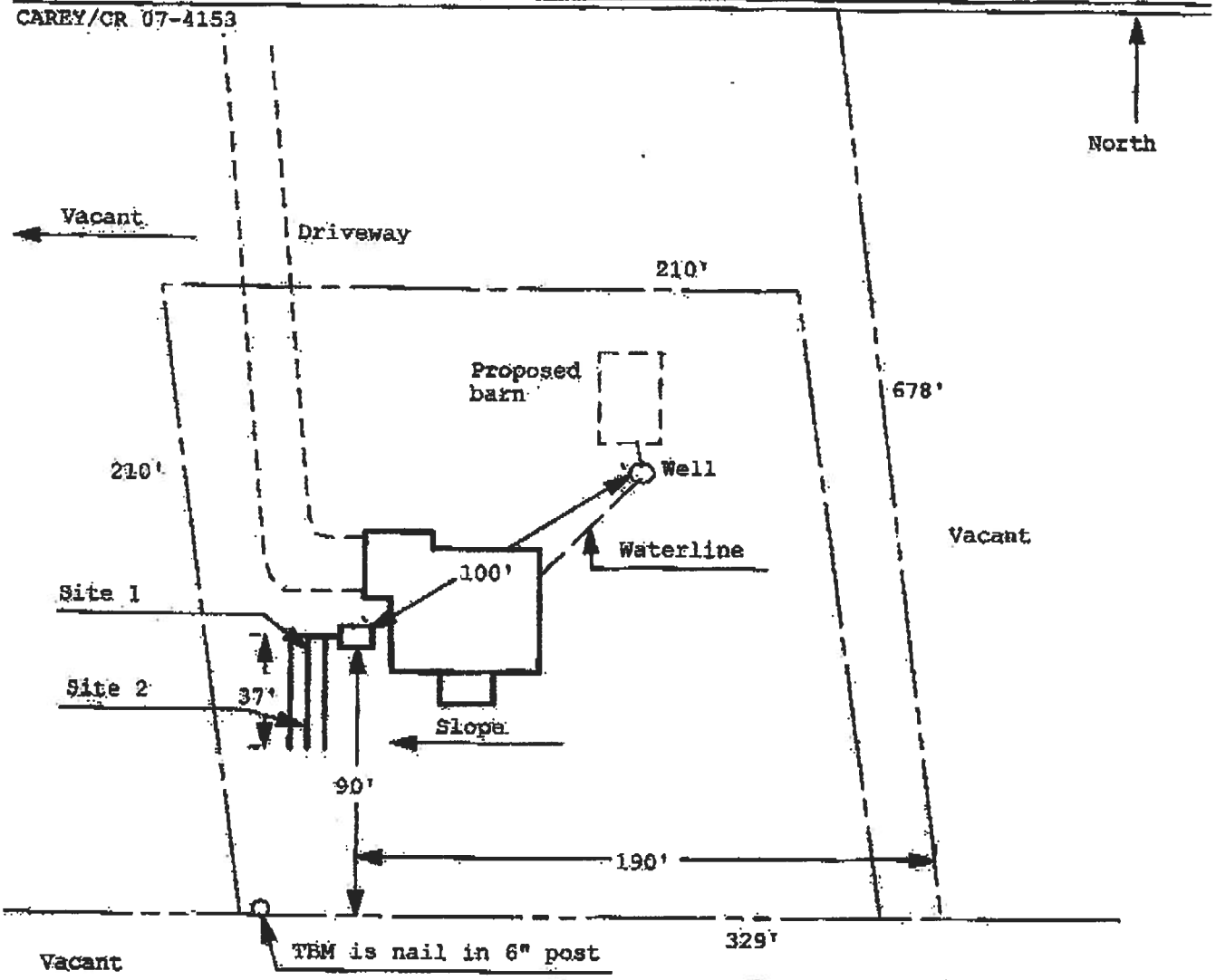
6A-22 OTHER PRESCRIPTIVE MEASURES (must be met or exceeded by all residences.)

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

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

Permit Application Number: 07-0902

ALL CHANGES MUST BE APPROVED BY THE COUNTY HEALTH UNIT



Site Plan Submitted By Paul Lloyd Date 11/5/07

Plan Approved ✓ Not Approved ___ Date 11/26/07

By Marsha Zanch Columbia CCHU

Notes: ___

0711-38

PREPARED BY:
Randy Bullard
Robertson & Anschutz
10333 Richmond Avenue, Suite 550
Houston, TX 77042

AFTER RECORDED RETURN TO:

Bank of America, N.A.
9000 Southside Blvd., Ste. 700
Jacksonville, FL 32256

Inst:20[redacted] Date:11/15/2007 Time:11:50 AM
DC,P.DeWitt Cason,Columbia County Page 1 of 4

NOTICE OF COMMENCEMENT

Permit No. _____

Tax Folio No. R03570-105

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: Parcel No. 11 5S 16 03570 105
   * Southwest CR 240
   Lake City, FL 32055

   See Exhibit "A" attached hereto and made a part hereof for all purposes
   (Legal description of the property and street address if available)

2. General Description of Improvement:

   Construction of Custom Home

3. Owner Information:
   Name: Richard A. Carey and Ann L. Carey, husband and wife
   Address: 425 Southwest Longhorn Terrace
   Fort White, FL 32038
   Interest in Property: _____

   Fee Simple Titleholder (if other than owner):
   Name: Richard A. Carey and Ann L. Carey, husband and wife
   Address: 425 Southwest Longhorn Terrace
   Fort White, FL 32038

4. Contractor:
   Name: Sparks Construction, Inc.
   Address: 163 Southwest Midtown Place
   Lake City FL 32025
   Phone:

5. Surety:
   Name: _____
   Address: _____
   _____
   Phone: _____ Amount of Bond: $ _____

0711-38

6. Lender:
Name: **Bank of America, N.A.**
Address: **1201 Main Street, 11th Floor, Dallas, TX 75202-0000**
Phone: **877-719-6142**

7. Persons within the State of Florida designated by Owner upon whom notices or other documents may be served as provided by Section 713.13(1)(a)(7), Florida Statutes
Name: _____
Address: _____
Phone numbers of designated persons: _____

8. In addition to himself or herself, Owner designates _____ of _____ to receive a copy of the Lienor's Notice as provided in Section 713.13(1)(b), Florida Statutes.
Phone number of person or entity designated by owner: _____

9. Expiration date of Notice of Commencement (the expiration date is (1) year from the date of recording unless 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 1, SECTION 71 3.13, 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 WITH YOUR LENDER OR AN ATTORNEY BEFORE COMMENCING WORK OR RECORDING YOUR NOTICE OF COMMITMENT.

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

_____
Signatory's Title/Office

0711-38

State of Florida
County of Columbia

The foregoing instrument was acknowledged before me this 14th day of November 2007 by Richard Carey & Ann Carey his wife, who is personally known to me or has produced FL DL as identification.

Notary Public State of Florida
Lisa Kraus
My Commission DD602601
Expires 10/06/2010

Lisa Kraus
Notary Public

Lisa Kraus
Printed Name
My Commission Expires:

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.

Lisa Kraus
Signature of Natural Person Signing Above

Lisa Kraus

0711-38

Loan No.: 6018972445

EXHIBIT "A"

Lot 5, Block B, WILSON PLACE, a subdivision, according to the plat thereof, recorded in Plat Book 7, Page(s) 86 of the Public Records of Columbia County, Florida

Residential System Sizing Calculation

Summary

Rick & Ann Carey
Highway 240
Columbia City, FL 32024-

Project Title:
Sparks Construction - Carey Residence

Code Only
Professional Version
Climate: North

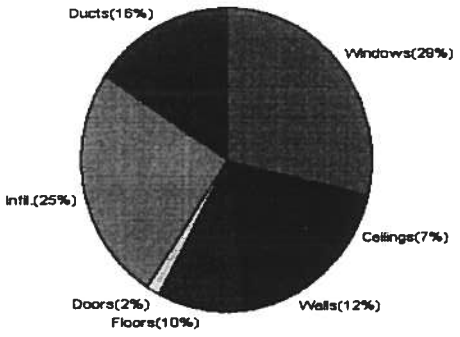
10/11/2007

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	**34047**	**Btuh**	**Total cooling load calculation**	**46066**	**Btuh**
Submitted heating capacity	% of calc	Btuh	Submitted cooling capacity	% of calc	Btuh
Total (Electric Heat Pump)	117.5	40000	Sensible (SHR = 0.75)	81.3	30000
Heat Pump + Auxiliary(0.0kW)	117.5	40000	Latent	109.3	10000
			Total (Electric Heat Pump)	86.8	40000

WINTER CALCULATIONS

Winter Heating Load (for 1940 sqft)

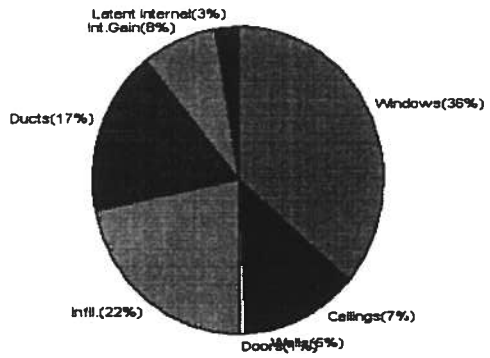
Load component			Load	
Window total	307	sqft	9882	Btuh
Wall total	1269	sqft	4167	Btuh
Door total	40	sqft	518	Btuh
Ceiling total	2050	sqft	2416	Btuh
Floor total	202	sqft	3304	Btuh
Infiltration	207	cfm	8382	Btuh
Duct loss			5378	Btuh
Subtotal			**34047**	**Btuh**
Ventilation	0	cfm	0	Btuh
TOTAL HEAT LOSS			**34047**	**Btuh**



SUMMER CALCULATIONS

Summer Cooling Load (for 1940 sqft)

Load component			Load	
Window total	307	sqft	16738	Btuh
Wall total	1269	sqft	2529	Btuh
Door total	40	sqft	392	Btuh
Ceiling total	2050	sqft	3395	Btuh
Floor total			0	Btuh
Infiltration	181	cfm	3370	Btuh
Internal gain			3780	Btuh
Duct gain			6711	Btuh
Sens. Ventilation	0	cfm	0	Btuh
Total sensible gain			**36915**	**Btuh**
Latent gain(ducts)			1334	Btuh
Latent gain(infiltration)			6617	Btuh
Latent gain(ventilation)			0	Btuh
Latent gain(internal/occupants/other)			1200	Btuh
Total latent gain			**9151**	**Btuh**
TOTAL HEAT GAIN			**46066**	**Btuh**



Powered by ACCA MANUAL J

Version 8
For Florida residences only

EnergyGauge® System Sizing
PREPARED BY: _____
DATE: 10-11-07

System Sizing Calculations - Winter

Residential Load - Whole House Component Details

Rick & Ann Carey
Highway 240
Columbia City, FL 32024-

Project Title:
Sparks Construction - Carey Residence

Code Only
Professional Version
Climate: North

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

10/11/2007

Component Loads for Whole House

Window	Panes/SHGC/Frame/U	Orientation	Area(sqft) X	HTM=	Load
1	2, Clear, Metal, 0.87	W	45.0	32.2	1449 Btuh
2	2, Clear, Metal, 0.87	W	30.0	32.2	966 Btuh
3	2, Clear, Metal, 0.87	W	40.0	32.2	1288 Btuh
4	2, Clear, Metal, 0.87	N	30.0	32.2	966 Btuh
5	2, Clear, Metal, 0.87	N	6.0	32.2	193 Btuh
6	2, Clear, Metal, 0.87	E	25.0	32.2	805 Btuh
7	2, Clear, Metal, 0.87	E	15.0	32.2	483 Btuh
8	2, Clear, Metal, 0.87	S	15.0	32.2	483 Btuh
9	2, Clear, Metal, 0.87	SE	30.0	32.2	966 Btuh
10	2, Clear, Metal, 0.87	NE	15.0	32.2	483 Btuh
11	2, Clear, Metal, 0.87	E	30.0	32.2	966 Btuh
12	2, Clear, Metal, 0.87	S	16.0	32.2	515 Btuh
13	2, Clear, Metal, 0.87	S	10.0	32.2	322 Btuh
	Window Total		307(sqft)		9882 Btuh
Walls	Type	R-Value	Area X	HTM=	Load
1	Frame - Wood - Ext(0.09)	13.0	1065	3.3	3498 Btuh
2	Frame - Wood - Adj(0.09)	13.0	204	3.3	670 Btuh
	Wall Total		1269		4167 Btuh
Doors	Type		Area X	HTM=	Load
1	Insulated - Exterior		20	12.9	259 Btuh
2	Insulated - Adjacent		20	12.9	259 Btuh
	Door Total		40		518Btuh
Ceilings	Type/Color/Surface	R-Value	Area X	HTM=	Load
1	Vented Attic/D/Shin	30.0	2050	1.2	2416 Btuh
	Ceiling Total		2050		2416Btuh
Floors	Type	R-Value	Size X	HTM=	Load
1	Slab On Grade	5	202.0 ft(p)	16.4	3304 Btuh
	Floor Total		202		3304 Btuh
			Envelope Subtotal:		20287 Btuh
Infiltration	Type	ACH X	Volume(cuft)	walls(sqft)	CFM=
	Natural	0.80	15520	1269	206.9
					8382 Btuh
Ductload				(DLM of 0.188)	5378 Btuh
All Zones			**Sensible Subtotal All Zones**		**34047 Btuh**

Manual J Winter Calculations

Residential Load - Component Details (continued)

Rick & Ann Carey
Highway 240
Columbia City, FL 32024-

Project Title:
Sparks Construction - Carey Residence

Code Only
Professional Version
Climate: North

10/11/2007

WHOLE HOUSE TOTALS

	Subtotal Sensible	34047 Btuh
	Ventilation Sensible	0 Btuh
	Total Btuh Loss	34047 Btuh

EQUIPMENT

1. Electric Heat Pump	#	40000 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)

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System Sizing Calculations - Winter

Residential Load - Room by Room Component Details

Rick & Ann Carey
Highway 240
Columbia City, FL 32024-

Project Title:
Sparks Construction - Carey Residence

Code Only
Professional Version
Climate: North

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

10/11/2007

Component Loads for Zone #1: Main

Window	Panes/SHGC/Frame/U	Orientation	Area(sqft) X	HTM=	Load
1	2, Clear, Metal, 0.87	W	45.0	32.2	1449 Btuh
2	2, Clear, Metal, 0.87	W	30.0	32.2	966 Btuh
3	2, Clear, Metal, 0.87	W	40.0	32.2	1288 Btuh
4	2, Clear, Metal, 0.87	N	30.0	32.2	966 Btuh
5	2, Clear, Metal, 0.87	N	6.0	32.2	193 Btuh
6	2, Clear, Metal, 0.87	E	25.0	32.2	805 Btuh
7	2, Clear, Metal, 0.87	E	15.0	32.2	483 Btuh
8	2, Clear, Metal, 0.87	S	15.0	32.2	483 Btuh
9	2, Clear, Metal, 0.87	SE	30.0	32.2	966 Btuh
10	2, Clear, Metal, 0.87	NE	15.0	32.2	483 Btuh
11	2, Clear, Metal, 0.87	E	30.0	32.2	966 Btuh
12	2, Clear, Metal, 0.87	S	16.0	32.2	515 Btuh
13	2, Clear, Metal, 0.87	S	10.0	32.2	322 Btuh
	Window Total		307(sqft)		9882 Btuh
Walls	Type	R-Value	Area X	HTM=	Load
1	Frame - Wood - Ext(0.09)	13.0	1065	3.3	3498 Btuh
2	Frame - Wood - Adj(0.09)	13.0	204	3.3	670 Btuh
	Wall Total		1269		4167 Btuh
Doors	Type		Area X	HTM=	Load
1	Insulated - Exterior		20	12.9	259 Btuh
2	Insulated - Adjacent		20	12.9	259 Btuh
	Door Total		40		518Btuh
Ceilings	Type/Color/Surface	R-Value	Area X	HTM=	Load
1	Vented Attic/D/Shin	30.0	2050	1.2	2416 Btuh
	Ceiling Total		2050		2416Btuh
Floors	Type	R-Value	Size X	HTM=	Load
1	Slab On Grade	5	202.0 ft(p)	16.4	3304 Btuh
	Floor Total		202		3304 Btuh
			Zone Envelope Subtotal:		20287 Btuh
Infiltration	Type	ACH X	Volume(cuft)	walls(sqft)	CFM=
	Natural	0.80	15520	1269	206.9	8382 Btuh
Ductload	Average sealed, Supply(R6.0-Attic), Return(R6.0-Attic) (DLM of 0.188)				5378 Btuh
Zone #1			**Sensible Zone Subtotal**		**34047 Btuh**

Manual J Winter Calculations

Residential Load - Component Details (continued)

Rick & Ann Carey
Highway 240
Columbia City, FL 32024-

Project Title:
Sparks Construction - Carey Residence

Code Only
Professional Version
Climate: North

10/11/2007

WHOLE HOUSE TOTALS

	Subtotal Sensible	34047 Btuh
	Ventilation Sensible	0 Btuh
	Total Btuh Loss	34047 Btuh

EQUIPMENT

1. Electric Heat Pump	#	40000 Btuh

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

Version 8
For Florida residences only

System Sizing Calculations - Summer

Residential Load - Whole House Component Details

Rick & Ann Carey
Highway 240
Columbia City, FL 32024-

Project Title:
Sparks Construction - Carey Residence

Code Only
Professional Version
Climate: North

Reference City: Gainesville (Defaults) Summer Temperature Difference: 17.0 F 10/11/2007

Component Loads for Whole House

Window	Type* Pn/SHGC/U/InSh/ExSh/IS	Ornt	Overhang Len	Overhang Hgt	Window Area(sqft) Gross	Shaded	Unshaded	HTM Shaded	HTM Unshaded	Load
1	2, Clear, 0.87, None,N,N	W	1.5ft	8ft.	45.0	0.0	45.0	29	80	3578 Btuh
2	2, Clear, 0.87, None,N,N	W	13.5f	8ft.	30.0	30.0	0.0	29	80	869 Btuh
3	2, Clear, 0.87, None,N,N	W	13.5f	8ft.	40.0	40.0	0.0	29	80	1158 Btuh
4	2, Clear, 0.87, None,N,N	N	1.5ft	8ft.	30.0	0.0	30.0	29	29	869 Btuh
5	2, Clear, 0.87, None,N,N	N	1.5ft	8ft.	6.0	0.0	6.0	29	29	174 Btuh
6	2, Clear, 0.87, None,N,N	E	1.5ft	8ft.	25.0	0.0	25.0	29	80	1988 Btuh
7	2, Clear, 0.87, None,N,N	E	1.5ft	8ft.	15.0	0.0	15.0	29	80	1193 Btuh
8	2, Clear, 0.87, None,N,N	S	3.5ft	8ft.	15.0	15.0	0.0	29	34	434 Btuh
9	2, Clear, 0.87, None,N,N	SE	7.5ft	8ft.	30.0	30.0	0.0	29	63	869 Btuh
10	2, Clear, 0.87, None,N,N	NE	7.5ft	8ft.	15.0	0.0	15.0	29	60	901 Btuh
11	2, Clear, 0.87, None,N,N	E	7.5ft	8ft.	30.0	19.3	10.7	29	80	1407 Btuh
12	2, Clear, 0.87, None,N,N	S	1.5ft	8ft.	16.0	16.0	0.0	29	34	463 Btuh
13	2, Clear, 0.87, None,N,N	S	1.5ft	8ft.	10.0	10.0	0.0	29	34	290 Btuh
	Excursion									2545 Btuh
	Window Total				307 (sqft)					16738 Btuh

Walls	Type	R-Value/U-Value	Area(sqft)	HTM	Load
1	Frame - Wood - Ext	13.0/0.09	1065.0	2.1	2221 Btuh
2	Frame - Wood - Adj	13.0/0.09	204.0	1.5	308 Btuh
	Wall Total		1269 (sqft)		2529 Btuh

Doors	Type	Area (sqft)	HTM	Load
1	Insulated - Exterior	20.0	9.8	196 Btuh
2	Insulated - Adjacent	20.0	9.8	196 Btuh
	Door Total	40 (sqft)		392 Btuh

Ceilings	Type/Color/Surface	R-Value	Area(sqft)	HTM	Load
1	Vented Attic/DarkShingle	30.0	2050.0	1.7	3395 Btuh
	Ceiling Total		2050 (sqft)		3395 Btuh

Floors	Type	R-Value	Size	HTM	Load
1	Slab On Grade	5.0	202 (ft(p))	0.0	0 Btuh
	Floor Total		202.0 (sqft)		0 Btuh

			Envelope Subtotal:		23054 Btuh

Infiltration	Type	ACH	Volume(cuft)	wall area(sqft)	CFM=	Load
	SensibleNatural	0.70	15520	1269	206.9	3370 Btuh

Internal gain	Occupants	Btuh/occupant		Appliance	Load
	6	X 230	+	2400	3780 Btuh
			Sensible Envelope Load:		30204 Btuh
Duct load			(DGM of 0.222)		6711 Btuh
			Sensible Load All Zones		**36915 Btuh**

Manual J Summer Calculations

Residential Load - Component Details (continued)

Rick & Ann Carey
Highway 240
Columbia City, FL 32024-

Project Title:
Sparks Construction - Carey Residence

Code Only
Professional Version
Climate: North

10/11/2007

WHOLE HOUSE TOTALS

Whole House Totals for Cooling	**Sensible Envelope Load All Zones**	**30204 Btuh**
	Sensible Duct Load	6711 Btuh
	Total Sensible Zone Loads	**36915 Btuh**
	Sensible ventilation	0 Btuh
	Blower	0 Btuh
	Total sensible gain	**36915 Btuh**
	Latent infiltration gain (for 54 gr. humidity difference)	6617 Btuh
	Latent ventilation gain	0 Btuh
	Latent duct gain	1334 Btuh
	Latent occupant gain (6 people @ 200 Btuh per person)	1200 Btuh
	Latent other gain	0 Btuh
	Latent total gain	**9151 Btuh**
	TOTAL GAIN	**46066 Btuh**

EQUIPMENT

1. Central Unit	#	40000 Btuh

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

Version 8
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System Sizing Calculations - Summer

Residential Load - Room by Room Component Details

Rick & Ann Carey
Highway 240
Columbia City, FL 32024-

Project Title:
Sparks Construction - Carey Residence

Code Only
Professional Version
Climate: North

Reference City: Gainesville (Defaults) Summer Temperature Difference: 17.0 F 10/11/2007

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	W	1.5ft	8ft.	45.0	0.0	45.0	29	80	3578 Btuh
2	2, Clear, 0.87, None,N,N	W	13.5f	8ft.	30.0	30.0	0.0	29	80	869 Btuh
3	2, Clear, 0.87, None,N,N	W	13.5f	8ft.	40.0	40.0	0.0	29	80	1158 Btuh
4	2, Clear, 0.87, None,N,N	N	1.5ft	8ft.	30.0	0.0	30.0	29	29	869 Btuh
5	2, Clear, 0.87, None,N,N	N	1.5ft	8ft.	6.0	0.0	6.0	29	29	174 Btuh
6	2, Clear, 0.87, None,N,N	E	1.5ft	8ft.	25.0	0.0	25.0	29	80	1988 Btuh
7	2, Clear, 0.87, None,N,N	E	1.5ft	8ft.	15.0	0.0	15.0	29	80	1193 Btuh
8	2, Clear, 0.87, None,N,N	S	3.5ft	8ft.	15.0	15.0	0.0	29	34	434 Btuh
9	2, Clear, 0.87, None,N,N	SE	7.5ft	8ft.	30.0	30.0	0.0	29	63	869 Btuh
10	2, Clear, 0.87, None,N,N	NE	7.5ft	8ft.	15.0	0.0	15.0	29	60	901 Btuh
11	2, Clear, 0.87, None,N,N	E	7.5ft	8ft.	30.0	19.3	10.7	29	80	1407 Btuh
12	2, Clear, 0.87, None,N,N	S	1.5ft	8ft.	16.0	16.0	0.0	29	34	463 Btuh
13	2, Clear, 0.87, None,N,N	S	1.5ft	8ft.	10.0	10.0	0.0	29	34	290 Btuh
	Window Total				307 (sqft)					14193 Btuh

Walls	Type	R-Value/U-Value	Area(sqft)	HTM	Load
1	Frame - Wood - Ext	13.0/0.09	1065.0	2.1	2221 Btuh
2	Frame - Wood - Adj	13.0/0.09	204.0	1.5	308 Btuh
	Wall Total		1269 (sqft)		2529 Btuh

Doors	Type	Area (sqft)	HTM	Load
1	Insulated - Exterior	20.0	9.8	196 Btuh
2	Insulated - Adjacent	20.0	9.8	196 Btuh
	Door Total	40 (sqft)		392 Btuh

Ceilings	Type/Color/Surface	R-Value	Area(sqft)	HTM	Load
1	Vented Attic/DarkShingle	30.0	2050.0	1.7	3395 Btuh
	Ceiling Total		2050 (sqft)		3395 Btuh

Floors	Type	R-Value	Size	HTM	Load
1	Slab On Grade	5.0	202 (ft(p))	0.0	0 Btuh
	Floor Total		202.0 (sqft)		0 Btuh

			Zone Envelope Subtotal:		20509 Btuh

Infiltration	Type	ACH	Volume(cuft)	wall area(sqft)	CFM=	Load
	SensibleNatural	0.70	15520	1269	181.1	3370 Btuh

Internal gain		Occupants		Btuh/occupant		Appliance	Load
		6	X	230	+	2400	3780 Btuh
				Sensible Envelope Load:			27659 Btuh
Duct load	Average sealed, Supply(R6.0-Attic), Return(R6.0-Attic)					(DGM of 0.222)	6146 Btuh
				Sensible Zone Load			**33804 Btuh**

The following window Excursion will be assigned to the system loads.

Windows		
	July excursion for System 1	2545 Btuh
	Excursion Subtotal:	2545 Btuh

Manual J Summer Calculations

Residential Load - Component Details (continued)

Rick & Ann Carey
Highway 240
Columbia City, FL 32024-

Project Title:
Sparks Construction - Carey Residence

Code Only
Professional Version
Climate: North

10/11/2007

Duct load		566 Btuh
	Sensible Excursion Load	**3111 Btuh**

Manual J Summer Calculations

Residential Load - Component Details (continued)

Rick & Ann Carey
Highway 240
Columbia City, FL 32024-

Project Title:
Sparks Construction - Carey Residence

Code Only
Professional Version
Climate: North

10/11/2007

WHOLE HOUSE TOTALS

Whole House Totals for Cooling	**Sensible Envelope Load All Zones**	**30204 Btuh**
	Sensible Duct Load	6711 Btuh
	Total Sensible Zone Loads	**36915 Btuh**
	Sensible ventilation	0 Btuh
	Blower	0 Btuh
	Total sensible gain	**36915 Btuh**
	Latent infiltration gain (for 54 gr. humidity difference)	6617 Btuh
	Latent ventilation gain	0 Btuh
	Latent duct gain	1334 Btuh
	Latent occupant gain (6 people @ 200 Btuh per person)	1200 Btuh
	Latent other gain	0 Btuh
	Latent total gain	**9151 Btuh**
	TOTAL GAIN	**46066 Btuh**

EQUIPMENT

1. Central Unit	#	40000 Btuh

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

Version 8
For Florida residences only

Residential Window Diversity

MidSummer

Rick & Ann Carey
Highway 240
Columbia City, FL 32024-

Project Title:
Sparks Construction - Carey Residence

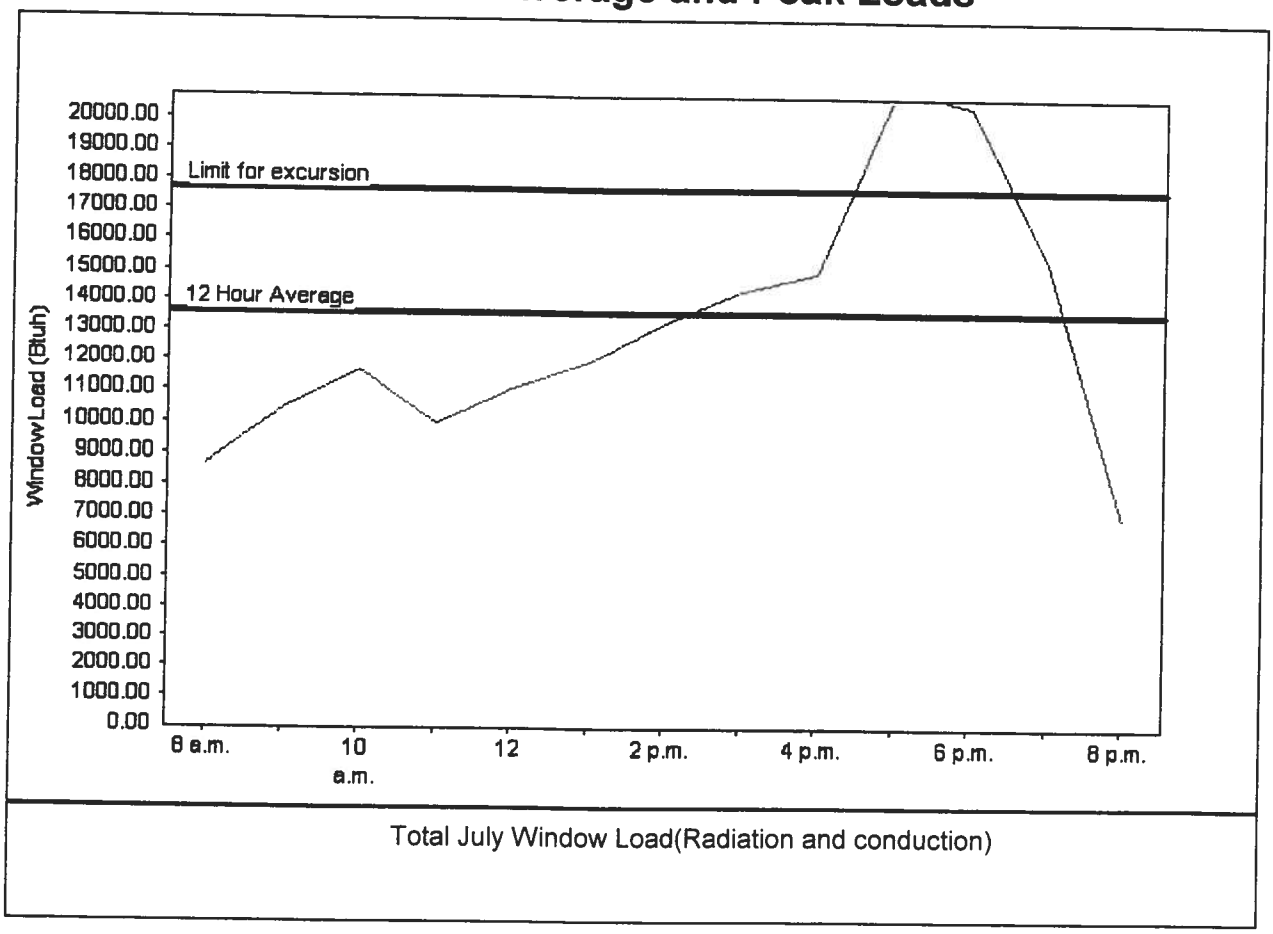
Code Only
Professional Version
Climate: North

10/11/2007

Weather data for: Gainesville - Defaults

Summer design temperature	92 F	Average window load for July	13577 Btu
Summer setpoint	75 F	Peak window load for July	20946 Btu
Summer temperature difference	17 F	Excusion limit(130% of Ave.)	17650 Btu
Latitude	29 North	Window excursion (July)	3296 Btuh

WINDOW Average and Peak Loads

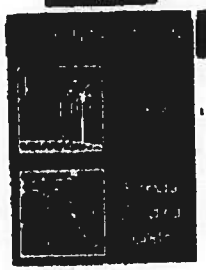


Total July Window Load(Radiation and conduction)

This application has glass areas that produce large heat gains for part of the day. Variable air volume devices are required to overcome spikes in solar gain for one or more rooms. Install a zoned system or provide zone control for problem rooms. Single speed equipment may not be suitable for the application.

EnergyGauge® System Sizing for Florida residences only
PREPARED BY: _____
DATE: _____

Florida Building Code Online



FLORIDA BUILDING CODE

Overview | User Registration | Organization Registration | User Authorization | Organization Search | Organization Accreditation

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

Organization Type: Product Manufacturer

Approval Status: (ALL)

Organization Name: General American Door - Product Manufacturer

Cancel Search

Result List for Organizations

Displaying 1-1 of 1

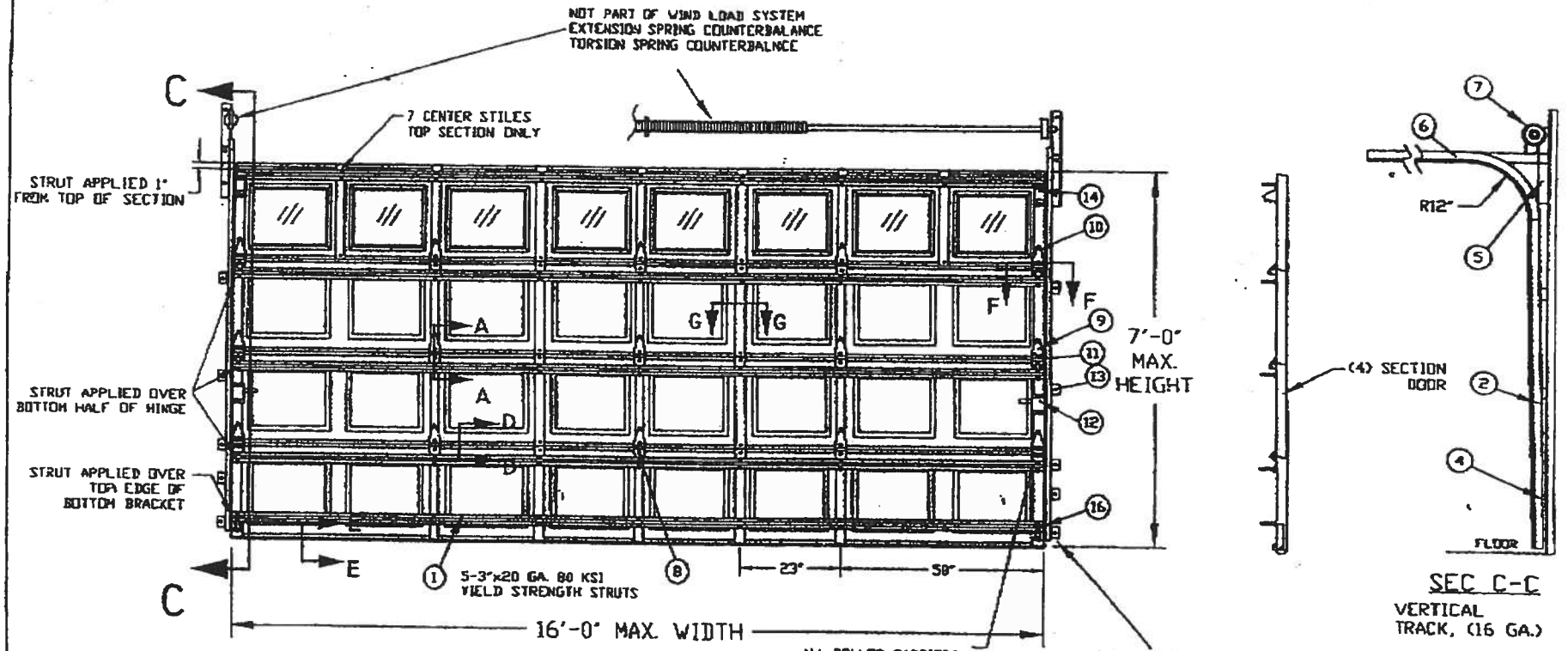
Name	City	Contact	Phone	Type	Expire	Status
General American Door	Montgomery	James Campbell	6308593000	Product Manufacturer	01/01/2099	Approved
Org Code: PDM System ID: 3585			Site Link: www.gadco.com			

Displaying 1-1 of 1

REV.	DATE	BY	DESCRIPTION
A-A	11-10-00	DW	SEE E.C.N. 491

NOTES:

1. TESTED TO POSITIVE AND NEGATIVE 20 PSF DESIGN AND POSITIVE AND NEGATIVE 30 PSF TEST PRESSURES PER ASTM E-330
2. MAXIMUM SECTION HEIGHT= 21"
3. SECTION HEIGHTS OF 21.00" AND 19.50" ARE AVAILABLE AND MAY BE USED IN ANY COMBINATION TO ACHIEVE VARIOUS DOOR HEIGHTS.
4. WINDOWS MAY BE INSTALLED IN THE TOP SECTION (AS TESTED WITH 1/8" DSB GLASS OR EQUIVALENT) OR IN THE SECTION IMMEDIATELY BELOW THE TOP SECTION.
5. MINIMUM LENGTH OF ROLLER STEM IS 5¼" (7" AS TESTED)
6. THE STRUT PLACEMENT ON DOOR MUST BE CONSISTENT WITH THE DOOR SHOWN.
7. STRUTS SECURED AT ALL LOCATIONS WITH TEK SCREWS.
8. QUANTITY OF SIDE LOCKS CAN BE 0,1, OR 2 AS TESTED.
9. ⚠ DROP IN TYPE OF INSULATION IS OPTIONAL



INSIDE ELEVATION

SEC C-C
VERTICAL TRACK, (16 GA.)

The seal on this drawing only certifies that the product(s) illustrated and described herein and the configuration(s) of the dimensions and installations(s) of the door as tested.

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL PE No. 024280 MEHRDAD R. MEHRVAN

LISTED SBCCI PST & ES
REPORT No. 2202

TEST REPORTS ON FILE: VIDEO 10/19/00 (80293)

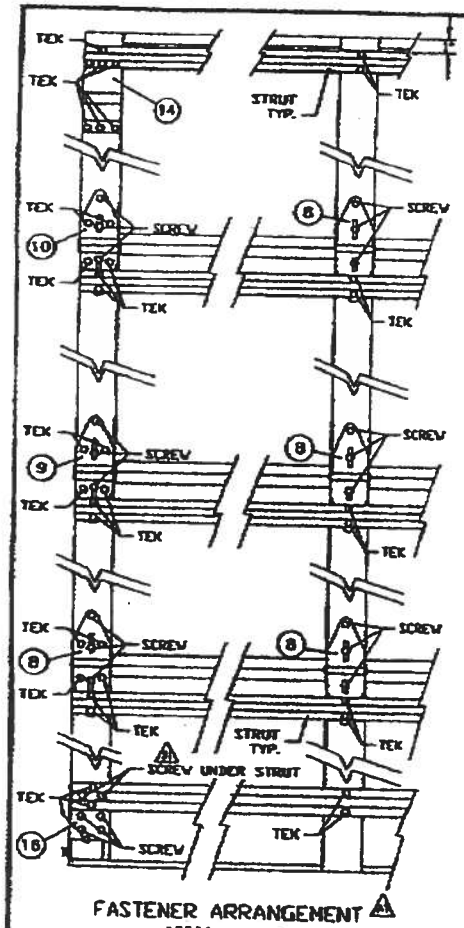
DESIGN LOAD +20.0 PSF & -20.0 PSF
TEST LOAD +30.0 PSF & -30.0 PSF

GADCO DOORS
SERIES 7400, EXTERIOR STEEL =.017 MIN (AS TESTED)
SERIES 7825, EXTERIOR STEEL =.019" MIN ⚠
SERIES 7524, EXTERIOR STEEL =.024" MIN ⚠
(TESTED WITH WINDOWS

MAXIMUM DOOR WIDTH	MAXIMUM DOOR HEIGHT	TYPICAL CTR. STILE SPACING	STRUTS 80 KSI SIZE	STRUTS 80 KSI QTY.	VERTICAL TRACK
16'	7'	23"	3"	5	2 IN.

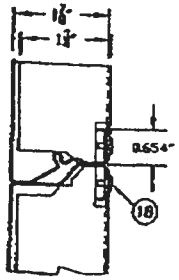
GENERAL AMERICAN DOOR COMPANY
5050 BASELINE ROAD
MONTGOMERY, IL 60538

SCALE: NTS | APPROVED BY: | DRAWN BY: R. MEHRVAN
DATE: 10-20-00 | REVISED: (A) 11-10-00
DESCRIPTION: 16' X 7' MAX. RAISED PANEL STEEL DOOR -WINDLOAD ±20 PSF
PART NUMBER: PAGE 1 OF 2 | DRAWING NUMBER: W13220-1

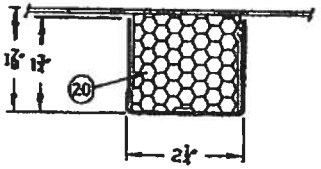


FASTENER ARRANGEMENT ⚠

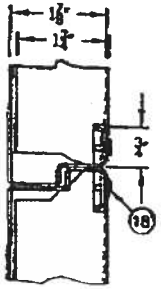
LISTED
SBCCI PST & ESI
REPORT No. 2202



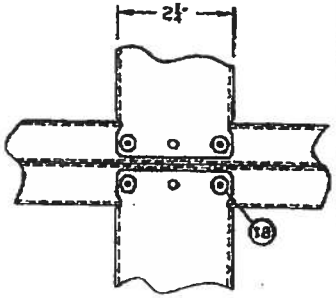
SEC D-D
PAN ATTACHMENT TO STILE (OPTIONAL)



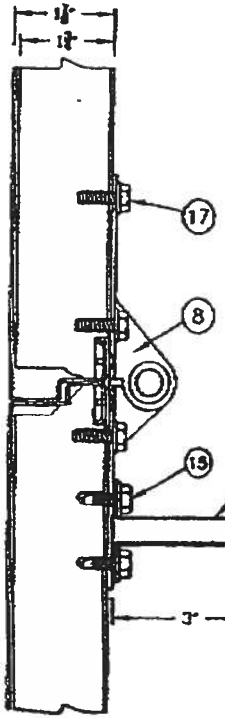
SEC G-G
CENTER STILE
20 GA GALVANIZED



SEC D-D
PAN ATTACHMENT TO STILE (AS TESTED)

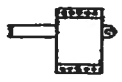


PAN ATTACHMENT TO STILE

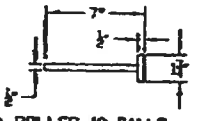


SEC A-A

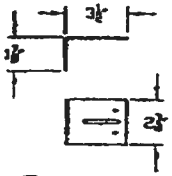
TRACK
16 GA. COSS MIN.)



(12) SIDE LOCK



(11) ROLLER 10 BALLS

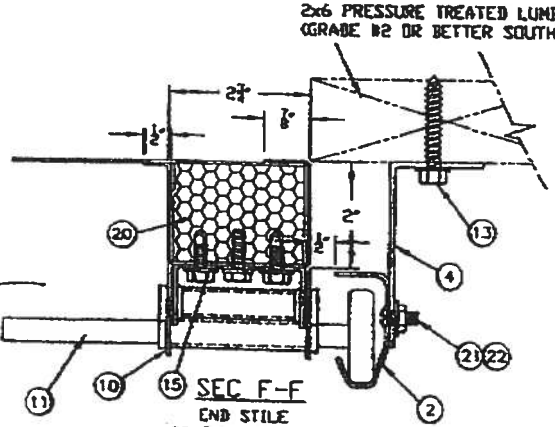


(4) #6 JAMB BRACKET

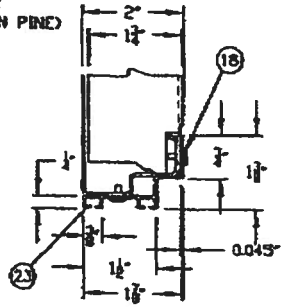
(1) 5-3"x20 GA. 80 KSI YIELD STRENGTH HEMMED STRUT APPLIED WITH 2 TEK SCREWS PER HINGE OR STILE LOCATION (14 PER STRUT, MINIMUM)

(17) ¼-20 x ¾ HEX WASHERHEAD SCREW

(15) ¼-20 x ¾ RHWH TEK SCREW WITH #2 REDUCED POINT



SEC F-F
END STILE
20 GA. PAINTED STEEL



SEC E-E

REV.	DATE	BY	DESCRIPTION
A	11-27-00	DW	SEE ECN 834
B	12-1-00	DW	SEE ECN 839

ITEM	PART NO.	DESCRIPTION
23	3485	BOTTOM RAIL, 6063 T6 ALUM EXT.
22	1391	1/4"-20 X 5/8" RIBBED NECK SCREW
21	4044	1/4"-20 SERRATED FLANGE NUT
20		1.0 lb DENSITY FILLER BLOCK EPS
19		
18	4388	POP RIVET 5/32" STEEL
17	4229	HEX WASHERHEAD SCREW 1/4"-20 X 3/4"
16	L999LH	BOTTOM ROLLER BRACKET
15	0138	RHWH TEK SCREW 1/4-20 X 3/4 W/ REDUCED PT.
14	3875	TOP SUPPORT BRACKET
13	4043	5/16" X 1-5/8" LAG SCREW
12	4718	SIDE LOCK
11	4306	LONG STEM ROLLER 2"
10	4283	ROLLER CARRIER HINGE #3 (14 GA)
9	4282	ROLLER CARRIER HINGE #2 (14 GA)
8	4281	ROLLER CARRIER HINGE #1 (14 GA)
7		COUNTER BALANCE (TORSION BAR & SPRINGS)
6		HORIZONTAL TRACK & ANGLE (16 GA)
5		VERTICAL FLAG ANGLE
4	4585-6	TRACK BRACKET #6 (12 GA)
3		
2		VERTICAL TRACK (16 GA)
1		3" HEMMED STRUT (20 GA) MIN. YIELD STR. 80KSI

GADCO®
GENERAL AMERICAN DOOR COMPANY
5050 BASELINE ROAD
MONTGOMERY, IL 60538

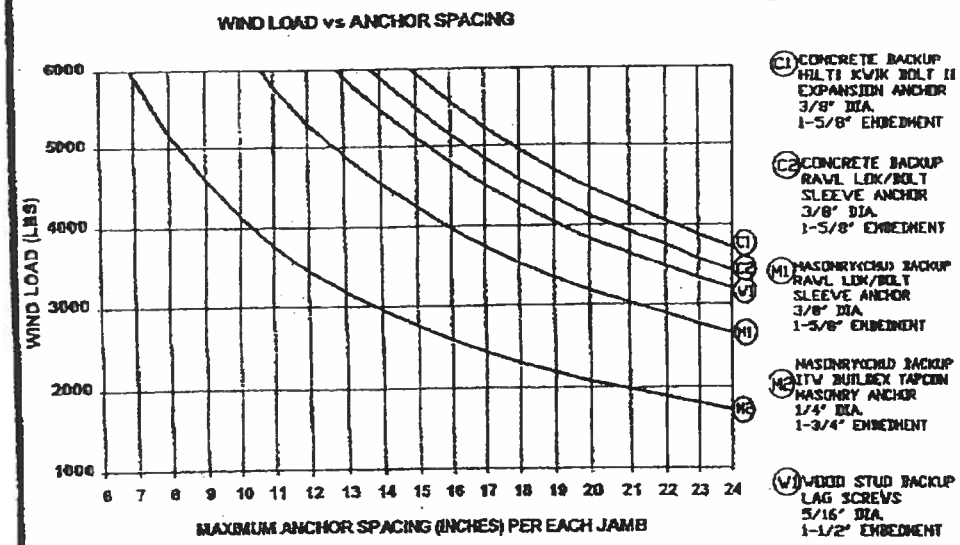
SCALE: NONE | APPROVED BY: | DRAWN BY: D. VIEDMAN
DATE: 11-7-00 | REVISED: (B) 12-1-00

DESCRIPTION: 16' X 7' MAX. RAISED PANEL STEEL DOOR-WINDLOAD ±28 PSF

PAGE 2 OF 2 | DRAWING NUMBER: V13220-2

NORTH CAROLINA PROFESSIONAL SEAL PE No. 024280 ENGINEER

The seal on this drawing only certifies that the product(s) illustrated and described herein represent the configuration(s), dimensions and installation(s) of the door as tested.



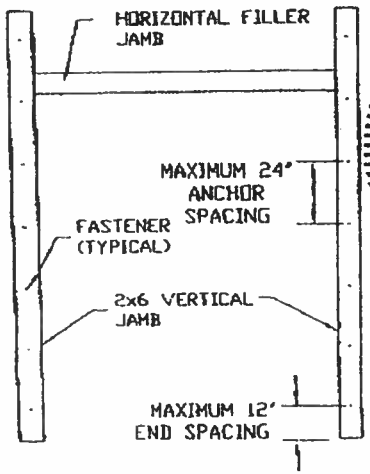
DESIGN LOAD (LBS/FT²) X GARAGE DOOR AREA(WIDTH-FT X HEIGHT-FT) = WIND LOAD(LBS)

EXAMPLE

30 LBS/FT² X (16 FT WIDE X 8 FT HIGH) = 3840 LBS

- C1 USE 22" SPACING
- C2 USE 21" SPACING
- V1 USE 19" SPACING
- M1 USE 16" SPACING
- M2 USE 10" SPACING

SEE NOTE 11 FOR ADDITIONAL REQUIRED 2X6 WOOD JAMB ANCHORS



NORTH CAROLINA PROFESSIONAL SEAL PE No. 024280 ENGINEER NASER R KEYVAN

NASER R KEYVAN NO. 53774 STATE OF FLORIDA PROFESSIONAL ENGINEER

3/8/2002

2x6 JAMB TO SUPPORTING STRUCTURE ATTACHMENT

2x6 PRESSURE TREATED (GRADE #2 OR BETTER SOUTHERN PINE) WOOD JAMB SHALL BE ANCHORED TO BUILDING WOOD FRAME, GROUTED AND REINFORCED CONCRETE MASONRY UNIT (CMU) WALLS OR COLUMNS, OR REINFORCED CONCRETE COLUMNS.

NOTES:

1) ALL DOOR OPENING SURROUNDING STRUCTURE TO BE DESIGNED BY REGISTERED ENGINEER OR ARCHITECT WITH DUE CONSIDERATION GIVEN TO INSTALLATIONS USING CENTER "HURRICANE" POSTS.

2) ALL DOOR OPENING STRUCTURE AND FASTENERS TO COMPLY WITH ALL APPLICABLE CODES INCLUDING SBCCI "STANDARD FOR HURRICANE RESISTANT RESIDENTIAL CONSTRUCTION" SSTD 10," CURRENT EDITION.

3) ALL FASTENERS TO BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS, INSTRUCTIONS AND RECOMMENDATIONS.

4) WOOD FRAME BUILDINGS: STUDS AT EACH SIDE OF DOOR OPENING SHALL BE PROPERLY DESIGNED, CONNECTED, ANCHORED AND SHALL CONSIST OF A MINIMUM OF THREE (3) LAMINATIONS OF 2X6 PRESSURE TREATED SOUTHERN PINE (#2 GRADE OR BETTER) WALL STUDS CONTINUOUS FROM FOOTING TO DOUBLE TOP PLATE.

5) REINFORCED CMU OR CONCRETE: 2X6 WOOD JAMB SHALL BE ANCHORED TO SOLIDLY GROUTED AND REINFORCED CONCRETE MASONRY UNIT (CMU) WALLS OR COLUMNS, OR REINFORCED CONCRETE COLUMNS. ANCHOR SPACING AND EMBEDMENT IS BASED ON CONCRETE MASONRY UNITS COMPLYING WITH ASTM C90 WITH A MINIMUM NET AREA COMPRESSIVE STRENGTH OF 2150 PSI. GROUT WITH A MINIMUM COMPRESSIVE STRENGTH OF 2000 PSI; REINFORCED CONCRETE COLUMNS WITH A MINIMUM COMPRESSIVE STRENGTH OF 2500 PSI.

6) EMBEDMENTS LISTED ARE THE MINIMUM ALLOWABLE EMBEDMENTS.

7) ANCHORS FOR CONCRETE AND CONCRETE MASONRY UNITS (CMU) SHALL HAVE A MINIMUM 3" EDGE DISTANCE FROM ALL EDGES OF CONCRETE OR CONCRETE MASONRY UNITS. ANCHORS FOR CONCRETE AND CMU SHALL HAVE A MINIMUM SPACING OF 3-3/4"

8) LAG SCREWS SHALL BE CENTERED IN ONE OF THE 1-1/2" DIMENSION FACES OF THE TRIPLE 2X6 WALL STUDS.

9) WASHERS ARE REQUIRED ON ALL FASTENERS.

10) THE WIND LOAD VS. ANCHOR SPACING CHART IS FOR A MAXIMUM DOOR SIZE OF 18' X 8' AT A MAXIMUM 42 PSF DESIGN WIND LOAD.

11) FOR THE UPPER THREE INDIVIDUAL STEEL JAMB BRACKETS, BRACKETS SHALL BE CENTERED BETWEEN THE TWO CLOSEST 2X6 WOOD JAMB ANCHORS. IF THE STEEL JAMB BRACKET IS NOT CENTERED BETWEEN THE TWO CLOSEST 2X6 WOOD JAMB ANCHORS, ADD AN ADDITIONAL 2X6 WOOD JAMB ANCHOR NEAR THAT STEEL BRACKET TO INSURE THAT THE LOAD FROM THE STEEL BRACKET IS EQUALLY TRANSFERRED TO TWO WOOD JAMB ANCHORS.

GADCO

GENERAL AMERICAN DOOR COMPANY
5050 BASELINE ROAD
MONTGOMERY, IL 60538

SCALE: NONE	APPROVED BY:	DRAWN BY: DV
DATE: 8-30-99		REVISED

DESCRIPTION: JAMB TO STRUCTURE ATTACHMENT FOR WIND LOADED GARAGE DOORS

MASTER DRAWING NUMBER: A10560

DRAWING NUMBER

FLORIDA DEPARTMENT OF Community Affairs

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** ASTM D 3462	**Year** 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.

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

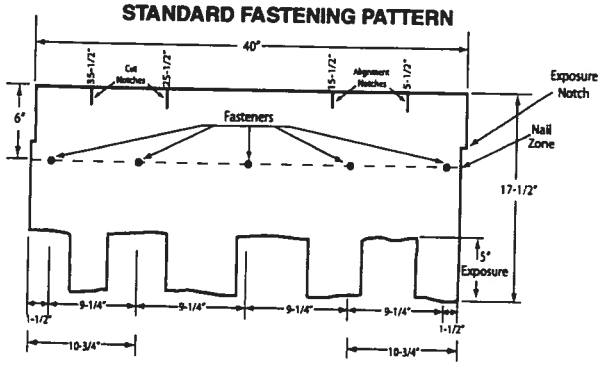
WIND CAUTION: Extreme wind velocities can damage these shingles after application when proper sealing of the shingles does not occur. This can especially be a problem if the shingles are applied in cooler months or in areas on the roof that do not receive direct sunlight. These conditions may impede 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



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)

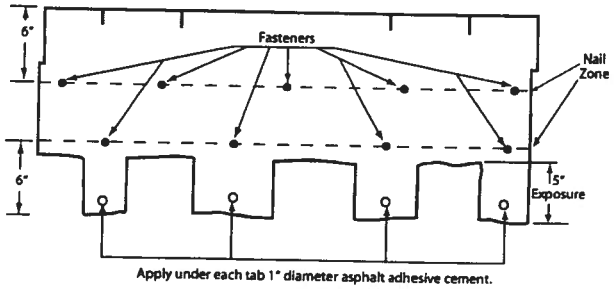
TAMKO BUILDING PRODUCTS

(CONTINUED from Pg. 1)

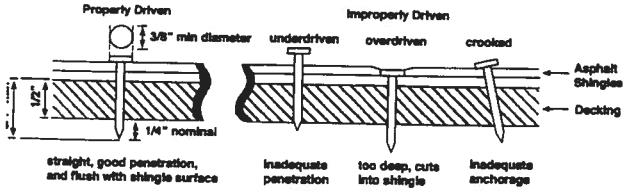
• HERITAGE® VINTAGE™ AR – Phillipsburg, KS
LAMINATED ASPHALT SHINGLES

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



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.

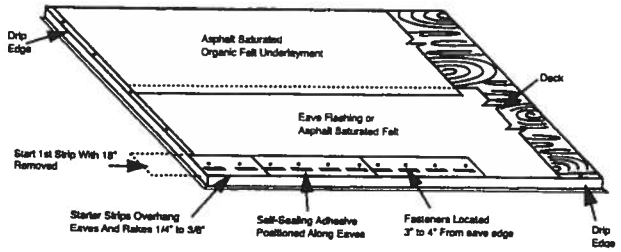
Products which are acceptable for use as underlayment are:

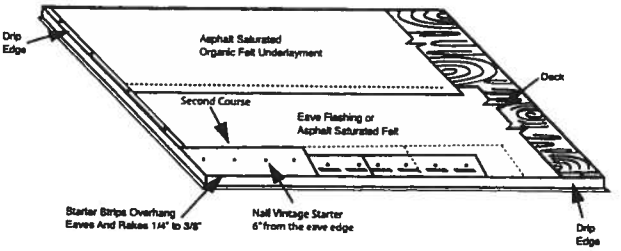
- TAMKO No. 15 Asphalt Saturated Organic Felt
- A non-perforated asphalt saturated organic felt which meets ASTM: D226, Type I or ASTM D4869, Type I
- Any TAMKO non-perforated asphalt saturated organic felt
- TAMKO TW Metal and Tile Underlayment, TW Underlayment and Moisture Guard Plus® (additional ventilation 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

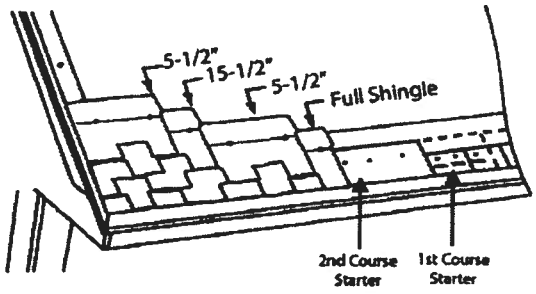
(Continued)

(CONTINUED from Pg. 2)

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)

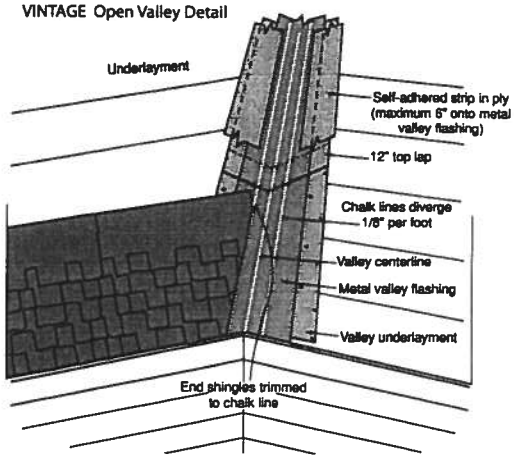
- Snap two chalk lines, one on each side of the valley centerline over the full length of the valley flashing. Locate the upper ends of the chalk lines 3" to either side of the valley centerline.
- The lower end should diverge from each other by 1/8" per foot. Thus, for an 8' long valley, the chalk lines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

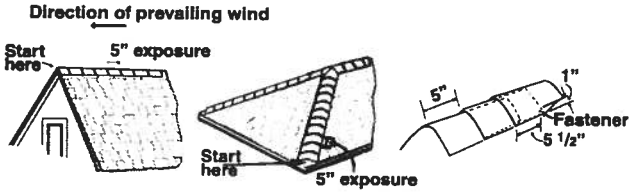
• HERITAGE® VINTAGE™ AR – Phillipsburg, KS
LAMINATED ASPHALT SHINGLES

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.



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.

FLORIDA DEPARTMENT OF Community Affairs

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Community Affairs

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- COMMUNITY PLANNING
- HOUSING & COMMUNITY DEVELOPMENT
- EMERGENCY MANAGEMENT
- OFFICE OF THE SECRETARY

Product Approval
USER: Public User

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

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	

U) window

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. (Didamar, FL) MI Windows & Doors, Inc. (Smyrna, TN)	MTL-8 MTL-9	185/318S SH (Fin) (AL)(O/O)(DG) (ASTM)	3'0" x 5'2"	2'10" x 2'7"	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:

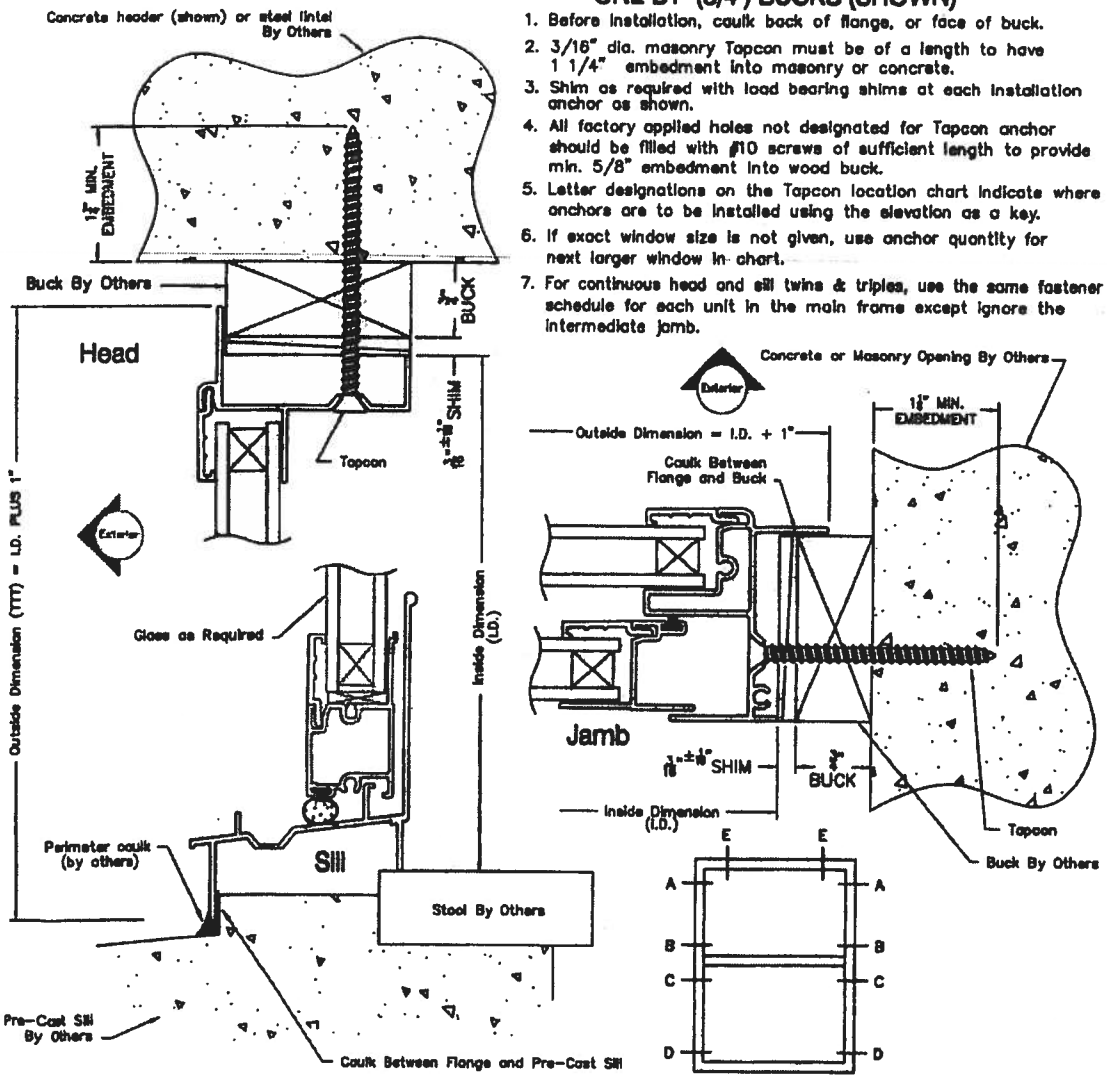
Associated Laboratories, Inc.

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.

HOME PRODUCTS
BetterBilt / Capitol

* TAPCON LOCATION CHART

CODE SIZE	WINDOW ID SIZE	FASTENER LOCATIONS		
		UP TO DP35	DP35.1 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	7/19/04	BB

PREPARED BY
PTC
Product Technology Corporation
1100 Lee Wagener Blvd., Suite 6
Winter Park, Florida 32789
Phone 407.522.6334 Fax 407.522.6335

MI HOME PRODUCTS
GRATZ, PA

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

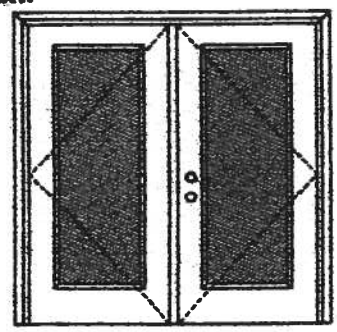
DRAWN BY	DRL	DATE	06/15/04
SCALE	N.T.S.	DWG. NO.	MIHP0059
REV. LETTER	A	SHEET	1 OF 1

XX
Glazed Outswing Unit

COP-WL-JH4162-02

WOOD-EDGE STEEL DOORS

APPROVED ARRANGEMENT:



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

Double Door
Maximum unit size = 6'0" 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, 136 Series


136 Series


600 Series


822 Series

1/2 GLASS:


105 Series*

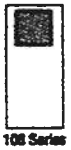

106, 150 Series*


129 Series*


200 Series*


12 RAL, 23 RVL, 24 RAL Series*


107 Series*


108 Series


304 Series

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

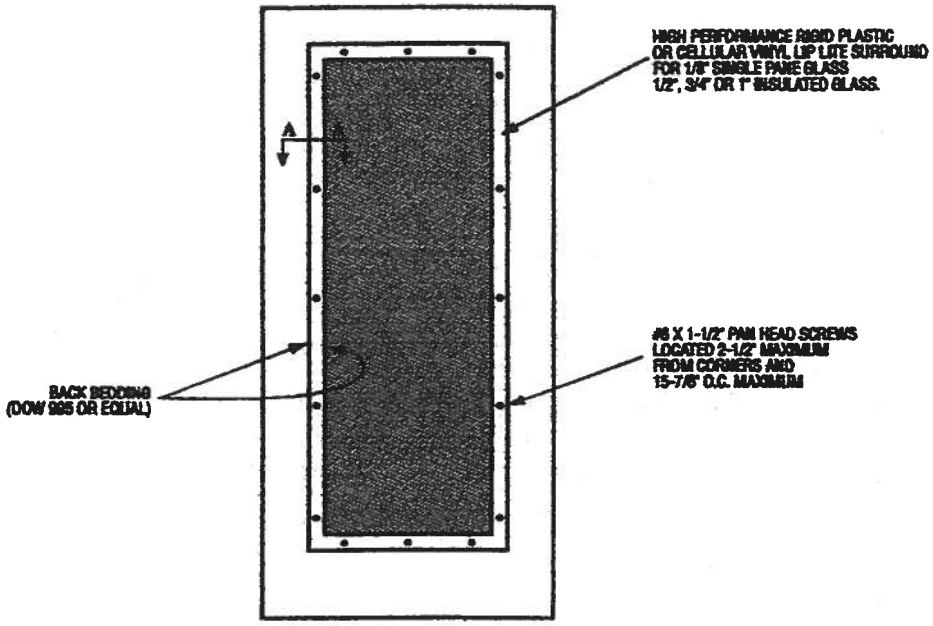
Johnson EntrySystems

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

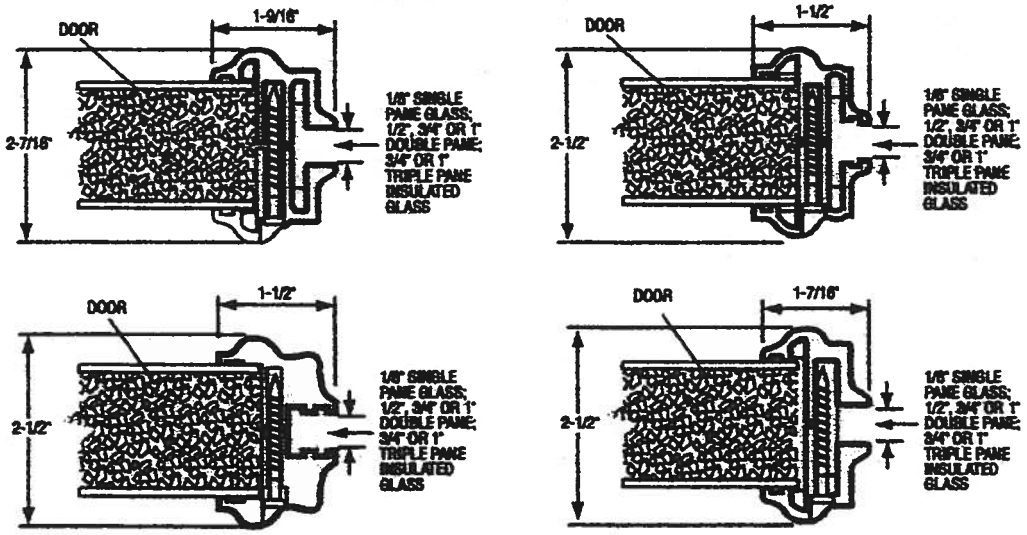
PREMDOR Collection Premium Quality Doors

Exclusively from Masonite®
Masonite International Corporation

GLASS INSERT IN DOOR OR SIDELITE PANEL



SECTION A-A
TYPICAL RIGID PLASTIC LIP LITE SURROUND



XX
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 210-1864-5, 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
Our continuing program of product improvement makes specifications, design and product details subject to change without notice.

PREMDOR Collection Premium Quality Doors

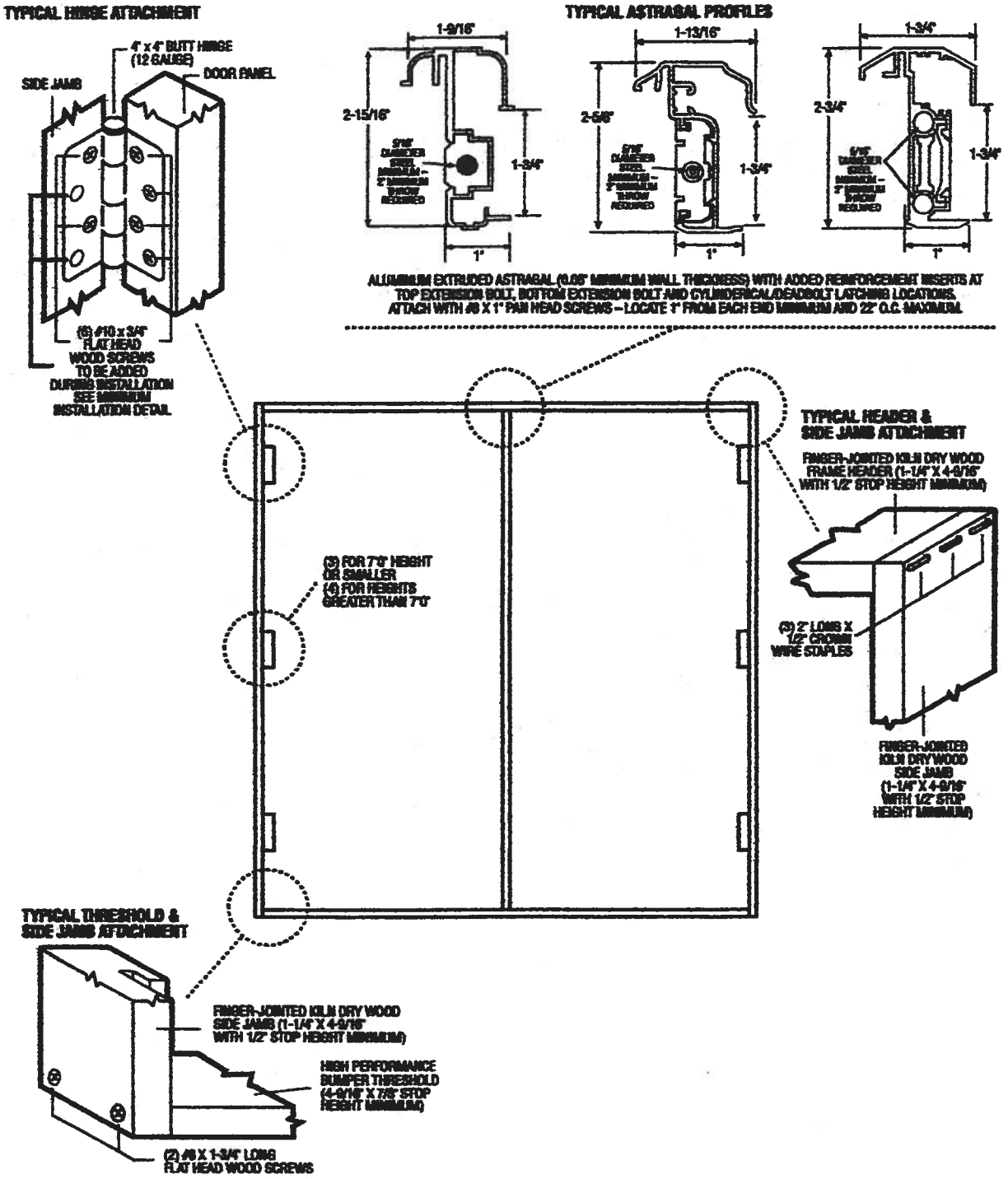
Exclusively from Masonite

Masonite International Corporation

XX
Unit

MAD-WL-MA8012-02

OUTSWING UNITS WITH DOUBLE DOOR



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

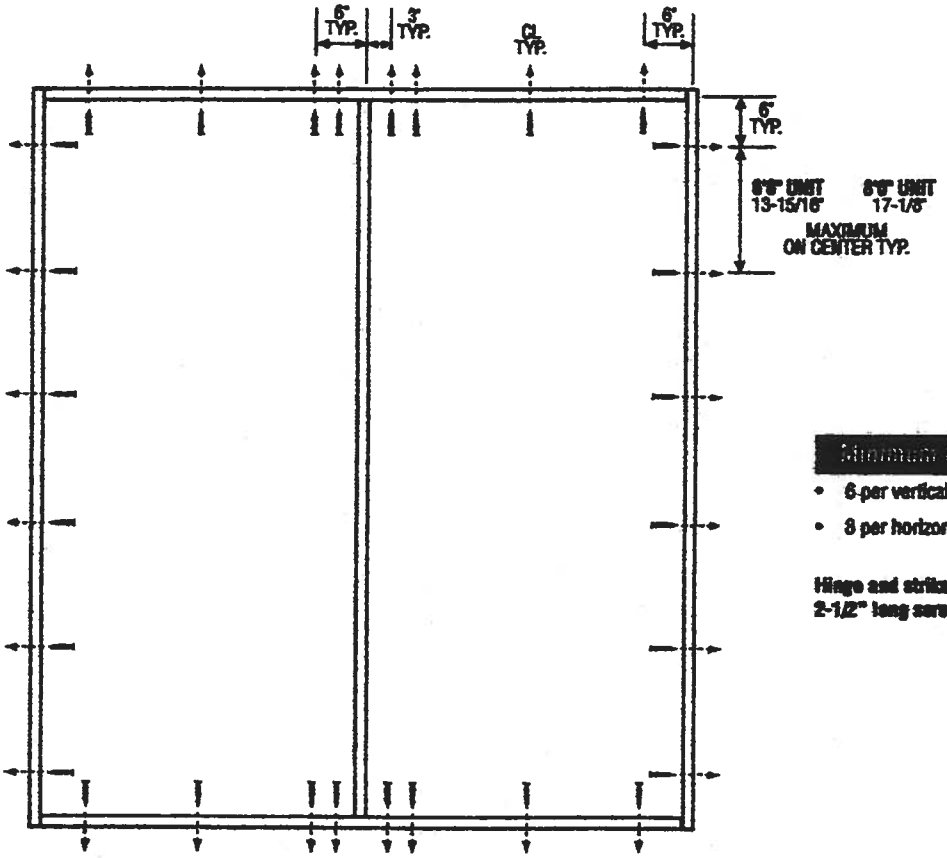
PREMDOR Collection
Premium Quality Doors

Exclusively from Masonite
Masonite International Corporation

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.

CERTIFICATE OF OCCUPANCY

COLUMBIA COUNTY, FLORIDA

Department of Building and Zoning Inspection

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

Parcel Number 11-5S-16-03570-105 **Building permit No.** 000026453

Use Classification SFD,UTILITY **Fire:** 32.10

Permit Holder JOSH SPARKS **Waste:** 83.75

Owner of Building RICHARD & ANN CAREY **Total:** 115.85

Location: 5718 SW CR 240, LAKE CITY, FL

Date: 05/01/2008

Wayne H. Russ

Building Inspector

POST IN A CONSPICUOUS PLACE
(Business Places Only)