



**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) 372-6339

NOTICE OF ACCEPTANCE (NOA)

www.miamidade.gov/buildingcode

R. C. Aluminum Industries, Inc.
2805 N. W. 75th Ave.
Miami, FL 33122

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 "ML 100" Aluminum Tube Mullion – L.M.I.

APPROVAL DOCUMENT: Drawing No. **M04-05**, titled "Aluminum Tube Mullions", sheets 1 through 7 of 7, dated 05/02/04 with revision "C" dated 09/22/08, prepared by Al-Farooq Corporation, signed and sealed by Humayoun Farooq, 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 **revises and renews** NOA # **06-1130.03** 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. 09-0128.14
Expiration Date: August 19, 2014
Approval Date: April 08, 2009
Page 1

R. C. Aluminum Industries, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Manufacturer's die drawings and sections.
2. Drawing No **M04-05**, titled "Aluminum Tube Mullions", sheets 1 through 7 of 7, dated 05/02/04 with revision "C" dated 09/22/08, prepared by Al-Farooq Corporation, signed and sealed by Humayoun Farooq, 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) Cyclic Wind Pressure Loading per FBC, TAS 203-94
along with installation diagram of aluminum single hung windows mulled together, prepared by Fenestration Testing Laboratory, Inc., Test Report No. **FTL-4024**, dated January 14, 2004, signed and sealed by Edmundo Largaespada, P.E.
(Submitted under previous NOA #04-0608.05)
2. 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) Large Missile Impact Test per FBC, TAS 201-94
4) Forced Entry Test, per FBC 2411.3.2.1 (b) and TAS 202-94
along with installation diagram of aluminum fixed and casement windows mulled together, prepared by Hurricane Engineering & Testing Inc., Test Report No. **HETI-03-1346**, dated September 16, 2003, signed and sealed by Rafael E. Droz-Seda, P.E.
(Submitted under previous NOA #04-0608.05)

C. CALCULATIONS

1. Anchor verification calculations and structural analysis, complying with FBC-2004, prepared by Al-Farooq Corporation, dated 09/24/08, signed and sealed by Humayoun Farooq, P.E.

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

1. None


Manuel Perez, P.E.
Product Control Examiner
NOA No. 09-0128.14
Expiration Date: August 19, 2014
Approval Date: April 08, 2009

R. C. Aluminum Industries, Inc.

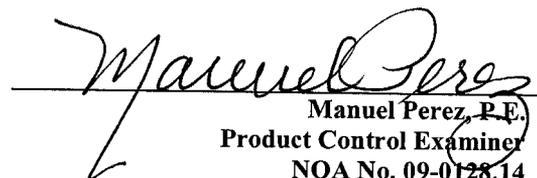
NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

F. STATEMENTS

1. Statement letter of compliance, dated September 16, 2008, signed and sealed by Humayoun Farooq, P.E.
2. Statement letter of no financial interest, dated October 06, 2006, signed and sealed by Humayoun Farooq, P.E.
(Submitted under previous NOA #06-1130.03)

G. OTHERS

1. Notice of Acceptance No. **06-1130.03**, issued to R. C. Aluminum Industries, Inc. for their Series "**Series "ML 100" Aluminum Tube Mullion – L.M.I.**", approved on 04/05/07 and expiring on 08/19/09.

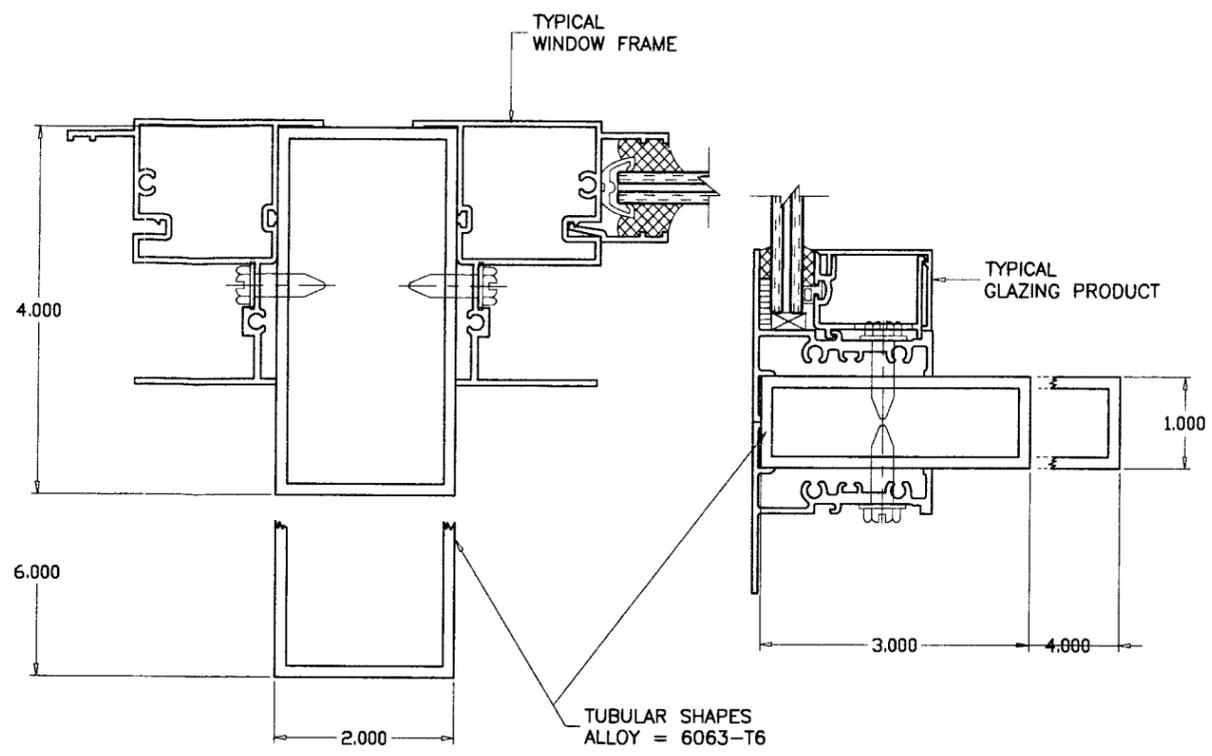

Manuel Perez, P.E.
Product Control Examiner
NOA No. 09-0128.14
Expiration Date: August 19, 2014
Approval Date: April 08, 2009

a f c

AL-FAROOQ CORPORATION
 ENGINEERS & PRODUCT DEVELOPMENT
 12335 S.W. 87 AVE
 MIAMI, FLORIDA 33174
 TEL. (305) 264-8100 FAX. (305) 262-6978

MULLION\M04-05RC

ALUMINUM TUBE MULLIONS
R.C. ALUMINUM INDUSTRIES INC.
 2805 N.W. 75 TH AVE.
 MIAMI, FL. 33122
 TEL. (305) 592-1515 FAX. (305) 592-2184



**MULLIONS CONTAINING TYPICAL GLAZING PRODUCTS
 HORIZONTAL OR VERTICAL**

SEE WINDOW OR DOOR APPROVAL FOR FASTENERS SIZES AND SPACING

MULLION SYSTEM IS RATED FOR LARGE MISSILE IMPACT.
 AND CAN BE USED WITH ALL MIAMI-DADE COUNTY APPROVED
 IMPACT AND NON-IMPACT RESISTANT PRODUCTS.

**RECTANGULAR ALUMINUM TUBE MULLIONS
 USING MULLION PROPERTIES ONLY**

NOTES:

- THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE FLORIDA BUILDING CODE 2004/2007 EDITION INCLUDING HIGH VELOCITY HURRICANE ZONE (HVHZ).
- ALL GLAZING PRODUCTS USED WITH THESE MULLIONS MUST MEET THE APPLICABLE BUILDING CODE REQUIREMENTS I.E: WIND LOAD, WATER INFILTRATION, FORCED ENTRY RESISTANCE, SAFEGUARDS ETC.
- WOOD BUCKS BY OTHERS, MUST BE ANCHORED PROPERLY TO TRANSFER LOADS TO THE STRUCTURE.
- ANCHORS SHALL BE AS LISTED, SPACED AS SHOWN ON DETAILS, EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL COVERING (STUCCO, TILE ETC.).
- ANCHORING CONDITIONS OTHER THAN THOSE SHOWN IN THESE DETAILS ARE NOT PART OF THIS APPROVAL.
- A LOAD DURATION INCREASE IN ALLOWABLE STRESS IS USED IN DESIGN OF ANCHORS INTO WOOD ONLY.
- MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF 2004 FLORIDA BLDG. CODE SECTION 2003.8.4.

INSTRUCTIONS:

USE CHARTS AND GRAPHS AS FOLLOWS.

- STEP 1** DETERMINE DESIGN LOAD REQUIRED PER ASCE 7 FOR PARTICULAR OPENING.
- STEP 2** USE APPROVED GLAZING PRODUCTS MEETING ABOVE LOAD REQUIREMENTS.
- STEP 3** USE CONNECTION TO MULLION AS PER PRODUCT APPROVAL.
- STEP 4** USING CHARTS ON SHEET 3 SELECT MULLION SIZE WITH DESIGN RATING MORE THAN DESIGN LOAD SPECIFIED IN STEP 1 ABOVE.
- STEP 5** USING ANCHOR TYPES ON SHEET 5 THRU 7 AND ANCHOR CHARTS ON SHEET 4, SELECT ANCHOR TYPE WITH DESIGN RATING MORE THAN THE DESIGN LOADS SPECIFIED IN STEP 1 ABOVE.

Engr: DR. HUMAYOON FAROOQ
 STRUCTURES
 FLA. PE # 16557
 C.A.N. 3538

[Signature]

SEP 25 2008

PRODUCT REVIEWED
 as complying with the Florida
 Building Code
 Acceptance No 09-012814
 Expiration Date 08/19/2014

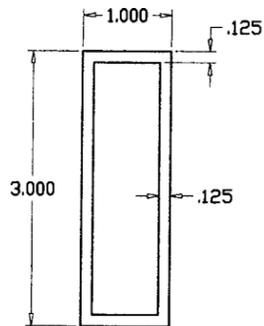
By *[Signature]*
 Miami Dade Product Control
 Division

Revisions:

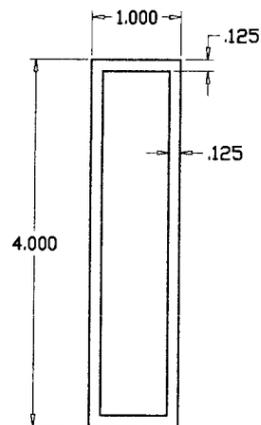
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A	07.13.04	REV. PER BCCO COMMENTS
B	10.09.06	UPDATED FOR 2004 FBC
C	09.22.08	UPDATED FOR 2007 FBC

date: 05-02-04
 scale: 1/2" = 1"
 dr. by: HAMID
 chk. by:

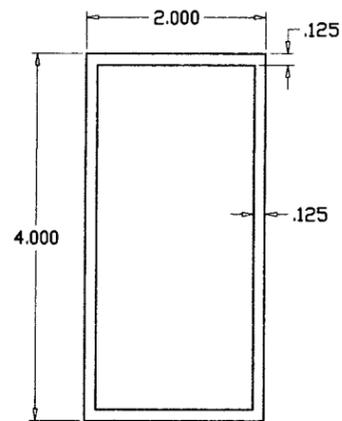
drawing no.
M04-05
 sheet 1 of 7



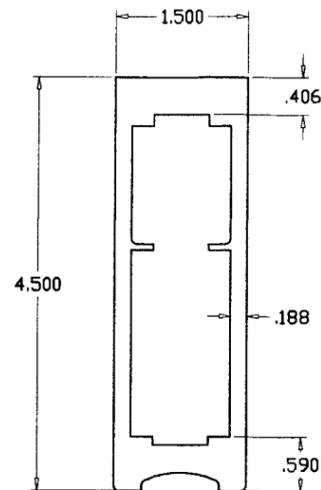
1 X 3
STD. MULLION
6063-T6



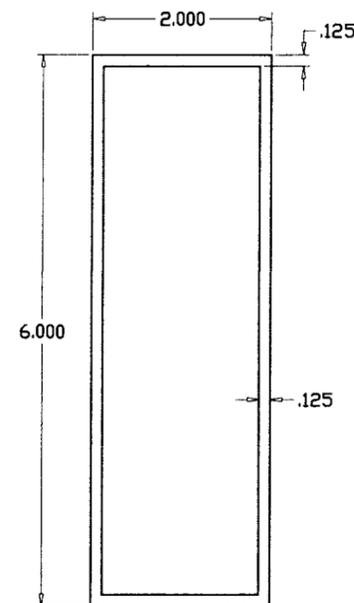
1 X 4
STD. MULLION
6063-T6



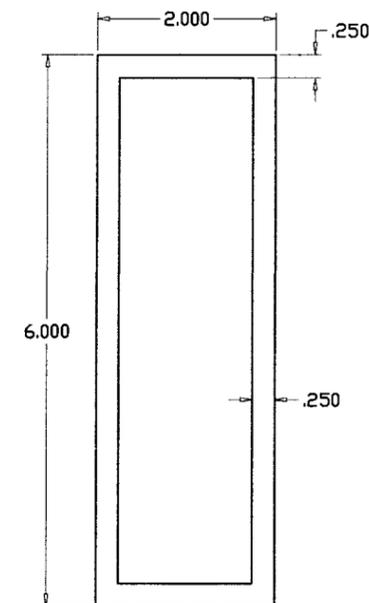
2 X 4
STD. MULLION
6063-T6



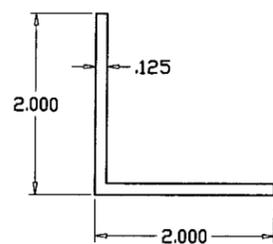
1-1/2 X 4-1/2
CUSTOM MULLION
6063-T6



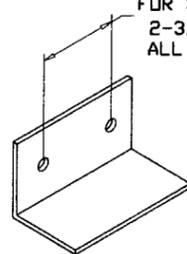
2 X 6
STD. MULLION
6063-T6



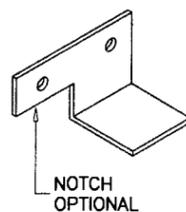
2 X 6
HEAVY MULLION
6063-T6



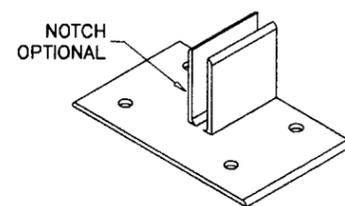
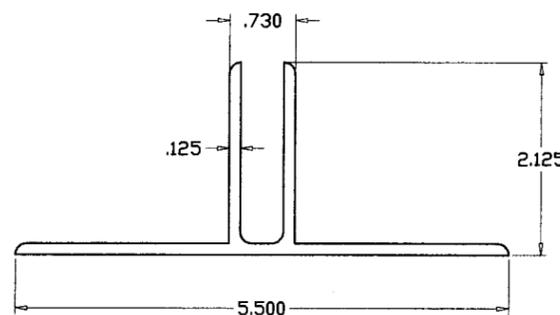
1-3/4" MIN.
FOR 3" TUBES
2-3/4" MIN.
ALL OTHERS



ANGLE CLIP
6063-T6

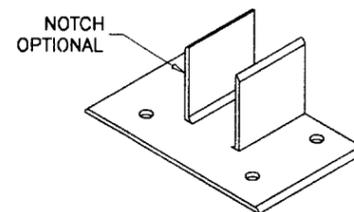
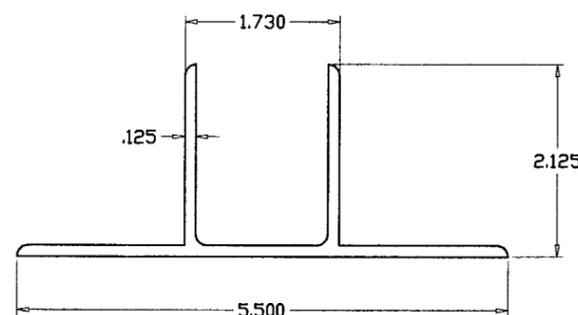


NOTCH
OPTIONAL



NOTCH
OPTIONAL

MULLION CLIP
6063-T6



NOTCH
OPTIONAL

MULLION CLIP
6063-T6

Engr: DR. HUMAYOUN FAROOQ
STRUCTURES
FLA. PE # 16557
C.A.N. 3538

SEP 25 2008

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 09-0128-14
Expiration Date 08/19/2014
By Manuel Perez
Miami Dade Product Control
Division

afc
AL-FAROOQ CORPORATION
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no	date	description
A	07.13.04	NO CHANGE THIS SHEET
B	10.09.06	UPDATED FOR 2004 FBC
C	09.22.08	NO CHANGE THIS SHEET

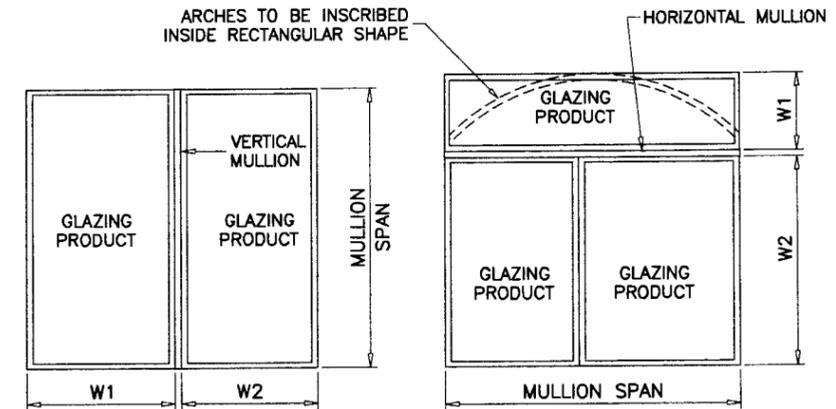
date: 05-02-04
scale: 1/2" = 1"
dr. by: HAMID
chk. by:
drawing no.
M04-05
sheet 2 of 7

DESIGN LOAD CAPACITY - PSF (TUBE MULLIONS)							
WINDOW DIMS.		1 X 3	1 X 4	2 X 4	1-1/2 X 4-1/2	2 X 6	2 X 6 HEAVY
WIDTH (W)	MULL SPAN	STD.	STD.	STD.	CUSTOM	STD.	HEAVY
19-1/8"	38-3/8"	150.0	150.0	150.0	150.0	150.0	150.0
26-1/2"		150.0	150.0	150.0	150.0	150.0	150.0
30"		150.0	150.0	150.0	150.0	150.0	150.0
37"		150.0	150.0	150.0	150.0	150.0	150.0
42"		150.0	150.0	150.0	150.0	150.0	150.0
48"		150.0	150.0	150.0	150.0	150.0	150.0
54"		137.8	150.0	150.0	150.0	150.0	150.0
60"		124.0	150.0	150.0	150.0	150.0	150.0
66"		112.7	150.0	150.0	150.0	150.0	150.0
72"	103.3	150.0	150.0	150.0	150.0	150.0	
19-1/8"	50-5/8"	150.0	150.0	150.0	150.0	150.0	150.0
26-1/2"		150.0	150.0	150.0	150.0	150.0	150.0
30"		142.5	150.0	150.0	150.0	150.0	150.0
37"		115.5	150.0	150.0	150.0	150.0	150.0
42"		101.8	150.0	150.0	150.0	150.0	150.0
48"		89.1	143.1	150.0	150.0	150.0	150.0
54"		79.2	127.2	150.0	150.0	150.0	150.0
60"		71.2	114.5	150.0	150.0	150.0	150.0
66"		64.8	104.1	150.0	150.0	150.0	150.0
72"	59.4	95.4	139.3	150.0	150.0	150.0	
19-1/8"	60"	141.3	150.0	150.0	150.0	150.0	150.0
26-1/2"		102.0	150.0	150.0	150.0	150.0	150.0
30"		90.1	150.0	150.0	150.0	150.0	150.0
37"		73.0	132.2	150.0	150.0	150.0	150.0
42"		64.3	116.5	150.0	150.0	150.0	150.0
48"		56.3	101.9	148.8	150.0	150.0	150.0
54"		50.0	90.6	132.3	150.0	150.0	150.0
60"		45.0	81.5	119.0	150.0	150.0	150.0
66"		40.9	74.1	108.2	150.0	150.0	150.0
72"	37.5	67.9	99.2	150.0	150.0	150.0	
19-1/8"	63"	122.1	150.0	150.0	150.0	150.0	150.0
26-1/2"		88.1	150.0	150.0	150.0	150.0	150.0
30"		77.8	147.9	150.0	150.0	150.0	150.0
37"		63.1	119.9	150.0	150.0	150.0	150.0
42"		55.6	105.6	150.0	150.0	150.0	150.0
48"		48.6	92.4	135.0	150.0	150.0	150.0
54"		43.2	82.2	120.0	150.0	150.0	150.0
60"		38.9	73.9	108.0	150.0	150.0	150.0
66"		35.4	67.2	98.2	150.0	150.0	150.0
72"	32.4	61.6	90.0	150.0	150.0	150.0	

DESIGN LOAD CAPACITY - PSF (TUBE MULLIONS)							
WINDOW DIMS.		1 X 3	1 X 4	2 X 4	1-1/2 X 4-1/2	2 X 6	2 X 6 HEAVY
WIDTH (W)	MULL SPAN	STD.	STD.	STD.	CUSTOM	STD.	HEAVY
19-1/8"	74-1/4"	74.6	150.0	150.0	150.0	150.0	150.0
26-1/2"		53.8	115.4	150.0	150.0	150.0	150.0
30"		47.5	101.9	148.9	150.0	150.0	150.0
37"		38.5	82.6	120.7	150.0	150.0	150.0
42"		33.9	72.8	106.4	150.0	150.0	150.0
48"		29.7	63.7	93.1	150.0	150.0	150.0
54"		26.4	56.6	82.7	150.0	150.0	150.0
60"		23.8	51.0	74.4	150.0	144.1	150.0
66"		21.6	46.3	67.7	136.7	131.0	150.0
72"	-	42.5	62.0	125.3	120.1	150.0	
19-1/8"	84"	51.5	110.4	150.0	150.0	150.0	150.0
26-1/2"		37.2	79.7	116.4	150.0	150.0	150.0
30"		32.8	70.4	102.8	150.0	150.0	150.0
37"		26.6	57.1	83.4	150.0	150.0	150.0
42"		23.4	50.3	73.5	150.0	150.0	150.0
48"		20.5	44.0	64.3	143.8	140.8	150.0
54"		-	39.1	57.1	127.8	125.1	150.0
60"		-	35.2	51.4	115.0	112.6	150.0
66"		-	32.0	46.7	104.6	102.4	150.0
72"	-	29.3	42.8	95.9	93.8	150.0	
19-1/8"	96"	34.5	74.0	108.1	150.0	150.0	150.0
26-1/2"		24.9	53.4	78.0	150.0	150.0	150.0
30"		22.0	47.2	68.9	150.0	150.0	150.0
37"		-	38.2	55.9	125.0	139.8	150.0
42"		-	33.7	49.2	110.1	123.2	150.0
48"		-	29.5	43.1	96.3	107.8	150.0
54"		-	26.2	38.3	85.6	95.8	150.0
60"		-	23.6	34.4	77.1	86.2	150.0
66"		-	21.4	31.3	70.1	78.4	144.0
72"	-	-	28.7	64.2	71.8	132.0	
19-1/8"	108"	24.2	51.9	75.9	150.0	150.0	150.0
26-1/2"		-	37.5	54.8	122.6	150.0	150.0
30"		-	33.1	48.4	108.3	134.5	150.0
37"		-	26.9	39.2	87.8	109.1	150.0
42"		-	23.7	34.6	77.3	96.1	150.0
48"		-	20.7	30.2	67.7	84.1	150.0
54"		-	-	26.9	60.1	74.7	137.3
60"		-	-	24.2	54.1	67.3	123.6
66"		-	-	22.0	49.2	61.2	112.3
72"	-	-	20.2	45.1	56.1	103.0	

DESIGN LOAD CAPACITY - PSF (TUBE MULLIONS)							
WINDOW DIMS.		1 X 3	1 X 4	2 X 4	1-1/2 X 4-1/2	2 X 6	2 X 6 HEAVY
WIDTH (W)	MULL SPAN	STD.	STD.	STD.	CUSTOM	STD.	HEAVY
19-1/8"	120"	-	37.9	55.3	123.8	150.0	150.0
26-1/2"		-	27.3	39.9	89.3	111.0	150.0
30"		-	24.1	35.3	78.9	98.1	150.0
37"		-	-	28.6	64.0	79.5	146.1
42"		-	-	25.2	56.4	70.1	128.7
48"		-	-	22.0	49.3	61.3	112.6
54"		-	-	-	43.8	54.5	100.1
60"		-	-	-	39.5	49.0	90.1
66"		-	-	-	35.9	44.6	81.9
72"	-	-	-	32.9	40.9	75.1	
19-1/8"	132"	-	28.5	41.6	93.0	115.6	150.0
26-1/2"		-	20.5	30.0	67.1	83.4	150.0
30"		-	-	26.5	59.3	73.7	135.4
37"		-	-	21.5	48.1	59.8	109.8
42"		-	-	-	42.4	52.6	96.7
48"		-	-	-	37.1	46.1	84.6
54"		-	-	-	32.9	40.9	75.2
60"		-	-	-	29.6	36.8	67.7
66"		-	-	-	27.0	33.5	61.5
72"	-	-	-	24.7	30.7	56.4	
19-1/8"	144"	-	21.9	32.0	71.6	89.0	150.0
26-1/2"		-	-	23.1	51.7	64.3	118.0
30"		-	-	20.4	45.7	56.8	104.3
37"		-	-	-	37.0	46.0	84.5
42"		-	-	-	32.6	40.5	74.5
48"		-	-	-	28.5	35.5	65.2
54"		-	-	-	25.4	31.5	57.9
60"		-	-	-	22.8	28.4	52.1
66"		-	-	-	20.8	25.8	47.4
72"	-	-	-	-	23.7	43.4	

NOTE:
MULLIONS RATED IN THESE CHARTS MAY BE ORIENTED VERTICALLY OR HORIZONTALLY.
(INTERPOLATION BETWEEN WIDTHS ALLOWED)



$$\text{WIDTH (W)} = \frac{W1 + W2}{2}$$

MULLIONS

Engr. DR. HUMAYOUN FAROOQ
STRUCTURES
F.I.A. FE # 16557
C.A.N. 3538
SEP 25 2008

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 09-0128.14
Expiration Date 08/19/2014
By *Manuel Perez*
Miami Dade Product Control
Division

af c
AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
1235 S.W. 87 AVE
MIAMI, FLORIDA 33174
TEL. (305) 264-8100 FAX. (305) 262-6978
MULLION\M04-05RC

ALUMINUM TUBE MULLIONS
R.C. ALUMINUM INDUSTRIES INC.
2805 N.W. 75 TH AVE.
MIAMI, FL. 33122
TEL. (305) 592-1515 FAX. (305) 592-2184

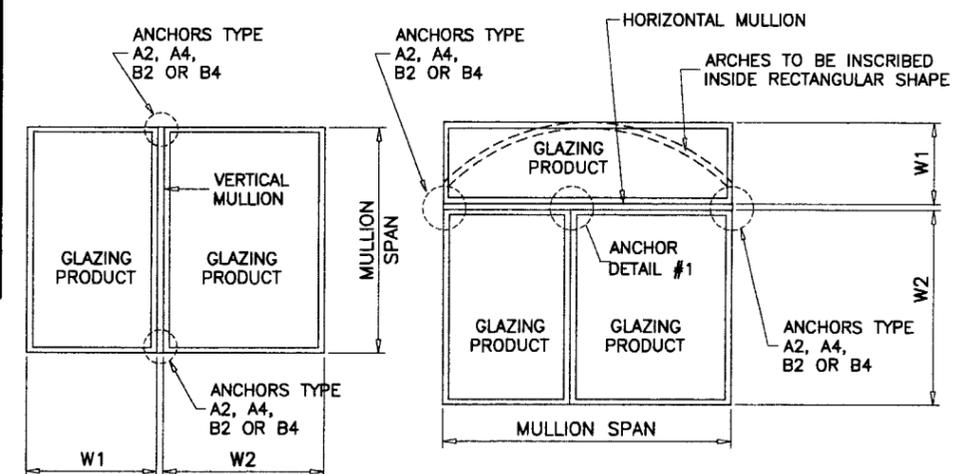
no	date	description
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B	10.09.06	UPDATED FOR 2004 FBC
C	09.22.08	NO CHANGE THIS SHEET

date: 05-02-04
scale:
dr. by: HAMID
chk. by:
drawing no.
M04-05
sheet 3 of 7

DESIGN LOAD CAPACITY - PSF							
WINDOW DIMS.		ANCHORS TYPE					
WIDTH (W)	MULL SPAN	A2	A4	AA2	AA4	B2	B4
19-1/8"	38-3/8"	150.0	150.0	150.0	150.0	150.0	150.0
26-1/2"		150.0	150.0	150.0	150.0	150.0	150.0
30"		150.0	150.0	150.0	150.0	150.0	150.0
37"		150.0	150.0	150.0	150.0	150.0	150.0
42"		135.1	150.0	150.0	150.0	150.0	150.0
48"		118.2	150.0	150.0	150.0	149.8	150.0
54"		105.1	150.0	150.0	150.0	133.1	150.0
60"		94.6	150.0	145.1	150.0	119.8	150.0
66"		86.0	150.0	131.9	150.0	108.9	150.0
72"	78.8	150.0	120.9	150.0	99.9	150.0	
19-1/8"	50-5/8"	150.0	150.0	150.0	150.0	150.0	150.0
26-1/2"		150.0	150.0	150.0	150.0	150.0	150.0
30"		143.4	150.0	150.0	150.0	150.0	150.0
37"		116.2	150.0	150.0	150.0	147.3	150.0
42"		102.4	150.0	150.0	150.0	129.8	150.0
48"		89.6	150.0	137.5	150.0	113.5	150.0
54"		79.6	150.0	122.2	150.0	100.9	150.0
60"		71.7	143.4	110.0	150.0	90.8	150.0
66"		65.2	130.3	100.0	150.0	82.6	150.0
72"	59.7	119.5	91.7	150.0	75.7	150.0	
19-1/8"	60"	150.0	150.0	150.0	150.0	150.0	150.0
26-1/2"		136.9	150.0	150.0	150.0	150.0	150.0
30"		121.0	150.0	150.0	150.0	150.0	150.0
37"		98.1	150.0	150.0	150.0	124.3	150.0
42"		86.4	150.0	132.6	150.0	109.5	150.0
48"		75.6	150.0	116.0	150.0	95.8	150.0
54"		67.2	134.4	103.1	150.0	85.2	150.0
60"		60.5	121.0	92.8	150.0	76.6	150.0
66"		55.0	110.0	84.4	150.0	69.7	139.3
72"	50.4	100.8	77.3	150.0	63.9	127.7	
19-1/8"	63"	150.0	150.0	150.0	150.0	150.0	150.0
26-1/2"		130.4	150.0	150.0	150.0	150.0	150.0
30"		115.2	150.0	150.0	150.0	146.0	150.0
37"		93.4	150.0	143.3	150.0	118.4	150.0
42"		82.3	150.0	126.3	150.0	104.3	150.0
48"		72.0	144.0	110.5	150.0	91.2	150.0
54"		64.0	128.0	98.2	150.0	81.1	150.0
60"		57.6	115.2	88.4	150.0	73.0	146.0
66"		52.4	104.7	80.3	150.0	66.4	132.7
72"	48.0	96.0	73.7	147.3	60.8	121.7	

DESIGN LOAD CAPACITY - PSF							
WINDOW DIMS.		ANCHORS TYPE					
WIDTH (W)	MULL SPAN	A2	A4	AA2	AA4	B2	B4
19-1/8"	74-1/4"	150.0	150.0	150.0	150.0	150.0	150.0
26-1/2"		110.7	150.0	150.0	150.0	140.2	150.0
30"		97.7	150.0	150.0	150.0	123.9	150.0
37"		79.3	150.0	121.6	150.0	100.4	150.0
42"		69.8	139.6	107.1	150.0	88.5	150.0
48"		61.1	122.2	93.7	150.0	77.4	150.0
54"		54.3	108.6	83.3	150.0	68.8	137.6
60"		48.9	97.7	75.0	150.0	61.9	123.9
66"		44.4	88.9	68.2	136.3	56.3	112.6
72"	40.7	81.5	62.5	125.0	51.6	103.2	
19-1/8"	84"	135.5	150.0	150.0	150.0	150.0	150.0
26-1/2"		97.8	150.0	150.0	150.0	123.9	150.0
30"		86.4	150.0	132.6	150.0	109.5	150.0
37"		70.1	140.1	107.5	150.0	88.8	150.0
42"		61.7	123.4	94.7	150.0	78.2	150.0
48"		54.0	108.0	82.9	150.0	68.4	136.9
54"		48.0	96.0	73.7	147.3	60.8	121.7
60"		43.2	86.4	66.3	132.6	54.7	109.5
66"		39.3	78.5	60.3	120.5	49.8	99.5
72"	36.0	72.0	55.2	110.5	45.6	91.2	
19-1/8"	96"	118.6	150.0	150.0	150.0	150.0	150.0
26-1/2"		85.6	150.0	131.3	150.0	108.5	150.0
30"		75.6	150.0	116.0	150.0	95.8	150.0
37"		61.3	122.6	94.1	150.0	77.7	150.0
42"		54.0	108.0	82.9	150.0	68.4	136.9
48"		47.3	94.5	72.5	145.0	59.9	119.8
54"		42.0	84.0	64.4	128.9	53.2	106.4
60"		37.8	75.6	58.0	116.0	47.9	95.8
66"		34.4	68.7	52.7	105.5	43.5	87.1
72"	31.5	63.0	48.3	96.7	39.9	79.8	
19-1/8"	108"	105.4	150.0	150.0	150.0	133.6	150.0
26-1/2"		76.1	150.0	116.7	150.0	96.4	150.0
30"		67.2	134.4	103.1	150.0	85.2	150.0
37"		54.5	109.0	83.6	150.0	69.0	138.1
42"		48.0	96.0	73.7	147.3	60.8	121.7
48"		42.0	84.0	64.4	128.9	53.2	106.4
54"		37.3	74.7	57.3	114.6	47.3	94.6
60"		33.6	67.2	51.6	103.1	42.6	85.2
66"		30.5	61.1	46.9	93.7	38.7	77.4
72"	28.0	56.0	43.0	85.9	35.5	71.0	

DESIGN LOAD CAPACITY - PSF							
WINDOW DIMS.		ANCHORS TYPE					
WIDTH (W)	MULL SPAN	A2	A4	AA2	AA4	B2	B4
19-1/8"	120"	94.9	150.0	145.6	150.0	120.2	150.0
26-1/2"		68.5	136.9	105.1	150.0	86.8	150.0
30"		60.5	121.0	92.8	150.0	76.6	150.0
37"		49.0	98.1	75.2	150.0	62.1	124.3
42"		43.2	86.4	66.3	132.6	54.7	109.5
48"		37.8	75.6	58.0	116.0	47.9	95.8
54"		33.6	67.2	51.6	103.1	42.6	85.2
60"		30.2	60.5	46.4	92.8	38.3	76.6
66"		27.5	55.0	42.2	84.4	34.8	69.7
72"	25.2	50.4	38.7	77.3	31.9	63.9	
19-1/8"	132"	86.2	150.0	132.3	150.0	109.3	150.0
26-1/2"		62.2	124.5	95.5	150.0	78.9	150.0
30"		55.0	110.0	84.4	150.0	69.7	139.3
37"		44.6	89.2	68.4	136.8	56.5	113.0
42"		39.3	78.5	60.3	120.5	49.8	99.5
48"		34.4	68.7	52.7	105.5	43.5	87.1
54"		30.5	61.1	46.9	93.7	38.7	77.4
60"		27.5	55.0	42.2	84.4	34.8	69.7
66"		25.0	50.0	38.3	76.7	31.7	63.3
72"	22.9	45.8	35.2	70.3	29.0	58.1	
19-1/8"	144"	79.1	150.0	121.3	150.0	100.2	150.0
26-1/2"		57.1	114.1	87.5	150.0	72.3	144.6
30"		50.4	100.8	77.3	150.0	63.9	127.7
37"		40.9	81.7	62.7	125.4	51.8	103.6
42"		36.0	72.0	55.2	110.5	45.6	91.2
48"		31.5	63.0	48.3	96.7	39.9	79.8
54"		28.0	56.0	43.0	85.9	35.5	71.0
60"		25.2	50.4	38.7	77.3	31.9	63.9
66"		22.9	45.8	35.2	70.3	29.0	58.1
72"	21.0	42.0	32.2	64.4	26.6	53.2	



TYPICAL MULLION ARRANGEMENTS

$$WIDTH (W) = \frac{W1 + W2}{2}$$

NOTE:
 ANY ANCHOR CONDITION SHOWN HEREIN MAY COVER LOCATIONS AT HEAD, SILL OR JAMB ENDS.
 FOR ANCHORS DESCRIPTION SEE SHEETS 5 THRU 7.
 (INTERPOLATION BETWEEN WIDTHS OR SPANS ALLOWED)

ANCHORS

Engr: DR. HUMAYOUN FAROOQ
 STRUCTURES
 FLA. PE # 16557
 C.A.N. 3538

SEP 25 2008

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 Miami Trade Product Control
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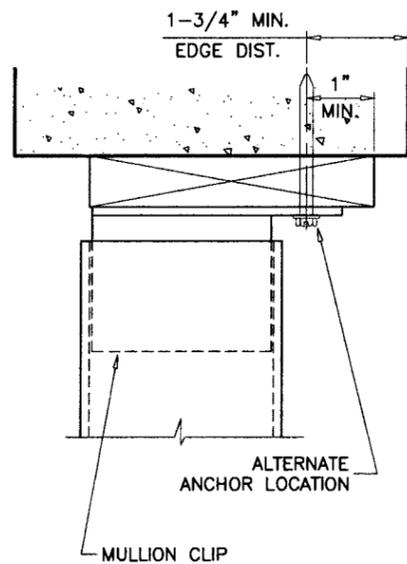
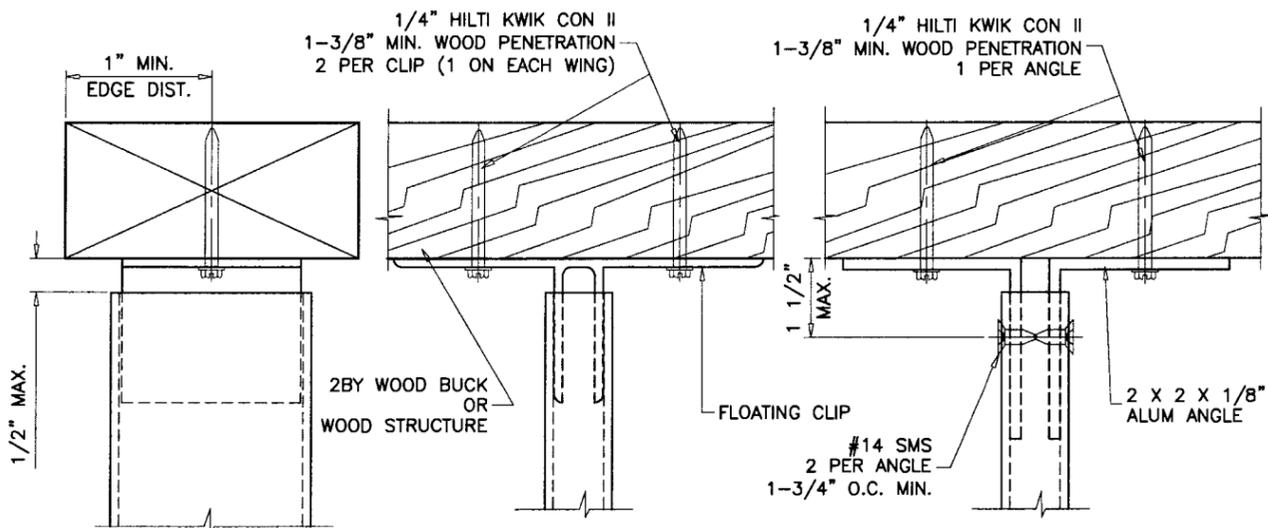
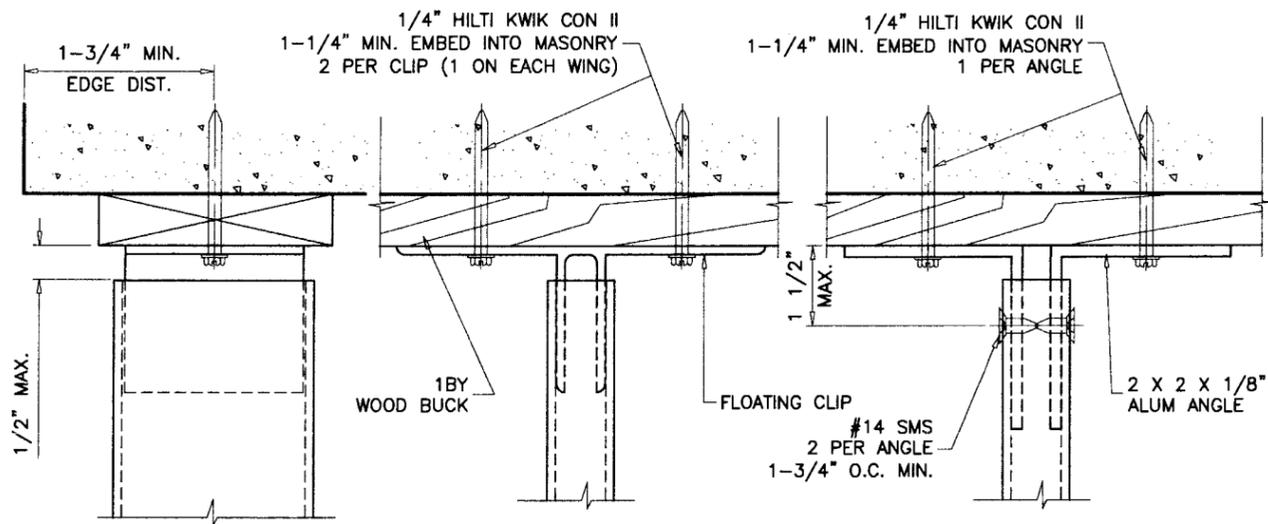
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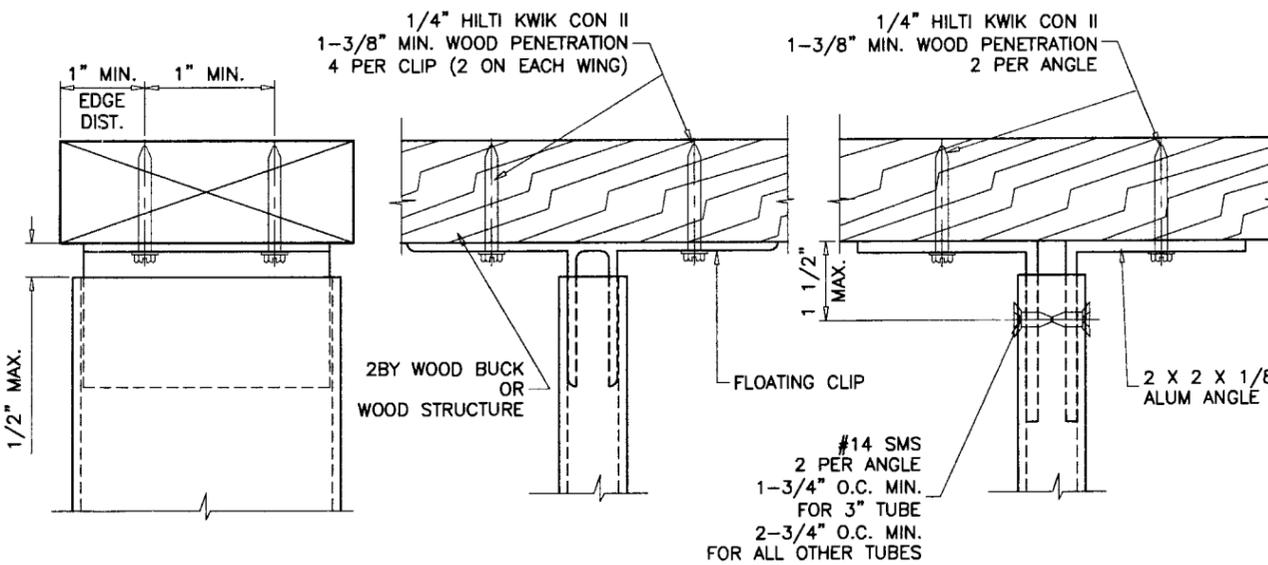
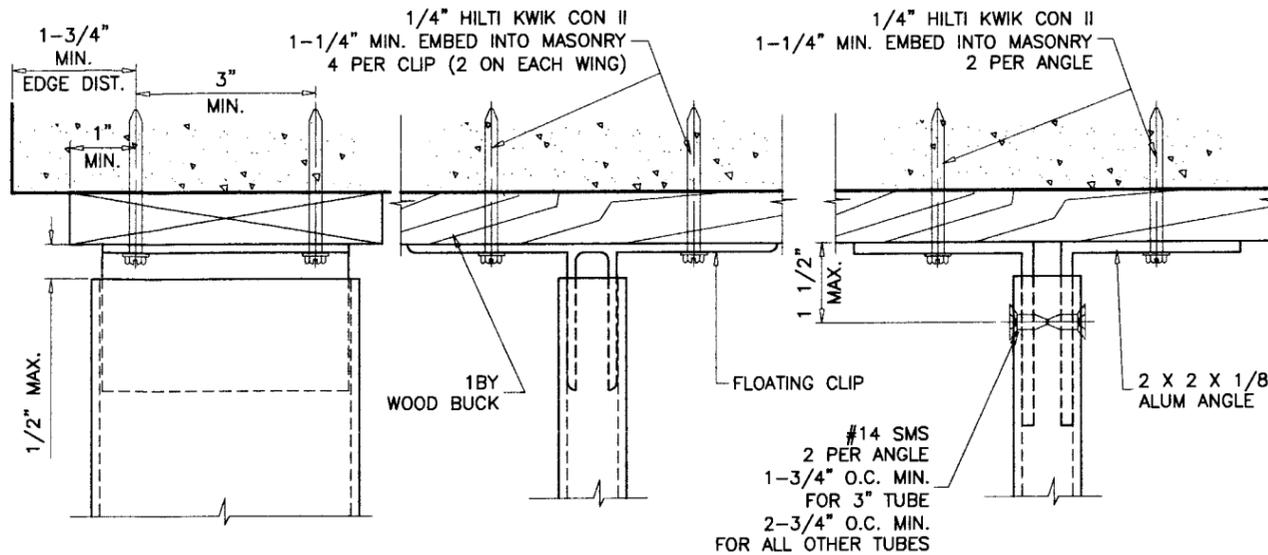
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C	09.22.08	UPDATED FOR 2007 FBC

revisions:
 date: 05-02-04
 scale:
 dr. by: HAMID
 chk. by:

drawing no.
M04-05
 sheet 4 of 7



ANCHORS TYPE 'A2'



ANCHORS TYPE 'A4'

ALL CLIPS TO FIT SNUG INTO TUBE MULLIONS.
TAPCONS MAY BE HEX OR FLAT HEAD.

Engr: DR. HUMAYUN FAROOQ
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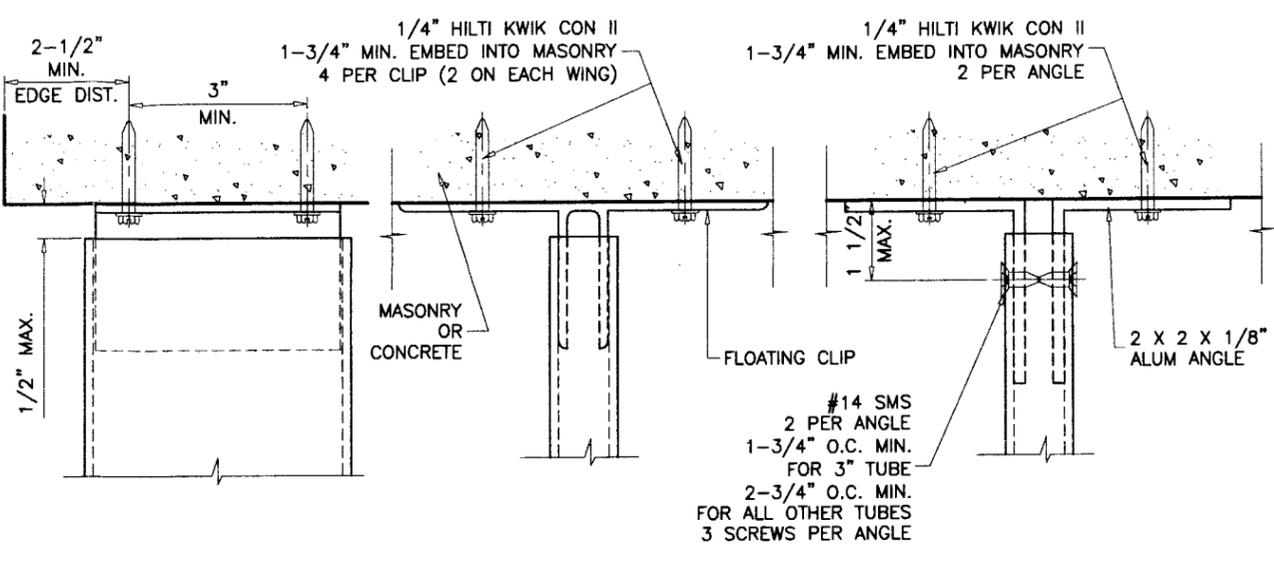
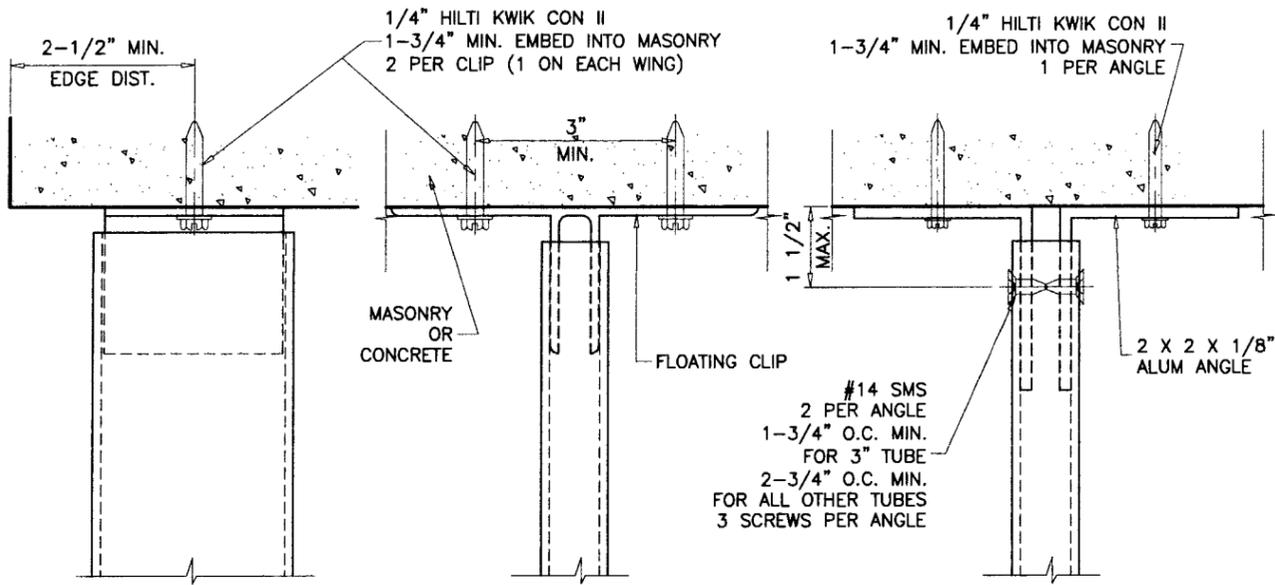
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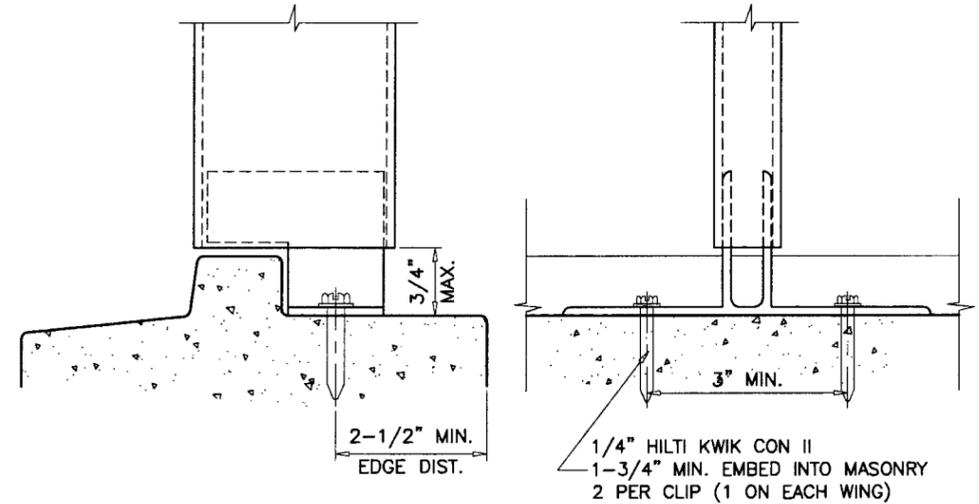
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date: 05-02-04
scale: 3/8" = 1"
dr. by: HAMID
chk. by:

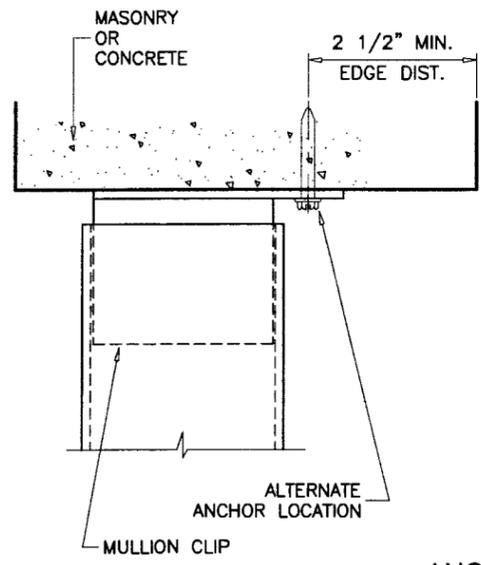
drawing no.
M04-05
sheet 5 of 7



ANCHORS TYPE 'AA4'



ANCHORS TYPE 'AA2'



ALL CLIPS TO FIT SNUG INTO TUBE MULLIONS.
TAPCONS MAY BE HEX OR FLAT HEAD.

CLIPS OR ANGLES CONNECTED DIRECTLY TO MASONRY TO BE PROTECTED WITH ALKALI-RESISTANT COATINGS, SUCH AS BITUMINOUS PAINT OR WATER-WHITE METHACRYLATE LACQUER.

Engr. DR. HUMAYOUN FAROOQ
STRUCTURES
FLA. PE # 16557
C.A.N. 3538

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Miami Dade Product Control
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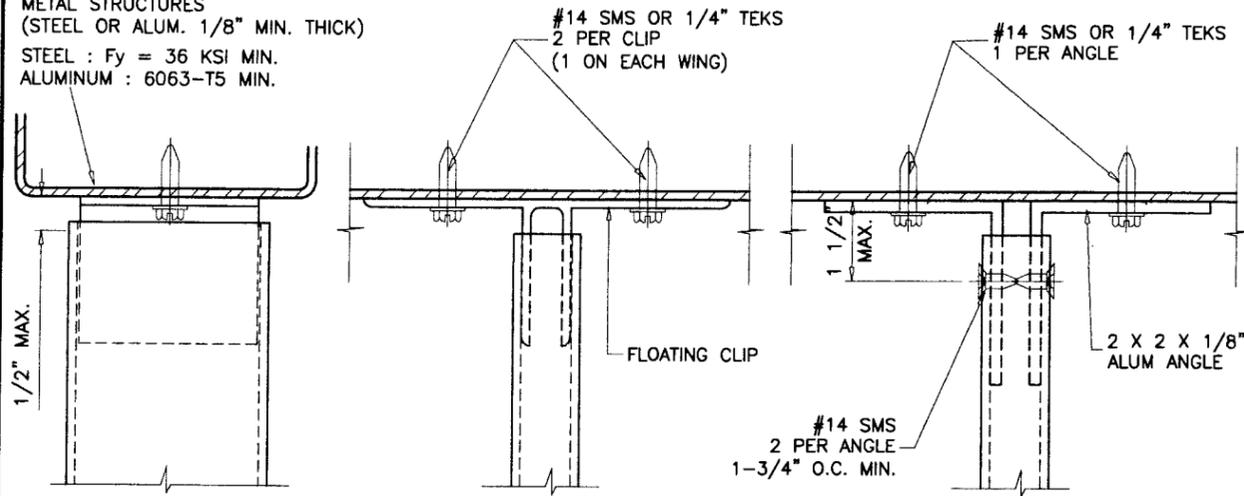
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ENGINEERS & PRODUCT DEVELOPMENT
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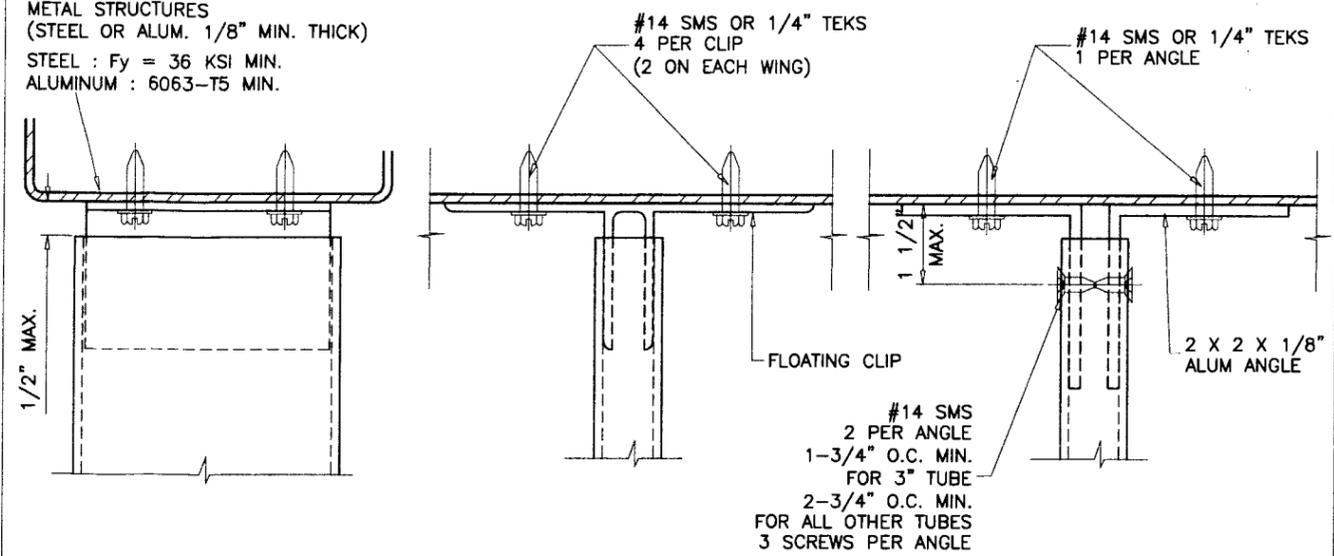
date: 05-02-04
scale: 3/8" = 1"
dr. by: HAMID
chk. by:
drawing no.
M04-05
sheet 6 of 7

METAL STRUCTURES
(STEEL OR ALUM. 1/8" MIN. THICK)
STEEL : Fy = 36 KSI MIN.
ALUMINUM : 6063-T5 MIN.

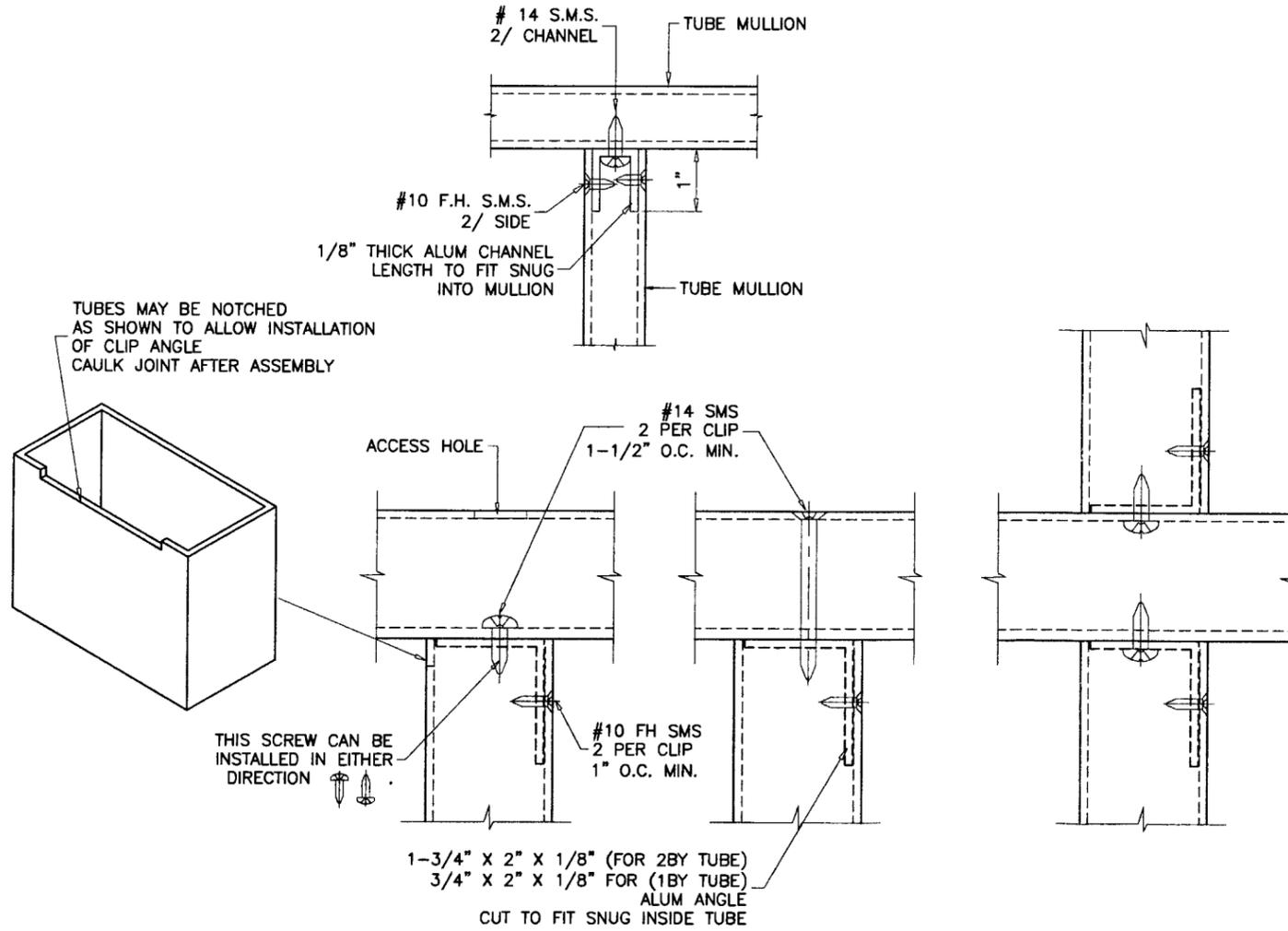


ANCHORS TYPE 'B2'

METAL STRUCTURES
(STEEL OR ALUM. 1/8" MIN. THICK)
STEEL : Fy = 36 KSI MIN.
ALUMINUM : 6063-T5 MIN.



ANCHORS TYPE 'B4'



ANCHOR DETAIL #1

METAL TO METAL CONNECTION
USE CHARTS FOR ANCHOR TYPE 'B4' TO VERIFY CAPACITY OF CONNECTION
SEE SHEET 4 OF 7 FOR ANCHOR CHARTS

Engr: DR. HUMAYOON FAROOQ
STRUCTURES
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sheet 7 of 7