



BUILDING CODE COMPLIANCE OFFICE (BCCO)
PRODUCT CONTROL DIVISION

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

NOTICE OF ACCEPTANCE (NOA)

www.buildingcodeonline.com

Sunshine Windows Manufacturing, Inc.
1745 W 33rd Place
Hialeah, FL 33012

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: Aluminum Tube Mullion – L.M.I.

APPROVAL DOCUMENT: Drawing No.SW-01-07 titled "Aluminum Tube Mullion," sheets 1 through 7 of 7, dated 09/30/05, prepared by manufacturer, signed and sealed by Francisco Hernandez, 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 Division.

MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

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

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

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

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

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official. This NOA renews NOA # 01-1226.14 and consists of this page 1 and evidence page E-1, as well as approval document mentioned above.

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



NOA No 06-0214.02
Expiration Date: January 25, 2012
Approval Date: February 22, 2007
Page 1

Sunshine Windows Manufacturing, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Manufacturer's die drawings and sections.
2. Drawing No **SW-01-07**, Sheets 1 through 7 of 7, titled "Aluminum Tube Mullion", dated 09/30/05, prepared by manufacturer, signed and sealed by Francisco Hernandez, P.E.

B. TESTS

1. 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 Aluminum Single Hung Windows Mullied Together, prepared by Fenestration Testing Laboratory, Inc. Test Report No. **FTL-2680**, dated 06/29/00, signed and sealed by Aldo P. Gonzalez, P.E. (*Submitted Under NOA 01-1226.14*)

C. CALCULATIONS

1. Anchor Calculations and structural analysis, complying with FBC-2004, prepared by manufacturer, dated 09/30/05 and revised on 01/15/07, signed and sealed by Francisco Hernandez, P.E.
2. Anchor Calculations and structural analysis, prepared by manufacturer, dated 02/29/00 signed and sealed by Francisco Hernandez, P.E. (*Submitted Under NOA 01-1226.14*)

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

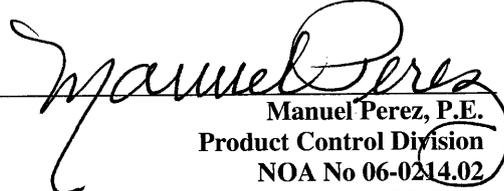
1. None.

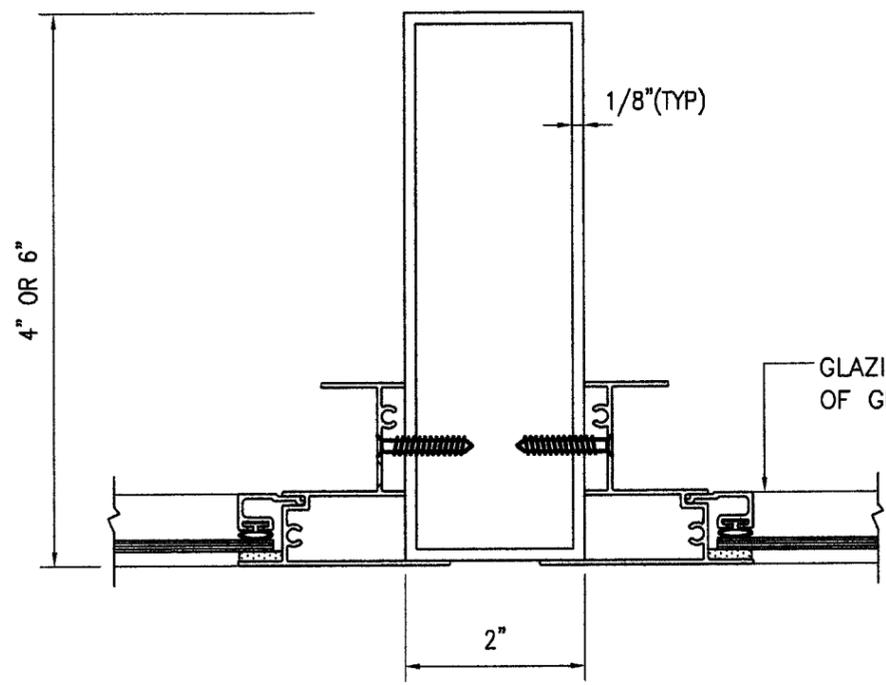
F. STATEMENTS

1. Statement letter of conformance, dated January 15, 2007, signed and sealed by Francisco Hernandez, P.E.
2. Statement letter of no financial interest, dated January 15, 2007, signed and sealed Francisco Hernandez, P.E.

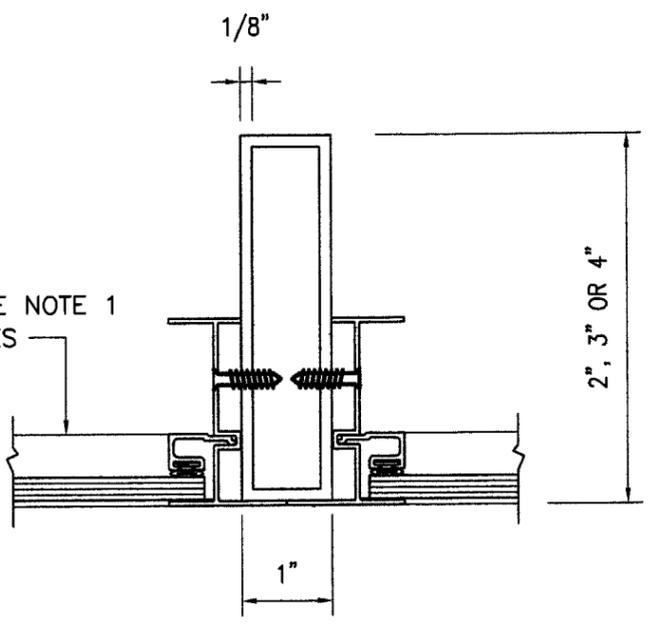
G. OTHER

1. Notice of Acceptance No. **01-1226.14**, issued to Sunshine Windows Manufacturing, Inc. for their Aluminum Tube Mullion, approved on 01/31/02 and expiring on 01/25/07.

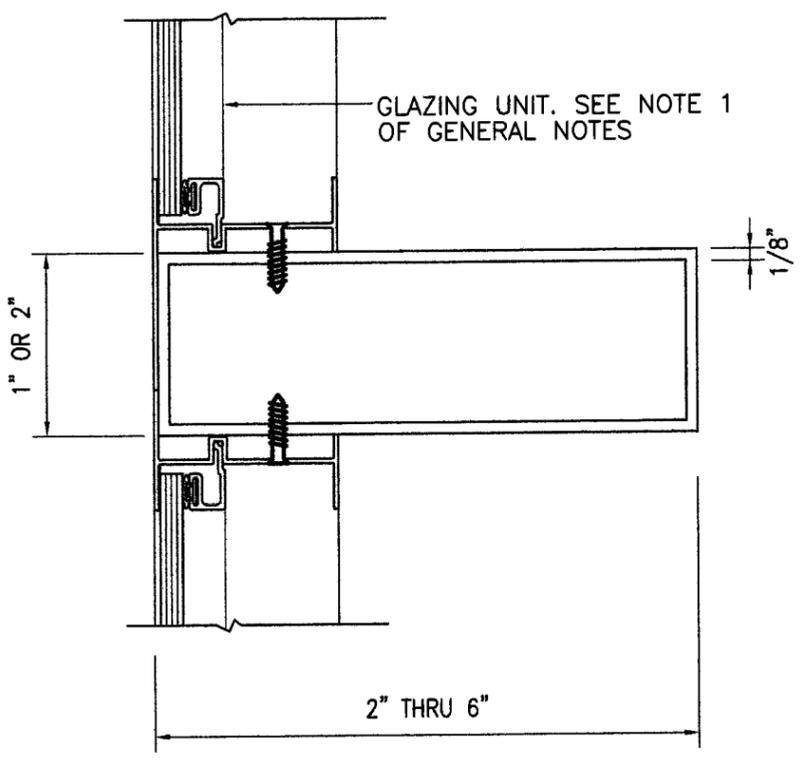

Manuel Perez, P.E.
Product Control Division
NOA No 06-0214.02
Expiration Date: January 25, 2012
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VERTICAL



VERTICAL



HORIZONTAL

MULLION APPLICATIONS

PROCEDURE FOR MULLION SELECTION

1. DETERMINE DESIGN PRESSURE BY COMPUTING THE WIND LOAD IN PSF ON MULLION AS PER FLORIDA BUILDING CODE.
2. USE TABLES ON SHEETS No.2 AND 3 TO DETERMINE THE MULLION SIZE REQUIRED TO ACHIEVE THE DESIGN PRESSURE.
3. USE TABLES ON SHEET No. 4 TO DETERMINE THE TYPE OF CONNECTION BETWEEN MULLION AND STRUCTURE REQUIRED TO ACHIEVE THE DESIGN PRESSURE.

GENERAL NOTES:

1. MULLIONS SHALL BE USED ALONG WITH MIAMI DADE APPROVED GLAZING UNITS.
2. TUBE MATERIAL SHALL BE ALUMINUM ALLOY 6063-T5.
3. FOR DETAILS OF ATTACHMENT BETWEEN MULLION AND STRUCTURE REFER TO SHEETS No.5 AND 6 OF THIS PRODUCT APPROVAL.
4. DESIGN PRESSURES SHOWN ON GRAPHS ARE BASED ONLY ON TUBE STRENGTH. NO CONTRIBUTION OF ATTACHED GLAZING UNITS ARE CONSIDERED.

PRODUCT REVISED as complying with the Florida Building Code Acceptance No. <u>06-0214.02</u> Expiration Date <u>JAN. 25, 2012</u> By <u>Manuel Perez</u> Miami Dade Product Control Division	 1-15-07 FRANCISCO HERNANDEZ FLORIDA PE # 51393
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Sunshine Windows
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 Fax: (305)828-5118

FRANCISCO HERNANDEZ P.E.
 Structural Engineering
 15113 SW 35 Terr.
 Miami, Florida 33185
 Phone (305) 227-6901



ALUMINUM TUBE MULLION

Drawn By: RF
 Date: 9-30-05
 Scale: 1/2"=1"
 Revision: _____
 Revision: _____

DRAWING No:
SW-01-07

SHEET
 1 OF 7

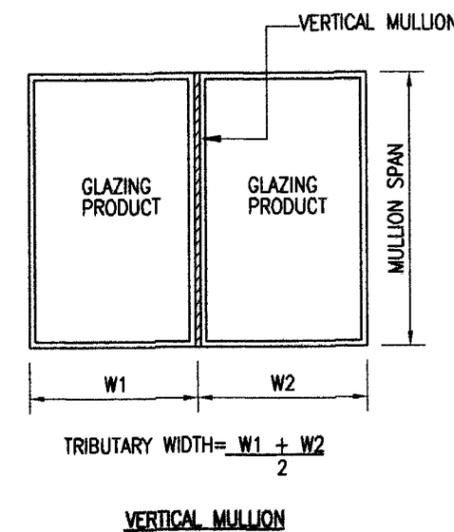
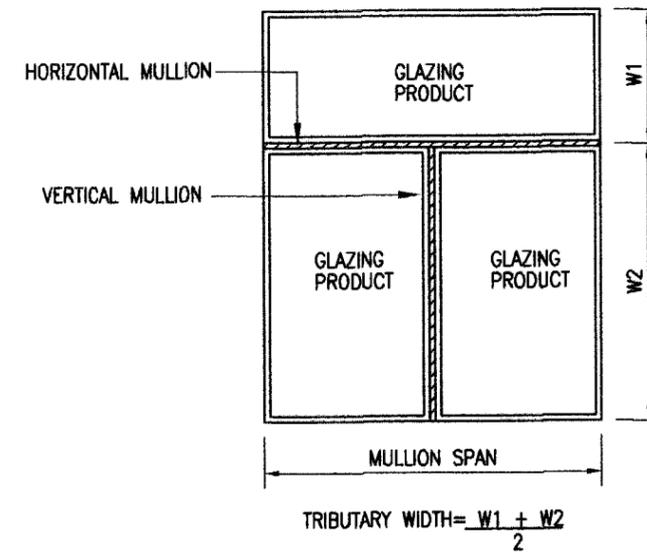
TUBE	SPAN	TRIBUTARY WIDTH (IN)	DESIGN PRESSURE (IN)
1 X 2	38.38	90	39.20
		80	44.10
		70	50.40
		60	58.80
		50	70.56
		40	88.19
		30	117.59
		20	176.39
	50.63	90	-
		80	-
		70	-
		60	25.61
		50	30.73
		40	38.42
		30	51.22
		20	76.84
	56.00	90	-
		80	-
		70	-
		60	-
		50	-
		40	28.39
		30	37.86
		20	56.78
63.00	90	-	
	80	-	
	70	-	
	60	-	
	50	-	
	40	-	
	30	26.59	
	20	39.88	

TUBE	SPAN	TRIBUTARY WIDTH (IN)	DESIGN PRESSURE (IN)
1 X 3	38.38	90	79.81
		80	89.79
		70	102.61
		60	119.71
		50	143.66
		40	179.57
		30	239.43
		20	359.14
	50.63	90	45.86
		80	51.59
		70	58.96
		60	68.79
		50	82.55
		40	103.19
		30	137.58
		20	206.38
	56.00	90	36.06
		80	40.56
		70	46.36
		60	54.09
		50	64.90
		40	81.13
		30	108.17
		20	162.26
63.00	90	25.32	
	80	28.49	
	70	32.56	
	60	37.99	
	50	45.58	
	40	56.98	
	30	75.97	
	20	113.96	

TUBE	SPAN	TRIBUTARY WIDTH (IN)	DESIGN PRESSURE (IN)
1 X 3	74.25	90	-
		80	-
		70	-
		60	-
		50	27.84
		40	34.81
		30	46.41
		20	69.61
	84.00	90	-
		80	-
		70	-
		60	-
		50	-
		40	-
		30	32.05
		20	48.08
	96.00	90	-
		80	-
		70	-
		60	-
		50	-
		40	-
		30	-
		20	32.21

TUBE	SPAN	TRIBUTARY WIDTH (IN)	DESIGN PRESSURE (IN)
1 X 4	50.63	90	73.65
		80	82.86
		70	94.69
		60	110.47
		50	132.57
		40	165.71
		30	220.95
		20	331.42
	56.00	90	60.20
		80	67.73
		70	77.40
		60	90.30
		50	108.36
		40	135.45
		30	180.61
		20	270.91
	63.00	90	47.57
		80	53.51
		70	61.16
		60	71.35
		50	85.62
		40	107.03
		30	142.70
		20	214.05
74.25	90	33.13	
	80	37.27	
	70	42.59	
	60	49.69	
	50	59.63	
	40	74.54	
	30	99.38	
	20	149.07	

TUBE	SPAN	TRIBUTARY WIDTH (IN)	DESIGN PRESSURE (IN)
1 X 4	84.00	90	-
		80	25.74
		70	29.42
		60	34.32
		50	41.18
		40	51.48
		30	68.64
		20	102.95
	96.00	90	-
		80	-
		70	-
		60	-
		50	27.59
		40	34.49
		30	45.98
		20	68.97
	108.00	90	-
		80	-
		70	-
		60	-
		50	-
		40	-
		30	32.29
		20	48.44



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ALUMINUM TUBE MULLION

Drawn By: RF
 Date: 9-30-05
 Scale: NTS
 Revision: _____
 Revision: _____

DRAWING NO.
 SW-01-07
 SHEET
 2 OF 7

NOTE:

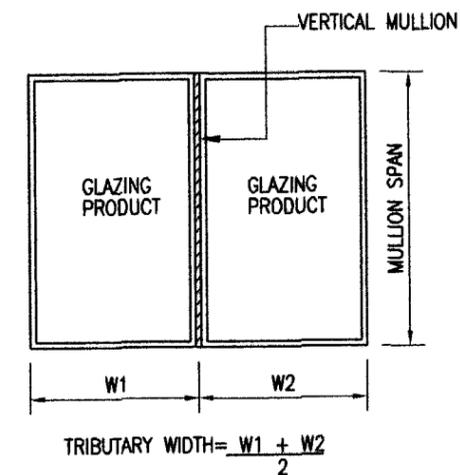
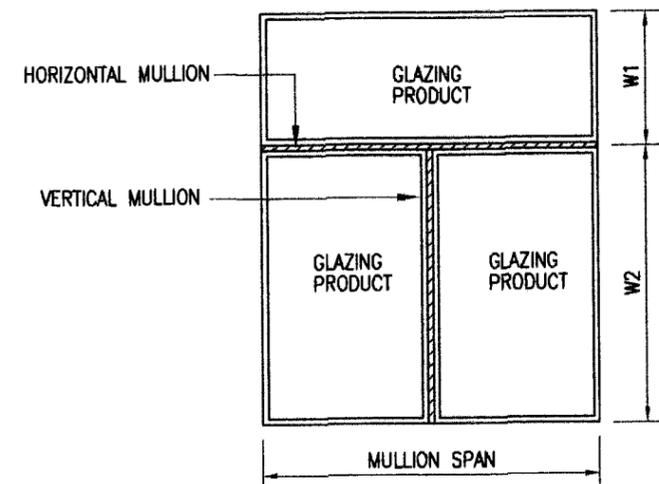
INTERPOLATE FOR INTERMEDIATE VALUES OF SPAN AND/OR TRIBUTARY WIDTH TO DETERMINE DESIGN PRESSURES.

PRODUCT REVISED
 as complying with the Florida
 Building Code
 Acceptance No. 06-0214-02
 Expiration Date JAN. 25, 2012
 By: Manuel Perez
 Miami Dade Product Control
 Division

Francisco Hernandez
 1-15-07
 FRANCISCO HERNANDEZ
 FLORIDA PE # 51393

TUBE	SPAN	TRIBUTARY WIDTH (IN)	DESIGN PRESSURE (IN)	TUBE	SPAN	TRIBUTARY WIDTH (IN)	DESIGN PRESSURE (IN)
2 X 4	50.63	90	107.49	2 X 4	84.00	90	33.39
		80	120.93			80	37.56
		70	138.20			70	42.93
		60	161.23			60	50.09
		50	198.48			50	60.10
		40	241.85			40	75.13
		30	322.47			30	100.17
		20	483.70			20	150.26
	56.00	90	87.86		96.00	90	-
		80	98.85			80	25.16
		70	112.97			70	28.76
		60	131.79			60	33.55
		50	158.15			50	40.26
		40	197.69			40	50.33
		30	263.59			30	67.11
		20	395.38			20	100.66
	63.00	90	69.42		108.00	90	-
		80	78.10			80	-
		70	89.26			70	-
		60	104.13			60	-
		50	124.96			50	28.28
		40	156.20			40	35.35
		30	208.27			30	47.13
		20	312.40			20	70.70
74.25	90	48.35	120.00	90	-		
	80	54.39		80	-		
	70	62.16		70	-		
	60	72.52		60	-		
	50	87.02		50	-		
	40	108.78		40	25.77		
	30	145.04		30	34.36		
	20	217.56		20	51.54		

TUBE	SPAN	TRIBUTARY WIDTH (IN)	DESIGN PRESSURE (IN)	TUBE	SPAN	TRIBUTARY WIDTH (IN)	DESIGN PRESSURE (IN)
2 X 6	63.00	90	95.30	2 X 6	108.00	90	32.43
		80	107.22			80	36.48
		70	122.53			70	41.70
		60	142.96			60	48.64
		50	171.55			50	58.37
		40	214.43			40	72.97
		30	285.91			30	97.29
		20	428.87			20	145.93
	74.25	90	68.61		120.00	90	26.27
		80	77.19			80	29.55
		70	88.21			70	33.77
		60	102.92			60	39.40
		50	123.50			50	47.28
		40	154.38			40	59.10
		30	205.83			30	78.80
		20	308.75			20	118.21
	84.00	90	53.61		132.00	90	-
		80	60.31			80	-
		70	68.92			70	-
		60	80.41			60	32.56
		50	96.49			50	39.08
		40	120.62			40	48.85
		30	160.82			30	65.13
		20	241.24			20	97.89
96.00	90	41.04	144.00	90	-		
	80	46.17		80	-		
	70	52.77		70	-		
	60	61.57		60	27.36		
	50	73.88		50	32.84		
	40	92.35		40	41.04		
	30	123.13		30	54.73		
	20	184.70		20	82.09		



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ALUMINUM TUBE MULLION

Drawn By: RF

Date: 9-30-05

Scale: NTS

Revision:

Revision:

DRAWING NO.
SW-01-07

SHEET
3 OF 7

NOTE:

INTERPOLATE FOR INTERMEDIATE VALUES OF SPAN AND/OR TRIBUTARY WIDTH TO DETERMINE DESIGN PRESSURES.

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 06-0214-02
Expiration Date JAN. 25, 2012
By: *Manuel Perez*
Miami Dade Product Control
Division

Francisco Hernandez
1-15-07

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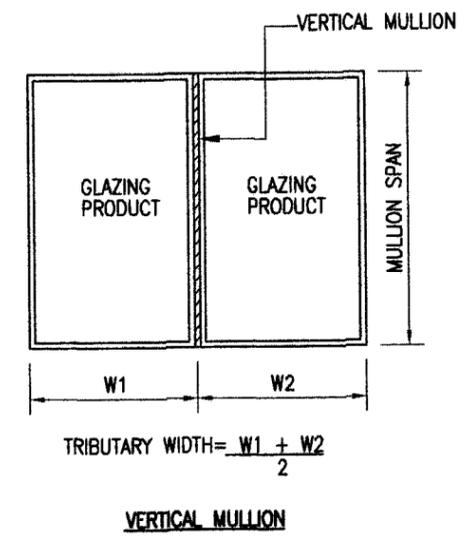
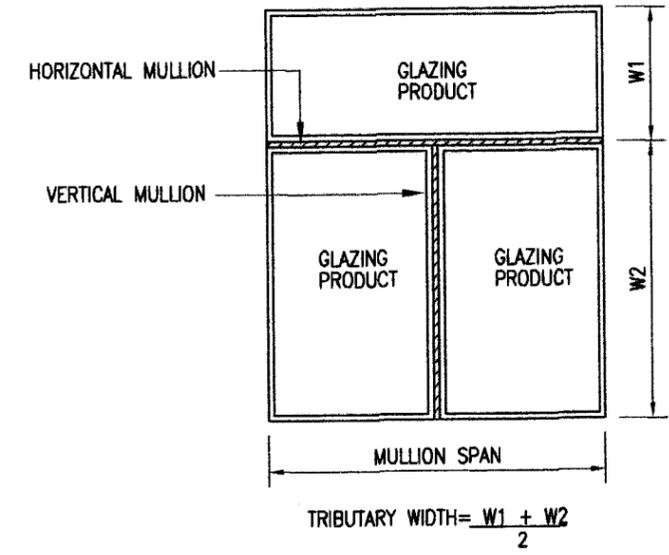
DRAWING NO.
SW-01-07
SHEET
4 OF 7

ANCHOR TYPE	SPAN	TRIBUTARY WIDTH (IN)	DESIGN PRESSURE (IN)	ANCHOR TYPE	SPAN	TRIBUTARY WIDTH (IN)	DESIGN PRESSURE (IN)	
A & D	38.38	85	64.98	A & D	74.00	43	66.61	
		60	92.05			40	71.61	
		40	138.07			30	95.48	
		20	276.14			20	143.22	
	50.63	65	64.42		84.00	39	64.70	
		50	83.74			30	84.11	
		30	139.57			20	126.17	
		20	209.35			34	64.94	
	57.00	57	65.24		96.00	30	73.60	
		50	74.37			20	110.40	
		30	123.96			108.00	30	65.42
		20	185.94				25	78.51
	63.00	52	64.70			20	98.13	
		40	84.11					
		30	112.15					
		20	168.23					

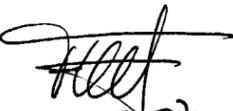
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ANCHOR TYPE	SPAN	TRIBUTARY WIDTH (IN)	DESIGN PRESSURE (IN)	ANCHOR TYPE	SPAN	TRIBUTARY WIDTH (IN)	DESIGN PRESSURE (IN)
B,C & E	50.63	85	98.52	B,C & E	108.00	85	46.18
		70	119.63			70	56.08
		60	139.57			50	78.51
		48	174.46			40	98.13
	57.00	85	87.50		120.00	22	178.42
		70	106.25			85	41.56
		60	123.96			70	50.47
		50	148.75			50	70.66
	63.00	85	79.17		132.00	40	88.32
		65	103.53			30	117.76
		50	134.58			20	176.64
		38	177.08			78	41.17
	72.00	85	69.27		144.00	70	45.88
		70	84.11			50	64.23
		50	117.76			40	80.29
		33	178.42			30	107.05
	84.00	85	59.37			20	160.58
		70	72.10			73	40.33
		50	100.94			60	49.07
		29	174.03			50	58.88
	96.00	85	51.95			40	73.60
		70	63.09			30	98.13
		50	88.32			20	147.20
		40	110.40				
		25	176.64				



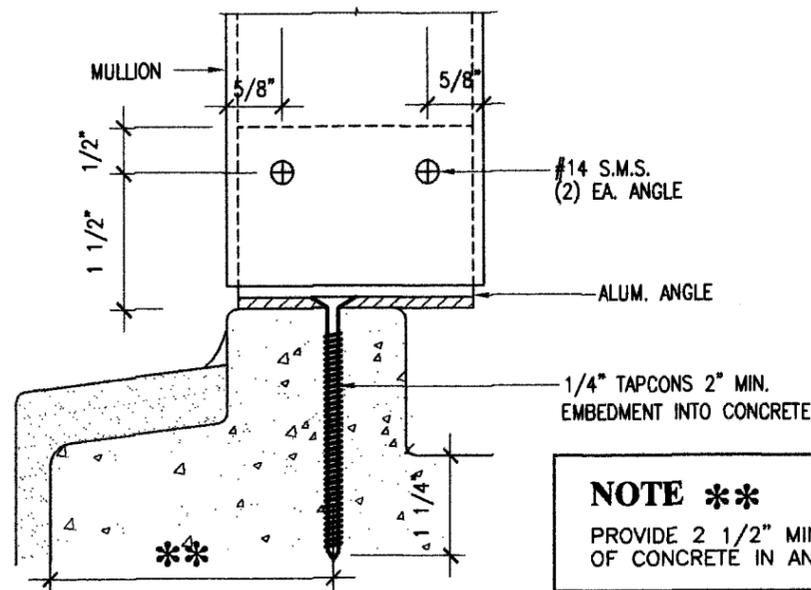
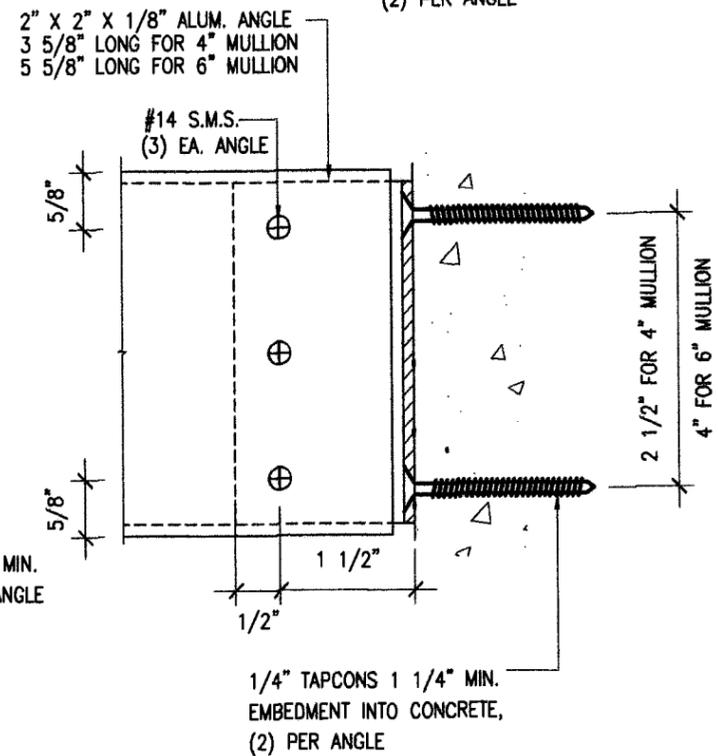
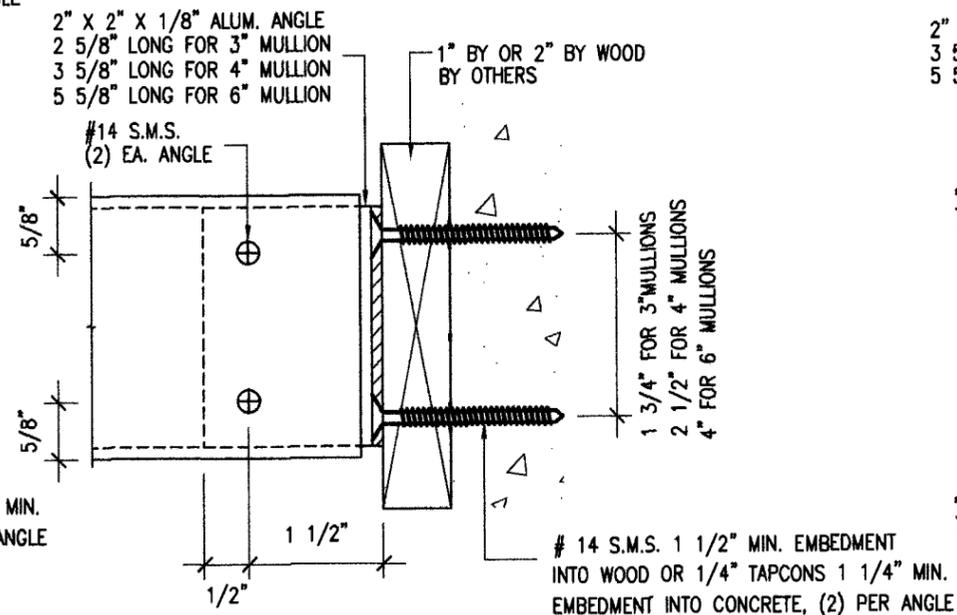
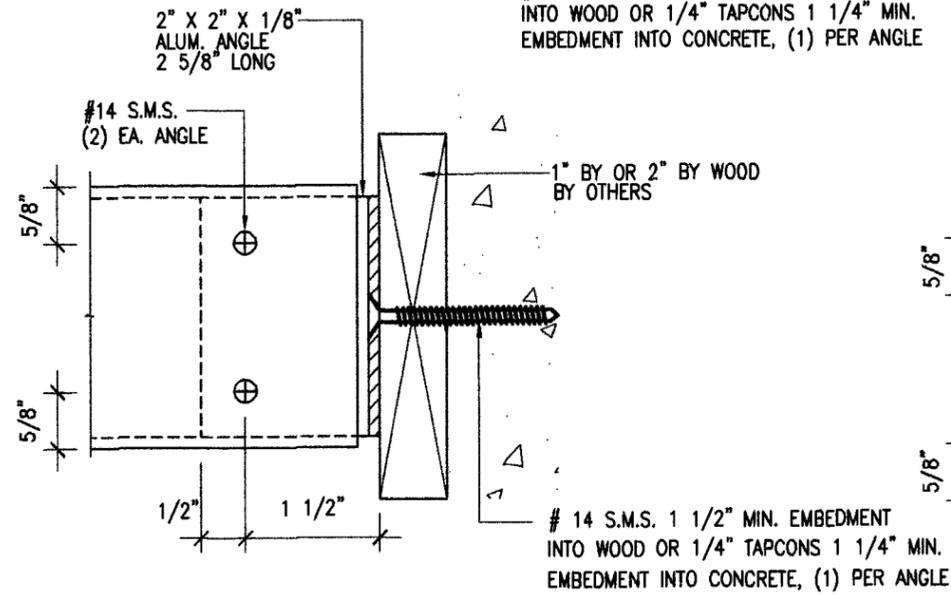
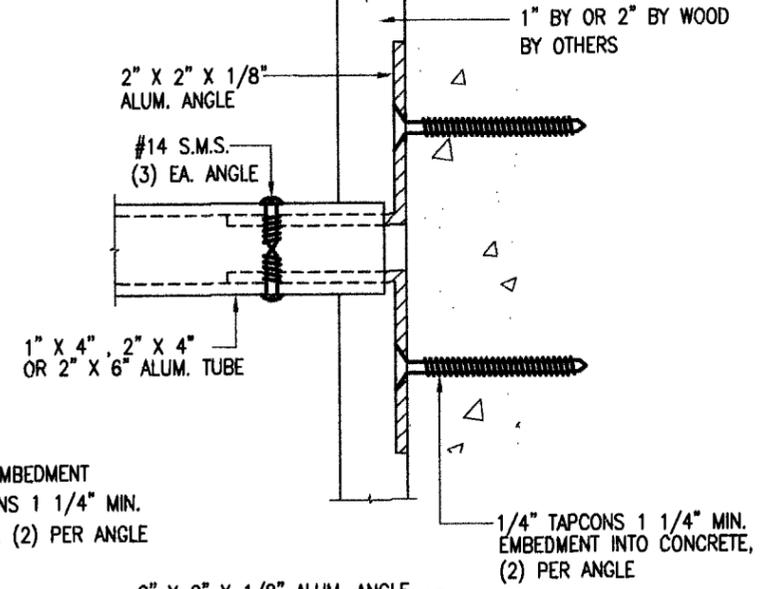
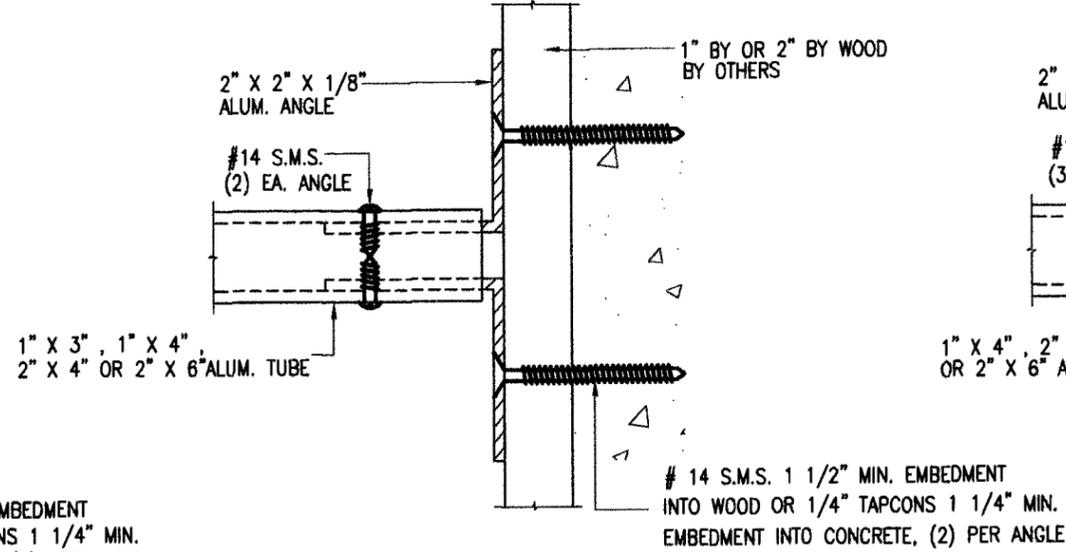
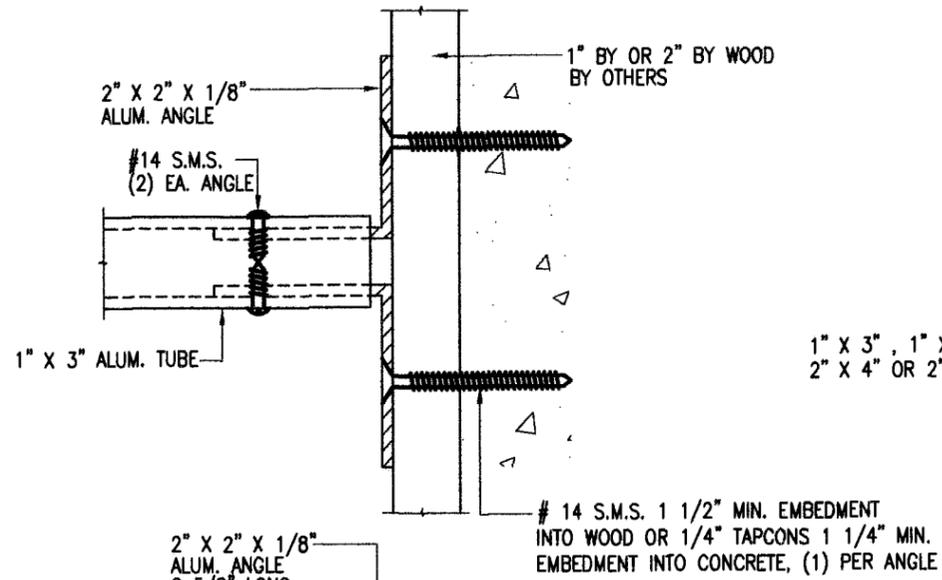
PRODUCT REVISED
to comply with the Florida
Building Code
Acceptance No. 06-0214.02
Expiration Date JAN. 25, 2012
By: Francisco Hernandez
Structural Engineering
Division


1-15-07
FRANCISCO HERNANDEZ
FLORIDA PE # 51393

ANCHOR TYPE "A"

ANCHOR TYPE "B"

ANCHOR TYPE "C"



NOTE **
PROVIDE 2 1/2" MIN. DISTANCE TO EDGE OF CONCRETE IN ANY DIRECTION

NOTE:

- 1- MULLION CONNECTIONS SHOWN ON THIS SHEET ARE APPLICABLE TO VERTICAL OR HORIZONTAL MULLIONS.
- 2- WOOD BUCK BY OTHERS MUST BE PROPERLY ANCHORED TO TRANSFER LOAD TO THE STRUCTURE AND TO BE REVIEWED BY BUILDING OFFICIAL

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ALUMINUM TUBE MULLION

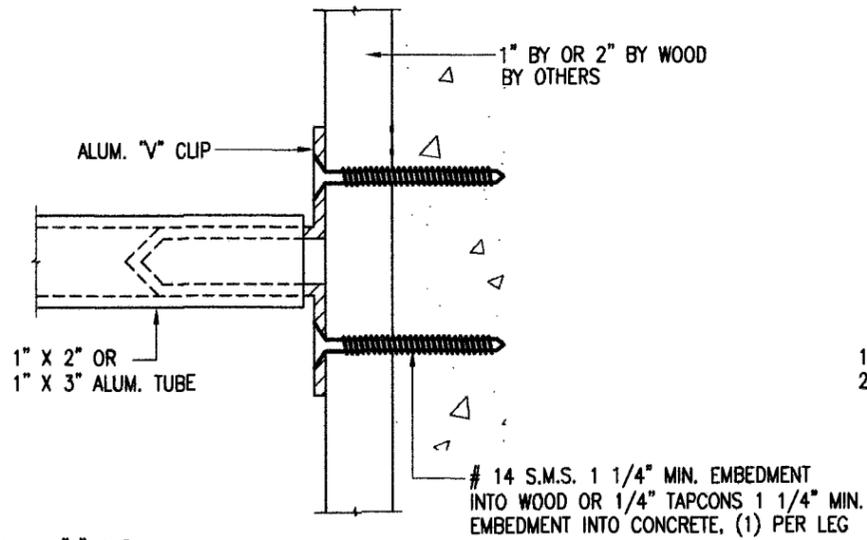
Drawn By: RF
Date: 9-30-05
Scale: 1/2"=1"
Revision: _____
Revision: _____

DRAWING No: SW-01-07
SHEET 5 OF 7

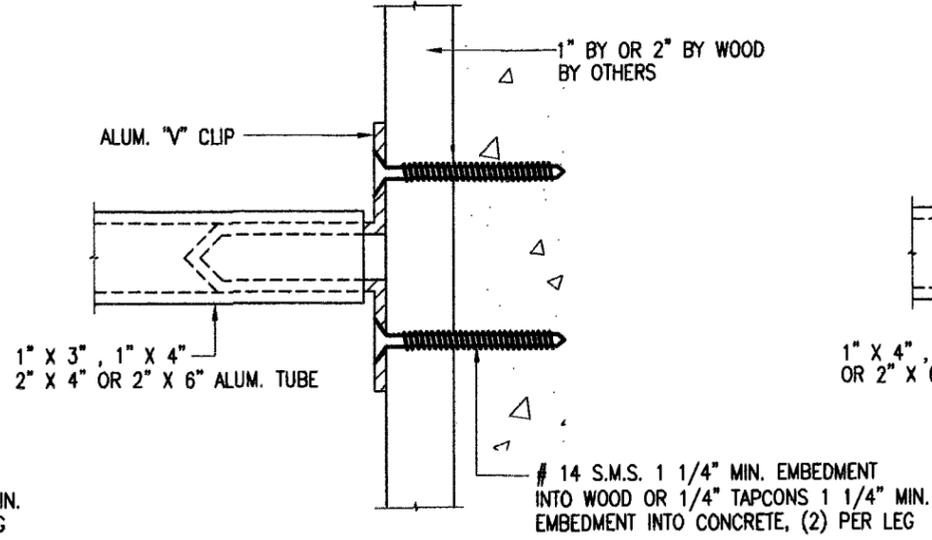
PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 06-0214.02
Expiration Date: JAN. 25, 2012
By: Manuel Perez
Miami Dade Product Control
Division

[Signature]
1-15-07
FRANCISCO HERNANDEZ
FLORIDA PE # 51393

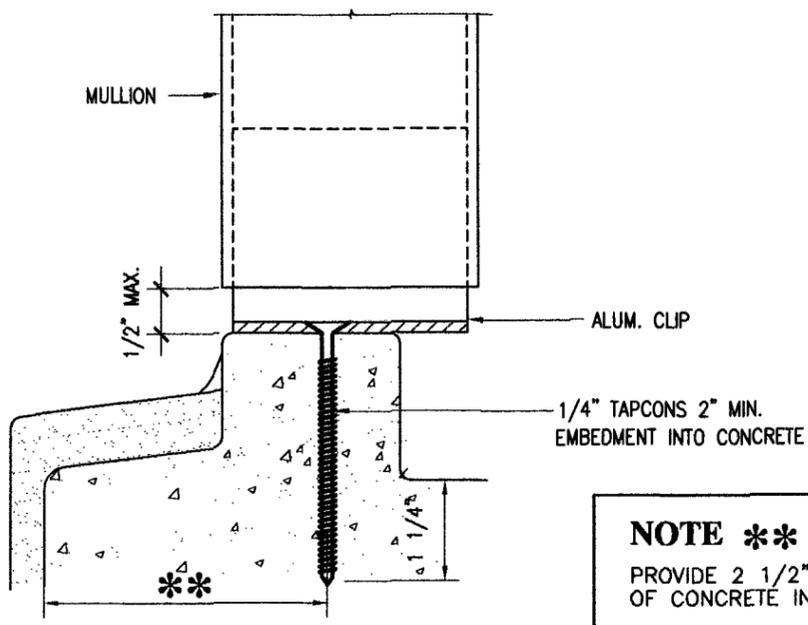
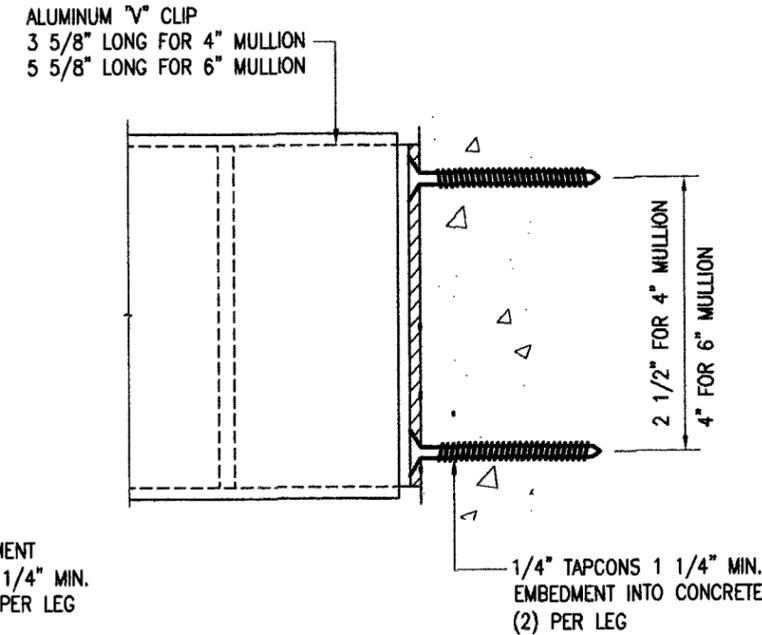
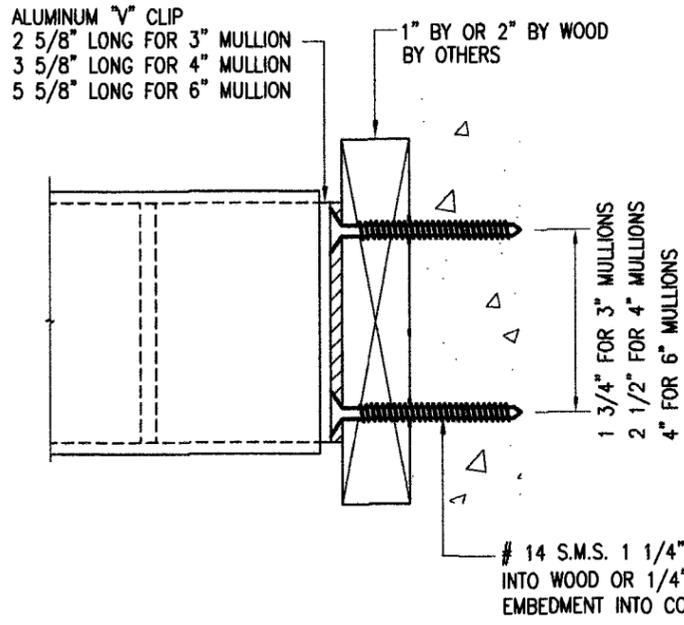
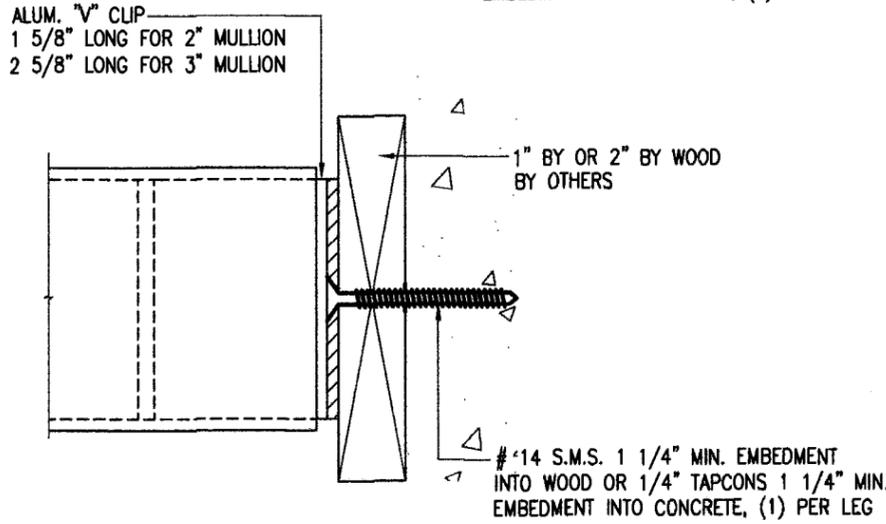
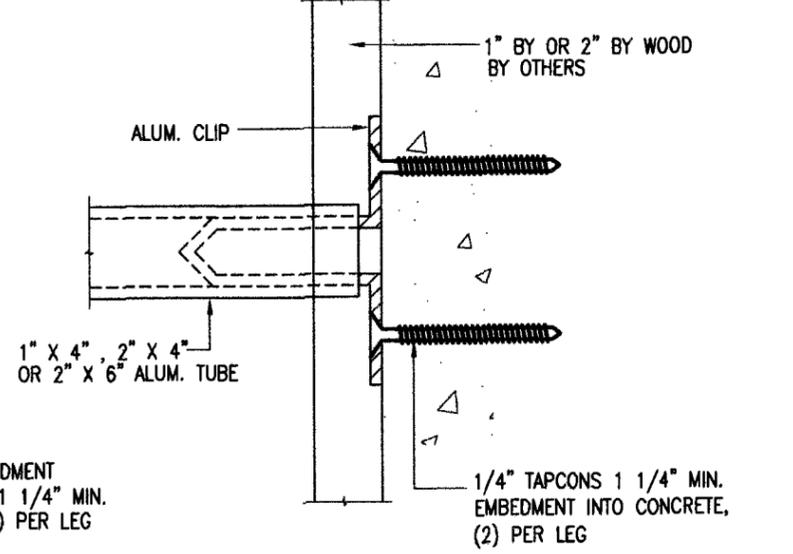
ANCHOR TYPE "A"



ANCHOR TYPE "B"



ANCHOR TYPE "C"



NOTE **
 PROVIDE 2 1/2" MIN. DISTANCE TO EDGE OF CONCRETE IN ANY DIRECTION

- NOTE:**
- MULLION CONNECTIONS SHOWN ON THIS SHEET ARE APPLICABLE TO VERTICAL OR HORIZONTAL MULLIONS.
 - WOOD BUCK BY OTHERS MUST BE PROPERLY ANCHORED TO TRANSFER LOAD TO THE STRUCTURE AND TO BE REVIEWED BY BUILDING OFFICIAL

Sunshine Windows Manufacturing, Inc.
 1745 W. 33rd Place
 Hialeah, Florida 33012
 Ph: (305)364-9952
 Fax:(305)828-5118

FRANCISCO HERNANDEZ P. E.
 Structural Engineering
 15113 SW 35 Terr.
 Miami, Florida 33185
 Phone (305) 227-6901

ALUMINUM TUBE MULLION

Drawn By: RF
 Date: 9-30-05
 Scale: 1/2"=1"
 Revision: _____
 Revision: _____

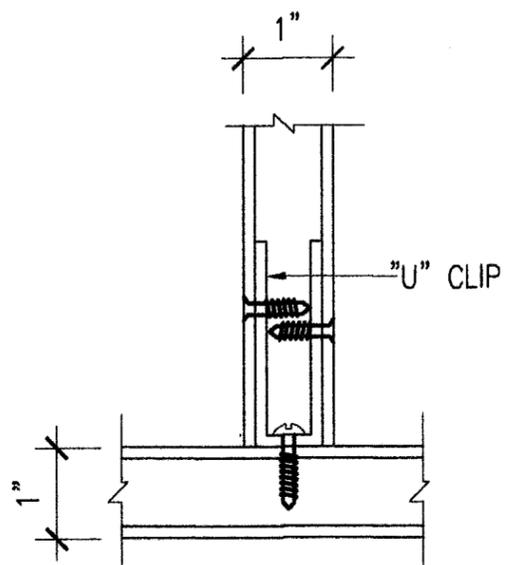
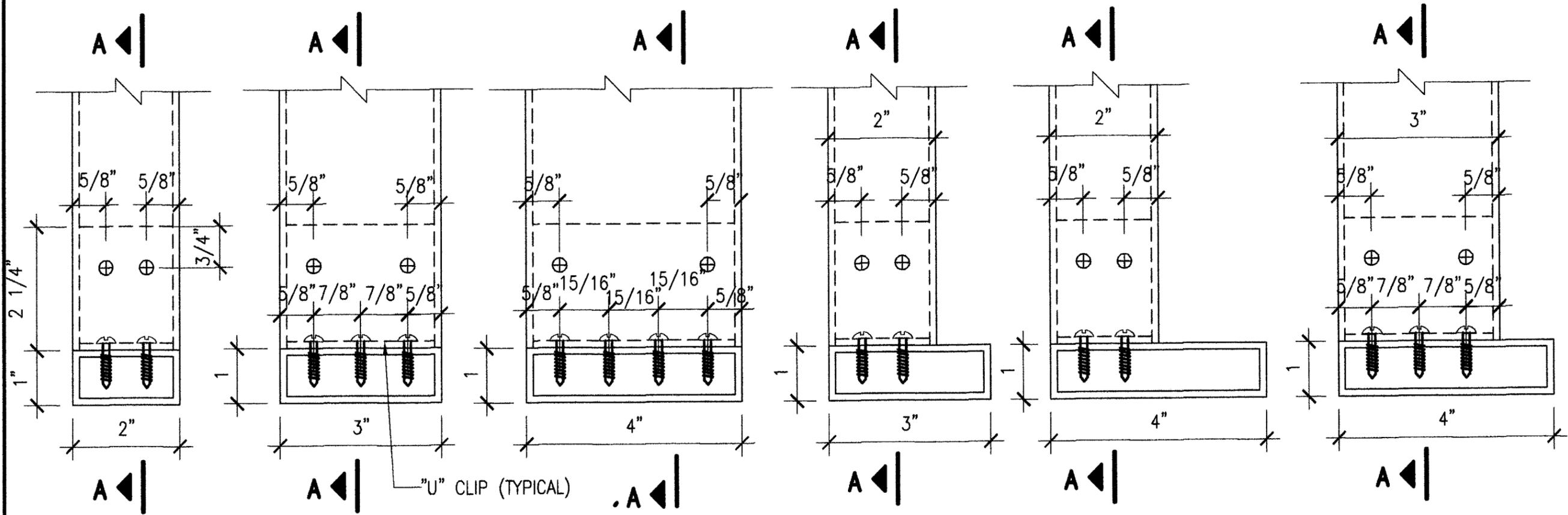
DRAWING No:
SW-01-07
 SHEET
 6 OF 7

<p>PRODUCT REVISED as complying with the Florida Building Code Acceptance No. <u>06-0214.02</u> Expiration Date <u>JAN. 25, 2012</u> By <u>Manuel Perez</u> Miami/Dade Product Control Division</p>	<p><i>[Signature]</i> 1-10-07 FRANCISCO HERNANDEZ FLORIDA PE # 51393</p>
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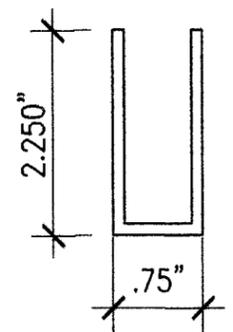
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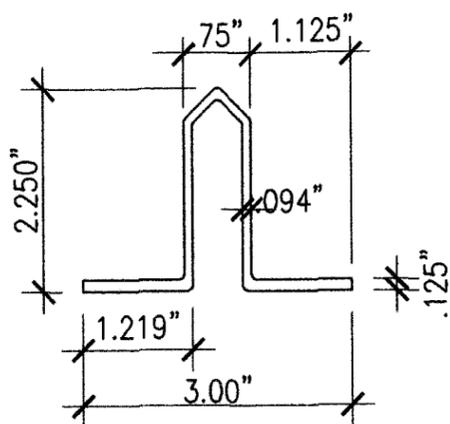
ALUMINUM TUBE MULLION



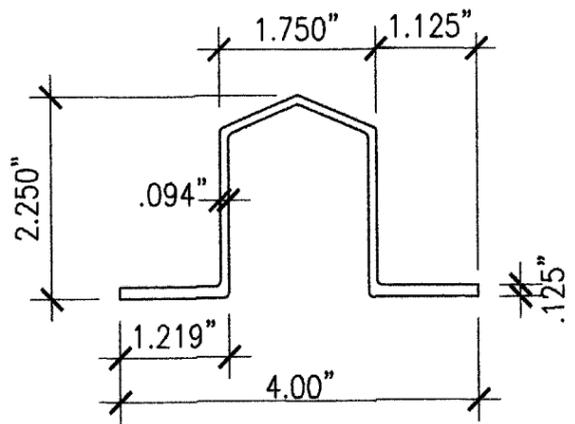
SECTION A-A



ALUMINUM "U" CLIP FOR 1" WIDE TUBES



"V" CLIP FOR 1" WIDE TUBES



"V" CLIP FOR 2" WIDE TUBES

DETAILS OF MULLION TO MULLION CONNECTIONS FOR 1" WIDE TUBES

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 By: *Manuel Lopez*
 Miami-Dade Product Control
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Francisco Hernandez
 1-15-07
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 FLORIDA PE # 51393

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 Revision: _____

DRAWING No:
 SW-01-07
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 7 OF 7