



BUILDING AND NEIGHBORHOOD COMPLIANCE DEPARTMENT (BNC)
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

NOTICE OF ACCEPTANCE (NOA)

www.miamidade.gov/building/home/asp

Bell-View, Inc.
150 Industrial Blvd.
Wrightsville, GA 31096

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 Section 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 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. BORA 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 "PA-20" Aluminum Single Hung Window – L.M.I.

APPROVAL DOCUMENT: Drawing No. **08-01109**, titled "PA-20 Aluminum Single Hung – Large Missile Impact", sheets 1 through 4 of 4, dated 09/20/10 with revision A dated 02/01/11, prepared by manufacturer, signed and sealed by Luis R. Lomas, 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 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 and renews** NOA # **03-0602.01** 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.**



NOA No. 10-0401.02
Expiration Date: February 24, 2016
Approval Date: February 24, 2011
Page 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Manufacturer's die drawings and sections.
2. Drawing No **08-01109**, titled "PA-20 Aluminum Single Hung – Large Missile Impact", Sheets 1 through 4 of 4, dated 09/20/10 with revision a dated 02/01/11, prepared by manufacturer, signed and sealed by Luis R. Lomas, P.E.

B. TESTS

1. Test reports on:
 - 1) Air Infiltration Test, per PA 202-94
 - 2) Uniform Static Air Pressure Test, Loading per PA 202-94
 - 3) Water Resistance Test, per PA 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 Resistance Test, per AAMA 1302.5.

along with installation diagram of specimens: D, G, K, and M for PA 202 and specimens: A, B, C, M, N, O, E, F, H, I, J, L for PA 201 & PA 203, consisting of an alum. single hung window 53-1/8" wide x 74-1/8" high x 2-3/4" deep with 4 different laminated glazing options, consisting of 8 specimens with 2 lites of 1/8" annealed glass and 7 specimens with 2 lites of 3/16" annealed glass, prepared by American Test Lab of South Florida, Report No. **ATL-1023.02-01**, dated 05/14/02, signed and sealed by William R. Mehner, P.E. and Henry Hattem, P.E.

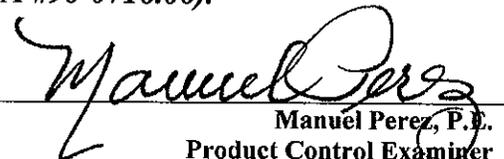
(Submitted under NOA #03-0602.01)

2. Test reports on:
 - 1) Air Infiltration Test, per PA 202-94
 - 2) Uniform Static Air Pressure Test, Loading per PA 202-94
 - 3) Water Resistance Test, per PA 202-94
 - 4) Forced Entry Resistance Test, per AAMA 1302.5.

along with installation diagram of an alum. single hung window 4' 5-1/8" wide x 6' 2-1/4" high x 2-3/4" deep with 3/16" annealed glass, prepared by Miami Testing Laboratory, Report No. **MTL-16727**, dated 4/12/96, re-issued on 7/2/96, signed and sealed by David Gale Ober, P.E. *(Submitted under NOA #96-0716.06)*

3. Test reports on:
 - 1) Air Infiltration Test, per PA 202-94
 - 2) Uniform Static Air Pressure Test, Loading per PA 202-94
 - 3) Water Resistance Test, per PA 202-94
 - 4) Forced Entry Resistance Test, per AAMA 1302.5.

along with installation diagram of an alum. single hung window 3' 1" wide x 5' 3" high x 2-3/4" deep with 1/8" DSB annealed glass, prepared by Miami Testing Laboratory, Report No. **MTL-16728**, dated April 2, 1996, signed and sealed by David Gale Ober, P.E. *(Submitted under NOA #96-0716.06)*.


Manuel Perez, P.E.
Product Control Examiner

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4. Test reports on: 1) Air Infiltration Test, per PA 202-94
2) Uniform Static Air Pressure Test, Loading per PA 202-94
3) Water Resistance Test, per PA 202-94
4) Forced Entry Resistance Test, per AAMA 1302.5.
along with installation diagram of an alum. single hung window 3' 1-1/8" wide x 3' 2-1/2" high x 2-3/4" deep with single strength SSB annealed glass, prepared by Miami Testing Laboratory, Report No. **MTL-16729**, dated April 2, 1996, signed and sealed by David Gale Ober, P.E. (**Submitted under NOA #96-0716.06**).
5. Test reports on: 1) Large Missile Impact Test, SFBC PA 201-94
2) Cyclic Loading Test, per SFBC PA 203-94
along with installation diagram of an alum. single hung window 53-1/8" wide x 78" high x 2-3/4" deep with 1/8" DSB annealed **Dupont Sentryglas**, prepared by American Test Lab of South Florida, Report No. **ATL-0118.01-96**, dated 3/16/96, signed and sealed by Gerard B. Sullivan, P.E. (**Submitted under NOA #96-0716.06**)

C. CALCULATIONS

1. Anchor verification calculations and structural analysis, complying with FBC-2007, dated 09/20/10, report #**511671**, prepared, signed and sealed by Luis R. Lomas, P.E.
2. Glazing complies with ASTM E1300-04

D. QUALITY ASSURANCE

1. Miami-Dade Building and Neighborhood Compliance Department (BNC).

E. MATERIAL CERTIFICATIONS

1. Notice of Acceptance No. **07-1116.04** issued to **E.I. DuPont DeNemours & Co., Inc.** for their "**DuPont SentryGlas® Plus**" dated 01/03/08, expiring on 01/14/12.
2. 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 and of no financial interest, dated January 19, 2011, signed and sealed by Luis R. Lomas, P.E.

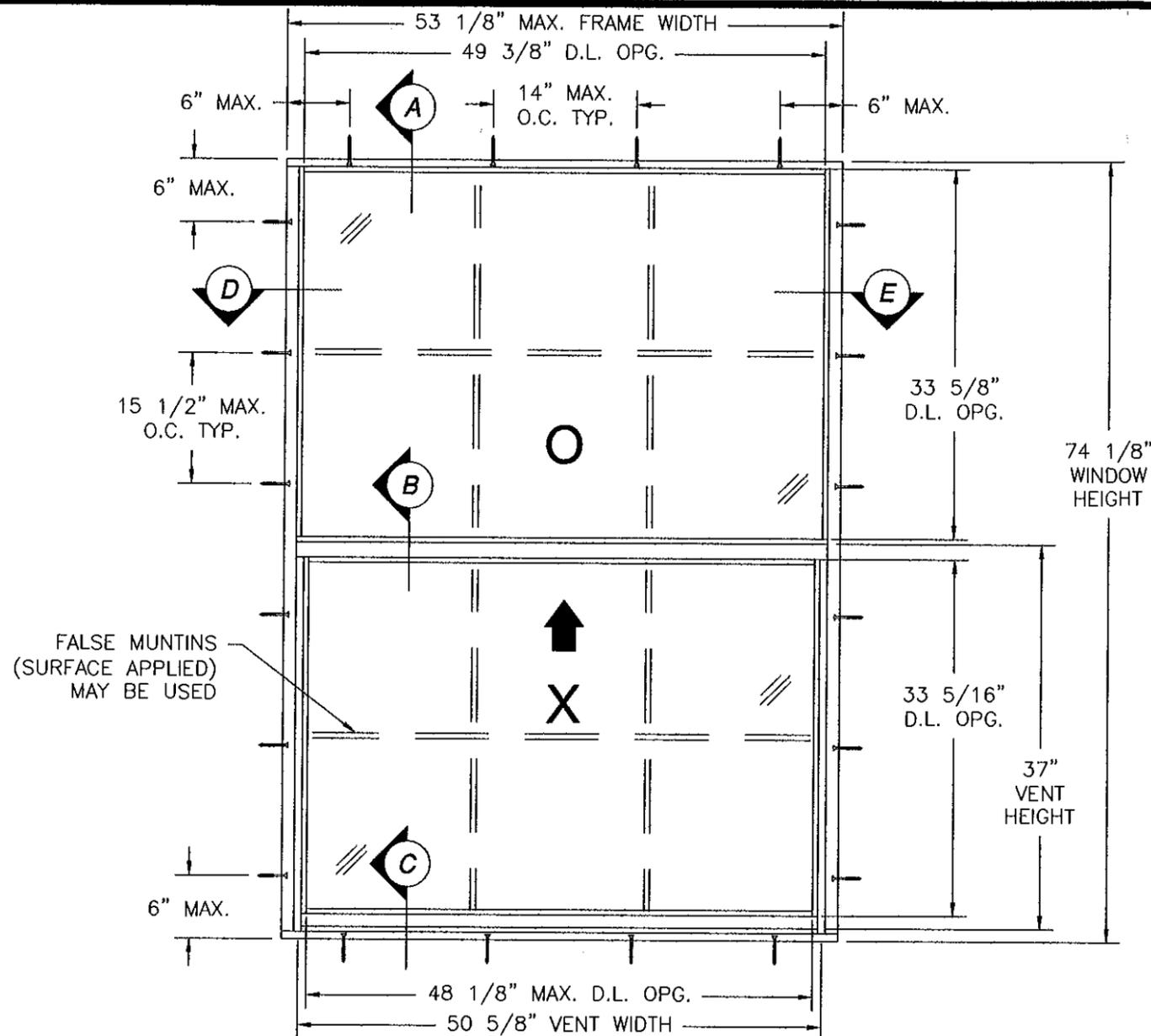
G. OTHER

1. Notice of Acceptance No. **03-0602.01**, issued to Bell-View, Inc. for their Series PA-20 Aluminum Single Hung Window – Large Missile Impact Resistant, approved on 03/27/04 and expiring on 03/13/09.


Manuel Perez, P.E.
Product Control Examiner
NOA No. 10-0401.02

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REVISIONS			
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A	REVISED PER DADE LETTER 01/31/11	02/01/11	R.L.



PA-20 ALUMINUM SINGLE HUNG
EXTERIOR VIEW

WITH GLAZING TYPES A AND B	
DESIGN PRESSURE RATING	IMPACT RATING
±55.0PSF	LARGE MISSILE IMPACT

WITH GLAZING TYPES C AND D	
DESIGN PRESSURE RATING	IMPACT RATING
+60.0 PSF -75.0 PSF	LARGE MISSILE IMPACT

TABLE OF CONTENTS	
SHEET NO.	DESCRIPTION
1	ELEVATION, ANCHORING LAYOUT AND NOTES
2	INSTALLATION DETAILS AND GLAZING DETAILS
3	INSTALLATION DETAILS BILL OF MATERIALS
4	COMPONENTS AND CORNER DETAILS

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 10-0401.02
Expiration Date FEB. 24, 2016
By *Manuel Perez*
Miami Dade Product Control

BELL-VIEW, INC.
150 INDUSTRIAL, BLVD.
WRIGHTSVILLE, GA. 31096

PA-20 ALUMINUM SINGLE HUNG
LARGE MISSILE IMPACT
ELEVATION, ANCHORING LAYOUT AND NOTES

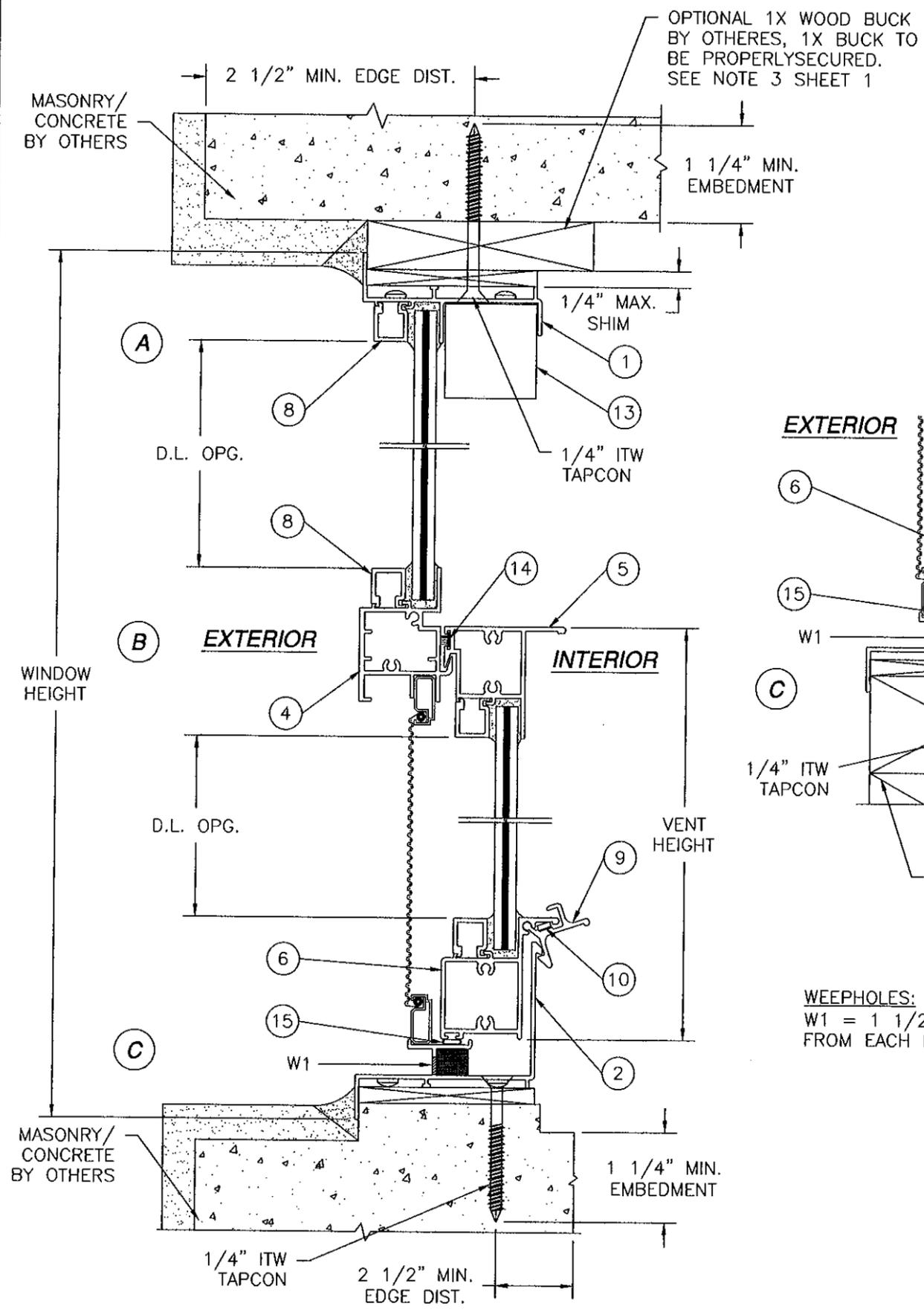
DRAWN: TJH	DWG NO. 08-01109	REV A
SCALE NTS	DATE 09/20/10	SHEET 1 OF 4

Luis R. Lomas
Luis R. Lomas P.E.
Florida No. 62514

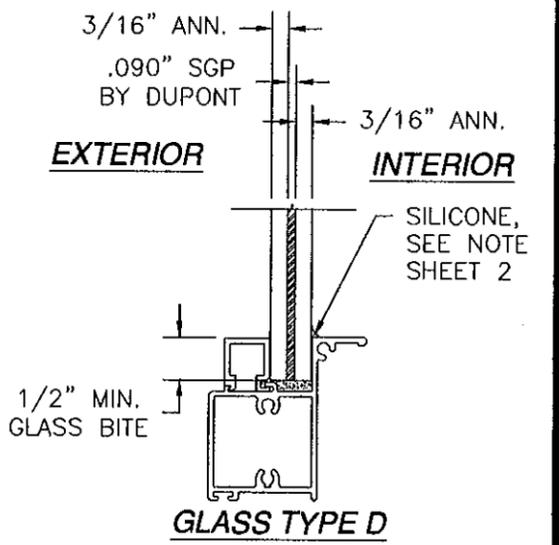
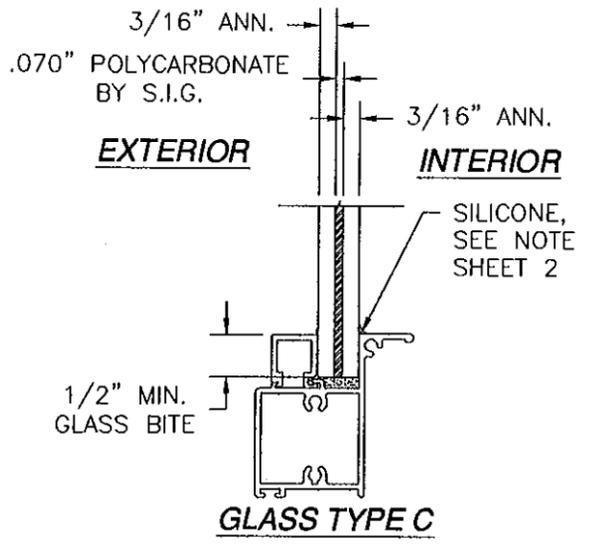
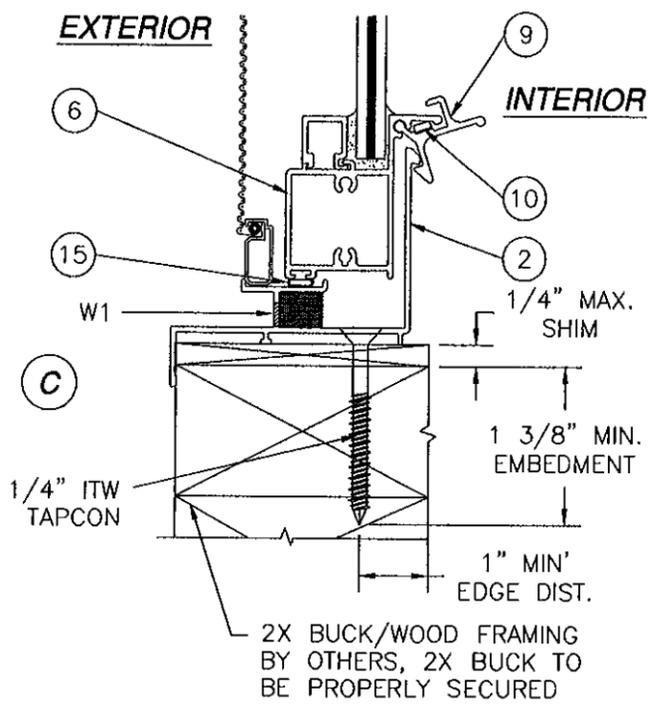
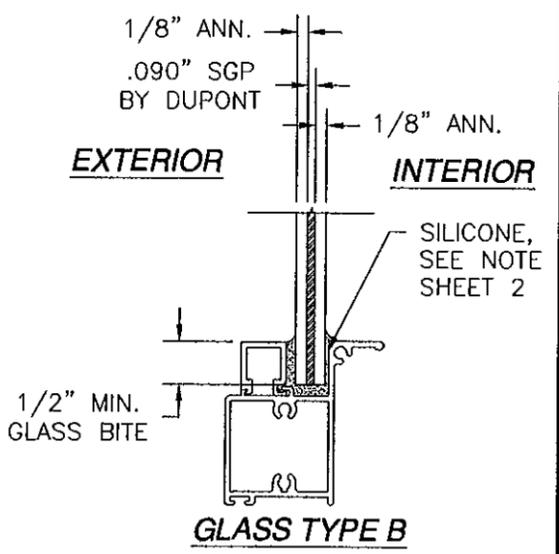
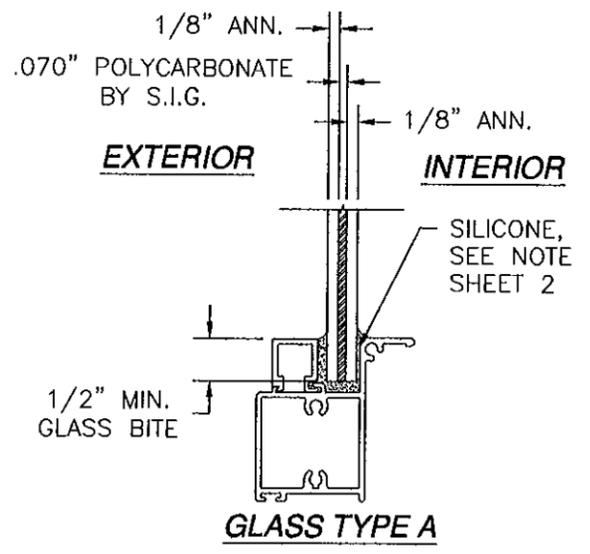
NOTES:

- 1) THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH REQUIREMENTS OF THE 2007 FLORIDA BUILDING CODE INCLUDING THE HVHZ.
- 2) WOOD FRAMING AND MASONRY OPENING TO BE DESIGNED AND ANCHORED TO PROPERLY TRANSFER ALL LOADS TO STRUCTURE. FRAMING AND MASONRY OPENING IS THE RESPONSIBILITY OF THE ARCHITECT OR ENGINEER OF RECORD.
- 3) 1X BUCK OVER MASONRY/CONCRETE IS OPTIONAL. WHERE 1X BUCK IS NOT USED DISSIMILAR MATERIALS MUST BE SEPARATED WITH APPROVED COATING OR MEMBRANE. SELECTION OF COATING OR MEMBRANE IS THE RESPONSIBILITY OF THE ARCHITECT OR ENGINEER OF RECORD.
- 4) ALLOWABLE STRESS INCREASE OF 1/3 WAS NOT USED IN THE DESIGN OF THE PRODUCT SHOWN HEREIN. WIND LOAD DURATION FACTOR Cd=1.6 WAS USED FOR WOOD ANCHOR CALCULATIONS.
- 5) FRAME AND SASH MATERIAL: EXTRUDED ALUMINUM 6063-T5 .062" THICK.
- 6) UNITS MUST BE GLAZED PER ASTM E1300. SEE SHEET 2 FOR GLASS TYPES.
- 7) APPROVED IMPACT PROTECTIVE SYSTEM IS NOT REQUIRED FOR THIS PRODUCT IN WIND BORNE DEBRIS REGIONS.
- 8) SHIM AS REQUIRED AT EACH INSTALLATION ANCHOR WITH LOAD BEARING SHIM. SHIM WHERE SPACE OF 1/16" OR GREATER OCCURS. MAXIMUM ALLOWABLE SHIM STACK TO BE 1/4".
- 9) FOR ANCHORING INTO MASONRY USE 1/4" ITW TAPCONS WITH SUFFICIENT LENGTH TO ACHIEVE A 1 1/4" MINIMUM EMBEDMENT INTO SUBSTRATE WITH 2 1/2" MINIMUM EDGE DISTANCE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
- 10) FOR ANCHORING INTO WOOD FRAMING OR 2X BUCK USE 1/4" ITW TAPCONS WITH SUFFICIENT LENGTH TO ACHIEVE A 1 3/8" MINIMUM EMBEDMENT INTO SUBSTRATE WITH 1" EDGE DISTANCE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
- 11) FOR ANCHORING INTO MIAMI-DADE APPROVED MULLION USE #12 TEK SCREW WITH SUFFICIENT LENGTH TO ACHIEVE A 3-THREADS MINIMUM EMBEDMENT BEYOND SUBSTRATE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
- 12) ALL FASTENERS TO BE CORROSION RESISTANT.
- 13) INSTALLATION ANCHORS SHALL BE INSTALLED 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:
A. WOOD - MINIMUM SPECIFIC GRAVITY OF G=0.42
B. CONCRETE - MINIMUM COMPRESSIVE STRENGTH OF 2,000 PSI.
C. MASONRY - STRENGTH CONFORMANCE TO ASTM C-90, GRADE N, TYPE 1 (OR GREATER).
- 14) APPROVAL APPLIES TO SINGLE UNITS OR SIDE BY SIDE MULLED COMBINATIONS OF SINGLE HUNG/SINGLE HUNG OR SINGLE HUNG WITH OTHER WINDOW TYPES IN MODULES OF TWO OR MORE WINDOWS USING MIAMI-DADE APPROVED MULLS. WHEN UNITS ARE MULLED LESSER DESIGN PRESSURE OF MULL OR WINDOW WILL GOVERN DESIGN PRESSURE OF MULLED UNIT.

REVISIONS			
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OPTIONAL 1X WOOD BUCK BY OTHERS, 1X BUCK TO BE PROPERLY SECURED. SEE NOTE 3 SHEET 1



WEEPHOLES:
W1 = 1 1/2" x 3/16" WEEPHOLES AT 2 1/4" FROM EACH END.

NOTE:
APPROVED SILICONE TYPES: DOW CORNING 995, DOW CORNING 899, SCHNEE-MOREHEAD AND TREMGLAZE S-500.

PRODUCT REVISED as complying with the Florida Building Code
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Expiration Date FEB. 24, 2016
By *M. P. Perez*
Miami Dade Product Control

BELL-VIEW, INC.
150 INDUSTRIAL, BLVD.
WRIGHTSVILLE, GA. 31096

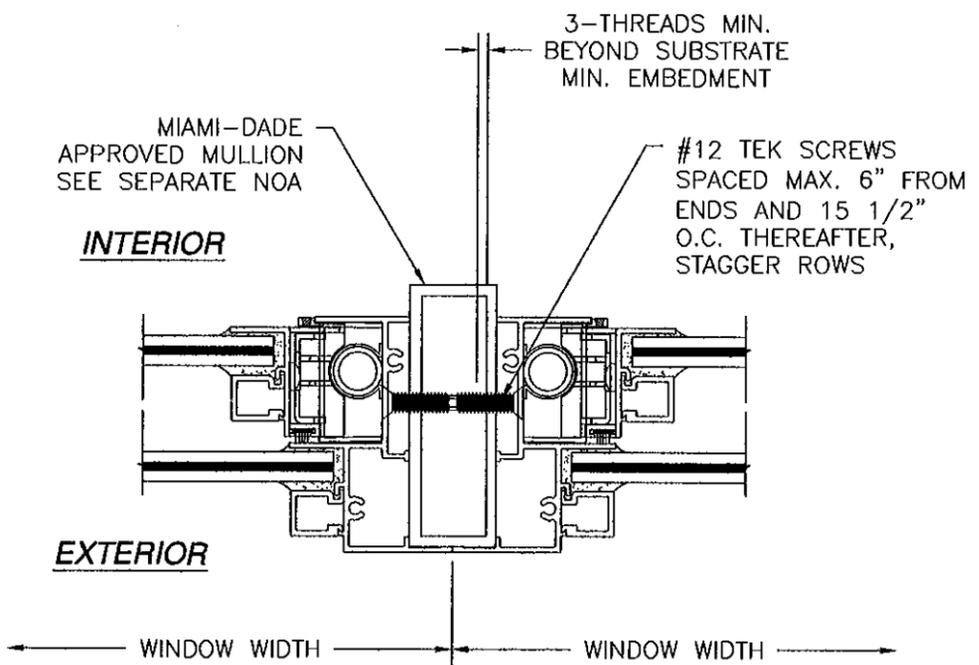
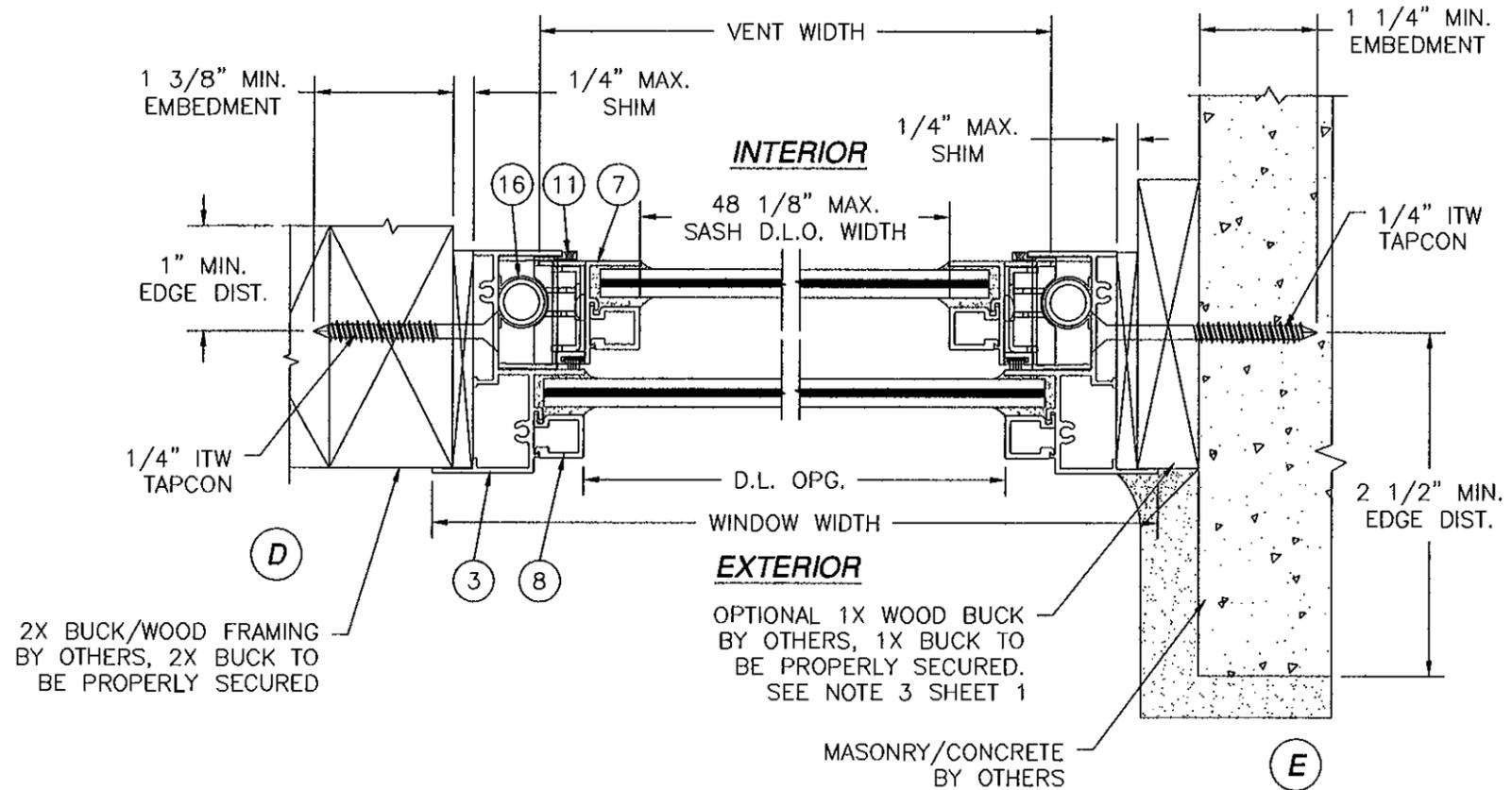
PA-20 ALUMINUM SINGLE HUNG
LARGE MISSILE IMPACT
INSTALLATION DETAILS AND GLAZING DETAILS

DRAWN: TJH	DWG. NO. 08-01109	REV A
SCALE NTS	DATE 09/20/10	SHEET 2 OF 4

Luis R. Lomas
Luis R. Lomas P.E.
Florida No. 62514

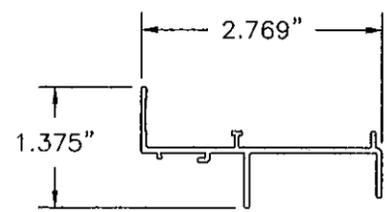
PARTS LIST				
NO.	PART NUMBER	DESCRIPTION	MANUFACTURER	MATERIAL
1	20-01	FRAME HEAD		ALUMINUM 6063-T5
2	20-03	FRAME SILL		ALUMINUM 6063-T5
3	20-04	FRAME JAMB		ALUMINUM 6063-T5
4	20-02	FIXED MEETING RAIL		ALUMINUM 6063-T5
5	20-05	VENT TOP RAIL		ALUMINUM 6063-T5
6	20-06	VENT BOTTOM RAIL		ALUMINUM 6063-T5
7	20-07	VENT SIDE RAIL		ALUMINUM 6063-T5
8	20-22	GLAZING BEAD		ALUMINUM 6063-T5
9	14-89	VENT LATCH @ 10 3/4" FROM ENDS		ALUMINUM 6063-T5
10		LATCH SPRING		STEEL
11	20-5002	SASH GUIDE		
12		#8 x 1" ASSEMBLY SCREW		STEEL
13	20-09	SASH STOP		ALUMINUM 6063-T5
14	4802100	PILE WEATHERSTRIPPING W/FIN	ULTRAFAB	PILE
15		BULD WEATHERSTRIPPING		VINYL
16	480786	5/8" SPIRAL BALANCE		
17		5/16" BOX SCREEN (OPTIONAL)		

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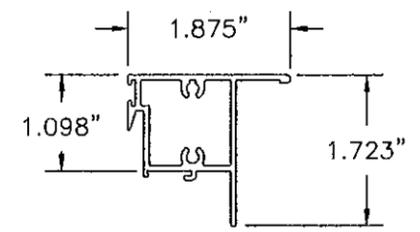


PRODUCT REVISED as complying with the Florida Building Code Acceptance No. 10-0401-02 Expiration Date FEB. 24, 2016 By <i>Manuel P...</i> Miami Dade Product Control	BELL-VIEW, INC. 150 INDUSTRIAL, BLVD. WRIGHTSVILLE, GA. 31096		
	PA-20 ALUMINUM SINGLE HUNG LARGE MISSILE IMPACT INSTALLATION DETAILS AND BILL OF MATERIALS		
DRAWN: TJH	DWG NO. 08-01109	REV. A	
SCALE NTS	DATE 09/20/10	SHEET 3 OF 4	

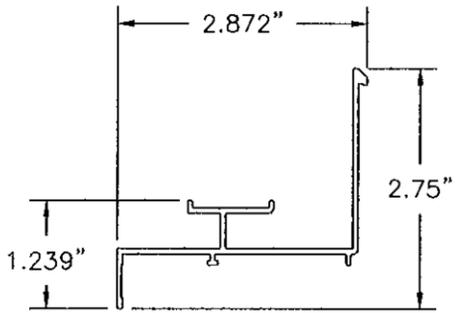
REVISIONS			
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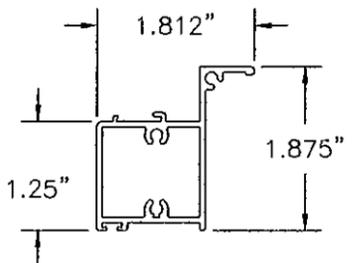
① **FRAME HEAD**
EXTRUDED ALUMINUM 6063-T5 .062" THICK



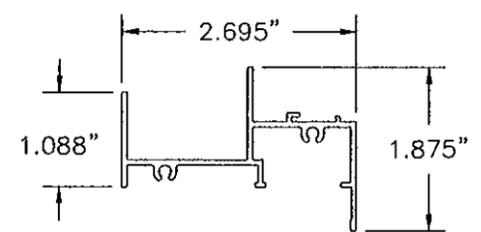
⑤ **VENT TOP RAIL**
EXTRUDED ALUMINUM 6063-T5 .062" THICK



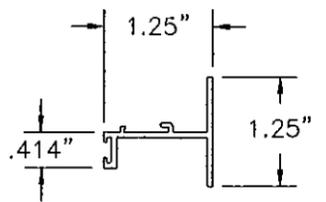
② **FRAME SILL**
EXTRUDED ALUMINUM 6063-T5 .062" THICK



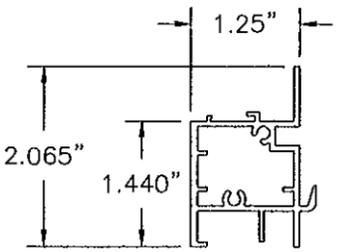
⑥ **VENT BOTTOM RAIL**
EXTRUDED ALUMINUM 6063-T5 .062" THICK



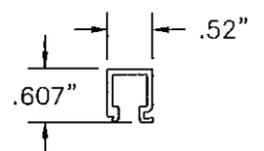
③ **FRAME JAMB**
EXTRUDED ALUMINUM 6063-T5 .062" THICK



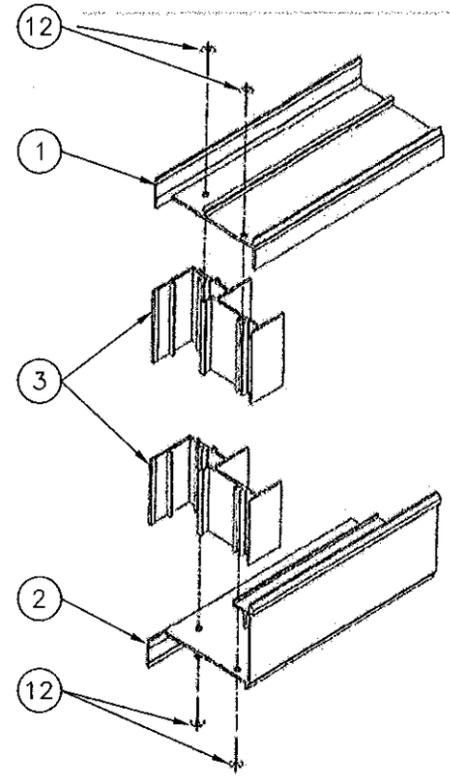
⑦ **VENT SIDE RAIL**
EXTRUDED ALUMINUM 6063-T5 .062" THICK



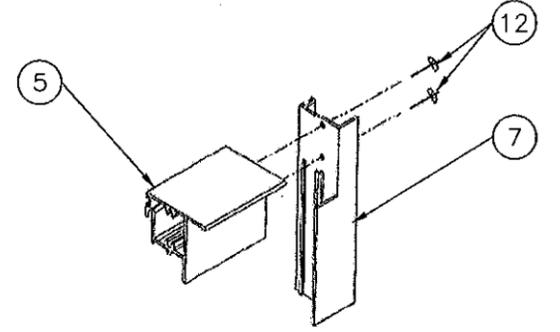
④ **FIXED MEETING RAIL**
EXTRUDED ALUMINUM 6063-T5 .062" THICK



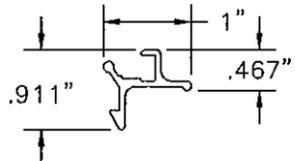
⑧ **GLAZING BEAD**
EXTRUDED ALUMINUM 6063-T5 .062" THICK



FRAME CORNER DETAIL



SASH CORNER DETAIL



⑨ **VENT LATCH**
EXTRUDED ALUMINUM 6063-T5 .062" THICK

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	PA-20 ALUMINUM SINGLE HUNG LARGE MISSILE IMPACT COMPONENTS AND CORNER DETAILS		
	DRAWN: TJH	DWG. NO. 08-01109	REV. A
	SCALE NTS	DATE 09/20/10	SHEET 4 OF 4

Luis R. Lomas
 State of Florida
 Professional Engineer
 License No. 62514