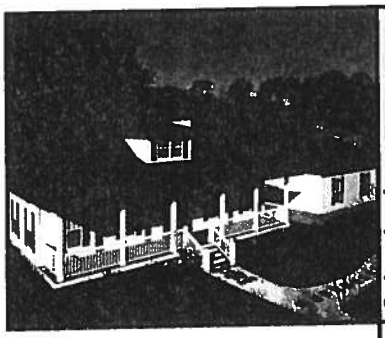
Metal Roofing

GIBRALTAR Building Products



		Galvanized	20 Yr Acrylic Coated Galvalume	25 Year SemCoat Modified Polyester over Galvanized Substrate: Barn Red	Forest Green	Marine Green	Hawaiian Blue	Cocoa Brown	Mocha Tan	Ivory	Light Stone	Burnished Slate	Old Town Gray	Charcoal Gray	Bone White	Reflective White	30 Year SemCoat PLUS Hylar® or Kynar® Resin-Based Paint over Galvalume Substrate: Brick Red	Regal Blue	Patina Green	Teal Green	Hartford Green	Slate Gray	Onyx Gray	Colonial White	Terra Cotta	Pacific Blue	Medium Bronze	Vintage Copper	Evergreen	Dark Bronze	Dove Gray	Antique White	Regal White	Slate Bronze	Chamois Tan
PANELS																																	
Sem-Lok	24 ga.		■														■			■			■								■	
	26 ga.		■														■	■	■	■	■	■	■								■	■
SM-Rib	26 ga.		■	■	■		■		■	■	■	■	■			■																	
	29 ga.	■	■	■	■		■	■	■	■	■		■	■	■																		
5V-Crimp & Corrugated	24 ga.		■																				■										
	26 ga.	■	■	■	■	■	■		■	■	■	■	■	■	■	■																	
	29 ga.	■	■																														
	utility	■																															
R Panel & PBR	26 ga.		■	■	■		■		■	■	■	■	■	■		■																	
	29 ga.	■	■	■	■		■	■	■	■	■		■	■	■	■																	
Verti-Lok & Rock-Lok	24 ga.		■																					■	■	■	■	■	■	■	■	■		
SHEETS																																	
48" x 120"	gr.50 24 ga.																									■		■		■	■		
45 1/4" x 120"	gr.50 24 ga.																								■	■	■		■				
42 1/16" x 120"	gr.50 24/26 ga.		■														■	■	■	■	■	■	■	■								■	■
27 1/2" CS Type B	24 ga.		■																					■									
	26 ga.	■	■	■	■	■	■		■	■	■	■	■	■	■	■																	
	29 ga.			■	■		■	■	■	■	■		■	■	■																		

Special Order Colors Available

More Attractive & Lasts Longer than Conventional Roofing

Cost Effective & Energy Efficient

Reduces Insurance Premiums

UL & Dade County Listings

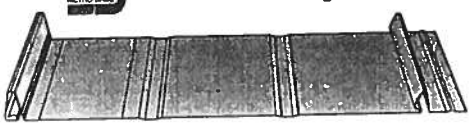
Fire Resistant

120 mph High Wind Rating

Installs over Existing Shingles or Solid Decking

Full Line of Accessories & Trims

SemLok 16" Net Coverage
Residential & Agricultural

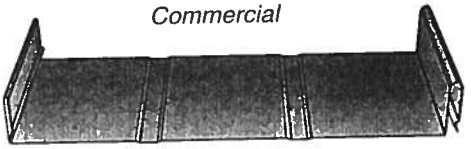


SM-Rib 36" Net Coverage
Residential & Agricultural

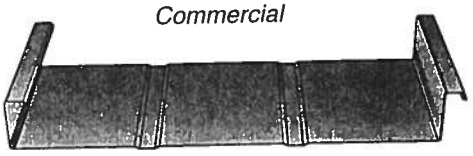
5V-Crimp 24" Net Coverage
Residential & Agricultural

PBR & R panels 36" Net Coverage
Commercial

Verti-Lok 16" Net Coverage
Commercial



Rock-Lok 16" Net Coverage
Commercial



2 1/2" Corrugated
24" Net Coverage - Walls
21 1/2" Net Coverage - Roofs
Residential & Agricultural

Pub. No. MR-001 Printed in USA 4/04

Cobra®

EXHAUST VENT FOR ROOF RIDGE

Cobra Ridge Vents Are The #1 Choice Of Professional Builders & Remodelers!†

The Weather Stopper® 5-Part Roofing System

1. LEAK BARRIER

Weather Watch® and StormGuard® are the ultimate Leak Barriers! They provide extra protection at vulnerable areas like eaves, rakes, valleys, chimneys, and skylights.

2. ROOF DECK PROTECTION

Shingle-Mate® Roof Deck Protection lays flatter for a better-looking roof. (In the West, premium Leatherback® Roof Deck Protection is a great alternative.)

3. QUALITY SHINGLES

Including Timberline®, the #1-selling architectural shingles in America—your safest choice in roofing. From the name homeowners have trusted since 1886!

4. EFFECTIVE ATTIC VENTILATION

Cobra® (coil or hard plastic) and Master Flow™ Ventilation Products help protect against premature roof deterioration (when used in a properly balanced ventilation system).

5. DISTINCTIVE RIDGE CAP SHINGLES

TIMBERTEX® and PacificRIDGE™ Distinctive Ridge Cap Shingles enhance the appearance of your home while guarding against leaks at the ridge line.

GAFMC Weather Stopper® 5-Part Roofing System **"Your Best And Safest Choice"**

Homeowner's Best Choice

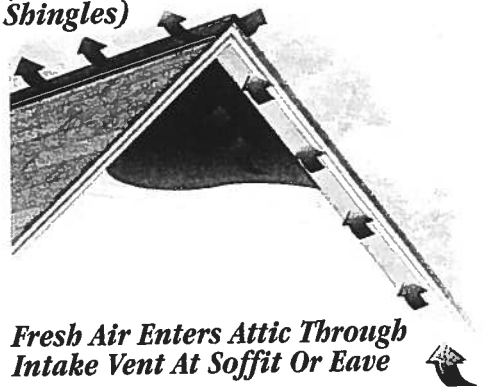
- ***Vents Your Attic...***Allows heat and condensation to escape at the most effective location—the ridge
- ***Looks Terrific...***100% shingle-over design is virtually invisible when installed
- ***Superior Protection...***Helps to prevent wood rot and extends the life of your exterior paint
- ***Safeguards Possessions...*** Helps limit mildew growth caused by damp attic air
- ***Energy Efficient...***May even reduce your utility bills!
- ***Safer...***Helps prevent problems with insects, birds, and animals in your attic
- ***Peace Of Mind...***Backed by a 40-year ltd. warranty*

**See ltd. warranty for complete coverage and restrictions.*

Professional's Best Choice

- ***Greater Homeowner Satisfaction...***Low-profile design is hidden by ridge cap shingle
- ***Easy To Install...***Quick, 3-step process; no need for complicated fitting, wrapping, connectors, or end plugs
- ***Nails Included...***Smart Nails for reliable installation or 1¾" coil nails for nail guns
- ***Superior Performance...*** Net free ventilating area: Cobra® Hand Nail: 16.9 sq. in./linear foot Cobra® Nail Gun: 14.1 sq. in./linear foot at the most effective part of the roof
- ***More Reliable...***Will not crack or dent during shipping or installation; won't corrode, rust, or turn brittle
- ***Hip & Ridge Compatible...***Works with traditional sizes (11½" & 12")

Stale Air Is Removed Through Cobra Exhaust Vent (Installed Under Ridge Cap Shingles)



Fresh Air Enters Attic Through Intake Vent At Soffit Or Eave

Balanced Ventilation Requirements

Balanced ventilation requires 1 square foot of ventilation for every 300 square feet of attic floor space.

1. Calculate the total square footage of the attic floor area (round up to the next highest number). This number will determine the minimum total linear feet of Cobra Exhaust Vent that is needed.
2. Find the appropriate amount of Cobra Exhaust Vent and minimum intake ventilation that corresponds to the total attic square footage.

Total Attic Square Footage	Recommended Length of Cobra Exhaust Vent (Feet)*	Minimum Intake Ventilation (Net Free Area in Sq. In.)
1600	23/27	430
1900	27/32	500
2200	31/37	580
2500	36/42	670
2800	40/47	750
3100	44/52	820
3400	48/57	900

** Hand Nail/Nail Gun*

NOTE: In no case should the amount of ridge exhaust ventilation exceed the amount of soffit ventilation.

	ICBO ES Listed See ICBO ES ER 5477	Made from over 50% recycled fiber over 30% post-consumer content	CLASSIFIED cULus US Class A Rated	BOCA See BOCA Evaluation Services, Inc. Research Report #93-49-01	DADE COUNTY Approval # NOA 00-0609.03	CCMC See Evaluation Report #12981-R
Cobra® Hand Nail:	Yes	Yes	Yes	Yes	Yes	Yes
Cobra® Nail Gun:	No	Yes	U.S. Only	Yes	No	

And Ventilat

Quality You Can Trust Since 1886... from North America's Largest Roofing Manufacturer

GAF® GAF MATERIALS CORPORATION

†Source: 2001 Builder Magazine Brand Use Study & 2001 Remodeling Magazine Brand Use Study

 RESCB137 73270-103

MIAMI-DADE

BUILDING CODE COMPLIANCE OFFICE (BCCO)
PRODUCT CONTROL DIVISION

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

NOTICE OF ACCEPTANCE (NOA)

Therma-Tru Corporation
108 Mutzfeld Rd.
Butler, IN 46721

SCOPE:
This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed by Miami-Dade County Product Control Division and accepted by the Board of Rules and Appeals (BORA) to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Division (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. BORA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Division that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: Premium Series 6'8 Opaque Steel Door w & wo sidelites (OS)

APPROVAL DOCUMENT: Drawing No. S-2149, titled ""Premium Series" 6-8 Single & Double Out-swing Steel Door", sheets 1 through 8, prepared by RW Building Consultants, Inc., dated 3/28/02, 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.

MISSILE IMPACT RATING: Large and Small Missile Impact and Non-Impact

LABELING: 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", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA 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 NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

The submitted documentation was reviewed by **Raul Rodriguez**

THERMA-TRU®

"PREMIUM SERIES" OUTSWING 6-8 SINGLE AND DOUBLE W/& W/OUT SIDELITES. INSULATED STEEL DOOR WITH WOOD FRAMES.

GENERAL NOTES

1. THIS PRODUCT IS DESIGNED TO MEET THE SOUTH FLORIDA BUILDING CODE 1994 EDITION FOR MIAMI-DADE COUNTY.
2. WOOD BUCKS BY OTHERS, MUST BE ANCHORED PROPERLY TO TRANSFER LOADS TO THE STRUCTURE.
3. PRODUCT ANCHORS SHALL BE AS LISTED AND SPACED AS SHOWN ON DETAILS. ANCHOR EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO.
4. DESIGNED PRESSURE RATING SEE TABLE PAGE 1.
5. MIAMI-DADE APPROVED IMPACT RESISTANT SHUTERS ARE REQUIRED FORE SIDELITES ONLY.
6. SIDELIES ARE AN OPTION AND CAN BE USED IN A SINGLE OR DOUBLE CONFIGURATION.
7. LOW PROFILE OUTSWING BUMP THRESHOLD RATED FOR +55.0 PSF & -55.0 PSF ON WATER FOR SINGLEUNITS.

INSULATED STEEL DOOR
(Common to all frame conditions)

Door & Sidelite Panel Construction:

Face sheets: 24 GA.(0.022")minimum thickness, Galvanized steel A-525 commercial quality - AKDQ per ASTM 620 with yield strength Fy(min.)=38,438 psi

Core design: Polyurethane foam core, with1.9 lbs. density by BASF.

Door Panel Construction: Flush or embossed type. The vertical edges of the skin, rolled formed to provide a mechanical interlock with finger jointed pine stiles. Wood end rails are butt jointed and pressure fitted with contact cement to the wood stiles at the corners.

Sidelite Panel Construction and Glazing: The vertical edges of the skin are rolled formed to provide a mechanical interlock with finger jointed pine stiles. Wood end rails are butt jointed to the wood stiles at the corners. The sidelite panels are sandwich glazed using a two piece lite frame.

Frame Construction: The frame is constructed from finger jointed Ponderosa Pine measuring 4.656" wide x 1.25" thick. The header is joined to the side jambs with (3) 16ga. 1/2" crown x 2" long staples at each side. The threshold is joined to the side jambs with (2) 16ga. 1/2" crown x 2.5" long staples at each side. The mullions are secured together in a sidelite application using #8 x 2 1/2" long PFH Wood Screws (6) screws per each mullion. The unit uses an Outswing Bumpface threshold, either Low Profile or High Water Dam.

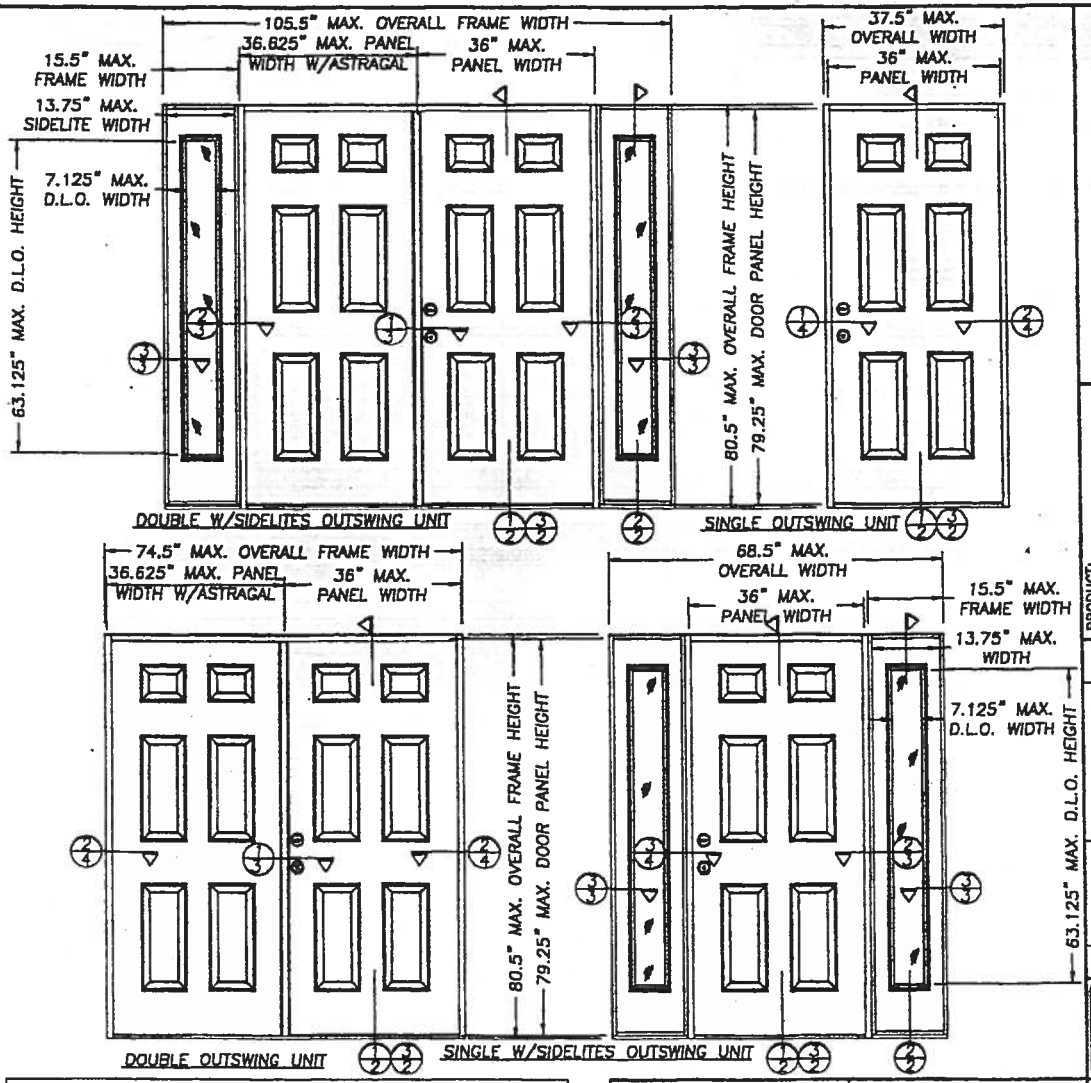


TABLE OF CONTENTS

DESIGN PRESSURE RATING

UNIT TYPE	W/LOW PROFILE BUMP THRESHOLD	W/HIGH DAM BUMP THRESHOLD
SINGLE	+ 55.0 PSF - 67.0 PSF	+ 75.0 PSF - 75.0 PSF
DOUBLE	NOT APPROVED FOR WATER	+ 65.0 PSF - 65.0 PSF
SINGLE W/SIDELITES	+ 55.0 PSF - 67.0 PSF	+ 65.0 PSF - 65.0 PSF
DOUBLE W/SIDELITES	NOT APPROVED FOR WATER	+ 65.0 PSF - 65.0 PSF

Approved as complying with the Florida Building Code
Date JUNE 20, 2002
NOA#. 01-0524.06
Miami Dade Product Control Division
By:

THERMA-TRU®
108 MUTZFELD Rd.
BUTLER, IN 46721
PH. (219) 868-5811

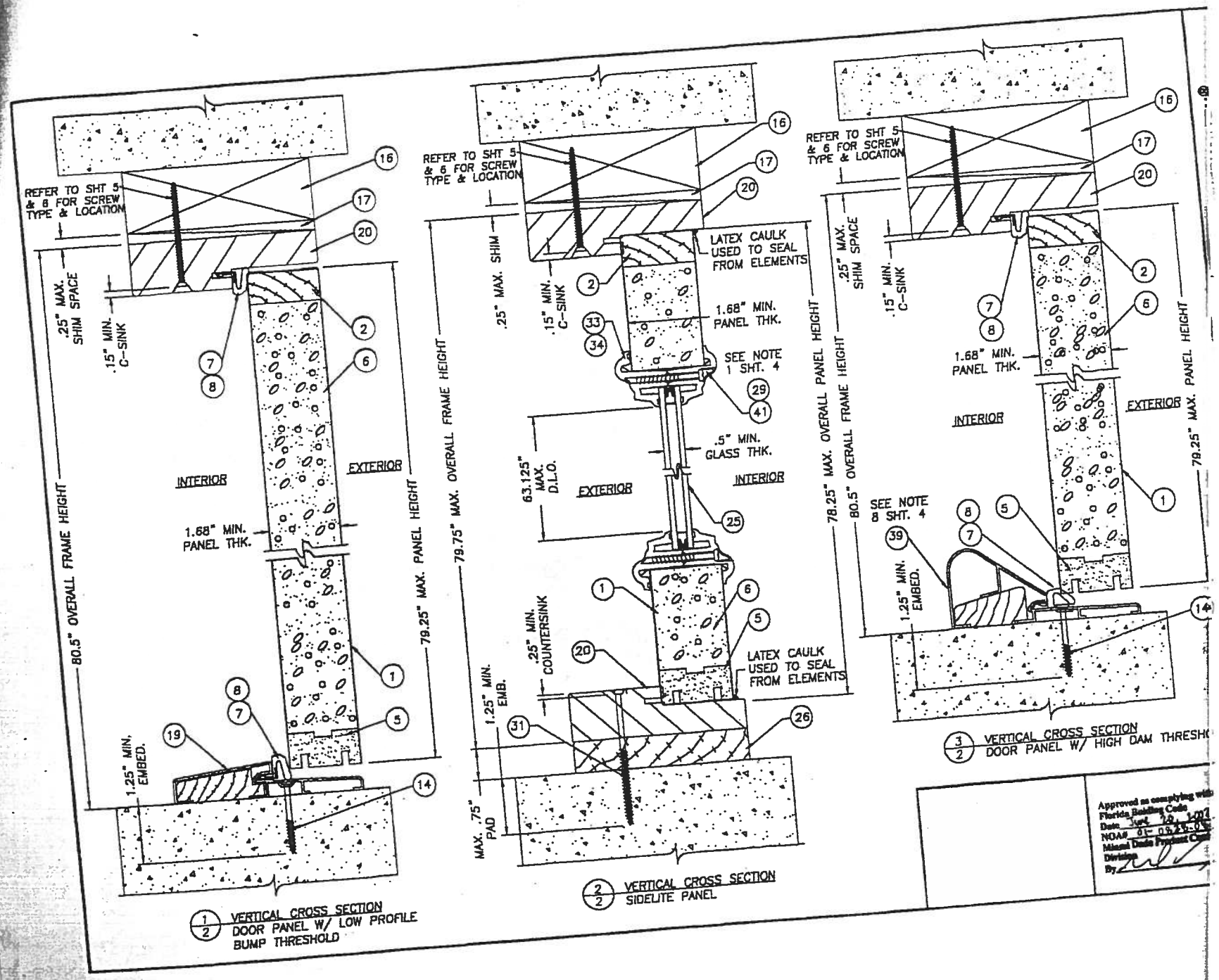
PRODUCT: "PREMIUM SERIES" 6-8 SINGLE & DOUBLE OUT-SWING STEEL DOOR

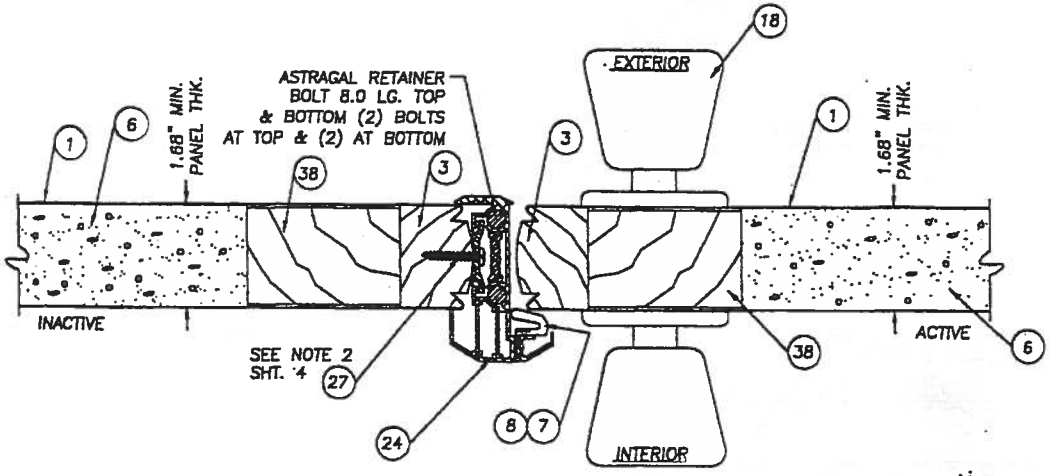
PART OR ASSEMBLY: TYPICAL ELEVATIONS & GENERAL NOTES

NO.	DATE	REVISIONS	BY
1	3/28/02	GENERAL REVISION	WLN

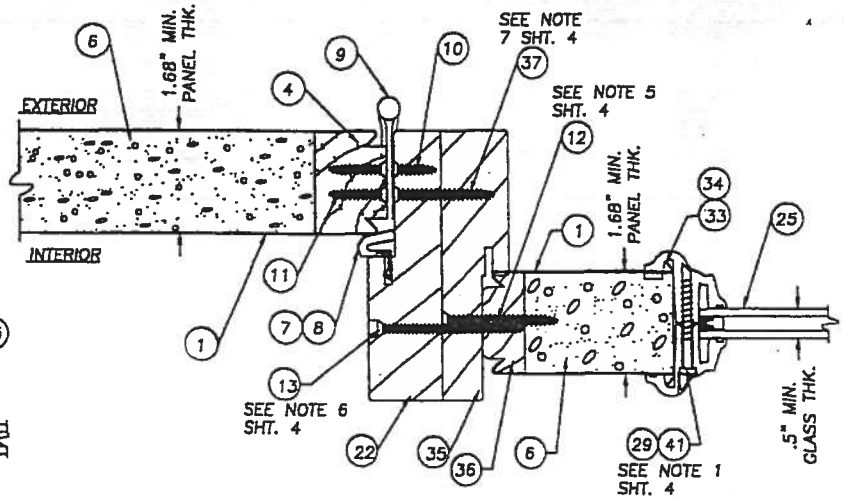
RW BUILDING CONSULTANTS, INC.
813.684.3831

DATE: 08/08/01
SCALE: N.T.S.
DWG. BY: TJH
CHK. BY: RW
DRAWING NO: S-2149
SHEET 1 OF 8

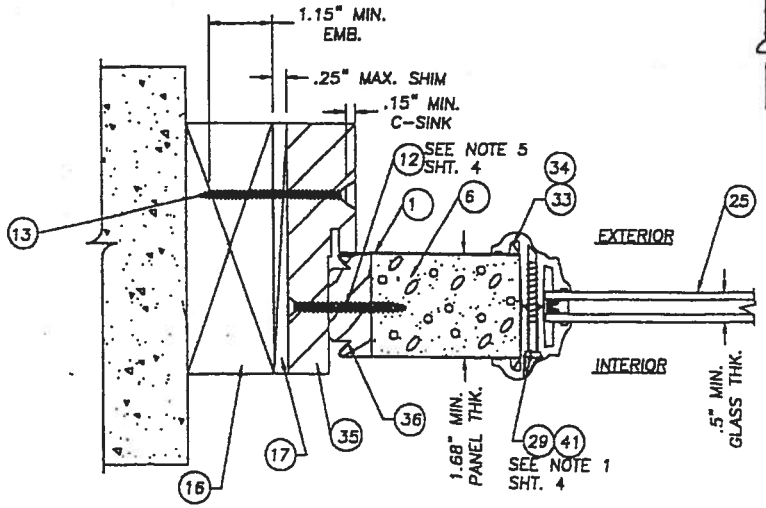

REFER TO SHT 5 & 6 FOR SCREW TYPE & LOCATION
.25" MAX. SHIM SPACE
.15" MIN. C-SINK
80.5" OVERALL FRAME HEIGHT
79.25" MAX. PANEL HEIGHT
INTERIOR
EXTERIOR
1.68" MIN. PANEL THK.
1.25" MIN. EMBED.
1 2 VERTICAL CROSS SECTION DOOR PANEL W/ LOW PROFILE BUMP THRESHOLD
79.75" MAX. OVERALL FRAME HEIGHT
LATEX CAULK USED TO SEAL FROM ELEMENTS
SEE NOTE 1 SHT. 4
.5" MIN. GLASS THK.
63.125" MAX. D.L.O.
.25" MIN. COUNTERSINK
MAX. .75" PAD
2 2 VERTICAL CROSS SECTION SIDELITE PANEL
78.25" MAX. OVERALL PANEL HEIGHT
80.5" OVERALL FRAME HEIGHT
SEE NOTE 8 SHT. 4
3 2 VERTICAL CROSS SECTION DOOR PANEL W/ HIGH DAM THRESH



1/3 HORIZONTAL CROSS SECTION @ ASTRAGAL



2/3 HORIZONTAL CROSS SECTION @ HINGE JAMB TO SIDELITE



3/3 HORIZONTAL CROSS SECTION @ SIDELITE TO BUCK

Approved as complying with the Florida Building Code
Date June 10, 2002
NOA# 01-0526.03
Miami-Dade Product Control Division
By

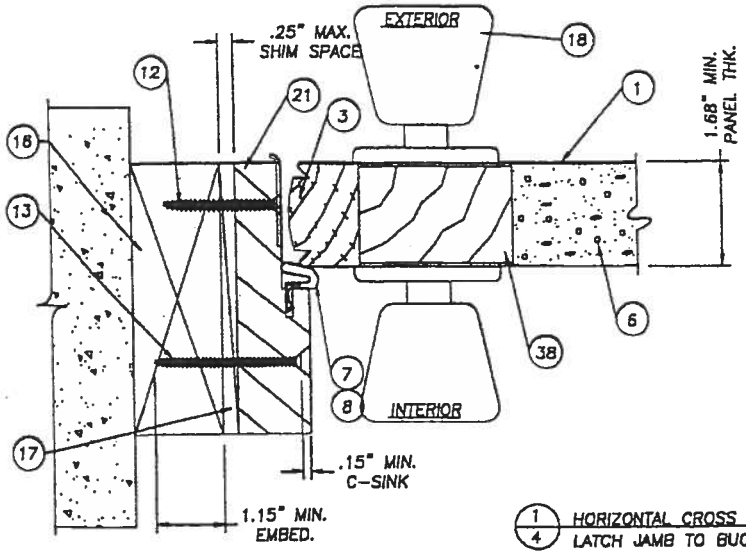
THERMA-TRU®
108 MUTZFELD Rd.
BUTLER, IN 46721
PH. (219) 868-5811

PRODUCT: "PREMIUM SERIES" 6-8 SINGLE & DOUBLE OUT-SWING STEEL DOOR
PART OR ASSEMBLY: HORIZONTAL CROSS SECTIONS

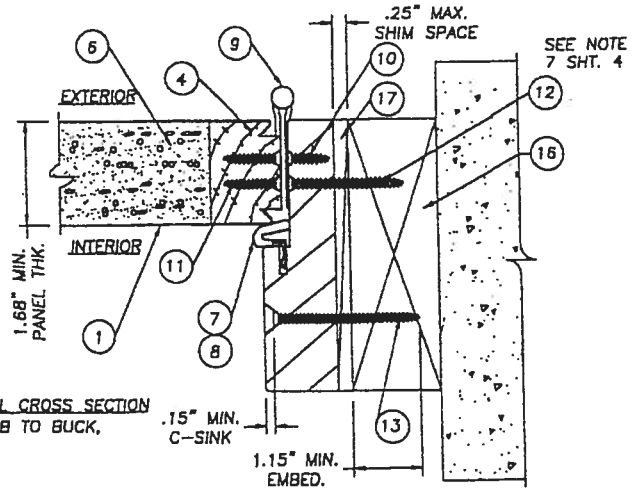
NO.	DATE	REVISIONS	BY
1	3/28/02	GENERAL REVISION	WW

RW BUILDING CONSULTANTS, INC. 813.684.3831

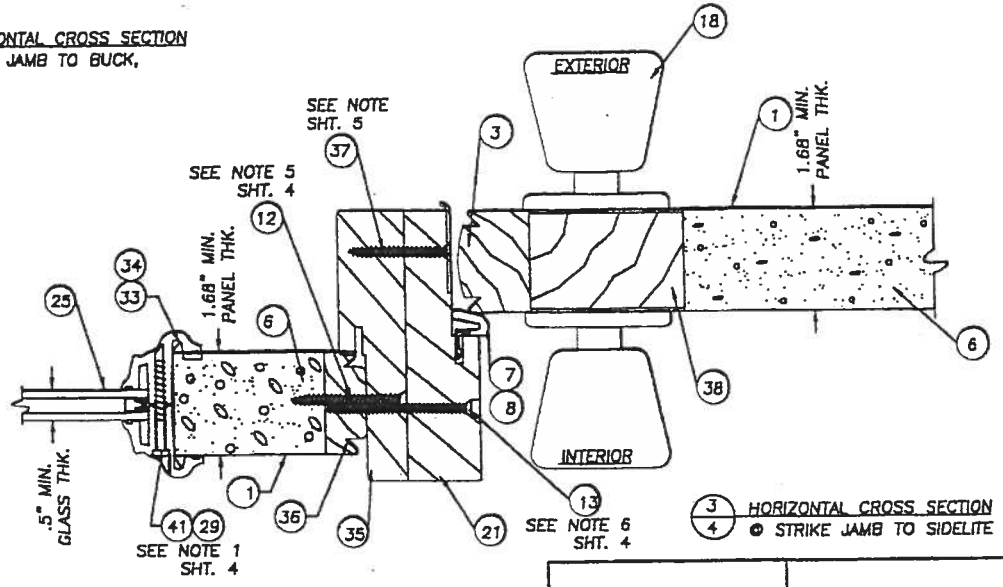
DATE: 08/08/01
SCALE: 1/2" = 1"
DWG. BY: TJH
CHK. BY: RW
DRAWING NO.: S-2149
SHEET 3 OF 8



1/4 HORIZONTAL CROSS SECTION
LATCH JAMB TO BUCK,



2/4 HORIZONTAL CROSS SECTION
HINGE JAMB TO BUCK,



3/4 HORIZONTAL CROSS SECTION
@ STRIKE JAMB TO SIDELITE

NOTES:

1. SPACING FOR ITEM #29 & #41 (LITE FRAME SCREWS) IS AS FOLLOWS: FROM THE TOP DOWN ON SIDES; 3", 14.75", 26.5", 38.25"; 50.5" & 62.25". THERE IS (1) SCREW BOTH TOP AND BOTTOM AT 4.25" IN FROM CORNER.
2. SPACING FOR ITEM #27 #8 x 1" PANHEAD SCREW ATTACHING THE ASTRAGAL TO THE INACTIVE DOOR IS AS FOLLOWS: FROM THE BOTTOM UP AND TOP DOWN 1", 3", 5", 26" AND (1) MORE 6" UP FROM THE STRIKE LOCATION.
3. THE HEAD JAMB IS ATTACHED TO THE SIDE JAMBS WITH (3) 16GA. x 1/2" CROWN x 2" STAPLES AT BOTH SIDE.
4. THE THRESHOLD IS ATTACHED TO THE SIDE JAMBS WITH (2) 16GA. x 1/2" CROWN x 2.5" STAPLES AT BOTH SIDE.
5. THE SIDELITE IS DIRECT SET INTO THE JAMB WITH ITEM #12 #10 x 2" PH.F.H. WOOD SCREW AT 8" DOWN FROM EACH CORNER AND A MAX. OF 12" O.C. ON THE SIDE JAMBS ONLY.
6. SPACING FOR ITEM #13, A #8 x 2 1/2" SCREW SECURING THE MULLIONS TOGETHER IS THE SAME AS THE PERIMETER ANCHORING SCREWS. 8" DOWN FROM THE TOP AND UP FROM THE BOTTOM WITH (4) MORE SPACED AT 13.7" O.C.
7. WHEN ATTACHING THE HINGE TO THE JAMB AND THE BUCK USE ITEM #12 A #10 x 2" SCREW. WHEN ATTACHING THE HINGE TO THE JAMB AND THE SIDELITE AT THE MULLION USE ITEM #37 A #10 x 1 3/4" SCREW.
8. ITEM #39, THE HIGH DAM THRESHOLD IS ONLY USED IN AN APPLICATION WHERE A HIGHER WATER PRESSURE MUST BE ACHIEVED.

Approved as complying with the Florida Building Code
Date June 10, 2002
NOA# 01-0525.09
Miami Dade Product Control Division
By

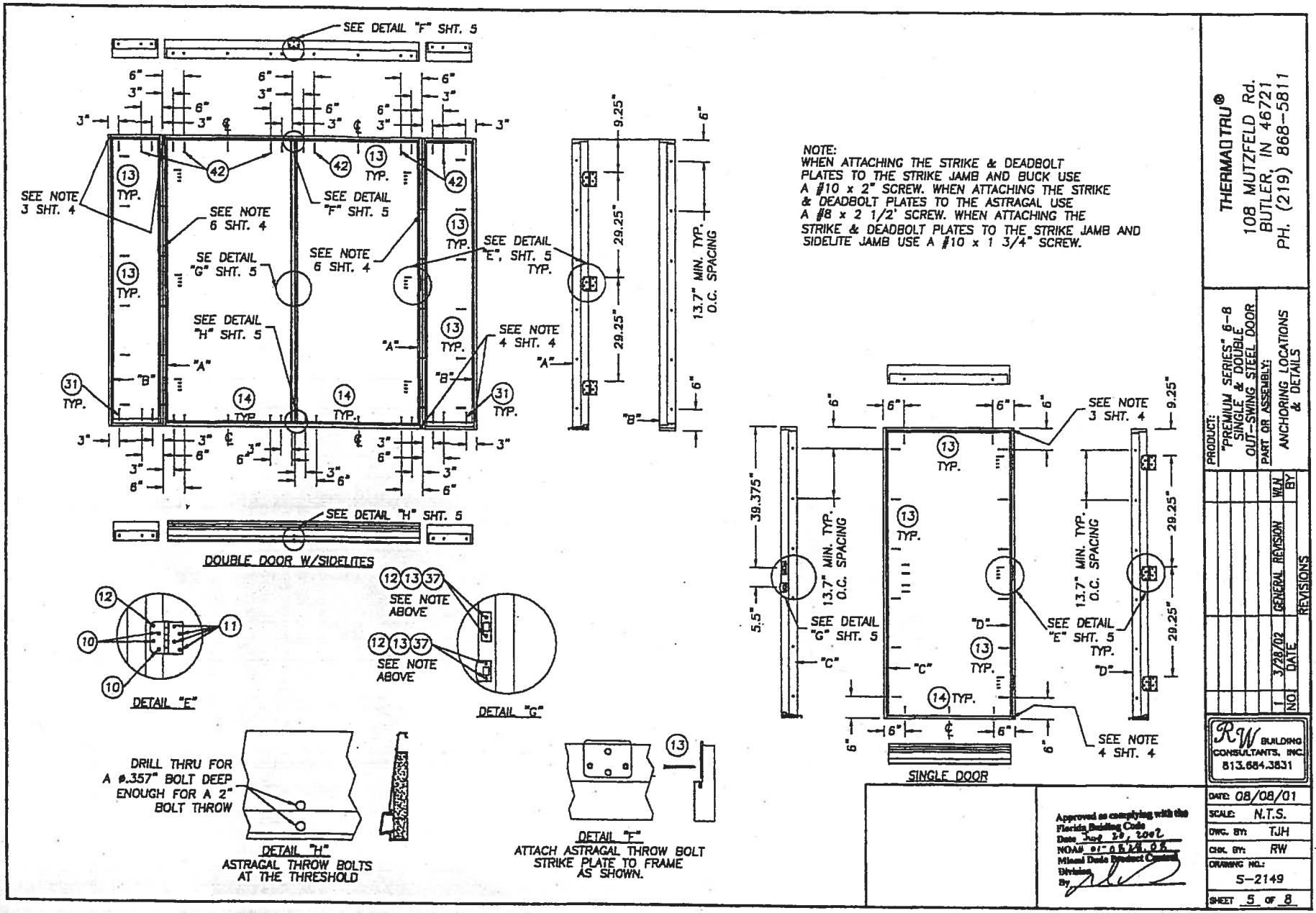
THERMA TRU®
108 MUTZFELD Rd.
BUTLER, IN 46721
PH. (219) 868-5811

PRODUCT: "PREMIUM SERIES" 6-8 SINGLE & DOUBLE OUT-SWING STEEL DOOR
PART OR ASSEMBLY: HORIZONTAL CROSS SECTIONS & NOTES

NO.	DATE	GENERAL REVISION	W.N	BY
1	3/26/02	REVISIONS		

RW BUILDING CONSULTANTS, INC. 813.684.3831

DATE: 08/08/01
SCALE: 1/2" = 1"
DWG. BY: TJH
CHK. BY: RW
DRAWING NO.: S-2149
SHEET 4 OF 8



THERMA TRU®
108 MUTZFELD Rd.
BUTLER, IN 46721
PH. (219) 868-5811

PRODUCT: "PREMIUM SERIES" 6-8 SINGLE & DOUBLE OUT-SWING STEEL DOOR

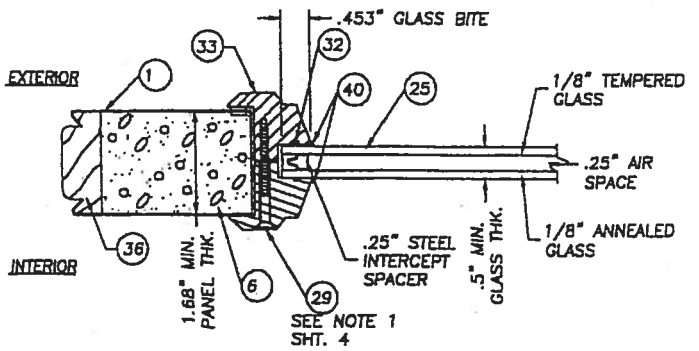
PART OR ASSEMBLY: ANCHORING LOCATIONS & DETAILS

NO	DATE	REVISIONS	BY
1	3/28/02	GENERAL REVISION	WJN

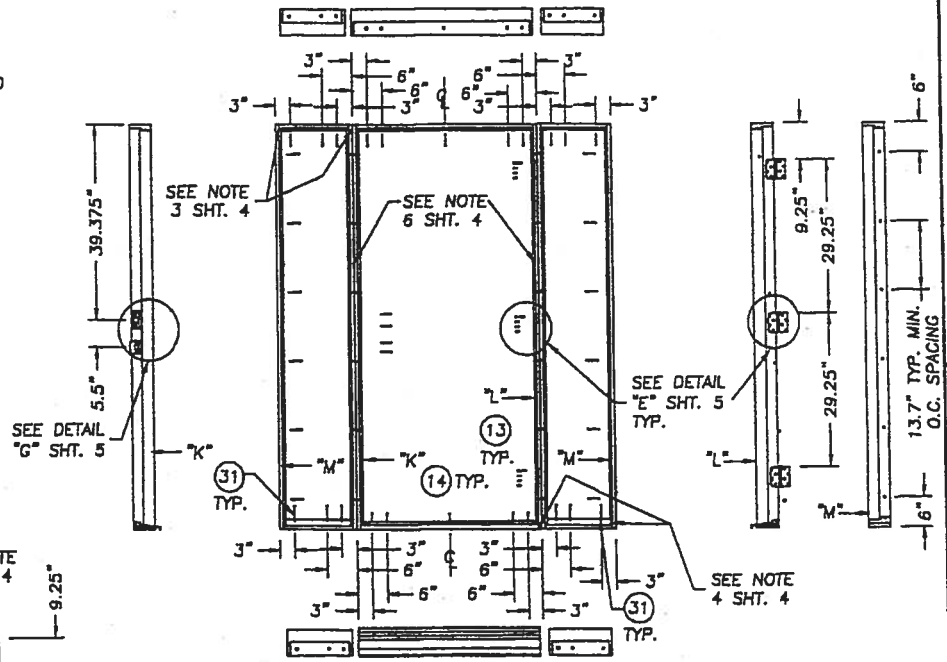
RW BUILDING CONSULTANTS, INC. 813.684.3831

Approved as complying with the Florida Building Code
Date June 24, 2002
NOA# 01-0628.08
Miami-Dade Product Control Division
By

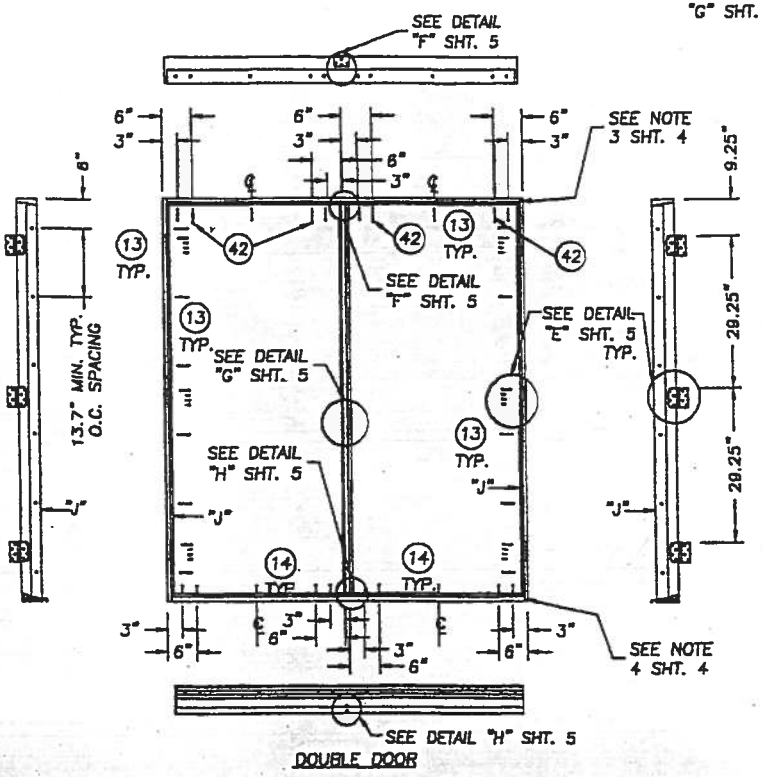
DATE: 08/08/01
SCALE: N.T.S.
DWG. BY: TJH
CHK. BY: RW
DRAWING NO.: S-2149
SHEET 5 OF 8



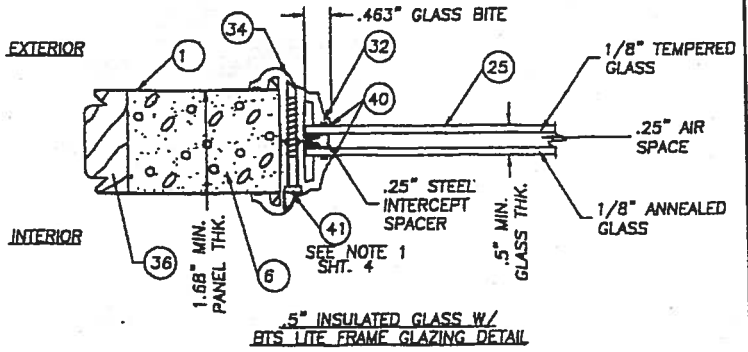
.5" INSULATED GLASS W/ PVC LITE FRAME GLAZING DETAIL



SINGLE DOOR W/SIDELITES



DOUBLE DOOR



.5" INSULATED GLASS W/ BTS LITE FRAME GLAZING DETAIL

THERMA-TRU®
108 MUTZFELD Rd.
BUTLER, IN 46721
PH. (219) 868-5811

PRODUCT: "PREMIUM SERIES" 6-8 SINGLE & DOUBLE OUT-SWING STEEL DOOR

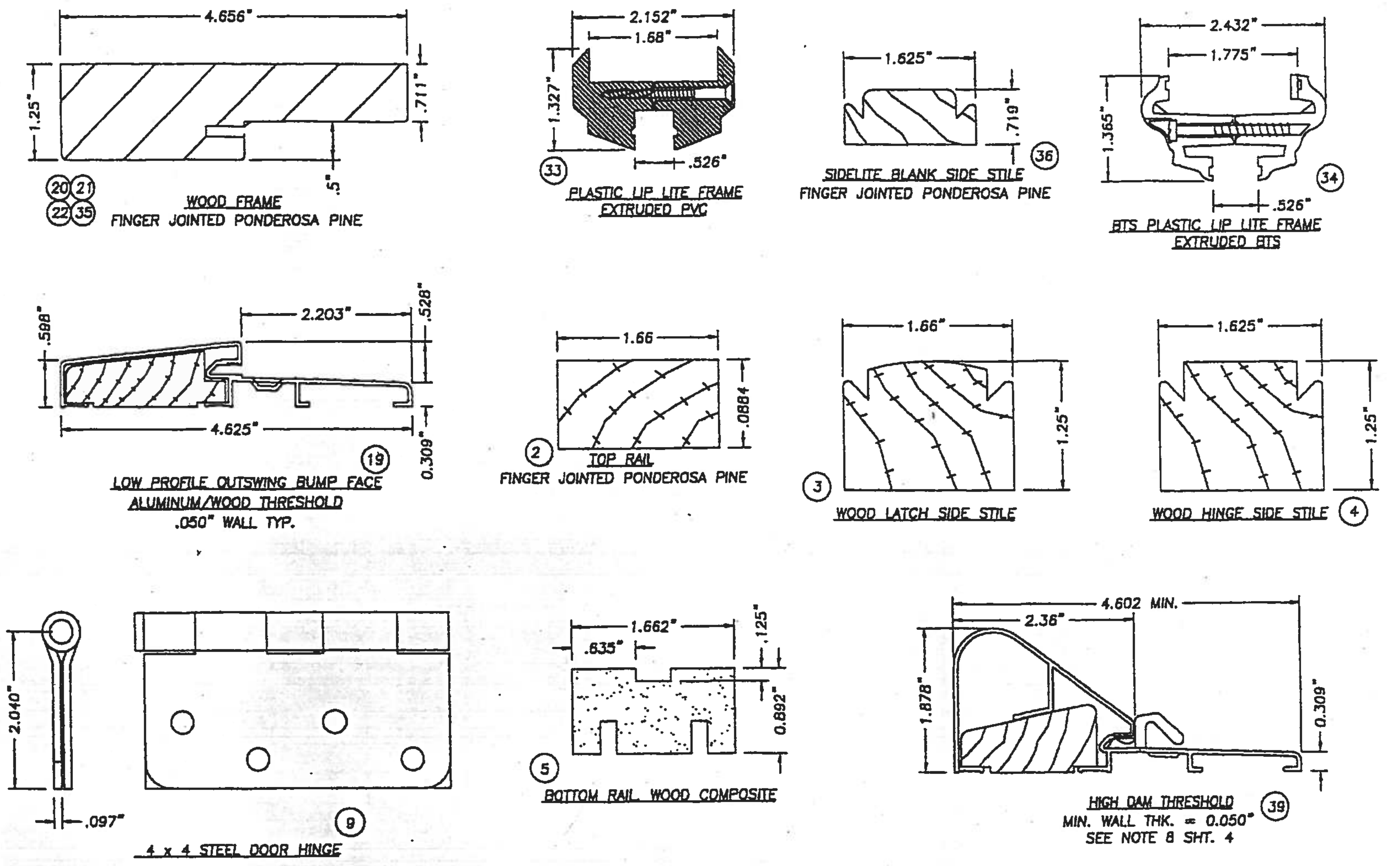
PART OR ASSEMBLY: ANCHORING LOCATIONS & GLAZING DETAILS

NO.	DATE	REVISIONS	BY
1	3/28/02	GENERAL REVISION	WJN

RW BUILDING CONSULTANTS, INC. 813.684.3831

Approved as complying with the Florida Building Code
Date June 20, 2002
NOA# 01-0426.08
Miami-Dade Product Control Division
By

DATE: 08/08/01
SCALE: N.T.S.
DWG. BY: TJH
CHK. BY: RW
DRAWING NO.: S-2149
SHEET 6 OF 8



NOTE
ALL DIMENSIONS ARE MINIMUM.
DIMENSIONS ARE THE LARGEST TESTED.

Approved as complying with the Florida Building Code
Date [illegible]
NOA# [illegible]
Miami Dade Product Control Division
By [signature]

THERMA TRU®
108 MUTZFELD Rd.
BUTLER, IN 46721
PH. (219) 868-5811

PRODUCT:
"PREMIUM SERIES" 6-8
SINGLE & DOUBLE
OUT-SWING STEEL DOOR

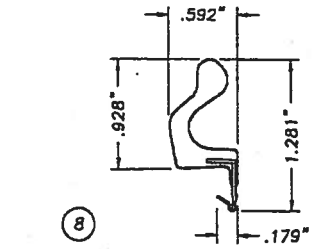
PART OR ASSEMBLY:
UNIT COMPONENTS

NO	DATE	REVISIONS	BY
1	3/28/02	GENERAL REVISION	WLN

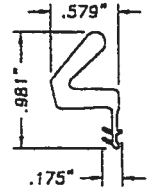
RW BUILDING CONSULTANTS, INC.
813.884.3831

DATE: 08/08/01
SCALE: N.T.S
DWG. BY: TJH
CHK. BY: RW
DRAWING NO.: S-2149
SHEET 7 OF 8

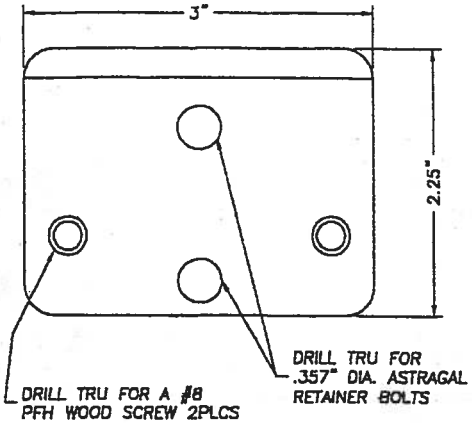
Item	DESCRIPTION	Material
1	DOOR SKIN: PREMIUM SERIES 24GA. (.022" MIN.)	STEEL
2	TOP RAIL (1.628" x .851" THERMA-TRU PONDEROSA PINE)	WOOD
3	LATCH STILE (THERMA-TRU, PONDEROSA PINE 1.66" x 1.253")	WOOD
4	HINGE STILE (THERMA-TRU, PONDEROSA PINE 1.625" x 1.25")	WOOD
5	BOTTOM RAIL (1.662" x 0.892" THERMA-TRU WOOD COMPOSITE)	WOOD COMPOSITE
6	POLYURETHANE FOAM (BASF, 1.9lbs. DENSITY)	FOAM
7	SHORT REACH COMPRESSION WEATHERSTRIP (THREMA-TRU)	FOAM
8	LONG REACH COMPRESSION WEATHERSTRIP (THREMA-TRU)	FOAM
9	4" x 4" HINGE .097" THK. (THERMA-TRU)	STEEL
10	#10 x 3/4" lg. PFH WOOD SCREW (Hinge to Frame)	STEEL
11	#10 x 1" LG. PFH WOOD SCREW	STEEL
12	#10 x 2" LG. PFH WOOD SCREW	STEEL
13	#8 x 2 1/2" LG. PFH WOOD SCREW	STEEL
14	3/16" TAPCON ANCHOR (ELCO, 1.75" MIN. LG.)	STEEL
15	NOTE USED	
16	2x WOOD BUCK	WOOD
17	MAX. 1/4" SHIM MATERIAL	WOOD
18	KWIKSET TITAN 700 SERIES PASSAGE LOCK	–
19	ONE PIECE BUMP FACE THRESHOLD LOW PROFILE (THERMA-TRU)	ALUM./WOOD
20	4.656" HEADER (THERMA-TRU, PONDEROSA PINE)	WOOD
21	4.656" STRIKE JAMB (THERMA-TRU, PONDEROSA PINE)	WOOD
22	4.656" HINGE JAMB (THERMA-TRU, PONDEROSA PINE)	WOOD
23	KWIKSET TITAN 700 SERIES DEADBOLT	–
24	ASTRAGAL WINDJAMBER II WR68T (.052" WALL)	ALUM.
25	GLAZING, 1/2" INSULATED TEMPERED GLASS	GLASS
26	3/4" THK. PRESSURE TREATED SIDELITE PAD	WOOD
27	#8 x 1" LG. PANHEAD SHEET METAL SCREW	STEEL
28	NOT USED	–
29	#6-18 x 1 3/4" PHILLIPS FLATHEAD SCREW (FOR ITEM #33)	STEEL
30	NOT USED	–
31	3/16" TAPCON ANCHOR (ELCO, 3.25" MIN. LG.)	STEEL
32	1/8 THK. CELLULAR GLAZING TAPE (STIK-II TAPE)	–
33	PLASTIC LIP LITE FRAME (PVC, THERMA-TRU)	PVC
34	PLASTIC LIP LITE FRAME (BTS, THERMA-TRU)	BTS
35	4.656" BLANK JAMB (THERMA-TRU, PONDEROSA PINE)	WOOD
36	SIDELITE SIDE STILE (THERMA-TRU, 1.625" x .719" PONDEROSA PINE)	WOOD
37	#10 x 1 3/4" LG. PFH WOOD SCREW	STEEL
38	LOCK BLOCK 2.625" x 10.375" x 1.625" THK.	WOOD
39	HIGH WATER DAM THRESHOLD (THERMA-TRU)	ALUM.
40	SILICONE CAULK	SILICONE
41	#8-10 x 1 1/2" PLASCREW (FOR ITEM #34)	STEEL
42	#10 x 3" LG. PFH WOOD SCREW	STEEL



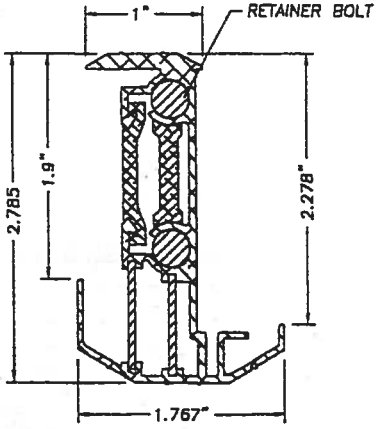
(8) LONG REACH COMPRESSION WEATHERSTRIP
FOAM CELL CORE W/VINYL JACKET



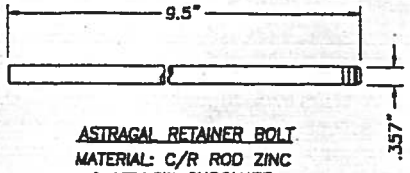
(7) COMPRESSION WEATHERSTRIP
BY THERMA-TRU
FOAM CELL CORE W/VINYL JACKET



WINDJAMBER II WR68T STRIKE PLATE



(24) WINDJAMBER II WR68T
ASTRAGAL (ALUMINUM .052" WALL TYP.)



ASTRAGAL RETAINER BOLT
MATERIAL: C/R ROD ZINC
& YELLOW CHROMATE

THERMATRU®
108 MUTZFELD Rd.
BUTLER, IN 46721
PH. (219) 868-5811

PRODUCT: "PREMIUM SERIES" 6-8 SINGLE & DOUBLE OUT-SWING STEEL DOOR

PART OR ASSEMBLY: BILL OF MATERIALS & UNIT COMPONENTS

NO.	DATE	GENERAL REVISION	BY
1	3/28/02		WLN

REVISIONS

RW BUILDING CONSULTANTS, INC.
813.884.3831

Approved as complying with the Florida Building Code
Date June 25, 2002
NOA# 01-0829.03
Miami-Dade Product Control
Division
By

DATE: 08/08/01
SCALE: N.T.S.
DWG. BY: TJH
CHK. BY: RW
DRAWING NO.: S-2149
SHEET 8 OF 8

THE WOOD STOVE INC.
611 N. MAIN STREET
GAINESVILLE, FL 32601

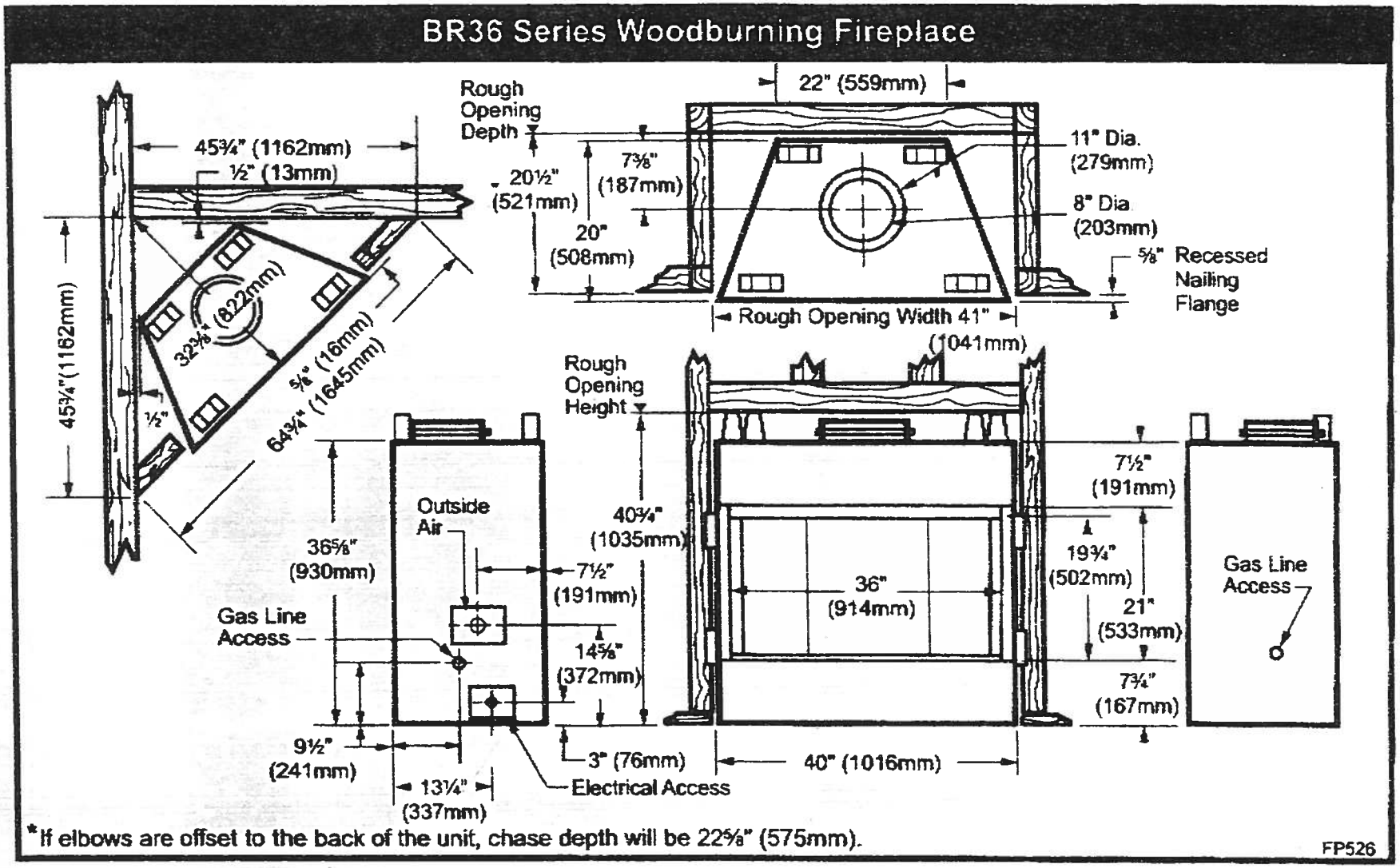


Fig. 1 BR36 Series specifications and framing.

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

Rendered to:

MI HOME PRODUCTS, INC.

SERIES/MODEL: 650 Fin
TYPE: Aluminum Single Hung Window

Title of Test	Results
Rating	H-R40 52 x 72
Overall Design Pressure	+45.0 psf -47.2 psf
Operating Force	11 lb max.
Air Infiltration	0.13 cfm/ft^2
Water Resistance	6.00 psf
Structural Test Pressure	+67.5 psf -70.8 psf
Deglazing	Passed
Forced Entry Resistance	Grade 10

Reference should be made to Report No. 01-41134.01 dated 03/26/02 for complete test specimen description and data.

For ARCHITECTURAL TESTING, INC.

Mark A. Hess, Technician

MAH:mlb

ALLEN N. REEVES
CERTIFICATE
NO. 13354
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

1 APRIL 2002

Architectural Testing

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

Rendered to

MI HOME PRODUCTS, INC.
650 West Market Street
P.O. Box 370
Gratz, Pennsylvania 17030-0370

Report No: 01-41134.01
Test Date: 03/07/02
Report Date: 03/26/02
Expiration Date: 03/07/06

Project Summary: Architectural Testing, Inc. (ATI) was contracted by MI Home Products, Inc. to perform tests on Series/Model 650 Fin, aluminum single hung window at their facility located in Elizabethville, Pennsylvania. The samples tested successfully met the performance requirements for a H-R40 52 x 72 rating.

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: 650 Fin

Type: Aluminum Single Hung Window

Overall Size: 4' 4-1/4" wide by 6' 0-3/8" high

Active Sash Size: 4' 1-3/4" wide by 3' 0-5/8" high

Daylight Opening Size: 3' 11-3/8" wide by 2' 9-1/2" high

Screen Size: 4' 0-1/4" wide by 2' 11-1/8" high

Finish: All aluminum was white.

Glazing Details: The active and fixed lites utilized 5/8" thick, sealed insulating glass constructed from two sheets of 1/8" thick, clear annealed glass and a metal reinforced butyl spacer system. The active sash was channel glazed utilizing a flexible vinyl wrap around gasket. The fixed lite was interior glazed against double-sided adhesive foam tape and secured with PVC snap-in glazing beads.

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

Allen M. Reeves
1 APRIL 2002

REEVES ☆ PROFESSIONAL ENGINEER ☆ NO. 15354 ☆ STATE OF FLORIDA

Test Specimen Description: (Continued)

Weatherstripping:

Description	Quantity	Location
0.230" high by 0.270" backed polypile with center fin	1 Row	Fixed meeting rail
0.250" high by 0.187" backed polypile with center fin	2 Rows	Active sash stiles
1/2" x 1/2" dust plug	4 Pieces	Active sash, top and bottom of stiles
1/4" foam-filled vinyl bulb seal	1 Row	Active sash, bottom rail

Frame Construction: The frame was constructed of extruded aluminum with coped, butted, and sealed corners fastened with two #8 x 1" screws through the head and sill into each jamb screw boss. End caps were utilized on the ends of the fixed meeting rail and secured with two 1-1/4" screws per cap. Meeting rail was secured to the frame utilizing two 1-1/4" screws.

Sash Construction: The sash was constructed of extruded aluminum with coped, butted, and sealed corners fastened with two #8 x 1-1/2" screws through the rails into each jamb screw boss.

Screen Construction: The screen was constructed from roll-formed aluminum with keyed corners. The fiberglass mesh was secured with a flexible spline.

Hardware:

Description	Quantity	Location
Metal cam lock with keeper		Midspan, active meeting rail with keeper adjacent on fixed meeting rail
Plastic tilt latch	2	Active sash, meeting rail ends
Metal tilt pin	2	Active sash, bottom rail ends
Balance assembly	2	One in each jamb
Screen plunger	2	4" from rail ends on top rail

Allen N. Reeves
1 APRIL 2002

ALLEN N. REEVES CERTIFICATE NO. 19[illegible] STATE OF FLORIDA PROFESSIONAL ENGINEER

Test Specimen Description: (Continued)

Drainage: Sloped sill

Reinforcement: No reinforcement was utilized.

Installation: The test specimen was installed into a 2 x 8 #2 Spruce-Pine-Fir wood test buck with #8 x 1-5/8" drywall screws every 8" on center around the nail fin. Polyurethane was used as a sealant under the nail fin and around the exterior perimeter.

Test Results:

The results are tabulated as follows.

Paragraph	Title of Test - Test Method	Results	Allowed
2.2.1.6.1	Operating Force	11 lbs	30 lbs max
	Air Infiltration (ASTM E 283-91) @ 1.57 psf (25 mph)	0.13 cfm/ft^2	0.3 cfm/ft^2 max

Note #1: The tested specimen meets the performance levels specified in AAMA/NWWDA 101/I.S. 2-97 for air infiltration.

	Water Resistance (ASTM E 547-00) (with and without screen) WTP = 2.86 psf	No leakage	No leakage
2.1.4.1	Uniform Load Deflection (ASTM E 330-97) (Measurements reported were taken on the meeting rail) (Loads were held for 33 seconds)		
	@ 25.9 psf (positive)	0.42"*	0.26" max.
	@ 34.7 psf (negative)	0.43"*	0.26" max.

**Exceeds L/175 for deflection, but passes all other test requirements.*

2.1.4.2	Uniform Load Structural (ASTM E 330-97) (Measurements reported were taken on the meeting rail) (Loads were held for 10 seconds)		
	@ 38.9 psf (positive)	0.02"	0.18" max.
	@ 52.1 psf (negative)	0.02"	0.18" max.

Allen N. Reeves
1 APRIL 2002

ALLEN N. REEVES
CERTIFICATE
NO. 1[illegible]
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

Test Specimen Description: (Continued)

Paragraph	Title of Test - Test Method	Results	Allowed
2.2.1.6.2	Deglazing Test (ASTM E 987)		
	In operating direction at 70 lbs		
	Meeting rail	0.12"/25%	0.50"/100%
	Bottom rail	0.12"/25%	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 (ASTM F 588-97)		
	Type: A Grade: 10		
	Lock Manipulation Test	No entry	No entry
	Tests A1 through A5	No entry	No entry
	Test A7	No entry	No entry
	Lock Manipulation Test	No entry	No entry
Optional Performance			
4.3	Water Resistance (ASTM E 547-00) (with and without screen) WTP = 6.00 psf	No leakage	No leakage
	Uniform Load Deflection (ASTM E 330-97) (Measurements reported were taken on the meeting rail) (Loads were held for 33 seconds)		
	@ 45.0 psf (positive)	0.47"*	0.26" max.
	@ 47.2 psf (negative)	0.46"*	0.26" max.

**Exceeds L/175 for deflection, but passes all other test requirements.*

Uniform Load Structural (ASTM E 330-97) (Measurements reported were taken on the meeting rail) (Loads were held for 10 seconds)		
@ 67.5 psf (positive)	0.05"	0.18" max.
@ 70.8 psf (negative)	0.05"	0.18" max.

Allen N. Reeves
1 APRIL 2002

LEN N. REEVES
CERTIFICATE NO. 19334
STATE OF FLORIDA
PROFESSIONAL ENGINEER

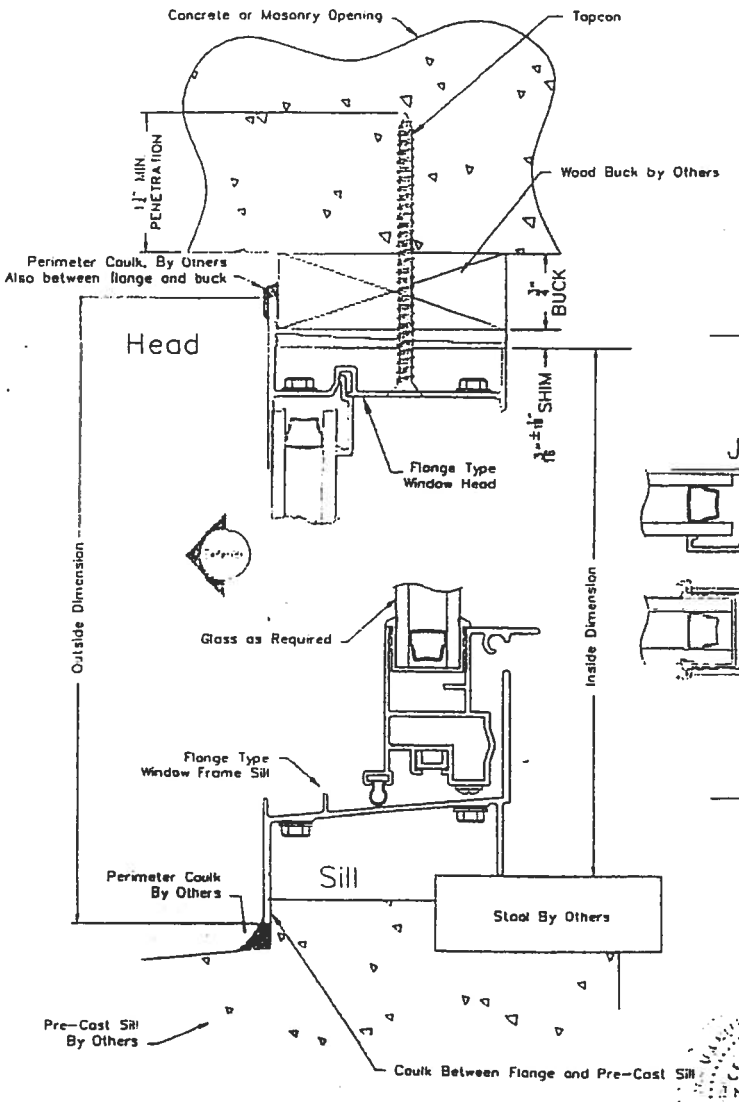
Detailed drawings, representative samples of the test specimen, and a copy of this report will be retained by ATI for a period of four years. The above results were secured by using the designated test methods and they indicate compliance with the performance requirements of the above referenced specification.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

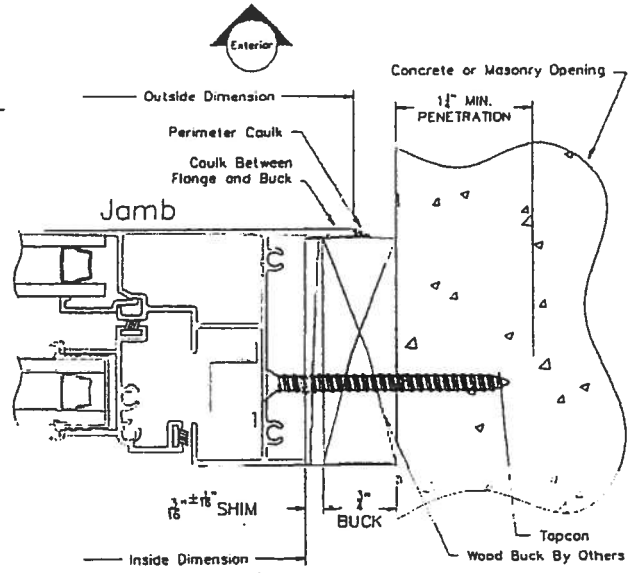
For ARCHITECTURAL TESTING, INC:

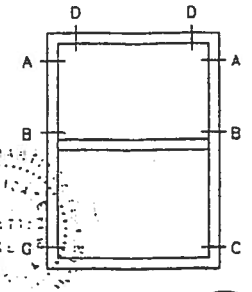
Mark A. Hess
Technician

Allen N. Reeves, P.E.
Director - Engineering Services
1 APRIL 2002

MAH:mlb
01-41134.01







1. Shim as required at each installation anchor as shown.
2. Anchor must be of a length to have 1 1/4" penetration into masonry or concrete.
3. Caulk between window flange and buck.
4. Caulk full perimeter of window.
5. If exact window size is not given, use anchor quantity for next larger window in chart.
6. Glass thickness will vary with window size and design load.
7. Letter designations on the tapcon location chart indicate where anchors are to be installed using the elevation as a key.
8. All factory applied holes not designated for tapcon anchor should be filled with #8 screws of sufficient length to provide min. 5/8" embedment into wood buck.

TAPCON * LOCATION CHART

CODE SIZE	WINDOW ID SIZE	FASTENER LOCATIONS	
		UP TO DP35	DP35.1 TO DP50
12	18 1/8 x 25	C, D	C, D
13	18 1/8 x 37 3/8	C, D	C, D
14	18 1/8 x 49 5/8	C, D	C, D
15	18 1/8 x 62	C, D	C, D
16	18 1/8 x 71 1/4	C, D	C, D
1/2 32	25 1/2 x 25	C, D	C, D
1/2 33	25 1/2 x 37 3/8	C, D	C, D
1/2 34	25 1/2 x 49 5/8	C, D	C, D
1/2 35	25 1/2 x 62	C, D	C, D
1/2 36	25 1/2 x 71 1/4	C, D	B, C, D
22	36 x 25	C, D	C, D
23	36 x 37 3/8	C, D	C, D
24	36 x 49 5/8	C, D	C, D
245	36 x 55 1/4	C, D	B, C, D
25	36 x 62	C, D	B, C, D
26	36 x 71 1/4	B, C, D	B, C, D
32	52 1/8 x 25	B, C, D	B, C, D
33	52 1/8 x 37 3/8	B, C, D	B, C, D
34	52 1/8 x 49 5/8	B, C, D	B, C, D
345	52 1/8 x 55 1/4	B, C, D	B, C, D
35	52 1/8 x 62	B, C, D	B, C, D
36	52 1/8 x 71 1/4	B, C, D	A, B, C, D

TAPCON * LOCATION CHART

CODE SIZE	WINDOW ID SIZE		
		UP TO DP35	DP35.1 TO DP50
2'-0" x 3'-0"	23 1/8 x 35 5/8	C, D	C, D
2'-0" x 4'-0"	23 1/8 x 47 5/8	C, D	C, D
3'-0" x 3'-0"	35 1/8 x 35 5/8	C, D	C, D
3'-0" x 4'-0"	35 1/8 x 47 5/8	C, D	C, D
3'-0" x 4'-4"	35 1/8 x 51 5/8	C, D	B, C, D
3'-0" x 5'-0"	35 1/8 x 59 5/8	C, D	B, C, D
3'-0" x 6'-0"	35 1/8 x 71 5/8	B, C, D	B, C, D
3'-4" x 3'-0"	39 1/8 x 35 5/8	C, D	C, D
3'-4" x 4'-0"	39 1/8 x 47 5/8	C, D	B, C, D
3'-4" x 4'-4"	39 1/8 x 51 5/8	C, D	B, C, D
3'-4" x 5'-0"	39 1/8 x 59 5/8	C, D	B, C, D
3'-4" x 6'-0"	39 1/8 x 71 5/8	B, C, D	B, C, D
3'-8" x 4'-0"	43 1/8 x 47 5/8	C, D	B, C, D
3'-8" x 4'-4"	43 1/8 x 51 5/8	C, D	B, C, D
3'-8" x 5'-0"	43 1/8 x 59 5/8	C, D	B, C, D
3'-8" x 6'-0"	43 1/8 x 71 5/8	B, C, D	B, C, D
4'-0" x 4'-0"	47 1/8 x 47 5/8	C, D	B, C, D
4'-8" x 4'-4"	47 1/8 x 51 5/8	C, D	B, C, D
4'-0" x 5'-0"	47 1/8 x 59 5/8	B, C, D	B, C, D
4'-0" x 6'-0"	47 1/8 x 71 5/8	B, C, D	B, C, D

*"TAPCON" TYPE HARDENED MASONRY SCREWS INCLUDE TAPCON, RAWL, & SIMPSON

HOME PRODUCTS

TITLE: INSTALLATION INSTRUCTIONS & FASTENER SCHEDULE

PRODUCT: 650 FLANGE SINGLE HUNG

DRAWN BY:	DATE:
Tony C	02/26/02
CHECKED:	DATE:
SCALE:	SHEET:
NONE	1 OF 1
DWG. NO.	REV.
650 FLANGE INSTALLATION INSTRUCTIONS	—

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

Rendered to:

MI HOME PRODUCTS, INC.

SERIES/MODEL: 650
TYPE: Aluminum Picture Window

Title of Test	Results
Rating	F-R45 60 x 80
Overall Design Pressure	+45.0 psf -47.2 psf
Air Infiltration	0.04 cfm/ft^2
Water Resistance	8.25 psf
Structural Test Pressure	+67.5 psf -70.8 psf
Forced Entry Resistance	Grade 10

Reference should be made to Report No. 01-41135.01 dated 03/26/02 for complete test specimen description and data.

For ARCHITECTURAL TESTING, INC.

Mark A. Hess, Technician

MAH:mlb

Allen M. Reeves
1 APRIL 2002

ALLEN M. REEVES
CERTIFICATE
NO. 19576
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

Architectural Testing

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

Rendered to

MI HOME PRODUCTS, INC.
650 West Market Street
P.O. Box 370
Gratz, Pennsylvania 17030-0370

Report No: 01-41135.01
Test Date: 03/07/02
Report Date: 03/26/02
Expiration Date: 03/07/06

Project Summary: Architectural Testing, Inc. (ATI) was contracted by MI Home Products, Inc. to perform tests on Series/Model 650, aluminum picture window at their facility located in Elizabethville, Pennsylvania. The samples tested successfully met the performance requirements for a F-R45 60 x 80 rating.

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: 650

Type: Aluminum Picture Window

Overall Size: 5' 0" wide by 6' 8" high

Daylight Opening Size: 4' 9-1/4" wide by 6' 5-1/4" high

Finish All aluminum was white.

Glazing Details: The test specimen utilized 7/8" thick, sealed insulating glass constructed from two sheets of 3/16" thick, clear annealed glass and a metal reinforced butyl spacer system. The glass was interior glazed against double-sided adhesive foam tape and secured with aluminum snap-in glazing beads.

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

Allen N. Reeves
1 APR 12 2002

ALLEN N. REEVES
CERTIFICATE NO. 11259
STATE OF FLORIDA
PROFESSIONAL ENGINEER

Test Specimen Description: (Continued)

Frame Construction: The frame was constructed of extruded aluminum with coped, butted, and sealed corners fastened with two #8 x 1" screws through the head and sill into each jamb screw boss.

Reinforcement: No reinforcement was utilized.

Installation: The test specimen was installed into a 2 x 8 #2 Spruce-Pine-Fir wood test buck. #8 x 2-1/2" installation screws were utilized 18" on center around the interior perimeter. Polyurethane was utilized to seal the exterior.

Test Results:

The results are tabulated as follows:

Paragraph	Title of Test - Test Method	Results	Allowed
	Air Infiltration (ASTM E 283-91) @ 1.57 psf (25 mph)	0.04 cfm/ft^2	0.3 cfm/ft^2 max.

Note #1: The tested specimen meets the performance levels specified in AAMA/NWWDA 101/I.S. 2-97 for air infiltration.

	Water Resistance (ASTM E 547-00) WTP = 2.86 psf	No leakage	No leakage
2.1.4.1	Uniform Load Deflection (ASTM E 330-97) (Measurements reported were taken on the jamb) (Loads were held for 33 seconds)		
	@ 25.9 psf (positive)	0.01"	0.41" max.
	@ 34.7 psf (negative)	0.01"	0.41" max.
2.1.4.2	Uniform Load Structural (ASTM E 330-97) (Measurements reported were taken on the jamb) (Loads were held for 10 seconds)		
	@ 38.9 psf (positive)	0.0"	0.29" max.
	@ 52.1 psf (negative)	0.01"	0.29" max.

ALLEN N. REEVES
No. 12564
STATE OF FLORIDA
PROFESSIONAL ENGINEER

Allen N. Reeves
1 APRIL 2002

Test Results: (Continued)

Paragraph	Title of Test - Test Method	Results	Allowed
	Forced Entry Resistance (ASTM F 588-97)		
	Type: D Grade: 10		
	Hand and Tool Manipulation Test	No entry	No entry
Optional Performance			
4.3	Water Resistance (ASTM E 547-00) WTP = 8.25 psf	No leakage	No leakage
	Uniform Load Deflection (ASTM E 330-97) (Measurements reported were taken on the jamb) (Loads were held for 33 seconds)		
	@ 45.0 psf (positive)	0.02"	0.41" max
	@ 47.2 psf (negative)	0.02"	0.41" max
	Uniform Load Structural (ASTM E 330-97) (Measurements reported were taken on the jamb) (Loads were held for 10 seconds)		
	@ 67.5 psf (positive)	0.01"	0.29" max
	@ 70.8 psf (negative)	0.02"	0.29" 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:

Mark A. Hess
Technician

Allen N. Reeves, P.E.
Director - Engineering Services
1 APRIL 2002

ALLEN N. REEVES
CERTIFICATE NO. 19394
STATE OF FLORIDA
PROFESSIONAL ENGINEER

MAH:mlb
01-41135.01

FORM 600A-2004

EnergyGauge® 4.0

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Community Affairs

Residential Whole Building Performance Method A

Project Name:	**Kasmire Model**	Builder:	
Address:		Permitting Office:	**Alachua**
City, State:	**, Fl**	Permit Number:	
Owner:		Jurisdiction Number:	**111000**
Climate Zone:	**Central**		

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)	1987 ft²	
7.	Glass type[1] and area: (Label reqd. by 13-104.4.5 if not default)		
a.	U-factor: (or Single or Double DEFAULT)	7a. (Dble Default) 226.9 ft²	
b.	SHGC: (or Clear or Tint DEFAULT)	7b. (Clear) 226.9 ft²	
8.	Floor types		
a.	Slab-On-Grade Edge Insulation	R=0.0, 177.3(p) ft	
b.	N/A		
c.	N/A		
9.	Wall types		
a.	Concrete, Int Insul, Exterior	R=5.0, 1493.2 ft²	
b.	Frame, Wood, Adjacent	R=11.0, 285.9 ft²	
c.	N/A		
d.	N/A		
e.	N/A		
10.	Ceiling types		
a.	Under Attic	R=30.0, 1986.8 ft²	
b.	N/A		
c.	N/A		
11.	Ducts		
a.	Sup: Unc. Ret: Unc. AH: Garage	Sup. R=6.0, 25.0 ft	
b.	N/A		

12.	Cooling systems		
a.	Central Unit	Cap: 42.0 kBtu/hr SEER: 12.10	
b.	N/A		
c.	N/A		
13.	Heating systems		
a.	Electric Heat Pump	Cap: 42.0 kBtu/hr HSPF: 8.20	
b.	N/A		
c.	N/A		
14.	Hot water systems		
a.	Electric Resistance	Cap: 40.0 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. HF-Whole house fan. PT-Programmable Thermostat. MZ-C-Multizone cooling. MZ-H-Multizone heating)		

Glass/Floor Area: 0.11

Total as-built points: 24604

Total base points: 28057

PASS

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

PREPARED BY: _____

DATE: 12/10/05

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

OWNER/AGENT: _____

DATE: _____

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

BUILDING OFFICIAL: _____

DATE: _____

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

SUMMER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: , , Fl, PERMIT #:

BASE

GLASS TYPES

.18 X	Conditioned Floor Area	X BSPM	= Points
.18	1987.0	25.78	9220.5

WALL TYPES

	Area	X BSPM	= Points
Adjacent	285.9	0.70	200.1
Exterior	1493.2	1.90	2837.1
Base Total:	**1779.1**		**3037.2**

DOOR TYPES

	Area	X BSPM	= Points
Adjacent	20.0	1.60	32.0
Exterior	20.0	4.80	96.0
Base Total:	**40.0**		**128.0**

CEILING TYPES

	Area	X BSPM	= Points
Under Attic	1986.8	2.13	4231.9
Base Total:	**1986.8**		**4231.9**

FLOOR TYPES

	Area	X BSPM	= Points
Slab	177.3(p)	-31.8	-5638.1
Raised	0.0	0.00	0.0
Base Total:			**-5638.1**

AS-BUILT

Type/SC	Overhang Ornt	Len	Hgt	Area X	SPM X	SOF =	Points
Double, Clear	E	2.0	3.7	4.9	55.69	0.71	194.2
Double, Clear	E	2.0	5.7	18.9	55.69	0.84	886.5
Double, Clear	S	8.0	4.7	10.1	41.92	0.51	213.9
Double, Clear	S	8.0	4.7	10.1	41.92	0.51	213.9
Double, Clear	E	8.5	6.8	16.5	55.69	0.47	434.6
Double, Clear	E	8.5	6.8	16.5	55.69	0.47	434.6
Double, Clear	E	8.5	8.3	60.0	55.69	0.52	1754.0
Double, Clear	W	2.0	4.7	10.1	50.22	0.78	398.0
Double, Clear	W	6.0	5.7	13.3	50.22	0.53	356.1
Double, Clear	W	6.0	5.7	13.3	50.22	0.53	356.1
Double, Clear	W	2.0	6.8	16.5	50.22	0.88	728.3
Double, Clear	S	2.0	4.7	10.1	41.92	0.73	310.4
Double, Clear	E	2.0	6.8	16.5	55.69	0.88	808.7
Double, Clear	S	2.0	4.7	10.1	41.92	0.73	310.4
As-Built Total:				**226.9**			**7399.6**

Type	R-Value	Area X	SPM =	Points
Concrete, Int Insul, Exterior	5.0	1493.2	1.00	1493.2
Frame, Wood, Adjacent	11.0	285.9	0.70	200.1
As-Built Total:		**1779.1**		**1693.3**

Type	Area X	SPM =	Points
Exterior Insulated	20.0	4.80	96.0
Adjacent Wood	20.0	2.40	48.0
As-Built Total:	**40.0**		**144.0**

Type	R-Value	Area X	SPM X SCM =	Points
Under Attic	30.0	1986.8	2.13 X 1.00	4231.9
As-Built Total:		**1986.8**		**4231.9**

Type	R-Value	Area X	SPM =	Points
Slab-On-Grade Edge Insulation	0.0	177.3(p	-31.90	-5655.9
As-Built Total:		**177.3**		**-5655.9**

SUMMER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: , , FI, PERMIT #:

BASE				AS-BUILT						
INFILTRATION	Area X	BSPM	= Points				Area X	SPM	=	Points
	1987.0	14.31	28434.0				1987.0	14.31		28434.0
Summer Base Points: 39413.4				**Summer As-Built Points:**						**36246.9**
Total Summer Points	X	System Multiplier	= Cooling Points	Total Component (System - Points)	X	Cap Ratio	X Duct Multiplier (DM x DSM x AHU)	X System Multiplier	X Credit Multiplier	= Cooling Points
				(sys 1: Central Unit 42000 btuh ,SEER/EFF(12.1) Ducts:Unc(S),Unc(R),Gar(AH),R6.0(INS)						
				36247		1.00	(1.09 x 1.150 x 1.00)	0.282	1.000	12769.3
39413.4		**0.4266**	**16813.8**	**36246.9**		**1.00**	**1.250**	**0.282**	**1.000**	**12769.3**

WINTER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: , , FI, PERMIT #:

BASE

GLASS TYPES

.18 X	Conditioned Floor Area	X BWPM	= Points
.18	1987.0	5.86	2095.9

WALL TYPES

	Area X	BWPM	= Points
Adjacent	285.9	1.80	514.6
Exterior	1493.2	2.00	2986.4
Base Total:	**1779.1**		**3501.0**

DOOR TYPES

	Area X	BWPM	= Points
Adjacent	20.0	4.00	80.0
Exterior	20.0	5.10	102.0
Base Total:	**40.0**		**182.0**

CEILING TYPES

	Area X	BWPM	= Points
Under Attic	1986.8	0.64	1271.6
Base Total:	**1986.8**		**1271.6**

FLOOR TYPES

	Area X	BWPM	= Points
Slab	177.3(p)	-1.9	-336.9
Raised	0.0	0.00	0.0
Base Total:			**-336.9**

AS-BUILT

GLASS TYPES

Type/SC	Overhang Ornt	Len	Hgt	Area X	WPM X	WOF =	Points
Double, Clear	E	2.0	3.7	4.9	8.82	1.07	46.2
Double, Clear	E	2.0	5.7	18.9	8.82	1.03	172.3
Double, Clear	S	8.0	4.7	10.1	6.74	2.18	148.6
Double, Clear	S	8.0	4.7	10.1	6.74	2.18	148.6
Double, Clear	E	8.5	6.8	16.5	8.82	1.21	175.7
Double, Clear	E	8.5	6.8	16.5	8.82	1.21	175.7
Double, Clear	E	8.5	8.3	60.0	8.82	1.17	617.8
Double, Clear	W	2.0	4.7	10.1	9.55	1.03	99.7
Double, Clear	W	6.0	5.7	13.3	9.55	1.09	138.1
Double, Clear	W	6.0	5.7	13.3	9.55	1.09	138.1
Double, Clear	W	2.0	6.8	16.5	9.55	1.02	160.2
Double, Clear	S	2.0	4.7	10.1	6.74	1.22	82.9
Double, Clear	E	2.0	6.8	16.5	8.82	1.03	149.3
Double, Clear	S	2.0	4.7	10.1	6.74	1.22	82.9
As-Built Total:				**226.9**			**2336.1**

WALL TYPES

Type	R-Value	Area X	WPM	= Points
Concrete, Int Insul, Exterior	5.0	1493.2	2.90	4330.3
Frame, Wood, Adjacent	11.0	285.9	1.80	514.6
As-Built Total:		**1779.1**		**4844.9**

DOOR TYPES

Type	Area X	WPM	= Points
Exterior Insulated	20.0	5.10	102.0
Adjacent Wood	20.0	5.90	118.0
As-Built Total:	**40.0**		**220.0**

CEILING TYPES

Type	R-Value	Area X	WPM X	WCM =	Points
Under Attic	30.0	1986.8	0.64 X	1.00	1271.6
As-Built Total:		**1986.8**			**1271.6**

FLOOR TYPES

Type	R-Value	Area X	WPM	= Points
Slab-On-Grade Edge Insulation	0.0	177.3(p	2.50	443.3
As-Built Total:		**177.3**		**443.3**

WINTER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: , , FI,	PERMIT #:

BASE				AS-BUILT						
INFILTRATION	Area X	BWPM	= Points		Area X	WPM	= Points			
	1987.0	-0.28	-556.4		1987.0	-0.28	-556.4			
Winter Base Points:			**6157.2**	**Winter As-Built Points:**						**8559.4**
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
				(sys 1: Electric Heat Pump 42000 btuh ,EFF(8.2) Ducts:Unc(S),Unc(R),Gar(AH),R6.0						
				8559.4		1.000	(1.078 x 1.160 x 1.00) 0.416		1.000	4455.0
6157.2		**0.6274**	**3863.0**	**8559.4**		**1.00**	**1.250**	**0.416**	**1.000**	**4455.0**

FORM 600A-2004 EnergyGauge® 4.0

WATER HEATING & CODE COMPLIANCE STATUS

Residential Whole Building Performance Method A - Details

ADDRESS: , , FI,	PERMIT #:

BASE				AS-BUILT						
WATER HEATING										
Number of Bedrooms	X Multiplier	= Total	Tank Volume	EF	Number of Bedrooms	X Tank Ratio	X Multiplier	X Credit Multiplier	= Total	
3	2460.00	7380.0	40.0	0.92	3	1.00	2460.00	1.00	7380.0	
			As-Built Total:						**7380.0**	

CODE COMPLIANCE STATUS

BASE				AS-BUILT			
Cooling Points	+ Heating Points	+ Hot Water Points	= Total Points	Cooling Points	+ Heating Points	+ Hot Water Points	= Total Points
16814	**3863**	**7380**	**28057**	**12769**	**4455**	**7380**	**24604**

PASS

Code Compliance Checklist

Residential Whole Building Performance Method A - Details

ADDRESS: , , **FI,** PERMIT #:

6A-21 INFILTRATION REDUCTION COMPLIANCE CHECKLIST

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

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

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

ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE SCORE* = 85.7

The higher the score, the more efficient the home.

, , , Fl,

1.	New construction or existing	New		12. Cooling systems	
2.	Single family or multi-family	Single family		a. Central Unit	Cap: 42.0 kBtu/hr
3.	Number of units, if multi-family	1			SEER: 12.10
4.	Number of Bedrooms	3		b. N/A	
5.	Is this a worst case?	Yes			
6.	Conditioned floor area (ft²)	1987 ft²		c. N/A	
7.	Glass type[1] and area: (Label reqd. by 13-104.4.5 if not default)				
a.	U-factor:	Description Area		13. Heating systems	
	(or Single or Double DEFAULT) 7a.	(Dble Default) 226.9 ft²		a. Electric Heat Pump	Cap: 42.0 kBtu/hr
b.	SHGC:				HSPF: 8.20
	(or Clear or Tint DEFAULT) 7b.	(Clear) 226.9 ft²		b. N/A	
8.	Floor types				
a.	Slab-On-Grade Edge Insulation	R=0.0, 177.3(p) ft		c. N/A	
b.	N/A				
c.	N/A			14. Hot water systems	
9.	Wall types			a. Electric Resistance	Cap: 40.0 gallons
a.	Concrete, Int Insul, Exterior	R=5.0, 1493.2 ft²			EF: 0.92
b.	Frame, Wood, Adjacent	R=11.0, 285.9 ft²		b. N/A	
c.	N/A				
d.	N/A			c. Conservation credits	
e.	N/A			(HR-Heat recovery, Solar	
10.	Ceiling types			DHP-Dedicated heat pump)	
a.	Under Attic	R=30.0, 1986.8 ft²		15. HVAC credits	
b.	N/A			(CF-Ceiling fan, CV-Cross ventilation,	
c.	N/A			HF-Whole house fan,	
11.	Ducts			PT-Programmable Thermostat,	
a.	Sup: Unc. Ret: Unc. AH: Garage	Sup. R=6.0, 25.0 ft		MZ-C-Multizone cooling,	
b.	N/A			MZ-H-Multizone heating)	

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

Builder Signature: _____ Date: _____

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

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

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

DUCT SYSTEM SUMMARY
Entire House

New Age Dimensions

Job: Kasmire Model 12/09/05

17600 S.E. 28th Court, Summerfield, FL 34491-7571 Phone: (352) 307-0692 Fax: (352) 307-9149 Email: www.NewAgeDimension@aol.com

Project Information

For: Browning Heating & A/C, LLC
Gainesville, FL 32602
Phone: (352) 258-3427

	HEATING	COOLING
External Static Pressure:	0.55 in H2O	0.55 in H2O
Pressure Losses:	0.12 in H2O	0.12 in H2O
Available Static Pressure:	0.43 in H2O	0.43 in H2O
Friction Rate:	0.880 in/100ft	0.880 in/100ft
Actual AVF:	1400 cfm	1400 cfm

Total Effective Length (TEL): 0 ft

Supply Branch Detail Table

Name	Htg (Btuh)	Clg (Btuh)	Htg (cfm)	Clg (cfm)	Dsn FR	Vel (fpm)	Dia (in)	Rect Sz (in)	Duct Matl	Trnk
Master WIC	1156	477	41	23	0.880	469	4	0x 0	VlFx	st1
Laundry Room	1778	2370	63	114	0.880	581	6	0x 0	VlFx	st1
Master Toilet	292	101	10	5	0.880	118	4	0x 0	VlFx	st1
Master Bathroom	2768	1268	98	61	0.880	498	6	0x 0	VlFx	st1
Master Bedroom-A	2754	2292	97	110	0.880	562	6	0x 0	VlFx	st1
Master Bedroom	2754	2292	97	110	0.880	562	6	0x 0	VlFx	st1
Dining Room	4101	2234	145	108	0.880	543	7	0x 0	VlFx	st2
Great Room-A	3253	2176	115	105	0.880	586	6	0x 0	VlFx	st2
Great Room	3253	2176	115	105	0.880	586	6	0x 0	VlFx	st2
Kitchen/Nook-A	2679	2494	95	120	0.880	612	6	0x 0	VlFx	st2
Kitchen/Nook	2679	2494	95	120	0.880	612	6	0x 0	VlFx	st2
Foyer	2063	984	73	47	0.880	535	5	0x 0	VlFx	st2
Bedroom #2	4732	3726	167	179	0.880	671	7	0x 0	VlFx	st2
Hall Bathroom	599	258	21	12	0.880	243	4	0x 0	VlFx	st2
Bedroom #3	4732	3726	167	179	0.880	671	7	0x 0	VlFx	st2

Supply Trunk Detail Table

Name	Trunk Type	Htg (cfm)	Clg (cfm)	Vel (fpm)	Diam (in)	Rect Duct Size (in)	Duct Material	Trunk
st1	Peak AVF	407	424	636	10	16 x 6	ShtMetl	st
st2	Peak AVF	993	976	639	16	16 x 14	ShtMetl	st
st	Peak AVF	1400	1400	700	18	16 x ~~18~~	ShtMetl	

Return Branch Detail Table

Name	Diffus Sz (in)	Design AVF (cfm)	Design (in H2O)	Design FR	Vel (fpm)	Dia (in)	Rect Sz (in)	Stud/Joist Opening (in)	Duct Matl	Trunk
rb1	20 x ~~25~~ 31	993	0.00	0.880	562	18	0 x 0		VlFx	ra
rb2	16 x 16 ~~17~~	424	0.00	0.880	540	12	0 x 0		VlFx	ra

Return Trunk Detail Table

Name	Trunk Type	Htg (cfm)	Clg (cfm)	Vel (fpm)	Diam (in)	Rect Duct Sz (in)	Duct Material	Trunk
ra	Peak AVF	1400	1400	560	20	18 x 18 ~~20~~	RectFbg	

RIGHT-J SHORT FORM
Entire House

New Age Dimensions

Job: Kasmire Model 12/09/05

17600 S.E. 28th Court, Summerfield, FL 34491-7571 Phone: (352) 307-0692 Fax: (352) 307-9149 Email: www.NewAgeDimension@aol.com

Project Information

For: Browning Heating & A/C, LLC
Gainesville, FL 32602
Phone: (352) 258-3427

Design Information

	Htg	Clg
Outside db (°F)	33	94
Inside db (°F)	70	75
Design TD (°F)	37	19
Daily range	-	M
Inside humidity (%)	-	50
Moisture difference (gr/lb)	-	48

Infiltration

Method	Simplified
Construction quality	Average
Fireplaces	0

HEATING EQUIPMENT

Make Tempstar
Trade SmartComfort 2200
TCH242AKA*

Efficiency	8.2 HSPF	
Heating input		
Heating output	42000	Btuh @ 47°F
Heating temperature rise	27	°F
Actual heating fan	1400	cfm
Heating air flow factor	0.035	cfm/Btuh

Space thermostat

COOLING EQUIPMENT

Make Tempstar
Trade SmartComfort 2200
TCH242AKA*
FCX48****

Efficiency	12.1 SEER	
Sensible cooling	30034	Btuh
Latent cooling	12872	Btuh
Total cooling	42905	Btuh
Actual cooling fan	1400	cfm
Cooling air flow factor	0.048	cfm/Btuh
Load sensible heat ratio	72	%

ROOM NAME	Area (ft²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)
Master WIC	89	1156	477	41	23
Laundry Room	94	1778	2370	63	114
Master Toilet	21	292	101	10	5
Master Bathroom	138	2768	1268	98	61
Master Bedroom	315	5509	4585	195	221
Dining Room	196	4101	2234	145	108
Great Room	280	6506	4352	230	210
Kitchen/Nook	320	5358	4988	189	240
Foyer	77	2063	984	73	47
Bedroom #2	186	4732	3726	167	179
Hall Bathroom	85	599	258	21	12
Bedroom #3	186	4732	3726	167	179

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

Entire House Ventilation air Equip. @ 0.99 RSM Latent cooling	d	1987	39593 0	29069 0 28778 11262	1400	1400
TOTALS		1987	39593	40040	1400	1400

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

RESIDENTIAL WIND DESIGN & ANALYSIS

NO COPIES ARE TO BE PERMITTED \ FBC2004

PREPARED FOR:

COOPER ENTERPRISES \ LOT 36 THREE RIVERS ESTATES

PREPARED BY:

MARTY R. ESKRIDGE
14952 MAIN ST
ALACHUA FL 32615
386-462-1340 / 352-375-6329

MARTY R. ESKRIDGE & ASSOCIATES
14952 MAIN ST ALACHUA FL 32615 PH: 386-462-1340

December 1, 2005

SUMMARY: Wind Load Analysis for Lot 36 \ 3 rivers estates
Wind Speed: 110 M.P.H. \ No Copies Permitted \ Florida Building Code 2004

Foundation:
20" wide x 12" deep stemwall footing with (2) #5 rebar continuous minimum. CMU walls must have #5 dowels at 60" o.c. with a standard 90 degree ACI hook in footing and a 4" slab on grade. Monolithic slab to be 12" wide x 20" deep minimum with (2) #5 rebar continuous with 12" minimum coverage on face of foundation. It is assumed that ideal soil conditions and pad preparation are provided.

Walls:
8" CMU block with vertical #5 reinforcing bar in grout filled cell at 60" o.c. maximum spacing. Wall heights are 9' nominal. Provide an 8" x 8" bond beam with 1-#5 rebar horizontal continuous at the top course. Install pre-cast, pre-engineered lintels or pre-engineered steel lintels spanning over all openings. One #5 rebar each corner. One #5 rebar each side of door and window openings. Two #5 rebar in openings wider than 12'-0". One #5 rebar where girders or girder trusses bear on masonry wall.

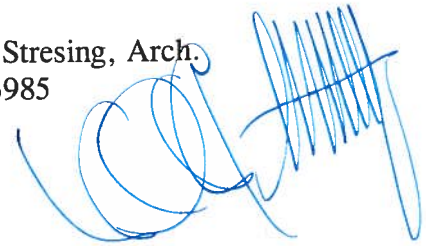
Shearwalls:
Transverse: 73'-0"
Longitudinal: 54'-0"

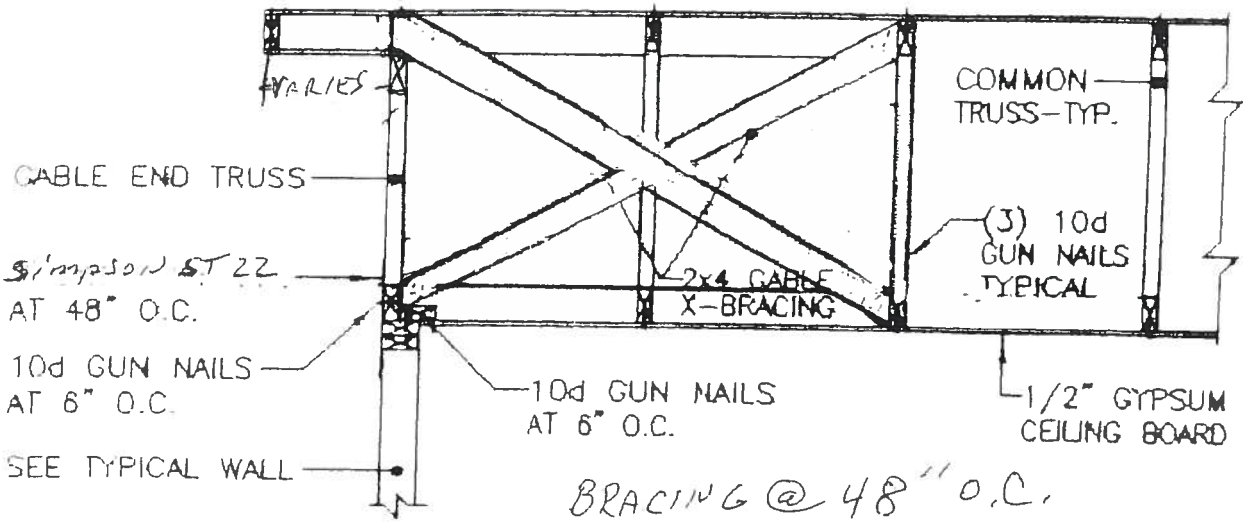
Trusses:
Pre-engineered Pre-fabricated with the bracing system designed by the manufacturer. Trusses must be anchored according to the truss engineering. Trusses must bear on all exterior walls and then porch headers.

Roof Sheathing:
5/8" cdx minimum attached to the top chords of the trusses with 8d/131 gauge nails spaced at 4" o.c. edges and 8" interior.

Columns:
4 x 4 x 9' syp pt @ 120" o.c. \ Simpson ABU44 \ CC44 or equal

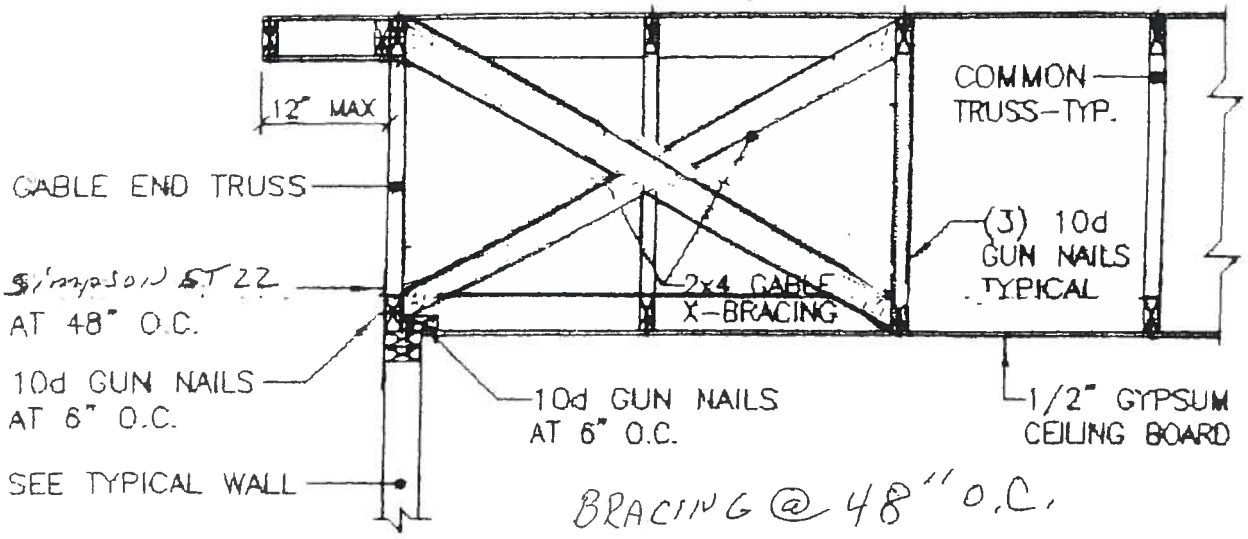
Paul R. Stresing, Arch.
AR0013985





GABLE END DETAIL

SCALE: NTS



GABLE END DETAIL

SCALE: NTS

AM013985
11/30/05

ASCE 7-98

12/1/05

Wind Load Design per ASCE 7-98

User Input Data		
Structure Type	Building	
Basic Wind Speed (V)	110	mph
Structural Category	II	
Exposure	B	
Struc Nat Frequency (n1)	1	Hz
Slope of Roof (Theta)	26.6	Deg
Type of Roof	Hipped	
Eave Height (Eht)	9.00	ft
Ridge Height (RHt)	22.97	ft
Mean Roof Height (Ht)	15.62	ft
Width Perp. to Wind (B)	52.67	ft
Width Parallel to Wind (L)	67.33	ft
Damping Ratio (beta)	0.01	

Red values should be changed only through "Main Menu"

Calculated Parameters	
Type of Structure	
Height/Least Horizontal Dim	0.30
Flexible Structure	No

Calculated Parameters		
Importance Factor	1	
Hurricane Prone Region (V>100 mph)		
Table C6-4 Values		
Alpha =	7.000	
zg =	1200.000	
At =	0.143	
Bt =	0.840	
Am =	0.250	
Bm =	0.450	
Cc =	0.300	
l =	320.00	ft
Epsilon =	0.333	
Zmin =	30.00	ft

Gust Factor Category I: Rigid Structures - Simplified Method			
Gust1	For rigid structures (Nat Freq > 1 Hz) use 0.85	0.85	
Gust Factor Category II: Rigid Structures - Complete Analysis			
Zm	Zmin	30.00	ft
Izm	Cc * (33/z)^0.167	0.3048	
Lzm	l*(zm/33)^Epsilon	309.99	ft
Q	(1/(1+0.63*((B+Ht)/Lzm)^0.63))^0.5	0.8970	
Gust2	0.925*((1+1.7*Izm*3.4*Q)/(1+1.7*3.4*Izm))	0.8642	
Gust Factor Category III: Flexible or Dynamically Sensitive Structures			
Vhref	V*(5280/3600)	161.33	ft/s
Vzm	bm*(zm/33)^Am*Vhref	70.89	ft/s
NF1	NatFreq*Lzm/Vzm	4.37	Hz
Rn	(7.47*NF1)/(1+10.302*NF1)^1.667	0.0552	
Nh	4.6*NatFreq*Ht/Vzm	1.01	
Nb	4.6*NatFreq*B/Vzm	3.42	
Nd	15.4*NatFreq*Depth/Vzm	14.63	
Rh	1/Nh-(1/(2*Nh^2)*(1-Exp(-2*Nh)))	0.5640	
Rb	1/Nb-(1/(2*Nb^2)*(1-Exp(-2*Nb)))	0.2498	
Rd	1/Nd-(1/(2*Nd^2)*(1-Exp(-2*Nd)))	0.0660	
RR	((1/Beta)*Rn*Rh*Rb*(0.53+0.47*Rd))^0.5	0.6605	
gg	+(2*LN(3600*n1))^0.5+0.577/(2*LN(3600*n1))^0.5	4.19	
Gust3	0.925*((1+1.7*Izm*(3.4^2*Q^2+GG^2*RR^2)^0.5)/(1+1.7*3.4*Izm))	1.05	

Gust Factor Summary			
Main Wind-force resisting system:		**Components and Cladding:**	
Gust Factor Category:	I	Gust Factor Category:	I
Gust Factor (G)	0.86	Gust Factor (G)	0.86

ASCE 7-98

12/1/05

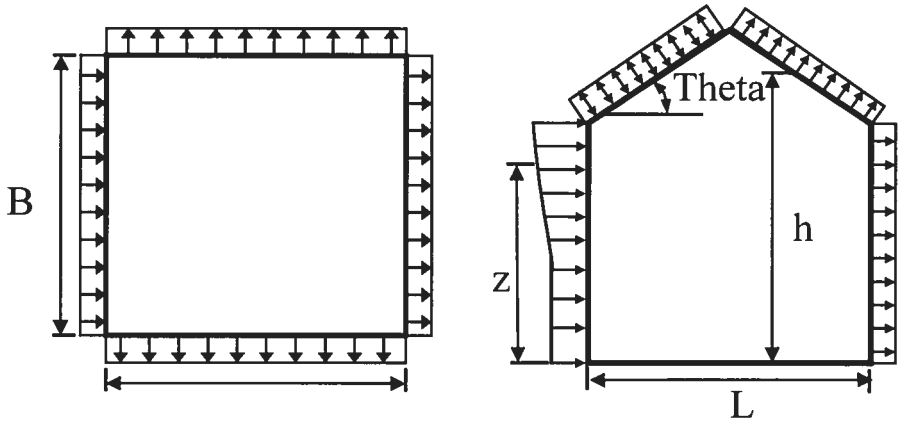
Wind Load Design per ASCE 7-98

6.5.12.2.1 Design Wind Pressure - Buildings of All Heights (Non-flexible)

Elev.	Kz	Kzt	Kd	qz	Pressure (lb/ft^2)	
					Windward Wall*	
ft			1.00	lb/ft^2	+GCpi	-GCpi
22.97	0.70	1.00	1.00	21.70	11.76	18.25
20	0.70	1.00	1.00	21.70	11.76	18.25
15.62	0.70	1.00	1.00	21.70	11.76	18.25
15	0.70	1.00	1.00	21.70	11.76	18.25

Figure 6-3 - External Pressure Coefficients, Cp

Loads on Main Wind-Force Resisting Systems



Variable	Formula	Value	Units
Kh	2.01*(Ht/zg)^(2/Alpha)	0.58	
Kht	Topographic factor (Fig 6-2)	1.00	
Qh	.00256*(V)^2*ImpFac*Kh*Kht*Kd	18.01	psf

Wall Pressure Coefficients, Cp	
Surface	Cp
Windward Wall (See Figure 6.5.12.2.1 for Pressures)	0.80

Roof Pressure Coefficients, Cp	
Roof Area (sq. ft.)	-
Reduction Factor	1.00

Description	Cp	Pressure (psf)	
		+GCpi	-GCpi
Leeward Walls (Wind Dir Parallel to 52.67 ft wall)	-0.44	-10.16	-3.67
Leeward Walls (Wind Dir Parallel to 67.33 ft wall)	-0.50	-11.02	-4.54
Side Walls	-0.70	-14.14	-7.65
Roof - Normal to Ridge (Theta>=10)			
Windward - Max Negative	-0.20	-6.35	0.13
Windward - Max Positive	0.30	1.43	7.91
Leeward Normal to Ridge	-0.60	-12.58	-6.10
Overhang Top	-0.20	-3.11	-3.11
Overhang Bottom	0.80	0.69	0.69
Roof - Parallel to Ridge (All Theta)			
Dist from Windward Edge: 0 ft to 7.81 ft	-0.90	-17.25	-10.77

ASCE 7-98

Wind Load Design per ASCE 7-98

Dist from Windward Edge: 7.81 ft to 15.62 ft	-0.90	-17.25	-10.77
Dist from Windward Edge: 15.62 ft to 31.24 ft	-0.50	-11.02	-4.54
Dist from Windward Edge: > 31.24 ft	-0.30	-7.91	-1.43

* Horizontal distance from windward edge

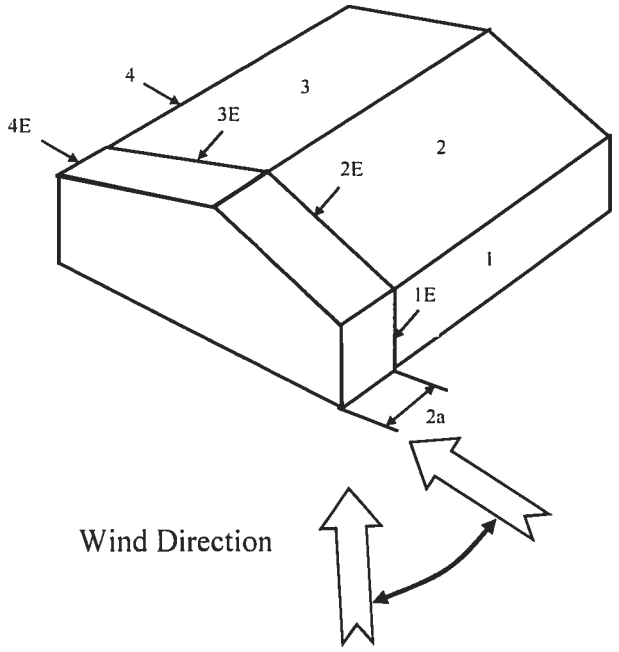
Figure 6-4 - External Pressure Coefficients, GCpf

Loads on Main Wind-Force Resisting Systems w/ Ht <= 60 ft

Kh =	2.01*(Ht/zg)^(2/Alpha)	=	0.58
Kht =	Topographic factor (Fig 6-2)	=	1.00
Qh =	0.00256*(V)^2*ImpFac*Kh*Kht*Kd	=	18.01

Case A						
Surface	**GCpf**	**+GCpi**	**-GCpi**	**qh (psf)**	**Min P (psf)**	**Max P (psf)**
1	0.55	0.18	-0.18	21.70	8.03	15.84
2	-0.10	0.18	-0.18	21.70	-5.99	1.82
3	-0.45	0.18	-0.18	21.70	-13.61	-5.79
4	-0.39	0.18	-0.18	21.70	-12.38	-4.57
5	0.00	0.18	-0.18	21.70	-3.91	3.91
6	0.00	0.18	-0.18	21.70	-3.91	3.91
1E	0.73	0.18	-0.18	21.70	11.88	19.69
2E	-0.19	0.18	-0.18	21.70	-7.93	-0.12
3E	-0.58	0.18	-0.18	21.70	-16.59	-8.78
4E	-0.53	0.18	-0.18	21.70	-15.50	-7.69
5E	0.00	0.18	-0.18	21.70	-3.91	3.91
6E	0.00	0.18	-0.18	21.70	-3.91	3.91

* p = qh * (GCpf - GCpi)



ASCE 7-98

12/1/05

Wind Load Design per ASCE 7-98

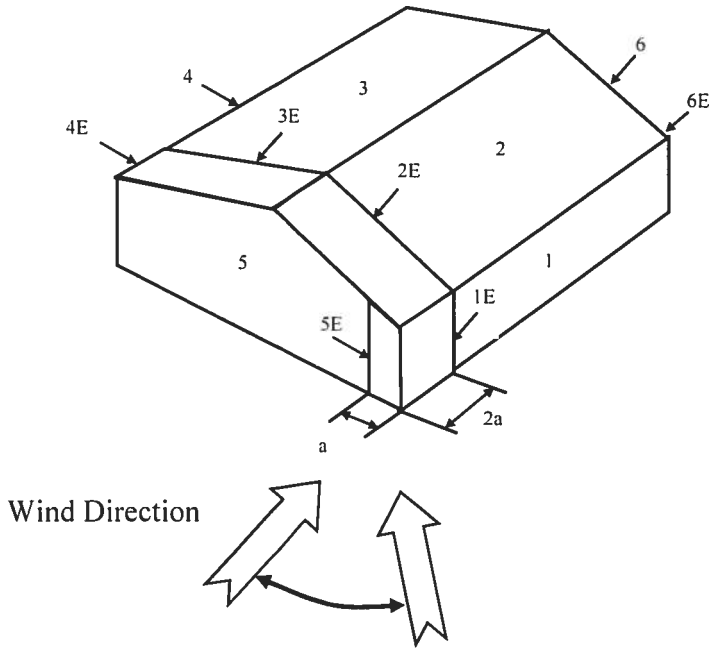
Figure 6-4 - External Pressure Coefficients, GCpf

Loads on Main Wind-Force Resisting Systems w/ Ht <= 60 ft

Kh =	2.01*(Ht/zg)^(2/Alpha)	=	0.58
Kht =	Topographic factor (Fig 6-2)	=	1.00
Qh =	0.00256*(V)^2*ImpFac*Kh*Kht*Kd	=	18.01

Case B						
Surface	**GCpf**	**+GCpi**	**-GCpi**	**qh (psf)**	**Min P (psf)**	**Max P (psf)**
1	-0.45	0.18	-0.18	21.70	-13.67	-5.86
2	-0.69	0.18	-0.18	21.70	-18.88	-11.07
3	-0.37	0.18	-0.18	21.70	-11.94	-4.12
4	-0.45	0.18	-0.18	21.70	-13.67	-5.86
5	0.40	0.18	-0.18	21.70	4.77	12.59
6	-0.29	0.18	-0.18	21.70	-10.20	-2.39
1E	-0.48	0.18	-0.18	21.70	-14.32	-6.51
2E	-1.07	0.18	-0.18	21.70	-27.13	-19.31
3E	-0.53	0.18	-0.18	21.70	-15.41	-7.60
4E	-0.48	0.18	-0.18	21.70	-14.32	-6.51
5E	0.61	0.18	-0.18	21.70	9.33	17.14
6E	-0.43	0.18	-0.18	21.70	-13.24	-5.43

* p = qh * (GCpf - GCpi)

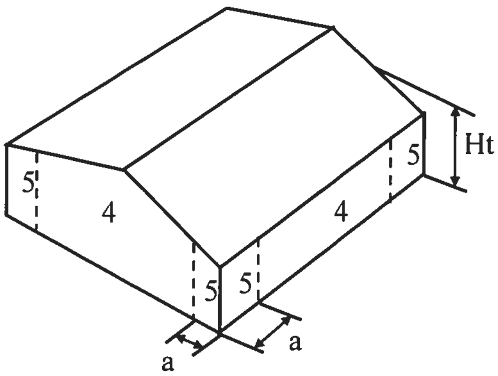


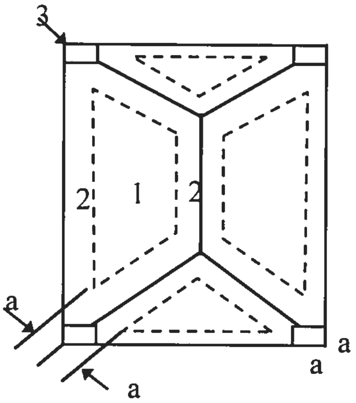
ASCE 7-98

Wind Load Design per ASCE 7-98

Figure 6-5 - External Pressure Coefficients, GCp

Loads on Components and Cladding for Buildings w/ Ht <= 60 ft





Hipped Roof
10 < Theta <= 30

a = 5.267 ==> 5.27 ft

Component	Width (ft)	Length (ft)	Area (ft^2)	Zone	GCp Max	GCp Min	Wind Press (lb/ft^2) Max	Wind Press (lb/ft^2) Min
	16	7	112.00	5	0.81	-1.03	17.91	-21.78
	0	0	0.00					
	0	0	0.00					
	0	0	0.00					
	0	0	0.00					
	0	0	0.00					
	0	0	0.00					
	0	0	0.00					
	0	0	0.00					
	0	0	0.00					
	0	0	0.00					
	0	0	0.00					
	0	0	0.00					
	0	0	0.00					
	0	0	0.00					
	0	0	0.00					
	0	0	0.00					
	0	0	0.00					
	0	0	0.00					
	0	0	0.00					
	0	0	0.00					
	0	0	0.00					
	0	0	0.00					

Note: * Enter Zone 1 through 5, or 1H through 3H for overhangs.

Table 6-7 Internal Pressure Coefficients for Buildings, Gcpi

ASCE 7-98

Wind Load Design per ASCE 7-98

Condition	Gcpi	
	Max +	Max -
Open Buildings	0.00	0.00
Partially Enclosed Buildings	0.55	-0.55
Enclosed Buildings	0.18	-0.18
Enclosed Buildings	**0.18**	**-0.18**

Table 6-8 External Pressure Coefficients for Arched Roofs, Cp

r (Rise-to-Span Ratio) = 0.3

Condition	Variable	Cp		
		Windward Quarter	Center Half	Leeward Quarter
Roof on Elevated Structure	Cp	0.13	-1	-0.5
	P (+GCpi) - psf	-1.30	-18.81	-11.02
	P (-GCpi) -psf	5.19	-12.32	-4.54
Roof Springing from Ground	Cp	0.42	-1	-0.5
	P (+GCpi) - psf	3.30	-18.81	-11.02
	P (-GCpi) -psf	3.30	-18.81	-11.02

Table 6-9 Force Coefficients for Monoslope Roofs over Open Buildings, Cf

Variable	Description	Value	
L	Roof dimension normal to wind direction	67.33	ft
B	Roof dimension parallel to wind direction	52.67	ft
L/B	Ratio of L to B	1.278	
Theta	Slope of Roof	26.6	Deg
Cf	Force Coefficient	1.15	
X	Distance to center of pressure from windward edge	0.40	ft

DW Pest Control, Inc.

13618 NW 270th Ave.
Alachua, FL 32615
(386) 418-4387

24035

CERTIFICATE OF COMPLIANCE FOR TERMITE PROTECTION

(As required by Florida Building Code (FBC) 1816.1.7)

Address of treatment or lot/block of treatment:
559 SW California Terr. Ft White, FL 32038

Describe method of termite prevention treatment:

Trench & Treat around structure

The building has received a complete treatment for the prevention of subterranean termites. Treatment is in accordance with rules and laws, established by the Florida Department of Agriculture and Consumer Services.

JF114163

Authorized Signature

CERTIFICATE OF OCCUPANCY

COLUMBIA COUNTY, FLORIDA

Department of Building and Zoning Inspection

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

Parcel Number 36-6S-15-00909-036 **Building permit No.** 000024035

Use Classification SFD,UTILITY **Fire:** 17.76

Permit Holder MICHAEL COOPER **Waste:** 36.75

Owner of Building JOHN & PAMELA CURTIS **Total:** 54.51

Location: 559 SW CALIFORNIA TERRACE

Date: 07/03/2006

Harry Dicks

Building Inspector

POST IN A CONSPICUOUS PLACE
(Business Places Only)