



DEPARTMENT OF PERMITTING, ENVIRONMENT, AND REGULATORY
AFFAIRS (PERA)
BOARD AND CODE ADMINISTRATION DIVISION

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

NOTICE OF ACCEPTANCE (NOA)

Hartman Windows and Doors, LLC
531 Southern Blvd.
West Palm Beach, FL 33405

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County PERA - Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. PERA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

DESCRIPTION: Series Wood Double Hung Window – L.M.I.

APPROVAL DOCUMENT: Drawing No. **04-HWD-0002**, titled “Double Hung Window – Large Missile Impact Resistant”, sheets 1 through 10 of 10, dated 11/08/04, with last revision dated 01/25/12, prepared by Engineering Express, signed and sealed by Frank L. Bennardo, 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, 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 NOA # **09-0608.13** 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.**



MP
5/24/12

NOA No. 12-0320.20
Expiration Date: April 07, 2015
Approval Date: May 31, 2012
Page 1

Hartman Windows and Doors, LLC

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Manufacturer's die drawings and sections.
2. Drawing No **04-HWD-0002**, titled "Double Hung Window – Large Missile Impact Resistant", sheets 1 through 10 of 10, dated 11/08/04, with last revision dated 01/25/12, prepared by Engineering Express, signed and sealed by Frank L. Bennardo, P.E.

B. TESTS

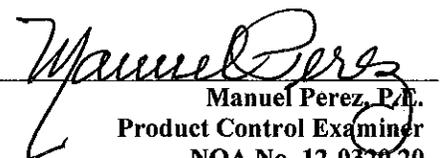
1. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
2) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
3) Water Resistance Test, per FBC, TAS 202-94
4) Large Missile Impact Test per FBC, TAS 201-94
5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
6) Forced Entry Test, per FBC 3603.2 (b) and TAS 202-94
along with marked-up drawings and installation diagram of wood double hung window, X/X configuration, prepared by Hurricane Test Laboratory, LLC, Test Report No. **HTL-0137-1028-02**, dated 10/17 to 21/02, signed and sealed by Vinu J. Abraham, P.E.
(Submitted under previous NOA No. 04-1129.03)
2. Test reports on: 1) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
2) Large Missile Impact Test per FBC, TAS 201-94
3) Cyclic Wind Pressure Loading per FBC, TAS 203-94
along with marked-up drawings and installation diagram of two wood double hung windows mullied together, X/X-X/X configuration, and two single windows, X/X configuration, prepared by Hurricane Test Laboratory, LLC, Test Report No. **HTL-0137-0114-04**, dated 1/28-29/04, signed and sealed by Vinu J. Abraham, P.E.
(Submitted under previous NOA No. 04-1129.03)

C. CALCULATIONS

1. Anchor verification calculations and structural analysis, complying with FBC-2007, dated 07/22/09, prepared by Engineering Express, signed and sealed by Frank L. Bennardo, P.E.
(Submitted under previous NOA#09-0608.13)
2. Glazing complies with ASTM E1300-04

D. QUALITY ASSURANCE

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


Manuel Perez, P.E.
Product Control Examiner
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E. MATERIAL CERTIFICATIONS

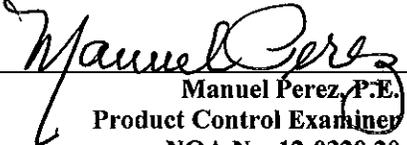
1. Notice of Acceptance No. **11-0624.02** issued to **E.I. DuPont DeNemours & Co., Inc.** for their "**DuPont SentryGlas® Interlayer**" dated 08/25/11, expiring on 01/14/17.
2. Notice of Acceptance No. **11-0325.05** issued to Solutia, Inc. for their "**Saflex and Vanceva clear and color interlayers**" dated 05/05/11, expiring on 05/21/16
3. Notice of Acceptance No. **07-1116.11** issued to **Saf-Glas, LLC** for their "**SAF-GLAS Polycarbonate Laminate**", dated 12/27/07, expiring on 12/16/12.

F. STATEMENTS

1. Statement letter of conformance, complying with FBC-2010, dated March 15, 2012, signed and sealed by Frank L. Bennardo, P.E.
2. Statement letter of no financial interest, issued by Al-Farooq Corporation, dated March 15, 2012, signed and sealed by Frank L. Bennardo, P.E.
3. Laboratory compliance letter for Test Reports No. **HTL- 0137-1028-02 and HTL- 0137-0114-04**, issued by Hurricane Test Laboratory, LLC, dated 08/09/04, signed and sealed by Vinu J. Abraham, P.E.
(Submitted under previous NOA#04-1129.03)

G. OTHER

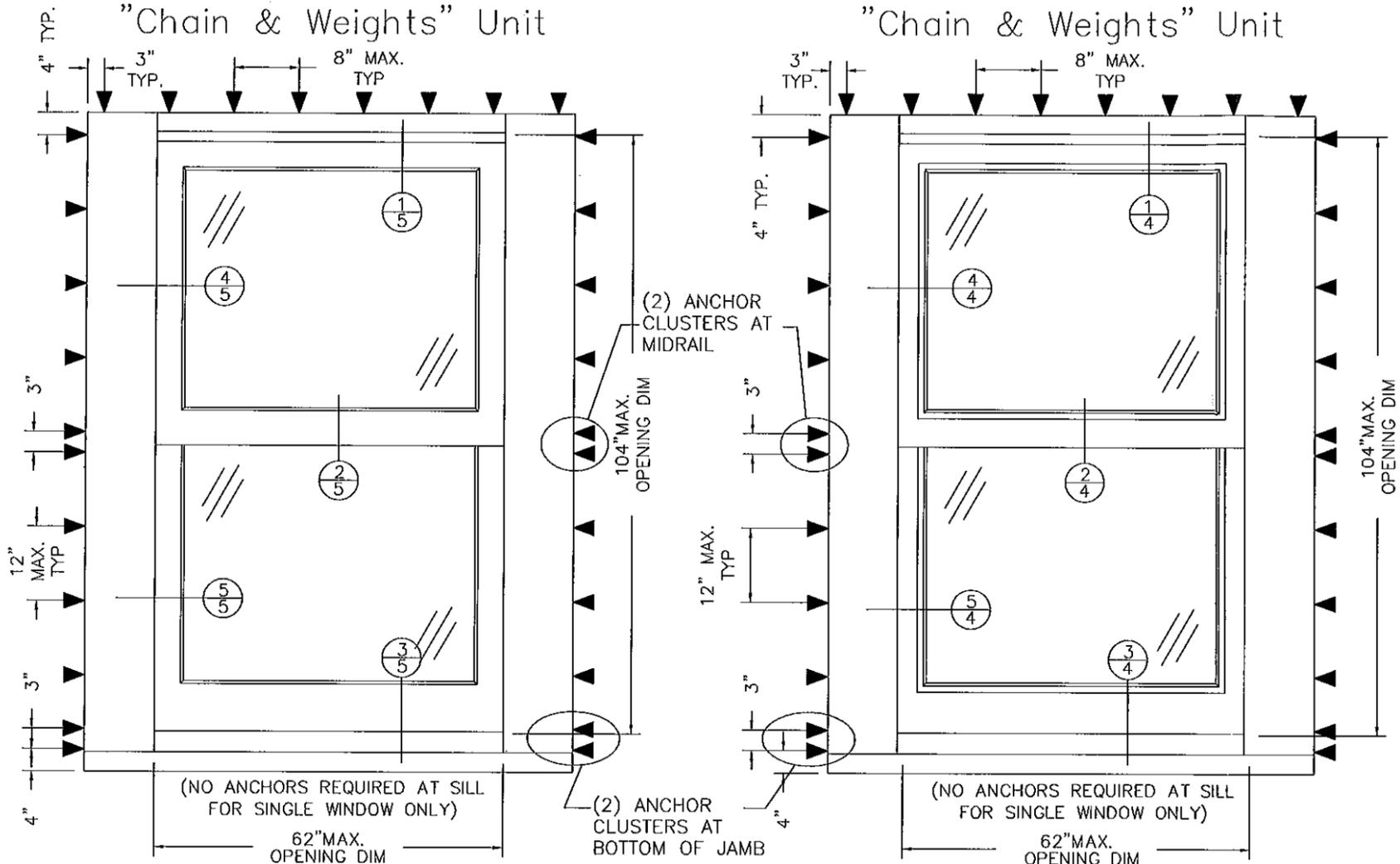
1. Notice of Acceptance No. **09-0608.13**, issued to Hartman Windows & Doors, LLC for their Series Wood Double Hung Window – L.M.I., approved on 09/30/09 and expiring on 04/07/15.


Manuel Perez, P.E.
Product Control Examiner
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DOUBLE HUNG WINDOW

Typical Interior Glazed "Chain & Weights" Unit

Typical Exterior Glazed "Chain & Weights" Unit



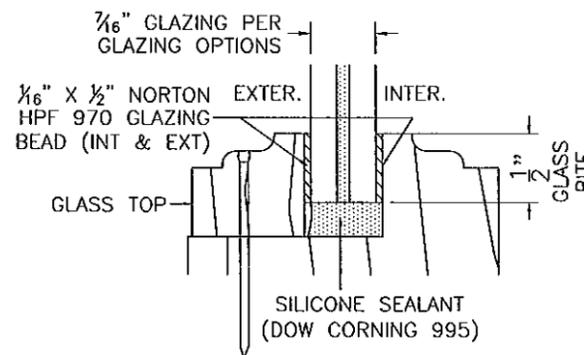
ANCHORS LEGEND
 (3) #10 SMS (3/4" MIN. THREAD PENETRATION INTO MAHOGANY WINDOW) AND (2) #12 SMS (1-1/2" MIN. THREAD PENETRATION INTO 2x SOUTHERN PINE BUCK)

ALLOWABLE DESIGN PRESSURES:
 +60 PSF
 -60 PSF

GENERAL NOTES:

- 1) THE SYSTEM DESCRIBED HEREIN HAS BEEN DESIGNED AND TESTED IN ACCORDANCE WITH THE 2010 FLORIDA BUILDING CODE PER TAS PROTOCOLS 201, 201, & 203.
- 2) ALL UNITS ARE LARGE MISSILE IMPACT RESISTANT. NO PROTECTION FROM WINDBORNE DEBRIS IS REQUIRED FOR ANY INSTALLATION.
- 3) POSITIVE AND NEGATIVE DESIGN PRESSURES CALCULATED FOR USE WITH THIS SYSTEM SHALL BE DETERMINED PER SEPARATE ENGINEERING IN ACCORDANCE WITH THE GOVERNING CODE. PRESSURE REQUIREMENTS AS DETERMINED IN ACCORDANCE WITH ASCE 7-10 AND CHAPTER 1609 OF THE 2010 FLORIDA BUILDING CODE SHALL BE LESS THAN OR EQUAL TO THE POSITIVE OR NEGATIVE DESIGN PRESSURE CAPACITY VALUES LISTED HEREIN FOR ANY ASSEMBLY AS SHOWN.
- 4) DESIGN PRESSURES NOTED HEREIN ARE BASED ON MAXIMUM TESTED PRESSURES DIVIDED BY A 1.5 SAFETY FACTOR.
- 5) ALL WOOD PARTS SHALL BE SOUTHERN PINE/ MAHOGANY WITH THE MINIMUM SPECIFIC GRAVITY OF G=0.55 OR ANY NATURALLY DURABLE WOOD WITH THE MINIMUM GRADE 2 AND WITH A SPECIFIC GRAVITY OF G = 0.55 AND MIN DOWEL BEARING STRENGTH Fe=5450psi.
- 6) ALL EXPOSED WOOD SHALL BE TREATED WITH EITHER SICKENS® CETOL-1 BASECOAT AND CETOL-23 TOPCOAT (FOR STAINED FINISHES) OR SHERWIN WILLIAMS® DURATION EXTERIOR ACRYLIC LATEX (FOR PAINTED FINISHES).
- 7) THE SYSTEM DETAILED HEREIN IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SPECIFIC SITE. FOR SITE CONDITIONS DIFFERENT FROM THE CONDITIONS DETAILED HEREIN, A LICENSED ENGINEER OR REGISTERED ARCHITECT SHALL PREPARE SITE-SPECIFIC DOCUMENTS AND SUBMIT FOR A ONE-TIME NOTICE OF ACCEPTANCE FOR USE IN CONJUNCTION WITH THIS DOCUMENT.
- 8) PERMIT HOLDER SHALL VERIFY THE ADEQUACY OF THE EXISTING STRUCTURE TO WITHSTAND SUPERIMPOSED LOADS. ALL 2x WOOD BUCKS SHALL BE ANCHORED TO THE HOST STRUCTURE TO ADEQUATELY TRANSFER ALL SUPERIMPOSED LOADS.

(INTER GLAZED OPTION SHOWN. FOR EXTER OPTION, REVERSE "INTERIOR" & "EXTERIOR" DESIGNATION)



GLAZING DETAIL:

ANCHOR NOTES:

- 1) ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS, WITH 3/4" MIN. EDGE DISTANCE.
- 2) ALL UNITS SHALL BE ANCHORED TO EXISTING 2x WOOD BUCK OR DIRECTLY TO 2x MIN WOOD HOST STRUCTURE WITH STEEL STRAPS SPACED AS FOLLOWS:
 - AT HEAD: 3" FROM EACH UNIT CORNER & 8" O.C.
 - AT JAMBS: 4" FROM EACH UNIT CORNER & 12" O.C.
 - AT SILL: NO ANCHORS REQUIRED
- 3) STRAPS SHALL BE 1/16" x 1-1/4" (MIN), ASTM A653 STRUCTURAL QUALITY GRADE 33 (MIN) STEEL WITH MIN Fu=45ksi.
- 4) EACH STRAP SHALL BE FASTENED TO THE MAHOGANY WINDOW FRAME WITH (3) #10 SMS (3/4" MIN EMBED) AND TO THE 2x SOUTHERN PINE BUCK WITH (2) #12 SMS (1-1/2" MIN EMBED), AS SHOWN HEREIN. SEE GENERAL NOTE No. 5.
- 5) ALL SHEET METAL AND/OR WOOD SCREWS SHALL BE SAE GRADE 5 STEEL OR EQUIVALENT.

GLAZING OPTIONS:

- 7/16" "Sentry Glass Plus" by E.I. Dupont (NOA #11-0624.02):
 - 3/16" ANNEALED GLASS
 - 0.090" DuPont SENTRYGLASS PLUS INTERLAYER
 - 3/16" ANNEALED GLASS
- 7/16" "SAFLEX" by Solutia (NOA #11-0325.05):
 - 3/16" HEAT STRENGTHENED GLASS
 - 0.090" SAFLEX PVB INTERLAYER
 - 3/16" HEAT STRENGTHENED GLASS
- 7/16" "Security Impact Glass" by SAFGLASS (NOA #07-1116.11):
 - 3/16" ANNEALED OR HEAT STRENGTHENED GLASS
 - 0.015" URETHANE ADHESIVE
 - 0.070" POLYCARBONATE "S.I.G." INTERLAYER
 - 0.015" URETHANE ADHESIVE
 - 3/16" ANNEALED OR HEAT STRENGTHENED GLASS

FRANK L. BERNARDO, P.E.
 LICENSE
 No. 46549
 03/15/2012
 STATE OF FLORIDA
 PROFESSIONAL ENGINEERING
 EXPRESS
 160 SW 12th AVENUE, #1100
 DEERFIELD BEACH, FL 33442
 Ph: (954) 354-0660 Fax: (954) 354-0661
 WWW.ENGEXP.COM
 CERT OF AUTH #9885
 A FRANK L. BERNARDO, P.E., INC. INNOVATION

HARTMAN WINDOWS & DOORS, LLC
 531 SOUTHERN BLVD
 WEST PALM BEACH, FL 33405
 DOUBLE HUNG WINDOW
 LARGE MISSILE IMPACT RESISTANT

DRWN	CHKD	DATE
CL	FLB	11/8/04
CL	FLB	6/16/05
AML	RKB	08/21/09
KL	FLB	01/25/12

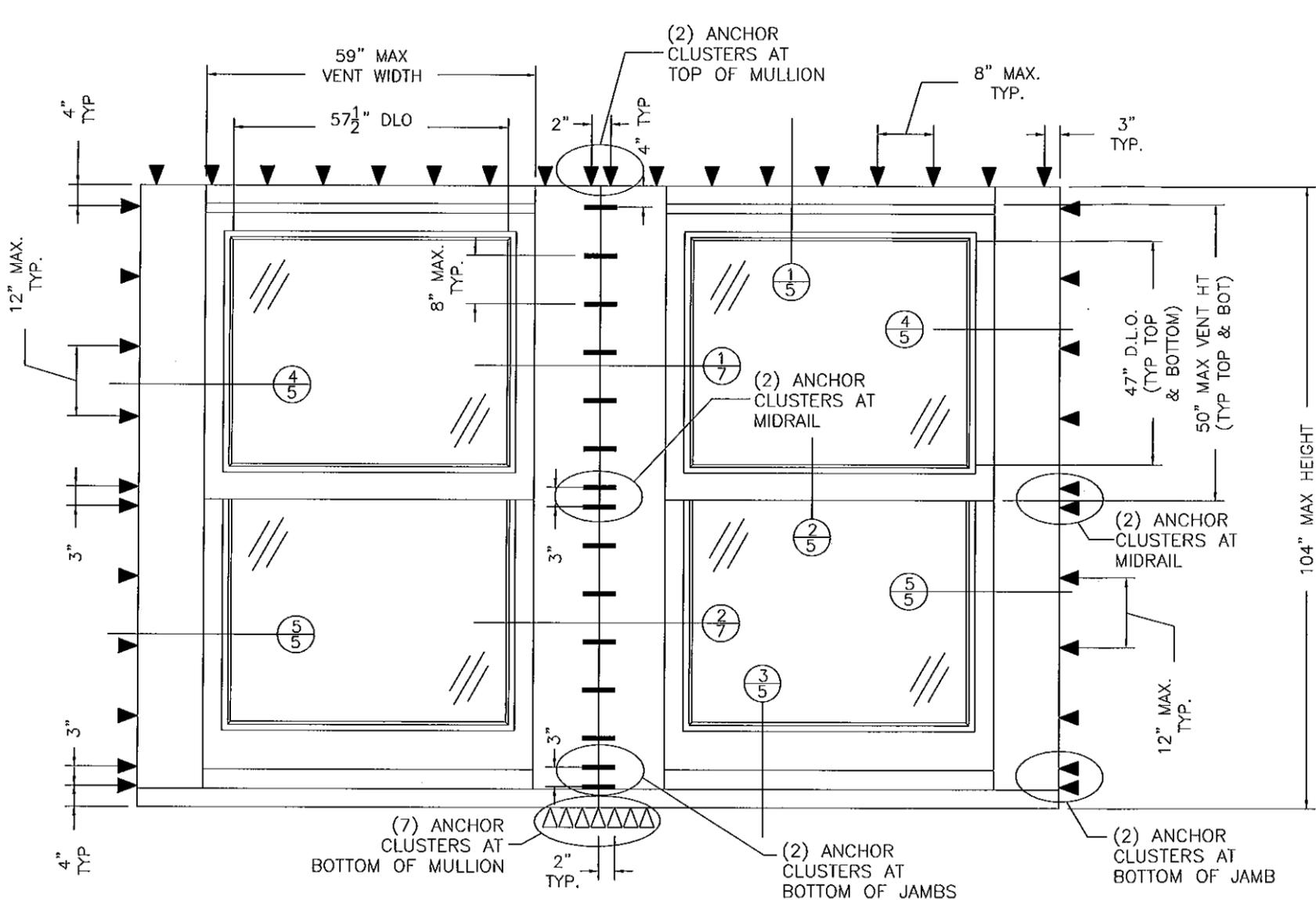
REMARKS
 INIT ISSUE
 2004 FBC
 2007 FBC
 COUNTY COMMENTS
 2010 FBC

04-HWD-0002
 SCALE: 1/8" = 1'-0"
 PAGE DESCRIPTION:
 1 of 10

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 Acceptance No 12-0320-20
 Expiration Date APRIL 1, 2015
 By *Manuel Perez*
 Miami Dade Product Control

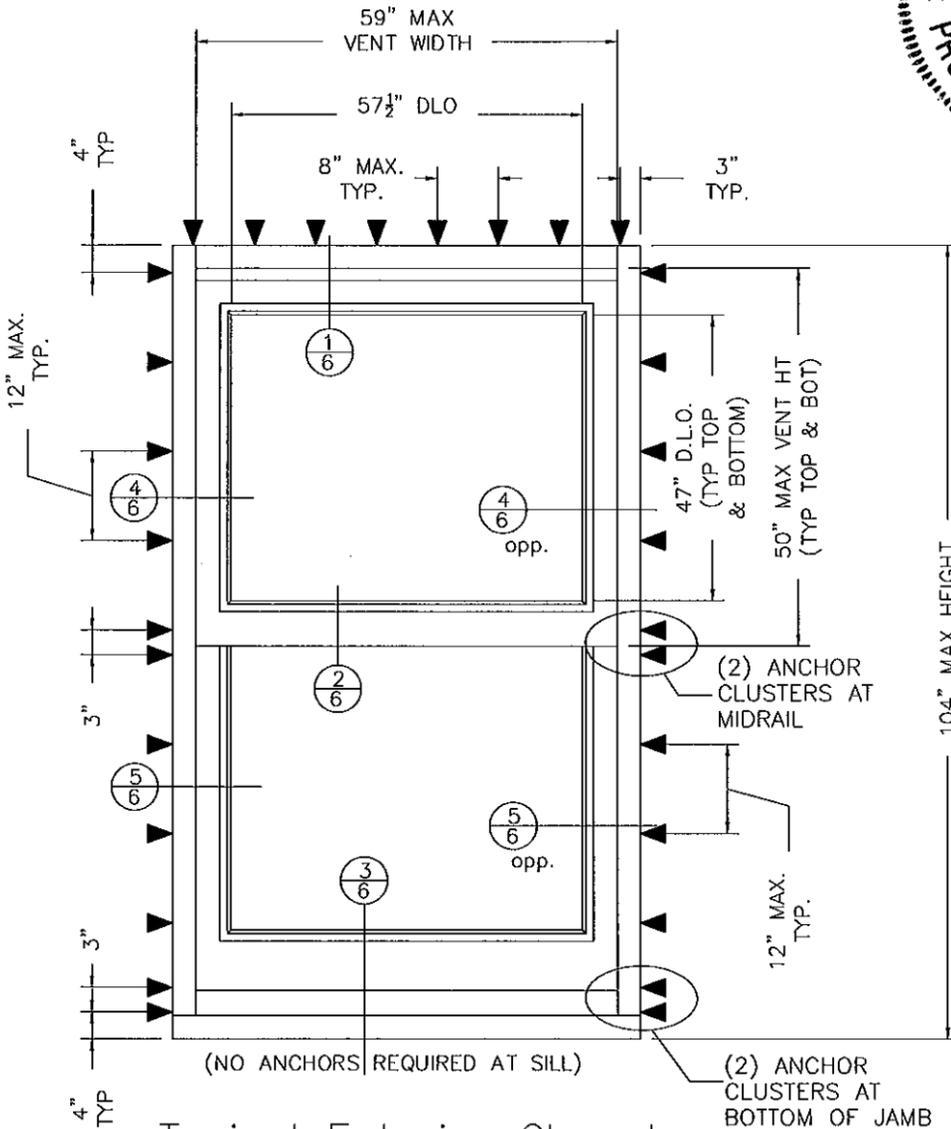
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DOUBLE HUNG WINDOW (SIDE-BY-SIDE INSTALLATIONS)



Typical Interior Glazed
"Chain & Weights" Units
Installed Side-By-Side

NOTE:
TWO (2) "CHAIN & WEIGHTS" UNITS MAY BE
INSTALLED SIDE-BY-SIDE WITH NO SEPARATE
MULLIONS OR ADDITIONAL REINFORCEMENT



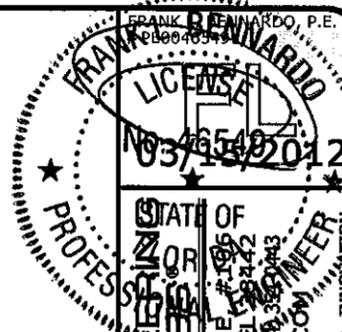
Typical Exterior Glazed
"Spring & Balance" Unit

ANCHORS LEGEND

- (5) #12 SMS (1-1/2" MIN. THREAD PENETRATION INTO MAHOGANY WINDOW)
- ▲ (3) #10 SMS (3/4" MIN. THREAD PENETRATION INTO MAHOGANY WINDOW) AND (2) #12 SMS (1-1/2" MIN. THREAD PENETRATION INTO 2x SOUTHERN PINE BUCK)
- △ (2) #10 SMS (3/4" MIN. THREAD PENETRATION INTO MAHOGANY WINDOW) AND (1) #12 SMS (1-1/2" MIN. THREAD PENETRATION INTO 2x SOUTHERN PINE BUCK)

PRODUCT REVISED
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By *Manuel Juez*
Miami Dade Product Control



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HARTMAN WINDOWS & DOORS, ILLC
531 SOUTHERN BLVD
WEST PALM BEACH, FL 33405
DOUBLE HUNG WINDOW
LARGE MISSILE IMPACT RESISTANT

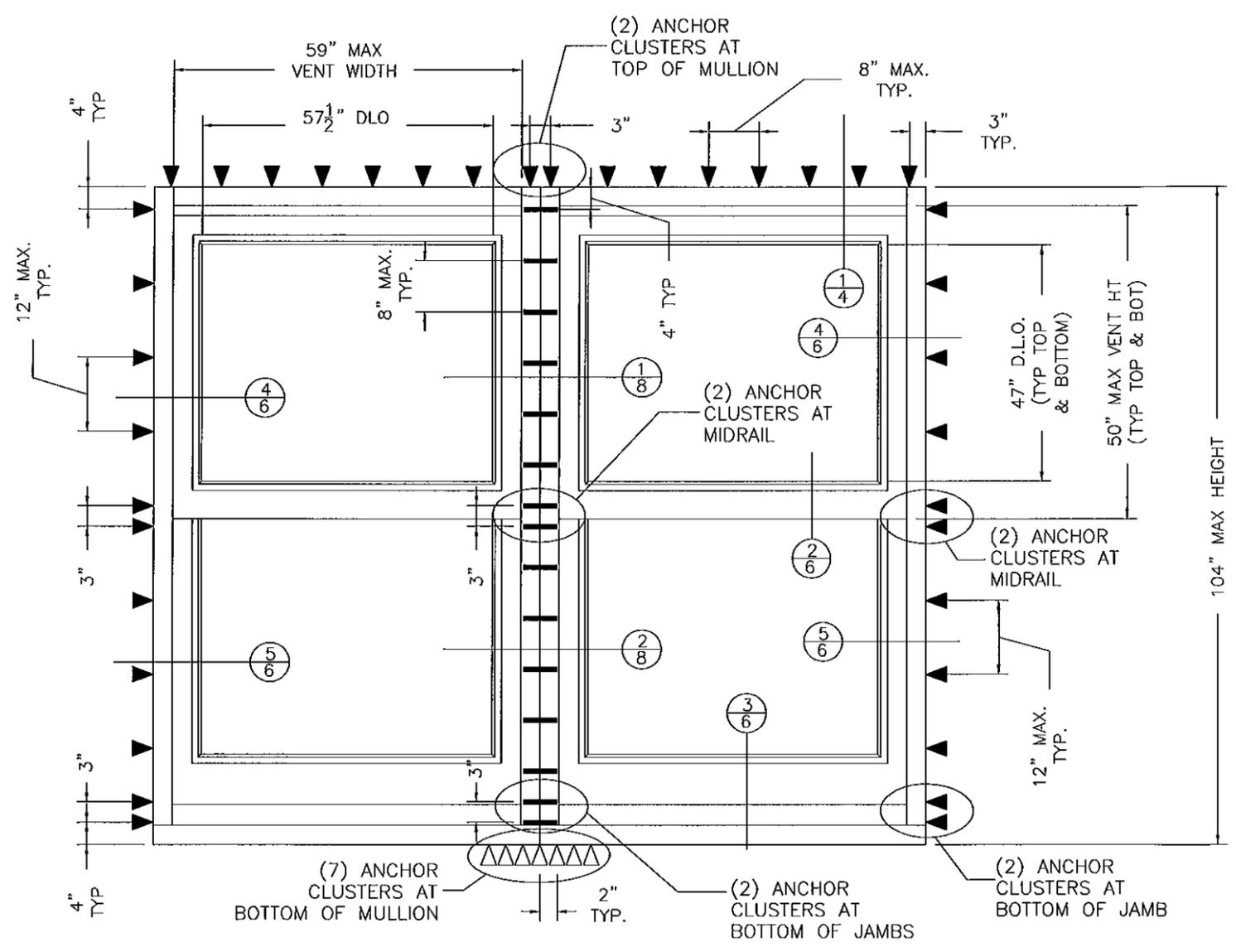
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08/21/09	AML	RGB	08/21/09
01/25/12	KL	FLB	01/25/12

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PAGE DESCRIPTION: 07

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DOUBLE HUNG WINDOW (SIDE-BY-SIDE INSTALLATIONS)



Typical Exterior Glazed
"Spring & Balance" Units
Installed Side-By-Side

NOTE:
TWO (2) "SPRING & BALANCE" UNITS MAY BE
INSTALLED SIDE-BY-SIDE WITH NO SEPARATE
MULLIONS OR ADDITIONAL REINFORCEMENT

- ANCHORS LEGEND**
- (5) #12 SMS (1-1/2" MIN. THREAD PENETRATION INTO MAHOGANY WINDOW)
 - ▲ (3) #10 SMS (3/4" MIN. THREAD PENETRATION INTO MAHOGANY WINDOW) AND (2) #12 SMS (1-1/2" MIN. THREAD PENETRATION INTO 2x SOUTHERN PINE BUCK)
 - △ (2) #10 SMS (3/4" MIN. THREAD PENETRATION INTO MAHOGANY WINDOW) AND (1) #12 SMS (1-1/2" MIN. THREAD PENETRATION INTO 2x SOUTHERN PINE BUCK)

FRANK L. BENNARDI, P.E.
No. 46549
03/15/2012

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531 SOUTHERN BLVD
WEST PALM BEACH, FL 33405

DOUBLE HUNG WINDOW
LARGE MISSILE IMPACT RESISTANT

DRWN	CHKD	DATE
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REMARKS
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2007 FBC
COUNTY COMMENTS
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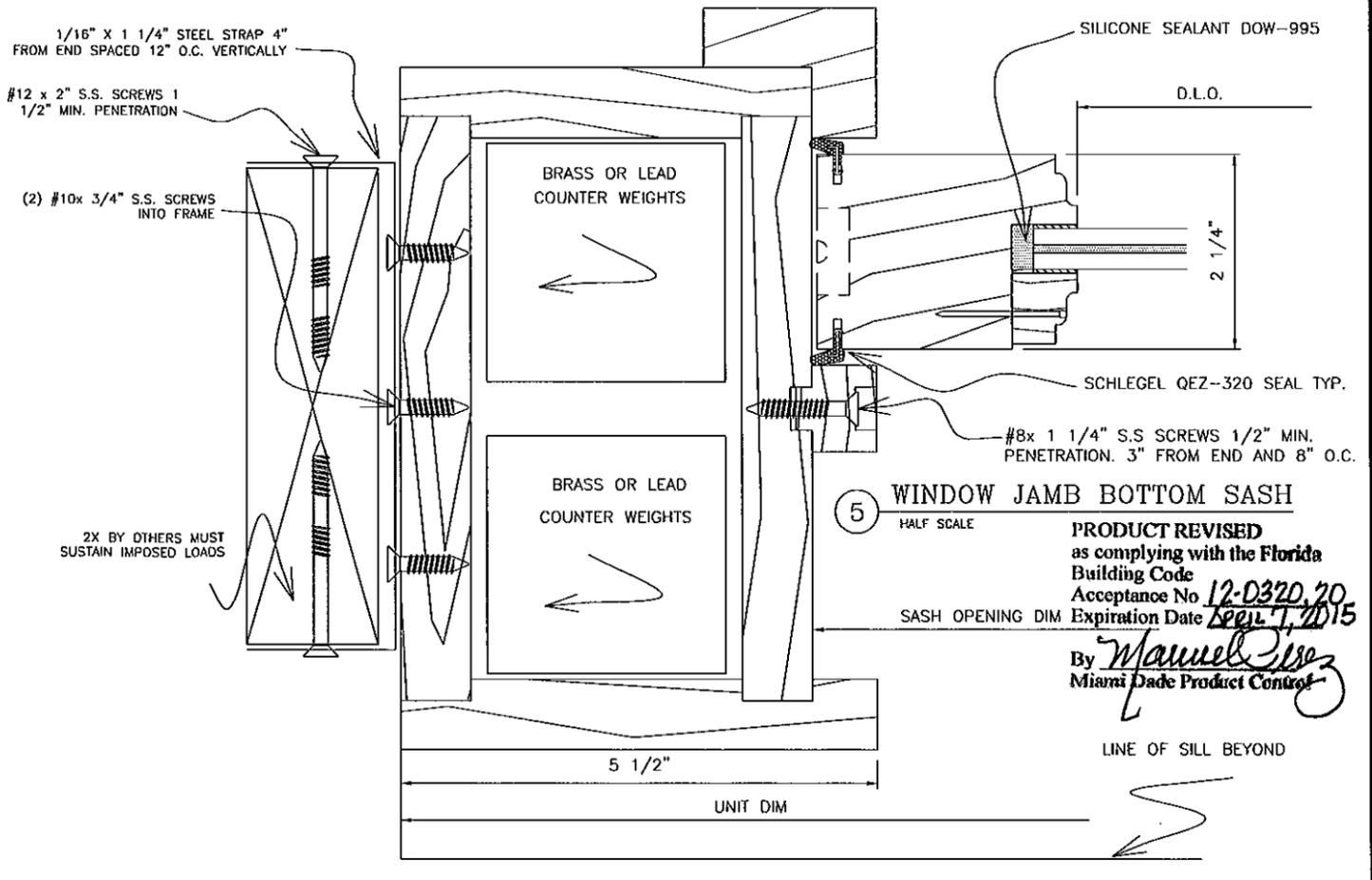
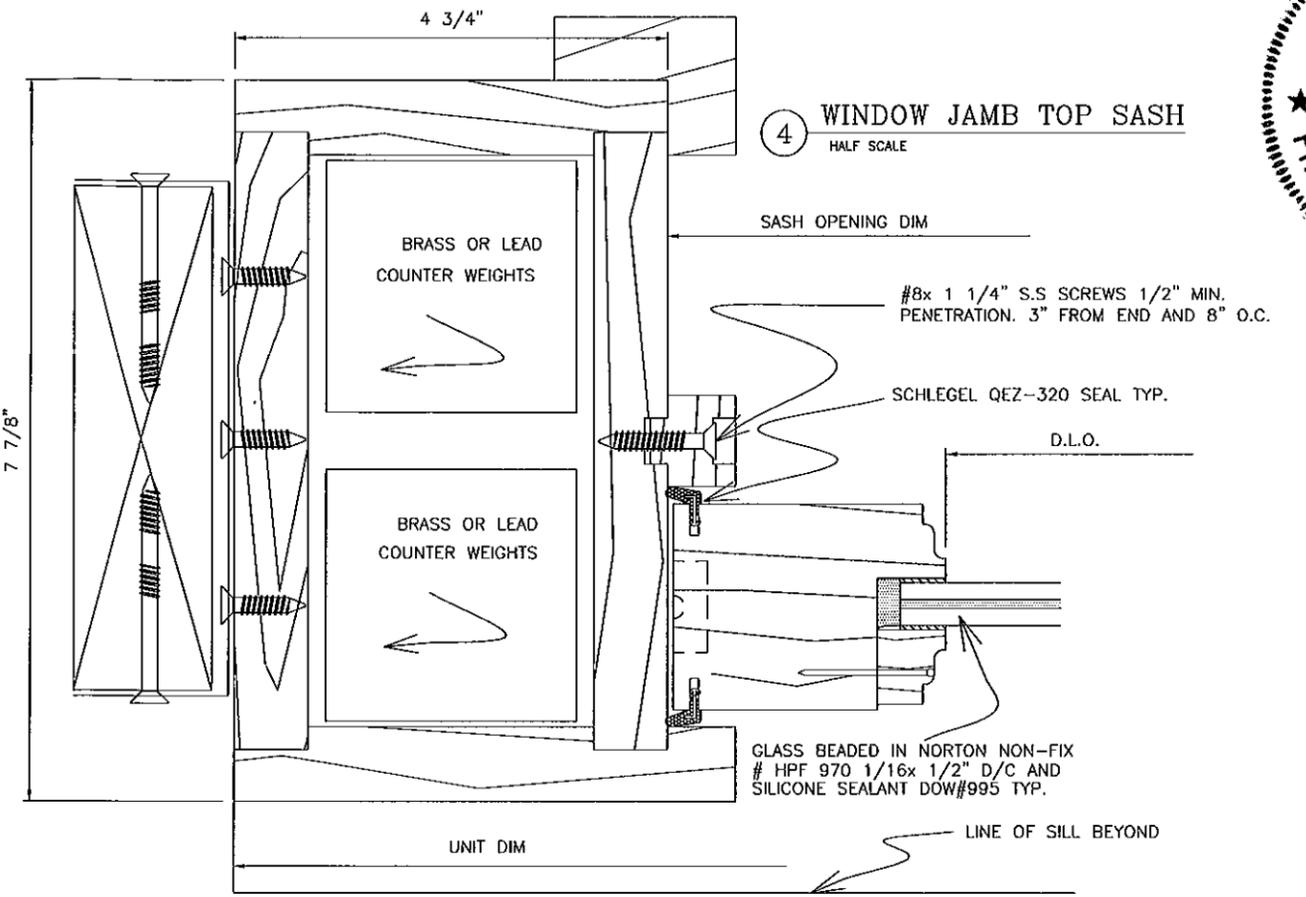
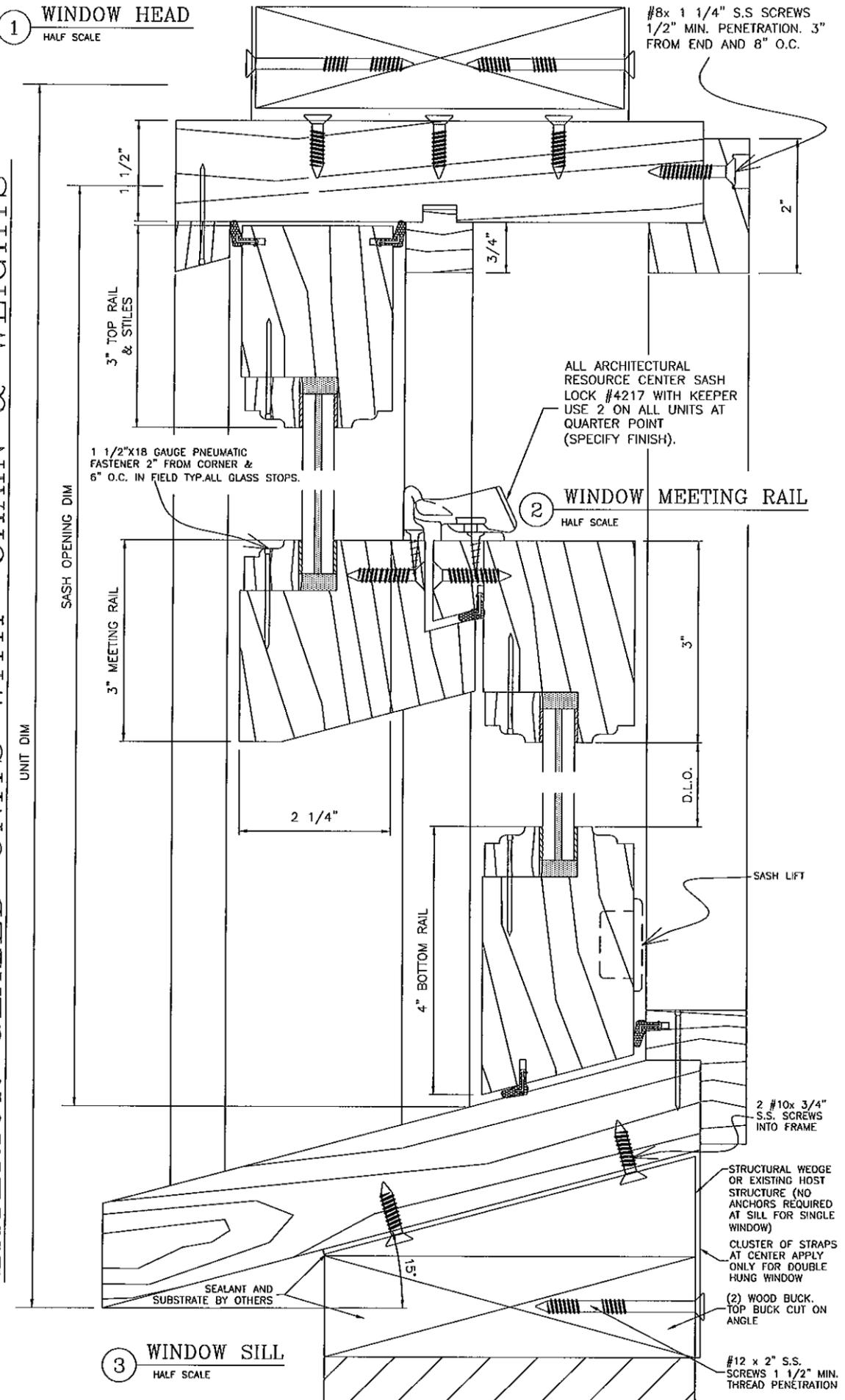
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By *Manuel Perez*
Miami Dade Product Control

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EXTERIOR GLAZED UNITS WITH "CHAIN & WEIGHTS"



FRANK L. BENNARDO
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A FRANK L. BENNARDO, P.E., INC. INNOVATION

HARTMAN WINDOWS & DOORS, LLC
531 SOUTHERN BLVD
WEST PALM BEACH, FL 33405
DOUBLE HUNG WINDOW
LARGE MISSILE IMPACT RESISTANT

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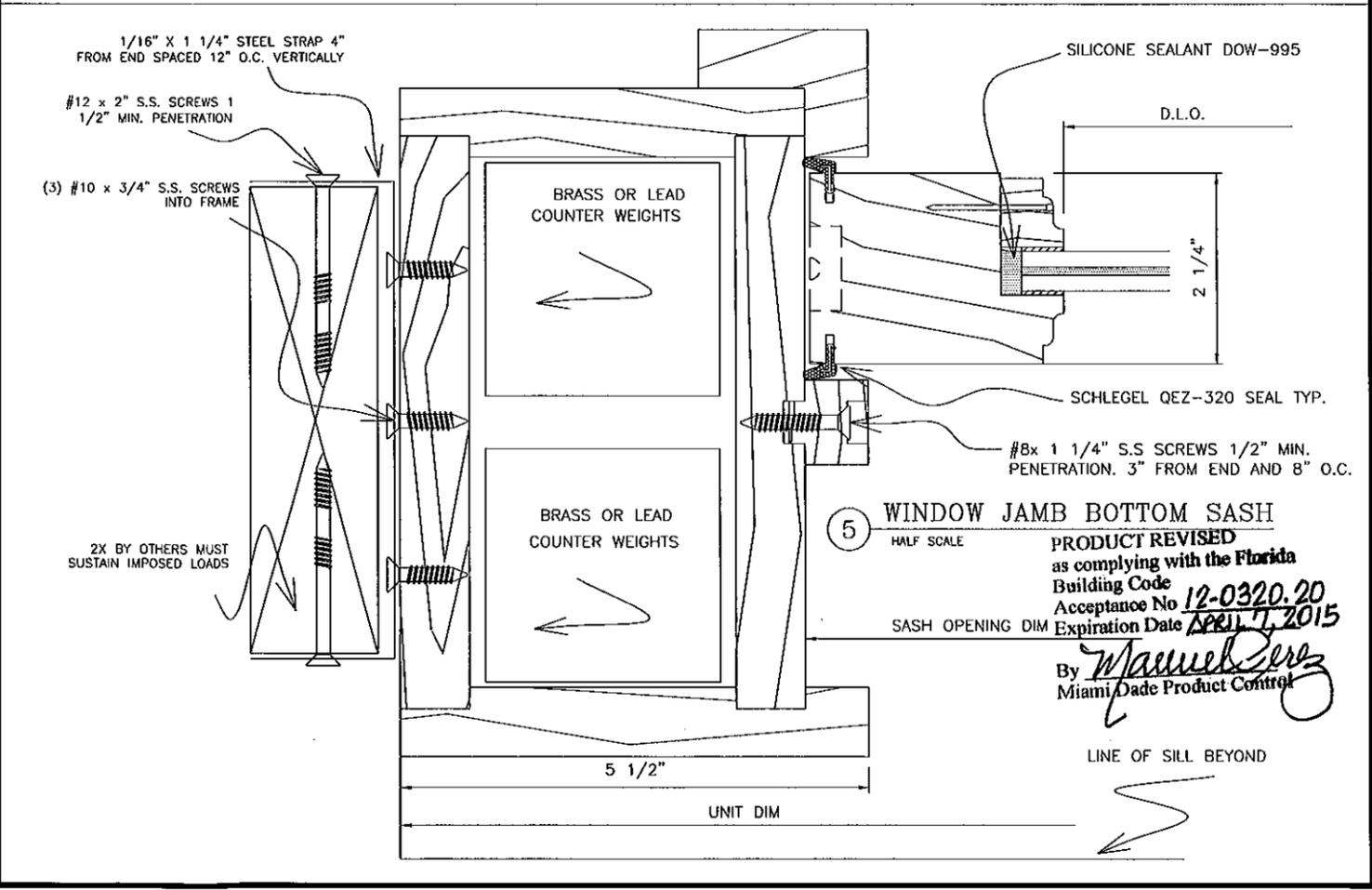
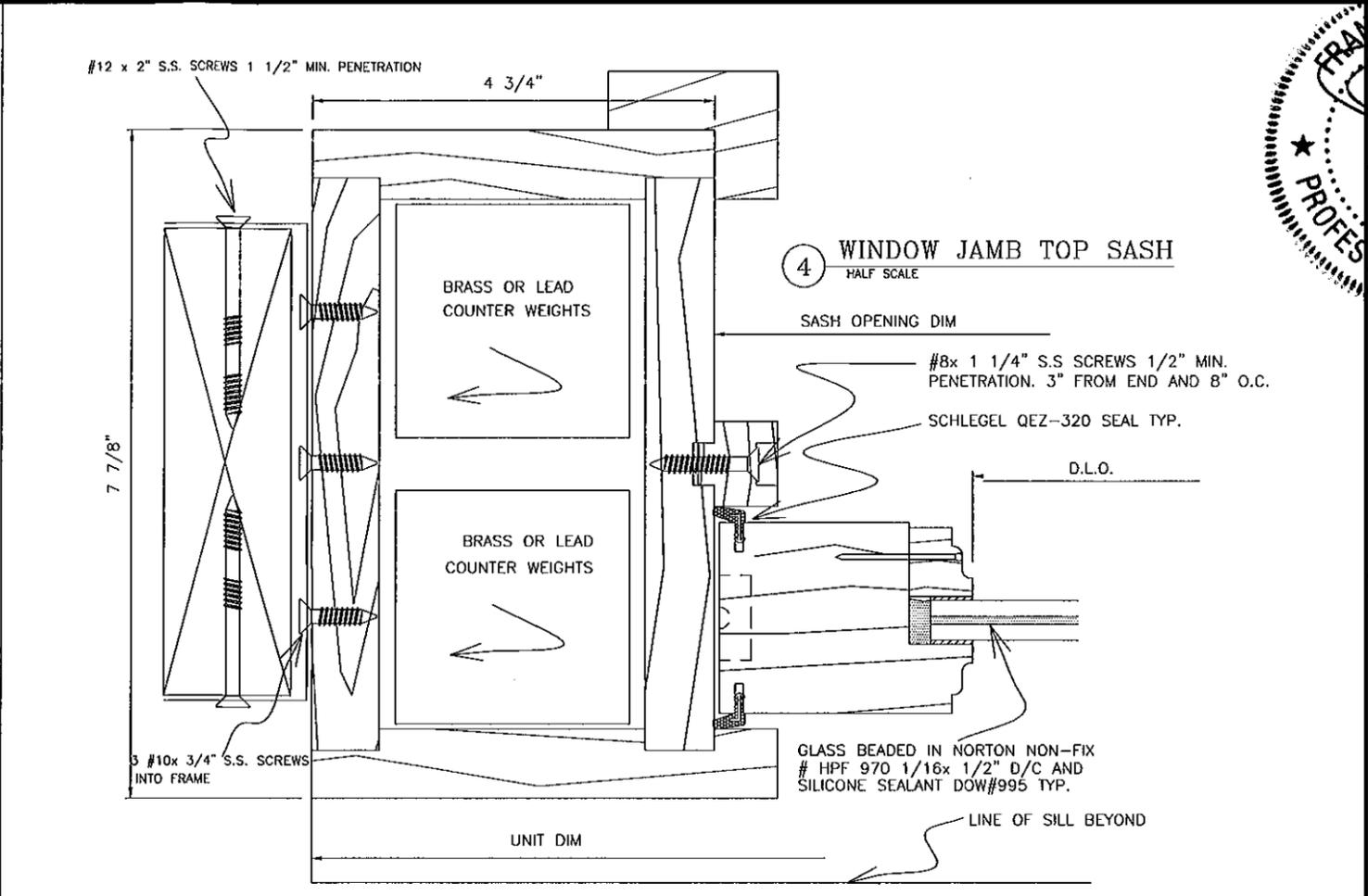
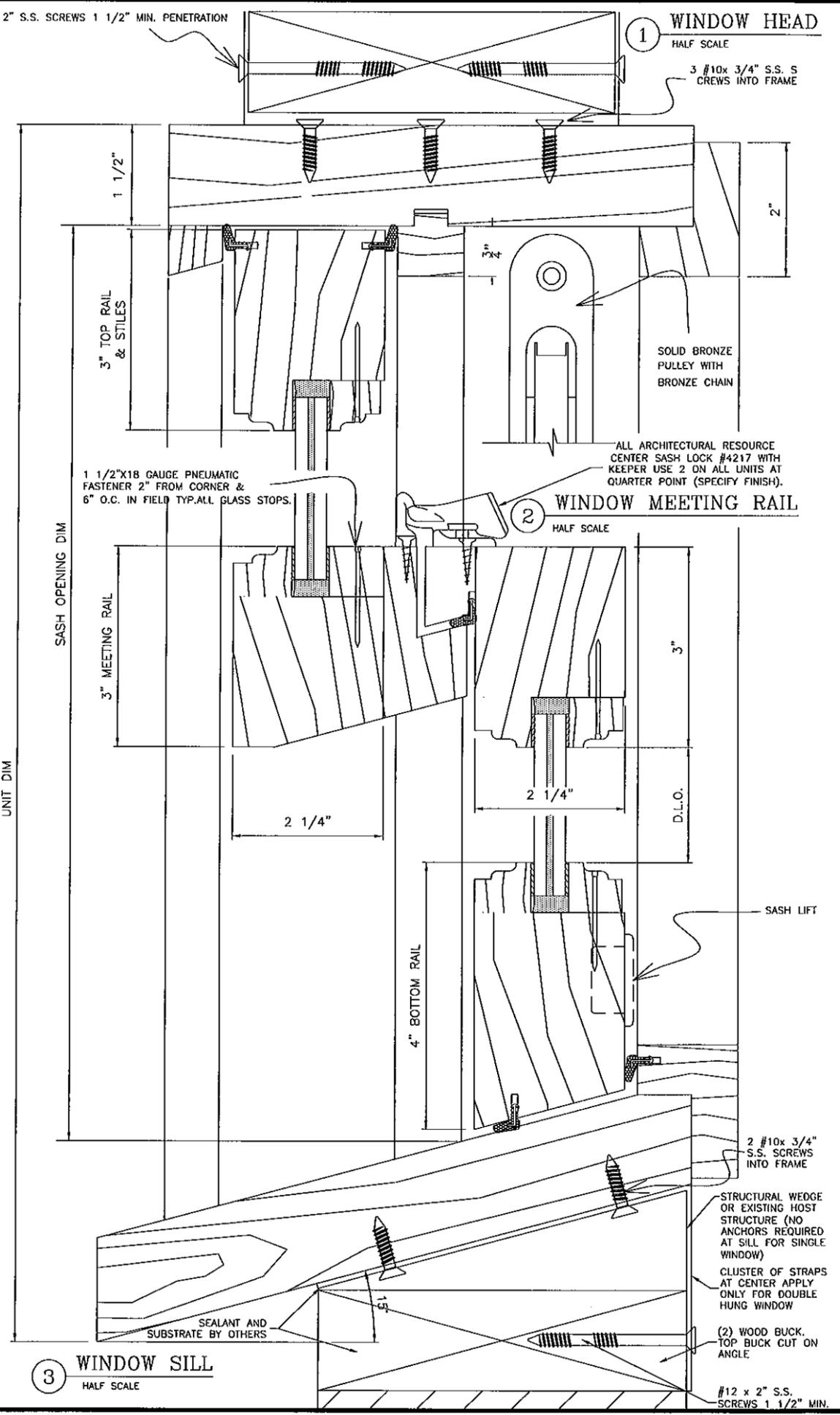
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PAGE DESCRIPTION:

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By *Manuel Pires*
Miami Dade Product Control

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INTERIOR GLAZED UNITS WITH "CHAIN & WEIGHTS"



FRANK L. BERNARDO, P.E.
LICENSED PROFESSIONAL ENGINEER
No. 46549
03/15/2012

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CERT. OF AUTH. #9895
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HARTMAN WINDOWS & DOORS, LLC
531 SOUTHERN BLVD
WEST PALM BEACH, FL 33405
DOUBLE HUNG WINDOW
LARGE MISSILE IMPACT RESISTANT

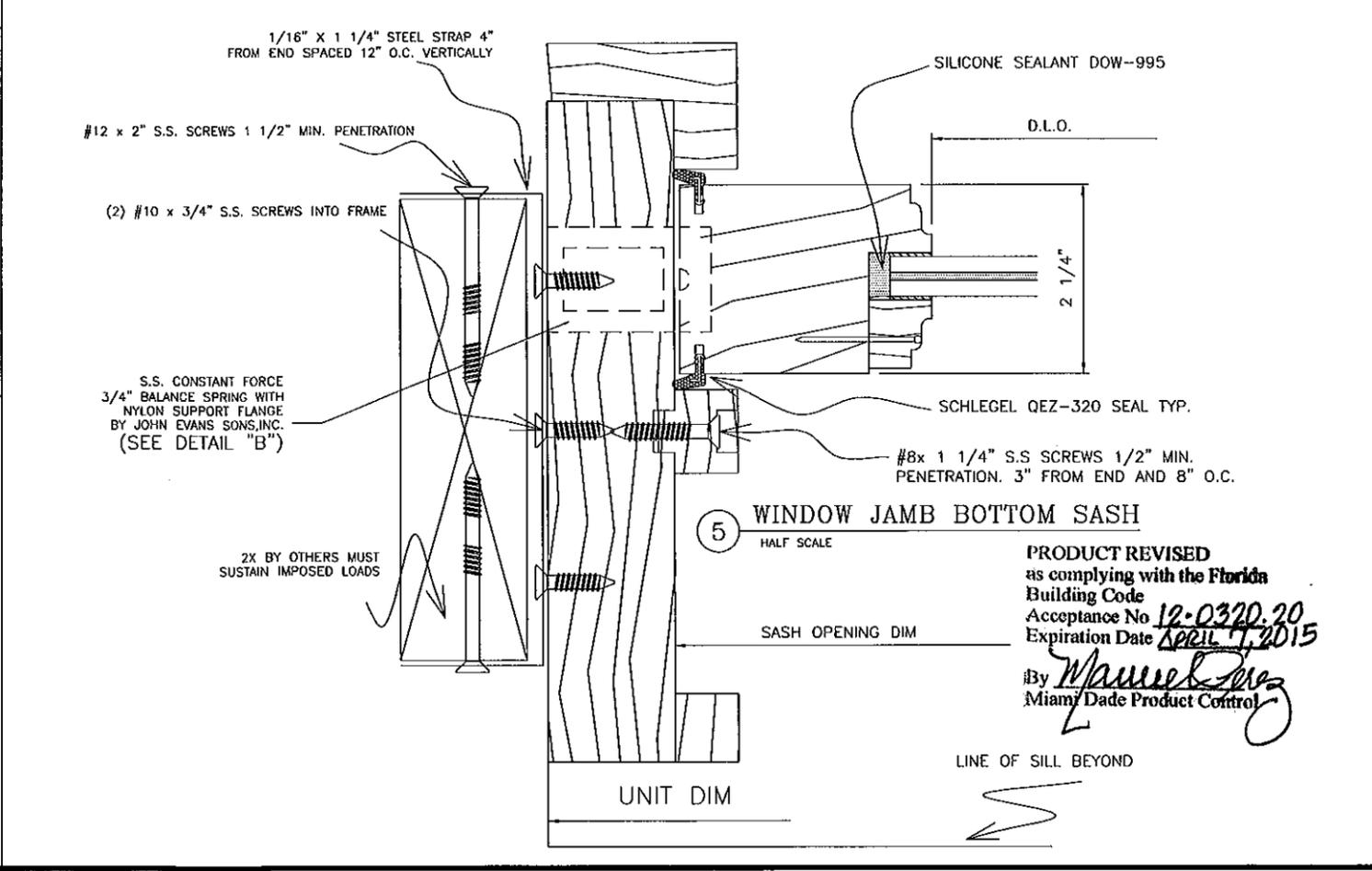
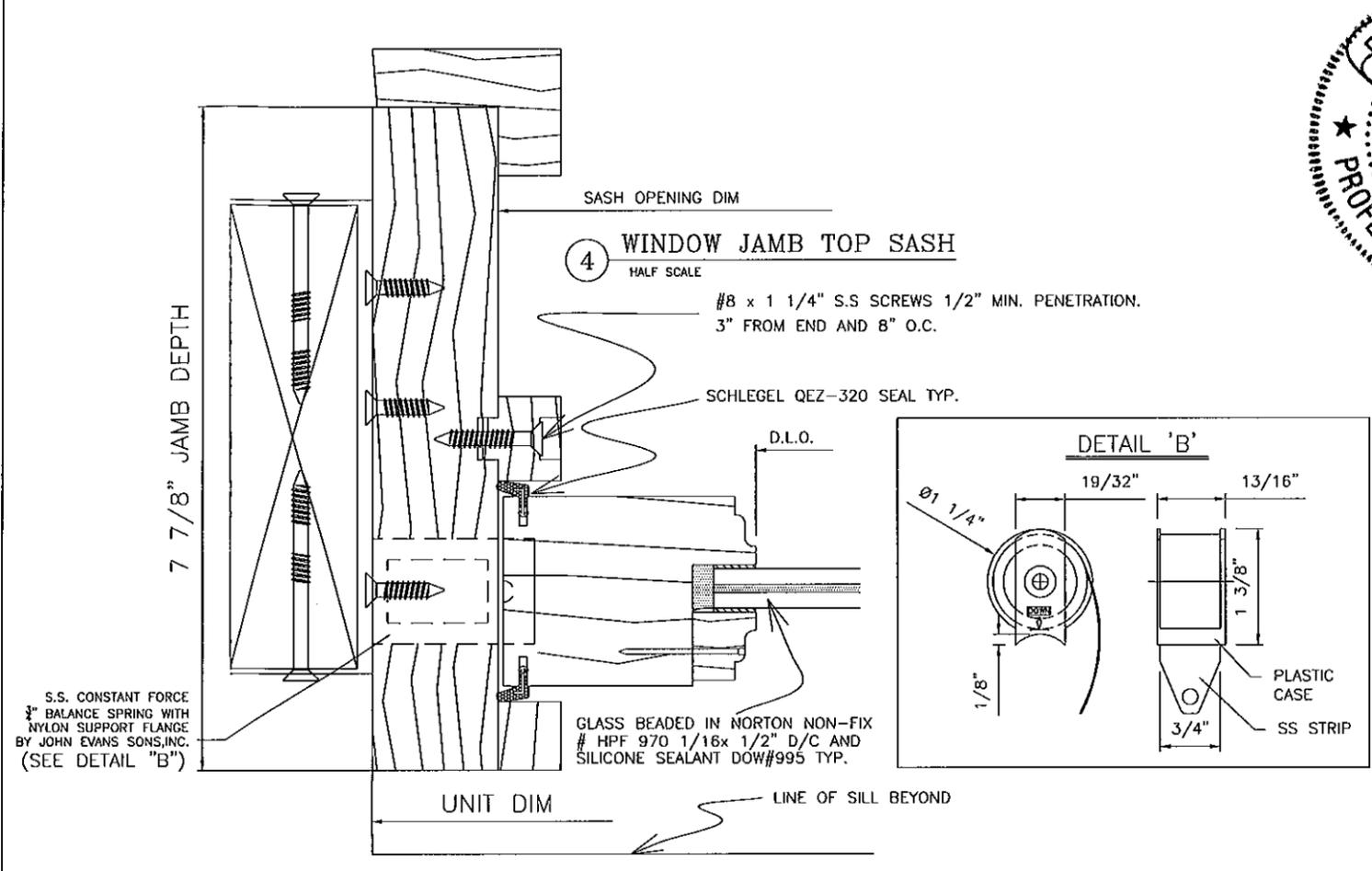
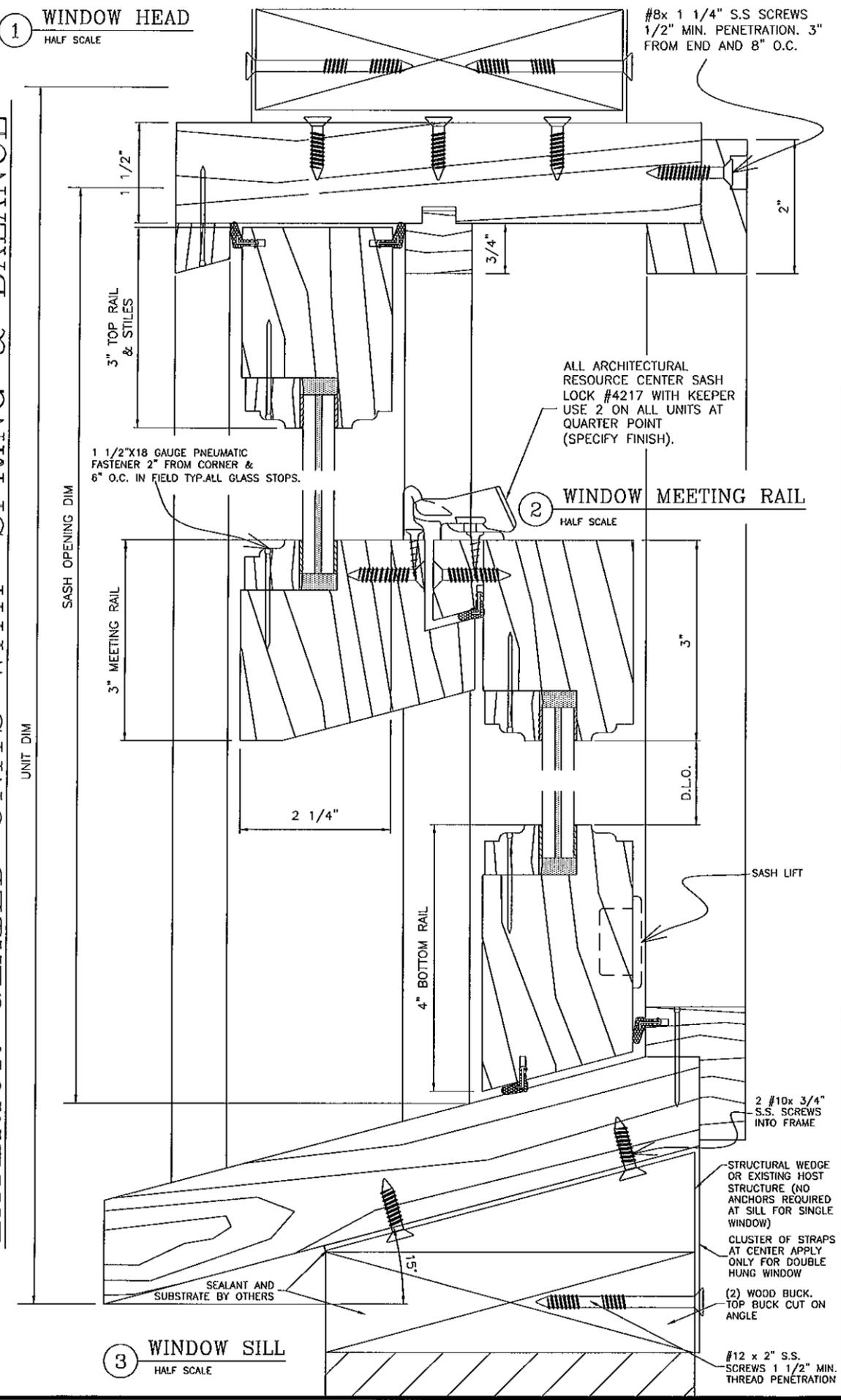
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EXTERIOR GLAZED UNITS WITH "SPRING & BALANCE"



PRODUCT REVISED
 as complying with the Florida
 Building Code
 Acceptance No. 12-0320-20
 Expiration Date April 17, 2015
 By *Maurice...*
 Miami Dade Product Control

FRANK L. BENNARDO, P.E.
 LICENSE
 09/485/0012
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 WWW.ENGEXP.COM CERT. OF AUTH. #9885
 A FRANK L. BENNARDO, P.E., INC. INNOVATIONS

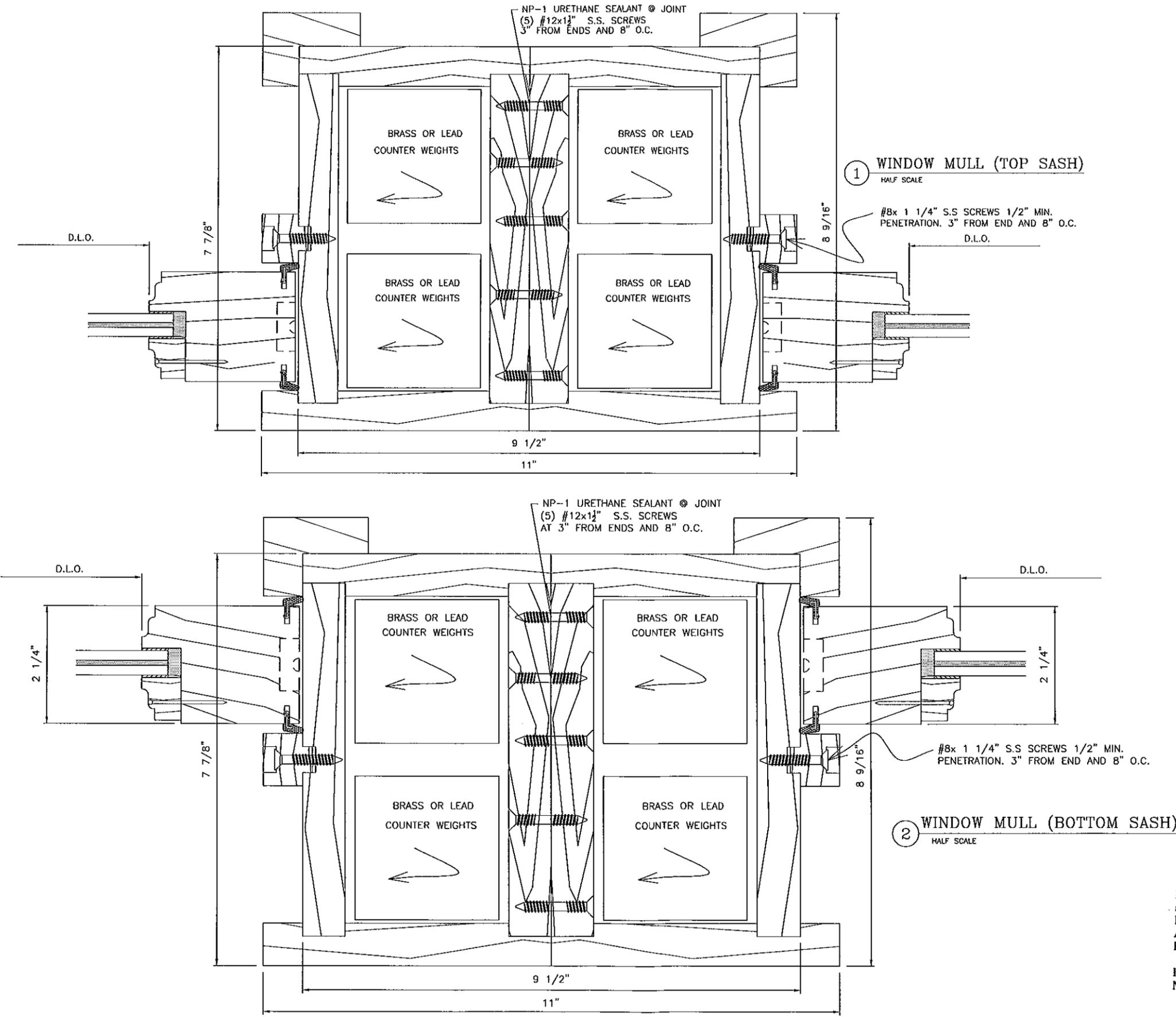
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 531 SOUTHERN BLVD
 WEST PALM BEACH, FL 33405
 DOUBLE HUNG WINDOW
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 SCALE: 1/8"
 PAGE DESCRIPTION: 10

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"CHAIN & WEIGHTS" UNITS



PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 12-0320-20
Expiration Date APRIL 30, 2015
By *Manuel Perez*
Miami Dade Product Control

FRANK L. BENNARDO, P.E.
LIC # 46549
03/15/2012

PROFESSIONAL ENGINEERING EXPRESS

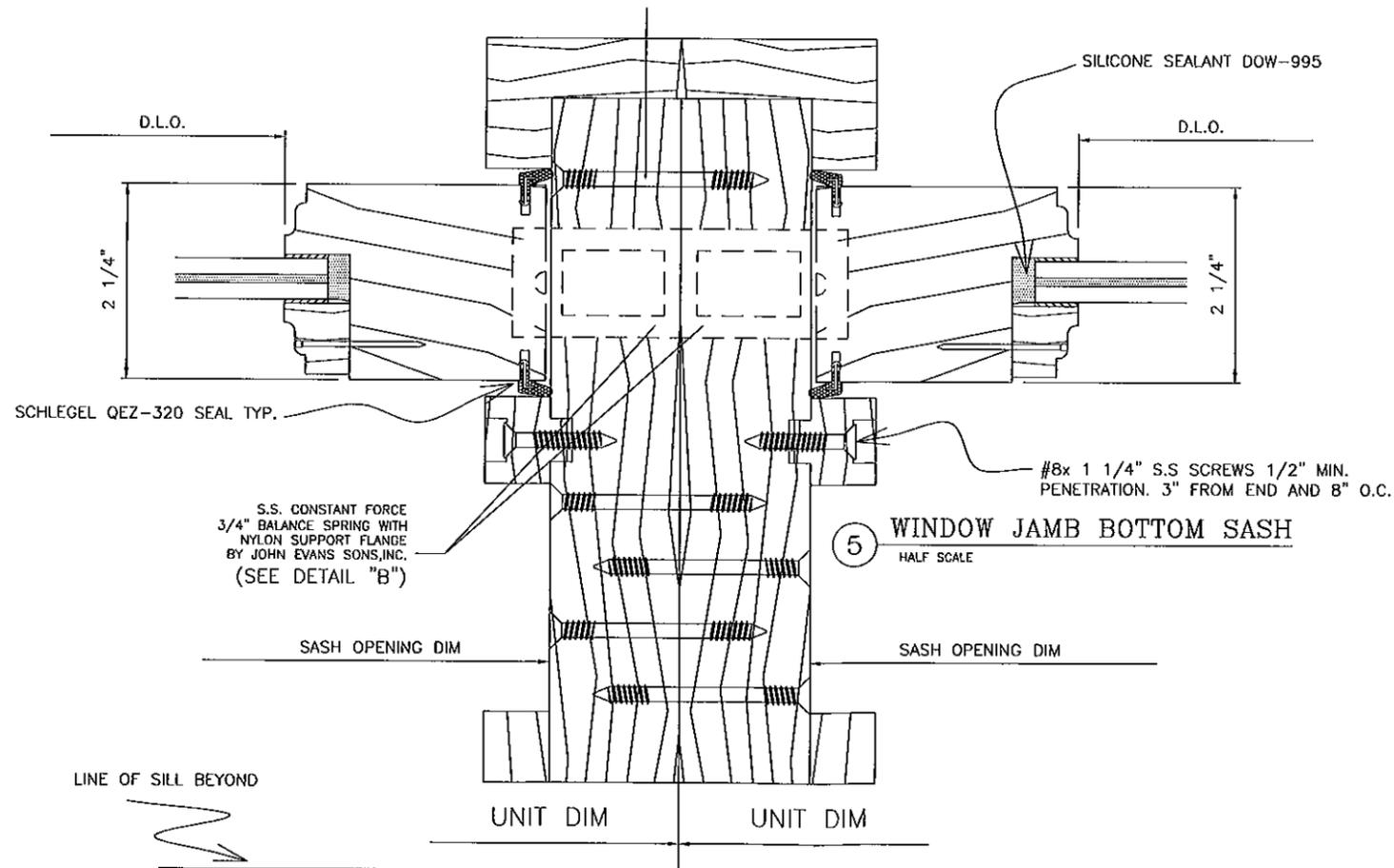
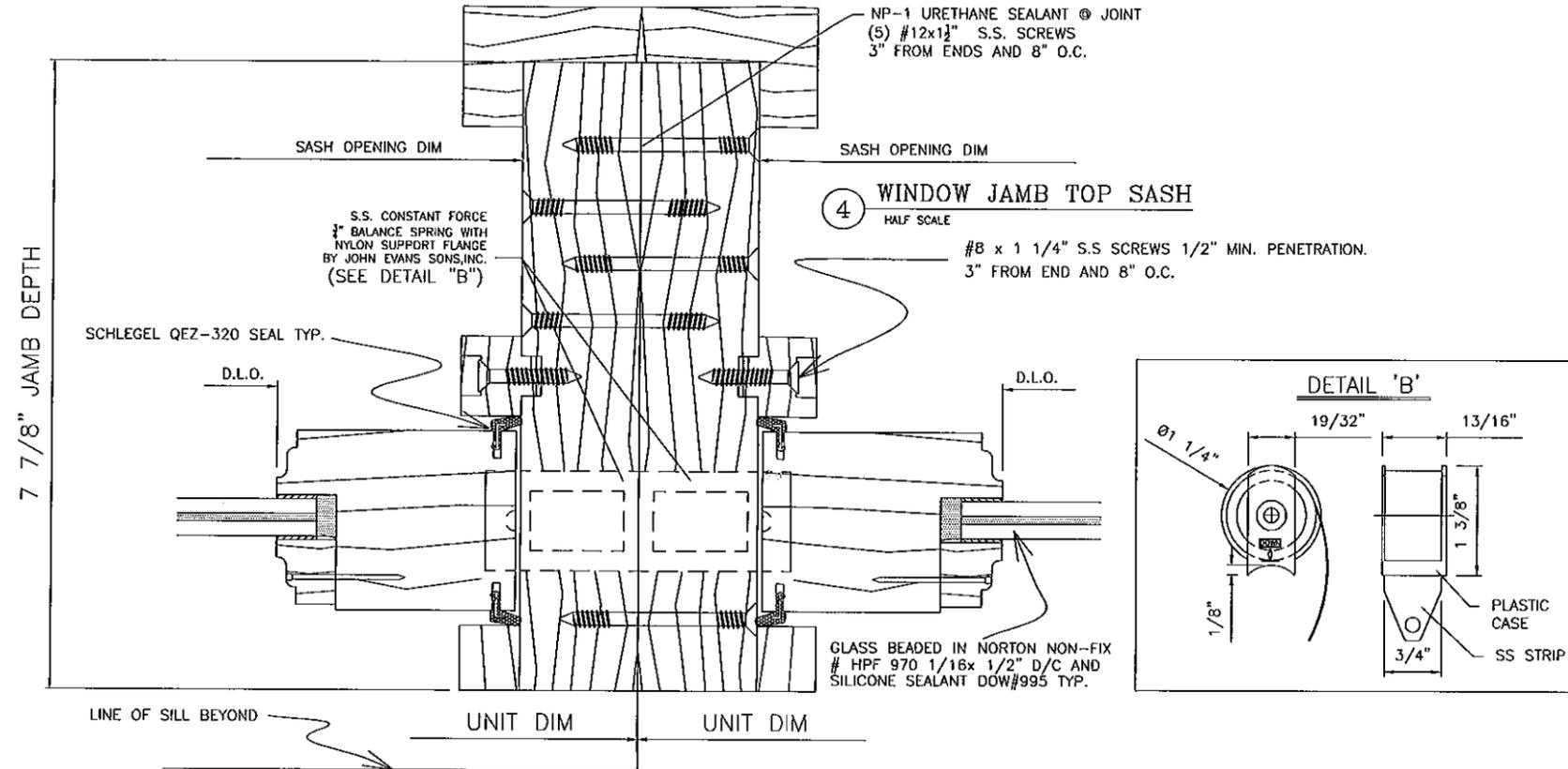
160 SW 12th AVENUE, SUITE 33442
DEERFIELD BEACH, FL 33442
Ph: (954) 354-0660 Fax: (954) 354-0443
WWW.ENGP.COM
CERT. OF AUTH. #8885
A FRANK L. BENNARDO, P.E., INC. INNOVATION

HARTMAN WINDOWS & DOORS, LLC
531 SOUTHERN BLVD
WEST PALM BEACH, FL 33405
DOUBLE HUNG WINDOW
LARGE MISSILE IMPACT RESISTANT

REMARKS	DRWN	CHKD	DATE
INT ISSUE	CL	FLB	11/8/04
2004 FBC	CL	FLB	6/16/05
2007 FBC	TSB	FLB	05/28/09
COUNTY COMMENTS	AML	RKB	08/21/09
2010 FBC	KL	FLB	01/25/12

04-HWD-0002
SCALE: 1/8" = 1'-0"
PAGE DESCRIPTION: 07

"SPRING & BALANCE" UNITS



FRANK L. BENNARDI, P.E.
 LICENSE NO. 46549
 03/15/2012
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 STATE OF FLORIDA
 ENGINEERING EXPRESS, INC.
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 A FRANK L. BENNARDI, P.E., INC. INNOVATION

HARTMAN WINDOWS
 & DOORS, LLC
 531 SOUTHERN BLVD
 WEST PALM BEACH, FL 33405
 DOUBLE HUNG WINDOW
 LARGE MISSILE IMPACT RESISTANT

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	CL	FLB	11/8/04
2004 FBC	CL	FLB	6/16/05
2007 FBC	TSB	FLB	05/28/09
COUNTY COMMENTS	AML	RKB	08/21/09
2010 FBC	KL	FLB	01/25/12

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 Expiration Date APRIL 7, 2015
 By *Manuel Cruz*
 Miami Dade Product Control

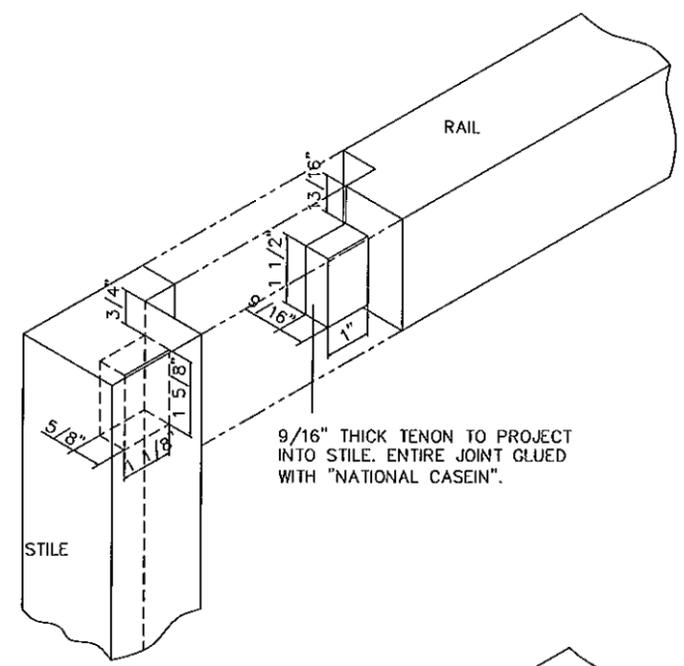
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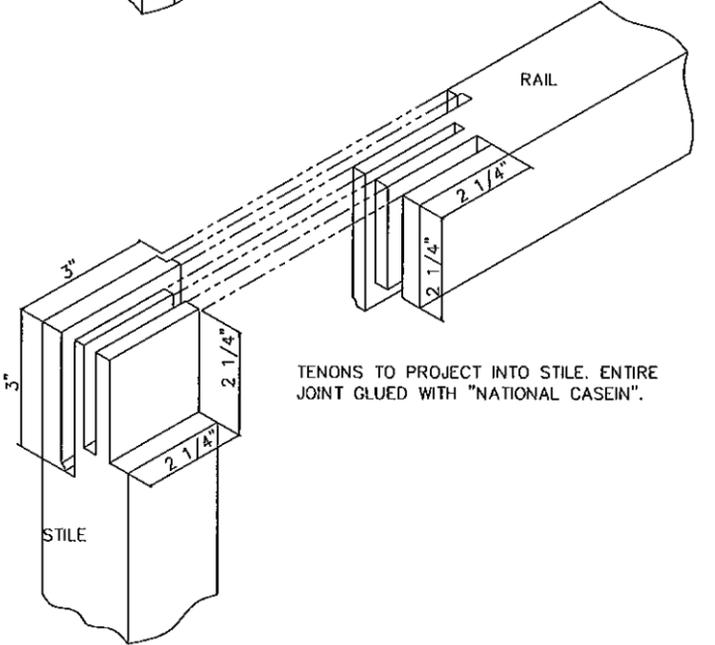
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FRAME & SASH CONSTRUCTION DETAILS

SASH CORNER DETAILS



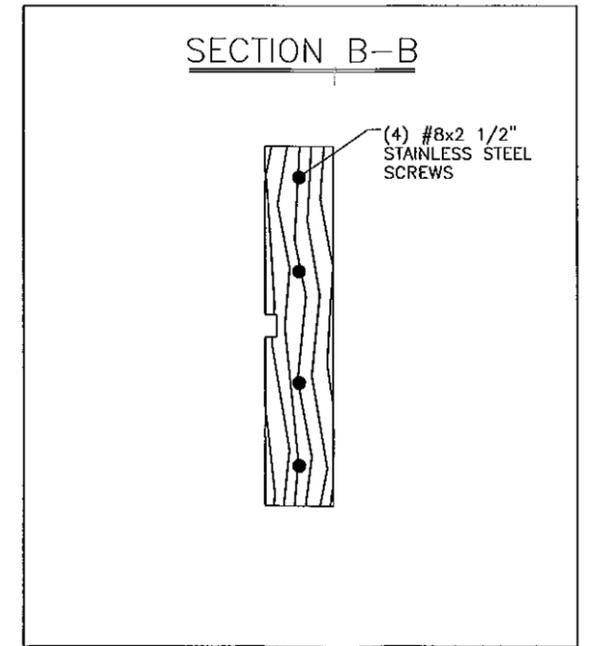
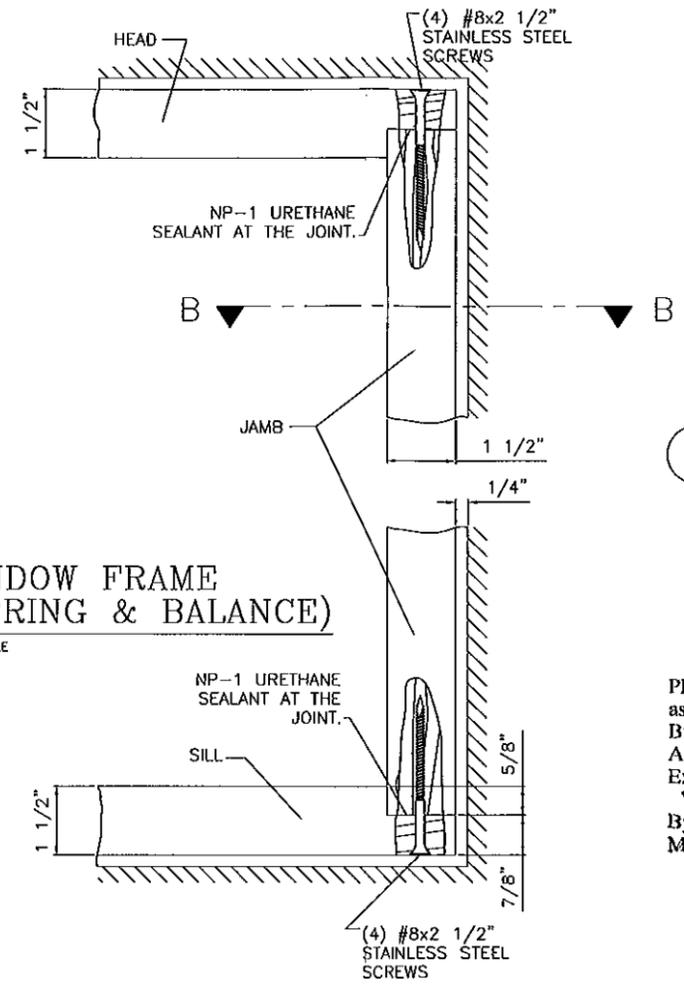
9/16" THICK TENON TO PROJECT INTO STILE. ENTIRE JOINT GLUED WITH "NATIONAL CASEIN".



TENONS TO PROJECT INTO STILE. ENTIRE JOINT GLUED WITH "NATIONAL CASEIN".

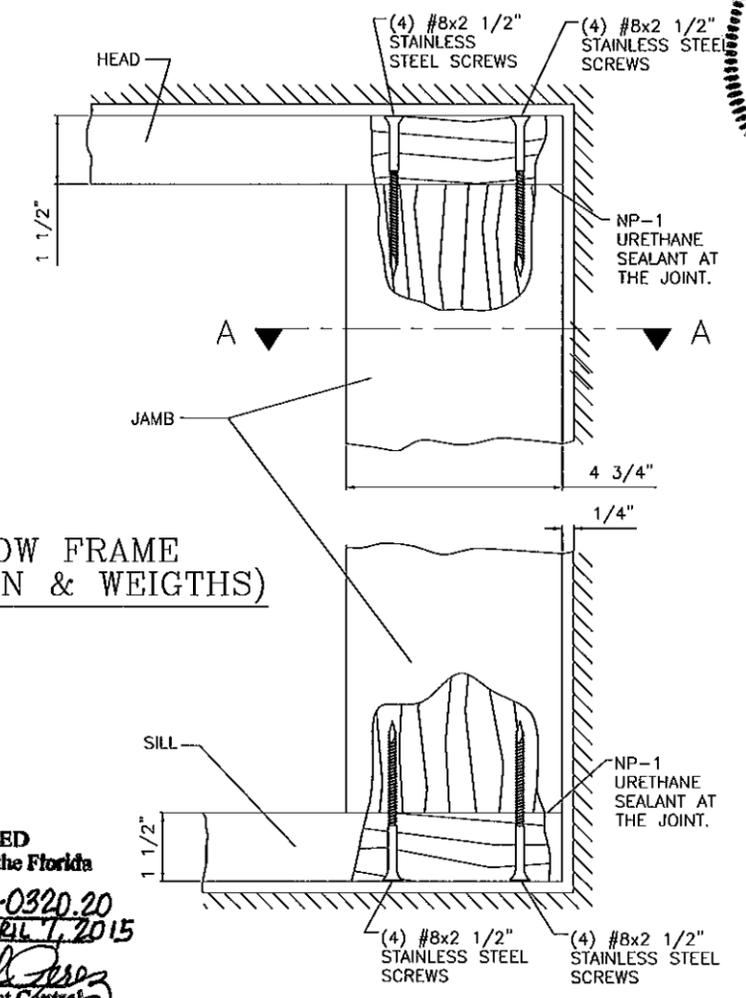
1 WINDOW FRAME (SPRING & BALANCE)

1:4 SCALE

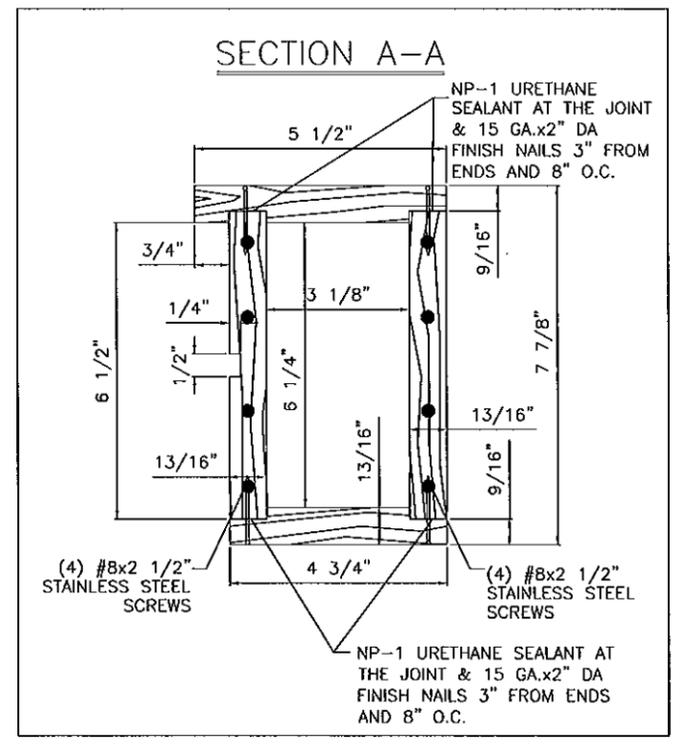


2 WINDOW FRAME (CHAIN & WEIGHTS)

1:4 SCALE



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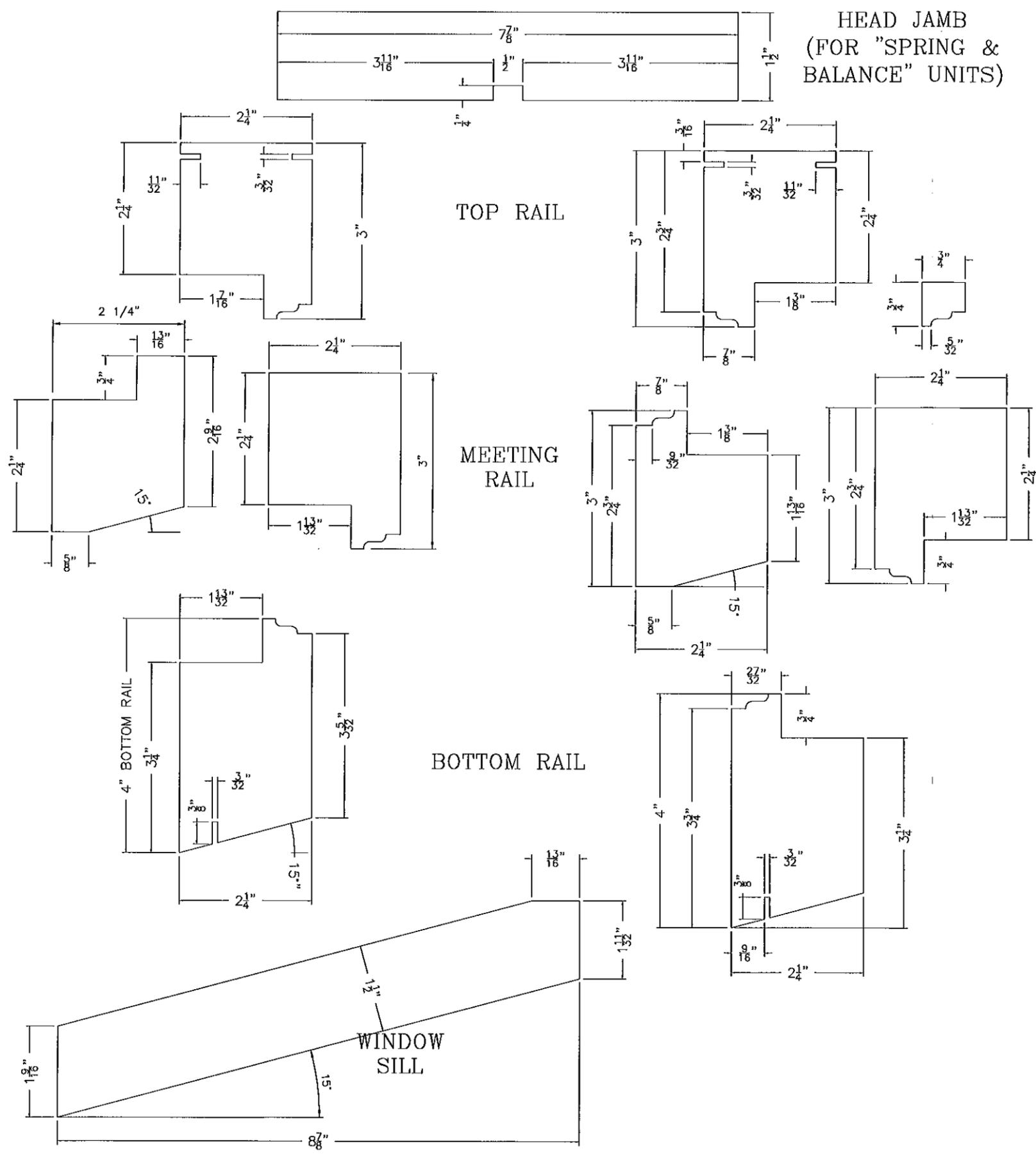
FRANK L. BENNARDO, P.E.
 LICENSE No. 46549
 03/15/2012
 STATE OF FLORIDA
 PROFESSIONAL ENGINEERING EXPERTS, INC.
 160 SW 12th AVENUE, #100
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 A FRANK L. BENNARDO, P.E., INC. INNOVATION

HARTMAN WINDOWS & DOORS, LLC
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 WEST PALM BEACH, FL 33405
 DOUBLE HUNG WINDOW
 LARGE MISSILE IMPACT RESISTANT

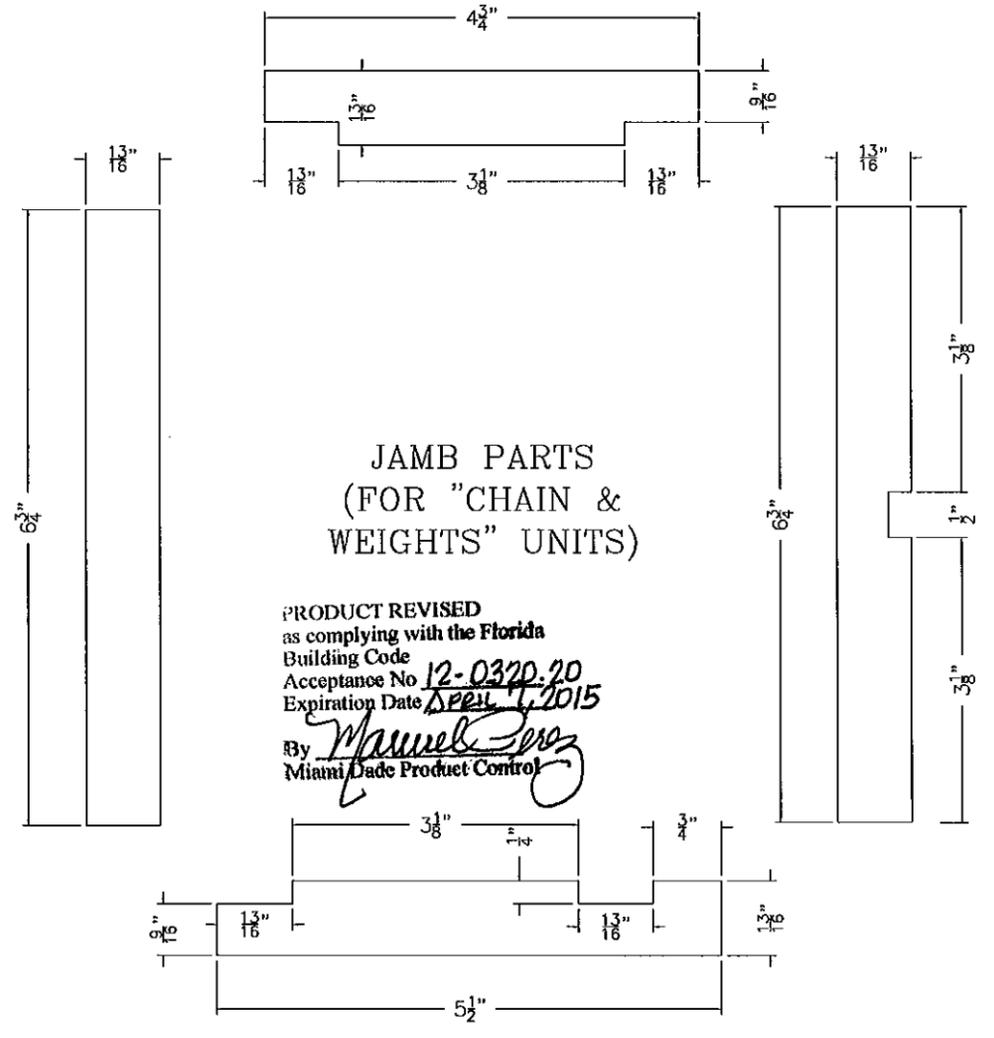
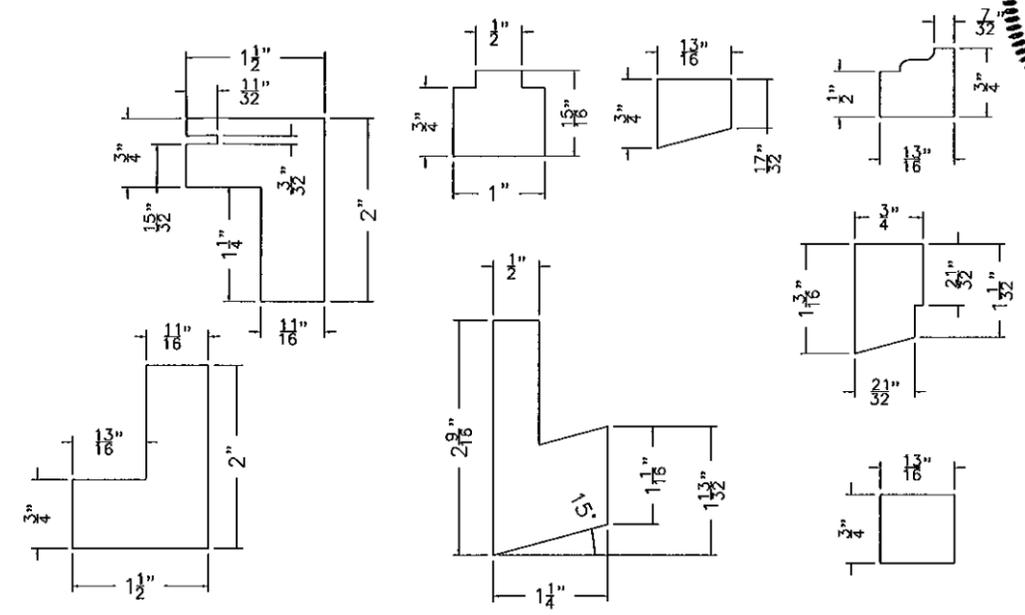
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INT ISSUE	CL	FLB	11/18/04
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2007 FBC	TSB	FLB	05/28/09
COUNTY COMMENTS	AML	RKB	09/21/09
2010 FBC	KL	FLB	01/25/12

04-HWD-0002
 SCALE: 07
 PAGE DESCRIPTION:

03/15/2012 - 12:25pm keithl F:\01 Project Files\Hartman Windows & Doors (HWD)\2004 Jobs\04-HWD-0002 Double-Hung Window (NOA).dwg 07a Double-Hung Window (NOA).dwg



GLAZING BEADS, STOPS AND MISCELLANEOUS



PRODUCT REVISED
 as complying with the Florida
 Building Code
 Acceptance No 12-0320-20
 Expiration Date April 1, 2015
 By *Manuel Pro*
 Miami Dade Product Control

FRANK L. BENNARD
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