



MIAMI-DADE COUNTY
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

Leader Industries, Inc.
P.O. Box 40913
Nashville, TN 37204

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 BNC -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. BNC 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: Model DC-HWD550 Aluminum Louver

APPROVAL DOCUMENT: Drawing No. **08-01058**, titled "DC-HWD550 Aluminum Vertical Louver Muller and Single Units" Sheets 1 through 12 of 12, dated 07/19/10, with revision A dated 01/05/11, prepared by Leader Industries, Inc, signed and sealed by Luis R. 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 Section.

MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

LABELING: Each unit shall bear the following permanent label:

Leader Industries, Inc.
 2509 Cruzen Street
 Nashville, TN 37211

and the statement: "Miami-Dade County Product Control Approved".

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 **Carlos M. Utrera, P.E.**



[Handwritten Signature]
 03/31/11

NOA No. 10-0920.16
 Expiration Date: April 07, 2016
 Approval Date: April 07, 2011
 Page 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Drawing No. **08-01058**, titled "DC-HWD550 Aluminum Vertical Louver Muller and Single Units" Sheets 1 through 12 of 12, dated 07/19/10, with revision A dated 01/05/11, prepared by Leader Industries, Inc, signed and sealed by Luis R. Lomas, P.E.

B. TESTS

1. 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 DC-HWD550 Aluminum Louver Systems", prepared by National Certified Testing Laboratories, Report No. **210-3692-1**, dated 06/14/10, signed and sealed by Gerald J. Ferrara, P.E.

C. CALCULATIONS

1. Anchor calculations prepared by Luis R. Lomas, P.E., dated 07/20/10 and 01/05/11, signed and sealed by Luis R. Lomas, P.E.

D. QUALITY ASSURANCE

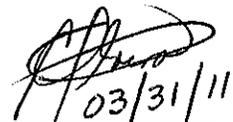
1. Miami-Dade Building and Neighborhood Compliance Department (BNC)

E. MATERIAL CERTIFICATIONS

1. None.

F. STATEMENTS

1. Statement letter of code conformance with FBC 2007 and no financial interest issued by L. Roberto Lomas, P.E., dated 07/26/10, signed and sealed by Luis R. Lomas, P.E.



03/31/11

Carlos M. Utrera, P.E.

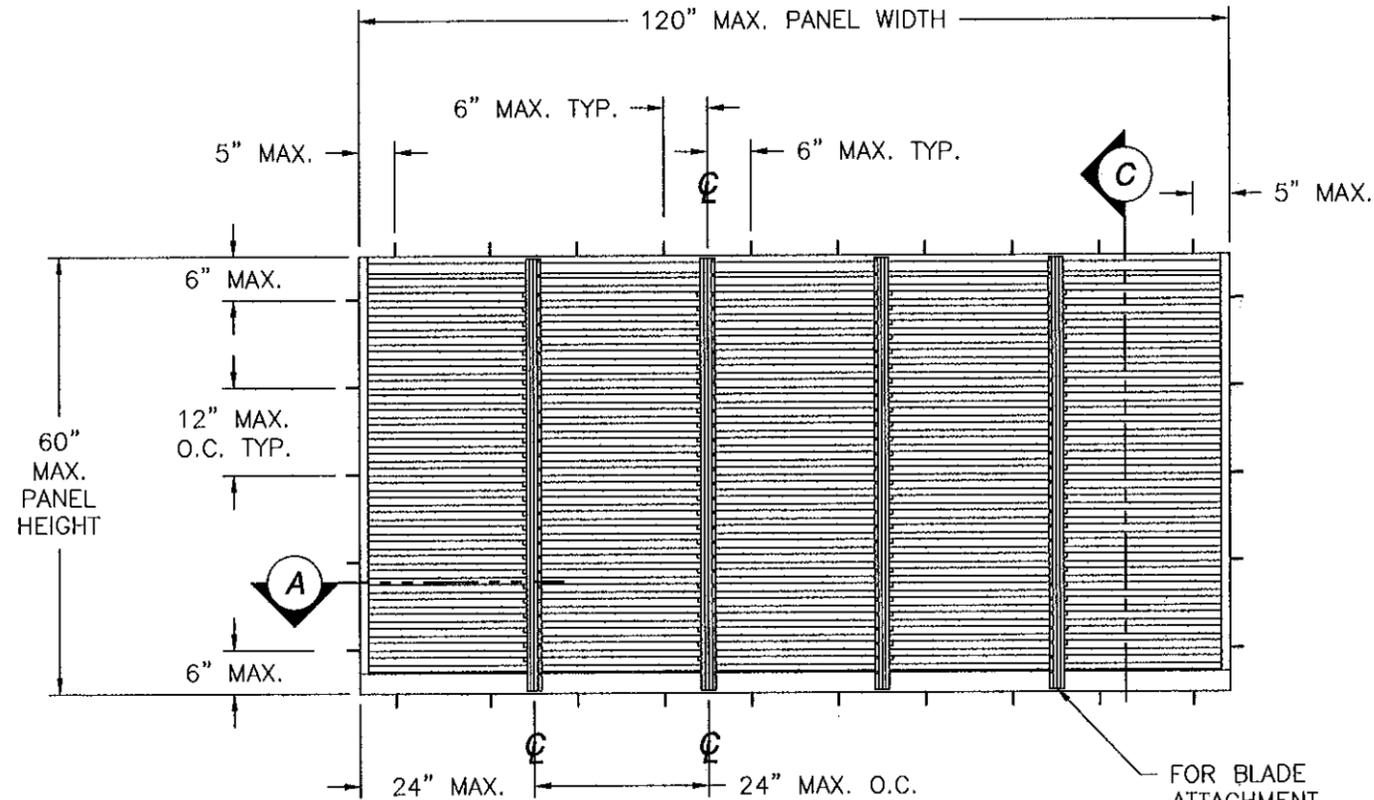
Product Control Examiner

NOA No. 10-0920.16

Expiration Date: April 07, 2016

Approval Date: April 07, 2011

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	PER DADE LETTER DATED 01-04-11	01/05/11	R.L.



FOR BLADE ATTACHMENT SEE DETAIL A SHEET 5 AND WELDMENT DETAIL D SHEET 4, TYP.

DC-HWD550 ALUMINUM SINGLE VERTICAL LOUVER
INTERIOR VIEW

DESIGN PRESSURE RATING	IMPACT RATING
±120PSF	LARGE MISSILE IMPACT

NOTES:

- 1) THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH REQUIREMENTS OF THE FLORIDA BUILDING CODE INCLUDING THE HVHZ.
- 2) WOOD FRAMING, STEEL FRAMING AND CONCRETE OPENING TO BE DESIGNED AND ANCHORED TO PROPERLY TRANSFER ALL LOADS TO STRUCTURE. FRAMING AND CONCRETE OPENING IS THE RESPONSIBILITY OF THE ARCHITECT OR ENGINEER OF RECORD.
- 3) 1X BUCK OVER 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 MATERIAL: EXTRUDED ALUMINUM 6063-T5 .080" THICK.
- 6) APPROVED IMPACT PROTECTIVE SYSTEM IS NOT REQUIRED FOR THIS PRODUCT IN WIND BORNE DEBRIS REGIONS.
- 7) 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".
- 8) ALL FASTENERS TO BE CORROSION RESISTANT.
- 9) 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=0.46
 B. CONCRETE - MINIMUM COMPRESSIVE STRENGTH OF 3,200 PSI.
 C. STEEL - 16GA. (.060") MINIMUM (WELDING INSTALLATION).
 D. STEEL - .1875" MINIMUM (3/8" MACHINE SCREW OR 3/8" BOLT AND NUT INSTALLATION).
 E. STEEL - 14GA. (.078") MINIMUM (5/16" SELF-TAPPING SCREW INSTALLATION).
- 10) LOUVER TO BE INSTALLED IN LOCATION WHERE ROOM HAS BEEN DESIGNED FOR WATER DRAINAGE, AND THE ROOM WILL HOUSE WATER RESISTANT OR WATER PROOF EQUIPMENT, COMPONENTS OR SUPPLIES.
- 11) LOUVER MAYBE INSTALLED WITH OR WITHOUT EAD DAMPER. SEE SECTION C SHEET 6.

TABLE OF CONTENTS	
SHEET NO.	DESCRIPTION
1 - 3	ELEVATION, ANCHORING AND NOTES
4	BILL OF MATERIALS AND WELDMENT DETAILS
5 - 6	CROSS SECTIONS
7 - 9	INSTALLATION DETAILS
11 - 12	COMPONENTS

Approved as complying with the Florida Building Code
 Date 04/07/2011
 NOA# 10-0920.16
 Miami Dade Product Control
 By [Signature]

LEADER INDUSTRIES, INC.

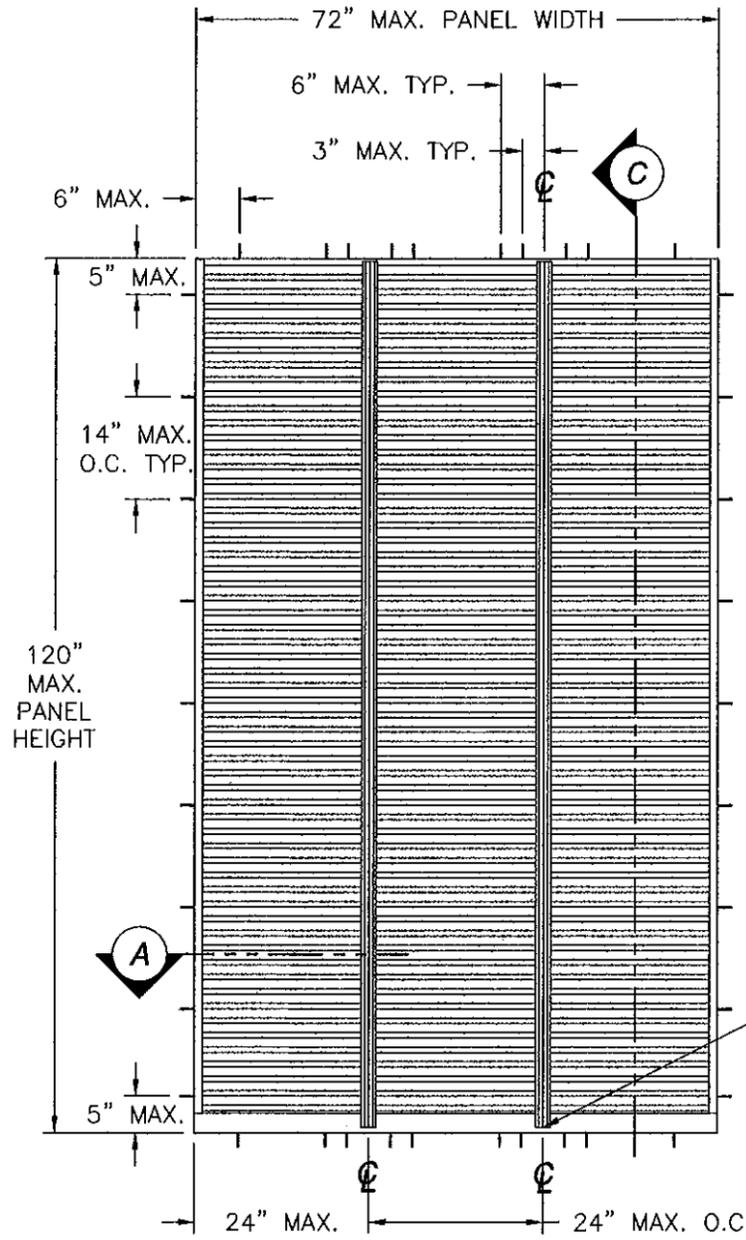
2509 CRUZEN STREET
NASHVILLE, TN 37211

DC-HWD550 ALUMINUM VERTICAL LOUVER
MULLED AND SINGLE UNITS - LARGE MISSILE IMPACT
SINGLE ELEVATIONS, ANCHORING AND NOTES

DRAWN: TJH	DWG NO. 08-01058	REV A
SCALE NTS	DATE 07/19/10	SHEET 1 OF 12

[Signature]
 3/15/11
 Luis R. Lomas, P.E.
 Florida No. 62514

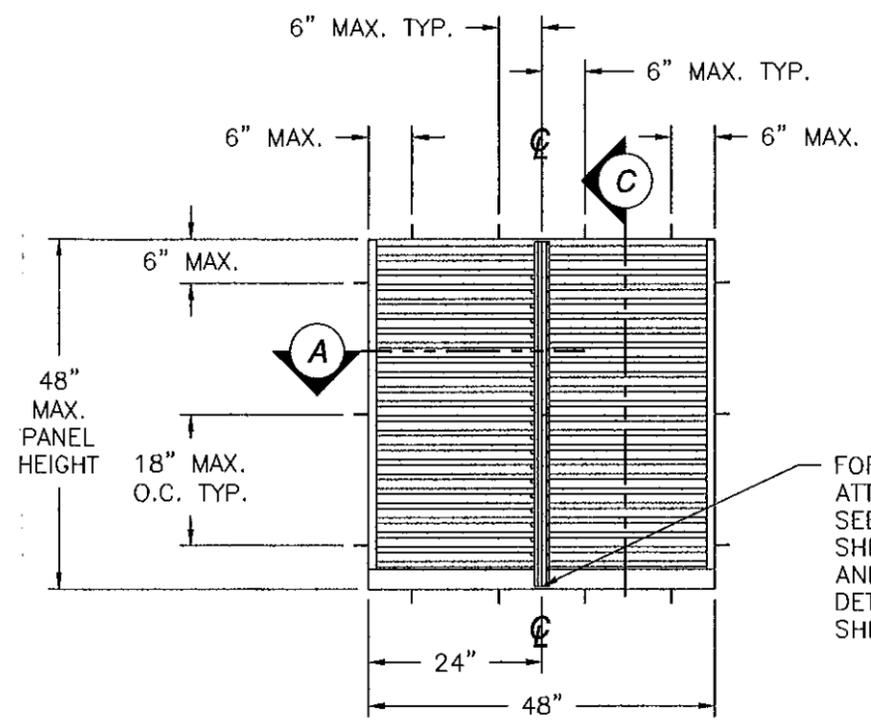
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	PER DADE LETTER DATED 01-04-11	01/05/11	R.L.



**DC-HWD550 ALUMINUM SINGLE
VERTICAL LOUVER
INTERIOR VIEW**

DESIGN PRESSURE RATING	IMPACT RATING
±120PSF	LARGE MISSILE IMPACT

FOR BLADE ATTACHMENT SEE DETAIL A SHEET 5 AND WELDMENT DETAIL D SHEET 4, TYP.



**DC-HWD550 ALUMINUM SINGLE
VERTICAL LOUVER
INTERIOR VIEW**

DESIGN PRESSURE RATING	IMPACT RATING
±180PSF	LARGE MISSILE IMPACT

FOR BLADE ATTACHMENT SEE DETAIL A SHEET 5 AND WELDMENT DETAIL D SHEET 4, TYP.

Approved as complying with the Florida Building Code
Date 04/07/2011
NOA# 10-0920-16
Miami Dept. Product Control
By *[Signature]*

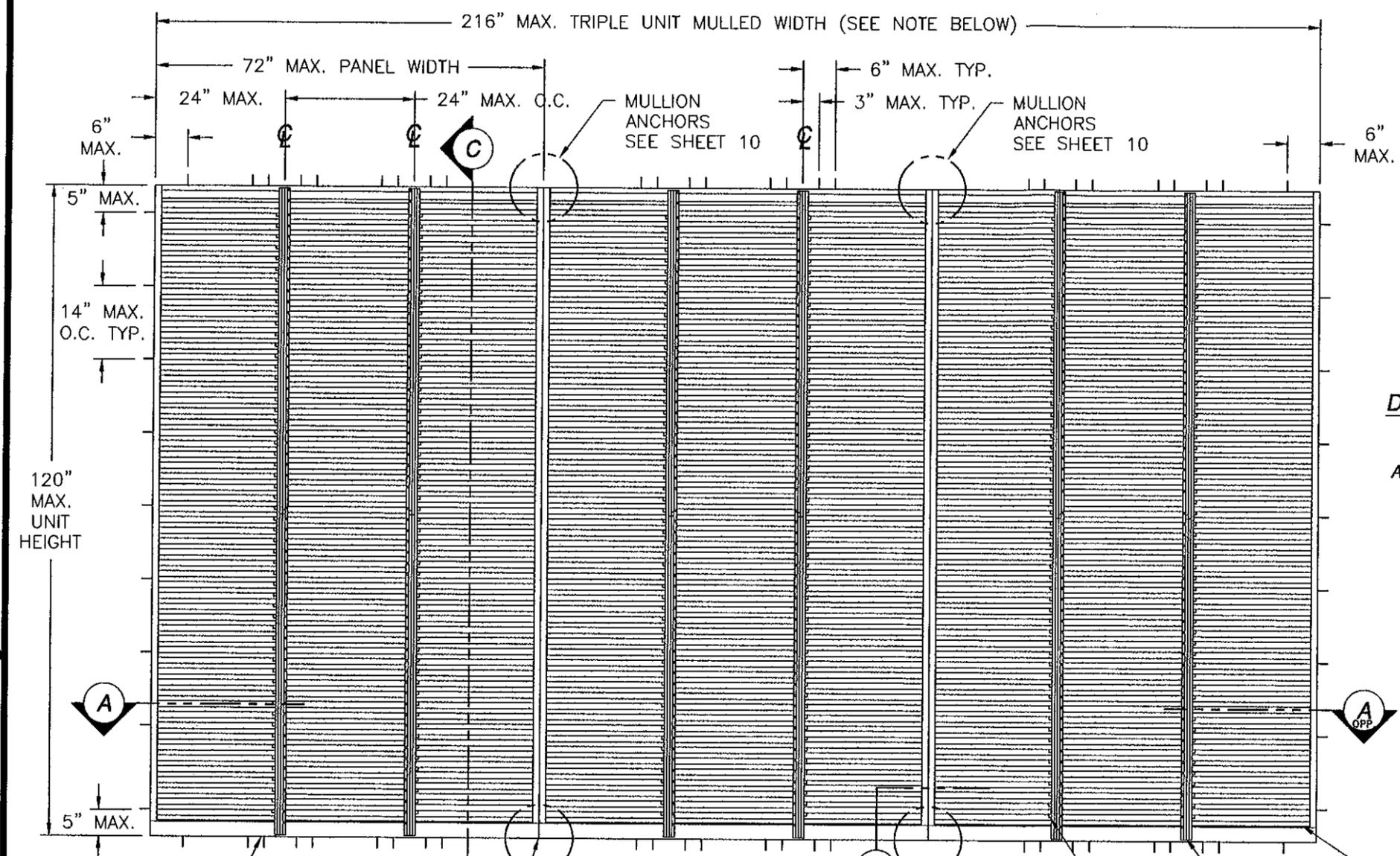
LEADER INDUSTRIES, INC.
2509 CRUZEN STREET
NASHVILLE, TN 37211

DC-HWD550 ALUMINUM VERTICAL LOUVER
MULLED AND SINGLE UNITS - LARGE MISSILE IMPACT
SINGLE ELEVATIONS, ANCHORING AND NOTES

DRAWN: TJH	DWG NO. 08-01058	REV A
SCALE NTS	DATE 07/19/10	SHEET 2 OF 12

[Signature]
3/15/11
Luis R. Lomas P.E.
Florida No. 62514

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	PER DADE LETTER DATED 01-04-11	01/05/11	R.L.



DC-HWD550 ALUMINUM MULLED VERTICAL LOUVER
 INTERIOR VIEW
 3 PANEL MULLED UNIT SHOWN, UNLIMITED MULTIPLES ARE APPROVED AS LONG AS SINGLE PANEL DOES NOT EXCEED SINGLE PANEL SIZE SHOWN IN ELEVATION AND CHART BELOW

DESIGN PRESSURE RATING	IMPACT RATING
±120PSF	LARGE MISSILE IMPACT

SEE WELDMENT DETAIL E SHEET 4
 SEE SLEEVE SPLICE DETAIL SHEET 4 TYPICAL
 MULLION ANCHORS SEE SHEET 10
 MULLION ANCHORS SEE SHEET 10
 SEE WELDMENT DETAIL D SHEET 4 TYP.
 FOR BLADE ATTACHMENT SEE DETAIL A SHEET 5 AND WELDMENT DETAIL D SHEET 4, TYP.
 SEE WELDMENT DETAIL F SHEET 3 TYPICAL

MAXIMUM DESIGN PRESURE RATING FOR APPROVED MULLED SIZES
 DC-HWD550 VERTICAL LOUVER

Height (in)	Single panel width																	
	50.0		60.0		70.0		72.0		80.0		90.0		100.0		110.0		120.0	
	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg
50.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
60.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
70.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
72.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
80.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	-	-	-	-
90.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	-	-	-	-	-	-
100.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	-	-	-	-	-	-	-	-
110.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	-	-	-	-	-	-	-	-	-	-
120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	-	-	-	-	-	-	-	-	-	-

Approved as complying with the Florida Building Code
 Date 04/07/2011
 NOAH 10-0920.16
 Miami Dade Product Control
 By [Signature]

LEADER INDUSTRIES, INC.
 2509 CRUZEN STREET
 NASHVILLE, TN 37211

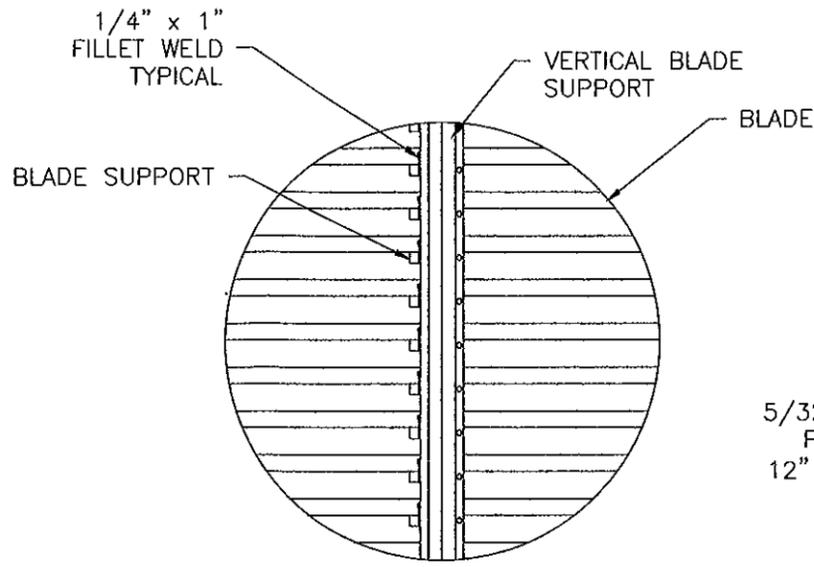
DC-HWD550 ALUMINUM VERTICAL LOUVER
 MULLED AND SINGLE UNITS - LARGE MISSILE IMPACT
 MULLED AND SINGLE ELEVATIONS AND ANCHORING

DRAWN: TJH	DWG NO. 08-01058	REV A
SCALE NTS	DATE 07/19/10	SHEET 3 OF 12

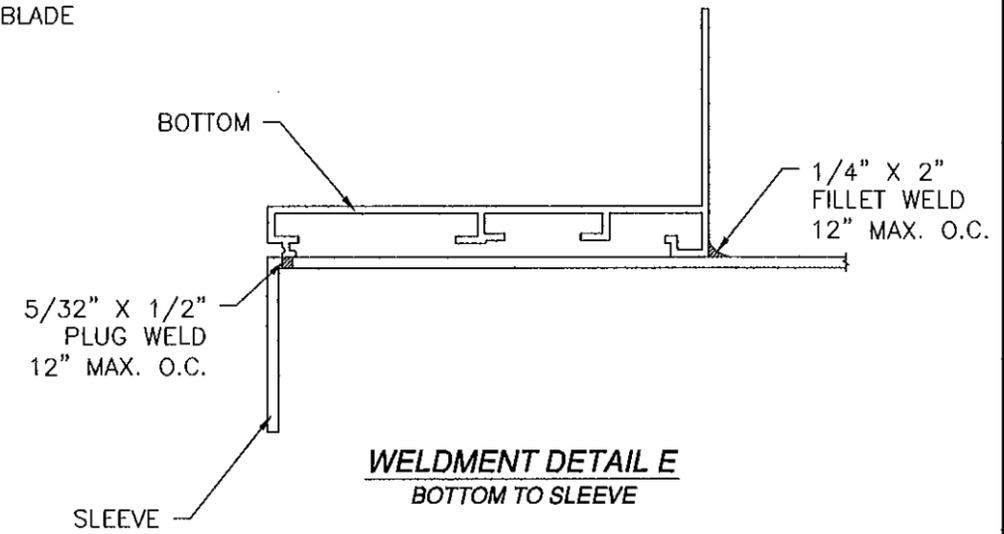
[Signature]
 3/15/11
 Luis R. Lomas P.E.
 Florida No. 62514

PARTS LIST				
NO.	PART NUMBER	DESCRIPTION	MANUFACTURER	MATERIAL
1	HWD550H	HWD550 HEAD	LEADER INDUSTRIES	ALUMINUM 6063-T5
2	HWD550BO	HWD550 BOTTOM	LEADER INDUSTRIES	ALUMINUM 6063-T5
3	HWD550J	HWD550 JAMB	LEADER INDUSTRIES	ALUMINUM 6063-T5
4	HWD550B	HWD550 BLADE	LEADER INDUSTRIES	ALUMINUM 6063-T5
5	HWD550BS	HWD550 BLADE SUPPORT	LEADER INDUSTRIES	ALUMINUM 6063-T5
6		VERTICAL BLADE SUPPORT	LEADER INDUSTRIES	ALUMINUM 6063-T5
7		INSTALLATION SLEEVE	LEADER INDUSTRIES	ALUMINUM 3003
8		2" x 2" x 3/16" INSTALL ANGLE	LEADER INDUSTRIES	ALUMINUM 6063-T5
9		2" x 4" x 1/4" MULLION ANGLE	LEADER INDUSTRIES	ALUMINUM 6063-T5
10	C4X5.4	MULLION C-CHANNEL	LEADER INDUSTRIES	A36 STEEL
11		2" x 4" x 1/4" x 3 1/2" CLIP	LEADER INDUSTRIES	ALUMINUM 6063-T5
12		#8 x 3/4" TEK SCREW		
13		#12 x 1" TEK SCREW		
14		1/2-13 x 1 1/2" HH BOLT		
15		1/2-13 NUT		
16		#10 x 3/4" TEK		
17		2" x 2" x 3/16" CONTINUOUS ANGLE	LEADER INDUSTRIES	ALUMINUM 6063-T5
18		EAD DAMPER BLADE	LEADER INDUSTRIES	ALUMINUM 6063-T5
19		HAND QUADRANT	LEADER INDUSTRIES	ALUMINUM 6063-T5
20		#14 x 7/8" TEK SCREW		
21		EAD DAMPER HAT CHANNEL	LEADER INDUSTRIES	ALUMINUM 6063-T5
22		EAD DAMPER BLADE STOP	LEADER INDUSTRIES	ALUMINUM 6063-T5

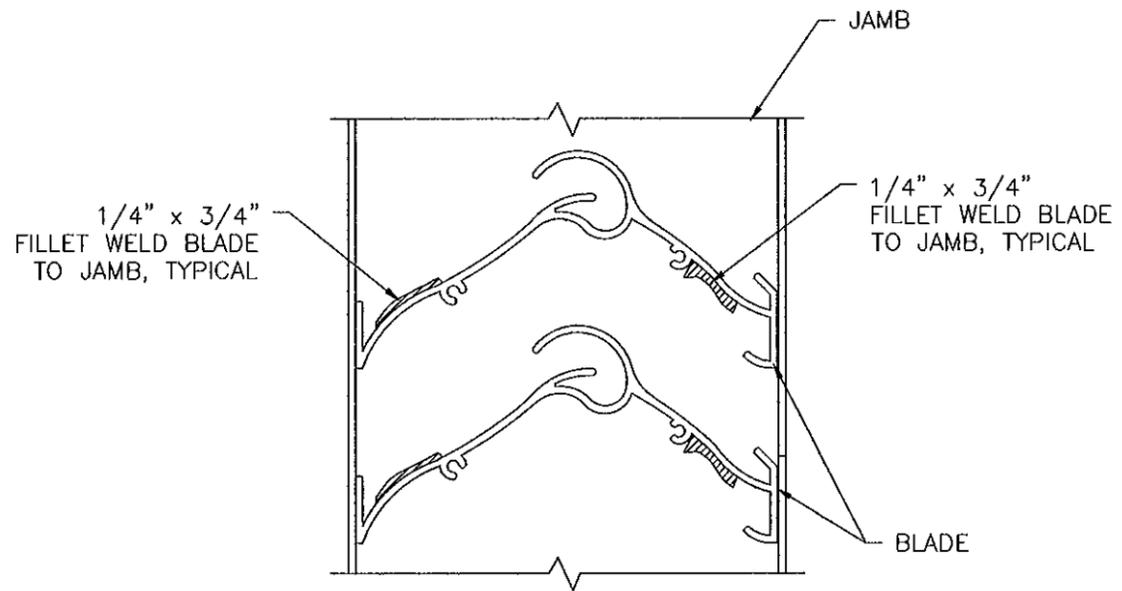
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	PER DADE LETTER DATED 01-04-11	01/05/11	R.L.



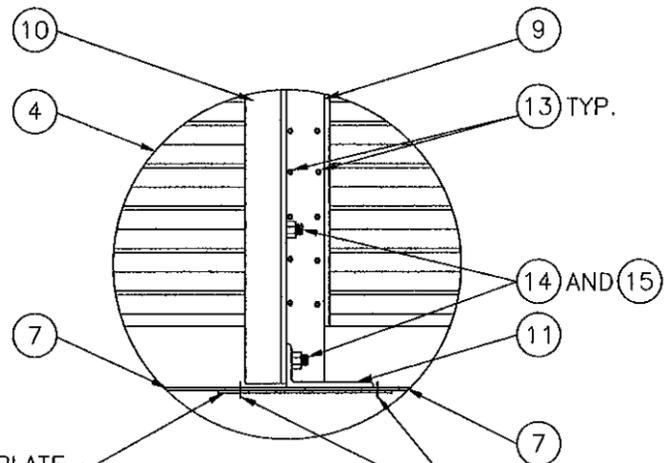
WELDMENT DETAIL D
BLADE TO BLADE SUPPORT



WELDMENT DETAIL E
BOTTOM TO SLEEVE



WELDMENT DETAIL F
BLADE TO JAMB



SPLICE PLATE
ALUMINUM 6063-T5
.101" THICK MINIMUM

SLEEVE SPLICE DETAIL

SPLICE PLATE IS ATTACHED TO SLEEVE WITH 3/16" POP RIVETS OR #12 x 1" TEK SCREWS, 3" FROM ENDS AND 3" MAX. O.C.

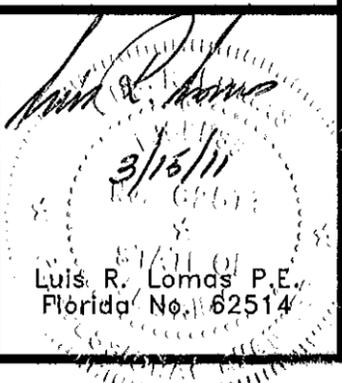
Approved as complying with the Florida Building Code
Date 04/07/2011
NOA# 10-0920.16
Miami Dade Product Control

By *[Signature]*

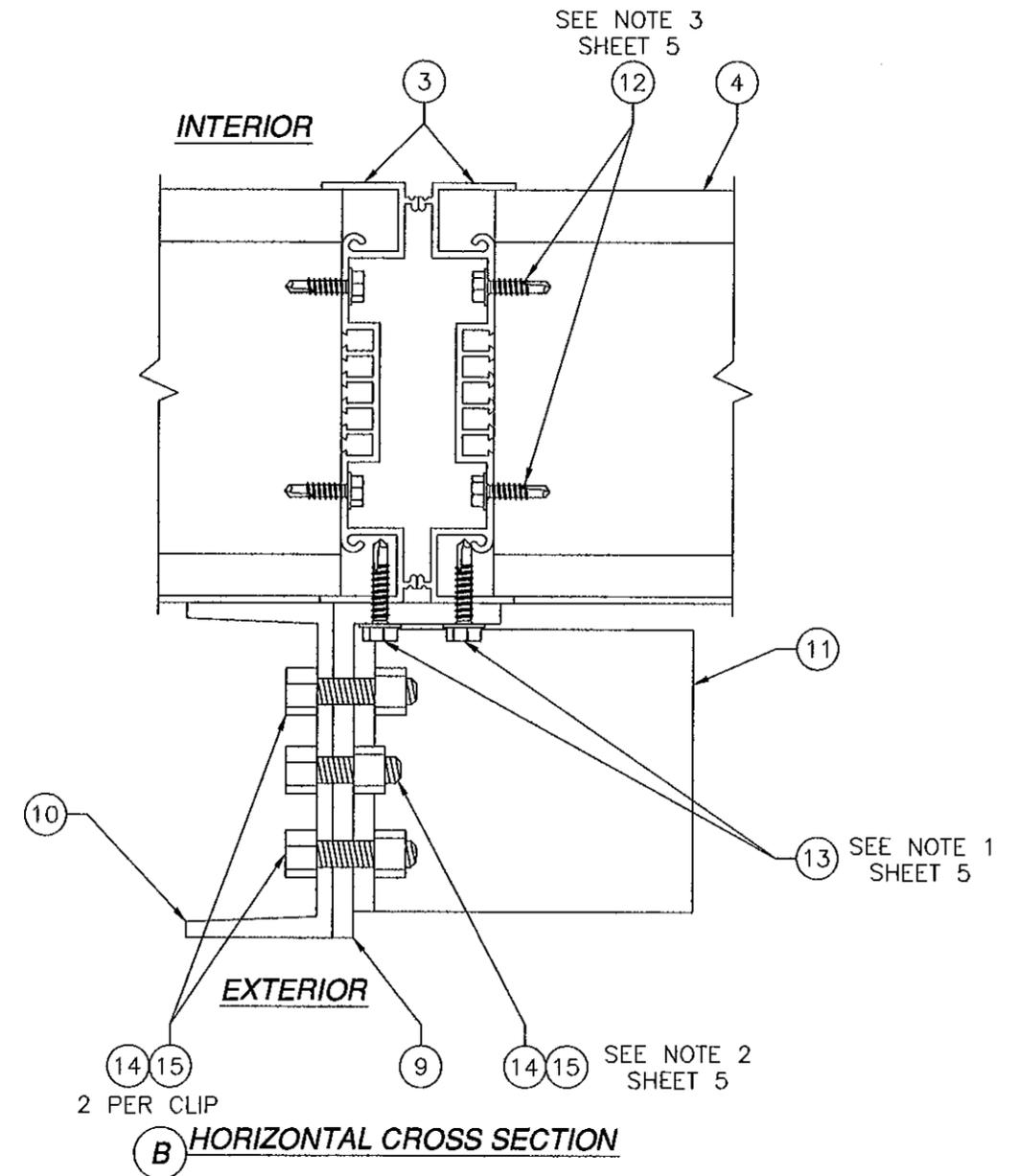
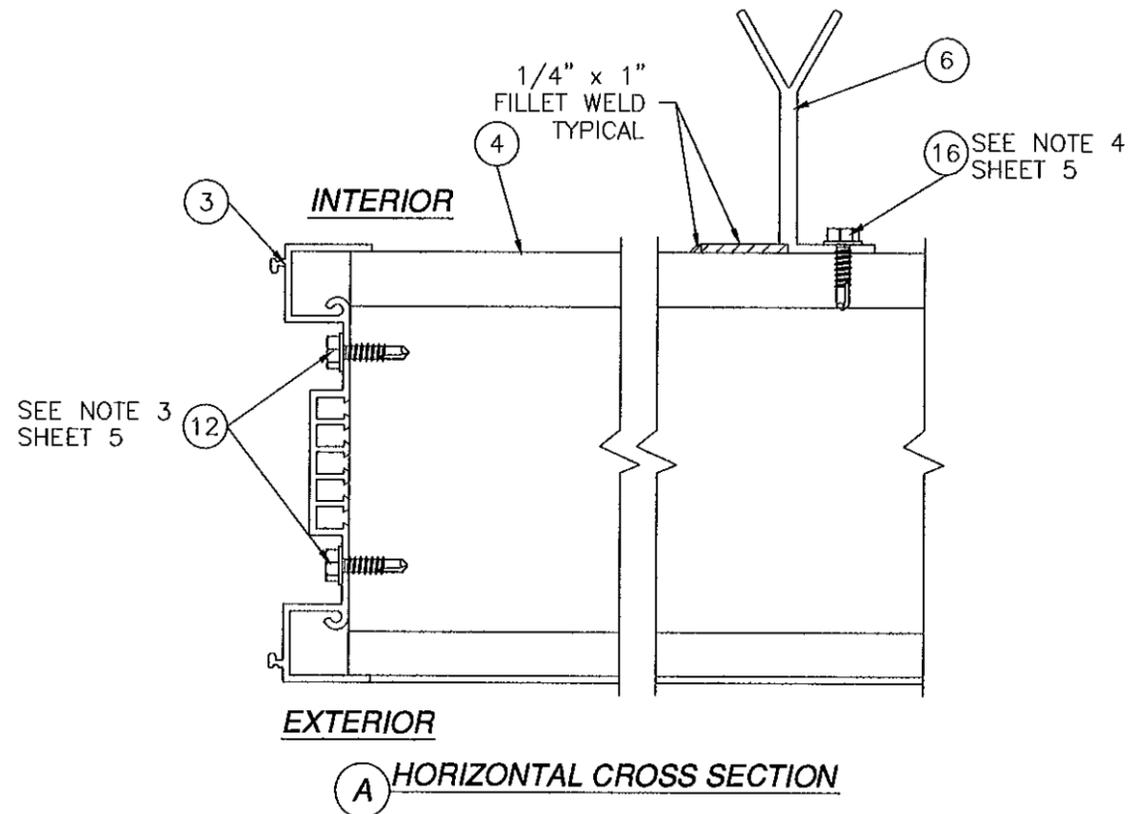
LEADER INDUSTRIES, INC.
2509 CRUZEN STREET
NASHVILLE, TN 37211

DC-HWD550 ALUMINUM VERTICAL LOUVER
MULLED AND SINGLE UNITS - LARGE MISSILE IMPACT
BILL OF MATERIALS AND WELDMENT DETAILS

DRAWN: TJH	DWG NO. 08-01058	REV A
SCALE NTS	DATE 07/19/10	SHEET 4 OF 12



REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	PER DADE LETTER DATED 01-04-11	01/05/11	R.L.



NOTES:

- 1) LOCATE #12 x 1" TEK SCREW 6" FROM ENDS AND 6" MAXIMUM O.C. THEREAFTER.
- 2) LOCATE 1/2" BOLT AND NUT 6" FROM ENDS AND 12" MAXIMUM O.C. THEREAFTER.
- 3) INSTALL (2) #8 x 3/4" TEK SCREW PER BLADE LOCATION.
- 4) LOCATE #10 x 3/4" TEK SCREW ATTACHING VERTICAL BLADE SUPPORT TO UNIT 2" FROM ENDS AND 2" MAX. O.C. THEREAFTER.

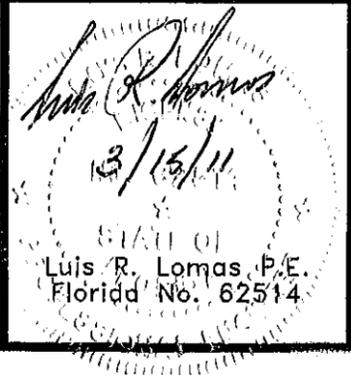
Approved as complying with the
Florida Building Code
Date: 04/10/2011
NOAH 10-0920.16
Miami Dade Product Control
By: *[Signature]*

LEADER INDUSTRIES, INC.

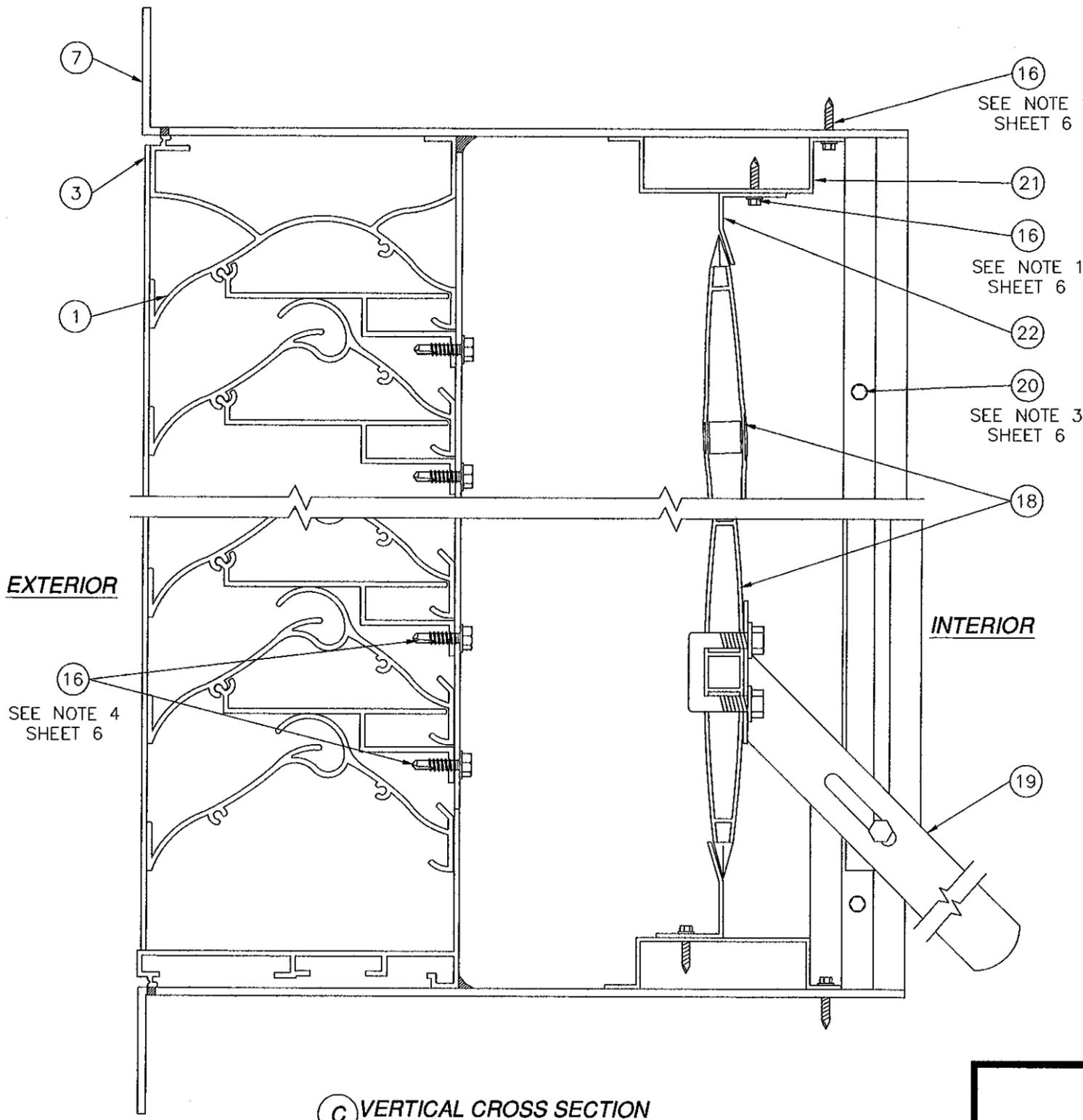
2509 CRUZEN STREET
NASHVILLE, TN 37211

DC-HWD550 ALUMINUM VERTICAL LOUVER
MULLED AND SINGLE UNITS - LARGE MISSILE IMPACT
CROSS SECTIONS

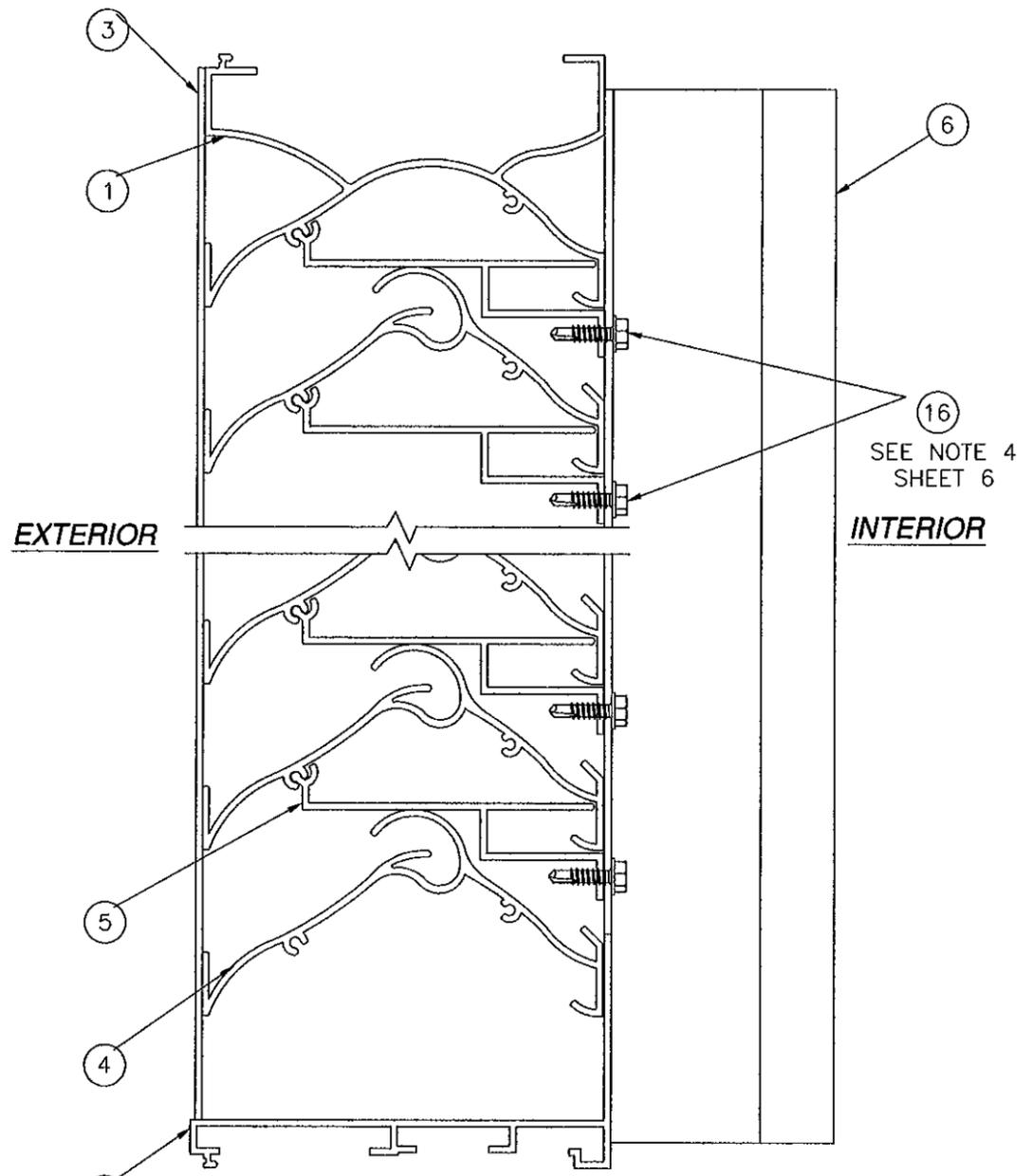
DRAWN: TJH	DWG. NO. 08-01058	REV A
SCALE NTS	DATE 07/19/10	SHEET 5 OF 12



REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	PER DADE LETTER DATED 01-04-11	01/05/11	R.L.



C VERTICAL CROSS SECTION
WITH SLEEVE AND EAD DAMPER



C VERTICAL CROSS SECTION
WITHOUT SLEEVE AND EAD DAMPER

- NOTES:
- 1) EAD DAMPER BLADE STOP IS ATTACHED TO HAT CHANNEL WITH #10 x 3/4" TEK SCREWS SPACED 12" MAX. O.C.
 - 2) HAT CHANNEL IS ATTACHED TO INSTALLATION SLEEVE WITH #10 x 3/4" TEK SCREWS SPACED 12" MAX. O.C.
 - 3) #14 IS SPACED 12" FROM ENDS AND 12" MAX. O.C. THEREAFTER.
 - 4) LOCATE #10 x 3/4" TEK SCREW ATTACHING VERTICAL BLADE SUPPORT TO UNIT 2" FROM ENDS AND 2" MAX. O.C. THEREAFTER.

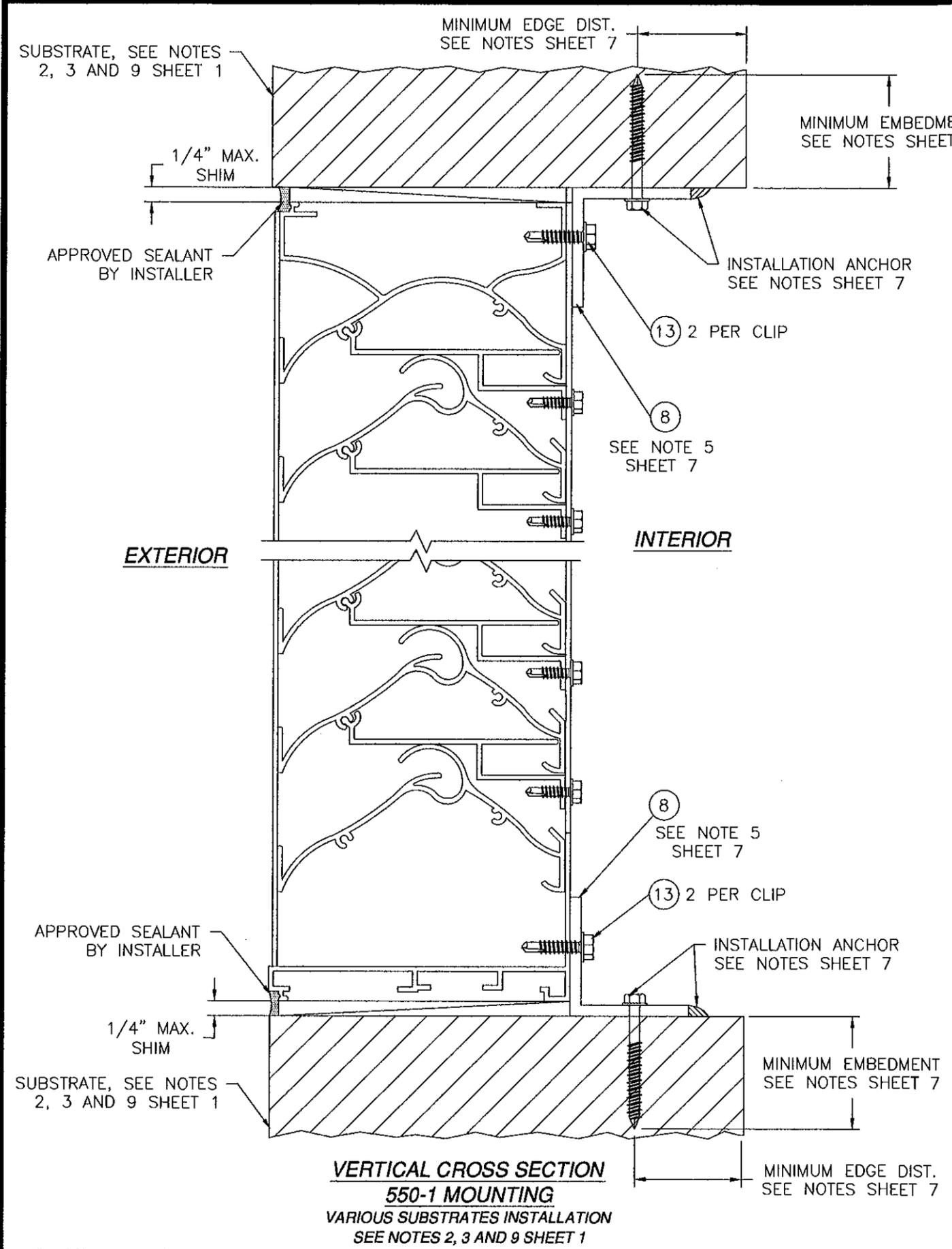
Approved as complying with the
Florida Building Code
Date 04/07/2011
NOA# 10-0920, 16
Miami Dade Product Control
By *[Signature]*

LEADER INDUSTRIES, INC.
2509 CRUZEN STREET
NASHVILLE, TN 37211

DC-HWD550 ALUMINUM VERTICAL LOUVER
MULLED AND SINGLE UNITS - LARGE MISSILE IMPACT
CROSS SECTIONS

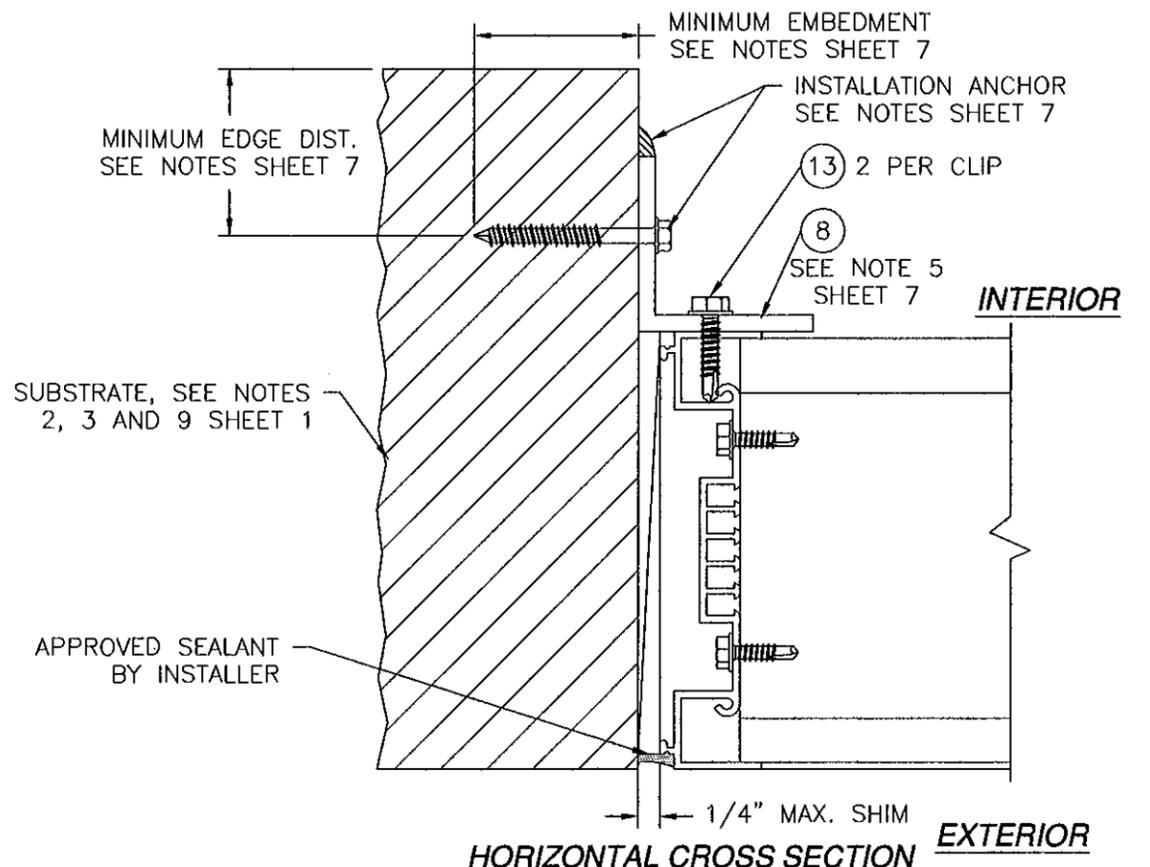
DRAWN: TJH	DWG NO. 08-01058	REV A
SCALE NTS	DATE 07/19/10	SHEET 6 OF 12

[Signature]
3/15/11
Luis R. Lomas, P.E.
Florida No. 62514



**VERTICAL CROSS SECTION
550-1 MOUNTING**
VARIOUS SUBSTRATES INSTALLATION
SEE NOTES 2, 3 AND 9 SHEET 1

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	PER DADE LETTER DATED 01-04-11	01/05/11	R.L.



**HORIZONTAL CROSS SECTION
550-1 MOUNTING**
VARIOUS SUBSTRATES INSTALLATION
SEE NOTES 2, 3 AND 9 SHEET 1

NOTES:

- 1) FOR ANCHORING CLIP INTO CONCRETE USE 5/16" ITW TAPCON WITH SUFFICIENT LENGTH TO ACHIEVE A 1 3/4" MINIMUM EMBEDMENT INTO SUBSTRATE WITH 2 3/16" MINIMUM EDGE DISTANCE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
- 2) FOR ANCHORING CLIP INTO WOOD FRAMING OR 2X BUCK USE 5/16" LAG SCREW SCREW WITH SUFFICIENT LENGTH TO ACHIEVE A 1 5/16" MINIMUM EMBEDMENT INTO SUBSTRATE WITH 1 1/4" MINIMUM EDGE DISTANCE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
- 3) FOR ANCHORING INTO 14GA. (.078" MIN.) STEEL FRAMING USE 5/16" DIAMETER SELF-TAPPING SCREW WITH SUFFICIENT LENGTH TO ACHIEVE 3-THREAD PITCH MINIMUM BEYOND THE SUBSTRATE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
- 4) FOR WELDING TO 16GA. (.060" MIN.) STEEL FRAMING USE 1/4" x 1 1/2" FILLET WELDS. LOCATE WELDS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
- 5) FOR ANCHOR SCREWS USE ITEM #8. FOR WELDING INSTALLATION USE 2" x 2" x 1/8" x 2" LONG A36 STEEL CLIP.

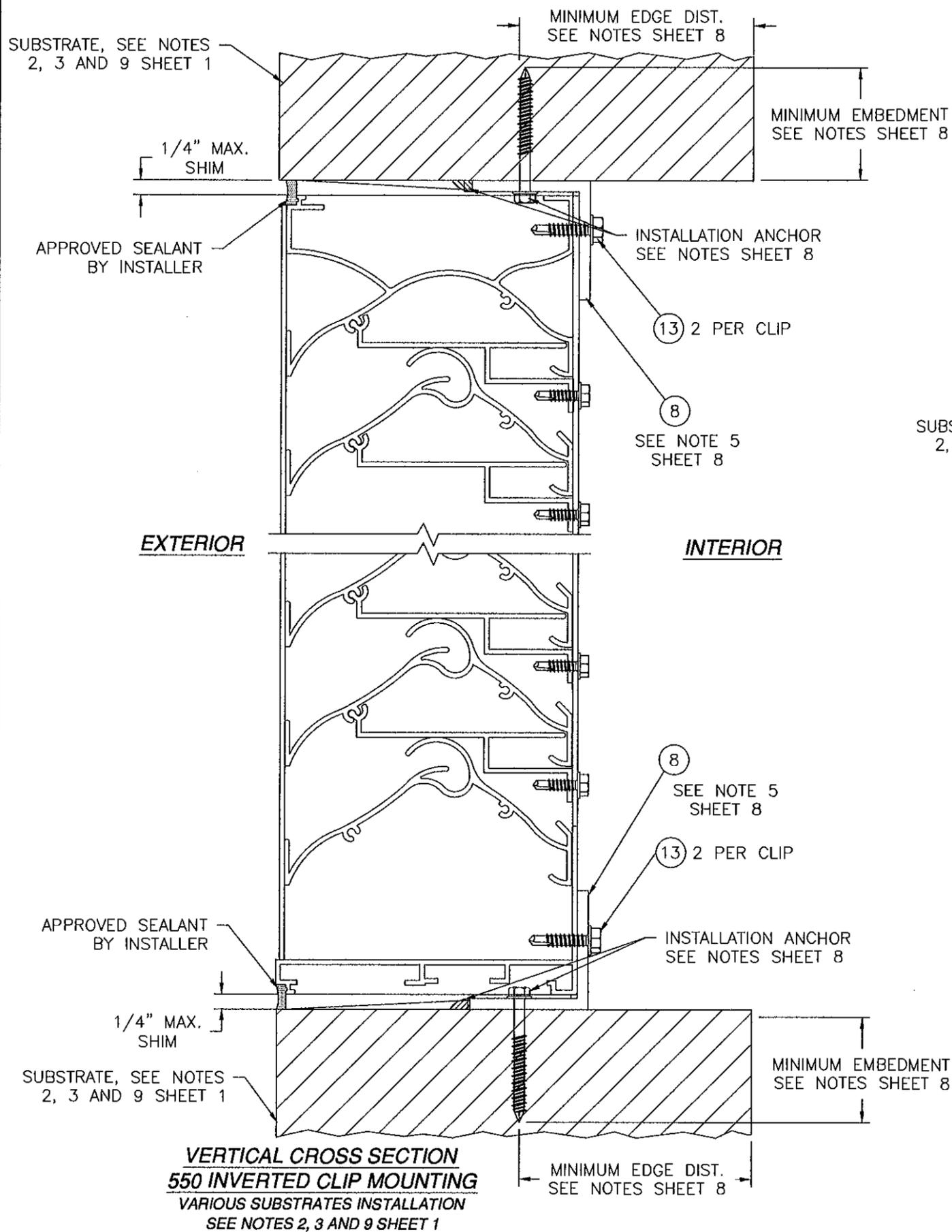
Approved as complying with the
Florida Building Code
Date 04/07/2011
NOA# 10-0920-16
Miami Dade Product Control
By *[Signature]*

LEADER INDUSTRIES, INC.
2509 CRUZEN STREET
NASHVILLE, TN 37211

DC-HWD550 ALUMINUM VERTICAL LOUVER
MULLED AND SINGLE UNITS - LARGE MISSILE IMPACT
INSTALLATION DETAILS - 550-1 MOUNTING

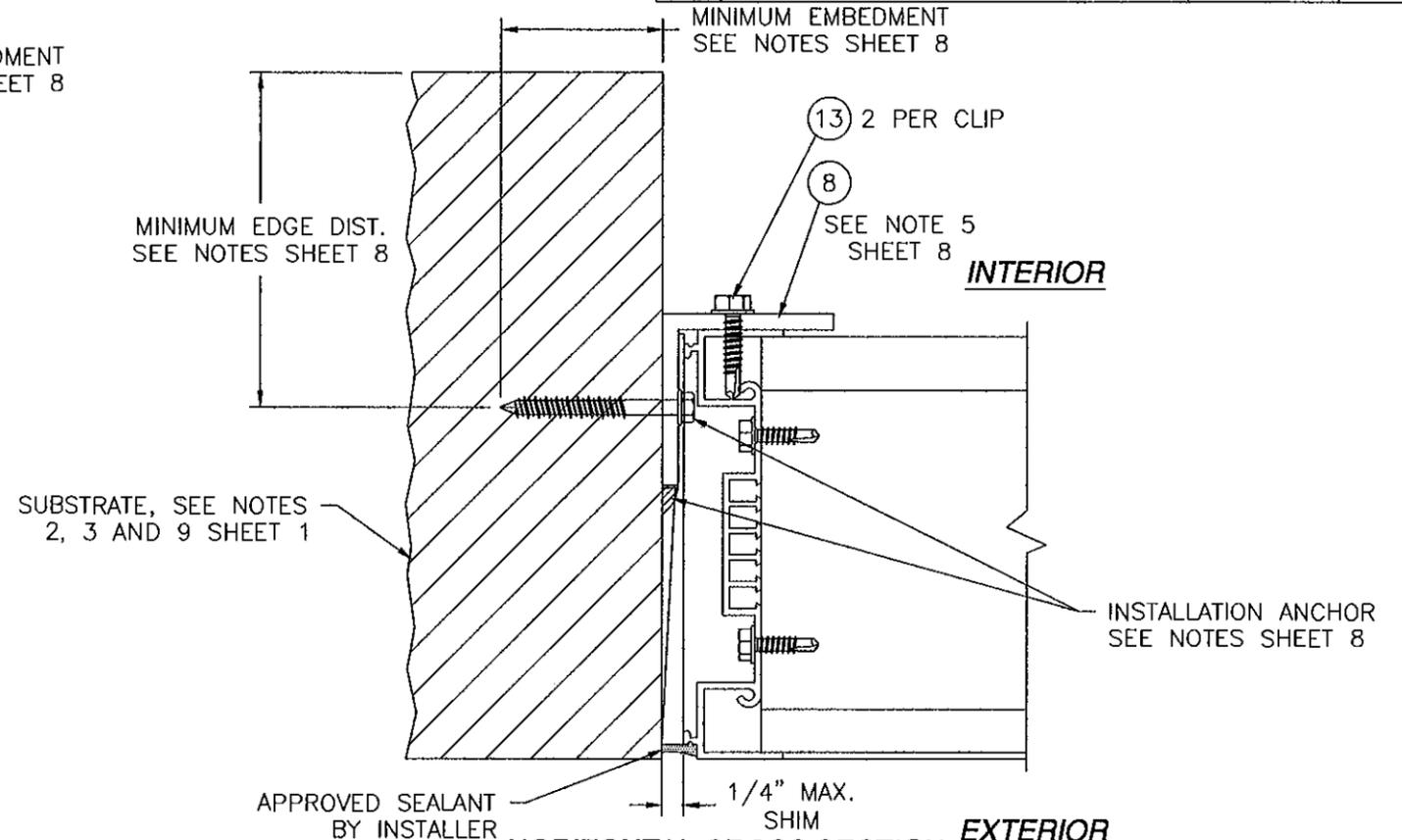
DRAWN: TJH	DWG. NO. 08-01058	REV A
SCALE NTS	DATE 07/19/10	SHEET 7 OF 12

[Signature]
3/15/11
Luis R. Lomas P.E.
Florida No. 62514



**VERTICAL CROSS SECTION
550 INVERTED CLIP MOUNTING
VARIOUS SUBSTRATES INSTALLATION
SEE NOTES 2, 3 AND 9 SHEET 1**

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	PER DADE LETTER DATED 01-04-11	01/05/11	R.L.

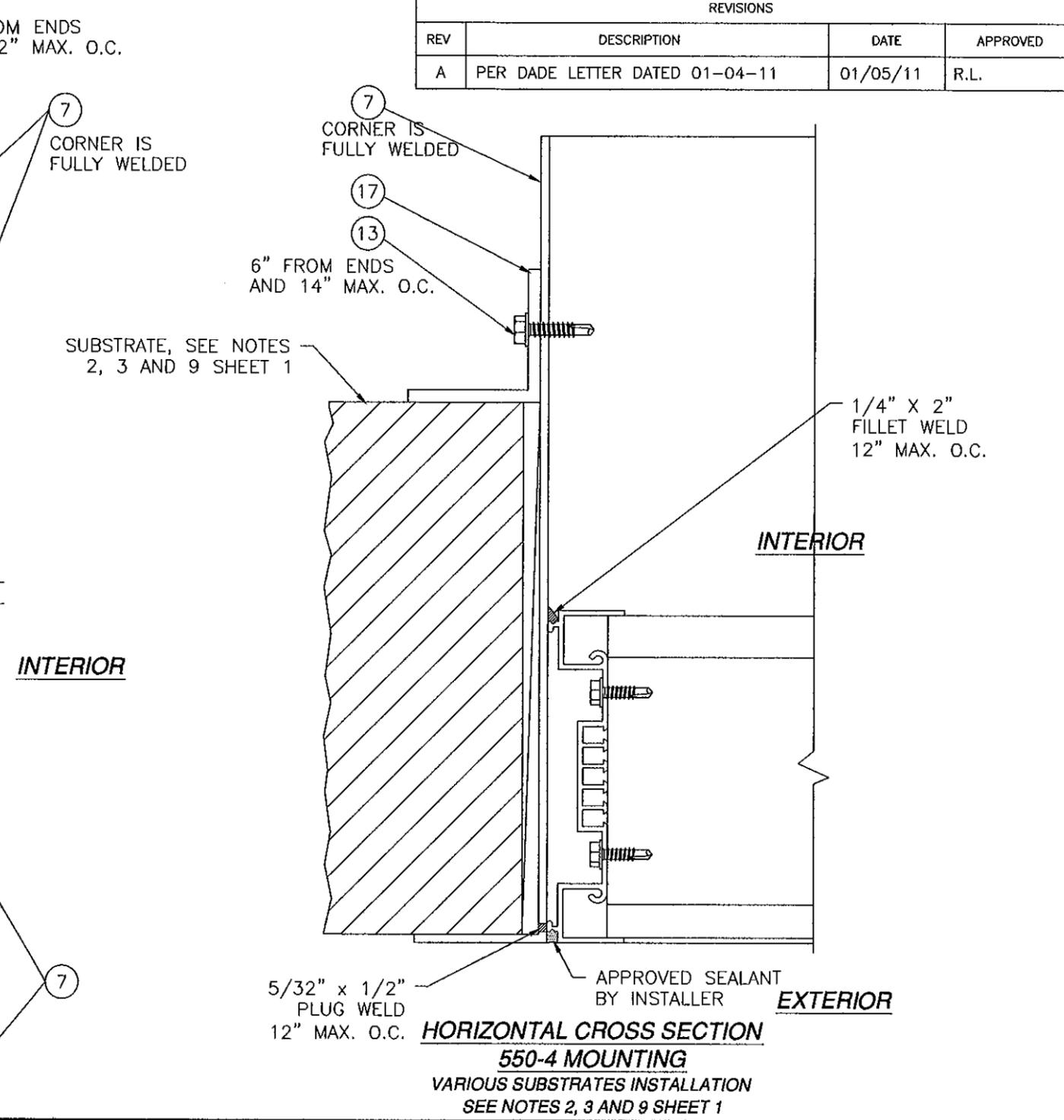
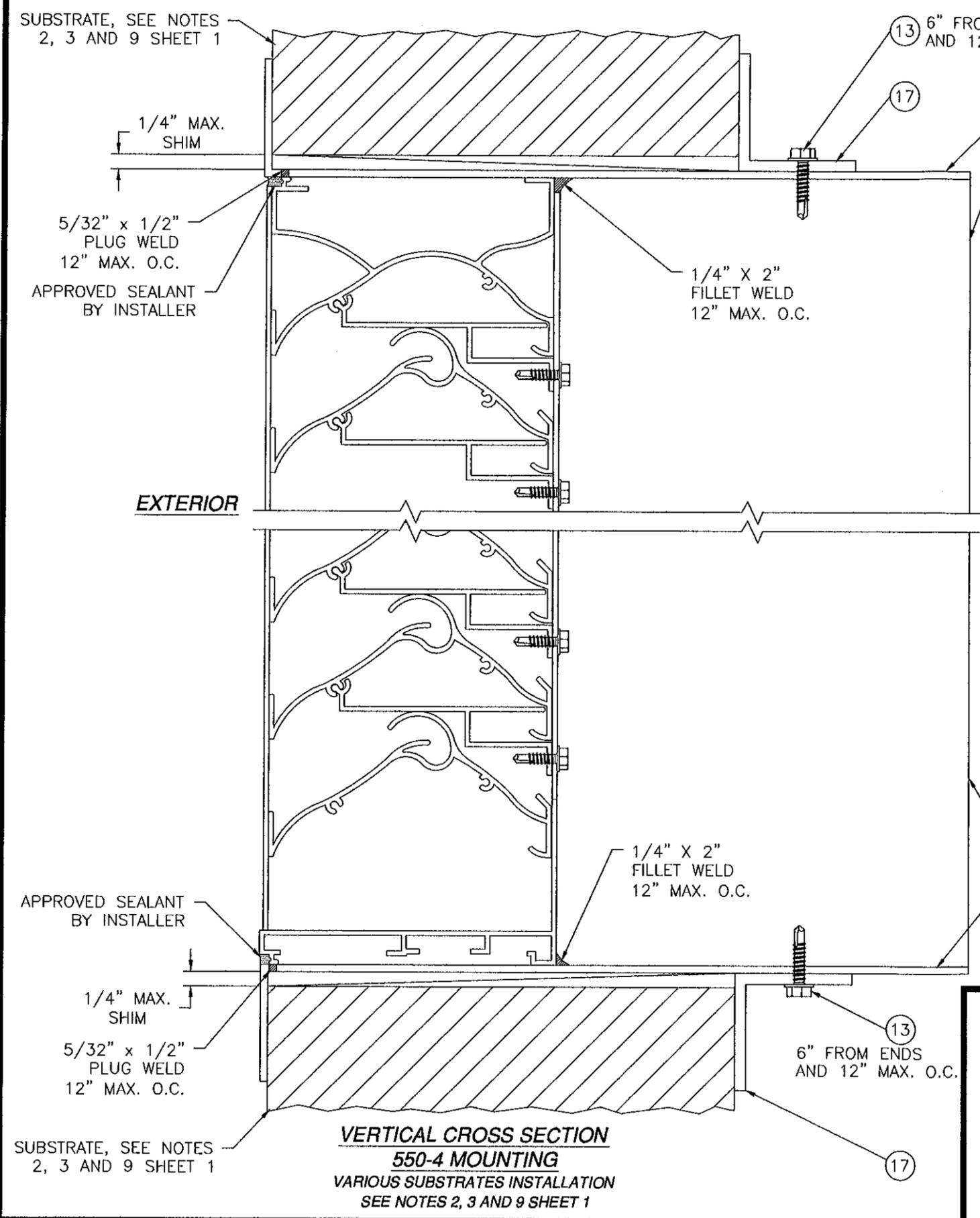


**HORIZONTAL CROSS SECTION
550 INVERTED CLIP MOUNTING
VARIOUS SUBSTRATES INSTALLATION
SEE NOTES 2, 3 AND 9 SHEET 1**

- NOTES:
- 1) FOR ANCHORING CLIP INTO CONCRETE USE 5/16" ITW TAPCON WITH SUFFICIENT LENGTH TO ACHIEVE A 1 3/4" MINIMUM EMBEDMENT INTO SUBSTRATE WITH 2 3/16" MINIMUM EDGE DISTANCE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
 - 2) FOR ANCHORING CLIP INTO WOOD FRAMING OR 2X BUCK USE 5/16" LAG SCREW SCREW WITH SUFFICIENT LENGTH TO ACHIEVE A 1 5/16" MINIMUM EMBEDMENT INTO SUBSTRATE WITH 1 1/4" MINIMUM EDGE DISTANCE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
 - 3) FOR ANCHORING INTO 14GA. (.078" MIN.) STEEL FRAMING USE 5/16" DIAMETER SELF-TAPPING SCREW WITH SUFFICIENT LENGTH TO ACHIEVE 3-THREAD MINIMUM BEYOND THE SUBSTRATE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
 - 4) FOR WELDING TO 16GA. (.060" MIN.) STEEL FRAMING USE 1/4" x 1 1/2" FILLET WELDS. LOCATE WELDS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
 - 5) FOR ANCHOR SCREWS USE ITEM #8. FOR WELDING INSTALLATION USE 2" x 2" x 1/8" x 2" LONG A36 STEEL CLIP.

<p>Approved as complying with the Florida Building Code Date: 04/10/2011 NOAH 10-0720.16 Miami Dade Product Control By: <i>[Signature]</i></p>			<p>LEADER INDUSTRIES, INC. 2509 CRUZEN STREET NASHVILLE, TN 37211</p>		
<p>DC-HWD550 ALUMINUM VERTICAL LOUVER MULLED AND SINGLE UNITS - LARGE MISSILE IMPACT INSTALLATION DETAILS - INVERTED CLIP MOUNTING</p>					
<p>DRAWN: TJH</p>	<p>DWG NO. 08-01058</p>	<p>REV A</p>			
<p>SCALE NTS</p>	<p>DATE 07/19/10</p>	<p>SHEET 8 OF 12</p>			

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	PER DADE LETTER DATED 01-04-11	01/05/11	R.L.



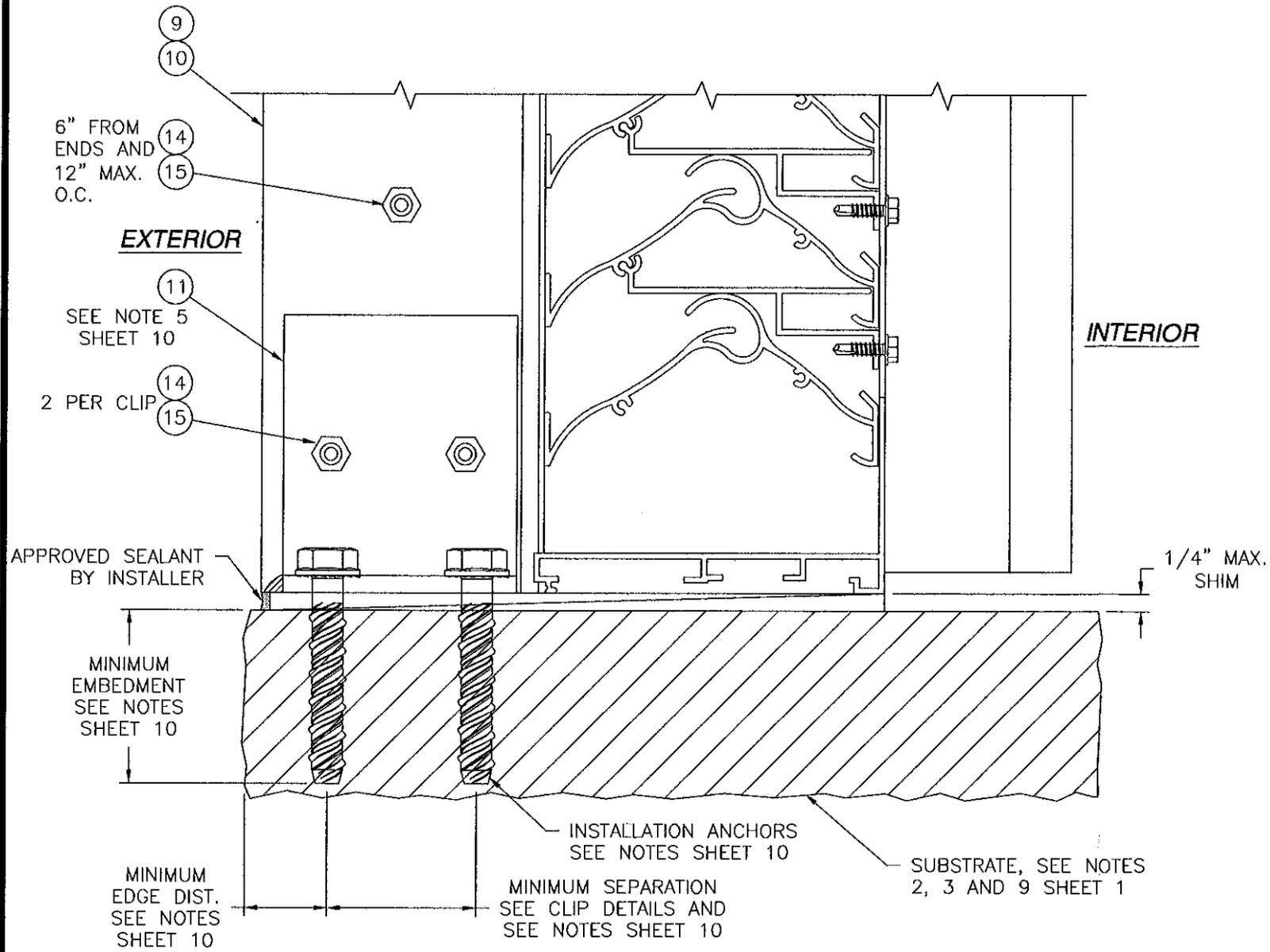
Approved as complying with the
 Florida Building Code
 Date 04/07/2011
 NOA# 10-0920.16
 Miami Dade Product Control
 By *[Signature]*

LEADER INDUSTRIES, INC.
 2509 CRUZEN STREET
 NASHVILLE, TN 37211
 DC-HWD550 ALUMINUM VERTICAL LOUVER
 MULLED AND SINGLE UNITS - LARGE MISSILE IMPACT
 INSTALLATION DETAILS - 550-4 MOUNTING

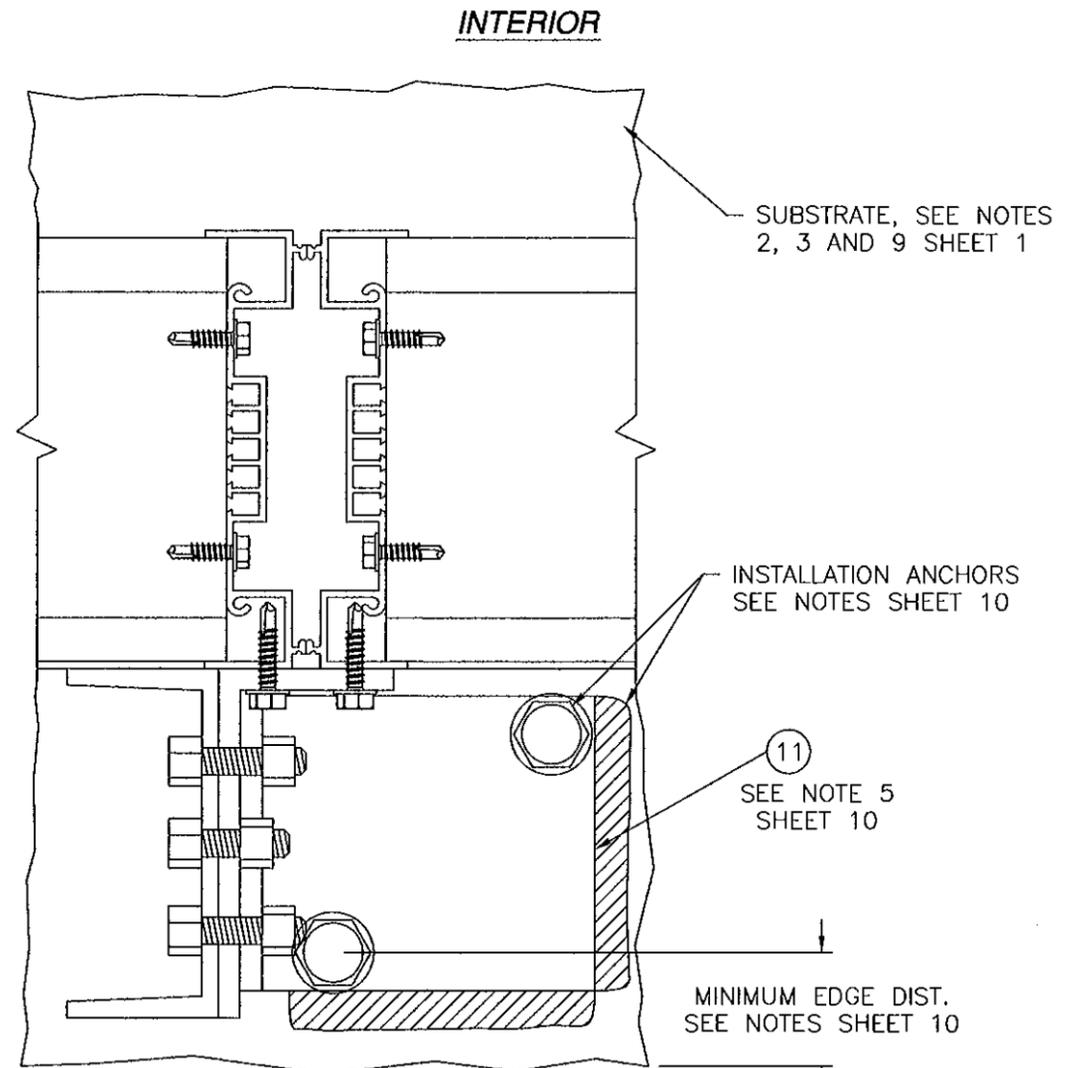
DRAWN: TJH	DWG. NO. 08-01058	REV. A
SCALE NTS	DATE 07/19/10	SHEET 9 OF 12

[Signature]
 3/15/11
 Luis R. Lombas, P.E.
 Florida No. 62514

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	PER DADE LETTER DATED 01-04-11	01/05/11	R.L.



VERTICAL MULLION DETAIL
BOTTOM SHOWN, HEAD SIMILAR



HORIZONTAL MULLION DETAIL
BOTTOM SHOWN, HEAD SIMILAR

- NOTES:
- 1) FOR ANCHORING CLIP INTO CONCRETE USE 1/2" WEDGE BOLT ANCHOR WITH SUFFICIENT LENGTH TO ACHIEVE A 2 1/2" MINIMUM EMBEDMENT INTO SUBSTRATE WITH 5" MINIMUM EDGE DISTANCE AND 2" MINIMUM SEPARATION. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
 - 2) FOR ANCHORING CLIP INTO WOOD FRAMING OR 2X BUCK USE 1/2" LAG SCREW SCREW WITH SUFFICIENT LENGTH TO ACHIEVE A 2 1/2" MINIMUM EMBEDMENT INTO SUBSTRATE WITH 2" MINIMUM EDGE DISTANCE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
 - 3) FOR ANCHORING CLIP INTO 3/16" MINIMUM STEEL FRAMING USE 3/8" DIAMETER SELF-TAPPING SCREW WITH SUFFICIENT LENGTH TO ACHIEVE 3-THREAD PITCH MINIMUM BEYOND THE SUBSTRATE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
 - 4) FOR ANCHORING CLIP INTO 3/16" MINIMUM STEEL FRAMING USE 3/8-16 GRADE 5 BOLT AND NUT. BOLT TO BE OF SUFFICIENT LENGTH TO ACHIEVE 3-THREAD PITCH MINIMUM BEYOND THE NUT. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
 - 5) FOR WELDING TO 16GA. (.060" MIN.) STEEL FRAMING USE (2) 1/4" x 3 1/2" FILLET WELDS. LOCATE WELDS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
 - 6) FOR ANCHOR SCREWS OR BOLTS USE ITEM #11. FOR WELDING INSTALLATION USE 2" x 4" x 1/8" x 3 1/2" LONG A36 STEEL CLIP.

Approved as complying with the
Florida Building Code
Date 04/07/2011
NOAH 10-0920-16
Miami Dept. Product Control
By [Signature]

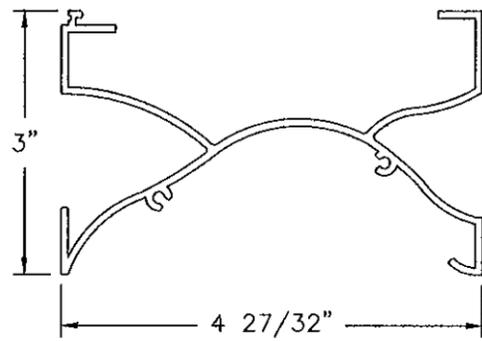
LEADER INDUSTRIES, INC.
2509 CRUZEN STREET
NASHVILLE, TN 37211

DC-HWD550 ALUMINUM VERTICAL LOUVER
MULLED AND SINGLE UNITS - LARGE MISSILE IMPACT
INSTALLATION DETAILS - MULLION ANCHOR CLIP

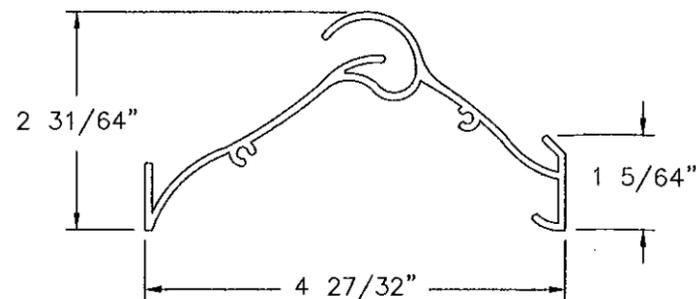
DRAWN: TJH	DWG NO. 08-01058	REV A
SCALE NTS	DATE 07/19/10	SHEET 10 OF 12

[Signature]
3/15/11
Luis R. Lomas, P.E.
Florida No. 62514

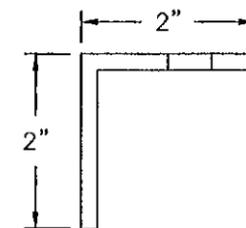
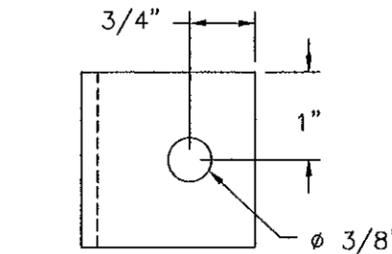
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	PER DADE LETTER DATED 01-04-11	01/05/11	R.L.



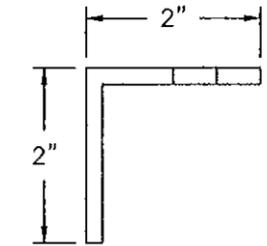
① **HDW550 HEAD**
EXTRUDED ALUMINUM
6063-T5 .080" THICK



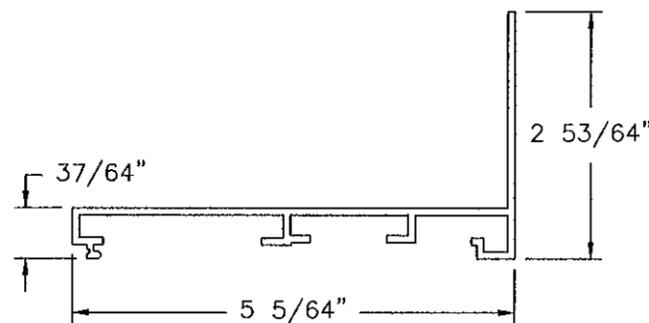
④ **HDW550 BLADE**
EXTRUDED ALUMINUM
6063-T5 .080" THICK



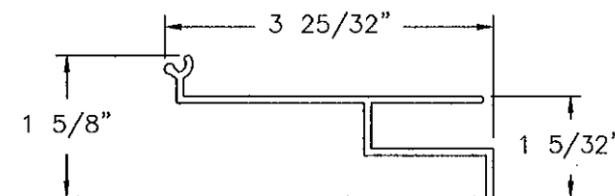
⑧ **2" x 2" x 3/16" INSTALLATION ANGLE**
EXTRUDED ALUMINUM 6063-T5 .1875" THICK



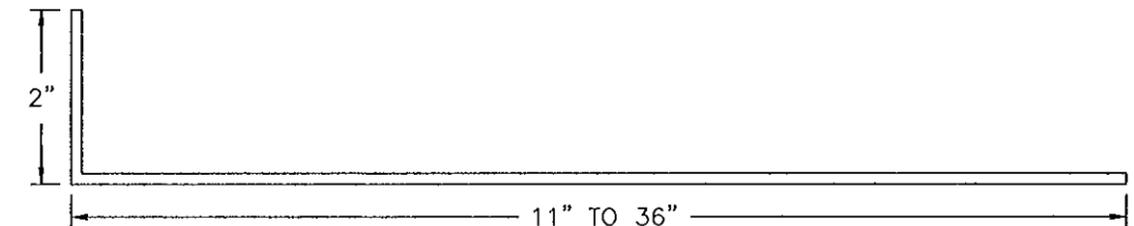
⑰ **2" x 2" x 3/16" CONTINUOUS ANGLE**
EXTRUDED ALUMINUM 6063-T5 .1875" THICK



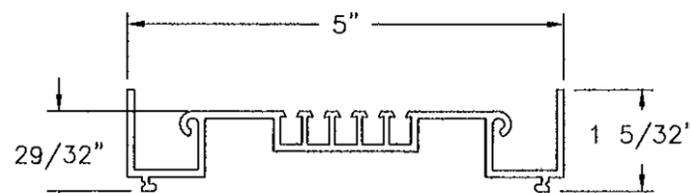
② **HDW550 BOTTOM**
EXTRUDED ALUMINUM
6063-T5 .080" THICK



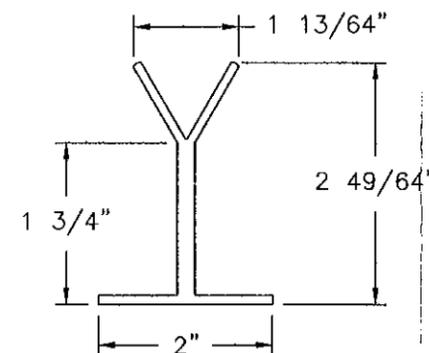
⑤ **HDW550 BLADE SUPPORT**
EXTRUDED ALUMINUM
6063-T5 .080" THICK



⑦ **INSTALLATION SLEEVE**
EXTRUDED ALUMINUM
3003 .101" THICK



③ **HDW550 JAMB**
EXTRUDED ALUMINUM
6063-T5 .080" THICK



⑥ **HDW550 VERTICAL BLADE SUPPORT**
EXTRUDED ALUMINUM
6063-T5 .202" THICK

Approved as complying with the
Florida Building Code
Date 04/07/2011
NOA# 10-0120.16
Miami Dade Product Control
By [Signature]

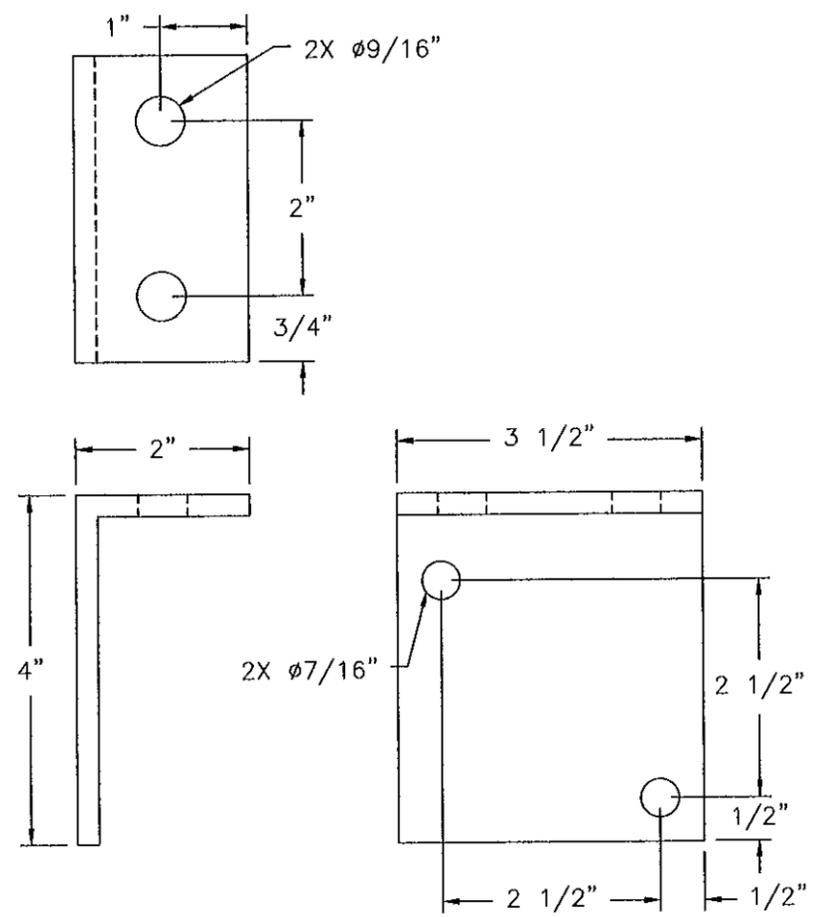
LEADER INDUSTRIES, INC.
2509 CRUZEN STREET
NASHVILLE, TN 37211

DC-HWD550 ALUMINUM VERTICAL LOUVER
MULLED AND SINGLE UNITS - LARGE MISSILE IMPACT
COMPONENTS

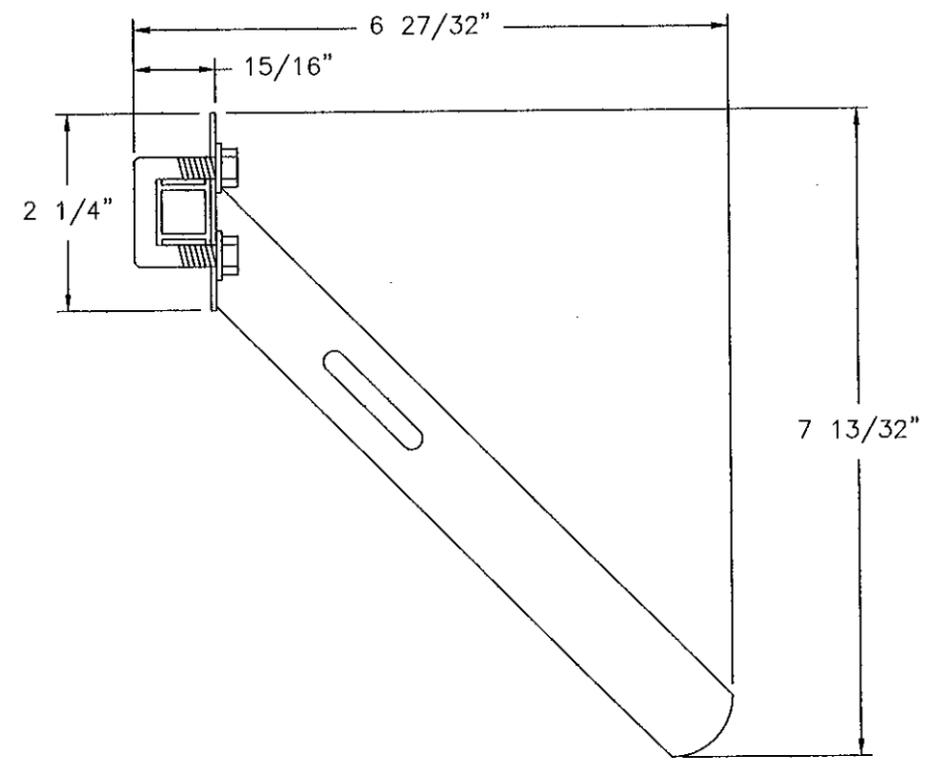
DRAWN: TJH	DWG NO.: 08-01058	REV A
SCALE NTS	DATE 07/19/10	SHEET 11 OF 12

[Signature]
3/15/11
Luis R. Lomas P.E.
Florida No. 62514

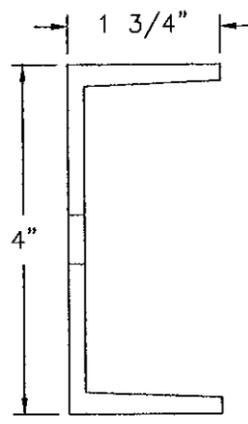
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	PER DADE LETTER DATED 01-04-11	01/05/11	R.L.



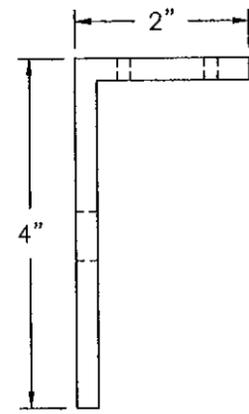
⑪ **2" x 4" x 1/4" x 3 1/2" CLIP**
EXTRUDED ALUMINUM 6063-T5 .25" THICK



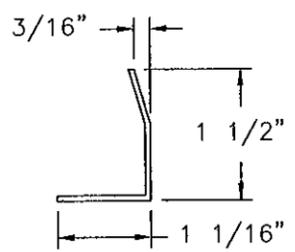
⑲ **HAND QUADRANT**
ALUMINUM 6063-T5



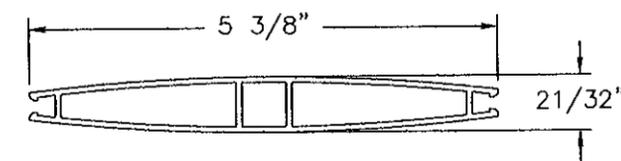
⑩ **MULLION C-CHANNEL**
A36 STEEL .1875" THICK



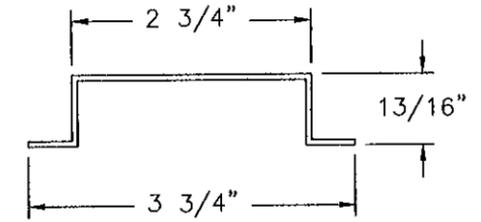
⑨ **2" x 4" x 1/4" MULLION ANGLE**
EXTRUDED ALUMINUM 6063-T5 .25" THICK



⑳ **EAD DAMPER BLADE STOP**
EXTRUDED ALUMINUM 6063-T5 .0625" THICK



⑱ **EAD DAMPER BLADE**
EXTRUDED ALUMINUM 6063-T5 .064" THICK



㉑ **EAD DAMPER HAT CHANNEL**
EXTRUDED ALUMINUM 6063-T5 .0625 THICK

<p>Approved as complying with the Florida Building Code Date: 04/07/2011 NOA# 10-0920.16 Miami Dade Product Control By: <i>[Signature]</i></p>		<p>LEADER INDUSTRIES, INC. 2509 CRUZEN STREET NASHVILLE, TN 37211</p>		<p>DC-HWD550 ALUMINUM VERTICAL LOUVER MULLED AND SINGLE UNITS - LARGE MISSILE IMPACT COMPONENTS</p> <p><i>[Signature]</i> 3/16/11 Luis R. Lomas, P.E. Florida No. 62514</p>
<p>DRAWN: TJH</p>	<p>DWG NO. 08-01058</p>	<p>REV A</p>		
<p>SCALE NTS</p>	<p>DATE 07/19/10</p>	<p>SHEET 12 OF 12</p>		