



BUILDING CODE COMPLIANCE OFFICE (BCCO)  
PRODUCT CONTROL DIVISION

MIAMI-DADE COUNTY, FLORIDA  
METRO-DADE FLAGLER BUILDING  
140 WEST FLAGLER STREET, SUITE 1107  
MIAMI, FLORIDA 33130-1563  
(305) 375-2902 FAX (305) 372-6339

**NOTICE OF ACCEPTANCE (NOA)**

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

Custom Window Systems, Inc.  
1900 SW 44<sup>th</sup> Avenue  
Ocala, FL 34474

**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: Series "SH 8100" White PVC Single Hung Window - L.M.I.**

**APPROVAL DOCUMENT:** Drawing No. CWS-368, titled "Series Single Hung Window - L.M.I.", sheets 1 through 7 of 7, dated 05/21/09 with revision "A" dated 09/16/09, prepared, signed and sealed by Luis Roberto Lomas, 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 Impact Resistant.**

**LIMITATIONS:**

Miami-Dade County Product Control Approved Shutters Or Protection Devices Shall Be Required above 30 ft. of Grade.

**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 page E-1, as well as approval document mentioned above. The submitted documentation was reviewed by **Jaime D. Gascon, P. E.**



*J. Gascon*  
*11/2/09*

NOA No. 09-0709.03  
Expiration Date: November 25, 2014  
Approval Date: November 25, 2009

Custom Window Systems, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

**A. DRAWINGS**

1. Manufacturer's die drawings and sections.
2. Drawing No. **CWS-368**, titled "Series Single Hung Window - L.M.I.", sheets 1 through 7 of 7, dated 05/21/09 with revision "A" dated 09/16/09, prepared, signed and sealed by Luis Roberto Lomas, P. E.

**B. TESTS**

1. Test reports on:
  - 1) Air Infiltration Test, per FBC, TAS 202-94
  - 2) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
  - 3) Water Resistance Test, per FBC, TAS 202-94
  - 4) Large Missile Impact Test per FBC, TAS 201-94
  - 5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
  - 6) Forced Entry Test, per FBC 2411 3.2.1, TAS 202-94

along with marked-up drawings and installation diagram of single hung, prepared by National Certified Testing Laboratories, Inc., Test Report No. **NCTL-210-3566-2**, dated May 05, 2009, signed and sealed by Gerard J. Ferrara, P. E.

**C. CALCULATIONS**

1. Anchor verification calculations and structural analysis, complying with FBC-2007, dated 5/29/09 and 10/03/09, prepared, signed and sealed by Luis Roberto Lomas, P. E.  
**Complies with ASTM E1300-04**

**D. QUALITY ASSURANCE**

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

**E. MATERIAL CERTIFICATIONS**

1. Notice of Acceptance No. **09-0312.02** issued to E.I. DuPont DeNemours & Co., Inc. for their "**DuPont Butacite® PVB, Interlayer**" dated 05/13/09, expiring on 12/11/10.
2. Notice of Acceptance No. **01-0525.01**, issued to Spectus Systems – A Mikron Co. for their Series "White PVC Extrusion Component", approved on 01/11/07 and expiring on 12/26/11.

**E. STATEMENTS**

1. Statement letter of conformance and no financial interest, dated May 29, 2009, signed and sealed by Luis Roberto Lomas, P. E.
2. Laboratory compliance letter for Test Report No. **NCTL-210-3566-2**, issued by National Certified Testing Laboratories, Inc., dated May 05, 2009, signed and sealed by Gerard J. Ferrara, P. E.

**G. OTHERS**

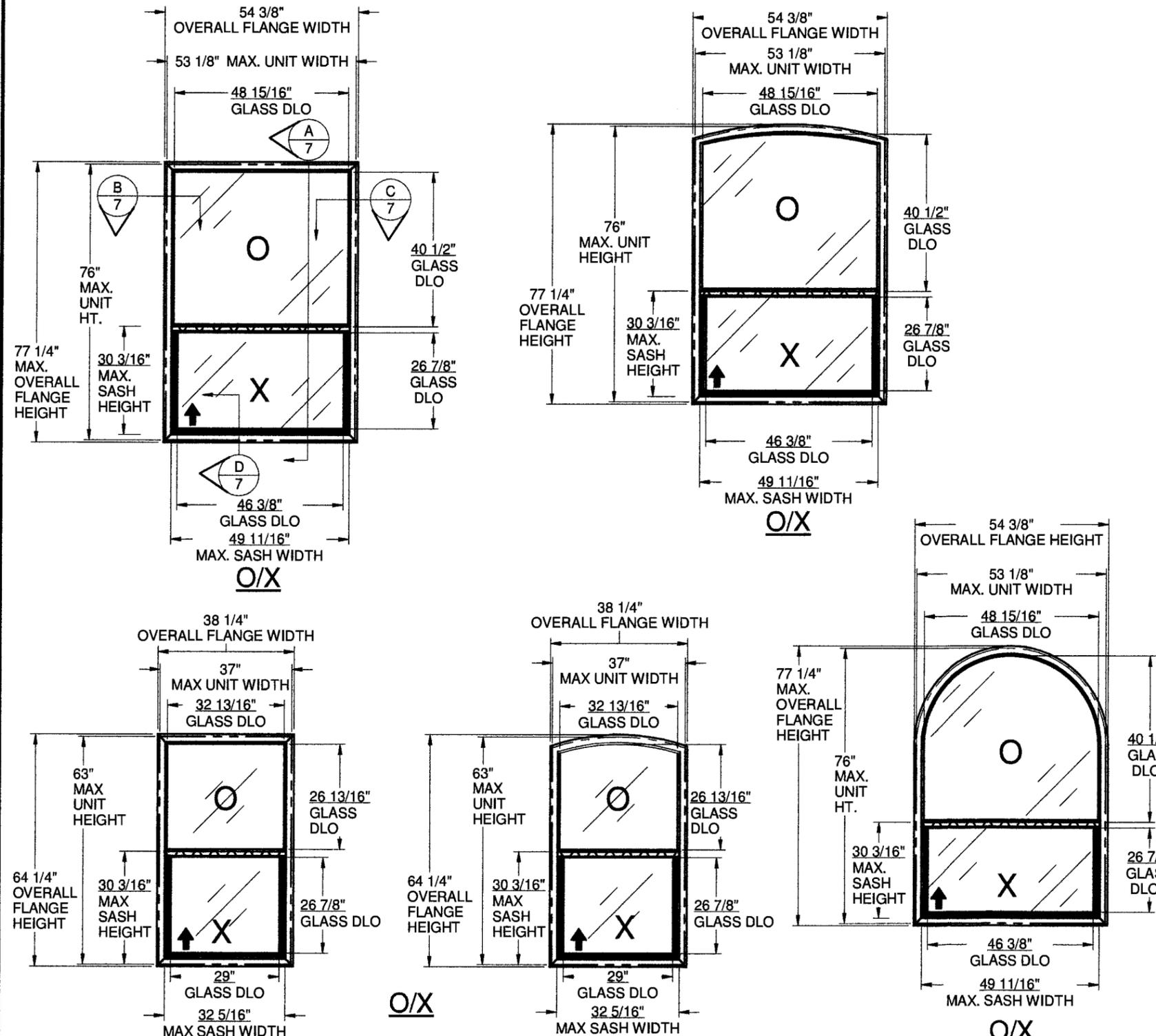
1. None.



Jaime D. Gascon, P. E.  
Chief, Product Control Division  
NOA No. 09-0709.03

Expiration Date: November 25, 2014  
Approval Date: November 25, 2009

# SINGLE HUNG ELEVATION (LARGE MISSILE IMPACT)



- PVC IMPACT REQUIREMENT:**
1. THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH THE FLORIDA BUILDING CODE, CURRENT EDITION
  2. GLAZING OPTIONS: (SEE SHEET 4 & 5)
  3. CONFIGURATIONS: "OX".  
-STANDARD  
-ARCH TOP  
-RADIUS TOP
  4. DESIGN PRESSURE RATING:  
-NEGATIVE DESIGN LOADS BASED ON TESTED PRESSURE AND GLASS TABLES ASTM E 1300.  
-POSITIVE DESIGN LOADS BASED ON, TESTED PRESSURE, WATER INFILTRATION TEST PRESSURE AND GLASS TABLES ASTM E 1300.
  5. ANCHORAGE: THE 33 1/3% STRESS INCREASE HAS NOT BEEN USED IN THE DESIGN OF THIS PRODUCT. SEE SHEET 7 FOR ANCHOR DETAIL. WIND LOAD DURATION FACTOR Cd=1.6 WAS USED FOR WOOD ANCHOR CALCULATIONS.
  6. SHUTTERS ARE NOT REQUIRED.
  7. ALL FRAMES AND VENTS FULLY WELDED. SMALL JOINT SEAM SEALANT USED AT FIXED MEETING RAIL AND JAMB.
  8. REFERENCE TEST REPORTS: NCTL-210-3566-2
  9. SERIES / MODEL DESIGNATION SH-8100.
  10. 1x OR 2x WOOD BUCK OR STUD FRAMING TO BE DESIGNED AND ANCHORED TO PROPERLY TRANSFER ALL LOADS TO STRUCTURE, BUCK AND FRAMING IS RESPONSIBILITY OF ARCHITECT OR ENGINEER OF RECORD.
  11. THE DESIGNATION X AND O STAND FOR THE FOLLOWING: X = OPERABLE SASH, O = FIXED SASH
  12. SECTION CALLOUTS APPLY TO ALL ELEVATIONS IN A SIMILAR LOCATION.
  13. WEEP SLOTS = 1" X 1/4" LOCATED 4" FROM BOTH ENDS OF SILL.

Approved as complying with the Florida Building Code  
 Date: November 25, 2009  
 NOA#: 09-0709.03  
 Miami-Dade Product Control Division  
 By: *[Signature]*

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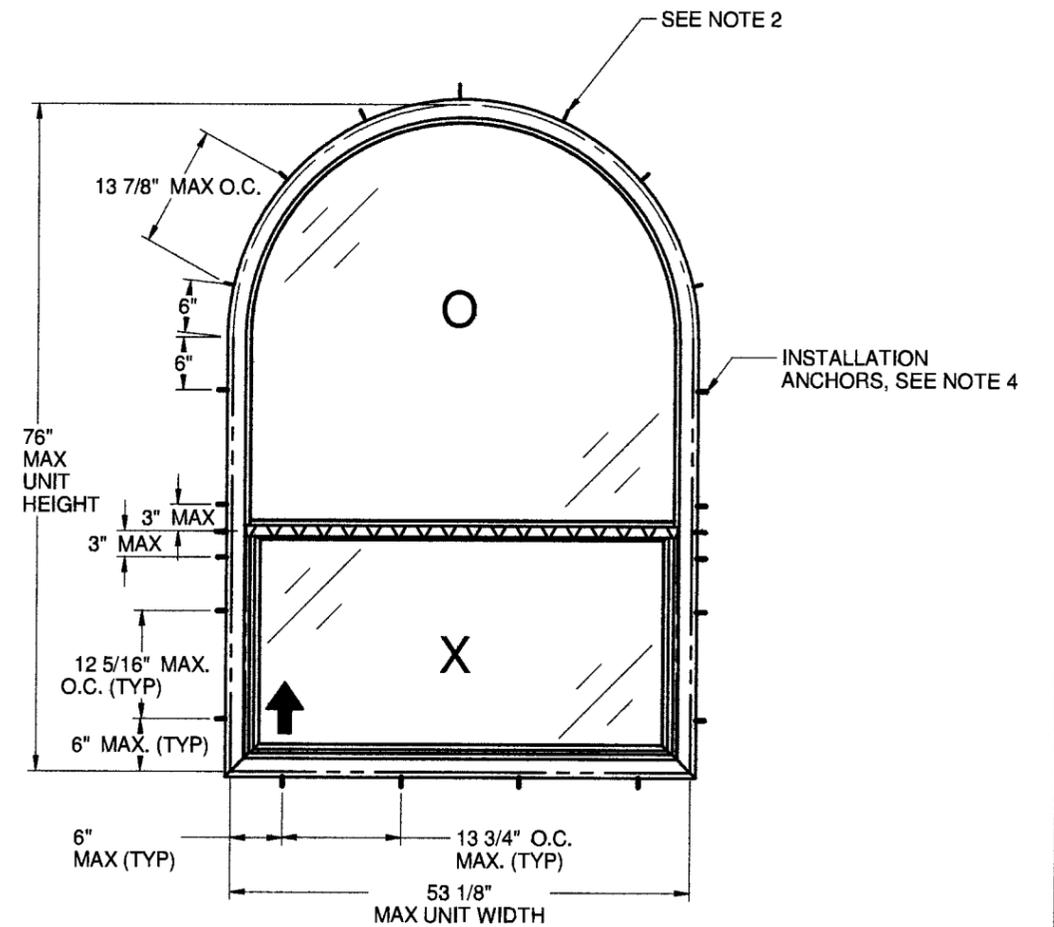
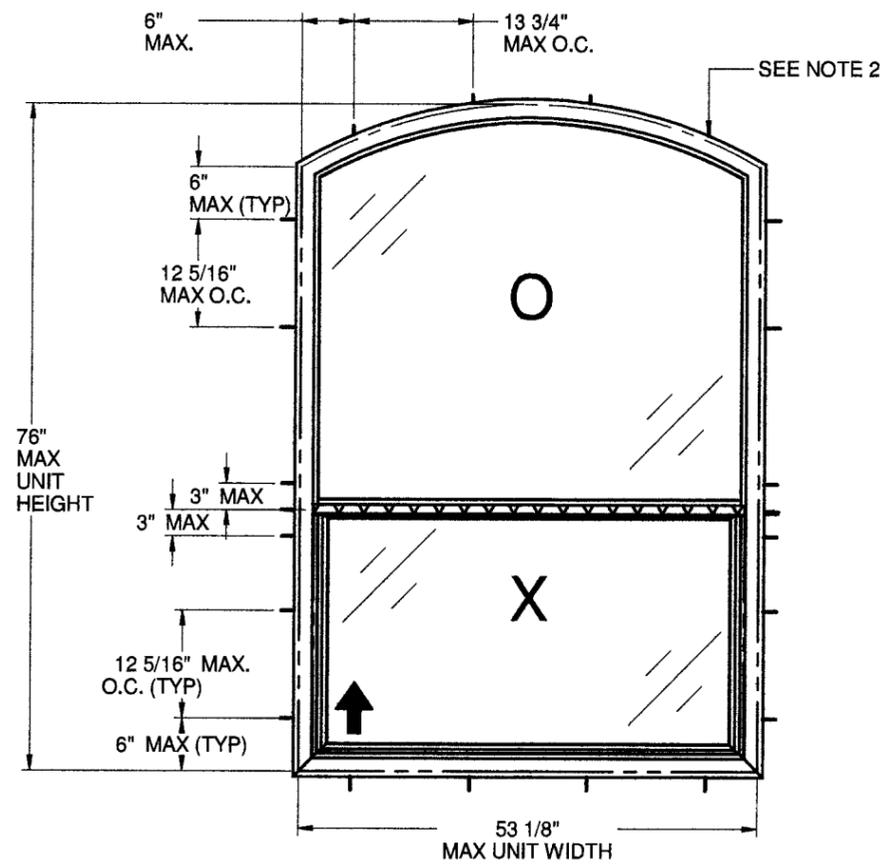
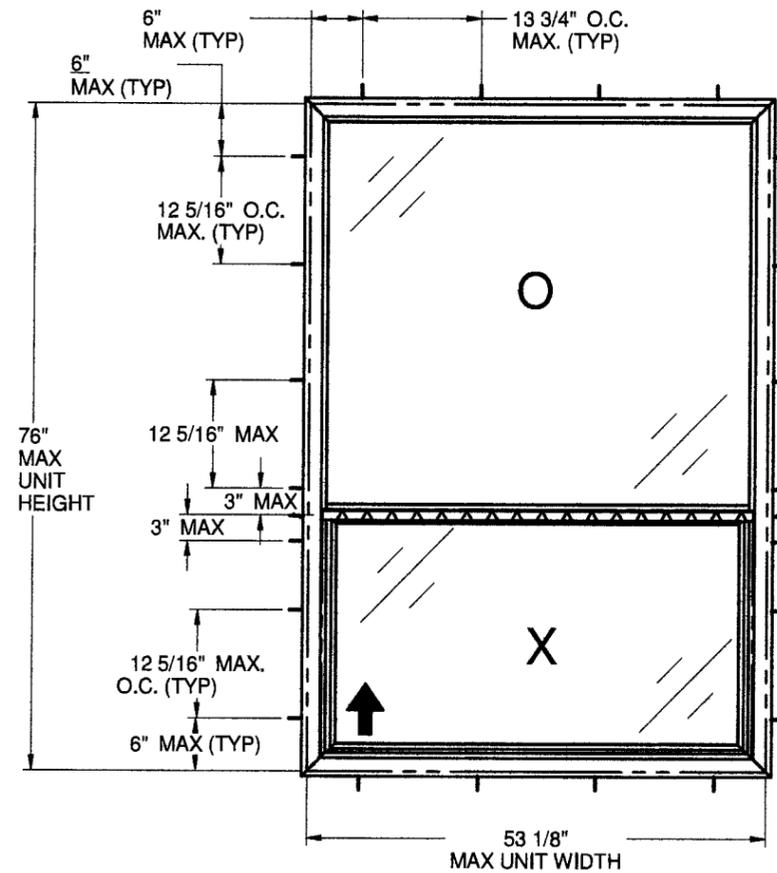
**DESIGN PRESSURE RATING**  
 ±67.5

*[Signature]*  
 10/01/09  
 L. ROBERTO LOMAS  
 FL. P.E. NO. 62514

**Custom WINDOW SYSTEMS**  
 1900 SW 44TH AVE.  
 OCALA, FLORIDA 34474

TITLE: GENERAL NOTES & ELEVATIONS - LARGE MISSILE IMPACT

SERIES: 8100	DRAWN BY: ADE	DATE: 9/16/2009
MODEL: SINGLE HUNG	SCALE: NTS	DWG. NO.: CWS - 368
	REV. LETTER: A	SHEET: 1 OF 7



ANCHOR LAYOUT - (FLANGE)  
THRU FRAME & CLIP

**NOTES:**

1. INSTALL ONE ANCHOR AT EACH INSTALLATION LOCATION.
2. SHIM AS REQ'D AT EACH SET OF INSTALLATION ANCHORS USING LOAD BEARING SHIMS. MAX. ALLOWABLE SHIM STACK TO BE 1/4". USE SHIMS WHERE SPACE GREATER THAN 1/16" IS PRESENT.
3. LOAD BEARING SHIMS SHALL BE CONSTRUCTED OF HIGH DENSITY PLASTIC OR BETTER. WOOD SHIMS ARE NOT ALLOWED.
4. 3/16" DIA. ELCO TAPCON MASONRY ANCHORS MUST BE OF SUFFICIENT LENGTH TO ACHIEVE A MIN. EMBEDMENT OF 1 1/4" INTO MASONRY THRU FRAME OR THRU 1 BY WOOD BUCK INTO MASONRY. A MINIMUM EDGE DISTANCE OF 2 1/2" SHALL BE ACHIEVED.
5. #10 WOOD SCREW ANCHORS MUST BE OF SUFFICIENT LENGTH TO ACHIEVE A MIN. EMBEDMENT OF 1 3/8" INTO 2 BY WOOD BUCK.
6. SEAL CORNERS WITH SMALL JOINT SEAM SEALANT.
7. ALL INSTALLATION ANCHORS MUST BE MADE OF A CORROSION RESISTANT MATERIAL OR COATING.
8. INSTALLATION ANCHORS SHALL BE IN ACCORDANCE WITH ANCHOR MANUFACTURER'S INSTALLATION INSTRUCTIONS, AND ANCHORS SHALL NOT BE USED IN SUBSTRATES WITH STRENGTHS LESS THAN THE MINIMUM STRENGTH SPECIFIED BELOW.
9. INSTALLATION ANCHOR CAPACITIES FOR PRODUCTS HEREIN ARE BASED ON SUBSTRATE MATERIAL WITH THE FOLLOWING PROPERTIES:
  - A. WOOD - MINIMUM SPECIFIC GRAVITY OF G=0.42
  - B. CONCRETE - MINIMUM COMPRESSIVE STRENGTH OF 3,200 PSI.
  - C. MASONRY - STRENGTH CONFORMANCE TO ASTM C-90, GRADE N, TYPE 1 (OR GREATER).

Approved as complying with the  
Florida Building Code  
Date: *November 25, 2009*  
MOA: *09-0709.03*  
Miami Dade Product Control  
Division  
By: *[Signature]*

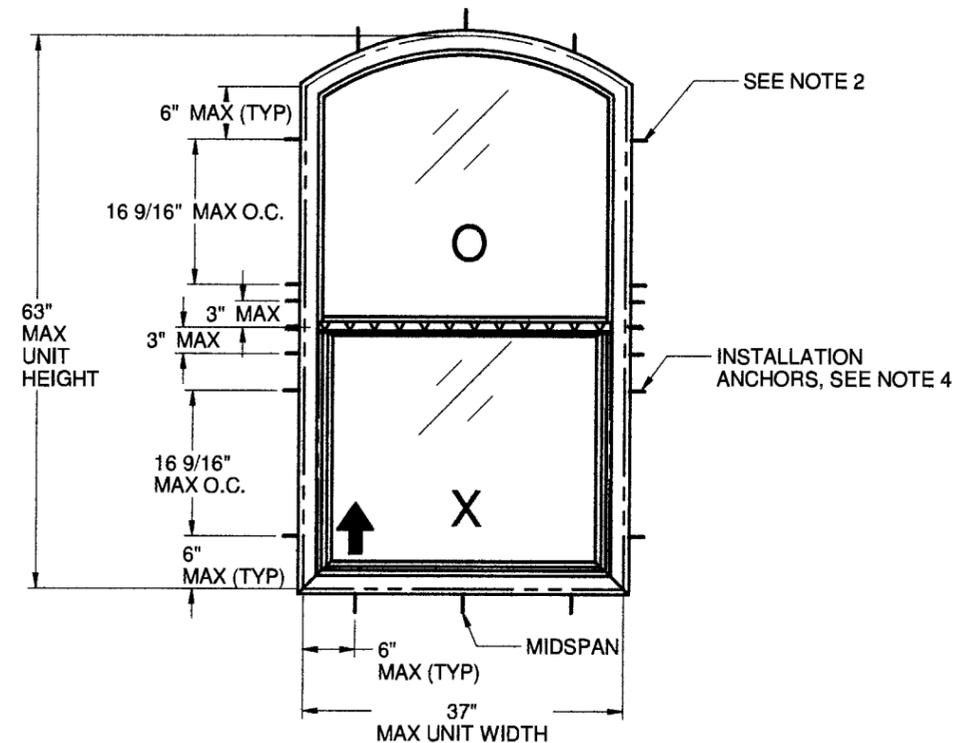
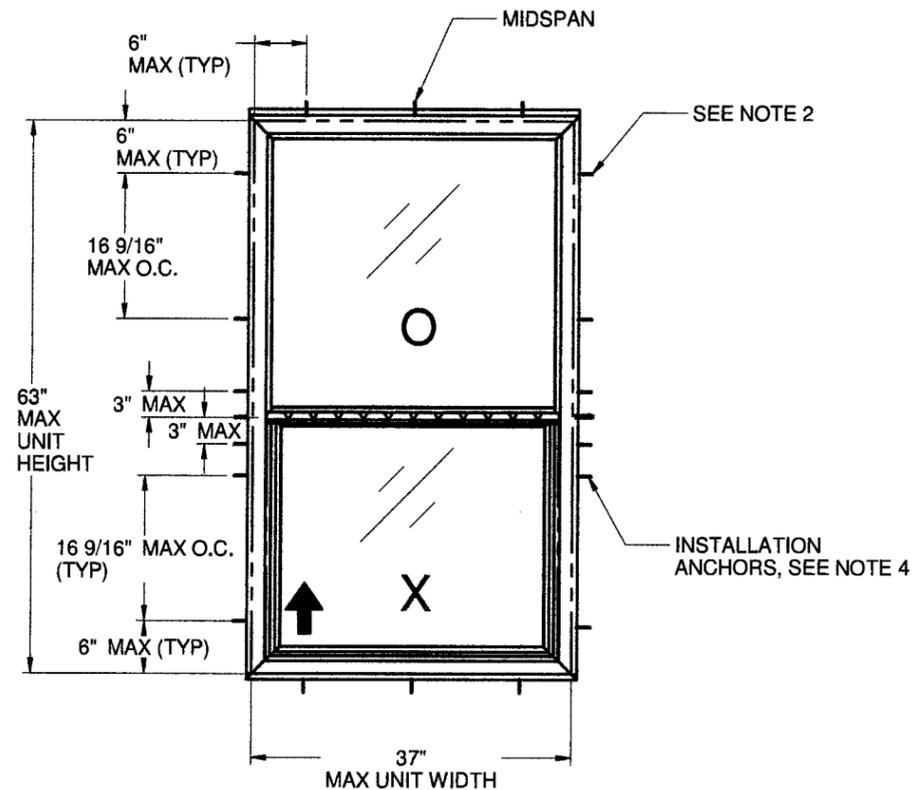
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10/01/09

L. ROBERTO LOMAS  
FL. P.E. NO. 62514



1900 SW 44TH AVE.  
OCALA, FLORIDA 34474

TITLE: ANCHOR SCHEDULE & NOTES - LARGE MISSILE IMPACT		
SERIES: 8100	DRAWN BY: ADE	DATE: 9/16/2009
MODEL: SINGLE HUNG	SCALE: NTS	DWG. NO.: CWS - 368
	REV. LETTER: A	SHEET: 2 OF 7



ANCHOR LAYOUT - (FLANGE)  
THRU FRAME & CLIP

**NOTES:**

1. INSTALL ONE ANCHOR AT EACH INSTALLATION LOCATION.
2. SHIM AS REQ'D AT EACH SET OF INSTALLATION ANCHORS USING LOAD BEARING SHIMS. MAX. ALLOWABLE SHIM STACK TO BE 1/4". USE SHIMS WHERE SPACE GREATER THAN 1/16" IS PRESENT.
3. LOAD BEARING SHIMS SHALL BE CONSTRUCTED OF HIGH DENSITY PLASTIC OR BETTER. WOOD SHIMS ARE NOT ALLOWED.
4. 3/16" DIA. ELCO TAPCON MASONRY ANCHORS MUST BE OF SUFFICIENT LENGTH TO ACHIEVE A MIN. EMBEDMENT OF 1 1/4" INTO MASONRY THRU FRAME OR THRU 1 BY WOOD BUCK INTO MASONRY. A MINIMUM EDGE DISTANCE OF 2 1/2" SHALL BE ACHIEVED.
5. #10 WOOD SCREW ANCHORS MUST BE OF SUFFICIENT LENGTH TO ACHIEVE A MIN. EMBEDMENT OF 1 3/8" INTO 2 BY WOOD BUCK.
6. SEAL CORNERS WITH SMALL JOINT SEAM SEALANT.
7. ALL INSTALLATION ANCHORS MUST BE MADE OF A CORROSION RESISTANT MATERIAL OR COATING.
8. INSTALLATION ANCHORS SHALL BE IN ACCORDANCE WITH ANCHOR MANUFACTURER'S INSTALLATION INSTRUCTIONS, AND ANCHORS SHALL NOT BE USED IN SUBSTRATES WITH STRENGTHS LESS THAN THE MINIMUM STRENGTH SPECIFIED BELOW.
9. INSTALLATION ANCHOR CAPACITIES FOR PRODUCTS HEREIN ARE BASED ON SUBSTRATE MATERIAL WITH THE FOLLOWING PROPERTIES:
  - A. WOOD - MINIMUM SPECIFIC GRAVITY OF G=0.42
  - B. CONCRETE - MINIMUM COMPRESSIVE STRENGTH OF 3,200 PSI.
  - C. MASONRY - STRENGTH CONFORMANCE TO ASTM C-90, GRADE N, TYPE 1 (OR GREATER).

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By [Signature]

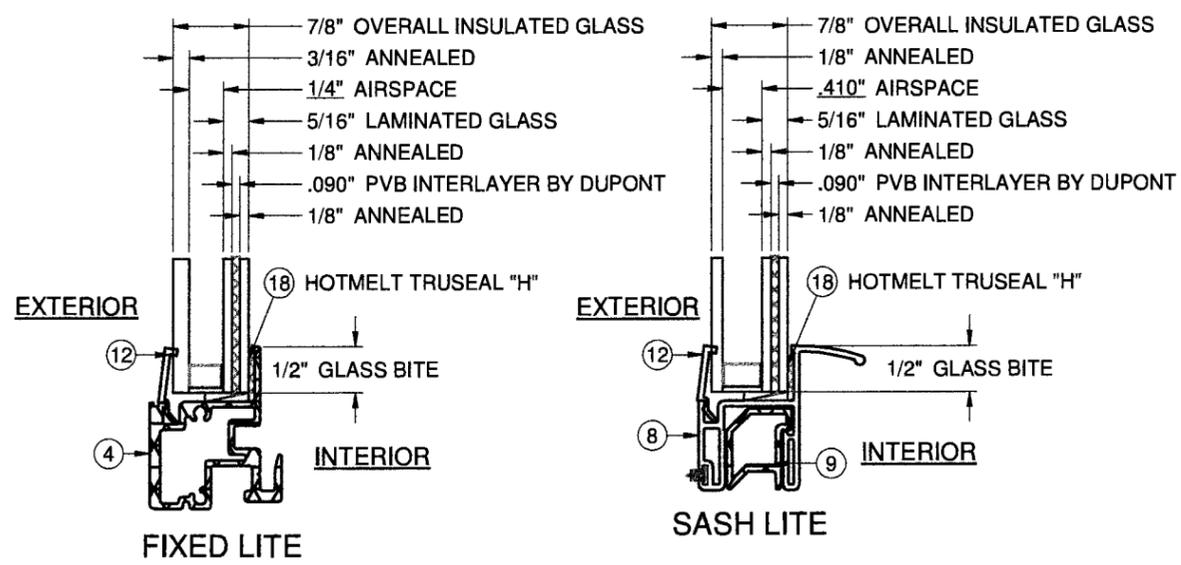
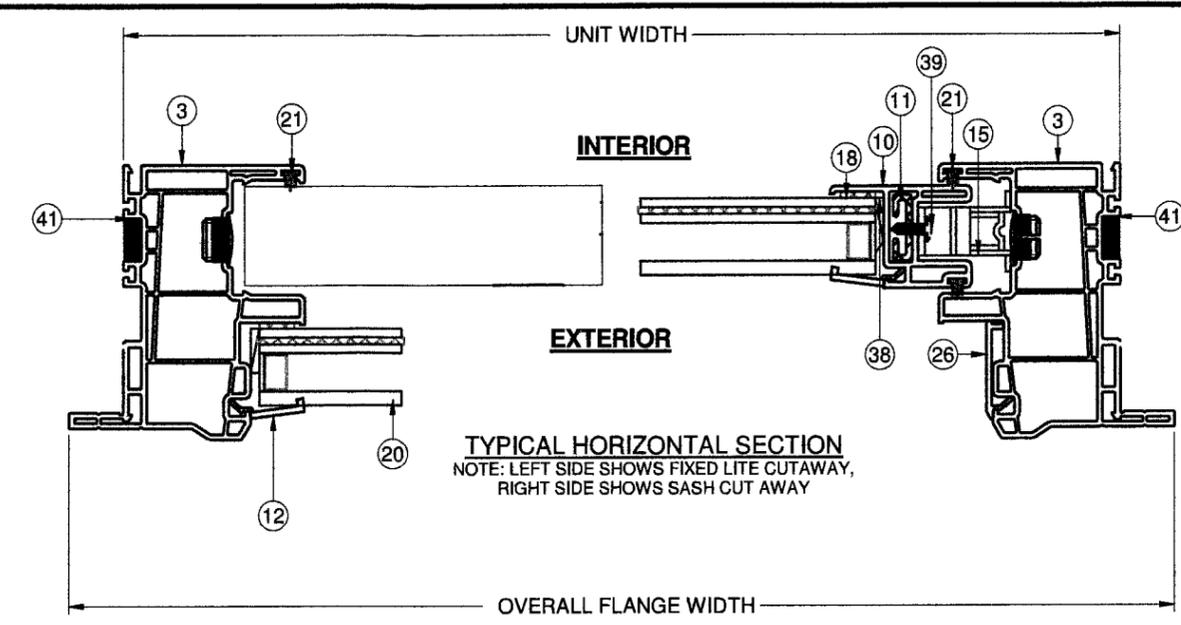
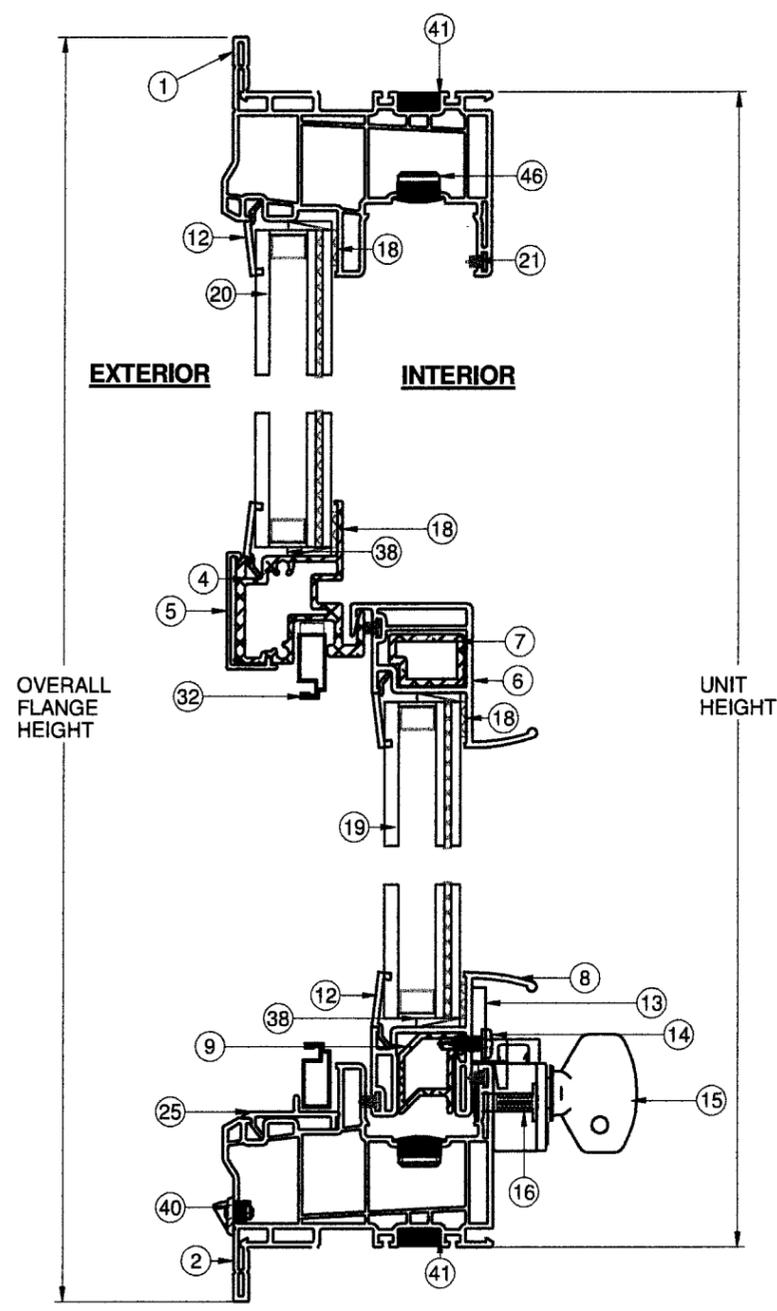
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10/01/09



1900 SW 44TH AVE.  
OCALA, FLORIDA 34474

TITLE: ANCHOR SCHEDULE & NOTES - LARGE MISSILE IMPACT		
SERIES: 8100	DRAWN BY: ADE	DATE: 9/16/2009
MODEL: SINGLE HUNG	SCALE: NTS	DWG. NO.: CWS - 368
	REV. LETTER: A	SHEET: 3 OF 7

L. ROBERTO LOMAS  
FL. P.E. NO. 62514



**GLASS TYPE A**  
**53 1/8" x 76" UNITS**

NOTE:  
ITEMS 33-37, 43-45 ARE NOT SHOWN.  
ITEMS 27-30 ARE NOT USED IN THIS WINDOW.

Approved as complying with the Florida Building Code  
Date November 25, 2009  
NOA# 09-0709.03  
Miami-Dade Product Control  
Division  
By *[Signature]*

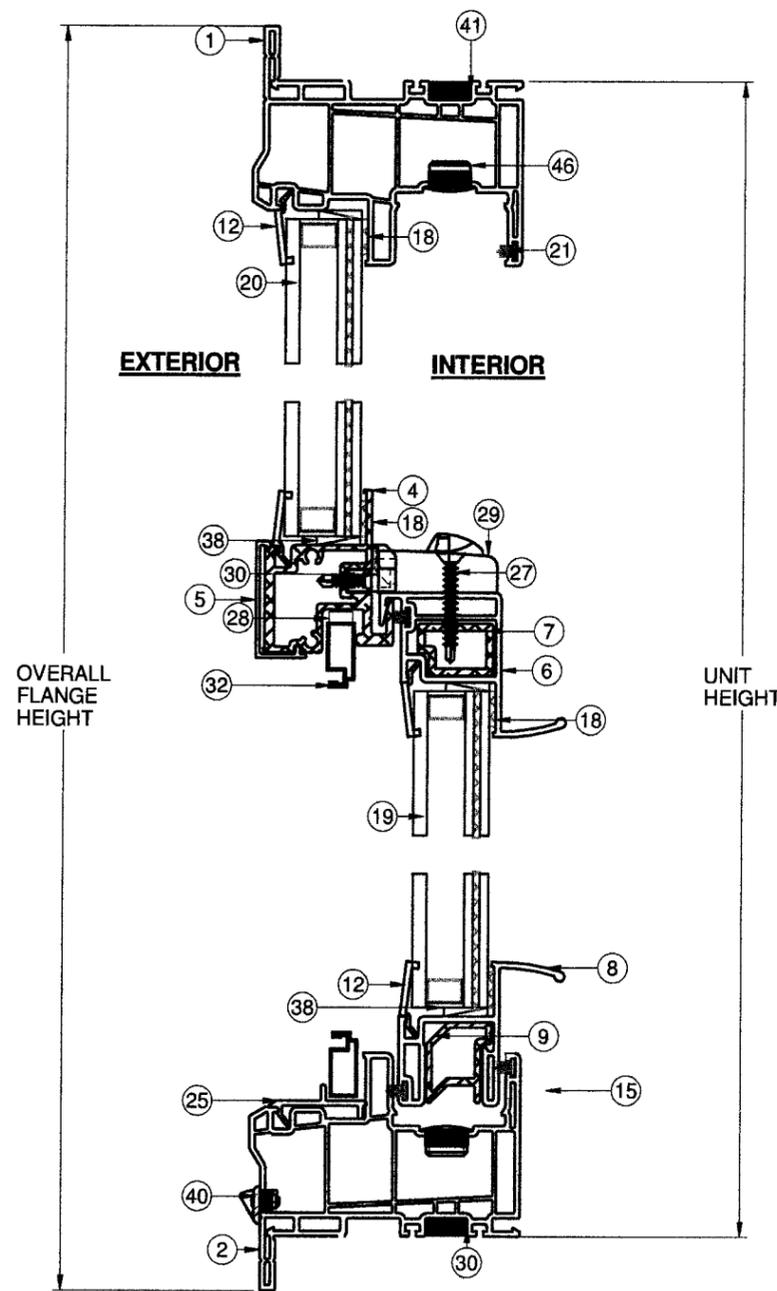
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**Custom WINDOW SYSTEMS**  
1900 SW 44TH AVE.  
OCALA, FLORIDA 34474

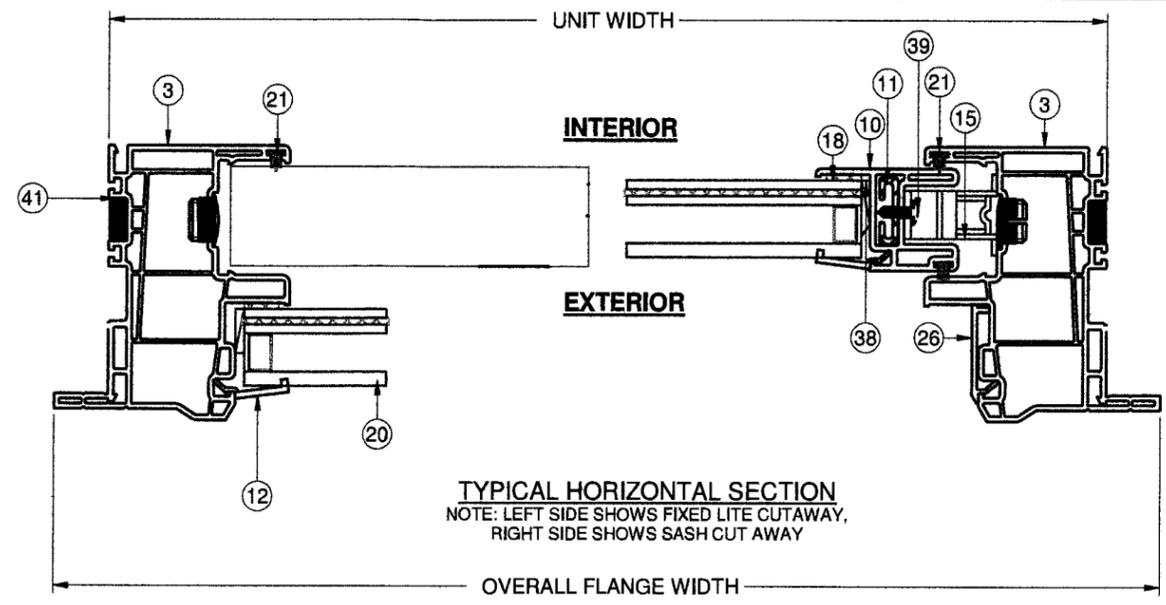
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MODEL: SINGLE HUNG	SCALE: NTS	DWG. NO.: CWS - 368
	REV. LETTER: A	SHEET: 4 OF 7

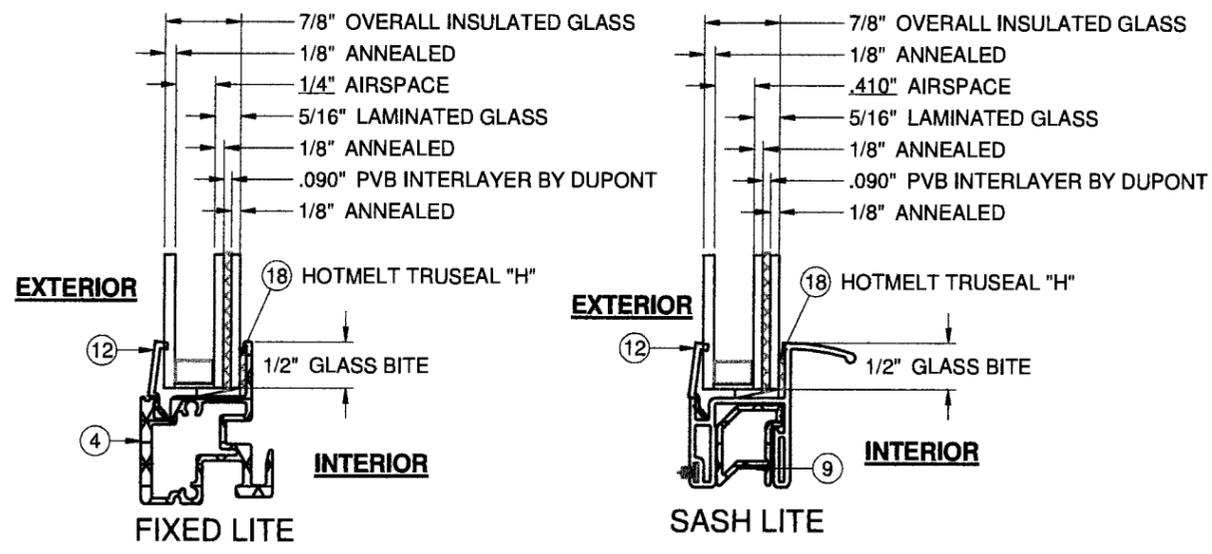
L. ROBERTO LOMAS  
FL. P.E. NO. 62514



TYPICAL VERTICAL SECTION



TYPICAL HORIZONTAL SECTION  
NOTE: LEFT SIDE SHOWS FIXED LITE CUTAWAY,  
RIGHT SIDE SHOWS SASH CUT AWAY



GLASS TYPE B  
37" x 63" UNITS

NOTE:  
ITEMS 33-37, 43-45 ARE NOT SHOWN.  
ITEMS 13-16 ARE NOT USED IN THIS  
WINDOW.

Approved as complying with the  
Florida Building Code  
Date November 25, 2009  
NO. 09-0709.03  
Affirm Date Product Control  
Division  
By [Signature]

[Signature]  
10/01/09

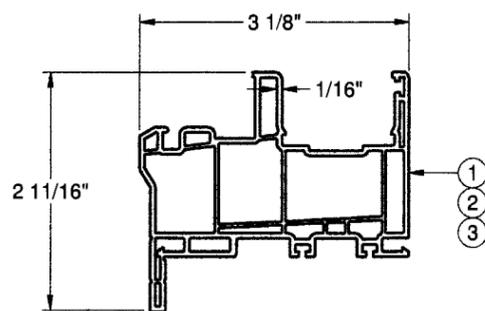
L. ROBERTO LOMAS  
FL. P.E. NO. 62514



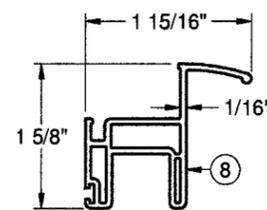
1900 SW 44TH AVE.  
OCALA, FLORIDA 34474

TITLE: SECTION VIEWS - LARGE MISSILE IMPACT		
SERIES: 8100	DRAWN BY: ADE	DATE: 9/16/2009
MODEL: SINGLE HUNG	SCALE: NTS	DWG. NO.: CWS - 368
	REV. LETTER: A	SHEET: 5 OF 7

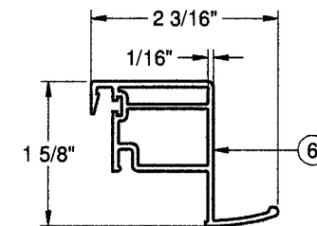
ITEM #	PART #	DESCRIPTION	MATERIAL	VENDOR
1	H-6031	Frame Head, Flg, Single Hung	RIGID PVC	MIKRON
2	H-6031	Frame Sill, Flg, Single Hung	RIGID PVC	MIKRON
3	H-6031	Frame Jamb, Flg, Single Hung	RIGID PVC	MIKRON
4	H-1602	Alum. Fixed Meet. Rail	ALUMINUM	KEYMARK
5	S-6063	Fixed Rail Cover	RIGID PVC	MIKRON
6	H-6027	Sash Top Rail	RIGID PVC	MIKRON
7	H-1497	Reinforcement for STR	ALUMINUM	KEYMARK
8	H-6028	Sash Bottom Rail	RIGID PVC	MIKRON
9	H-1699	Reinforcement for SBR	ALUMINUM	KEYMARK
10	H-6004	Sash Side Rail	RIGID PVC	MIKRON
11	S-1498	Reinforcement for SSR	ALUMINUM	KEYMARK
12	S-6064	Glazing Bead	RIGID PVC	MIKRON
13	P-3118	Keeper	STEEL	SULLIVAN
14	P-3541	#8 x 1/2", Pan Head, Tek	ZINC	FASTENAL
15	P-4632	Sw eep Lock	ZINC	SULLIVAN
16	P-4633	Barrel Fastener	STEEL	FASTENAL
17		Block & Tackle Balance	STEEL	CALDWELL
18		SikaFlex 552	SILICONE	SIKA
19	Sash	See Glazing Chart (pg3)	GLASS	CARDINAL
20	Fixed	See Glazing Chart (pg3)	GLASS	CARDINAL
21	P-3429	Wstp., 0.270 x 0.187 back FinSeal	NYLON	ULTRAFAB
22	P-3114	#8 x 2" Ph Truss SMS	STEEL	FASTENAL
23		#10 x 1 1/2" Panhead SMS	STEEL	FASTENAL
24		Flat Washer	STEEL	FASTENAL
25	S-6014	Screen Catch	RIGID PVC	MIKRON
26	S-6013	Screen Support	RIGID PVC	MIKRON
27	P-4051	#8 x 1 1/4" Ph Fh TEK, Wht.	ZINC	FASTENAL
28	P-3748	#6 x 0.625" Quad Fh TEK, Wht.	ZINC	FASTENAL
29	P-3783	Impact, Lock	STEEL	INTERLOCK
30	P-4069	Impact, Keeper	STEEL	INTERLOCK
31	P-3114	#8 x 2 Phil Flat Zinc	ZINC	FASTENAL
32	P-3218	Screen Frame	ALUMINUM	ALLMETAL
33	P-3321	Screen Corner Key	PLASTIC	M&M
34	P-3228	Screen Spline	RUBBER	DAPA
35	P-3581	Screen Cloth	VINYL	WIER
36	P-3033	Screen Spring	STEEL	HURLEY
37	P-3029	Screen Pull Tab	STEEL	HURLEY
38	P-3352	Set. Blk. 1/8" x 5/8" x 2"	RUBBER	FRANK LOWE
39	P-3768	#8 x 5/8 Phil Pan Zinc	ZINC	FASTENAL
40	P-4479	Weepcover	PLASTIC	M&M
41	P-3113	Screw Support	RUBBER	TEAM
42	P-6029	Sash Stop	RIGID PVC	MIKRON
43	P-3059	Sash Cam	PLASTIC	M&M
44	P-3295	Take Out Clip	STEEL	SUMMIT
45	P-3342	Seam Sealer	SILICONE	SCHNEE
46	P-3752	Hole Plug	PLASTIC	M&M



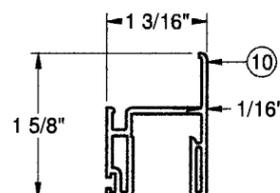
PVC FRAME FLANGE-6031



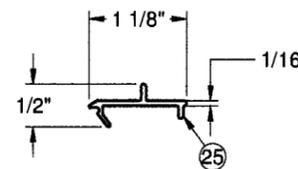
PVC SASH BTM. RAIL-6028



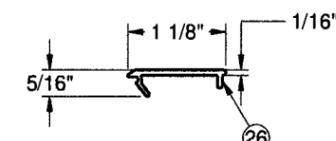
PVC SASH TOP RAIL-6027



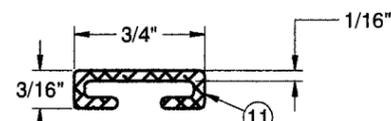
PVC SASH SIDE RAIL-6004



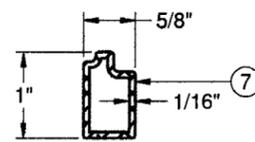
PVC SCREEN CATCH - 6013



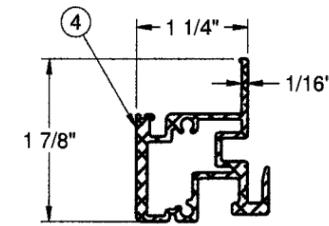
PVC SCREEN SUPPORT - 6014



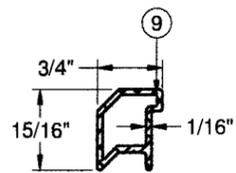
REINF. S.B.R./S.S.R. - 1498  
ALUMINUM 6063 T-6



REINF. SASH TOP RAIL-1497  
ALUMINUM 6063 T-6



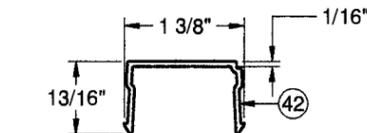
ALUMINUM MEETING RAIL-1602  
ALUMINUM 6063 T-6



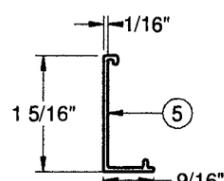
REINF. SASH BTM RAIL-1699  
ALUMINUM 6063 T-6



SCREW SUPPORT-3113

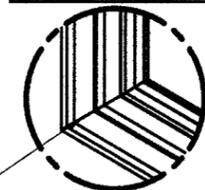


PVC SASH STOP-6029

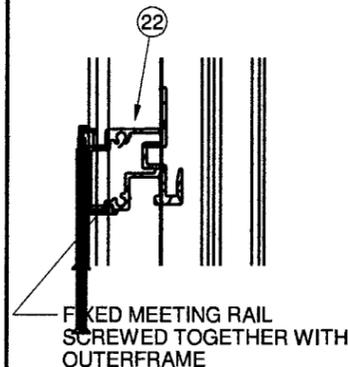


PVC FIXED RAIL COVER - 6063

**FRAME CORNER CONSTRUCTION**



CORNER WELD (ALL SIDES)



FIXED MEETING RAIL  
SCREWED TOGETHER WITH  
OUTERFRAME

NOTE:  
RIGID WHITE PVC BY  
MIKRON IS UNDER  
SEPARATE N.O.A.  
\*WHITE PVC EXTRUSION  
TO BE LABELED WITH  
AAMA EXTRUDER CODE,  
EXTRUDER NAME, CITY,  
STATE, & "MDCA".

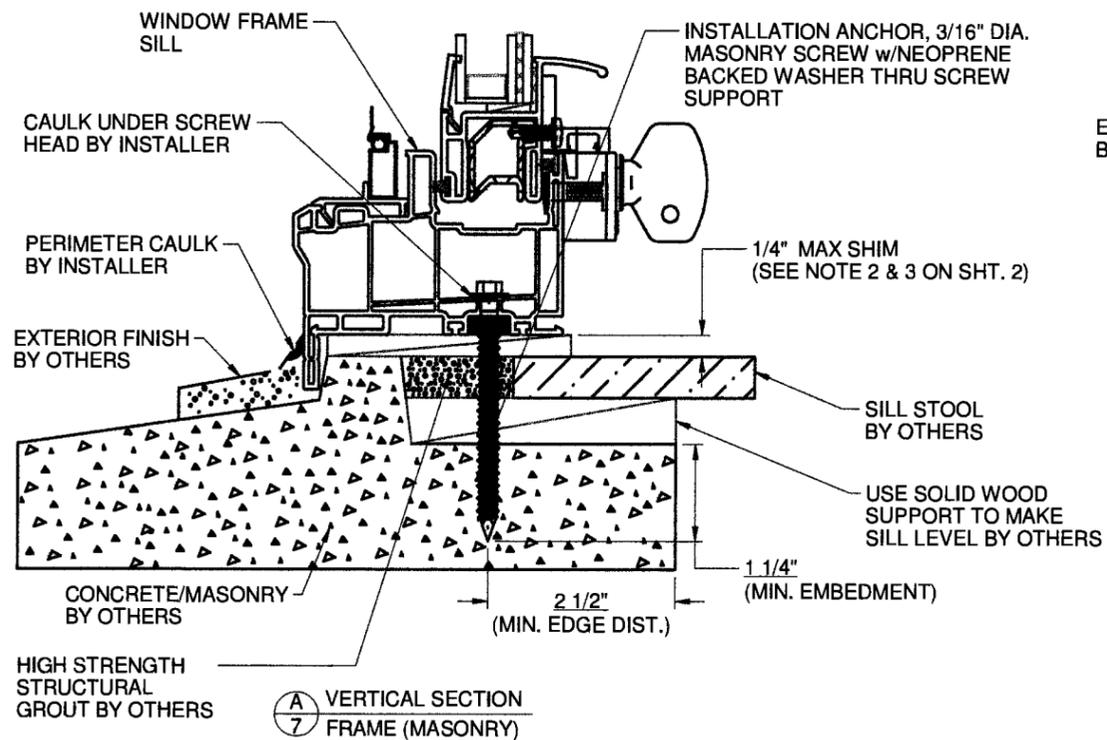
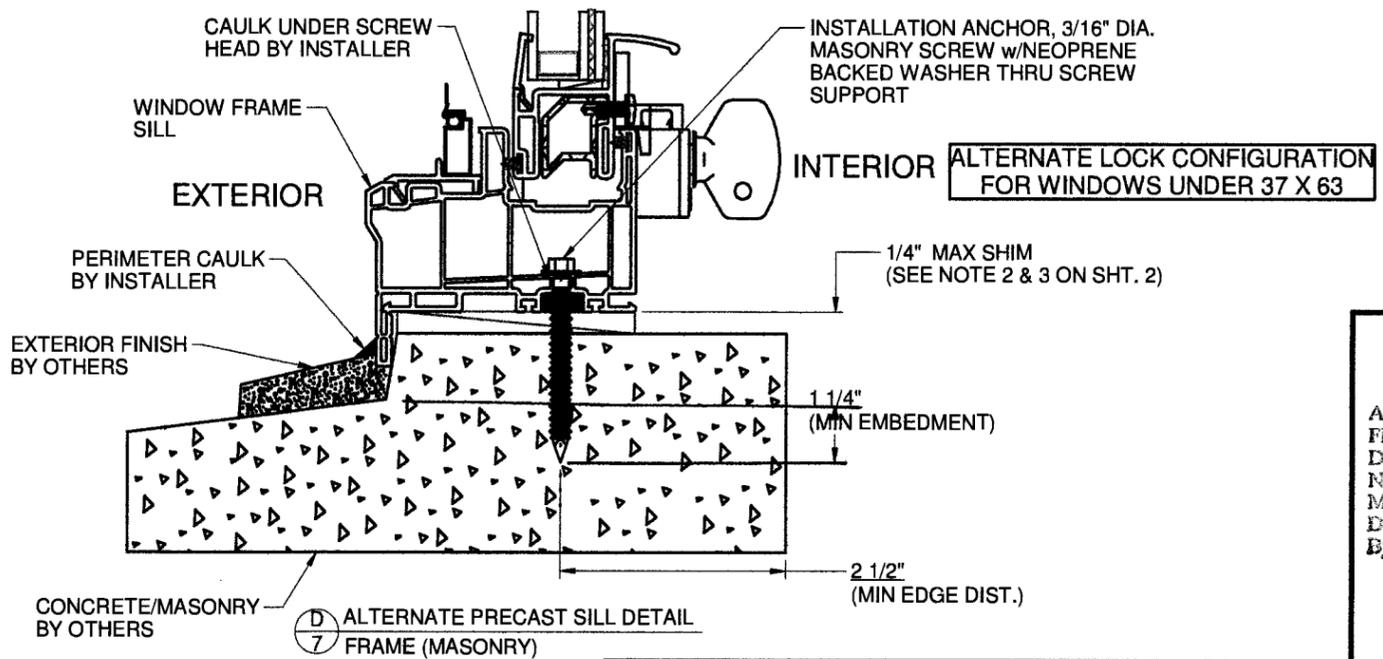
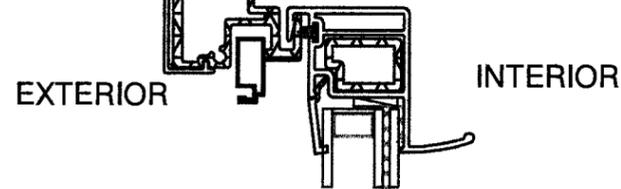
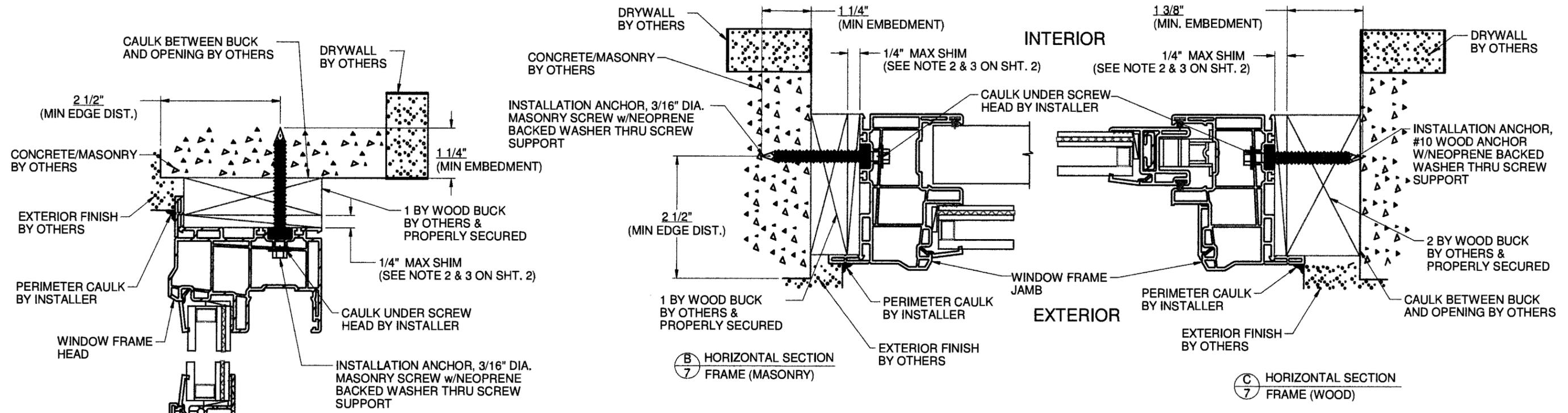
Approved as complying with the  
Florida Building Code  
Date **November 25, 2009**  
NOA# **09-0709.03**  
Miami Dade Building Control  
Division  
By *[Signature]*

*[Signature]*  
10/01/09  
  
L. ROBERTO LOMAS  
FL. P.E. NO. 62514



1900 SW 44TH AVE.  
OCALA, FLORIDA 34474

TITLE: EXTRUSIONS / B.O.M.- LARGE MISSILE IMPACT		
SERIES: 8100	DRAWN BY: ADE	DATE: 9/16/2009
MODEL: SINGLE HUNG	SCALE: NTS	DWG. NO.: CWS - 368
	REV. LETTER: A	SHEET: 6 OF 7



Approved as complying with the Florida Building Code  
 Date November 25, 2009  
 NOA# 09-0709.03  
 Miami Dade Product Control Division  
 By *[Signature]*

*[Signature]*  
10/01/09

L. ROBERTO LOMAS  
FL. P.E. NO. 62514

1900 SW 44TH AVE.  
OCALA, FLORIDA 34474

TITLE: **INSTALLATION DETAIL - LARGE MISSILE IMPACT**

SERIES: 8100	DRAWN BY: ADE	DATE: 9/16/2009
MODEL: SINGLE HUNG	SCALE: NTS	DWG. NO.: CWS - 368
	REV. LETTER: A	SHEET: 7 OF 7