



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

www.miamidade.gov/buildingcode

NOTICE OF ACCEPTANCE (NOA)

Marvin Windows and Doors
Highway 11 West, P.O. Box 100
Warroad, MN 56763-0100

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 Florida Building Code, including the High Velocity Hurricane Zone.

DESCRIPTION: Series "French Storm Plus I-24" 8'-0" Wood Outswing Glazed Doors – L.M.I.

APPROVAL DOCUMENT: Drawing No. 1502, titled Series "8 Ft. Wood Out-Swing Impact Doors", sheets 1 through 9 of 9, dated 10/17/06 with the latest revision dated 03/13/07, prepared by W. W. Schafer Engineering & Consulting, P.A., signed and sealed by Warren W. Schafer, P.E., 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 Resistant

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.

APPROVAL of this NOA shall be considered after an approval 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. This NOA consists of this page 1 and evidence page E-1 and E-2, as well as approval document mentioned above.

The submitted documentation was reviewed by **Jaime D. Gascon, P.E.**



J. Gascon
4/13/07

NOA No. 06-1228.03
Expiration Date: May 03, 2012
Approval Date: May 03, 2007
Page 1

Marvin Windows and Doors

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

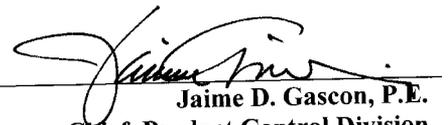
A. DRAWINGS

1. Manufacturer's die drawings and sections.
2. Drawing No. **1502**, titled Series "8 Ft. Wood Out-Swing Impact Doors", sheets 1 through 9 of 9, dated 10/17/06 with the latest revision dated 03/13/07, prepared by W. W. Schafer Engineering & Consulting, P.A., signed and sealed by Warren W. Schafer, P.E.,

B. TESTS

1. Test reports on:
 - 1) Air Infiltration Test, per FBC, TAS 202-94
 - 2) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
 - 3) Water Resistance Test, per FBC, TAS 202-94
 - 4) Large Missile Impact Test per FBC, TAS 201-94
 - 5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
 - 6) Forced Entry Test, per FBC 2411 3.2.1, TAS 202-94along with marked-up drawings and installation diagram prepared by Architectural Testing, Inc., Test Report No. **ATI-67287.01-201-18**, dated 12 /01/06, signed and sealed by Joseph A. Reed, P.E.
2. Test reports on:
 - 1) Tensile Properties and Xenon-Arc Weathering Tests of Fiberglass Reinforced Plastic Samples, Test Report No. **TCT 18 0-0758**, dated November 29, 2000;
 - 2) Flammability Testing of Fiberglass Reinforced Plastic, per ASTM D-635, Test Report No. **TCT 18 0-0758.1**, dated October 12, 2000;
 - 3) Ignition Temperature, per ASTM D-2843, Density of Smoke Testing of Fiberglass Reinforced Plastic, Test Report No. **TCT 18 0-0758.2**, dated November 08, 2000;
 - 4) Tensile Properties and Xenon-Arc Weathering Tests of Fiberglass Reinforced Plastic Samples, Test Report No. **TCT 18 0-0758.3**, dated April 19, 2001;
 - 5) Flammability Testing of Geon 06935-3490, per ASTM D-635, Test Report No. **TCT 18 0-0796**, dated November 16, 2000;
 - 6) Ignition Temperature Testing of Geon 06935-3490, per ASTM D-2843, Density of Smoke Testing of Fiberglass Reinforced Plastic, Test Report No. **TCT 18 0-0796.2**, dated November 09, 2000, latest revision on November 16, 2000;

along with marked-up drawings and installation diagram prepared by Stork/ Twin City Testing Corporation, signed and sealed by Derrick J. Swanson, P.E.



Jaime D. Gascon, P.E.

Chief, Product Control Division
NOA No. 06-1228.03

Expiration Date: May 03, 2012
Approval Date: May 03, 2007

Marvin Windows and Doors

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

C. CALCULATIONS

1. Anchor verification calculations and structural analysis, complying with FBC-2004, prepared by W. W. Schafer Engineering & Consulting, P.A., dated 10/10/06, signed and sealed by Warren W. Schafer, P.E.
Complies with ASTM E1300-98/ 02

D. QUALITY ASSURANCE

1. Miami Dade Building Code Compliance Office (BCCO).

E. MATERIAL CERTIFICATIONS

1. None.

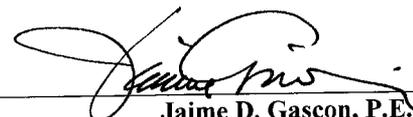
F. STATEMENTS

1. Statement letter of conformance, dated October 12, 2006, signed and sealed by Warren W. Schafer, P.E.
2. Statement letter of compliance, dated December 01, 2006, signed and sealed by Joseph A. Reed, P.E.

G. OTHER

1. Test reports on:
 - 1) Determining Ignition Temperature of Plastic, per ASTM D-1929, Test Report No. **SGS 147520-1**, dated October 27, 2000;
 - 2) Determining Ignition Temperature of Plastic, per ASTM D-1929, Test Report No. **SGS 147520-2**, dated October 27, 2000;
 - 3) Density of Smoke Testing of Fiberglass Reinforced Plastic, per ASTM D-2843, Test Report No. **SGS 147520-3**, dated October 27, 2000;
 - 4) Density of Smoke Testing of Fiberglass Reinforced Plastic, per ASTM D-2843, Test Report No. **SGS 147520-4**, dated October 27, 2000;

along with installation diagram prepared by SGS U. S. Testing Company, Inc., signed by Michael S. Elliott.



Jaime D. Gascon, P.E.

Chief, Product Control Division
NOA No. 06-1228.03

Expiration Date: May 03, 2012
Approval Date: May 03, 2007

| NO. | REVISION DESCRIPTION | DATE | BY |
|-----|----------------------|------|----|
| | | | |
| | | | |

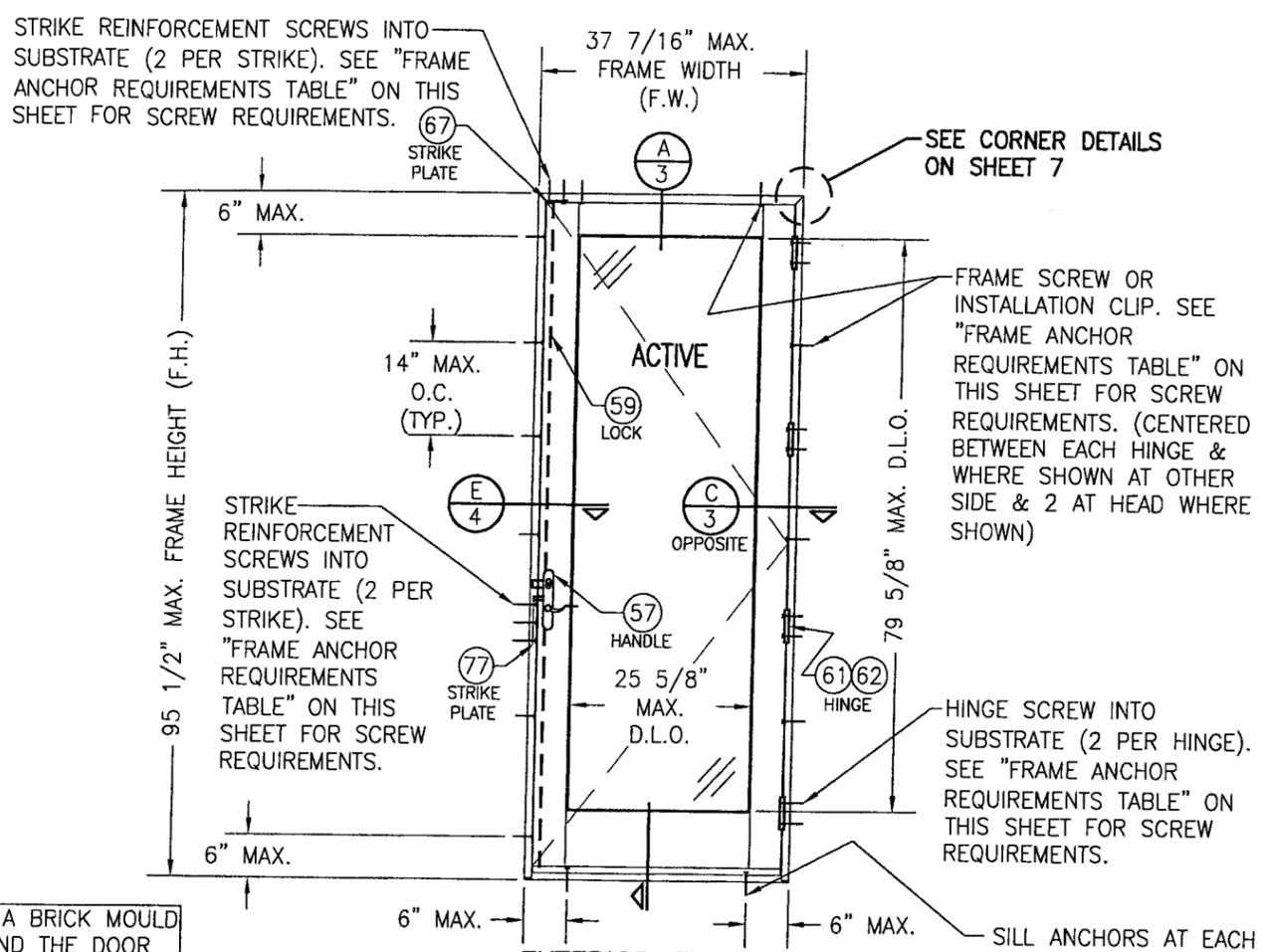
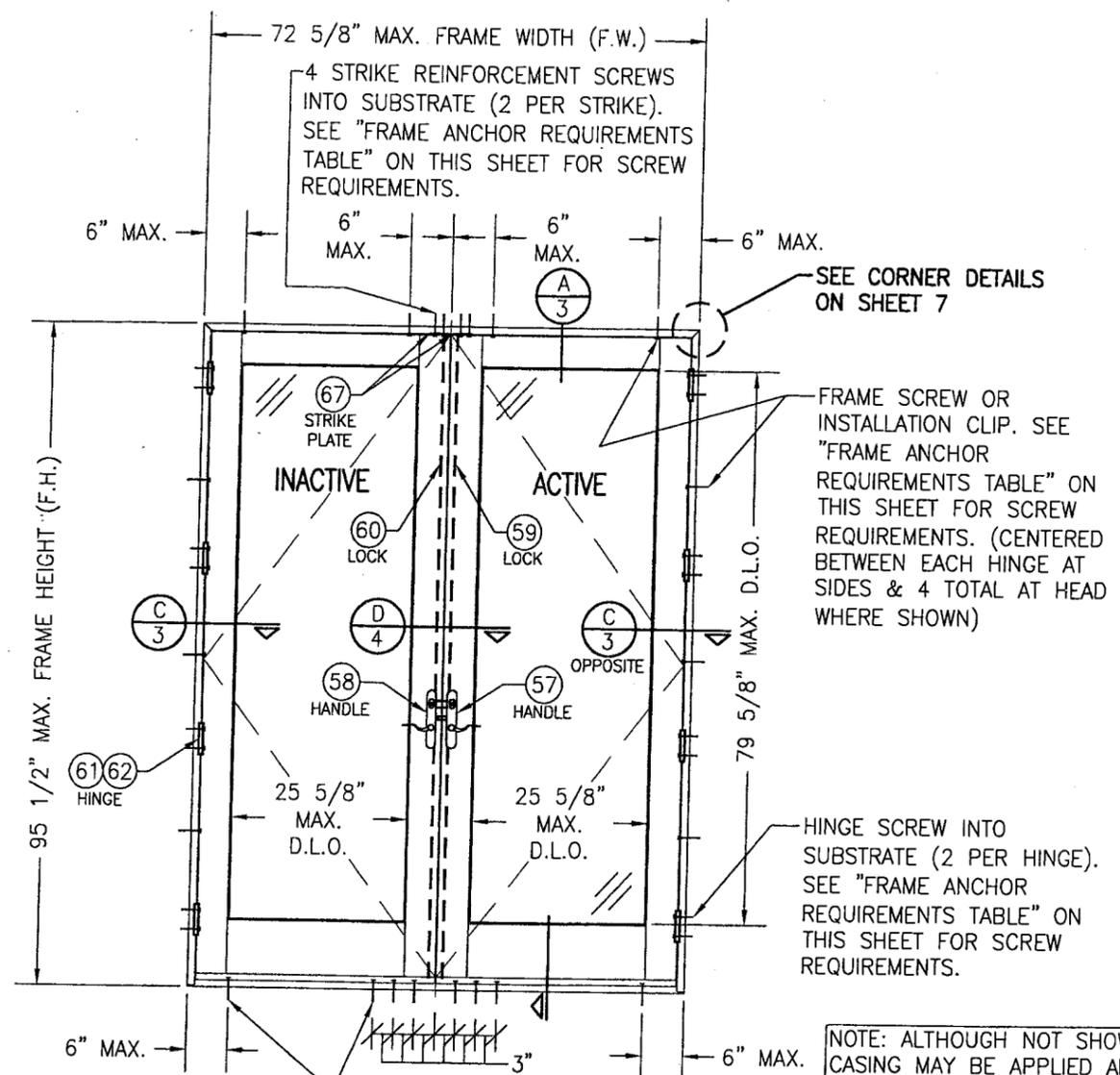
MANUFACTURER
MARVIN WINDOWS & DOORS
 HIGHWAY 11; P.O. BOX 100
 WARRADOR, MN 56763
 800-346-5044

CONSULTANTS
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.
 8895 N. MILITARY TRAIL, SUITE C-204
 PALM BEACH GARDENS, FL 33410
 PHONE: 561-775-4902 FAX: 561-775-4903

DRAWING TITLE
8 FT. WOOD OUT-SWING IMPACT DOORS

CERTIFICATION
 MAR 13 2007
 WARREN W. SCHAEFER, P.E.
 P.E. NO. 44135

DRAWING NO. 1502
 SHEET NO. 1 OF 9



NOTE: ALTHOUGH NOT SHOWN, A BRICK MOULD CASING MAY BE APPLIED AROUND THE DOOR FRAMES IN ADDITION TO ANCHOR CONDITIONS SHOWN TO ACT AS A PERIMETER SEAL (BRICK MOULD SHALL NOT BE A SUBSTITUTE FOR ANCHOR CONDITIONS SHOWN).

| FRAME ANCHOR REQUIREMENTS TABLE | | | |
|--|--------------------------------|---------------|--------------------|
| FRAME/HINGE/STRIKE SHEAR SCREWS | | | |
| OPENING TYPE (SUBSTRATE) | JAMB TO OPENING FASTENER TYPE | MINIMUM EMBED | MINIMUM EDGE DIST. |
| 2X_ WOOD FRAME OR BUCK | NO. 10 SMS SCREW | 1 1/4" | 3/4" |
| C90 CMU & MIN. 2500 PSI CONCRETE | (1) 3/16" CONCRETE SCREW | 1 1/4" | 2" |
| MIN. 18 GAGE 33 KSI METAL | NO. 10 SELF TAP/DRILLING SCREW | FULL | 1/2" |
| MIN. 1/8" THK. 6063-T5 ALUMINUM OR A36 STEEL | NO. 10 SELF TAP/DRILLING SCREW | FULL | 1/2" |
| INSTALLATION CLIP SCREWS | | | |
| 2X_ WOOD FRAME OR BUCK | NO. 8 SMS SCREW | 1 3/8" | 3/4" |
| MIN. 18 GAGE 33 KSI METAL | NO. 8 SELF TAP/DRILLING SCREW | FULL | 1/2" |
| MIN. 1/8" THK. 6063-T5 ALUMINUM OR A36 STEEL | NO. 8 SELF TAP/DRILLING SCREW | FULL | 1/2" |

(1) CONCRETE SCREWS SHALL BE ELCO OR ITW RAMSET/RED HEAD TAPCONS, HILTI KWIK-CON II OR POWERS RAWL TAPPER (HARDENED STEEL OR S.S.).

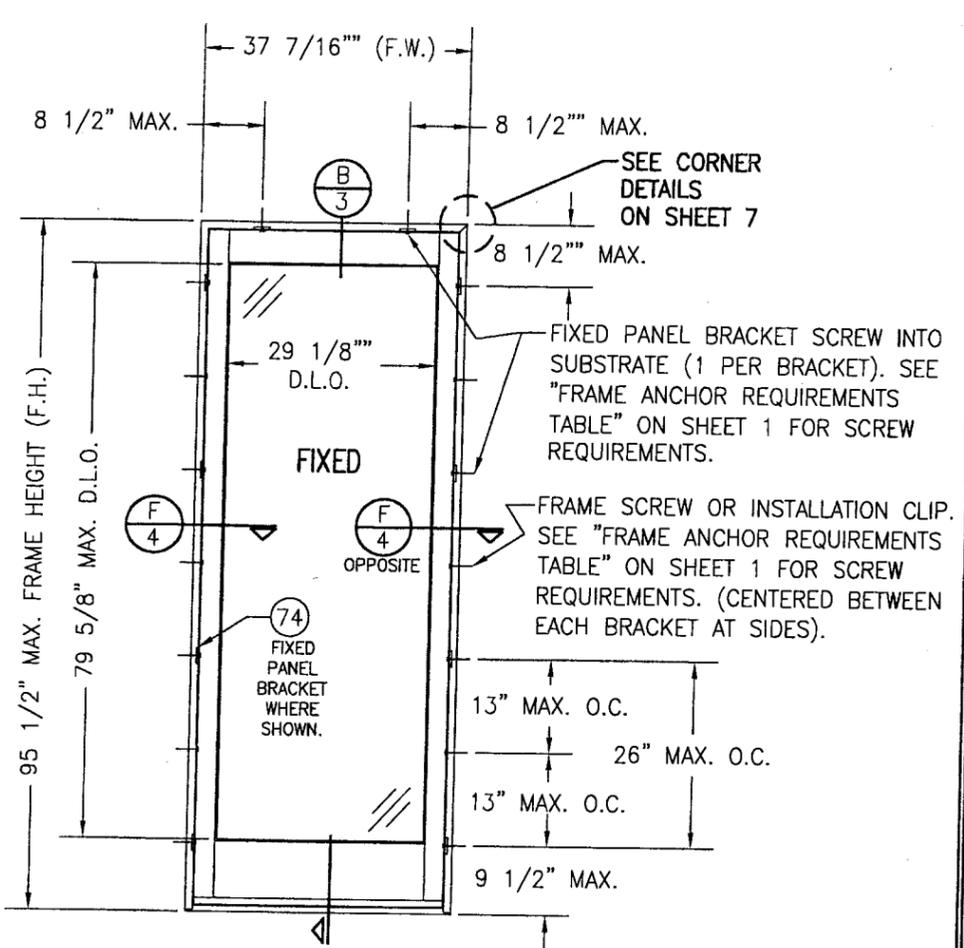
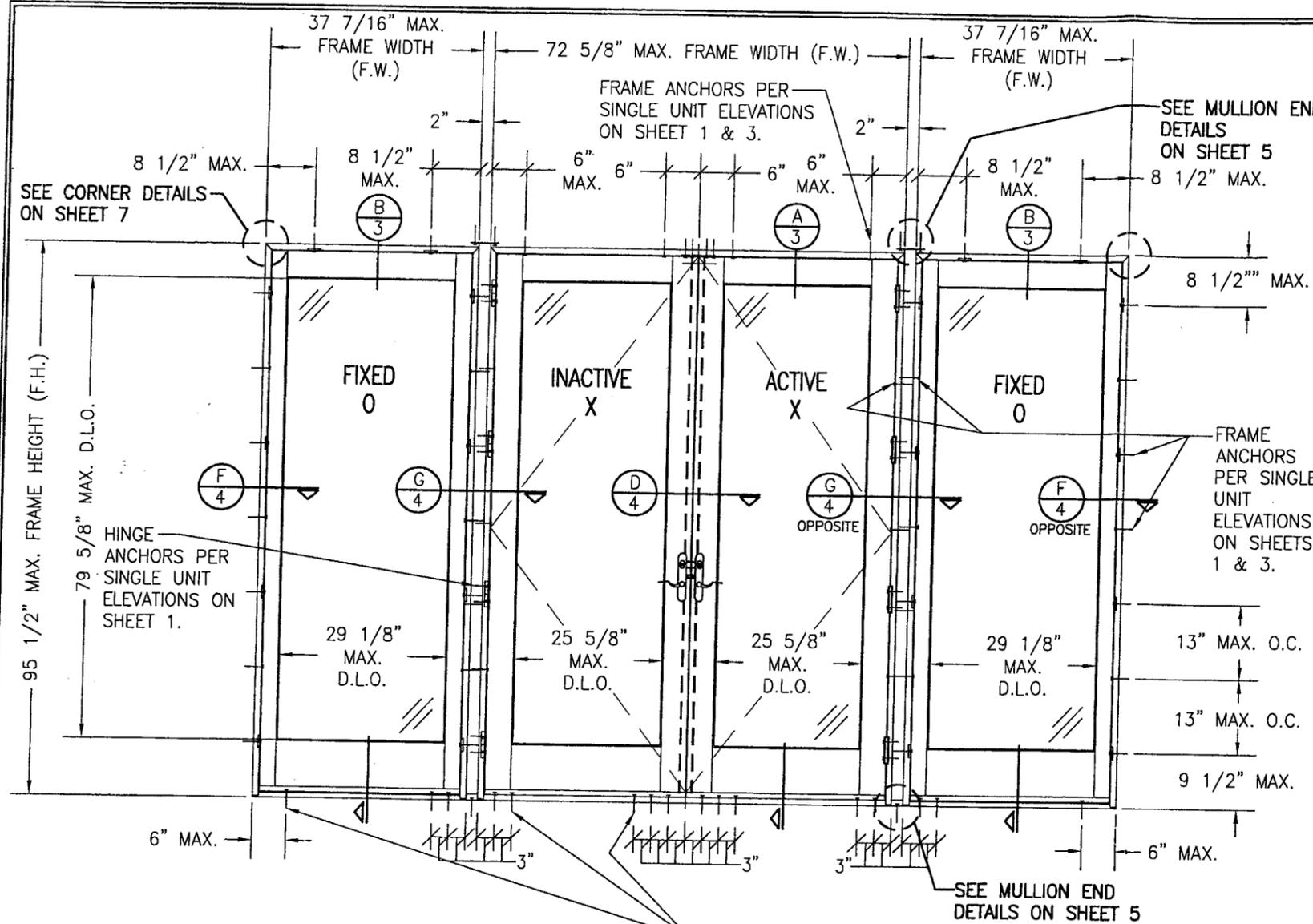
ALLOWABLE DESIGN PRESSURE
 SEE LOAD TABLES ON SHEET 2

| HINGE REQUIREMENTS | |
|--------------------|------------------|
| MAX. FRAME HEIGHT | MIN. # OF HINGES |
| 95 1/2" | 4 |
| 82" | 3 |

Approved as complying with the Florida Building Code
 Date 05/03/2007
 NOA# 06-1228.03
 Miami Dade Product Control Division
 By: *[Signature]*

GENERAL NOTES

- THESE DOOR SYSTEMS HAVE BEEN TESTED, ANALYZED AND APPROVED FOR DESIGN PRESSURES NOT TO EXCEED THOSE SHOWN IN THE "ALLOWABLE DESIGN LOADS" TABLE(S).
- BUCKING, OPENINGS & BUCKING FASTENERS MUST BE PROPERLY DESIGNED & INSTALLED TO TRANSFER WIND LOADS TO THE STRUCTURE.
- ALL HARDWARE & FASTENERS SHALL BE IN ACCORDANCE WITH THESE DRAWINGS & SHALL NOT VARY UNLESS SPECIFICALLY MENTIONED ON THE DRAWINGS.
- THE DETAILS & SPECIFICATIONS SHOWN HEREIN REPRESENT THE PRODUCTS TESTED & PROPOSED FOR WATER, AIR, IMPACT, CYCLIC & UNIFORM STATIC AIR PRESSURE TESTING IN CONFORMANCE WITH THE 2004 FLORIDA BUILDING CODE PROTOCOLS TAS-201, 202 & 203 FOR LARGE MISSILE IMPACT DOORS.
- THESE DOORS SYSTEMS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE 2004 FLORIDA BUILDING CODE (FBC) INCLUDING HIGH VELOCITY HURRICANE ZONES (HVHZ).
- IMPACT SHUTTERS ARE NOT REQUIRED WITH THESE DOORS.
- ALL ANCHORS SHALL BE INSTALLED AS SPECIFIED ON THESE DRAWINGS. SPECIFIED EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL FINISH OR STUCCO.
- ALL FRAME ANCHORS SECURING WINDOW/DOOR FRAME TO PRESSURE TREATED BUCKS OR WOOD FRAMING SHALL BE CAPABLE OF RESISTING CORROSION CAUSED BY THE PRESSURE TREATING CHEMICALS IN THE WOOD.
- MATERIALS, INCLUDING BUT NOT LIMITED TO STEEL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF 2004 FLORIDA BUILDING CODE SECTION 2003.8.4.



**EXTERIOR ELEVATION
SINGLE FIXED PANEL**
SCALE: 1/2" = 1'-0"

**EXTERIOR ELEVATION
DOUBLE OUTSWING DOOR WITH SIDELIGHTS**
SCALE: 1/2" = 1'-0"

NOTE: OXXO DOOR SHOWN. ALL OTHER 4-PANEL CONFIGURATIONS OF SINGLE/DOUBLE DOORS & SIDELIGHTS ALSO APPLY. (FOR ALL DETAIL NOT SHOWN, SEE SINGLE UNIT ELEVATIONS.)

Approved as complying with the
Florida Building Code
Date 05/03/2007
NOA# 06-1228.03
Miami Dade Product Control
Division
By *[Signature]*

**ALLOWABLE DESIGN PRESSURE WITH GLASS OPTION 1
(SINGLE & MULLED UNITS)**

| DOOR TYPE | MAX. FRAME HEIGHT | MAX. D.L.O. HEIGHT | D.L.O. WIDTH LESS THAN OR EQUAL TO 23 5/8" | D.L.O. WIDTH BETWEEN 23 5/8" & 25 5/8" | D.L.O. WIDTH = 25 5/8" TO 29 1/8" |
|--------------------------|-------------------|--------------------|--|--|-----------------------------------|
| SINGLE & DOUBLE OPERABLE | 95 1/2" | 79 5/8" | +65/-80 PSF | +65/-72 PSF | N/A |
| SINGLE & DOUBLE OPERABLE | 82" | 66 1/8" | +65/-85 PSF | +65/-78 PSF | N/A |
| FIXED PANEL | 95 1/2" | 79 5/8" | +65/-85 PSF | +65/-72 PSF | +57/-57 PSF |

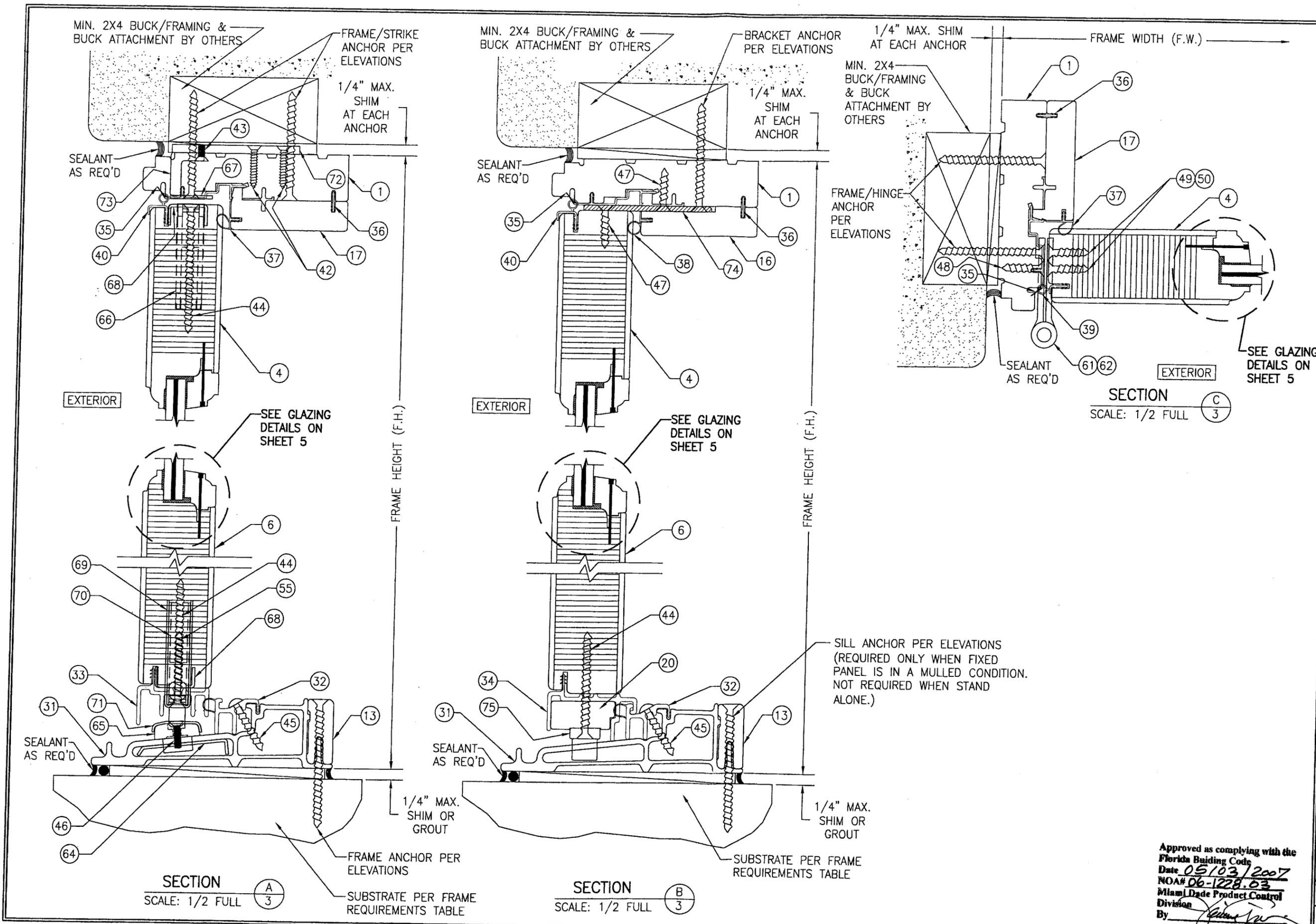
NOTE: SEE GLAZING DETAIL ON SHEET 6 FOR GLASS OPTIONS.

**ALLOWABLE DESIGN PRESSURE WITH GLASS OPTION 2
(SINGLE & MULLED UNITS)**

| DOOR TYPE | MAX. FRAME HEIGHT | MAX. D.L.O. HEIGHT | ALL D.L.O. WIDTHS |
|--------------------------|-------------------|--------------------|-------------------|
| SINGLE & DOUBLE OPERABLE | 95 1/2" | 79 5/8" | +65/-80 PSF |
| SINGLE & DOUBLE OPERABLE | 82" | 66 1/8" | +65/-85 PSF |
| FIXED PANEL | 95 1/2" | 79 5/8" | +65/-85 PSF |

NOTE: SEE GLAZING DETAIL ON SHEET 6 FOR GLASS OPTIONS.

| | |
|--|---|
| DRAWN BY: W.R.M. | CHECKED BY: W.W.S. |
| PLOT: 1=24 | DATE: 10/17/06 |
| NO. | REVISION DESCRIPTION |
| DATE | BY |
| DRAWING TITLE 8 FT. WOOD OUT-SWING IMPACT DOORS | |
| CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. | MANUFACTURER MARVIN WINDOWS & DOORS |
| 8895 N. MILITARY TRAIL, SUITE C-204 PALM BEACH GARDENS, FL 33410 PHONE: 561-775-4902 FAX: 561-775-4903 | HIGHWAY 11; P.O. BOX 100 WARROAD, MN 56763 800-346-5044 |
| CERTIFICATION MAR 13 2007 | WARREN W. SCHAEFER, P.E. P.E. NO. 44135 |
| DRAWING NO. 1502 | REV. |
| SHEET NO. 2 | OF 9 |



| | | | |
|-----------|----------------------|-------------|----------|
| DRAWN BY: | W.R.M. | CHECKED BY: | W.W.S. |
| PLOT: | 1=2 | DATE: | 10/17/06 |
| NO. | REVISION DESCRIPTION | BY | DATE |

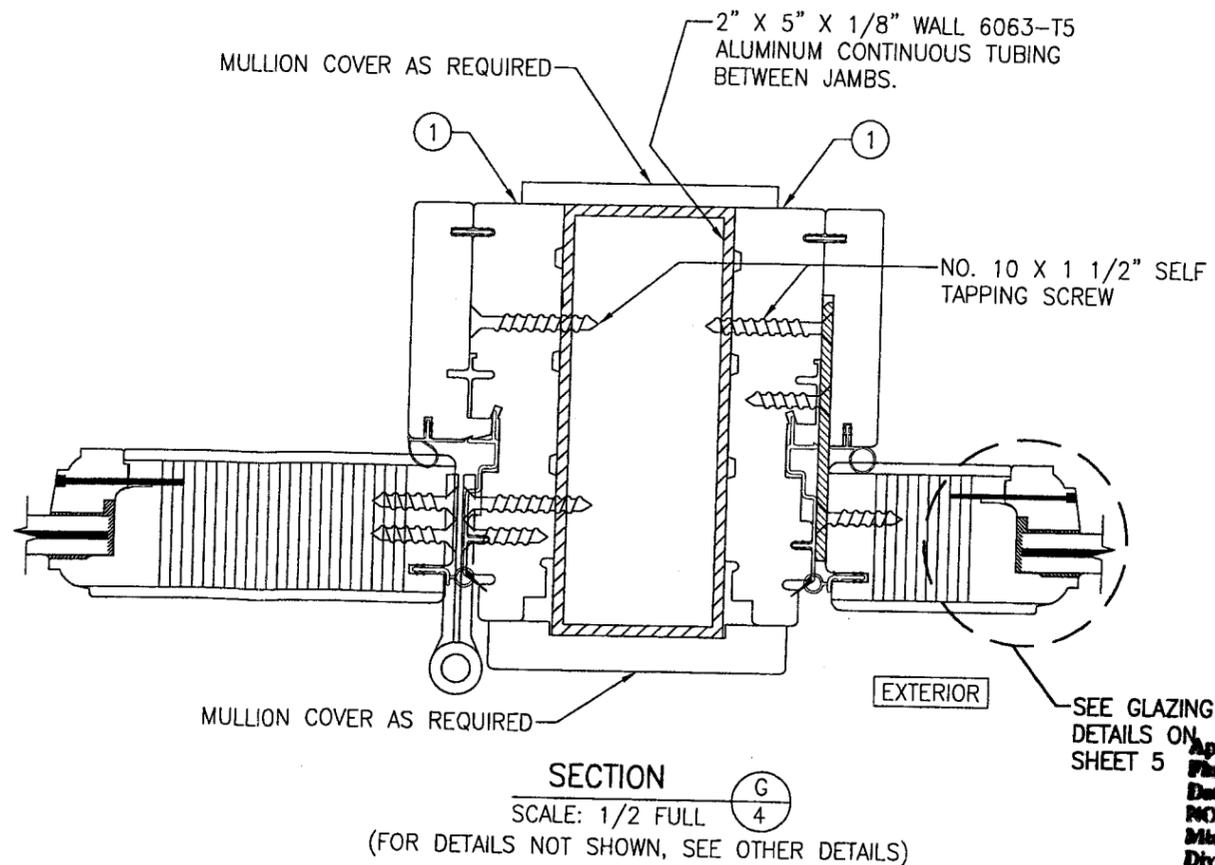
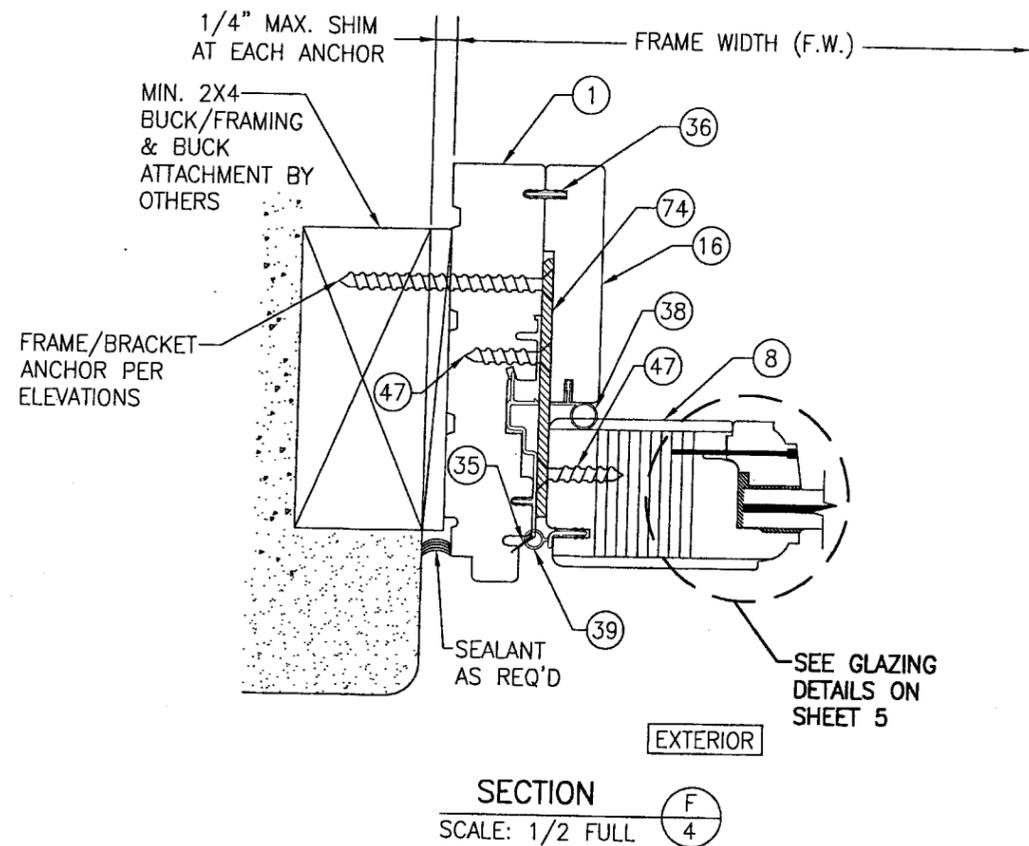
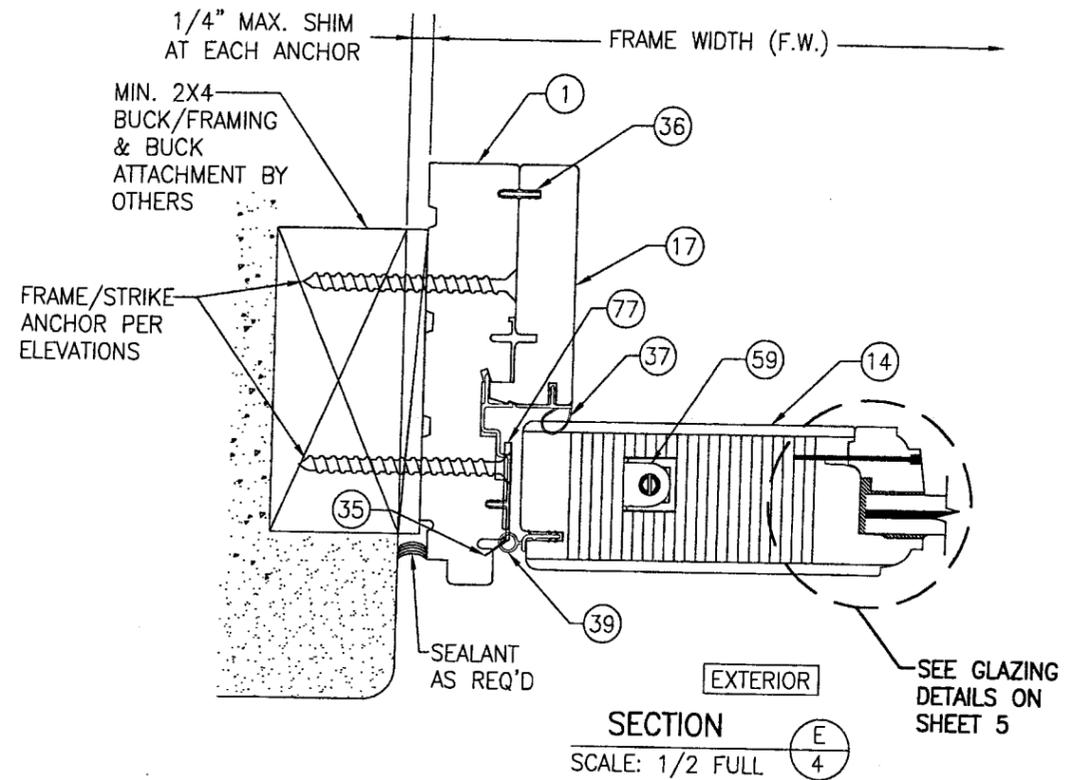
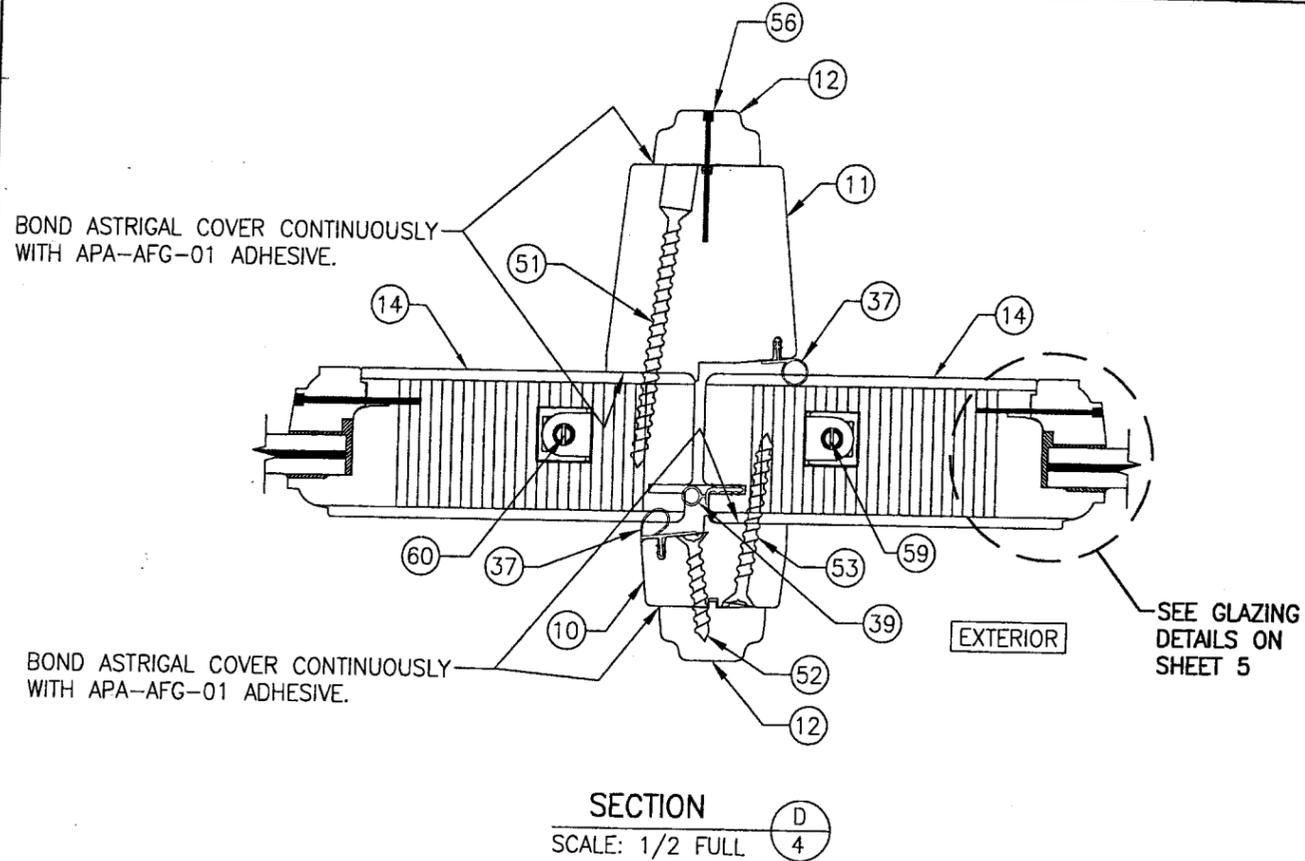
DRAWING TITLE
 8 FT. WOOD OUT-SWING IMPACT DOORS

MANUFACTURER
 MARVIN WINDOWS & DOORS
 HIGHWAY 11; P.O. BOX 100
 WARROAD, MN 56763
 800-346-5044

CONSULTANTS
 W. W. SCHAEFER ENGINEERING
 & CONSULTING, P.A.
 8695 N. MILITARY TRAIL; SUITE C-204
 PALM BEACH GARDENS, FL 33410
 PHONE: 561-775-4902 FAX: 561-775-4903

| | |
|-------------------------------------|--|
| CERTIFICATION MAR 13 2007 | WARREN W. SCHAEFER, P.E. P.E. NO. 44135 |
| DRAWING NO. 1502 | REV. |
| SHEET NO. 3 | OF 9 |

Approved as complying with the
 Florida Building Code
 Date 05/03/2007
 NOAH 06-1228.03
 Miami Dade Product Control
 Division
 By *[Signature]*



| | |
|---------------------|-----------------------|
| DRAWN BY: W.R.M. | CHECKED BY: W.W.S. |
| PLOT: 1=2 | DATE: 10/17/06 |
| NO. | REVISION DESCRIPTION |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

DRAWING TITLE
8 FT. WOOD OUT-SWING IMPACT DOORS

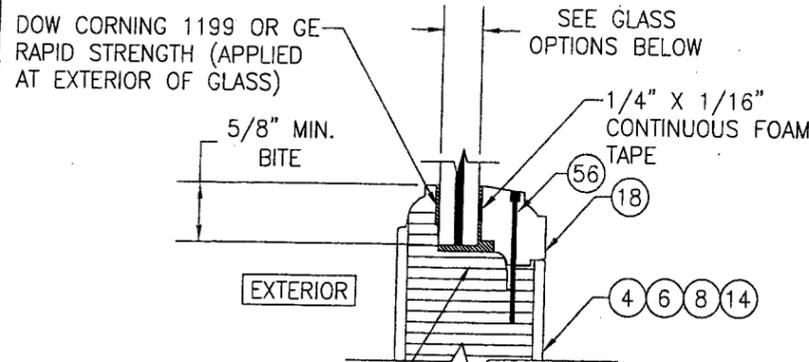
CONSULTANTS
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.
8895 N. MILITARY TRAIL, SUITE C-204
PALM BEACH GARDENS, FL 33410
PHONE: 561-775-4902 FAX: 561-775-4903

MANUFACTURER
MARVIN WINDOWS & DOORS
HIGHWAY 11; P.O. BOX 100
WARROAD, MN 56763
800-346-5044

CERTIFICATION
MAR 13 2007

Approved as complying with the
Florida Building Code
Date: **05/03/2007**
NOAH 06-1228.03
Miami Dade Product Control
Division
By: *[Signature]*

| | |
|----------------------------|----------------|
| DRAWING NO. 1502 | REV. |
| SHEET NO. 4 | OF 9 |

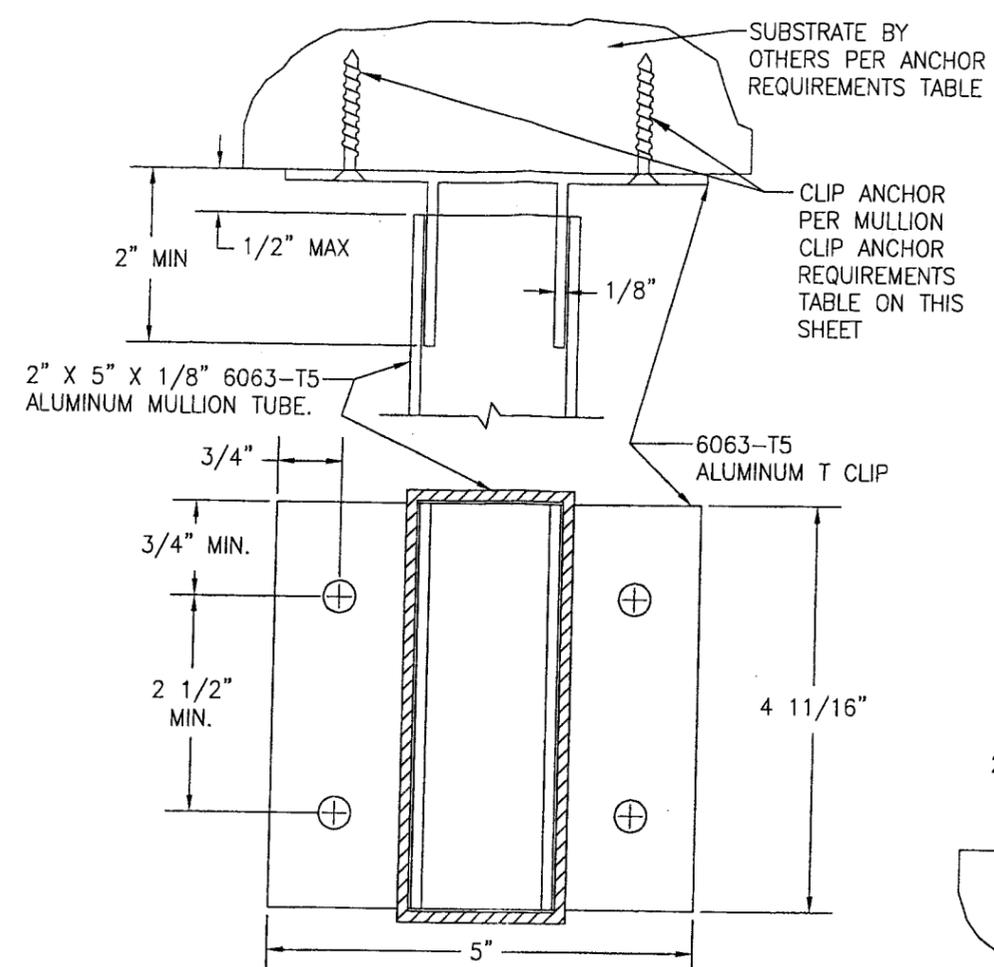


DOW CORNING 995 OR GE RAPID STRENGTH (APPLIED AT INTERIOR OF GLASS & ALONG THE GLASS EDGE)

TYP. GLAZING DETAIL

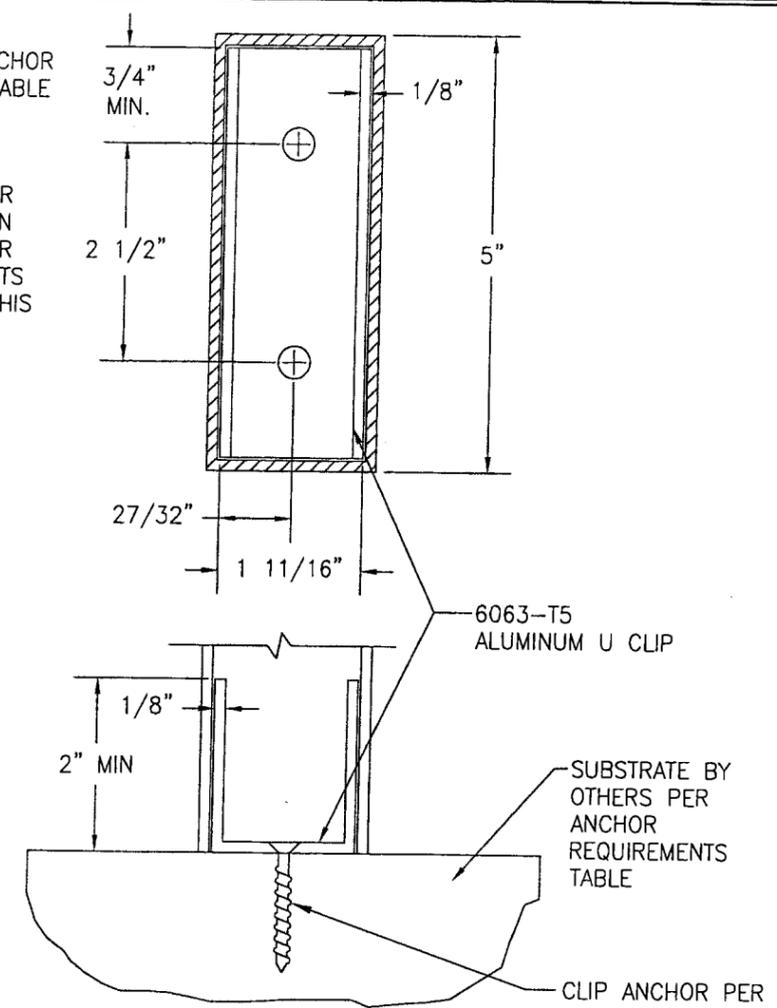
SCALE: 1/2 FULL

- OPTION 1: 3/8" DUPONT SENTRY GLASS PLUS (SGP) LAMINATED GLASS SUPPLIED BY CARDINAL (5/32" ANNEALED/.090 SGP/ 5/32" ANNEALED)
- OPTION 2: 1/2" DUPONT SENTRY GLASS PLUS (SGP) LAMINATED GLASS SUPPLIED BY CARDINAL (3/16" ANNEALED/.090 SGP/ 3/16" ANNEALED)



HEAD MULLION END DETAIL

NOTE: JAMBS, CLADDING, & DOOR MEMBERS NOT SHOWN FOR CLARITY.



SILL MULLION END DETAIL

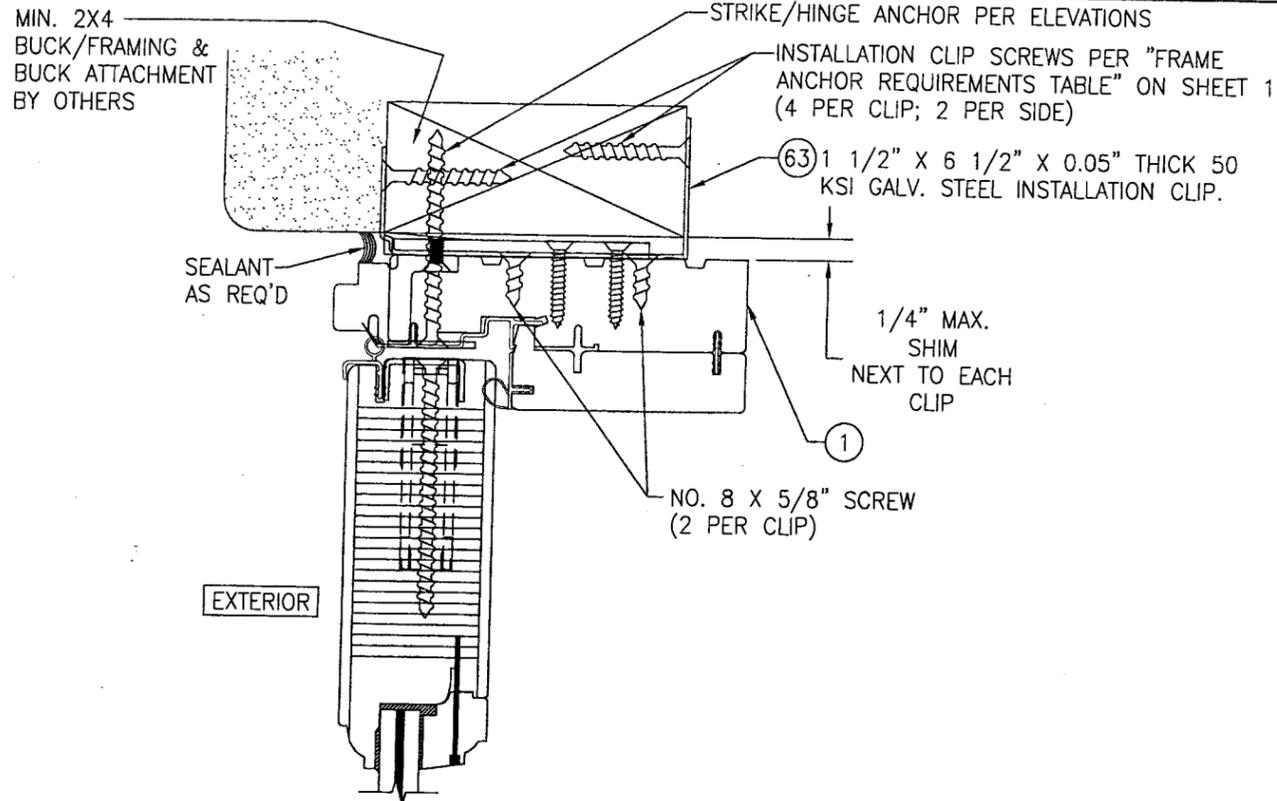
NOTE: JAMBS, CLADDING, & DOOR MEMBERS NOT SHOWN FOR CLARITY.

| MULLION CLIP ANCHOR REQUIREMENTS TABLE | | | |
|--|--|---------------|--------------------|
| OPENING TYPE (SUBSTRATE) | JAMB TO OPENING FASTENER TYPE | MINIMUM EMBED | MINIMUM EDGE DIST. |
| 2X_ WOOD FRAME OR BUCK | NO. 12 SMS SCREW | 1 1/4" | 3/4" |
| MIN. 1/8" THK. A36 STEEL | NO. 12 SELF DRILLING/TAPPING GRADE 5 SCREW | FULL | 1/2" |
| MIN. 1/8" THK. 6063-T5 ALUMINUM | NO. 12 SELF DRILLING/TAPPING GRADE 5 SCREW | FULL | 1/2" |
| MIN. 18 GAGE 33 KSI METAL STUD | NO. 12 SELF DRILLING/TAPPING GRADE 5 SCREW | FULL | 1/2" |
| MIN. 2500 PSI CONCRETE | (1) 1/4" CONCRETE SCREW | 1 1/4" | 2" |

(1) CONCRETE SCREWS SHALL BE ELCO OR ITW RAMSET/RED HEAD TAPCONS, HILTI KWIK-CON II OR POWERS RAWL TAPPER (HARDENED STEEL OR S.S.).

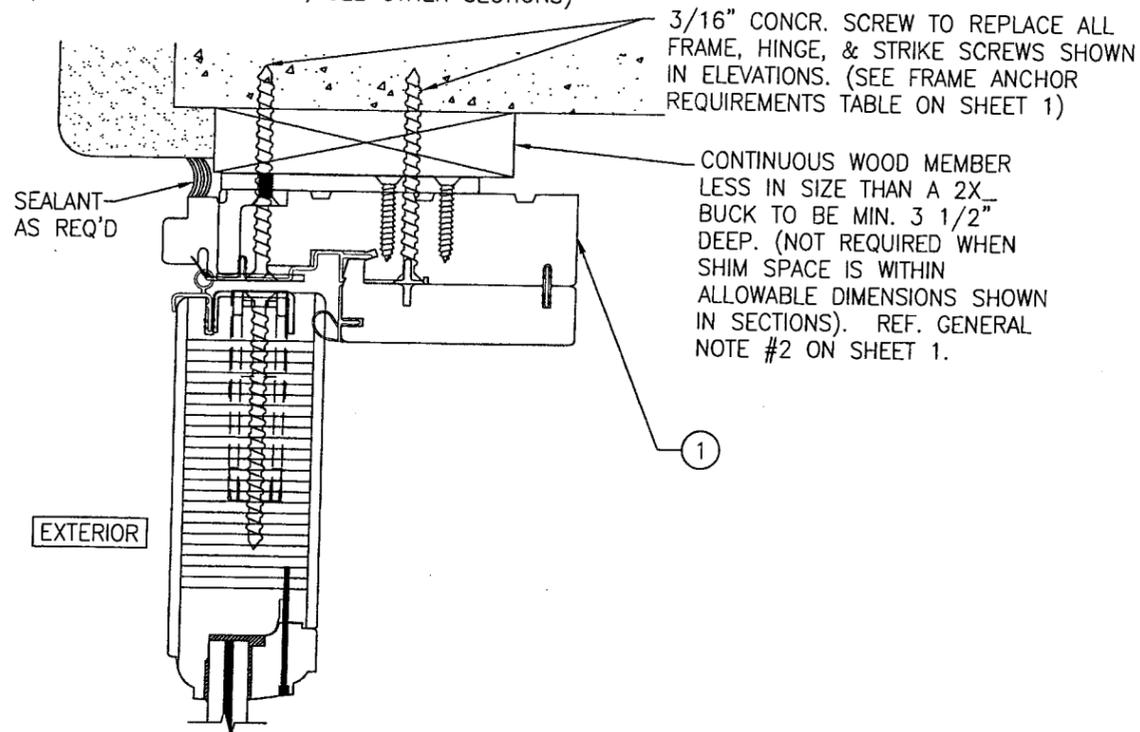
Approved as complying with the Florida Building Code
 Date 05/03/2007
 NOAH 06-1228.03
 Miami Dade Product Control Division
 By *[Signature]*

| | | | |
|---|-----------------------|--|-------------------|
| DRAWN BY: W.R.M. | CHECKED BY: W.W.S. | PLOT: 1=2 | DATE: 10/17/06 |
| NO. | REVISION DESCRIPTION | BY | DATE |
| DRAWING TITLE: 8 FT. WOOD OUT-SWING IMPACT DOORS MANUFACTURER: MARVIN WINDOWS & DOORS HIGHWAY 11; P.O. BOX 100 WARROAD, MN 56763 800-346-5044 | | | |
| CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. 8895 N. MILITARY TRAIL; SUITE C-204 PALM BEACH GARDENS, FL 33410 PHONE: 561-775-4902 FAX: 561-775-4903 | | P.E. NO. 44135 WARREN W. SCHAEFER, P.E. | |
| CERTIFICATION MAR 13 2007 | | DRAWING NO. 1502 | REV. |
| SHEET NO. 5 OF 9 | | | |



OPTIONAL INSTALLATION CLIP MOUNT DETAIL

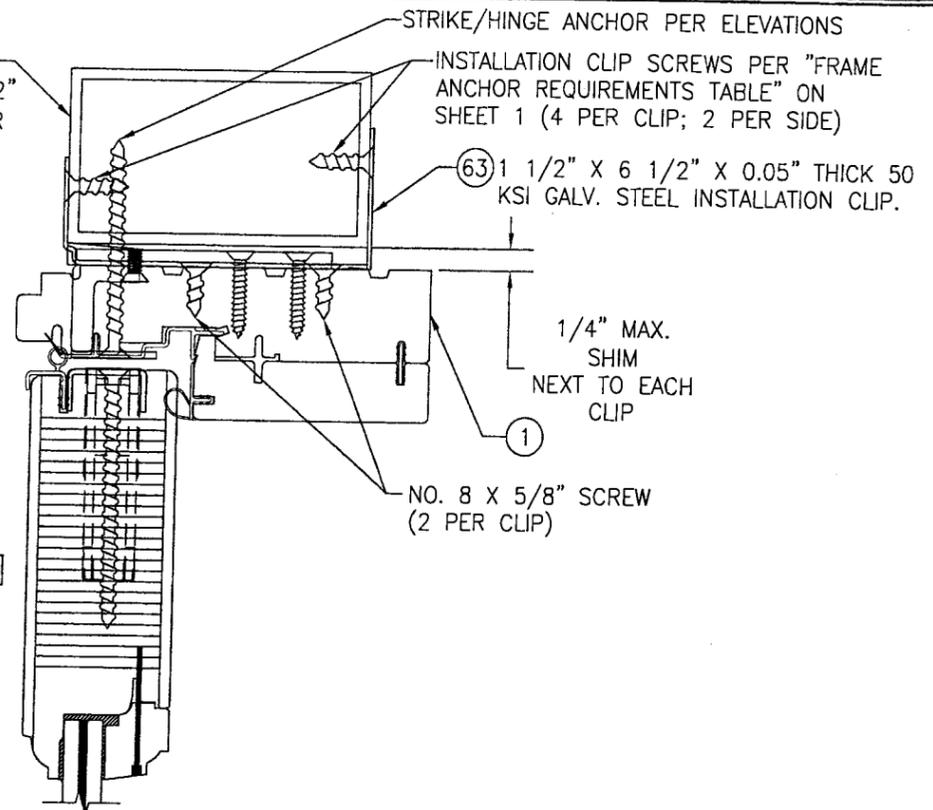
(HEAD SECTION SHOWN, SIDES ARE SIMILIAR)
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)



OPTIONAL DIRECT MOUNT DETAIL TO BLOCK OR CONCRETE WITH SPACER OR SHIM

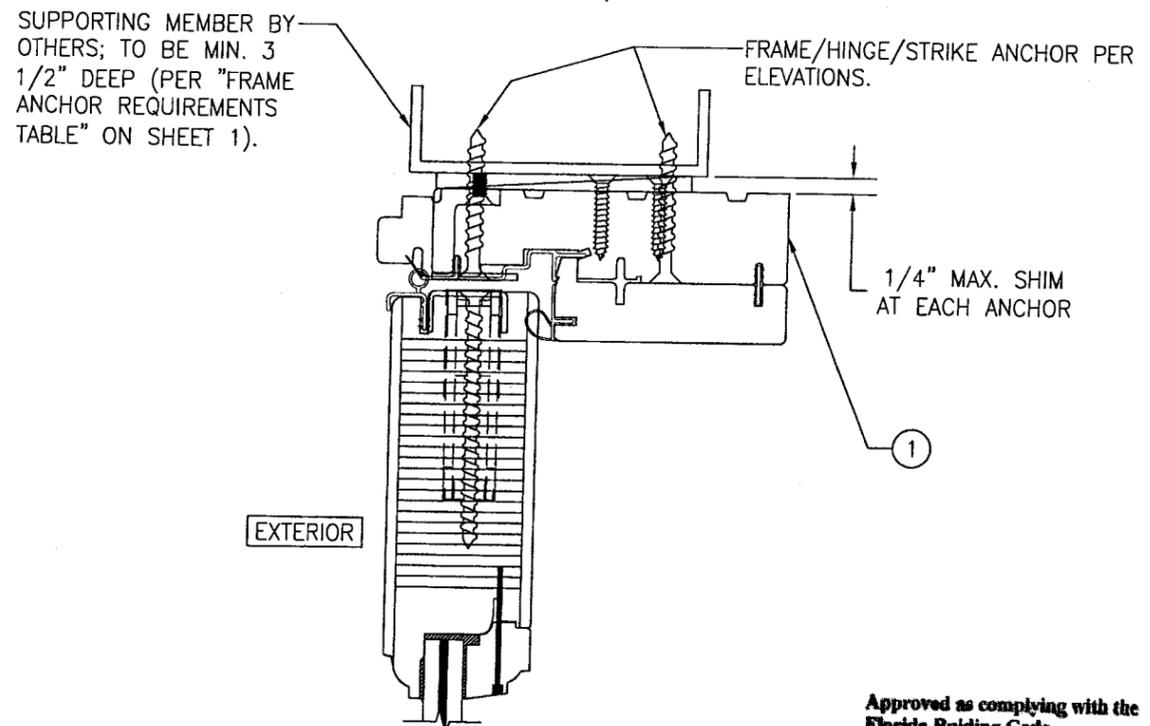
(HEAD SECTION SHOWN, SIDES ARE SIMILIAR)
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)

SUPPORTING MEMBER BY OTHERS; TO BE MIN. 3 1/2\"/>



OPTIONAL CLIP MOUNT DETAIL TO ALUMINUM OR STEEL

(HEAD SECTION SHOWN, SIDES ARE SIMILIAR)
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)

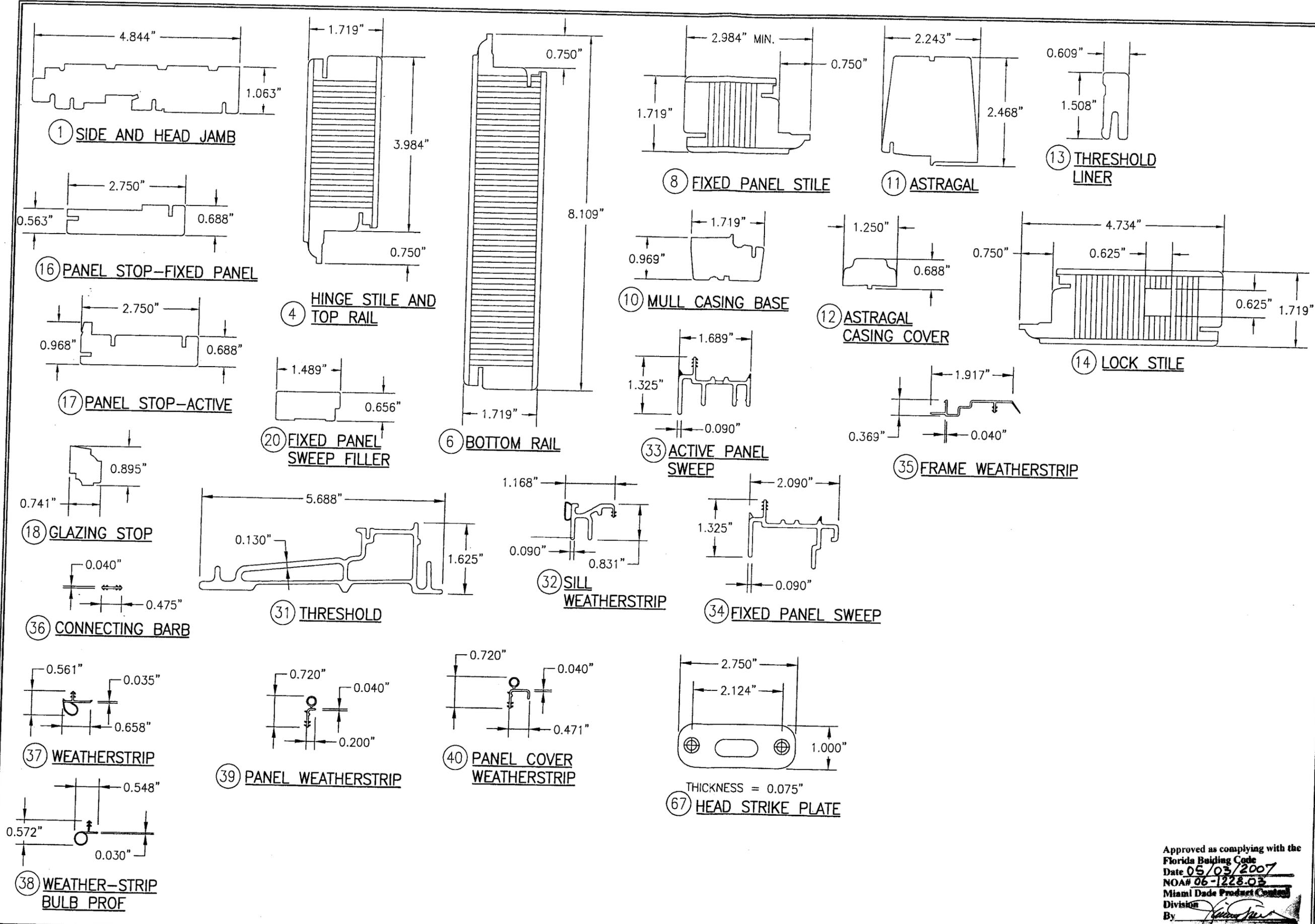


OPTIONAL DIRECT MOUNT DETAIL TO ALUMINUM, STEEL, OR METAL STUD

(HEAD SECTION SHOWN, SIDES ARE SIMILIAR)
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)

Approved as complying with the Florida Building Code
Date 05/03/2007
NOA# 06-1228.03
Miami Dade Product Control
Division
By *[Signature]*

| | |
|--|---|
| DRAWN BY: W.R.M. | CHECKED BY: W.W.S. |
| PLOT: 1-2 | DATE: 10/17/06 |
| NO. | REVISION DESCRIPTION |
| DATE | BY |
| DRAWING TITLE 8 FT. WOOD OUT-SWING IMPACT DOORS | |
| CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. | MANUFACTURER MARVIN WINDOWS & DOORS |
| 8895 N. MILITARY TRAIL, SUITE C-204 PALM BEACH GARDENS, FL 33410 PHONE: 561-775-4902 FAX: 561-775-4903 | HIGHWAY 11; P.O. BOX 100 WARROAD, MN 56763 800-346-5044 |
| CERTIFICATION MAR 13 2007 | WARREN W. SCHAEFER, P.E. P.E. NO. 44135 |
| DRAWING NO. 1502 | REV. |
| SHEET NO. 6 | OF 9 |



| | |
|----------------------|-----------------------|
| DRAWN BY: W.R.M. | CHECKED BY: W.W.S. |
| PLOT: 1=2 | DATE: 10/17/06 |
| DATE | |
| BY | |
| REVISION DESCRIPTION | |
| NO. | |

DRAWING TITLE: 8 FT. WOOD OUT-SWING IMPACT DOORS

MANUFACTURER: MARVIN WINDOWS & DOORS
 HIGHWAY 11; P.O. BOX 100
 WARROAD, MN 56763
 800-346-5044

CONSULTANTS: W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.
 8885 N. MILITARY TRAIL, SUITE C-204
 PALM BEACH GARDENS, FL 33410
 PHONE: 561-775-4902 FAX: 561-775-4903

CERTIFICATION: MAR 13 2007

WARREN W. SCHAEFER, P.E.
 P.E. NO. 44135

DRAWING NO. 1502
 SHEET NO. 8 OF 9

Approved as complying with the Florida Building Code
 Date 05/03/2007
 NOA# 06-1228-03
 Miami Dade Product Control
 Division
 By: *[Signature]*

PARTS LIST

| NO. | REF. NO. | DESCRIPTION | NOTES |
|-------------------------------|----------|-------------------------------|--|
| PARTS & EXTRUSIONS | | | |
| 1 | 00011397 | SIDE & HEAD JAMB | *WOOD |
| 4 | 00013493 | HINGE STILE & TOP RAIL | LVL WITH WOOD VENEER |
| 6 | 00011732 | BOTTOM RAIL | LVL WITH WOOD VENEER |
| 8 | 00015155 | FIXED PANEL STILE | LVL WITH WOOD VENEER |
| 10 | 00016785 | MULL CASING BASE | *WOOD |
| 11 | 00042535 | ASRAGAL | *WOOD |
| 12 | 00008310 | ASTRAGAL CASING COVER | *WOOD |
| 13 | 00011114 | THRESHOLD LINER | *WOOD |
| 14 | 00013493 | LOCK STILE | LVL WITH WOOD VENEER |
| 16 | 00041914 | PANEL STOP - FIXED PANEL | *WOOD |
| 17 | 00016403 | PANEL STOP - ACTIVE | *WOOD |
| 18 | 00016573 | GLAZING STOP - GLASS | *WOOD |
| 20 | 00014943 | FIXED PANEL SWEEP FILLER | *WOOD |
| 31 | 00011107 | THRESHOLD (PAINTED ULTREX) | FIBERGLASS WITH MIN. Fy = 39 KSI & BEARING STRESS = 26.1 KSI |
| 32 | 00013508 | SILL WEATHERSTRIP | VINYL PER MARVIN SPECIFICATION (SEE REFERENCE NO.) |
| 33 | 00013510 | ACTIVE PANEL SWEEP | VINYL PER MARVIN SPECIFICATION (SEE REFERENCE NO.) |
| 34 | 00013509 | FIXED PANEL SWEEP | VINYL PER MARVIN SPECIFICATION (SEE REFERENCE NO.) |
| 35 | 00013511 | FRAME WEATHERSTRIP | VINYL PER MARVIN SPECIFICATION (SEE REFERENCE NO.) |
| SEALS AND SEALANTS | | | |
| 36 | 00005685 | CONNECTING BARB | VINYL PER MARVIN SPECIFICATION (SEE REFERENCE NO.) |
| 37 | 00005648 | WEATHERSTRIP | VINYL PER MARVIN SPECIFICATION (SEE REFERENCE NO.) |
| 38 | 00005399 | WEATHERSTRIP BULB PROFILE | VINYL PER MARVIN SPECIFICATION (SEE REFERENCE NO.) |
| 39 | 00013513 | PANEL WEATHERSTRIP | VINYL PER MARVIN SPECIFICATION (SEE REFERENCE NO.) |
| 40 | 00013512 | PANEL COVER WEATHERSTRIP | VINYL PER MARVIN SPECIFICATION (SEE REFERENCE NO.) |
| FASTENERS | | | |
| 41 | - | NO. 10 X 3" PH A SMS | 2 PER HEAD STRIKE PLATE |
| 42 | - | NO. 8 X 1" AB | 2 PER HEADER REINFORCEMENT PLATE |
| 43 | - | NO. 8 X 3/8" MACHINE SCREW | 2 PER HEADER REINFORCEMENT BRACKET |
| 44 | - | NO. 8 X 3" SMS | 1 PER SHOOT BOLT GUIDE INTO PANELS |
| 45 | - | NO. 8 X 1 1/4" P.H. S/STL SMS | 2 1/4" FROM ENDS & MAX. 11" O.C. |
| 46 | - | NO. 8 X 5/8" MACHINE SCREW | 2 PER THRESHOLD STRIKE |
| 47 | - | NO. 8 X 1" AB | 2 INTO STILE/RAIL; 1 INTO JAMB |
| 48 | - | NO. 10 X 1" SMS | 2 PER HINGE INTO JAMB |
| 49 | - | NO. 9 X 1 1/2" SMS | 4 PER ADJ HINGE INTO STILE |
| 50 | - | NO. 10 X 1" SMS | 4 PER BUTT HINGE INTO STILE |
| 51 | - | NO. 8 X 3" SMS | 3" FROM ENDS & MAX. 8" O.C. (ASTRAGAL) |
| 52 | - | NO. 8 X 1 1/4" SMS | 3" FROM ENDS & MAX. 12" O.C. (ASTRAGAL) |
| 53 | - | NO. 7 X 2" SMS | 3" FROM ENDS & MAX. 12" O.C. (ASTRAGAL) |
| 54 | - | NO. 8 X 1" TH SMS | 3" FROM ENDS & MAX. 12" O.C. (ASTRAGAL) |
| 55 | - | NO. 8 X 1 1/2" P.H. SMS | 2 1/2" FROM ENDS & MAX. 9" O.C. & ADDITIONAL ONE AT LOCK THROW |
| 56 | - | 1 1/2" BRAD NAIL | 2" FROM ENDS & 10-12" O.C. |

* ALL WOOD USED WITH TESTED UNITS IS MIN. GRADE 2 WESTERN PINE. ALTERNATE WOOD SPECIES TO PINE ARE MIN. GRADE 2 MAHOGANY, OAK, CHERRY, CYPRUS, & DOUGLAS FIR
 NOTE: ALL WOOD IS RECEIVED BY MARVIN WINDOWS & DOORS AS GRADE 2, BUT IS MACHINED BY MARVIN TO A SELECT GRADE USE.

PARTS LIST

| NO. | REF. NO. | DESCRIPTION | NOTES |
|-----------------|----------|---|--|
| HARDWARE | | | |
| 57 | 00015469 | ACTIVE DOOR HANDLE | AS REQUIRED TO OPERATE LOCK SYSTEM |
| 58 | 00015824 | INACTIVE DOOR HANDLE | AS REQUIRED TO OPERATE LOCK SYSTEM |
| 59 | 00013771 | ACTIVE DOOR 2-POINT LOCK/DEADBOLT | ASHLAND |
| 60 | 00013966 | INACTIVE DOOR 2-POINT LOCK HARDWARE | ASHLAND |
| 61 | 00003751 | 4 X 4 BUTT HINGE | LAWRENCE |
| 62 | 00003749 | 4 X 4 ADJUSTABLE HINGE | ASHLAND |
| 63 | 00036080 | GALVANIZED STEEL 0.050 C - CLIP MIN. Fy = 50 KSI | 1 9/16" WIDE X 6 1/2" LONG X .050" THK. MAY REPLACE FRAME FASTENERS PER ELEVATIONS. |
| 64 | 00027022 | SS BACKER PLATE | 1 AT EACH THRESHOLD STRIKE BELOW SILL |
| 65 | 00014912 | GLASS REINFORCED ACETAL SILL STRIKE | 1 AT EA. LOCK BAR; 1.07 X 2.82 X 0.3 THK |
| 66 | 00014905 | GLASS FILLED NYLON SHOOT BOLT GUIDE | 1 AT EA. OPERATER PANEL (TOP) |
| 67 | 00004621 | S.S. HEAD STRIKE PLATE | 1 FOR EA. LOCK BAR (HEADER) |
| 68 | 00026910 | S.S. STILE END PLATE | 1 AT EA. OPERATER PANEL (TOP AND BOTTOM) |
| 69 | 00015312 | S.S. SHOOT BOLT GUIDE REINFORCEMENT | 1 AT EA. OPERATER PANEL (BOTTOM) |
| 70 | 00015314 | GLASS FILLED NYLON SHOOT BOLT GUIDE | 1 AT EA. OPERATER PANEL (BOTTOM) |
| 71 | 00027702 | S.S. SILL STRIKE | 1 AT EA. LOCK BAR; .250 X 2.661 X .048 THK 302 S.S. |
| 72 | 00037647 | S.S. HEADER REINFORCEMENT PLATE | 1 FOR EA. LOCK BAR (HEADER) 1.500 X 3.000 X .188 THK 304 S.S. |
| 73 | 00036001 | S.S. HEADER REINFORCEMENT BRACKET | 1 FOR EA. LOCK BAR (HEADER) .781 x 1 x .75 THK 304 S.S. |
| 74 | 00042575 | FIXED PANEL BRACKET | LOCATED PER ELEVATIONS; 1 X 3 X 1/8 THK 5052 ALUMINUM |
| 75 | 00011232 | FIXED PANEL SILL BOLT | 2 PER FIXED PANEL AT THRESHOLD |
| 77 | 05700044 | S.S. STRIKE PLATE | 1 FOR EA. LOCK BAR (SIDE JAMB) |

DRAWN BY: W.R.M.
 CHECKED BY: W.W.S.
 PLOT: 1=2
 DATE: 10/17/06

| NO. | REVISION DESCRIPTION | DATE |
|-----|----------------------|------|
| | | |
| | | |
| | | |

DRAWING TITLE: 8 FT. WOOD OUT-SWING IMPACT DOORS

CONSULTANTS: W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.
 8895 N. MILITARY TRAIL, SUITE C-204
 PALM BEACH GARDENS, FL 33410
 PHONE: 561-775-4902 FAX: 561-775-4903

MANUFACTURER: MARVIN WINDOWS & DOORS
 HIGHWAY 11, P.O. BOX 100
 WARROAD, MN 56763
 800-346-5044

CERTIFICATION: MAR 13 2007

WARREN W. SCHAEFER, P.E.
 P.E. NO. 44135

DRAWING NO. 1502
 SHEET NO. 9 OF 9

Approved as complying with the Florida Building Code
 Date 05/03/2007
 NOA# 06-1228-03
 Miami Dade Product Control Division
 By: *[Signature]*