MIAMI-DADE

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)

YKK AP America Inc.
5630 Gwaltney Drive
Atlanta, GA 30336

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 High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: Series "YES 45 FS" Aluminum Flush Glazed Storefront System

APPROVAL DOCUMENT: Drawing No. **W03-54**, titled Series "YES 45 FS" Aluminum Flush Glazed Storefront System, sheets 1 through 10 of 10, dated 07/18/03, with revision A dated 9/18/03, 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: None

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 NOA # 03-0801.03** 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.**

PRODUCT CONTROL ACCEPTED

YKK AP America Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Manufacturer's die drawings and sections
2. Drawing No. **W03-54**, titled "YES 45F-S Alum. Flush Glaze Storefront Sys.", Sheets 1 through 10 of 10, dated 07/18/03, with revision A dated 9/18/03, prepared by Al-Farooq Corporation, signed and sealed by Humayoun Farooq, 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
   along with installation diagram of an aluminum flush glazed storefront system 8' 0" high x 4'0" mullion spacing, prepared by National Certified Testing Laboratories, Test Report No. **NCTL-210-1872-1,2,3** (S), dated 09/24/96, signed and sealed by Barry D. Portnoy, P.E. ***Tests done under previous approval (96-1029.05)***
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) Forced Entry Test, per FBC 3603.2 (b) and TAS 202-94
   along with marked-up drawings and installation diagram of specimen #4 (elevation A) YES45 FS storefront with 35D doors, prepared by Hurricane Test Laboratory, Inc., Test Report No. **HTL-0231-0710-02**, dated 8/9/02, signed and sealed by Vinu J. Abraham, P.E.
3. 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) Forced Entry Test, per FBC 3603.2 (b) and TAS 202-94
   along with marked-up drawings and installation diagram of specimen #1 (elevation B) YES45 FS storefront with 35D doors, prepared by Hurricane Test Laboratory, Inc., Test Report No. **HTL-0231-0402-03**, dated 4/1/03, signed and sealed by Vinu J. Abraham, P.E.
4. 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) Forced Entry Test, per FBC 3603.2 (b) and TAS 202-94
   along with marked-up drawings and installation diagram of specimen #2 (elevation C) YES45 FS storefront with 35D doors, prepared by Hurricane Test Laboratory, Inc., Test Report No. **HTL-0231-0306-03**, dated 3/10-11/03, signed and sealed by Vinu J. Abraham, P.E.

Manuel Perez

Manuel Perez, P.E.
Product Control Examiner
NOA No 03-0801.04
Expiration Date: August 07, 2008
Approval Date: October 23, 2003

5. 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) Forced Entry Test, per FBC 3603.2 (b) and TAS 202-94
   along with marked-up drawings and installation diagram of specimen #2 (elevation C1) YES45 FS storefront with 35D doors, prepared by Hurricane Test Laboratory, Inc., Test Report No. **HTL-0231-0306-03**, dated 3/10-11/03, signed and sealed by Vinu J. Abraham, P.E.
6. 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) Forced Entry Test, per FBC 3603.2 (b) and TAS 202-94
   along with marked-up drawings and installation diagram of specimen #1 (elevation D) YES45 FS storefront with 20D doors, prepared by Hurricane Test Laboratory, Inc., Test Report No. **HTL-0231-0523-03**, dated 5/14/03, signed and sealed by Vinu J. Abraham, P.E.

C. CALCULATIONS

1. Anchor Calculations and Structural Analysis, prepared by Al-Farooq Corporation, dated November 12, 2001, signed and sealed by Humayoun Farooq, P.E. Complies with ASTM E1300-98.

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 23, 2003, signed and sealed by Humayoun Farooq, P.E.
2. Statement letter of no financial interest, dated January 23, 2003, signed and sealed by Humayoun Farooq, P.E.

G. OTHER

1. Notice of Acceptance No. **03-0801.03**, issued to YKK AP America Inc. for their Series "YES 45 FS" Aluminum Flush Glazed Storefront System, approved on 08/29/03 and expiring on 08/07/08.

Manuel Perez, P.E.
Product Control Examiner
NOA No 03-0801.04
Expiration Date: August 07, 2008
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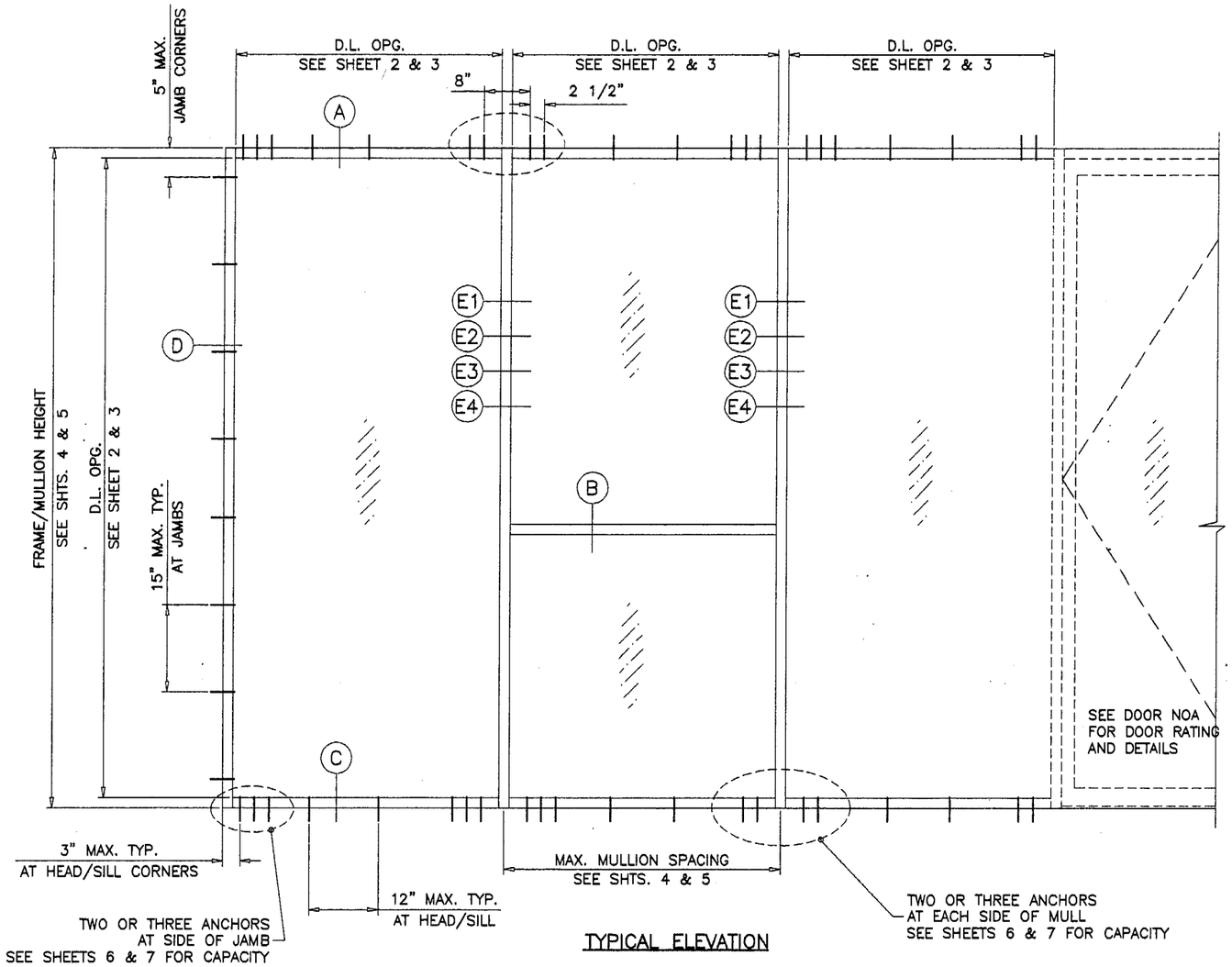


TYPICAL ELEVATION

ALUMINUM FLUSH GLAZED STOREFRONT SYSTEM SERIES YES 45F-S

THIS SYSTEM MAY BE USED IN CONJUNCTION WITH OUTSWING ENTRANCE DOORS MODEL 20D & 35D.

THIS SYSTEM IS NOT RATED FOR IMPACT. MIAMI-DADE COUNTY APPROVED IMPACT RESISTANT SHUTTERS ARE REQD.

CODE REQUIREMENTS FOR SAFEGUARDS MUST BE OBSERVED FOR ANY KIND OF GLASS BEING USED.

THIS PRODUCT IS DESIGNED TO COMPLY WITH THE HIGH VELOCITY HURRICANE ZONE OF THE 2001 FLORIDA BUILDING CODE.
ALSO FOR WIND LOADS AS PER ASCE 7-88. ASCE 7-93, ASCE 7-95 OR ASCE 7-98 AS REQUIRED BY PREVAILING BUILDING CODE.

WOOD BUCKS BY OTHERS, MUST BE ANCHORED PROPERLY TO TRANSFER LOADS TO THE STRUCTURE.

ANCHORS SHALL BE AS LISTED, SPACED AS SHOWN ON DETAILS. ANCHOR EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO.

ALL STEEL IN CONTACT WITH ALUMINUM TO BE PAINTED OR PLATED.

INSTRUCTIONS:

USE CHARTS AS FOLLOWS.

STEP 1 DETERMINE DESIGN WIND LOAD REQUIREMENT BASED ON WIND VELOCITY, BLDG. HEIGHT, WIND ZONE USING APPLICABLE ASCE 7 STANDARD.

STEP 2 SEE CHARTS ON SHEETS 2 & 3 FOR DESIGN LOAD CAPACITY OF DESIRED GLASS SIZE.

STEP 3 CHECK MULLION CAPACITY FOR A GIVEN SPACING AND HEIGHT USING CHARTS ON
SHEET 4 FOR MULLIONS WITHOUT INTERMEDIATE HORIZONTALS
SHEET 5 FOR MULLIONS WITH INTERMEDIATE HORIZONTALS
THE CAPACITY SHOULD EXCEED THE DESIGN LOAD.

STEP 4 USING CHART ON SHEETS 6 & 7 SELECT ANCHOR OPTION WITH DESIGN RATING MORE THAN DESIGN LOAD SPECIFIED IN STEP 1 ABOVE.

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

SEP 1 9 2003

PRODUCT REVISED
as complying with the Florida Buiding Code
Acceptance No 03-0801.04
Expiration Date AUG. 7, 2008
By Manuel Perez
Miami Dade Product Control Division

AL-FAROOQ CORPORATION
ENGINEERS, PLANNERS & PRODUCT DESIGN
1235 SW 87 AVE
MIAMI, FLORIDA 33174
TEL. (305) 264-8100 FAX. (305) 262-6978
STORE\W03-54YKK

YES 45F-S ALUM FLUSH GLAZE STOREFRONT SYS.

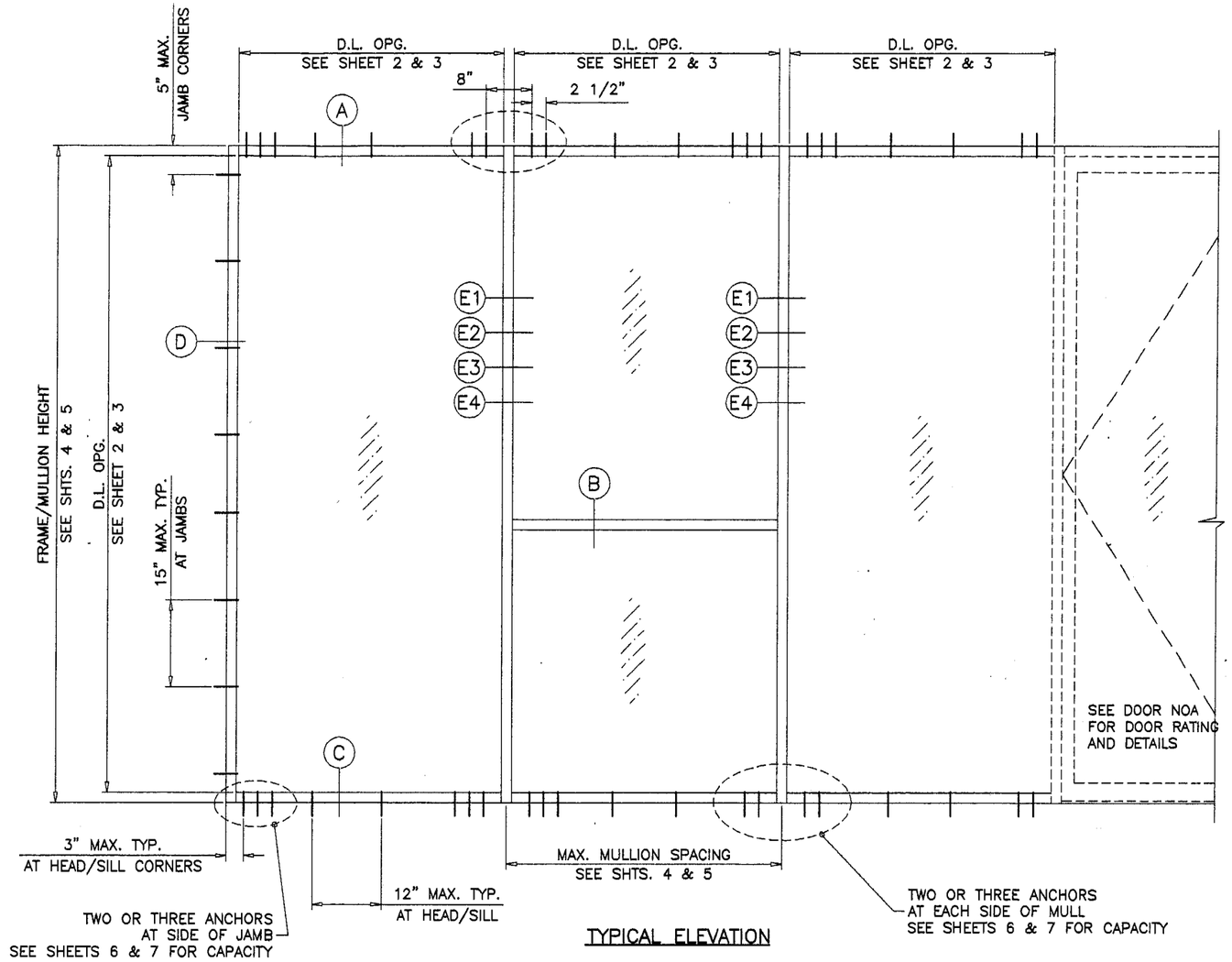
YKK AP AMERICA INC.
332 FIRETOWER ROAD
DUBLIN, GEORGIA 31021
TEL(478) 277-1955 FAX(478) 277-1978

revisions:

no	date	by	description
A	9.18.03		REV. PER BCCO COMMENTS

date: 07-18-03
scale: 1/2"=1'-0"
dr. by: HAMID
chk. by:

drawing no.
W03-54



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THE CAPACITY SHOULD EXCEED THE DESIGN LOAD.

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

SEP 1 9 2003

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as complying with the Florida Buiding Code
Acceptance No. 03-0801.04
Expiration Date AUG. 7, 2008
By Manuel Perez
Miami Dade Product Control Division

AL-FAROOQ CORPORATION
ENGINEERS, PLANNERS & PRODUCT DESIGN
1235 SW 87 AVE
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YES 45F-S ALUM FLUSH GLAZE STOREFRONT SYS.

YKK AP AMERICA INC.
332 FIRETOWER ROAD
DUBLIN, GEORGIA 31021
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revisions:

no	date	by	description
A	9.18.03		REV. PER BCCO COMMENTS

date: 07-18-03
scale: 1/2"=1'-0"
dr. by: HAMID
chk. by:

drawing no. W03-54

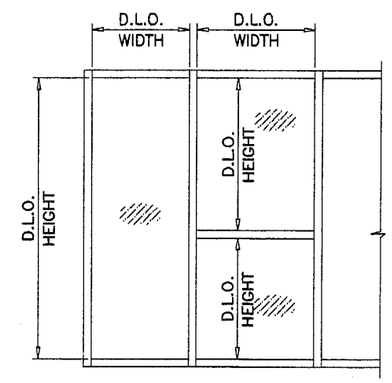
GLASS DESIGN LOAD CAPACITY-PSF			
NOMINAL DIMS		1/4" ANN. GLASS	
D.L.O. WIDTH	D.L.O. HEIGHT	EXT. (+)	INT. (−)
18"	30"	120.0	120.0
21"		120.0	120.0
24"		120.0	120.0
27"		114.5	114.5
30"		102.2	102.2
33"		94.8	94.8
36"		88.0	88.0
39"		81.6	81.6
42"		75.7	75.7
45"		70.2	70.2
48"		65.2	65.2
51"		60.7	60.7
18"	33"	120.0	120.0
21"		120.0	120.0
24"		117.7	117.7
27"		105.2	105.2
30"		94.8	94.8
33"		85.6	85.6
36"		80.3	80.3
39"		75.2	75.2
42"		70.3	70.3
45"		65.6	65.6
48"		61.2	61.2
18"	36"	120.0	120.0
21"		120.0	120.0
24"		107.9	107.9
27"		96.8	96.8
30"		88.0	88.0
33"		80.3	80.3
36"		73.2	73.2
39"		69.3	69.3
42"		65.4	65.4
45"		61.6	61.6
18"	39"	120.0	120.0
21"		114.8	114.8
24"		99.2	99.2
27"		89.2	89.2
30"		81.6	81.6
33"		75.2	75.2
36"		69.3	69.3
39"		63.7	63.7
42"		60.7	60.7
18"	42"	120.0	120.0
21"		107.0	107.0
24"		91.7	91.7
27"		82.3	82.3
30"		75.7	75.7
33"		70.3	70.3
36"		65.4	65.4
39"		60.7	60.7

GLASS DESIGN LOAD CAPACITY-PSF			
NOMINAL DIMS		1/4" ANN. GLASS	
D.L.O. WIDTH	D.L.O. HEIGHT	EXT. (+)	INT. (−)
18"	45"	120.0	120.0
21"		100.6	100.6
24"		85.2	85.2
27"		76.2	76.2
30"		70.2	70.2
33"		65.6	65.6
36"		61.6	61.6
18"	48"	120.0	120.0
21"		95.3	95.3
24"		79.7	79.7
27"		70.8	70.8
30"		65.2	65.2
33"		61.2	61.2
18"	51"	120.0	120.0
21"		91.1	91.1
24"		75.1	75.1
27"		66.1	66.1
30"		60.7	60.7
18"	54"	117.2	117.2
21"		87.6	87.6
24"		71.3	71.3
27"		62.0	62.0
30"		56.6	56.6
18"	57"	114.8	114.8
21"		84.9	84.9
24"		68.1	68.1
27"		58.6	58.6
18"	60"	112.7	112.7
21"		82.7	82.7
24"		65.5	65.5
27"		55.7	55.7
18"	63"	110.7	110.7
21"		81.0	81.0
24"		63.4	63.4
18"	66"	108.8	108.8
21"		79.6	79.6
24"		61.7	61.7
18"	69"	106.8	106.8
21"		78.5	78.5
18"	72"	104.7	104.7
21"		77.4	77.4
18"	75"	102.5	102.5
21"		76.4	76.4
18"	78"	100.4	100.4
21"		75.4	75.4
18"	81"	98.6	98.6
18"	84"	97.4	97.4

GLASS DESIGN LOAD CAPACITY-PSF			
NOMINAL DIMS		1/4" HEAT STR. GLASS	
D.L.O. WIDTH	D.L.O. HEIGHT	EXT. (+)	INT. (−)
30"	30"	120.0	120.0
33"		120.0	120.0
36"		120.0	120.0
39"		120.0	120.0
42"		120.0	120.0
45"		120.0	120.0
48"		120.0	120.0
51"		120.0	120.0
54"		113.2	113.2
57"		106.2	106.2
60"		100.0	100.0
63"		94.8	94.8
66"		90.2	90.2
69"		86.2	86.2
72"		83.0	83.0
30"	36"	120.0	120.0
33"		120.0	120.0
36"		120.0	120.0
39"		120.0	120.0
42"		120.0	120.0
45"		120.0	120.0
48"		115.6	115.6
51"		108.4	108.4
54"		101.6	101.6
57"		95.2	95.2
60"		89.2	89.2
63"		83.8	83.8
66"		79.0	79.0
69"		74.6	74.6
72"		70.8	70.8
30"	42"	120.0	120.0
33"		120.0	120.0
36"		120.0	120.0
39"		120.0	120.0
42"		112.6	112.6
45"		108.0	108.0
48"		103.0	103.0
51"		98.2	98.2
54"		93.2	93.2
57"		88.2	88.2
60"		83.4	83.4
63"		78.8	78.8
66"		74.6	74.6
69"		70.4	70.4
72"		66.6	66.6

GLASS DESIGN LOAD CAPACITY-PSF			
NOMINAL DIMS		1/4" HEAT STR. GLASS	
D.L.O. WIDTH	D.L.O. HEIGHT	EXT. (+)	INT. (−)
30"	48"	120.0	120.0
33"		120.0	120.0
36"		115.6	115.6
39"		109.4	109.4
42"		103.0	103.0
45"		96.8	96.8
48"		90.8	90.8
51"		87.8	87.8
54"		84.6	84.6
57"		81.2	81.2
60"		77.8	77.8
63"		74.2	74.2
66"		70.8	70.8
69"		67.4	67.4
72"		64.2	64.2
30"	54"	113.2	113.2
33"		106.6	106.6
36"		101.6	101.6
39"		97.4	97.4
42"		93.2	93.2
45"		89.0	89.0
48"		84.6	84.6
51"		80.2	80.2
54"		75.6	75.6
57"		73.6	73.6
60"		71.2	71.2
63"		68.8	68.8
66"		66.4	66.4
69"		63.8	63.8
30"	60"	100.0	100.0
33"		93.4	93.4
36"		89.2	89.2
39"		86.2	86.2
42"		83.4	83.4
45"		80.8	80.8
48"		77.8	77.8
51"		74.6	74.6
54"		71.2	71.2
57"		68.0	68.0
60"		64.6	64.6

GLASS DESIGN LOAD CAPACITY-PSF			
NOMINAL DIMS		1/4" HEAT STR. GLASS	
D.L.O. WIDTH	D.L.O. HEIGHT	EXT. (+)	INT. (−)
30"	66"	90.2	90.2
33"		83.2	83.2
36"		79.0	79.0
39"		76.4	76.4
42"		74.6	74.6
45"		72.8	72.8
48"		70.8	70.8
51"		68.6	68.6
54"		66.4	66.4
30"	72"	83.0	83.0
33"		75.2	75.2
36"		70.8	70.8
39"		68.2	68.2
42"		66.6	66.6
45"		65.4	65.4
48"		64.2	64.2
51"		62.8	62.8
30"	78"	78.0	78.0
33"		69.4	69.4
36"		64.2	64.2
39"		61.4	61.4
42"		59.8	59.8
45"		58.8	58.8
30"	84"	74.6	74.6
33"		65.0	65.0
36"		59.4	59.4
39"		56.0	56.0
42"		54.2	54.2



Engr: DR. HUMAYOUN FAROOQ
STRUCTURES
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By Manuel Serra
Miami Dade Product Control Division

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STORE\W03-54YKK

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YKK AP AMERICA INC.
332 FIRETOWER ROAD
DUBLIN, GEORGIA 31021
TEL.(478) 277-1955 FAX(478) 277-1978

revisions:

no	date	by	description
A	9.18.03		NO CHANGE THIS SHEET

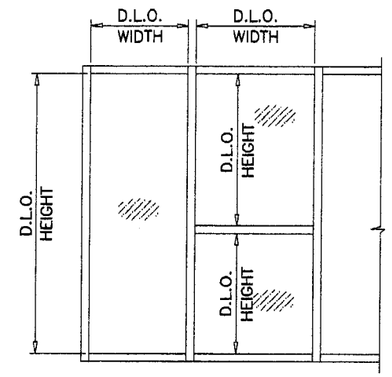
date: 07-18-03
scale: 1/2"=1'-0"
dr. by: HAMID
chk. by:

drawing no.
W03-54

GLASS DESIGN LOAD CAPACITY-PSF			
NOMINAL DIMS		1/4" TEMP. GLASS	
D.L.O. WIDTH	D.L.O. HEIGHT	EXT. (+)	INT. (−)
30"	60"	120.0	120.0
33"		120.0	120.0
36"		120.0	120.0
39"		120.0	120.0
42"		120.0	120.0
45"		120.0	120.0
48"		120.0	120.0
51"		120.0	120.0
54"		120.0	120.0
57"		120.0	120.0
60"		120.0	120.0
63"		120.0	120.0
66"		120.0	120.0
69"		118.8	118.8
72"		115.2	115.2
30"	66"	120.0	120.0
33"		120.0	120.0
36"		120.0	120.0
39"		120.0	120.0
42"		120.0	120.0
45"		120.0	120.0
48"		120.0	120.0
51"		120.0	120.0
54"		120.0	120.0
57"		120.0	120.0
60"		120.0	120.0
63"		117.2	117.2
66"		112.0	112.0
69"		109.6	109.6
72"		106.8	106.8
30"	72"	120.0	120.0
33"		120.0	120.0
36"		120.0	120.0
39"		120.0	120.0
42"		120.0	120.0
45"		108.0	108.0
48"		120.0	120.0
51"		120.0	120.0
54"		120.0	120.0
57"		118.8	118.8
60"		115.2	115.2
63"		110.8	110.8
66"		106.8	106.8
69"		102.8	102.8
72"		98.4	98.4

GLASS DESIGN LOAD CAPACITY-PSF			
NOMINAL DIMS		1/4" TEMP. GLASS	
D.L.O. WIDTH	D.L.O. HEIGHT	EXT. (+)	INT. (−)
30"	78"	120.0	120.0
33"		120.0	120.0
36"		120.0	120.0
39"		120.0	120.0
42"		119.6	119.6
45"		117.6	117.6
48"		116.0	116.0
51"		114.4	114.4
54"		112.4	112.4
57"		110.0	110.0
60"		107.2	107.2
63"		104.0	104.0
66"		100.8	100.8
69"		97.6	97.6
30"	84"	120.0	120.0
33"		120.0	120.0
36"		118.8	118.8
39"		112.0	112.0
42"		108.4	108.4
45"		106.4	106.4
48"		105.2	105.2
51"		104.4	104.4
54"		103.2	103.2
57"		101.6	101.6
60"		99.6	99.6
63"		97.2	97.2
30"	90"	120.0	120.0
33"		120.0	120.0
36"		111.2	111.2
39"		103.6	103.6
42"		99.2	99.2
45"		97.2	97.2
48"		96.0	96.0
51"		95.2	95.2
54"		94.4	94.4
57"		93.6	93.6
60"		92.0	92.0
30"	96"	120.0	120.0
33"		119.6	119.6
36"		106.0	106.0
39"		97.2	97.2
42"		92.0	92.0
45"		89.2	89.2
48"		88.0	88.0
51"		87.2	87.2
54"		86.8	86.8
57"		86.0	86.0

GLASS DESIGN LOAD CAPACITY-PSF			
NOMINAL DIMS		1/4" TEMP. GLASS	
D.L.O. WIDTH	D.L.O. HEIGHT	EXT. (+)	INT. (−)
30"	102"	120.0	120.0
33"		116.8	116.8
36"		102.0	102.0
39"		92.4	92.4
42"		86.4	86.4
45"		82.8	82.8
48"		81.2	81.2
51"		80.4	80.4
30"	108"	120.0	120.0
33"		114.4	114.4
36"		98.8	98.8
39"		88.4	88.4
42"		81.6	81.6
45"		77.6	77.6
48"		75.6	75.6
30"	114"	120.0	120.0
33"		112.8	112.8
36"		96.8	96.8
39"		85.6	85.6
42"		78.4	78.4
45"		73.6	73.6
48"		70.8	70.8
30"	120"	120.0	120.0
33"		110.8	110.8
36"		95.2	95.2
39"		83.6	83.6
42"		75.6	75.6
45"		70.4	70.4
30"	126"	120.0	120.0
33"		109.2	109.2
36"		93.6	93.6
39"		82.0	82.0
42"		73.6	73.6
30"	132"	120.0	120.0
33"		107.2	107.2
36"		92.0	92.0
39"		80.4	80.4
30"	138"	120.0	120.0
33"		105.2	105.2
36"		90.4	90.4
39"		78.8	78.8



PRODUCT REVISED
as complying with the Florida Buiding Code
Acceptance No. 03-0801.04
Expiration Date AUG. 7, 2008
By Manuel Cruz
Miami Dade Product Control Division

SEP 1 9 2003

AL-FAROOQ CORPORATION
ENGINEERS, PLANNERS & PRODUCT DESIGN
1235 SW 87 AVE
MIAMI, FLORIDA 33174
TEL. (305) 264-8100 FAX. (305) 262-6978
STORE\W03-54YKK

YES 45F-S ALUM FLUSH GLAZE STOREFRONT SYS.

YKK AP AMERICA INC.
332 FIRETOWER ROAD
DUBLIN, GEORGIA 31021
TEL.(478) 277-1955 FAX(478) 277-1978

revisions:

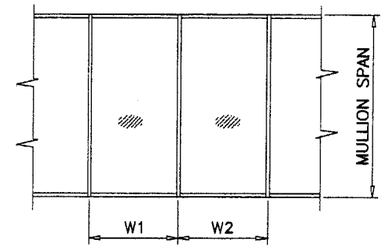
no	date	by	description
A	9.18.03		NO CHANGE THIS SHEET

date: 07-18-03
scale: 1/2"=1'-0"
dr. by: HAMID
chk. by:

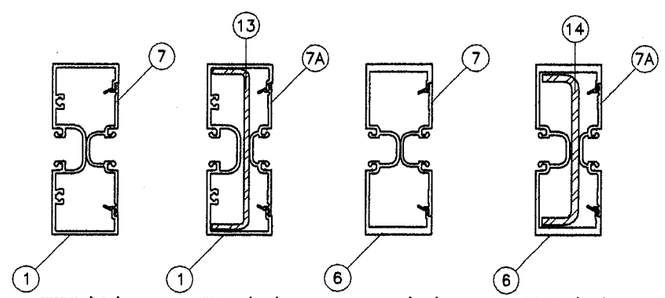
drawing no.
W03-54

MULLION DESIGN LOAD CAPACITY - PSF					
NOMINAL DIMS.		TYPE 'M1'	TYPE 'M2'	TYPE 'M3'	TYPE 'M4'
WIDTH (W)	FRAME HEIGHT	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)
24"	72"	120.0	120.0	120.0	120.0
30"		102.0	120.0	120.0	120.0
36"		87.3	120.0	120.0	120.0
42"		77.4	120.0	120.0	120.0
48"		70.5	120.0	120.0	120.0
54"		X	120.0	120.0	120.0
60"		X	120.0	117.0	120.0
66"		X	120.0	X	120.0
72"		X	120.0	X	120.0
78"		X	120.0	X	120.0
24"	78"	105.8	120.0	120.0	120.0
30"		86.2	120.0	120.0	120.0
36"		73.4	120.0	120.0	120.0
42"		64.7	120.0	120.0	120.0
48"		X	120.0	109.3	120.0
54"		X	113.2	101.1	120.0
60"		X	106.8	95.3	120.0
66"		X	102.4	X	120.0
72"		X	99.9	X	120.0
24"	84"	90.8	120.0	120.0	120.0
30"		73.8	120.0	120.0	120.0
36"		62.7	120.0	117.0	120.0
42"		55.0	115.0	102.7	120.0
48"		X	103.5	92.4	120.0
54"		X	95.1	84.9	120.0
60"		X	89.0	X	120.0
66"		X	84.6	X	120.0
24"	90"	78.9	120.0	120.0	120.0
30"		63.9	120.0	119.4	120.0
36"		54.2	113.2	101.1	120.0
42"		X	99.0	88.4	120.0
48"		X	88.8	79.3	120.0
54"		X	81.2	X	120.0
60"		X	75.5	X	120.0
24"	96"	69.1	120.0	120.0	120.0
30"		55.9	117.0	104.5	120.0
36"		47.3	98.9	88.3	120.0
42"		X	86.2	77.0	120.0
48"		X	77.0	68.8	120.0
54"		X	70.2	X	118.5
60"		X	65.0	X	109.7
24"	102"	59.9	120.0	111.5	120.0
30"		48.5	103.2	90.3	120.0
36"		X	87.1	76.4	120.0
42"		X	75.8	66.7	120.0
48"		X	67.5	X	114.1
54"		X	61.3	X	103.6
24"	108"	50.4	113.7	93.7	120.0
30"		40.7	91.8	75.8	120.0
36"		X	77.3	64.0	120.0
42"		X	67.2	55.8	110.3
48"		X	59.7	X	98.4
54"		X	54.1	X	X

MULLION DESIGN LOAD CAPACITY - PSF					
NOMINAL DIMS.		TYPE 'M1'	TYPE 'M2'	TYPE 'M3'	TYPE 'M4'
WIDTH (W)	FRAME HEIGHT	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)
24"	114"	42.7	100.6	79.5	120.0
30"		34.5	81.2	64.2	120.0
36"		X	68.5	54.2	107.1
42"		X	59.6	X	93.2
48"		X	53.1	X	83.0
24"	120"	36.6	86.1	68.0	120.0
30"		29.5	69.5	54.9	108.6
36"		X	58.5	46.3	91.5
42"		X	50.8	X	79.5
48"		X	45.2	X	70.6
24"	126"	X	74.3	X	116.1
30"		X	59.9	X	93.6
36"		X	50.4	X	78.8
42"		X	43.7	X	68.3
24"	132"	X	64.5	X	100.8
30"		X	52.0	X	81.2
36"		X	43.7	X	68.3
42"		X	37.9	X	59.2
24"	138"	X	56.4	X	88.1
30"		X	45.4	X	71.0
36"		X	38.1	X	59.6
42"		X	33.0	X	X
24"	144"	X	49.6	X	77.5
30"		X	39.9	X	62.4
36"		X	33.5	X	52.4



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



TYPE 'M1' TYPE 'M2' TYPE 'M3' TYPE 'M4'

MULLION LOAD CHARTS FOR MULLS
WITHOUT INTERMEDIATE HORIZONTALS

Engr: DR. HUMAYOUN FAROOQ
STRUCTURES
FLA. PE # 18557
C.A.N. 3538

SEP 1 9 2003

PRODUCT REVISED
as complying with the Florida Building Code
Acceptance No 03-0801.04
Expiration Date AUG. 7, 2008
By Manuel Perez
Miami-Dade Product Control Division

AL-FAROOQ CORPORATION
ENGINEERS, PLANNERS & PRODUCT DESIGN
1235 SW 87 AVE
MIAMI, FLORIDA 33174
TEL. (305) 264-8100 FAX. (305) 262-6978
STORE\W03-54YKK

YES 45F-S ALUM FLUSH GLAZE STOREFRONT SYS.

YKK AP AMERICA INC.
332 FIRETOWER ROAD
DUBLIN, GEORGIA 31021
TEL(478) 277-1955 FAX(478) 277-1978

revisions:

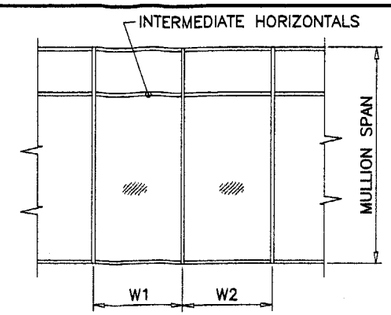
no	date	by	description
A	9.18.03		NO CHANGE THIS SHEET

date: 07-18-03
scale: 1/2"=1'-0"
dr. by: HAMID
chk. by:

drawing no.
W03-54

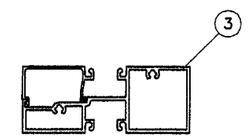
MULLION DESIGN LOAD CAPACITY - PSF					
NOMINAL DIMS.		TYPE 'M1'	TYPE 'M2'	TYPE 'M3'	TYPE 'M4'
WIDTH (W)	FRAME HEIGHT	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)
24"	72"	120.0	120.0	120.0	120.0
30"		96.3	120.0	120.0	120.0
36"		80.2	120.0	120.0	120.0
42"		68.8	120.0	120.0	120.0
48"		60.2	120.0	112.4	120.0
54"		X	111.8	99.9	120.0
60"		X	100.6	89.9	120.0
66"		X	91.5	X	120.0
72"		X	83.9	X	120.0
78"		X	77.4	X	120.0
24"	78"	102.5	120.0	120.0	120.0
30"		82.0	120.0	120.0	120.0
36"		68.4	120.0	120.0	120.0
42"		58.6	120.0	109.4	120.0
48"		X	107.2	95.7	120.0
54"		X	95.3	85.1	120.0
60"		X	85.8	X	120.0
66"		X	78.0	X	120.0
72"		X	71.5	X	120.0
24"	84"	88.4	120.0	120.0	120.0
30"		70.7	120.0	120.0	120.0
36"		58.9	120.0	110.1	120.0
42"		50.5	105.6	94.3	120.0
48"		X	92.4	82.6	120.0
54"		X	82.2	73.4	120.0
60"		X	73.9	X	120.0
66"		X	67.2	X	113.5
24"	90"	77.0	120.0	120.0	120.0
30"		61.6	120.0	115.1	120.0
36"		51.3	107.4	95.9	120.0
42"		X	92.0	82.2	120.0
48"		X	80.5	71.9	120.0
54"		X	71.6	X	120.0
60"		X	64.4	X	108.8
24"	96"	67.7	120.0	120.0	120.0
30"		54.2	113.2	101.1	120.0
36"		45.1	94.4	84.3	120.0
42"		X	80.9	72.2	120.0
48"		X	70.8	63.2	119.5
54"		X	62.9	X	106.2
60"		X	56.6	X	X
24"	102"	58.7	120.0	109.8	120.0
30"		47.0	100.3	87.8	120.0
36"		X	83.6	73.2	120.0
42"		X	71.6	62.7	120.0
48"		X	62.7	X	105.9
54"		X	55.7	X	94.1
24"	108"	49.5	111.8	X	120.0
30"		39.6	89.5	X	120.0
36"		X	74.6	X	120.0
42"		X	63.9	X	104.0
48"		X	55.9	X	91.0
54"		X	49.7	X	X

MULLION DESIGN LOAD CAPACITY - PSF					
NOMINAL DIMS.		TYPE 'M1'	TYPE 'M2'	TYPE 'M3'	TYPE 'M4'
WIDTH (W)	FRAME HEIGHT	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)
24"	114"	42.1	99.0	X	120.0
30"		33.7	79.2	X	120.0
36"		X	66.0	X	103.2
42"		X	56.6	X	88.4
48"		X	49.5	X	77.4
24"	120"	36.1	84.9	X	120.0
30"		28.9	67.9	X	106.1
36"		X	56.6	X	88.4
42"		X	48.5	X	75.8
48"		X	42.4	X	X
24"	126"	X	73.3	X	114.6
30"		X	58.7	X	91.7
36"		X	48.9	X	76.4
42"		X	41.9	X	65.5
24"	132"	X	63.8	X	99.7
30"		X	51.0	X	79.7
36"		X	42.5	X	66.4
42"		X	36.4	X	57.0
24"	138"	X	55.8	X	87.2
30"		X	44.6	X	69.8
36"		X	37.2	X	58.2
42"		X	31.9	X	X
24"	144"	X	49.1	X	76.8
30"		X	39.3	X	61.4
36"		X	32.7	X	51.2

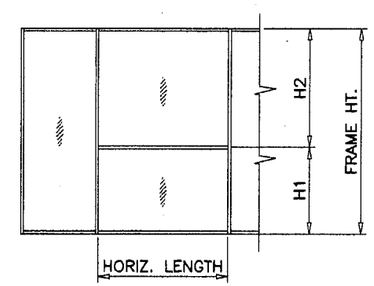


$$\text{WIDTH (W)} = \frac{W1 + W2}{2}$$

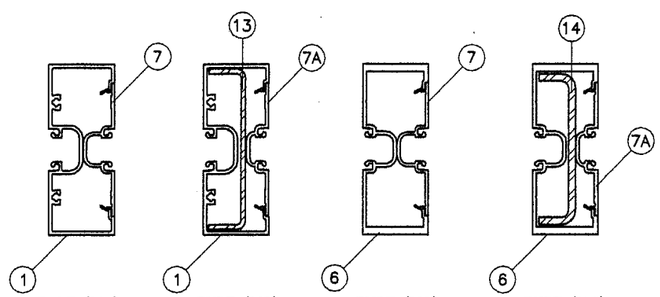
HORIZONTAL DESIGN LOAD CAPACITY - PSF		
NOMINAL DIMS.		HORIZONTAL
HEIGHT (H)	HORIZ. LENGTH	EXT. (+) INT. (-)
30"	54"	120.0
36"		120.0
42"		120.0
48"		120.0
54"		120.0
30"	60"	120.0
36"		120.0
42"		117.6
48"		109.6
30"	66"	120.0
36"		105.3
42"		94.0
30"	72"	101.5
36"		86.9
30"	78"	85.8
36"		73.1



HORIZONTAL



$$\text{HEIGHT (H)} = \frac{H1 + H2}{2}$$



TYPE 'M1' TYPE 'M2' TYPE 'M3' TYPE 'M4'

MULLION LOAD CHARTS FOR MULLS WITH INTERMEDIATE HORIZONTALS

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

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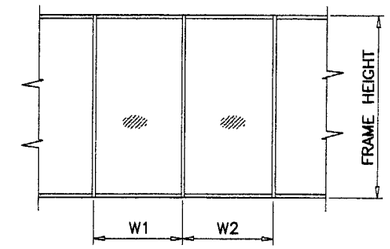
revisions:			
no	date	by	description
A	9.18.03		NO CHANGE THIS SHEET

date: 07-18-03
scale: 1/2"=1'-0"
dr. by: HAMID
chk. by:

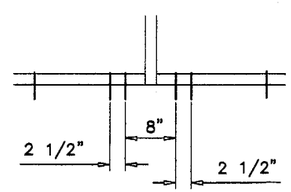
drawing no. W03-54

ANCHOR DESIGN LOAD CAPACITY – PSF							
		2 ANCHORS @ EACH SIDE OF MULL			3 ANCHORS @ EACH SIDE OF MULL		
NOMINAL DIMS.		TYPE 'A2'	TYPE 'B2'	TYPE 'C2'&'D2'	TYPE 'A3'	TYPE 'B3'	TYPE 'C3'&'D3'
WIDTH (W)	FRAME HEIGHT	EXT. (+) INT. (–)	EXT. (+) INT. (–)	EXT. (+) INT. (–)	EXT. (+) INT. (–)	EXT. (+) INT. (–)	EXT. (+) INT. (–)
24"	72"	120.0	120.0	120.0	120.0	120.0	120.0
30"		120.0	120.0	120.0	120.0	120.0	120.0
36"		120.0	120.0	120.0	120.0	120.0	120.0
42"		120.0	120.0	120.0	120.0	120.0	120.0
48"		117.0	120.0	120.0	120.0	120.0	120.0
54"		110.9	120.0	120.0	120.0	120.0	120.0
60"		107.0	120.0	120.0	120.0	120.0	120.0
66"		104.7	120.0	120.0	120.0	120.0	120.0
72"		104.0	120.0	120.0	120.0	120.0	120.0
78"		104.0	120.0	120.0	120.0	120.0	120.0
24"	78"	120.0	120.0	120.0	120.0	120.0	120.0
30"		120.0	120.0	120.0	120.0	120.0	120.0
36"		120.0	120.0	120.0	120.0	120.0	120.0
42"		112.6	120.0	120.0	120.0	120.0	120.0
48"		104.0	120.0	120.0	120.0	120.0	120.0
54"		97.9	114.2	120.0	120.0	120.0	120.0
60"		93.6	109.2	115.6	120.0	120.0	120.0
66"		90.8	105.9	112.1	120.0	120.0	120.0
72"		89.1	104.0	110.1	120.0	120.0	120.0
24"	84"	120.0	120.0	120.0	120.0	120.0	120.0
30"		120.0	120.0	120.0	120.0	120.0	120.0
36"		113.5	120.0	120.0	120.0	120.0	120.0
42"		101.9	118.9	120.0	120.0	120.0	120.0
48"		93.6	109.2	115.6	120.0	120.0	120.0
54"		87.6	102.2	108.2	120.0	120.0	120.0
60"		83.2	97.1	102.8	120.0	120.0	120.0
66"		80.1	93.4	98.9	120.0	120.0	120.0
24"	90"	120.0	120.0	120.0	120.0	120.0	120.0
30"		119.8	120.0	120.0	120.0	120.0	120.0
36"		104.0	120.0	120.0	120.0	120.0	120.0
42"		93.0	108.5	114.9	120.0	120.0	120.0
48"		85.1	99.3	105.1	120.0	120.0	120.0
54"		79.2	92.4	97.9	118.9	120.0	120.0
60"		74.9	87.4	92.5	112.3	120.0	120.0
24"	96"	120.0	120.0	120.0	120.0	120.0	120.0
30"		110.9	120.0	120.0	120.0	120.0	120.0
36"		96.0	112.0	118.6	120.0	120.0	120.0
42"		85.6	99.8	105.7	120.0	120.0	120.0
48"		78.0	91.0	96.3	117.0	120.0	120.0
54"		72.3	84.4	89.4	108.5	120.0	120.0
60"		68.1	79.4	84.1	102.1	119.1	120.0
24"	102"	120.0	120.0	120.0	120.0	120.0	120.0
30"		103.3	120.0	120.0	120.0	120.0	120.0
36"		89.1	104.0	110.1	120.0	120.0	120.0
42"		79.2	92.4	97.9	118.9	120.0	120.0
48"		72.0	84.0	88.9	108.0	120.0	120.0
54"		66.6	77.7	82.2	99.8	116.5	120.0

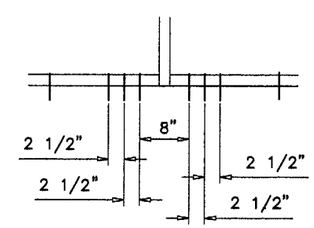
ANCHOR DESIGN LOAD CAPACITY – PSF							
		2 ANCHORS @ EACH SIDE OF MULL			3 ANCHORS @ EACH SIDE OF MULL		
NOMINAL DIMS.		TYPE 'A2'	TYPE 'B2'	TYPE 'C2'&'D2'	TYPE 'A3'	TYPE 'B3'	TYPE 'C3'&'D3'
WIDTH (W)	FRAME HEIGHT	EXT. (+) INT. (–)	EXT. (+) INT. (–)	EXT. (+) INT. (–)	EXT. (+) INT. (–)	EXT. (+) INT. (–)	EXT. (+) INT. (–)
24"	108"	117.0	120.0	120.0	120.0	120.0	120.0
30"		96.6	112.7	119.3	120.0	120.0	120.0
36"		83.2	97.1	102.8	120.0	120.0	120.0
42"		73.8	86.1	91.1	110.7	120.0	120.0
48"		66.9	78.0	82.6	100.3	117.0	120.0
54"		61.6	71.9	76.1	92.4	107.9	114.2
24"	114"	110.1	120.0	120.0	120.0	120.0	120.0
30"		90.8	105.9	112.1	120.0	120.0	120.0
36"		78.0	91.0	96.3	117.0	120.0	120.0
42"		69.0	80.5	85.2	103.5	120.0	120.0
48"		62.4	72.8	77.1	93.6	109.2	115.6
24"	120"	104.0	120.0	120.0	120.0	120.0	120.0
30"		85.6	99.8	105.7	120.0	120.0	120.0
36"		73.4	85.6	90.7	110.1	120.0	120.0
42"		64.8	75.6	80.1	97.2	113.5	120.0
48"		58.5	68.3	72.3	87.8	102.4	108.4
24"	126"	98.5	114.9	120.0	120.0	120.0	120.0
30"		81.0	94.4	100.0	120.0	120.0	120.0
36"		69.3	80.9	85.6	104.0	120.0	120.0
42"		61.1	71.3	75.5	91.7	107.0	113.2
24"	132"	93.6	109.2	115.6	120.0	120.0	120.0
30"		76.8	89.6	94.9	115.2	120.0	120.0
36"		65.7	76.6	81.1	98.5	114.9	120.0
42"		57.8	67.5	71.4	86.7	101.2	107.1
24"	138"	89.1	104.0	110.1	120.0	120.0	120.0
30"		73.1	85.2	90.2	109.6	120.0	120.0
36"		62.4	72.8	77.1	93.6	109.2	115.6
42"		54.9	64.0	67.8	82.3	96.0	101.6
24"	144"	85.1	99.3	105.1	120.0	120.0	120.0
30"		69.7	81.3	86.0	104.5	120.0	120.0
36"		59.4	69.3	73.4	89.1	104.0	110.1



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



TWO ANCHORS
AT EACH SIDE OF MULLS



THREE ANCHORS
AT EACH SIDE OF MULLS

ANCHORS TYPES: SEE SHEET 8 FOR DESCRIPTION

A2 = (2) ANCHORS TYPE 'A' AT EACH SIDE OF MULLION
B2 = (2) ANCHORS TYPE 'B' AT EACH SIDE OF MULLION
C2 = (2) ANCHORS TYPE 'C' AT EACH SIDE OF MULLION
D2 = (2) ANCHORS TYPE 'D' AT EACH SIDE OF MULLION

A3 = (3) ANCHORS TYPE 'A' AT EACH SIDE OF MULLION
B3 = (3) ANCHORS TYPE 'B' AT EACH SIDE OF MULLION
C3 = (3) ANCHORS TYPE 'C' AT EACH SIDE OF MULLION
D3 = (3) ANCHORS TYPE 'D' AT EACH SIDE OF MULLION

ALL OTHER ANCHORS TO BE SPACED AS PER ELEVATION.

ANCHOR LOAD CHARTS FOR MULLS
WITHOUT INTERMEDIATE HORIZONTALS

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

SEP 1 0 2003

PRODUCT REVISED
as complying with the Florida
Buiding Code
Acceptance No 03-0801.04
Expiration Date AUG. 7, 2008
By Manuel Perez
Miami-Dade Product Control
Division

AL-FAROOQ CORPORATION
ENGINEERS, PLANNERS & PRODUCT DESIGN
1235 SW 87 AVE
MIAMI, FLORIDA 33174
TEL. (305) 264-8100 FAX. (305) 262-6978
STORE\W03-54YKK

YES 45F-S ALUM FLUSH GLAZE STOREFRONT SYS.

YKK AP AMERICA INC.
332 FIRETOWER ROAD
DUBLIN, GEORGIA 31021
TEL(478) 277-1955 FAX(478) 277-1978

revisions:

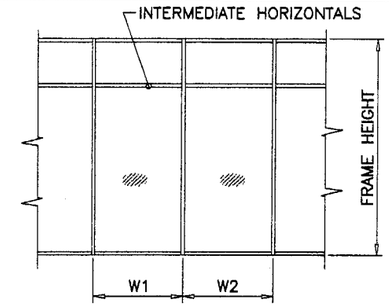
no	date	by	description
A	9.18.03		NO CHANGE THIS SHEET

date: 07-18-03
scale: 1/2"=1'-0"
dr. by: HAMID
chk. by:

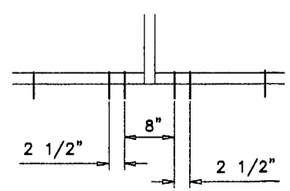
drawing no.
W03-54

ANCHOR DESIGN LOAD CAPACITY – PSF							
		2 ANCHORS @ EACH SIDE OF MULL			3 ANCHORS @ EACH SIDE OF MULL		
NOMINAL DIMS.		TYPE 'A2'	TYPE 'B2'	TYPE 'C2'&'D2'	TYPE 'A3'	TYPE 'B3'	TYPE 'C3'&'D3'
WIDTH (W)	FRAME HEIGHT	EXT. (+) INT. (–)	EXT. (+) INT. (–)	EXT. (+) INT. (–)	EXT. (+) INT. (–)	EXT. (+) INT. (–)	EXT. (+) INT. (–)
24"	72"	120.0	120.0	120.0	120.0	120.0	120.0
30"		120.0	120.0	120.0	120.0	120.0	120.0
36"		104.0	120.0	120.0	120.0	120.0	120.0
42"		89.1	104.0	110.1	120.0	120.0	120.0
48"		78.0	91.0	96.3	117.0	120.0	120.0
54"		69.3	80.9	85.6	104.0	120.0	120.0
60"		62.4	72.8	77.1	93.6	109.2	115.6
66"		56.7	66.2	70.1	85.1	99.3	105.1
72"		52.0	60.7	64.2	78.0	91.0	96.3
78"		48.0	56.0	59.3	72.0	84.0	88.9
24"	78"	120.0	120.0	120.0	120.0	120.0	120.0
30"		115.2	120.0	120.0	120.0	120.0	120.0
36"		96.0	112.0	118.6	120.0	120.0	120.0
42"		82.3	96.0	101.6	120.0	120.0	120.0
48"		72.0	84.0	88.9	108.0	120.0	120.0
54"		64.0	74.7	79.0	96.0	112.0	118.6
60"		57.6	67.2	71.1	86.4	100.8	106.7
66"		52.4	61.1	64.7	78.5	91.6	97.0
72"		48.0	56.0	59.3	72.0	84.0	88.9
24"	84"	120.0	120.0	120.0	120.0	120.0	120.0
30"		107.0	120.0	120.0	120.0	120.0	120.0
36"		89.1	104.0	110.1	120.0	120.0	120.0
42"		76.4	89.1	94.4	114.6	120.0	120.0
48"		66.9	78.0	82.6	100.3	117.0	120.0
54"		59.4	69.3	73.4	89.1	104.0	110.1
60"		53.5	62.4	66.1	80.2	93.6	99.1
66"		48.6	56.7	60.1	72.9	85.1	90.1
24"	90"	120.0	120.0	120.0	120.0	120.0	120.0
30"		99.8	116.5	120.0	120.0	120.0	120.0
36"		83.2	97.1	102.8	120.0	120.0	120.0
42"		71.3	83.2	88.1	107.0	120.0	120.0
48"		62.4	72.8	77.1	93.6	109.2	115.6
54"		55.5	64.7	68.5	83.2	97.1	102.8
60"		49.9	58.2	61.7	74.9	87.4	92.5
24"	96"	117.0	120.0	120.0	120.0	120.0	120.0
30"		93.6	109.2	115.6	120.0	120.0	120.0
36"		78.0	91.0	96.3	117.0	120.0	120.0
42"		66.9	78.0	82.6	100.3	117.0	120.0
48"		58.5	68.3	72.3	87.8	102.4	108.4
54"		52.0	60.7	64.2	78.0	91.0	96.3
60"		46.8	54.6	57.8	70.2	81.9	86.7
24"	102"	110.1	120.0	120.0	120.0	120.0	120.0
30"		88.1	102.8	108.8	120.0	120.0	120.0
36"		73.4	85.6	90.7	110.1	120.0	120.0
42"		62.9	73.4	77.7	94.4	110.1	116.6
48"		55.1	64.2	68.0	82.6	96.4	102.0
54"		48.9	57.1	60.4	73.4	85.6	90.7

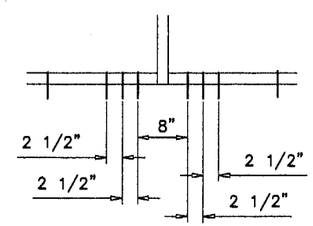
ANCHOR DESIGN LOAD CAPACITY – PSF							
		2 ANCHORS @ EACH SIDE OF MULL			3 ANCHORS @ EACH SIDE OF MULL		
NOMINAL DIMS.		TYPE 'A2'	TYPE 'B2'	TYPE 'C2'&'D2'	TYPE 'A3'	TYPE 'B3'	TYPE 'C3'&'D3'
WIDTH (W)	FRAME HEIGHT	EXT. (+) INT. (–)	EXT. (+) INT. (–)	EXT. (+) INT. (–)	EXT. (+) INT. (–)	EXT. (+) INT. (–)	EXT. (+) INT. (–)
24"	108"	104.0	120.0	120.0	120.0	120.0	120.0
30"		83.2	97.1	102.8	120.0	120.0	120.0
36"		69.3	80.9	85.6	104.0	120.0	120.0
42"		59.4	69.3	73.4	89.1	104.0	110.1
48"		52.0	60.7	64.2	78.0	91.0	96.3
54"		46.2	53.9	57.1	69.3	80.9	85.6
24"	114"	98.5	114.9	120.0	120.0	120.0	120.0
30"		78.8	92.0	97.3	118.2	120.0	120.0
36"		65.7	76.6	81.1	98.5	114.9	120.0
42"		56.3	65.7	69.5	84.5	98.5	104.3
48"		49.3	57.5	60.8	73.9	86.2	91.3
24"	120"	93.6	109.2	115.6	120.0	120.0	120.0
30"		74.9	87.4	92.5	112.3	120.0	120.0
36"		62.4	72.8	77.1	93.6	109.2	115.6
42"		53.5	62.4	66.1	80.2	93.6	99.1
48"		46.8	54.6	57.8	70.2	81.9	86.7
24"	126"	89.1	104.0	110.1	120.0	120.0	120.0
30"		71.3	83.2	88.1	107.0	120.0	120.0
36"		59.4	69.3	73.4	89.1	104.0	110.1
42"		50.9	59.4	62.9	76.4	89.1	94.4
24"	132"	85.1	99.3	105.1	120.0	120.0	120.0
30"		68.1	79.4	84.1	102.1	119.1	120.0
36"		56.7	66.2	70.1	85.1	99.3	105.1
42"		48.6	56.7	60.1	72.9	85.1	90.1
24"	138"	81.4	95.0	100.5	120.0	120.0	120.0
30"		65.1	76.0	80.4	97.7	113.9	120.0
36"		54.3	63.3	67.0	81.4	95.0	100.5
42"		46.5	54.3	57.4	69.8	81.4	86.2
24"	144"	78.0	91.0	96.3	117.0	120.0	120.0
30"		62.4	72.8	77.1	93.6	109.2	115.6
36"		52.0	60.7	64.2	78.0	91.0	96.3



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



TWO ANCHORS
AT EACH SIDE OF MULLS



THREE ANCHORS
AT EACH SIDE OF MULLS

ANCHORS TYPES: SEE SHEET 8 FOR DESCRIPTION

A2 = (2) ANCHORS TYPE 'A' AT EACH SIDE OF MULLION
B2 = (2) ANCHORS TYPE 'B' AT EACH SIDE OF MULLION
C2 = (2) ANCHORS TYPE 'C' AT EACH SIDE OF MULLION
D2 = (2) ANCHORS TYPE 'D' AT EACH SIDE OF MULLION

A3 = (3) ANCHORS TYPE 'A' AT EACH SIDE OF MULLION
B3 = (3) ANCHORS TYPE 'B' AT EACH SIDE OF MULLION
C3 = (3) ANCHORS TYPE 'C' AT EACH SIDE OF MULLION
D3 = (3) ANCHORS TYPE 'D' AT EACH SIDE OF MULLION

ALL OTHER ANCHORS TO BE SPACED AS PER ELEVATION.

ANCHOR LOAD CHARTS FOR MULLS
WITH INTERMEDIATE HORIZONTALS

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

SEP 1 9 2003

PRODUCT REVISED
as complying with the Florida
Buiding Code
Acceptance No 03-0801.04
Expiration Date AUG. 7, 2008
By Manuel Perez
Miami Dade Product Control
Division

AL-FAROOQ CORPORATION
ENGINEERS, PLANNERS & PRODUCT DESIGN
1235 SW 87 AVE
MIAMI, FLORIDA 33174
TEL. (305) 264-8100 FAX. (305) 262-6978
STORE\W03-54YKK

YES 45F-S ALUM FLUSH GLAZE STOREFRONT SYS.

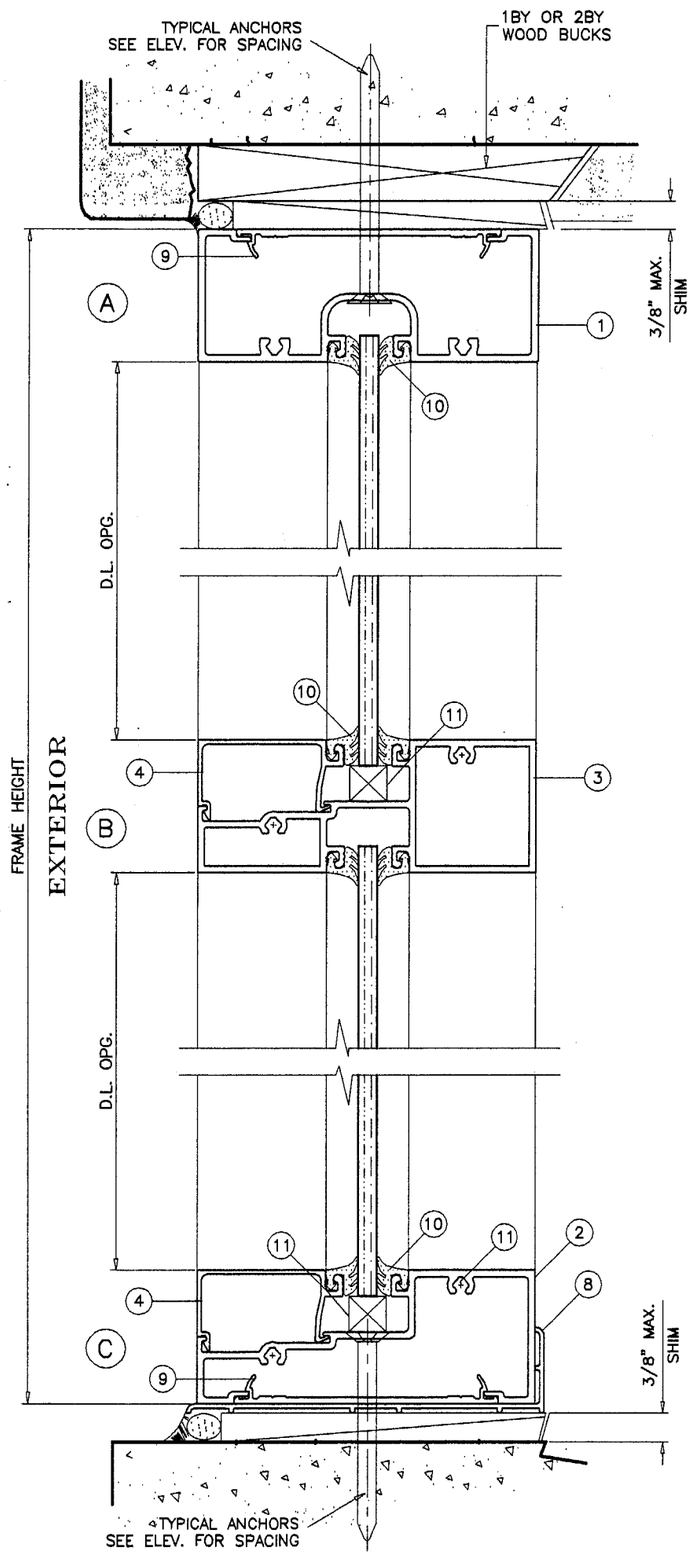
YKK AP AMERICA INC.
332 FIRETOWER ROAD
DUBLIN, GEORGIA 31021
TEL.(478) 277-1955 FAX(478) 277-1978

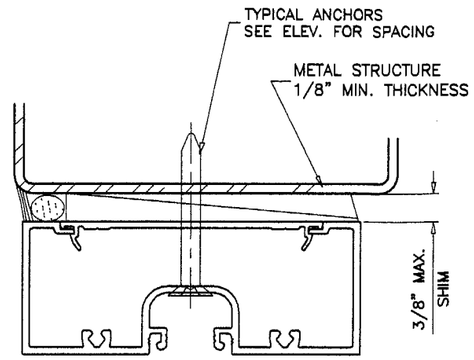
revisions:

no	date	by	description
A	9.18.03		NO CHANGE THIS SHEET

date: 07-18-03
scale: 1/2"=1'-0"
dr. by: HAMID
chk. by:

drawing no.
W03-54





ITEM NO.	PART NUMBER	QUANTITY	DESCRIPTION	MATERIAL	MANF./SUPPLIER/REMARKS
1	E9-1003	AS REQD.	FRAME HEAD/JAMB/MULLION	6063-T5	–
2	E9-1004	AS REQD.	FRAME HORIZONTAL/SILL	6063-T5	–
3	E9-1006	AS REQD.	FRAME HORIZONTAL	6063-T5	–
4	E9-1005	AS REQD.	GLAZING STOP	6063-T5	–
5	E9-1001	AS REQD.	OPTIONAL JAMB	6063-T5	–
6	E9-1059	AS REQD.	MULLION	6063-T5	–
7	E9-1009	AS REQD.	POCKET FILLER	6063-T5	–
7A	E9-1002	AS REQD.	POCKET FILLER	6063-T5	–
8	E9-1030	AS REQD.	SILL FLASHING	6063-T5	–
9	E1-1054	AS REQD.	SNAP IN COVER, 2-1/2" LONG	6063-T5	–
10	E2-0052	AS REQD.	GLAZING GASKET	EPDM	–
11	E2-0019	AS REQD.	SETTING BLOCK	EPDM	–
12	PC-1216	2/ CORNER	ASSEMBLY SCREWS PHSMS	CRS	#12 X 1" PPH SMS
13	E1-0181	AS REQD.	REINFORCING CHANNEL	STEEL	.813 X 4.188 X .813 X .125" THK.
14	E1-0184	AS REQD.	REINFORCING CHANNEL	STEEL	.750 X 3.875 X .750 X .188" THK.
15	PC-1220	2/ CORNER	ASSEMBLY SCREWS PHSMS	CRS	–

WOOD BUCKS AND METAL STRUCTURES NOT BY YKK INC. MUST SUPPORT LOADS IMPOSED BY GLAZING SYSTEM AND TRANSFER THEM TO THE BUILDING STRUCTURE.

TYPICAL ANCHORS: SEE ELEV. FOR SPACING

A) 1/4" DIA TAPCONS
INTO WOOD STRUCTURES
WITH 1-1/2" MIN. PENETRATION INTO WOOD

B) 1/4" DIA TAPCONS
THRU 1BY OR 2BY WOOD BUCKS INTO MASONRY
WITH 1-1/4" MIN. EMBED INTO CONC. OR MASONRY

C) 1/4" DIA TAPCONS
DIRECTLY INTO MASONRY
WITH 1-1/4" MIN. EMBED INTO MASONRY

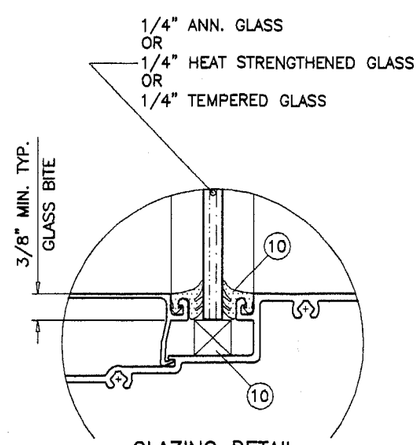
D) 1/4-20 KWIK-FLEX SELF DRILLING SCREWS BY 'HILTI'
INTO METAL STRUCTURES
(STEEL OR ALUMINUM 1/8" MIN. THICK.)

STEEL : Fy = 36 KSI MIN.
ALUMINUM : 6063-T5 MIN.

TYPICAL EDGE DISTANCE
INTO CONCRETE AND MASONRY = 3" MIN.
INTO WOOD STRUCTURE = 3/4" MIN.

SEALANTS:

ALL FRAME CORNERS SEALED WITH JOINT SEALANT.



GLAZING DETAIL

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

SEP 19 2003

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date: 07-18-03
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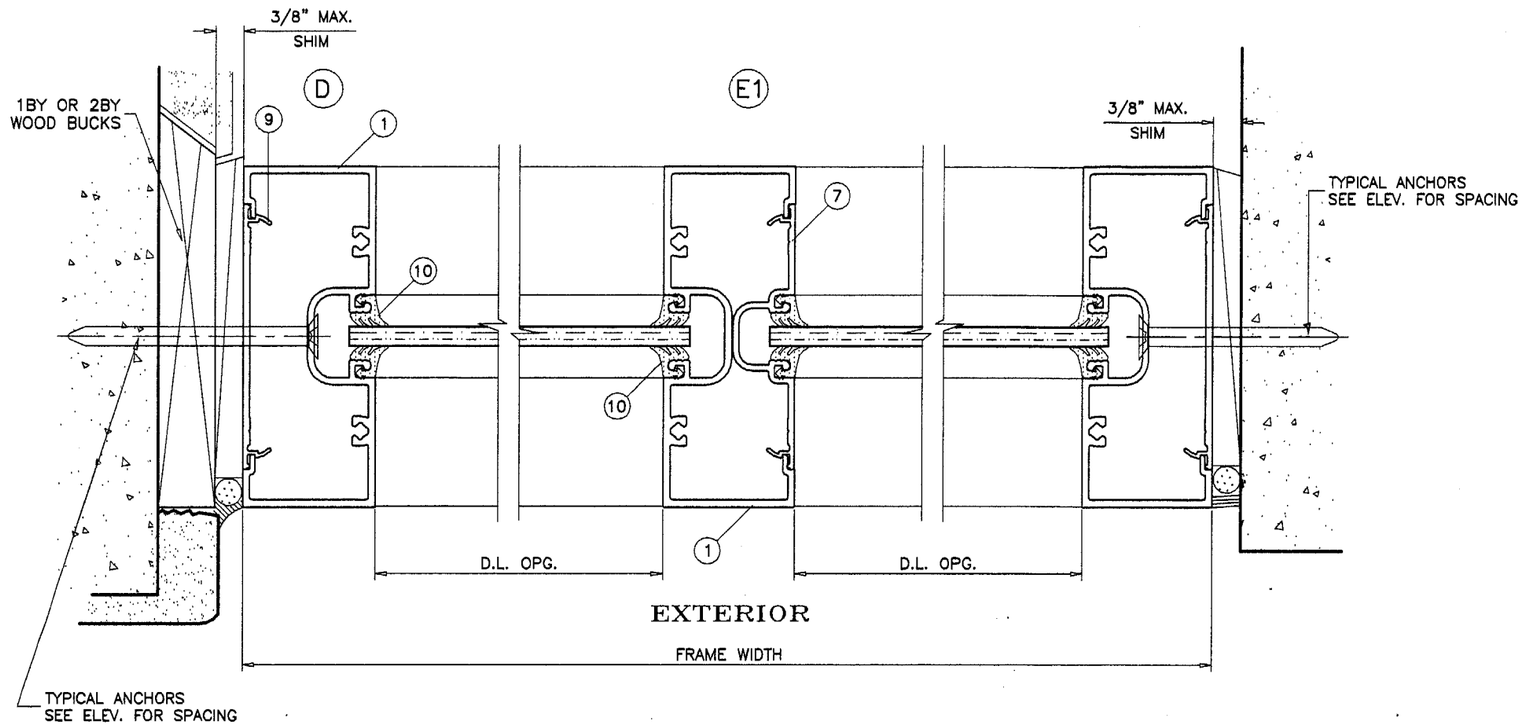
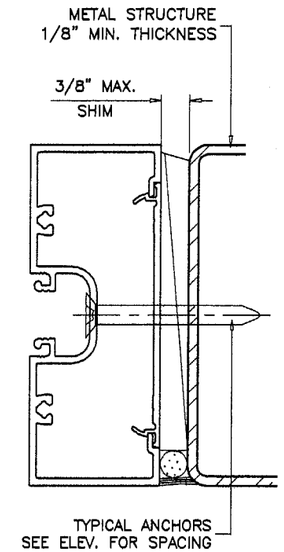
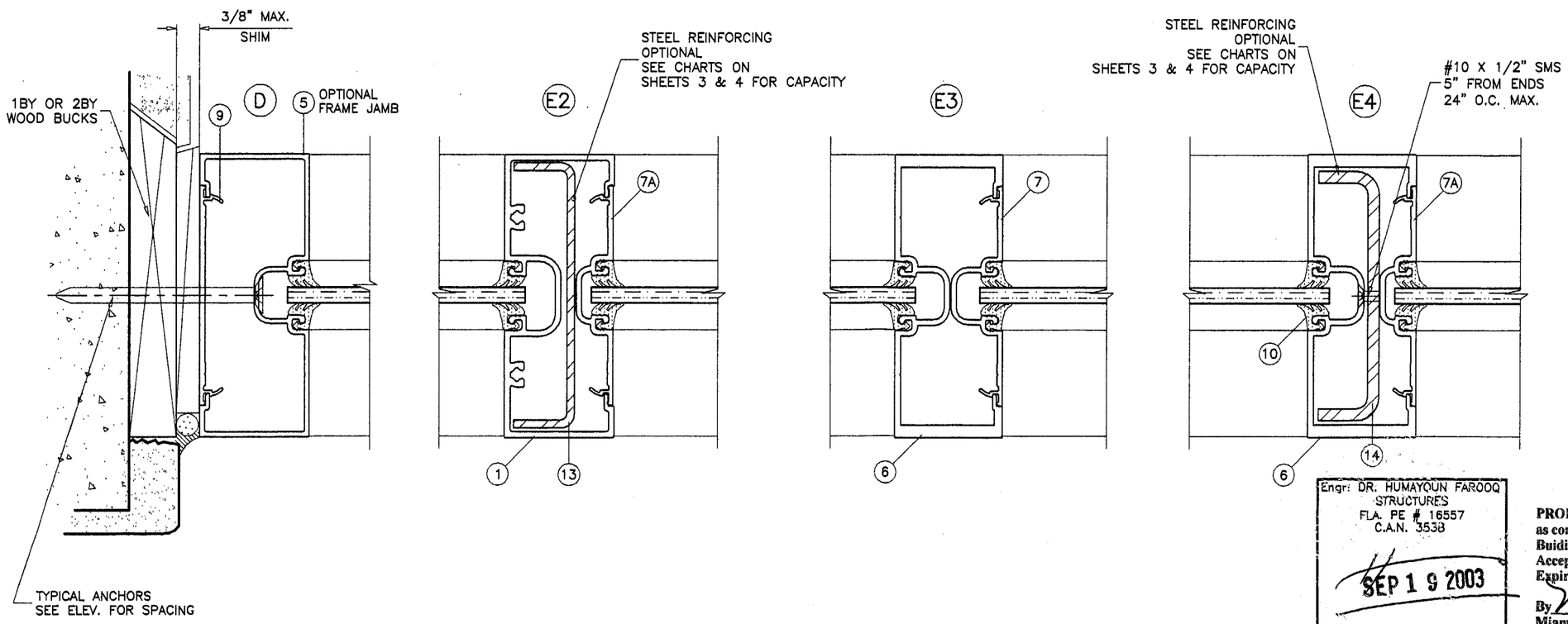
W03-54







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

SEP 1 9 2003

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as complying with the Florida Buiding Code
Acceptance No. 03-0801.04
Expiration Date AUG. 7, 2008
By Manuel Sierra
Miami-Dade Product Control Division

AL-FAROOQ CORPORATION
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STORE\W03-54YKK

YES 45F-S ALUM FLUSH GLAZE STOREFRONT SYS.

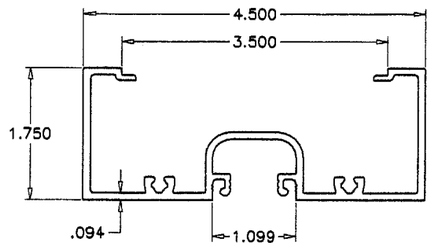
YKK AP AMERICA INC.
332 FIRETOWER ROAD
DUBLIN, GEORGIA 31021
TEL.(478) 277-1955 FAX(478) 277-1978

revisions:

no	date	by	description
A	9.18.03		REV. PER BCCO COMMENTS

date: 07-18-03
scale: 1/2" = 1"
dr. by: HAMID
chk. by:

drawing no.
W03-54



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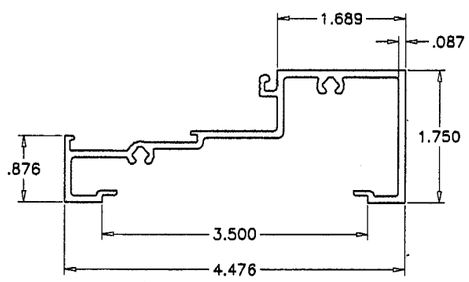

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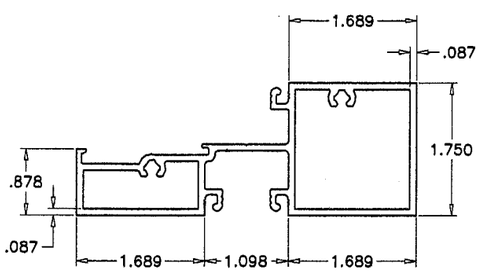

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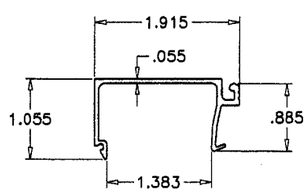

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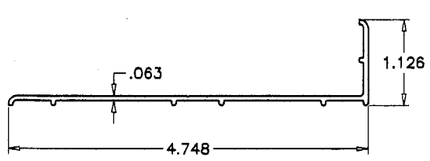

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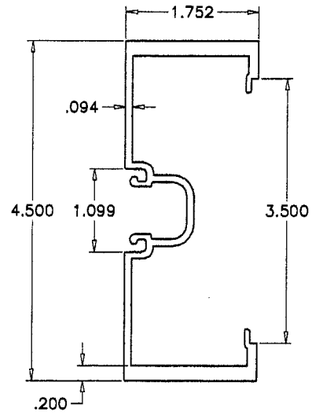

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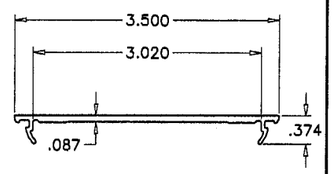

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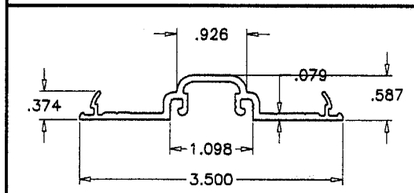

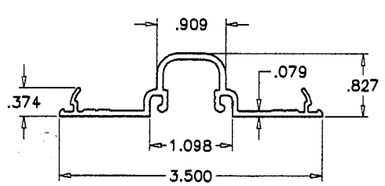

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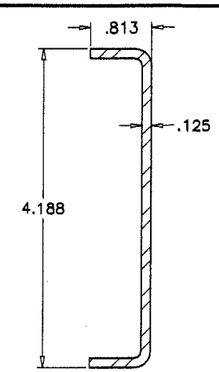
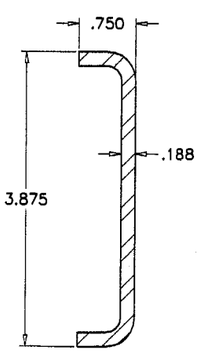
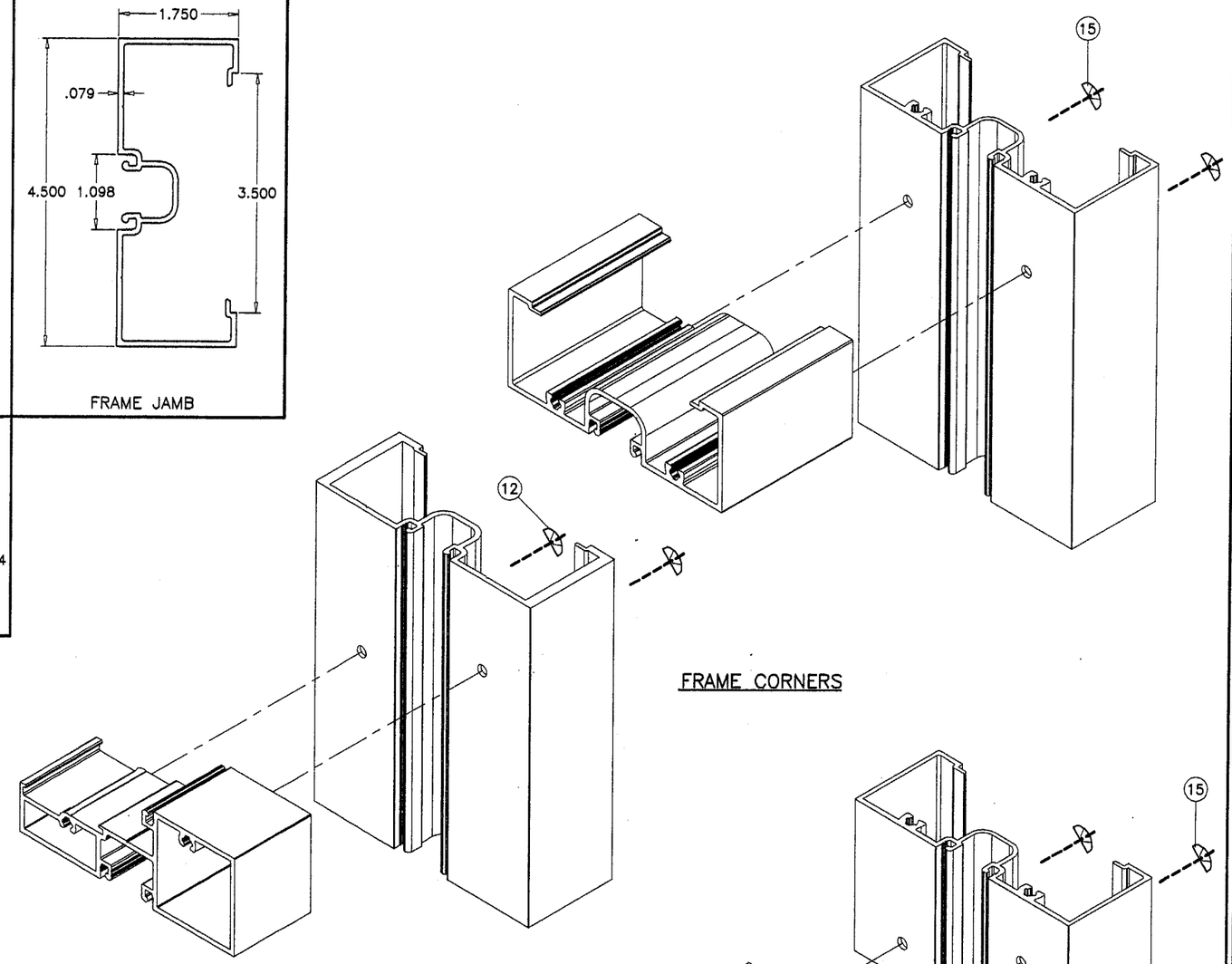


FOR MULLION E9-1003



FOR MULLION E9-1059

STEEL REINFORCING
36 KSI MIN.



FRAME CORNERS

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sheet 10 of 10