MIAMI-DADE COUNTY
DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)
BOARD AND CODE ADMINISTRATION DIVISION

MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION
11805 SW 26 Street, Room 208
T (786) 315-2590 F (786) 315-2599
www.miamidade.gov/economy

NOTICE OF ACCEPTANCE (NOA)

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 RER - 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. RER 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: Series "Mahogany Impact Inswing Casement" Wood Fixed Window – L.M.I.

APPROVAL DOCUMENT: Drawing No. **1534**, titled "In–Swing Impact Wood Fixed Casement Window", sheets 1 through 7 of 7, dated 04/03/08, with revision **B1** dated 09/04/13, prepared by W. W. Schaefer Engineering & Consulting, P.A., signed and sealed by Warren W. Schaefer, P. E., bearing the Miami–Dade County Product Control Section Revision stamp with the Notice of Acceptance number and expiration date by the Miami–Dade County Product Control Section.

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, model/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 and renews NOA# 11-1101.08** and consists of this page 1 and evidence pages E-1 and E-2, as well as approval document mentioned above.

The submitted documentation was reviewed by **Manuel Perez, P.E.**

MIAMI-DADE COUNTY APPROVED

12/18/13

NOA No. 13-1105.06
Expiration Date: January 08, 2019
Approval Date: December 26, 2013

Tischler und Sohn (USA) Ltd.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Manufacturer's die drawings and sections.
   (Submitted under NOA No. 08–0804.15)
2. Drawing No. **1534**, titled "In–Swing Impact Wood Fixed Casement Window", sheets 1 through 7 of 7, dated 04/03/08, with revision **B1** dated 09/04/13, prepared by W. W. Schaefer Engineering & Consulting, P.A., signed and sealed by Warren W. Schaefer, 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, and TAS 202–94

   along with marked–up drawings and installation diagram of wood fixed and operable wood casement windows, prepared by Architectural Testing, Inc., Test Report No. **ATI–77324.01-109-18,** dated 06/30/08, signed and sealed by Michael D. Stremmel, P.E.
   (Submitted under NOA No. 08-0804.15)

C. CALCULATIONS

1. Anchor verification calculations and structural analysis, complying with FBC-2004 and FBC-2007, prepared by W. W. Schaefer Engineering & Consultant, P. A., dated 07/28/08, and updated to **FBC-2010** on 10/28/13, signed and sealed by Warren W. Schaefer, P.E.
2. Glazing complies with **ASTM E1300-04**

D. QUALITY ASSURANCE

1. Miami-Dade Department of Regulatory and Economic Resources (RER)

E. MATERIAL CERTIFICATIONS

1. Notice of Acceptance No. **12–1231.10** issued to **Eastman Chemical Company (MA)** for their "**Saflex Clear and Color Glass Interlayers**" dated 03/28/13, expiring on 05/21/16.
2. Notice of Acceptance No. **12–1231.08** issued to **Eastman Chemical Company (MA)** for their "**Saflex CP – Saflex and Saflex HP Composite Glass Interlayers with PET Core**" dated 03/28/13, expiring on 12/11/18.

Manuel Perez, P.E.
Product Control Examiner
NOA No. 13-1105.06
Expiration Date: January 08, 2019
Approval Date: December 26, 2013

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

F. STATEMENTS

1. Statement letter of conformance, and compliance with **FBC 2010**, issued by W. W. Schaefer Engineering & Consulting, P.A., dated 09/03/13, signed and sealed by Warren W. Schaefer, P.E.
2. Statement letter of independence and no financial interest, issued by W. W. Schaefer Engineering & Consulting, P.A., dated 09/04/13, signed and sealed by Warren W. Schaefer, P.E.
3. Distributor Agreement between Tischler und Sohn (USA), Ltd., Connecticut, USA, and Tischler/ Cornelius Korn, G.m.b.H., Wedel (Holstein) S. H., Germany, dated 04/13/09, signed by Tim Carpenter and Wilhelm Korn, respectively.
   (Submitted under previous NOA No. 11–1101.08)
4. Laboratory compliance letters for Test Report No. **ATI–77324.01–109–18**, issued by Architectural Testing, Inc., dated 06/26 and 07/01/08, all signed and sealed by Michael D. Stremmel, P.E.
   (Submitted under NOA No. 08–0804.15)

G. OTHERS

1. Notice of Acceptance No. **11–1101.08**, issued to Tischler und Sohn (USA), Ltd. for their Series "Mahogany Impact Inswing Casement" Wood Fixed Window – L.M.I., approved on 01/19/12 and expiring on 01/08/14.

Manuel Perez

Manuel Perez, P.E.
Product Control Examiner
NOA No. 13-1105.06
Expiration Date: January 08, 2019
Approval Date: December 26, 2013

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 PROTOCALS 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 Kd = 0.85 MAY BE APPLIED PER THE ASCE 7 STANDARD.
9. NO INCREASE IN ALLOWABLE STRESS HAS BEEN USED IN THE CERTIFICATION OF THIS PRODUCT. WIND LOAD DURATION FACTOR Cd = 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.

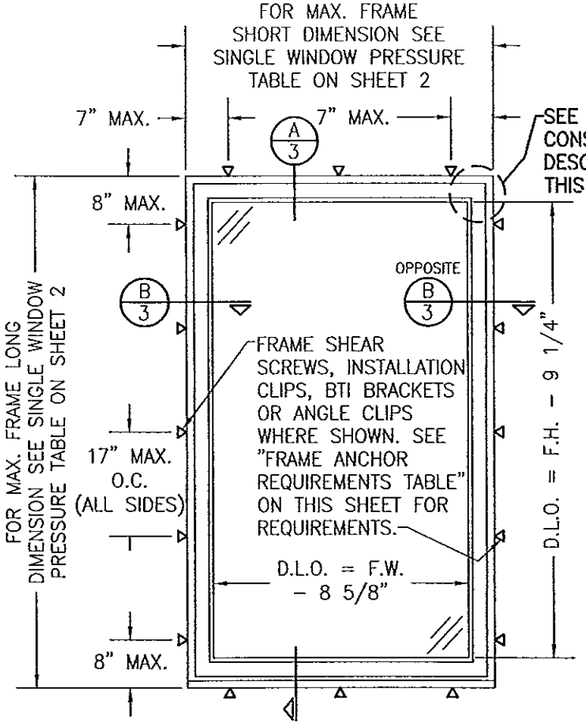
CORNER CONSTRUCTION:

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/BRACKET 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 ULTRACONS, ELCO CRETE-FLEX OR HILTI KWIK--CON II (HARDENED STEEL OR S.S.).
(2) ALL SELF TAP/DRILLING SCREWS SHALL BE MIN. GR. 5

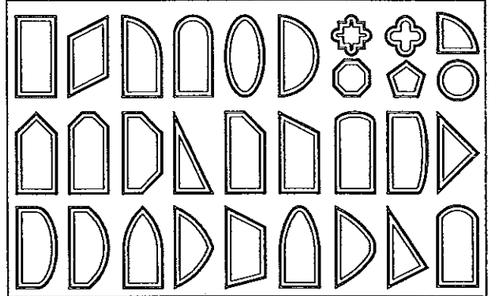


INTERIOR ELEVATION: SINGLE FIXED WINDOW

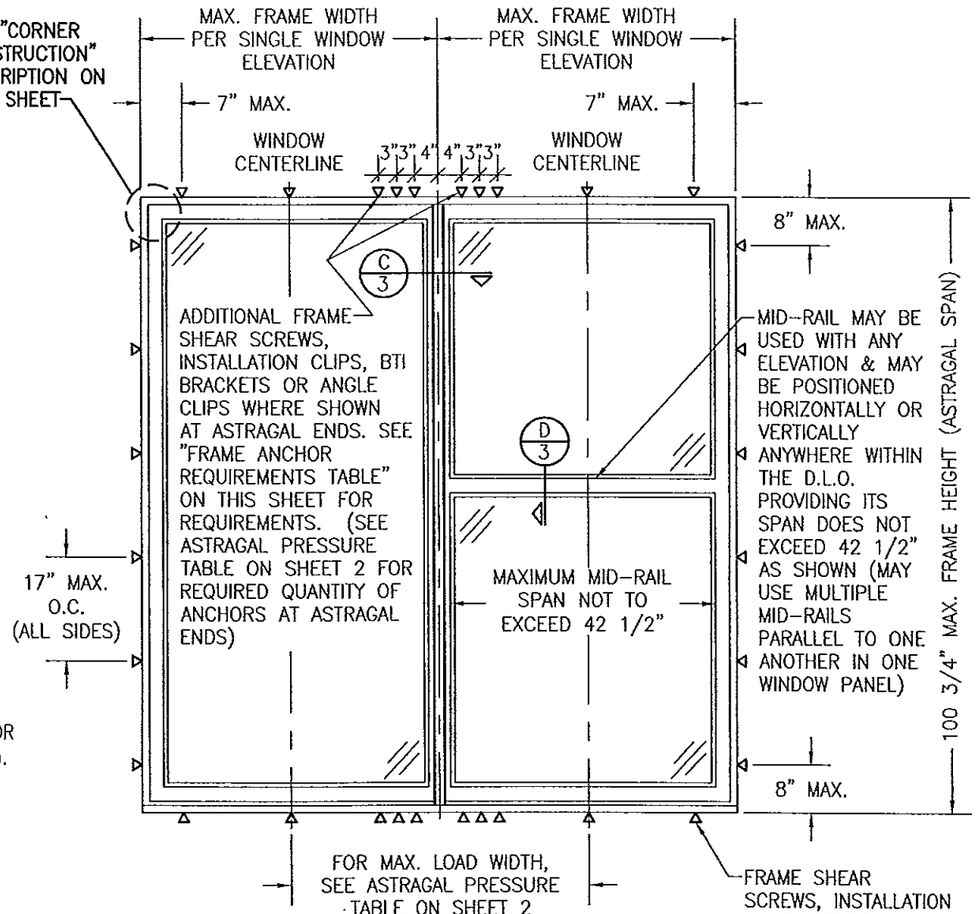
SCALE: 1/2" = 1'-0"
LONG DIMENSION OF WINDOW MAY BE HORIZONTAL OR VERTICAL (HEIGHT & WIDTH MAY BE INTERCHANGED).

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.

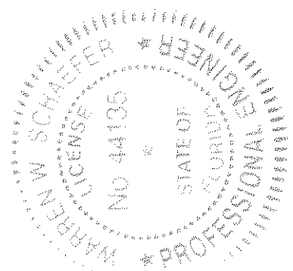


INTERIOR ELEVATION: DOUBLE FIXED WINDOW WITH FIXED ASTRAGAL

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

PRODUCT REVISED
as complying with the Florida Building Code
Acceptance No 13-1105.06
Expiration Date Jan 2, 2019
By Manuel Perez
Miami-Dade Product Control



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.

DRAWN BY: W.R.M. | CHECKED BY: W.W.S. | PLOT: 1=24 | DATE: 04/03/08

NO.	REVISION DESCRIPTION	BY	DATE
A1	UPDATE TO CURRENT STANDARDS	W.R.M.	10/25/11
B1	UPDATE GLASS DESCRIPTION	W.R.M.	09/04/13

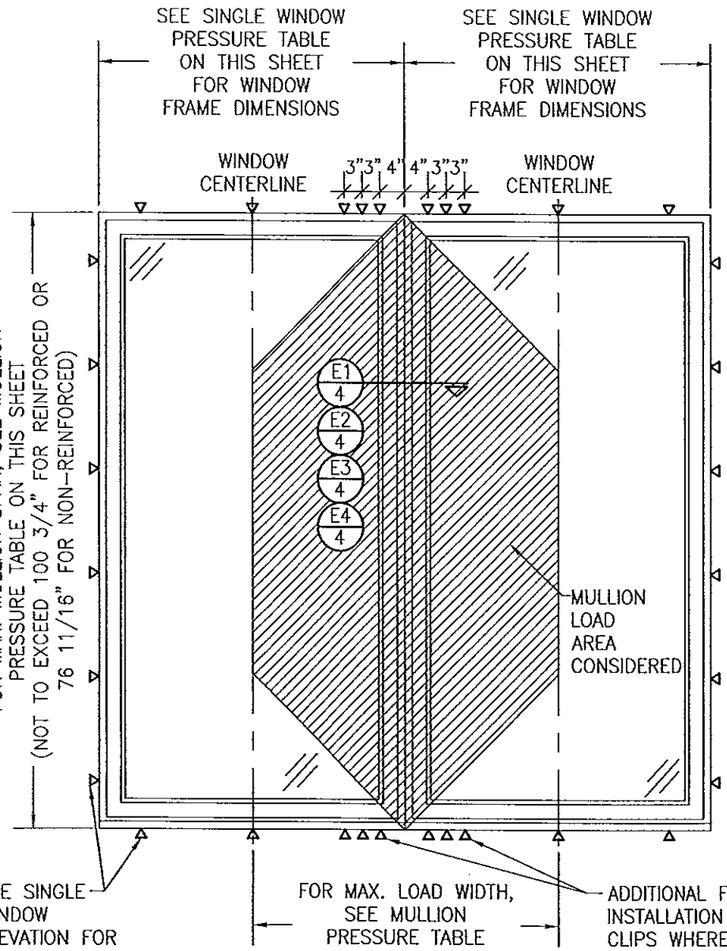
DRAWING TITLE: IN-SWING IMPACT WOOD FIXED CASEMENT WINDOW

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

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

CERTIFICATION
SEP 04 2013
WARREN W. SCHAEFER, P.E.
P.E. NO. 44135

DRAWING NO. 1534 | REV. B
SHEET NO. 1 OF 7



EXTERIOR ELEVATION: MULTIPLE FIXED WINDOWS

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

(RECTANGULAR WINDOWS SHOWN, SHAPED WINDOWS ALSO APPLY)

ALLOWABLE SINGLE WINDOW PRESSURE TABLE

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

1. SEE GLAZING DETAILS FOR GLASS OPTIONS.
2. "N/A" DESIGNATES A SIZE NOT APPLICABLE TO THAT GLASS OPTION.
3. WINDOW SIZES SHOWN ARE MAXIMUM SIZES. SMALLER SIZES SHALL APPLY TO LOADS EQUAL TO THE NEAREST LARGER SIZE SHOWN IN TABLE.
4. LONG DIMENSION MAY BE HORIZONTAL OR VERTICAL
5. 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
84	72	70.0	70.6	70.0	77.0
	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
77	72	70.0	82.7	70.0	85.0
	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	70.0	85.0

NOTES:
1. LOAD WIDTH IS THE DISTANCE BETWEEN WINDOW CENTERLINES.
2. ALLOWABLE UNIT PRESSURE SHALL BE THE LESSER OF THE PRESSURES SHOWN IN THIS TABLE & THOSE SPECIFIED FOR THE INDIVIDUAL WINDOW.
3. 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	
		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
96	72	N/A	N/A	45.3	45.3	50.1	50.1
	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
84	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
	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
77	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
	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 3/4	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
	52	54.7	54.7	70.0	82.8	70.0	85.0
	49	56.7	56.7	70.0	85.0	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
	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	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
	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	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:
1. LOAD WIDTH IS THE DISTANCE BETWEEN WINDOW CENTERLINES.
2. ALLOWABLE UNIT PRESSURE SHALL BE THE LESSER OF THE PRESSURES SHOWN IN THIS TABLE & THOSE SPECIFIED FOR THE INDIVIDUAL WINDOW.
3. "N/A" DESIGNATES A SIZE NOT APPLICABLE TO THAT REINFORCEMENT CONDITION.
4. SIZE VALUES IN TABLE ARE +/-1/2"

MULTIPLE UNIT NOTES:

1. FOR ALL DETAIL NOT SHOWN, SEE SINGLE WINDOW ELEVATIONS.
2. MULLION MAY BE HORIZONTAL OR VERTICAL PROVIDING UNIT SIZES ARE RESTRICTED AS SHOWN IN THIS ELEVATION.
3. IF VERTICALLY STACKED, THE MANUFACTURER SHALL INSURE THAT THE DEAD LOAD WEIGHT OF THE WINDOWS CAN NOT CAUSE UNDO FAILURE.
4. 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 TRANSFERED FROM THE WINDOWS & THEIR MULLIONS.
5. INDIVIDUAL WINDOW SIZES SHALL BE RESTRICTED AS SPECIFIED IN THE SINGLE WINDOW ELEVATIONS.

PRODUCT REVISED
as complying with the Florida Building Code
Acceptance No 13-1105.06
Expiration Date Jan. 8, 2019
By Manuel Perez
Miami Dade Product Control

DRAWN BY: W.R.M. | CHECKED BY: W.W.S.
PLOT: 1=24 | DATE: 04/03/08

NO.	REVISION DESCRIPTION	BY	DATE

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

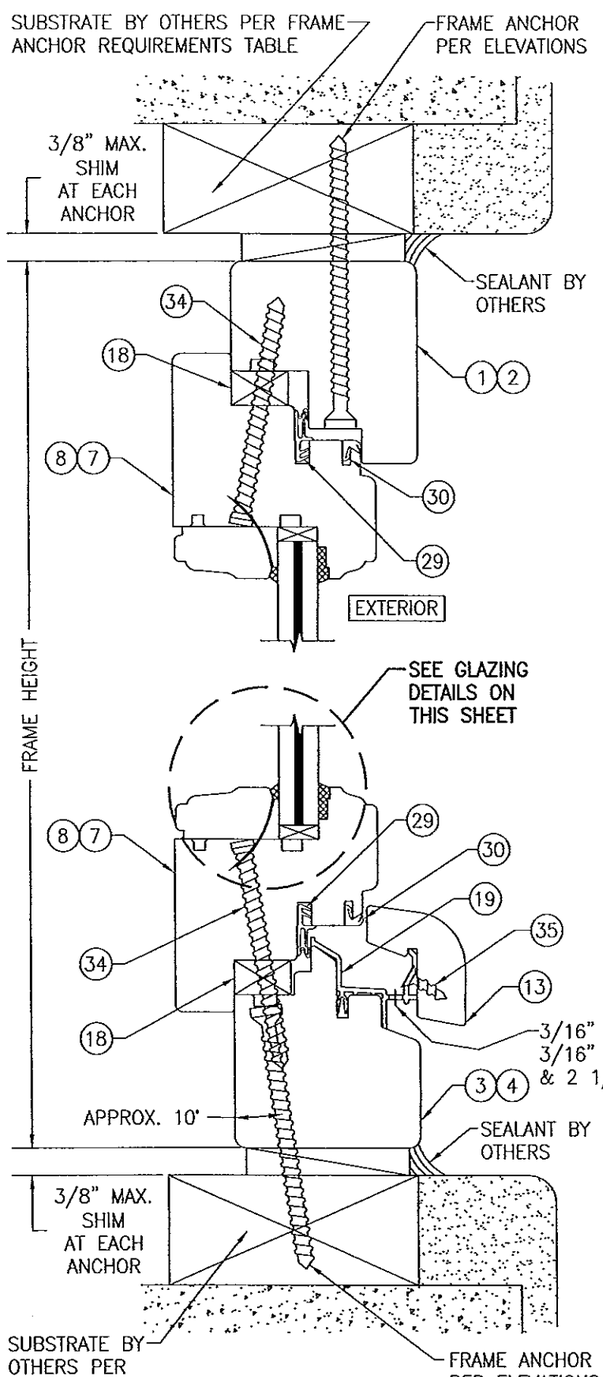
DRAWING TITLE
IN-SWING IMPACT WOOD FIXED CASEMENT WINDOW

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.
P.E. NO. 44135

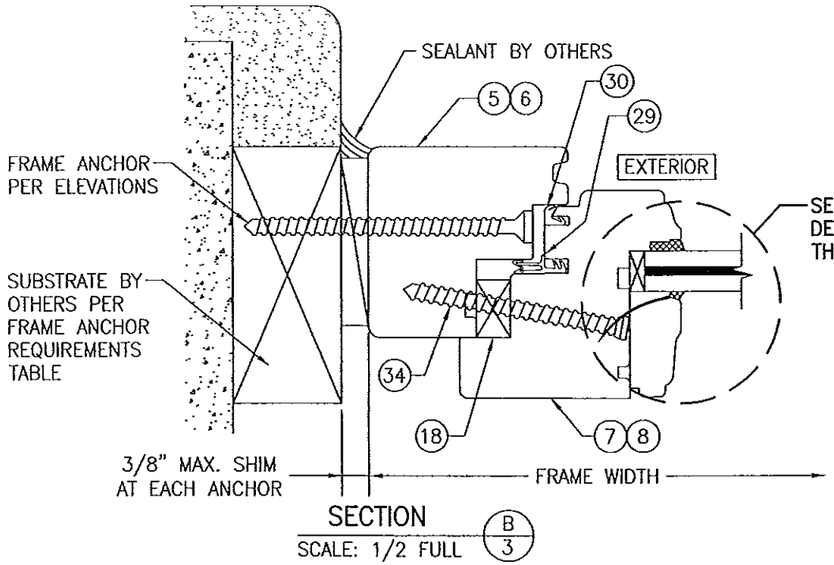
SEP 04 2013

DRAWING NO. 1534 | REV. B
SHEET NO. 2 OF 7



SECTION (A / 3)
SCALE: 1/2 FULL

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



SECTION (B / 3)
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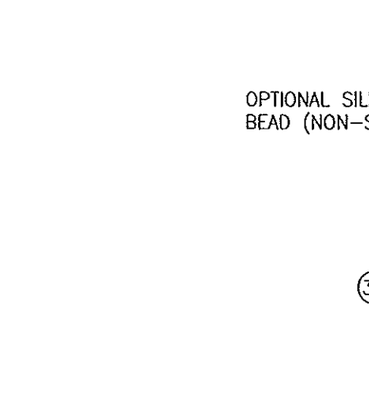
FRAME SHEAR SCREW INSTALLATION SHOWN. SEE OPTIONAL DETAILS FOR OTHER INSTALLATION CONDITIONS.



SECTION (D / 3)
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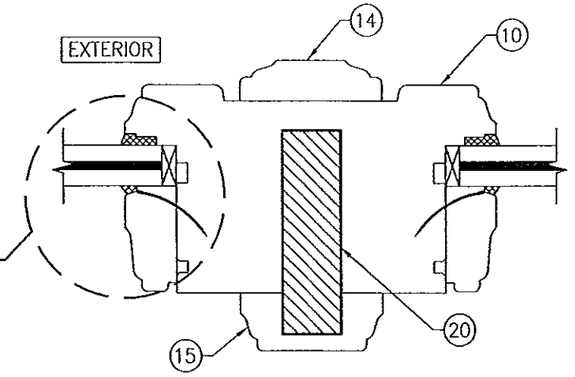
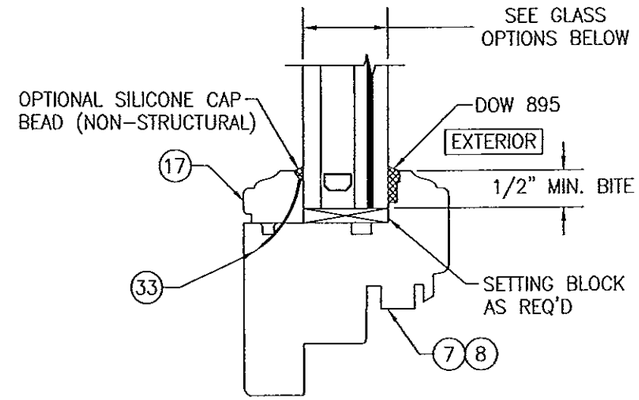


SECTION (C / 3)
SCALE: 1/2 FULL



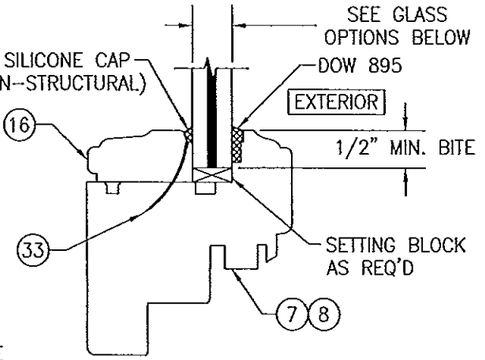
I.G. GLAZING DETAIL
GLASS OPTIONS 4, 5 & 6

GLASS OPTION 4: 1 3/16" LAMINATED I.G. (3/16" AN./0.09" EASTMAN CHEMICAL CO. SAFLEX/3/16" AN./1/2" AIR SPACE/1/4 AN.)

GLASS OPTION 5: 1 3/16" LAMINATED I.G. (3/16" AN./0.09" EASTMAN CHEMICAL CO. SAFLEX/3/16" AN./1/2" AIR SPACE/1/4 TEMP.)

GLASS OPTION 6: 1 3/16" LAMINATED I.G. (3/16" H.S./0.075" EASTMAN CHEMICAL CO. SAFLEX CP/3/16" H.S./1/2" AIR SPACE/1/4 TEMP.)

NOTE: THE SINGLE PANE OF THE IG GLASS SHALL BE TEMPERED WHEN REQUIRED TO CONFORM WITH SECTION 2406 OF THE FLORIDA BUILDING CODE FOR USE OF GLASS IN HAZARDOUS LOCATIONS.



NON-I.G. GLAZING DETAIL
GLASS OPTIONS 1, 2 & 3

GLASS OPTION 1: 9/16" LAMINATED GLASS (1/4" AN./0.09" EASTMAN CHEMICAL CO. SAFLEX/1/4" AN.)

GLASS OPTION 2: 9/16" LAMINATED GLASS (1/4" H.S./0.075" EASTMAN CHEMICAL CO. SAFLEX CP/1/4" H.S.)

GLASS OPTION 3: 9/16" LAMINATED GLASS (1/4" AN./0.075" EASTMAN CHEMICAL CO. SAFLEX CP/1/4" AN.)

PRODUCT REVISED
as complying with the Florida Building Code
Acceptance No 13-1105.06
Expiration Date Jan. 8, 2019
By Manuel Perez
Miami-Dade Product Control

WARREN W. SCHAEFER LICENSE NO. 44135 STATE OF FLORIDA PROFESSIONAL ENGINEER

NO.	REVISION DESCRIPTION	BY	DATE

DRAWN BY: W.R.M. | CHECKED BY: W.W.S.
PLOT: 1=2 | DATE: 04/03/08

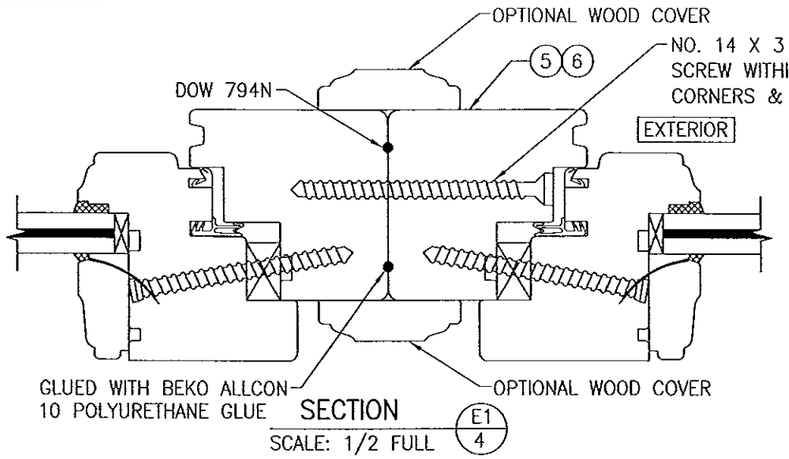
DRAWING TITLE: IN-SWING IMPACT WOOD FIXED CASEMENT WINDOW

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

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

CERTIFICATION
SEP 04 2013
WARREN W. SCHAEFER P.E.
P.E. NO. 44135

DRAWING NO. 1534 | REV. B
SHEET NO. 3 OF 7



SECTION E1/4
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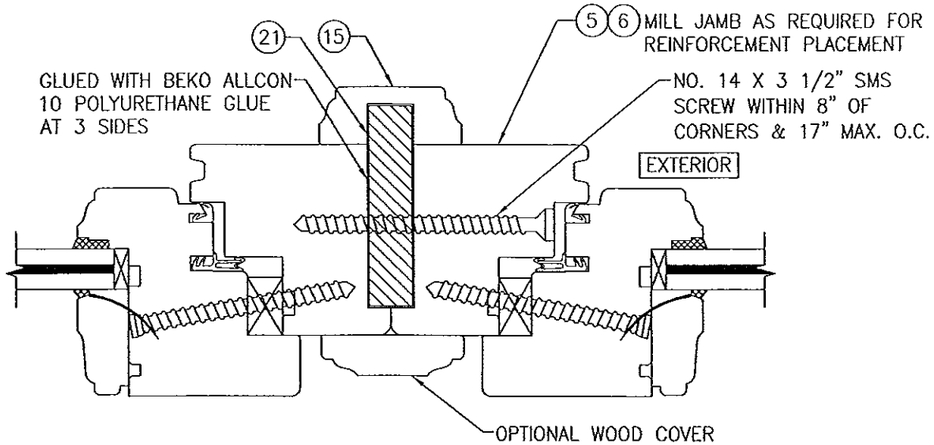
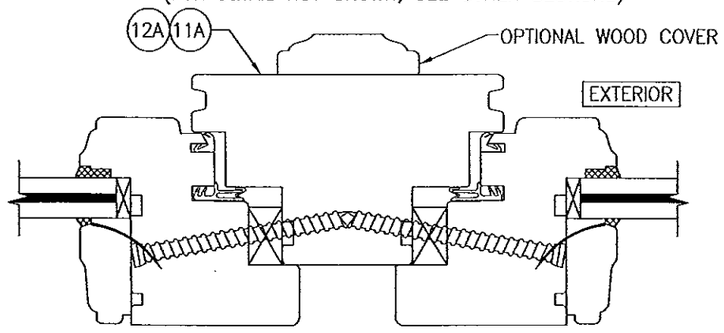
(NON-REINFORCED MULLION)
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)



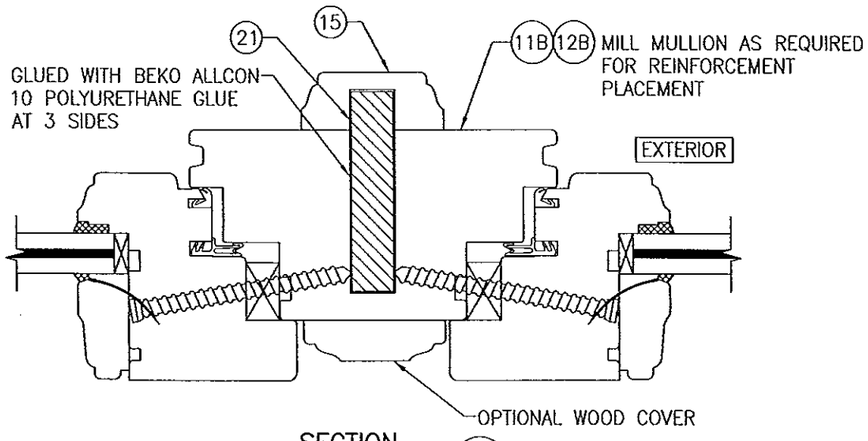
SECTION E2/4
SCALE: 1/2 FULL

(REINFORCED MULLION)
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)



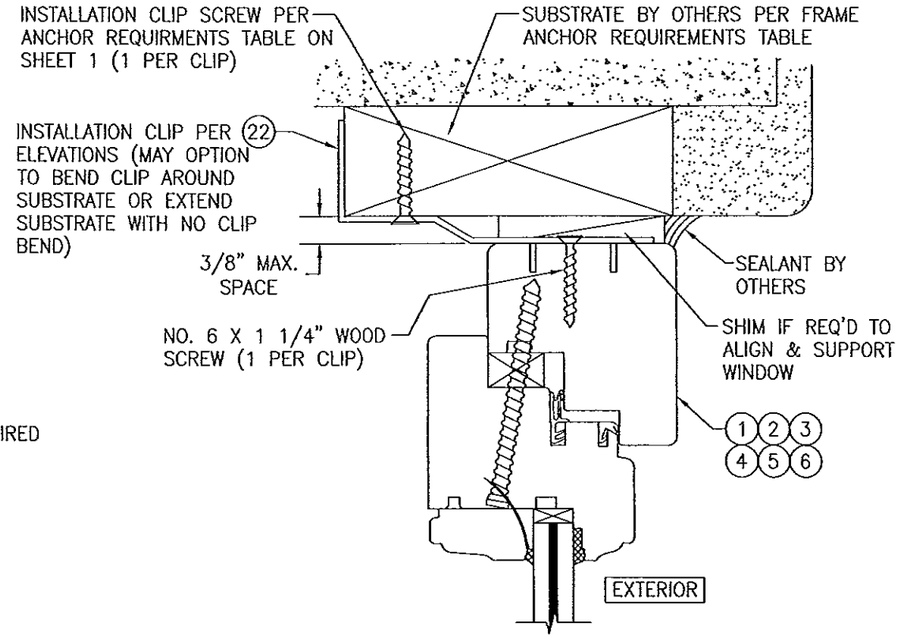
SECTION E3/4
SCALE: 1/2 FULL

(NON-REINFORCED MULLION)
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)



SECTION E4/4
SCALE: 1/2 FULL

(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)

PRODUCT REVISED
as complying with the Florida Building Code
Acceptance No 13-1105.06
Expiration Date Jan. 8, 2019
By Manuel Perez
Miami Dade Product Control

DRAWN BY: W.R.M. | CHECKED BY: W.W.S.
PLOT: 1=2 | DATE: 04/03/08

NO.	REVISION DESCRIPTION	BY	DATE

DRAWING TITLE
IN-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. (CA 6809)
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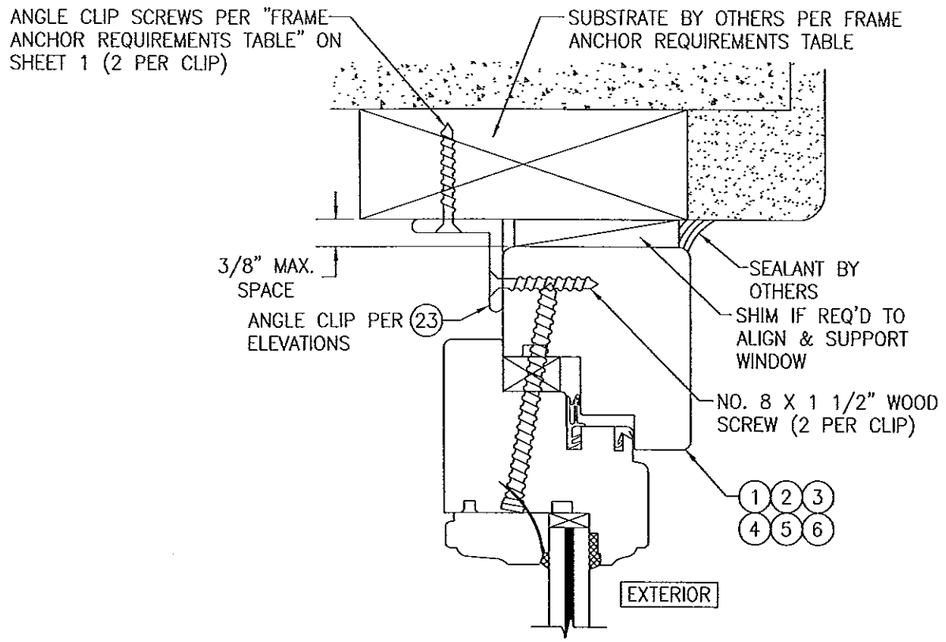
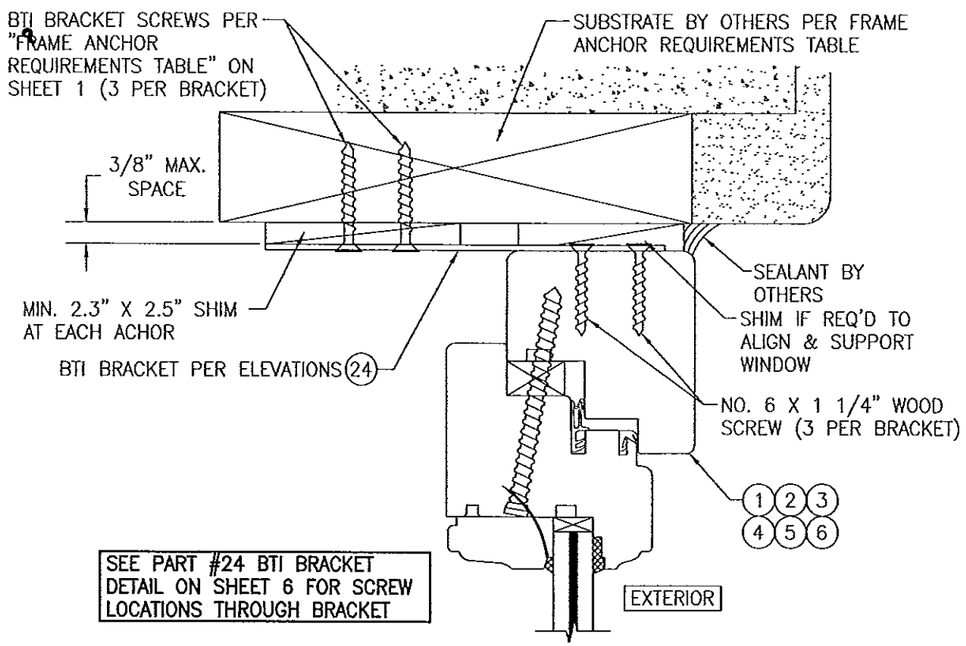
CERTIFICATION
SEP 04 2013
WARREN W. SCHAEFER, P.E.
P.E. NO. 44135

DRAWING NO. 1534 | REV. B
SHEET NO. 4 OF 7



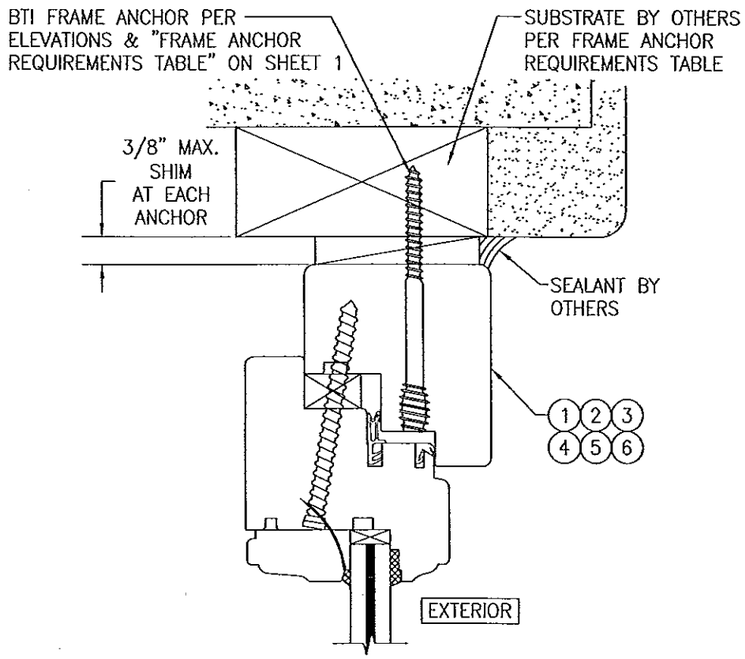
OPTIONAL INSTALLATION ANGLE CLIP DETAIL

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



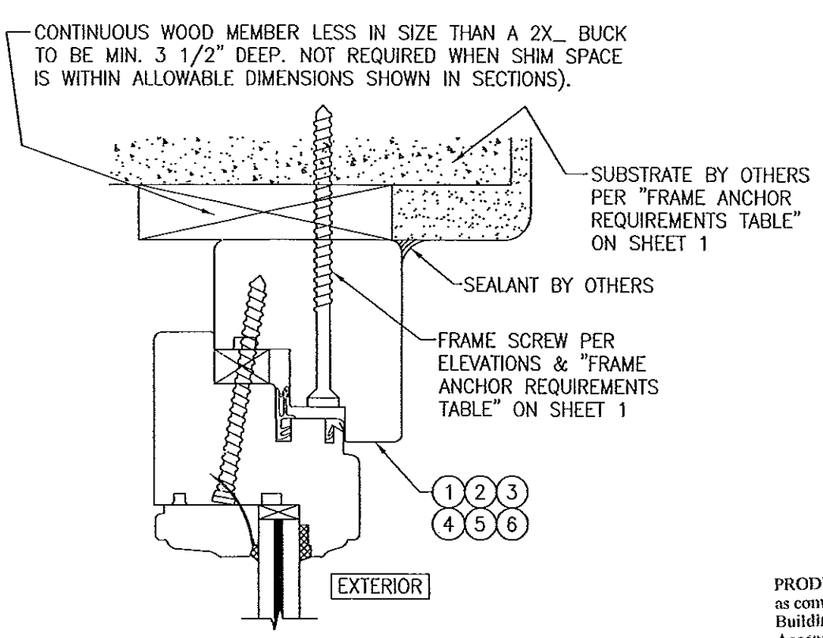
OPTIONAL INSTALLATION BTI BRACKET DETAIL

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



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)

PRODUCT REVISED
as complying with the Florida Building Code
Acceptance No 13-1105.06
Expiration Date Jan. 8 2019
By Manuel Cruz
Miami-Dade Product Control

DRAWN BY: W.R.M.	CHECKED BY: W.W.S.
PLOT: 1=2	DATE: 04/03/08

NO.	REVISION DESCRIPTION	BY	DATE

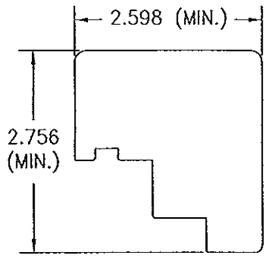
DRAWING TITLE
IN-SWING IMPACT WOOD FIXED CASEMENT WINDOW

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

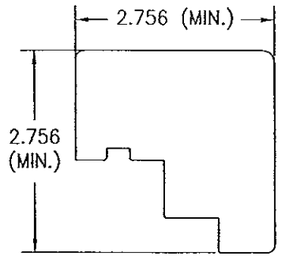
CONSULTANTS
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809)
7480 150TH COURT NORTH
PALM BEACH GARDENS, FL 33418
PHONE: 561-744-3424

CERTIFICATION
SEP 04 2013
WARREN W. SCHAEFER, P.E.
P.E. NO. 44135

DRAWING NO. 1534 | REV. B
SHEET NO. 5 OF 7

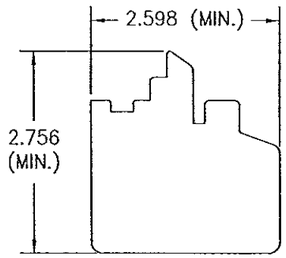


(1) HEAD

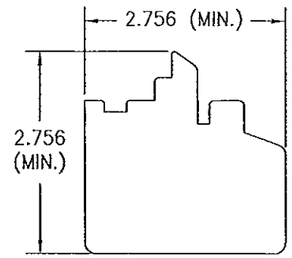


(2) HEAD

(USED WHEN FIXED WINDOW IS COMBINED WITH CONCEALED HINGE CASEMENT WINDOW)

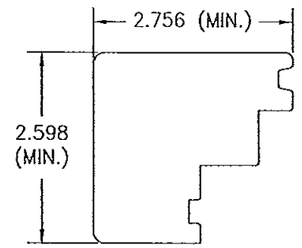


(3) SILL

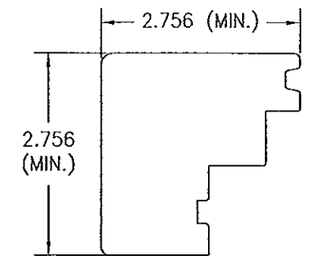


(4) SILL

(USED WHEN FIXED WINDOW IS COMBINED WITH CONCEALED HINGE CASEMENT WINDOW)



(5) JAMB



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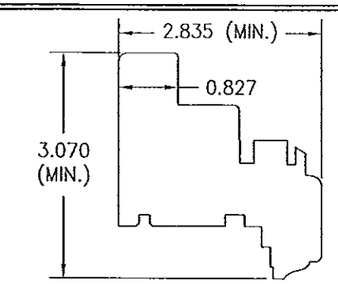
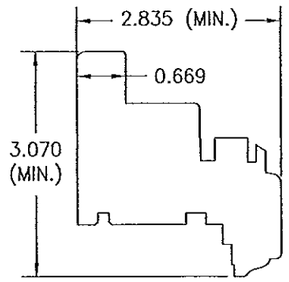
(USED WHEN FIXED WINDOW IS COMBINED WITH CONCEALED HINGE CASEMENT WINDOW)



(7) SASH



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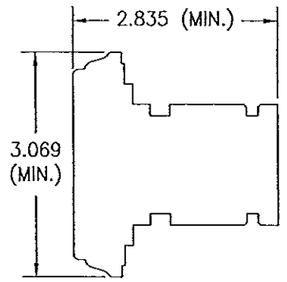
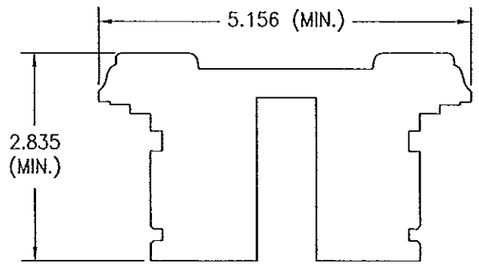
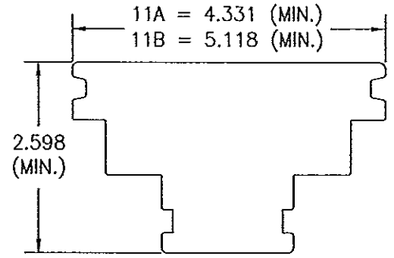
(USED WHEN FIXED WINDOW IS COMBINED WITH CONCEALED HINGE CASEMENT WINDOW)



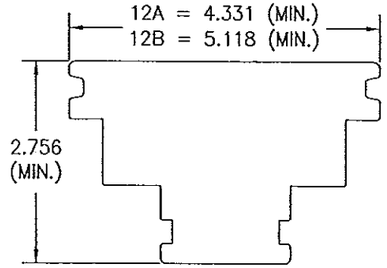
(9) MID-RAIL



(10) 1 PIECE ASTRAGAL STILE

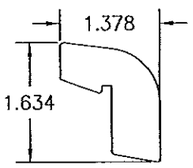


(11A) (11B) ONE-PIECE MULLION

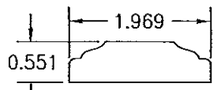


(12A) (12B) ONE-PIECE MULLION

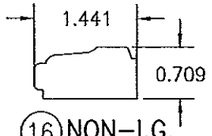
(USED WHEN FIXED WINDOW IS COMBINED WITH CONCEALED HINGE CASEMENT WINDOW)



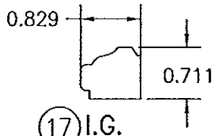
(13) BOTTOM RAIL DRIP EDGE



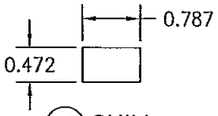
(14) ASTRAGAL



(16) NON-I.G. GLAZING BEAD



(17) I.G. GLAZING BEAD



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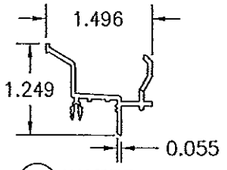
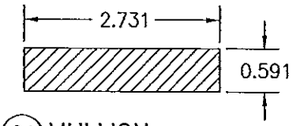
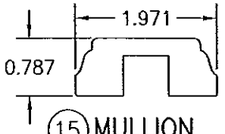


(19) WATER DEFLECTOR

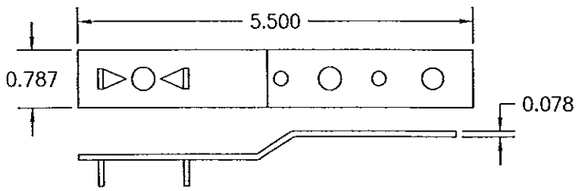
(20) ONE-PIECE MULLION REINFORCEMENT



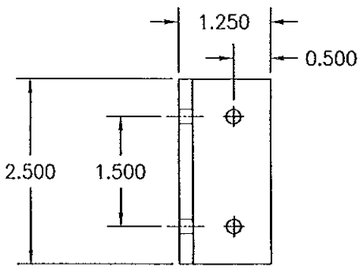
(21) MULLION REINFORCEMENT



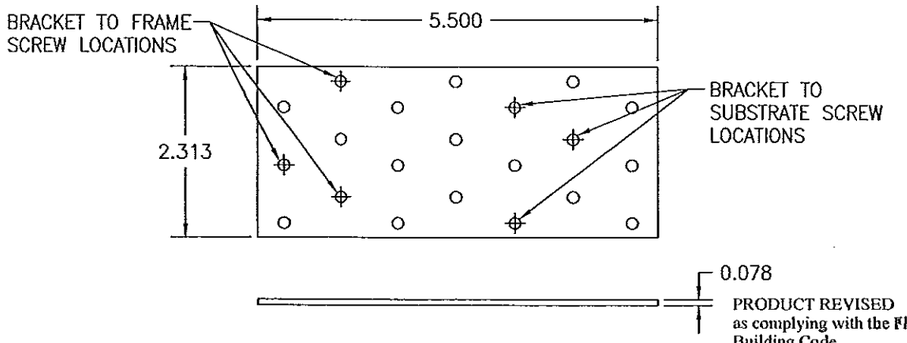
(15) MULLION BAR COVER



(22) INSTALLATION CLIP



(23) ANGLE CLIP



(24) BTI BRACKET

PRODUCT REVISED
as complying with the Florida Building Code
Acceptance No 13-1105.06
Expiration Date Jan. 5, 2019
By Manuel Sere
Miami-Dade Product Control

DRAWN BY: W.R.M. | CHECKED BY: W.W.S.
PLOT: 1=2 | DATE: 04/03/08

NO.	REVISION DESCRIPTION	BY	DATE

DRAWING TITLE
IN-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. (CA 6809)
7480 150TH COURT NORTH
PALM BEACH GARDENS, FL 33418
PHONE: 561-744-3424

CERTIFICATION
SEP 04 2013
WARREN W. SCHAEFER, P.E.
P.E. NO. 44135

DRAWING NO. 1534 | REV. B
SHEET NO. 6 OF 7

ITEM #	ITEM DESCRIPTION	MANUFACTURER/NOTES
	PARTS	
1	HEAD (STANDARD)	MAHOGANY
2	HEAD (OPTIONAL)	MAHOGANY
3	SILL (STANDARD)	MAHOGANY
4	SILL (CONCEALED HINGE WINDOW)	MAHOGANY
5	JAMB (STANDARD)	MAHOGANY
6	JAMB (CONCEALED HINGE WINDOW)	MAHOGANY
7	SASH (STANDARD)	MAHOGANY
8	SASH (OPTIONAL)	MAHOGANY
9	MID-RAIL	MAHOGANY
10	1 PIECE ASTRAGAL STILE	MAHOGANY
11A	ONE-PIECE NON-REINFORCED MULLION (STANDARD)	MAHOGANY
11B	ONE-PIECE REINFORCED MULLION (STANDARD)	MAHOGANY
12A	ONE-PIECE NON-REINFORCED MULLION (OPTIONAL)	MAHOGANY
12B	ONE-PIECE REINFORCED MULLION (OPTIONAL)	MAHOGANY
13	BOTTOM RAIL DRIP EDGE	MAHOGANY
14	ASTRAGAL	MAHOGANY
15	MULLION BAR COVER	MAHOGANY
16	NON-I.G. GLAZING BEAD	MAHOGANY
17	I.G. GLAZING BEAD	MAHOGANY
18	SHIM BLOCK	MAHOGANY
19	WATER DEFLECTOR	6061-T6 ALUMINUM
20	ONE-PIECE MULLION REINFORCEMENT	34 KSI STAINLESS STEEL OR A36 STEEL
21	TRANSOM/VERTICAL MULLION REINFORCEMENT	34 KSI STAINLESS STEEL OR A36 STEEL
22	INSTALLATION CLIP	GALVANIZED 54 KSI STEEL
23	ANGLE CLIP	6061-T6 ALUMINUM
24	BTI BRACKET	GALVANIZED 54 KSI STEEL
	SEALS & SEALANTS	
29	WEATHERSTRIP	THERMOPLASTIC ELASTOMER; BY: DEVENTER
30	WEATHERSTRIP	THERMOPLASTIC ELASTOMER; BY: DEVENTER
	FASTENERS	
33	OPTIONAL 18 GA. X 1 1/2" S.S. CURVED NAIL	4" FROM CORNERS & 12" MAX. O.C.
34	NO. 14 X 3 1/8" BAUTEC WOOD SCREW	WITHIN 8" OF ENDS & 17" MAX. O.C.
35	NO. 6 X 5/8" WOOD SCREW	2" FROM CORNERS & 4 3/4" 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 = 1,6000,000 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 REVISED
as complying with the Florida
Building Code
Acceptance No 13-1105.06
Expiration Date Jan. 8, 2019
By Manuel Perez
Miami Dade Product Control

DRAWN BY: W.R.M. | CHECKED BY: W.W.S.
PLOT: 1=2 | DATE: 04/03/08

NO.	REVISION DESCRIPTION	BY	DATE

DRAWING TITLE
IN-SWING IMPACT WOOD FIXED CASEMENT WINDOW

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TISCHLER UND SOHN (USA) LTD.
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DRAWING NO. 1534 | REV. B
SHEET NO. 7 OF 7