



**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) 375-2902 FAX (305) 372-6339**

**NOTICE OF ACCEPTANCE (NOA)**

**[www.miamidade.gov/buildingcode](http://www.miamidade.gov/buildingcode)**

**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: "Direct Set" Wood Fixed Window – L.M.I.**

**APPROVAL DOCUMENT:** Drawing No. **04-HWD-0003**, titled "Direct Set Window – Large Missile Impact Resistant", sheets 1 through 6 of 6, dated 11/22/04, last revision dated 12/17/08, prepared by Engineering Express, Inc., signed and sealed by Frank L. Bennardo, P. E., bearing the Miami-Dade County Product Control Renewal stamp with the Notice of Acceptance number and expiration 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 the following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

**REVISION** 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 **renews NOA No. 09-0224.09** and consists of this page 1 and evidence submitted pages E-1, E-2, E-3 and E-4, as well as approval document mentioned above.

The submitted documentation was reviewed by **Jaime D. Gascon, P. E.**



*J. Gascon*  
*12/17/10*

**NOA No. 10-1012.08**  
**Expiration Date: October 13, 2015**  
**Approval Date: December 23, 2010**  
**Page 1**

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**1. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL NOA NO. 04-1129.04**

**A. DRAWINGS**

1. *Manufacturer's die drawings and sections.*
2. *Drawing No. 04-HWD-0003, titled "Direct Set Window – Large Missile Impact Resistant", sheets 1 through 6, of 6, dated 11/22/04, revised on 6/16/05, 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  
along with marked-up drawings and installation diagram of one wood fixed window, O configuration, prepared by Hurricane Test Laboratory, LLC, Test Report No. HTL-0137-0911-01, dated 9/12/01, 2/21/02, signed & sealed by Vinu J. Abraham, P. E.*
2. *Test reports on 1) Large Missile Impact Test per FBC, TAS 201-94  
2) Cyclic Wind Pressure Loading per FBC, TAS 203-94  
along with marked-up drawings and installation diagram of one wood fixed window, O configuration, prepared by Hurricane Test Laboratory, LLC, Test Report No. HTL-0137-0217-02, dated 9/12/01, 2/21/02, signed & sealed by Vinu J. Abraham, P. E.*
3. *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 direct set wood fixed window, one half round and one eyebrow shape, O configuration each, prepared by Hurricane Test Laboratory, LLC, Test Report No. HTL-0137-0101-04, dated 12/30/03, signed and sealed by Vinu J. Abraham, P. E.*

**C. CALCULATIONS**

1. *Anchor Calculations and structural analysis complying with FBC-2004, dated Nov. 22, 2004, revised on June 16, 2005, prepared by Frank L. Bennardo, P. E., Inc., signed and sealed by Frank L. Bennardo, P.E.  
Complies with ASTM E1300-02*

**D. QUALITY ASSURANCE**

1. *Miami-Dade County Building Code Compliance Office (BCCO).*



Jaime D. Gascon, P. E.  
Chief, Product Control Division  
NOA No. 10-1012.08

Expiration Date: October 13, 2015  
Approval Date: December 23, 2010

**Hartman Windows & Doors, LLC**

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**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.
3. Notice of Acceptance No. **01-1204.01** issued to E.I. DuPont DeNemours for "**Sentry Glass Plus**" dated 01/17/02, expiring on 01/14/07.

**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. OTHERS**

1. None.

**2. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL NOA NO. 09-0224.09**

**A. DRAWINGS**

1. Drawing No 04-HWD-0003, titled "Direct Set Window - Large Missile Impact Resistant", sheets 1 through 6 of 6, dated 11/22/04 with the latest revision dated 12/17/08, prepared by Engineering Express, Inc., signed and sealed by Frank L. Bennardo, P. E.

**B. TESTS**

1. None.

**C. CALCULATIONS**


1. Statement letter of conformance with the FBC-2007, dated January 28, 2009, prepared by Engineering Express, Inc., signed and sealed by Frank L. Bennardo, P. E.

**D. QUALITY ASSURANCE**

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

**E. MATERIAL CERTIFICATIONS**

1. Notice of Acceptance No. **07-1116.04** issued to E.I. DuPont DeNemours & Co., Inc. for their "**DuPont Sentry Glass ® Plus**" dated 01/03/08, expiring on 01/14/12.

  
Jaime D. Gascon, P. E.

Chief, Product Control Division

NOA No. 10-1012.08

Expiration Date: October 13, 2015

Approval Date: December 23, 2010

**Hartman Windows & Doors, LLC**

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**E. MATERIAL CERTIFICATIONS (CONTINUED)**

2. *Notice of Acceptance No. 06-0216.06 issued to Solutia Inc. for their "Saflex IIIIG Clear or colored interlayer" dated May 04, 2006, expiring on May 21, 2011.*
3. *Notice of Acceptance No. 07-1116.11 issued to SAF-GLASS for their "SAF-GLAS Polycarbonate Laminate" dated December 12, 2007, expiring on December 16, 2012.*

**F. STATEMENTS**

1. *Statement letter of conformance, dated March 10, 2009, signed and sealed by Frank L. Bennardo, P.E.*
2. *Statement letter of conformance with the FBC-2007, dated January 28, 2009, revised dated March 10, 2009, prepared by Engineering Express, Inc., signed and sealed by Frank L. Bennardo, P.E.*

**G. OTHERS**

1. *Notice of Acceptance No. 04-1129.04, issued to Hartman Windows & Doors, LLC for their Series "Direct Set Wood Fixed Window - L. M. I.", approved on 10/13/05 and expiring on 10/13/10.*

**3. NEW EVIDENCE SUBMITTED**

**B. DRAWINGS**

1. *Drawing No 04-HWD-0003, titled "Direct Set Window - Large Missile Impact Resistant", sheets 1 through 6 of 6, dated 11/22/04 with the latest revision dated 12/17/08, prepared by Engineering Express, Inc., signed and sealed by Frank L. Bennardo, P. E.*

**B. TESTS**

1. *None.*

**C. CALCULATIONS**

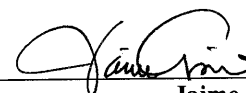
1. *None.*

**G. QUALITY ASSURANCE**

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

**H. MATERIAL CERTIFICATIONS**

1. *Notice of Acceptance No. 10-0413.04 issued to E.I. DuPont DeNemours & Co., Inc. for their "DuPont Sentry Glass® Interlayer" dated 05/26/2010, expiring on 01/14/12.*



Jaime D. Gascoth, P. E.  
Chief, Product Control Division  
NOA No. 10-1012.08

Expiration Date: October 13, 2015  
Approval Date: December 23, 2010

**Hartman Windows & Doors, LLC**

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**H. MATERIAL CERTIFICATIONS (CONTINUED)**

2. *Notice of Acceptance No. 06-0216.06 issued to Solutia Inc. for their "Saflex III G Clear or colored interlayer" dated 05/04/06, expiring on 05/21/11.*
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.*

**I. STATEMENTS**

1. *None.*

**G. OTHERS**

1. *Notice of Acceptance No. 09-0224.09, issued to Hartman Windows & Doors, LLC for their Series "Direct Set Wood Fixed Window - L. M. I.", approved on 04/08/09 and expiring on 10/13/10.*

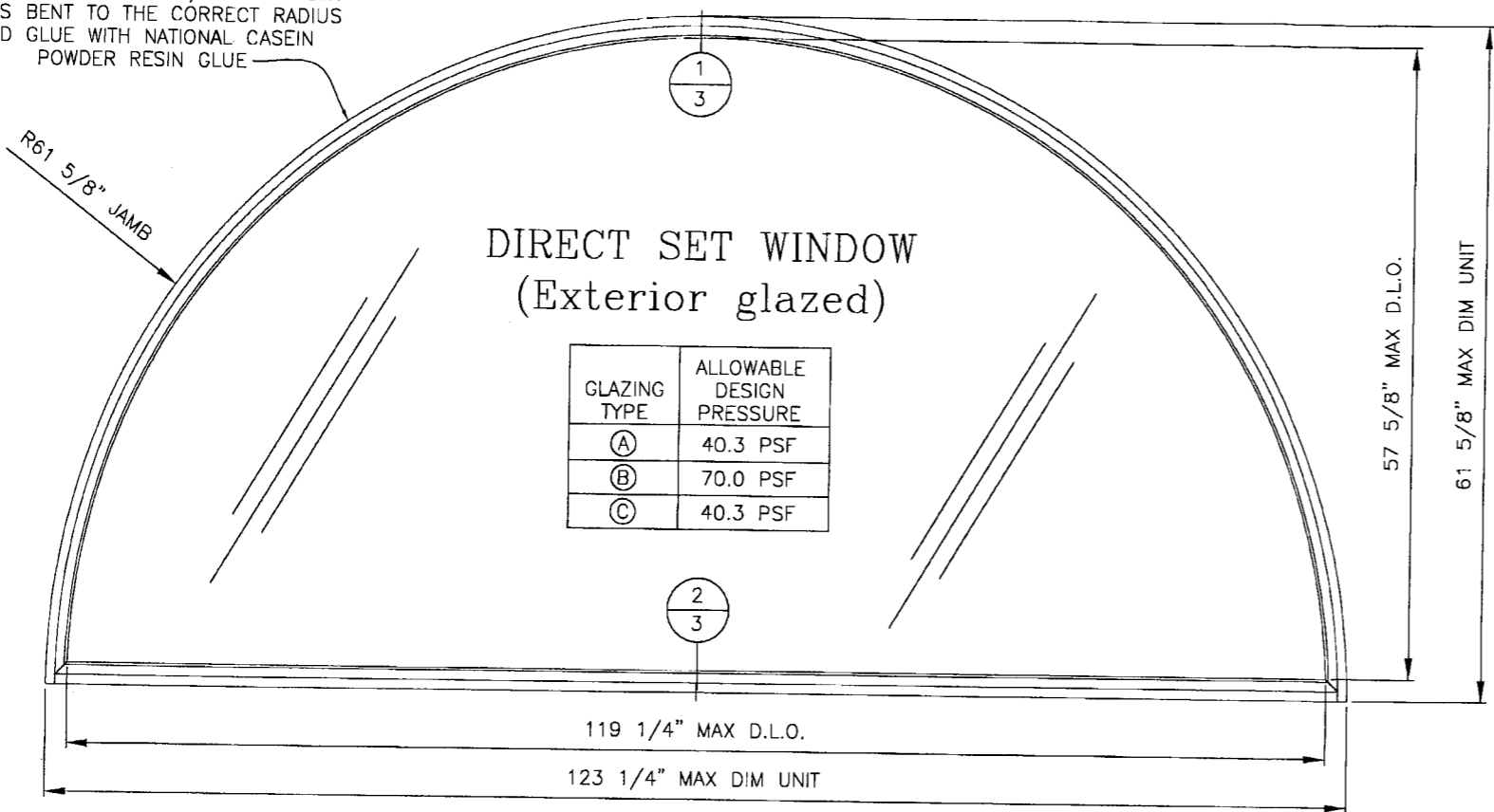


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**Jaime D. Gascon, P. E.**  
**Chief, Product Control Division**  
**NOA No. 10-1012.08**  
**Expiration Date: October 13, 2015**  
**Approval Date: December 23, 2010**

# DIRECT SET WINDOW

TYPICAL ALL RADIUSED WINDOW PARTS:  
EACH IS MADE UP OF 1/8" MAHOGONY STRIPS BENT TO THE CORRECT RADIUS AND GLUE WITH NATIONAL CASEIN POWDER RESIN GLUE

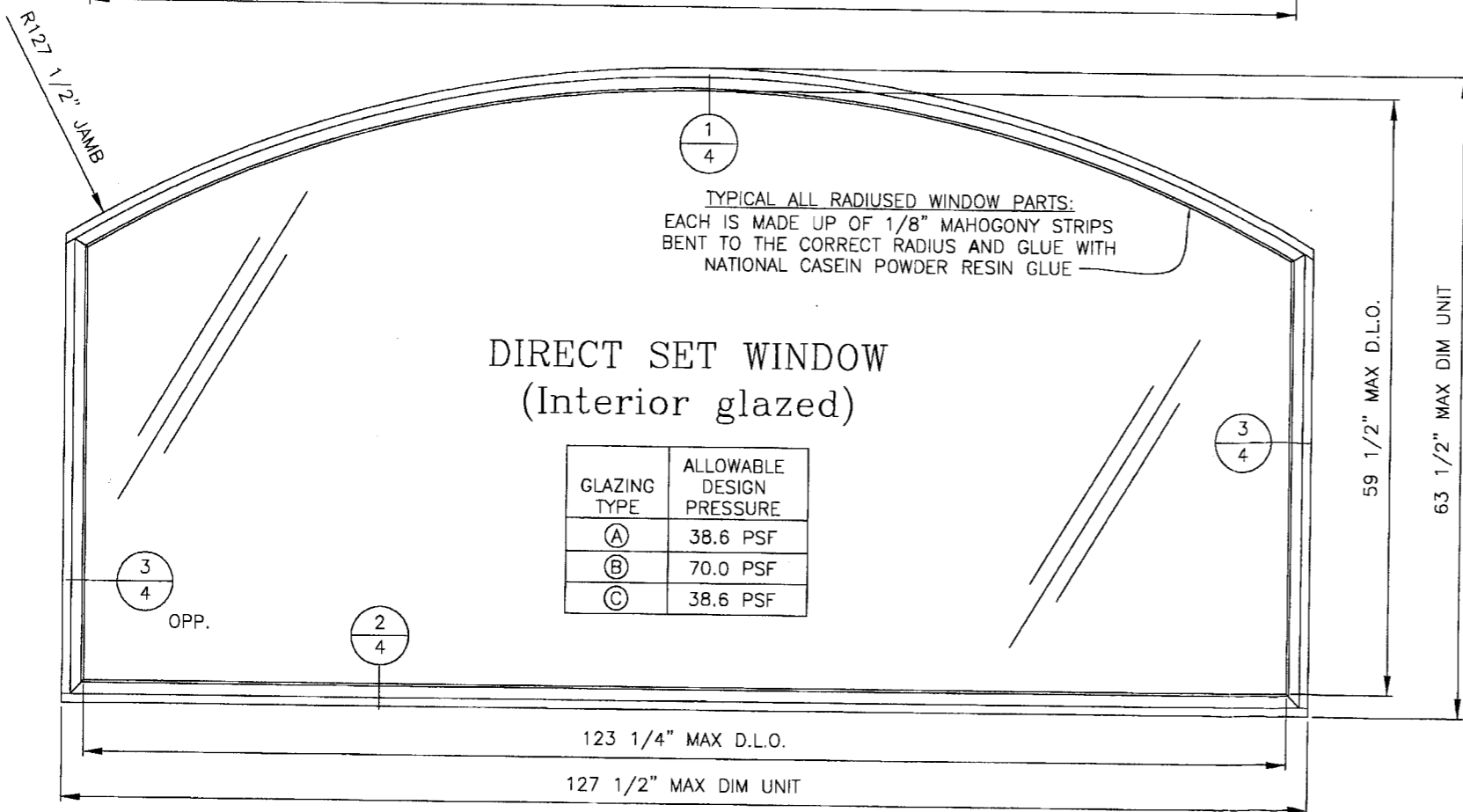


GLAZING TYPE	ALLOWABLE DESIGN PRESSURE
(A)	40.3 PSF
(B)	70.0 PSF
(C)	40.3 PSF

03/10/2009 - 2:10pm keith F:\01 Project Files\Hartman Windows & Doors (HWD)\2004 Jobs\04-HWD-0003 Direct-Set Window (NOA)\04-HWD-0003\_02b Direct-Set Window (NOA).dwg

## GENERAL NOTES

1. THE SYSTEM DESCRIBED HEREIN HAS BEEN DESIGNED AND TESTED IN ACCORDANCE WITH THE 2007 FLORIDA BUILDING CODE, FOR USE WITHIN THE HIGH VELOCITY HURRICANE ZONE, PER TAS 201 / 202 / 203 & ASTM E1300-98 STANDARDS.
2. NO 33-1/3% INCREASE IN ALLOWABLE STRESS HAS BEEN USED IN THE DESIGN OF THIS SYSTEM. WIND LOAD DURATION FACTOR Cd=1.6 HAS BEEN USED FOR WOOD ANCHOR DESIGN.
3. 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.
4. MULTIPLE UNITS MUST BE INSTALLED USING MIAMI-DADE COUNTY BCCO-APPROVED STRUCTURAL MULLIONS.
5. 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 FOR USE IN CONJUNCTION WITH THIS DOCUMENT.
6. PERMIT HOLDER SHALL VERIFY THE ADEQUACY OF THE EXISTING STRUCTURE TO WITHSTAND SUPERIMPOSED LOADS. WOOD BUCKS (BY OTHERS) SHALL BE ANCHORED PROPERLY TO TRANSFER LOADS TO THE EXISTING STRUCTURE.
7. ALL FRAMING MEMBERS SHALL BE MAHOGANY WOOD HAVING MINIMUM SPECIFIC GRAVITY G=0.54 AND MIN DOWEL BEARING STRENGTH Fe=5450psi.
8. UNITS GLAZED WITH 7/16" LAMINATED GLASS ARE LARGE MISSILE IMPACT RESISTANT AND DO NOT REQUIRE IMPACT RESISTANT SHUTTERS.
9. EXTERIOR SEAM OF FRAME CORNERS SHALL BE SEALED WITH SILICONE.
10. ALL DIMENSIONAL LUMBER COMING INTO CONTACT WITH CONCRETE OR MASONRY MUST BE PRESSURE TREATED OR PROTECTED WITH ROOFING FELT PAPER AT THE CONTACT AREA AS PRESCRIBED IN THE 2007 FLORIDA BUILDING CODE, SECTION 2326.2.



TYPICAL ALL RADIUSED WINDOW PARTS:  
EACH IS MADE UP OF 1/8" MAHOGONY STRIPS BENT TO THE CORRECT RADIUS AND GLUE WITH NATIONAL CASEIN POWDER RESIN GLUE

GLAZING TYPE	ALLOWABLE DESIGN PRESSURE
(A)	38.6 PSF
(B)	70.0 PSF
(C)	38.6 PSF

### PRODUCT RENEWED

as complying with the Florida

Building Code

Acceptance No. 10-1012.08

Expiration Date 10/13/2015

By *[Signature]*  
Miami Dade Product Control  
Division

### PRODUCT REVISED

as complying with the Florida

Building Code

Acceptance No. 09-0224.09

Expiration Date 10/13/2010

By *[Signature]*  
Miami Dade Product Control  
Division

### GLAZING OPTIONS:

- (A) 7/16" "Sentry Glass Plus" by E.I. Dupont (NOA #07-1116.04):
  - 3/16" ANNEALED GLASS
  - 0.090" DuPont SENTRYGLASS PLUS INTERLAYER
  - 3/16" ANNEALED GLASS
- (B) 7/16" "SAFLEX" by Solutia (NOA #06-0216.06):
  - 3/16" HEAT STRENGTHENED GLASS
  - 0.090" SAFLEX PVB INTERLAYER
  - 3/16" HEAT STRENGTHENED GLASS
- (C) 7/16" "SAF-GLAS" by Saf-Glas, LLC (NOA #07-1116.11):
  - 3/16" ANNEALED GLASS
  - 0.015" URETHANE ADHESIVE
  - 0.070" POLYCARBONATE "S.I.G" INTERLAYER
  - 0.015" URETHANE ADHESIVE
  - 3/16" ANNEALED GLASS

FRANK L. BENNARDO, P.E.  
#PE0046549

03/10/2009

VALID FOR (1) JOB ONLY  
VALID ONLY WITH RAISED ENGINEER SEAL

**ENGINEERING EXPRESS**

160 SW 12th AVENUE, #106  
DEERFIELD BEACH, FL 33442  
Ph: (954) 354-0660 FAX: (954) 354-0443  
WWW.ENGEXP.COM

CERT. OF AUTH. #0005  
A. FRANK L. BENNARDO, P.E., INC. INNOVATION

HARTMAN WINDOWS & DOORS, LLC

531 SOUTHERN BLVD - WEST PALM BEACH, FL 33405  
PHONE: (954) 722-8707 FAX: (954) 783-0288

DIRECT SET WINDOW  
LARGE MISSILE IMPACT RESISTANT

REMARKS	INITIAL	ISSUE	DATE
	CL	FLB	11/22/04
	CL	FLB	08/16/05
	AML	CL	12/17/08

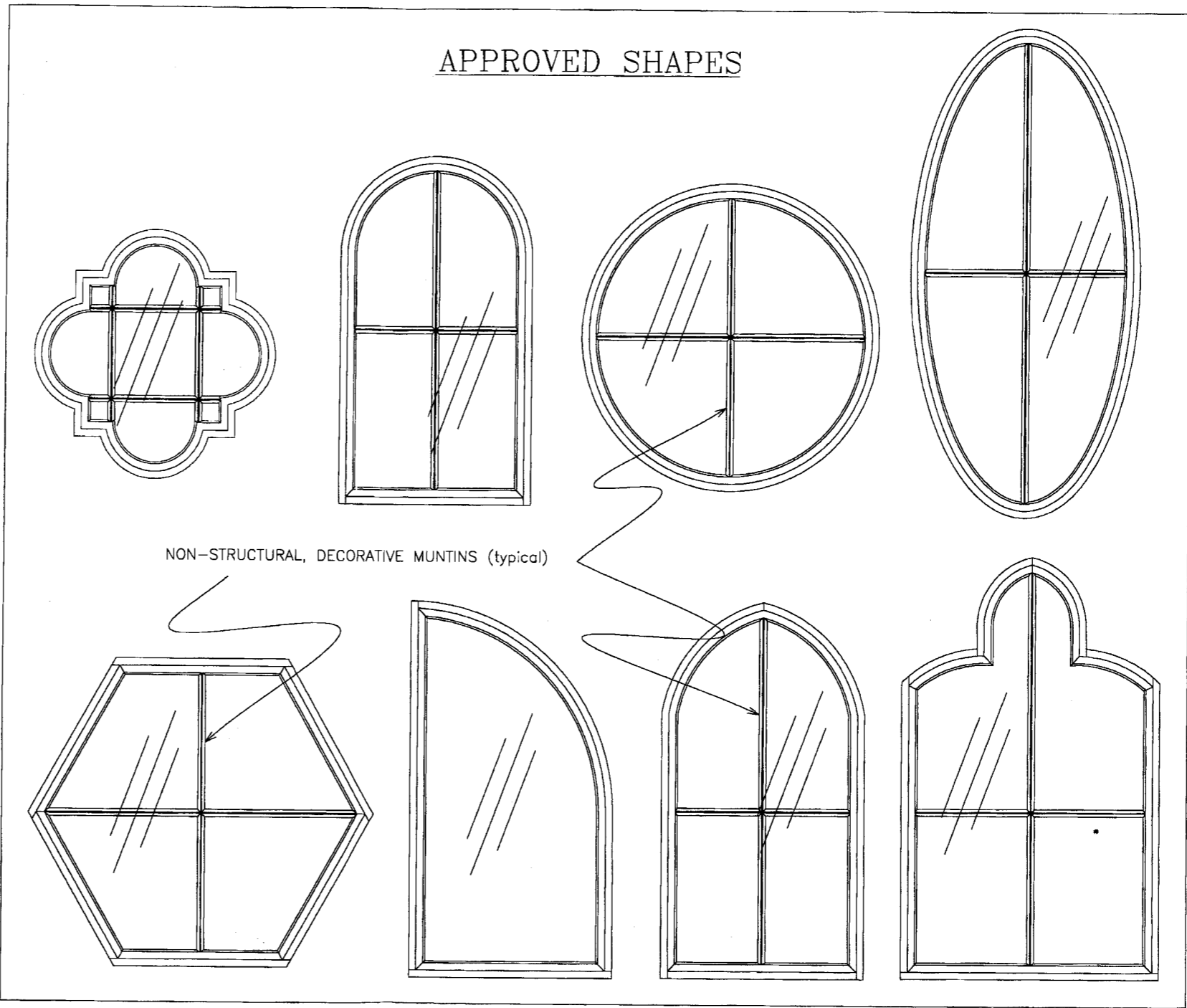
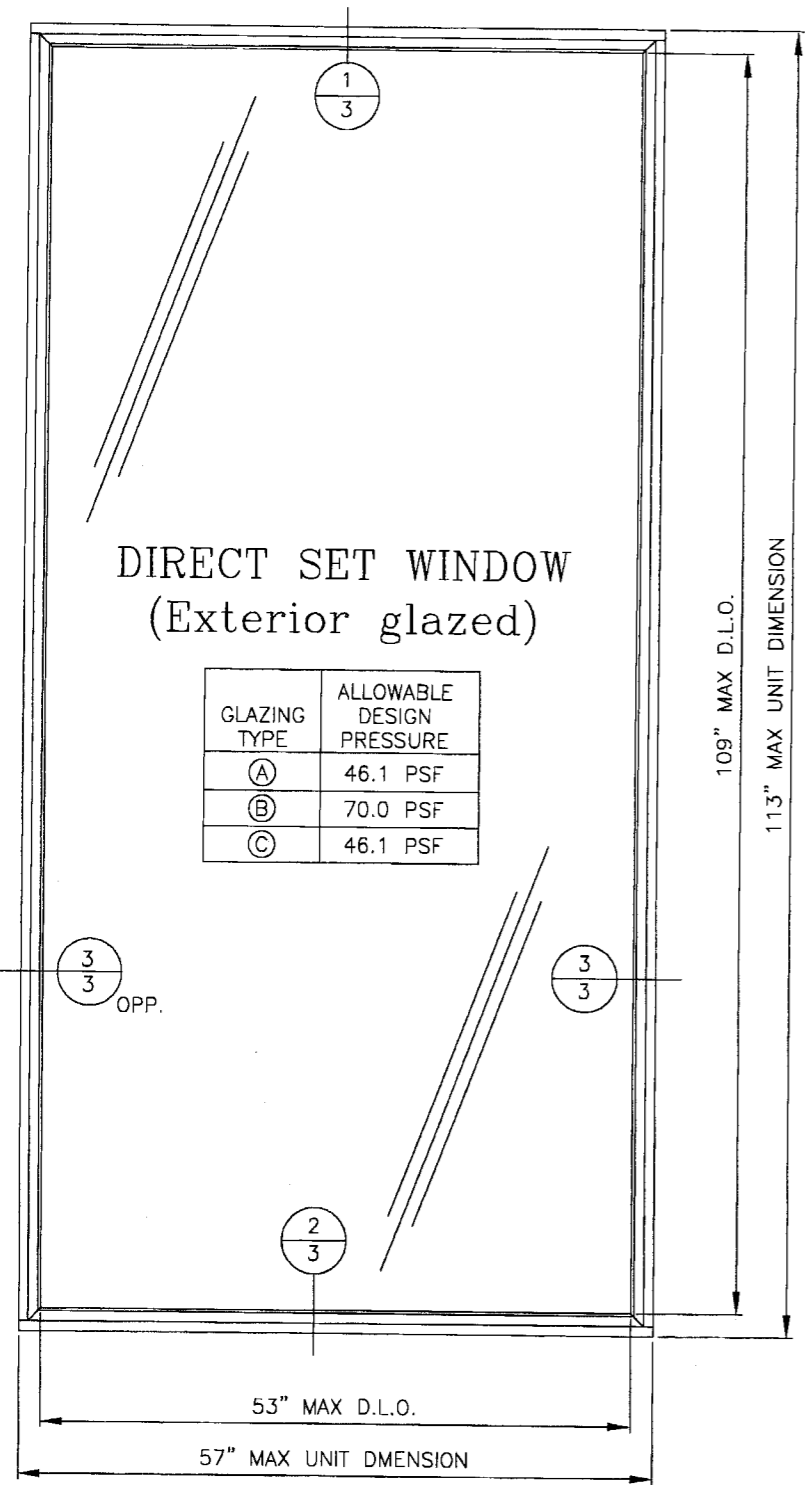
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04-HWD-0003

SCALE: 01

PAGE DESCRIPTION:

03/10/2009 - 2:10pm keith F:\01 Project Files\Hartman Windows & Doors (HWD)\2004 Jobs\04-HWD-0003 Direct-Set Window (NOA)\04-HWD-0003 02b Direct-Set Window (NOA).dwg



**SHAPED UNIT NOTES:**

- 1) UNITS OF ANY SHAPE ARE ALLOWED PROVIDED CONSTRUCTION, GLAZING, & ANCHORAGE ARE PER DETAILS SHOWN HEREIN.
- 2) ALL SHAPED UNITS (OTHER THAN THOSE SHOWN ON SHEET 1) SHALL FIT WITHIN THE RECTANGULAR DIMENSIONS SHOWN ABOVE.
- 3) ALL RADIUSED WINDOW PARTS ARE MADE UP OF 1/8" MAHOGONY STRIPS BENT TO THE CORRECT RADIUS AND GLUE WITH NATIONAL CASEIN POWDER RESIN GLUE

**PRODUCT RENEWED**  
 as complying with the Florida Building Code  
 Acceptance No. **10-1912.08**  
 Expiration Date **10/13/2015**  
 By *[Signature]*  
 Miami Dade Product Control Division

**PRODUCT REVISED**  
 as complying with the Florida Building Code  
 Acceptance No. **09-0224.09**  
 Expiration Date **10/13/2010**  
 By *[Signature]*  
 Miami Dade Product Control Division

FRANK L. BENNARDO, P.E.  
 # PE0046549  
 03/10/2009  
 VALID FOR (1) JOB ONLY  
 VALID ONLY WITH RAISED ENGINEER SEAL

**ENGINEERING EXPRESS**  
 160 SW 12th AVENUE, # 106  
 DEERFIELD BEACH, FL 33442  
 Ph: (954) 354-0660 Fax: (954) 354-0443  
 WWW.ENGEXP.COM  
 CERT OF AUTH #6886  
 A FRANK L. BENNARDO, P.E., INC. INNOVATION

**HARTMAN WINDOWS & DOORS, LLC**  
 531 SOUTHERN BLVD - WEST PALM BEACH, FL 33405  
 PHONE: (954) 722-8707 FAX: (954) 783-0288  
 DIRECT SET WINDOW  
 LARGE MISSILE IMPACT RESISTANT

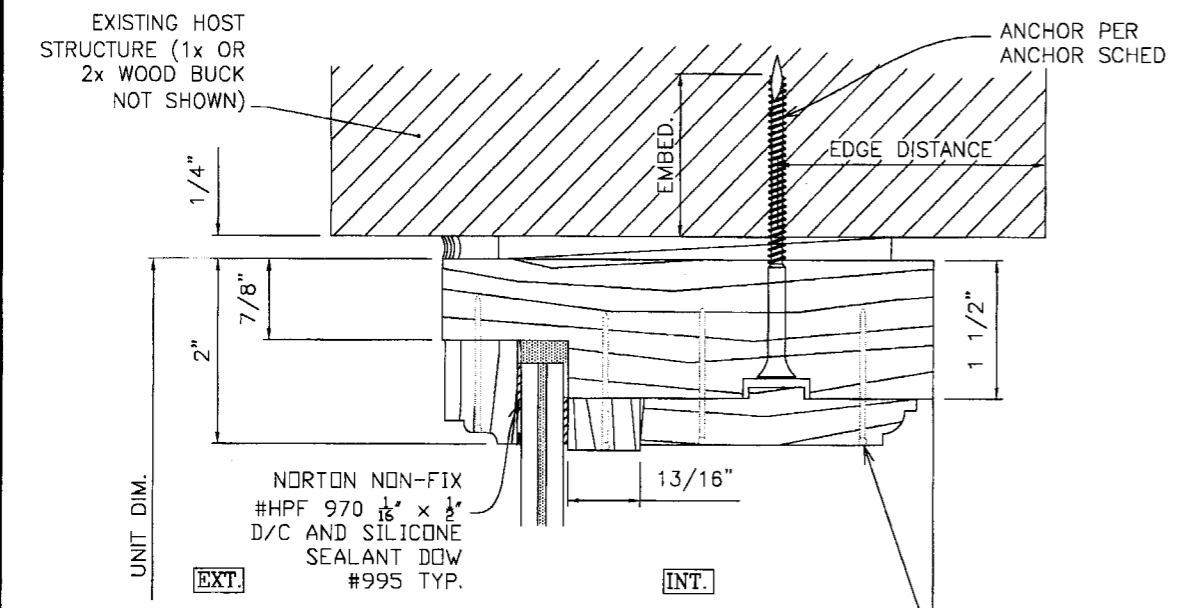
REMARKS	DRWN	CHKD	DATE
INITIAL ISSUE	CL	FLB	11/22/04
2004 FBC	CL	FLB	08/16/05
2007 FBC	AML	CL	12/17/08

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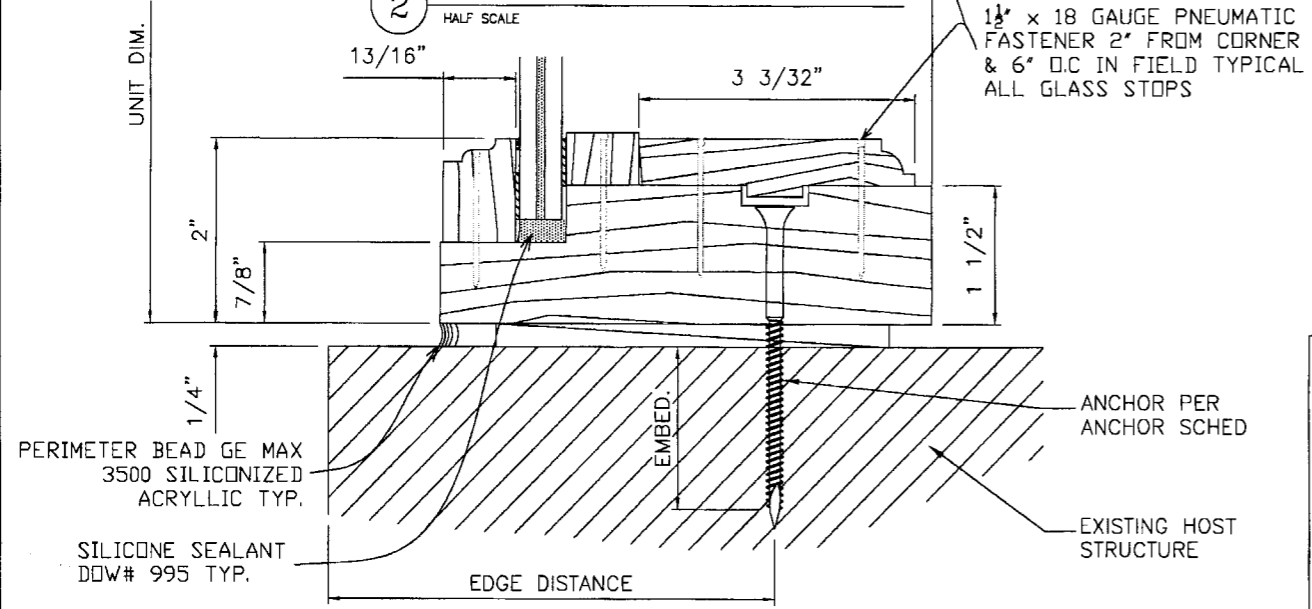
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**04-HWD-0003**  
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# EXTERIOR GLAZED DETAILS

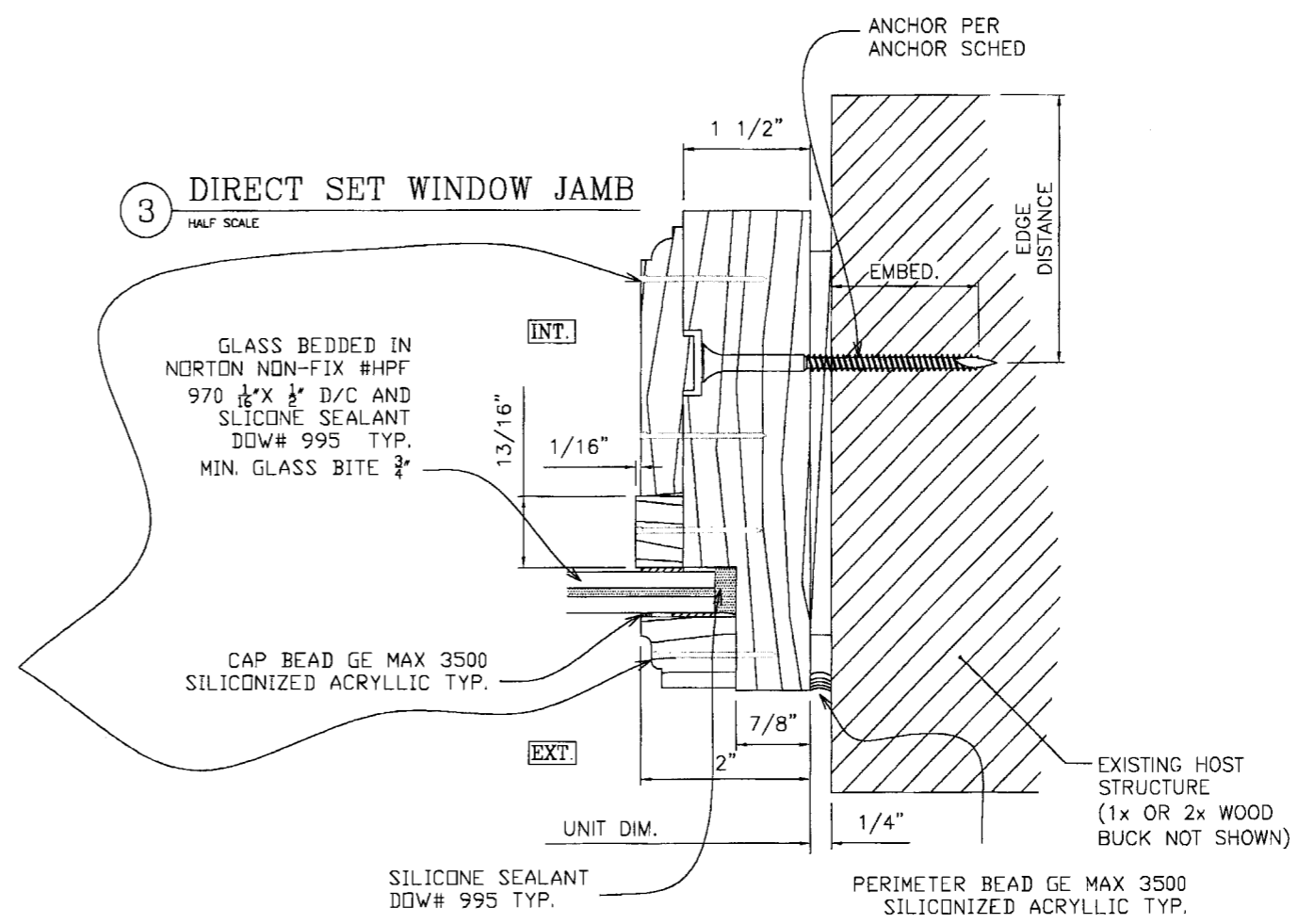
**1 DIRECT SET WINDOW HEAD**  
HALF SCALE



**2 DIRECT SET WINDOW SILL**  
HALF SCALE



**3 DIRECT SET WINDOW JAMB**  
HALF SCALE



**ANCHOR SCHEDULE:**

TO CONCRETE OR HOLLOW BLOCK  
(WITH OR WITHOUT 1x WOOD BUCK)  
1/4" ITW TAPCON WITH 1-1/4" MIN EMBED  
& 2-1/2" MIN EDGE DISTANCE

TO 2x (MIN) WOOD BUCK OR WOOD STRUCTURE  
#12 WOOD SCREW OR SMS WITH 1-1/2"  
MIN EMBED & 1" MIN EDGE DISTANCE

**ANCHOR NOTES:**

1. ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' RECOMMENDATIONS.
2. TAPCONS SHALL BE MANUFACTURED BY ITW.
3. ALL UNITS SHALL BE ANCHORED TO EXISTING HOST STRUCTURE WITH ANCHORS AT 3" FROM EACH CORNER & 8" O.C. AROUND ENTIRE PERIMETER. REFER TO ANCHOR SCHEDULE FOR ALLOWABLE ANCHORS & ANCHORING CONDITIONS.
4. ALL SHEET METAL AND/OR WOOD SCREWS SHALL BE SAE GRADE 5 STEEL OR EQUIVALENT.
5. ENSURE MINIMUM 2-1/2" EDGE DISTANCE FOR ALL ANCHORS TO CONCRETE & TO HOLLOW BLOCK.
6. WHERE EXISTING STRUCTURE IS WOOD FRAMING, EXISTING CONDITIONS MAY VARY. FIELD VERIFY THAT FASTENERS ARE INTO ADEQUATE WOOD FRAMING MEMBERS, NOT INTO PLYWOOD. 1" EDGE DISTANCE IS ACCEPTABLE FOR ANCHORS TO WOOD FRAMING.
7. WOOD HOST STRUCTURE SHALL BE "SOUTHERN PINE" G=0.55 OR GREATER DENSITY.
8. MINIMUM EMBEDMENT SHALL BE AS NOTED IN ANCHOR SCHEDULE. MINIMUM EMBEDMENT AND EDGE DISTANCE EXCLUDES STUCCO, FOAM, BRICK, AND OTHER WALL FINISHES.
9. WOOD BUCKS (BY OTHERS) SHALL BE ANCHORED PROPERLY TO TRANSFER LOADS TO THE EXISTING STRUCTURE.

**PRODUCT RENEWED**  
as complying with the Florida  
Building Code  
Acceptance No **10-1012-08**  
Expiration Date **10/13/2015**

By *[Signature]*  
Miami Dade Product Control  
Division

**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
Acceptance No **09-0224-09**  
Expiration Date **10/13/2010**

By *[Signature]*  
Miami Dade Product Control  
Division

FRANK L. BENNARDO, P.E.  
# PE0046549

03/10/2009

VALID FOR (L-1) JOB ONLY  
VALID ONLY WITH RAISED ENGINEER SEAL

**ENGINEERING EXPRESS**  
160 SW 12th AVENUE, #106  
DEERFIELD BEACH, FL 33442  
PH: (954) 354-0660 FAX: (954) 354-0443  
WWW.ENGINEERINGEXPRESS.COM  
CERT. OF AUTH. #9985  
A FRANK L. BENNARDO, P.E., INC. INNOVATION

**HARTMAN WINDOWS & DOORS, LLC**  
531 SOUTHERN BLVD - WEST PALM BEACH, FL 33405  
PHONE: (954) 722-8707 FAX: (954) 783-0288  
DIRECT SET WINDOW  
LARGE MISSILE IMPACT RESISTANT

REMARKS	DATE
INITIAL ISSUE	11/22/04
2004 FBC	08/16/05
2007 FBC	12/17/08

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04-HWD-0003

SCALE: 01

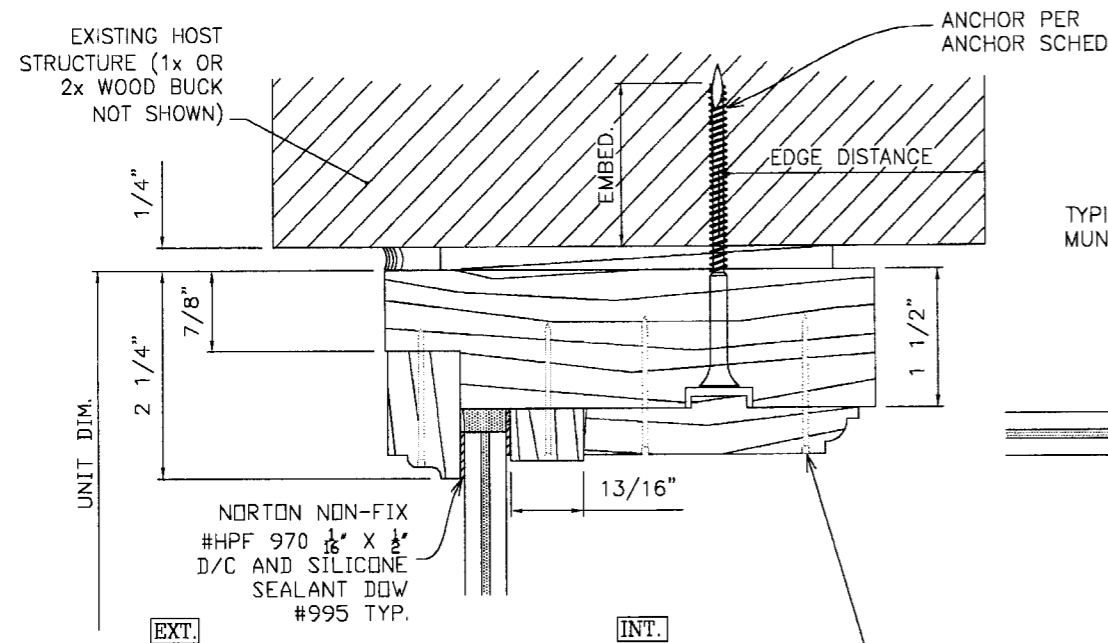
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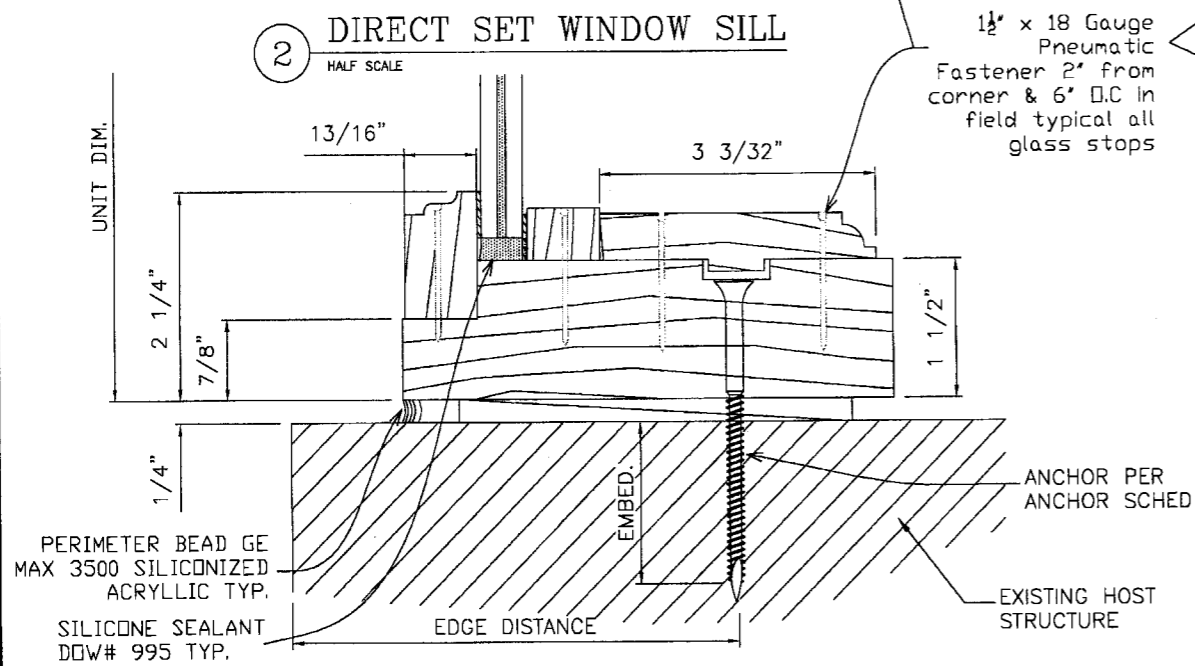


# INTERIOR GLAZED DETAILS

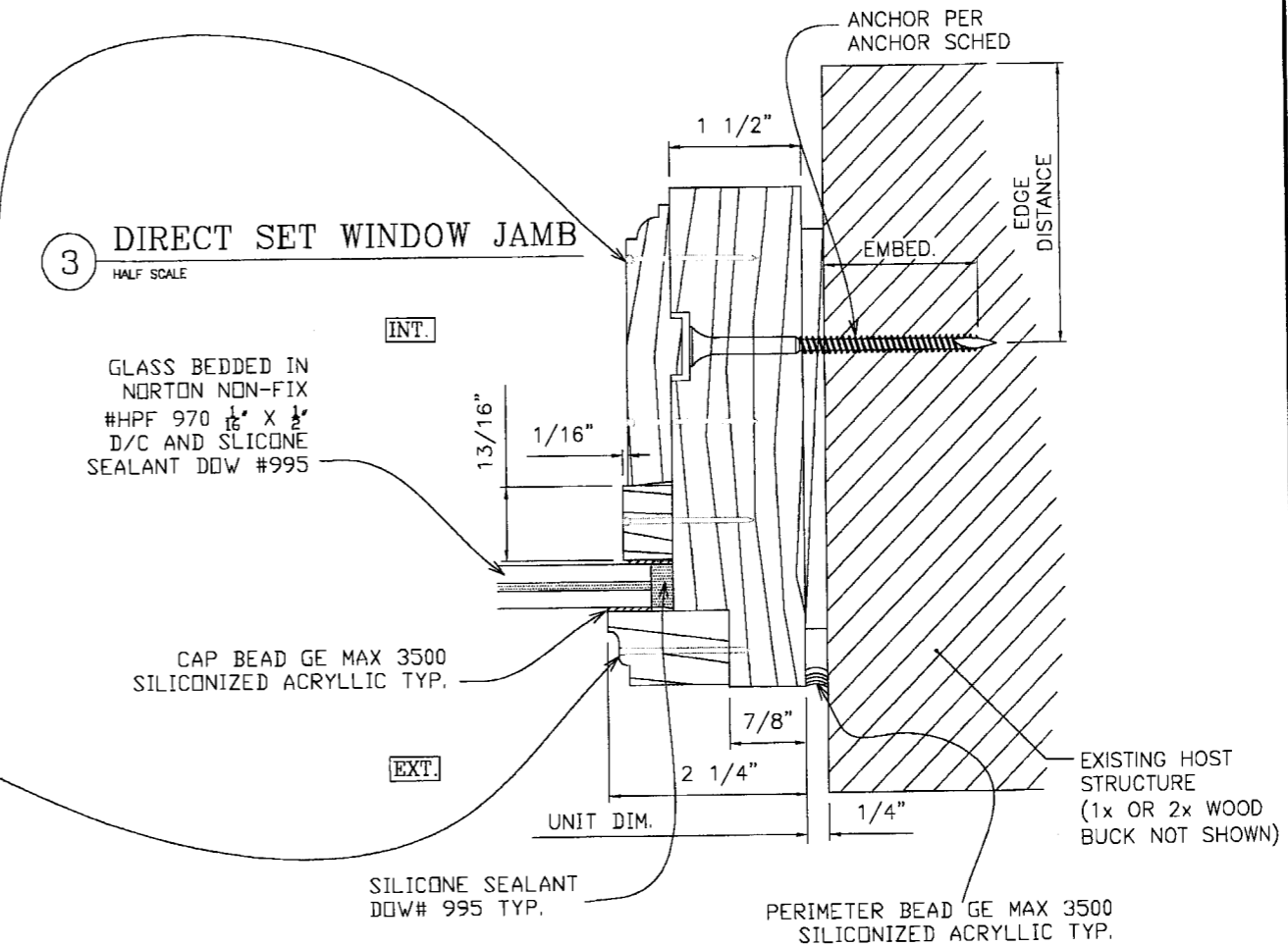
## 1 DIRECT SET WINDOW HEAD HALF SCALE



## 2 DIRECT SET WINDOW SILL HALF SCALE



## 3 DIRECT SET WINDOW JAMB HALF SCALE



### ANCHOR SCHEDULE:

TO CONCRETE OR HOLLOW BLOCK  
(WITH OR WITHOUT 1x WOOD BUCK)  
1/4" ITW TAPCON WITH 1-1/4" MIN EMBED  
& 2-1/2" MIN EDGE DISTANCE

TO 2x (MIN) WOOD BUCK OR WOOD STRUCTURE  
#12 WOOD SCREW OR SMS WITH 1-1/2"  
MIN EMBED & 1" MIN EDGE DISTANCE

### ANCHOR NOTES:

1. ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' RECOMMENDATIONS.
2. TAPCONS SHALL BE MANUFACTURED BY ITW.
3. ALL UNITS SHALL BE ANCHORED TO EXISTING HOST STRUCTURE WITH ANCHORS AT 3" FROM EACH CORNER & 8" O.C. AROUND ENTIRE PERIMETER. REFER TO ANCHOR SCHEDULE FOR ALLOWABLE ANCHORS & ANCHORING CONDITIONS.
4. ALL SHEET METAL AND/OR WOOD SCREWS SHALL BE SAE GRADE 5 STEEL OR EQUIVALENT.
5. ENSURE MINIMUM 2-1/2" EDGE DISTANCE FOR ALL ANCHORS TO CONCRETE & TO HOLLOW BLOCK.
6. WHERE EXISTING STRUCTURE IS WOOD FRAMING, EXISTING CONDITIONS MAY VARY. FIELD VERIFY THAT FASTENERS ARE INTO ADEQUATE WOOD FRAMING MEMBERS, NOT INTO PLYWOOD. 1" EDGE DISTANCE IS ACCEPTABLE FOR ANCHORS TO WOOD FRAMING.
7. WOOD HOST STRUCTURE SHALL BE "SOUTHERN PINE" G=0.55 OR GREATER DENSITY.
8. MINIMUM EMBEDMENT SHALL BE AS NOTED IN ANCHOR SCHEDULE. MINIMUM EMBEDMENT AND EDGE DISTANCE EXCLUDES STUCCO, FOAM, BRICK, AND OTHER WALL FINISHES.
9. WOOD BUCKS (BY OTHERS) SHALL BE ANCHORED PROPERLY TO TRANSFER LOADS TO THE EXISTING STRUCTURE.

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FRANK L. BERNARDO, P.E.  
#PE0046549

03/10/2009

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DIRECT SET WINDOW  
LARGE MISSILE IMPACT RESISTANT

DATE	DRWN	CHKD	DATE	REMARKS
11/22/04	CL	FLB	11/22/04	INITIAL ISSUE
06/16/05	CL	FLB	06/16/05	2004 FBC
12/17/08	CL	AML	12/17/08	2007 FBC

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04-HWD-0003

SCALE: 1/8" = 1'-0"

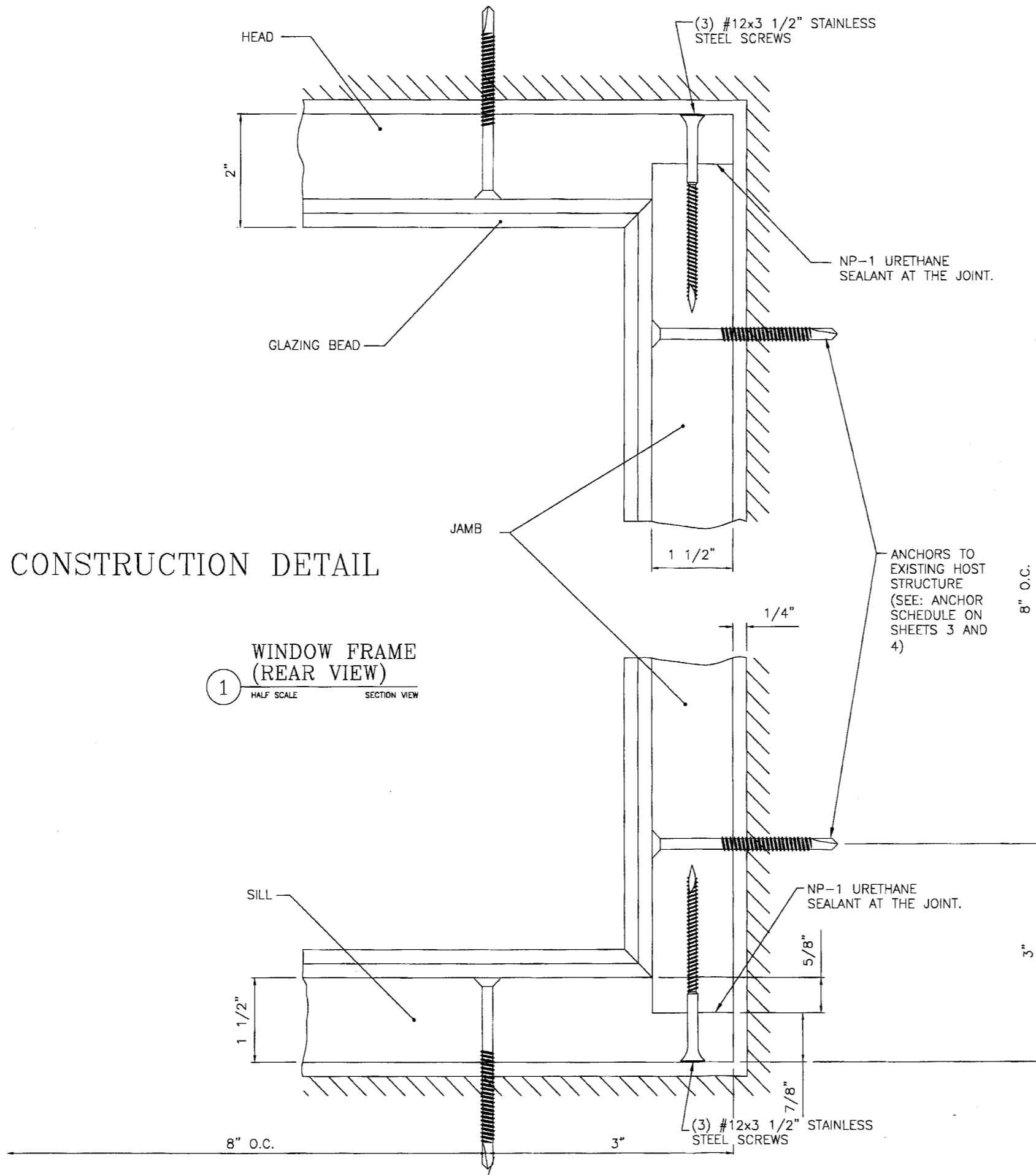
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03/10/2009 - 2:10pm keith

03/10/2009 - 2:10pm keithl F:\01 Project Files\Hartman Windows & Doors (HWD)\2004 Jobs\04-HWD-0003 Direct-Set Window (NOA).dwg

# CORNER CONSTRUCTION DETAIL

1 WINDOW FRAME (REAR VIEW)  
HALF SCALE SECTION VIEW



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AML	CL	12/17/08

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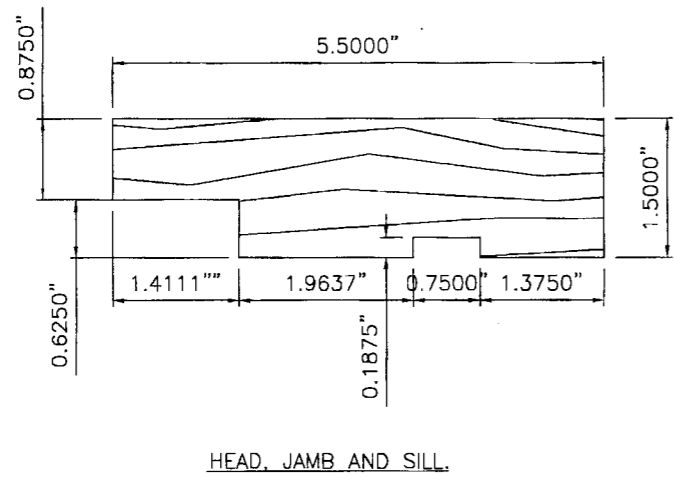
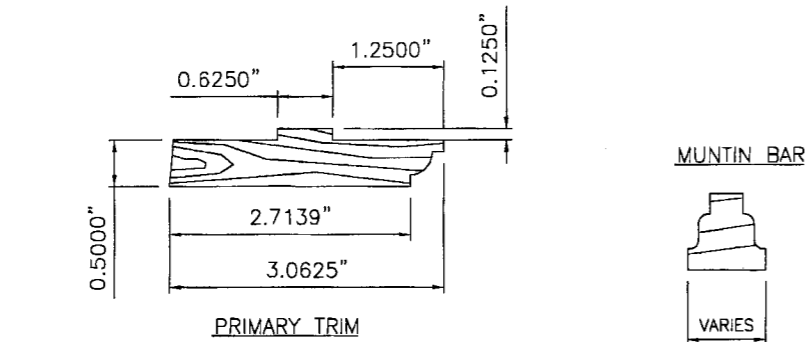
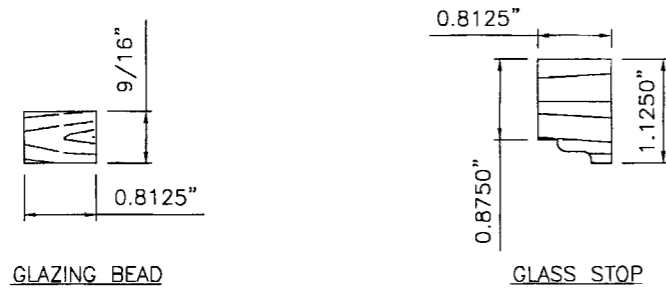
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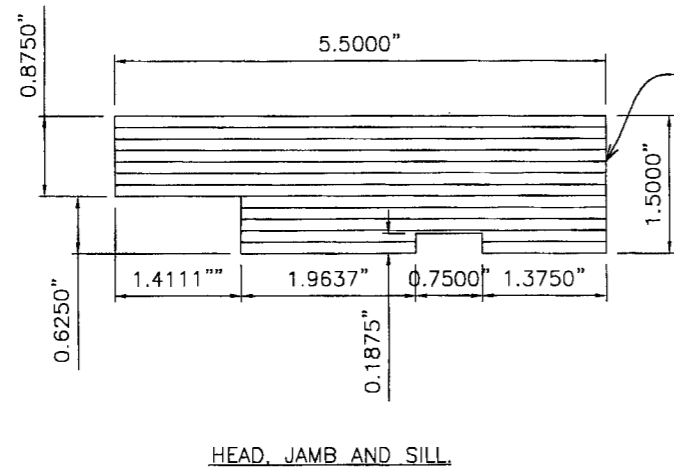
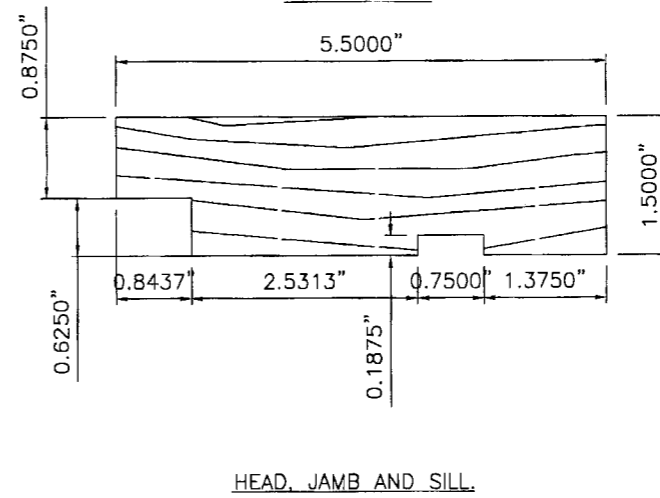
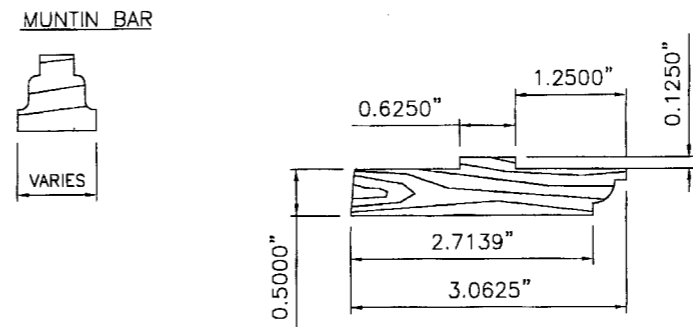
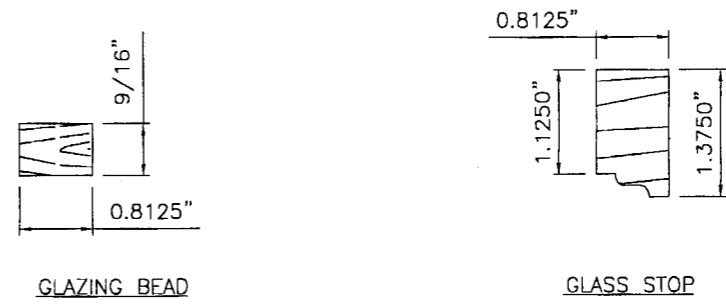
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**EXTERIOR GLAZED**

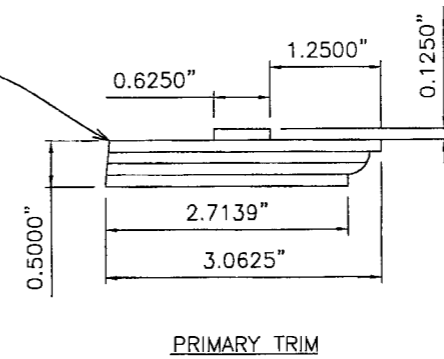


**INTERIOR GLAZED**



1/8" mahogany strips typical all parts

Typical all radiused window parts:  
Each is made up of 1/8" mahogany strips bent to the correct radius and glue with National Casein powder resin glue



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