



MIAMI-DADE COUNTY
BUILDING CODE COMPLIANCE OFFICE (BCCO)
PRODUCT CONTROL DIVISION

MIAMI-DADE COUNTY, FLORIDA
METRO-DADE FLAGLER BUILDING
140 WEST FLAGLER STREET, SUITE 1603
MIAMI, FLORIDA 33130-1563
(305) 375-2901 FAX (305) 375-2908

NOTICE OF ACCEPTANCE (NOA)

Hartman Windows & 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 by Miami-Dade County Product Control Division and accepted by the Board of Rules and Appeals (BORA) to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

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

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

DESCRIPTION: Wood Double Hung Window - Impact

APPROVAL DOCUMENT: Drawing No. **04-HWD-0002**, titled "Double Hung Window - Large Missile Impact Resistant", sheets 1 through 8, dated 11/8/04, with revision dated 3/9/05, prepared by Frank L. Bennardo, P.E., Inc. Consulting Engineers, signed and sealed by Frank L. Bennardo, P.E., bearing the Miami-Dade County Product Control Approval stamp with the Notice of Acceptance number and approval date by the Miami-Dade County Product Control Division.

MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA consists of this page 1 and evidence pages E-1 and E-2, as well as approval document mentioned above.

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



J. Garscan
9/21/06

NOA No 04-1129.03
Expiration Date: April 7, 2010
Approval Date: April 7, 2005
Page 1

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 8, dated 11/8/04, with revision dated 3/9/05, prepared by Frank L. Bennardo, P.E., Inc. Consulting Engineers, 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 10/17-21/02, signed and sealed by Vinu J. Abraham, P.E.
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 window 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.

C. CALCULATIONS

1. Anchor Calculations and structural analysis, prepared by Frank L. Bennardo, P.E., Inc., dated Nov. 22, 2004, signed and sealed by Frank L. Bennardo, P.E.

D. QUALITY ASSURANCE

1. Miami Dade Building Code Compliance Office (BCCO).

E. MATERIAL CERTIFICATIONS

1. Notice of Acceptance No. **02-1205.03** issued to Security Impact Glass Holding LLC for "SAF-GLAS Polycarbonate Laminate" dated 01/02/03, expiring on 12/16/072.
2. Notice of Acceptance No. **01-0205.02** issued to Solutia Inc. for their "Saflex /Keepsafe Maximum" dated 05/17/01, expiring on 05/21/06.


Manuel Perez, P.E.

Product Control Examiner

NOA No 04-1129.03

Expiration Date: April 7, 2010

Approval Date: April 7, 2005

Hartman Windows & Doors, LLC

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

F. STATEMENTS

1. Statement letter of conformance, dated November 22, 2004, signed and sealed by Frank L. Bennardo, P.E.
2. Statement letter of no financial interest, dated November 22, 2004, signed and sealed by Frank L. Bennardo, P.E.
3. Laboratory compliance letter **HTL02080** for Test Reports No. **HTL- 0137-1028-02** and **HTL- 0137-0114-04**, issued by Hurricane Test Laboratory, LLC., dated August 9, 2004, signed and sealed by Vinu J. Abraham, P.E.

G. OTHER

1. None


Manuel Perez, P.E.

Product Control Examiner

NOA No 04-1129.03

Expiration Date: April 7, 2010

Approval Date: April 7, 2005

DOUBLE HUNG WINDOW

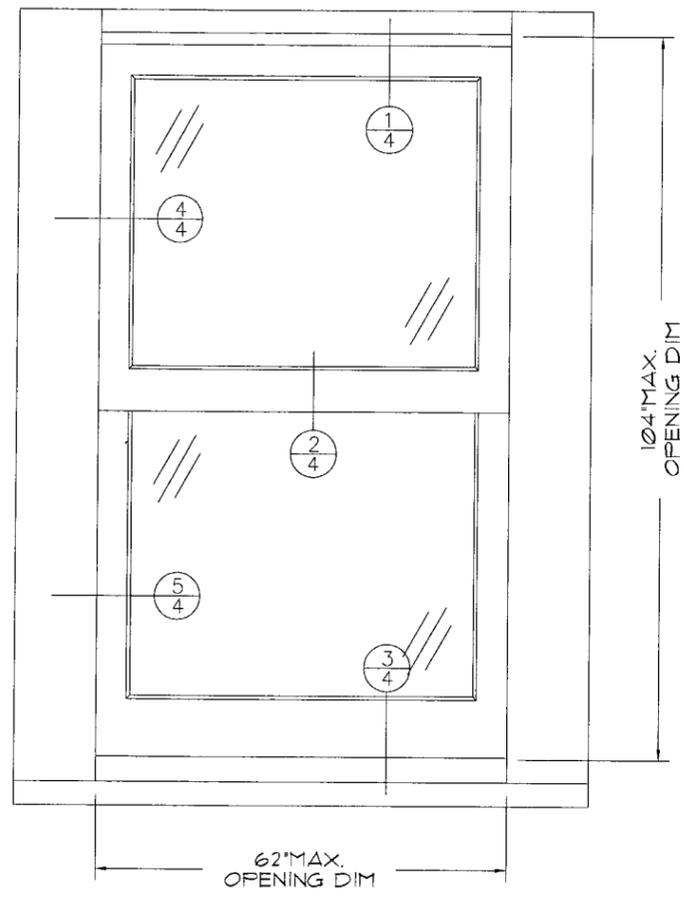
ALLOWABLE DESIGN PRESSURES:

+60 PSF
-60 PSF

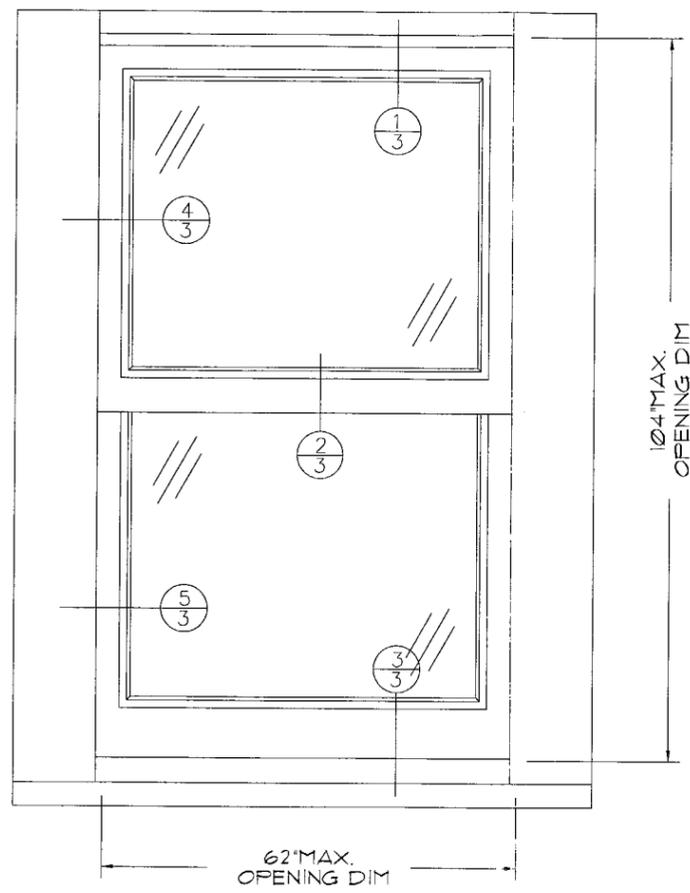
GENERAL NOTES:

- 1) THE SYSTEM DESCRIBED HEREIN HAS BEEN DESIGNED AND TESTED IN ACCORDANCE WITH THE 2001 FLORIDA BUILDING CODE PER TAS PROTOCOLS 201, 201, & 203.
- 2) NO 33-1/3% INCREASE IN ALLOWABLE STRESS HAS BEEN USED IN THE DESIGN OF THIS SYSTEM.
- 3) ALL UNITS ARE LARGE MISSILE IMPACT RESISTANT. NO PROTECTION FROM WINDBORNE DEBRIS IS REQUIRED FOR ANY INSTALLATION.
- 4) POSITIVE AND NEGATIVE DESIGN PRESSURES CALCULATED FOR USE WITH THIS SYSTEM SHALL BE DETERMINED BY OTHERS ON A JOB-SPECIFIC BASIS IN ACCORDANCE WITH THE GOVERNING CODE.
- 5) ALL FRAMING MEMBERS SHALL BE MAHOGANY WOOD HAVING MINIMUM SPECIFIC GRAVITY G=0.54 AND MIN DOWEL BEARING STRENGTH Fe=5450psi.
- 6) 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.
- 7) 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.

Typical Interior Glazed "Springs & Balance" Unit



Typical Exterior Glazed "Springs & Balance" Unit



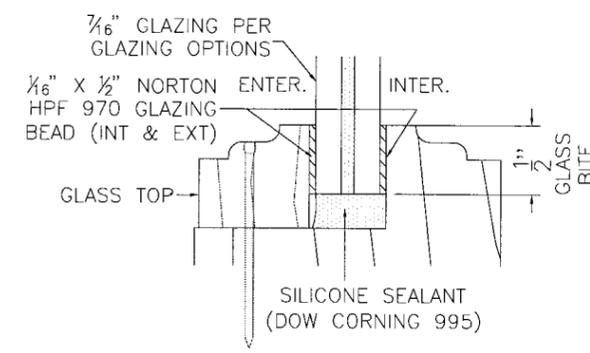
ANCHOR NOTES:

- 1) ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- 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.
- 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 #01-1204.01):
 - 3/16" ANNEALED GLASS
 - 0.090" DuPont SENTRYGLASS PLUS INTERLAYER
 - 3/16" ANNEALED GLASS
- 7/16" "SAFLEX" by Solutia (NOA #01-0205.02):
 - 3/16" HEAT STRENGTHENED GLASS
 - 0.090" SAFLEX PVB INTERLAYER
 - 3/16" HEAT STRENGTHENED GLASS
- 7/16" "Security Impact Glass" by SAFGLASS (NOA #02-1205.03):
 - 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

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



GLAZING DETAIL:

Approved as complying with the Florida Building Code
Date April 7, 2005
NOA# 04-1129.03
Miami Dade Product Control Division
By [Signature]

FRANK L. BENNARDO, P.E.
#PE0046549

03/23/2005

FRANK L. BENNARDO, P.E., INC.
CONSULTING ENGINEERS
4441 NORTH DIXIE HIGHWAY
BOCA RATON, FL 33431
(561) 391-2888 FAX: (561) 391-2862
WWW.FLBENGINEERING.COM
CERTIFICATE OF AUTHORIZATION: #9885

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

REMARKS	CHKD	DATE
ORIG ISSUE	CL	11/8/04
COUNTY COMMENTS	FLB	03/03/05
CNTY COMMENTS: MULLS	CL	3/9/05
CNTY COMMENTS: ELEV		

04-HWD-0002

PAGE SCALE:
DESCRIPTION:

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DOUBLE HUNG WINDOW (CONTINUOUS INSTALLATIONS)

FRANK L. BENNARDO, P.E.
PE0046549

03/23/2005

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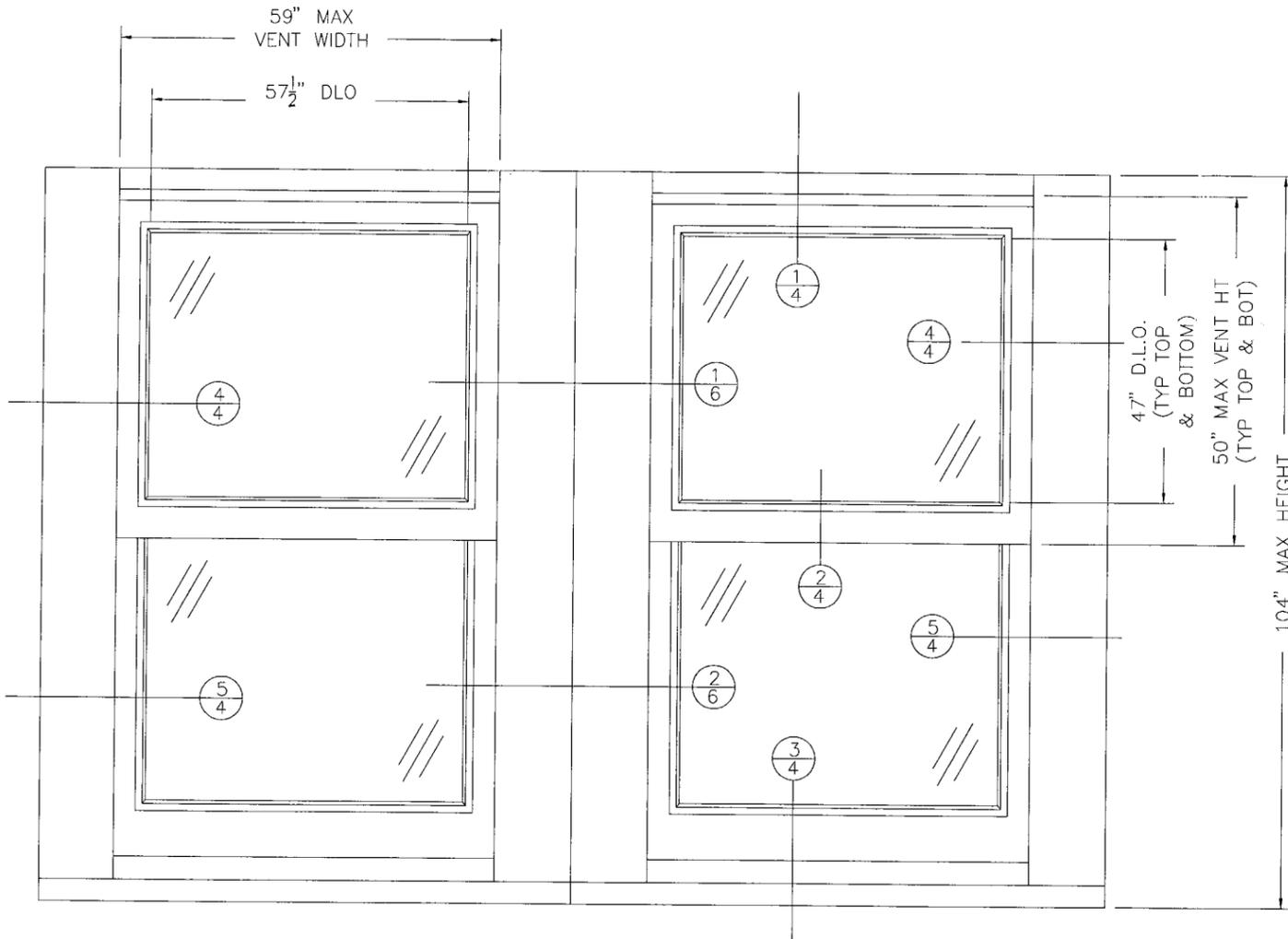
**HARTMAN WINDOWS
& DOORS, LLC**
531 SOUTHERN BLVD
WEST PALM BEACH, FL 33405
**DOUBLE HUNG WINDOW
LARGE MISSILE IMPACT RESISTANT**

REMARKS	DWN	CHKD	DATE
ORIG ISSUE	CL	FLB	11/8/04
COUNTY COMMENTS	FLC	FLB	03/03/05
CNTY COMMENTS: MULLS	CL	FLB	3/9/05
CNTY COMMENTS: ELEV			

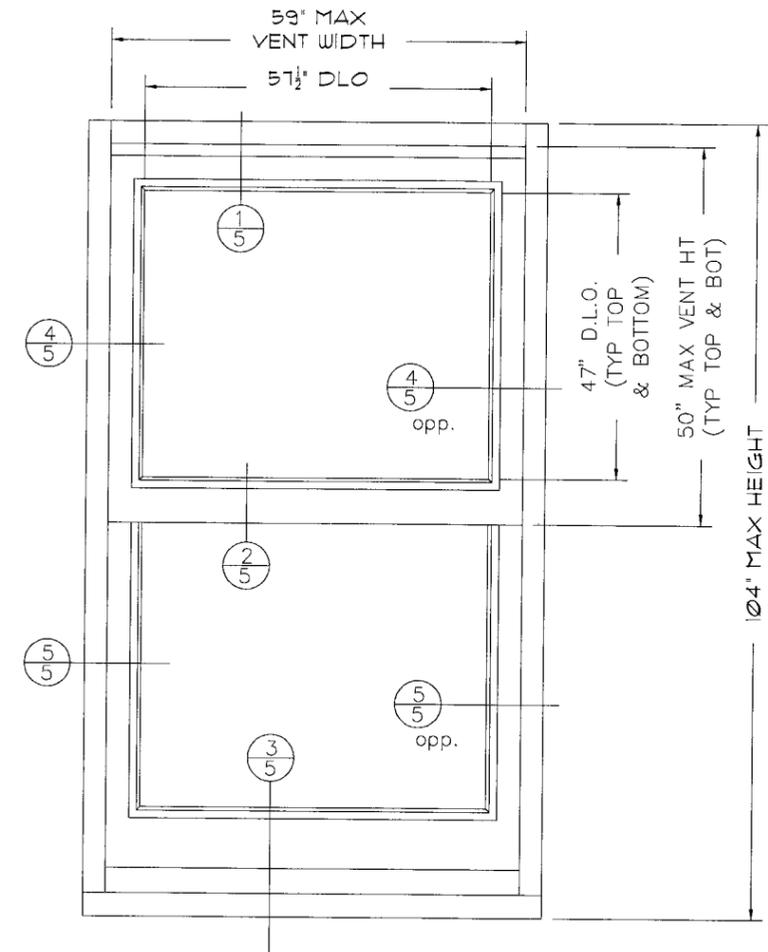
04-HWD-0002

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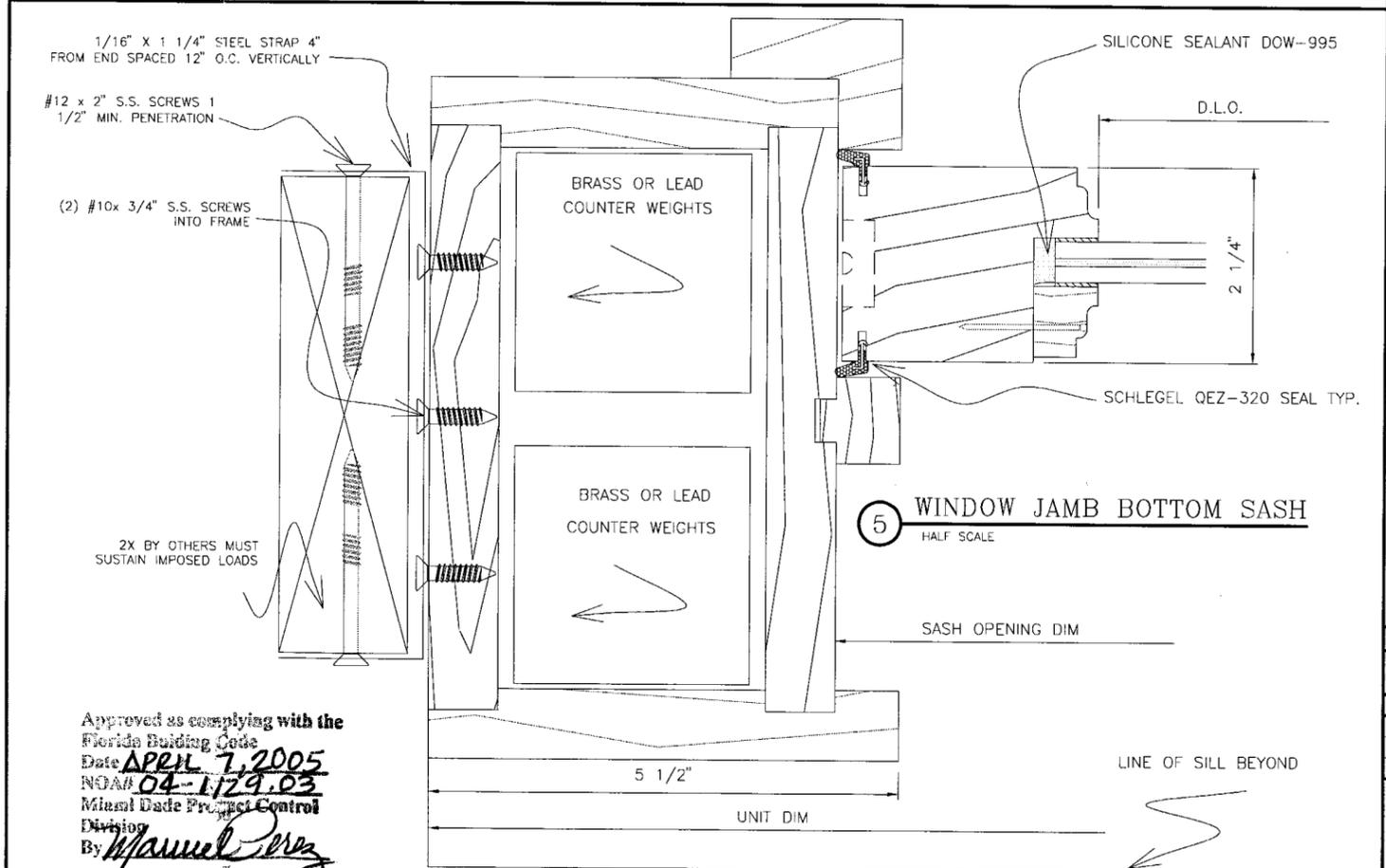
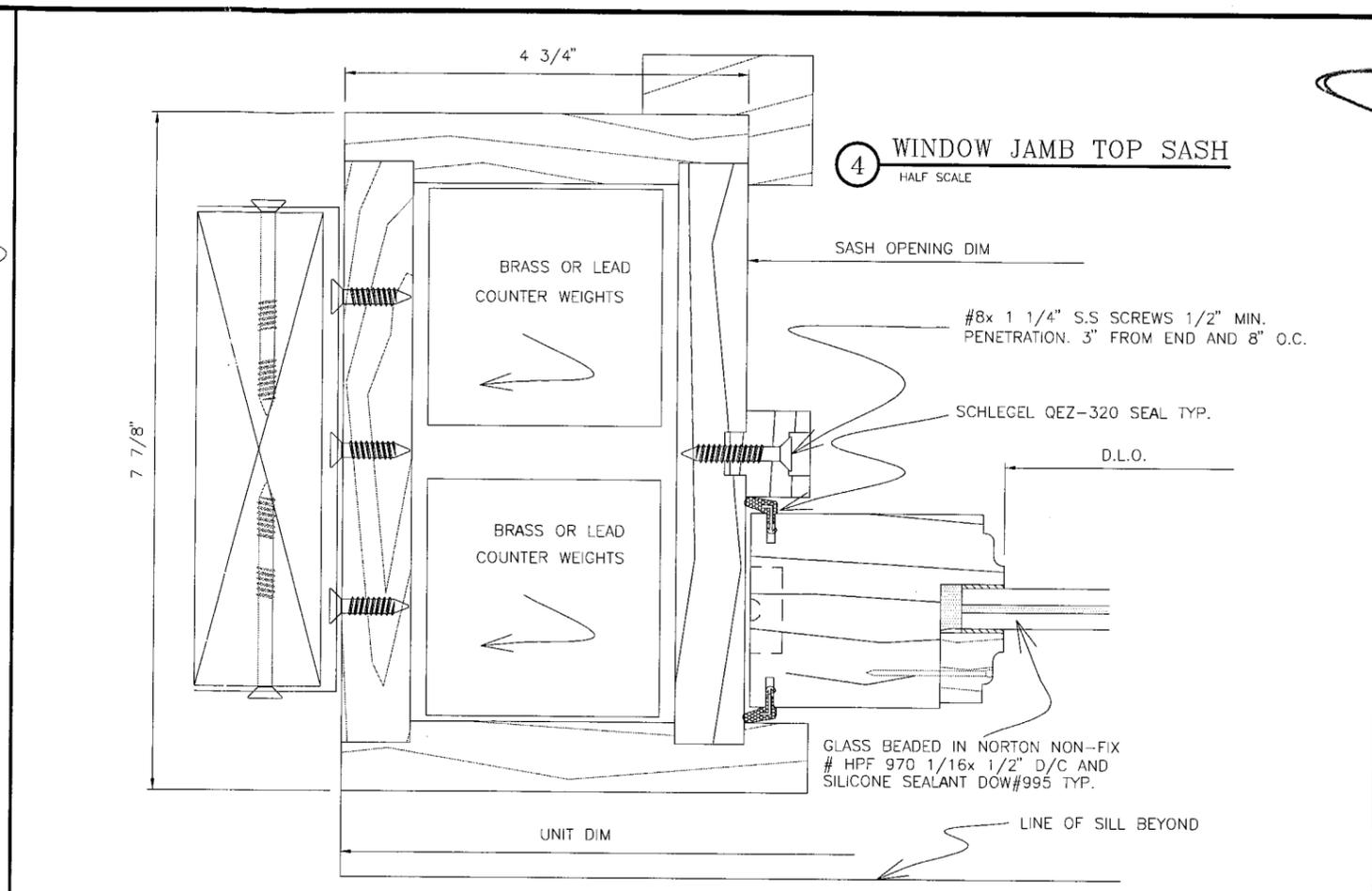
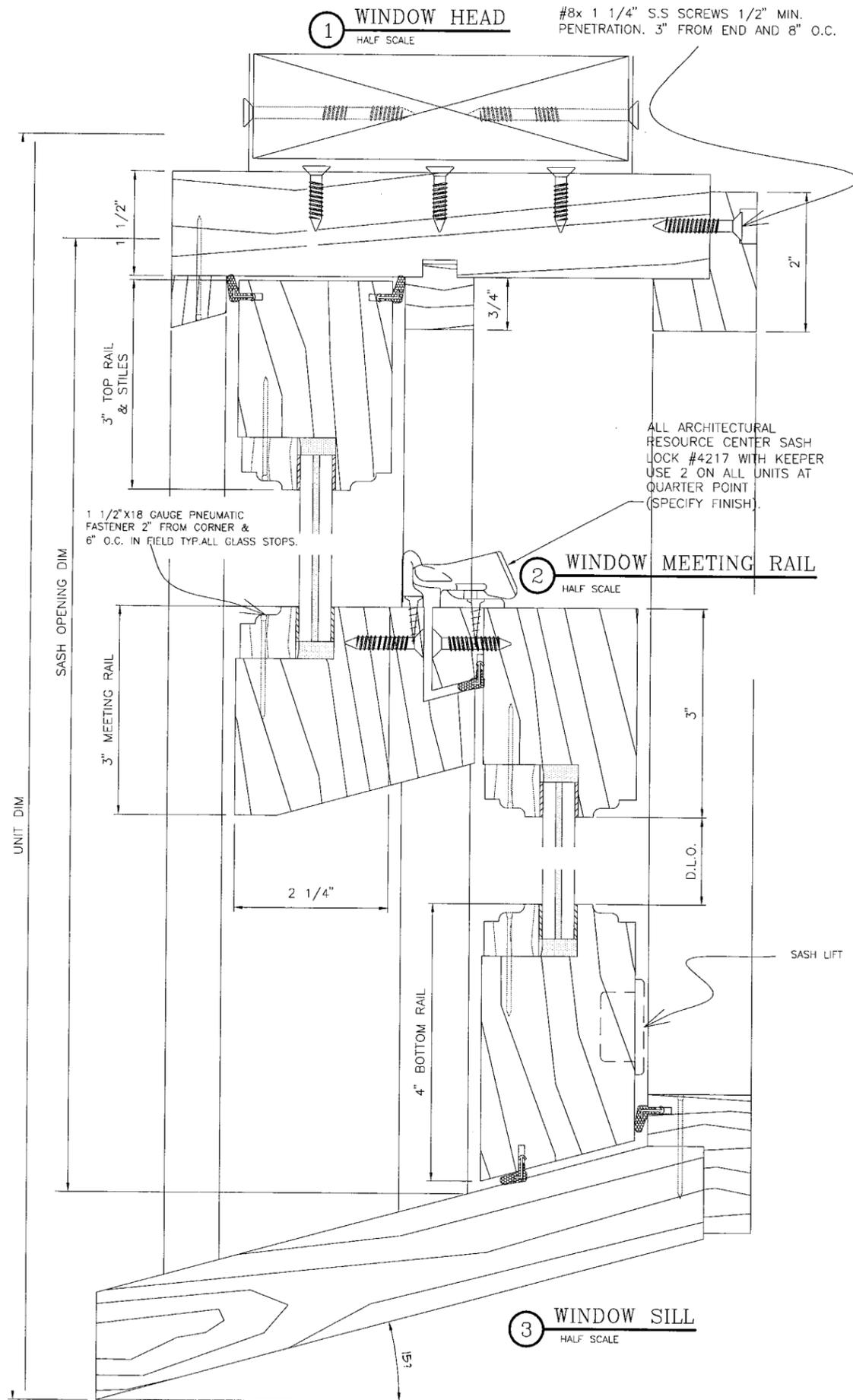
TWO (2) "CHAIN & WEIGHTS" UNITS MAY BE INSTALLED SIDE-BY-SIDE WITH NO SEPARATE MULLIONS OR ADDITIONAL REINFORCEMENT



"SPRINGS & BALANCE" UNIT

Approved as complying with the
Florida Building Code
Date APRIL 7, 2005
NOAH 04-1129.03
Miami Dade Product Control
Division
By Mmanuel Srey

EXTERIOR GLAZED UNITS WITH "CHAIN WEIGHTS"



Approved as complying with the Florida Building Code
Date APRIL 7, 2005
NOA# 04-1129.03
Miami Dade Project Control
Division
By Manuel Perez

FRANK L. BENNARDO, P.E.
PE0046549

03/23/2005

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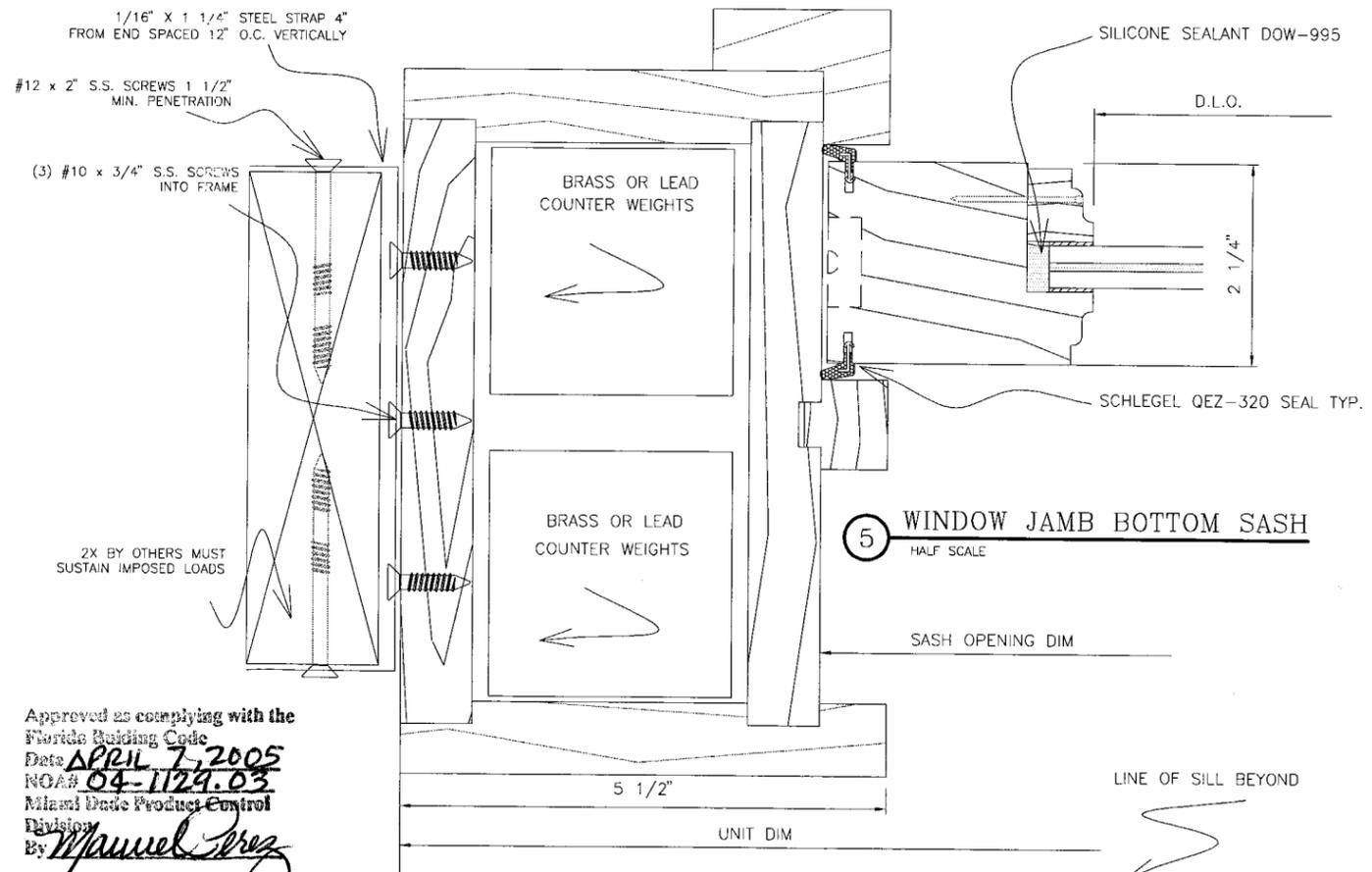
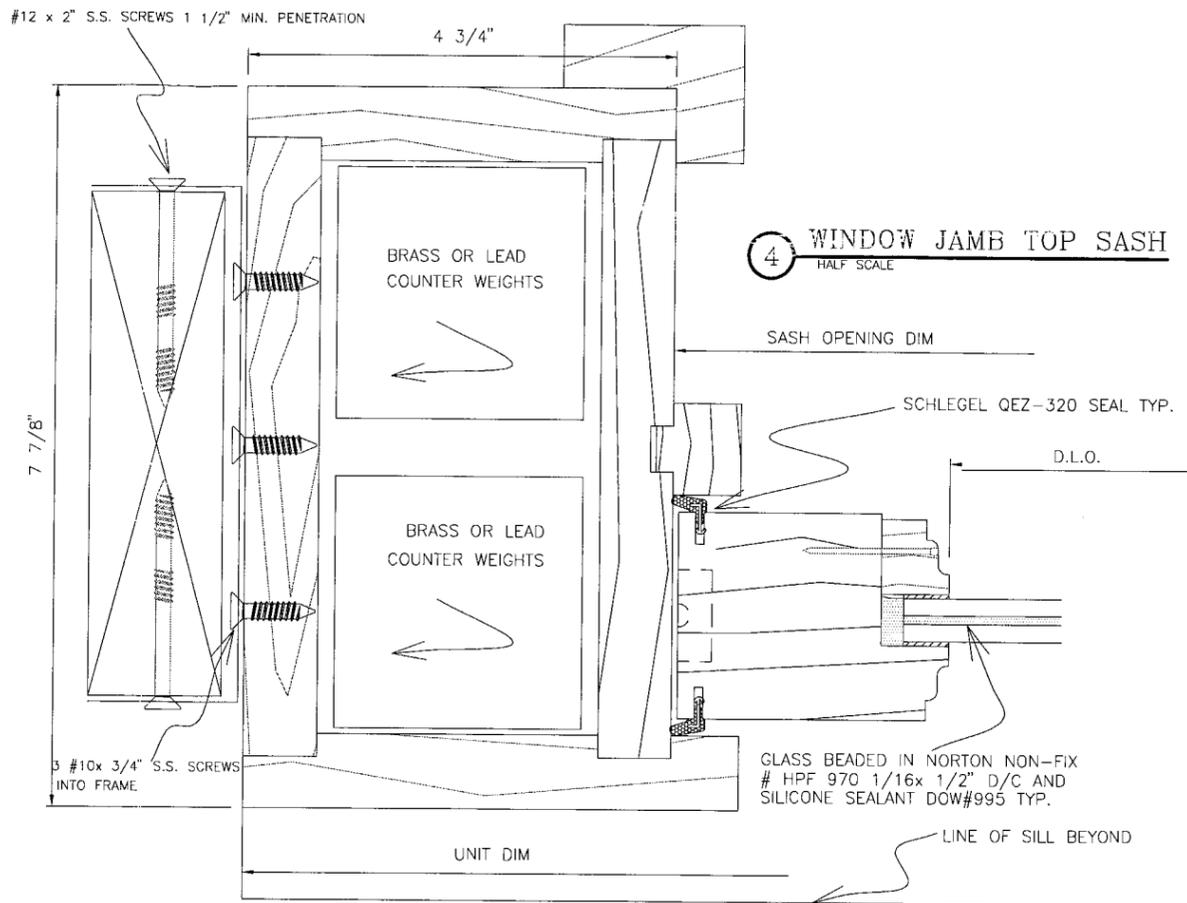
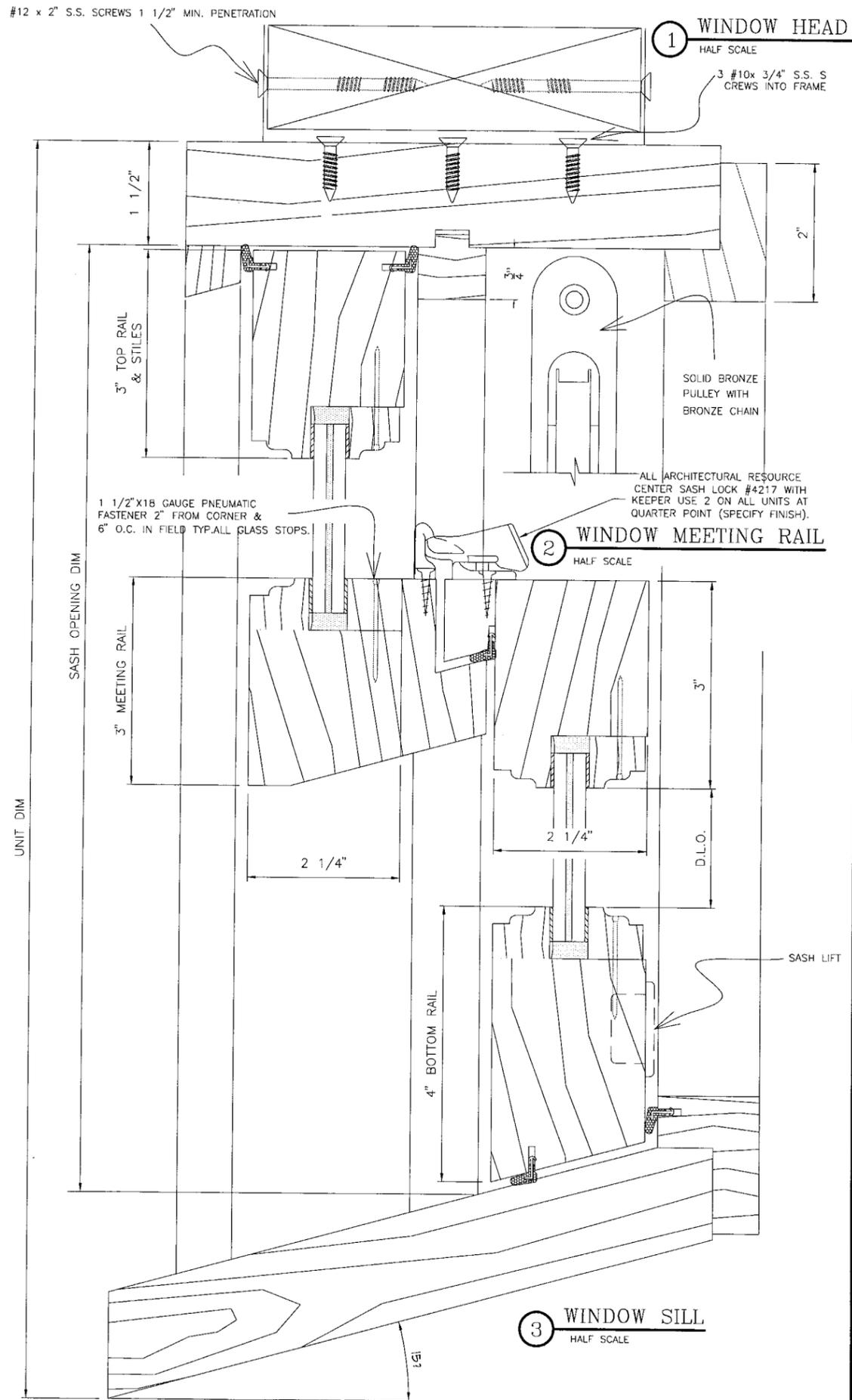
HARTMAN WINDOWS & DOORS, LLC
531 SOUTHERN BLVD
WEST PALM BEACH, FL 33405
DOUBLE HUNG WINDOW
LARGE MISSILE IMPACT RESISTANT

REMARKS	DWN	CHKD	DATE
ORIG ISSUE	CL	FLB	11/8/04
COUNTY COMMENTS	FLC	FLB	03/03/05
CNTY COMMENTS: MULLS	CL	FLB	3/9/05
CNTY COMMENTS: ELEV			

04-HWD-0002

PAGE SCALE:
DESCRIPTION:

INTERIOR GLAZED UNITS WITH "CHAIN WEIGHTS"



Approved as complying with the Florida Building Code
 Date **APRIL 7, 2005**
 NOA# **04-1129-03**
 Miami Code Product Control Division
 By *Manuel Perez*

FRANK L. BENNARDO, P.E.
 # PE0046549

03/23/2005

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

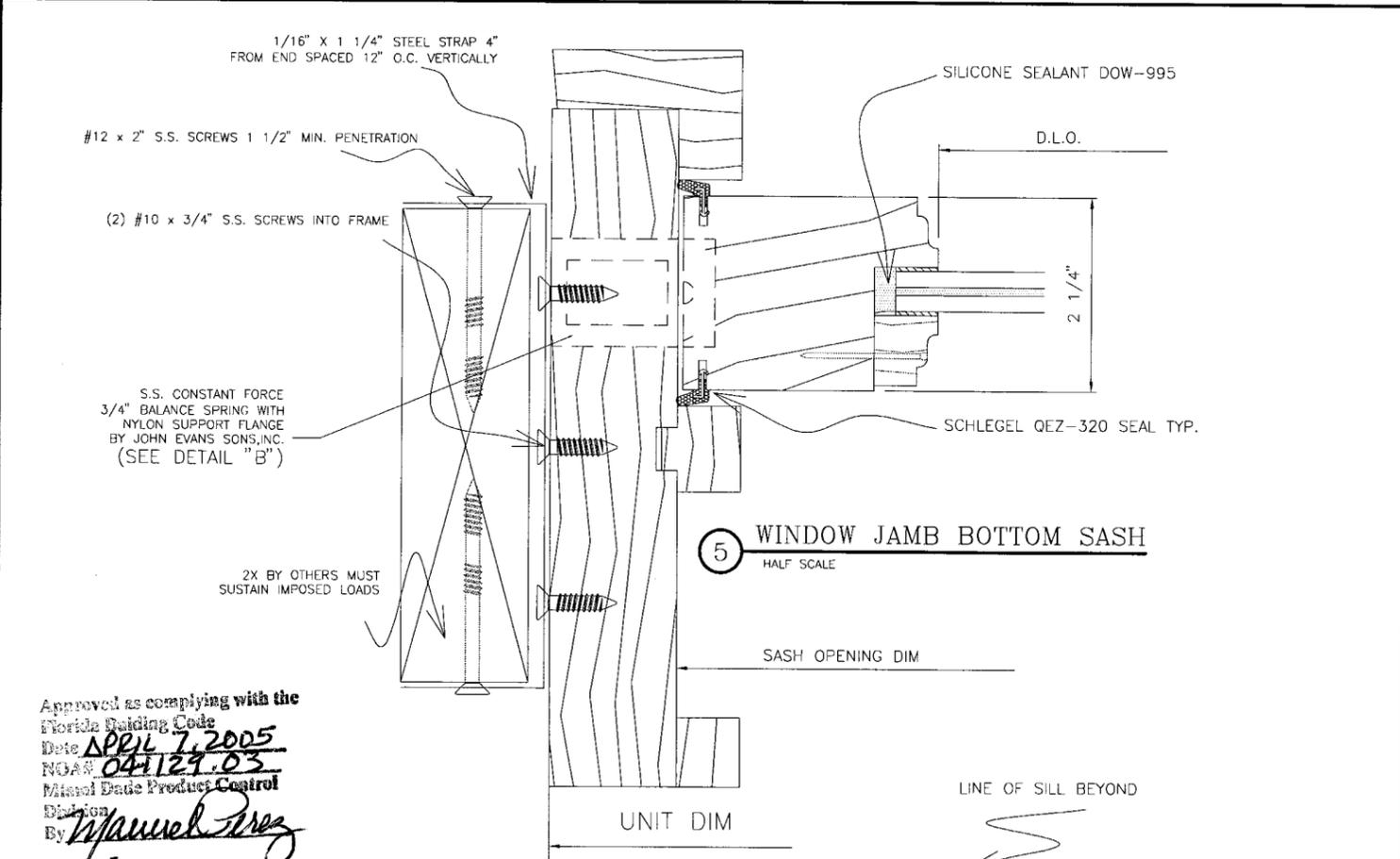
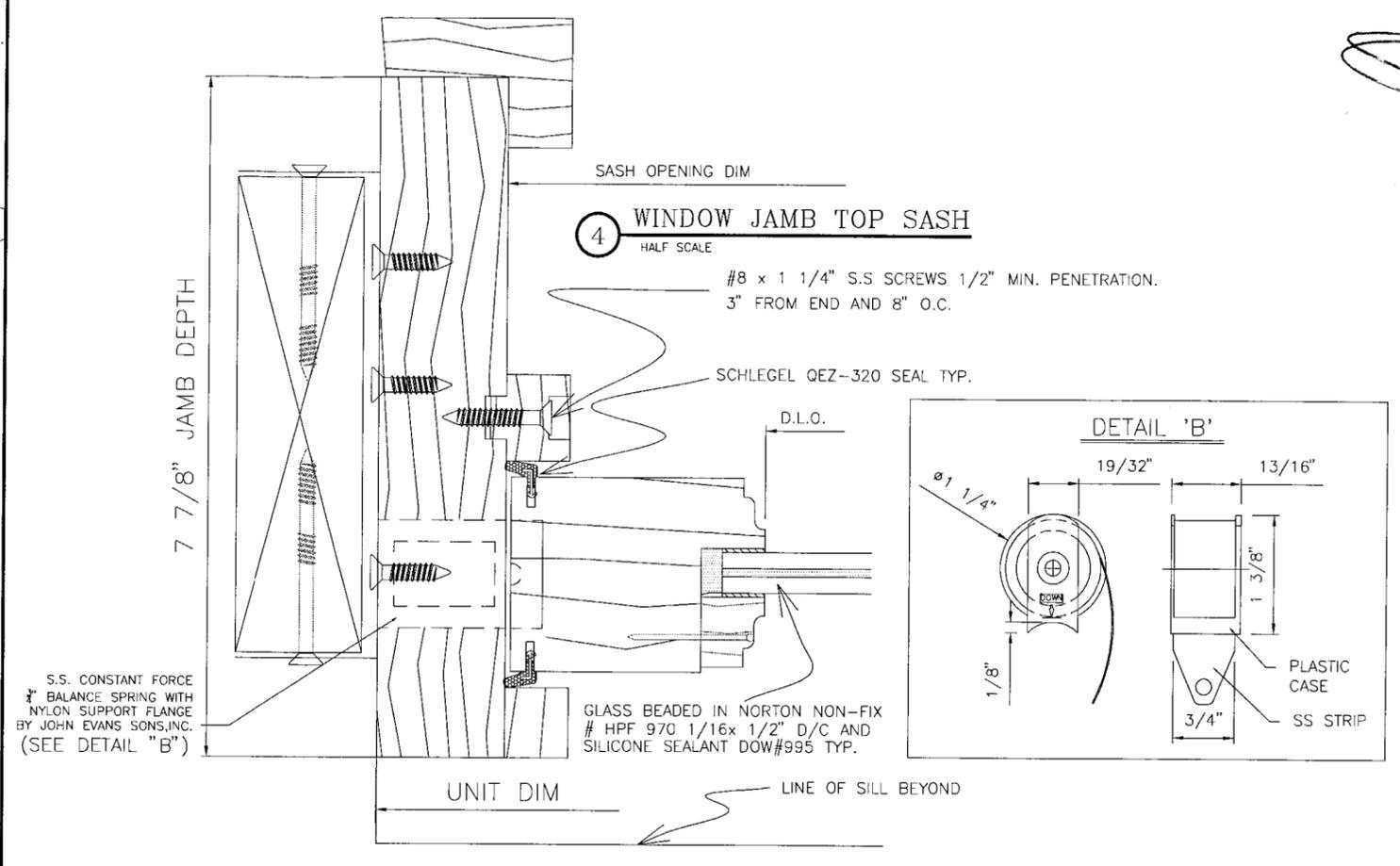
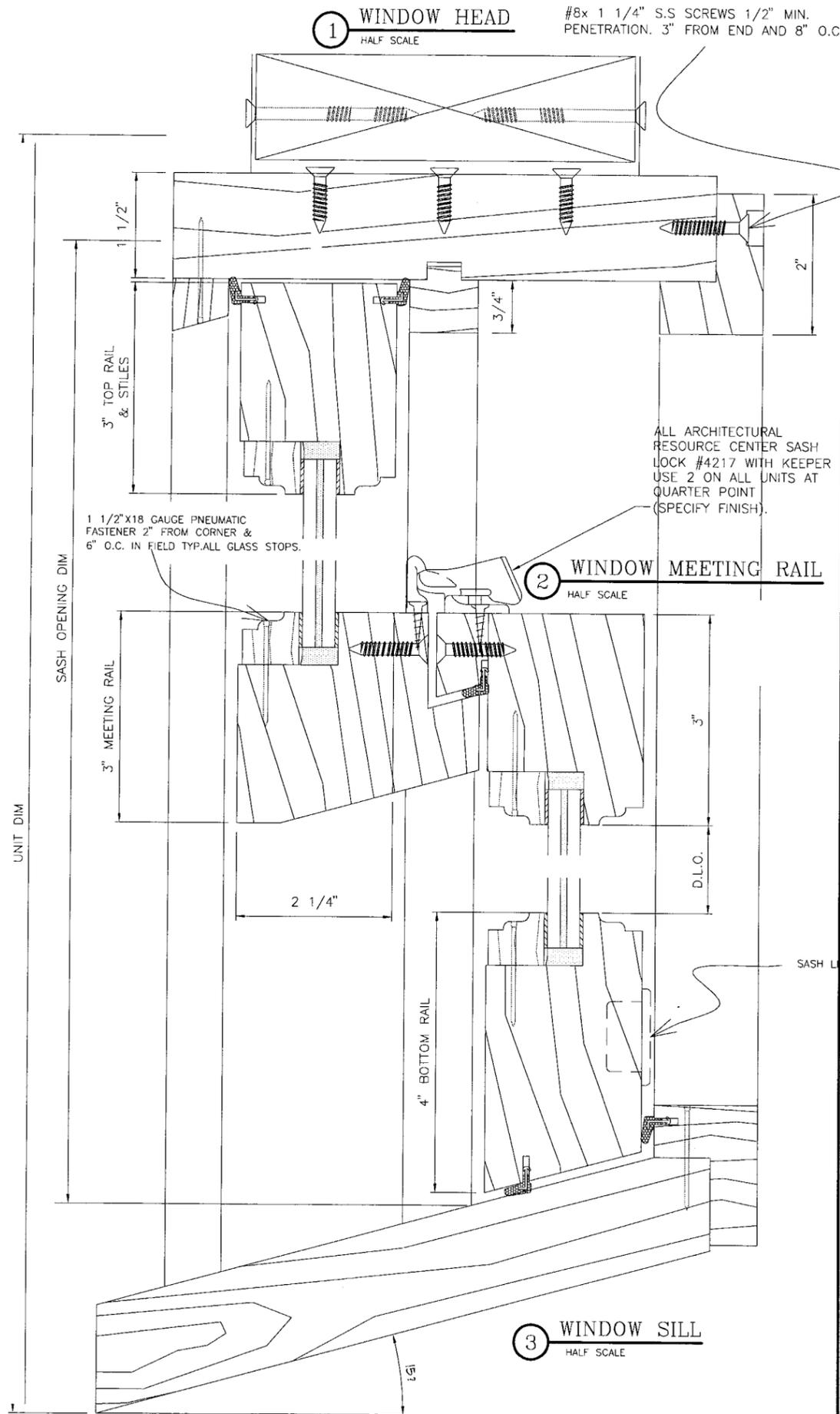
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CNTY COMMENTS: ELEV			

04-HWD-0002

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EXTERIOR GLAZED UNITS WITH "SPRING & BALANCE"



Approved as complying with the Florida Building Code
 Date APRIL 7, 2005
 NOA# 041129.03
 Manual Date Product Control
 Division
 By Manuel Perez

FRANK L. BENNARDO, P.E.
 # PE0046549

03/23/2005

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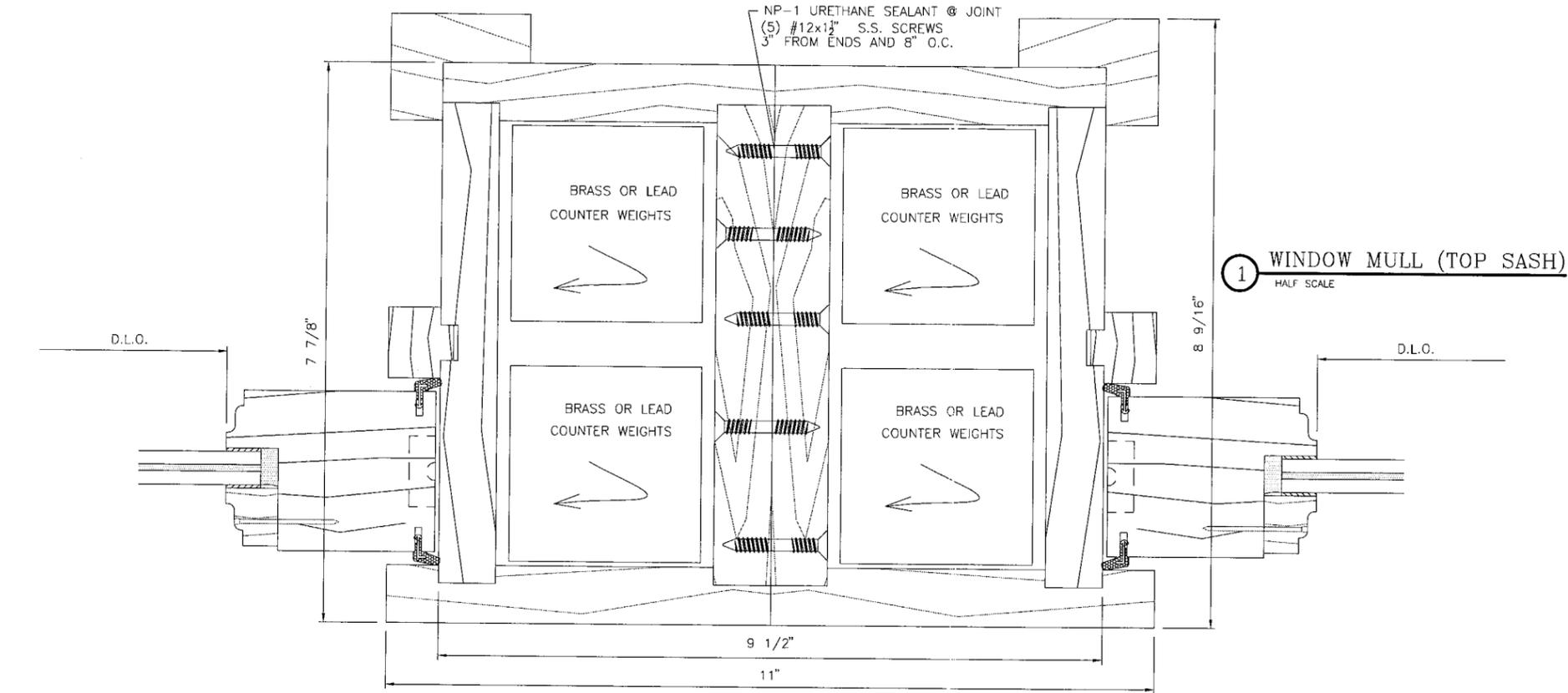
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04-HWD-0002

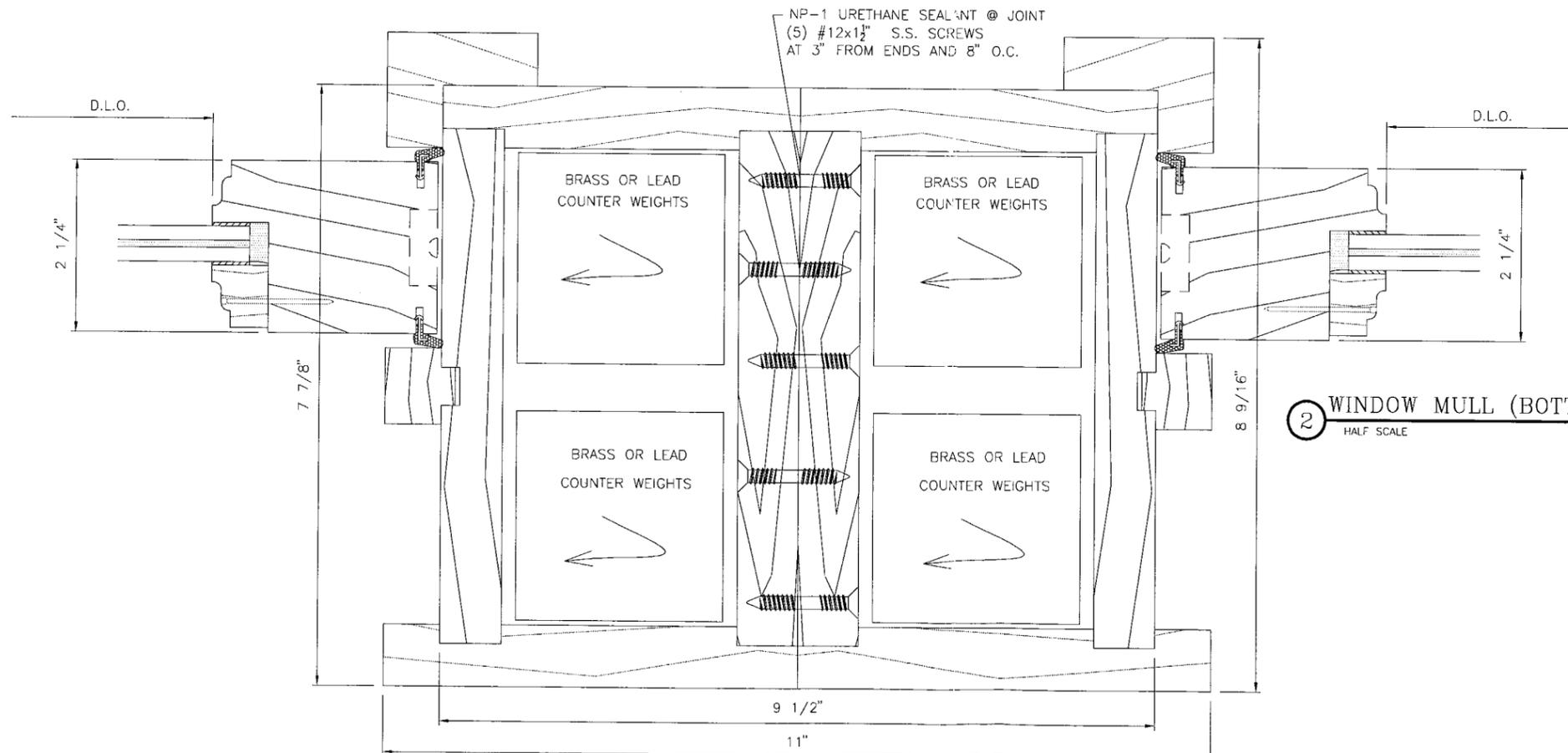
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"CHAIN & WEIGHTS" UNITS



1 WINDOW MULL (TOP SASH)
HALF SCALE



2 WINDOW MULL (BOTTOM SASH)
HALF SCALE

FRANK L. BENNARDO, P.E.
PE0046549

03/23/2005

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CNTY COMMENTS: ELEV	-	-	-

04-HWD-0002

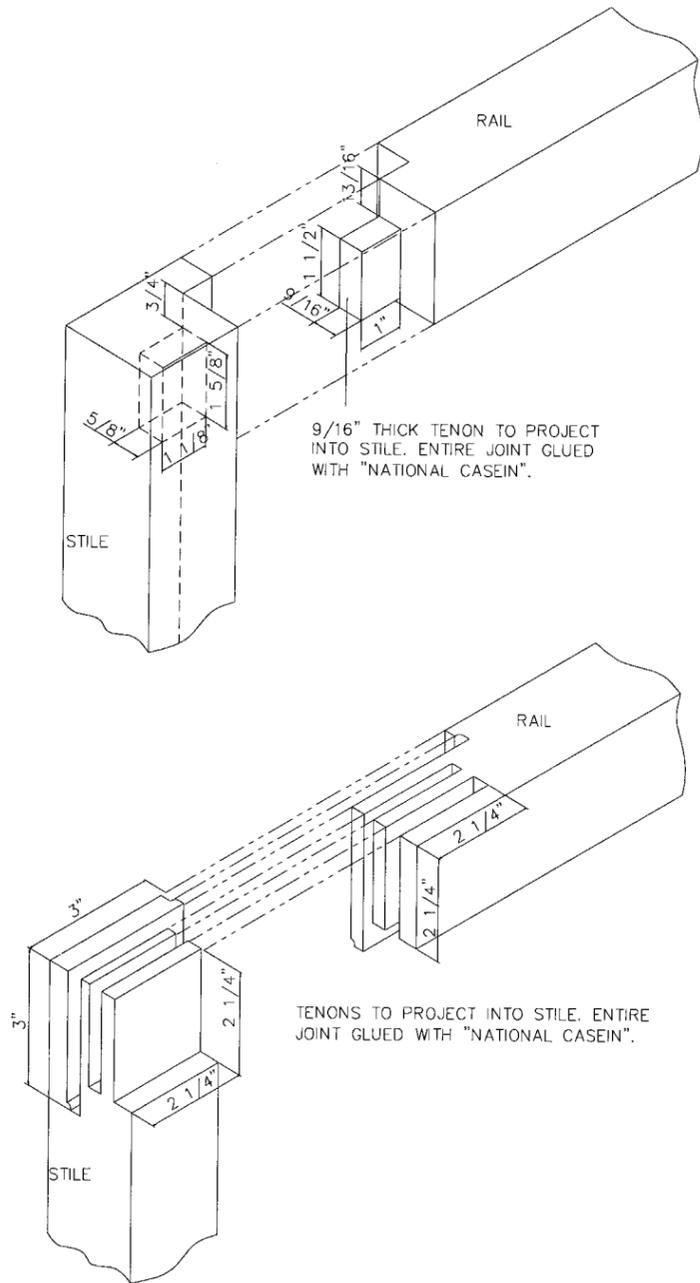
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Date APRIL 7, 2005
NOA# 04-1129-03
Miami Dade Product Control
Division
By Manuel Perez

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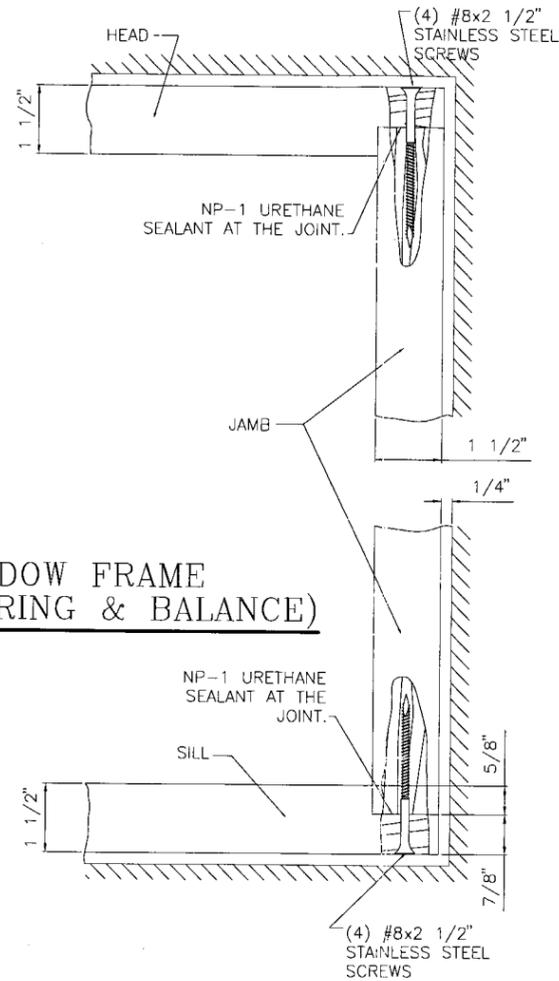
FRAME & SASH CONSTRUCTION DETAILS

SASH CORNER DETAILS



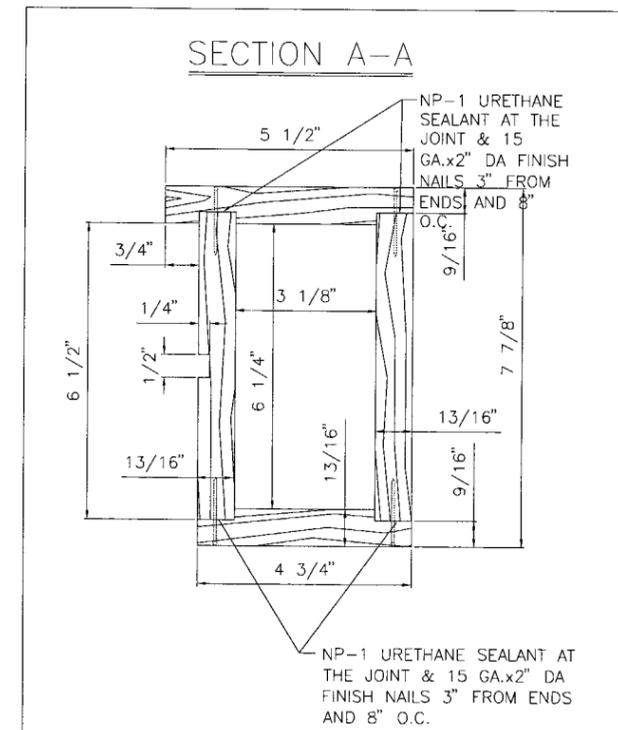
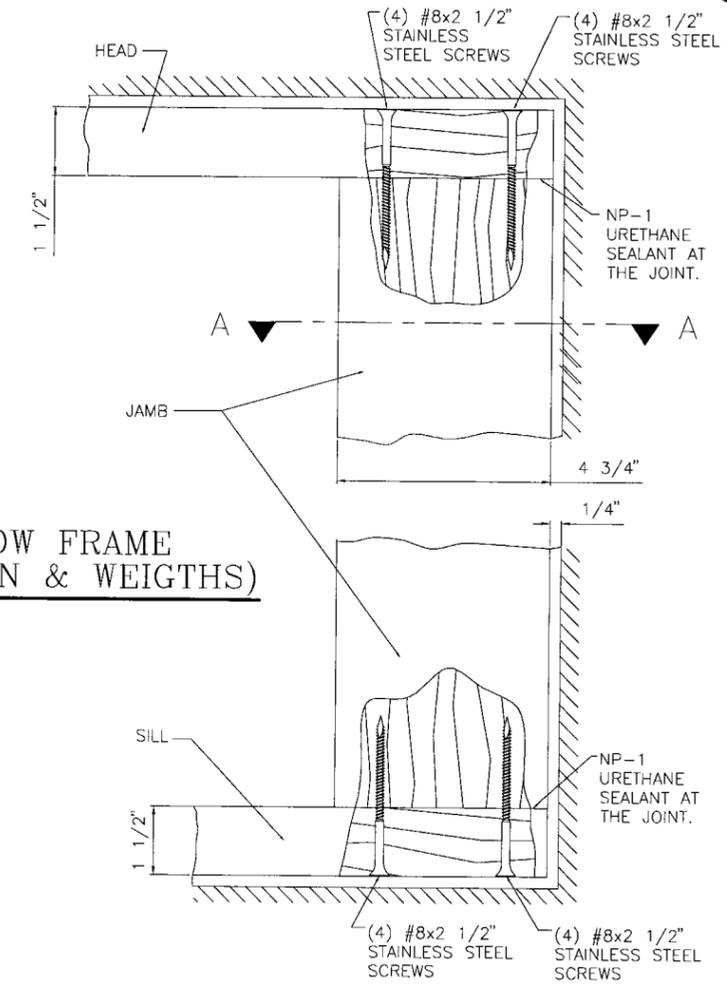
1 WINDOW FRAME (SPRING & BALANCE)

1:4 SCALE



2 WINDOW FRAME (CHAIN & WEIGHTS)

1:4 SCALE



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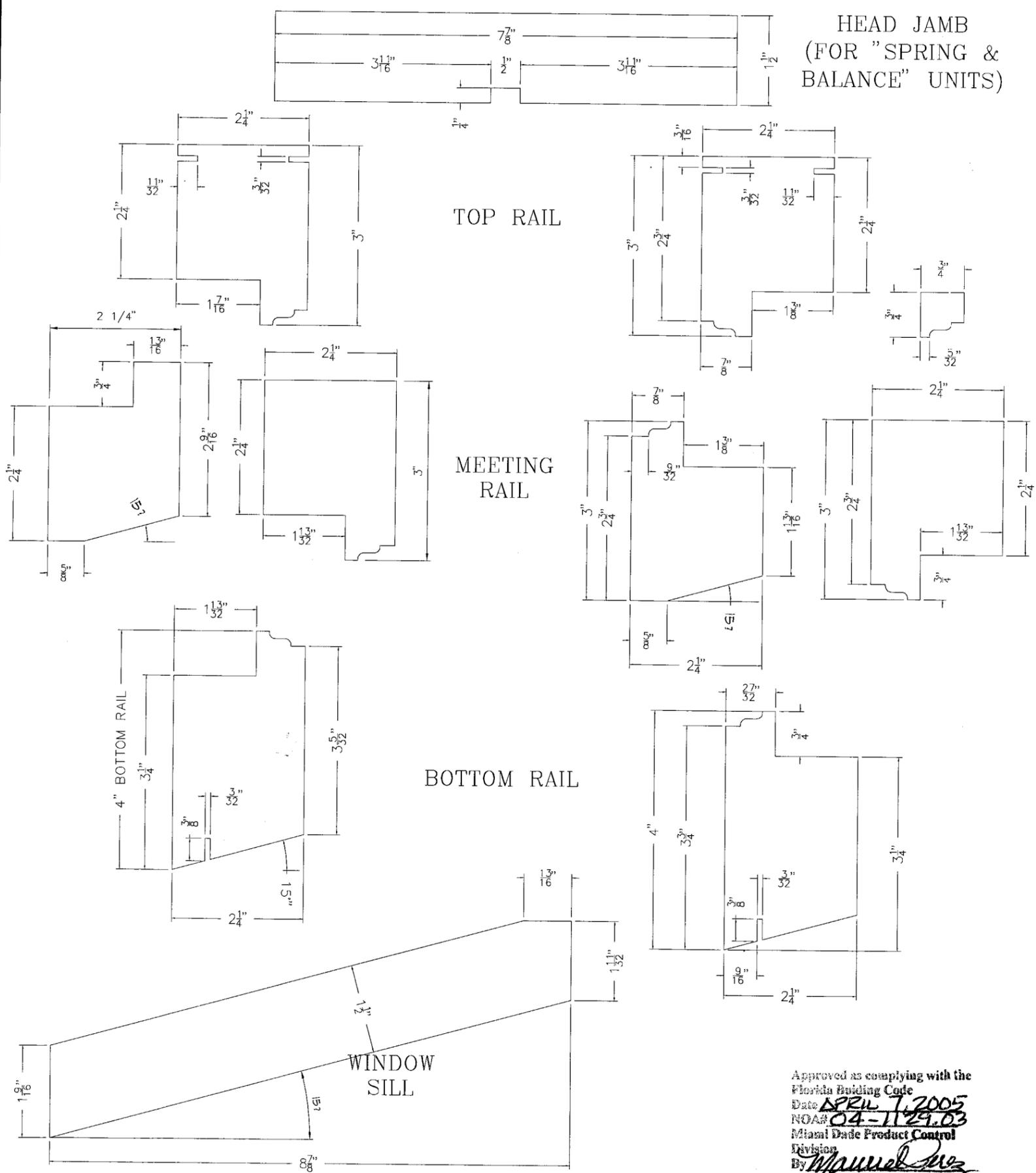
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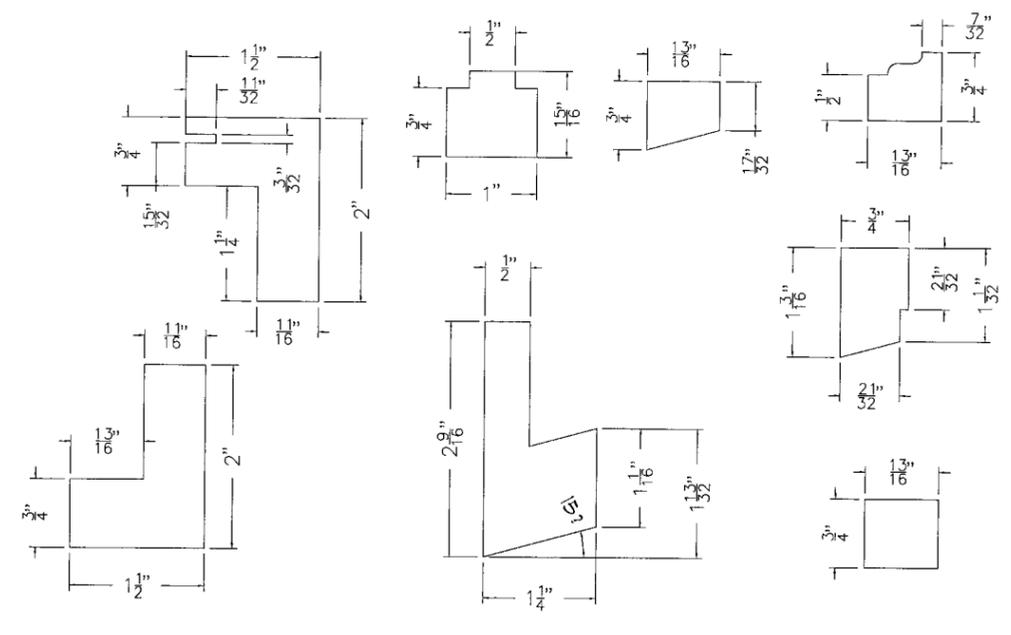
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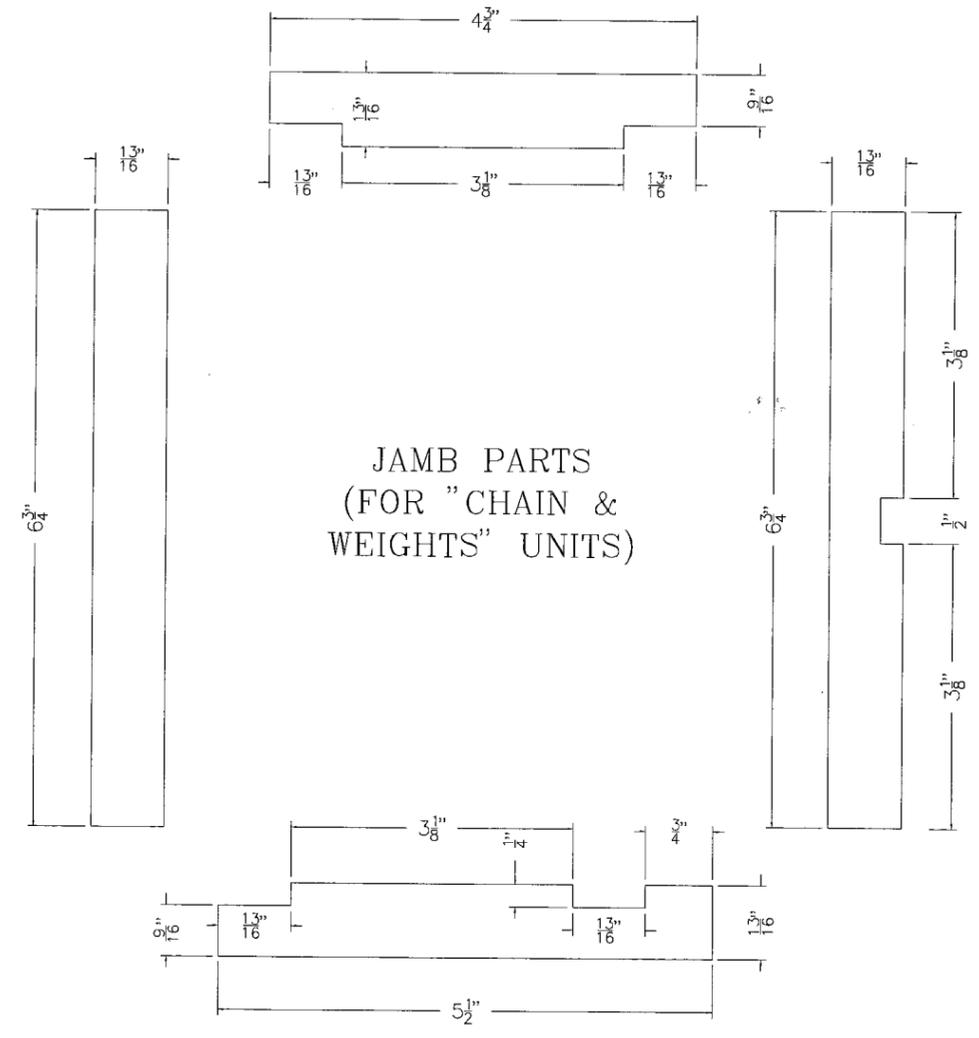


Approved as complying with the Florida Building Code
 Date **APRIL 7, 2005**
 NOA# **04-1129.03**
 Miami Dade Product Control Division
 By *Manuel Perez*

GLAZING BEADS, STOPS AND MISCELLANEOUS



JAMB PARTS
(FOR "CHAIN & WEIGHTS" UNITS)



FRANK L. BENNARDO, P.E.
PE0046549

03/23/2005

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 (561) 391-2888 FAX: (561) 391-2862
 WWW.FLBENGINEERING.COM
 CERTIFICATE OF AUTHORIZATION: #9885

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CNTY COMMENTS: ELEV	-	-	-

04-HWD-0002

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DESCRIPTION:

