



MIAMI-DADE COUNTY
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) 372-6339

NOTICE OF ACCEPTANCE (NOA)

www.maimidade.gov/buildingcode

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 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 "Mahogany Impact Outswing Casement" Wood Fixed Window – L.M.I.

APPROVAL DOCUMENT: Drawing No. **1533**, titled "Out-Swing Impact Wood Fixed Casement Window", sheets 1 through 6 of 6, dated 04/03/08, 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.

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.

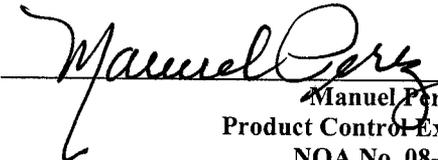
INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official. This NOA consists of this page 1 and evidence page E-1, as well as approval document mentioned above. The submitted documentation was reviewed by **Manuel Perez, P.E.**



NOA No. 08-0804.13
Expiration Date: January 08, 2014
Approval Date: January 08, 2009
Page 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

- A. DRAWINGS**
1. Manufacturer's die drawings and sections.
 2. Drawing No. **1533**, titled "Out-Swing Impact Wood Fixed Casement Window", sheets 1 through 6 of 6, dated 04/03/08, 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 of fixed and operable wood casement windows, prepared by Architectural Testing, Inc., Test Report No. **ATI-77324.01-109-18**, dated 06/30/08, and addendum letter dated 11/20/08, all signed and sealed by Michael D. Stremmel, P.E.
- C. CALCULATIONS**
1. Anchor verification calculations and structural analysis, complying with FBC-2004 and 2007, prepared by W.W. Schafer Engineering & Consulting, P.A., dated 07/28/08, signed and sealed by Warren W. Schafer, P.E. **Complies with ASTM E1300-02**
- D. QUALITY ASSURANCE**
1. Miami Dade Building Code Compliance Office (BCCO).
- E. MATERIAL CERTIFICATIONS**
1. Notice of Acceptance No. **06-0216.06** issued to Solutia Inc. for their "**Saflex III G Clear or colored interlayer**" dated 05/04/06, expiring on 05/21/11.
 2. Notice of Acceptance No. **08-0520.08** issued to Solutia Inc. for their "**Vanceva Composites Glass Interlayer**" dated 07/17/08, expiring on 12/11/13.
- F. STATEMENTS**
1. Statement letter of conformance, dated December 12, 2007, signed and sealed by Warren W. Schafer, P.E.
 2. Statement letter of independence and no financial interest, dated July 28, 2008, signed and sealed by Warren W. Schafer, P.E.
 3. Laboratory compliance letter for Test Report no. **ATI 77324.01-109-18**, issued by Architectural Testing, Inc., dated July 01, 2008, signed and sealed by Michael D. Stremmel, P.E.
 4. Test Proposal # **07-2960** issued by BCCO, dated 07/24/07 revised on 08/16/07 and signed by Manuel Perez, P.E.
- G. OTHERS**
1. None


Manuel Perez, P.E.
Product Control Examiner
NOA No. 08-0804.13
Expiration Date: January 08, 2014
Approval Date:

GENERAL NOTES:

1. THESE WINDOW SYSTEMS HAVE BEEN TESTED, ANALYZED & APPROVED FOR DESIGN PRESSURES NOT TO EXCEED THOSE SHOWN IN THE "ALLOWABLE DESIGN PRESSURE TABLE(S).
2. OPENINGS, BUCKING & BUCKING FASTENERS MUST BE PROPERLY DESIGNED & INSTALLED TO TRANSFER WIND LOADS TO THE STRUCTURE.
3. 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.
4. 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 WINDOWS.
5. THESE WINDOW SYSTEMS HAVE BEEN DESIGNED IN ACCORDANCE WITH AND MEET THE REQUIREMENTS OF THE FLORIDA BUILDING CODE (FBC) INCLUDING HIGH VELOCITY HURRICANE ZONES (HVHZ).
6. IMPACT SHUTTERS ARE NOT REQUIRED WITH THESE WINDOWS.
7. ALL ANCHORS SECURING WINDOW FRAME TO PRESSURE TREATED BUCKS OR WOOD FRAMING SHALL BE CAPABLE OF RESISTING CORROSION CAUSED BY THE PRESSURE TREATING CHEMICALS IN THE WOOD.
8. 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 WHEN USED IN CONJUNCTION WITH LOAD COMBINATIONS SPECIFIED IN SECTION 2.0 OF THE ASCE 7 STANDARD.
9. 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.
10. 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.
11. ALL WOOD MEMBERS OF WINDOWS 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.

CORNER CONSTRUCTION:

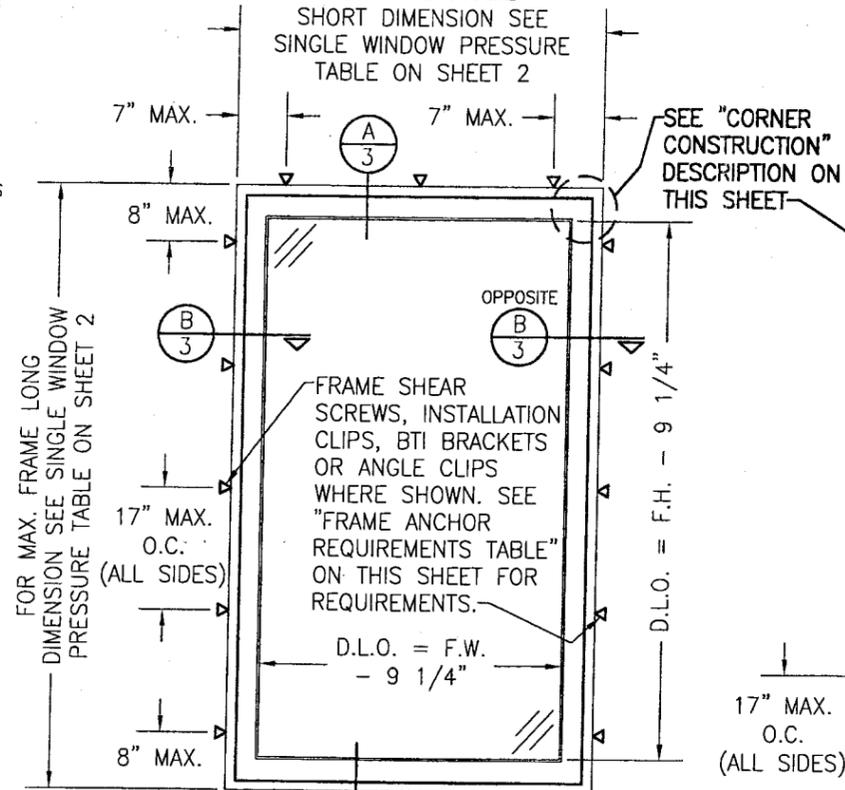
- RECTANGULAR FRAME CORNERS:** MORTISE & TENON CONSTRUCTION JOINED & GLUED WITH PONAL SUPER 3 WOOD GLUE OR EQUIVALENT.
- ARCHED FRAME CORNERS:** ARCHED FRAME BUTTED TO STRAIGHT FRAME, JOINED WITH ONE(1) NO.14 X 3" WOOD SCREW, & GLUED WITH PONAL SUPER 3 WOOD GLUE OR EQUIVALENT.
- HALF ROUND FRAME CORNERS:** FINGER JOINT CONSTRUCTION JOINED & GLUED WITH PONAL SUPER 3 WOOD GLUE OR EQUIVALENT.
- RECTANGULAR SASH CORNERS:** MORTISE & TENON CONSTRUCTION JOINED & GLUED WITH PONAL SUPER 3 WOOD GLUE OR EQUIVALENT.
- ARCHED SASH CORNERS:** ARCHED SASH BUTTED TO STRAIGHT SASH, JOINED WITH ONE(1) NO.14 X 3" WOOD SCREW, & GLUED WITH PONAL SUPER 3 WOOD GLUE OR EQUIVALENT.
- HALF ROUND SASH CORNERS:** FINGER JOINT CONSTRUCTION JOINED & GLUED WITH PONAL SUPER 3 WOOD GLUE OR EQUIVALENT.

FRAME ANCHOR REQUIREMENTS TABLE

OPENING TYPE (SUBSTRATE)	FRAME/CLIP/BACKET TO OPENING FASTENER TYPE	MINIMUM EMBED	MINIMUM EDGE DIST.
FRAME SCREWS			
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"
INSTALLATION CLIP SCREWS			
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"
BTI BRACKET & ANGLE CLIP SCREWS			
MIN. 2X6 WOOD FRAME OR BUCK (MIN. GR. 3 & G=0.55)	NO. 8 X 1 1/2" SMS	1 1/8"	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"

- (1) CONCRETE SCREWS SHALL BE ELCO OR ITW RAMSET/RED HEAD TAPCONS OR HILTI KWIK-CON II (HARDENED STEEL OR S.S.).
- (2) ALL SELF TAP/DRILLING SCREWS SHALL BE MIN. GR. 5

FOR MAX. FRAME SHORT DIMENSION SEE SINGLE WINDOW PRESSURE TABLE ON SHEET 2

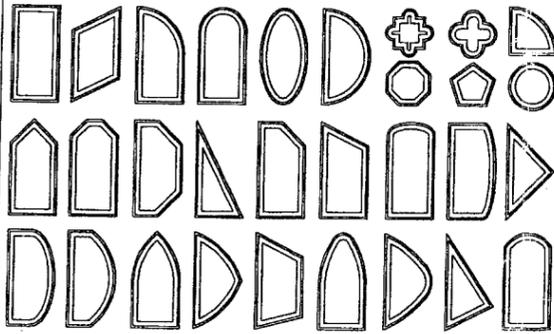


EXTERIOR ELEVATION: SINGLE FIXED WINDOW

SCALE: 1/2" = 1'-0"
LONG DIMENSION OF WINDOW MAY BE HORIZONTAL OR VERTICAL (HEIGHT & WIDTH MAY BE INTERCHANGED).

RECTANGULAR WINDOWS SHOWN. ANCHORING OF SHAPED WINDOWS IS THE SAME WITH REQUIRED ANCHOR SPACING ALONG THE FRAME CIRCUMFERENCE BEING THE SAME AS SPECIFIED FOR A STRAIGHT FRAME.

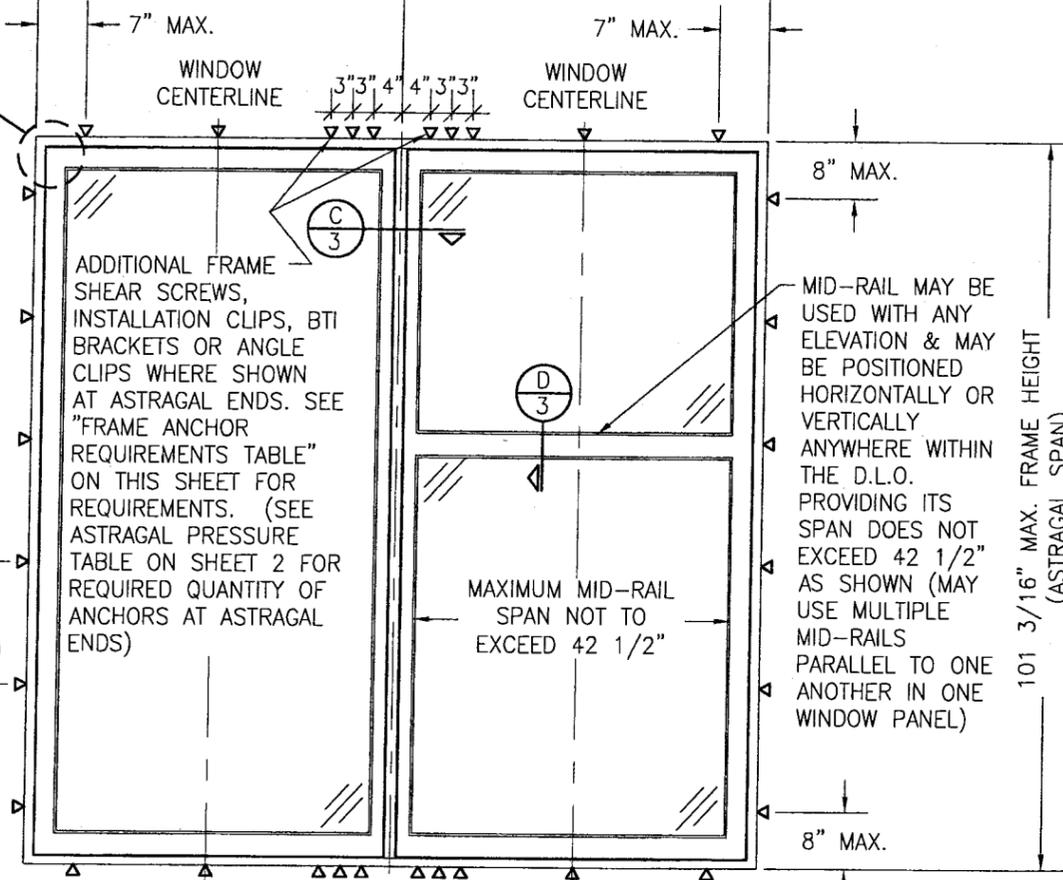
APPROVED SHAPES



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 WINDOWS AND THE WINDOWS ON EITHER SIDE OF A FIXED ASTRAGAL.

MAX. FRAME WIDTH PER SINGLE WINDOW ELEVATION



EXTERIOR ELEVATION: DOUBLE FIXED WINDOW WITH FIXED ASTRAGAL

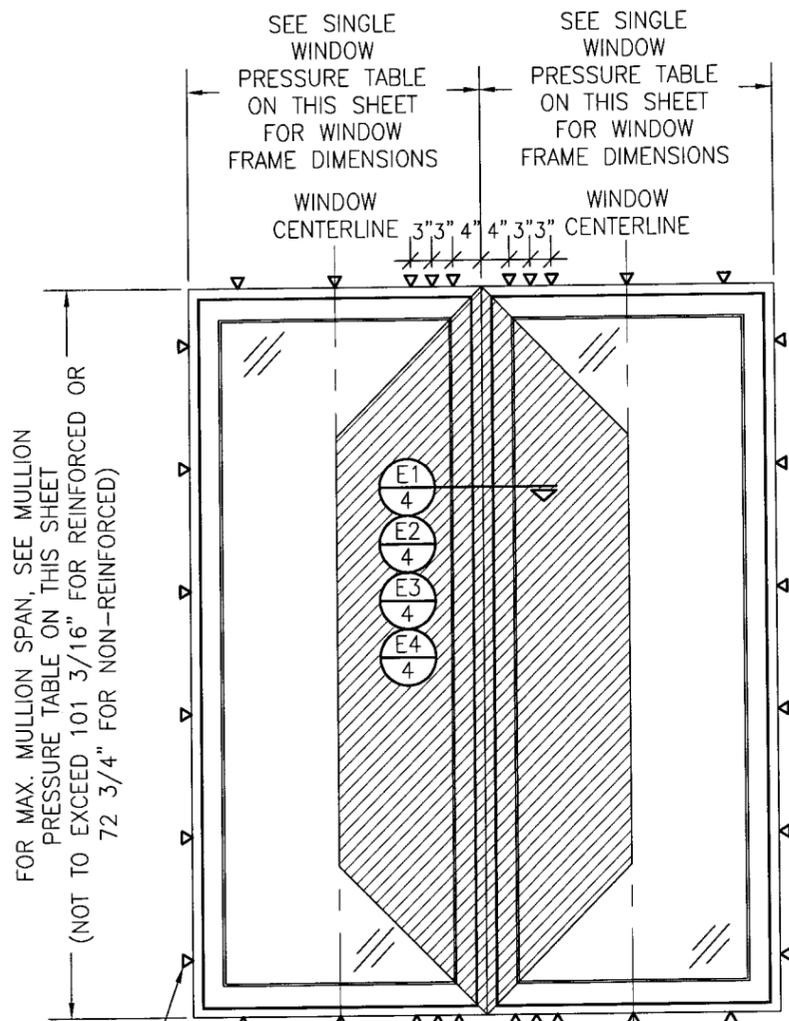
SCALE: 1/2" = 1'-0"
SEE SINGLE WINDOW ELEVATION FOR WINDOW DETAIL NOT SHOWN

ALLOWABLE DESIGN PRESSURE (ALL CONDITIONS)

SEE LOAD TABLES ON SHEET 2

DRAWN BY: W.R.M.	CHECKED BY: W.W.S.
PLOT: 1-24	DATE: 04/03/08
DATE	
BY	
REVISION DESCRIPTION	
NO.	
DRAWING TITLE OUT-SWING IMPACT WOOD FIXED CASEMENT WINDOW	
MANUFACTURER TISCHLER UND SOHN (USA) LTD. SIX SUBURBAN AVENUE STAMFORD, CONNECTICUT 203-674-0600	
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. 8895 N. MILITARY TRAIL, SUITE C-204 PALM BEACH GARDENS, FL 33410 PHONE: 561-775-4502 FAX: 561-775-4903	
CERTIFICATION NOV 18 2008 WARREN W. SCHAEFER, P.E. P.E. NO. 44135	
DRAWING NO. 1533	REV.
SHEET NO. 1	OF 6

Approved as complying with the Florida Building Code
Date 01/08/2009
NOA# 08-0804.13
Miami Dade Product Control
Division
By *Warren W. Schaefer*



FOR MAX. MULLION SPAN, SEE MULLION PRESSURE TABLE ON THIS SHEET (NOT TO EXCEED 101 3/16" FOR REINFORCED OR 72 3/4" FOR NON-REINFORCED)

SEE SINGLE WINDOW ELEVATION FOR FRAME ANCHOR REQUIREMENTS & POSITIONS AROUND WINDOWS

**EXTERIOR ELEVATION;
MULTIPLE FIXED WINDOWS**

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

(RECTANGULAR WINDOWS SHOWN, SHAPED WINDOWS ALSO APPLY)

FOR MAX. LOAD WIDTH, SEE MULLION PRESSURE TABLE ON THIS SHEET

ADDITIONAL FRAME SHEAR SCREWS, INSTALLATION CLIPS, BTI BRACKETS OR ANGLE CLIPS WHERE SHOWN AT MULLION ENDS. SEE "FRAME ANCHOR REQUIREMENTS TABLE" ON SHEET 1 FOR REQUIREMENTS. (SEE MULLION PRESSURE TABLE FOR REQUIRED QUANTITY OF ANCHORS AT MULLION ENDS)

MULTIPLE UNIT NOTES:

- FOR ALL DETAIL NOT SHOWN, SEE SINGLE WINDOW ELEVATIONS.
- MULLION MAY BE HORIZONTAL OR VERTICAL PROVIDING UNIT SIZES ARE RESTRICTED AS SHOWN IN THIS ELEVATION.
- IF VERTICALLY STACKED, THE MANUFACTURER SHALL INSURE THAT THE DEAD LOAD WEIGHT OF THE WINDOWS CAN NOT CAUSE UNDO FAILURE.
- THERE IS NO LIMIT ON THE NUMBER OF WINDOWS THAT MAY BE COMBINED IN ONE DIRECTION INTO ONE OPENING PROVIDING THE OPENING IS DESIGNED TO SUPPORT ALL LOADS TRANSFERRED FROM THE WINDOWS & THEIR MULLIONS.
- INDIVIDUAL WINDOW SIZES SHALL BE RESTRICTED AS SPECIFIED IN THE SINGLE WINDOW ELEVATIONS.

ALLOWABLE SINGLE WINDOW PRESSURE TABLE							
MAXIMUM FRAME LONG DIMENSION (IN.)	MAXIMUM FRAME SHORT DIMENSION (IN.)	ALLOWABLE PRESSURE (+/- PSF)					
		GLASS OPTION 1, 4 & 5		GLASS OPTION 2		GLASS OPTION 3	GLASS OPTION 6
		POS.	NEG.	POS.	NEG.		
144	35	70.0	70.0	70.0	70.0	70.0	70.0
	27	70.0	70.0	85.0	70.0	70.0	70.0
132	39	70.0	70.0	70.0	70.0	70.0	70.0
	29	70.0	70.0	85.0	70.0	70.0	70.0
120	42	70.0	70.0	70.0	70.0	70.0	70.0
	32	70.0	70.0	85.0	70.0	70.0	70.0
108	47	70.0	70.0	70.0	69.0	70.0	70.0
	43	70.0	70.0	70.0	70.0	70.0	70.0
	36	70.0	70.0	85.0	70.0	70.0	70.0
101	52	70.0	70.0	70.0	65.9	70.0	70.0
	49	70.0	70.0	70.0	68.3	70.0	70.0
	43	70.0	70.0	70.0	70.0	70.0	70.0
	38	70.0	70.0	85.0	70.0	70.0	70.0
96	53	N/A	70.0	70.0	70.0	70.0	70.0
	40	70.0	70.0	85.0	70.0	70.0	70.0
84	61	N/A	70.0	70.0	70.0	70.0	70.0
	46	70.0	70.0	85.0	70.0	70.0	70.0
77	66	N/A	70.0	70.0	70.0	70.0	70.0
	51	70.0	70.0	85.0	70.0	70.0	70.0
73	70	N/A	70.0	70.0	70.0	70.0	70.0
	53	N/A	70.0	85.0	70.0	70.0	70.0
72	72	N/A	70.0	85.0	70.0	70.0	70.0
67	58	N/A	70.0	85.0	70.0	70.0	70.0
63	62	N/A	70.0	85.0	70.0	70.0	70.0

- SEE GLAZING DETAILS FOR GLASS OPTIONS.
- "N/A" DESIGNATES A SIZE NOT APPLICABLE TO THAT GLASS OPTION.
- WINDOW SIZES SHOWN ARE MAXIMUM SIZES. SMALLER SIZES SHALL APPLY TO LOADS EQUAL TO THE NEAREST LARGER SIZE SHOWN IN TABLE.
- LONG DIMENSION MAY BE HORIZONTAL OR VERTICAL
- DIMENSIONS SHOWN ARE +/- 1/2".

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.
101	72	52.2	52.2	53.6	N/A
	67	54.0	54.0	56.1	N/A
	61	56.8	56.8	59.7	N/A
	55	60.4	60.4	64.8	N/A
	49	65.1	65.1	70.0	71.0
	43	70.0	71.4	70.0	77.8
	37	70.0	80.0	70.0	85.0
	31	70.0	85.0	70.0	85.0
96	72	56.5	56.5	60.7	60.7
	67	58.3	58.3	63.3	63.3
	61	61.1	61.1	66.6	66.6
	55	64.8	64.8	70.0	70.6
	49	69.7	69.7	70.0	75.9
	43	70.0	76.2	70.0	83.0
	37	70.0	85.0	70.0	85.0
	31	70.0	70.6	70.0	77.0
84	67	70.0	72.2	70.0	78.6
	61	70.0	74.8	70.0	81.5
	55	70.0	78.6	70.0	85.0
	49	70.0	83.7	70.0	85.0
	43	70.0	85.0	70.0	85.0
	37	70.0	82.7	70.0	85.0
77	67	70.0	83.8	70.0	85.0
	61	70.0	85.0	70.0	85.0
	72 3/4	72	70.0	85.0	85.0

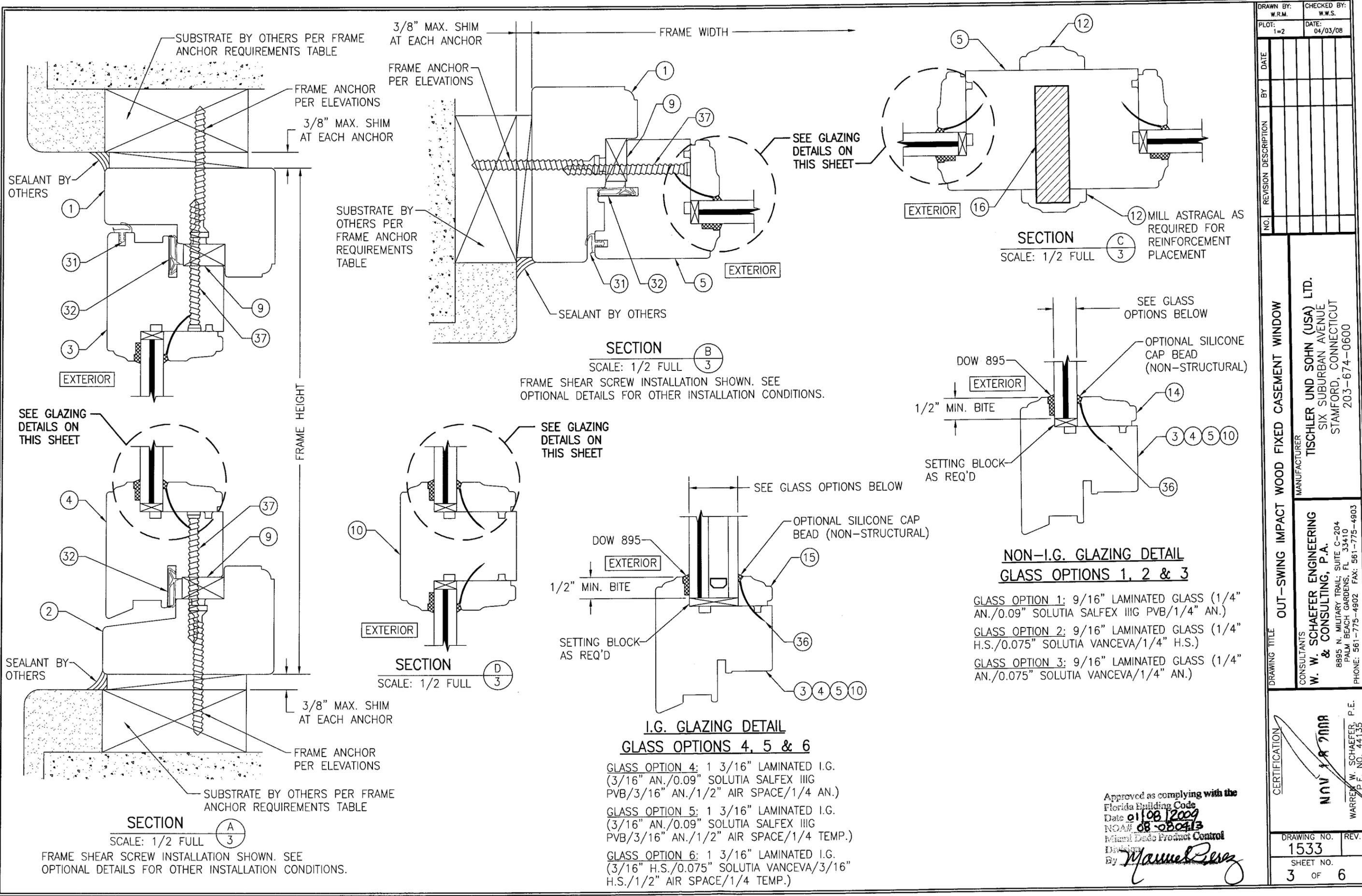
- NOTES:
- LOAD WIDTH IS THE DISTANCE BETWEEN WINDOW CENTERLINES.
 - ALLOWABLE UNIT PRESSURE SHALL BE THE LESSER OF THE PRESSURES SHOWN IN THIS TABLE & THOSE SPECIFIED FOR THE INDIVIDUAL WINDOW.
 - DIMENSIONS SHOWN ARE +/- 1/2".

MULLION ALLOWABLE DESIGN PRESSURE									
MAXIMUM MULLION SPAN (IN.)	MAXIMUM LOAD WIDTH (IN.)	ALLOWABLE PRESSURE (+/- PSF)							
		NON-REINFORCED				REINFORCED			
		4 OR 6 END ANCHORS		4 END ANCHORS		6 END ANCHORS		6 END ANCHORS	
		POS.	NEG.	POS.	NEG.	POS.	NEG.	POS.	NEG.
101	72	N/A	N/A	41.8	41.8	44.3	44.3		
	67	N/A	N/A	43.3	43.3	46.3	46.3		
	61	N/A	N/A	45.5	45.5	49.3	49.3		
	55	N/A	N/A	48.4	48.4	53.5	53.5		
	49	N/A	N/A	52.2	52.2	58.9	58.9		
	43	N/A	N/A	57.3	57.3	65.8	65.8		
	37	N/A	N/A	64.2	64.2	70.0	74.3		
	31	N/A	N/A	70.0	73.9	70.0	85.0		
	25	N/A	N/A	70.0	85.0	70.0	85.0		
	72	N/A	N/A	45.3	45.3	50.1	50.1		
96	67	N/A	N/A	46.8	46.8	52.3	52.3		
	61	N/A	N/A	49.0	49.0	55.5	55.5		
	55	N/A	N/A	52.0	52.0	59.9	59.9		
	49	N/A	N/A	55.9	55.9	64.7	64.7		
	43	N/A	N/A	61.1	61.1	70.0	70.8		
	37	N/A	N/A	68.3	68.3	70.0	79.1		
	31	N/A	N/A	70.0	78.5	70.0	85.0		
	25	N/A	N/A	70.0	85.0	70.0	85.0		
	72	N/A	N/A	56.7	56.7	65.6	65.6		
	67	N/A	N/A	57.9	57.9	67.0	67.0		
84	61	N/A	N/A	60.0	60.0	69.5	69.5		
	55	N/A	N/A	63.0	63.0	73.0	73.0		
	49	N/A	N/A	67.2	67.2	70.0	77.8		
	43	N/A	N/A	70.0	72.9	70.0	84.4		
	37	N/A	N/A	70.0	80.8	70.0	85.0		
	31	N/A	N/A	70.0	85.0	70.0	85.0		
	72	N/A	N/A	66.3	66.3	70.0	76.8		
	67	N/A	N/A	67.2	67.2	70.0	77.8		
	61	N/A	N/A	69.0	69.0	70.0	80.0		
	55	N/A	N/A	70.0	71.9	70.0	83.3		
72 3/4	49	N/A	N/A	70.0	76.1	70.0	85.0		
	43	N/A	N/A	70.0	82.1	70.0	85.0		
	37	N/A	N/A	70.0	85.0	70.0	85.0		
	72	48.6	48.6	70.0	74.0	70.0	85.0		
	67	49.1	49.1	70.0	74.5	70.0	85.0		
	61	50.5	50.5	70.0	76.0	70.0	85.0		
	55	52.9	52.9	70.0	78.7	70.0	85.0		
	49	54.7	54.7	70.0	82.8	70.0	85.0		
	43	62.0	62.0	70.0	85.0	70.0	85.0		
	37	70.0	70.0	70.0	85.0	70.0	85.0		
67	31	70.0	80.7	70.0	85.0	70.0	85.0		
	25	70.0	85.0	70.0	85.0	70.0	85.0		
	67 OR GREATER	62.1	62.1	70.0	85.0	70.0	85.0		
	61	63.1	63.1	70.0	85.0	70.0	85.0		
	55	65.1	65.1	70.0	85.0	70.0	85.0		
	52	66.9	66.9	70.0	85.0	70.0	85.0		
	49	69.0	69.0	70.0	85.0	70.0	85.0		
	43	70.0	74.9	70.0	85.0	70.0	85.0		
61	37	70.0	83.7	70.0	85.0	70.0	85.0		
	31	70.0	85.0	70.0	85.0	70.0	85.0		
	61 OR GREATER	70.0	82.3	70.0	85.0	70.0	85.0		
	55	70.0	83.8	70.0	85.0	70.0	85.0		
	52	70.0	85.0	70.0	85.0	70.0	85.0		
55	55 OR GREATER	70.0	85.0	70.0	85.0	70.0	85.0		

- NOTES:
- LOAD WIDTH IS THE DISTANCE BETWEEN WINDOW CENTERLINES.
 - ALLOWABLE UNIT PRESSURE SHALL BE THE LESSER OF THE PRESSURES SHOWN IN THIS TABLE & THOSE SPECIFIED FOR THE INDIVIDUAL WINDOW.
 - "N/A" DESIGNATES A SIZE NOT APPLICABLE TO THAT REINFORCEMENT CONDITION.
 - SIZE VALUES IN TABLE ARE +/- 1/2"

Approved as complying with the Florida Building Code
 Date 01/08/2009
 NOA# 08-080413
 Miami Dade Product Control Division
 By *Maureen Perry*

DRAWN BY: W.R.M.	CHECKED BY: W.S.
PLOT: 1=24	DATE: 04/03/08
DATE	REVISION DESCRIPTION
NO.	
OUT-SWING IMPACT WOOD FIXED CASEMENT WINDOW MANUFACTURER TISCHLER UND SOHN (USA) LTD. SIX SUBURBAN AVENUE STAMFORD, CONNECTICUT 203-674-0600	
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 NOV 18 2008 WARREN W. SCHAEFER, P.E. P.E. NO. 44135	
DRAWING NO.	REV.
1533	
SHEET NO.	
2 OF 6	



NO.	REVISION DESCRIPTION	BY	DATE
1			
2			

OUT-SWING IMPACT WOOD FIXED CASEMENT WINDOW

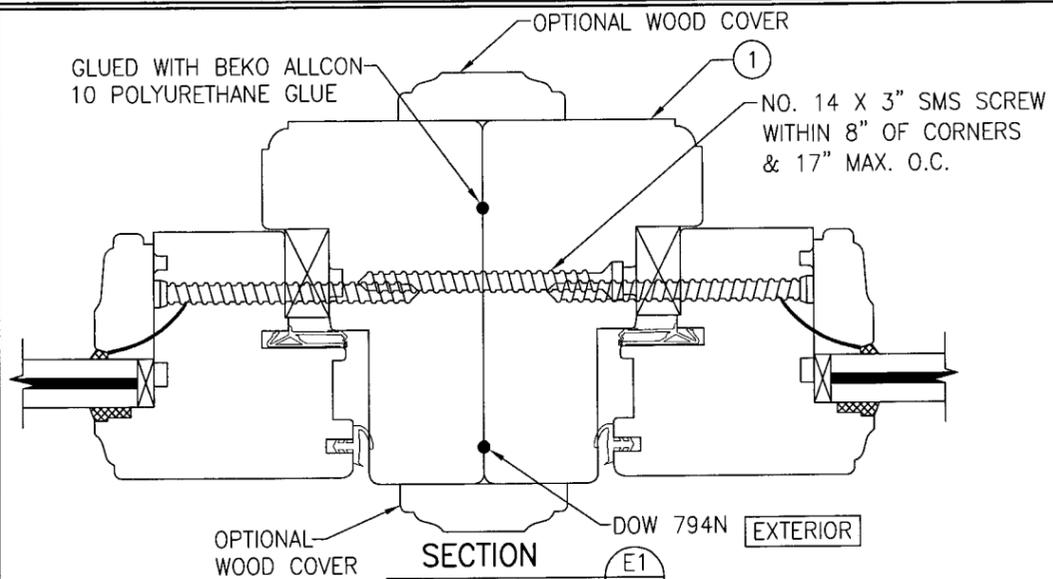
MANUFACTURER
TISCHLER UND SOHN (USA) LTD.
 SIX SUBURBAN AVENUE
 STAMFORD, CONNECTICUT
 203-674-0600

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

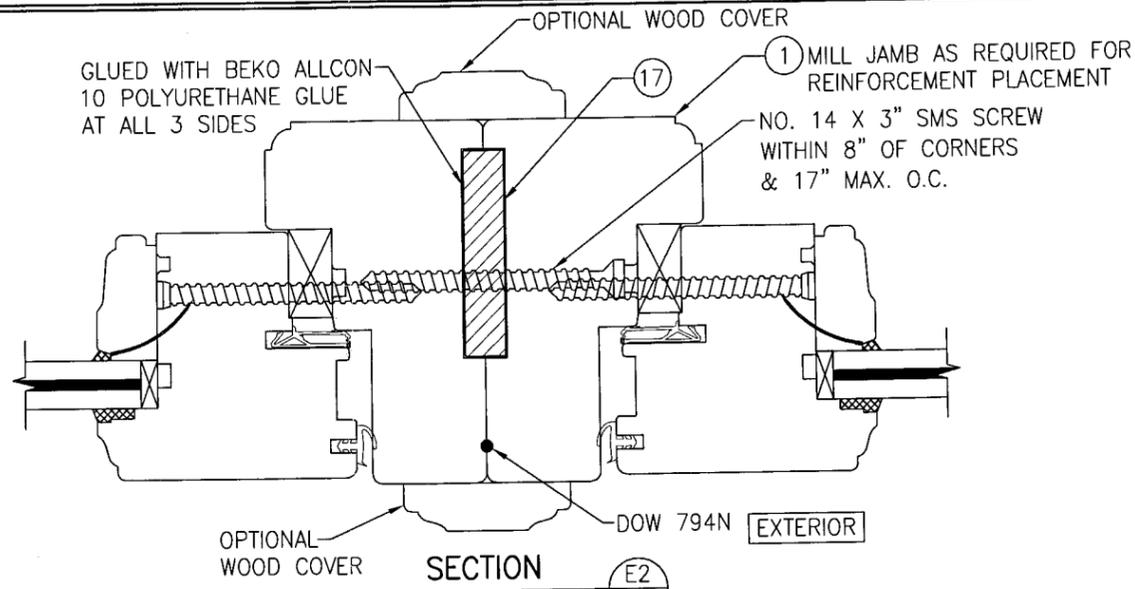
CERTIFICATION
 NOV 18 2009
 WARREN W. SCHAEFER, P.E.
 P.E. NO. 44135

DRAWING NO. 1533
 SHEET NO. 3 OF 6

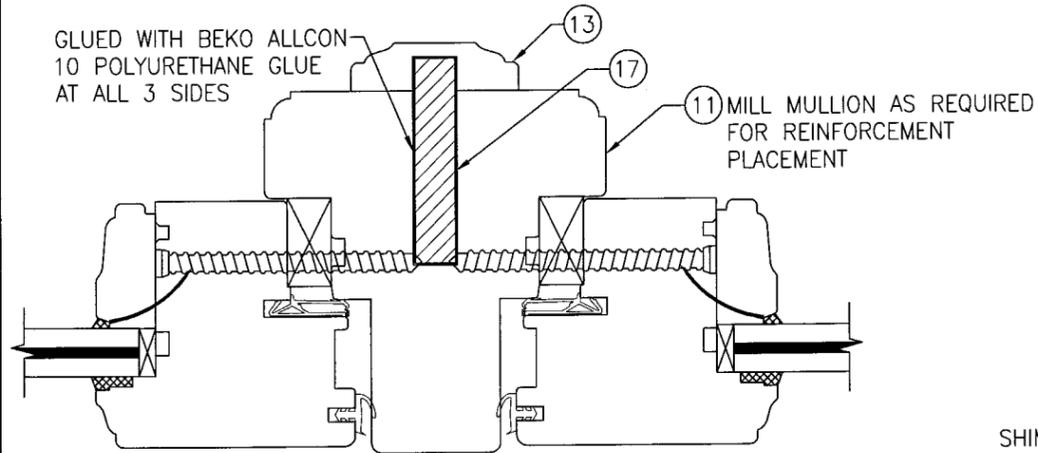
Approved as complying with the Florida Building Code
 Date 01/08/2009
 NOA# 08-080413
 Miami Dade Product Control
 By *Manuel Perez*



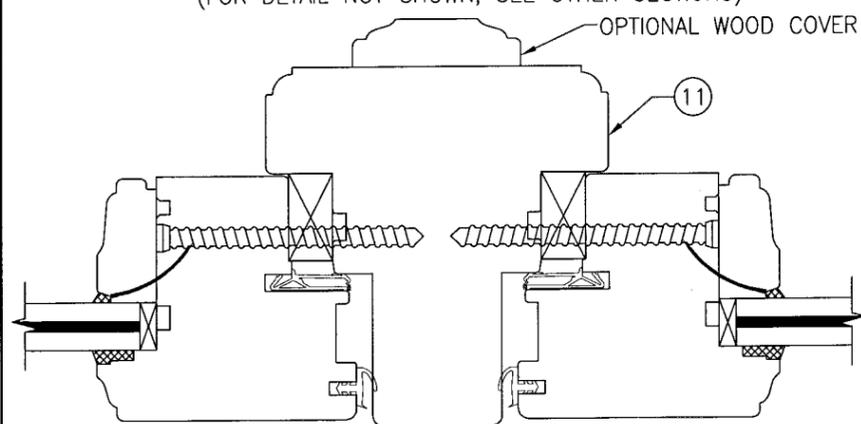
SECTION E1
SCALE: 1/2 FULL
(NON-REINFORCED MULLION)
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)



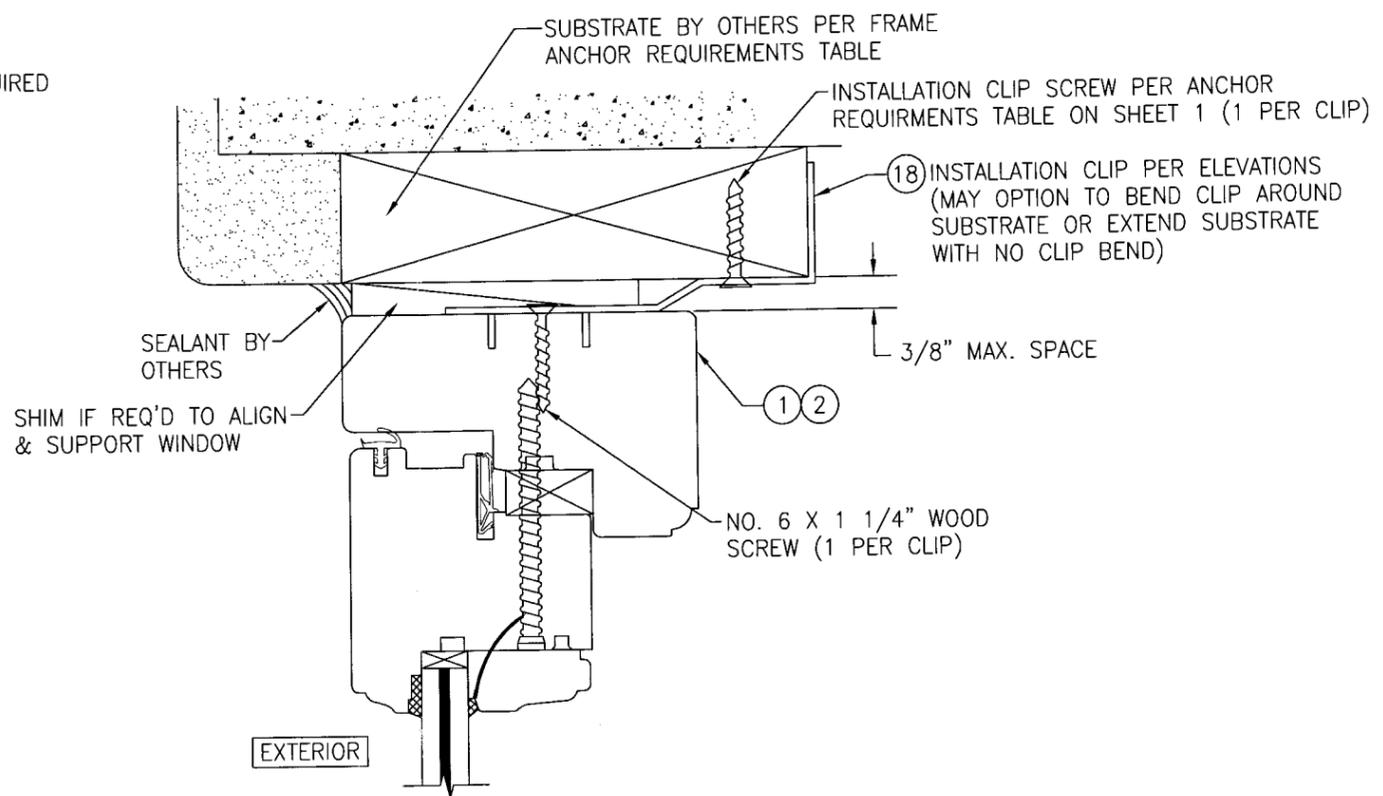
SECTION E2
SCALE: 1/2 FULL
(REINFORCED MULLION)
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)



SECTION E3
SCALE: 1/2 FULL
(REINFORCED MULLION)
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)



SECTION E4
SCALE: 1/2 FULL
(NON-REINFORCED MULLION)
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)



OPTIONAL INSTALLATION CLIP DETAIL
(HEAD SECTION SHOWN, SILL & SIDES ARE INSTALLED THE SAME)
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)

DRAWN BY: W.R.M.	CHECKED BY: W.W.S.
PLOT: 1=2	DATE: 04/03/08
NO.	REVISION DESCRIPTION
BY	DATE

DRAWING TITLE: OUT-SWING IMPACT WOOD FIXED CASEMENT WINDOW

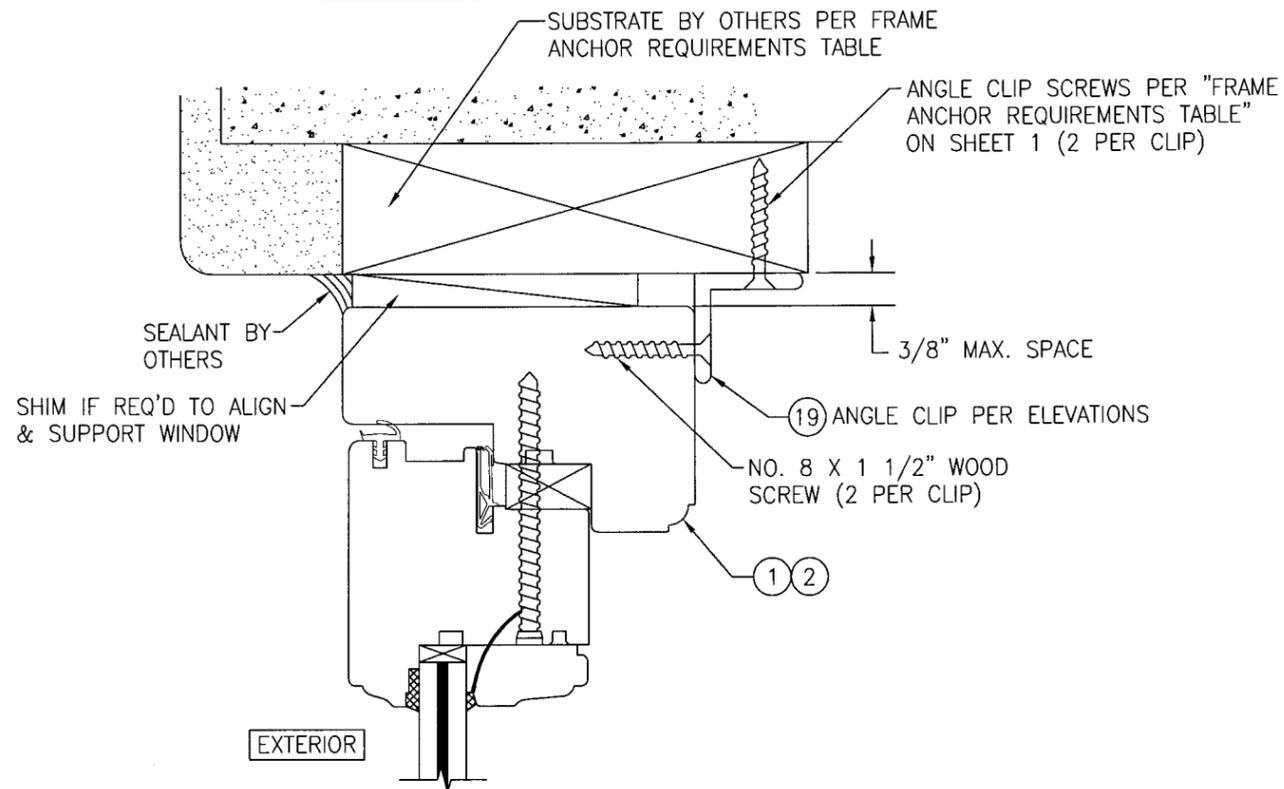
MANUFACTURER
TISCHLER UND SOHN (USA) LTD.
SIX SUBURBAN AVENUE
STAMFORD, CONNECTICUT
203-674-0600

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

CERTIFICATION
NOV 18 2008
WARREN W. SCHAEFER, P.E.
P.E. NO. 44135

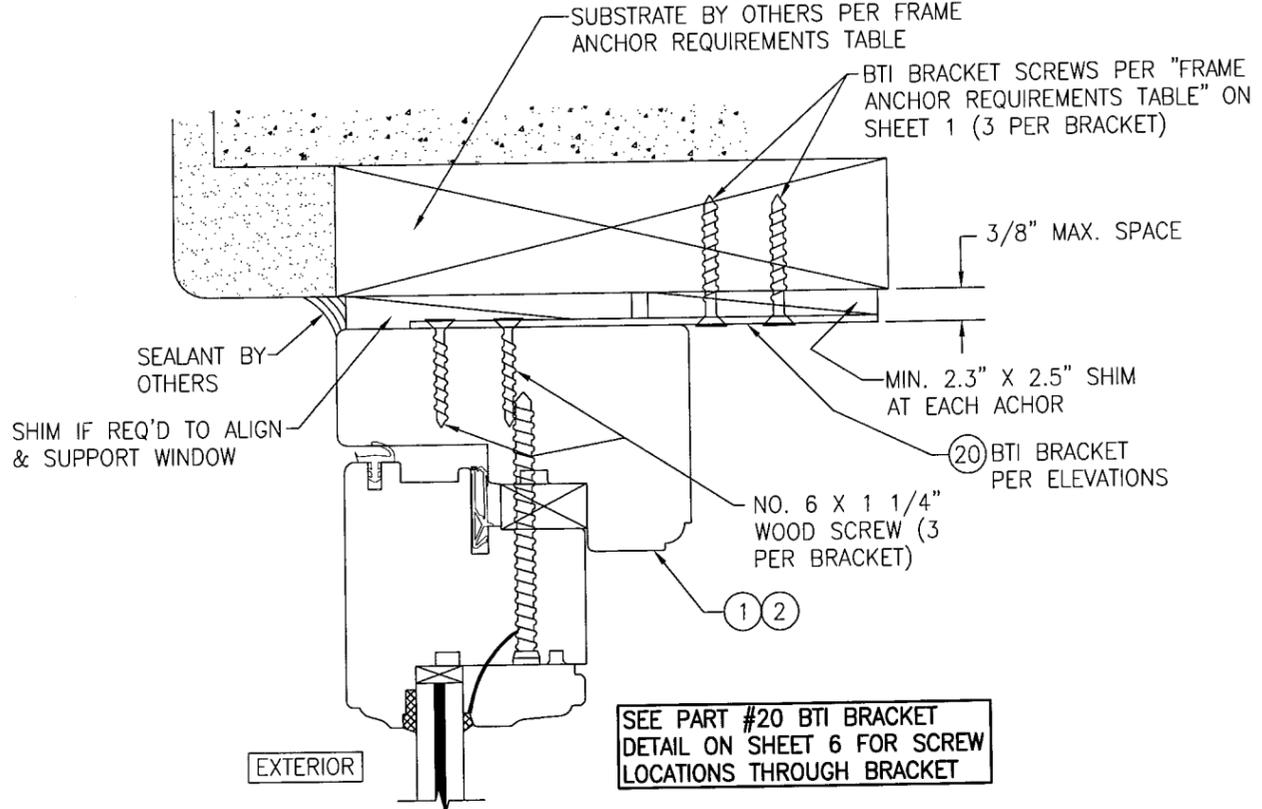
Approved as complying with the
Florida Building Code
Date 01/08/2009
NOA# 08-080413
Miami Dade Product Control
Division
By *Manuel...*

DRAWING NO. 1533	REV.
SHEET NO. 4	OF 6



OPTIONAL INSTALLATION ANGLE CLIP DETAIL

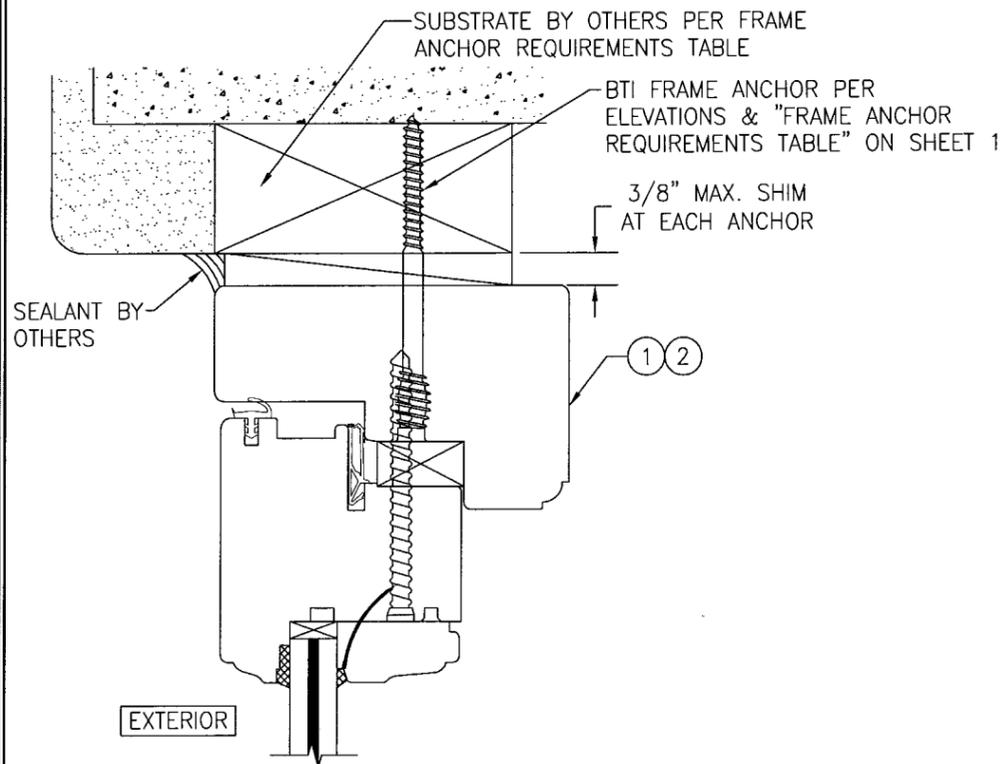
(HEAD SECTION SHOWN, SILL & SIDES ARE INSTALLED THE SAME)
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)



OPTIONAL INSTALLATION BTI BRACKET DETAIL

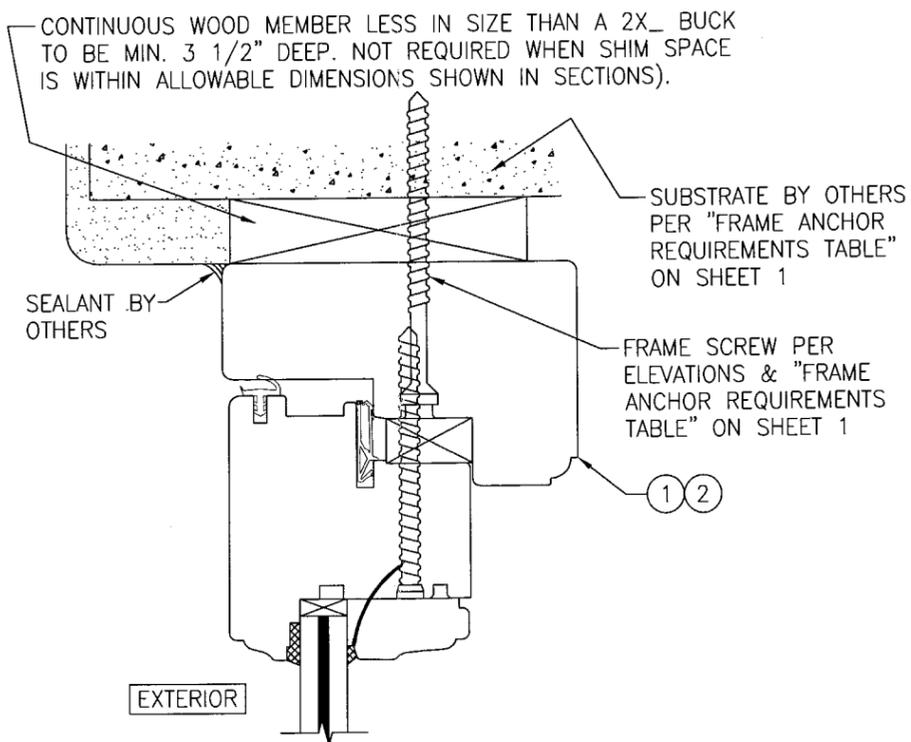
(HEAD SECTION SHOWN, SILL & SIDES ARE INSTALLED THE SAME)
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)

SEE PART #20 BTI BRACKET
DETAIL ON SHEET 6 FOR SCREW
LOCATIONS THROUGH BRACKET



OPTIONAL BTI SCREW DETAIL

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



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

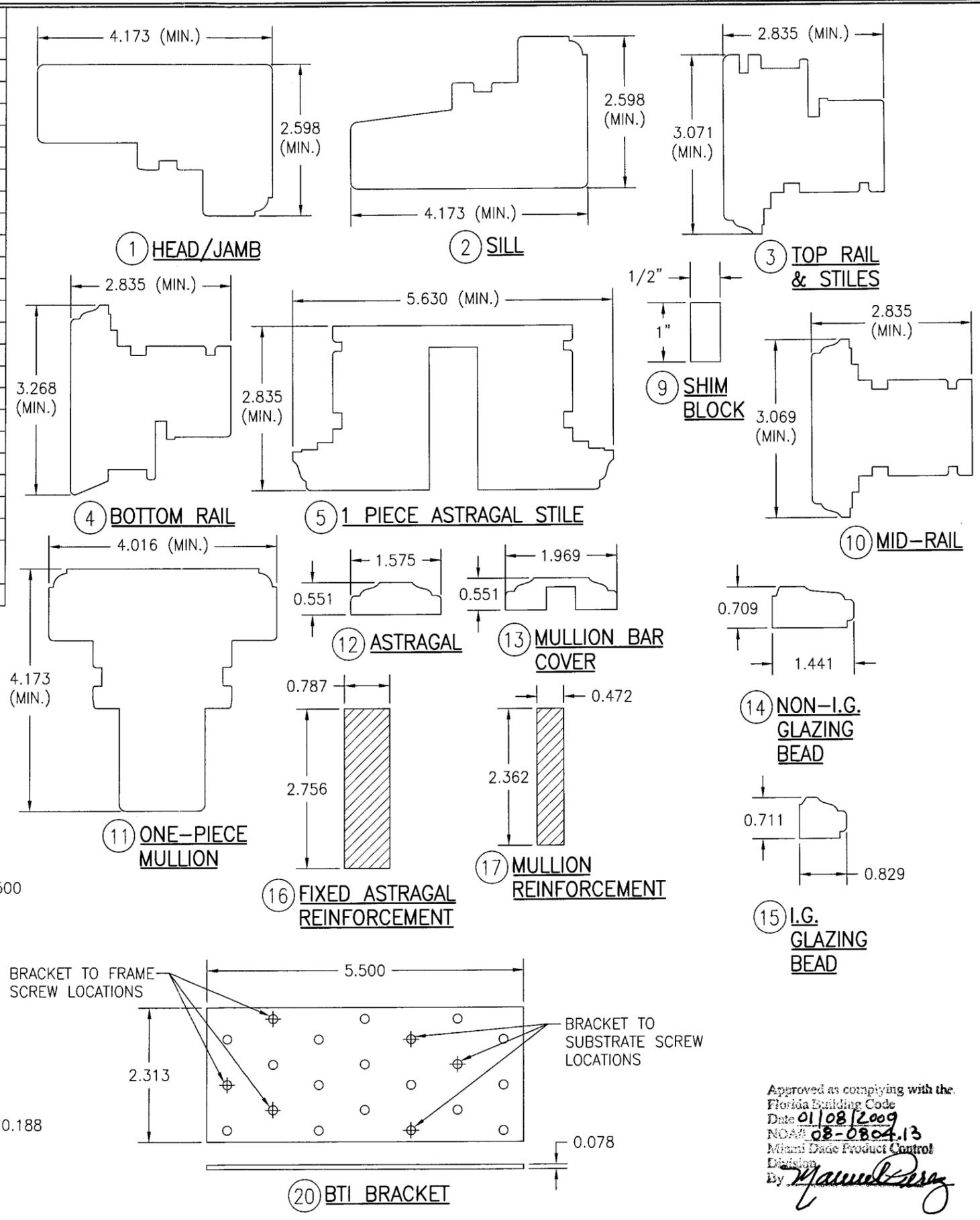
(HEAD SECTION SHOWN, SILL & SIDES ARE INSTALLED THE SAME)
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)

Approved as complying with the
Florida Building Code
Date 01/08/2009
NOA# 08-080413
Miami Dade Product Control
Division
By *Manuel Perez*

DRAWN BY: W.R.M.		CHECKED BY: W.W.S.	
PLOT: 1=2		DATE: 04/03/08	
NO.	REVISION	DESCRIPTION	DATE
DRAWING TITLE: OUT-SWING IMPACT WOOD FIXED CASEMENT WINDOW			
CONSULTANTS: W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.			
MANUFACTURER: TISCHLER UND SOHN (USA) LTD.			
8895 N. MILITARY TRAIL, SUITE C-204 PALM BEACH GARDENS, FL 33410 PHONE: 561-775-4902 FAX: 561-775-4903			
CERTIFICATION: NOV 18 2008			
DRAWING NO. 1533			
SHEET NO. 5 OF 6			

ITEM #	ITEM DESCRIPTION	MANUFACTURER/NOTES
PARTS		
1	HEAD/JAMB	MAHOGANY
2	SILL	MAHOGANY
3	TOP RAIL & STILES	MAHOGANY
4	BOTTOM RAIL	MAHOGANY
5	1 PIECE ASTRAGAL STILE	MAHOGANY
9	SHIM BLOCK	MAHOGANY
10	MID-RAIL	MAHOGANY
11	ONE-PIECE MULLION	MAHOGANY
12	ASTRAGAL	MAHOGANY
13	MULLION BAR COVER	MAHOGANY
14	NON-I.G. GLAZING BEAD	MAHOGANY
15	I.G. GLAZING BEAD	MAHOGANY
16	FIXED ASTRAGAL REINFORCEMENT	34 KSI STAINLESS STEEL OR A36 STEEL
17	MULLION REINFORCEMENT	34 KSI STAINLESS STEEL OR A36 STEEL
18	INSTALLATION CLIP	GALVANIZED 54 KSI STEEL
19	ANGLE CLIP	6061-T6 ALUMINUM
20	BTI BRACKET	GALVANIZED 54 KSI STEEL
SEALS & SEALANTS		
31	WEATHERSTRIP	THERMOPLASTIC ELASTOMER; BY: DEVENTER
32	WEATHERSTRIP	THERMOPLASTIC ELASTOMER; BY: DEVENTER
33	WEATHERSTRIP	THERMOPLASTIC ELASTOMER; BY: DEVENTER
FASTENERS		
36	OPTIONAL 18 GA. X 1 1/2" S.S. CURVED NAIL	4" FROM CORNERS & 12" MAX. O.C.
37	NO. 14 X 3 1/8" BAUTEC WOOD SCREW	WITHIN 8" OF ENDS & 17" MAX. O.C.

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



DRAWN BY: W.R.M.	CHECKED BY: W.W.S.
PLOT: 1=2	DATE: 04/03/08
DATE	
BY	
REVISION DESCRIPTION	
NO.	

DRAWING TITLE
OUT-SWING IMPACT WOOD FIXED CASEMENT WINDOW

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

CONSULTANTS
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PHONE: 561-775-4902 FAX: 561-775-4903

CERTIFICATION
NOV 18 2008
WARREN W. SCHAEFER, P.E.
P.E. NO. 44135

Approved as complying with the Florida Building Code
Date 01/08/2009
NOA# 08-0804.13
Miami Dade Product Control Division
By *Manuel Perry*

DRAWING NO. 1533	REV.
SHEET NO. 6	OF 6