

Columbia County Building Permit Application

Revised 9-23-04

For Office Use Only Application # 0601-15 Date Received 1/5 By JIN Permit # 952/24050
 Application Approved by - Zoning Official BLK Date 8.06.06 Plans Examiner OK JTH Date 7-18-06
 Flood Zone X Development Permit N/A Zoning A-3 Land Use Plan Map Category A-3
 Comments - NOC ON RECORD

Checking # of Dwellings on Property Verify that existing structure does not have e.t. floor
15 F5504

Applicants Name Matt Cason Phone 752-5152
 Address 853 SW Sisters Welcome Rd LC FL 32025
 Owners Name Alan & Bonnie Friend Phone 752-5152
 911 Address 207 SE Pittman Ct LC FL 32025
 Contractors Name Stanley Crawford Const. Phone 752-5152
 Address 853 SW Sisters Welcome Rd, L.P. 32025
 Fee Simple Owner Name & Address —
 Bonding Co. Name & Address —
 Architect/Engineer Name & Address Nick Geisler 755-9021
 Mortgage Lenders Name & Address Sun Trust Mortgage
 Circle the correct power company - FL Power & Light - Clay Elec. - Suwannee Valley Elec. - Progressive Energy
 Property ID Number 11-55-17-09208-004 Estimated Cost of Construction 125,000
 Subdivision Name — Lot — Block — Unit — Phase —
 Driving Directions Hwy 41 south, TL on Myrtis Rd, TL on Pittman Ct, Lot at end.

Type of Construction Single Fam / Residential Number of Existing Dwellings on Property 1
 Total Acreage 5 Lot Size — Do you need a - Culvert Permit or Culvert Waiver or Have an Existing Drive
 Actual Distance of Structure from Property Lines - Front 232 Side 56 Side 220 Rear 378
 Total Building Height 21' 10" Number of Stories 1 Heated Floor Area 1911 Roof Pitch 7/12
PORCH 610 GARAGE 500 TOTAL 3022

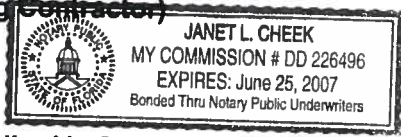
Application is hereby made to obtain a permit to do work and installations as indicated. I certify that no work or installation has commenced prior to the issuance of a permit and that all work be performed to meet the standards of all laws regulating construction in this jurisdiction.

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

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

Stanley Crawford
 Owner/Builder or Agent (Including Contractor)

STATE OF FLORIDA
 COUNTY OF COLUMBIA



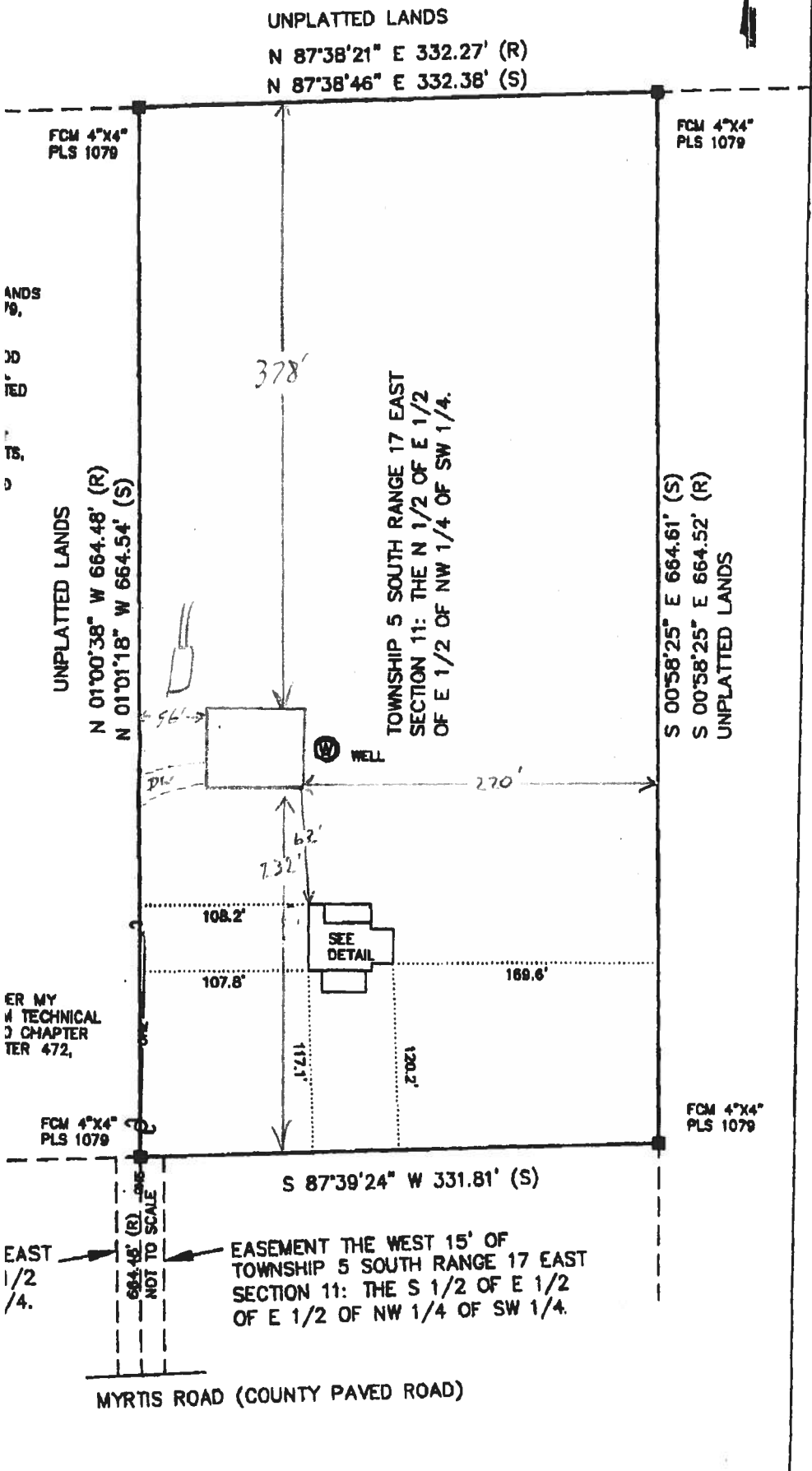
Stanley Crawford
 Contractor Signature
 Contractors License Number RG-0042896
 Competency Card Number 5627
 NOTARY STAMP/SEAL

Sworn to (or affirmed) and subscribed before me
 this — day of — 20—
 Personally known — or Produced Identification —

Janet L. Cheek
 Notary Signature

ACROSS THE WEST 15' OF THE S 1/2 OF E 1/2
OF SW 1/4 AND OVER AND ACROSS THE EAST
1/2 OF W 1/2 OF E 1/2 OF NW 1/4 OF SW 1/4,
FLORIDA.

*Friend
Plot Plan*





APPROXIMATE SCALE IN FEET



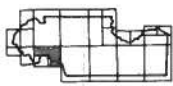
NATIONAL FLOOD INSURANCE PROGRAM

FIRM FLOOD INSURANCE RATE MAP

COLUMBIA
COUNTY,
FLORIDA
(UNINCORPORATED AREAS)

PANEL 250 OF 290

PANEL LOCATION



COMMUNITY-PANEL NUMBER
120070 0250 B
EFFECTIVE DATE:
JANUARY 6, 1988



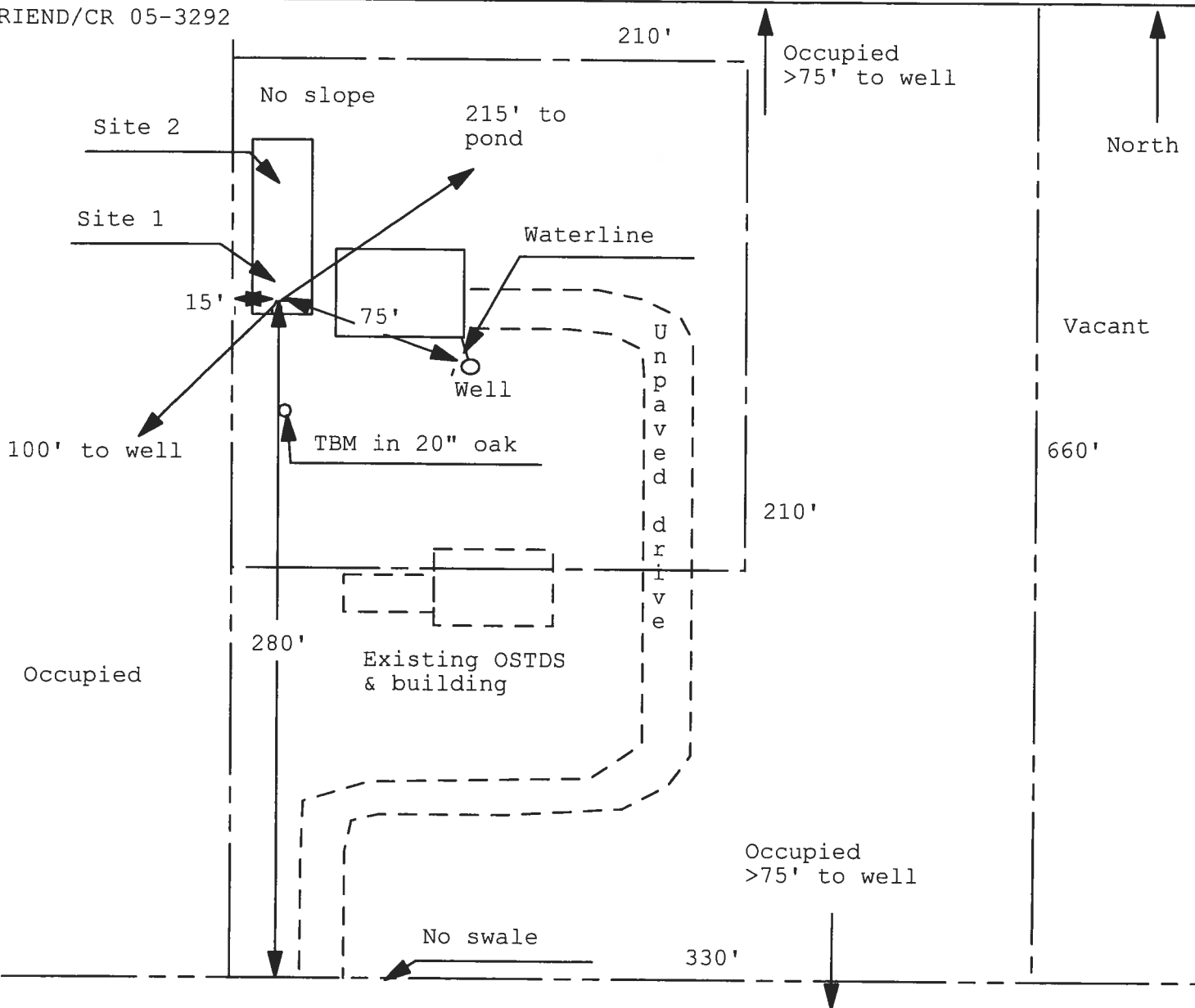
Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT Version 1.0. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. Further information about National Flood Insurance Program flood hazard maps is available at www.fema.gov/nifmsd.

**Application for Onsite Sewage Disposal System
Construction Permit. Part II Site Plan**
Permit Application Number: 06-0004N

ALL CHANGES MUST BE APPROVED BY THE COUNTY HEALTH UNIT

FRIEND/CR 05-3292



1 inch = 65 feet

Site Plan Submitted By Paul Lloyd Date 12/22/05
Plan Approved ☒ Not Approved ☐ Date 1-4-06
By Mr. S. Lark Columbia CPHU

Notes: _____

This instrument was Prepared By:
STANLEY CRAWFORD CONSTRUCTION, INC
853 S.W. Sisters Welcome Rd
Lake City, Florida 32025

PERMIT NO. _____ TAX FOLIO NO. _____

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: See Attachment
2. General description of improvement: Construction of Dwelling
3. Owner information:
Name and address: Alan and Bonnie Friend
207 S.E. Pittman Court
Lake City, FL 32025
- b. Interest in property: Fee Simple
- c. Name and address of fee simple title holder (if other Than owner): NONE
4. Contractor: Stanley Crawford Construction, Inc.
853 S.W. Sisters Welcome Rd, Lake City, FL 32025
5. Surety N/A
 - a. Name and address:
 - b. Amount of bond:
6. Lender: Sun Trust Mortgage
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 : NONE
8. In addition to himself, Owner designates _____ 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).

[Signature]

Bonnie Friend

The foregoing instrument was acknowledged before me this 5th day of January, 2006, by Alan & Bonnie Friend who are personally known to me and who did not take an oath.

[Signature]
Notary Public

My Commission Expires: June 25, 2007



Just 2/20/06/58 Date 01/05/2006 Time 10:24
DC, P. DeWitt Caseon Columbia County B. 1070 P. 885

Columbia County Property Appraiser

DB Last Updated: 12/8/2005

Parcel: 11-5S-17-09208-004

2006 Proposed Values

[Tax Record](#)
[Property Card](#)
[Interactive GIS Map](#)
[Print](#)

Owner & Property Info

Search Result: 1 of 1

Owner's Name	FRIEND ALAN
Site Address	
Mailing Address	207 SE PITTMAN CT LAKE CITY, FL 32025
Brief Legal	N1/2 OF E1/2 OF E1/2 OF NW1/4 OF SW1/4. (AKA PRCL "D" NORTH ALDINE FEAGEL S/D UNREC)

Use Desc. (code)	SINGLE FAM (000100)
Neighborhood	11517.02
Tax District	3
UD Codes	MKTA02
Market Area	02
Total Land Area	5.060 ACRES

Property & Assessment Values

Mkt Land Value	cnt: (1)	\$39,301.00
Ag Land Value	cnt: (0)	\$0.00
Building Value	cnt: (1)	\$22,619.00
XFOB Value	cnt: (1)	\$1,504.00
Total Appraised Value		\$63,424.00

Just Value	\$63,424.00
Class Value	\$0.00
Assessed Value	\$57,407.00
Exempt Value	\$0.00
Total Taxable Value	\$57,407.00

Sales History

Sale Date	Book/Page	Inst. Type	Sale Vlmp	Sale Qual	Sale RCode	Sale Price
3/31/2005	1042/784	WD	I	Q		\$67,500.00
3/24/2004	1010/2886	WD	I	Q		\$57,000.00
3/24/2004	1010/2885	WD	I	U	03	\$28,500.00

Building Characteristics

Bldg Item	Bldg Desc	Year Blt	Ext. Walls	Heated S.F.	Actual S.F.	Bldg Value
1	PREF M B A (008700)	2000	Mod Metal (25)	1200	1628	\$22,619.00
Note: All S.F. calculations are based on exterior building dimensions.						

Extra Features & Out Buildings

Code	Desc	Year Blt	Value	Units	Dims	Condition (% Good)
0166	CONC,PAVMT	2002	\$1,504.00	752.000	0 x 0 x 0	(.00)

Land Breakdown

Lnd Code	Desc	Units	Adjustments	Eff Rate	Lnd Value
000100	SFR (MKT)	5.060 AC	1.00/1.00/1.00/1.00	\$7,767.00	\$39,301.00

Columbia County Property Appraiser

DB Last Updated: 12/8/2005

1 of 1

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Community Affairs
Residential Whole Building Performance Method A

Project Name: FRIEND Address: City, State: , Owner: Climate Zone: North	Builder: STANLEY CRAWFORD Permitting Office: COLU MBM Permit Number: 221010 Jurisdiction Number: 24050
--	---

<ol style="list-style-type: none"> 1. New construction or existing New <input type="checkbox"/> 2. Single family or multi-family Single family <input type="checkbox"/> 3. Number of units, if multi-family 1 <input type="checkbox"/> 4. Number of Bedrooms 3 <input type="checkbox"/> 5. Is this a worst case? Yes <input type="checkbox"/> 6. Conditioned floor area (ft²) 1911.7 ft² <input type="checkbox"/> 7. Glass type¹ and area: (Label reqd. by 13-104.4.5 if not default) <table style="width: 100%;"> <tr> <td style="width: 30%;">a. U-factor:</td> <td style="width: 30%;">Description</td> <td style="width: 40%;">Area</td> </tr> <tr> <td>(or Single or Double DEFAULT)</td> <td>7a. (Dble Default)</td> <td>270.0 ft²</td> </tr> <tr> <td>b. SHGC:</td> <td></td> <td></td> </tr> <tr> <td>(or Clear or Tint DEFAULT)</td> <td>7b. (Clear)</td> <td>270.0 ft²</td> </tr> </table> 8. Floor types <table style="width: 100%;"> <tr> <td style="width: 30%;">a. Slab-On-Grade Edge Insulation</td> <td style="width: 30%;">R=4.0, 212.0(p) ft</td> <td style="width: 40%;"></td> </tr> <tr> <td>b. N/A</td> <td></td> <td></td> </tr> <tr> <td>c. N/A</td> <td></td> <td></td> </tr> </table> 9. Wall types <table style="width: 100%;"> <tr> <td style="width: 30%;">a. Frame, Wood, Exterior</td> <td style="width: 30%;">R=13.0, 1554.0 ft²</td> <td style="width: 40%;"></td> </tr> <tr> <td>b. Frame, Wood, Adjacent</td> <td>R=13.0, 300.0 ft²</td> <td></td> </tr> <tr> <td>c. N/A</td> <td></td> <td></td> </tr> <tr> <td>d. N/A</td> <td></td> <td></td> </tr> <tr> <td>e. N/A</td> <td></td> <td></td> </tr> </table> 10. Ceiling types <table style="width: 100%;"> <tr> <td style="width: 30%;">a. Under Attic</td> <td style="width: 30%;">R=30.0, 1911.7 ft²</td> <td style="width: 40%;"></td> </tr> <tr> <td>b. Under Attic</td> <td>R=19.0, 220.0 ft²</td> <td></td> </tr> <tr> <td>c. N/A</td> <td></td> <td></td> </tr> </table> 11. Ducts <table style="width: 100%;"> <tr> <td style="width: 30%;">a. Sup: Unc. Ret: Unc. AH: Garage</td> <td style="width: 30%;">Sup. R=6.0, 224.0 ft</td> <td style="width: 40%;"></td> </tr> <tr> <td>b. N/A</td> <td></td> <td></td> </tr> </table> 	a. U-factor:	Description	Area	(or Single or Double DEFAULT)	7a. (Dble Default)	270.0 ft²	b. SHGC:			(or Clear or Tint DEFAULT)	7b. (Clear)	270.0 ft²	a. Slab-On-Grade Edge Insulation	R=4.0, 212.0(p) ft		b. N/A			c. N/A			a. Frame, Wood, Exterior	R=13.0, 1554.0 ft²		b. Frame, Wood, Adjacent	R=13.0, 300.0 ft²		c. N/A			d. N/A			e. N/A			a. Under Attic	R=30.0, 1911.7 ft²		b. Under Attic	R=19.0, 220.0 ft²		c. N/A			a. Sup: Unc. Ret: Unc. AH: Garage	Sup. R=6.0, 224.0 ft		b. N/A			<ol style="list-style-type: none"> 12. Cooling systems <table style="width: 100%;"> <tr> <td style="width: 30%;">a. Central Unit</td> <td style="width: 30%;"></td> <td style="width: 40%;">Cap: 36.0 kBtu/hr</td> </tr> <tr> <td></td> <td></td> <td>SEER: 13.00</td> </tr> <tr> <td>b. N/A</td> <td></td> <td></td> </tr> <tr> <td>c. N/A</td> <td></td> <td></td> </tr> </table> 13. Heating systems <table style="width: 100%;"> <tr> <td style="width: 30%;">a. Electric Heat Pump</td> <td style="width: 30%;"></td> <td style="width: 40%;">Cap: 35.0 kBtu/hr</td> </tr> <tr> <td></td> <td></td> <td>HSPF: 7.00</td> </tr> <tr> <td>b. N/A</td> <td></td> <td></td> </tr> <tr> <td>c. N/A</td> <td></td> <td></td> </tr> </table> 14. Hot water systems <table style="width: 100%;"> <tr> <td style="width: 30%;">a. Electric Resistance</td> <td style="width: 30%;"></td> <td style="width: 40%;">Cap: 50.0 gallons</td> </tr> <tr> <td></td> <td></td> <td>EF: 0.92</td> </tr> <tr> <td>b. N/A</td> <td></td> <td></td> </tr> <tr> <td>c. Conservation credits</td> <td></td> <td></td> </tr> <tr> <td colspan="3">(HR-Heat recovery, Solar</td> </tr> <tr> <td colspan="3">DHP-Dedicated heat pump)</td> </tr> </table> 15. HVAC credits <table style="width: 100%;"> <tr> <td style="width: 30%;">(CF-Ceiling fan, CV-Cross ventilation,</td> <td style="width: 40%;"></td> </tr> <tr> <td>HF-Whole house fan,</td> <td></td> </tr> <tr> <td>PT-Programmable Thermostat,</td> <td></td> </tr> <tr> <td>MZ-C-Multizone cooling,</td> <td></td> </tr> <tr> <td>MZ-H-Multizone heating)</td> <td></td> </tr> </table> 	a. Central Unit		Cap: 36.0 kBtu/hr			SEER: 13.00	b. N/A			c. N/A			a. Electric Heat Pump		Cap: 35.0 kBtu/hr			HSPF: 7.00	b. N/A			c. N/A			a. Electric Resistance		Cap: 50.0 gallons			EF: 0.92	b. N/A			c. Conservation credits			(HR-Heat recovery, Solar			DHP-Dedicated heat pump)			(CF-Ceiling fan, CV-Cross ventilation,		HF-Whole house fan,		PT-Programmable Thermostat,		MZ-C-Multizone cooling,		MZ-H-Multizone heating)	
a. U-factor:	Description	Area																																																																																																						
(or Single or Double DEFAULT)	7a. (Dble Default)	270.0 ft²																																																																																																						
b. SHGC:																																																																																																								
(or Clear or Tint DEFAULT)	7b. (Clear)	270.0 ft²																																																																																																						
a. Slab-On-Grade Edge Insulation	R=4.0, 212.0(p) ft																																																																																																							
b. N/A																																																																																																								
c. N/A																																																																																																								
a. Frame, Wood, Exterior	R=13.0, 1554.0 ft²																																																																																																							
b. Frame, Wood, Adjacent	R=13.0, 300.0 ft²																																																																																																							
c. N/A																																																																																																								
d. N/A																																																																																																								
e. N/A																																																																																																								
a. Under Attic	R=30.0, 1911.7 ft²																																																																																																							
b. Under Attic	R=19.0, 220.0 ft²																																																																																																							
c. N/A																																																																																																								
a. Sup: Unc. Ret: Unc. AH: Garage	Sup. R=6.0, 224.0 ft																																																																																																							
b. N/A																																																																																																								
a. Central Unit		Cap: 36.0 kBtu/hr																																																																																																						
		SEER: 13.00																																																																																																						
b. N/A																																																																																																								
c. N/A																																																																																																								
a. Electric Heat Pump		Cap: 35.0 kBtu/hr																																																																																																						
		HSPF: 7.00																																																																																																						
b. N/A																																																																																																								
c. N/A																																																																																																								
a. Electric Resistance		Cap: 50.0 gallons																																																																																																						
		EF: 0.92																																																																																																						
b. N/A																																																																																																								
c. Conservation credits																																																																																																								
(HR-Heat recovery, Solar																																																																																																								
DHP-Dedicated heat pump)																																																																																																								
(CF-Ceiling fan, CV-Cross ventilation,																																																																																																								
HF-Whole house fan,																																																																																																								
PT-Programmable Thermostat,																																																																																																								
MZ-C-Multizone cooling,																																																																																																								
MZ-H-Multizone heating)																																																																																																								

Glass/Floor Area: 0.14

Total as-built points: 27325

Total base points: 29151

PASS

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

PREPARED BY: SUNCOAST INSULATORS
625 NW 253rd Terrace
Newberry, FL 33855
(352) 472-9995

DATE: 12/23/05

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: , , ,

PERMIT #:

BASE				AS-BUILT							
GLASS TYPES											
.18 X Conditioned X BSPM = Points Floor Area				Type/SC	Overhang Omt Len Hgt		Area X SPM X SOF = Points				
.18	1911.7	20.04	6895.9	Double, Clear	W	2.0	6.0	59.0	38.52	0.85	1930.6
				Double, Clear	S	2.0	6.0	47.0	35.87	0.78	1308.2
				Double, Clear	N	2.0	6.0	54.0	19.20	0.90	933.2
				Double, Clear	E	2.0	6.0	110.0	42.06	0.85	3923.8
				As-Built Total:		270.0			8095.8		
WALL TYPES Area X BSPM = Points				Type	R-Value		Area X SPM = Points				
Adjacent	300.0	0.70	210.0	Frame, Wood, Exterior	13.0		1554.0	1.50	2331.0		
Exterior	1554.0	1.70	2641.8	Frame, Wood, Adjacent	13.0		300.0	0.60	180.0		
Base Total: 1854.0 2851.8				As-Built Total:		1854.0			2511.0		
DOOR TYPES Area X BSPM = Points				Type	R-Value		Area X SPM = Points				
Adjacent	18.0	2.40	43.2	Exterior Insulated			56.0	4.10	229.6		
Exterior	56.0	6.10	341.6	Adjacent Insulated			18.0	1.60	28.8		
Base Total: 74.0 384.8				As-Built Total:		74.0			258.4		
CEILING TYPES Area X BSPM = Points				Type	R-Value		Area X SPM X SCM = Points				
Under Attic	1911.7	1.73	3307.2	Under Attic	30.0		1911.7	1.73 X 1.00	3307.2		
				Under Attic	19.0		220.0	2.34 X 1.00	514.8		
Base Total: 1911.7 3307.2				As-Built Total:		2131.7			3822.0		
FLOOR TYPES Area X BSPM = Points				Type	R-Value		Area X SPM = Points				
Slab	212.0(p)	-37.0	-7844.0	Slab-On-Grade Edge Insulation	4.0		212.0(p)	-36.70	-7780.4		
Raised	0.0	0.00	0.0								
Base Total: -7844.0				As-Built Total:		212.0			-7780.4		
INFILTRATION Area X BSPM = Points						Area X SPM = Points					
	1911.7	10.21	19518.5			1911.7 10.21 19518.5					

SUMMER CALCULATIONS

Residential Whole Building Performance Method A - Details

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

BASE				AS-BUILT						
Summer Base Points: 25114.2				Summer As-Built Points: 26425.3						
Total Summer Points	X System Multiplier	=	Cooling Points	Total Component (System - Points)	X Cap Ratio (DM x DSM x AHU)	X Duct Multiplier (DM x DSM x AHU)	X System Multiplier	X Credit Multiplier	=	Cooling Points
25114.2	0.4266		10713.7	<small>(sys 1: Central Unit 36000 btuh ,SEER/EFF(13.0) Ducts:Unc(S),Unc(R),Gar(AH),R6.0(INS)</small> 26425 1.00 (1.09 x 1.147 x 1.00) 0.263 1.000 8673.7 26425.3 1.00 1.250 0.263 1.000 8673.7						

WINTER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: , , ,

PERMIT #:

BASE				AS-BUILT							
GLASS TYPES											
.18 X Conditioned X BWPM = Points Floor Area				Type/SC	Overhang Omt Len Hgt		Area X WPM X WOF = Points				
.18	1911.7	12.74	4383.9	Double, Clear	W	2.0	6.0	59.0	20.73	1.04	1275.2
				Double, Clear	S	2.0	6.0	47.0	13.30	1.26	786.5
				Double, Clear	N	2.0	6.0	54.0	24.58	1.00	1333.4
				Double, Clear	E	2.0	6.0	110.0	18.79	1.06	2192.4
				As-Built Total:				270.0	5687.5		
WALL TYPES Area X BWPM = Points				Type	R-Value		Area X WPM = Points				
Adjacent	300.0	3.60	1080.0	Frame, Wood, Exterior	13.0		1554.0	3.40	5283.6		
Exterior	1554.0	3.70	5749.8	Frame, Wood, Adjacent	13.0		300.0	3.30	990.0		
Base Total:				As-Built Total:		1854.0		6273.6			
DOOR TYPES Area X BWPM = Points				Type	R-Value		Area X WPM = Points				
Adjacent	18.0	11.50	207.0	Exterior Insulated			56.0	8.40	470.4		
Exterior	56.0	12.30	688.8	Adjacent Insulated			18.0	8.00	144.0		
Base Total:				As-Built Total:		74.0		614.4			
CEILING TYPES Area X BWPM = Points				Type	R-Value		Area X WPM X WCM = Points				
Under Attic	1911.7	2.05	3919.0	Under Attic	30.0		1911.7	2.05 X 1.00	3919.0		
				Under Attic	19.0		220.0	2.70 X 1.00	594.0		
Base Total:				As-Built Total:		2131.7		4513.0			
FLOOR TYPES Area X BWPM = Points				Type	R-Value		Area X WPM = Points				
Slab	212.0(p)	8.9	1886.8	Slab-On-Grade Edge Insulation	4.0		212.0(p)	8.45	1791.4		
Raised	0.0	0.00	0.0								
Base Total:				As-Built Total:		212.0		1791.4			
INFILTRATION Area X BWPM = Points								Area X WPM = Points			
1911.7 -0.59 -1127.9								1911.7 -0.59 -1127.9			

WINTER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: , , ,

PERMIT #:

BASE			AS-BUILT					
Winter Base Points: 16787.4			Winter As-Built Points: 17652.0					
Total Winter X System = Heating Points Multiplier Points	Total X Cap X Duct X System X Credit = Heating Component Ratio Multiplier Multiplier Multiplier Points (System - Points) (DM x DSM x AHU)							
16787.4 0.6274 10532.4	(sys 1: Electric Heat Pump 35000 btuh ,EFF(7.0) Ducts:Unc(S),Unc(R),Gar(AH),R6.0 17652.0 1.000 (1.069 x 1.169 x 1.00) 0.487 1.000 10745.9 17652.0 1.00 1.250 0.487 1.000 10745.9							

WATER HEATING & CODE COMPLIANCE STATUS

Residential Whole Building Performance Method A - Details

ADDRESS: , , ,

PERMIT #:

BASE				AS-BUILT					
WATER HEATING									
Number of Bedrooms	X	Multiplier	= Total	Tank Volume	EF	Number of Bedrooms	X Tank Ratio	Multiplier X Credit Multiplier	= Total
3		2635.00	7905.0	50.0	0.92	3	1.00	2635.00	7905.0
				As-Built Total:					7905.0

CODE COMPLIANCE STATUS

BASE					AS-BUILT				
Cooling Points	+	Heating Points	+	Hot Water Points = Total Points	Cooling Points	+	Heating Points	+	Hot Water Points = Total Points
10714		10532		7905 29151	8674		10746		7905 27325

PASS

Code Compliance Checklist

Residential Whole Building Performance Method A - Details

ADDRESS: , , ,

PERMIT #:

6A-21 INFILTRATION REDUCTION COMPLIANCE CHECKLIST

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

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

COMPONENTS	SECTION	REQUIREMENTS	CHECK
Water Heaters	612.1	Comply with efficiency requirements in Table 612.1.ABC.3.2. Switch or clearly marked 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* = 83.9

The higher the score, the more efficient the home.

1. New construction or existing	New	12. Cooling systems	
2. Single family or multi-family	Single family	a. Central Unit	Cap: 36.0 kBtu/hr
3. Number of units, if multi-family	1		SEER: 13.00
4. Number of Bedrooms	3	b. N/A	
5. Is this a worst case?	Yes	c. N/A	
6. Conditioned floor area (ft²)	1911.7 ft²		
7. Glass type ¹ and area: (Label reqd. by 13-104.4.5 if not default)		13. Heating systems	
a. U-factor:	Description Area	a. Electric Heat Pump	Cap: 35.0 kBtu/hr
(or Single or Double DEFAULT)	7a. (Dble Default) 270.0 ft²		HSPF: 7.00
b. SHGC:		b. N/A	
(or Clear or Tint DEFAULT)	7b. (Clear) 270.0 ft²	c. N/A	
8. Floor types		14. Hot water systems	
a. Slab-On-Grade Edge Insulation	R=4.0, 212.0(p) ft	a. Electric Resistance	Cap: 50.0 gallons
b. N/A			EF: 0.92
c. N/A		b. N/A	
9. Wall types		c. Conservation credits	
a. Frame, Wood, Exterior	R=13.0, 1554.0 ft²	(HR-Heat recovery, Solar	
b. Frame, Wood, Adjacent	R=13.0, 300.0 ft²	DHP-Dedicated heat pump)	
c. N/A		15. HVAC credits	
d. N/A		(CF-Ceiling fan, CV-Cross ventilation,	
e. N/A		HF-Whole house fan,	
10. Ceiling types		PT-Programmable Thermostat,	
a. Under Attic	R=30.0, 1911.7 ft²	MZ-C-Multizone cooling,	
b. Under Attic	R=19.0, 220.0 ft²	MZ-H-Multizone heating)	
c. N/A			
11. Ducts			
a. Sup: Unc. Ret: Unc. AH: Garage	Sup. R=6.0, 224.0 ft		
b. N/A			

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

Builder Signature: _____

Date: _____

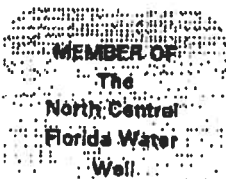
Address of New Home: _____

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.
EnergyGauge® (Version: FLRCSB v4.0)



Clyatt Well Drilling, Inc.
(Established in 1971)
POST OFFICE BOX 180
WORTHINGTON SPRINGS, FLORIDA 32697



Telephone Number (386)496-2488
FAX Number (386)496-4640

June 18, 2002

Columbia County Building Department
Post Office Box 1529
Lake City, Florida 32056

To Whom It May Concern:

As required by building code regulations for Columbia County in order that a building permit can be issued, the following well information is provided with regard to the above-referenced well:

Size of Pump Motor:	1-1/2 Horse Power
Size of Pressure Tank:	220 Gallon Equivalent
Cycle Stop Valve Used:	No

Should you require any additional information, please do not hesitate to contact us.

Respectfully,

CLYATT WELL DRILLING, INC.

K. Melaine "Red" Clyatt
President

Clyatt Well Drilling, Inc.
(Established in 1971)
POST OFFICE BOX 180
WORTHINGTON SPRINGS, FLORIDA 32697

Telephone Number (386)496-2488
FAX Number (386)496-4640

**PUMP AND TANK SPECIFICATIONS FOR
STANDARD 4" RESIDENTIAL WELLS**

PUMPS

1 Horse Power Submersible Pump
20 Gallons Per Minute
Voltage: 240
Phase: (Single) 1

1.5 Horse Power Submersible Pump
25 Gallons Per Minute
Voltage: 240
Phase: (Single) 1

TANK

WF-255 Captive Air Tank
Capacity 81 Gallons
Equivalent 220 Gallons
Draw Down 25 Gallons

From: The Columbia County Building Department
Plans Review
135 NE Hernando Av.
P. O Box 1529
Lake City Florida, 32056-1529

0601-15

Reference to: Build permit application Number:

Stanley Crawford owner Alan Friend 207 SE Pittman Court

On the date of January 11, 2006 application 0601-15 and plans for construction of a single family dwelling were reviewed and the following information or alteration to the plans will be required to continue processing this application. If you should have any question please contact the above address, or contact phone number (386) 758-1163 or fax any information to (386) 754-7088.

Please include application number 0601-15 when making reference to this application.

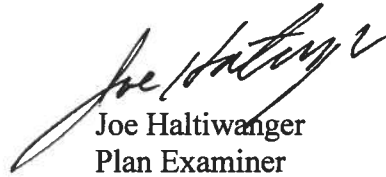
MPC ✓
1/11/06 1. On the electrical plan show the location of the electrical panel and include the total amperage rating of the electrical service panel.

2. Please have Mr. Nicholas Geisler supply the following information, show all required connectors with uplift rating and required number and size of fasteners for continuous tie from roof to foundation shall be designed by a Windload engineer using the engineered roof truss plans.

MPC ✓
1/11/06 3. In the garage area show the method of protecting the appliances as required by the Florida Mechanical Code, Sections: 303.4 Protection from damage: Appliances

shall not be installed in a location where subject to mechanical damage unless protected by approved barriers.

Thank you,

A handwritten signature in black ink, appearing to read "Joe Haltiwanger", with a stylized flourish at the end.

Joe Haltiwanger
Plan Examiner
Columbia County Building Department

@ CAM170M02 CamaUSA Appraisal System
 1/18/2006 15:13 **Permits Maintenance**
 Year T Property
2005 R 11-5S-17-09208-004

Columbia County
25806 Land 001
AG 000
22037 Bldg 001
1504 Xfea 001
49347 TOTAL B

FRIEND ALAN

Options: **A=Add C=Change D=Delete N=Notes R=Restore V=Void**

S	Seq	PermitNumber	Date	BldgDept	Inspected	Completed
			Issued	FinalInsp	Date / By	Date / By
1		19270	3/27/2002			
		Type 0002 Desc SFR			NoInsp	Permit\$ 289
		IssuedTo				
		Entered	Voided		LastMtc 3/27/2002 CHUCK	
2		17207	7/13/2000		7/13/2001	
*		Type 0022 Desc STORAGE			NoInsp	Permit\$ 75
		IssuedTo				
		Entered	Voided		LastMtc 7/31/2000 CAROL	
		Type Desc			NoInsp	Permit\$
		IssuedTo				
		Entered	Voided		LastMtc	

F1=Task F4=Prompt F5=Refresh F9=Expand F12=Cancel PgUp/PgDn F24=More



Columbia County Property Appraiser

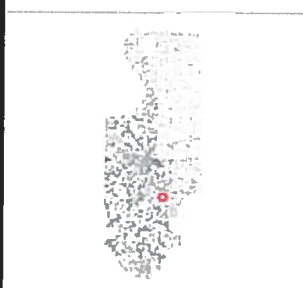
J. Doyle Crews, CFA - Lake City, Florida - 386-758-1083

PARCEL: 11-5S-17-09208-004 - SINGLE FAM (000100)

N1/2 OF E1/2 OF E1/2 OF NW1/4 OF SW1/4. (AKA PRCL "D" NORTH ALDINE
FEAGEL S/D UNREC)

Name:	FRIEND ALAN	LandVal	\$39,301.00
Site:		BldgVal	\$22,619.00
Mail:	207 SE PITTMAN CT	ApprVal	\$63,424.00
	LAKE CITY, FL 32025	JustVal	\$63,424.00
Sales	3/31/2005 \$67,500.00 / Q	Assd	\$57,407.00
Info	3/24/2004 \$57,000.00 / Q	Exmpt	\$0.00
	3/24/2004 \$28,500.00 / U	Taxable	\$57,407.00

0 0.09 0.18 0.27 mi



This information, GIS Map Updated: 8/3/2005, was derived from data which was compiled by the Columbia County Property Appraiser Office solely for the governmental purpose of property assessment. This information should not be relied upon by anyone as a determination of the ownership of property or market value. No warranties, expressed or implied, are provided for the accuracy of the data herein, it's use, or it's interpretation. Although it is periodically updated, this information may not reflect the data currently on file in the Property Appraiser's office. The assessed values are NOT certified values and therefore are subject to change before being finalized for ad valorem assessment purposes.

Edw. Weeje
**Columbia County Building Department
Culvert Waiver**

**Culvert Waiver No.
000000952**

DATE: 01/19/2006 BUILDING PERMIT NO. 24050

APPLICANT MATT CASON PHONE 752.5152

ADDRESS 853 SW SISTERS WELCOME ROAD LAKE CITY FL 32025

OWNER ALAN & BONNIE FRIEND PHONE _____

ADDRESS 207 SE PITTMAN COURT LAKE CITY FL 32025

CONTRACTOR STANLEY CRAWFORD PHONE 752.5152

LOCATION OF PROPERTY 41-S TO MYRTIS RD, TL TO PITTMAN CT., TL THE LOT IS AT THE END.

SUBDIVISION/LOT/BLOCK/PHASE/UNIT _____

PARCEL ID # 11-5S-17-09208-004

I HEREBY CERTIFY THAT I UNDERSTAND AND WILL FULLY COMPLY WITH THE DECISION OF THE COLUMBIA COUNTY PUBLIC WORKS DEPARTMENT IN CONNECTION WITH THE HEREIN PROPOSED APPLICATION.

SIGNATURE: *Matt Cason*

A SEPARATE CHECK IS REQUIRED
MAKE CHECKS PAYABLE TO BCC

Amount Paid 50.00

PUBLIC WORKS DEPARTMENT USE ONLY

I HEREBY CERTIFY THAT I HAVE EXAMINED THIS APPLICATION AND DETERMINED THAT THE
CULVERT WAIVER IS:

_____ APPROVED _____ NOT APPROVED - NEEDS A CULVERT PERMIT

COMMENTS: Private Rd.

SIGNED: *Willie Mantie* DATE: 1-7-06

ANY QUESTIONS PLEASE CONTACT THE PUBLIC WORKS DEPARTMENT AT 386-752-5955.

135 NE Hernando Ave., Suite B-21
Lake City, FL 32055
Phone: 386-758-1008 Fax: 386-758-2160





RIGHT-J LOAD AND EQUIPMENT SUMMARY

Entire House

Touchstone Heating and Air, Inc.

Job: Alan Friend Residence
12/28/05

490 SE 3rd Ave., Lake Butler, FL 32054 Phone: 386-486-3467 Fax: 386-486-3147

Project Information

For: Stanley Crawford Construction
859 SW Sisters Welcome Road, Lake City, FL 32025
Phone: 386-752-5152 Fax: 386-755-2165

Notes:

Design Information

Weather: Gainesville, FL, US

Winter Design Conditions

Outside db	33 °F
Inside db	70 °F
Design TD	37 °F

Summer Design Conditions

Outside db	92 °F
Inside db	75 °F
Design TD	17 °F
Daily range	M
Relative humidity	50 %
Moisture difference	52 gr/lb

Heating Summary

Building heat loss	37063 Btuh
Ventilation air	0 cfm
Ventilation air loss	0 Btuh
Design heat load	37063 Btuh

Sensible Cooling Equipment Load Sizing

Structure	25029 Btuh
Ventilation	935 Btuh
Design temperature swing	3.0 °F
Use mfg. data	n
Rate/swing multiplier	0.97
Total sens. equip. load	25185 Btuh

Infiltration

Method	Simplified
Construction quality	Average
Fireplaces	0

Latent Cooling Equipment Load Sizing

Internal gains	460 Btuh
Ventilation	1753 Btuh
Infiltration	2849 Btuh
Total latent equip. load	5061 Btuh

	Heating	Cooling
Area (ft²)	1912	1912
Volume (ft³)	16252	16252
Air changes/hour	0.10	0.30
Equiv. AVF (cfm)	27	81

Total equipment load	30247 Btuh
Req. total capacity at 0.70% SHR	3.0 ton

Heating Equipment Summary

Make	Trane
Trade	E. XE 1200 Weathertron
	TWP036C
Efficiency	9.1 HSPF
Heating input	
Heating output	34600 Btuh @ 47°F
Heating temp rise	26 °F
Actual heating fan	1230 cfm
Heating air flow factor	0.033 cfm/Btuh
Space thermostat	

Cooling Equipment Summary

Make	Trane
Trade	E. XE 1200 Weathertron
	TWP036C
	TWE031E13
Efficiency	13.0 SEER
Sensible cooling	24840 Btuh
Latent cooling	10560 Btuh
Total cooling	35200 Btuh
Actual cooling fan	1230 cfm
Cooling air flow factor	0.049 cfm/Btuh
Load sensible heat ratio	84 %

Bold/italic values have been manually overridden

Printout certified by ACCA to meet all requirements of Manual J 7th Ed

**RESIDENTIAL MINIMUM PLAN REQUIREMENTS AND CHECKLIST FOR
FLORIDA BUILDING CODE 2001
ONE (1) AND TWO (2) FAMILY DWELLINGS
ALL REQUIREMENTS ARE SUBJECT TO CHANGE
EFFECTIVE MARCH 1, 2002**

Applicant	Plans Examiner	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	All drawings must be clear, concise and drawn to scale ("Optional " details that are not used shall be marked void or crossed off). Square footage of different areas shall be shown on plans.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Designers name and signature on document (FBC 104.2.1). If licensed architect or engineer, official seal shall be affixed.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>Site Plan including:</u> <ol style="list-style-type: none"> Dimensions of lot Dimensions of building set backs Location of all other buildings on lot, well and septic tank if applicable, and all utility easements. Provide a full legal description of property.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>Wind-load Engineering Summary, calculations and any details required</u> <ol style="list-style-type: none"> Plans or specifications must state compliance with FBC Section 1606 The following information must be shown as per section 1606.1.7 FBC <ol style="list-style-type: none"> Basic wind speed (MPH) Wind importance factor (I) and building category Wind exposure – if more than one wind exposure is used, the wind exposure and applicable wind direction shall be indicated The applicable internal pressure coefficient Components and Cladding. The design wind pressure in terms of psf (kN/m²), to be used for the design of exterior component and cladding materials not specifically designed by the registered design professional
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>Elevations including:</u> <ol style="list-style-type: none"> All sides Roof pitch Overhang dimensions and detail with attic ventilation Location, size and height above roof of chimneys Location and size of skylights Building height Number of stories

- ☒ ☐
- ☒ ☐
- ☒ ☐

Floor Plan including:

- a) Rooms labeled and dimensioned
- b) Shear walls
- c) Windows and doors (including garage doors) showing size, mfg., approval listing and attachment specs. (FBC 1707) and safety glazing where needed (egress windows in bedrooms to be shown)
- d) Fireplaces (gas appliance) (vented or non-vented) or wood burning with hearth
- e) Stairs with dimensions (width, tread and riser) and details of guardrails and handrails
- f) Must show and identify accessibility requirements (accessible bathroom)

- ☒ ☐

Foundation Plan including:

- a) Location of all load-bearing wall with required footings indicated as standard Or monolithic and dimensions and reinforcing
- b) All posts and/or column footing including size and reinforcing
- c) Any special support required by soil analysis such as piling
- d) Location of any vertical steel

- ☒ ☐

Roof System:

- a) Truss package including:
 1. Truss layout and truss details signed and sealed by Fl. Pro. Eng.
 2. Roof assembly (FBC 104.2.1 Roofing system, materials, manufacturer, fastening requirements and product evaluation with wind resistance rating)
- b) Conventional Framing Layout including:
 1. Rafter size, species and spacing
 2. Attachment to wall and uplift
 3. Ridge beam sized and valley framing and support details
 4. Roof assembly (FBC 104.2.1 Roofing systems, materials, manufacturer, fastening requirements and product evaluation with wind resistance rating)

- ☐ ☐

Wall Sections including:

- a) Masonry wall
 1. All materials making up wall
 2. Block size and mortar type with size and spacing of reinforcement
 3. Lintel, tie-beam sizes and reinforcement
 4. Gable ends with rake beams showing reinforcement or gable truss and wall bracing details
 5. All required connectors with uplift rating and required number and size of fasteners for continuous tie from roof to foundation
 6. Roof assembly shown here or on roof system detail (FBC 104.2.1 Roofing system, materials, manufacturer, fastening requirements and product evaluation with resistance rating)
 7. Fire resistant construction (if required)
 8. Fireproofing requirements
 9. Shoe type of termite treatment (termicide or alternative method)
 10. Slab on grade
 - a. Vapor retarder (6mil. Polyethylene with joints lapped 6 inches and sealed)
 - b. Must show control joints, synthetic fiber reinforcement or Welded fire fabric reinforcement and supports
 11. Indicate where pressure treated wood will be placed
 12. Provide insulation R value for the following:
 - a. Attic space
 - b. Exterior wall cavity
 - c. Crawl space (if applicable)

- ☐ ☐



b) Wood frame wall

1. All materials making up wall
2. Size and species of studs
3. Sheathing size, type and nailing schedule
4. Headers sized
5. Gable end showing balloon framing detail or gable truss and wall hinge bracing detail
6. All required fasteners for continuous tie from roof to foundation (truss anchors, straps, anchor bolts and washers)
7. Roof assembly shown here or on roof system detail (FBC104.2.1 Roofing system, materials, manufacturer, fastening requirements and product evaluation with wind resistance rating)
8. Fire resistant construction (if applicable)
9. Fireproofing requirements
10. Show type of termite treatment (termiteicide or alternative method)
11. Slab on grade
 - a. Vapor retarder (6Mil. Polyethylene with joints lapped 6 inches and sealed
 - b. Must show control joints, synthetic fiber reinforcement or welded wire fabric reinforcement and supports
12. Indicate where pressure treated wood will be placed
13. Provide insulation R value for the following:
 - a. Attic space
 - b. Exterior wall cavity
 - c. Crawl space (if applicable)



c) Metal frame wall and roof (designed, signed and sealed by Florida Prof. Engineer or Architect)

Floor Framing System:



a) Floor truss package including layout and details, signed and sealed by Florida Registered Professional Engineer



b) Floor joist size and spacing



c) Girder size and spacing



d) Attachment of joist to girder



e) Wind load requirements where applicable



Plumbing Fixture layout

Electrical layout including:



a) Switches, outlets/receptacles, lighting and all required GFCI outlets identified



b) Ceiling fans



c) Smoke detectors



d) Service panel and sub-panel size and location(s)



e) Meter location with type of service entrance (overhead or underground)



f) Appliances and HVAC equipment



g) Arc Fault Circuits (AFCI) in bedrooms

HVAC information



a) Manual J sizing equipment or equivalent computation



b) Exhaust fans in bathroom



Energy Calculations (dimensions shall match plans)



Gas System Type (LP or Natural) Location and BTU demand of equipment

Disclosure Statement for Owner Builders

Notice Of Commencement

Private Potable Water

a) Size of pump motor

b) Size of pressure tank

c) Cycle stop valve if used

**RESIDENTIAL MINIMUM PLAN REQUIREMENTS AND CHECKLIST FOR
FLORIDA BUILDING CODE 2001
ONE (1) AND TWO (2) FAMILY DWELLINGS
ALL REQUIREMENTS ARE SUBJECT TO CHANGE
EFFECTIVE MARCH 1, 2002**

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

Applicant	Plans Examiner	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	All drawings must be clear, concise and drawn to scale ("Optional" details that are not used shall be marked void or crossed off). Square footage of different areas shall be shown on plans.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Designers name and signature on document (FBC 104.2.1). If licensed architect or engineer, official seal shall be affixed.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>Site Plan including:</u> a) Dimensions of lot b) Dimensions of building set backs c) Location of all other buildings on lot, well and septic tank if applicable, and all utility easements. d) Provide a full legal description of property.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>Wind-load Engineering Summary, calculations and any details required</u> a) Plans or specifications must state compliance with FBC Section 1606 b) The following information must be shown as per section 1606.1.7 FBC <ul style="list-style-type: none"> a. Basic wind speed (MPH) b. Wind importance factor (I) and building category c. Wind exposure – if more than one wind exposure is used, the wind exposure and applicable wind direction shall be indicated d. The applicable internal pressure coefficient e. Components and Cladding. The design wind pressure in terms of psf (kN/m²), to be used for the design of exterior component and cladding materials not specifically designed by the registered design professional
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>Elevations including:</u>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	a) All sides
<input checked="" type="checkbox"/>	<input type="checkbox"/>	b) Roof pitch
<input checked="" type="checkbox"/>	<input type="checkbox"/>	c) Overhang dimensions and detail with attic ventilation
<input checked="" type="checkbox"/>	<input type="checkbox"/>	d) Location, size and height above roof of chimneys
<input checked="" type="checkbox"/>	<input type="checkbox"/>	e) Location and size of skylights
<input checked="" type="checkbox"/>	<input type="checkbox"/>	f) Building height
<input checked="" type="checkbox"/>	<input type="checkbox"/>	g) Number of stories

Floor Plan Including:

- ☒ ☐ a) Rooms labeled and dimensioned
- ☒ ☐ b) Shear walls
- ☒ ☐ c) Windows and doors (including garage doors) showing size, mfg., approval listing and attachment specs. (FBC 1707) and safety glazing where needed (egress windows in bedrooms to be shown)
- ☐ ☐ d) Fireplaces (gas appliance) (vented or non-vented) or wood burning with hearth
- ☒ ☐ e) Stairs with dimensions (width, tread and riser) and details of guardrails and handrails
- ☐ ☐ f) Must show and identify accessibility requirements (accessible bathroom)

Foundation Plan Including:

- ☒ ☐ a) Location of all load-bearing wall with required footings indicated as standard Or monolithic and dimensions and reinforcing
- ☒ ☐ b) All posts and/or column footing including size and reinforcing
- ☒ ☐ c) Any special support required by soil analysis such as piling
- ☒ ☐ d) Location of any vertical steel

Roof System:

- ☒ ☐ a) Truss package including:
 - 1. Truss layout and truss details signed and sealed by Fl. Pro. Eng.
 - 2. Roof assembly (FBC 104.2.1 Roofing system, materials, manufacturer, fastening requirements and product evaluation with wind resistance rating)
- ☐ ☐ b) Conventional Framing Layout including:
 - 1. Rafter size, species and spacing
 - 2. Attachment to wall and uplift
 - 3. Ridge beam sized and valley framing and support details
 - 4. Roof assembly (FBC 104.2.1 Roofing systems, materials, manufacturer, fastening requirements and product evaluation with wind resistance rating)

Wall Sections Including:

- ☐ ☐ a) Masonry wall
 - 1. All materials making up wall
 - 2. Block size and mortar type with size and spacing of reinforcement
 - 3. Lintel, tie-beam sizes and reinforcement
 - 4. Gable ends with rake beams showing reinforcement or gable truss and wall brace details
 - 5. All required connectors with uplift rating and required number and size of fastener for continuous tie from roof to foundation
 - 6. Roof assembly shown here or on roof system detail (FBC 104.2.1 Roofing system materials, manufacturer, fastening requirements and product evaluation with resistance rating)
 - 7. Fire resistant construction (if required)
 - 8. Fireproofing requirements
 - 9. Shoe type of termite treatment (termicide or alternative method)
 - 10. Slab on grade
 - a. Vapor retardant (6mil. Polyethylene with joints lapped 6 inches and sealed)
 - b. Must show control joints, synthetic fiber reinforcement or Welded fire fabric reinforcement and supports
 - 11. Indicate where pressure treated wood will be placed
 - 12. Provide Insulation R value for the following:
 - a. Attic space
 - b. Exterior wall cavity
 - c. Crawl space (if applicable)

b) Wood frame wall

1. All materials making up wall
2. Size and species of studs
3. Sheathing size, type and nailing schedule
4. Headers sized
5. Gable end showing balloon framing detail or gable truss and wall hinge bracing detail
6. All required fasteners for continuous tie from roof to foundation (truss anchors, straps, anchor bolts and washers)
7. Roof assembly shown here or on roof system detail (FBC104.2.1 Roofing system materials, manufacturer, fastening requirements and product evaluation with wind resistance rating)
8. Fire resistant construction (if applicable)
9. Fireproofing requirements
10. Show type of termite treatment (termicide or alternative method)
11. Slab on grade
 - a. Vapor retardant (6Mil. Polyethylene with joints lapped 6 inches and sealed)
 - b. Must show control joints, synthetic fiber reinforcement or welded wire fabric reinforcement and supports
12. Indicate where pressure treated wood will be placed
13. Provide Insulation R value for the following:
 - a. Attic space
 - b. Exterior wall cavity
 - c. Crawl space (if applicable)

c) Metal frame wall and roof (designed, signed and sealed by Florida Prof. Engineer or Architect)**Floor Framing System:**

- a) Floor truss package including layout and details, signed and sealed by Florida Registered Professional Engineer
- b) Floor joist size and spacing
- c) Girder size and spacing
- d) Attachment of joist to girder
- e) Wind load requirements where applicable

Plumbing Fixture layout**Electrical layout including:**

- a) Switches, outlets/receptacles, lighting and all required GFCI outlets identified
- b) Ceiling fans
- c) Smoke detectors
- d) Service panel and sub-panel size and location(s)
- e) Meter location with type of service entrance (overhead or underground)
- f) Appliances and HVAC equipment
- g) Arc Fault Circuits (AFCI) in bedrooms

HVAC Information

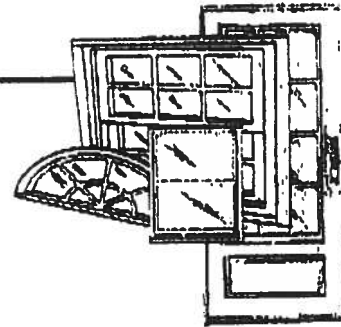
- a) Manual J sizing equipment or equivalent computation
- b) Exhaust fans in bathroom

Energy Calculations (dimensions shall match plans)**Gas System Type (LP or Natural) Location and BTU demand of equipment****Disclosure Statement for Owner/Builder*******Notice Of Commencement Required Before Any Inspections Will Be Done****Private Potable Water**

- a) Size of pump motor
- b) Size of pressure tank
- c) Cycle stop valve if used

CERTIFIED TESTING LABORATORIES

Architectural Division • 7252 Narcoossee Rd. • Orlando, FL 32822
(407) 384-7744 • Fax (407) 384-7751
Web Site: www.ctlarch.com
E-mail: ctlarch.com



Report Number: CTLA-991W-1-AWT
Report Date: February 18, 2003

STRUCTURAL PERFORMANCE TEST REPORT

Client: ACTION WINDOOR TECHNOLOGY INC
1312 W. CROSBY ROAD
CARROLLTON, TX 75006

Product Type and Series: AWT Series 3950 Vinyl Fin Frame Single Hung Window with Reinforced Sash Top Rail, Stiles & Meeting Rail H-R40 (36"x 72")

Test Specifications: AAMA/NWWDA 101/I.S.2-97 "Voluntary Specifications for Aluminum, Vinyl (PVC) and Wood Windows and Glass Doors"

Frame: Vinyl Fin frame measured 35.50" wide x 71.50" high overall. Mitered corner weld construction. Fixed meeting rail secured to each frame jamb with one (1) #8 x 2" PH., PH. screw.

Ventilator: Operable sash measured 33.375" wide x 35.25" high overall. Mitered corner weld construction. Clear lite measured 31.5625" high x 33.5625" high. Fixed lite measured 32.50" wide x 33.4375" high.

Weather Stripping: One (1) strip of woolpile .220" high with integral plastic fin frame sill. One (1) strip of woolpile .250" high with integral plastic fin sash top rail exterior. One (1) strip of woolpile .250" high each sash stile exterior leg. One (1) strip of woolpile .250" high with integral plastic fin each sash stile interior leg. One (1) strip of foam filled bulb weatherstrip sash bottom rail.

Hardware & Location: Two (2) metallic sweep locks located on sash top rail approx 8" from each end of rail. Two (2) metallic keepers located on fixed meeting rail. One (1) tilt latch at each end of sash top rail. One (1) block and tackle at each frame jamb. One (1) pivot bar at each end of sash bottom rail.

Glazing: 5/8" insulated annealed glass consisting of .125" glass .375" air space with swiggle .125" glass. Sash exterior glazed. Fixed lite interior glazed adhesive foam strip backbedding and vinyl snap in glazing bead.

Sealant: A silicone type sealant was used on sill and to seal specimen to test buck.

Weep System: Weep notch measuring 2.25" x leg height located each end of sill weeping to the exterior

Muntins: N/A

Reinforcement: Fixed meeting rail has one (1) piece of extruded aluminum reinforcement measuring .662" wide x .755" high x .099" thick x full length. Top rail, and sash stiles has one (1) piece of extruded aluminum reinforcement measuring .590" wide x .995" high x .115" thick x full length.

Additional Description: N/A

Screen: Roll formed aluminum frame, fiberglass mesh with vinyl spline. Two (2) metallic retainer clips and two (2) metallic plungers. Corners secured with plastic corner keys

Installation: Twenty-six (26) 1.75" roofing nails were used to secure the specimen to the wood test buck. Five (5) were located in head and sill measuring 4", 13", 21", 29", and 33" from left jamb. Eight (8) were located in each jamb measuring 4.50", 14.25", 24", 32.75", 42", 57.25", 60.50" and 70" from sill.

Surface Finish: White Vinyl

Comment: Nominal 2 mil polyethylene film was used to seal against air leakage during structural loads. The film was used in a manner that did not influence the test results

Performance Test Results

<u>Paragraph No</u>	<u>Title of Test</u>	<u>Method</u>	<u>Measured</u>	<u>Allowed</u>
2.1.2	Air Infiltration @1.57 psf	ASTM E283-91	.18 cfm/ft ²	.34 cfm/ft ²
The tested specimen meets or exceeds the performance levels specified in AAMA/NWWDA 101/ES2-97. Results recorded in two (2) decimals at the clients request. Unit tested with shims installed under cam locks.				
2.1.3	Water Resistance @ 5.0 gph/ft ²	ASTM E547-93 Four (4) five (5) minute cycles	No Entry	No Entry
	WTP= 6.75 psf	ASTM E331-93 Fifteen (15) minute duration	No Entry	No Entry
Unit tested with insect screen.				
2.1.3	Water Resistance @ 5.0 gph/ft ²	ASTM E547-93 Four (4) five (5) minute cycles	No Entry	No Entry
	WTP= 6 psf	ASTM E331-93 Fifteen (15) minute duration	No Entry	No Entry
Unit tested without insect screen.				
2.1.4.2	Uniform Load Structural Permanent Deformation @ 60 psf positive @ 60 psf negative	ASTM E330-90 Ten (10) second load	.015" .005"	.134" .134"
2.1.8	Forced Entry Resistance	AAMA 1302.5-76		
	Test A		0"	1/4"
	Test B		0"	1/4"
	Test C		0"	1/4"
	Test D, E and F		0"	1/4"
	Test G		0"	1/4"

Performance Test Results (continued)

<u>Paragraph No</u>	<u>Title of Test</u>	<u>Method</u>	<u>Measured</u>	<u>Allowed</u>
2.2.2.5.1	Operating Force Sash	AAMA/NWDA 101/1.S.2-97	18 lbs.	30 lbs.
2.2.2.5.2	Deglazing	ASTM E987-88		
	Top Rail 70 lbs.		.039" = 7.8% < 100%	
	Bottom Rail 70 lbs.		.038" = 7.6% < 100%	
	Left Side 50 lbs.		.050" = 10% < 100%	
	Right Side 50 lbs.		.035" = 7.0% < 100%	
2.1.7	Welded Corner Test	AAMA/NWDA 101/IS2-97		Passed

Test Date November 21, 2002

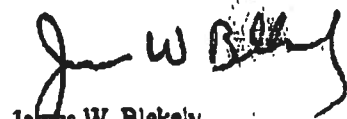
Test Completion Date: November 21, 2002

Remarks: Detailed drawings were available for laboratory records and comparison to the test specimen at the time of this report. A copy of this report along with representative sections of the test specimen will be retained by CTL for a period of four (4) years. The results obtained apply only to the specimen tested.

This test report does not constitute certification of this product, but only that the above test results were obtained using the designated test methods and they indicate compliance with the performance requirements (paragraphs as listed) of the above referenced specifications.

Certified Testing Laboratories assumes that all information provided by the client is accurate and that the physical and chemical properties of the components are as stated by the manufacturer.

Certified Testing Laboratories, Inc



James W. Blakely
Vice President
Architectural Division

cc: Action Window Technology Inc. (3)
File (1)

Report Number: ETC-04-034-14544.0
Test Start Date: 04/10/03
Test Finish Date: 03/16/04
Report Date: 03/18/04
Expiration Date: 03/18/08

Fenestration Structural Test Report
Rendered To:

Vinyl Building Products, Inc.
One Raritan Road
Oakland, NJ 07436

Series/Model
2900 Horizontal Slider (OX)

Description: The product tested was a vinyl Horizontal Sliding window. The test specimen was glazed with 5/8-inch thick insulating glass units constructed with double strength annealed glass. The frame size was 69 inches wide by 48 inches high by 2-3/4 inches deep. See Appendix A.

Test Specification: ANSI/AAMA/NWDA 101/LS.2

Summary of Results

Overall Design Pressure	35.0 psf
Air Leakage Rate	0.18 scfm/ft ²
Maximum Water Pressure Achieved	5.25 psf
Maximum Structural Pressure Achieved	60.0 psf
Forced Entry Resistance - (ASTM)	Grade 10

Product Designation **H-R35 69 x 48**

TEST REPORT

ETC Laboratories

Specifications: The test specimen was evaluated in accordance with ANSI/AAMA/NWDA 101/I.S.2 "Voluntary Specification for Aluminum, Vinyl and Wood Windows and Glass Doors". Sections 1, 2 and 4 only. All performance specifications in this standard shall be met for full compliance to the standard and for product certification, labeling or represented as conforming to this standard.

Referenced Test Reports: NONE

Note – The test data in any section below with an "RTR" comment have not been obtained from this specimen but from the Referenced Test Report with a specimen of the same or larger size and identical construction.

Design Pressure (DP): The product tested herein has been first evaluated to the Gateway pressure in the referenced specification for the performance class rating achieved.

Gateway Performance Tests

<u>Specification Paragraph</u>	<u>Title of Test</u>	<u>Results</u>	<u>Allowed</u>
2.1.2	<u>Air Infiltration – ASTM E283</u> Test Pressure - 1.57 psf The tested specimen exceeds the performance levels specified in ANSI/AAMA/NWDA 101/I.S.2 for air infiltration.	0.18 scfm/ft ²	0.30 scfm/ft ²
2.1.3	<u>Water Resistance – ASTM E547</u> 5 gal/hr-ft ² – 4 Test cycles – 24 Minutes Design Pressure - 15.0 psf Test Pressure – 2.86 psf With and Without Screen	Pass	No Leakage
2.1.4.2	<u>Uniform Structural Load - ASTM E330</u> Design Pressure - 15.0 psf Test Pressure Positive Load – 22.5 psf (150% x DP) Negative Load – 22.5 psf (150% x DP) Note: Measurement taken after load from center of the meeting stile	0.033 in. 0.020 in.	0.177 in. 0.177 in.
2.1.7	<u>Corner Weld</u> Frame – 4 Corners Sashes – 4 Corners	Pass Pass	< 100% < 100%
2.1.8	<u>Forced Entry Resistance - ASTM E588</u> Lock/Tool Manipulation Tests A1 through A7 Lock/Tool Manipulation	Pass Pass Pass	No Entry No Entry No Entry
2.2.1.6.1	<u>Operating Force – No Standardized Method</u> Right Sash – Open/Close	18/18 lbf	20 lbf
2.2.1.6.2	<u>De-glazing – ASTM E987</u> Right Sash: Left Stile - 70 lbf Right Stile - 70 lbf Top Rail - 50 lbf Bottom Rail - 50 lbf	0.0% 0.0% 0.0% 0.0%	<100% <100% <100% <100%

Optional Performance Tests

The manufacturer specified herein has successfully achieved all the required criteria in Section 2 of the referenced specification for the Gateway size of the achieved Performance Rating and has further successfully tested the product to higher performance levels as indicated below.

Design Pressure (DP): The product tested herein has been additionally evaluated to the Design Pressure referenced below.

Specification

<u>Paragraph</u>	<u>Title of Test</u>	<u>Results</u>	<u>Allowed</u>
4.3	<u>Water Resistance - ASTM E547</u> 5 gal/hr-ft ² - 4 Test cycles - 24 Minutes Design Pressure - 35.0 psf Test Pressure - 5.25 psf (15% x DP) With and Without Screen	Pass	No Leakage
4.4	<u>Uniform Structural Load - ASTM E330</u> Design Pressure - 40.0 psf Test Pressure Positive Load - 60.0 psf (150% x DP) Negative Load - 60.0 psf (150% x DP) Note: Measurement taken after load from center of meeting stile	0.069 in. 0.066 in.	0.177 in. 0.177 in.

Conditions, Terms, and General Notes Regarding These Tests

The product tested Has Been compared to the detailed drawings, bill of materials and fabrication information supplied by the client so named herein. Our analysis, which includes dimensional and component description comparisons, indicate the tested product and engineering information supplied by the client "Are Equivalent". See Appendix A. The report and representative samples will be retained for four years from the date of initial test.

These test results were obtained by employing all requirements of the designated test methods with no deviations. The test results and specimen supplied for testing are in compliance with the referenced specifications.

The test results are specific to the product tested by this laboratory and of the sample supplied by the client named herein, and they relate to no other product either manufactured by the client, a Fabricator of the client or of installed field performance.

This report does not constitute an AAMA or NWWDA certified product under the certification programs of these organizations. The program administrator of these programs and organizations may only grant product certification.

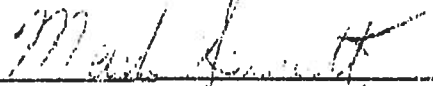
ETC Laboratories makes no opinions or endorsements regarding this product and its performance. This report may not be reproduced or quoted in partial form without the expressed written approval of ETC Laboratories.

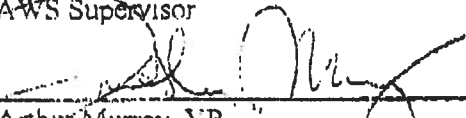
No conclusions of any kind regarding the adequacy of the glass in the test specimen may be drawn from the test. Procedure "A" in ASTM E330 was used for this test.

ETC Laboratories letters, reports, its name or insignia or mark are for the exclusive use of the client so named herein and any other use is strictly prohibited. The report, letters and the name of ETC Laboratories, its seal or mark shall not be used in any circumstance to the general public or in any advertising.

Limitation of Liability: Due diligence was used in rendering this professional opinion. By acceptance of this report, this client agrees to hold harmless and indemnify ETC Laboratories, its employees and offices and owners against all claims and demands of any kind whatsoever, which arise out of or in any manner connected with the performance of work referred to herein.

FOR ETC LABORATORIES


Mark Schnett
AWS Supervisor


Arthur Murray, VP
Manager, Wind Engineering Laboratory

TEST REPORT

ETC Laboratories



March 6, 2002

Subject: Elk Product Approval Information

All Prestique® and Capstone® products manufactured in Tuscaloosa, AL are certified under the Miami – Dade County Building Code Office (BCCO). These products also meet the requirements for the Florida Building Code since they are MD approved. The following test protocols must be passed by each of the products in order for MD product certification:

ASTM D3462

PA 100 (110 mph uplift and wind driven rain resistance)

PA 107 (Modified ASTM D3161 - 110 mph wind uplift resistance)

The nailing patterns that were used during the PA 100 and PA 107 wind test protocols for the Prestique and Capstone products are listed below. Also listed below are the Miami – Dade Notice of Acceptance Numbers (NOA).

Raised Profile, Prestique High Definition, Prestique 25, or Prestique 30 –

PA 100 = 4 nails

PA 107 = 5 nails

MD NOA# = 01-1226.04

Prestique I 35 or Prestique I* –

PA 100 = 4 nails

PA 107 = 5 nails

MD NOA# = 01-1226.05

Prestique Plus or Prestique Gallery Collection* –

PA 100 = 4 nails

PA 107 = 4 nails

MD NOA# = 01-1226.03

Capstone*

PA 100 = 4 Nails

PA 107 = 4 Nails

MD NOA# = 01-0523.01

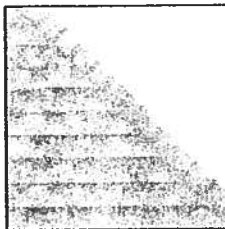
* As per the Elk Limited Warranty, six nails are required for the Elk high wind warranty.

If there are any questions please contact:

Mike Reed – Technical Manager or
(205) 342-0287

Daniel DeJarnette – QA Engineer
(205) 342-0298

ROOFING PRODUCTS SPECIFICATIONS – TUSCALOOSA, AL



**PRESTIQUE®
HIGH DEFINITION®**

High Definition

Product size	13 1/4" x 39 3/4"
Exposure	5 1/2"
Pieces/Bundle	16
Bundles/Square	4/98.5 sq.ft.
Squares/Pallet	11

50-year limited warranty period: non-prorated coverage for shingles and application labor for the initial 5 years, plus an option for transferability*; prorated coverage for application labor and shingles for balance of limited warranty period; 5-year limited wind warranty*.



RAISED PROFILE™

Product size	13 1/4" x 38 1/2"
Exposure	5 1/2"
Pieces/Bundle	22
Bundles/Square	3/100 sq.ft.
Squares/Pallet	16

30-year limited warranty period: non-prorated coverage for shingles and application labor for the initial 5 years, plus an option for transferability*; prorated coverage for application labor and shingles for balance of limited warranty period; 5-year limited wind warranty*.

High Definition

Product size	13 1/4" x 39 3/4"
Exposure	5 1/2"
Pieces/Bundle	16
Bundles/Square	4/98.5 sq.ft.
Squares/Pallet	14

40-year limited warranty period: non-prorated coverage for shingles and application labor for the initial 5 years, plus an option for transferability*; prorated coverage for application labor and shingles for balance of limited warranty period; 5-year limited wind warranty*.

HIP AND RIDGE SHINGLES

Size: 12" x 12"
Exposure: 6 1/2"
Pieces/Bundle: 45
Coverage: 4 Bundles = 100 linear feet

High Definition

Product size	13 1/4" x 38 1/2"
Exposure	5 1/2"
Pieces/Bundle	22
Bundles/Square	3/100 sq.ft.
Squares/Pallet	16

30-year limited warranty period: non-prorated coverage for shingles and application labor for the initial 5 years, plus an option for transferability*; prorated coverage for application labor and shingles for balance of limited warranty period; 5-year limited wind warranty*.

52 Bundles/Pallet
18 Pallets/Truck
936 Bundles/Truck
19 Pieces/Bundle
1 Bundle = 120.33 linear feet

Available Colors: Antique Slate, Weatheredwood, Shakedown, Sablewood, Hickory, Barkwood**, Forest Green, Wedgewood**, Birchwood**, Sandalwood. Gallery Collection: Balsam Forest*, Weathered Sage*, Sienna Sunset*.

All Prestique, Raised Profile and Seal-A-Ridge roofing products contain Elk WindGuard® sealant. WindGuard activates with the sun's heat, bonding shingles into a wind and weather resistant cover that resists blow-offs and leaks.

Check for availability with built-in StainGuard® treatment to inhibit the discoloration of roofing granules caused by the growth of certain types of algae. Not available in Sablewood.

All Prestique and Raised Profile shingles meet UL® Wind Resistant (UL 997) and Class "A" Fire Ratings (UL 790); and ASTM Specifications D 3018, Type-I; D 3161, Type-I; E 108 and the requirements of ASTM D 3462.

All Prestique and Raised Profile shingles meet the latest Metro Dade building code requirements.

*See actual limited warranty for conditions and limitations.

**Check for product availability.

SCOPE: Work includes furnishing all labor, materials and equipment necessary to complete installation of (name) shingles specified herein. Color shall be (name of color). Hip and ridge type to be Elk Seal-A-Ridge with formula FLX.

All exposed metal surfaces (flashing, vents, etc.) to be painted with matching Elk roof accessory paint.

PREPARATION OF ROOF DECK: Roof deck to be dry, well-seasoned 1" x 6" (25.4mm x 152.4mm) boards; exterior-grade plywood (exposure 1 rated sheathing) at least 3/8" (9.525mm) thick conforming to the specifications of the American Plywood Association; 7/16" (11.074mm) oriented strandboard; or chipboard. Most fire retardant plywood decks are NOT approved substrates for Elk shingles. Consult Elk Field Service for application specifications over other decks and other slopes.

MATERIALS: Underlayment for standard roof slopes, 4" per foot (101.6/304.8mm) or greater: apply non-perforated No. 15 or 30 asphalt-saturated felt underlayment. For low slopes (4" per foot (101.6/304.8mm) to a minimum of 2" per foot (50.8/304.8mm)), use two plies of underlayment overlapped a minimum of 19". Fasteners shall be of sufficient length and holding power for securing material as required by the application instructions printed on shingle wrapper.

For areas where algae is a problem, shingles shall be (name) with StainGuard treatment, as manufactured by the Elk Tuscaloosa plant. Hip and ridge type to be Seal-A-Ridge with formula FLX with StainGuard treatment.

Complete application instructions are published by Elk and printed on the back of every shingle bundle. All

warranties are contingent upon the correct installation as shown on the instructions. These instructions are the minimum required to meet Elk application requirements. In some areas, building codes may require additional application techniques or methods beyond our instructions. In these cases, the local code must be followed. Under no circumstances will Elk accept application requirements less than those contained in its application instructions.

For specifications in CSI format, call 800.354.SPEC (7732) or e-mail specinfo@elkcorp.com.

**SOUTHEAST &
ATLANTIC OFFICE:**
800.945.5551

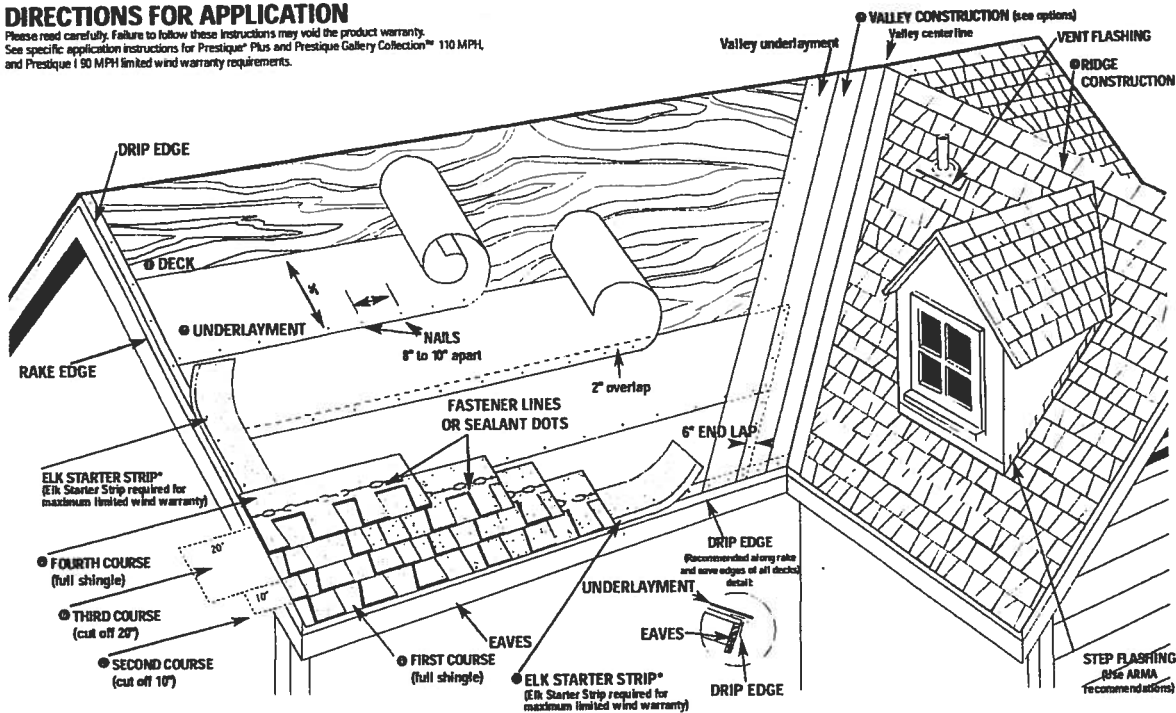
CORPORATE HEADQUARTERS:
800.354.7732

PLANT LOCATION:
800.945.5545

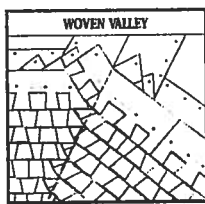
ELK
www.elkcorp.com

DIRECTIONS FOR APPLICATION

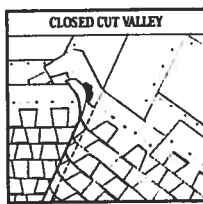
Please read carefully. Failure to follow these instructions may void the product warranty. See specific application instructions for Prestique® Plus and Prestique Gallery Collection™ 110 MPH, and Prestique I 90 MPH limited wind warranty requirements.



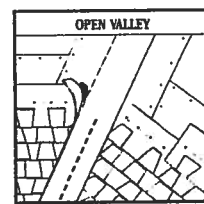
● **VALLEY CONSTRUCTION OPTION** (California Open and California Closed are also acceptable) NOTE: For complete ARMA valley installation details, see ARMA Residential Asphalt Roofing Manual.



VALLEY CENTER LINE



VALLEY CENTER LINE



VALLEY CENTER LINE

DIRECTIONS FOR APPLICATION

These application instructions are the minimum required to meet Elk's application requirements. Your failure to follow these instructions may void the product warranty. In some areas, the building codes may require additional application techniques or methods beyond our instructions. In these cases, the local code must be followed. Under no circumstances will Elk accept application requirements that are less than those printed here. Shingles should not be jammed tightly together. All attics should be properly ventilated. Note: It is not necessary to remove tape on back of shingle.

● DECK PREPARATION

Roof decks should be dry, well-seasoned 1" x 6" boards or exterior grade plywood minimum 3/8" thick and conform to the specifications of the American Plywood Association or 7/16" oriented strandboard, or 7/16" chipboard.

● UNDERLAYMENT

Apply underlayment (Non-Perforated No. 15 or 30 asphalt saturated felt). Cover drip edge at eaves only.

For low slope (2/12 up to 4/12), completely cover the deck with two plies of underlayment overlapping a minimum of 18". Begin by fastening a 19" wide strip of underlayment placed along the eaves. Place a full 36" wide sheet over the starter, horizontally placed along the eaves and completely overlapping the starter strip.

EAVE FLASHING FOR ICE DAMS (ASK A ROOFING CONTRACTOR, REFER TO ARMA MANUAL OR CHECK LOCAL CODES)

For standard slope (4/12 to less than 21/12), use coated roll roofing of no less than 50 pounds over the felt underlayment extending from the eave edge to a point at least 24" beyond the inside wall of the living space below or one layer of a self-adhered eave and flashing membrane.

For low slope (2/12 up to 4/12), use a continuous layer of asphalt plastic cement between the two plies of underlayment from the eave edge up to a point at least 24" beyond the inside wall of the living space below or one layer of a self-adhered eave and flashing membrane.

Consult the Elk Field Service Department for application specifications over other decks and other slopes.

● STARTER SHINGLE COURSE

USE AN ELK STARTER STRIP OR A STRIP SHINGLE INVERTED WITH THE HEADLAP APPLIED AT THE EAVE EDGE. With at least 4" trimmed from the end of the first shingle, start at the rake edge overhanging the eave 1/2" to 3/4". Fasten 2" from the lower edge and 1" from each side. Shingles may be applied with a course alignment of 45° on the roof.

● FIRST COURSE

Start at rake and continue course with full shingles laid flush with the starter course.

● SECOND COURSE

Start at the rake with the shingle having 10" trimmed off and continue across roof with full shingles.

● THIRD COURSE

Start at the rake with the shingle having 20" trimmed off and continue across roof with full shingles.

● FOURTH COURSE

Start at the rake and continue with full shingles across roof.

FIFTH AND SUCCEEDING COURSES.

Repeat application as shown for second, third, and fourth courses. Do not rack shingles straight up the roof.

● VALLEY CONSTRUCTION

Open, woven and closed cut valleys are acceptable when applied by Asphalt Roofing Manufacturing Association (ARMA) recommended procedures. For metal valleys, use 36" wide vertical underlayment prior to applying 18" metal flashing (secure edge with nails). No nails are to be within 6" of valley center.

● RIDGE CONSTRUCTION

For ridge construction use Class "A" Seal-A-Ridge™ with formula FLX™ (See ridge package for installation instructions.)

FASTENERS

While nailing is the preferred method for Elk shingles, Elk will accept fastening methods according to the following instructions.

Always nail or staple through the fastener line or on products without fastener lines, nail or staple between and in line with sealant dots.

NAILS: Corrosive resistant, 3/8" head, minimum 12-gauge roofing nails. Elk recommends 1-1/4" for new roofs and 1-1/2" for re-roofs. In cases where you are applying shingles to a roof that has an exposed overhang, for new roofs only, 3/4" ring shank nails are allowed to be used from the eave's edge to a point up the roof that is past the outside wall line. 1" ring shank nails allowed for re-roof.

STAPLES: Corrosive resistant, 16-gauge minimum, crown width minimum of 15/16". Note: An improperly adjusted staple gun can result in raised staples that can cause a fish-mouthed appearance and can prevent sealing.

Fasteners should be long enough to obtain 3/4" deck penetration or penetration through deck, whichever is less.

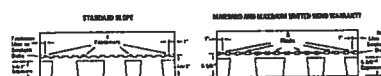
MANSARD APPLICATIONS

Correct fastening is critical to the performance of the roof. For slopes exceeding 60° (or 21/12) use six fasteners per shingle. Locate fasteners in the fastener area 1" from each side edge with the remaining four fasteners equally spaced along the length of the double thickness (laminated) area. Only fastening methods according to the above instructions are acceptable.

LIMITED WIND WARRANTY

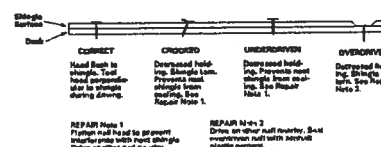
For a Limited Wind Warranty, all Prestique and Raised Profile™ shingles must be applied with 4 properly placed fasteners, or in the case of mansard applications, 6 properly placed fasteners per shingle.

For a Limited Wind Warranty up to 110 MPH for Prestique Gallery Collection or Prestique Plus or 90 MPH for Prestique I, shingles must be applied with 6 properly placed NAILS per shingle. SHINGLES APPLIED WITH STAPLES WILL NOT QUALIFY FOR THIS ENHANCED LIMITED WIND WARRANTY. Also, Elk Starter Strip shingles must be applied at the eaves and rake edges to qualify Prestique Plus, Prestique Gallery Collection and Prestique I shingles for this enhanced Limited Wind Warranty. Under no circumstances should the Elk Shingles or the Elk Starter Strip overhang the eaves or rake edge more than 3/4" of an inch.



HELP STOP BLOW-OFFS AND CALL-BACKS

A minimum of four fasteners must be driven into the DOUBLE THICKNESS (laminated) area of the shingle. Nails or staples must be placed along – and through – the "fastener line" or on products without fastener lines, nail or staple between and in line with sealant dots. CAUTION: Do not use fastener line for shingle alignment.



Refer to local codes which in some areas may require specific application techniques beyond those Elk has specified. All Prestique and Raised Profile shingles have a U.L.® Wind Resistance Rating when applied in accordance with these instructions using nails or staples on re-roofs as well as new construction.

CAUTION TO WHOLESALER: Careless and improper storage or handling can harm fiberglass shingles. Keep these shingles completely covered, dry, reasonably cool, and protected from the weather. Do not store near various sources of heat. Do not store in direct sunlight until applied. DO NOT DOUBLE STACK. Systematically rotate all stock so that the material that has been stored the longest will be the first to be moved out.

© 2002 Elk Corporation of Dallas.

All trademarks, ®, are registered trademarks of Elk Corporation of Dallas, an ELCOR company. Raised Profile, RidgeCrest, Gallery Collection and FLX are trademarks pending registration of Elk Corporation of Dallas. UL is a registered trademark of Underwriters Laboratories, Inc.

ELK
www.elkcorp.com



Underwriters Laboratories Inc.®

333 Pingston Road
Northbrook, Illinois 60062-2006
United States Country Code (1)
(847) 272-8800
FAX No. (847) 272-8129
<http://www.ul.com>

March 4, 2002

GAF Materials Corporation
Mr Randall Ziegler
1361 Alps Road
Wayne, NJ 07470

Our Reference: R21

Subject: UL Listed products

Dear Mr Ziegler:

This is is response to your request to identify some of the products that are currently Listed with Underwriters Laboratories relating to various Standards. Following are those products:

Royal Sovereign®
Marquis®/Marquis® WeatherMax®
SLATELINE®
Grand canyon™
Grand Sequoia®
Country Mansion™
Country Estates™
Timberline 30™
Timberline Select™ 40
Timberline Ultra™
Sentinel®

The above products have been tested to ASTM D3462, Class A UL790/ASTM E108 and UL 997/ ASTM D3161 (secured with 4 nails) with velocities up to 110 mph and have successfully met those test criteria.

If you have any questions please feel free to contact the writer.

Very truly yours,

Reviewed by,

Roger Anderson (Ext. 43283)
Senior Engineering Associate
Conformity Assessment Services- 3011E-NBK

Douglas C. Miller (Ext. 43262)
Engineering Group Leader
Conformity Assessment Services- 3011E-NBK



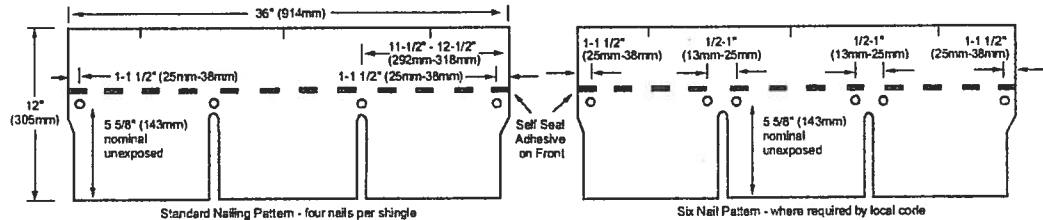
MARQUIS[®] WeatherMax[®] SHINGLES

ROYAL SOVEREIGN[®] SHINGLES

SENTINEL[®] SHINGLES

APPLICATION INSTRUCTIONS

Note: These shingles must be nailed a nominal 5 5/8" (143mm) from bottom of shingles, not in or above self seal, as shown. Nails should remain unexposed.



GENERAL INSTRUCTIONS

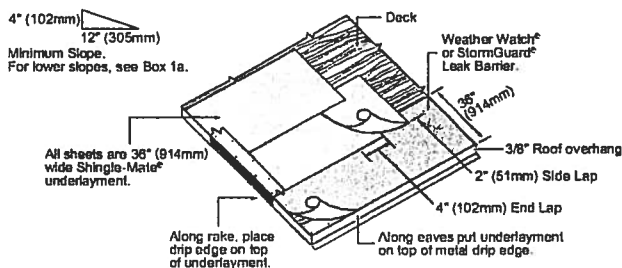
- **ROOF DECKS:** For use on new or reroofing work over well-seasoned, supported wood deck, tightly-constructed with maximum 6" (152mm) wide lumber, having adequate nail-holding capacity and smooth surface. Plywood decking as recommended by The Engineered Wood Assn. is acceptable. Plywood decks for Class A installations must be 3/8" (10mm) thick or greater with underlayment as noted below. Shingles must not be fastened directly to insulation or insulated deck unless authorized in writing by GAF Materials Corporation. Roof decks and existing surfacing material must be dry prior to application of shingles.
- **UNDERLAYMENT:** Underlayment is required on new construction and required for reroofing when old roof is removed from the deck. Use only "breathable" material like GAF Materials Corporation Shingle-Mate[®] Underlayment or equivalent. Underlayment must be installed flat, without wrinkles.
- **FASTENERS:** Use of nails is recommended. (Staple specifications and application instructions are available from GAF Materials Corporation, Contractor Services Dept., 1361 Alps Road, Wayne, NJ 07470.) Use only zinc coated steel or aluminum, 10-12 gauge, barbed, deformed or smooth shank roofing nails with heads 3/8" (10mm) to 7/16" (12mm) in diameter. Fasteners should be long enough to penetrate at least 3/4" (19mm) into wood decks or just through the plywood decks. Fasteners must be driven flush with the surface of the shingle. Over driving will damage the shingle. Raised fasteners will interfere with the sealing of the shingles. For normal installation, four fasteners must be installed per shingle, a nominal 5 5/8" (143mm) up from the bottom of the shingle. Fasteners must be installed approximately 1"-1 1/2" (25-38mm) and 11 1/2"-12 1/2" (292-318mm) from each side.
- **WIND RESISTANT:** These shingles have a special thermal sealant that firmly bonds the shingles together after application when exposed to sun and warm temperatures. Shingles installed in Fall or Winter may not seal until the following Spring. If shingles are damaged by winds before sealing or are not exposed to adequate surface temperatures, or if the self-sealant gets dirty, the shingles may never seal. Failure to seal under these circumstances results from the nature of self-sealing shingles and is not a manufacturing defect. To insure immediate sealing,

- apply 2 quarter-sized dabs of shingle tab adhesive on the back of each tab, approximately 1" (25mm) from end and 1" (25mm) up from bottom of each tab corner. The shingle must be pressed firmly into the adhesive.
- NOTE:** Application of excess tab adhesive can cause blistering of the shingle.
- For maximum wind resistance along rakes, cement shingles to underlayment and each other in a 4" (102mm) width of asphalt plastic roof cement.
- NOTE:** The film strips on the back of each shingle are to prevent sticking together of the shingles while in the bundle. Their removal is NOT required during application.
- **CANADIAN COLD WEATHER APPLICATIONS:** CSA A123.5-M90 mandates that shingles applied between September 1 and April 30 shall be adhered with a compatible field-applied adhesive. See Wind Resistant for GAF Materials Corporation's recommendations for the application of that adhesive.
- **MANSARD AND STEEP SLOPE APPLICATIONS:** For roof slopes greater than 21° (1750mm/m) per foot (do NOT use on vertical side walls), shingle sealing must be enhanced by hand sealing. After fastening the shingle in place, apply 2 quarter-sized dabs of shingle tab adhesive as indicated in Wind Resistant above. The shingle must be pressed firmly into the adhesive.
- **EXPOSURE:** 5" (127mm)
- **THROUGH VENTILATION:** All roof structures must be provided with through ventilation to prevent entrapment of moisture laden air behind roof sheathing. Ventilation provisions must at least meet or exceed current F.H.A., H.U.D. or local code minimum requirements.
- **NON-CORRODING METAL DRIP EDGES:** Recommended along rake and eave edges on all decks, especially plywood decks.
- **ASPHALT PLASTIC CEMENT:** For use as shingle tab adhesive. Must conform to ASTM D4586 Type I or II.

1 Underlayment: Standard Slope-4/12 (333mm/m) or more

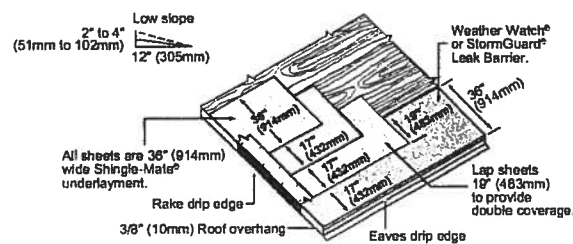
Application of underlayment: Cover deck with one layer of underlayment installed without wrinkles. Use only enough nails to hold underlayment in place until covered by shingles.

Application of eave flashing: Install eave flashing such as GAF Materials Corporation Weather Watch[®] or StormGuard[®] Leak Barrier in localities where leaks may be caused by water backing up behind ice or debris dams. Eave flashing must overhang the roof edge by 3/8" (10mm) and extend 24" (610mm) beyond the inside wall line.



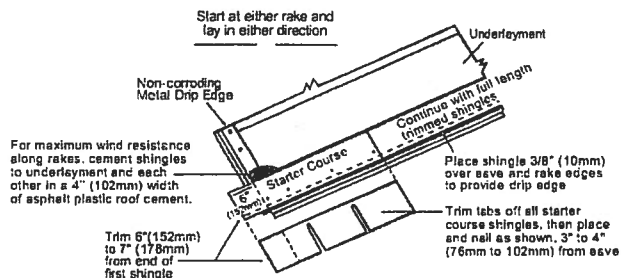
1a Underlayment: Low Slope 2/12-4/12 (167mm-333mm/m)

Application of underlayment and eave flashing: Completely cover the deck with two layers of underlayment as shown. Use only enough nails to hold underlayment in place until covered by shingles. Use blind nailing for eave flashings. At eaves and where ice dams can be expected, use one layer of GAF Materials Corporation Weather Watch[®] or StormGuard[®] Leak Barrier. Eave flashing must overhang the roof edge by 3/8" (10mm) and extend 24" (610mm) beyond the inside wall line. Where ice dams or debris dams are not expected, install 2 plies of Shingle-Mate[®] underlayment.



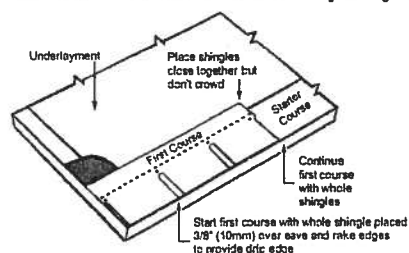
2 Starter Course

Use of any GAF MC 3-tab Shingle is recommended. Apply as shown.



3 First Course

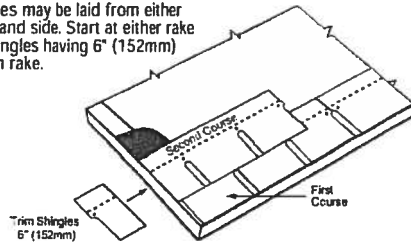
Start and continue with full shingles laid flush with the starter course. Shingles may be laid from left to right or right to left. DO NOT lay shingles straight up the roof since this procedure can cause an incorrect color blend on the roof and may damage the shingles.



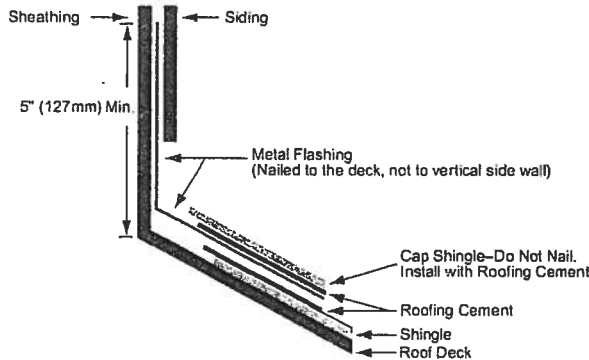
4 Second Course

Start and continue second course and all even numbered courses as shown. Position the shingle on the top of the cutouts of the underlying shingle so that there will be 5" (127mm) of each shingle exposed. Strike a chalk line about every 6 courses to check parallel alignment with eaves. Factory applied self-sealing dots on lower courses are designed to seal down the shingle tabs in an upper course.

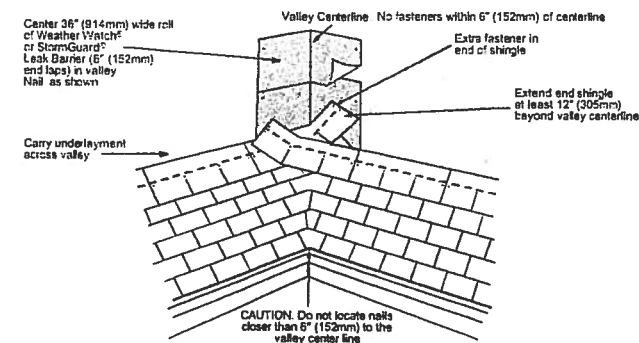
NOTE: Shingles may be laid from either left or right hand side. Start at either rake edge with shingles having 6" (152mm) trimmed from rake.



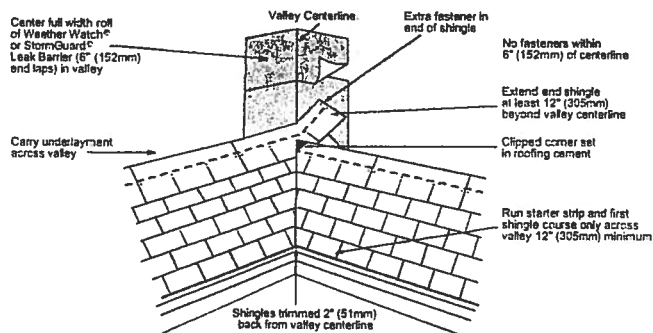
6 Wall Flashing (Sloped Roof to Vertical Wall)



8 Valley Construction - Closed or Woven Valley

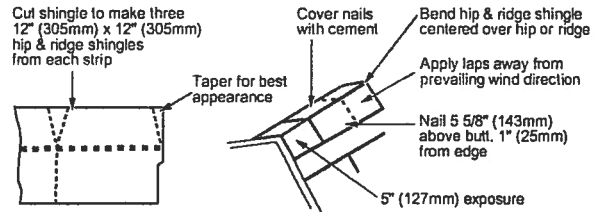


10 Valley Construction—Closed Cut

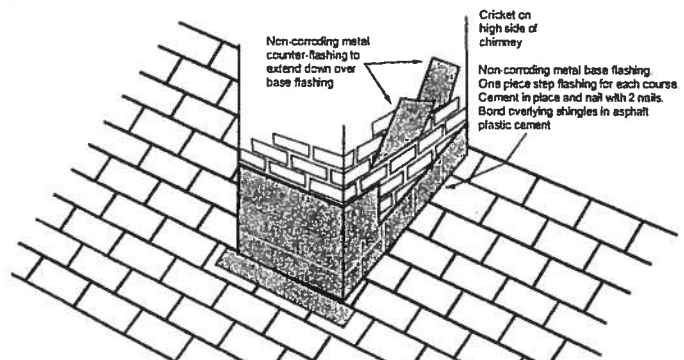


5 Hip and Ridge

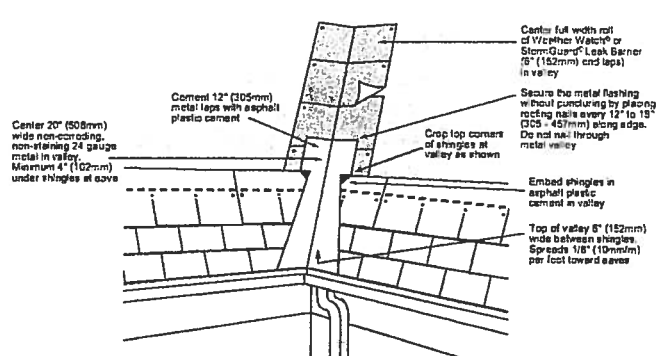
Use GAF hip & ridge shingles, or cut hip & ridge shingles from these full shingles, and apply as shown. Position laps away from prevailing wind direction.



7 Chimney Flashing



9 Valley Construction—Open Cut



Precautionary Notes

These shingles are fiberglass, self-sealing asphalt shingles. Because of the natural characteristics of the high quality waterproofing material used, these shingles will be stiff in cold weather and flexible in hot weather.

1. Bundles should not be dropped on edge nor should attempt be made to separate shingles by "breaking" over ridge or other bundles.
2. Handle carefully. Shingles can easily be broken in cold weather or their edges damaged in hot weather.
3. All exposed materials must be of Class A type.
4. Storage should be in a covered, ventilated area—maximum temperature 110°F (43°C). Store on flat surface and use weight equalization boards if pallets are to be double stacked. Shingles must be protected from weather when stored at job site. Do not store near steam pipes, radiators, etc., or in sunlight. All rolled product must be stored on ends.
5. If shingles are to be applied during PROLONGED COLD periods or in areas where airborne dust or sand can be expected before sealing occurs, the shingles MUST be hand sealed. See Wind Resistant instructions.

Re-Roofing

If old asphalt shingles are to remain in place, nail down or cut away all loose, curled or lifted shingles; replace with new; and just before applying the new roofing, sweep the surface clean of all loose debris. Since any irregularities may show through the new shingles, be sure the underlying shingles provide a smooth surface. Fasteners must be of sufficient length to penetrate the wood deck at least 3/4" (19mm) or just through plywood. Follow other above instructions for application. Note: Shingles can be applied over wood shingles when precautions have been taken to provide an acceptable smooth surface. This includes cutting back old shingles at eaves and rakes and installing new wood edging strips as needed. Make surface smooth and use beveled wood strips if necessary. Install #30 underlayment to maintain Class A rating.

This product is sold with an express LIMITED WARRANTY only. A copy of the LIMITED WARRANTY stating its terms and restrictions is printed on the product wrapper or may be obtained from the distributor of this product or directly from GAF Materials Corporation. Any deviation from printed instructions shall be the responsibility of applicator and/or specifier.



Shadow Accent TIMBERLINE[®] Ultra[®] SHINGLES

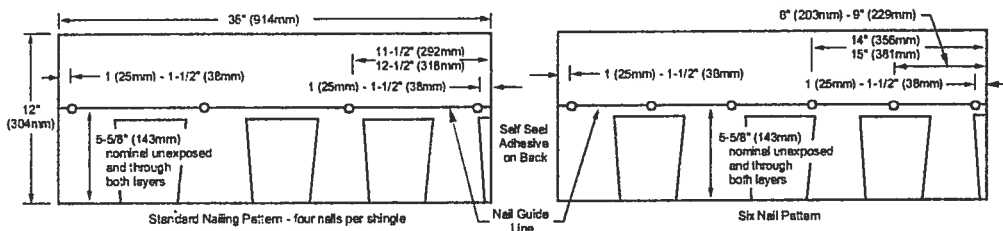
TIMBERLINE[®] SHINGLES

TIMBERLINE[®] 30 SHINGLES

APPLICATION INSTRUCTIONS

Timberline[®] Series shingles come in either 36" (914mm) or 36-15/16" (938mm) lengths, depending on shingle brand. Application instructions apply to both.

These shingles must be nailed a nominal 5-5/8" (143mm) from bottom of shingles, as shown, to allow for penetration through the double ply area just above the tabs. Nails should remain unexposed.



GENERAL INSTRUCTIONS

- ROOF DECKS:** For use on new or reroofing work over well-seasoned, supported wood deck, tightly-constructed with maximum 6" (152mm) wide lumber, having adequate nail-holding capacity and smooth surface. Plywood decking as recommended by The Engineered Wood Assn. is acceptable. Plywood decks for Class A installations must be 3/8" (10mm) thick or greater with underlayment as noted below. Shingles must not be fastened directly to insulation or insulated deck unless authorized in writing by GAF Materials Corporation. Roof decks and existing surfacing material must be dry prior to application of shingles.
- UNDERLAYMENT:** Underlayment beneath shingles has many benefits, including preventing wind driven rain from reaching the interior of the building and preventing sap in some wood decking from reacting with asphalt shingles. Underlayment is also required by many code bodies. Consult your local building department for its requirements. Where an underlayment is to be installed, a breather-type underlayment such as GAFMC's Shingle-Mate[®] underlayment is recommended. Underlayment must be installed flat, without wrinkles.
- FASTENERS:** Use of nails is recommended. (Staple specifications and application instructions are available from GAF Materials Corporation, Contractor Services Dept., 1361 Alps Road, Wayne, NJ 07470.) Use only zinc coated steel or aluminum, 10-12 gauge, barbed, deformed or smooth shank roofing nails with heads 3/8" (10mm) to 7/16" (12mm) in diameter. Fasteners should be long enough to penetrate at least 3/4" (19mm) into wood decks or just through the plywood decks. Fasteners must be driven flush with the surface of the shingle. Over driving will damage the shingle. Raised fasteners will interfere with the sealing of the shingles. For normal installation, four fasteners must be installed per shingle, a nominal 5-5/8" (143mm) up from the bottom of the shingle, to penetrate both layers of the shingle. Fasteners must be installed approximately 1" - 1 1/2" (25-38mm) and 11-1/2" - 12-1/2" (292-318mm) from each side.
- WIND RESISTANT:** These shingles have a special thermal sealant that firmly bonds the shingles together after application when exposed to sun and warm temperatures. Shingles installed in Fall or Winter may not seal until the following Spring. If shingles are damaged by winds

before sealing or are not exposed to adequate surface temperatures, or if the self-sealant gets dirty, the shingles may never seal. Failure to seal under these circumstances results from the nature of self-sealing shingles and is not a manufacturing defect. To insure immediate sealing, apply 4 quarter-sized dabs of shingle tab adhesive on the back of the shingle 1" (25mm) and 13" (330mm) in from each side and 1" (25mm) up from bottom of the shingle. The shingle must be pressed firmly into the adhesive.

NOTE: Application of excess tab adhesive can cause blistering of the shingle.

For maximum wind resistance along rakes, cement shingles to underlayment and each other in a 4" (102mm) width of asphalt plastic roof cement.

NOTE: The film strips on the back of each shingle are to prevent sticking together of the shingles while in the bundle. Their removal is NOT required during application.

• CANADIAN COLD WEATHER APPLICATIONS: CSA 123.5-M90 mandates that shingles applied between September 1 and April 30 shall be adhered with a compatible field-applied adhesive. See Wind Resistant for GAF Materials Corporation's recommendations for the application of that adhesive.

• MANSARD AND STEEP SLOPE APPLICATIONS: For roof slopes greater than 21° (1750mm/m) per foot (do NOT use on vertical side walls), shingle sealing must be enhanced by hand sealing. After fastening the shingle in place, apply 4 quarter-sized dabs of shingle tab adhesive as indicated in Wind Resistant above. The shingle must be pressed firmly into the adhesive.

• EXPOSURE: 5" (127mm)

• THROUGH VENTILATION: All roof structures must be provided with through ventilation to prevent entrapment of moisture laden air behind roof sheathing. Ventilation provisions must at least meet or exceed current F.H.A., H.U.D. or local code minimum requirements.

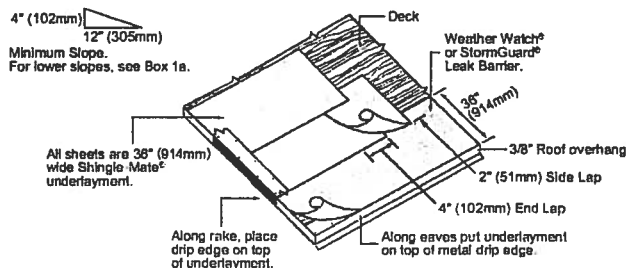
• NON-CORRODING METAL DRIP EDGES: Recommended along rake and eave edges on all decks, especially plywood decks.

• ASPHALT PLASTIC CEMENT: For use as shingle tab adhesive. Must conform to ASTM D4586 Type I or II.

1 Underlayment: Standard Slope-4/12 (333mm/m) or more

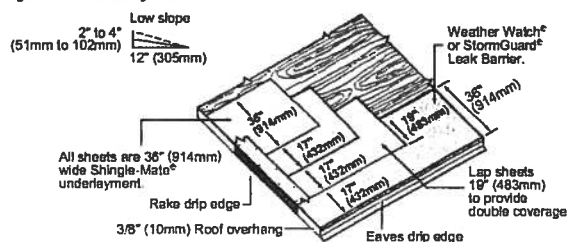
Application of underlayment: Cover deck with one layer of underlayment installed without wrinkles. Use only enough nails to hold underlayment in place until covered by shingles.

Application of eave flashing: Install eave flashing such as GAF Materials Corporation Weather Watch[®] or StormGuard[®] Leak Barrier in localities where leaks may be caused by water backing up behind ice or debris dams. Eave flashing must overhang the roof edge by 3/8" (10mm) and extend 24" (610mm) beyond the inside wall line.



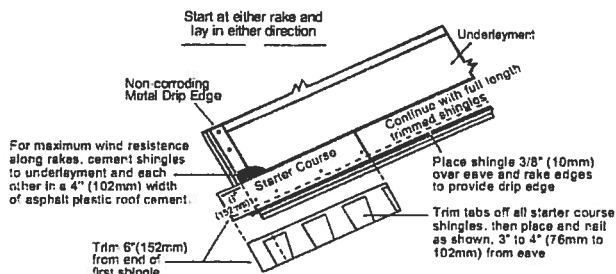
1a Underlayment: Low Slope 2/12-4/12 (167mm-333mm/m)

Application of underlayment and eave flashing: Completely cover the deck with two layers of underlayment as shown. Use only enough nails to hold underlayment in place until covered by shingles. Use blind nailing for eave flashings. At eaves and where ice dams can be expected, use one layer of GAF Materials Corporation Weather Watch[®] or StormGuard[®] Leak Barrier. Eave flashing must overhang the roof edge by 3/8" (10mm) and extend 24" (610mm) beyond the inside wall line. Where ice dams or debris dams are not expected, install 2 plies of Shingle-Mate[®] underlayment.



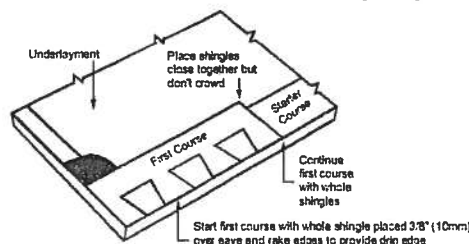
2 Starter Course

Apply as shown.



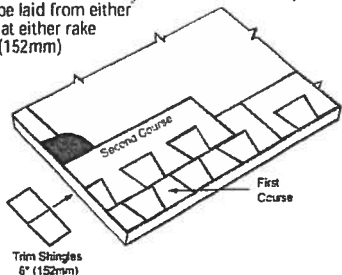
3 First Course

Start and continue with full shingles laid flush with the starter course. Shingles may be laid from left to right or right to left. DO NOT lay shingles straight up the roof since this procedure can cause an incorrect color blend on the roof and may damage the shingles.



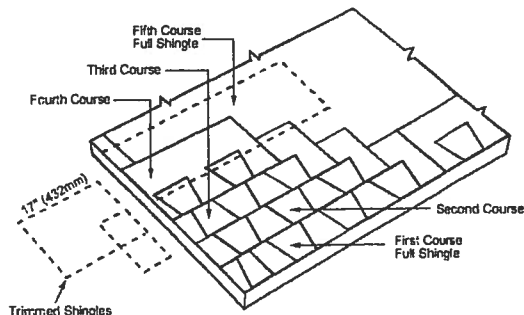
4 Second Course

Start and continue second course as shown. Trim 6" (152mm) from the end of the shingle. Position the shingles in the second and subsequent courses flush with the tops of the wide cutouts. This results in a 5" (127mm) exposure. Continue with full width shingles across the roof. Strike a chalk line about every 6 courses to check parallel alignment with eaves. NOTE: Shingles may be laid from either left or right hand side. Start at either rake edge with shingles having 6" (152mm) trimmed from rake.

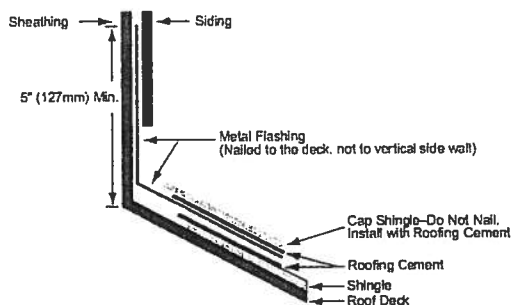


6 Fourth Course and Remaining Courses

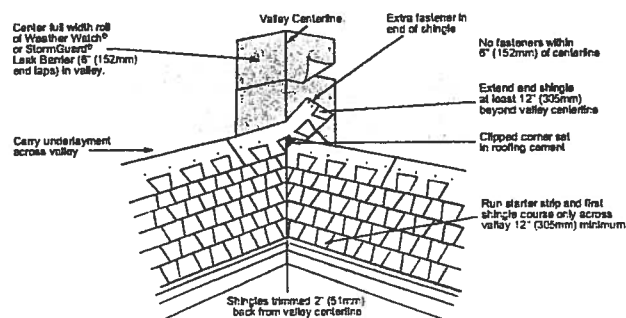
Trim 17" (432mm) from first shingle in the course, then continue with full shingles across the roof. Fifth and subsequent courses repeat full shingle instructions from Step 3.



8 Wall Flashing (Sloped Roof to Vertical Wall)



10 Valley Construction-Closed Cut



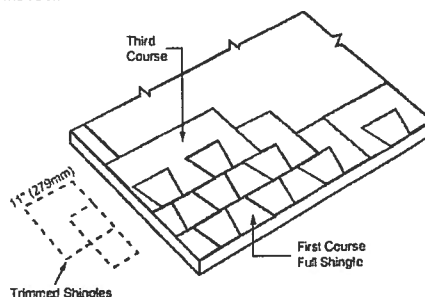
Precautionary Notes

Timberline® Series shingles are fiberglass, self-sealing asphalt shingles. Because of the natural characteristics of the high quality waterproofing material used, these shingles will be stiff in cold weather and flexible in hot weather.

1. Bundles should not be dropped on edge nor should attempt be made to separate shingles by "breaking" over ridge or other bundles.
2. Handle carefully. Shingles can easily be broken in cold weather or their edges damaged in hot weather.
3. All exposed materials must be of Class A type.
4. Storage should be in a covered, ventilated area—maximum temperature 110°F (43°C). Store on flat surface and use weight equalization boards if pallets are to be double stacked. Shingles must be protected from weather when stored at job site. Do not store near steam pipes, radiators, etc., or in sunlight. All rolled product must be stored on ends.
5. If shingles are to be applied during PROLONGED COLD periods or in areas where airborne dust or sand can be expected before sealing occurs, the shingles MUST be hand sealed. See Wind Resistant instructions.

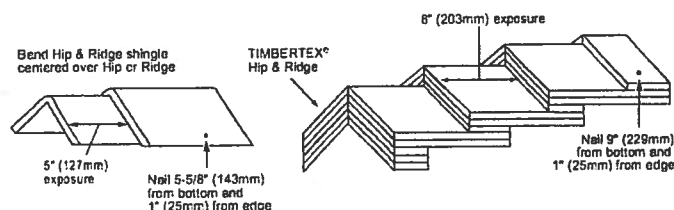
5 Third Course

Trim 11" (279mm) from the first shingle in the course then continue with full shingles across the roof.

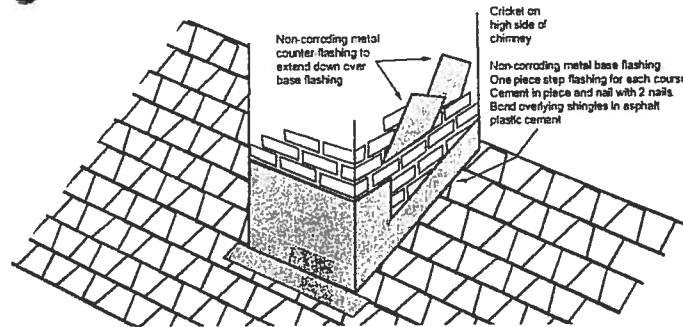


7 Hip and Ridge

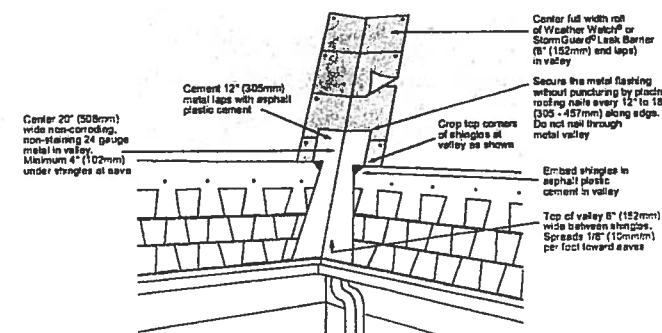
For single layer application, use hip and ridge shingles and apply as shown. To enhance appearance, use GAF TIMBERTEX® or a double layer application of Universal Hip & Ridge. (One bundle of TIMBERTEX® Hip & Ridge covers 20 lineal ft.—6.1 meters.) For double application, start with triple thickness of precut Hip & Ridge shingles and continue remainder with double thickness. Fasten in same manner as single application shown. Apply laps away from prevailing wind direction.



9 Chimney Flashing



11 Valley Construction-Open



Re-Roofing

If old asphalt shingles are to remain in place, nail down or cut away all loose, curled or lifted shingles; replace with new; and just before applying the new roofing, sweep the surface clean of all loose debris. Since any irregularities may show through the new shingles, be sure the underlying shingles provide a smooth surface. Fasteners must be of sufficient length to penetrate the wood deck at least 3/4" (19mm) or just through plywood. Follow other above instructions for application.

Note: Shingles can be applied over wood shingles when precautions have been taken to provide an acceptable smooth surface. This includes cutting back old shingles at eaves and rakes and installing new wood edging strips as needed. Make surface smooth and use beveled wood strips if necessary. Install #30 underlayment to maintain Class A rating.

This product is sold with an express LIMITED WARRANTY only. A copy of the LIMITED WARRANTY stating its terms and restrictions is printed on the product wrapper or may be obtained from the distributor of this product or directly from GAF Materials Corporation. Any deviation from printed instructions shall be the responsibility of applicator and/or specifier.

[illegible]



MIAMI-DADE COUNTY, FLORIDA
METRO-DADE FLAGLER BUILDING

BUILDING CODE COMPLIANCE OFFICE
METRO-DADE FLAGLER BUILDING
140 WEST FLAGLER STREET, SUITE 1603
MIAMI, FLORIDA 33130-1563
(305) 375-2901 FAX (305) 375-2908

CONTRACTOR LICENSING SECTION
(305) 375-2527 FAX (305) 375-2558

CONTRACTOR ENFORCEMENT DIVISION
(305) 375-2966 FAX (305) 375-2908

PRODUCT CONTROL DIVISION
(305) 375-2902 FAX (305) 375-6339

PRODUCT CONTROL NOTICE OF ACCEPTANCE

Premdor Entry Systems
911 E. Jefferson, P.O. Box 76
Pittsburgh, KS 66762

Your application for Notice of Acceptance (NOA) of:
Entergy 6-8 S/E Inswing Opaque Double w/sidelites Residential Insulated Steel Door
under Chapter 8 of the Code of Miami-Dade County governing the use of Alternate Materials and Types of Construction, and completely described herein, has been recommended for acceptance by the Miami-Dade County Building Code Compliance Office (BCCO) under the conditions specified herein.

This NOA shall not be valid after the expiration date stated below. BCCO reserves the right to secure this product or material at any time from a jobsite or manufacturer's plant for quality control testing. If this product or material fails to perform in the approved manner, BCCO may revoke, modify, or suspend the use of such product or material immediately. BCCO reserves the right to revoke this approval, if it is determined by BCCO that this product or material fails to meet the requirements of the South Florida Building Code.

The expense of such testing will be incurred by the manufacturer.

Raul Rodriguez
Chief Product Control Division

ACCEPTANCE NO.: 01-0314.23
EXPIRES: 04/02/2006

THIS IS THE COVERSHEET, SEE ADDITIONAL PAGES FOR SPECIFIC AND GENERAL
CONDITIONS
BUILDING CODE & PRODUCT REVIEW COMMITTEE

This application for Product Approval has been reviewed by the BCCO and approved by the Building Code and Product Review Committee to be used in Miami-Dade County, Florida under the conditions set forth above.

Francisco J. Quintana, R.A.
Director
Miami-Dade County
Building Code Compliance Office

APPROVED: 06/05/2001

NOTICE OF ACCEPTANCE: SPECIFIC CONDITIONS

1. SCOPE

- 1.1 This renews the Notice of Acceptance No. 00-0321.25 which was issued on April 28, 2000. It approves a residential insulated door, as described in Section 2 of this Notice of Acceptance, designed to comply with the South Florida Building Code (SFBC), 1994 Edition for Miami-Dade County, for the locations where the pressure requirements, as determined by SFBC Chapter 23, do not exceed the Design Pressure Rating values indicated in the approved drawings.

2. PRODUCT DESCRIPTION

- 2.1 The Series Entergy 6-8 S/E Inswing Opaque Double Residential Insulated Steel Doors with Sidelites-Impact Resistant Door Slab Only and its components shall be constructed in strict compliance with the following documents: Drawing No 31-1029-EM-I, Sheets 1 through 6 of 6, titled "Premdor (Entergy Brand) Double Door with Sidelites in Wood Frames with Bumper Threshold (Inswing)," prepared by manufacturer, dated 7/29/97 with revision C dated 01/11/00, bearing the Miami-Dade County Product Control approval stamp with the Notice of Acceptance number and approval date by the Miami-Dade County Product Control Division. These documents shall hereinafter be referred to as the approved drawings.

3. LIMITATIONS

- 3.1 This approval applies to single unit applications of pair of doors and single door only, as shown in approved drawings. Single door units shall include all components described in the active leaf of this approval.
- 3.2 Unit shall be installed only at locations protected by a canopy or overhang such that the angle between the edge of canopy or overhang to sill is less than 45 degrees. Unless unit is installed in non-habitable areas where the unit and the area are designed to accept water infiltration.

4. INSTALLATION

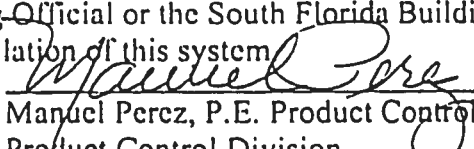
- 4.1 The residential insulated steel door and its components shall be installed in strict compliance with the approved drawings.
- 4.2 Hurricane protection system (shutters):
- 4.2.1 Door: the installation of this unit will not require a hurricane protection system.
- 4.2.2 Sidelite: the installation of this unit will require a hurricane protection system.

5. LABELING

- 5.1 Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved".

6. BUILDING PERMIT REQUIREMENTS

- 6.1 Application for building permit shall be accompanied by copies of the following:
- 6.1.1 This Notice of Acceptance
- 6.1.2 Duplicate copies of the approved drawings, as identified in Section 2 of this Notice of Acceptance, clearly marked to show the components selected for the proposed installation.
- 6.1.3 Any other documents required by the Building Official or the South Florida Building Code (SFBC) in order to properly evaluate the installation of this system


Manuel Perez, P.E. Product Control Examiner
Product Control Division

Premdor Entry Systems

ACCEPTANCE No. 01-0314.23

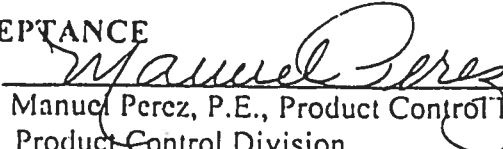
APPROVED : JUN 05-2001

EXPIRES : April 02, 2006

NOTICE OF ACCEPTANCE: STANDARD CONDITIONS

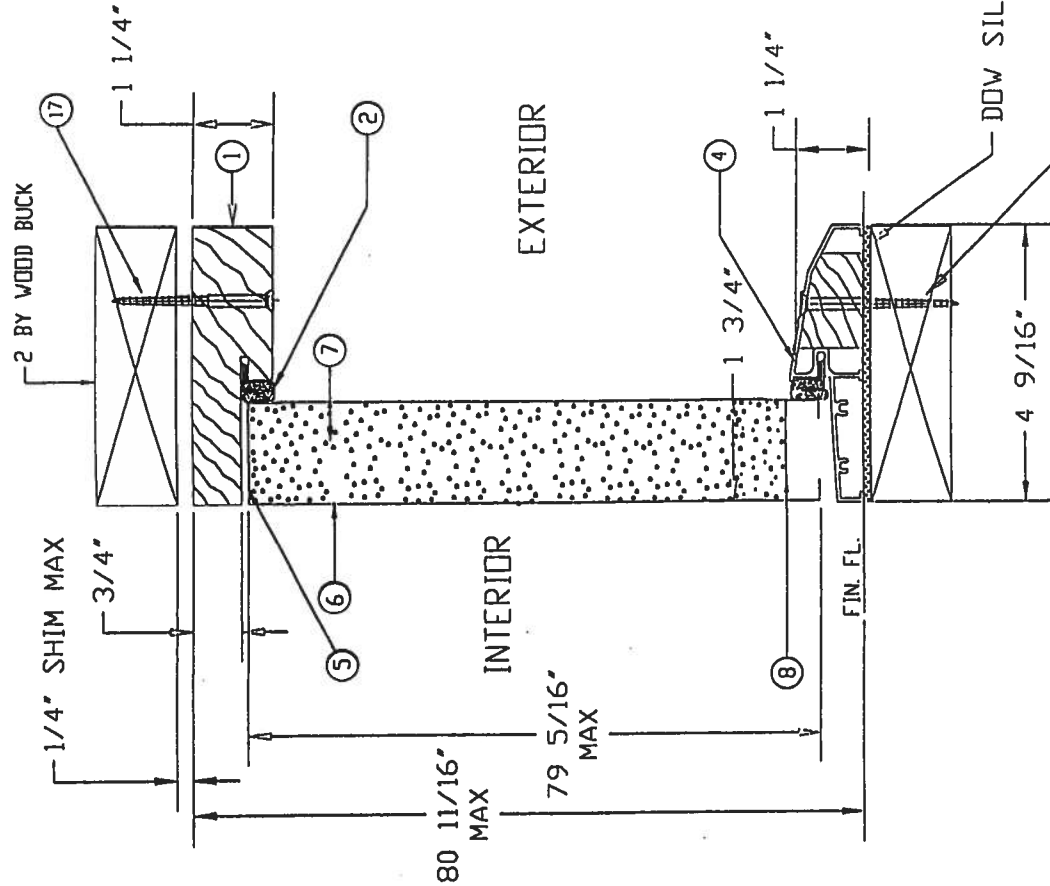
1. Renewal of this Acceptance (approval) shall be considered after a renewal application has been filed and the original submitted documentation, including test supporting data, engineering documents, are no older than eight (8) years.
2. Any and all approved products shall be permanently labeled with the manufacturer's name, city, state, and the following statement: "Miami-Dade County Product Control Approved", or as specifically stated in the specific conditions of this Acceptance.
3. Renewals of Acceptance will not be considered if:
 - a. There has been a change in the South Florida Building Code affecting the evaluation of this product and the product is not in compliance with the code changes.
 - b. The product is no longer the same product (identical) as the one originally approved.
 - c. If the Acceptance holder has not complied with all the requirements of this acceptance, including the correct installation of the product.
 - d. The engineer who originally prepared, signed and sealed the required documentation initially submitted, is no longer practicing the engineering profession.
4. Any revision or change in the materials, use, and/or manufacture of the product or process shall automatically be cause for termination of this Acceptance, unless prior written approval has been requested (through the filing of a revision application with appropriate fee) and granted by this office.
5. Any of the following shall also be grounds for removal of this Acceptance:
 - a. Unsatisfactory performance of this product or process.
 - b. Misuse of this Acceptance as an endorsement of any product, for sales, advertising or any other purposes.
6. The Notice of Acceptance number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the Notice of Acceptance is displayed, then it shall be done in its entirety.
7. A copy of this Acceptance as well as approved drawings and other documents, where it applies, shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at all time. The engineer needs not reseal the copies.
8. Failure to comply with any section of this Acceptance shall be cause for termination and removal of Acceptance.
9. This Notice of Acceptance consists of pages 1, 2 and this last page 3.

END OF THIS ACCEPTANCE


Manuel Perez, P.E., Product Control Examiner
Product Control Division

MATERIALS LIST

ITEM NO.	DESCRIPTION	PART NUMBER	COMMENTS
1	WOOD HEAD JAMB	EM-14	1 1/4" X 4 9/16" MTL. TO BE PINE OR EQUIVALENT
2	COMPRESSION WEATHERSTRIP	EM-25	LOCKSCREEN BRAND LDXSEAL 9650-BRONZE
3	ALUMINUM ASTRAGAL	EM-12	PREMIOR BRAND OR EQUIVALENT - 5/8" ALUMINUM ASTRAGAL
4	ALUMINUM-BUMPER THRESHOLD	EM-15	PREMIOR BRAND OR EQUIVALENT - 1 1/4" X 4 9/16"
5	TOP CHANNEL	EM-08	PREMIOR BRAND - 1 1/16" - 20 GA STEEL
6	STEEL SKIN	26 ga. (30) 1/4" - 1/4"	MAX. ALLOWED SPACING 24" ON CENTER
7	POLYURETHANE FOAM CORE	BASF FOAM - DENSITY 2.0 TO 2.5 LBS./FT. ³	MAX. ALLOWED SPACING 24" ON CENTER
8	BOTTOM CHANNEL	EM-07	PREMIOR BRAND - 1 1/16" - 20 GA STEEL
9	WOOD LOCK BLOCK	EM-09	4" X 9 1/2" MTL. TO BE PINE OR EQUIVALENT
10	STRIKE STILE	EM-06	PREMIOR BRAND - 1 1/16" - 20 GA STEEL
11	HINGE STILE	EM-05	PREMIOR BRAND - 1 1/16" - 20 GA STEEL
12	LOCK PREP FILLER PLATE	EM-10	PREMIOR BRAND - .050" THICK - MTL. TO BE POLYETHYLENE
13	4"x4" HINGE	EM-16	HAGER BRAND HINGE OR EQUIVALENT - .097 THICK (STEEL)
14	WOOD HINGE JAMB	EM-13	1 1/4" X 4 9/16" MTL. TO BE PINE OR EQUIVALENT
15	#10-24 x 1/2" F.H.V.S.		(4) SCREWS PER HINGE INTO DOOR
16	#10 x 2" F.H.V.S.		(5) SCREWS THROUGH HINGE JAMB INTO SIDELITE JAMB, 8" DOWN FROM TOP MAX 18" O.C. THEREAFTER
17	WOOD HINGE JAMB		(6) SCREWS THROUGH STRIKE JAMB INTO SIDELITE JAMB, 4" DOWN FROM TOP MAX 18" O.C. THEREAFTER
18	WOOD HINGE JAMB		(6) SCREWS THROUGH EACH SIDELITE JAMB INTO SIDELITE, 4" DOWN FROM TOP, MAX 15" O.C. THEREAFTER
19	WOOD HINGE JAMB		REFER TO ELEVATION VIEW, FOR # OF SCREWS USED AND LOCATIONS
20	WOOD HINGE JAMB		(2) SCREWS PER HINGE INTO JAMB
21	WOOD HINGE JAMB		(2) SCREWS AT EACH STRIKE PLATE
22	WOOD HINGE JAMB		KVIKSET BRAND 200 LOCK OR HARLOC BRAND 100 LOCK
23	WOOD HINGE JAMB		(2) SCREWS PER HINGE INTO JAMB
24	WOOD HINGE JAMB		1 1/4" X 4 9/16" MTL. TO BE PINE OR EQUIVALENT
25	WOOD HINGE JAMB		TEMPERED GLASS IN POLYPROPYLENE FRAME - DC-1643 - (COLOR - 1/8" CLEAR TEMPERED GLASS)
26	WOOD HINGE JAMB		5/16" X 1/2" MTL. TO BE PINE OR EQUIVALENT
27	WOOD HINGE JAMB		1/8" X 1/4" MTL. TO BE PINE OR EQUIVALENT - TIE RODS ARE HOLDINGS US FOR "SIDE BY SIDE" JAMBS AS ILLUSTRATED
28	WOOD HINGE JAMB		1 1/4" X 4 9/16" MTL. TO BE PINE OR EQUIVALENT
29	WOOD HINGE JAMB		1 1/4" X 4 9/16" MTL. TO BE PINE OR EQUIVALENT
30	WOOD HINGE JAMB		HP POLYPROPYLENE by ODL
31	WOOD HINGE JAMB		DOOR SPACING TO BE 3" IN FROM EACH CORNER AND 1/8" PER FRAME TO EXCEED 1/4" O.C. THEREAFTER
32	WOOD HINGE JAMB		15/16" X 1 1/16" MTL. TO BE PINE OR EQUIVALENT
33	WOOD HINGE JAMB		2"x1" LONG W/ 4" IN FROM END, MAX 8" O.C. THEREAFTER, USED ON MILLIONS AND 1/4"



SECTION B-B

APPROVED AS COMPLYING WITH THE
SOUTH FLORIDA BUILDING CODE
DATE: JUN 05 2001
BY: [Signature]
PROJECT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE
ACCEPTANCE NO. 01-034423

DOW SILICONE #995

LIMITS: UNLESS NOTED, TRAC : DEC : ANG :
EXTENSIONS: UNLESS NOTED, STD. CONFL. 101.3
ENGINEER:
DATE: 7-29-97
PREMIOR ENTRY SYSTEMS
911 E. JEFFERSON
PITTSBURGH, PA. 15212

31-1029-EM-I
SHEET 3 OF 6

REVISION LETTER B



EXTERIOR

SECTION C-C

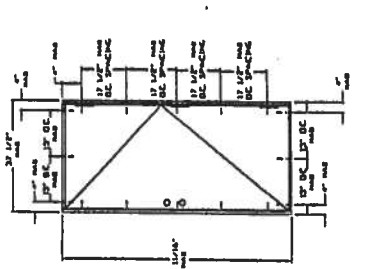
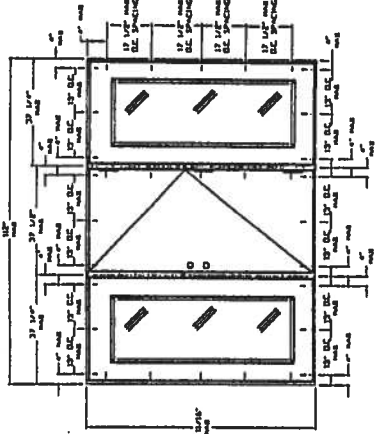
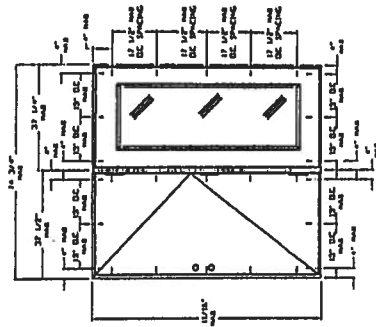
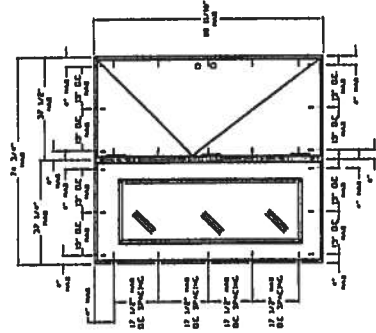
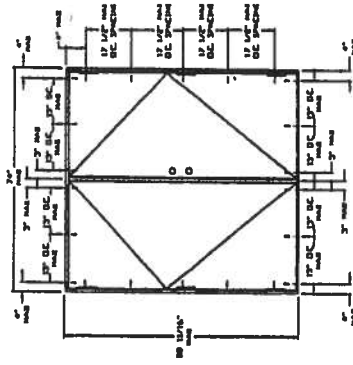
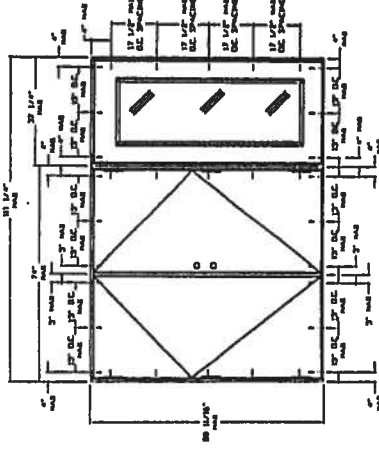
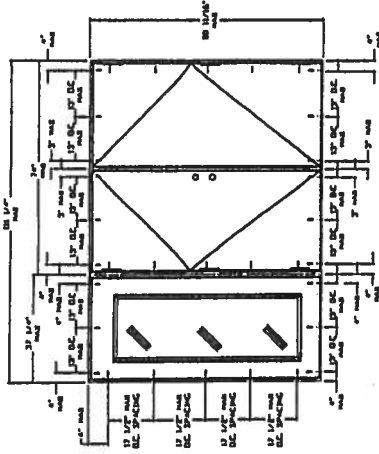
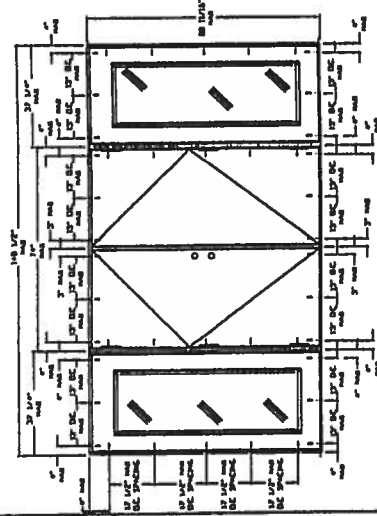
DATE COUNTY MODIFICATIONS	DATE	JD
MATERIAL WAS PM STYRENE	6-2-79	RS
ADDED PAGE 5, CONTR. OPTIONS	10-1-80	RS
ADD NOTES TO LITE DRAW & MATERIAL LIST	2-8-87	RS
REVISIONS	DATE	BY
LIR		
ENGINEER:		
LIMITS, UNLESS NOTED, FOUNC	REC	AGE
EXTRUSION, UNLESS NOTED, STD. DRFL. DIA. 3		

DR. BY R.S. DATE 7-29-97
PREMDOR ENTRY SYSTEMS
911 E. JEFFERSON
PITTSBURGH, PA 15212

31-1029-EM-1
SHEET 4 OF 6

REVISION LETTER

OTHER DOOR CONFIGURATIONS

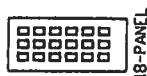
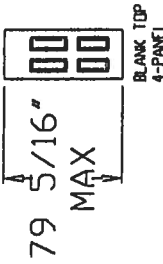


UNITS: UNLESS NOTED, FINISH: DEC: ANS:		EXTRUSIONS: UNLESS NOTED, STD. COM. 102'S		REVISIONS		DATE		BY	
ENGINEER:		LIR		PART NAME:		DATE:		BY:	
DR. BY: J.A.		DATE: 1-11-01		SCALE:		31-1029-EM-I		SHEET 5 OF 6	
PREMIOR ENTRY SYSTEMS		911 E. JEFFERSON		PHILADELPHIA, PA. 19102		REVISION LETTER			

APPROVED AS COMPLYING WITH THE
SOUTH FLORIDA BUILDING CODE
DATE: JUN 05 2000
BY: *Signature*
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE
ACCEPTANCE NO. 01-0314-23

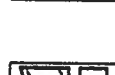
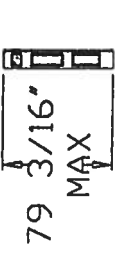
OTHER DOOR PANEL STYLES

79 5/16" MAX
36" MAX



OTHER SIDELITE STYLES

79 3/16" MAX
36" MAX



SL-10

SL-20

SL-30

SL-60

SL-50

SL-50B

SL-69A

SL-69C

SL-25

SL-55

SL-300

SL-40

SL-90A

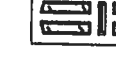
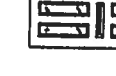
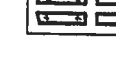
SL-90B

SL-90C

SL-30B

SL-70

SL-80



PD-1

PD-2

PD-3

PD-4

PD-5

PD-6

PD-7

PD-8

PD-9

PD-10

PD-11

PD-12

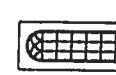
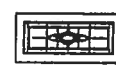
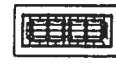
PD-13

PD-14

PD-15

PD-16

PD-17



PD-18

PD-19

PD-20

PD-21

PD-22

PD-23

PD-24

PD-25

PD-26

PD-27

PD-28

PD-29

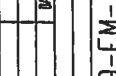
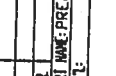
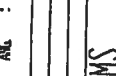
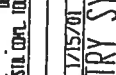
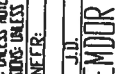
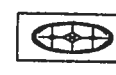
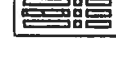
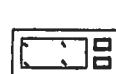
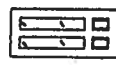
PD-30

PD-31

PD-32

PD-33

PD-34



PD-35

PD-36

PD-37

PD-38

PD-39

PD-40

PD-41

PD-42

PD-43

PD-43A

PD-43B

APPROVED AS COMPLYING WITH THE
SOUTH FLORIDA BUILDING CODE
DATE JUN 05 2001
BY *Michael J. ...*
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE
ACCEPTANCE NO 01-0314-23

UNITS: INCHES, MILLI METER : DEC : ANG :		DATE : 12/15/01	
ENGINEER :		DATE : 12/15/01	
PROJECT NAME: PRE-MOR DOOR SYSTEMS		SCALE:	
SHEET 6 OF 6		31-1029-EM-I	
PHILADELPHIA, PA 19106		REVISION LETTER	

WOOD BUCKS BY OTHERS, MUST BE ANCHORED SPECIFICALLY TO TRANSFER LOADS TO THE STRUCTURE. THE PRECEDING DRAWINGS ARE INTENDED TO INDICATE THE FOLLOWING INSTALLATIONS.

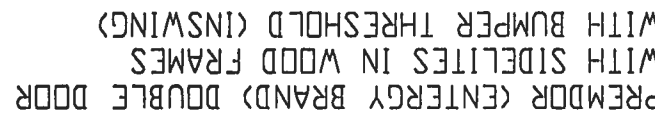
WOOD FRAME CONSTRUCTION WHERE DOOR OPENING.

MASSARY OR CONCRETE CONSTRUCTION WHERE DOOR SYSTEM IS ANCHORED TO A MINIMUM TWO BY WOOD STRUCTURAL WOOD BUCK.

MASSARY OR CONCRETE CONSTRUCTION WHERE DOOR SYSTEM IS ANCHORED DIRECTLY TO CONCRETE OR MASSARY WITH OR WITHOUT A NON-STRUCTURAL ANCHORING SCREWS TO BE #10 WITH MINIMUM 1 1/2" EMBEDMENT INTO WOOD SUBSTRATE OR 3/4" PCH TAPCONS WITH 1 1/2" EMBEDMENT INTO MASSARY.

UNIT MUST BE INSTALLED WITH MIAMI-DADE COUNTY APPROVED SHUTTERS

THREE STAPLES PER SIDE JAMB INTO HEADERS ON SIDELITES AND DOOR, THREE STAPLES PER JAMB INTO THRESHOLD ON



Notice of Treatment 11851

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

Address: Bay Ave

City Late City Phone 752-1703

Site Location: Subdivision # 24050

Lot # _____ Block# _____ Permit # 21851

Address 247 SE Pittman CT

<u>Product used</u>	<u>Active Ingredient</u>	<u>% Concentration</u>
<input type="checkbox"/> Premise	Imidacloprid	0.1%
<input type="checkbox"/> Termidor	Fipronil	0.12%
<input checked="" type="checkbox"/> Bora-Care	Disodium Octaborate Tetrahydrate	23.0%

Type treatment: ☐ Soil ☒ Wood

<u>Area Treated</u>	<u>Square feet</u>	<u>Linear feet</u>	<u>Gallons Applied</u>
<u>Driveway</u>	<u>3023</u>	<u>750</u>	<u>6</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

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

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

3-12-06 1500 F254 Gummy
Date Time Print Technician's Name

Remarks: _____

Applicator - White

Permit File - Canary

Permit Holder - Pink

10/05



COLUMBIA COUNTY FLORIDA DEPARTMENT OF BUILDING AND ZONING

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-17-09208-004

Building permit No. 000024050

Use Classification SFD/UTILITY

Fire: 17.76

Permit Holder STANLEY CRAWFORD

Waste: 36.75

Owner of Building ALAN & BONNIE FRIEND

Total: 54.51

Location: 207 SE PITTMAN COURT

Date: 07/03/2006

Stacy Dickie

Building Inspector



POST IN A CONSPICUOUS PLACE
(Business Places Only)