



**DEPARTMENT OF PERMITTING, ENVIRONMENT, AND REGULATORY AFFAIRS (PERA)  
BOARD AND CODE ADMINISTRATION DIVISION  
NOTICE OF ACCEPTANCE (NOA)**

**MIAMI-DADE COUNTY  
PRODUCT CONTROL SECTION**  
11805 SW 26 Street, Room 208  
Miami, Florida 33175-2474  
T (786) 315-2590 F (786) 315-2599  
[www.miamidade.gov/pera/](http://www.miamidade.gov/pera/)

**Tischler Und Sohn (USA) Ltd.  
Six Suburban Avenue  
Stamford, Ct. 06901**

**SCOPE:**

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County PERA -Product Control Section 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 Section (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. PERA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section 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: Tischler series Outswing Wood Panel Doors-L.M. Impact**

**APPROVAL DOCUMENT:** Drawing No.1616 Rev A, titled "Out-Swing Impact Wood Panel Doors", sheets 1 through 17 of 17, dated 10/08/08 and last revised on OCT 27, 2011, prepared by W.W. Schaefer Engineering & Consulting, P.A., signed and sealed by Warren Schaefer, P.E., bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Section.

**MISSILE IMPACT RATING: Large Missile Impact Resistant**

**Limitation:**

1. MDF material: Medite Exterior MDF panel EN 622 Type MDF-H2
2. For reinforcement requirements see sheet 8 thru 10, panel glazing options on sheet 11.
3. Lower design pressure shall control when doors mulled with Tishler's sidelites or transom.

**LABELING:** Each unit shall bear a permanent label with the manufacturer's name or logo, Kall/Eifel, Germany and series 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.

This NOA revises NOA # 09-0212.07 and consists of this page 1 and evidence pages E-1, as well as approval document mentioned above.

The submitted documentation was reviewed by **Ishaq I. Chanda, P.E.**



**NOA No 11-1101.15**  
**Expiration Date: May 27, 2014**  
**Approval Date: January 05, 2012**  
**Page 1**

12/27/11

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**A. DRAWINGS (transferred from file # 09-0212.07)**

1. Manufacturer's die drawings and sections.
2. Drawing No. **1616 Rev A**, titled "Out-Swing Impact Wood Panel Doors", sheets 1 through 17 of 17, dated 10/08/08 and last revised on OCT 27, 2011, prepared by W.W. Schaefer Engineering & Consulting, P.A., signed and sealed by Warren Schaefer, P.E.

(Note: The revision consist of compliance to FBC 2010 only)

**B. TESTS (transferred from file # 09-0212.07)**

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 202-94

Along with installation diagram of Single & Double Outswing / Inswing, Tilt/Turn Mahogany Wood French doors w/ wo Sidelite & Transom, w/ MDF & Wood Veneered Panels and different shapes top, prepared by Architectural Testing, Test Report(s) No. **ATI 77326.01-109-18**, dated 02/03/09 and **ATI 77327.01-109-18**, dated 02/202/09, both signed and sealed by Michael D. Stremmel, P.E.

2. Additional test report: ATI 77324.01-109.18 (specimen A3-1 & A3-7) issued by Architectural Testing per TAS 201, 202 and 203-94.

**C. CALCULATIONS**

1. Statement letters of conformance to FBC 2010, dated OCT 28, 2011, prepared by W. W. Schafer Engineering & Consulting, P. A., signed and sealed by Warren W. Schafer, P.E.
2. Anchor calculations and structural analysis complying w/ FBC 2007 dated 02/09/09 and 04-22-09, prepared by W.W. Schaefer Engineering & Consulting, P.A., signed & sealed by Warren Schaefer, P.E. (transferred from file # 09-0212.07)

**D. QUALITY ASSURANCE**

1. Miami Dade Department of Permitting, Environment, and Regulatory Affairs (PERA).

**E. MATERIAL CERTIFICATIONS**

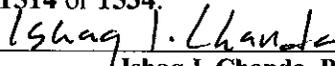
1. Test report No. ATI-86006.01-106-18 (Rev 2) dated 12/12/08 and ATI-86006.02-106-18 02/05/09 for "Durability of Wood-Based Composite Lumber and panels" per ASTM ASTM D-1761 and ASTM D-4761, issued by Architectural Testing Lab.

**F. STATEMENTS**

1. Statement letters of conformance to FBC 2010, dated OCT 28, 2011 and "No financial interest dated OCT 24, 2011, prepared by W. W. Schafer Engineering & Consulting, P. A., signed and sealed by Warren W. Schafer, P.E.
2. E-mail statement dated 03/31/09, issued by Michael D. Stremmel, P.E. of Architectural testing in reference to low sill, water infiltration test.

**G. OTHER**

1. This NOA revises NOA # 09-0212.07, expiring 05/27/14.
2. Test proposal # 07-3533 dated Oct 22, 2007, approved by BCCO.
3. Distribution agreement between Tishler Und Sohn (USA) and Tishler/Cornelius Korn GmbH, Germany, signed by Tim Carpenter & Wilhelm Korn, respectively.
4. Tishler's Fixed Casement windows NOA(s) w/ Drawing No. 1514 or 1534.

  
Ishaq I. Chanda, P.E.  
Product Control Examiner  
NOA No 11-1101.15  
Expiration Date: May 27, 2014  
Approval Date: January 05, 2012

**GENERAL NOTES:**

- THESE DOOR SYSTEMS HAVE BEEN TESTED, ANALYZED & APPROVED FOR DESIGN PRESSURES NOT TO EXCEED THOSE SHOWN IN THE "ALLOWABLE DESIGN PRESSURE TABLE(S)".
- OPENINGS, BUCKING & 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. SPECIFIED ANCHOR EMBED TO BASE MATERIAL SHALL BE BEYOND WALL FINISH OR STUCCO.
- THE DETAILS & SPECIFICATIONS SHOWN HEREIN REPRESENT THE PRODUCTS TESTED & PROPOSED FOR WATER, AIR, IMPACT, CYCLIC & UNIFORM STATIC AIR PRESSURE TESTING IN CONFORMANCE WITH THE FLORIDA BUILDING CODE PROTOCOLS TAS-201, 202 & 203 FOR LARGE MISSILE IMPACT DOORS.
- THESE DOOR SYSTEMS HAVE BEEN DESIGNED IN ACCORDANCE WITH AND MEET THE REQUIREMENTS OF THE FLORIDA BUILDING CODE (FBC) INCLUDING HIGH VELOCITY HURRICANE ZONES (HVHZ).
- IMPACT SHUTTERS ARE NOT REQUIRED WITH THESE DOORS.
- ALL ANCHORS SECURING DOOR FRAME TO PRESSURE TREATED BUCKS OR WOOD FRAMING SHALL BE CAPABLE OF RESISTING CORROSION CAUSED BY THE PRESSURE TREATING CHEMICALS IN THE WOOD.
- DETERMINE THE POSITIVE & NEGATIVE DESIGN LOADS TO USE WHEN REFERENCING THESE DOCUMENTS IN ACCORDANCE WITH THE GOVERNING CODE AND GOVERNING WIND VELOCITY. FOR WIND LOAD CALCULATIONS IN ACCORDANCE WITH THE FLORIDA BUILDING CODE, A DIRECTIONALITY FACTOR OF  $K_d = 0.85$  MAY BE APPLIED PER THE ASCE 7 STANDARD.
- NO INCREASE IN ALLOWABLE STRESS HAS BEEN USED IN THE CERTIFICATION OF THIS PRODUCT. WIND LOAD DURATION FACTOR  $C_d = 1.6$  WAS USED FOR WOOD SCREW ANALYSIS ONLY.
- MATERIALS, INCLUDING BUT NOT LIMITED TO STEEL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF FLORIDA BUILDING CODE CHAPTER 20.
- ALL WOOD MEMBERS OF DOORS THAT MAY POSSIBLY COME INTO CONTACT WITH MASONRY OR CONCRETE SUBSTRATES, ARE SUBJECT TO MOISTURE &/OR ARE SUBJECT TO THE OUTSIDE ENVIRONMENT SHALL BE OF AN APPROVED DURABLE SPECIES OR BE TREATED IN AN APPROVED METHOD WITH AN APPROVED PRESERVATIVE PER FBC SECTION 2326.

**LOCK STRIKE REQUIREMENTS (TOP OF PANEL)**

PANEL WIDTH	QUANTITY PER PANEL
RECTANGULAR PANEL	
ALL WIDTHS	2
ARCH & ROUND TOP PANEL	
OVER 32"	3
28" TO 32"	2

**(1) LOCK STRIKE REQUIREMENTS (BOTTOM OF PANEL)**

PANEL WIDTH	QUANTITY PER PANEL
ALL PANEL SHAPES	
ALL WIDTHS	2

(1) WHEN ADA SILL IS USED WITH DOUBLE DOORS, ONLY THE KJV LOCK SYSTEM MAY BE USED. WHEN ADA SILL IS USED WITH A SINGLE DOOR, BOTH THE KJV & SIEGENIA LOCK SYSTEMS APPLY BUT DO NOT REQUIRE SILL STRIKES.

**LOCK STRIKE REQUIREMENTS (LOCK SIDE OF PANEL)**

(1) PANEL HEIGHT	QUANTITY PER PANEL
ALL PANEL SHAPES	
OVER 96"	4
76" TO 96"	3

(1) THE "PANEL HEIGHT" IS CONSIDERED TO BE FULL PANEL HEIGHT FOR RECTANGULAR UNITS OR DISTANCE FROM THE BASE OF PANEL TO PANEL SPRINGLINE FOR SHAPED UNITS

THESE DRAWINGS ARE APPLICABLE ONLY TO THE PRODUCT SPECIFIED. THEY MAY NOT BE USED FOR THE ASSEMBLY AND/OR INSTALLATION OF ANY OTHER PRODUCT NOR MAY THEY BE USED FOR RATIONAL AND/OR LOCAL APPROVAL OF ANY PRODUCT NOT PRODUCED BY THE MANUFACTURER STATED ON THESE DRAWINGS.

**HINGE REQUIREMENTS**

(1) PANEL HEIGHT	QUANTITY PER PANEL
OVER 99"	5
76" TO 99"	4

(1) THE "PANEL HEIGHT" IS CONSIDERED TO BE FULL PANEL HEIGHT FOR RECTANGULAR UNITS OR DISTANCE FROM THE BASE OF PANEL TO PANEL SPRINGLINE FOR SHAPED UNITS

**FRAME ANCHOR REQUIREMENTS TABLE**

OPENING TYPE (SUBSTRATE)	FRAME/SILL/CLIP/BACKET TO OPENING FASTENER TYPE	MINIMUM EMBED	MINIMUM EDGE DIST.
<b>FRAME/SILL SCREWS</b>			
MIN. 2X4 WOOD FRAME OR BUCK (MIN. GR. 3 & G=0.55)	NO. 14 SMS/WOOD SCREW OR 1/4" BTI SCREW	1 1/4"	3/4"
MIN. 18 GA. 33 KSI METAL STUD	(2)1/4-14 SELF TAP/DRILLING SCREW	FULL	1/2"
MIN. 1/8" THK A36 STEEL	(2)1/4-14 SELF TAP/DRILLING SCREW	FULL	1/2"
MIN. 1/8" THK 6063-T5 ALUM.	(2)1/4-14 SELF TAP/DRILLING SCREW	FULL	1/2"
C-90 CMU/2500 PSI CONCRETE	(1) 1/4" CONCRETE SCREW	1 1/4"	2"
<b>INSTALLATION CLIP SCREWS</b>			
MIN. 2X6 WOOD FRAME OR BUCK (MIN. GR. 3 & G=0.55)	NO. 12 X 1 1/2" SMS	1 3/8"	3/4"
MIN. 18 GA. 33 KSI METAL STUD	(2)12-14 SELF TAP/DRILLING SCREW	FULL	1/2"
MIN. 1/8" THK A36 STEEL	(2)12-14 SELF TAP/DRILLING SCREW	FULL	1/2"
MIN. 1/8" THK 6063-T5 ALUM.	(2)12-14 SELF TAP/DRILLING SCREW	FULL	1/2"
C-90 CMU/2500 PSI CONCRETE	(1) 1/4" CONCRETE SCREW	1 1/4"	2"
<b>BTI BRACKET SCREWS</b>			
MIN. 2X6 WOOD FRAME OR BUCK (MIN. GR. 3 & G=0.55)	NO. 8 X 1 1/2" SMS	1 3/8"	3/4"
MIN. 18 GA. 33 KSI METAL STUD	(2) 8-18 SELF TAP/DRILLING SCREW	FULL	1/2"
MIN. 1/8" THK A36 STEEL	(2) 8-18 SELF TAP/DRILLING SCREW	FULL	1/2"
MIN. 1/8" THK 6063-T5 ALUM.	(2) 8-18 SELF TAP/DRILLING SCREW	FULL	1/2"
<b>ANGLE CLIP SCREWS</b>			
MIN. 2X6 WOOD FRAME OR BUCK (MIN. GR. 3 & G=0.55)	NO. 8 X 1 1/2" SMS	1 3/8"	3/4"
MIN. 18 GA. 33 KSI METAL STUD	(2) 8-18 SELF TAP/DRILLING SCREW	FULL	1/2"
MIN. 1/8" THK A36 STEEL	(2) 8-18 SELF TAP/DRILLING SCREW	FULL	1/2"
MIN. 1/8" THK 6063-T5 ALUM.	(2) 8-18 SELF TAP/DRILLING SCREW	FULL	1/2"
C-90 CMU/2500 PSI CONCRETE	(1) 3/16" CONCRETE SCREW	1 1/4"	2"

PANEL WIDTH DIMENSIONS ARE APPROXIMATELY 3" LESS THAN THE FRAME WIDTH & PANEL HEIGHT WIDTH DIMENSIONS ARE APPROXIMATELY 1 3/4" LESS THAN THE FRAME HEIGHT

**ALLOWABLE DESIGN PRESSURE (SINGLE & DOUBLE OPERABLE DOORS)**

MAX. FRAME WIDTH (IN.)	MAX. FRAME HEIGHT (IN.)	ALLOWABLE PRESSURE	
		POSITIVE (PSF)	NEGATIVE (PSF)
<b>SINGLE DOOR</b>			
51 11/16	120	70	70
41 1/2	99	70	(1) 85
<b>DOUBLE DOOR</b>			
80 1/16	120	70	70
80 1/16	99	70	(1) (2) 85

(1) HIGHER PRESSURE OF -85 PSF IS ONLY APPLICABLE WITH STANDARD OR OPTIONAL SILL (USE OF ADA SILL IS NOT APPLICABLE TO UNITS WITH PRESSURE EXCEEDING +/-70 PSF).

(2) HIGHER PRESSURE OF -85 PSF IS ONLY APPLICABLE WITH DOUBLE DOORS WHEN THE DOUBLE DOOR MEETING STILES ARE BAR REINFORCED (REF. SECTIONS).

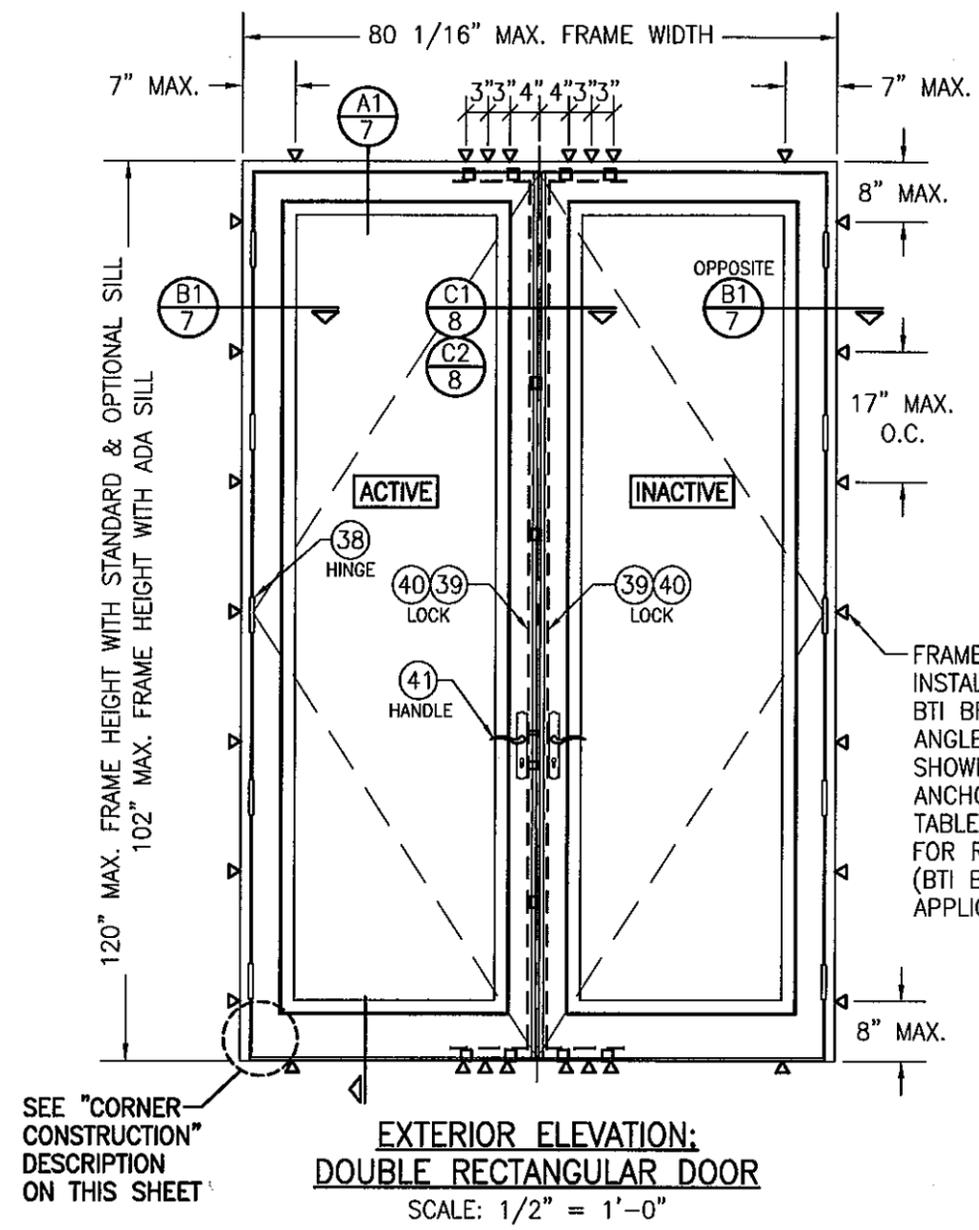
**CORNER CONSTRUCTION:**

**RECTANGULAR FRAME CORNERS:** MORTISE & TENON CONSTRUCTION JOINED & GLUED WITH PONAL SUPER 3 WOOD GLUE OR EQUIVALENT.  
**ARCHED FRAME CORNERS:** ARCHED FRAME BUTTED TO STRAIGHT FRAME, JOINED WITH ONE(1) NO.14 X 3" WOOD SCREW, & GLUED WITH PONAL SUPER 3 WOOD GLUE OR EQUIVALENT.  
**HALF ROUND FRAME CORNERS:** FINGER JOINT CONSTRUCTION JOINED & GLUED WITH PONAL SUPER 3 WOOD GLUE OR EQUIVALENT.  
**RECTANGULAR PANEL CORNERS:**  
**OPTION 1** (USED WITH STILE & RAIL CONDITIONS WHERE MEMBERS ARE 4.250" OR LESS IN OVERALL HEIGHT): MORTISE & TENON CONSTRUCTION JOINED & GLUED WITH PONAL SUPER 3 WOOD GLUE OR EQUIVALENT.  
**OPTION 2** (USED WITH STILE & RAIL CONDITIONS WHERE MEMBERS ARE GREATER THAN 4.250" IN OVERALL HEIGHT): MEMBERS ARE SQUARE CUT, BUTTED, JOINED WITH FIVE(5) #5/16 X 2" WOOD DOWELS, & GLUED WITH PONAL SUPER 3 WOOD GLUE OR EQUIVALENT.  
**ARCHED PANEL CORNERS:** ARCHED RAIL BUTTED TO STRAIGHT STILE, JOINED WITH ONE(1) NO.14 X 3" WOOD SCREW, & GLUED WITH PONAL SUPER 3 WOOD GLUE OR EQUIVALENT.  
**HALF ROUND PANEL CORNERS:** FINGER JOINT CONSTRUCTION JOINED & GLUED WITH PONAL SUPER 3 WOOD GLUE OR EQUIVALENT.  
**SILL CORNERS:**  
 ALL SILL CONDITIONS: SILL IS BUTTED TO THE JAMBS & JOINED WITH THREE(3) NO.6 X 2" WOOD SCREWS & SEALED WITH SEALANT.

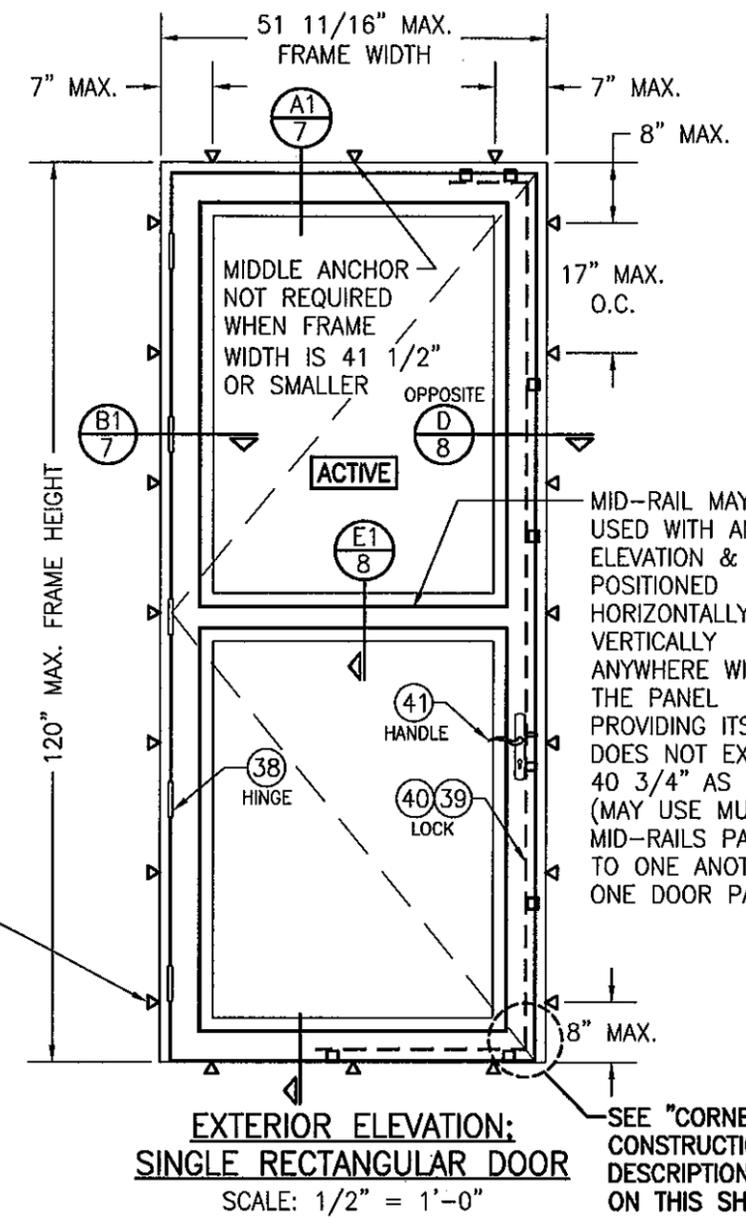
**PRODUCT REVIEWED**  
 as complying with the Florida Building Code  
 Acceptance No. 11-1101-15  
 Expiration Date 05/27/2014  
 By: [Signature]  
 Miami Dade Product Control



DRAWN BY: W.R.M.	CHECKED BY: W.W.S.
PLOT: 1-24	DATE: 10/08/08
DATE: 10/25/11	
BY: W.R.M.	
REVISION DESCRIPTION: UPDATE TO CURRENT STANDARDS	
NO. AT	
<b>DRAWING TITLE: OUT-SWING IMPACT WOOD PANEL DOORS</b>	
<b>MANUFACTURER: TISCHLER UND SOHN (USA) LTD.</b>	
SIX SUBURBAN AVENUE STAMFORD, CONNECTICUT 06901 203-674-0600	
<b>CONSULTANTS: W. W. SCHAEFER ENGINEERING &amp; CONSULTING, P.A. (CA 6809)</b>	
7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424	
<b>CERTIFICATION:</b>	
OCT 27 2011	
WARREN W. SCHAEFER, P.E. P.E. NO. 44135	
DRAWING NO. 1616	REV. A
SHEET NO. 1 OF 17	



EXTERIOR ELEVATION:  
DOUBLE RECTANGULAR DOOR  
SCALE: 1/2" = 1'-0"



EXTERIOR ELEVATION:  
SINGLE RECTANGULAR DOOR  
SCALE: 1/2" = 1'-0"

FRAME SCREWS,  
INSTALLATION CLIPS,  
BTI BRACKETS OR  
ANGLE CLIPS WHERE  
SHOWN. SEE "FRAME  
ANCHOR REQUIREMENTS  
TABLE" ON SHEET 1  
FOR REQUIREMENTS  
(BTI BRACKETS NOT  
APPLICABLE AT SILL).

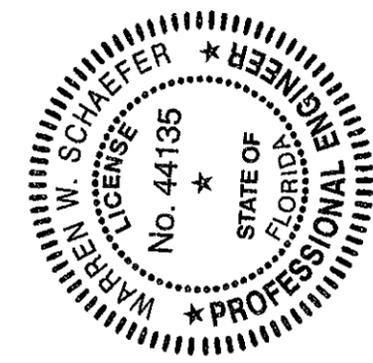
MID-RAIL MAY BE  
USED WITH ANY  
ELEVATION & MAY BE  
POSITIONED  
HORIZONTALLY OR  
VERTICALLY  
ANYWHERE WITHIN  
THE PANEL  
PROVIDING ITS SPAN  
DOES NOT EXCEED  
40 3/4" AS SHOWN  
(MAY USE MULTIPLE  
MID-RAILS PARALLEL  
TO ONE ANOTHER IN  
ONE DOOR PANEL)

SEE "CORNER  
CONSTRUCTION"  
DESCRIPTION  
ON THIS SHEET

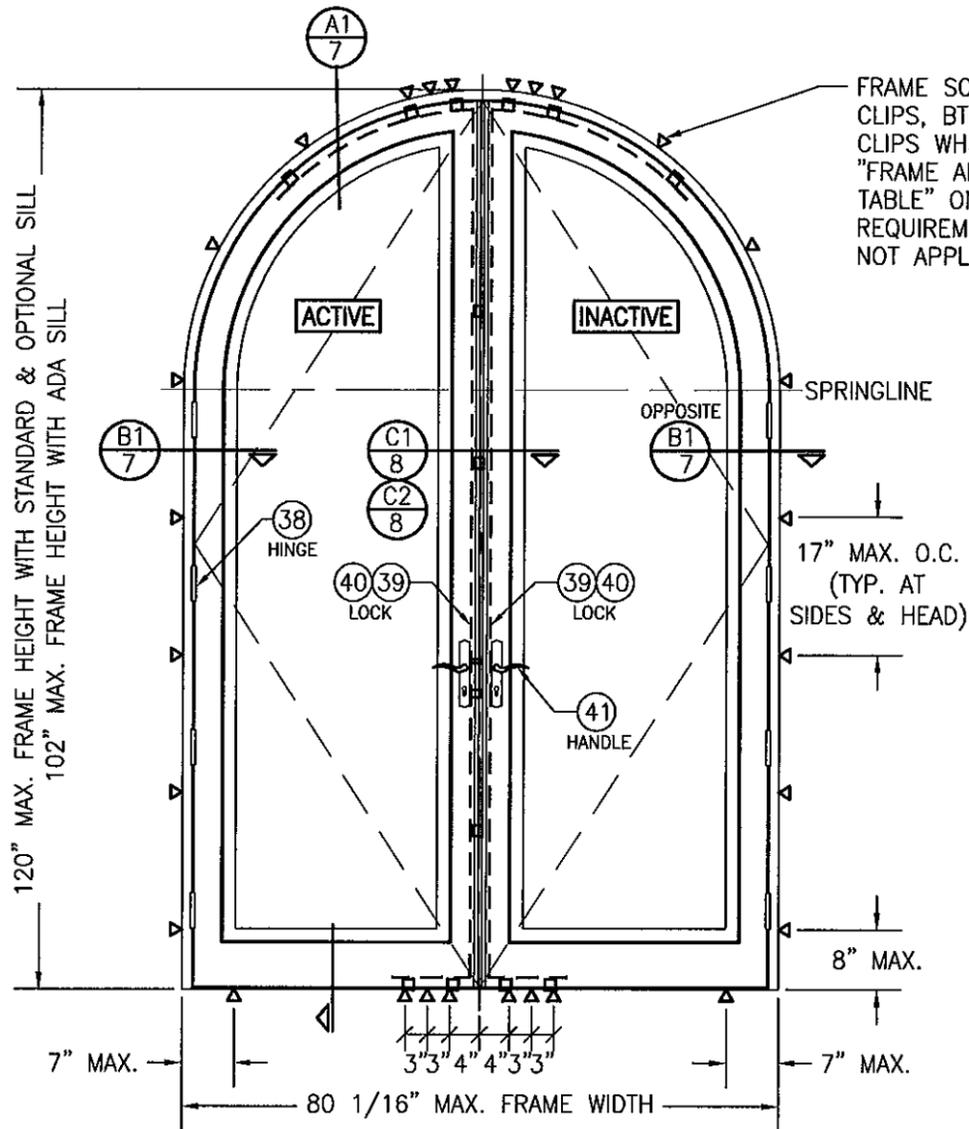
SEE "CORNER  
CONSTRUCTION"  
DESCRIPTION  
ON THIS SHEET

ALLOWABLE DESIGN PRESSURE  
SEE PRESSURE TABLE ON SHEET 1

PRODUCT REVISED  
to comply with the Florida  
Building Code  
Acceptance No. 11-1101.15  
Expiration Date 5/27/14  
*Isaac J. Lunde*  
Miami Dade Product Control

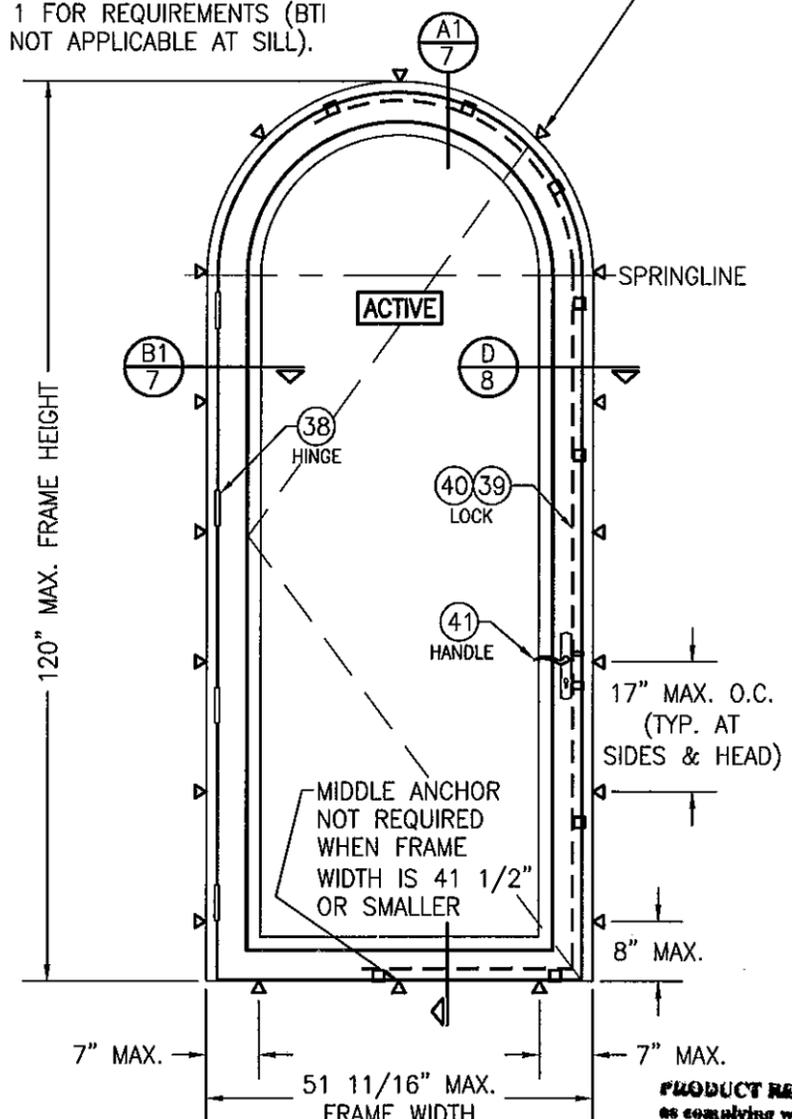


DRAWN BY: W.R.M.		CHECKED BY: W.W.S.	
PLOT: 1-24		DATE: 10/08/08	
NO.	REVISION DESCRIPTION	DATE	BY
DRAWING TITLE: <b>OUT-SWING IMPACT WOOD PANEL DOORS</b>			
CONSULTANTS: <b>W. W. SCHAEFER ENGINEERING &amp; CONSULTING, P.A. (CA 6809)</b>		MANUFACTURER: <b>TISCHLER UND SOHN (USA) LTD.</b>	
7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424		SIX SUBURBAN AVENUE STAMFORD, CONNECTICUT 06901 203-674-0600	
CERTIFICATION	OCT 27 2011		WARREN W. SCHAEFER, P.E. P.E. NO. 44135
DRAWING NO.	REV.	SHEET NO.	
1616	A	2 OF 17	



**EXTERIOR ELEVATION:  
DOUBLE HALF ROUND DOOR**  
SCALE: 1/2" = 1'-0"

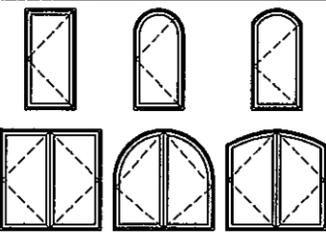
FRAME SCREWS, INSTALLATION CLIPS, BTI BRACKETS OR ANGLE CLIPS WHERE SHOWN. SEE "FRAME ANCHOR REQUIREMENTS TABLE" ON SHEET 1 FOR REQUIREMENTS (BTI BRACKETS NOT APPLICABLE AT SILL).



**EXTERIOR ELEVATION:  
SINGLE HALF ROUND DOOR**  
SCALE: 1/2" = 1'-0"

**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
Acceptance No. 11-1101.15  
Expiration Date 5/27/14  
By: [Signature]  
Minimal Date Product Control

**APPROVED SHAPES  
(OPERABLE DOORS)**



**NOTES:**  
1. OTHER SHAPES MAY APPLY PROVIDING THEY ARE SIMILAR TO THOSE SHOWN & HAVE CORNER CONSTRUCTION AS DESCRIBED IN THIS DRAWING.  
2. ALL SHAPED UNITS MUST FIT INSCRIBED INTO THE ALLOWABLE RECTANGULAR UNITS & BE GOVERNED BY THE ALLOWABLE PRESSURE OF THE RESPECTIVE RECTANGULAR UNIT.

**ALLOWABLE DESIGN PRESSURE**  
SEE PRESSURE TABLE ON SHEET 1

**ANCHOR NOTE:** ANCHOR SPACING AT THE HEAD OF ALL TYPES OF SHAPED DOORS MUST EQUAL THAT SPECIFIED AT THE SIDES (17" MAX. O.C.)

DRAWN BY: W.R.M.	CHECKED BY: W.W.S.
PLOT: 1-24	DATE: 10/08/08
NO.	REVISION DESCRIPTION
DATE	BY

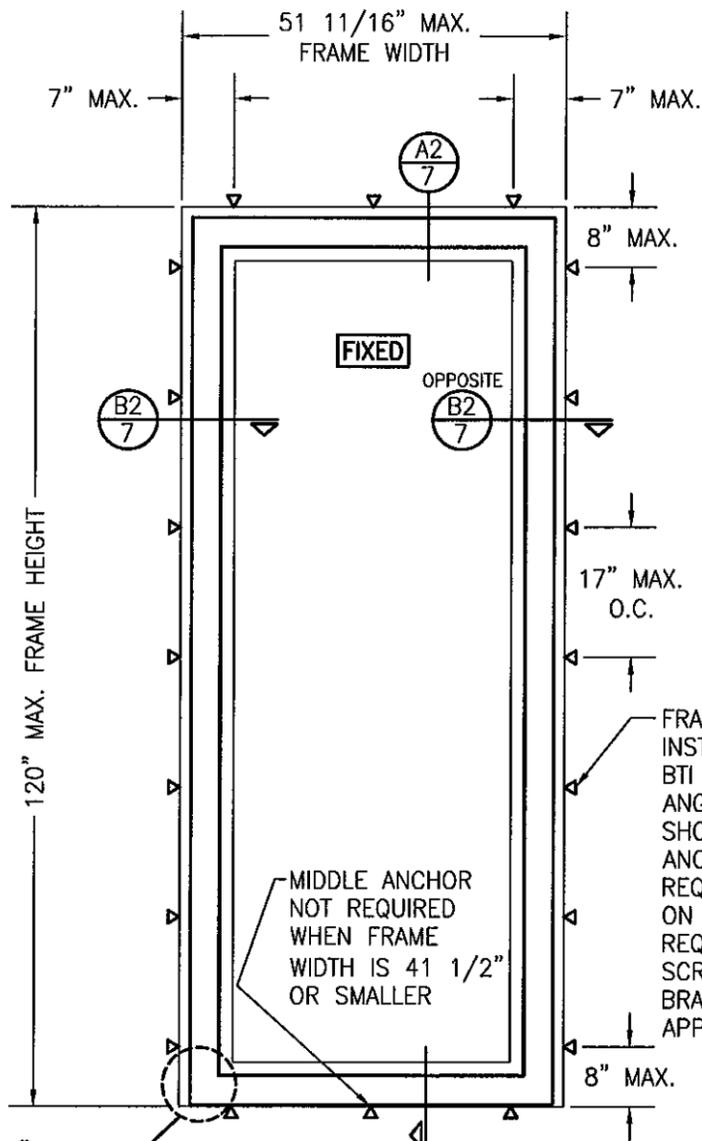
**OUT-SWING IMPACT WOOD PANEL DOORS**  
MANUFACTURER  
**TISCHLER UND SOHN (USA) LTD.**  
SIX SUBURBAN AVENUE  
STAMFORD, CONNECTICUT 06901  
203-674-0600

**CONSULTANTS**  
**W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809)**  
7480 150TH COURT NORTH, 33418  
PALM BEACH GARDENS, FL 33418  
PHONE 561-744-3424



**CERTIFICATION**  
OCT 27 2011  
WARREN W. SCHAEFER, P.E.  
P.E. NO. 44135

DRAWING NO. 1616	REV. A
SHEET NO. 3	OF 17



**EXTERIOR ELEVATION:  
SINGLE FIXED PANEL**

SCALE: 1/2" = 1'-0"

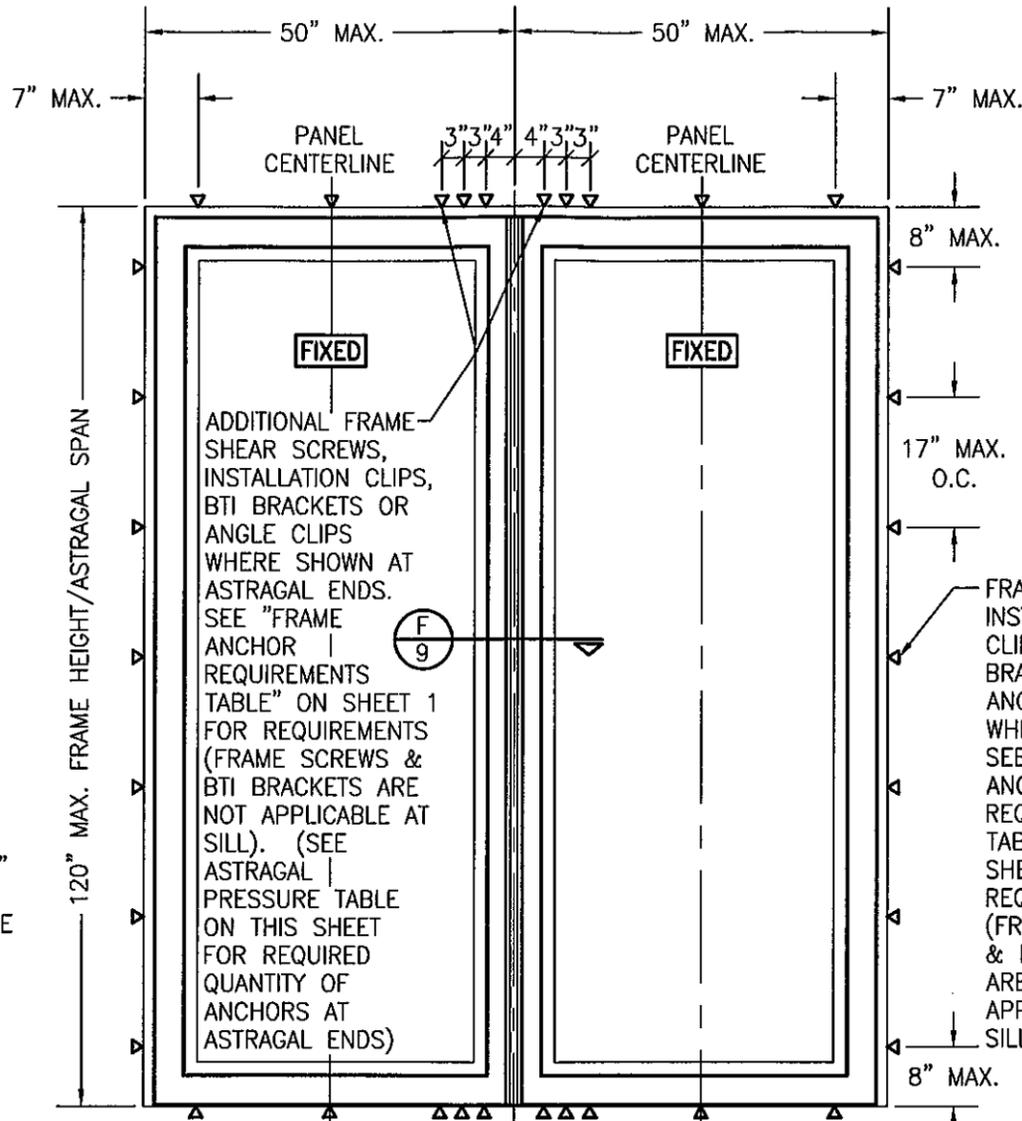
(RECTANGULAR FIXED DOOR SHOWN, SHAPED DOORS ALSO APPLY. SEE "APPROVED SHAPES" TABLE ON THIS SHEET)

ALLOWABLE DESIGN PRESSURE (SINGLE FIXED PANELS)			
MAX. FRAME WIDTH (IN.)	MAX. FRAME HEIGHT (IN.)	ALLOWABLE PRESSURE	
		POSITIVE (PSF)	NEGATIVE (PSF)
51 11/16	120	70	70
51 11/16	99	70	85

**APPROVED SHAPES  
(FIXED PANELS)**



**NOTES:**  
1. OTHER SHAPES MAY APPLY PROVIDING THEY ARE SIMILAR TO THOSE SHOWN & HAVE CORNER CONSTRUCTION AS DESCRIBED IN THIS DRAWING.  
2. ALL SHAPED UNITS MUST FIT INSCRIBED INTO THE ALLOWABLE RECTANGULAR UNITS & BE GOVERNED BY THE ALLOWABLE PRESSURE OF THE RESPECTIVE RECTANGULAR UNIT.  
3. THE SHAPES SHOWN APPLY TO SINGLE FIXED PANELS AND THE PANELS ON EITHER SIDE OF A FIXED ASTRAGAL.



**EXTERIOR ELEVATION:  
DOUBLE FIXED PANEL WITH FIXED ASTRAGAL**

SCALE: 1/2" = 1'-0"

SEE SINGLE FIXED PANEL ELEVATION FOR DETAIL NOT SHOWN

**ANCHOR NOTE:** ANCHOR SPACING AT THE HEAD OF ALL TYPES OF SHAPED PANEL DOORS MUST EQUAL THAT SPECIFIED AT THE SIDES (17" MAX. O.C.)

**FIXED ASTRAGAL ALLOWABLE DESIGN PRESSURE**

MAXIMUM ASTRAGAL SPAN (IN.)	MAXIMUM LOAD WIDTH (IN.)	ALLOWABLE PRESSURE (PSF)			
		4 END ANCHORS		6 END ANCHORS	
		POS.	NEG.	POS.	NEG.
120	50	51.4	51.4	70.0	70.0
	48	53.5	53.5	70.0	70.0
	44	58.4	58.4	70.0	70.0
	40	64.2	64.2	70.0	70.0
	36	70.0	70.0	70.0	70.0
	32	70.0	70.0	70.0	70.0
108	50	57.1	57.1	70.0	70.0
	48	59.5	59.5	70.0	70.0
	44	64.9	64.9	70.0	70.0
	40	70.0	70.0	70.0	70.0
	36	70.0	70.0	70.0	70.0
	32	70.0	70.0	70.0	70.0
99	50	62.3	62.3	70.0	85.0
	48	64.9	64.9	70.0	85.0
	44	70.0	70.8	70.0	85.0
	40	70.0	77.9	70.0	85.0
	36	70.0	85.0	70.0	85.0
	32	70.0	85.0	70.0	85.0
96	50	64.2	64.2	70.0	85.0
	48	66.9	66.9	70.0	85.0
	44	70.0	73.0	70.0	85.0
	40	70.0	80.3	70.0	85.0
	37	70.0	85.0	70.0	85.0
	32	70.0	85.0	70.0	85.0
84	50	70.0	73.4	70.0	85.0
	48	70.0	76.5	70.0	85.0
	44	70.0	83.4	70.0	85.0
	43	70.0	85.0	70.0	85.0
	40	70.0	85.0	70.0	85.0
	37	70.0	85.0	70.0	85.0
80	50	70.0	77.1	70.0	85.0
	48	70.0	80.3	70.0	85.0
	45	70.0	85.0	70.0	85.0

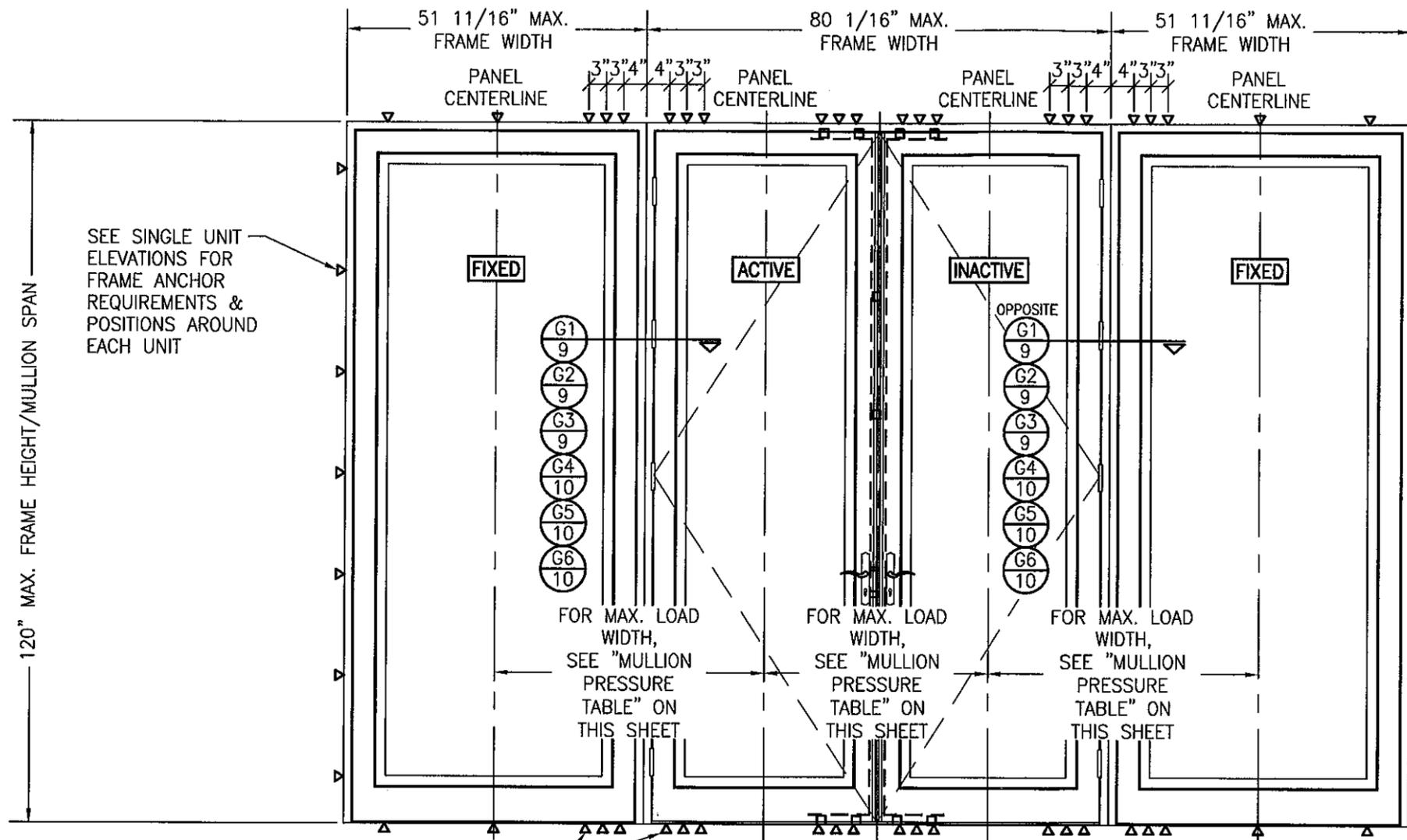
**NOTES:**

1. LOAD WIDTH IS THE DISTANCE BETWEEN PANEL CENTERLINES.
2. ALLOWABLE UNIT PRESSURE SHALL BE THE LESSER OF THE PRESSURES SHOWN IN THIS TABLE & THOSE SPECIFIED FOR THE INDIVIDUAL FIXED PANEL.
3. SIZE VALUES IN TABLE ARE +/- 1/4"

**PRODUCT REVISED**  
as complying with the Florida Building Code  
Acceptance No. 11-1101-15  
Expiration Date 9/27/14  
By: [Signature]  
Mineral Data Product Control



DRAWN BY: W.R.M.	CHECKED BY: W.W.S.
PLOT: 1-24	DATE: 10/08/08
DATE	BY
NO.	REVISION DESCRIPTION
<b>OUT-SWING IMPACT WOOD PANEL DOORS</b> MANUFACTURER <b>TISCHLER UND SOHN (USA) LTD.</b> SIX SUBURBAN AVENUE STAMFORD, CONNECTICUT 06901 203-674-0600	
CONSULTANTS <b>W. W. SCHAEFER ENGINEERING &amp; CONSULTING, P.A. (CA 6809)</b> 7480 150TH COURT NORTH, 33418 PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424	
<b>CERTIFICATION</b> OCT 27 2011 WARREN W. SCHAEFER, P.E. P.E. NO. 44135	
DRAWING NO. <b>1616</b>	REV. <b>A</b>
SHEET NO. <b>4 OF 17</b>	



**EXTERIOR ELEVATION:  
DOUBLE DOORS WITH FIXED PANELS**

SCALE: 1/2" = 1'-0"

(RECTANGULAR DOORS SHOWN, SHAPED DOORS ALSO APPLY. SEE "APPROVED SHAPED" TABLE ON SHEETS 3 & 4)

**MULTIPLE UNIT NOTES:**

1. FOR ALL DETAIL NOT SHOWN, SEE INDIVIDUAL UNIT ELEVATIONS.
2. THERE IS NO LIMIT ON THE NUMBER OF DOORS THAT MAY BE COMBINED IN ONE DIRECTION INTO ONE OPENING PROVIDING THE OPENING IS DESIGNED TO SUPPORT ALL LOADS TRANSFERRED FROM THE DOORS & THEIR MULLIONS.
3. OXO UNIT IS SHOWN. ALL OTHER FIXED/OPERABLE COMBINATIONS ALSO APPLY WITH THE MULLION CONDITIONS SHOWN.
4. INDIVIDUAL DOOR/FIXED PANEL SIZES SHALL BE RESTRICTED AS SPECIFIED IN THE SINGLE UNIT ELEVATIONS.

FRAME SCREWS ARE NOT APPLICABLE FOR USE WITH FIXED PANEL DOOR SILLS

ADDITIONAL FRAME SCREWS, INSTALLATION CLIPS, BTI BRACKETS OR ANGLE CLIPS WHERE SHOWN AT MULLION ENDS. SEE "FRAME ANCHOR REQUIREMENTS TABLE" ON SHEET 1 FOR REQUIREMENTS (BTI BRACKETS NOT APPLICABLE AT SILL).

SEE SINGLE UNIT ELEVATIONS FOR FRAME ANCHOR REQUIREMENTS & POSITIONS AROUND EACH UNIT

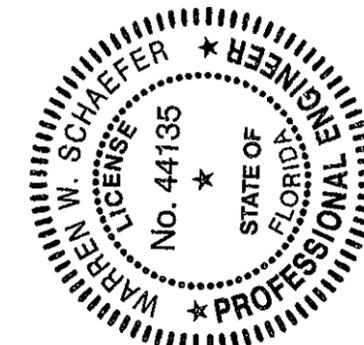
**MULLION ALLOWABLE DESIGN PRESSURE**

MAXIMUM MULLION SPAN (IN.)	MAXIMUM LOAD WIDTH (IN.)	ALLOWABLE PRESSURE (PSF)	
		POS.	NEG.
120	52	53.8	53.8
	48	58.3	58.3
	44	63.6	63.6
	40	70.0	70.0
	36	70.0	70.0
	32	70.0	70.0
108	52	59.8	59.8
	48	64.8	64.8
	44	70.0	70.0
99	40	70.0	70.0
	36	70.0	70.0
	52	70.0	75.2
96	48	70.0	81.5
	46	70.0	85.0
	52	70.0	77.5
84	48	70.0	84.0
	44	70.0	85.0
84	52	70.0	85.0

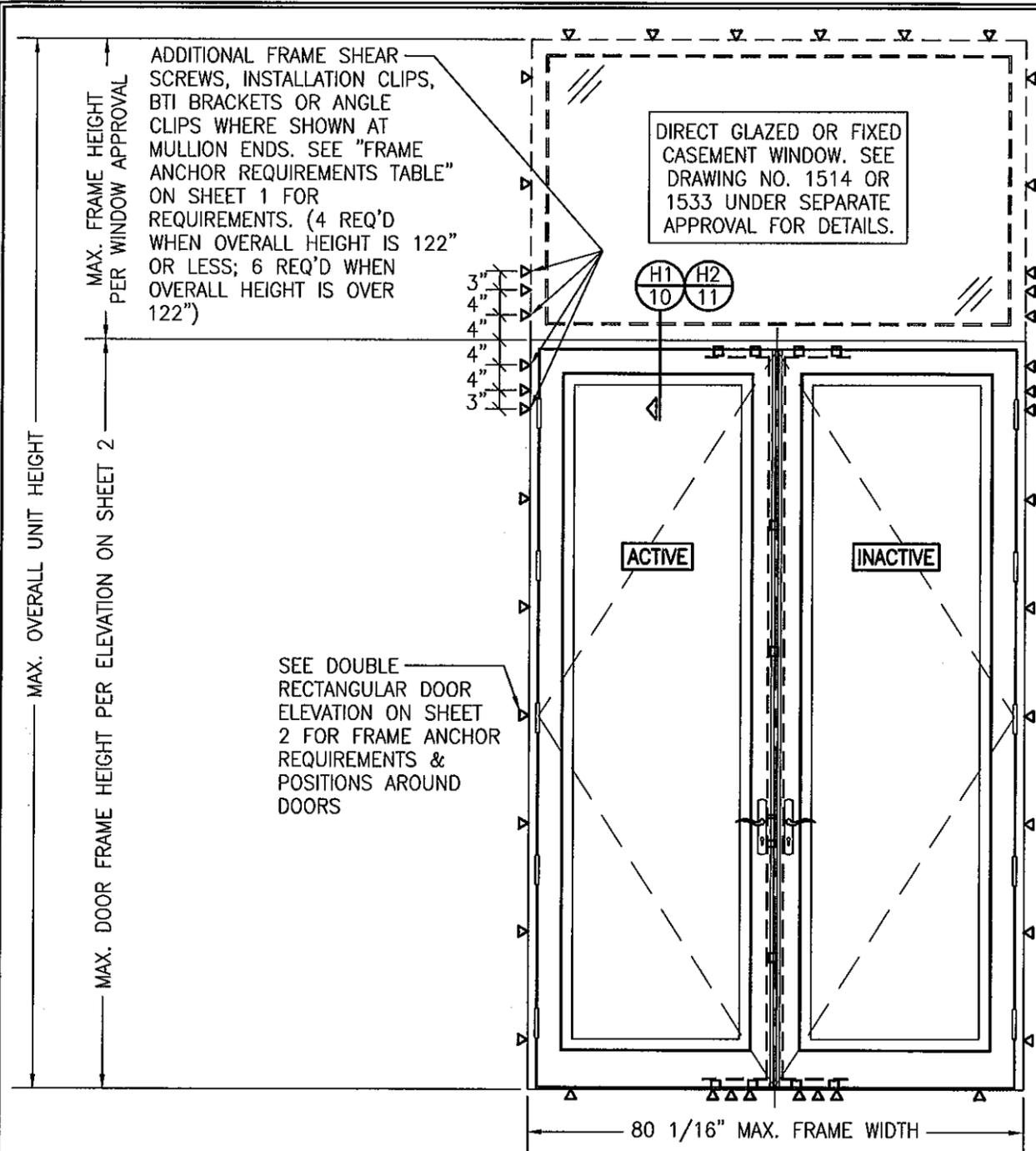
**NOTES:**

1. LOAD WIDTH IS THE DISTANCE BETWEEN PANEL CENTERLINES.
2. ALLOWABLE UNIT PRESSURE SHALL BE THE LESSER OF THE PRESSURES SHOWN IN THIS TABLE & THOSE SPECIFIED FOR THE INDIVIDUAL DOOR/FIXED PANEL.
3. SIZE VALUES IN TABLE ARE +/- 1/4"

PRODUCT REVISED  
as complying with the Florida  
Building Code  
Acceptance No. 11-1101-15  
Expiration Date 05/27/14  
By: [Signature]  
Michael Dade Product Control



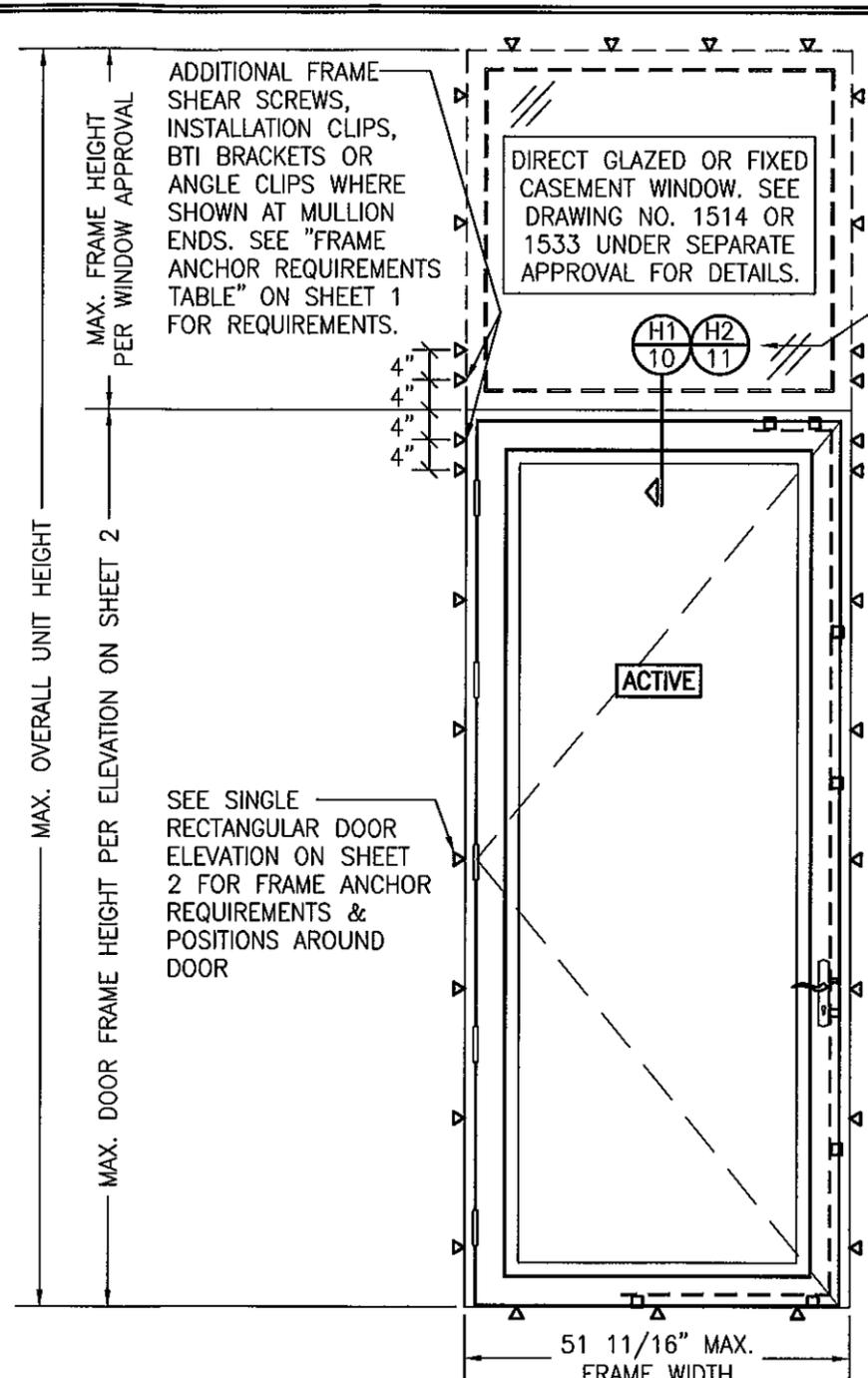
DRAWN BY: W.R.M.	CHECKED BY: W.W.S.
PLOT: 1-24	DATE: 10/08/08
DATE	
BY	
REVISION DESCRIPTION	
NO.	
DRAWING TITLE <b>OUT-SWING IMPACT WOOD PANEL DOORS</b>	
CONSULTANTS <b>W. W. SCHAEFER ENGINEERING &amp; CONSULTING, P.A. (CA 6809)</b>	MANUFACTURER <b>TISCHLER UND SOHN (USA) LTD.</b> SIX SUBURBAN AVENUE STAMFORD, CONNECTICUT 06901 203-674-0600
CERTIFICATION OCT 27 2011 WARREN W. SCHAEFER P.E. NO. 44135	
DRAWING NO. <b>1616</b>	REV. <b>A</b>
SHEET NO. <b>5 OF 17</b>	



EXTERIOR ELEVATION; DOUBLE DOORS WITH TRANSOM

SCALE: 1/2" = 1'-0"

(SEE DOUBLE RECTANGULAR DOOR ELEVATION ON SHEET 2 FOR DOOR DETAIL NOT SHOWN)



EXTERIOR ELEVATION; SINGLE DOOR WITH TRANSOM

SCALE: 1/2" = 1'-0"

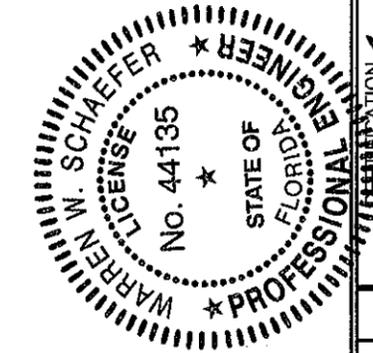
(SEE SINGLE RECTANGULAR DOOR ELEVATION ON SHEET 2 FOR DOOR DETAIL NOT SHOWN)

ALLOWABLE DESIGN PRESSURE (DOUBLE DOOR TRANSOM UNIT)			
MAX. FRAME WIDTH (IN.)	MAX. OVERALL UNIT HEIGHT (IN.)	(1) ALLOWABLE PRESSURE	
		POSITIVE (PSF)	NEGATIVE (PSF)
80 1/16	168	70	70
80 1/16	138	70	(1) 85

(1) LESSER OF THE PRESSURES IN THIS TABLE & THOSE FOR THE INDIVIDUAL DOORS SHALL CONTROL.

ALLOWABLE DESIGN PRESSURE (SINGLE DOOR TRANSOM UNIT)			
MAX. FRAME WIDTH (IN.)	MAX. OVERALL UNIT HEIGHT (IN.)	(1) ALLOWABLE PRESSURE	
		POSITIVE (PSF)	NEGATIVE (PSF)
51 11/16	168	70	70
41 1/2	168	70	(1) 85

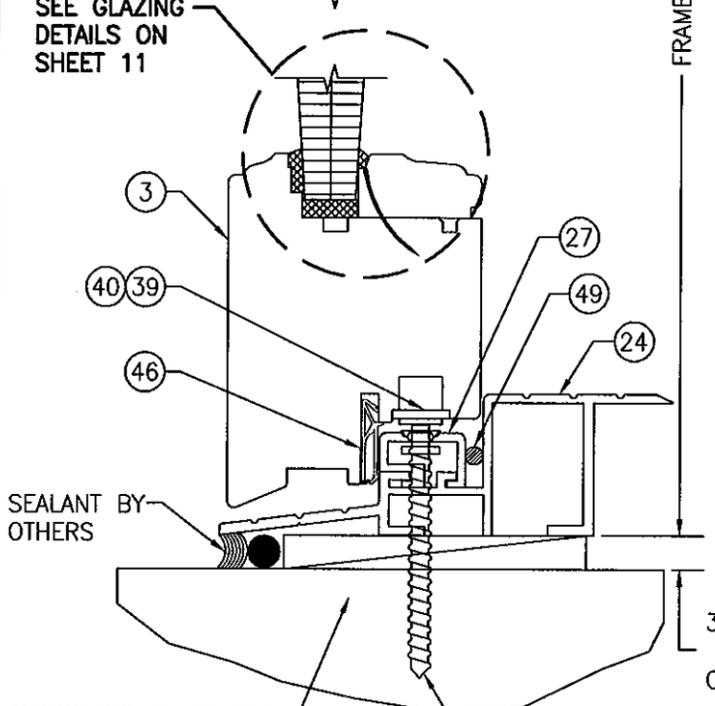
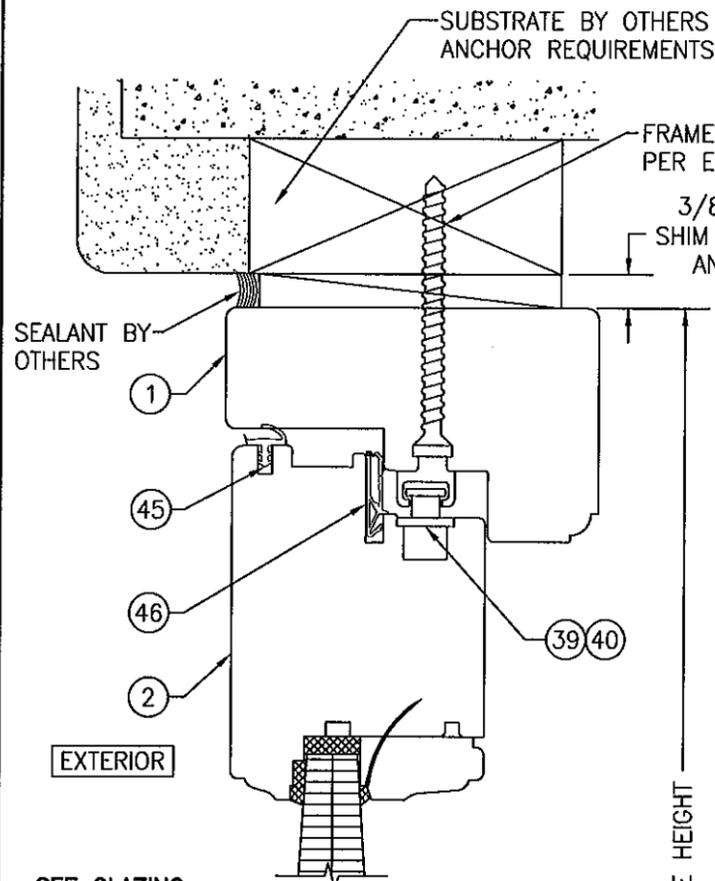
(1) LESSER OF THE PRESSURES IN THIS TABLE & THOSE FOR THE INDIVIDUAL DOORS SHALL CONTROL.



DRAWN BY: W.R.M.	CHECKED BY: W.W.S.
PLOT: 1=24	DATE: 10/08/08
NO.	REVISION DESCRIPTION
BY	DATE
DRAWING TITLE <b>OUT-SWING IMPACT WOOD PANEL DOORS</b>	
MANUFACTURER <b>TISCHLER UND SOHN (USA) LTD.</b> SIX SUBURBAN AVENUE STAMFORD, CONNECTICUT 06901 203-674-0600	
CONSULTANTS <b>W. W. SCHAEFER ENGINEERING &amp; CONSULTING, P.A. (CA 6809)</b> 7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424	
DRAWING NO. <b>1616</b>	
REV. <b>A</b>	
SHEET NO. <b>6 OF 17</b>	

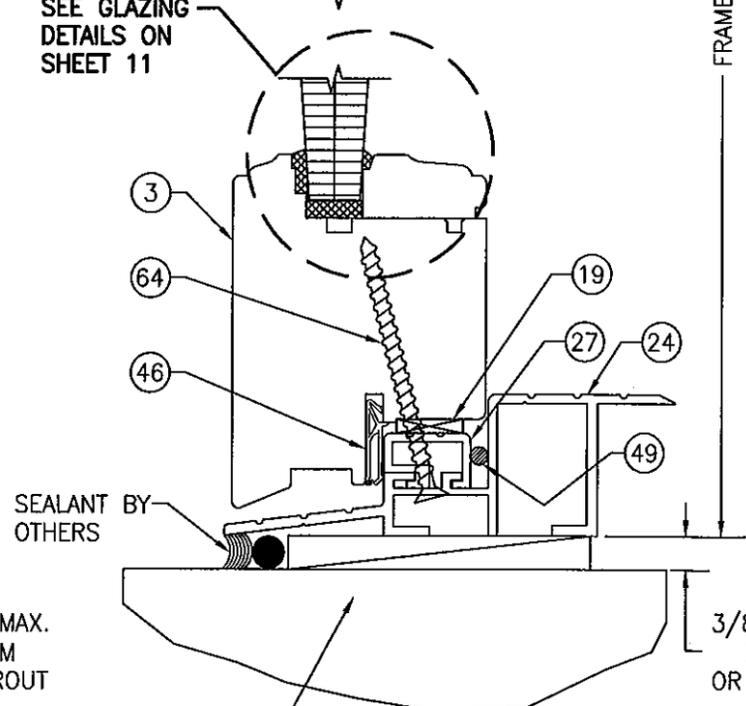
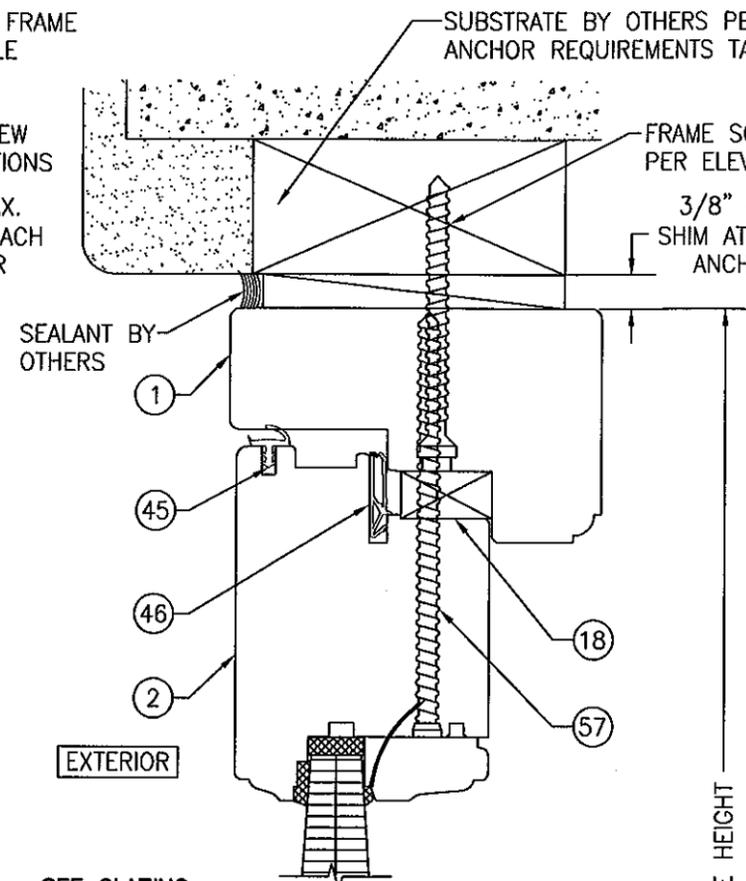
DATE: OCT 27 2011  
WARREN W. SCHAEFER, P.E.  
P.E. NO. 44135

PRODUCT REVISED  
as complying with the Florida  
Building Code  
Acceptance No. 11-1101.15  
Expiration Date 9-27-14  
By: [Signature]  
Warren W. Schaefer, P.E.



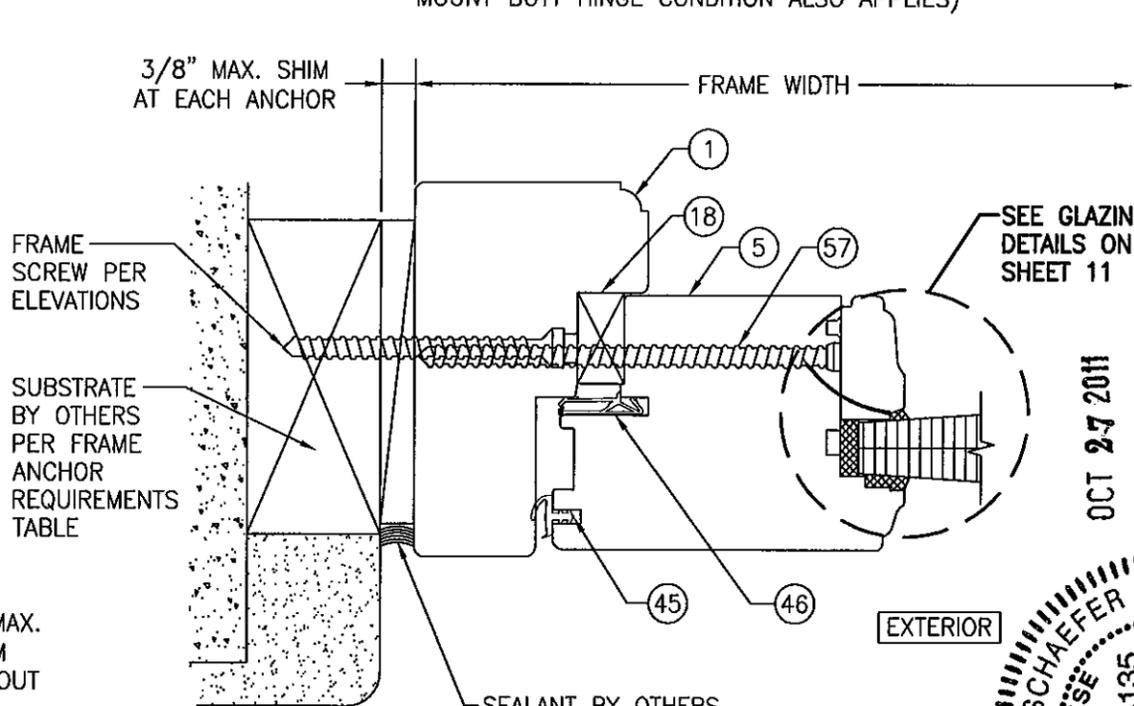
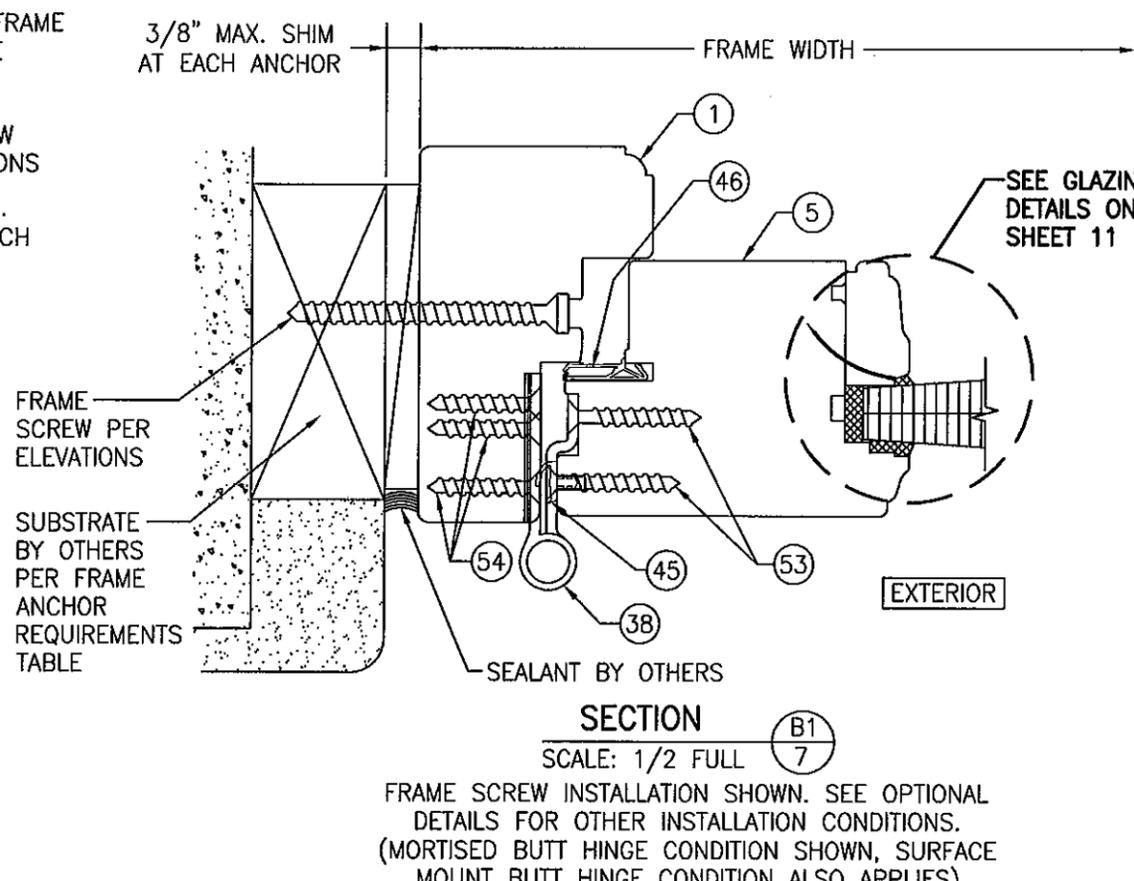
**SECTION A1**  
SCALE: 1/2 FULL

FRAME SCREW INSTALLATION & STANDARD SILL CONDITION SHOWN. SEE OPTIONAL DETAILS FOR OTHER INSTALLATION & SILL CONDITIONS.



**SECTION A2**  
SCALE: 1/2 FULL

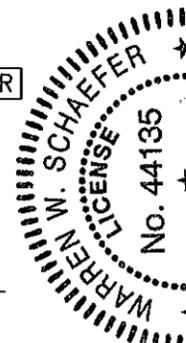
SUBSTRATE BY OTHERS PER "FRAME ANCHOR REQUIREMENTS TABLE" (FOR SILL INSTALLATION NOT SHOWN, SEE ANGLE CLIP & INSTALLATION CLIP SILL DETAILS ON SHEETS 13, 14 & 15.



**SECTION B2**  
SCALE: 1/2 FULL

FRAME SCREW INSTALLATION SHOWN. SEE OPTIONAL DETAILS FOR OTHER INSTALLATION CONDITIONS.

**PRODUCT REVISED**  
in compliance with the Florida Building Code  
Acceptance No. 11-1101-15  
Expiration Date 9/27/14  
By: [Signature]  
Miami Dade Product Council



DRAWN BY: W.R.M.	CHECKED BY: W.W.S.
PLOT: 1-2	DATE: 10/08/08
DATE	
BY	
REVISION DESCRIPTION	
NO.	

DRAWING TITLE: **OUT-SWING IMPACT WOOD PANEL DOORS**

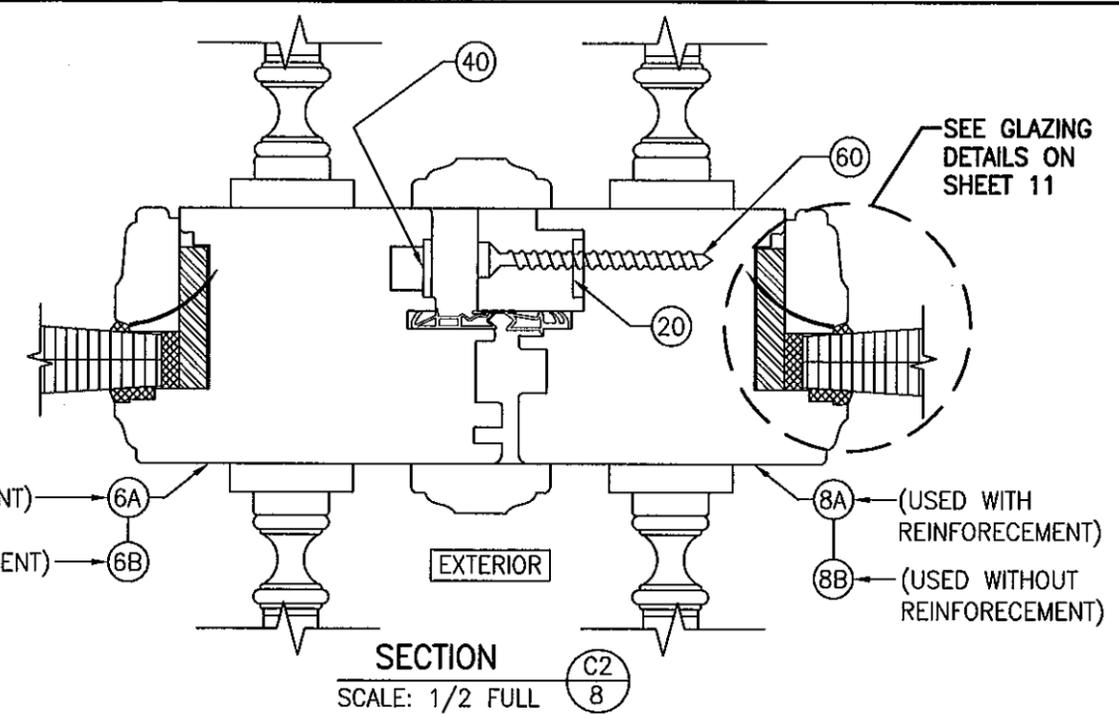
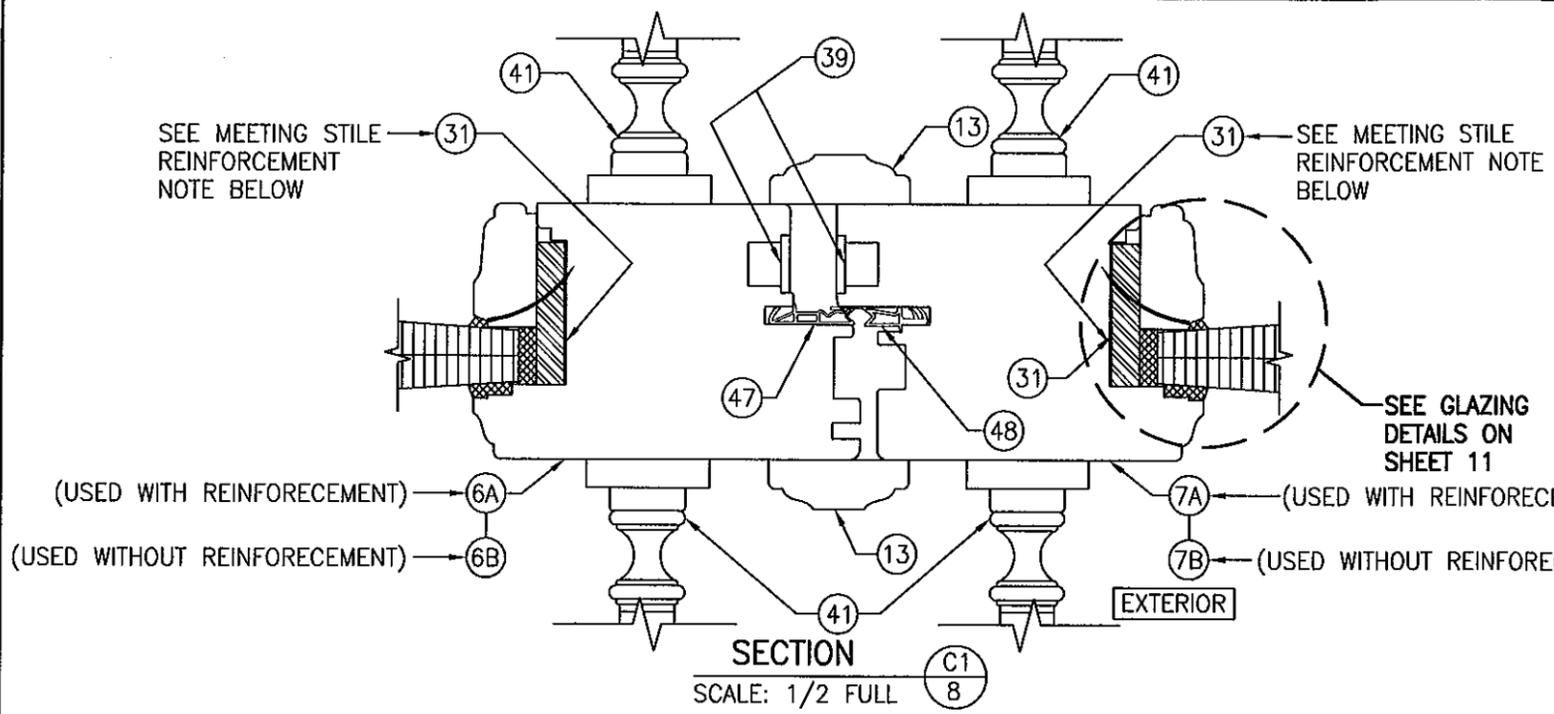
MANUFACTURER: **TISCHLER UND SOHN (USA) LTD.**  
SIX SUBURBAN AVENUE  
STAMFORD, CONNECTICUT 06901  
203-674-0600

CONSULTANTS: **W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809)**  
7480 150TH COURT NORTH  
PALM BEACH GARDENS, FL 33418  
PHONE: 561-744-3424

CERTIFICATION STATE OF FLORIDA: **WARREN W. SCHAEFER, P.E.**  
LICENSE NO. 44135

DRAWING NO. 1616 REV. A  
SHEET NO. 7 OF 17

DRAWN BY: W.R.M.	CHECKED BY: W.W.S.
PLOT: 1=2	DATE: 10/08/08
REVISION DESCRIPTION	DATE
NO.	

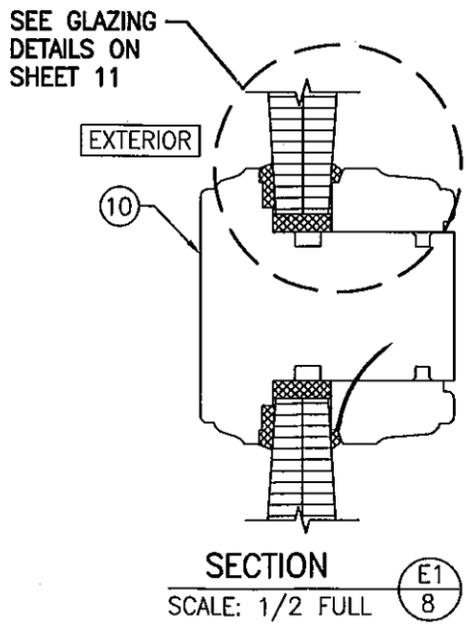
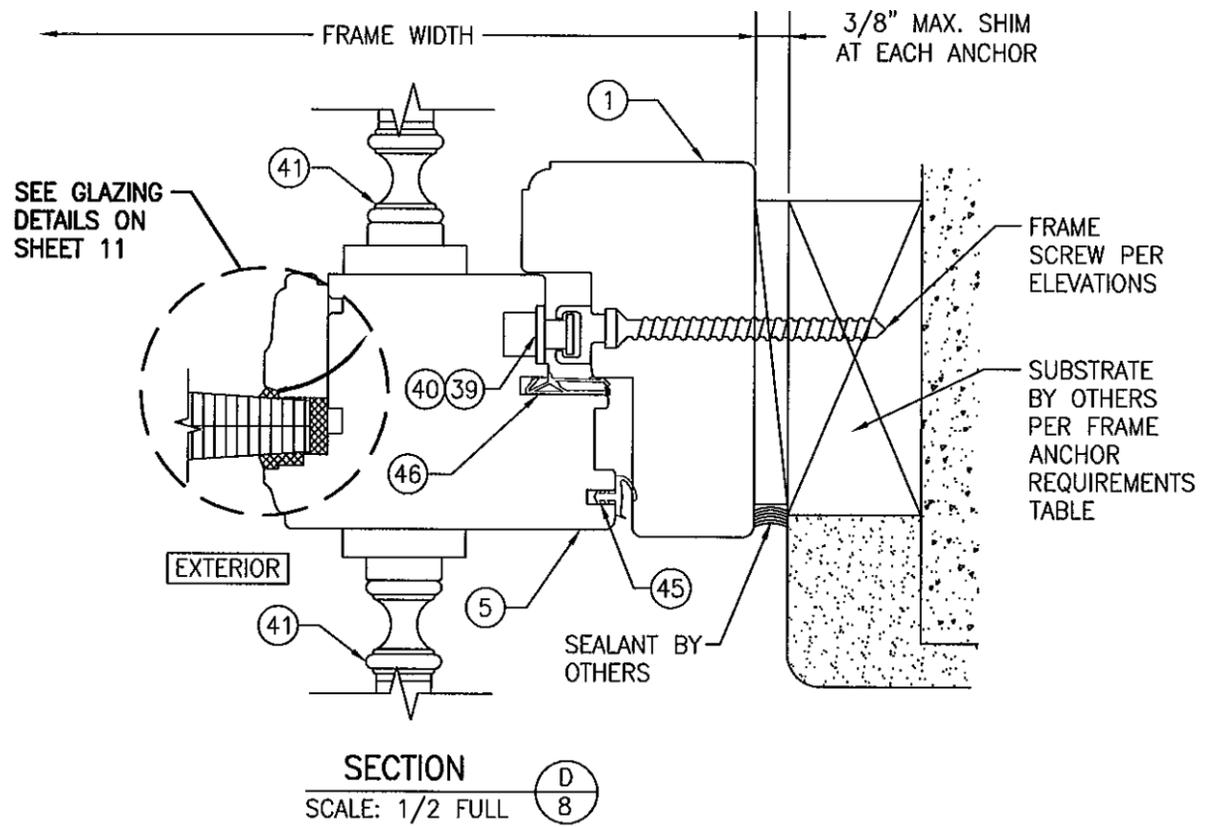


MEETING STILE CONDITION WITH SIEGENIA MULTI-POINT LOCK SYSTEM

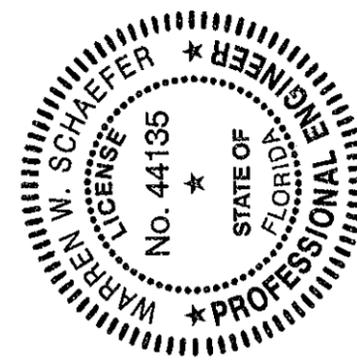
MEETING STILE CONDITION WITH KFV MULTI-POINT LOCK SYSTEM  
(FOR DETAIL NOT SHOWN, SEE SECTION C1/7)

**MEETING STILE REINFORCEMENT NOTE:**

- REINFORCEMENT IS REQUIRED WHEN ANY ONE OF THE FOLLOWING DOOR CONDITIONS EXISTS.
1. WHEN FRAME HEIGHT IS OVER 99".
  2. WHEN ADA SILL IS USED (ALL APPLICABLE FRAME HEIGHTS).
  3. WHEN JOB REQUIRED DESIGN PRESSURE IS OVER +/-70 PSF.



PRODUCT REVISED  
as complying with the Florida  
Building Code  
Acceptance No. 11-1101-15  
Expiration Date 5/27/11  
By: [Signature]  
Miami Trade Product Control



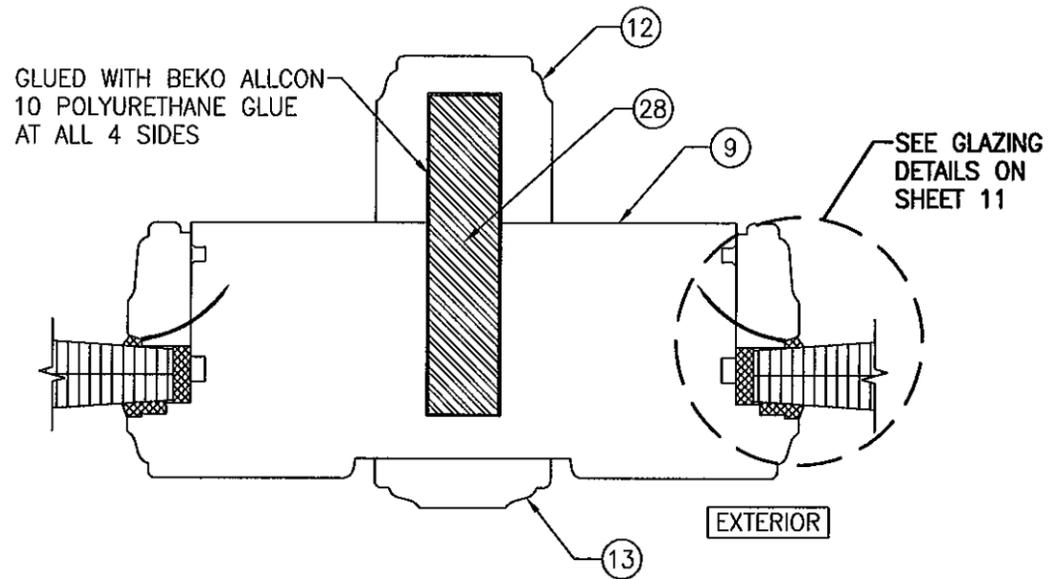
DRAWING TITLE: **OUT-SWING IMPACT WOOD PANEL DOORS**

CONSULTANTS: **W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809)**  
7480 150TH COURT NORTH  
PALM BEACH GARDENS, FL 33418  
PHONE: 561-744-3424

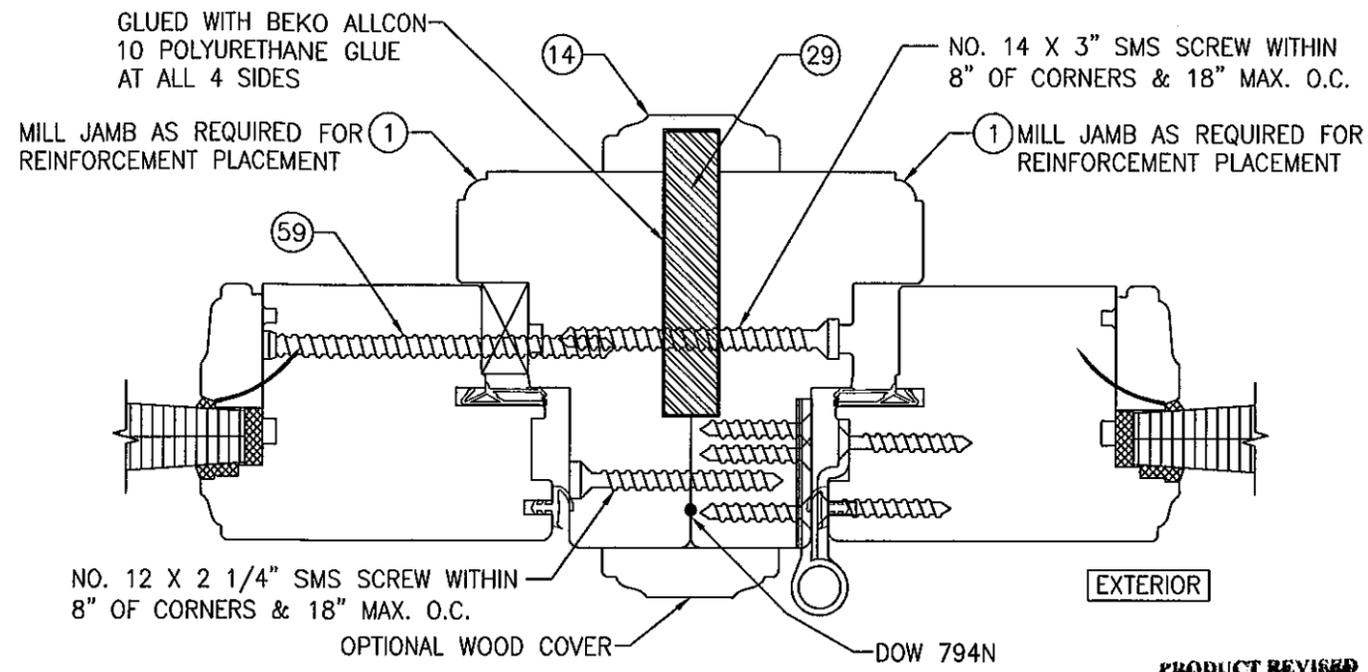
MANUFACTURER: **TISCHLER UND SOHN (USA) LTD.**  
SIX SUBURBAN AVENUE  
STAMFORD, CONNECTICUT 06901  
203-674-0600

CERTIFICATION: [Signature] **OCT 27 2011**  
WARREN W. SCHAEFER, P.E.  
P.E. NO. 44135

DRAWING NO. **1616** REV. **A**  
SHEET NO. **8** OF **17**

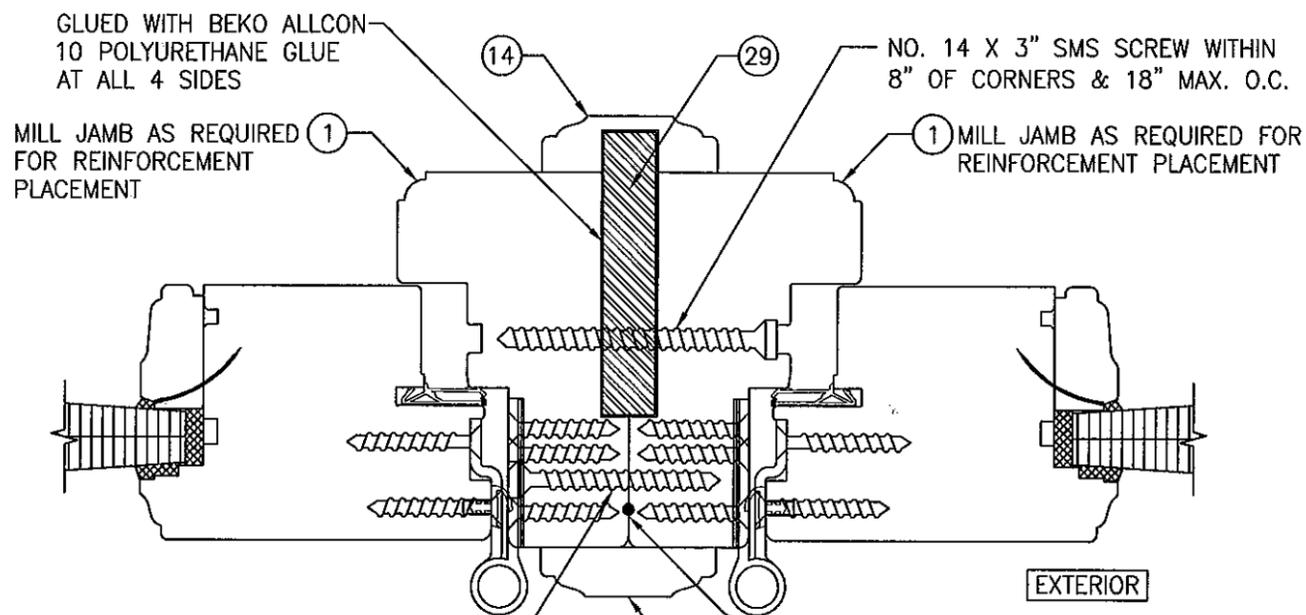


SECTION F  
SCALE: 1/2 FULL

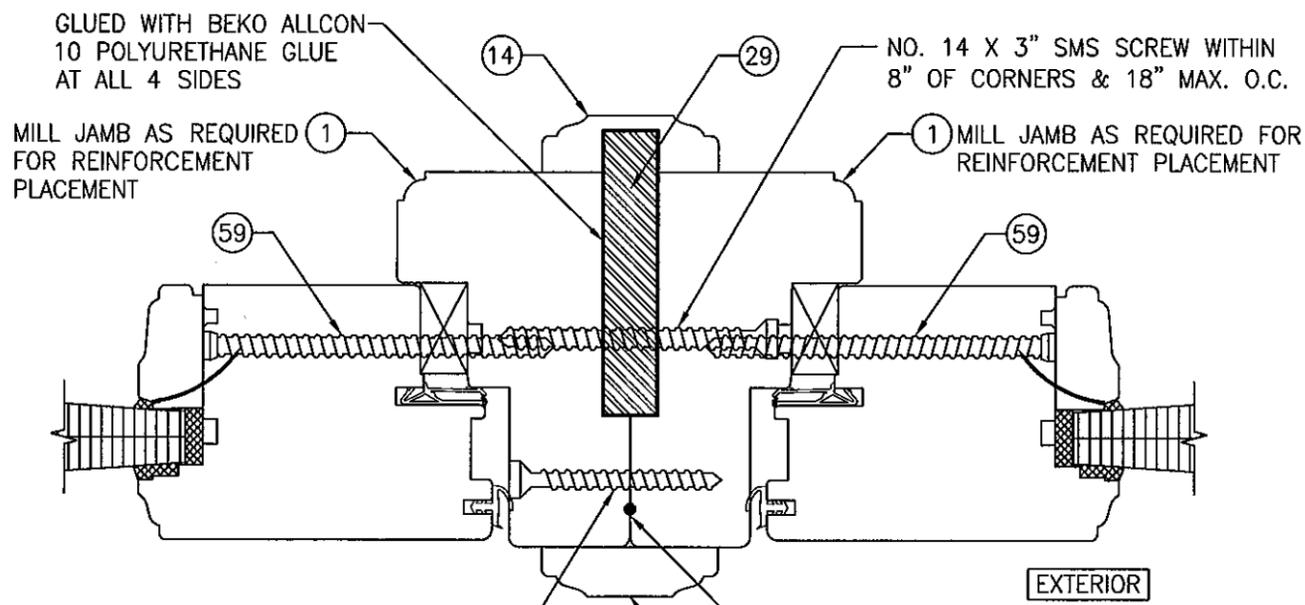


SECTION G1  
SCALE: 1/2 FULL

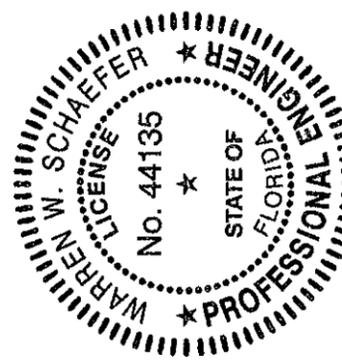
PRODUCT REVISED  
as complying with the Florida  
Building Code  
Acceptance No. 11-1101-15  
Expiration Date 5/27/14  
By *Thomas I. Schaefer*  
Member State Professional Council



SECTION G2  
SCALE: 1/2 FULL  
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)



SECTION G3  
SCALE: 1/2 FULL  
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)



DRAWN BY: W.R.M.	CHECKED BY: W.W.S.
PLOT: 1=2	DATE: 10/08/08
NO.	DATE
BY	
REVISION DESCRIPTION	

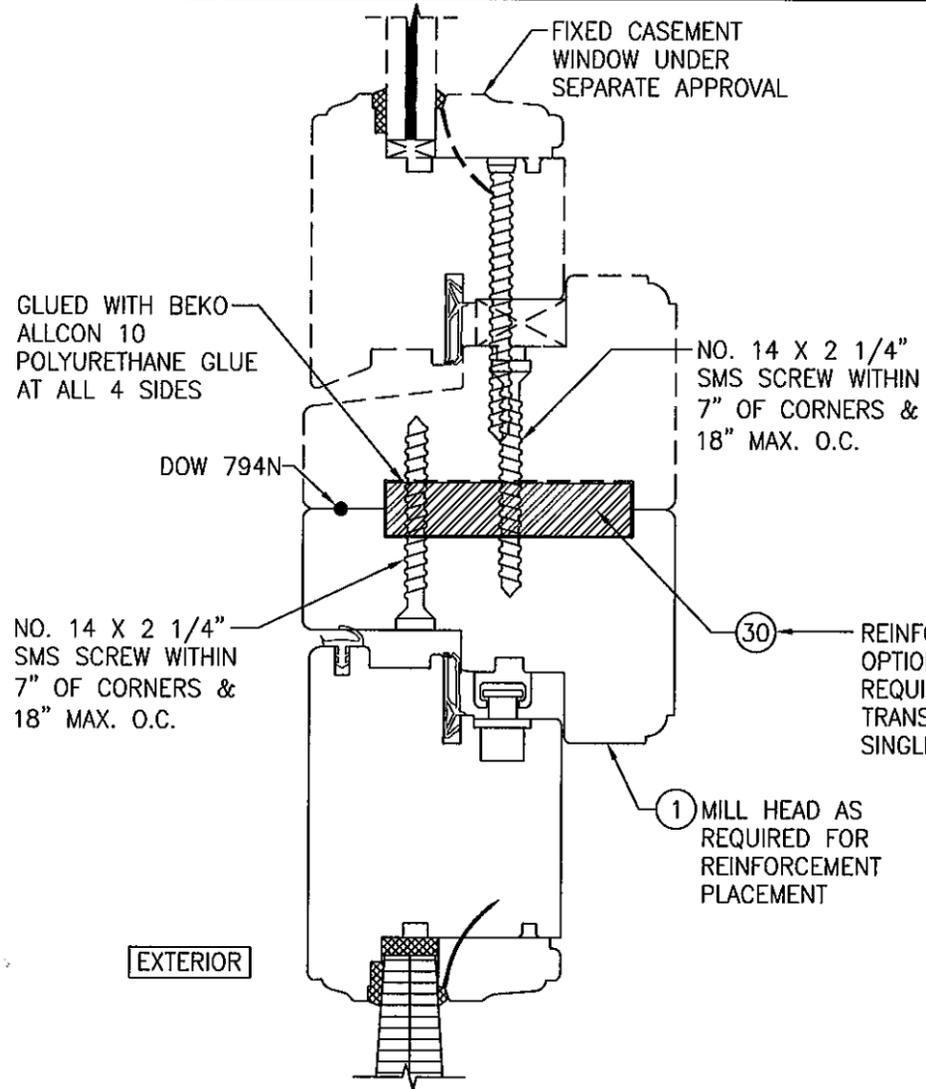
DRAWING TITLE: OUT-SWING IMPACT WOOD PANEL DOORS

MANUFACTURER: TISCHLER UND SOHN (USA) LTD.  
SIX SUBURBAN AVENUE  
STAMFORD, CONNECTICUT 06901  
203-674-0600

CONSULTANTS: W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809)  
7480 150TH COURT NORTH  
PALM BEACH GARDENS, FL 33418  
PHONE: 561-744-3424

CERTIFICATION: WARREN W. SCHAEFER, P.E.  
OCT 27 2011  
WARREN W. SCHAEFER, P.E. NO. 44135





NO. 14 X 2 1/4" SMS SCREW WITHIN 7" OF CORNERS & 18" MAX. O.C.

REINFORCEMENT IS OPTIONAL & NOT REQUIRED WHEN TRANSOM IS OVER A SINGLE DOOR.

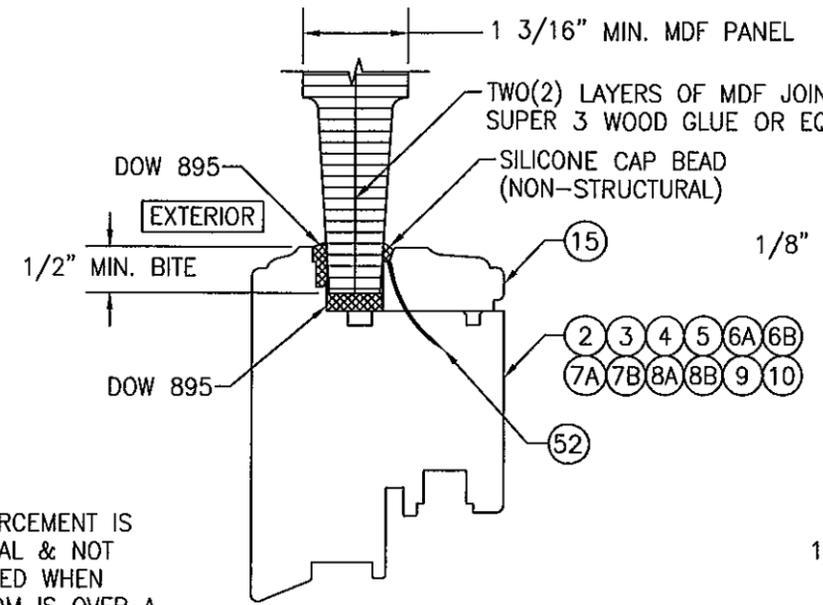
1 MILL HEAD AS REQUIRED FOR REINFORCEMENT PLACEMENT

30

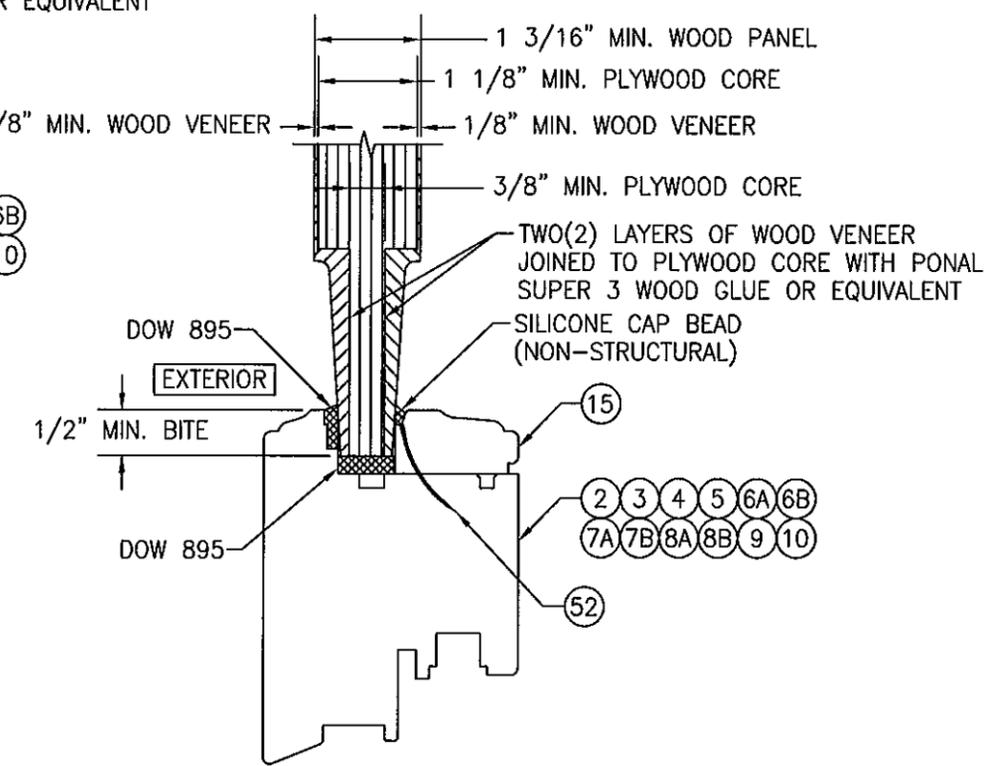
SECTION H2 11

SCALE: 1/2 FULL

(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)  
 (OPERABLE DOOR CONDITION SHOW, FIXED PANEL DOOR IS MULLED THE SAME)

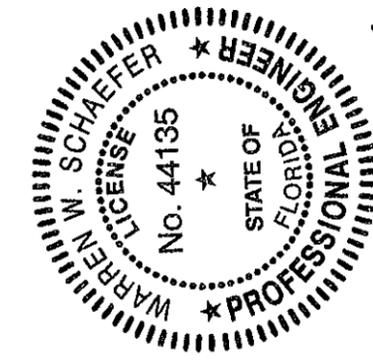


MDF PANEL GLAZING DETAIL

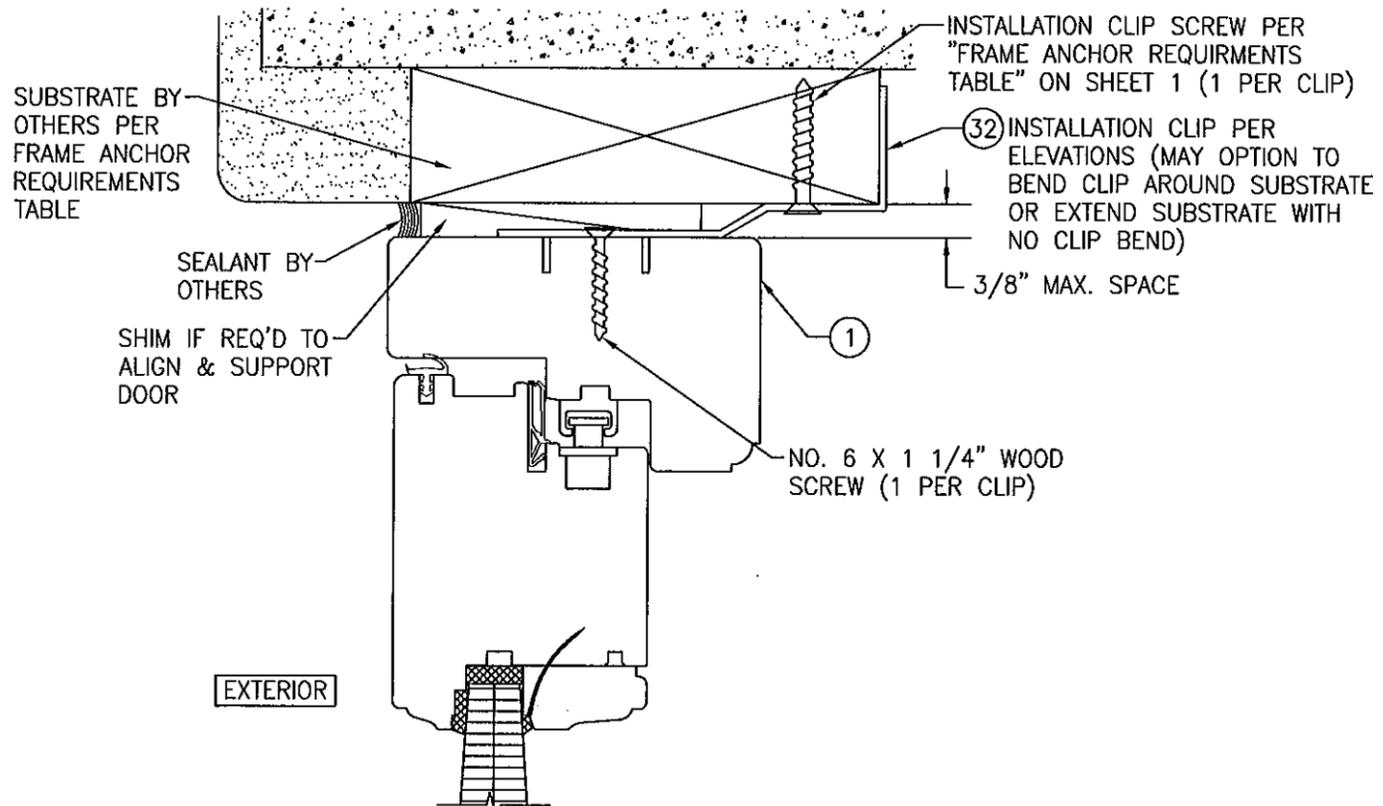


WOOD VENEER PANEL GLAZING DETAIL

PRODUCT REVISED  
 as complying with the Florida  
 Building Code  
 Acceptance No. 11-110.15  
 Expiration Date 5/27/14  
 By: [Signature]  
 Miami Code Product Control

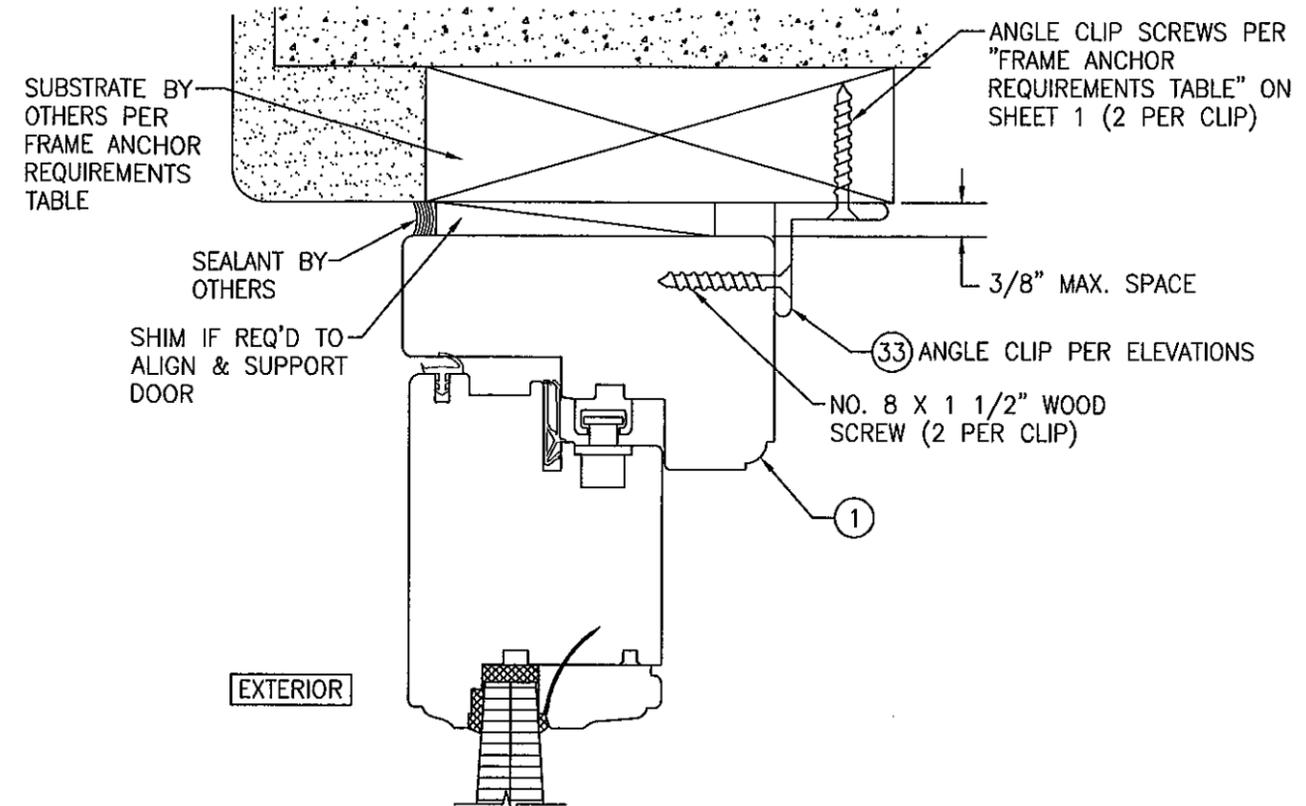


DRAWN BY: W.R.M.	CHECKED BY: W.W.S.
PLOT: 1-2	DATE: 10/08/08
REVISION DESCRIPTION	DATE
NO.	
DRAWING TITLE <b>OUT-SWING IMPACT WOOD PANEL DOORS</b>	
CONSULTANTS <b>W. W. SCHAEFER ENGINEERING &amp; CONSULTING, P.A. (CA 6809)</b> 7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424	
MANUFACTURER <b>TISCHLER UND SOHN (USA) LTD.</b> SIX SUBURBAN AVENUE STAMFORD, CONNECTICUT 06901 203-674-0600	
CERTIFICATION	<b>OCT 27 2011</b> WARREN W. SCHAEFER, P.E. P.E. NO. 44135
DRAWING NO. <b>1616</b>	REV. <b>A</b>
SHEET NO. <b>11 OF 17</b>	



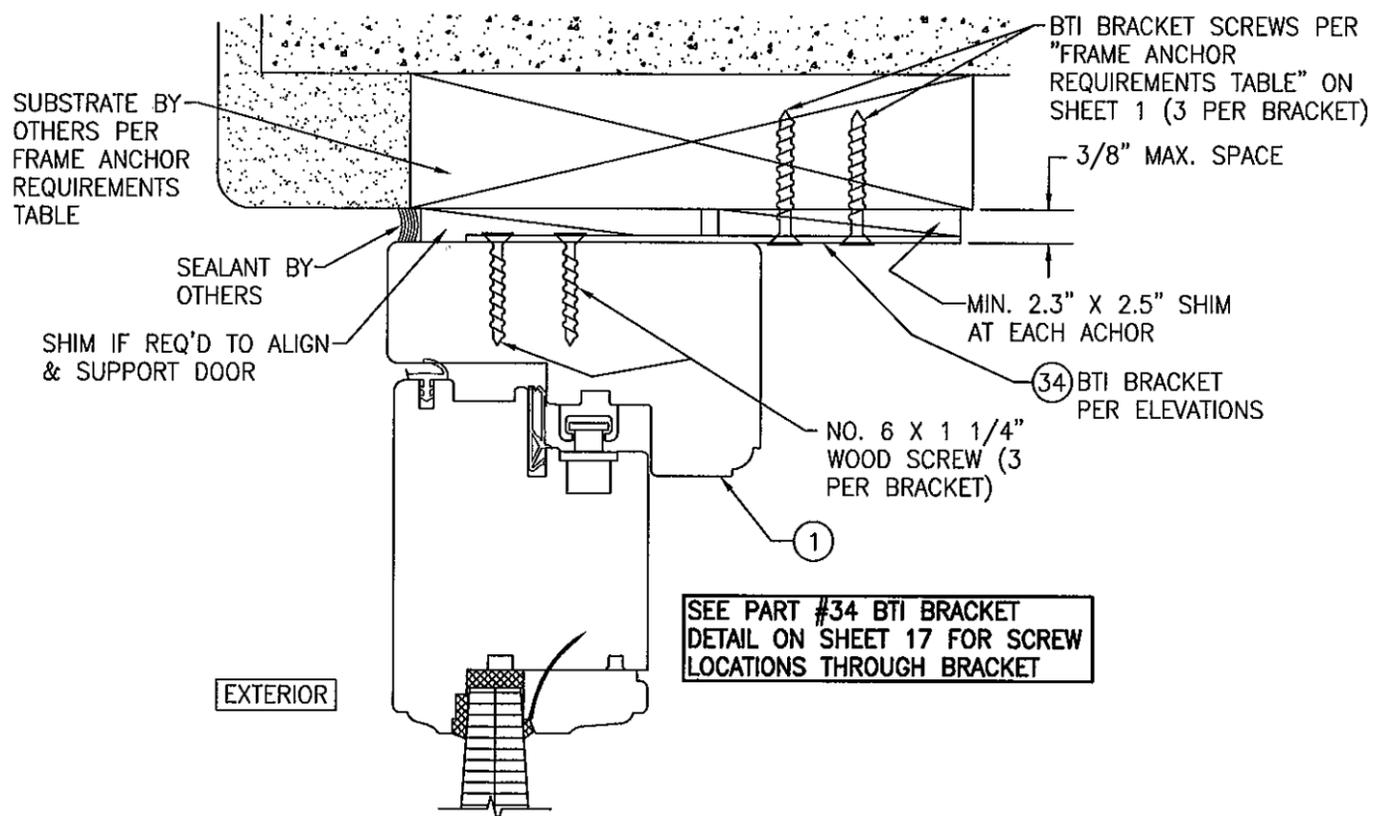
**OPTIONAL INSTALLATION CLIP DETAIL**

(HEAD SECTION SHOWN, SIDES ARE INSTALLED THE SAME)  
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)



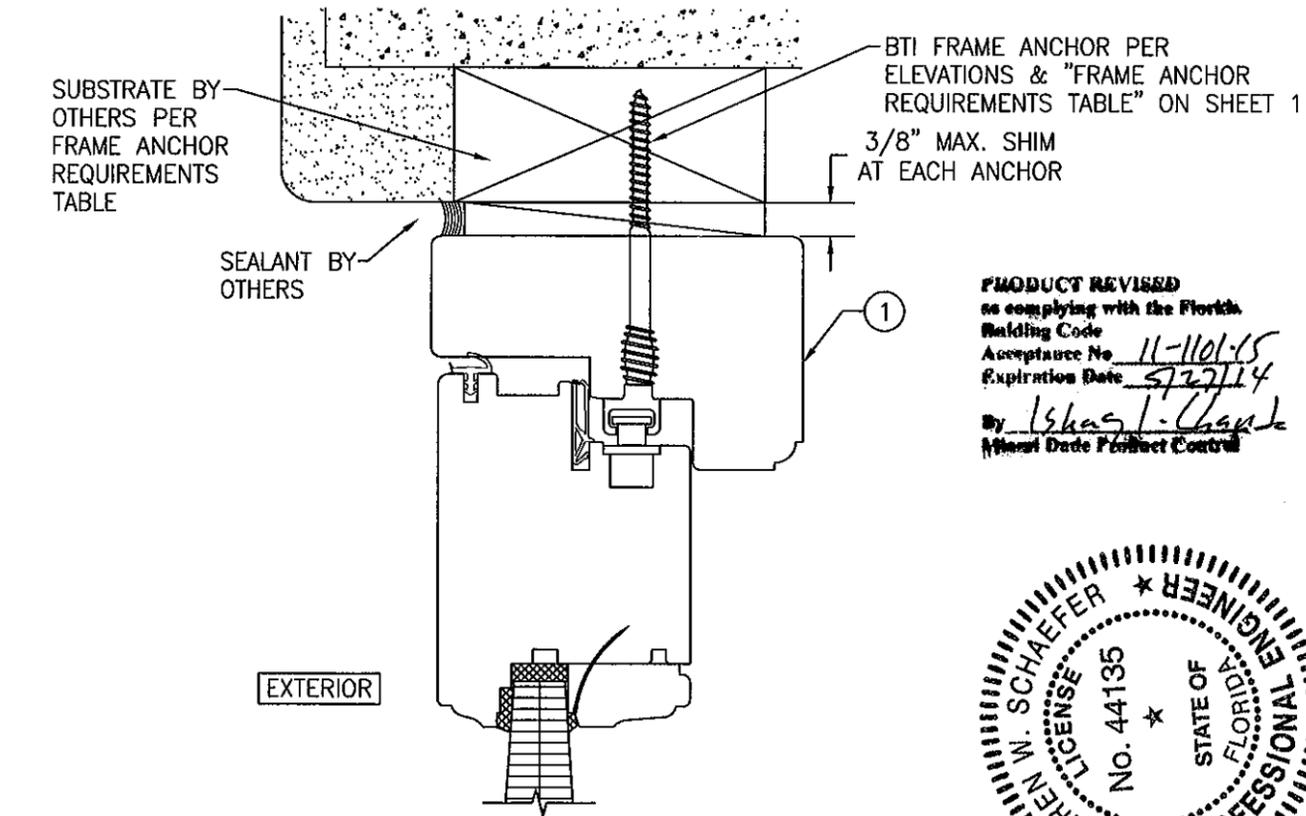
**OPTIONAL INSTALLATION ANGLE CLIP DETAIL**

(HEAD SECTION SHOWN, SIDES ARE INSTALLED THE SAME)  
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)



**OPTIONAL INSTALLATION BTI BRACKET DETAIL**

(HEAD SECTION SHOWN, SIDES ARE INSTALLED THE SAME)  
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)



**OPTIONAL BTI SCREW DETAIL**

(HEAD SECTION SHOWN, SIDES ARE INSTALLED THE SAME)  
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)

**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
Acceptance No. 11-1101-15  
Expiration Date 5/27/14  
By Isaac L. Chavira  
Miami Dade Product Control



DRAWN BY:	W.R.M.	CHECKED BY:	W.W.S.
PLOT:	1-2	DATE:	10/08/08
NO.		BY	
REVISION DESCRIPTION		DATE	

**DRAWING TITLE**  
OUT-SWING IMPACT WOOD PANEL DOORS

**CONSULTANTS**  
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809)  
7480 150TH COURT NORTH  
PALM BEACH GARDENS, FL 33418  
PHONE: 561-744-3424

**MANUFACTURER**  
TISCHLER UND SOHN (USA) LTD.  
SIX SUBURBAN AVENUE  
STAMFORD, CONNECTICUT 06901  
203-674-0600

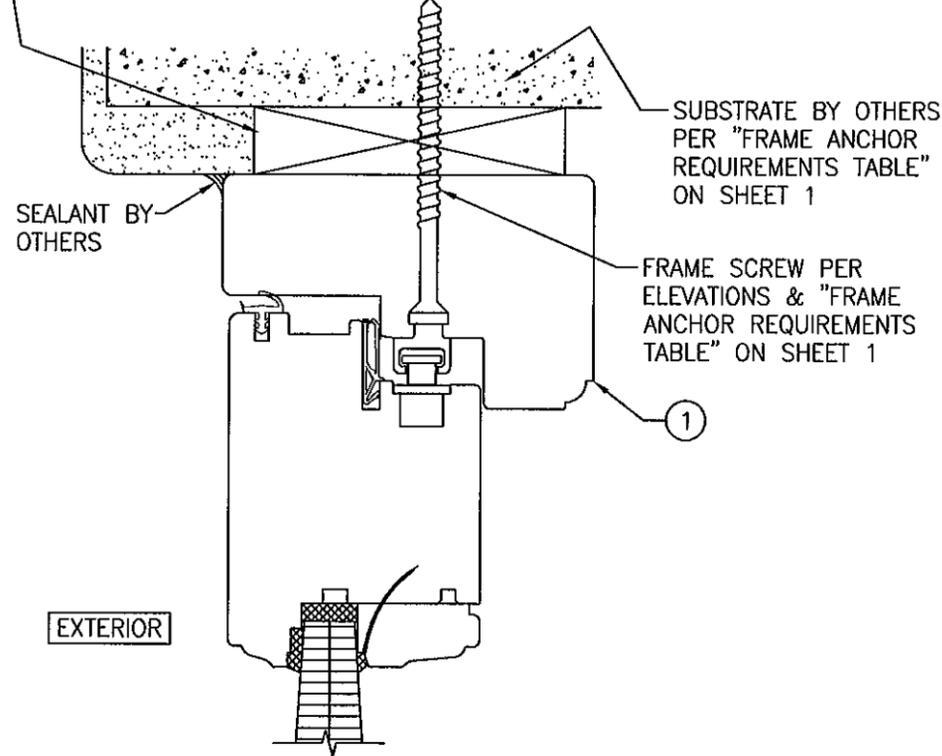
**CERTIFICATION**  
OCT 27 2011  
WARREN W. SCHAEFER, P.E.  
P.E. NO. 44135

**DRAWING NO.**  
1616

**REV.**  
A

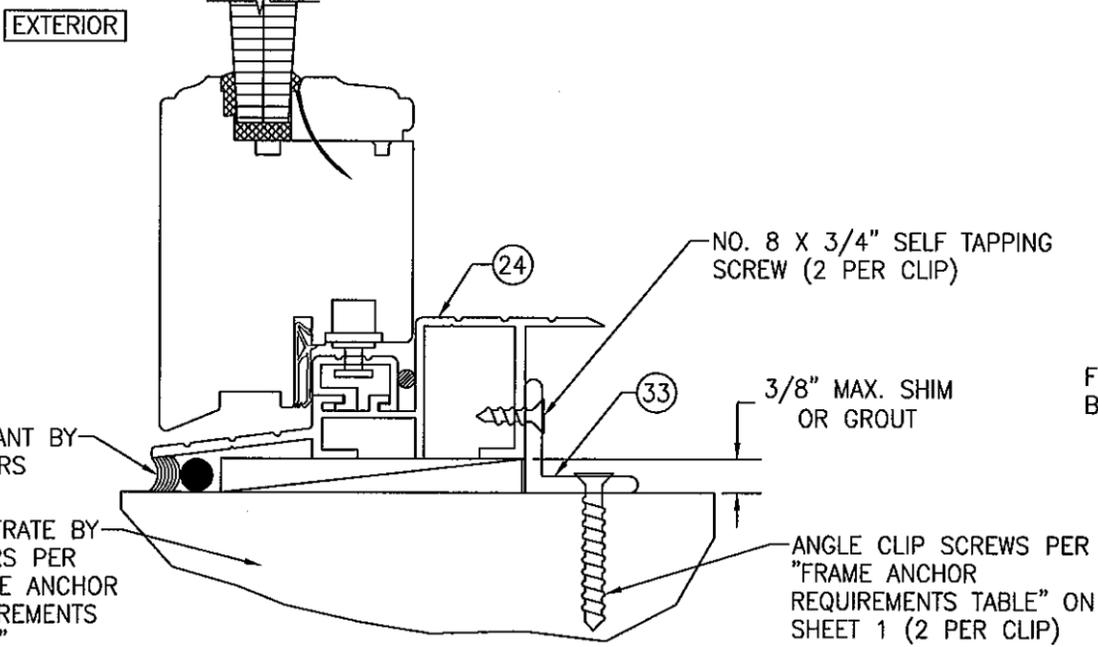
**SHEET NO.**  
12 OF 17

CONTINUOUS WOOD MEMBER LESS IN SIZE THAN A 2X\_ BUCK TO BE MIN. 3 1/2" DEEP. NOT REQUIRED WHEN SHIM SPACE IS WITHIN ALLOWABLE DIMENSIONS SHOWN IN SECTIONS).



**OPTIONAL DIRECT MOUNT DETAIL TO SUBSTRATE WITH SPACER**

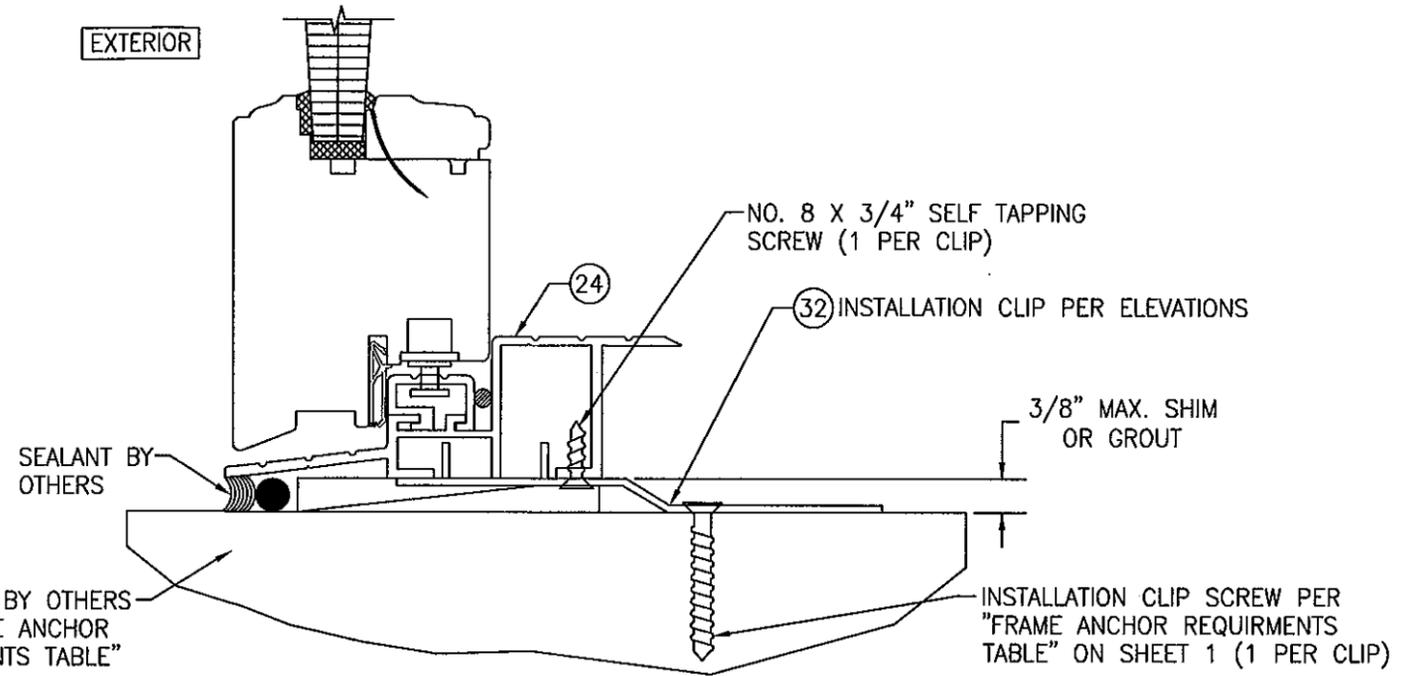
(HEAD SECTION SHOWN, SIDES ARE INSTALLED THE SAME)  
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)



**SILL DETAIL (STANDARD SILL INSTALLED WITH ANGLE CLIP)**

(OPERABLE DOOR CONDITION SHOWN, FIXED PANEL DOORS ARE INSTALLED THE SAME)  
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)

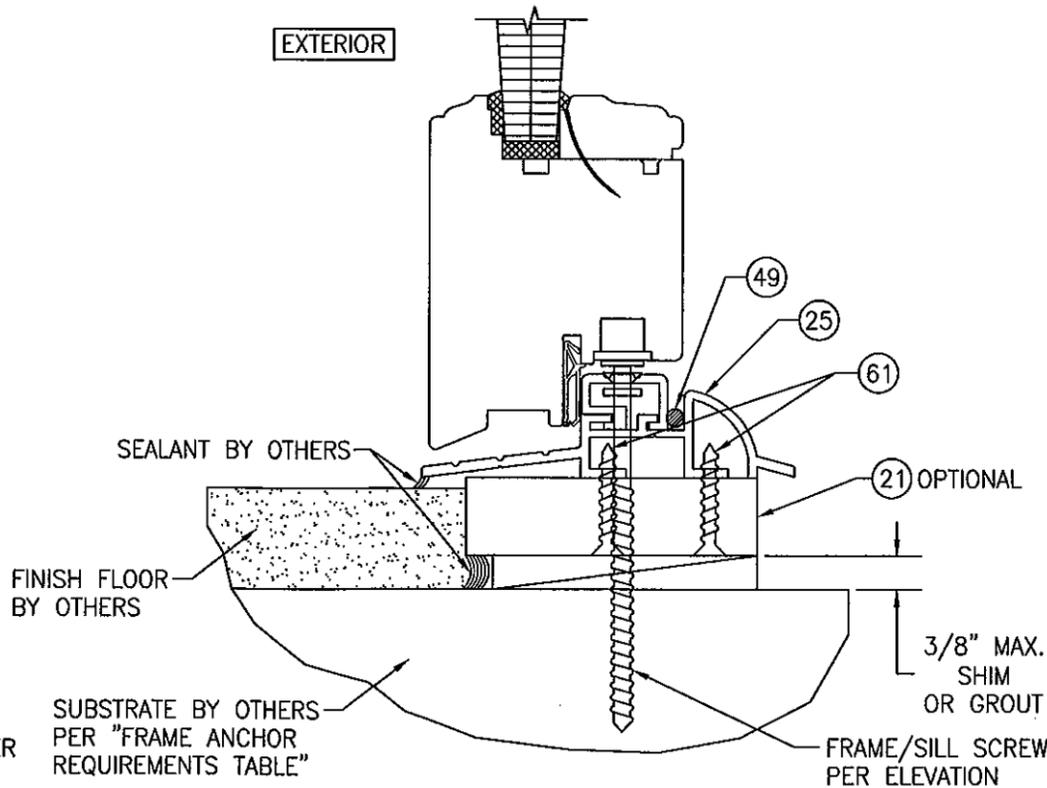
EXTERIOR



**SILL DETAIL (STANDARD SILL INSTALLED WITH INSTALLATION CLIP)**

(OPERABLE DOOR CONDITION SHOWN, FIXED PANEL DOORS ARE INSTALLED THE SAME)  
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)

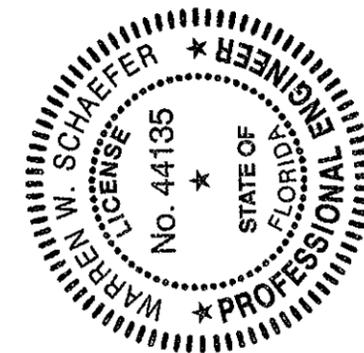
EXTERIOR



**SILL DETAIL (OPTIONAL SILL INSTALLED WITH FRAME/SILL SCREW)**

(OPERABLE DOOR CONDITION SHOWN, FIXED PANEL DOORS ARE INSTALLED THE SAME)  
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)

PRODUCT REVISED  
as complying with the Florida  
Building Code  
Acceptance No. 11-1101.05  
Expiration Date 5/27/14  
By *Isaac J. Chouk*  
Miami Dade Product Control



DRAWN BY: W.R.M.	CHECKED BY: W.W.S.
PLOT: 1=2	DATE: 10/08/08
NO.	DATE
BY	
REVISION DESCRIPTION	

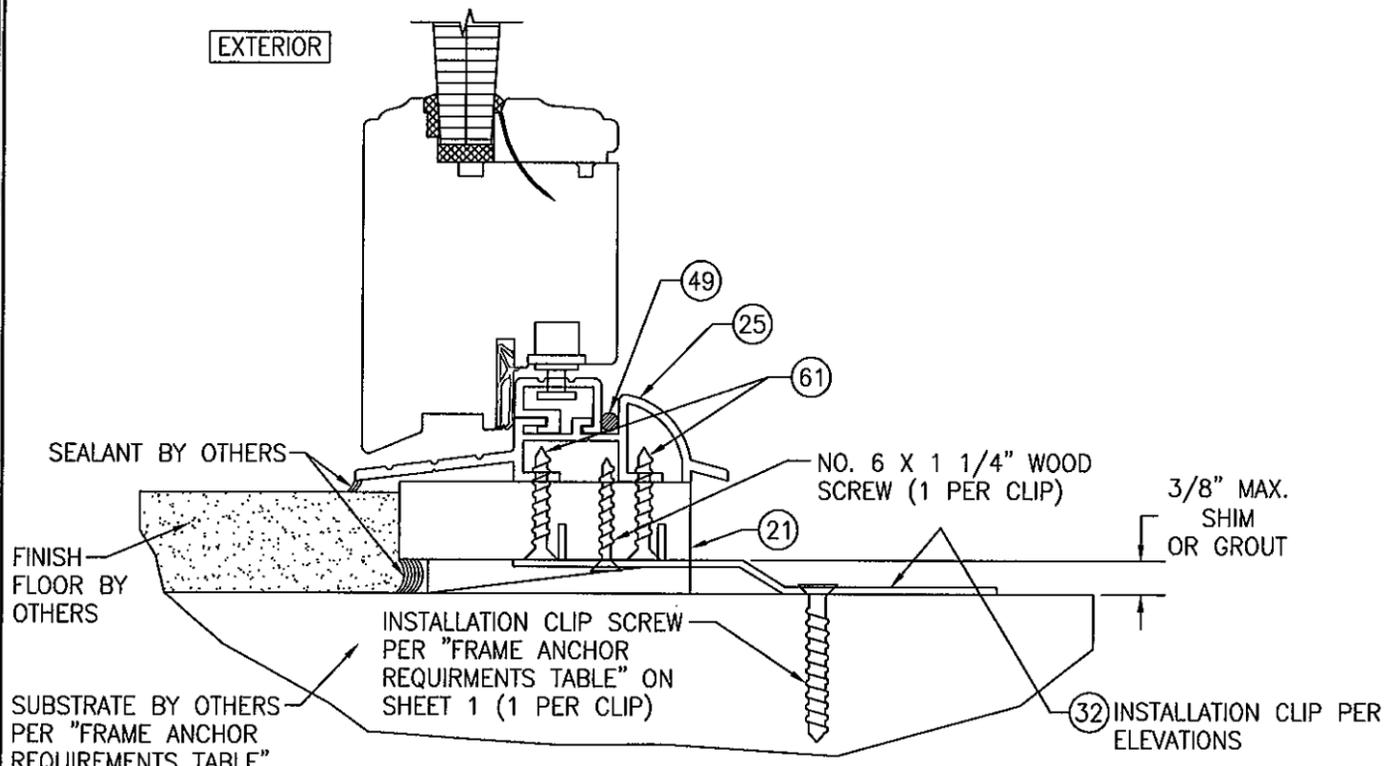
DRAWING TITLE  
**OUT-SWING IMPACT WOOD PANEL DOORS**

MANUFACTURER  
**TISCHLER UND SOHN (USA) LTD.**  
SIX SUBURBAN AVENUE  
STAMFORD, CONNECTICUT 06901  
203-674-0600

CONSULTANTS  
**W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809)**  
7480 150TH COURT NORTH  
PALM BEACH GARDENS, FL 33418  
PHONE: 561-744-3424

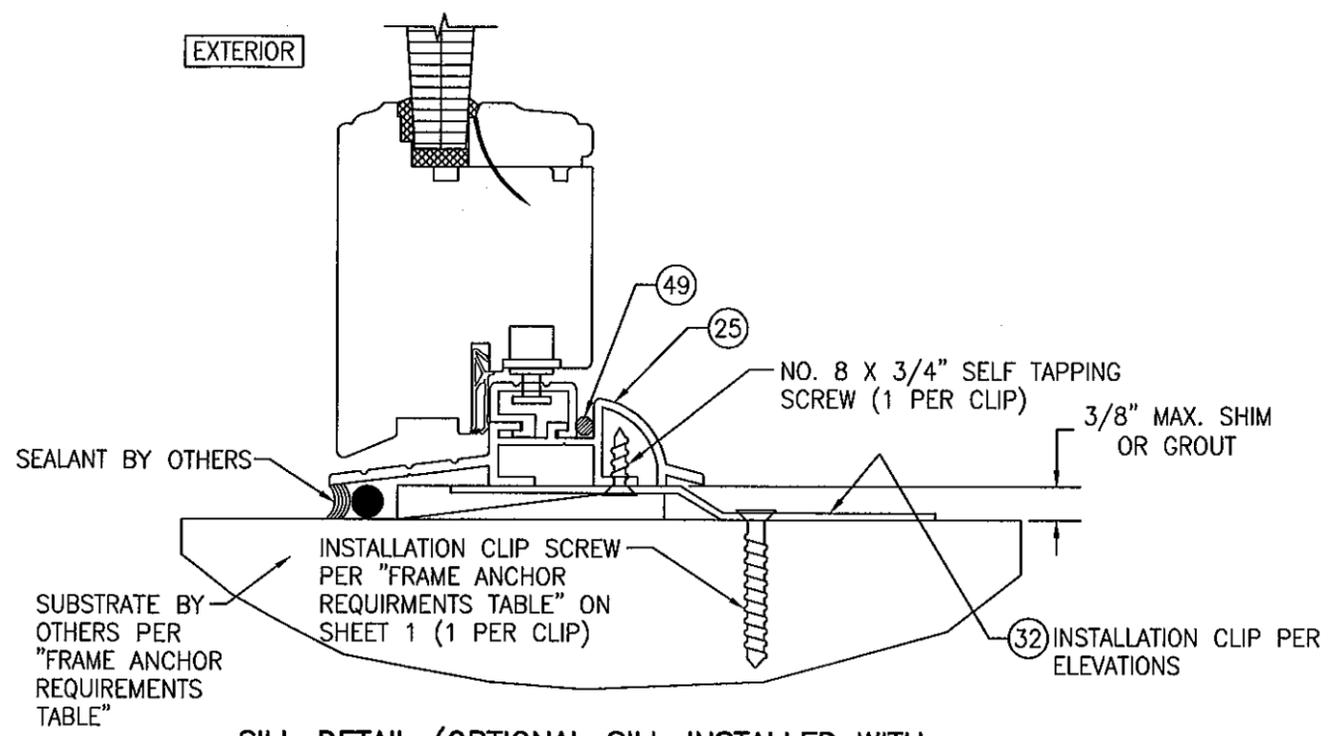
CERTIFICATION  
OCT 27 2011  
WARREN W. SCHAEFER, P.E.  
P.E. NO. 44135

DRAWING NO. 1616 REV. A  
SHEET NO. 13 OF 17



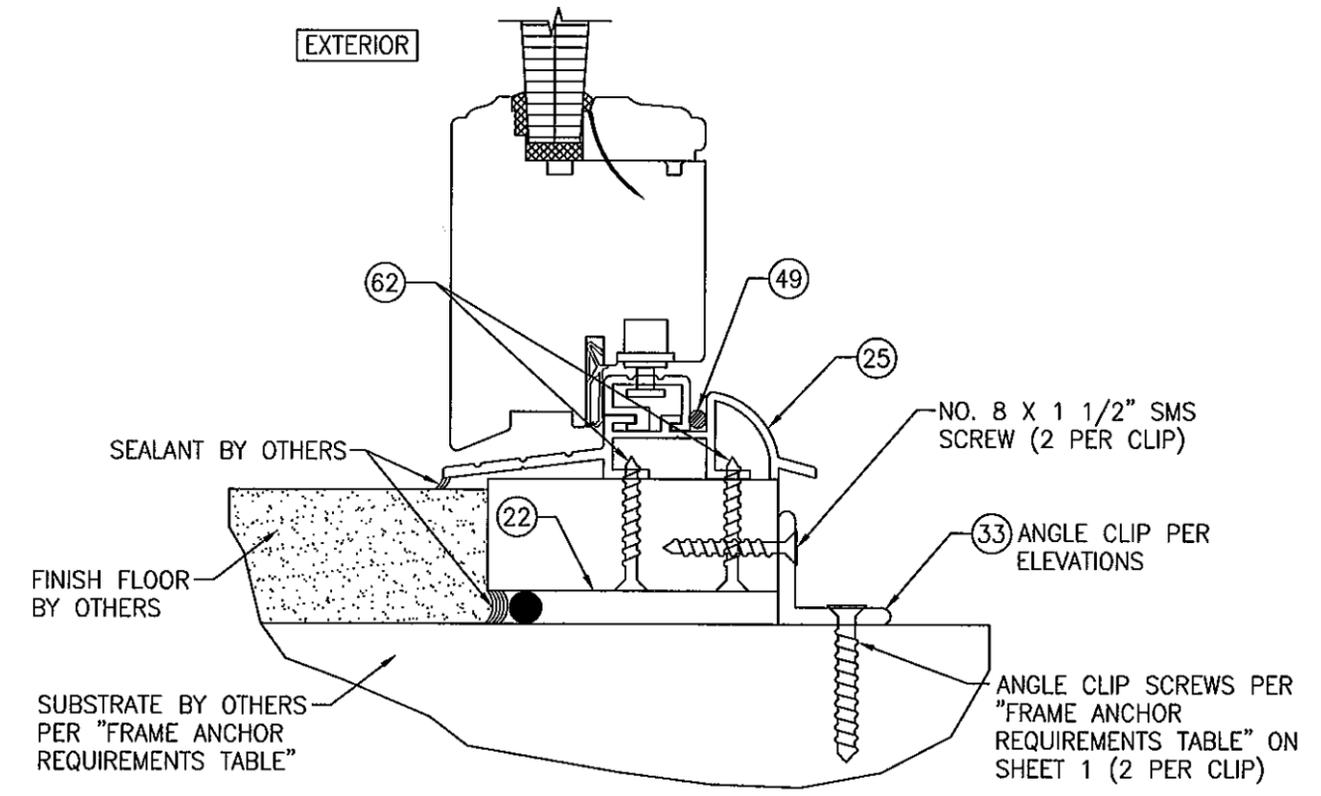
**SILL DETAIL (OPTIONAL SILL INSTALLED WITH INSTALLATION CLIP & SUB-SILL)**

(OPERABLE DOOR CONDITION SHOWN, FIXED PANEL DOORS ARE INSTALLED THE SAME)  
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)



**SILL DETAIL (OPTIONAL SILL INSTALLED WITH INSTALLATION CLIP & NO SUB-SILL)**

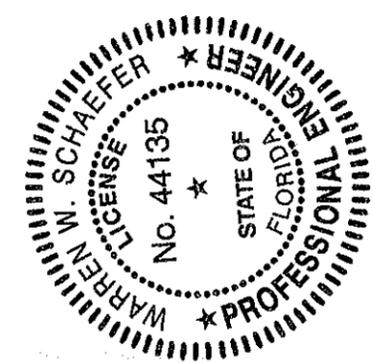
(OPERABLE DOOR CONDITION SHOWN, FIXED PANEL DOORS ARE INSTALLED THE SAME)  
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)



**SILL DETAIL (OPTIONAL SILL INSTALLED WITH ANGLE CLIP)**

(OPERABLE DOOR CONDITION SHOWN, FIXED PANEL DOORS ARE INSTALLED THE SAME)  
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)

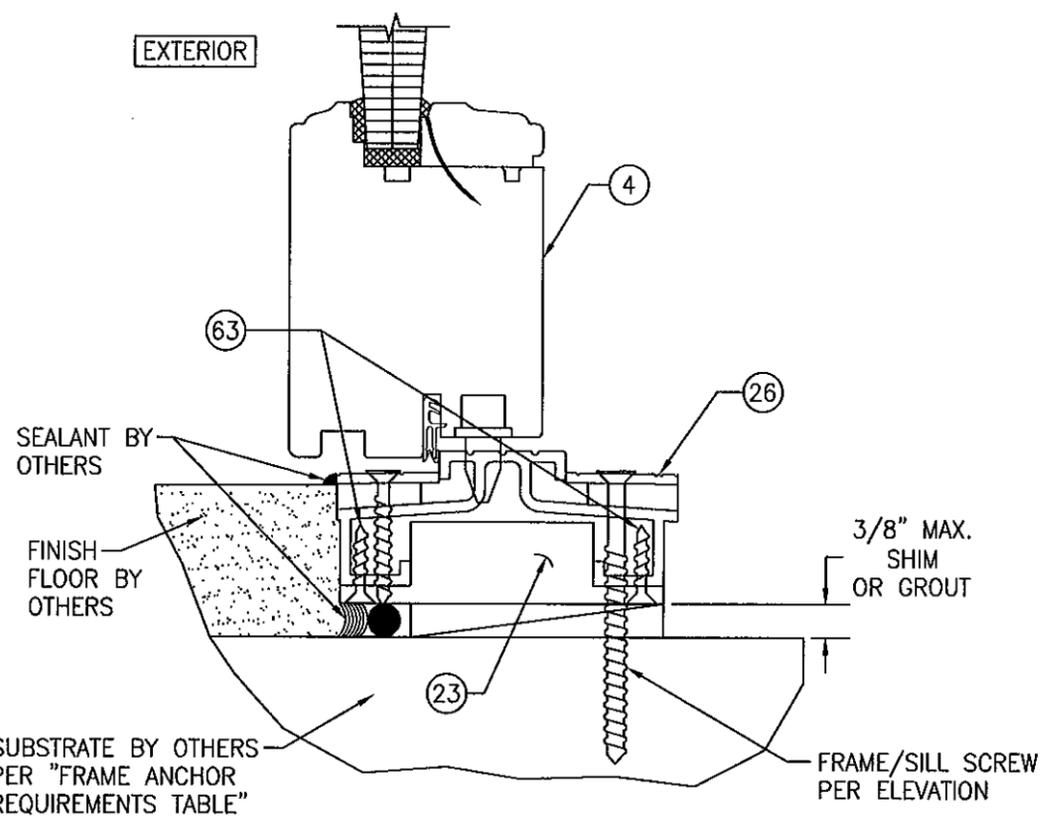
PRODUCT REVISED  
as complying with the Florida  
Building Code  
Acceptance No. 11-1101.15  
Expiration Date 7/27/14  
By *Warren W. Schaefer*  
Miami Dade Product Control



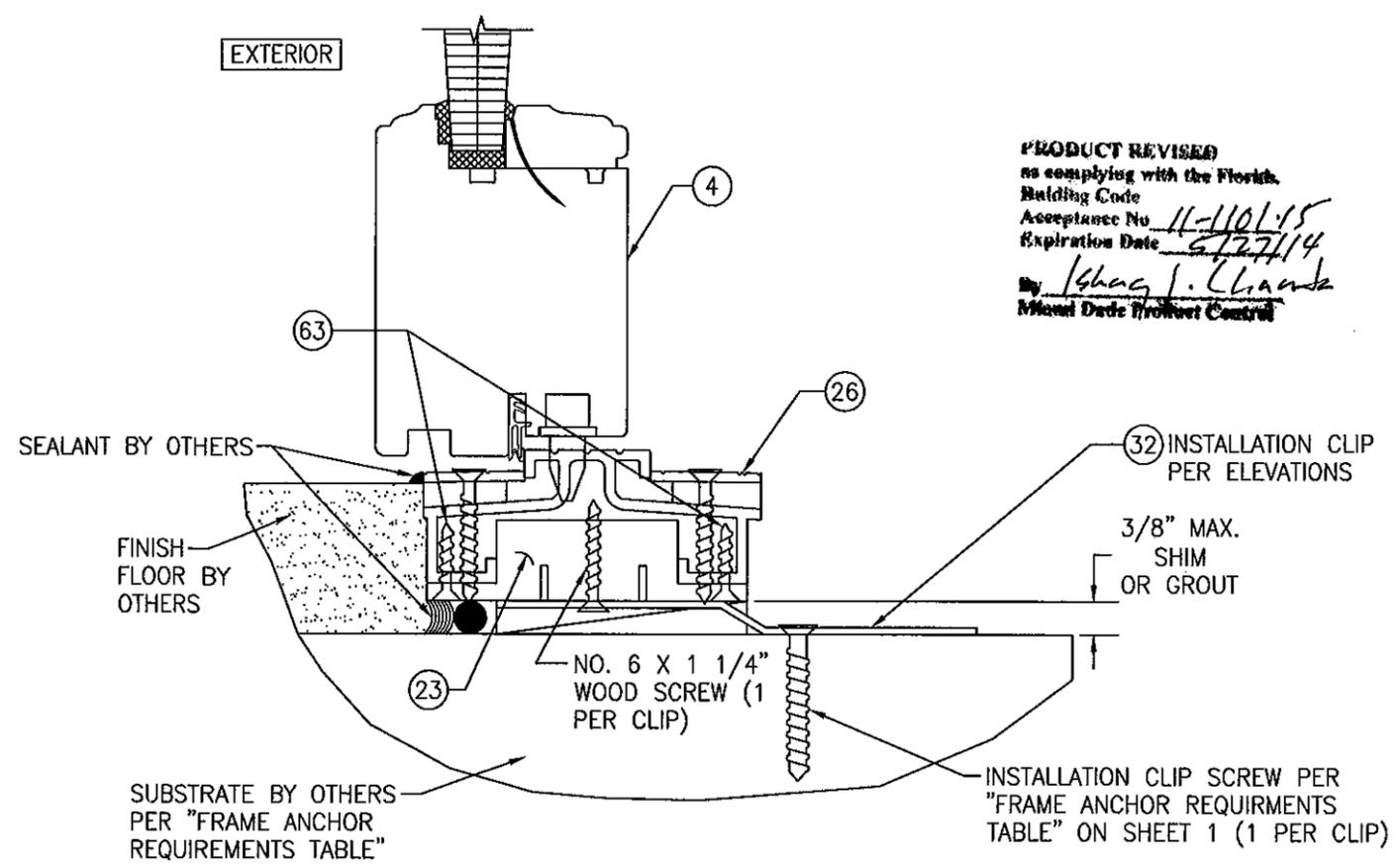
DRAWN BY: W.R.M.	CHECKED BY: W.W.S.
PLOT: 1=2	DATE: 10/08/08
DATE	
BY	
REVISION DESCRIPTION	
NO.	
DRAWING TITLE <b>OUT-SWING IMPACT WOOD PANEL DOORS</b>	
CONSULTANTS <b>W. W. SCHAEFER ENGINEERING &amp; CONSULTING, P.A. (CA 6809)</b>	MANUFACTURER <b>TISCHLER UND SOHN (USA) LTD.</b> SIX SUBURBAN AVENUE STAMFORD, CONNECTICUT 06901 203-674-0600
CERTIFICATION <b>OCT 27 2011</b> WARREN W. SCHAEFER, P.E. P.E. NO. 44135	DRAWING NO. <b>1616</b> REV. <b>A</b> SHEET NO. <b>14</b> OF <b>17</b>

DRAWN BY: W.R.M.	CHECKED BY: W.W.S.
PLOT: 1=2	DATE: 10/08/08
DATE	
BY	
REVISION DESCRIPTION	
NO.	

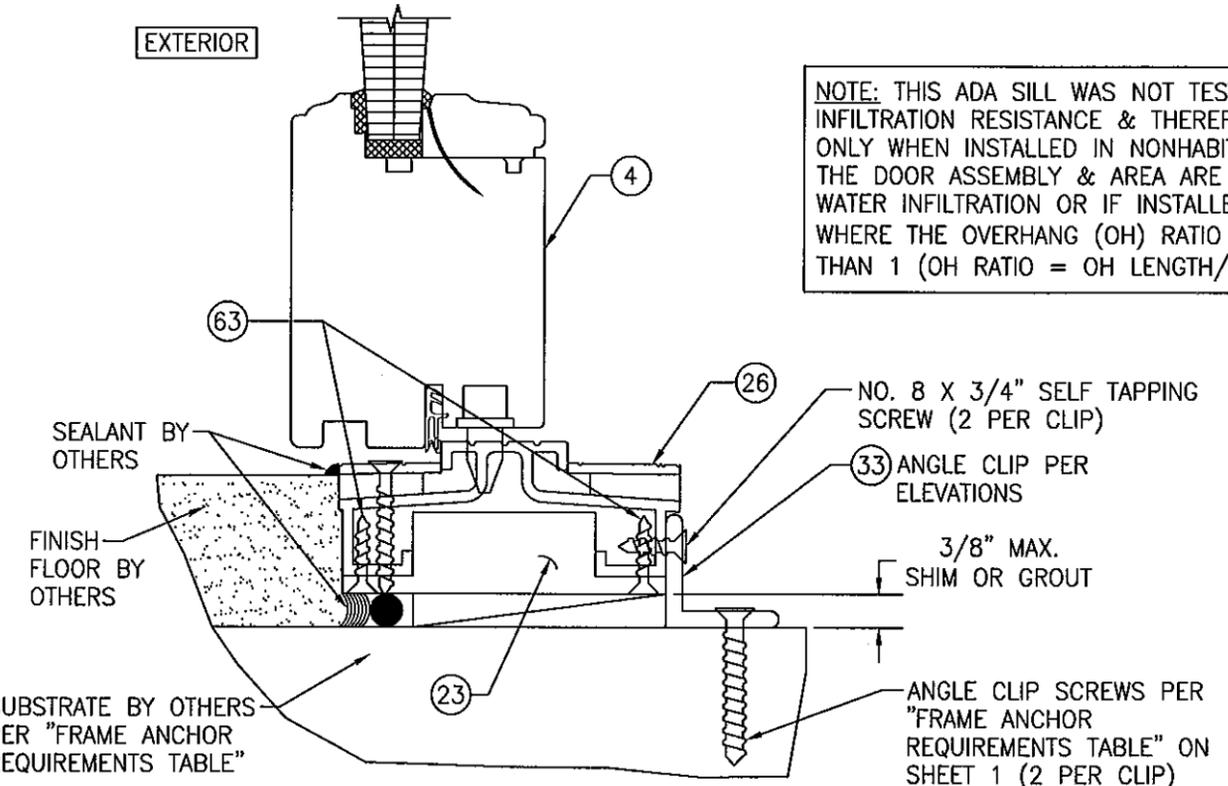
**PRODUCT REVISED**  
 as complying with the Florida  
 Building Code  
 Acceptance No. 11-1101-15  
 Expiration Date 5/27/14  
 By Isaac J. Clark  
 Miami Dade Product Control



**ADA SILL DETAIL (ADA SILL INSTALLED WITH FRAME/SILL SCREW)**  
 (OPERABLE DOOR CONDITION SHOWN, FIXED PANEL DOORS ARE INSTALLED THE SAME)  
 (FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)

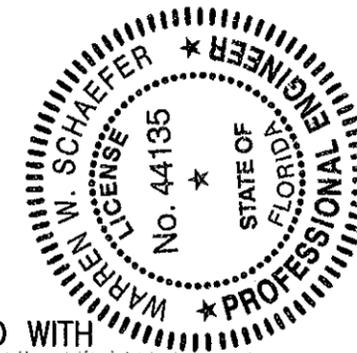
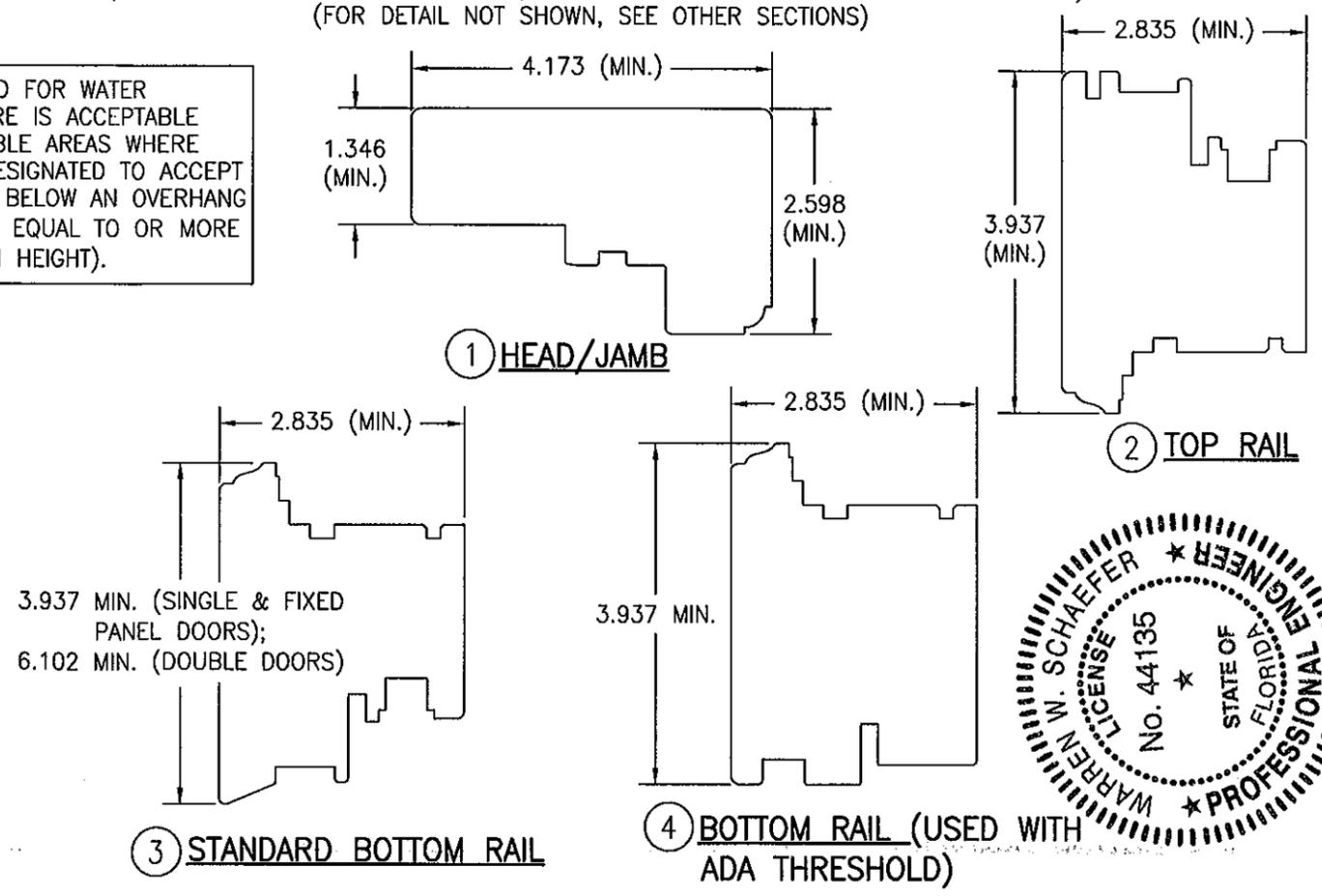


**ADA SILL DETAIL (ADA SILL INSTALLED WITH INSTALLATION CLIP)**  
 (OPERABLE DOOR CONDITION SHOWN, FIXED PANEL DOORS ARE INSTALLED THE SAME)  
 (FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)



NOTE: THIS ADA SILL WAS NOT TESTED FOR WATER INFILTRATION RESISTANCE & THEREFORE IS ACCEPTABLE ONLY WHEN INSTALLED IN NONHABITABLE AREAS WHERE THE DOOR ASSEMBLY & AREA ARE DESIGNATED TO ACCEPT WATER INFILTRATION OR IF INSTALLED BELOW AN OVERHANG WHERE THE OVERHANG (OH) RATIO IS EQUAL TO OR MORE THAN 1 (OH RATIO = OH LENGTH/OH HEIGHT).

**ADA SILL DETAIL (ADA SILL INSTALLED WITH ANGLE CLIP)**  
 (OPERABLE DOOR CONDITION SHOWN, FIXED PANEL DOORS ARE INSTALLED THE SAME)  
 (FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)



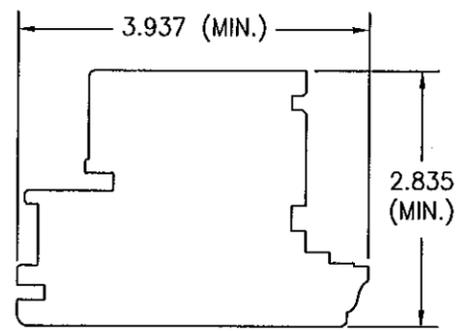
DRAWING TITLE: **OUT-SWING IMPACT WOOD PANEL DOORS**

MANUFACTURER: **TISCHLER UND SOHN (USA) LTD.**  
 SIX SUBURBAN AVENUE  
 STAMFORD, CONNECTICUT 06901  
 203-674-0600

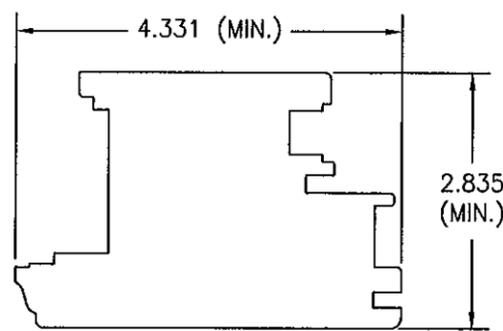
CONSULTANTS: **W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809)**  
 7480 150TH COURT NORTH  
 PALM BEACH GARDENS, FL 33418  
 PHONE: 561-744-3424

CERTIFICATION: **OCT 27 2011**  
 WARREN W. SCHAEFER, P.E.  
 NO. 44135

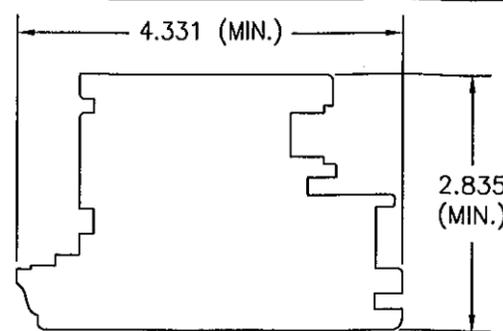
DRAWING NO. **1616** REV. **A**  
 SHEET NO. **15** OF **17**



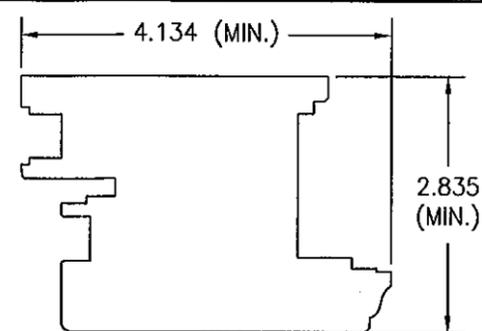
5 STILE



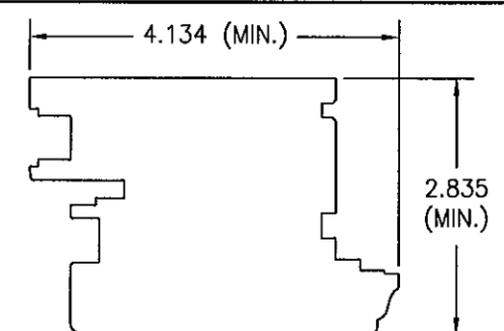
6A ACTIVE MEETING STILE (USED WITH REINFORCEMENT)



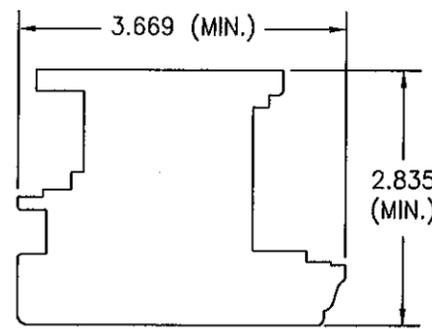
6B ACTIVE MEETING STILE (USED WITHOUT REINFORCEMENT)



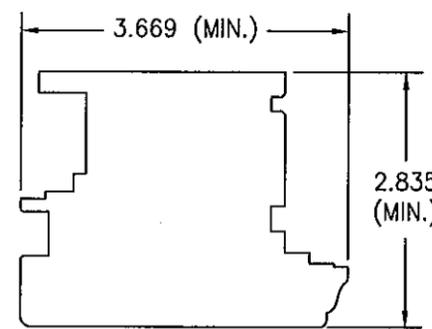
7A INACTIVE MEETING STILE (USED WITH SIEGENIA LOCK SYSTEM & REINFORCEMENT)



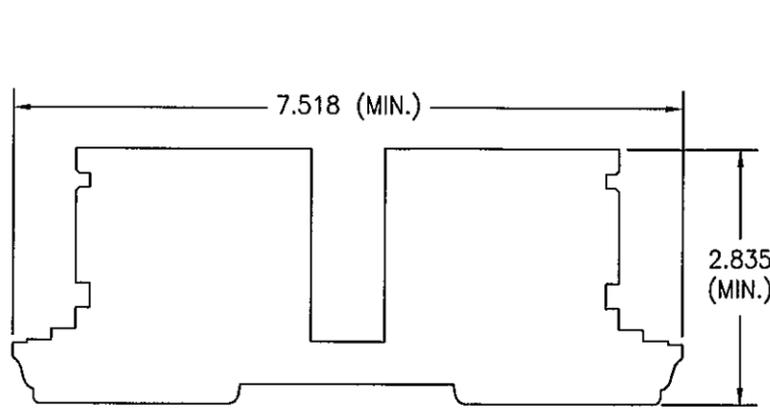
7B INACTIVE MEETING STILE (USED WITH SIEGENIA LOCK SYSTEM & WITHOUT REINFORCEMENT)



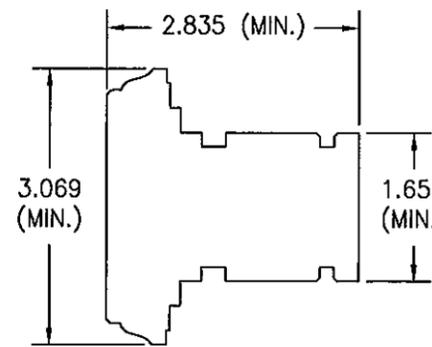
8A INACTIVE MEETING STILE (USED WITH Kfv LOCK SYSTEM & REINFORCEMENT)



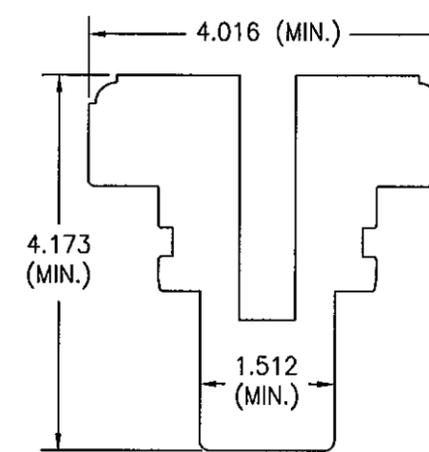
8B INACTIVE MEETING STILE (USED WITH Kfv LOCK SYSTEM & WITHOUT REINFORCEMENT)



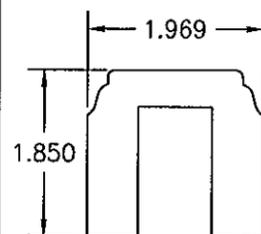
9 FIXED ASTRAGAL



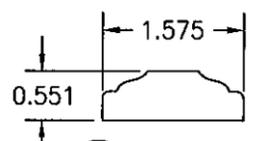
10 MID-RAIL



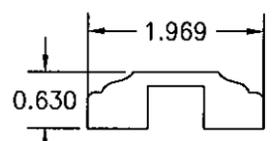
11 ONE-PIECE MULLION



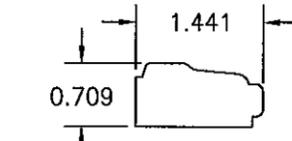
12 FIXED ASTRAGAL MULLION BAR COVER



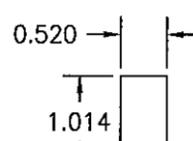
13 ASTRAGAL



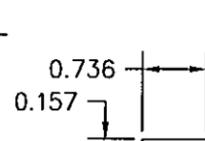
14 ONE-PIECE MULLION BAR COVER



15 GLAZING BEAD



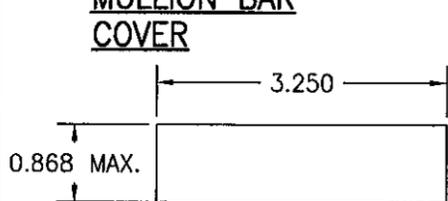
18 SPACER BLOCK



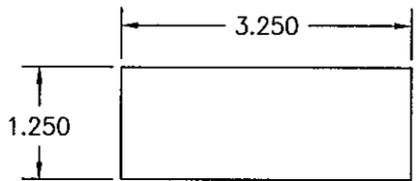
19 SPACER BLOCK



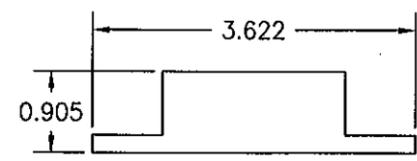
20 SPACER BLOCK (USED WITH Kfv MULTI-POINT LOCK SYSTEM)



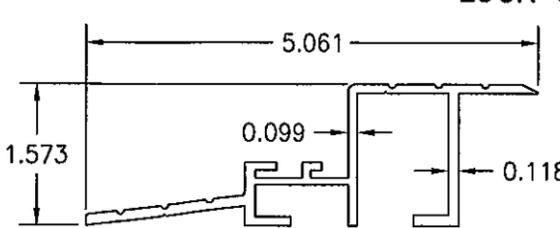
21 SUB-SILL



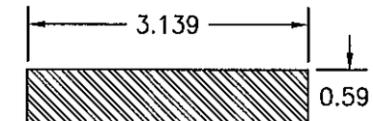
22 SUB-SILL



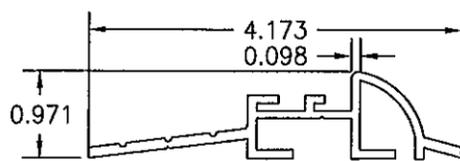
23 ADA SUB-SILL



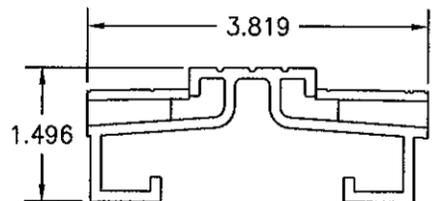
24 STANDARD SILL



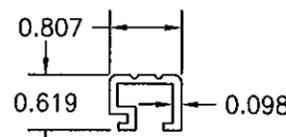
29 VERTICAL MULLION REINFORCEMENT



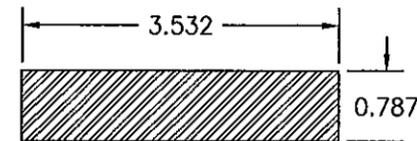
25 OPTIONAL SILL



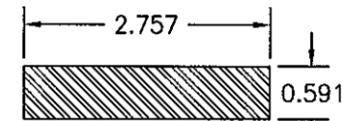
26 OPTIONAL ADA SILL



27 CONTINUOUS SILL STRIKE/COVER

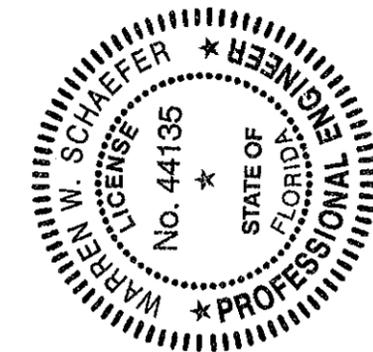


28 VERTICAL FIXED ASTRAGAL REINFORCEMENT



30 TRANSOM MULLION REINFORCEMENT

PRODUCT REVISED  
 not complying with the Florida  
 Building Code  
 Acceptance No. 11-1101-15  
 Expiration Date 5/27/14  
 By: [Signature]  
 Miami Dade Product Control



DRAWN BY:	W.R.M.	CHECKED BY:	W.W.S.
PLOT:	1=2	DATE:	10/08/08
NO.		REVISION DESCRIPTION	
BY		DATE	

DRAWING TITLE: OUT-SWING IMPACT WOOD PANEL DOORS  
 MANUFACTURER: TISCHLER UND SOHN (USA) LTD.  
 SIX SUBURBAN AVENUE  
 STAMFORD, CONNECTICUT 06901  
 203-674-0600

CONSULTANTS: W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809)  
 7480 150TH COURT NORTH  
 PALM BEACH GARDENS, FL 33418  
 PHONE: 561-744-3424

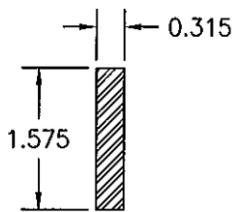
CERTIFICATION: [Signature]  
 OCT 27 2011  
 WARREN W. SCHAEFER, P.E.  
 P.E. NO. 44135

ITEM #	ITEM DESCRIPTION	MANUFACTURER/NOTES
PARTS		
1	HEAD/JAMB	MAHOGANY
2	TOP RAIL	MAHOGANY
3	STANDARD BOTTOM RAIL	MAHOGANY
4	BOTTOM RAIL (USED WITH ADA THRESHOLD)	MAHOGANY
5	STILE	MAHOGANY
6A	ACTIVE MEETING STILE (USED WITH REINFORCEMENT)	MAHOGANY
6B	ACTIVE MEETING STILE (USED WITHOUT REINFORCEMENT)	MAHOGANY
7A	INACTIVE MEETING STILE (USED WITH SIEGENIA LOCK SYSTEM & REINFORCEMENT)	MAHOGANY
7B	INACTIVE MEETING STILE (USED WITH SIEGENIA LOCK SYSTEM & WITHOUT REINFORCEMENT)	MAHOGANY
8A	INACTIVE MEETING STILE (USED WITH KJV LOCK SYSTEM & REINFORCEMENT)	MAHOGANY
8B	INACTIVE MEETING STILE (USED WITH KJV LOCK SYSTEM & WITHOUT REINFORCEMENT)	MAHOGANY
9	FIXED ASTRAGAL	MAHOGANY
10	MID-RAIL	MAHOGANY
11	ONE-PIECE MULLION	MAHOGANY
12	FIXED ASTRAGAL MULLION BAR COVER	MAHOGANY
13	ASTRAGAL	MAHOGANY
14	ONE-PIECE MULLION BAR COVER	MAHOGANY
15	GLAZING BEAD	MAHOGANY
18	SPACER BLOCK	MAHOGANY
19	SPACER BLOCK	MAHOGANY
20	SPACER BLOCK (USED WITH KJV MULTI-POINT LOCK SYSTEM)	MAHOGANY
21	SUB-SILL	MAHOGANY
22	SUB-SILL	MAHOGANY
23	ADA SUB-SILL	MAHOGANY
24	STANDARD SILL	BRONZE
25	OPTIONAL SILL	BRONZE
26	OPTIONAL ADA SILL	BRONZE
27	CONTINUOUS SILL STRIKE/COVER	BRONZE
28	VERTICAL FIXED ASTRAGAL REINFORCEMENT	34 KSI STAINLESS STEEL OR A36 STEEL
29	VERTICAL MULLION REINFORCEMENT	34 KSI STAINLESS STEEL OR A36 STEEL
30	TRANSOM MULLION REINFORCEMENT	34 KSI STAINLESS STEEL OR A36 STEEL
31	MEETING STILE REINFORCEMENT	34 KSI STAINLESS STEEL OR A36 STEEL
32	INSTALLATION CLIP	GALVANIZED 54 KSI STEEL
33	ANGLE CLIP	6061-T6 ALUMINUM
34	BTI BRACKET	GALVANIZED 54 KSI STEEL
HARDWARE		
38	BUTT HINGE	BY: GENIATEC GMBH
39	MULTI-POINT LOCK SYSTEM	BY: KJV: STRAIGHT SHOOT
40	MULTI-POINT LOCK SYSTEM	BY: SIEGENIA AUBI KG TYPE: MUSHROOM
41	HANDLE	AS REQUIRED TO OPERATE LOCK SYSTEM

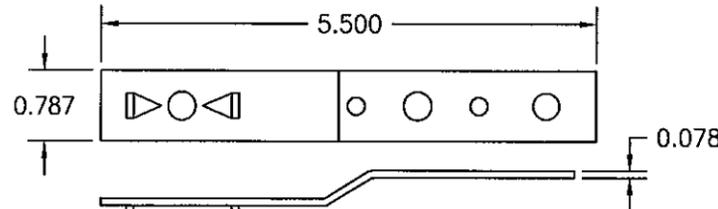
ITEM #	ITEM DESCRIPTION	MANUFACTURER/NOTES
SEALS & SEALANTS		
45	WEATHERSTRIP	THERMOPLASTIC ELASTOMER; BY: DEVENTER
46	WEATHERSTRIP	THERMOPLASTIC ELASTOMER; BY: DEVENTER
47	WEATHERSTRIP	THERMOPLASTIC ELASTOMER; BY: DEVENTER
48	WEATHERSTRIP	THERMOPLASTIC ELASTOMER; BY: DEVENTER
49	WEATHERSTRIP	THERMOPLASTIC ELASTOMER; BY: WEGNER
FASTENERS		
52	0.06" X 1.26" S.S. CURVED NAIL	4" FROM CORNERS & 12" MAX. O.C.
53	0.16" X 1.57" WOOD SCREW	2 PER HINGE INTO STILE
54	0.16" X 1.18" WOOD SCREW	3 PER HINGE INTO JAMB
55	0.16" X 1 1/4" MACHINE SCREW	3 PER HINGE
56	0.16" THREADED INSERT	3 PER HINGE
57	0.30" X 4.72" BAUTEC WOOD SCREW	WITHIN 8" OF ENDS & 18" MAX. O.C.
59	NO. 14 X 4" BAUTEC WOOD SCREW	WITHIN 8" OF ENDS & 18" MAX. O.C.
60	0.18" X 2" WOOD SCREW	WITHIN 6" OF ENDS & 18" MAX. O.C.
61	0.136" X 1.26" SELF TAPPING SCREW	WITHIN 4" OF ENDS & 13 3/4" MAX. O.C.
62	0.136" X 1.50" SELF TAPPING SCREW	WITHIN 4" OF ENDS & 13 3/4" MAX. O.C.
63	0.11" X 0.87" SELF TAPPING SCREW	WITHIN 4" OF ENDS & 13 3/4" MAX. O.C.
64	0.24" X 3.15" WOOD SCREW	WITHIN 8" OF ENDS & 18" MAX. O.C.

NOTE: WOOD USED IN TESTING WAS SIPO MAHOGANY WITH A SPECIFIC GRAVITY OF  $G = 0.62$  AND A MODULUS OF ELASTICITY OF  $E = 1,600,000$  PSI. OTHER WOOD SPECIES APPLICABLE FOR USE WITH THIS PRODUCT ARE THOSE WITH A SPECIFIC GRAVITY OF 0.62 AND MODULUS OF ELASTICITY OF 1,600,000 PSI OR GREATER. ALL WOOD IS MINIMUM GRADE 2 MILLED BY TISCHLER UND SOHN TO SELECT.

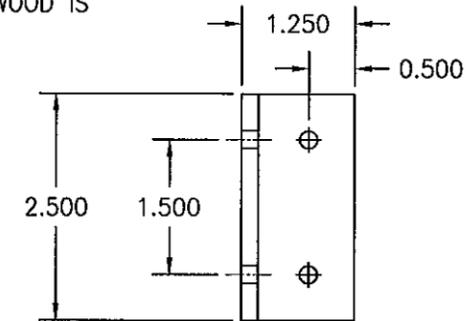
PRODUCT REVIEWED  
 as complying with the Florida  
 Building Code  
 Acceptance No. 11-1101-15  
 Expiration Date 5/27/14  
 By: *Shag J. Chan*  
 Material Data Product Control



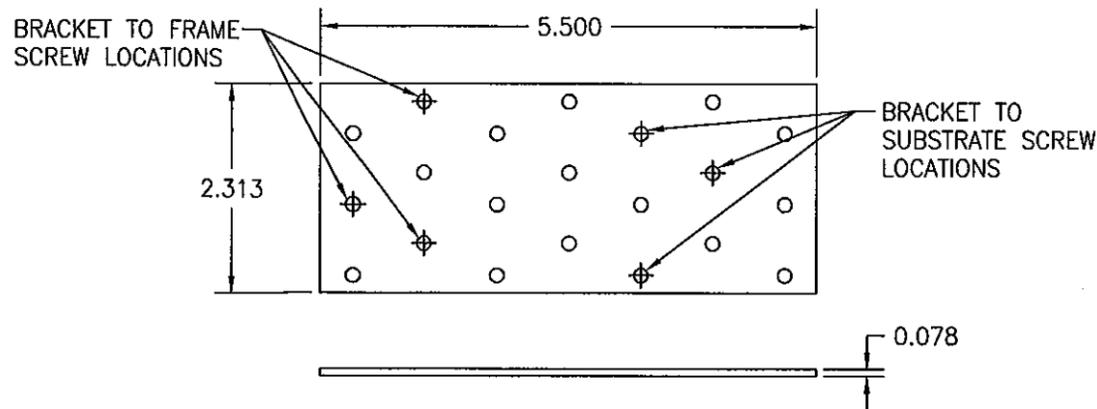
31 MEETING STILE REINFORCEMENT



32 INSTALLATION CLIP



33 ANGLE CLIP



34 BTI BRACKET

DRAWN BY: W.R.M.	CHECKED BY: W.W.S.
PLOT: 1=2	DATE: 10/08/08
DATE	
BY	
REVISION DESCRIPTION	
NO.	

DRAWING TITLE  
 OUT-SWING IMPACT WOOD PANEL DOORS

MANUFACTURER  
 TISCHLER UND SOHN (USA) LTD.  
 SIX SUBURBAN AVENUE  
 STAMFORD, CONNECTICUT 06901  
 203-674-0600

CONSULTANTS  
 W. W. SCHAEFER ENGINEERING  
 & CONSULTING, P.A. (CA 6809)  
 7480 150TH COURT NORTH  
 PALM BEACH GARDENS, FL 33418  
 PHONE: 561-744-3424



CERTIFICATION  
 OCT 27 2011  
 WARREN W. SCHAEFER, P.E.  
 P.E. NO. 44135

DRAWING NO. 1616 REV. A  
 SHEET NO. 17 OF 17