

Columbia County Building Permit Application

Left Message 3-16-06
Revised 9-23-04

For Office Use Only Application # 0602-101 Date Received 2/28/06 By GT Permit # 24275
Application Approved by - Zoning Official BLK Date 08-03-06 Plans Examiner OKJTH Date 3-7-06
Flood Zone X Development Permit N/A Zoning RSF-1 Land Use Plan Map Category Res. U.L. Dev.
Comments _____

Applicants Name Kevin Bodenbaugh Phone 386-938-5588
Address PO Box 1414 Live Oak, FL 32064
Owners Name Charles Parrish Phone 719-7300
911 Address 433 SW Broderick Lane Lake City, FL
Contractors Name Plumb Level construction Phone 386-938-5588
Address PO Box 1414 Live Oak, FL 32064
Fee Simple Owner Name & Address _____
Bonding Co. Name & Address _____
Architect/Engineer Name & Address John K. Gentry 114-B West Green Street, Perry, FL 32369
Mortgage Lenders Name & Address _____
Circle the correct power company - FL Power & Light - Clay Elec. - Suwannee Valley Elec. - Progressive Energy
Property ID Number 208466-118 Estimated Cost of Construction \$20,000
Subdivision Name Saddle of the South Lot 18 Block _____ Unit _____ Phase _____
Driving Directions 47 South to Broderick Lane, Then (R) About the 5th house on Right 433 on house & mail box. 9th lot on right across from Chuck Rd.
Type of Construction Addition to SFD Number of Existing Dwellings on Property 1
Total Acreage 1.84 Lot Size _____ Do you need a - Culvert Permit or Culvert Waiver or Have an Existing Drive
Actual Distance of Structure from Property Lines - Front 35 ✓ Side 30 ✓ Side 30 ✓ Rear 55 ✓
Total Building Height 13 Number of Stories 1 Heated Floor Area 320 Roof Pitch 6/12

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

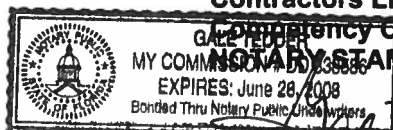
Kevin Bodenbaugh
Owner/Builder or Agent (Including Contractor)

STATE OF FLORIDA
COUNTY OF COLUMBIA

Sworn to (or affirmed) and subscribed before me
this 28th day of February 2006.

Personally known ✓ or Produced Identification _____

Contractor Signature
Contractors License Number RBoode6597



Emergency Card Number _____

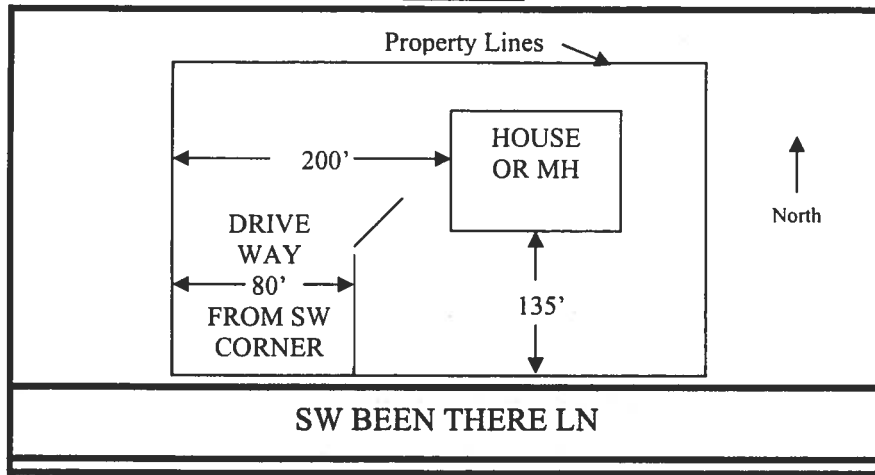
NOTARY SEAL/SEAL

Mike Tedder

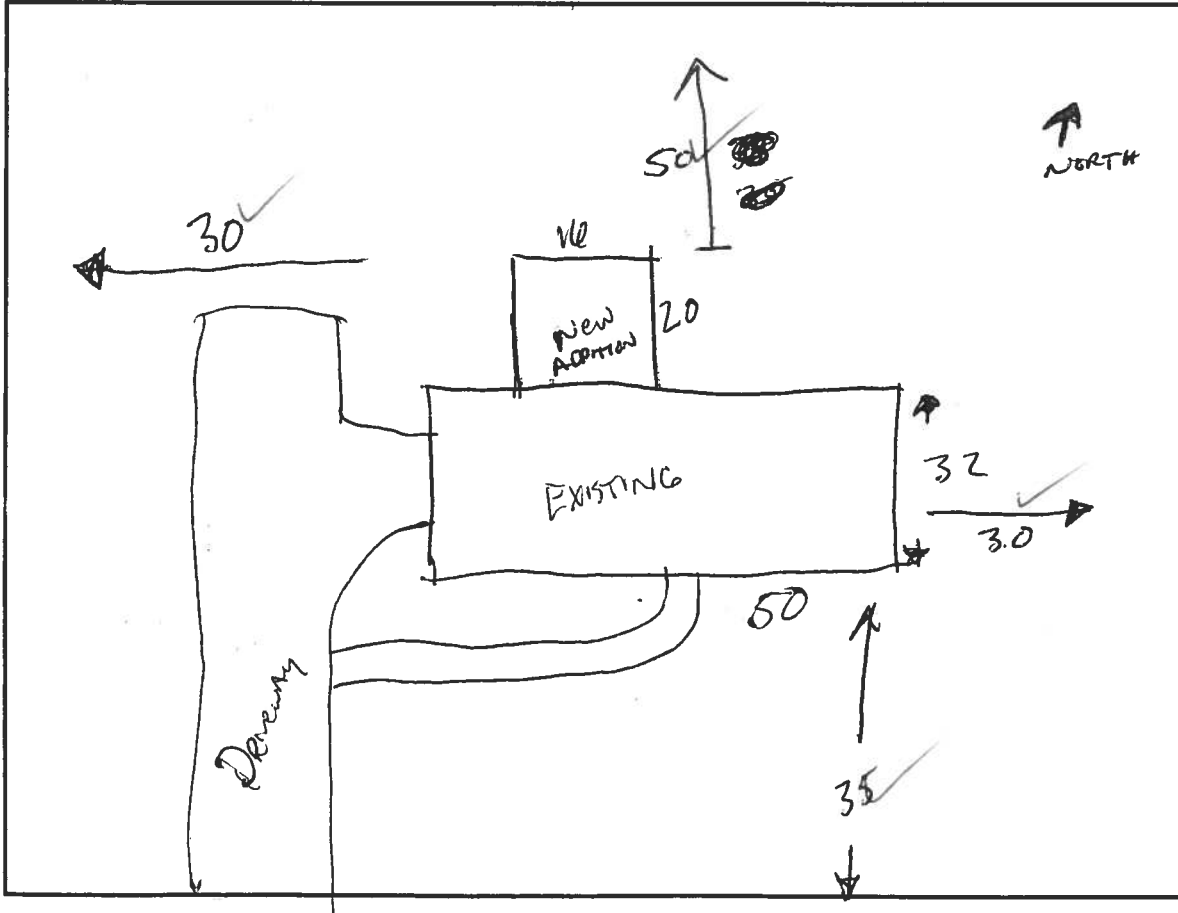
Notary Signature

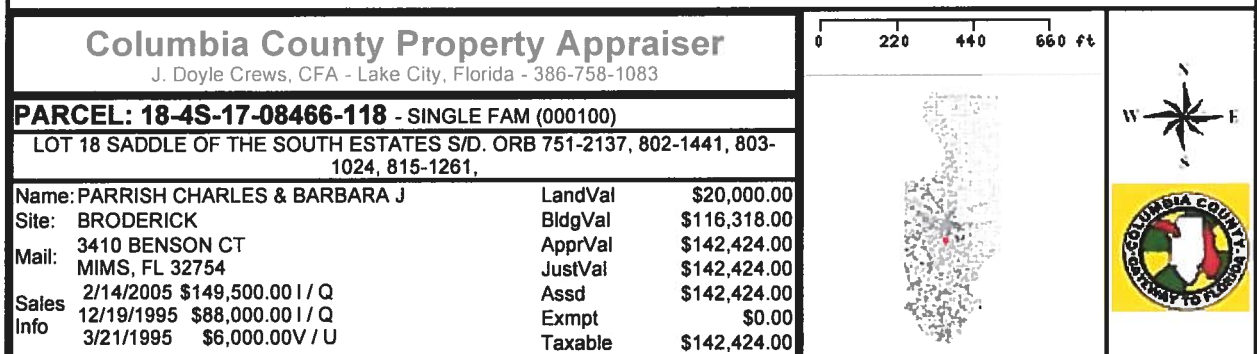
1. A PLAT, PLAN, OR DRAWING SHOWING THE PROPERTY LINES OF THE PARCEL.
2. LOCATION OF PLANNED RESIDENT OR BUSINESS STRUCTURE ON THE PROPERTY WITH DISTANCES FROM AT LEAST TWO OF THE PROPERTY LINES TO THE STRUCTURE (SEE SAMPLE BELOW).
3. LOCATION OF THE ACCESS POINT (DRIVEWAY, ETC.) ON THE ROADWAY FROM WHICH LOCATION IS TO BE ADDRESSED WITH A DISTANCE FROM A PARALLEL PROPERTY LINE AND OR PROPERTY CORNER (SEE SAMPLE BELOW).
4. TRAVEL OF THE DRIVEWAY FROM THE ACCESS POINT TO THE STRUCTURE (SEE SAMPLE BELOW).

SAMPLE:

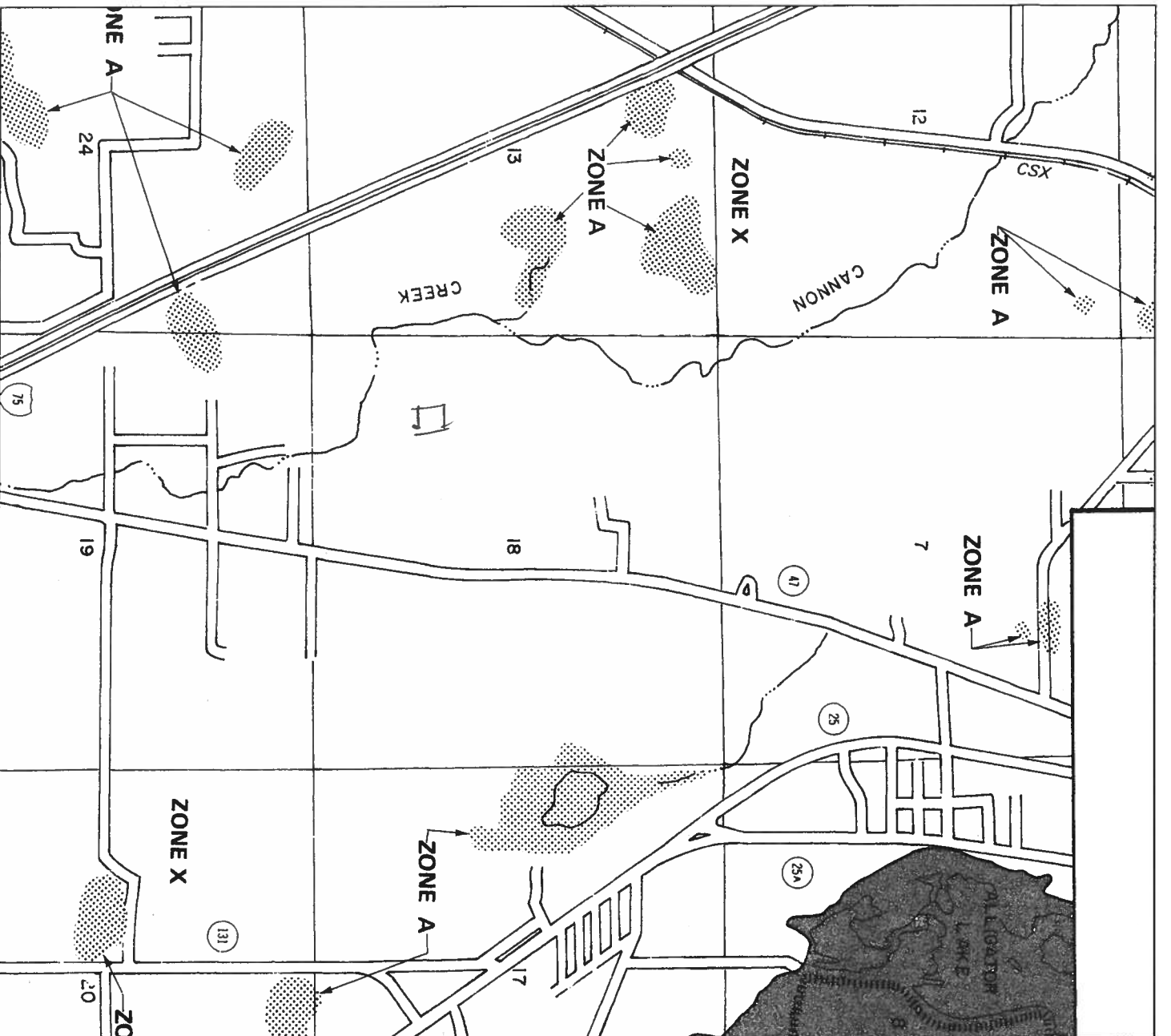


SITE PLAN BOX:





http://appraiser.columbiacountyfla.com/GIS/Print_Map.asp?pjbnlkplhgmeclpoffddhfadbdk... 3/7/2006



APPROXIMATE SCALE IN FEET



NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

**COLUMBIA
COUNTY,
FLORIDA
(UNINCORPORATED AREAS)**

PANEL 175 OF 290

PANEL LOCATION



COMMUNITY-PANEL NUMBER
120070 0175 B
EFFECTIVE DATE:
JANUARY 6, 1988



Federal Emergency Management Agency

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

Return to: (enclose self-addressed stamped envelope)

Name:

Address:

This Instrument Prepared by:

Name:

Address:

Property Appraisers Parcel Identification

Inst: 2006004825 Date: 02/28/2006 Time: 14:31

J. G. DC, P. DeWitt Cason, Columbia County B: 1075 P: 1289

SPACE ABOVE THIS LINE FOR PROCESSING DATA

SPACE ABOVE THIS LINE FOR RECORDING DATA

NOTICE OF COMMENCEMENT

Permit No. _____

Tax Folio No. R08466-11

State of Florida _____

County of Columbia }

The undersigned hereby gives notice that improvements will be made to certain real property, and in accordance with chapter 713 of the Florida Statutes, the following information is provided in this NOTICE OF COMMENCEMENT.

Legal description of property (include Street Address, if available) N/A

General description of improvements ADDITION

Owner's Name Charles Parish

Address 433 SW Broderick Lane, Lake City FL 32025

Owner's Interest in site of the improvement 100%

Fee Simple Title holder (if other than owner) N/A

Address _____ Phone: _____ Fax: _____

Contractor Plumb Level Construction

Address PO Box 1416 Live Oak FL 32064 Phone: 938-5388 Fax: _____

Surety N/A Phone: _____ Fax: _____

Address _____ Amount of bond \$ _____

Lender's Name N/A

Address: _____ Phone: _____ Fax: _____

Persons within the State of Florida designated by owner upon whom notices or other documents may be served as provided by Section 713.13(1)(a)7, Florida Statutes.

Name Kevin Bedenbaugh

Address PO 1416 Live Oak FL 32064 Phone: 386 938-5588 Fax: _____

In addition to himself, owner designates N/A

Of _____ Phone: _____ Fax: _____

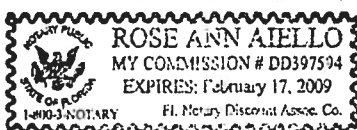
to receive a copy of the Lienor's Notice as provided in Section 713.13(1)(b), Florida Statutes.

Expiration date of Notice of Commencement (the expiration date is 1 year from the date of recording unless a different date is specified)

Kevin Bedenbaugh
Signature of Owner

Kevin Bedenbaugh
Printed Name of Owner

NOTARY RUBBER STAMP SEAL



I have relied upon the following identification of the Affiant FL DL

Sworn to and subscribed before me this February day of 2006

Rose Ann Aiello
Notary Signature

Rose Ann Aiello
Printed Name

Prepared by and Return to:
Virlyn Willis
Gateway Title Agency, LLC
4255 SW Cambridge Glen
Lake City, Florida 32024

File Number: 31731GW

Parcel I.D. Number: R08466-118

Incidental to the issuance of a Title Insurance Policy

RETURN TO:

KEYSTONE TITLE AGENCY, INC.

9735 U.S. Hwy. 19

Port Richey, FL 34668

General Warranty Deed

Made this February 14, 2005 A.D. By Dolores Collins a single person, whose address is: 2023 St. Lucie Blvd. Lot 172, Ft. Pierce, FL 34946 hereinafter called the grantor, to Charles Parrish and Barbara J. Parrish, husband and wife, whose post office address is: 3410 Benson Ct, Mims, FL 32754, hereinafter called the grantee:

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

Witnesseth, that the grantor, for and in consideration of the sum of **One Hundred Forty Nine Thousand Five Hundred dollars & no cents, (\$149,500.00)** 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:

Lot 18, of Saddle of the South Estates, according to the Plat thereof, as recorded in Plat Book 6, at Page 64, of the Public Records of Columbia County, Florida.

Subject to covenants, conditions, restrictions, reservations, limitations, easements and agreements of record, if any; taxes and assessments for the year 2005 and subsequent years; and to all applicable zoning ordinances and/or restrictions and prohibitions imposed by governmental authorities, if any

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

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

And the grantor hereby covenants with said grantee that the grantor is lawfully seized of said land in fee simple; that the grantor has good right and lawful authority to sell and convey said land; that the grantor hereby fully warrants the title to said land and will defend the same against the lawful claims of all persons whomsoever.

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:

REQUIRES TWO DIFFERENT WITNESSES

Witness #1 signature

Print Witness #1 name

Witness #2 signature

Print Witness #2 name

State of

County of

Dolores Collins

(Seal)

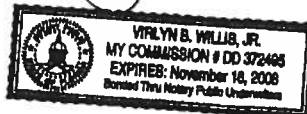
(Seal)

The foregoing instrument was acknowledged before me this February 14, 2005, by Dolores Collins a single person, who has produced a drivers license as identification.

Notary Seal

Notary Public

my commission expires:



Compliance with Method B Chapter 6 of the Florida Energy Efficiency Code may be demonstrated by the use of Form 600B for single and multifamily residences of 3 stories or less in height, and additions to existing residential buildings. To comply, a building must meet or exceed all of the energy efficiency prescriptives in any one of the prescriptive component packages and comply with the prescriptive measures listed in Table 6B-1 of this form. An alternative method is provided for additions of 600 square feet or less by use of Form 600C. If a building does not comply with this method, it may still comply under other sections in Chapter 6 of the Code.

PROJECT NAME: AND ADDRESS:	PARISH 433 SW Brookside Court LAKE CITY, FL	BUILDER: Plumb Level Construction	PERMITTING OFFICE:	Columbia	CLIMATE ZONE:	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/>
OWNER:	Charles Parish	PERMIT NO.:	24275	JURISDICTION NO.:	221000	

GENERAL DIRECTIONS

1. New construction including additions which incorporates any of the following features cannot comply using this method: steel stud walls, single assembly roof/ceiling construction, or skylights or other non-vertical roof glass.
2. Choose one of the component packages "A" through "E" from Table 6B-1 by which you intend to comply with the Code. Circle the column of the package you have chosen.
3. Fill in all the applicable spaces of the "To Be Installed" column on Table 6B-1 with the information requested. All "To Be Installed" values must be equal to or more efficient than the required levels.
4. Complete page 1 based on the "To Be Installed" column information.
5. Read "Minimum Requirements for All Packages", Table 6B-2 and check each box to indicate your intent to comply with all applicable items.
6. Read, sign and date the "Prepared By" certification statement at the bottom of page 1. The owner or owner's agent must also sign and date the form.

Please Print

CK

1. Compliance package chosen (A-F)
2. New construction or addition
3. Single family detached or Multifamily attached
4. If Multifamily—No. of units covered by this submission
5. Is this a worst case? (yes / no)
6. Conditioned floor area (sq. ft.)
7. Predominant eave overhang (ft.)
8. Glass type and area :
 - a. Clear glass
 - b. Tint, film or solar screen
9. Percentage of glass to floor area
10. Floor type, area or perimeter, and insulation:
 - a. Slab on grade (R-value)
 - b. Wood, raised (R-value)
 - c. Wood, common (R-value)
 - d. Concrete, raised (R-value)
 - e. Concrete, common (R-value)
11. Wall type, area and insulation:
 - a. Exterior: 1. Masonry (Insulation R-value)
2. Wood frame (Insulation R-value)
 - b. Adjacent: 1. Masonry (Insulation R-value)
2. Wood frame (Insulation R-value)
12. Ceiling type, area and insulation:
 - a. Under attic (Insulation R-value)
 - b. Single assembly (Insulation R-value)
13. Air Distribution System: Duct insulation, location
Test report (attach if required)
14. Cooling system
(Types: central, room unit, package terminal A.C., gas, none)
15. Heating system:
(Types: heat pump, elec. strip, nat. gas, L.P. gas, gas h.p., room or PTAC, none)
16. Hot water system:
(Types: elec., nat. gas, L.P. gas, solar, heat rec., ded. heat pump, other, none)

1.	C	
2.	ADDITION	
3.	SF	
4.	—	
5.		
6.	320	
7.	2	
	Single Pane	Double Pane
8a.	sq. ft.	64.95 sq. ft.
8b.	sq. ft.	sq. ft.
9.	20 %	
10a.	R= 0	56 lin. ft.
10b.	R=	sq. ft.
10c.	R=	sq. ft.
10d.	R=	sq. ft.
10e.	R=	sq. ft.
11a-1	R=	sq. ft.
11a-2	R= 13	383 sq. ft.
11b-1	R=	sq. ft.
11b-2	R=	sq. ft.
12a.	R= 30	320 sq. ft.
12b.	R=	sq. ft.
13.	R=	
14a.	Type: Central	
14b.	SEER/EER: 10.5 +	
14c.	Capacity:	
15a.	Type: Heat Pump	
15b.	HSPF/COP/AFUE:	
15c.	Capacity: 7.4 +	
16a.	Type: Elec.	
16b.	EF: 91 +	

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

PREPARED BY: KEVIN BOWEN
I hereby certify that this building, as designed, is in compliance with the Florida Energy Code

OWNER AGENT: DATE: 2-28-06

DATE: 2-28-06

Review of 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 in accordance with Section 553.908, F.S.

BUILDING OFFICIAL:

DATE:

COLUMBIA COUNTY BUILDING DEPARTMENT

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

ALL BUILDING PLANS MUST INDICATE THE FOLLOWING ITEMS AND INDICATE COMPLIANCE WITH CHAPTER 1606 OF THE FLORIDA BUILDING CODE 2001 BY PROVIDING CALCULATIONS AND DETAILS THAT HAVE THE SEAL AND SIGNATURE OF A CERTIFIED ARCHITECT OR ENGINEER REGISTERED IN THE STATE OF FLORIDA, OR ALTERNATE METHODOLOGIES, APPROVED BY THE STATE OF FLORIDA BUILDING COMMISSION FOR ONE-AND-TWO FAMILY DWELLINGS. FOR DESIGN PURPOSES THE FOLLOWING BASIC WIND SPEED AS PER FIGURE 1606 SHALL BE USED.

WIND SPEED LINE SHALL BE DEFINED AS FOLLOWS: THE CENTERLINE OF INTERSTATE 75.

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

APPLICANT – PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL

GENERAL REQUIREMENTS: Two (2) complete sets of plans containing the following:

Applicant

Plans Examiner



All drawings must be clear, concise and drawn to scale ("Optional " details that are not used shall be marked void or crossed off). Square footage of different areas shall be shown on plans.



Designers name and signature on document (FBC 104.2.1). If licensed architect or engineer, official seal shall be affixed.



Site Plan including:

- a) Dimensions of lot
- b) Dimensions of building set backs
- c) Location of all other buildings on lot, well and septic tank if applicable, and all utility easements.
- d) Provide a full legal description of property.



Wind-load Engineering Summary, calculations and any details required

- a) Plans or specifications must state compliance with FBC Section 1606
- b) The following information must be shown as per section 1606.1.7 FBC
 - a. Basic wind speed (MPH)
 - b. Wind importance factor (I) and building category
 - c. Wind exposure – if more than one wind exposure is used, the wind exposure and applicable wind direction shall be indicated
 - d. The applicable internal pressure coefficient
 - e. Components and Cladding. The design wind pressure in terms of psf (kN/m²), to be used for the design of exterior component and cladding materials not specifically designed by the registered design professional



Elevations including:

- a) All sides
- b) Roof pitch
- c) Overhang dimensions and detail with attic ventilation
- d) Location, size and height above roof of chimneys
- e) Location and size of skylights
- f) Building height
- e) Number of stories



Floor Plan including:

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

Foundation Plan including:

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

Roof System:

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

Wall Sections including:

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

b) Wood frame wall

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

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

Floor Framing System:

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

Plumbing Fixture layout

Electrical layout including:

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

HVAC information

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

Energy Calculations (dimensions shall match plans)

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

Disclosure Statement for Owner Builders

*****Notice Of Commencement Required Before Any Inspections Will Be Done**

Private Potable Water

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

THE FOLLOWING ITEMS MUST BE SUBMITTED WITH BUILDING PLANS

1. **Building Permit Application:** A current Building Permit Application form is to be completed and submitted for all residential projects.
2. **Parcel Number:** The parcel number (Tax ID number) from the Property Appraiser (386) 758-1084 is required. A copy of property deed is also requested.
3. **Environmental Health Permit or Sewer Tap Approval:** A copy of the Environmental Health permit, existing septic approval or sewer tap approval is required before a building permit can be issued.
(386) 758-1058 (Toileet facilities shall be provided for construction workers)
4. **City Approval:** If the project is to be located within the city limits of the Town of Fort White, prior approval is required. The Town of Fort White approval letter is required to be submitted by the owner or contractor to this office when applying for a Building Permit. (386) 497-2321
5. **Flood Information:** All projects within the Floodway of the Suwannee or Santa Fe Rivers shall require permitting through the Suwannee River Water Management District, before submitting application to this office. Any project located within a flood zone where the base flood elevation (100 year flood) has been established shall meet the requirements of Section 8.8 of the Columbia County Land Development Regulations. Any project located within a flood zone where the base flood elevation has not been established (Zone A) shall meet the requirements of Section 8.7 of the Columbia County Land Development Regulations. **CERTIFIED FINISHED FLOOR ELEVATIONS WILL BE REQUIRED ON ANY PROJECT WHERE THE BASE FLOOD ELEVATION (100 YEAR FLOOD) HAS BEEN ESTABLISHED.**
A development permit will also be required. Development permit cost is **\$50.00**
6. **Driveway Connection:** If the property does not have an existing access to a public road, then an application for a culvert permit (**\$25.00**) must be made. If the applicant feels that a culvert is not needed, they may apply for a culvert waiver (**\$50.00**). All culvert waivers are sent to the Columbia County Public Works Department for approval or denial.
7. **911 Address:** If the project is located in an area where the 911 address has been issued, then the proper paperwork from the 911 Addressing Department must be submitted. (386) 752-8787

ALL REQUIRED INFORMATION IS TO BE SUBMITTED FOR REVIEW. YOU WILL BE NOTIFIED WHEN YOUR APPLICATION AND PLANS ARE APPROVED AND READY TO PERMIT. PLEASE DO NOT EXPECT OR REQUEST THAT PERMIT APPLICATIONS BE REVIEWED OR APPROVED WHILE YOU ARE HERE – TIME WILL NOT ALLOW THIS –PLEASE DO NOT ASK

NOTICE:

ADDRESSES BY APPOINTMENT ONLY!

TO OBTAIN A 9-1-1 ADDRESS THE REQUESTER MUST CONTACT THE COLUMBIA COUNTY 9-1-1 ADDRESSING DEPARTMENT AT (386) 752-8787 FOR AN APPOINTMENT TIME AND DATE:

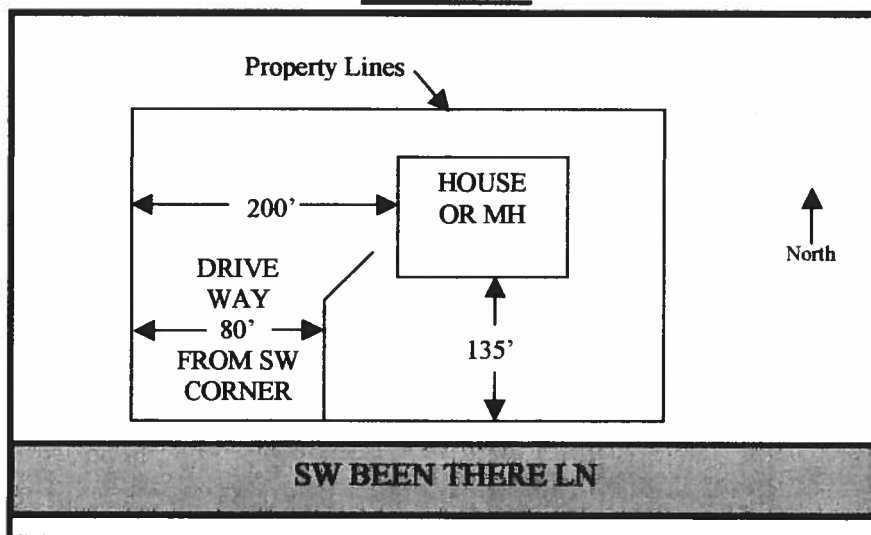
YOU CAN NOT OBTAIN A NEW ADDRESS OVER THE TELEPHONE. MUST MAKE AN APPOINTMENT!

THE ADDRESSING DEPARTMENT IS LOCATED AT 263 NW LAKE CITY AVENUE (OFF OF WEST U.S. HIGHWAY 90 WEST OF INTERSTATE 75 AT THE COLUMBIA COUNTY EMERGENCY OPERATIONS CENTER).

THE REQUESTER WILL NEED THE FOLLOWING:

1. THE PARCEL OR TAX ID NUMBER (SAMPLE: "25-4S-17-12345-123" OR "R12345-123) FOR THE PROPERTY.
2. A PLAT, PLAN, SITE PLAN, OR DRAWING SHOWING THE PROPERTY LINES OF THE PARCEL.
 - a. LOCATION OF PLANNED RESIDENT OR BUSINESS STRUCTURE ON THE PROPERTY WITH DISTANCES FROM TWO OF THE PROPERTY LINES TO THE STRUCTURE (SEE SAMPLE BELOW).
 - b. LOCATION OF THE ACCESS POINT (DRIVEWAY, ETC.) ON THE ROADWAY FROM WHICH LOCATION IS TO BE ADDRESSED WITH A DISTANCE FROM A PARALLEL PROPERTY LINE AND OR PROPERTY CORNER (SEE SAMPLE BELOW).
 - c. TRAVEL OF THE DRIVEWAY FROM THE ACCESS POINT TO THE STRUCTURE (SEE SAMPLE BELOW).

SAMPLE:



NOTE: 5 TO 7 WORKING DAYS MAY BE REQUIRED IF ADDRESSING DEPARTMENT NEEDS TO CONDUCT AN ON SITE SURVEY.



Architectural Testing

AAMA/NWWDA 101/I.S.2-97
TEST REPORT SUMMARY

Rendered to:

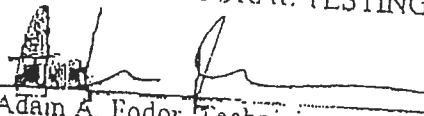
MI HOME PRODUCTS, INC.

SERIES/MODEL: 450/650
TYPE: Aluminum Single Hung Window
RATING: H-C30 54 x 90; H-C45 52 x 72*

Title of Test	Results	
	Test Specimen #1	Test Specimen #2
Overall Design Pressure	30 psf	47 psf
Operating Force	20 lb max.	N/A
Air Infiltration	0.27 cfm/ft ²	N/A
Water Resistance	5.25 psf	6.0 psf
Structural Test Pressure	±45.0 psf	±70.5 psf
Deglazing	Passed	N/A
Forced Entry Resistance	Grade 10	N/A

Reference should be made to Report No. 01-37589.01 for complete test specimen description and data.

For ARCHITECTURAL TESTING, INC.


Adam A. Fodor, Technician

AAF:tpj

130 Derry Court
York, PA 17402-9405
phone: 717.764.7700
fax: 717.764.4129
www.testatf.com



AAMA/NWWDA 101/I.S.2-97 TEST REPORT

Rendered to:

MI HOME PRODUCTS, INCORPORATED
650 West Market Street
Graz, Pennsylvania 17030-0370

Report No: 01-37589.01
Test Date: 06/29/00
Report Date: 09/11/00
Expiration Date: 06/29/04

Project Summary: Architectural Testing, Inc. (ATI) was contracted to witness tests on a Series/Model 450, aluminum single hung window at the MI Home Products in-plant test facility in Elizabethville, Pennsylvania. The samples tested successfully met the performance requirements for the following ratings: Test Specimen #1 H-C30 54 x 90; Test Specimen #2 H-C40 52 x 72*. Test specimen descriptions and results are reported herein.

General Note: An asterisk (*) next to the performance grade indicates that the size tested for optional performance was smaller than the minimum test size for the product type and class.

Test Specification: The test specimen was evaluated in accordance with AAMA/NWWDA 101/I.S.2-97, *Voluntary Specifications for Aluminum, Vinyl (PVC) and Wood Windows and Glass Doors*.

Test Specimen Description

Series/Model: 450

Type: Aluminum Single Hung Window

Test Specimen #1 H-C30 54 x 90

Overall Size: 4' 6-1/2" wide by 7' 6-1/2" high

Sash Size: 4' 4" wide by 3' 9-3/4" high

Fixed Daylight Opening Size: 4' 1-1/2" wide by 3' 6-1/2" high

Screen Size: 4' 2-1/4" wide by 3' 8-1/2" high

130 Derry Court
York, PA 17402-9405
phone: 717.764.7700
fax: 717.764.4129
www.testati.com



Test Specimen Description: (Continued)

Test Specimen #2: H-C40 52 x 72*

Overall Size: 4' 4-1/4" wide by 6' 0" high

Sash Size: 4' 2" wide by 3' 0-1/2" high

Fixed Daylight Opening Size: 3' 11-1/2" wide by 2' 9-1/2" high

Screen Size: 4' 0" wide by 2' 11" high

The following descriptions apply to all specimens.

Finish: All aluminum was painted.

Glazing Details: The lites utilized 5/8" thick sealed insulating glass units fabricated from two sheets of 3/32" thick clear annealed glass and an Intercept™ spacer system. The sash was channel glazed with a flexible gasket. The fixed lite was interior glazed onto single-sided adhesive foam tape and secured with extruded PVC glazing beads.

Weatherstripping:

<u>Description</u>	<u>Quantity</u>	<u>Location</u>
0.210" high by 0.270" backed polypile with center fin	Row	Fixed meeting rail
0.250" high by 0.187" backed polypile with center fin	2 Rows	Stiles
0.300" diameter by 0.187" backed foam-filled vinyl bulb gasket	Row	Bottom rail
0.400' high by 1/2" square polypile dust plug	4	One on each sash corner

Frame Construction: The main frame was constructed of thermally-broken extruded aluminum members with coped, butted and sealed corners. The fixed meeting rail was constructed of an extruded aluminum member with coped, butted and sealed ends fastened with two screws each.

Test Specimen Description: (Continued)

Sash Construction: The sash members were constructed of thermally-broken extruded aluminum members with coped, butted and sealed corners fastened with one screw each.

Screen Construction: The screen was constructed of rolled aluminum members with plastic keyed corners. The fiberglass mesh was secured with a flexible spline.

Hardware:

<u>Description</u>	<u>Quantity</u>	<u>Location</u>
Plastic snap latch	1	Midspan of bottom rail
Block and tackle balance system	2	One per jamb
Plastic tilt latch	2	One on each end of sash meeting rail
Metal pivot bar	2	One on each end of bottom rail

Drainage: Sloped sill

Reinforcement: No reinforcement was utilized.

Installation: The test unit was installed into the nominal 2" x 8" Spruce-Pine-Fir #2 wood test buck utilizing the integral nailing fin secured with 1" long galvanized roofing nails, 6" from each corner and every 18" on center. The nailing fin was also bedded in polyurethane. The exterior perimeter was blindstopped with wood members and secured with #8 x 3" screws every 24" on center.

Test Results:

The results are tabulated as follows:


<u>Paragraph</u>	<u>Title of Test - Test Method</u>	<u>Results</u>	<u>Allowed</u>
<u>Test Specimen #1:</u> H-C30 54 x 90			
2.2.1.6.1	Operating Force	20 lbs	45 lbs max.
	Air Infiltration per ASTM E 283 (See Note #1) @ 1.57 psf (25 mph)	0.27 cfm/ft ²	0.3 cfm/ft ² max.
<i>Note #1: The tested specimen meets (or exceeds) the performance levels specified in AAMA/NWDA 101/I.S. 2-97 for air infiltration.</i>			
	Water Resistance per ASTM E 547 (with and without screen) WTP = 4.5 psf	No leakage	No leakage
2.1.4.2	Uniform Load Structural per ASTM E 330 (Measurements reported were taken on the fixed meeting rail) @ 45.0 psf (exterior) @ 45.0 psf (interior)	0.03" 0.04"	0.22" max. 0.22" max.
2.2.1.6.2	Deglazing Test per ASTM E 987 In operating direction at 70 lbs		
	Meeting rail	0.06"/12%	0.50"/100%
	Bottom rail	0.06"/12%	0.50"/100%
	In remaining direction at 50 lbs		
	Left stile	0.06"/12%	0.50"/100%
	Right stile	0.06"/12%	0.50"/100%
Forced Entry Resistance per ASTM F 588-97			
Type: A			
Grade: 10			
	Lock Manipulation Test	No entry	No entry
	Test A1 through A5	No entry	No entry
	Test A7	No entry	No entry
	Lock Manipulation Test	No entry	No entry

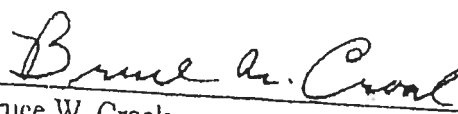
Test Results:

<u>Paragraph</u>	<u>Title of Test - Test Method</u>	<u>Results</u>	<u>Allowed</u>
<u>Test Specimen #1: (Continued)</u>			
<u>Optional Performance</u>			
4.3	Water Resistance per ASTM E 547 (with and without screen) WTP = 5.25 psf	No leakage	No leakage
<u>Test Specimen #2: H-C40 52 X 72*</u>			
<u>Optional Performance</u>			
4.3	Water Resistance per ASTM E 547 and 331 (with and without screen) WTP - 6.0 psf	No leakage	No leakage
4.4.2	Uniform Load Structural per ASTM E 330 (Measurements reported were taken on the fixed meeting rail) (Loads held for 33 seconds) @ 47.0 psf (exterior) @ 47.0 psf (interior)	0.04" 0.03"	N/A N/A
	(Loads held for 10 seconds) @ 70.5 psf (exterior) @ 70.5 psf (interior)	0.07" 0.04"	0.21" max. 0.21" max.

Detailed drawings, representative samples of the test specimen, and a copy of this report will be retained by ATI for a period of four years. The above results were secured by using the designated test methods and they indicate compliance with the performance requirements of the above referenced specification. This report does not constitute certification of this product which may only be granted by the certification program administrator.

For ARCHITECTURAL TESTING, INC:


Adam A. Fodor
Technician


Bruce W. Croak
Director - Product/Physical Testing

**AAMA/NWWDA 101/I.S.2-97
TEST REPORT SUMMARY**

Rendered to:

MI HOME PRODUCTS, INC.

SERIES/MODEL: 450/480/650/680

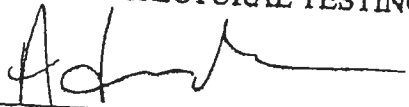
TYPE: Aluminum Fixed Window

RATING: F-C80 72 x 96

Title of Test	Results
Overall Design Pressure	80 psf
Air Infiltration	<0.01 cfm/ft ²
Water Resistance	12.0 psf
Structural Test Pressure	+120.0 psf
Forced Entry Resistance	Grade 10

Reference should be made to Report No. 01-38781.01 for complete test specimen description and data.

For ARCHITECTURAL TESTING, INC.


Adam Fodor, Technician

AF:tjp



Architectural Testing

AAMA/NWWDA 101/I.S.2-97 TEST REPORT

Rendered to

MI HOME PRODUCTS, INC.
650 West Market Street
Gratz, Pennsylvania 17030-0370

Report No: 01-38781.01

Test Date: 01/23/01

Report Date: 02/22/01

Expiration Date: 01/23/05

Project Summary: Architectural Testing, Inc. (ATI) was contracted to witness tests on a Series/Model 450/480/650/680, aluminum fixed window at the MI Home Products, Inc. in-plant test facility in Elizabethtown, Pennsylvania. The sample tested successfully met the performance requirements for an F-C80 72 x96 rating. Test specimen description and results are reported herein.

Test Specification: The test specimen was evaluated in accordance with AAMA/NWWDA 101/I.S.2-97, *Voluntary Specifications for Aluminum, Vinyl (PVC) and Wood Windows and Glass Doors*.

Test Specimen Description:

Series/Model: 450/480/650/680

Type: Aluminum Fixed Window

Overall Size: 6' 0-1/4" wide by 8' 0" high

Fixed Daylight Opening Size: 5' 9-1/2" wide by 7' 9-1/2" high

Finish: All aluminum was painted.

Glazing Details: The window utilized a 7/8" thick sealed insulating glass unit fabricated from two sheets of 3/16" thick, clear, tempered glass and a spacer system. The lite was interior glazed onto silicone bedding and dual-sided adhesive foam tape, while secured with aluminum snap-fit glazing beads and polypile weatherstrip.

Test Specimen Description: (Continued)

Frame Construction: The frame was constructed of thermally broken extruded aluminum members with coped, butted and sealed corners fastened with two screws each.

Drainage: No fabricated drainage was utilized.

Reinforcement: No reinforcement was utilized.

Installation: The test unit was installed into the 2" x 8" Spruce-Pine-Fir #2 wood test buck utilizing the integral nailing fin bedded in polyurethane sealant. The nailing fin was secured to the buck with a 1" roofing nail at each corner, midspan of the head and sill, and two spaced evenly at the jambs.

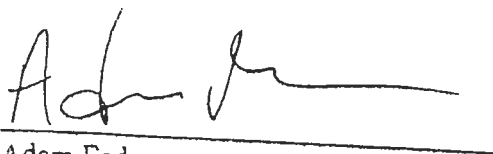
Test Results:

The results are tabulated as follows:

<u>Paragraph</u>	<u>Title of Test - Test Method</u>	<u>Results</u>	<u>Allowed</u>
2.1.2	Air Infiltration per ASTM E 283 (See Note #1) @ 1.57 psf (25 mph)	<0.01 cfm/ft ²	0.3 cfm/ft ² max.
<i>Note #1: The tested specimen meets (or exceeds) the performance levels specified in AAMA/NWDA 101/I.S. 2-97 for air infiltration.</i>			
	Water Resistance per ASTM E 547 WTP = 4.5 psf	No leakage	No leakage
2.1.4.2	Uniform Load Structural per ASTM E 330 (Measurements reported were taken on the jamb) @ 45.0 psf (exterior) @ 45.0 psf (interior)	0.02" 0.02"	0.38" max. 0.38" max.
	Forced Entry Resistance per ASTM F 588-97 Type: D Grade: 10		
	Hand Manipulation Test	No entry	No entry
<u>Optional Performance</u>			
4.3	Water Resistance per ASTM E 547 and 331 WTP = 12.0 psf	No leakage	No leakage
	Uniform Load Structural per ASTM E 330 (Measurements reported were taken on the jamb) @ 120.0 psf (exterior) @ 120.0 psf (interior)	0.03" 0.04"	0.38" max. 0.38" max.

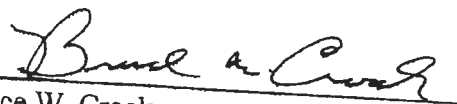
Detailed drawings, representative samples of the test specimen, and a copy of this report will be retained by ATI for a period of four years. The above results were secured by using the designated test methods and they indicate compliance with the performance requirements of the above referenced specification. This report does not constitute certification of this product which may only be granted by the certification program administrator.

For ARCHITECTURAL TESTING, INC:



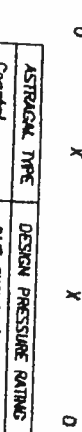
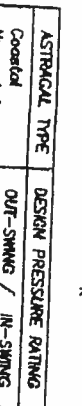
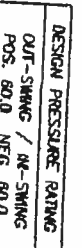
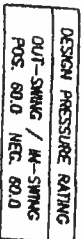
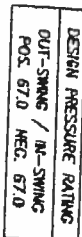
Adam Fodor
Technician

AF:tpj
01-38781.01



Bruce W. Croak
Director - Product/Physical Testing

OPAQUE INSULATED STEEL DOOR
OUT-SWING / IN-SWING 6-8 UNITS W/ & W/OUT SIDELITES



PRODUCT DESCRIPTION

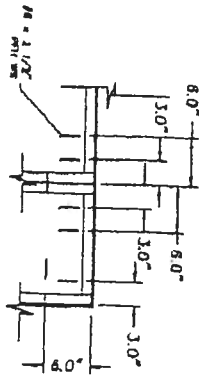
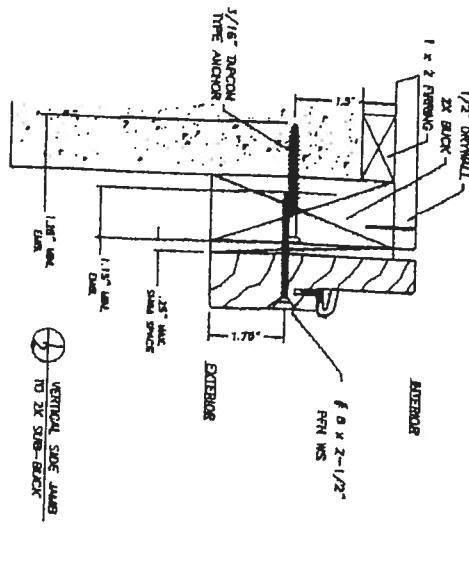
1. THE DOOR FACE SHEETS ARE 25 GA. (0.0118) IN. THICKNESS.
2. THE STILES AND RAILS ARE WOOD CONSTRUCTION.
3. THE INTERIOR DOOR CAVITY IS URETHANE.
4. THE SHELTRE GLAZING IS 0.5" INSULATED TEMPERED GLASS BY THERMA-TRU.
5. THE WOOD JAMBS ARE 1 IN. 4-9/16".
6. THE THRESHOLD IS AN ALUMINUM BRUSH FACE TYPE (OUTSWING) OR AN ALUMINUM SLODE TYPE (INSWING).
- *7. THE STANDARD ALUMINUM ASTRALC UTILIZES 7.5" LONG x 0.312" DIA. STEEL ROD WITH A 6.0" LONG ALUMINUM SLIDE ROD REINFORCEMENT BAR TOP AND BOTTOM.
8. ALL LATCHBOLT AND DEADBOLT HARDWARE MUST BE CHINA/LOCAL GRADE 1 WITH A 181 EDGE PREP AND A MINIMUM 1.0" DEADBOLT THROW.

Lyndon F. Schmidt
Florida P. E. No. 43409
19506 French Lake Drive Lutz, Fl. 33559

DATE	7/30/0
ACAD	M.T.S.
COUR	WLN
CHG	RW
SHOWN NO.	
TR	100-0
SHEET	OF 4

PRODUCT:
WOOD EDGE STEEL DOOR
OPAQUE W/WO SIDELITES
PART OR ASSEMBLY:

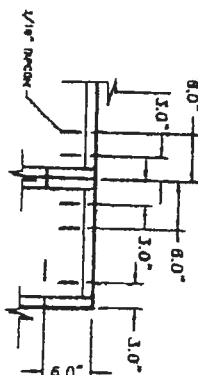
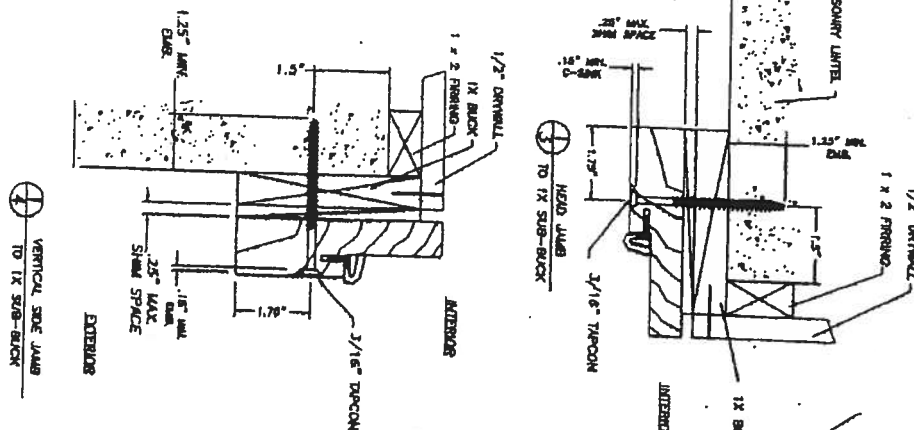
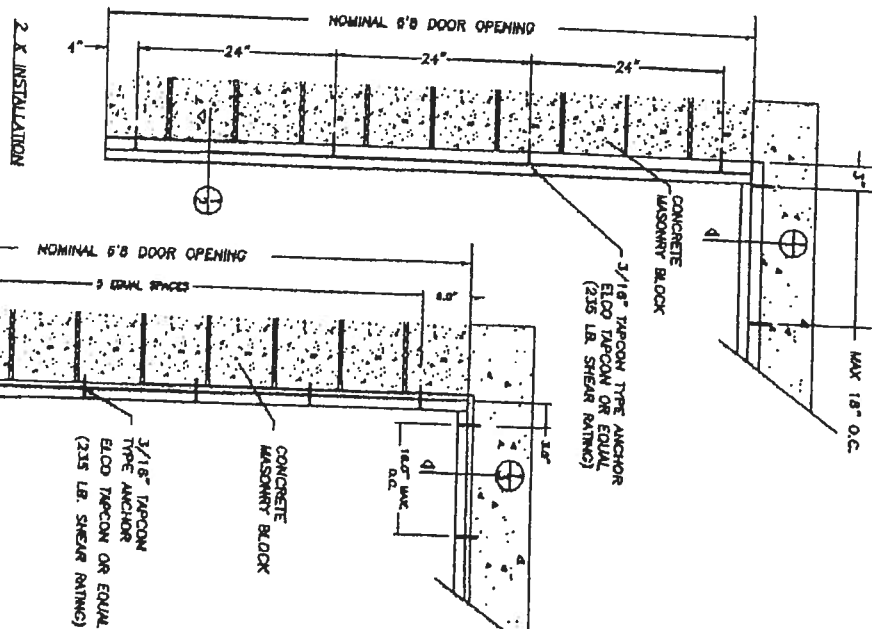
THERMA-TRU CORPORATION
 1687 WOODLANDS DRIVE
 MAUMEE, OHIO



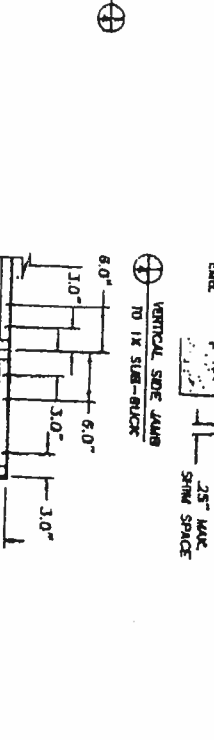
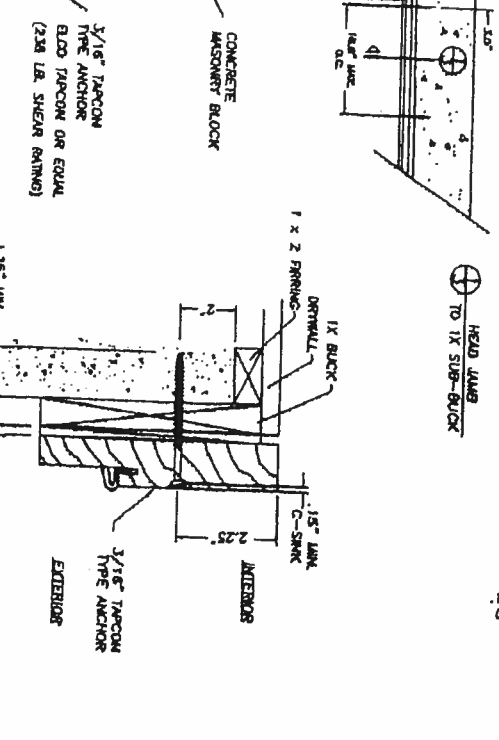
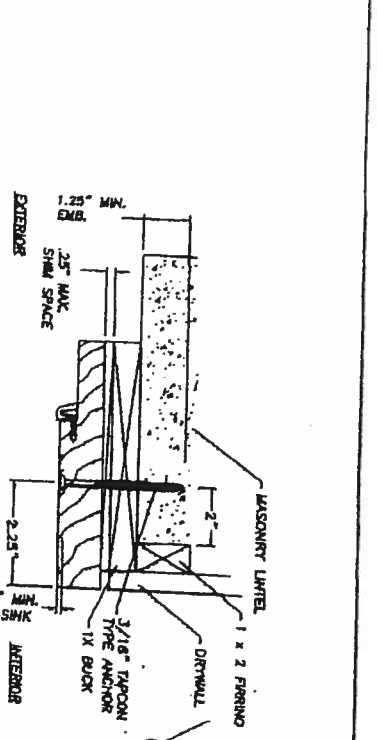
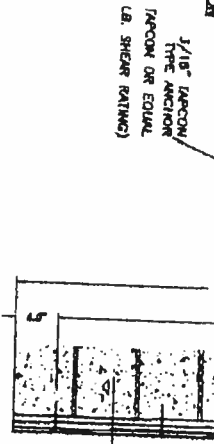
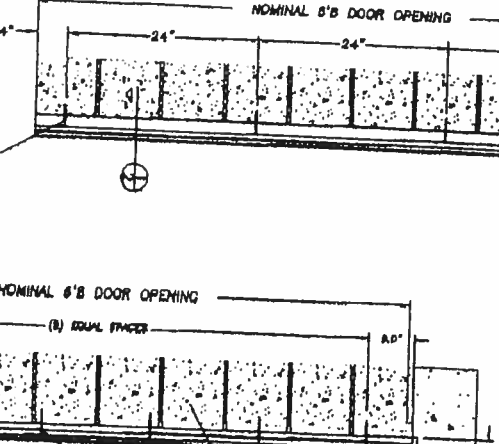
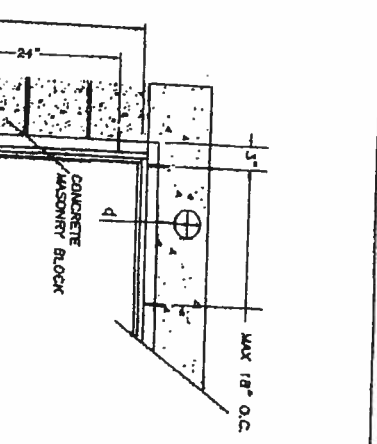
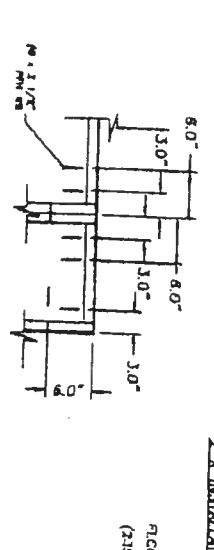
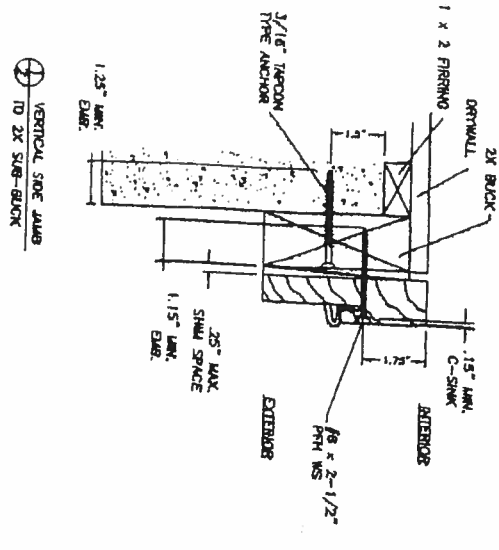
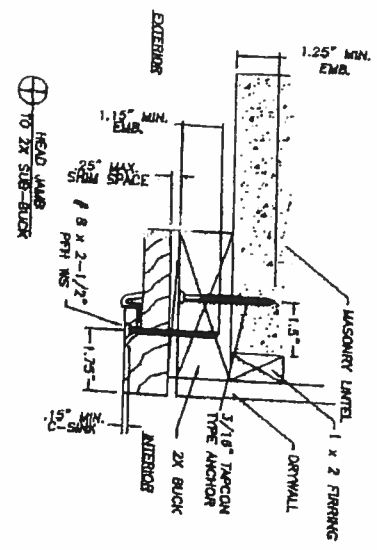
ANCHORING OF SADDLE NO. 28. 8N16W

NOTE:

A minimum clearance of 2.0" for all anchoring screws to mortar joints must be maintained.



ANCHORING OF SOLUBLE THROUGH IX NUCLEI



NOTE:
1. When using a 1x sub-block a 6-8/16" joint is required to allow for min. edge spacing for Tropic type anchors.
2. A minimum clearance of 2.0" for all anchoring screws to mortar joints must be maintained.

ANCHORING OF SIDELINE TO 2X BLOCK

1X INSTALLATION

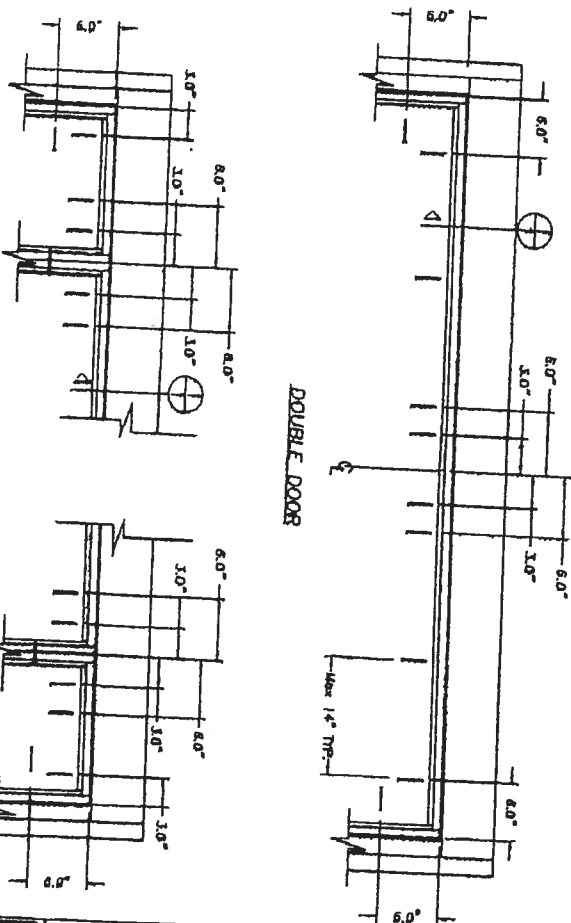
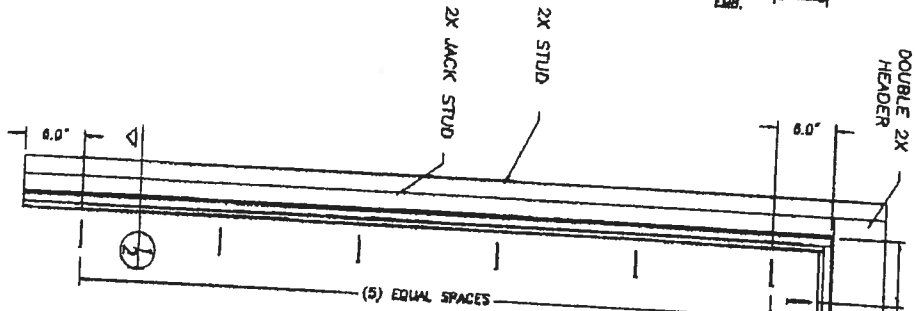
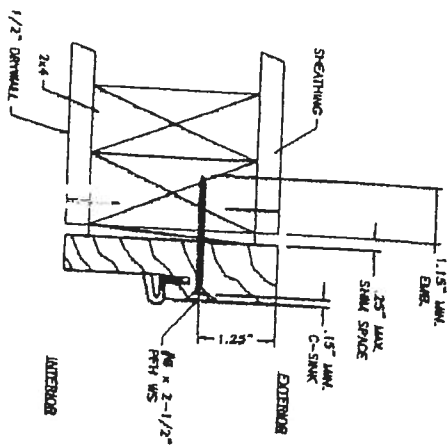
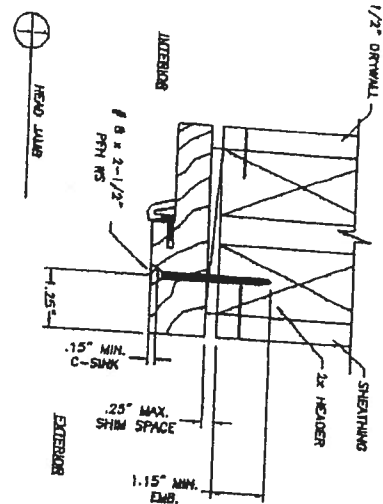
ANCHORING OF SIDELINE THROUGH 1X BLOCK

ANCHOR CROSS SECTIONS
MASONRY 6'S
OUT-SWING WOOD FRAME

THERMA-TRU CORPORATION
1687 WOODLANDS DRIVE
MAUMEE, OHIO

Lyndon F. Schmidt
Florida P. E. No. 43409

DATE: 7/30/02
DRAWN BY: MTS
CHECKED BY: RWV
SCALE: 1/4" = 1'-0"



SINGLE OR DOUBLE DOOR WITH SIDELITES

ANCHOR CROSS SECTIONS
WOOD OR STEEL STUD
IN-SWING / OUT-SWING

THERMA-TRU CORPORATION
1687 WOODLANDS DRIVE
MAUMEE OHIO

AUGUST 12, 2002
Lyndon F. Schmidt
Florida P. E. No. 43409

DATE	7/30/02
DESIGN	NTS
CHECK	WLN
DATE	8/1/02
BY	RW
PROJECT	TT-108-OC

Report No. ETC 01-741-10622.0
DC Notification Number ETC 01018 - Date: May 25, 2001
ETC Certification # 99-0416.01
Test Start Date: March 23, 2001
Test End Date: May 1, 2001

Test Requested By: THERMA TRU CORP
108 Mutzfeld Rd.
Butler, IN 46721
Phone 219 - 868 - 5811
Facsimile 219 - 868 - 5190

Tests Conducted: PA 201, PA 202 & PA 203 (with no deviations)

Design Pressures:	Specimen 1	(PA 202)	Out-swing	+ 67.0 psf.	- 67.0 psf.
	Specimen 2,	(PA 202)	In-swing	+ 67.0 psf.	- 67.0 psf.
	Specimen 5	(PA 201 & 203)	In-swing	+ 67.0 psf.	- 67.0 psf.
	Specimens 3 & 4	(PA 201 & 203)	Out-swing	+ 67.0 psf.	- 67.0 psf.

Section 1 - DESCRIPTION OF SERIES:

Model Designation - Therma-Tru Construction Series Opaque Wood Edge Steel Door

Overall Size:

Specimens 1, 3 & 4 - Out-swing Bumper Threshold - 37.5 in. W. x 80.5 in. H. x 4.6 in. D
Specimens 2 & 5 - In-swing Saddle Threshold - 37.5 in. W x 82.0 in. H x 4.6 in. D

Configuration: All Specimens are operable (X)

No. & Size of Doors: All Specimens are opaque door panels
1 active leaf - 36.0 in. W x 79.25 in. H

Section 2 - MATERIAL CHARACTERISTICS:

Frame and Door Material: Finger jointed pine jambs and steel panels.

Florida Registered Professional Engineers Review:

Reg. # 42929, May 25, 2001 - Joseph L. Doldan

Signature: *Joseph L. Doldan*

Section 2 - MATERIAL CHARACTERISTICS Cont.:

ETC-01-741-10622.0
Page 2 of 10

Frame Construction:

The head jambs and side jambs are finger jointed pine measuring 4.656 in. W. x 1.211 in. Thk. The head jamb and side jambs are mortised, butted and joined using (3) 0.5 in. Crown x 2 in. - 16 ga. wire staples at each end. The following thresholds were tested, specimens 1, 3 & 4 - Therma-Tru Aluminum Out-swing Bump measuring 4.602 in. x 0.837 in. and attached to the jamb with (2) 0.5 in. Crown x 2.5 in. - 16 ga. wire staples at each end. Specimen 1A was affixed with an add-on high dam sill that increased the height of the original bump threshold to 1.878 in. at the inner most plane of the frame system. Specimens 2 & 5 - Self-adjusting In-swing saddle threshold (Alum/Wood/Vinyl) measuring 5.767 in. x 1.548 in. and attached to the jamb with (2) 0.5 in. Crown x 2.5 in. - 16 ga. wire staples at each end. The hinge jamb was mortised to receive Therma-Tru 4.0 in. x 4.0 in. self-locating hinges located at 9.25 in., 38.5 in. and 67.75 in. from the top of the door jamb.

Panel Construction:

The panel is constructed from 25 Ga. (0.018 in. min. thick) galvanized and primed coated steel face sheets. The interior cavity of each door is filled with BASF polyurethane foam. The face sheet edges are roll formed to form a mechanical interlock with the hinge (1.234 in. thick x 1.660 in. wide) and latch finger jointed pine stiles (1.242 in. thick x 1.660 in. wide). The stiles are machined to interlock with the steel face sheets. The top rail is finger jointed pine (0.789 in. thick x 1.660 in. wide) and the bottom rail is wood composite (0.892 in. thick by 1.660 in. wide) and kerfed to receive a door sweep (sweep used on in-swing models only). The stiles and rails are pressure fitted and contact cement is used to secure them to the steel face sheets. The hinge stile was mortised at 8.375 in., 37.625 in. and 66.875 in. from the top of the door panel to receive 3 Therma-Tru 4.0" x 4.0" butt type hinges.

Glazing: N / A

Glazing Material: N / A

Glazing Method: N / A

Daylight Opening: N / A

Weather-stripping:

Specimens 1, 3 & 5 Hinge Jamb 1 pc Therma-Tru long reach foam compression weather-strip.
 Latch Jamb 1 pc Therma-Tru long reach foam compression weather-strip.
 Head Jamb 1 pc Therma-Tru long reach foam compression weather-strip.
 Corner pad seals 2 - 1 at each side jamb at threshold

Specimens 2 & 4 Hinge Jamb 1 pc Therma-Tru short reach foam compression weather-strip.
 Latch Jamb 1 pc Therma-Tru short reach foam compression weather-strip.
 Head Jamb 1 pc Therma-Tru short reach foam compression weather-strip.
 Corner pad seals 2 - 1 at each side jamb at threshold

Specimens 1, 3 & 4 - Out-swing Bump threshold 1 row Therma-Tru vinyl bulb weather-strip.

Specimens 2 & 5 - Therma-Tru vinyl fixed door bottom sweep.

Florida Registered Professional Engineers Review:

Reg. # 42929, ⁸⁻⁷⁻⁰¹ May 25, 2001 - Joseph L. Doldan

Signature:

Joseph L. Doldan

Section 2 - MATERIAL CHARACTERISTICS (Con't.):

Hardware: All Specimens (1) Kwikset 700 Series Latchbolt at 44.0 in. from top of panel.
(The strikeplate was attached to the jamb with (2) #8 x 2.5 in. PFH WS.)
(1) Kwikset 700 Deadbolt at 38.5 in. from top of panel.
(The strikeplate was attached to the jamb with (2) #8 x 2.5 in. PFH WS.)
(3) Therma-Tru 4 in. butt type hinges
(The hinge was fastened to the door panel with (4) #10 x 0.75 in PFH
WS and fastened to the jamb with (3) #10 x 0.75 in. PFH WS and
(1) #10 x 2.0 in. PFH WS.)

Weepholes: None

Muntins: None

Reinforcement: None

SEALANT: Latex caulking as needed to seal unit into rough opening.

ADDITIONAL DESCRIPTION:

All specimens were installed in a wood test buck.

Section 3 - INSTALLATION:

Screws and Method of Attachment:

Specimens 1, 2, 3, 4 & 5

14 - # 8 x 2.5 in. PFH WS, used to fasten the frame to the wood buck at head and side jambs.

(2) header - one at 6.0 in. from each end.

(6) hinge and latch jamb - In-swing one at 6.0 in. from each end and (4) additional at 14.0 in. on center.
Out-swing one at 6.0 in. from each end and (4) additional at 13.75 in. on center.

(3) threshold - 6.0 from each end and one in the center.

Note - Specimens 2 and 5 (in-swing) were not attached to the wood buck with any screws.

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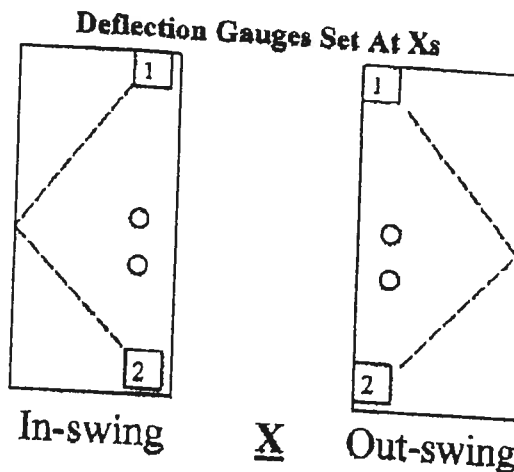
Signature:

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Section 4 - SEQUENCE OF TESTS PERFORMED:

Test Sequence: PA 202

1. Air Infiltration
2. 1/2 Test Pressure Positive
3. Design Pressure Positive
4. 1/2 Test Pressure Negative
5. Design Pressure Negative
6. Water Infiltration Positive Direction
7. Full Test Pressure Positive
8. Full Test Pressure Negative
9. Forced Entry



Deflection was measured with two (2) Aerospace 2.0" dial indicators: location # 1-SN 213293 and location # 2-SN213848.

TEST RESULTS:

AIR INFILTRATION

Air Infiltration Tests were conducted in accordance with DCBCCD PA 202-94

Air at 1.57 psf		Actual	Allowable
Specimen 1	Out-swing	0.02 CFM/SQ FT	0.34 CFM/SQ FT
Specimen 2	In-swing	0.17 CFM/SQ FT	0.34 CFM/SQ FT

WATER INFILTRATION TEST

Water Infiltration Test was conducted in accordance with DCBCCD PA 202 - 94

Specimen 1	Out-swing	Water @ 8.25 psf for 15 min.	No water penetration over sill.
Specimen 1A	Out-swing	Water @ 10.0 psf for 15 min.	No water penetration over sill.
Specimen 2	In-swing	Water @ 2.86 psf for 15 min.	No water penetration over sill.

Note: Specimen 1 (renamed 1A for water test) was affixed with an add on prototype threshold increasing the inner plane of the threshold to 1.875 in. above floor to achieve the higher water test pressure of 10.0 PSF.

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TEST RESULTS Cont.:**STATIC AIR PRESSURE TESTS**

Static Tests were conducted in accordance with DCBCCD PA 202-94

Specimen 1 (out-swing)		Design Loads + 67.0 psf, - 67.0 psf.		
Range of test	Time (Sec.)	Load (psf)	Deflection (in.)	Perm. Set (in.)
Positive loads				
1/2 Test	30	50.25		
Design	30	67.00		
Test	30	100.50	Door T (1) 0.389 Door B (2) 0.372	0.015 0.016
Range of test	Time (Sec.)	Load (psf)	Deflection (in.)	Perm. Set (in.)
Negative loads				
1/2 Test	30	50.25		
Design	30	67.00		
Test	30	100.50	Door T (1) 1.750 Door B (2) 1.650	0.281 0.257

- (1) Door T - Max. allowable perm. set at completion of test load (0.4% of span) $.004 \times 79.25 \text{ in.} = 0.317 \text{ in.}$
 (1) Door T - Max. allowable perm. set at completion of test load (0.4% of span) $.004 \times 79.25 \text{ in.} = 0.317 \text{ in.}$

Specimen 2 (In-swing)		Design Loads + 67.0 psf, - 67.0 psf.		
Range of test	Time (Sec.)	Load (psf)	Deflection (in.)	Perm. Set (in.)
Positive loads				
1/2 Test	30	50.25		
Design	30	67.00		
Test	30	100.50	Door T (1) 1.610 Door B (2) 1.510	0.274 0.251
Range of test	Time (Sec.)	Load (psf)	Deflection (in.)	Perm. Set (in.)
Negative loads				
1/2 Test	30	50.25		
Design	30	67.00		
Test	30	100.50	Door T (1) 0.395 Door B (2) 0.365	0.012 0.010

- (1) Door T - Max. allowable perm. set at completion of test load (0.4% of span) $.004 \times 79.25 \text{ in.} = 0.317 \text{ in.}$
 (1) Door T - Max. allowable perm. set at completion of test load (0.4% of span) $.004 \times 79.25 \text{ in.} = 0.317 \text{ in.}$

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TEST RESULTS Cont.:

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FORCED ENTRY TEST

Forced Entry Test was conducted in accordance with DCBCCD PA202-94

Specimen	Size	Time	Result
Specimen 1	37.5 in. W x 80.5 in. H	30 seconds	(Doors remained locked & shut)
Specimen 2	37.5 in. W x 82.0 in. H	30 seconds	(Doors remained locked & shut)

NOTE: Active door panel remained engaged and was operable before and after all tests.

IMPACT TEST - LARGE MISSILE

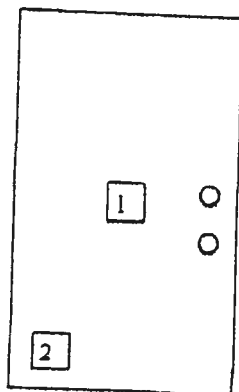
Impact tests were conducted in accordance with DCBCCD PA 201-94.

Note:

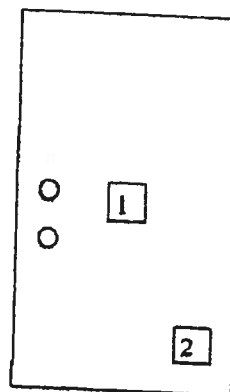
X measurement from left edge of specimen.

Y measurement from top edge of test specimen.

Type and weight of missile: # 2 Southern Yellow Pine, Nominal 2x4,
Length approx. 88.25 in., Weight - 9 lb.



X (In-swing)



X (Out-swing)

Specimen 3 Opaque Single Door (Out-swing)

Impact No.	Impact Loc.	Speed (F/Sec)	X-Meas. (in.)	Y-Meas. (in.)
1.	1	50.1	16.75	40.25
2.	2	50.2	28.75	71.00

None of the impacts penetrated the specimen and all locks remained engaged. P-7-01

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TEST RESULTS Cont.:

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IMPACT TEST - LARGE MISSILE Cont:

Specimen 4 Opaque Single Door (Out-swing)

Impact No.	Impact Loc.	Speed (Ft/Sec)	X-Meas (in.)	Y-Meas (in.)
1.	1	50.1	18.0	40.0
2.	2	50.0	28.5	72.5

None of the impacts penetrated the specimen and all locks remained engaged.

Specimen 5 Opaque Single Door (In-swing)

Impact No.	Impact Loc.	Speed (Ft/Sec)	X-Meas (in.)	Y-Meas (in.)
1.	1	50.2	16.75	39.50
2.	2	50.1	8.0	72.0

None of the impacts penetrated the specimen and all locks remained engaged.

FATIGUE LOADING TEST

Cycle tests were conducted in accordance with DCBCCD PA 203

Specimen 3 Opaque Single Door (Out-swing)

Design Load psf = + 67.0 psf, - 67.0 psf

Positive loads

<u>Range of Test</u>	<u># Cycles</u>	<u>Load (psf)</u>	<u>Cycles/Min.</u>
+ 0 to 0.5	600	33.5	23
+ 0 to 0.6	70	40.2	23
+ 0 to 1.3	1	87.1	

671 cycles completed

Negative Loads

<u>Range of Test</u>	<u># Cycles</u>	<u>Load (psf)</u>	<u>Cycles/Min.</u>
+ 0 to 0.5	600	33.5	23
+ 0 to 0.6	70	40.2	23
+ 0 to 1.3	1	87.1	

671 cycles completed

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TEST RESULTS Cont.:

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FATIGUE LOADING TEST (Cont.)

Specimen 4 Opaque Single Door (Out-swing)

Design Load psf = - 67.0 psf, - 67.0 psf

Positive loads

<u>Range of Test</u>	<u># Cycles</u>	<u>Load (psf)</u>	<u>Cycles/Min.</u>
+ 0 to 0.5	600	33.5	23
+ 0 to 0.6	70	40.2	23
+ 0 to 1.3	1	87.1	23

671 cycles completed

Negative Loads

<u>Range of Test</u>	<u># Cycles</u>	<u>Load (psf)</u>	<u>Cycles/Min.</u>
+ 0 to 0.5	600	33.5	23
+ 0 to 0.6	70	40.2	23
+ 0 to 1.3	1	87.1	23

671 cycles completed

Specimen 5 Opaque Single Door (In-swing)

Design Load psf = + 67.0 psf, - 67.0 psf

Positive loads

<u>Range of Test</u>	<u># Cycles</u>	<u>Load (psf)</u>	<u>Cycles/Min.</u>
+ 0 to 0.5	600	33.5	23
+ 0 to 0.6	70	40.2	23
+ 0 to 1.3	1	87.1	23

671 cycles completed

Negative Loads

<u>Range of Test</u>	<u># Cycles</u>	<u>Load (psf)</u>	<u>Cycles/Min.</u>
+ 0 to 0.5	600	33.5	23
+ 0 to 0.6	70	40.2	23
+ 0 to 1.3	1	87.1	23

671 cycles completed

Specimens showed no resultant failure or duress after cycle test. No failure of fasteners. Locks remained engaged. There were no cracks longer than 5 in. x 1/16 in. through which air could pass observed. The door was operable at end of test.

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Signature:

Joseph L. Doldan

Section 5 - DRAWINGS TO BE SUBMITTED:

1. L-2110 sheets 1 through 10 of 10
2. Laboratory Anchor Sketch

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.

Observers:

Steve Kepler – Project Scientist, THERMA-TRU Corp.
Rick Wright – Consultant, R.W. Building Consultants, Inc.

Dade County Witness:

Not present

All Tests Witnessed by:

Joseph L. Doldan, P.E.
Arthur Murray, ETC Laboratories
Bill Yanda, ETC Laboratories

cc: THERMA TRU CORP. (2)
Rick Wright (2)
File (1)

Florida Registered Professional Engineers Review:

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Signature:

Joseph L. Doldan

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". 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.

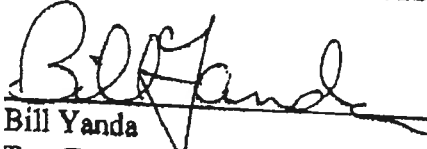
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For ETC Laboratories

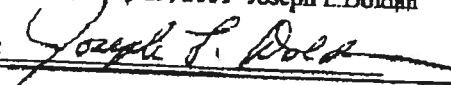

Bill Yanda
Test Technician


Arthur Murray
Laboratory Manager
Wind Engineering Laboratory

Florida Registered Professional Engineers Review:

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Reg. # 42929, May 25, 2001 - Joseph L. Doldan

Signature:





January 31, 2002

FEB - 4 2002

TO: OUR FLORIDA CUSTOMERS:

Effective February 1, 2002, the following TAMKO shingles, as manufactured at TAMKO's Tuscaloosa, Alabama, facility, comply with ASTM D-3161, Type I modified to 110 mph. Testing was conducted using four nails per shingle. These shingles also comply with Florida Building Code TAS 100 for wind driven rain.

- Glass-Seal AR
- Elite Glass-Seal AR
- ASTM Heritage 30 AR (formerly ASTM Heritage 25 AR)
- Heritage 40 AR (formerly Heritage 30 AR)
- Heritage 50 AR (formerly Heritage 40 AR)

All testing was performed by Florida State certified independent labs.

Please direct all questions to TAMKO's Technical Services Department at 1-800-641-4691.

TAMKO Roofing Products, Inc.