



DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)
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/economy

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 “Concealed Balance System” Wood Single & Double Hung Window – L.M.I.

APPROVAL DOCUMENT: Drawing No. **1827**, titled “Single & Double Hung Concealed Balance System Impact Window” sheets 1 through 7 of 7, dated 07/02/12, with revision **A1** dated 07/21/17, 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 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, Wedel (Schleswig–Holstein), Germany, 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 NOA# 17-0807.22** and consists of this page 1 and evidence pages E-1, E-2 and E-3, as well as approval document mentioned above.

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


7/20/20

NOA No. 20-0623.06
Expiration Date: June 13, 2023
Approval Date: July 30, 2020
Page 1

Tischler und Sohn (USA) Ltd.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. EVIDENCE SUBMITTED UNDER PREVIOUS NOA's

A. DRAWINGS

1. Manufacturer's die drawings and sections.
(Submitted under NOA No. 13-0304.07)
2. Drawing No. **1827**, titled "Single & Double Hung Concealed Balance System Impact Window" sheets 1 through 7 of 7, dated 07/02/12, with revision **A1** dated 07/21/17, prepared by W. W. Schaefer Engineering & Consulting, P.A., signed and sealed by Warren W. Schaefer, P.E.
(Submitted under NOA No. 17-0807.22)

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 a wood double & single hung window with spiral balance system, marked-up by Architectural Testing, Inc., Test Report No. **ATI-C262.01-109-18**, dated 11/20/12, signed and sealed by Michael D. Stremmel, P.E.
(Submitted under NOA No. 13-0304.07)

C. CALCULATIONS

1. Anchor verification calculations and structural analysis, complying with **FBC 6th Edition (2017)**, dated 09/25/12 and updated on 07/20/17, prepared by W.W. Schaefer Engineering & Consulting, P.A., signed and sealed by Warren W. Schaefer, P.E.
(Submitted under NOA No. 17-0807.22)
2. Glazing complies with **ASTM E1300-09**.

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

1. Notice of Acceptance No. **17-0712.03** issued to **Eastman Chemical Company (MA)** for their "**Saflex CP – Saflex and Saflex HP Composite Glass Interlayers with PET Core**" dated 09/07/17, expiring on 12/11/18.



Manuel Perez, P.E.
Product Control Examiner
NOA No. 20-0623.06
Expiration Date: June 13, 2023
Approval Date: July 30, 2020

Tischler und Sohn (USA) Ltd.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

F. STATEMENTS

1. Statement letter of conformance, complying with **FBC 5th Edition (2014)** and with **FBC 6th Edition (2017)**, dated July 20, 2017, issued by W.W. Schaefer Engineering & Consulting, P.A., signed and sealed by Warren W. Schaefer, P.E.
(Submitted under NOA No. 17-0807.22)
2. Statement letter of no financial interest and independence, dated July 20, 2017, issued by W. W. Schaefer Engineering & Consulting, P.A., signed and sealed by Warren W. Schaefer, P.E.
(Submitted under NOA No. 17-0807.22)
3. Laboratory compliance letter for Test Report No. **ATI-C262.01-109-18**, issued by Architectural Testing, Inc., dated 11/20/12, signed and sealed by Michael Stremmel, P.E.
(Submitted under NOA No. 13-0304.07)
4. Distributor Agreement between Tischler und Sohn (USA), Ltd., Connecticut, USA, and Tischler/ Cornelius Korn, G.m.b.H., Wedel (Schleswig-Holstein), Germany, dated 04/13/09, signed by Tim Carpenter and Wilhelm Korn, respectively.
(Submitted under NOA No. 13-0304.07)

G. OTHERS

1. Notice of Acceptance No. **14-0428.16**, issued to Tischler und Sohn (USA) Ltd. for their Series “Concealed Balance System” Single & Double Hung Wood Window – L.M.I., approved on 07/03/14 and expiring on 06/13/18.


Manuel Pérez, P.E.
Product Control Examiner
NOA No. 20-0623.06
Expiration Date: June 13, 2023
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NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

2. NEW EVIDENCE SUBMITTED

A. DRAWINGS

1. None.

B. TESTS

1. None

C. CALCULATIONS

1. None.

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

1. Notice of Acceptance No. **18-0301.06** issued to **Eastman Chemical Company (MA)** for their “**Saflex CP - Saflex and Saflex HP Composite Glass Interlayers with PET Core**” dated 05/17/18, expiring on 12/11/23.

F. STATEMENTS

1. Statement letter of conformance, complying with **FBC 6th Edition (2017)** and **FBC 7th Edition (2020)** dated June 05, 2020, issued by W.W. Schaefer Engineering & Consulting, P.A., signed and sealed by Warren W. Schaefer, P.E.

G. OTHERS

1. Notice of Acceptance No. **17-0807.22**, issued to Tischler und Sohn (USA) Ltd. for their Series “**Concealed Balance System**” Single & Double Hung Wood Window – L.M.I., approved on 11/02/17 and expiring on 06/13/23.


Manuel Pérez, P.E.
Product Control Examiner
NOA No. 20-0623.06
Expiration Date: June 13, 2023
Approval Date: July 30, 2020

GENERAL NOTES:

- THIS PRODUCT HAS 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 CONFORMANCE WITH THE FLORIDA BUILDING CODE PROTOCOLS TAS-201, 202 & 203 FOR LARGE MISSILE IMPACT PRODUCTS.
- THIS PRODUCT HAS BEEN DESIGNED IN ACCORDANCE WITH AND MEETS THE REQUIREMENTS OF THE FLORIDA BUILDING CODE (FBC) INCLUDING HIGH VELOCITY HURRICANE ZONES (HVHZ).
- IMPACT SHUTTERS ARE NOT REQUIRED WITH THIS PRODUCT.
- ALL ANCHORS SECURING PRODUCT FRAMES 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.
- ALL WOOD MEMBERS OF THIS PRODUCT 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 REQUIREMENTS.

SASH LOCK QUANTITY REQUIREMENTS	
FRAME WIDTH	QUANTITY PER SASH
22"	2
22" & LESS	1

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 NATIONAL AND/OR LOCAL APPROVAL OF ANY PRODUCT NOT PRODUCED BY THE MANUFACTURER STATED ON THESE DRAWINGS.

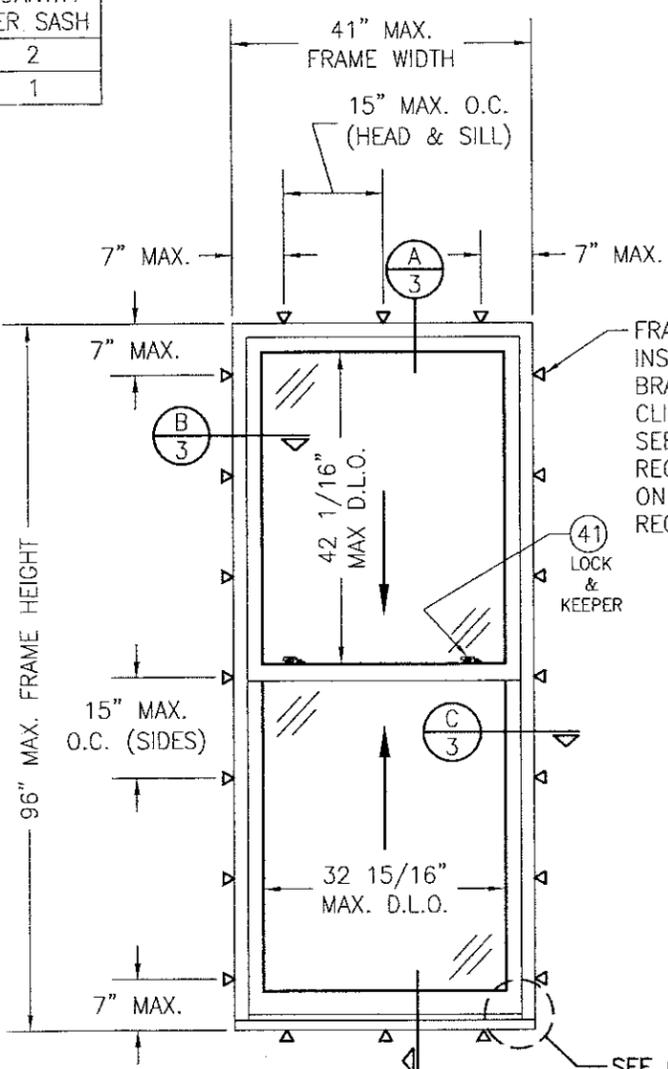
DRAWN BY: W.R.M.	CHECKED BY: W.W.S.
PLOT: 1=24	DATE: 07/02/12

NO.	REVISION DESCRIPTION	BY	DATE
A1	UPDATE TO CURRENT STANDARDS		07/21/17

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. 16 GA. 33 KSI METAL STUD	1/4" GR. 5 SELF TAP/DRILLING SCREW	FULL	1/2"
MIN. 1/8" THK A36 STEEL	1/4" GR. 5 SELF TAP/DRILLING SCREW	FULL	1/2"
MIN. 1/8" THK 6063-T5 ALUM.	1/4" GR. 5 SELF TAP/DRILLING SCREW	FULL	1/2"
(3) C-90 CMU	(1) 1/4" CONCRETE SCREW	1 1/4"	2"
2500 PSI CONCRETE	(1) 1/4" CONCRETE SCREW	1 3/4"	2"
INSTALLATION CLIP SCREWS			
(2) MIN. 2X_ WOOD FRAME OR BUCK (MIN. GR. 3 & G=0.55)	NO. 12 SMS OR WOOD SCREW	1 3/8"	3/4"
MIN. 16 GA. 33 KSI METAL STUD	NO. 12 GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
MIN. 1/8" THK A36 STEEL	NO. 12 GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
MIN. 1/8" THK 6063-T5 ALUM.	NO. 12 GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
(3) C-90 CMU	(1) 1/4" CONCRETE SCREW	1 1/4"	2"
2500 PSI CONCRETE	(1) 1/4" CONCRETE SCREW	1 3/4"	2"
BTI BRACKET SCREWS			
(2) MIN. 2X_ WOOD FRAME OR BUCK (MIN. GR. 3 & G=0.55)	NO. 8 SMS OR WOOD SCREW	1 3/8"	3/4"
MIN. 18 GA. 33 KSI METAL STUD	NO. 8 GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
MIN. 1/8" THK A36 STEEL	NO. 8 GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
MIN. 1/8" THK 6063-T5 ALUM.	NO. 8 GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
ANGLE CLIP SCREWS			
MIN. 2X4 WOOD FRAME OR BUCK (MIN. GR. 3 & G=0.55)	NO. 8 SMS OR WOOD SCREW	1 5/16"	1/2"
MIN. 1/8" THK A36 STEEL	NO. 8 GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
MIN. 1/8" THK 6063-T5 ALUM.	NO. 8 GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"

- CONCRETE SCREWS SHALL BE ELCO ULTRACONS (C.S.), ELCO CRETE-FLEX (S.S.) OR HILTI KWIK-CON II (C.S OR S.S.).
- 2X_ BUCKS SHALL BE OF A MINIMUM DEPTH REQUIRED TO MEET ANCHOR EDGE DISTANCE REQUIREMENTS
- CMU IS NOT APPLICABLE AT HEAD OR SILL.



EXTERIOR ELEVATION: SINGLE WINDOW

SCALE: 1/2" = 1'-0"
 (DOUBLE HUNG WINDOW SHOWN. SINGLE HUNG IS IDENTICAL EXCEPT THE TOP SASH IS FIXED. FOR SINGLE HUNG FIXED SASH DETAIL, SEE "ALTERNATE SECTION B" ON SHEET 3)

ALLOWABLE DESIGN PRESSURE (ALL WINDOW CONDITIONS)
+/-70 PSF

CORNER CONSTRUCTION:

FRAME CORNERS: SQUARE CUT, BUTTED AND JOINED WITH THREE(3) NO. 10 X 2" WOOD SCREWS THROUGH THE HORIZONTAL MEMBERS INTO THE VERTICAL MEMBERS & GLUED WITH OTTOSEAL M360 WOOD GLUE OR EQUIVALENT.
 MULLION ENDS: SQUARE CUT, BUTTED AND JOINED WITH TWO(2) NO. 10 X 2" WOOD SCREWS THROUGH THE HORIZONTAL MEMBERS INTO THE VERTICAL MEMBERS & GLUED WITH OTTOSEAL M360 WOOD GLUE OR EQUIVALENT.
 SASH CORNERS: SQUARE CUT, BUTTED AND JOINED WITH FOUR(4) 5/16" X 1 1/2" WOOD DOWELS & GLUED WITH PONAL SUPER 3 WOOD GLUE OR EQUIVALENT.

FRAME SCREWS, INSTALLATION CLIPS, BTI BRACKETS OR ANGLE CLIPS WHERE SHOWN. SEE "FRAME ANCHOR REQUIREMENTS TABLE" ON THIS SHEET FOR REQUIREMENTS.

SEE CORNER CONSTRUCTION DESCRIPTIONS ON THIS SHEET

PRODUCT REVISED
 as complying with the Florida Building Code
 NOA-No. **20-0623.06**
 Expiration Date: **06/13/2023**
 By: *Manuel Perez*
 Miami-Dade Product Control



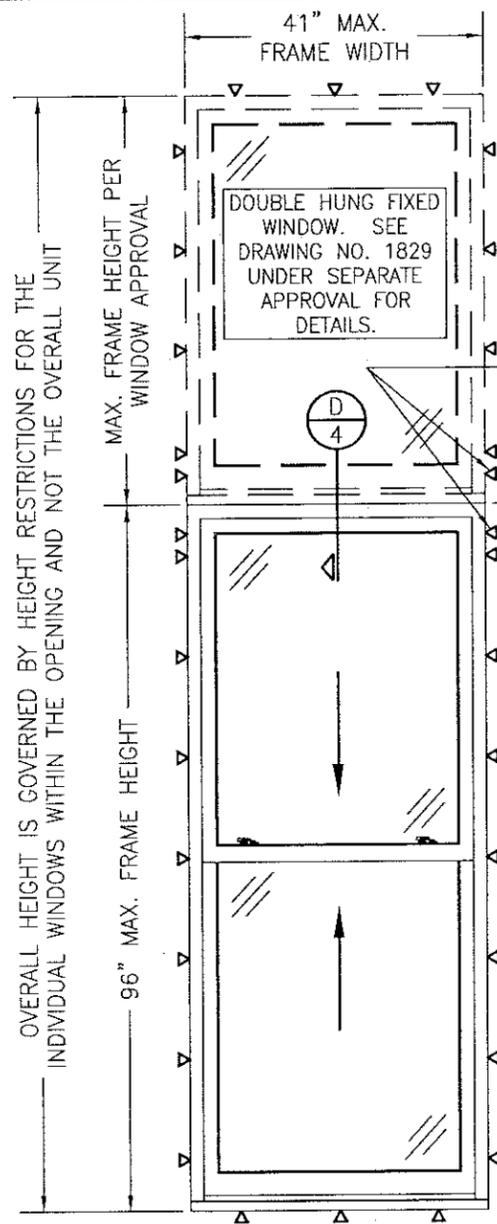
PRODUCT REVISED
 as complying with the Florida Building Code
 Acceptance No. **17-0807-22**
 Expiration Date **June 13, 2023**
 By: *Manuel Perez*
 Miami-Dade Product Control

DRAWING TITLE: SINGLE & DOUBLE HUNG CONCEALED BALANCE SYSTEM IMPACT 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	JUL 21 2017
DRAWING NO.	1827
REV.	A
SHEET NO.	1 OF 7



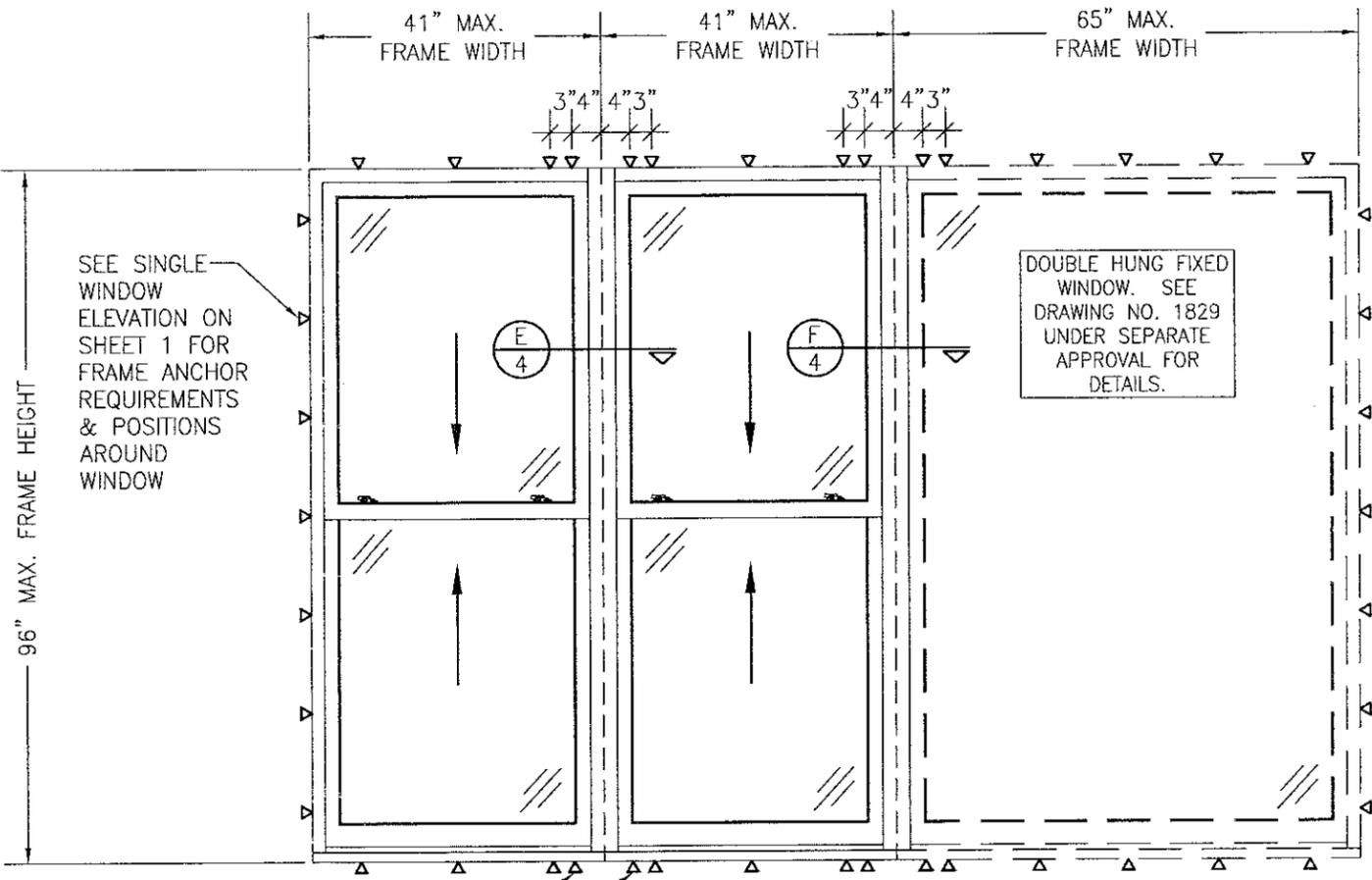
**EXTERIOR ELEVATION:
SINGLE WINDOW WITH TRANSOM**

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

(DOUBLE HUNG WINDOW SHOWN. SINGLE HUNG WINDOW ALSO APPLIES)
(FOR DETAIL NOT SHOWN, SEE SINGLE WINDOW ELEVATION ON SHEET 1)

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.

SEE SINGLE WINDOW ELEVATION ON SHEET 1 FOR FRAME ANCHOR REQUIREMENTS & POSITIONS AROUND WINDOW



**EXTERIOR ELEVATION:
MULTIPLE OPERABLE/FIXED WINDOW**

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

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.

(DOUBLE HUNG WINDOWS SHOWN. SINGLE HUNG WINDOWS ALSO APPLY)

MULTIPLE UNIT NOTES:

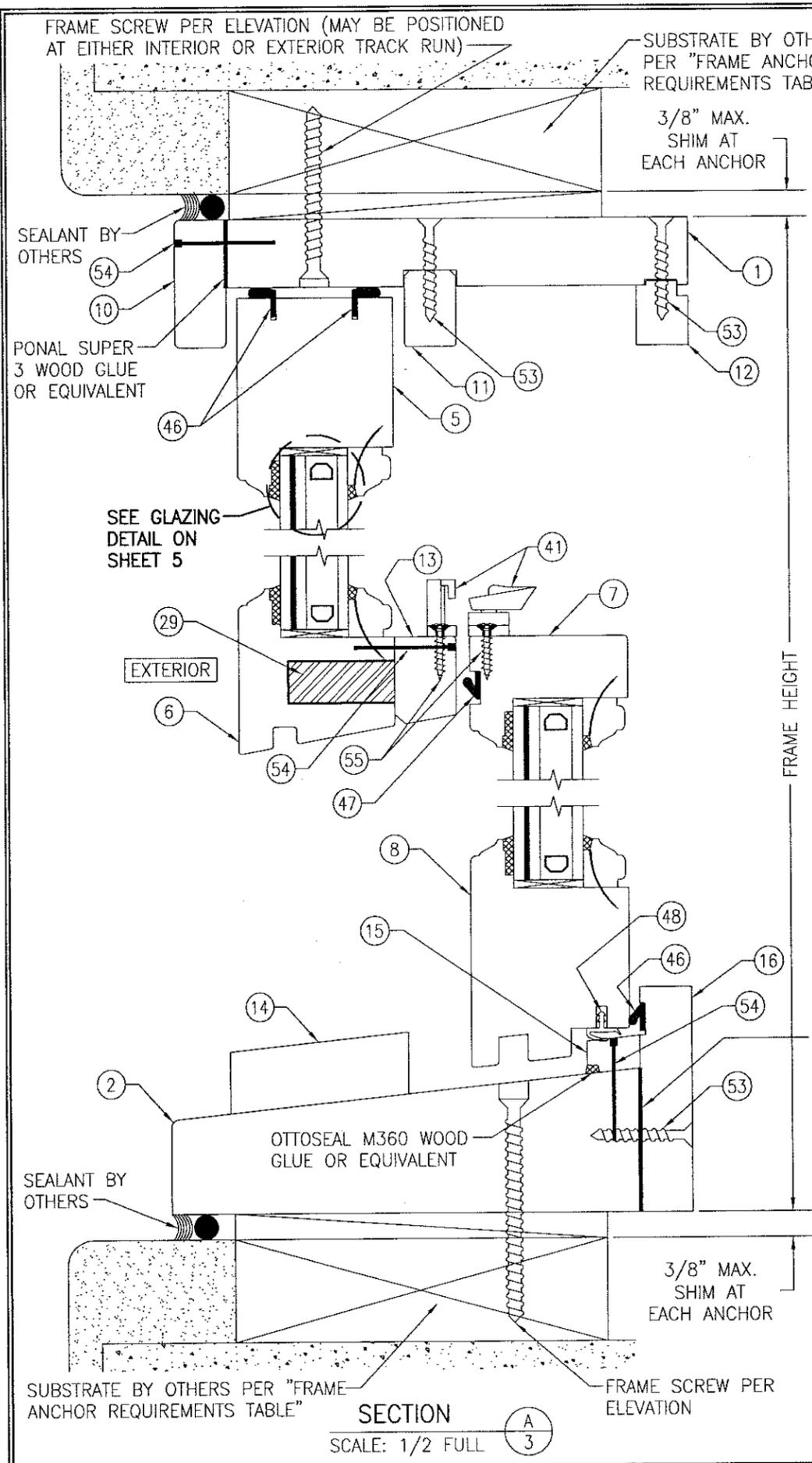
1. FOR ALL DETAIL NOT SHOWN, SEE INDIVIDUAL WINDOW ELEVATION.
2. THERE IS NO LIMIT ON THE NUMBER OF WINDOWS THAT MAY BE COMBINED HORIZONTALLY IN ONE DIRECTION INTO ONE OPENING PROVIDING THE OPENING IS DESIGNED TO SUPPORT ALL LOADS TRANSFERRED FROM THE WINDOWS & THEIR MULLIONS.
3. ANY COMBINATION OF FIXED/OPERABLE WINDOWS IN ONE OPENING SHALL APPLY.

DRAWN BY: W.R.M.	CHECKED BY: W.W.S.
PLOT: 1-24	DATE: 07/02/12
NO.	REVISION DESCRIPTION
BY	DATE
DRAWING TITLE: SINGLE & DOUBLE HUNG CONCEALED BALANCE SYSTEM IMPACT WINDOW	
CONSULTANTS	MANUFACTURER
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809) 7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424	TISCHLER UND SOHN (USA) LTD. SIX SUBURBAN AVENUE STAMFORD, CONNECTICUT 203-674-0600
CERTIFICATION	REV.
WARREN W. SCHAEFER, P.E. P.E. NO. 44135	A
JUL 21 2017	DRAWING NO. 1827
	SHEET NO. 2 OF 7

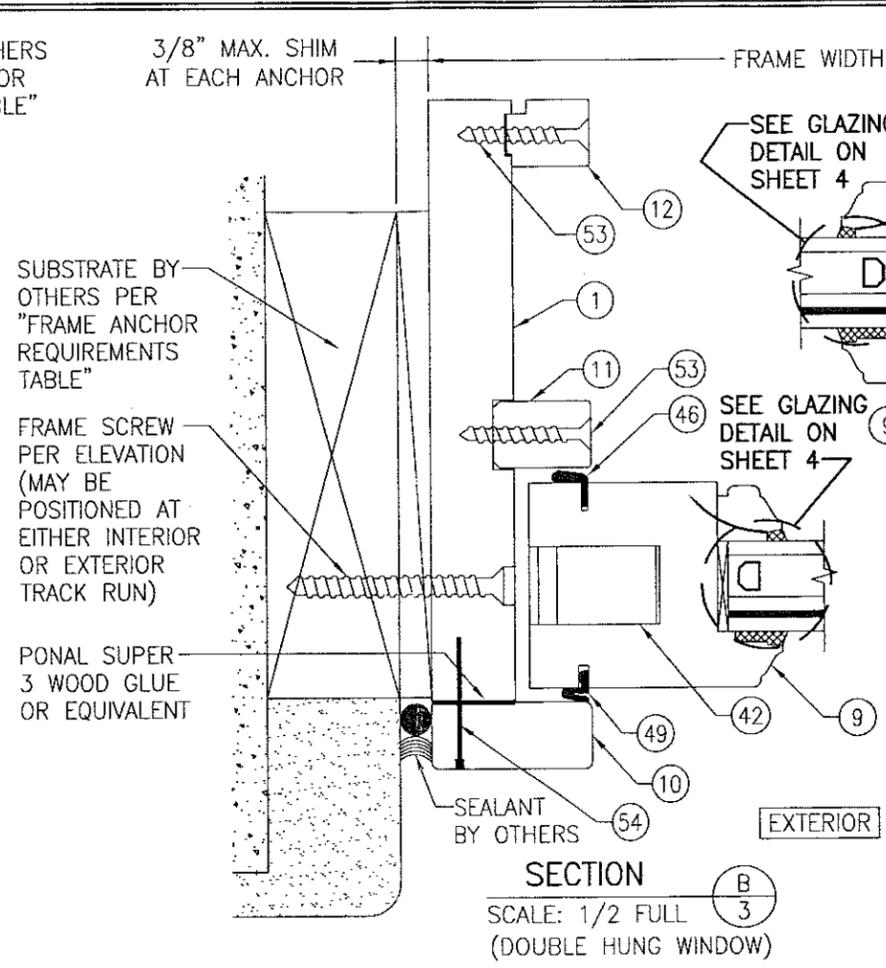
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By: *Manuel Perez*
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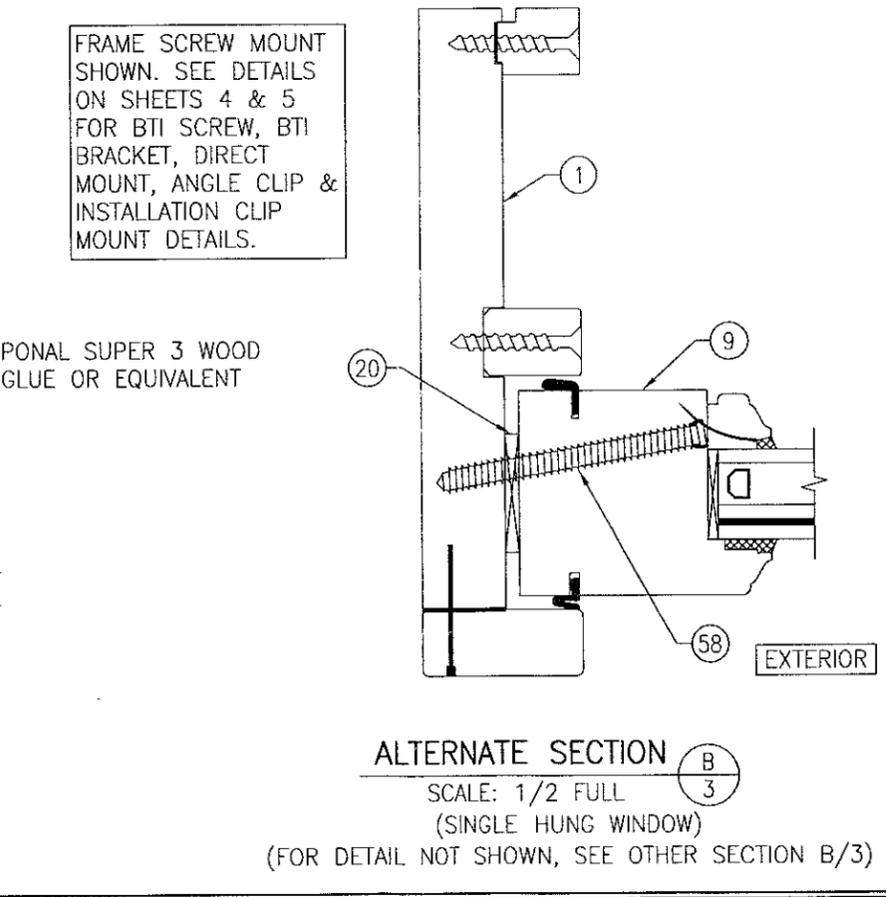




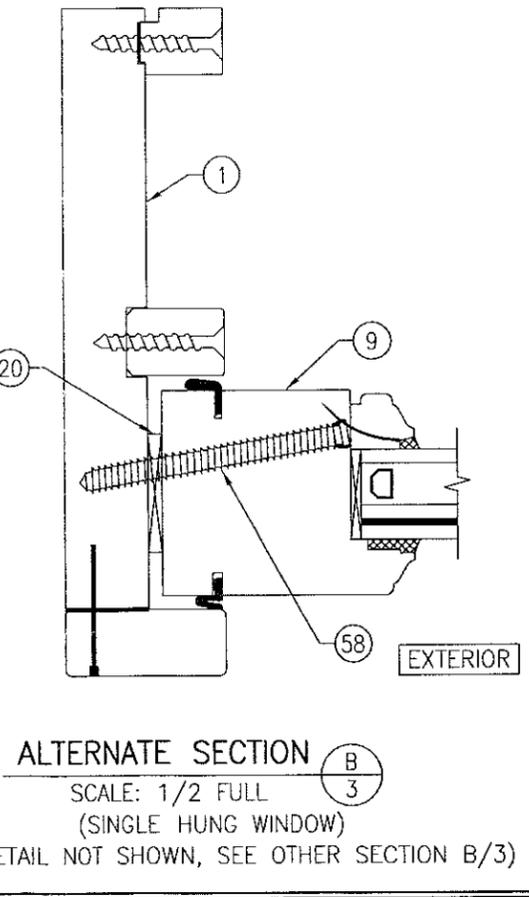
SECTION A
SCALE: 1/2 FULL



SECTION B
SCALE: 1/2 FULL
(DOUBLE HUNG WINDOW)



SECTION C
SCALE: 1/2 FULL

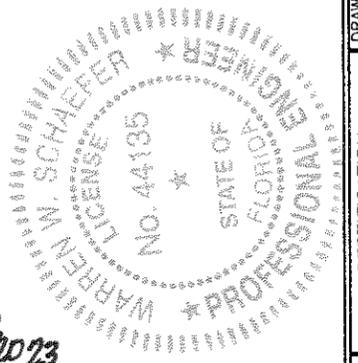


ALTERNATE SECTION B
SCALE: 1/2 FULL
(SINGLE HUNG WINDOW)
(FOR DETAIL NOT SHOWN, SEE OTHER SECTION B/3)

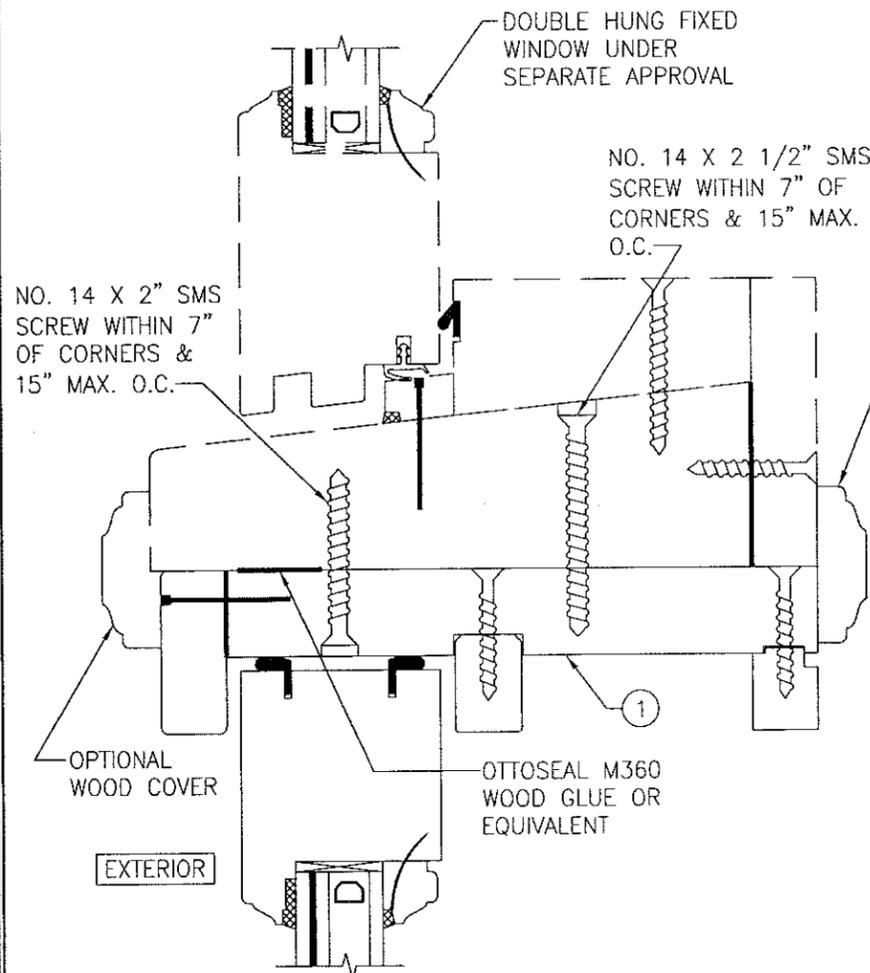
FRAME SCREW MOUNT SHOWN. SEE DETAILS ON SHEETS 4 & 5 FOR BTI SCREW, BTI BRACKET, DIRECT MOUNT, ANGLE CLIP & INSTALLATION CLIP MOUNT DETAILS.

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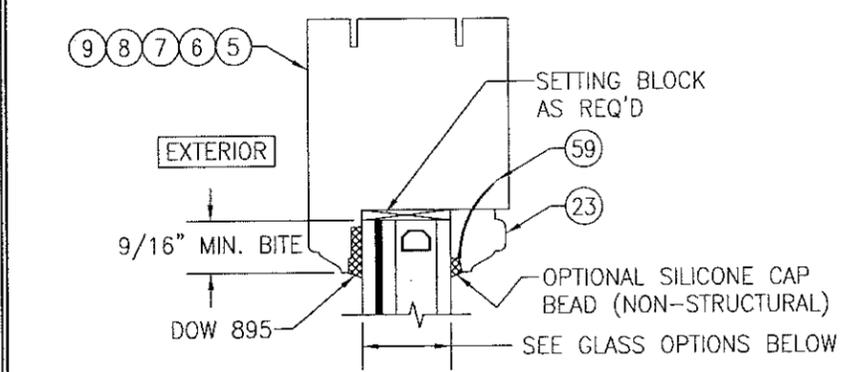


DRAWN BY: W.R.M.	CHECKED BY: W.W.S.
PLOT: 1=2	DATE: 07/02/12
DATE	
BY	
REVISION DESCRIPTION	
NO.	
DRAWING TITLE: SINGLE & DOUBLE HUNG CONCEALED BALANCE SYSTEM IMPACT WINDOW	
MANUFACTURER: TISCHLER UND SOHN (USA) LTD. SIX SUBURBAN AVENUE STAMFORD, CONNECTICUT 203-674-0600	
CONSULTANTS: W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809) 7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424	
CERTIFICATION	JUL 21 2017
DRAWING NO.	REV.
1827	A
SHEET NO.	
3	OF 7



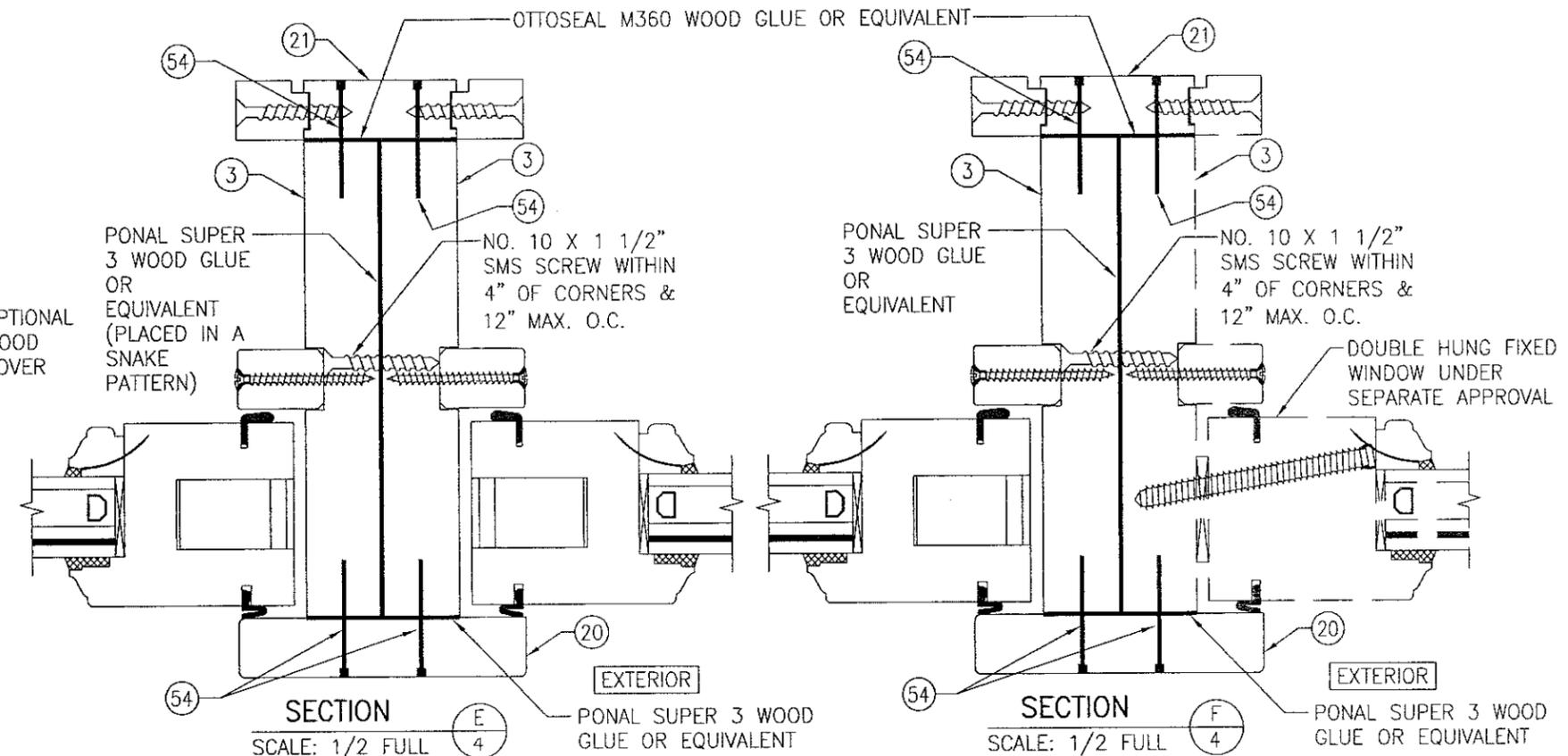
SECTION D
SCALE: 1/2 FULL

(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)



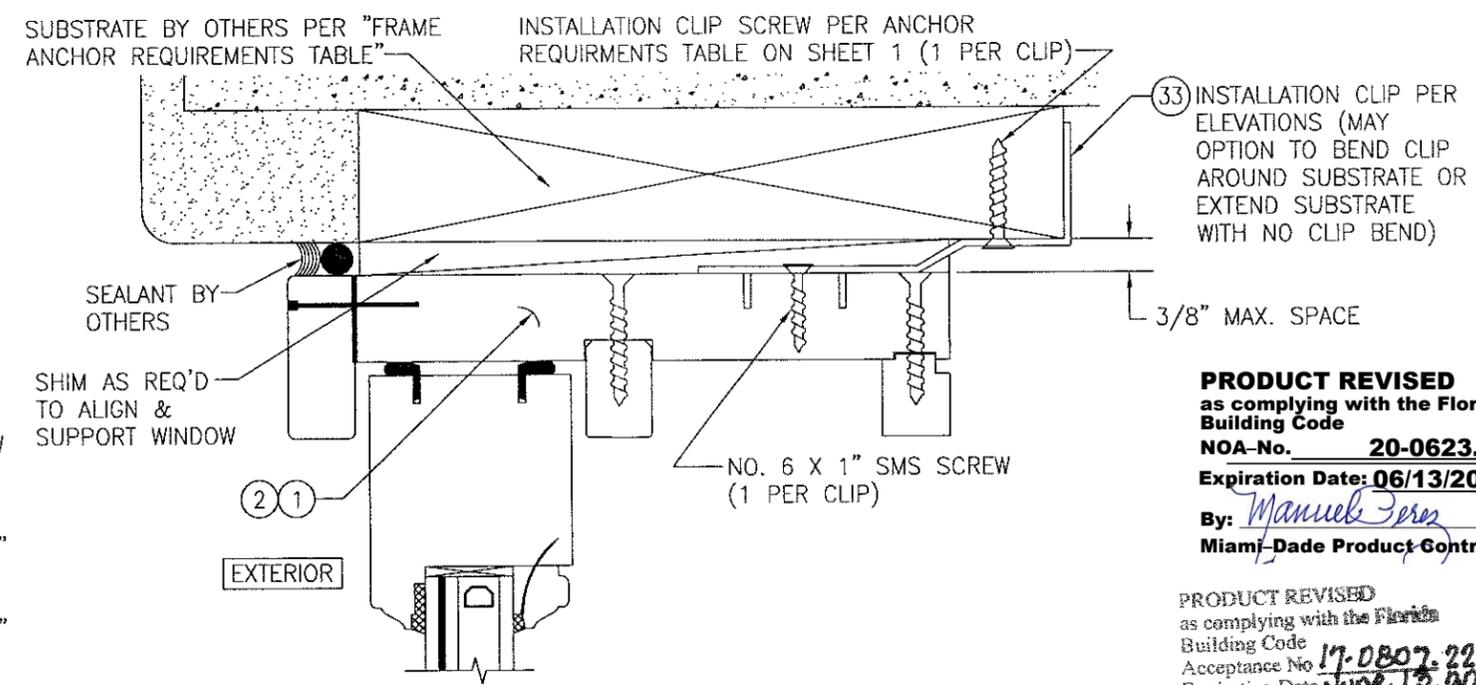
TYPICAL GLAZING DETAIL

- GLASS OPTION 1: 1 1/8" LAMINATED I.G. (3/16" AN./0.075" EASTMAN CHEM. CO. SAFLEX CP/3/16" AN. EXTERIOR; 1/2" AIR SPACE/3/16" AN. INTERIOR)
- GLASS OPTION 2: 1 1/8" LAMINATED I.G. (3/16" AN./0.075" EASTMAN CHEM. CO. SAFLEX CP/3/16" AN. EXTERIOR; 1/2" AIR SPACE/3/16" TEMP. INTERIOR)
- GLASS OPTION 3: 1 1/8" LAMINATED I.G. (3/16" HT. ST./0.075" EASTMAN CHEM. CO. SAFLEX CP/3/16" HT. ST. EXTERIOR; 1/2" AIR SPACE/3/16" TEMP. INTERIOR)



(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)

(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)

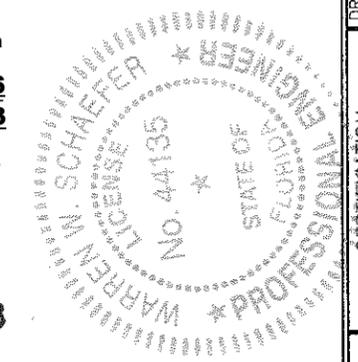


OPTIONAL INSTALLATION CLIP DETAIL

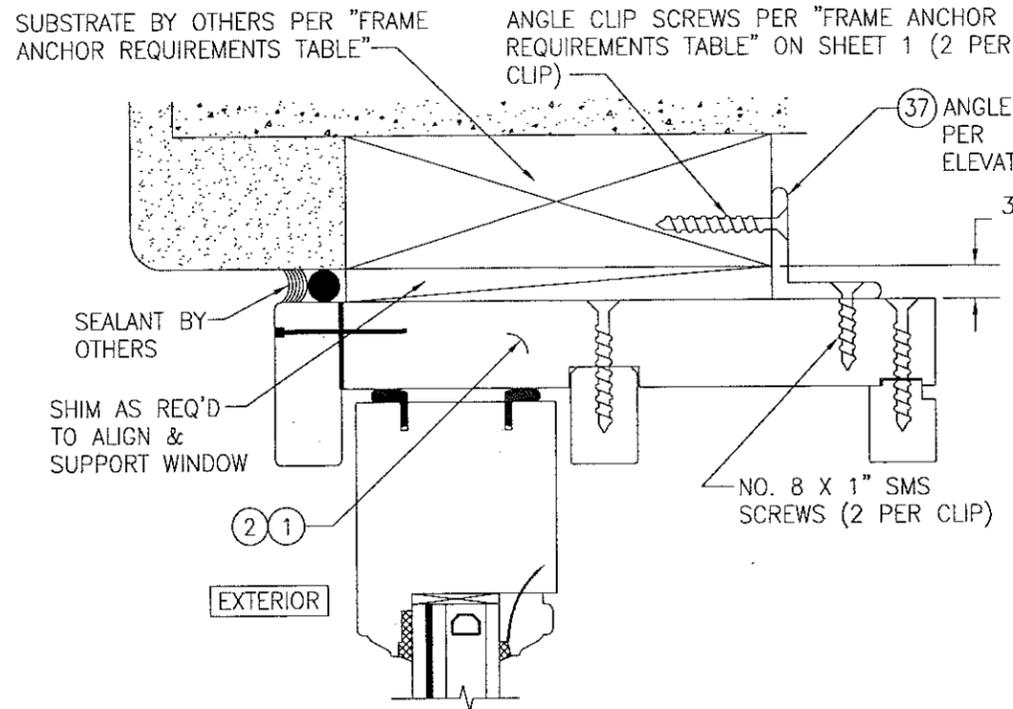
(HEAD SECTION SHOWN, SILL & SIDES ARE INSTALLED THE SAME)
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)

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as complying with the Florida Building Code
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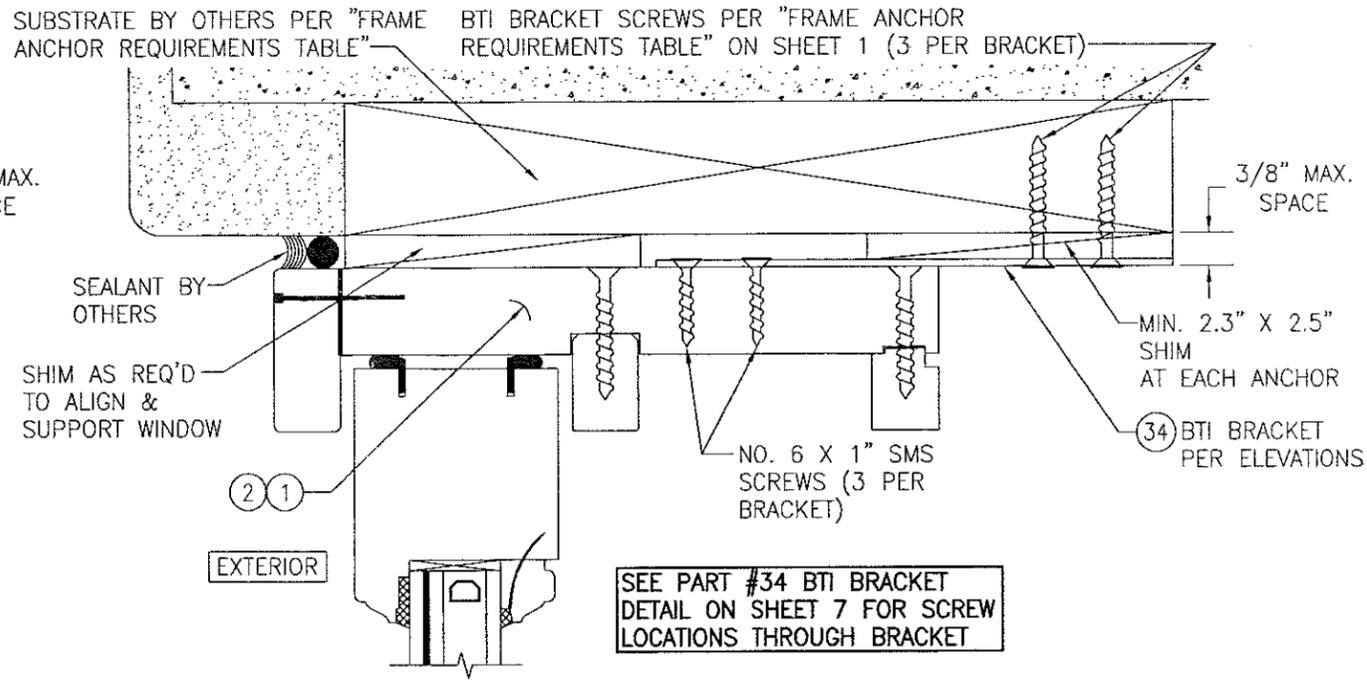


DRAWN BY: W.R.M.	CHECKED BY: W.W.S.
PLOT: 1-2	DATE: 07/02/12
DATE	
BY	
REVISION DESCRIPTION	
NO.	
DRAWING TITLE: SINGLE & DOUBLE HUNG CONCEALED BALANCE SYSTEM IMPACT WINDOW	
MANUFACTURER: TISCHLER UND SOHN (USA) LTD. SIX SUBURBAN AVENUE STAMFORD, CONNECTICUT 203-674-0600	
CONSULTANTS: W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809) 7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424	
CERTIFICATION	JUL 21 2017
DRAWING NO.	REV.
1827	A
SHEET NO.	
4	OF 7



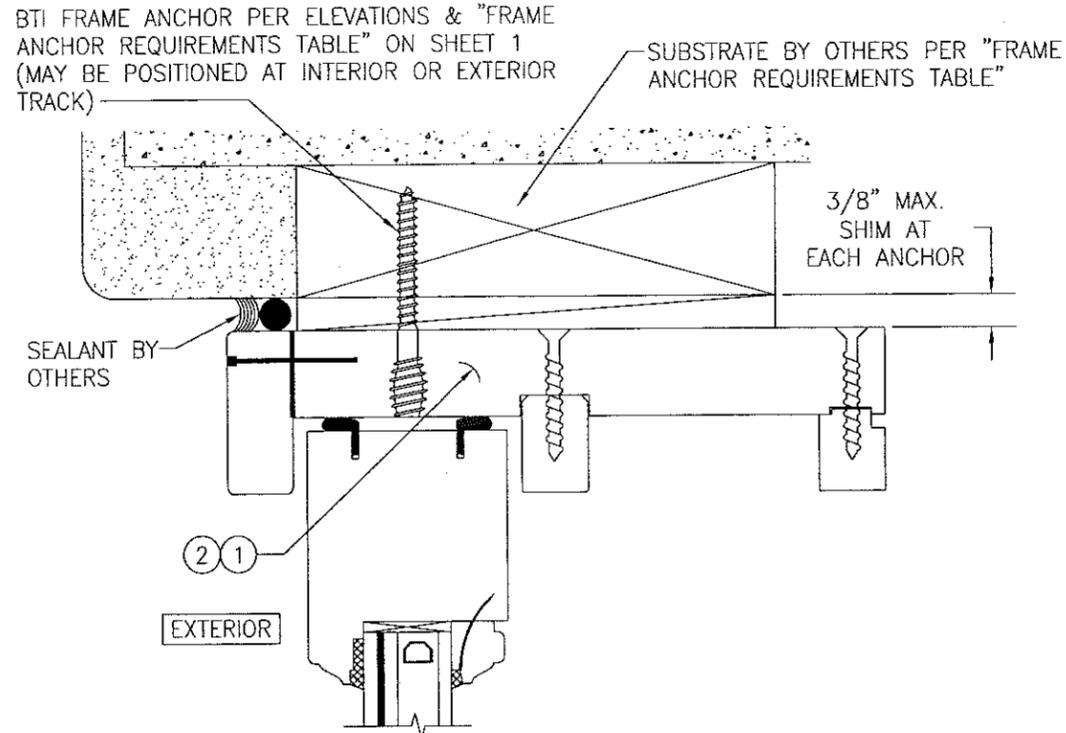
OPTIONAL ANGLE CLIP INSTALLATION DETAIL

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



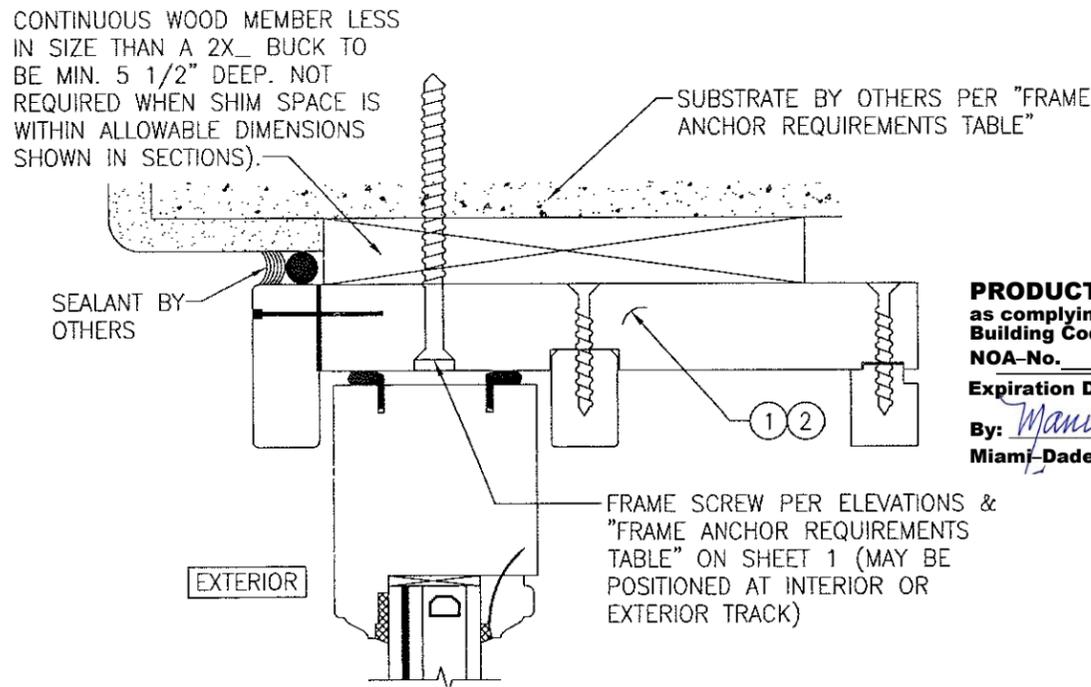
OPTIONAL BTI BRACKET INSTALLATION DETAIL

(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)

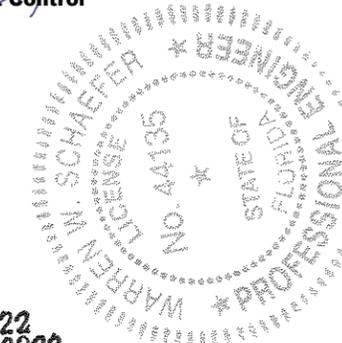


OPTIONAL DIRECT MOUNT DETAIL TO SUBSTRATE WITH SPACER

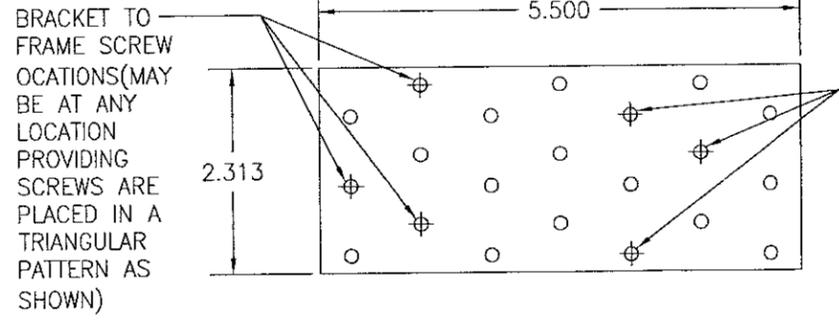
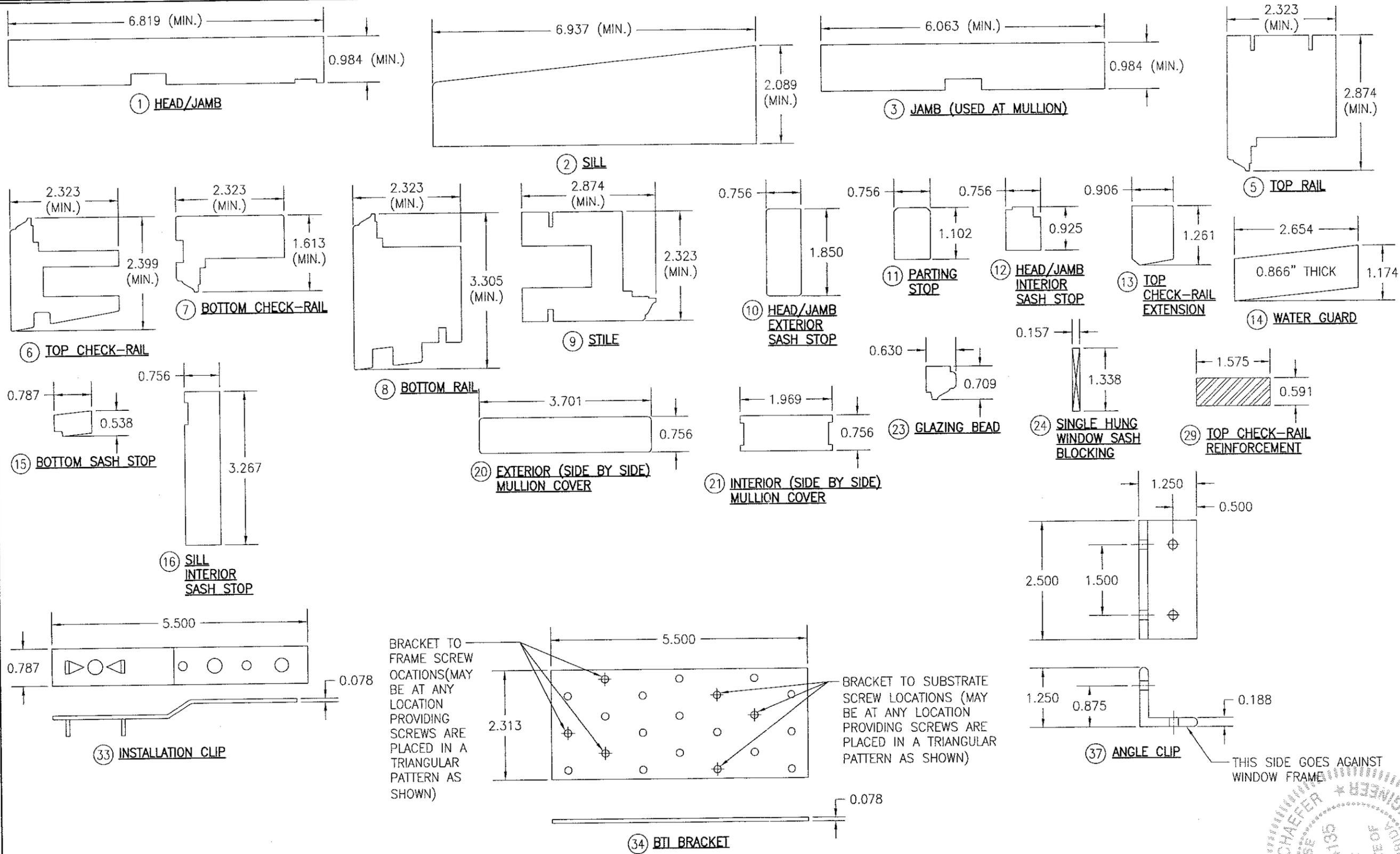
(HEAD SECTION SHOWN, SILL & SIDES ARE INSTALLED THE SAME)
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)

PRODUCT REVISED
as complying with the Florida Building Code
NOA-No. **20-0623.06**
Expiration Date: **06/13/2023**
By: *Manuel Ferr*
Miami-Dade Product Control

PRODUCT REVISED
as complying with the Florida Building Code
Acceptance No. **17-0807.22**
Expiration Date **June 13, 2023**
By: *Manuel Ferr*
Miami-Dade Product Control

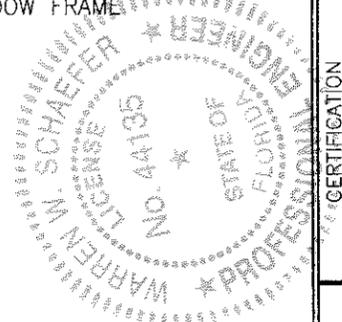


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PLOT: 1-2		DATE: 07/02/12	
DATE	BY	REVISION DESCRIPTION	NO.
DRAWING TITLE: SINGLE & DOUBLE HUNG CONCEALED BALANCE SYSTEM IMPACT WINDOW			
MANUFACTURER: TISCHLER UND SOHN (USA) LTD. SIX SUBURBAN AVENUE STAMFORD, CONNECTICUT 203-674-0600			
CONSULTANTS: W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809) 7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424			
CERTIFICATION	 JUL 21 2017 WARREN W. SCHAEFER, P.E. P.E. NO. 44135		
DRAWING NO.	REV.		
1827	A		
SHEET NO.			
5 OF 7			



PRODUCT REVISED
 as complying with the Florida Building Code
 NOA-No. 20-0623.06
 Expiration Date: 06/13/2023
 By: Manuel Perez
 Miami-Dade Product Control

PRODUCT REVISED
 as complying with the Florida Building Code
 Acceptance No. 17-0807.22
 Expiration Date: June 15, 2025
 By: Manuel Perez
 Miami-Dade Product Control



DRAWN BY: W.R.M.	CHECKED BY: W.W.S.
PLOT: 1-2	DATE: 07/02/12
DATE	BY
REVISION DESCRIPTION	NO.
DRAWING TITLE: SINGLE & DOUBLE HUNG CONCEALED BALANCE SYSTEM IMPACT 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	JUL 21 2017
WARREN W. SCHAEFER, P.E. P.E. NO. 44135	
DRAWING NO. 1827	REV. A
SHEET NO. 6 OF 7	

ITEM #	ITEM DESCRIPTION	MANUFACTURER/NOTES
PARTS		
1	HEAD/JAMB	WOOD
2	SILL	WOOD
3	JAMB (USED AT MULLION)	WOOD
5	TOP RAIL	WOOD
6	TOP CHECK-RAIL	WOOD
7	BOTTOM CHECK-RAIL	WOOD
8	BOTTOM RAIL	WOOD
9	STILE	WOOD
10	HEAD/JAMB EXTERIOR SASH STOP	WOOD
11	PARTING STOP	WOOD
12	HEAD/JAMB INTERIOR SASH STOP	WOOD
13	TOP CHECK-RAIL EXTENSION	WOOD
14	WATER GUARD	WOOD
15	BOTTOM SASH STOP	WOOD
16	SILL INTERIOR SASH STOP	WOOD
20	EXTERIOR (SIDE BY SIDE) MULLION COVER	WOOD
21	INTERIOR (SIDE BY SIDE) MULLION COVER	WOOD
23	GLAZING BEAD	WOOD
24	SINGLE HUNG WINDOW SASH BLOCKING	WOOD
29	TOP CHECK-RAIL REINFORCEMENT	34 KSI STAINLESS STEEL OR A36 STEEL
33	INSTALLATION CLIP	GALVANIZED 54 KSI STEEL
34	BTI BRACKET	GALVANIZED 54 KSI STEEL
37	ANGLE CLIP	6061-T6 ALUMINUM
HARDWARE		
41	SASH LOCK & KEEPER	PHELPS LKF-14
42	CONCEALED BALANCE	PHELPS H583 TO H-590
SEALS & SEALANTS		
46	WEATHERSTRIP	SCHLEGEL QWS-250
47	WEATHERSTRIP	SCHLEGEL QFS-375
48	SILL WEATHERSTRIP	DEVENTER S6961
49	WEATHERSTRIP	SCHLEGEL QL-3055
FASTENERS		
53	NO. 8 X 1 1/2" SMS OR WOOD SCREW	WITHIN 2" FROM CORNERS & 12" MAX. O.C.
54	18 GA. X 1 1/2" S.S. BRAD NAIL	WITHIN 2" FROM CORNERS & 12" MAX. O.C.
55	NO. 8 X 3/4" SMS OR WOOD SCREW	2 PER EACH SASH LOCK AND KEEPER
58	NO. 14 X 3 1/8" BAUTEC WOOD SCREW	WITHIN 4" FROM CORNERS & 12" MAX. O.C.
59	18 GA. X 1 1/2" S.S. CURVED NAIL	WITHIN 4" FROM CORNERS & 12" 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.

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CERTIFICATION JUL 21 2017 WARREN W. SCHAEFER, P.E. P.E. NO. 44135			
DRAWING NO. 1827	REV. A	SHEET NO. 7 OF 7	

PRODUCT REVISED
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Building Code
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Acceptance No. 17-0807-22
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