

WMA

Columbia County Building Permit Application

Revised 9-23-06

For Office Use Only Application # 0609-84 Date Received 9-27-06 By LH Permit # 1240-25119
Application Approved by - Zoning Official BLK Date 03.10.06 Plans Examiner OKJTH Date 9-31-06
Flood Zone Xpr plet Development Permit N/A Zoning RSF-2 Land Use Plan Map Category RES. Low Dev.
Comments NEEDS PROPER TAX PARCEL ID # 11-45-16-02911-319
OK EHS FAX 755-2165

Applicants Name Matt Cason - Mary Ann Crawford Phone 752-5152
Address 853 SW Sisters Welcome Rd, L.C. #1 32024
Owners Name Stanley Crawford Const. Phone 752-5152
911 Address 195 SW Lucite Ct Lake City, FL 32025
Contractors Name SCCI Phone _____
Address 853 SW Sisters Welcome Rd LC FL 32025
Fee Simple Owner Name & Address _____
Bonding Co. Name & Address _____
Architect/Engineer Name & Address Mark Disosway 754-5419
Mortgage Lenders Name & Address _____

Circle the correct power company - FL Power & Light - Clay Elec. - Suwannee Valley Elec. - Progressive Energy
Property ID Number 1145-16-02914-319 PROPOSED #2007 Estimated Cost of Construction 103,000
Subdivision Name Mayfair Lot 19 Block _____ Unit 3 Phase _____
Driving Directions US 90 W, TL on CR247, TR on Mayfair Ln,
TR on Lucite Ct, 4th lot on the R.

Type of Construction Residential Number of Existing Dwellings on Property 0
Total Acreage .51 Lot Size _____ Do you need a Culvert Permit or Culvert Waiver or Have an Existing Drive
Actual Distance of Structure from Property Lines - Front 61 Side 34 Side 34 Rear 61
Total Building Height 17'10.5" Number of Stories 1 Heated Floor Area 1718 Roof Pitch 4/12
TOTAL 2636

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



Sworn to (or affirmed) and subscribed before me
this 27th day of September 2006.
Personally known ✓ or Produced Identification _____

Stanley Crawford
Contractor Signature
Contractors License Number RG-0042896
Competency Card Number 5627
NOTARY STAMP/SEAL
Janet L. Cheek
Notary Signature

11-45-16-02911-319 mayfair call 103.06

Notice of Treatment

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

Address: 15740 Ave

City: Lake City Phone: 252-1703

Site Location: Subdivision MAYFAIR

Lot # 19 Block # 25119 Permit # 25119

Address 195 SW Lucille CT

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

☐ Soil

☒ Wood

<u>Area Treated</u>	<u>Square feet</u>	<u>Linear feet</u>	<u>Gallons Applied</u>
---------------------	--------------------	--------------------	------------------------

<u>Dwelling</u>	<u>21636</u>	<u>787</u>	<u>5</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 _____.

2/2/07

Date

1505

Time

Tosha Gumpel

Print Technician's Name

Remarks: _____

Applicator - White

Permit File - Canary

Permit Holder - Pink

10/05



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

Inst:2006022855 Date:09/25/2006 Time:15:18
DC,P.Dewitt Cason,Columbia County B:1097 P:83

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: Mayfair Lot 19 Unit III
S.W. Lucille Court
Lake City, FL 32024
2. General description of improvement: Construction of Dwelling
3. Owner information:
Name and address: Stanley Crawford Construction, Inc.
853 S.W. Sisters Welcome Rd
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: N/A
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).

Stanley Crawford

The foregoing instrument was acknowledged before me this 25th day of September, 2006, by Stanley Crawford who are personally known to me and who did not take an oath.

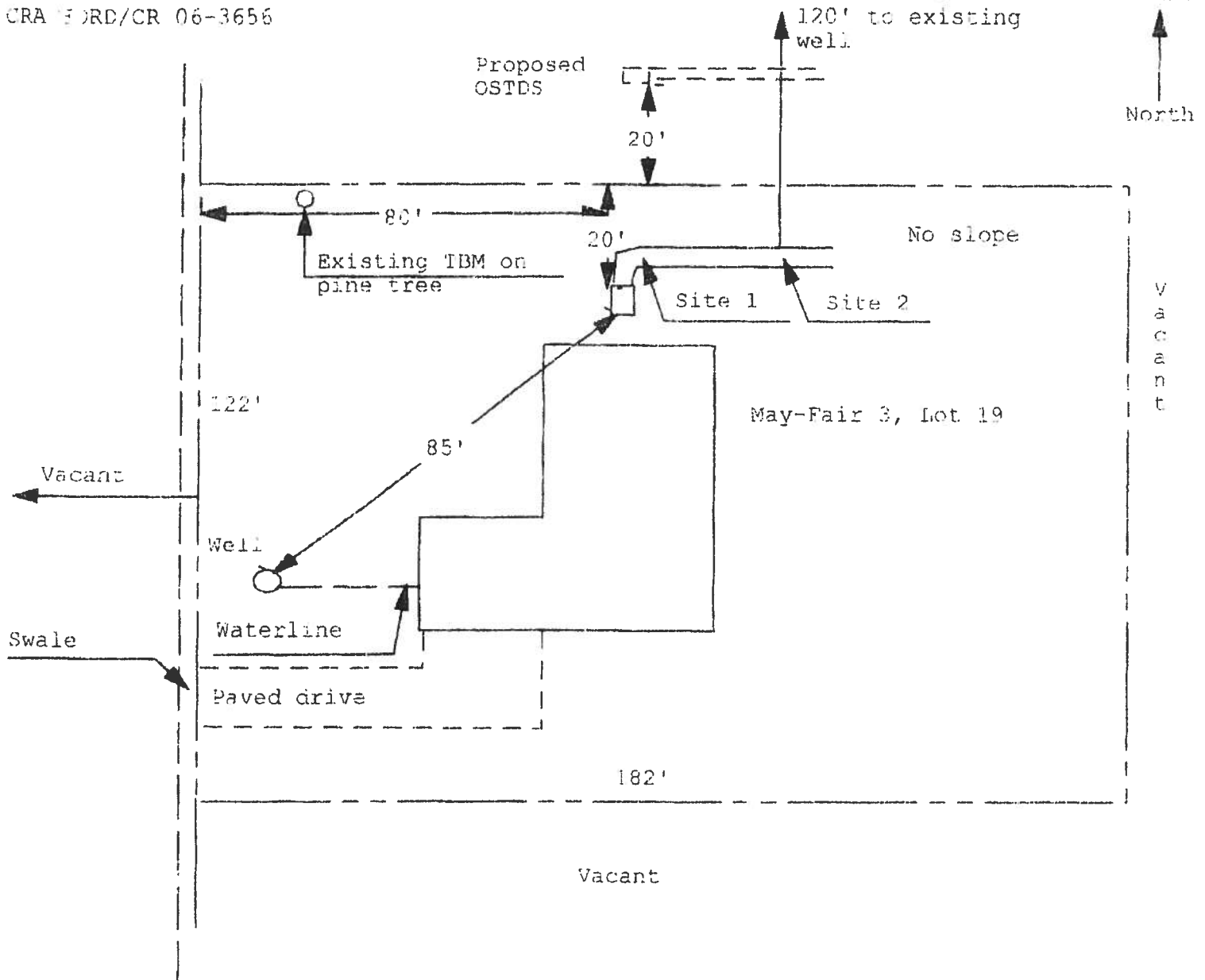
Janet L. Cheek
Notary Public
My Commission Expires: June 25, 2007



Application for Onsite Sewage Disposal System
Construction Permit. Part II Site Plan
Permit Application Number: 06-0855N

ALL CHANGES MUST BE APPROVED BY THE COUNTY HEALTH UNIT

CRA FORD/CR 06-3656



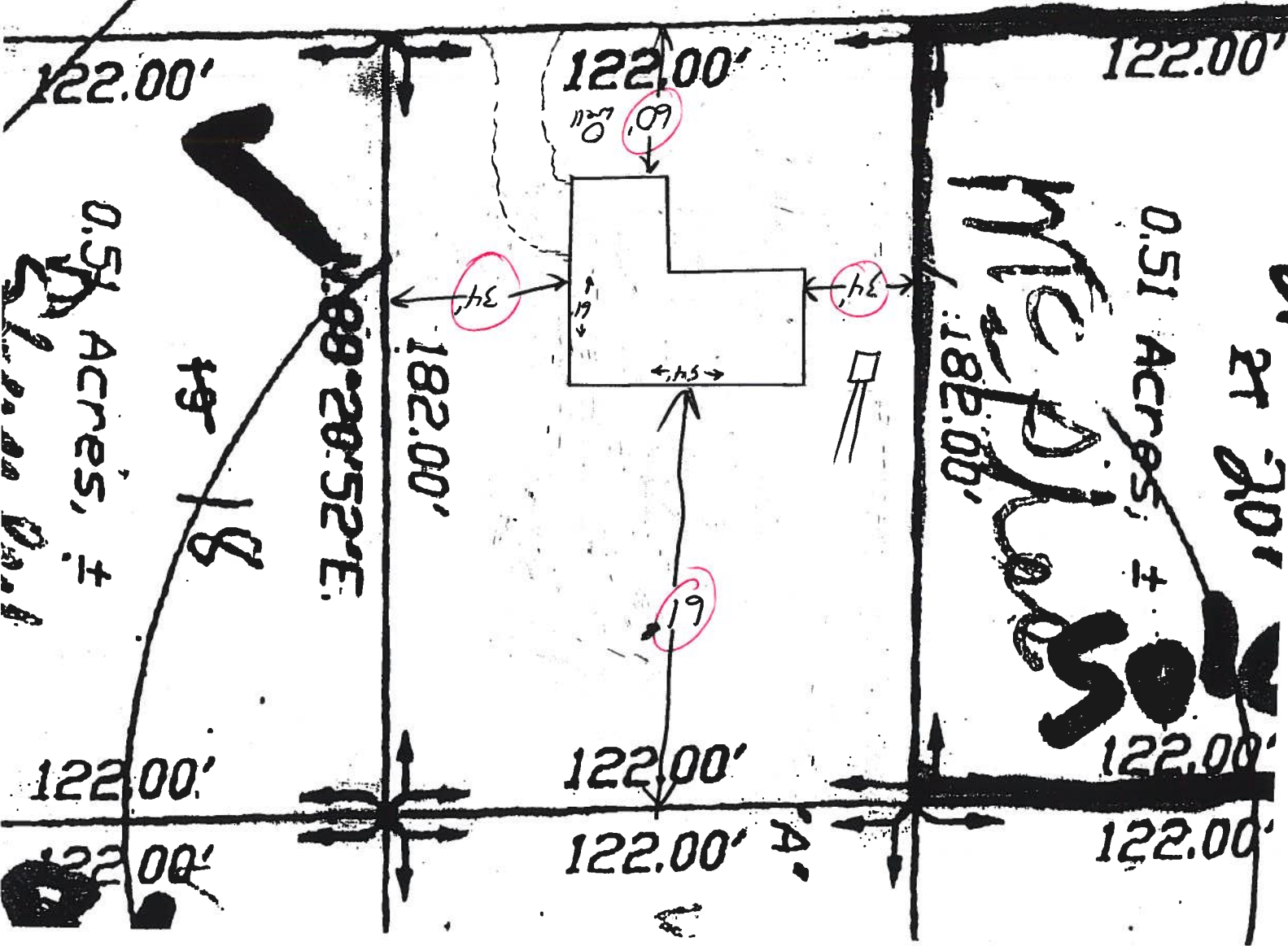
1 inch = 30 feet

Site Plan Submitted By Paul L. [Signature] Date 8/23/06
Plan Approved ☒ Not Approved ☐ Date 9/26/06

By M. [Signature] Columbia CPHU

Notes: _____

52.00' E. 122.00' 122.00' 122.00' 122.00'
 S. 01° 39' 08" E. 632.43'
 SW LUTILE WAY



North
 Mayfair Lot 17

Prepared by:
Michael H. Harrell
Abstract & Title Services, Inc.
283 NW Cole Terrace
Lake City, FL 32055

Warranty Deed

Individual to Individual

THIS WARRANTY DEED made the 2nd day of June, 2006 by

Peter W. Giebelg, A Single Person

hereinafter called the grantor, to

Stanley Crawford Construction, Inc.

whose post office address is: 853 SW Sisters Welcome Road, Lake City, FL 32025
hereinafter called the grantee:

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

Witnesseth: That the grantor, for and in consideration of the sum of \$10.00 and other valuable considerations, receipt whereof is hereby acknowledged, hereby grants, bargains, sells, aliens, remises, releases, conveys, and confirms unto the grantee, all that certain land situate in COLUMBIA County, FLORIDA, viz: Parcel ID# P/O R02914-003

Lot 19, May-Fair Unit 3, a subdivision according to the plat thereof filed in Plat Book 8, Pages 84-85, of the Public Records of Columbia County, Florida.

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

TO HAVE AND TO HOLD, the same in fee simple forever.

AND the grantor hereby covenants with said grantee that the grantor is lawfully seized of said land in fee simple; that the grantor has good right and lawful authority to sell and convey said land; that the grantor hereby fully warrants the title to said land and will defend the same against the lawful claims of all persons whomsoever; and that said land is free of all encumbrances, except taxes accruing subsequent to December 31, 2005.

IN WITNESS WHEREOF, the said grantor has signed and sealed these presents the day and year first above written.

Signed, sealed and delivered in our presence:

Cheryl Beatty
Witness

Cheryl Beatty
Printed Name

Traci Landrey
Witness

TRACI LANDREY
Printed Name

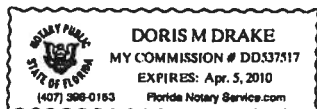
Peter W. Giebelg
Peter W. Giebelg

Inst:2006013524 Date:06/06/2006 Time:12:08
Loc Stamp-Deed : 434.00
J.F. DC, P. Dewitt Cason, Columbia County B:1085 P:2219

STATE OF FLORIDA
COUNTY OF COLUMBIA

The foregoing instrument was acknowledged before me this 2nd day of June, 2006 by Peter W. Giebelg, A Single Person personally known to me or, if not personally known to me, who produced for identification and who did not take an oath.

(SEAL)



[Signature]
Notary Public

My Commission Expires:

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Community Affairs
Residential Whole Building Performance Method A

Project Name: MAYFAIR LOT 19	Builder: STANLEY CRAWFORD
Address:	Permitting Office: Columbia
City, State:	Permit Number: 25119
Owner:	Jurisdiction Number: 221000
Climate Zone: North	

1. New construction or existing	New	12. Cooling systems	
2. Single family or multi-family	Single family	a. Central Unit	Cap: 36.0 kbtu/hr SEER: 13.00
3. Number of units, if multi-family	1	b. N/A	
4. Number of Bedrooms	3	c. N/A	
5. Is this a worst case?	Yes	13. Heating systems	
6. Conditioned floor area (ft²)	1718 ft²	a. Electric Heat Pump	Cap: 35.0 kbtu/hr HSPF: 7.00
7. Glass type ¹ and area: (Label req'd. by 13-104.4.5 if not default)		b. N/A	
a. U-factor:	Description Area	c. N/A	
(or Single or Double DEFAULT) 7a. (Uble Default) 204.0 ft²		14. Hot water systems	
b. SHGC:		a. Electric Resistance	Cap: 50.0 gallons EF: 0.92
(or Clear or Tint DEFAULT) 7b. (Clear) 204.0 ft²		b. N/A	
8. Floor types		c. N/A	
a. Slab-On-Grade Edge Insulation	R=0.0, 203.0(p) ft	15. HVAC credits	
b. N/A		(CF-Ceiling fan, CV-Cross ventilation, HIF-Whole house fan, PT-Programmable Thermostat, MZ-C-Multizone cooling, MZ-H-Multizone heating)	
c. N/A			
9. Wall types			
a. Frame, Wood, Exterior	R=13.0, 1124.0 ft²		
b. Frame, Wood, Exterior	R=13.0, 260.0 ft²		
c. N/A			
d. N/A			
e. N/A			
10. Ceiling types			
a. Under Attic	R=30.0, 1718.0 ft²		
b. Under Attic	R=19.0, 220.0 ft²		
c. N/A			
11. Ducts			
a. Sup. Unc. Ret. Unc. All: Interior	Sup. R=6.0, 220.0 ft		
b. N/A			

Glass/Floor Area: 0.12

Total as-built points: 23643

Total base points: 26052

PASS

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

PREPARED BY: _____

DATE: **8/21/06**

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				Overhang Type/SC Omt Len Hgt Area X SPM X SOF = Points							
.18	1718.0	20.04	6197.2	Double, Clear	W	2.0	6.0	70.0	38.52	0.85	2290.5
				Double, Clear	N	2.0	6.0	20.0	19.20	0.90	345.6
				Double, Clear	E	2.0	6.0	114.0	42.06	0.85	4066.5
				As-Built Total: 204.0 6702.7							
WALL TYPES Area X BSPM = Points				Type R-Value Area X SPM = Points							
Adjacent	0.0	0.00	0.0	Frame, Wood, Exterior				13.0	1124.0	1.50	1686.0
Exterior	1384.0	1.70	2352.8	Frame, Wood, Exterior				13.0	280.0	1.50	390.0
Base Total: 1384.0 2352.8				As-Built Total: 1384.0 2076.0							
DOOR TYPES Area X BSPM = Points				Type Area X SPM = Points							
Adjacent	18.0	2.40	43.2	Exterior Insulated					40.0	4.10	164.0
Exterior	40.0	6.10	244.0	Adjacent Insulated					18.0	1.80	28.8
Base Total: 58.0 287.2				As-Built Total: 58.0 192.8							
CEILING TYPES Area X BSPM = Points				Type R-Value Area X SPM X SCM = Points							
Under Attic	1718.0	1.73	2972.1	Under Attic				30.0	1718.0	1.73 X 1.00	2972.1
				Under Attic				19.0	220.0	2.34 X 1.00	514.8
Base Total: 1718.0 2972.1				As-Built Total: 1938.0 3486.9							
FLOOR TYPES Area X BSPM = Points				Type R-Value Area X SPM = Points							
Slab	203.0(p)	-37.0	-7511.0	Slab-On-Grade Edge Insulation				0.0	203.0(p)	-41.20	-8363.6
Raised	0.0	0.00	0.0								
Base Total: -7511.0				As-Built Total: 203.0 -8363.6							
INFILTRATION Area X BSPM = Points				Area X SPM = Points							
	1718.0	10.21	17540.8						1718.0	10.21	17540.8

SUMMER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: , , ,

PERMIT #:

BASE			AS-BUILT					
Summer Base Points: 21839.1			Summer As-Built Points: 21635.6					
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
21839.1	0.4266	9316.6	<small>(eqn 1: Central Unit 30000 Btu/h, SEER/EER (13.0) Ducts: Umc(S), Umc(R), Int(AH), R6.0 (INS)</small> 21636 1.00 (1.00 x 1.147 x 0.91) 0.263 1.000 6462.4 21635.6 1.00 1.138 0.263 1.000 6462.4					

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	1718.0	12.74	3938.7	Double, Clear	W	2.0	6.0	70.0	20.73	1.04	1513.0
				Double, Clear	N	2.0	6.0	20.0	24.58	1.00	493.9
				Double, Clear	E	2.0	6.0	114.0	18.79	1.06	2272.1
				As-Built Total:				204.6	4278.9		
WALL TYPES Area X BWPM = Points				Type	R-Value		Area X WPM = Points				
Adjacent	0.0	0.00	0.0	Frame, Wood, Exterior	13.0		1124.0	3.40	3821.6		
Exterior	1384.0	3.70	5120.8	Frame, Wood, Exterior	13.0		280.0	3.40	964.0		
Base Total:				As-Built Total:		1384.0		4705.6			
DOOR TYPES Area X BWPM = Points				Type	Area X WPM = Points						
Adjacent	18.0	11.50	207.0	Exterior Insulated			40.0	8.40	336.0		
Exterior	40.0	12.30	492.0	Adjacent Insulated			18.0	8.00	144.0		
Base Total:				As-Built Total:		58.0		480.0			
CEILING TYPES Area X BWPM = Points				Type	R-Value		Area X WPM X WCM = Points				
Under Attic	1718.0	2.05	3521.9	Under Attic	30.0		1718.0	2.05 X 1.00	3521.9		
				Under Attic	19.0		220.0	2.70 X 1.00	594.0		
Base Total:				As-Built Total:		1938.0		4115.9			
FLOOR TYPES Area X BWPM = Points				Type	R-Value		Area X WPM = Points				
Slab	203.0(p)	8.9	1806.7	Slab-On-Grade Edge Insulation	0.0		203.0(p)	18.80	3816.4		
Raised	0.0	0.00	0.0								
Base Total:				As-Built Total:		203.0		3816.4			
INFILTRATION Area X BWPM = Points				Area X WPM = Points							
1718.0 -0.59 -1013.6				1718.0 -0.59 -1013.6							

WINTER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: , , ,

PERMIT #:

BASE			AS-BUILT						
Winter Base Points: 14074.5			Winter As-Built Points: 16383.2						
Total Winter Points	X System Multiplier	= Heating Points	Total Component (System - Points)	X Cap Ratio	X Duct Multiplier (DM x DSM x AHU)	X System Multiplier	X Credit Multiplier	= Heating Points	
14074.5	0.6274	8830.3	(sys 1: Electric Heat Pump 35000 btuh, EFF(7.0) Ducts: Unc(S), Unc(R), Int(AH), R6.0 16383.2 1.000 (1.000 x 1.162 x 0.93) 0.487 1.000 9275.4 16383.2 1.00 1.162 0.487 1.000 9275.4						

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
9317	8830	7905	26052	8462	9275	7905	23643

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 joist 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, sealed.	
Multi-story Houses	606.1.ABC.1.2.5	Air barrier on perimeter of floor cavity between floors.	
Additional Infiltration reqs	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.	

MEMBER OF
The
North Central
Florida Water
Well

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

K. Melaine
"Red" Clyatt

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

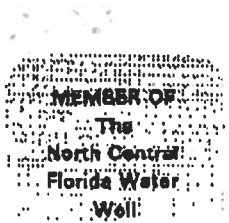
Should you require any additional information, please do not hesitate to contact us.

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

Columbia County Building Department Culvert Permit

Culvert Permit No.
000001240

DATE 10/16/2006 PARCEL ID # 11-4S-16-02911-319
APPLICANT MARY ANN CRAWFORD PHONE 752-5152
ADDRESS 853 SW SISTERS WELCOME RD LAKE CITY FL 32024
OWNER STANLEY CRAWFORD PHONE 752-5152
ADDRESS 195 SW LUCILLE COURT LAKE CITY FL 32025
CONTRACTOR STANLEY CRAWFORD PHONE 752-5152
LOCATION OF PROPERTY 247S, TR ON MAYFAIR LANE, TR ON LUCILLE COURT, 4TH ON RIGHT

SUBDIVISION/LOT/BLOCK/PHASE/UNIT MAYFAIR 19 3

SIGNATURE *MA Crawford*

INSTALLATION REQUIREMENTS



Culvert size will be 18 inches in diameter with a total length of 32 feet, leaving 24 feet of driving surface. Both ends will be mitered 4 foot with a 4 : 1 slope and poured with a 4 inch thick reinforced concrete slab.

INSTALLATION NOTE: Turnouts will be required as follows:

- a) a majority of the current and existing driveway turnouts are paved, or;
- b) the driveway to be served will be paved or formed with concrete.

Turnouts shall be concrete or paved a minimum of 12 feet wide or the width of the concrete or paved driveway, whichever is greater. The width shall conform to the current and existing paved or concreted turnouts.



Culvert installation shall conform to the approved site plan standards.



Department of Transportation Permit installation approved standards.



Other _____

ALL PROPER SAFETY REQUIREMENTS SHOULD BE FOLLOWED
DURING THE INSTALATION OF THE CULVERT.

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

Amount Paid 25.00





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

Reference to a building permit application Number: **0609-84**

Stanley Crawford Construction Owner Stanley Crawford Property ID 11-4s-16-02914-003

On the date of September 29, 2006 application 0609-84 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 0609-84 and when making reference to this application.

This is a plan review for compliance with the Florida Residential Code 2004 only and doesn't make any consideration toward the land use and zoning requirements.

1. Please submit a recorded (with the Columbia County Clerk Office) notice of commencement before any inspections can be preformed by the Columbia County Building Department.

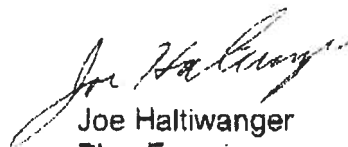
- 2.** Please provide a copy of a signed released site plan from the Columbia County Environmental Health Department which confirms approval of the waste water disposal system.
- 3.** Please provide for compliance with the Florida Residential Building Code -2004 section R322.1.1 All new single-family houses, duplexes, triplexes, condominiums and townhouses shall provide at least one bathroom, located with maximum possible privacy, where bathrooms are provided on habitable grade levels, with a door that has a 29-inch (737 mm) clear opening. However, if only a toilet room is provided at grade level, such toilet rooms shall have a clear opening of not less than 29 inches (737 mm).
- 4.** In the garage please show compliance with sections R309 of the Florida Residential Building Code 2004
 - a.** R309.1 Opening protection: Openings from a private garage directly into a room used for sleeping purposes shall not be permitted. Other openings between the garage and residence shall be equipped with solid wood doors not less than 13/8 inches (35 mm) in thickness, solid or honeycomb core steel doors not less than 13/8 inches (35 mm) thick, or 20-minute fire-rated doors.
 - b.** Sections R309.2 Separation required: The garage shall be separated from the residence and its attic area by not less than ½-inch (12.7 mm) gypsum board applied to the garage side. Garages beneath habitable rooms shall be separated from all habitable rooms above by not less than 5/8-inch (15.9 mm) Type X gypsum

board or equivalent. Where the separation is a floor-ceiling assembly, the structure supporting the separation shall also be protected by not less than ½-inch (12.7 mm) gypsum board or equivalent.

- c. For 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.

5. The electrical plans indicate the location of the electrical service entrance (meter can) and the interior location of the electrical circuit panel. Please indicate the total amperage rating of the electrical service. At the electrical service entrance point an overcurrent protection device shall be installed on the exterior of structure which will provide overcurrent protection for the total service amperage rating and a means of disconnecting electrical service from the serving utility company. Conductors used from the exterior disconnecting means to a panel or sub panel shall have four-wire conductors, of which one conductor shall be used as an equipment ground.

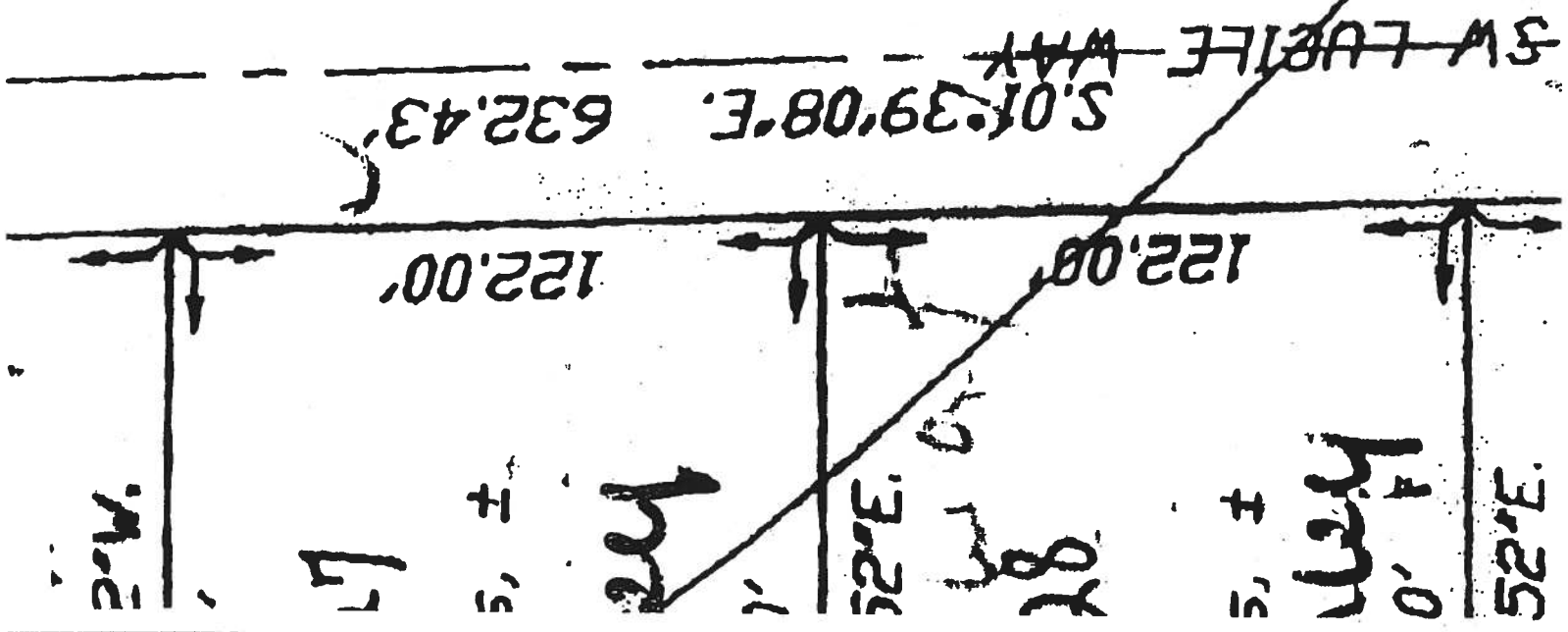
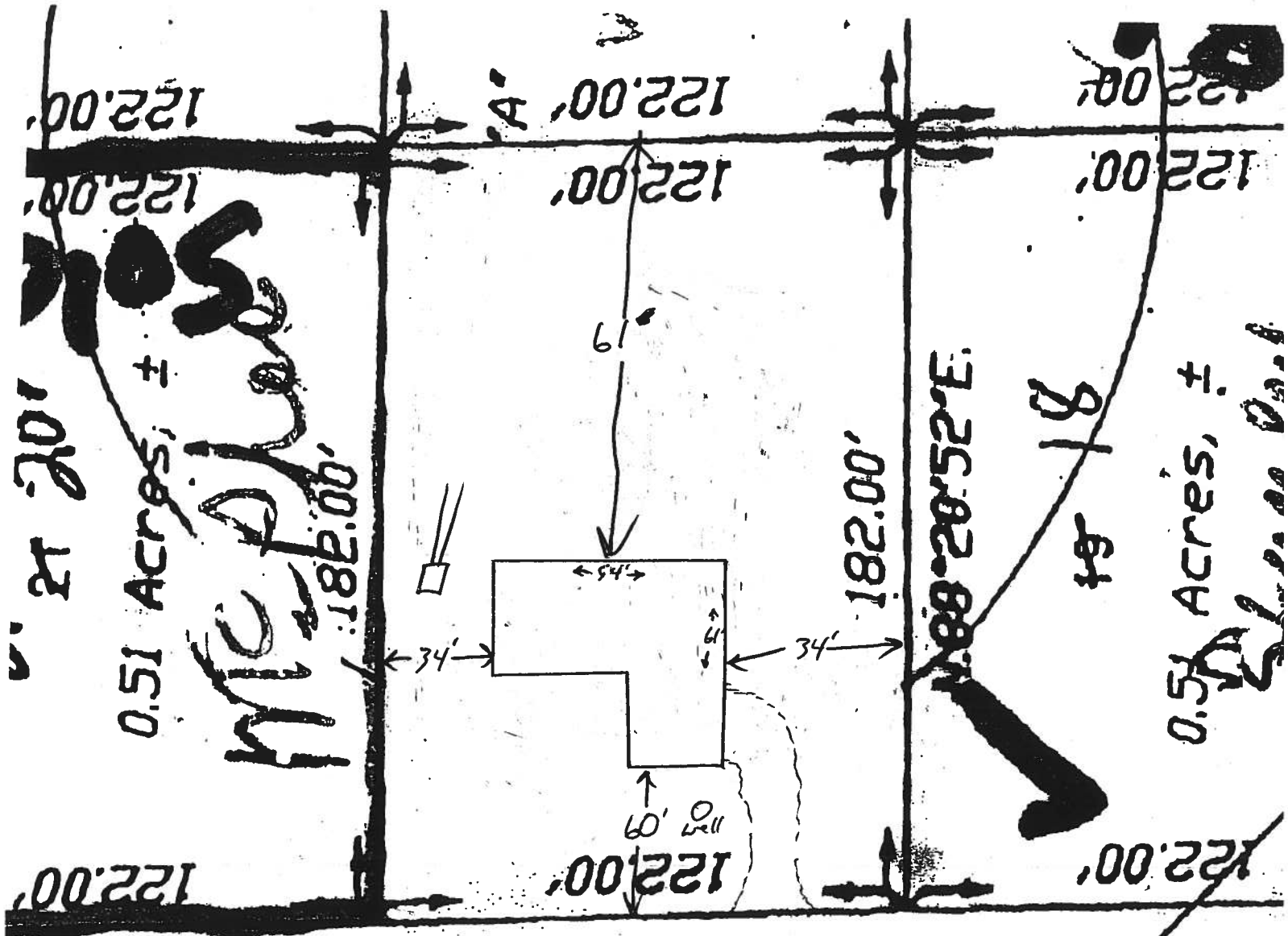
Thank You:



Joe Haltiwanger
Plan Examiner
Columbia County Building
Department

Mayfair Lot 19

North
←



Prepared by:
Michael H. Harrell
Abstract & Title Services, Inc.
283 NW Cole Terrace
Lake City, FL 32055

Warranty Deed

Individual to Individual

THIS WARRANTY DEED made the 2nd day of June, 2006 by

Peter W. Giebelg, A Single Person

hereinafter called the grantor, to

Stanley Crawford Construction, Inc.

whose post office address is: 853 SW Sisters Welcome Road, Lake City, FL 32025
hereinafter called the grantee:

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

Witnesseth: That the grantor, for and in consideration of the sum of \$10.00 and other valuable considerations, receipt whereof is hereby acknowledged, hereby grants, bargains, sells, aliens, remises, releases, conveys, and confirms unto the grantee, all that certain land situate in COLUMBIA County, FLORIDA, viz: Parcel ID# P/O R02914-003

Lot 19, May-Fair Unit 3, a subdivision according to the plat thereof filed in Plat Book 8, Pages 84-85, of the Public Records of Columbia County, Florida.

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

TO HAVE AND TO HOLD, the same in fee simple forever.

AND the grantor hereby covenants with said grantee that the grantor is lawfully seized of said land in fee simple; that the grantor has good right and lawful authority to sell and convey said land; that the grantor hereby fully warrants the title to said land and will defend the same against the lawful claims of all persons whomsoever; and that said land is free of all encumbrances, except taxes accruing subsequent to December 31, 2005.

IN WITNESS WHEREOF, the said grantor has signed and sealed these presents the day and year first above written.

Signed, sealed and delivered in our presence:

Cheryl Beatty
Witness

Cheryl Beatty
Printed Name

Traci Landrey
Witness

TRACI LANDEY
Printed Name

Peter W. Giebelg
Peter W. Giebelg

{nst:2006013524 Date:06/06/2006 Time:12:08
Loc Stamp-Deed : 434.00
J. P. DC, P. DeWitt Cason, Columbia County B:1085 P:2219

STATE OF FLORIDA
COUNTY OF COLUMBIA

The foregoing instrument was acknowledged before me this 2nd day of June, 2006 by Peter W. Giebelg, A Single Person personally known to me or, if not personally known to me, who produced for identification and who did not take an oath.

(SEAL)



[Signature]
Notary Public

My Commission Expires:



RIGHT-J LOAD AND EQUIPMENT SUMMARY Entire House

Touchstone Heating and Air, Inc.

Job: May Fair Lot 19 08/17/08

P.O. Box 327, Lake Butler, FL 32054 Phone: 386-496-3487 Fax: 386-496-3147

Project Information

For: Stanley Crawford Construction
1531 SW Commercial Glen, 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	43991 Btuh
Ventilation air	7 cfm
Ventilation air loss	288 Btuh
Design heat load	44279 Btuh

Sensible Cooling Equipment Load Sizing

Structure	28725 Btuh
Ventilation	0 Btuh
Design temperature swing	3.0 °F
Use mfg. data	n
Rate/swing multiplier	0.97
Total sens. equip. load	25923 Btuh

Infiltration

Method	Simplified
Construction quality	Average
Fireplaces	1

	Heating	Cooling
Area (ft²)	1718	1718
Volume (ft³)	14603	14603
Air changes/hour	0.10	0.60
Equiv. AVF (cfm)	24	148

Latent Cooling Equipment Load Sizing

Internal gains	230 Btuh
Ventilation	0 Btuh
Infiltration	5119 Btuh
Total latent equip. load	5349 Btuh

Total equipment load	31272 Btuh
Req. total capacity at 70% SHR	3.1 ton

Heating Equipment Summary

Make Trane
Trade
TWR036D

Efficiency	9.1 HSPF
Heating input	
Heating output	31800 Btuh @ 47°F
Heating temp rise	24 °F
Actual heating fan	1185 cfm
Heating air flow factor	0.027 cfm/Btuh

Space thermostat

Cooling Equipment Summary

Make Trane
Trade
TWR036D
TWE040E13

Efficiency	13.0 SEER
Sensible cooling	26800 Btuh
Latent cooling	11400 Btuh
Total cooling	38000 Btuh
Actual cooling fan	1185 cfm
Cooling air flow factor	0.044 cfm/Btuh

Load sensible heat ratio	63 %
--------------------------	------

Bold/italic values have been manually overridden

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



wrightsoft Right-Size Residential™ 5.5.08 RSR25972
D:\Control File Storage\Wrightsoft HVAC\hofmann.rsr

2008-Aug-17 15:21:54

Page 1

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Community Affairs
Residential Whole Building Performance Method A

Project Name: **MAYFAIR LOT 19**

Address:

City, State:

Owner:

Climate Zone: **North**

Builder:

STANLEY CRAWFORD

Permitting Office:

Permit Number:

Jurisdiction Number:

- | | |
|---|----------------------|
| 1. New construction or existing | New |
| 2. Single family or multi-family | Single family |
| 3. Number of units, if multi-family | 1 |
| 4. Number of Bedrooms | 3 |
| 5. Is this a worst case? | Yes |
| 6. Conditioned floor area (ft²) | 1718 ft² |
| 7. Glass type ¹ and area: (Label reqd. by 13-104.4.5 if not default) | |
| a. U-factor: | Description Area |
| (or Single or Double DEFAULT) 7a. (Lble Default) 204.0 ft² | |
| b. SHGC: | |
| (or Clear or Tint DEFAULT) 7b. (Clear) 204.0 ft² | |
| 8. Floor types | |
| a. Slab-On-Grade Edge Insulation | R=0.0, 203.0(tp) ft |
| b. N/A | |
| c. N/A | |
| 9. Wall types | |
| a. Frame, Wood, Exterior | R=13.0, 1124.0 ft² |
| b. Frame, Wood, Exterior | R=13.0, 260.0 ft² |
| c. N/A | |
| d. N/A | |
| e. N/A | |
| 10. Ceiling types | |
| a. Under Attic | R=30.0, 1718.0 ft² |
| b. Under Attic | R=19.0, 220.0 ft² |
| c. N/A | |
| 11. Ducts | |
| a. Sup. Unc. Ret. Unc. All: Interior | Sup. R=6.0, 220.0 ft |
| b. N/A | |

12. Cooling systems

a. Central Unit

Cap: 36.0 kbtu/hr

SEER: 13.00

b. N/A

c. N/A

13. Heating systems

a. Electric Heat Pump

Cap: 35.0 kbtu/hr

HSPF: 7.00

b. N/A

c. N/A

14. Hot water systems

a. Electric Resistance

Cap: 50.0 gallons

EF: 0.92

b. N/A

c. Conservation credits

(HR-Heat recovery, Solar

DHP-Dedicated heat pump)

15. HVAC credits

(CF-Ceiling fan, CV-Cross ventilation,

HIF-Whole house fan,

PT-Programmable Thermostat,

MZ-C-Multizone cooling,

MZ-H-Multizone heating)

Glass/Floor Area: 0.12

Total as-built points: 23643

Total base points: 26052

PASS

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

PREPARED BY: _____

DATE: **8/21/06**

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 area, 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	1718.0	20.04	6197.2	Double, Clear	W	2.0	6.0	70.0	38.52	0.85	2290.5
				Double, Clear	N	2.0	6.0	20.0	19.20	0.90	345.8
				Double, Clear	E	2.0	6.0	114.0	42.06	0.85	4066.5
				As-Built Total:			204.0			6702.7	
WALL TYPES Area X BSPM = Points				Type	R-Value			Area X SPM = Points			
Adjacent	0.0	0.00	0.0	Frame, Wood, Exterior	13.0			1124.0	1.50	1686.0	
Exterior	1384.0	1.70	2352.8	Frame, Wood, Exterior	13.0			280.0	1.50	390.0	
Base Total:	1384.0		2352.8	As-Built Total:			1384.0			2076.0	
DOOR TYPES Area X BSPM = Points				Type				Area X SPM = Points			
Adjacent	18.0	2.40	43.2	Exterior Insulated				40.0	4.10	164.0	
Exterior	40.0	6.10	244.0	Adjacent Insulated				18.0	1.60	28.8	
Base Total:	58.0		287.2	As-Built Total:			58.0			192.8	
CEILING TYPES Area X BSPM = Points				Type	R-Value			Area X SPM X SCM = Points			
Under Attic	1718.0	1.73	2972.1	Under Attic	30.0			1718.0	1.73 X 1.00	2972.1	
				Under Attic	19.0			220.0	2.34 X 1.00	514.8	
Base Total:	1718.0		2972.1	As-Built Total:			1938.0			3486.9	
FLOOR TYPES Area X BSPM = Points				Type	R-Value			Area X SPM = Points			
Slab	203.0(p)	-37.0	-7511.0	Slab-On-Grade Edge Insulation	0.0			203.0(p)	-41.20	-8363.6	
Raised	0.0	0.00	0.0								
Base Total:			-7511.0	As-Built Total:			203.0			-8363.6	
INFILTRATION Area X BSPM = Points				Area X SPM = Points							
	1718.0	10.21	17540.8	1718.0 10.21 17540.8							

SUMMER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: , , ,

PERMIT #:

BASE			AS-BUILT					
Summer Base Points: 21839.1			Summer As-Built Points: 21635.6					
Total Summer Points	X System Multiplier	= Cooling Points	Total Component (System - Points)	X Cap Ratio	X Duct Multiplier (DM x DSM x AHU)	X System Multiplier	X Credit Multiplier	= Cooling Points
21839.1	0.4266	9316.6	<small>(eq 1: Central Unit 36000 btuh, SEER/EER(13.0) Ducts: Uno(S), Uno(R), ml(AH), R6.0(IN))</small> 21636 1.00 (1.00 x 1.147 x 0.91) 0.263 1.000 6462.4 21635.6 1.00 1.138 0.263 1.000 6462.4					

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	1718.0	12.74	3938.7	Double, Clear	W	2.0	6.0	70.0	20.73	1.04	1513.0
				Double, Clear	N	2.0	6.0	20.0	24.58	1.00	493.9
				Double, Clear	E	2.0	6.0	114.0	18.79	1.05	2272.1
				As-Built Total:				204.6	4278.9		
WALL TYPES											
Area X BWPM = Points				Type	R-Value		Area X WPM = Points				
Adjacent	0.0	0.00	0.0	Frame, Wood, Exterior	13.0		1124.0	3.40	3821.6		
Exterior	1384.0	3.70	5120.8	Frame, Wood, Exterior	13.0		280.0	3.40	864.0		
Base Total:				As-Built Total:		1384.0		4705.6			
DOOR TYPES											
Area X BWPM = Points				Type	R-Value		Area X WPM = Points				
Adjacent	18.0	11.50	207.0	Exterior Insulated			40.0	8.40	336.0		
Exterior	40.0	12.30	492.0	Adjacent Insulated			18.0	8.00	144.0		
Base Total:				As-Built Total:		58.0		480.0			
CEILING TYPES											
Area X BWPM = Points				Type	R-Value		Area X WPM X WCM = Points				
Under Attic	1718.0	2.05	3521.9	Under Attic	30.0		1718.0	2.05 X 1.00	3521.9		
				Under Attic	19.0		220.0	2.70 X 1.00	594.0		
Base Total:				As-Built Total:		1938.0		4115.9			
FLOOR TYPES											
Area X BWPM = Points				Type	R-Value		Area X WPM = Points				
Slab	203.0(p)	8.9	1806.7	Slab-On-Grade Edge Insulation	0.0		203.0(p)	18.80	3816.4		
Raised	0.0	0.00	0.0								
Base Total:				As-Built Total:		203.0		3816.4			
INFILTRATION											
Area X BWPM = Points						Area X WPM = Points					
1718.0 -0.59 -1013.6						1718.0 -0.59		-1013.6			

WINTER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: , , ,

PERMIT #:

BASE			AS-BUILT						
Winter Base Points: 14074.5			Winter As-Built Points: 16383.2						
Total Winter Points	X System Multiplier	= Heating Points	Total Component (System - Points)	X Cap Ratio (DM x DSM x AHU)	X Duct Multiplier	X System Multiplier	X Credit Multiplier	= Heating Points	
14074.5	0.6274	8830.3	(sys 1: Electric Heat Pump 35000 btuh, EFF(7.0) Ducts: Unc(S), Unc(R), Int(AH), R6.0 16383.2 1.000 (1.000 x 1.169 x 0.93) 0.487 1.000 9275.4 16383.2 1.00 1.162 0.487 1.000 9275.4						

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 X Ratio	Multiplier X Credit	= Total Multiplier
3		2635.00	7905.0	50.0	0.92	3	1.00	2635.00	1.00 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
9317		8830	7905 26052	6462		9275	7905 23643

PASS



Code Compliance Checklist

Residential Whole Building Performance Method A - Details

ADDRESS: , , ,

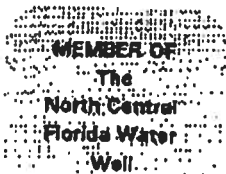
PERMIT #:

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 joist 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, sealed.	
Multi-story Houses	606.1.ABC.1.2.5	Air barrier on perimeter of floor cavity between floors.	
Additional Infiltration reqs	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.	



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:

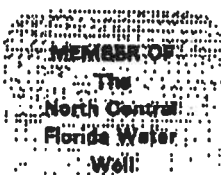
Size of Pump Motor:	1-1/2 Horse Power
Size of Pressure Tank:	220 Gallon Equivalent
Cycle Stop Valve Used:	No

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

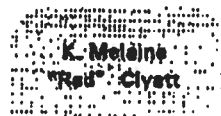
Respectfully,

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



BUILDING CODE COMPLIANCE OFFICE
METRO-DADE FLAGLER BUILDING
140 WEST FLAGLER STREET, SUITE 1603
MIAMI, FLORIDA 33130-1503
(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.

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

Raul Rodriguez
Chief Product Control Division

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

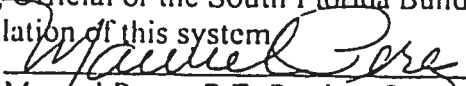
- 4.1 The residential insulated steel door and its components shall be installed in strict compliance with the approved drawings.
- 4.2 Hurricane protection system (shutters):
- 4.2.1 Door: the installation of this unit will not require a hurricane protection system.
- 4.2.2 Sidelite: the installation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

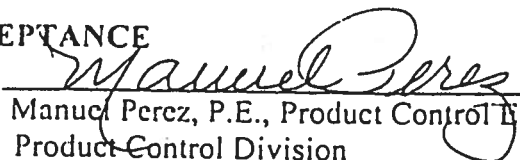
- 6.1 Application for building permit shall be accompanied by copies of the following:
- 6.1.1 This Notice of Acceptance
- 6.1.2 Duplicate copies of the approved drawings, as identified in Section 2 of this Notice of Acceptance, clearly marked to show the components selected for the proposed installation.
- 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

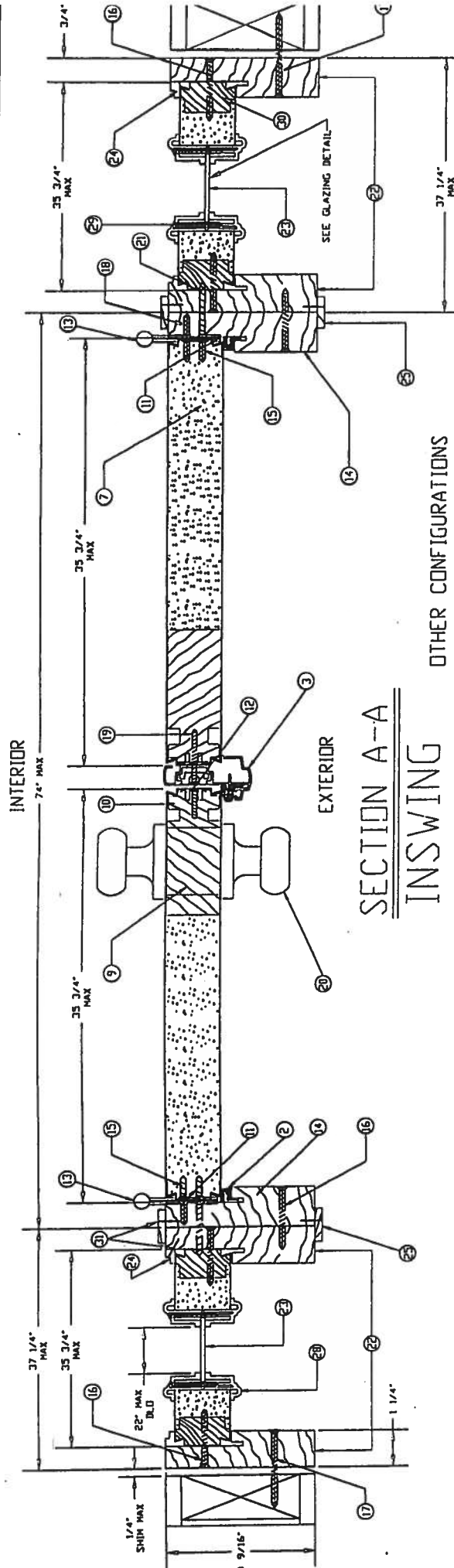

Manuel Perez, P.E. Product Control Examiner
Product Control Division

NOTICE OF ACCEPTANCE: STANDARD CONDITIONS

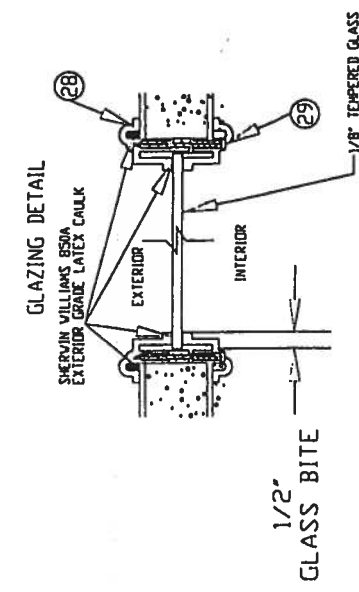
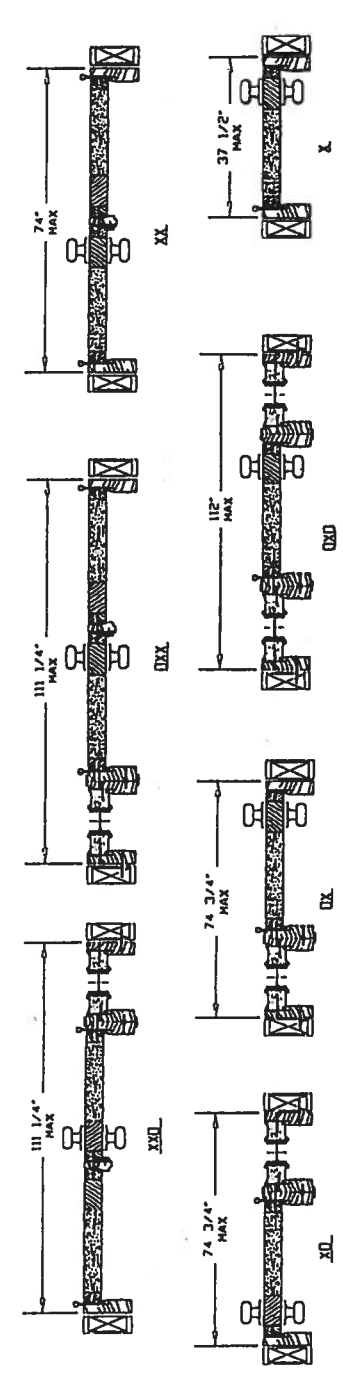
1. Renewal of this Acceptance (approval) shall be considered after a renewal application has been filed and the original submitted documentation, including test supporting data, engineering documents, are no older than eight (8) years.
2. Any and all approved products shall be permanently labeled with 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



OTHER CONFIGURATIONS



APPROVED AS COMPLYING WITH THE
SQUIM JUNIOR BUILDING CODE
DATE May 15, 2003
BY Michael P. King
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE
ACCEPTANCE NO. 01-0314.23

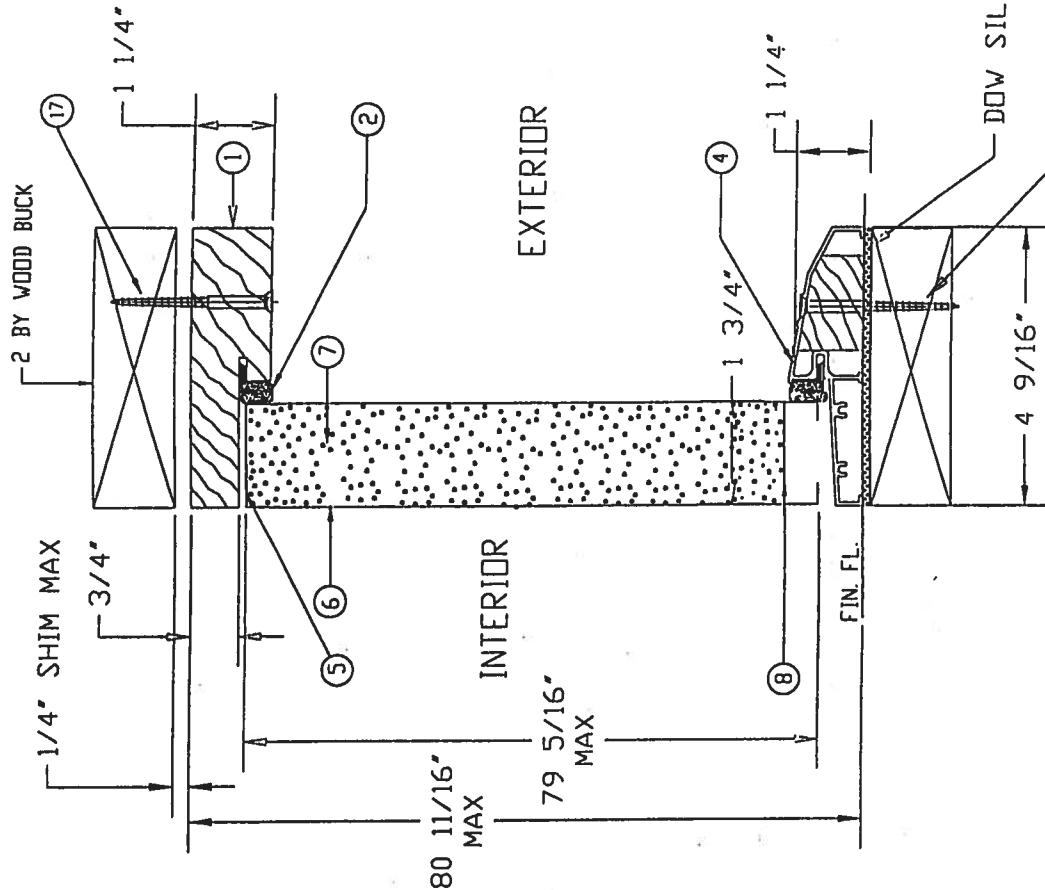
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MATERIALS LIST

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 LKXSEAL 9650-3000Z
3	ALUMINUM ASTRAGAL	EM-12	PREMIOR BRAND OR EQUIVALENT - 5/8" ALUMINUM ASTRA
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. UN7.484 -100	IN POLYURETHANE FOAM CORE
7	POLYURETHANE FOAM CORE	BASF FOAM - DENSITY 2.0 TO 2.5 LBS/FT ³	
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 POLYETHYL
13	4"x4" HINGE	EM-16	HANGER BRAND HINGE OR EQUIVALENT - .097 THICK CSTE
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 SIBLITE JAMB, 8" DOWN FROM MAX 18" O.C. THEREAFTER
17	#10 X 3/4" F.H.V.S.		(6) SCREWS THROUGH STRIKE JAMB INTO SIBLITE JAMB, 4" DOWN FROM MAX 8" O.C. THEREAFTER
18	#8 X 2" F.H.V.S.		(7) SCREWS THROUGH EACH SIBLITE JAMB INTO SIBLITE, 4" DOWN FROM TOP, MAX 15" O.C. THEREAFTER
19	LOCKSET		REFER TO ELEVATION VIEW, FOR # OF SCREWS USED AND LOCATION
20	#10 X 1 3/4" F.H.V.S.		(2) SCREWS PER HINGE INTO JAMB
21	WOOD SIBLITE JAMB		(2) SCREWS AT EACH STRIKE PLATE
22	22" X 64" SINGLE PANEL GLASS	EM-18	KVINKSET BRAND 200 LOCK OR HARLOC BRAND 100 LOCK
23	SIBLITE TRIM (WOOD)	EM-19	(2) SCREWS PER HINGE INTO JAMB
24	WOOD CASING	EM-20	1 1/4" X 4 9/16" MTL. TO BE PINE OR EQUIVALENT
25	WOOD SIBLITE HEAD JAMB	EM-21	TEMPERED GLASS IN POLYPROPYLENE FRAME - DC-1643 - (CDA 1/8" CLEAR TEMPERED GLASS
26	WOOD SIBLITE BASE	EM-22	5/16" X 1/2" MTL. TO BE PINE OR EQUIVALENT
27	POLYPROPYLENE LITE FRAME	EM-23	1/8" X 1/2" MTL. TO BE PINE OR EQUIVALENT
28	#6 X 1 1/2" PAN HEAD SCREWS	DC-1643, DR-2	FOR 3/8" X 1/2" MTL. TO BE PINE OR EQUIVALENT
29	SIBLITE STILES		HP Polypropylene by ODL
30	PIN NAIL		18 PER FRAME TO EXCEED 12" O.C. THEREAFTER
31			15/16" X 1 1/16" MTL. TO BE PINE OR EQUIVALENT
32			3/4" LONG NAIL, 4" IN FROM END, MAX 8" O.C. THEREAFTER, USED ON WALLS AND



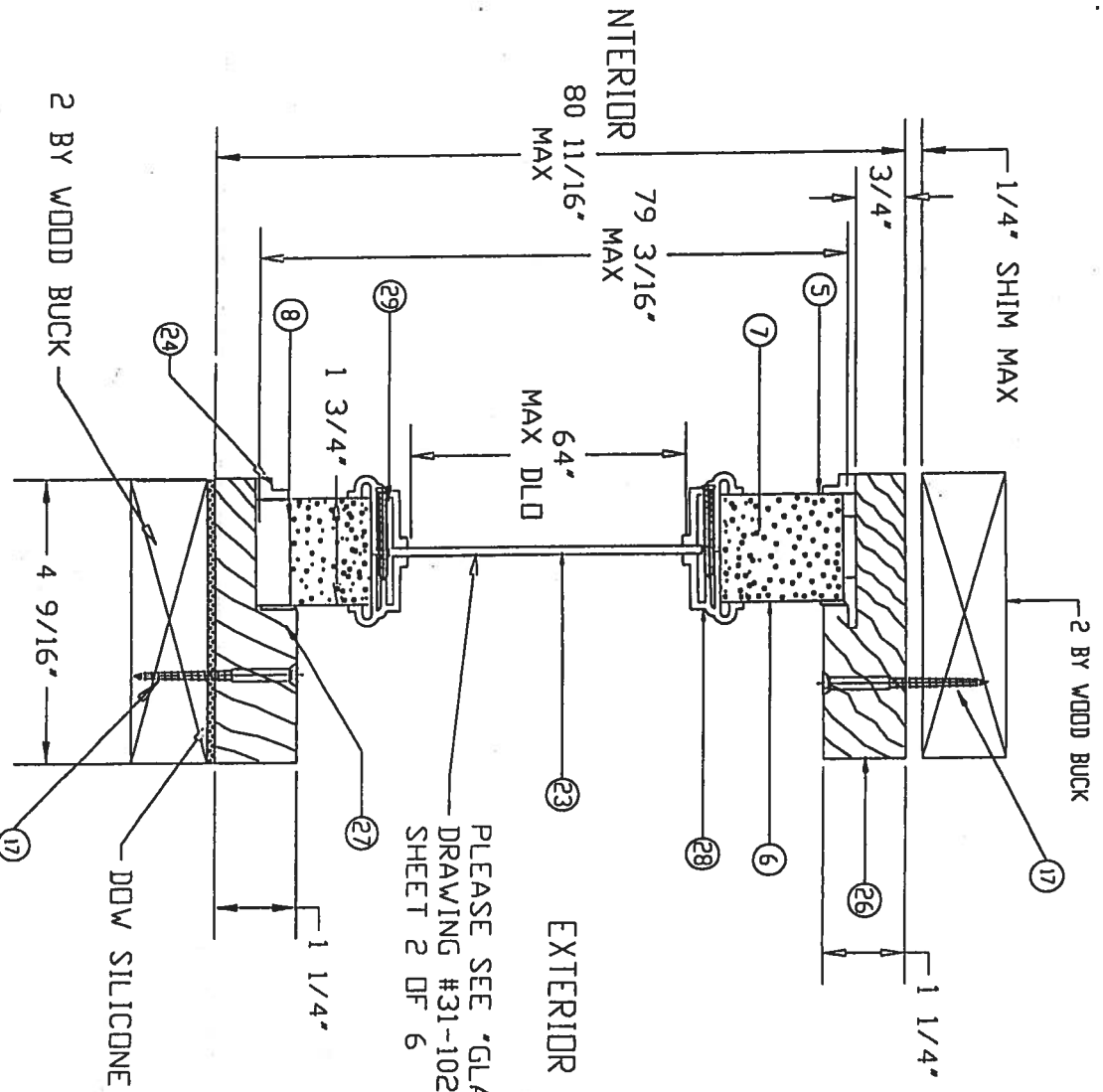
SECTION B-B

#995

DOW SILICONE

APPROVED AS COMPLYING WITH THE
SOUTH FLORIDA BUILDING CODE
DATE: JUN 03 2001
BY: [Signature]
PROJECT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE
ACCEPTANCE NO. 01-0314.2.3

UNITS: UNLESS NOTED, FRAC. : DEC. : ANG. :
EXTRUSIONS UNLESS NOTED, STD. COMPL. TOL. S.
ENGINEER: [Signature]
DATE: 7-29-97
PREMIOR ENTRY SYSTEMS
911 E. JEFFERSON
PITTSBURG, KS. 66762
31-1029-EM-I
SHEET 3 OF 6
REVISION LETTER B



PLEASE SEE 'GLAZING DETAIL'
DRAWING #31-1029-EM-1
SHEET 2 OF 6

SECTION C-C

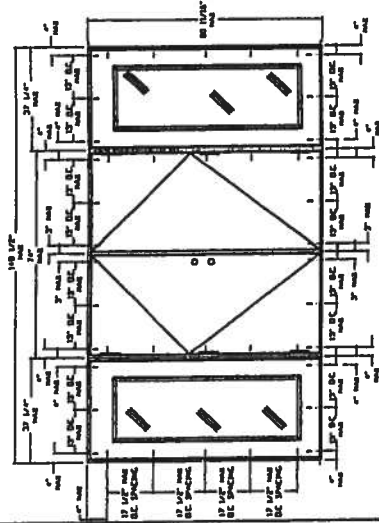
APPROVED AS COMPLYING WITH THE
FLORIDA BUILDING CODE
DATE JUN 05 2005
BY Matthew
FRIEDRICH CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE
ACCEPTANCE NO. 01-0314-23

DATE	BY	DATE	BY
7-29-97	RS	7-29-97	RS
PREMIER ENTRY SYSTEMS			
911 C. JEFFERSON			
PITTSBURGH, KS 66762			
LIMITS: UNLESS NOTED, FRAC. : DEC. : ANG. :			
EXTENSIONS: UNLESS NOTED, STD. DIM. UNITS			
ENGINEER:			
LITERATURE:			
PART NAME: ENERGY METAL EDGE SINGLITE (C-C)			
SCALE:			

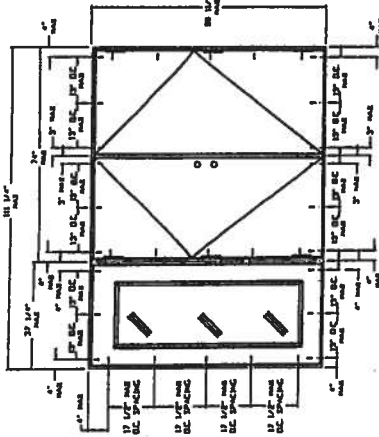
ID	DATE	COUNTY	MODIFICATIONS	DATE	BY
C	6-2-99	RS	MATERIAL VAS POLYSTYRENE	6-2-99	RS
B	10-1-98	RS	ADDED PAGE 5 (OTHER OPTIONS)	10-1-98	RS
A	12-18-97	RS	ADD SCREWS TO LITE FRAME & MATERIAL LIST	12-18-97	RS
REVISIONS					
DATE					
BY					

31-1029-EM-1
SHEET 4 OF 6
REVISION LETTER D

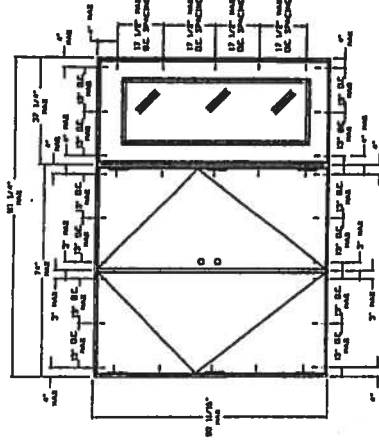
OTHER DOOR CONFIGURATIONS



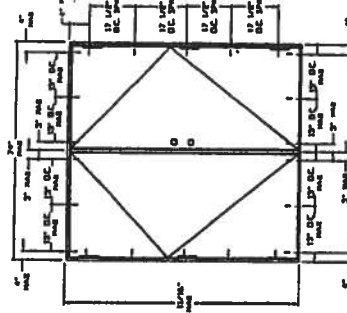
OXXD



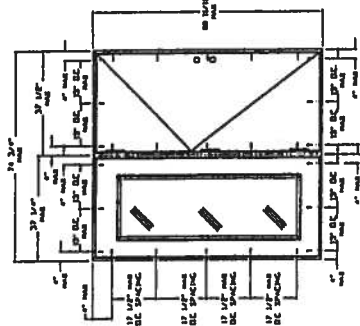
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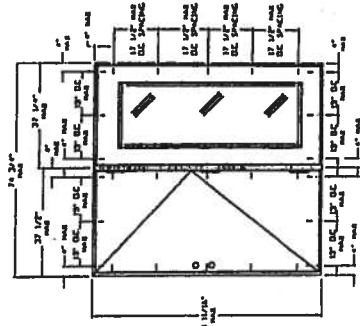
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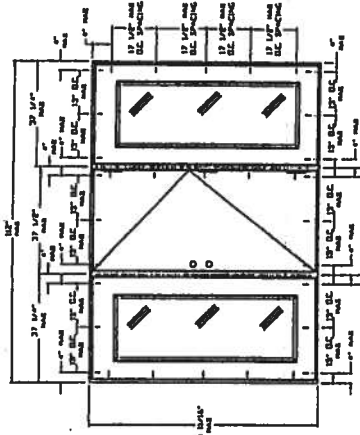
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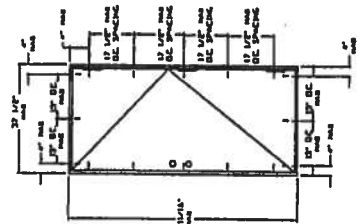
OX



XD



OXD

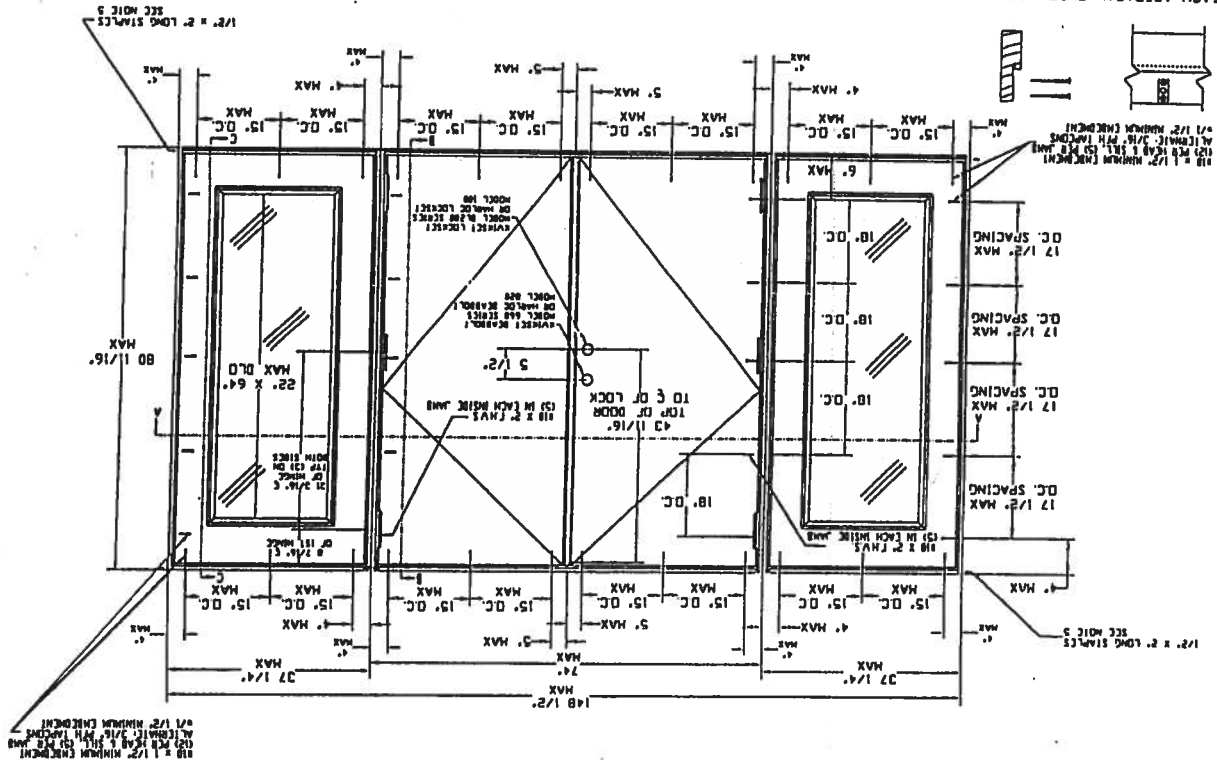


X

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

LIMITS: UNLESS NOTED, FINC : DEC : ANG :		LIR		PART NAME		SCALE	
EXTENSIONS: UNLESS NOTED, STD. COMPL. TO 3		REVISES		DATE		31-1029-EM-I	
ENGINEER:		DATE 1-11-01		PART NAME		SHEET 5 OF 6	
DR. BT. J.D.		PREMIOR ENTRY SYSTEMS		911 L. JEFFERSON		PHILADELPHIA, PA 19102	
						REVISION LETTER	

PREMDOR (CENTERGY BRAND) DOUBLE DOOR WITH SIDELITES IN WOOD FRAMES WITH BUMPER THRESHOLD (INSWING)

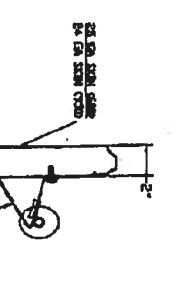


DESIGN PRESSURE RATINGS	WHERE WATER INFILTRATION REQUIREMENT IS NOT MET	NOT APPROVED *	NOT APPROVED *
Positive	+55.0 psf	NOT APPROVED *	-55.0 psf
Negative	-55.0 psf	NOT APPROVED *	-55.0 psf

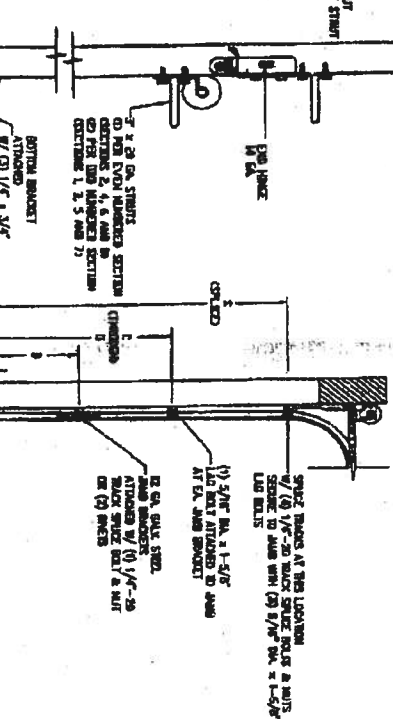
APPROVED AS COMPLYING WITH THE
SOUTH FLORIDA BUILDING CODE
DATE: JUN 05 2001
BY: Michael J. [Signature]
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE
ACCEPTANCE NO. 01-0314.23

PREMDOR ENTRY SYSTEMS		SHEET 1 OF 6	
UNIT: 7-29-97		31-1029-EM-1	
LIMITS: UNLESS NOTED		SCALE: N.T.S.	
C: BASE COUNTY MODIFICATIONS		A: ADD OTHER DOOR CONFIGURATIONS	
B: ADD OTHER DOOR CONFIGURATIONS		D: ADD OTHER DOOR CONFIGURATIONS	
E: ADD OTHER DOOR CONFIGURATIONS		F: ADD OTHER DOOR CONFIGURATIONS	
G: ADD OTHER DOOR CONFIGURATIONS		H: ADD OTHER DOOR CONFIGURATIONS	
I: ADD OTHER DOOR CONFIGURATIONS		J: ADD OTHER DOOR CONFIGURATIONS	
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U: ADD OTHER DOOR CONFIGURATIONS		V: ADD OTHER DOOR CONFIGURATIONS	
W: ADD OTHER DOOR CONFIGURATIONS		X: ADD OTHER DOOR CONFIGURATIONS	
Y: ADD OTHER DOOR CONFIGURATIONS		Z: ADD OTHER DOOR CONFIGURATIONS	

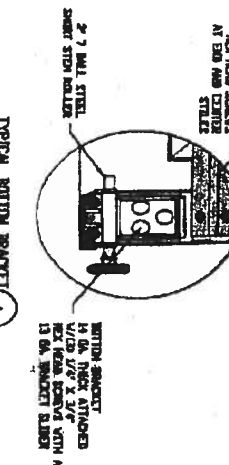
NOTES:
1. WOOD FRAMES BY OTHERS, MUST BE ANCHORED TO TRANSFER LOADS TO THE STRUCTURE.
2. THE PRECEDING DRAWINGS ARE INTENDED TO QUALIFY THE FOLLOWING INSTALLATIONS.
3. WOOD FRAME CONSTRUCTION WHERE DOOR SYSTEM IS ANCHORED TO A MINIMUM TWO BY TWO BY WOOD.
4. MASONRY OR CONCRETE CONSTRUCTION WHERE DOOR SYSTEM IS ANCHORED TO A MINIMUM TWO BY TWO BY WOOD BUCK.
5. MASONRY OR CONCRETE CONSTRUCTION WHERE DOOR SYSTEM IS ANCHORED TO A MINIMUM TWO BY TWO BY WOOD BUCK.
6. ALL ANCHORING SCREWS TO BE #10 WITH MINIMUM 1 1/2" EMBEDMENT INTO WOOD SUBSTRATE.
7. IR 3/16" PPH TAPCONS WITH 1 1/2" MINIMUM EMBEDMENT INTO MASONRY.
8. UNIT MUST BE INSTALLED WITH "MIAMI-DADE COUNTY APPROVED" SHUTTERS.
9. THREE STAPLES PER SIDE JAMB INTO HEADER ON SIDELITES AND DOOR.
10. LATEX SEALANT TO BE APPLIED AT SIDE BY SIDE AMBS AND SIDELITES.
11. DOOR/SIDELITE HEADERS, DOOR/SIDELITE JAMBS, AND SIDELITE BASE DORSERS ARE COPED AND BUTT JOINED.
12. DOORS SHALL BE PRE-PAINTED WITH A WATER-BASED EPOXY RUST INHIBITIVE PRIMER PAINT WITH A DRY FILM THICKNESS OF 0.8 TO 1.2 MIL. FRAMES SHALL BE PRE-PAINTED WITH AN ACRYLIC LATEX WATER-BASED/ WATER-REDUCIBLE WHITE PRIMER WITH A DRY FILM THICKNESS OF 0.8 TO 1.2 MIL.



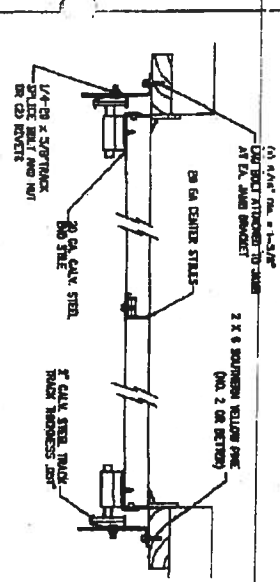
SECTION B-B



TRACK CONFIRMATION
IN T.S.



4
MIA



TRACK MOUNTING DETAIL

UNIT	DESCRIPTION OF SERVICES	DATE	BY
MAX SIZE 18" x 14"	DESIGN LOADS +18.3 PSF -20.8 PSF	EST LOADS +27.5 PSF -31.3 PSF	
<p>Amarr CALLED 2000</p> <p>345 DORCHESTER COURT, WESTVILLE, GA 30185</p> <p>PHONE: 606-874-0020 FAX: 606-874-0026</p> <p>MOBILE: 606-874-0026 V/THRUSTATE</p> <p>Street View, Lane View and Photo View</p> <p>SEE DRAWING FOR DATE 04/07/00</p> <p>B. CREDITED BY DATE 04/07/00</p> <p>DATE 04/07/00</p> <p>NO. 6016-110-11</p>			
<p>JUN 03 2003</p>			

JUN 03 2003.



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

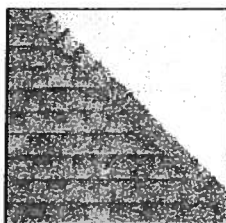
* As per the Elk Limited Warranty, six nails are required for the Elk high wind warranty.

If there are any questions please contact:

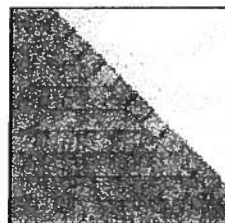
Mike Reed – Technical Manager
(205) 342-0287

or

Daniel DeJarnette – QA Engineer
(205) 342-0298



**PRESTIQUE®
HIGH DEFINITION®**



RAISED PROFILE™

*Prestique Plus High Definition
and Prestique Gallery Collection**

Product size 13"x 39"
Exposure 5"
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"x 38"
Exposure 5"
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*.

Prestique I High Definition

Product size 13"x 39"
Exposure 5"
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

Seal-A-Ridge with FLX®

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

Prestique High Definition

Product size 13"x 38"
Exposure 5"
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*.

Elk Starter Strip

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

Available Colors: Antique Slate, Weatheredwood, Shalewood, 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.

SPECIFICATIONS

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

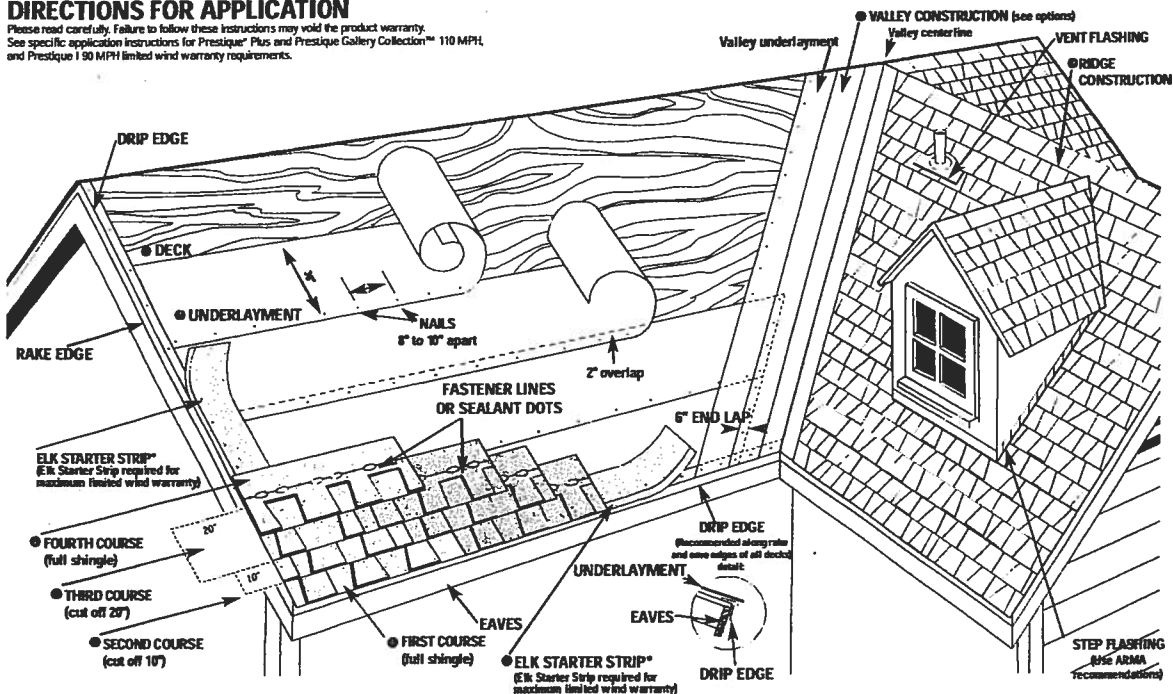
CORPORATE HEADQUARTERS:
800.354.7732

PLANT LOCATION:
800.945.5545

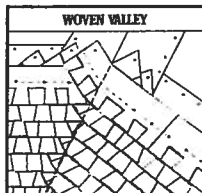
ELK
www.elkcorp.com
SSOOT 01/02

DIRECTIONS FOR APPLICATION

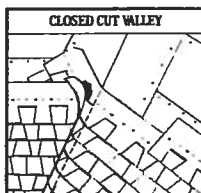
Please read carefully. Failure to follow these instructions may void the product warranty. See specific application instructions for Prestique® Plus and Prestique Gallery Collection™ 110 MPH, and Prestique 190 MPH limited wind warranty requirements.



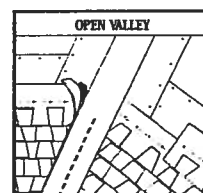
● VALLEY CONSTRUCTION OPTION (California Open and California Closed are also acceptable) NOTE: For complete ARMA valley installation details, see ARMA Residential Asphalt Roofing Manual.



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 shingles.

1 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.

2 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 18" 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 2/12), use coated roll roofing of no less than 30 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.

3 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.

4 FIRST COURSE

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

5 SECOND COURSE

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

6 THIRD COURSE

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

7 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.

8 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.

9 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.

MANSAARD APPLICATIONS

Correct fastening is critical to the performance of the roof. For slopes exceeding 6/12 (or 2/12) 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

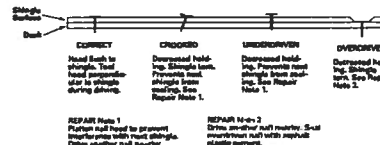
For a Limited Wind Warranty, all Prestique and Raised Profile® shingles must be applied with 4 properly placed fasteners, or in the case of mansard applications, 6 properly placed fasteners per shingle.

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.

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ELK
www.elkcorp.com



Underwriters Laboratories Inc. ®

333 Pringston Road
Northbrook, Illinois 60062-2008
United States Country Code (1)
(847) 272-4800
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

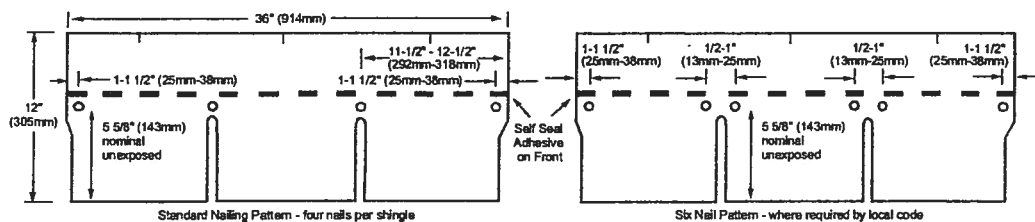
Douglas C. Miller (Ext. 43262)
Engineering Group Leader
Conformity Assessment Services- 3011E-NBK



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 type" 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.

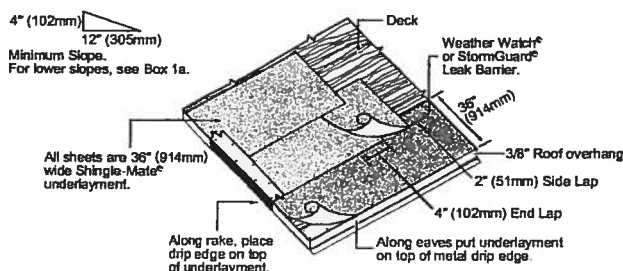
• **NON-CORRODING METAL DRIP EDGES:** Recommended along rake and eave edges on all decks, especially plywood decks.

• **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

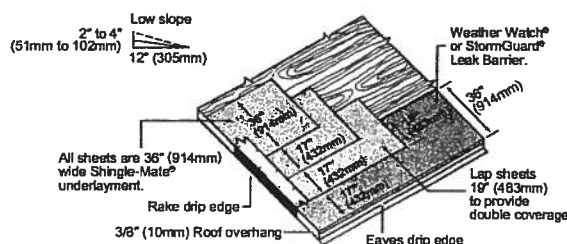
Application of underlayment: Cover deck with one layer of underlayment installed without wrinkles. Use only enough nails to hold underlayment in place until covered by shingles.

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.



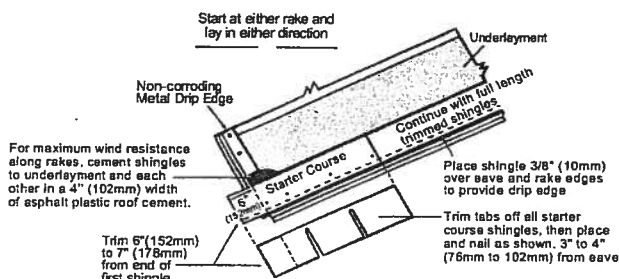
1a Underlayment: Low Slope 2/12-4/12 (167mm-333mm/m)

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.



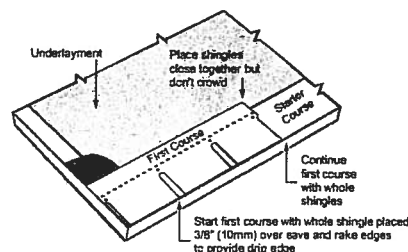
2 Starter Course

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



3 First Course

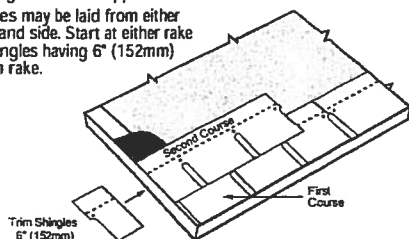
Start and continue with full shingles laid flush with the starter course. Shingles may be laid from left to right or right to left. DO NOT lay shingles straight up the roof since this procedure can cause an incorrect color blend on the roof and may damage the shingles.



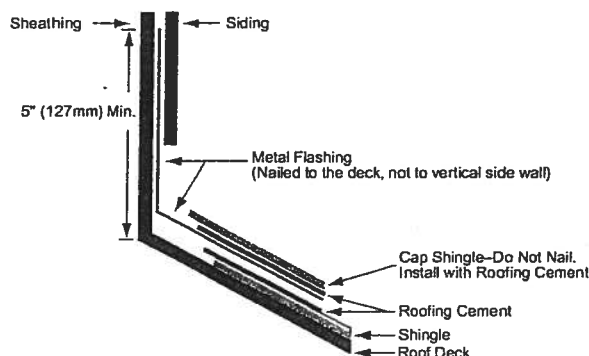
4 Second Course

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.

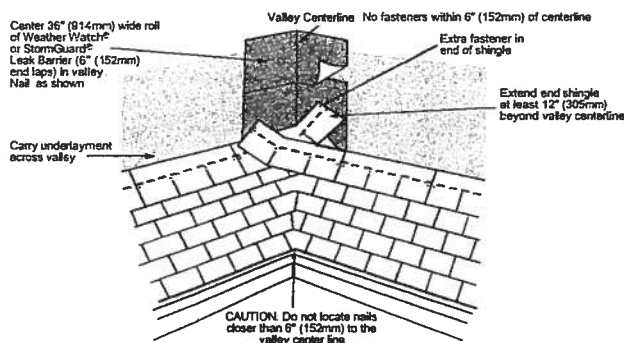
NOTE: Shingles may be laid from either left or right hand side. Start at either rake edge with shingles having 6" (152mm) trimmed from rake.



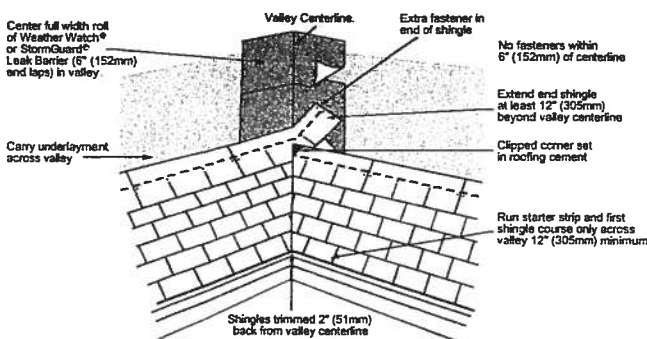
6 Wall Flashing (Sloped Roof to Vertical Wall)



8 Valley Construction - Closed or Woven Valley

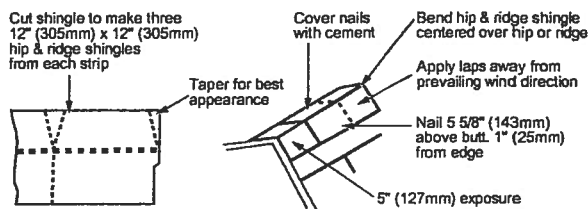


10 Valley Construction—Closed Cut

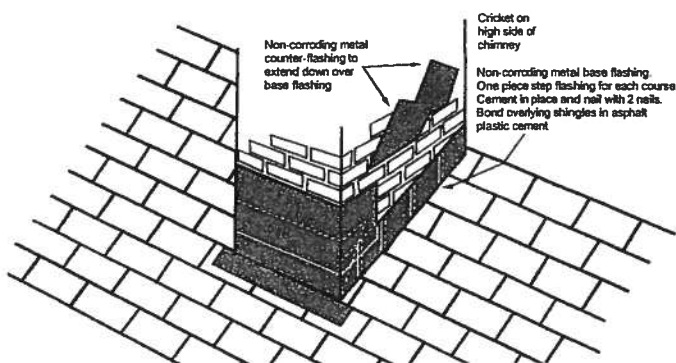


5 Hip and Ridge

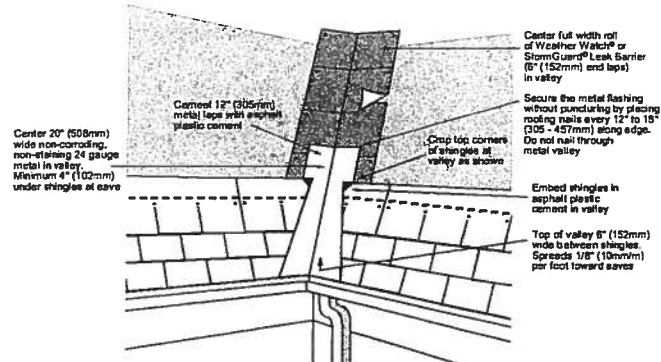
Use GAF hip & ridge shingles, or cut hip & ridge shingles from these full shingles, and apply as shown. Position laps away from prevailing wind direction.



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.



TIMBERLINE[®] Ultra[®] SHINGLES

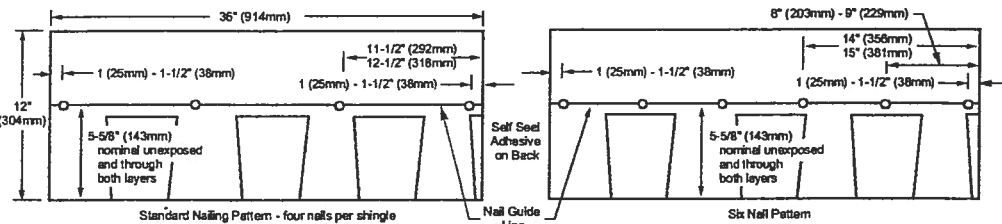
TIMBERLINE[®] 40[®] SHINGLES

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 underlayers 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.

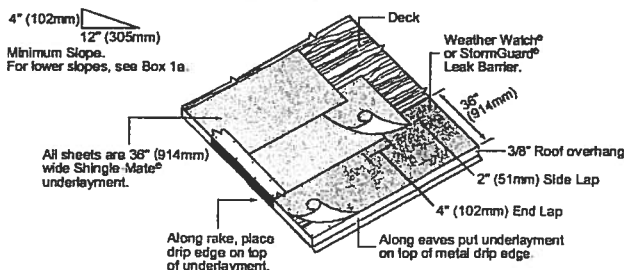
- **NON-CORRODING METAL DRIP EDGES:** Recommended along rake and eave edges on all decks, especially plywood decks.

- **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

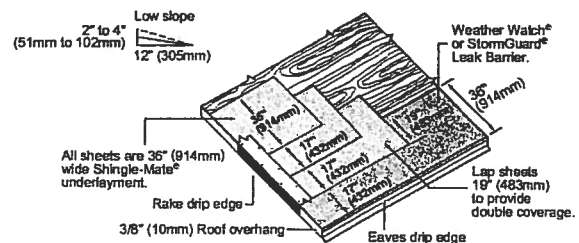
Application of underlayment: Cover deck with one layer of underlayment installed without wrinkles. Use only enough nails to hold underlayment in place until covered by shingles.

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.



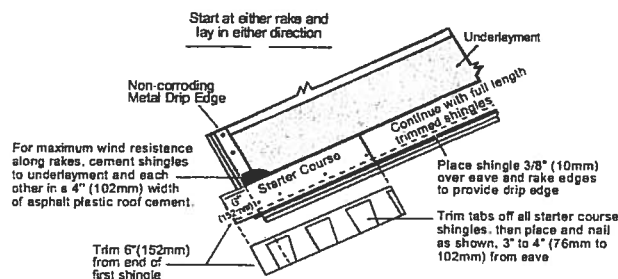
1a Underlayment: Low Slope 2/12-4/12 (167mm-333mm/m)

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.



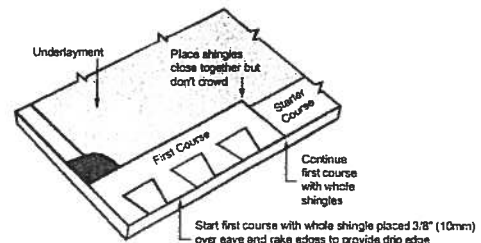
2 Starter Course

Apply as shown.



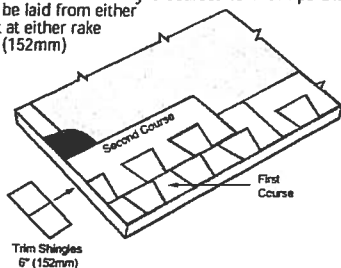
3 First Course

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.



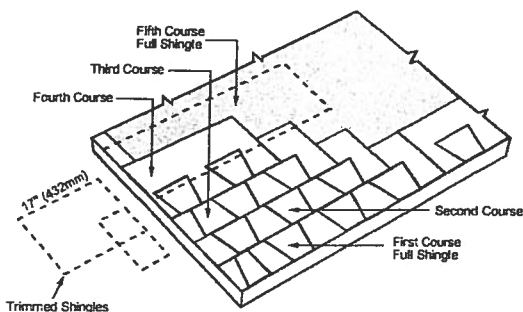
4 Second Course

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.

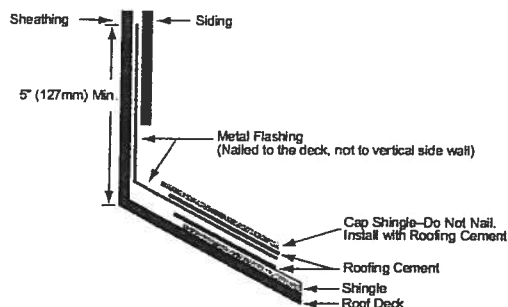


6 Fourth Course and Remaining Courses

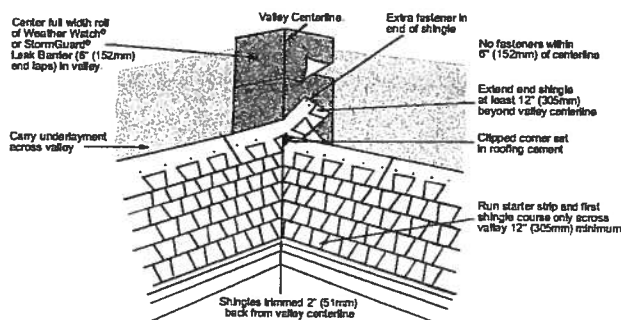
Trim 17" (432mm) from first shingle in the course, then continue with full shingles across the roof. Fifth and subsequent courses repeat full shingle instructions from Step 3.



8 Wall Flashing (Sloped Roof to Vertical Wall)



10 Valley Construction—Closed Cut



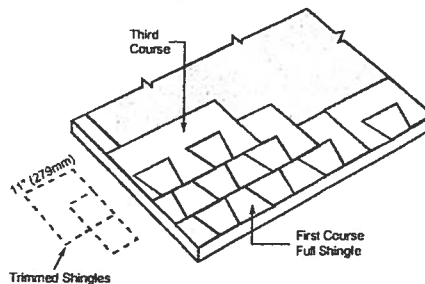
Precautionary Notes

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.

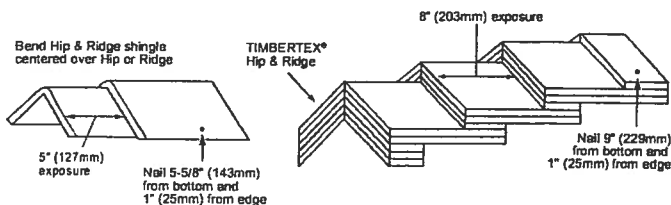
5 Third Course

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

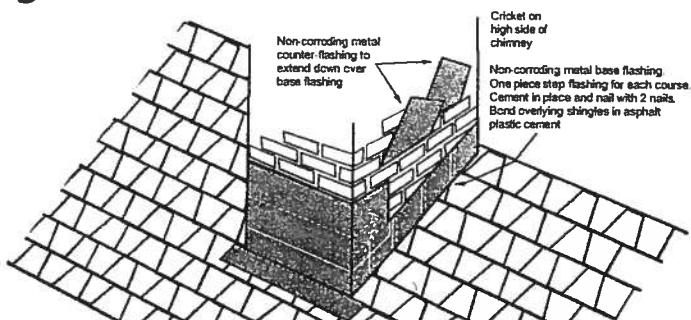


7 Hip and Ridge

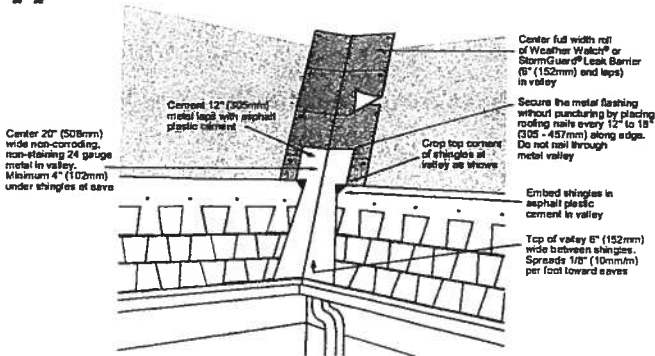
For single layer application, use hip and ridge shingles and apply as shown. To enhance appearance, use GAF TIMBERTEX® or a double layer application of Universal Hip & Ridge. (One bundle of TIMBERTEX® Hip & Ridge covers 20 lineal ft.—6.1 meters.) For double application, start with triple thickness of 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.

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ENGLISH 121201

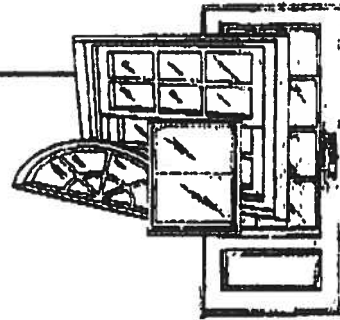
CERTIFIED TESTING LABORATORIES

Architectural Division • 7252 Narcoossee Rd. • Orlando, FL 32822

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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 101/1.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 101/13.2-97. 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/IS.2-97	18 lbs.	30 lbs.
2.2.2.5.2	Deglazing Top Rail 70 lbs. Bottom Rail 70 lbs. Left Side 50 lbs. Right Side 50 lbs.	ASTM E987-88	.039" = 7.8% < 100% .038" = 7.6% < 100% .050" = 10% < 100% .035" = 7.0% < 100%	
2.1.7	Welded Corner Test	AAMA/NWDA 101/IS2-97	Passed	

Test Date November 21, 2002

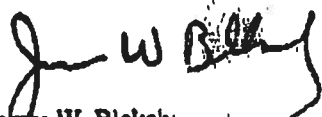
Test Completion Date: November 21, 2002

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-04-034-14644.0
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/I.S.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 "RTT" 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>Deglazing - 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.

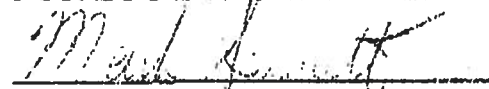
ETC Laboratories makes no opinions or endorsements regarding this product and its performance. This report may not be reproduced or quoted in partial form without the expressed written approval of ETC Laboratories.

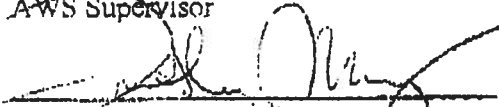
No conclusions of any kind regarding the adequacy of the glass in the test specimen may be drawn from the test. Procedure "A" in ASTM E330 was used for this test.

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FOR ETC LABORATORIES


Mark Sennett
AWS Supervisor


Arthur Murray, VP
Manager, Wind Engineering Laboratory

TEST REPORT

ETC Laboratories