



MIAMI-DADE COUNTY
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

Hurricane Manufacturing Corp.
11850 Miramar Parkway
Miramar, FL 33025

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 "HMC 175R Retrofit" Aluminum Storefront System – L.M.I.

APPROVAL DOCUMENT: Drawing No. **09-050**, titled "HMC 175R Retrofit Window Series Large & Small Missile Impact Rated", sheets 1 through 8 of 8, dated 07/19/10, prepared by EngCo, Inc., signed and sealed by Pedro De Figueiredo, P.E., bearing the Miami-Dade County Product Control Approval stamp with the Notice of Acceptance number and approval date by the Miami-Dade County Product Control 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 consists of this page 1, 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. 09-1228.02
Expiration Date: October 06, 2015
Approval Date: October 06, 2010
 Page 1

Hurricane Manufacturing Corp.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Manufacturer's die drawings and sections.
2. Drawing No **09-050**, Sheets 1 through 8 of 8, titled "HMC 175R Retrofit Window Series Large & Small Missile Impact Rated", dated 07/19/10, prepared by EngCo, Inc., signed and sealed by Pedro De Figueiredo, P.E.

B. TESTS

1. Test reports on:
 - 1) Air Infiltration Test, per TAS 202-94
 - 2) Uniform Static Air Pressure Test, Loading per TAS 202-94
 - 3) Water Resistance Test, per TAS 202-94
 - 4) Large Missile Impact Test per, 201-94
 - 5) Cyclic Wind Pressure Loading per FBC, TAS 203-94along with marked-up drawings and installation diagram of a HMC 175R retrofit aluminum fixed window, prepared by Hurricane Test Laboratory, LLC, Test Report No. **HTL-0314-0305-10**, dated from 03/18/10 to 05/04/10, signed and sealed by Vinu J. Abraham, P.E.
2. Test reports on:
 - 1) Air Infiltration Test, per TAS 202-94
 - 2) Uniform Static Air Pressure Test, Loading per TAS 202-94
 - 3) Water Resistance Test, per TAS 202-94
 - 4) Large Missile Impact Test per, 201-94
 - 5) Cyclic Wind Pressure Loading per FBC, TAS 203-94along with marked-up drawings and installation diagram of a HMC 175R retrofit aluminum fixed window, prepared by Hurricane Test Laboratory, LLC, Test Report No. **HTL-0314-0602-09**, dated 04/15-21/05, signed and sealed by Vinu J. Abraham, P.E.

C. CALCULATIONS

1. Anchor verification calculations and structural analysis, complying with FBC-2007, dated 10/12/09 and 9/9/10, prepared by EngCo, Inc., signed and sealed by Pedro De Figueiredo, P.E.
Complies with ASTM E1300-04

D. QUALITY ASSURANCE

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


Manuel Perez, P.E.
Product Control Examiner
NOA No. 09-1228.02
Expiration Date: October 06, 2015
Approval Date: October 06, 2010

Hurricane Manufacturing Corp.

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E. MATERIAL CERTIFICATIONS

1. Notice of Acceptance No. **08-0520.08** issued to **Solutia, Inc.** for their “**Vanceva Composites Glass Interlayer**” dated 07/17/08, expiring on 12/11/13.

F. STATEMENTS

1. Statement letter of conformance and no financial interest, dated September 09, 2010, signed and sealed by Pedro De Figueiredo, P.E.
2. Laboratory compliance letter for Test Report No. **HTL-0314-0305-10**, issued by Hurricane Test Laboratory, Inc., dated June 01, 2010, signed and sealed by Vinu J. Abraham, P.E.
3. Laboratory compliance letter for Test Report No. **HTL-0314-0602-09**, issued by Hurricane Test Laboratory, Inc., dated December 04, 2009, signed and sealed by Vinu J. Abraham, P.E.

G. OTHERS

1. None.


Manuel Perez, P.E.

Product Control Examiner
NOA No. 09-1228.02

Expiration Date: October 06, 2015
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GENERAL NOTES: FLORIDA BUILDING CODE 2007

1- CODE: THIS PRODUCT HAS BEEN TESTED AND DESIGNED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE 2007 INCLUDING THE HIGH VELOCITY HURRICANE ZONE (HVHZ).

2- DEFINITION: THIS PRODUCT IS A FIXED TYPE WINDOW DESIGNED, CONSTRUCTED AND TESTED ATTACHED TO AN EXISTING STRUCTURE (SUB-FRAME) TO PROVIDE PROTECTION FROM HURRICANE FORCE WINDS AND WIND BORNE DEBRIS (LARGE MISSILE) WITHIN THE ALLOWABLE DESIGNED PRESSURES AND LIMITATIONS STATED IN THIS APPROVAL. INSTALLATION OF HURRICANE PROTECTION DEVICES IS NOT REQUIRED.

3- POSTING:

"HMC 175R RETROFIT WINDOW SERIES
HMC HURRICANE MANUFACTURING CORPORATION
MIRAMAR - FLORIDA
MIAMI-DADE COUNTY PRODUCT CONTROL APPROVED"

4- DESIGN LOADS: THE DESIGNED LOADS MUST BE CALCULATED BY A PROFESSIONAL ARCHITECT OR ENGINEER FOR EACH SPECIFIC PROJECT. THE CALCULATED DESIGNED PRESSURE MUST NOT EXCEED THE ALLOWABLE WINDOW PRESSURE.

5- MATERIAL: GLAZING TO BE IMPACT LAMINATED GLASS AS SPECIFIED ON THIS APPROVAL.

6- FASTENERS: ASSEMBLY SCREWS AND ANCHORS SHALL BE AS SPECIFIED IN THE CURRENT SET OF DRAWINGS. INSTALLATION AND LOADS AS PER THIS APPROVAL. ANCHOR QUANTITY & SPACING MUST NOT EXCEED THE MAXIMUM LIMITS SPECIFIED BY THIS APPROVAL.

7- USE: IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, ARCHITECT OR ENGINEER OF RECORD TO VERIFY THE FOLLOWING:

7.1- THE STABILITY OF THE STRUCTURE WHERE THE PRODUCT IS TO BE ATTACHED INSURING PROPER ANCHORAGE.

7.2- THE SITE SPECIFIC PROJECT CRITERIA, SUCH AS BUT NOT LIMITED TO, LOCAL CODE REQUIREMENTS, DESIGNED PRESSURES ETC.

7.3- THAT THIS APPROVAL IS ADEQUATE TO THE SPECIFIC PROJECT.

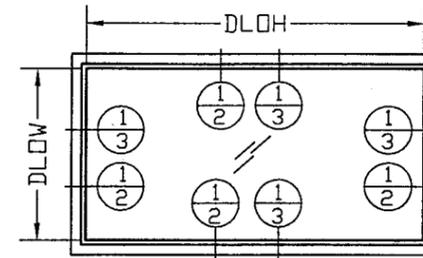
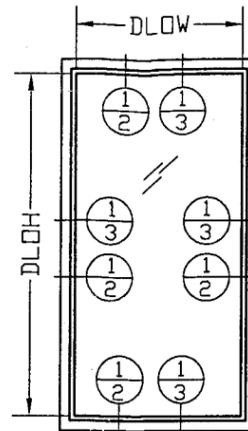
7.4- AN EVALUATION OF THE EQUIVALENT EXISTING STRUCTURES AND ANCHORING CONDITIONS AS COMPARED WITH TESTED STRUCTURES MUST BE PERFORMED BY A PROFESSIONAL ENGINEER AND A SIGNED AND SEALED REPORT SUBMITTED FOR EACH INSTALLATION.

8- 33 1/3% INCREASE IN ALLOWABLE LOADS HAVE NOT BEEN USED IN THE DESIGN OF THE ANCHORS FOR THIS PRODUCT APPROVAL, HOWEVER, WOOD SCREWS WITH 1.6 INCREASE FOR WIND LOAD DURATION HAVE BEEN USED.

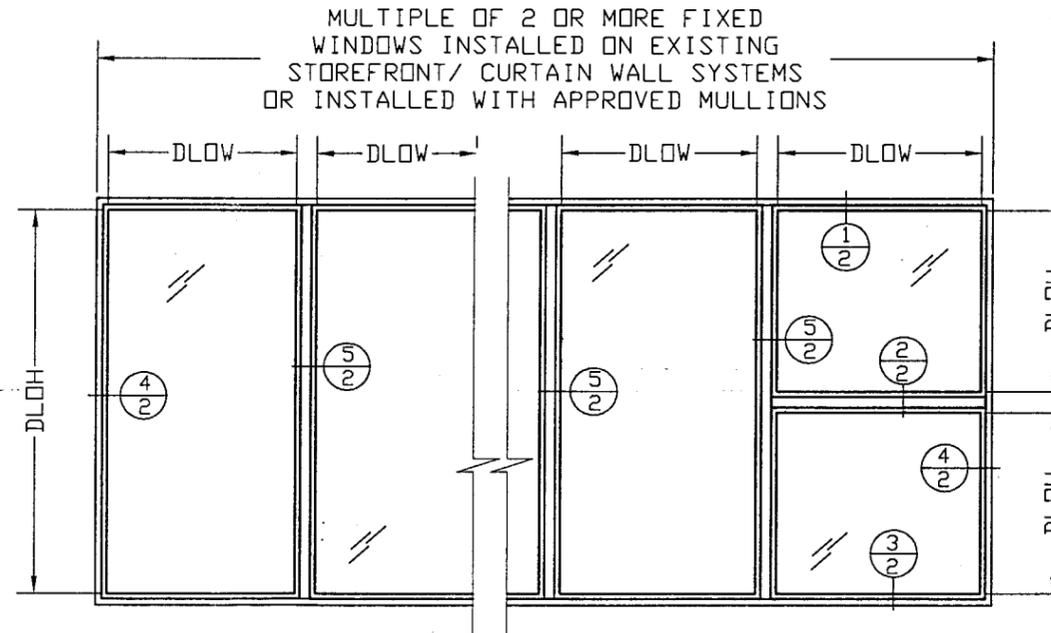
9- DISSIMILAR MATERIALS: MATERIALS, INCLUDING BUT NOT LIMITED TO STEEL, THAT COME IN CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF 2007 FLORIDA BUILDING CODE.

FOR ALLOWABLE SIZES AND PRESSURES
REFER TO SHEETS 4, 5, 6 AND 7

TYPICAL ELEVATIONS
VIEW FROM OUTSIDE



SINGLE FIXED WINDOW
SEE TABLE 1 FOR DESIGN RATINGS



MULTIPLE FIXED WINDOWS
SEE TABLE 1 AND TABLE 2 OR TABLE 3 AND/OR TABLE 4
FOR DESIGN RATINGS

TABLE OF CONTENTS:

SHEET	DESCRIPTION
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2 of 8	TYPICAL SECTIONS
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7 of 8	TABLE 4 HORIZONTALS TYPE 2A OR 2B CAPACITY DESIGN RATING
8 of 8	WINDOW COMPONENTS, GLAZING DETAILS & CORNER ASSEMBLY

MANUFACTURER:
HMC
HURRICANE MANUFACTURING CORPORATION
11850 MIRAMAR PKWY
MIRAMAR, FL. 33325
TEL.: (954) 392-7933
FAX: (954) 392-7356

PRODUCT:
HMC 175R
RETROFIT WINDOW SERIES
LARGE & SMALL MISSILE
IMPACT RATED

Engineering:
EngCo Inc.
CA 8116
6971 W. Sunrise Blvd.
Plantation, FL 33318
ENGCO@AOL.COM
PEDRO M. DE GUERREDO
LICENSE
No. 52609
STATE OF FLORIDA
Professional Engineer
SEP 19 2010
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DRAFTING:
PK DRAFTING & MORE

MIAMI-DADE BCCO:

Approved as complying with the
Florida Building Code
Date OCT 6 2010
NOA# 09-1228-02
Miami Dade Product Control
By Manuel Perez

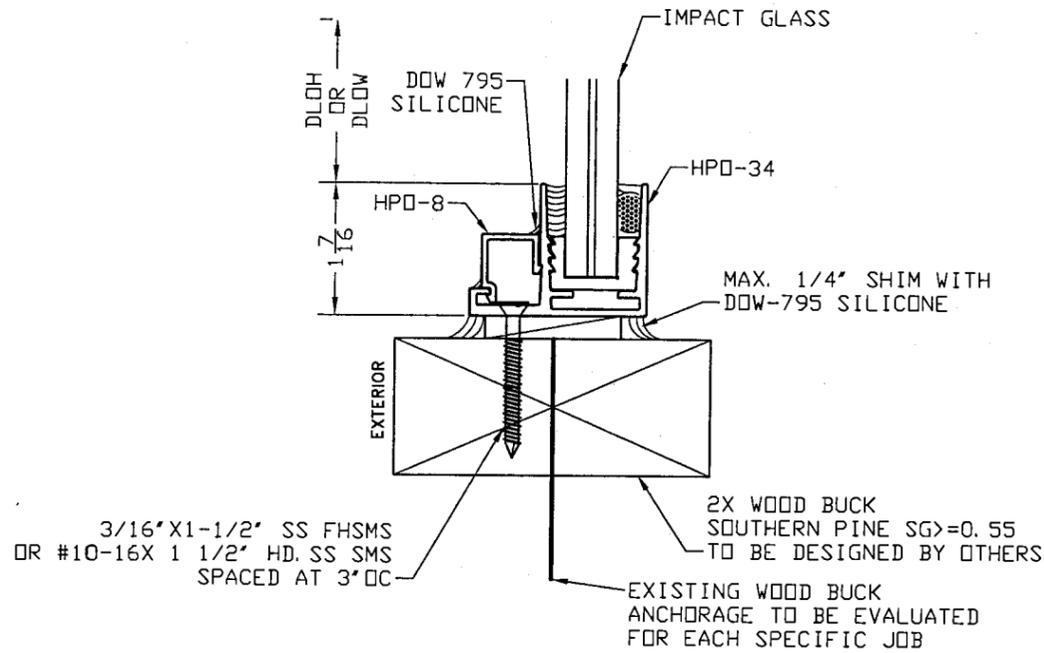
Date: 07/19/10
Scale: NA
Design by: PPMF

Drawing Number
09-050

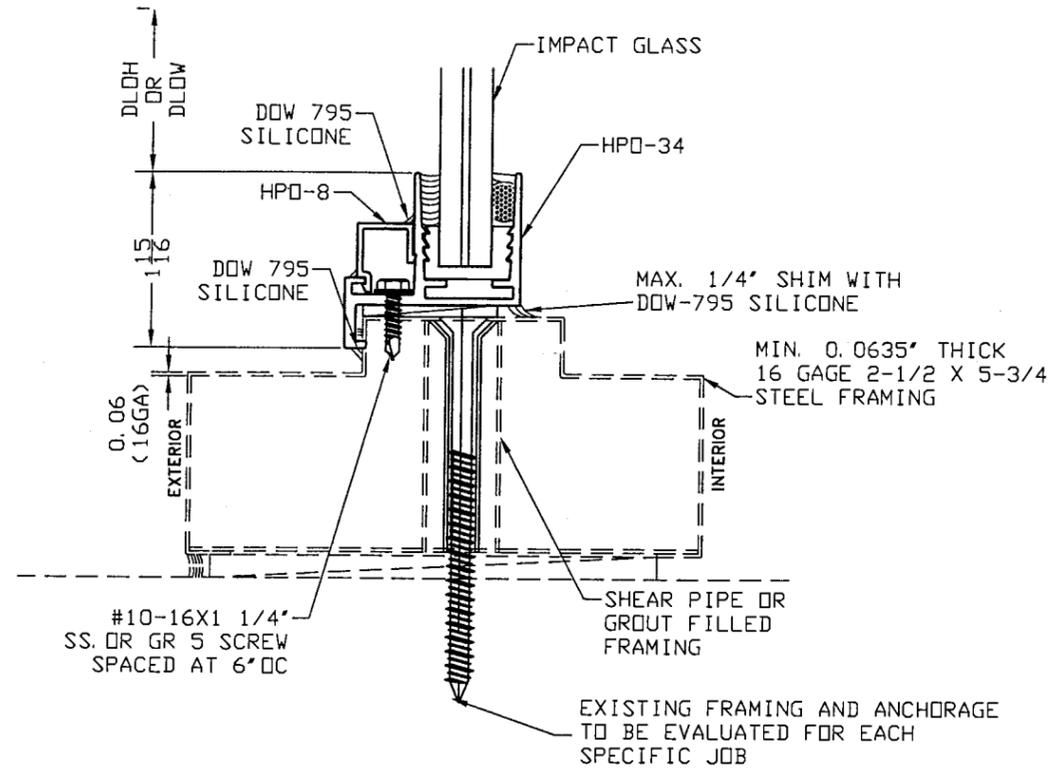
SHEET
1 of 8

TYPICAL SECTIONS

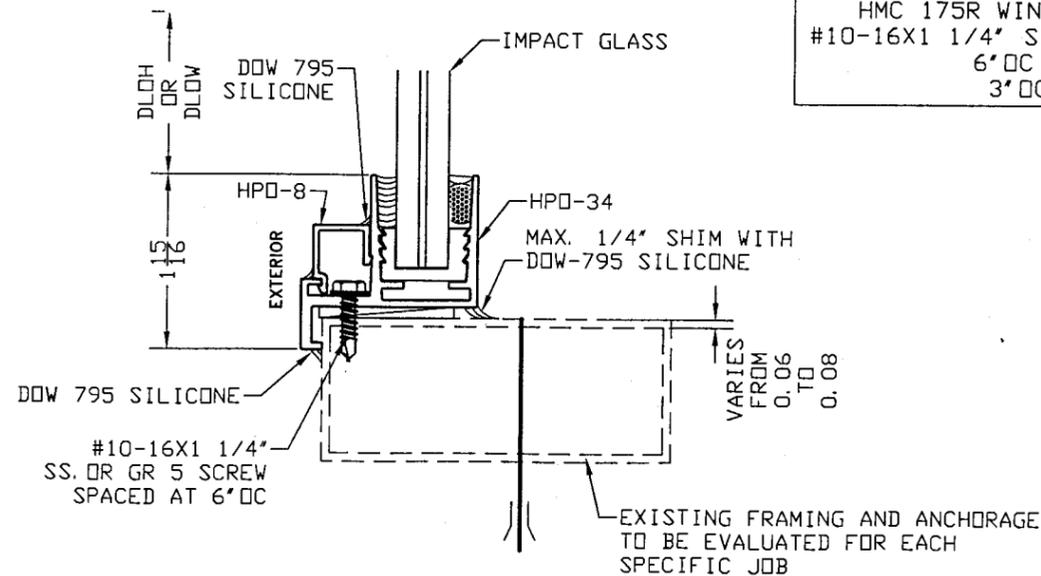
1 TYPICAL PERIMETER FRAMING INTO WOOD



1 TYPICAL PERIMETER FRAMING INTO STEEL WINDOW



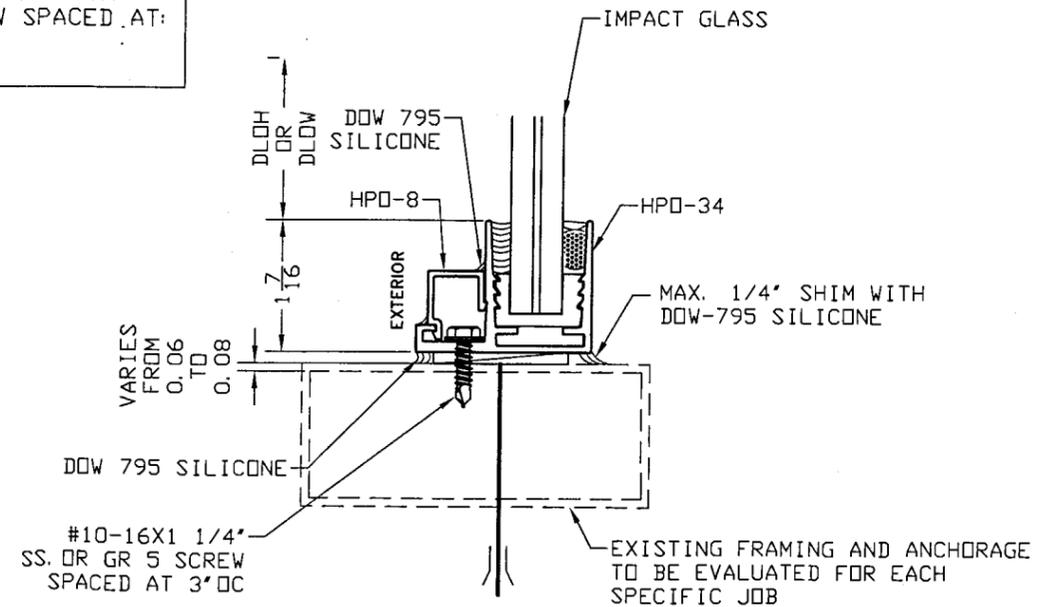
1 TYPICAL DETAIL PERIMETER FRAMING INTO ALUMINUM WINDOW



ALL EXISTING SUB FRAMING / STRUCTURES TO BE EVALUATED AS PER GENERAL NOTE 7.4

HMC 175R WINDOW TO BE SECURED WITH #10-16X1 1/4" SS. OR GR 5 SCREW SPACED AT: 6" OC FOR HPD-34 AND 3" OC FOR HPD-34TL

1 TYPICAL DETAIL PERIMETER FRAMING W/OUT THE FLANGE INTO ALUMINUM WINDOW



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HMC 175R
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LARGE & SMALL MISSILE
IMPACT RATED

Engineering:
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Professional Engineer
No. 52609
STATE OF FLORIDA
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DRAFTING:
PK DRAFTING & MORE

MIAMI-DADE BCCO:
Approved as complying with the Florida Building Code
Date: Oct. 6, 2010
NOA: 09-1225.02
Miami-Dade Product Control
Division
By: *Manuel Perez*

Date: 07/19/10
Scale: NA
Design by: PPMF

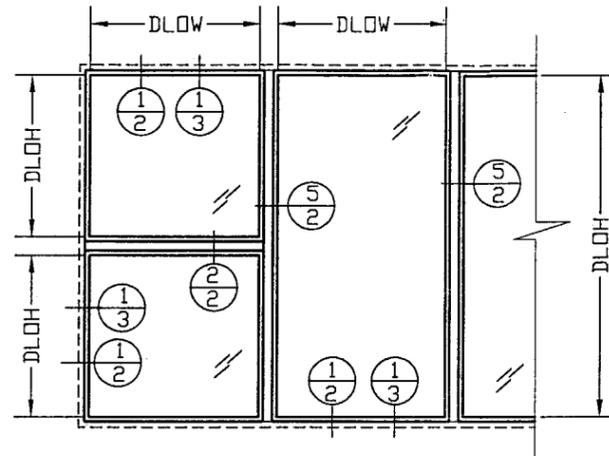
Drawing Number
09-050

SHEET
3 of 8

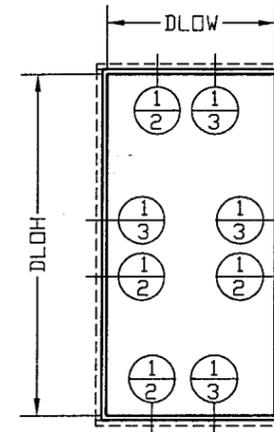
TABLE 1
GLAZING CAPACITY
DESIGNED RATING (PSF)

MAXIMUM DLO IN INCHES	DESIGNED RATING IN PSF	DESIGNED RATING IN PSF	
		(+)	(-)
36	24	90	120
	36	90	120
	48	90	120
	60	90	120
	72	90	118
	84	90	113
	96	90	109
	108	90	105
	120	90	95
48	24	90	120
	36	90	120
	48	90	120
	60	90	112
	72	90	101
	84	90	95
	96	90	90
	108	70	70
	120	62	70
60	24	90	120
	36	90	120
	48	90	112
	60	90	108
	72	90	95
	84	70	70
	96	62	70
	103	52	68
	72	24	90
36		90	118
48		90	101
60		90	93
84		56	70
84	24	90	120
	36	90	113
	48	90	95
	60	70	70
96	24	90	120
	36	90	109
	48	90	90
108	24	90	120
	36	90	105
	48	70	70
120	24	90	120
	36	90	95
	48	62	70

GLAZING CAPACITY BASED ON
ASTM E1300-04 (3 SEC. GUST)



MULTIPLE UNITS CONFIGURATION



INDIVIDUAL WINDOW CONFIGURATION

INSTALLATION INSTRUCTIONS

NOTES: UNITS CAN BE INSTALLED AS FOLLO:

- 1- AS AN INDIVIDUAL WINDOW PART OF A NEW OR RETROFIT CONSTRUCTION. USE TABLE 1 TO CALCULATE MAXIMUM PRESSURE. USE APPLICABLE DETAILS ON SHEET 3 OF 8 TO DETERMINE REQUIRED ANCHORS.
- 2- IN MULTIPLE CONFIGURATION WITH APPROVED MULLIONS. USE TABLE 1 FOR GLAZING CAPACITY AND SEPARATE MULLION PRODUCT APPROVAL, USE THE LOWEST OF THE TWO VALUES AND USE APPLICABLE DETAILS ON SHEETS 2 AND 3 OF 8 TO DETERMINE REQUIRED ANCHORS.
- 3- MULTIPLE CONFIGURATIONS RETROFIT OVER EXISTING STOREFRONT AND CURTAIN WALLS SYSTEMS. EXISTING FRAMING TO BE VERIFIED BY EQUIVALENT ANALYSIS WITH MULLIONS TYPE 5A, 5B, 5C OR 5D. USE TABLE 1 FOR THE GLAZING CAPACITY AND TABLES 2 OR 3 IN CONJUNCTION WITH SITE SPECIFIC ENGINEERING ANALYSIS. THE LOWEST VALUE OF THE TWO CONTROLS THE DESIGN. USE APPLICABLE DETAILS ON SHEET 2 AND 3 OF 8 TO DETERMINE REQUIRED ANCHORS.
- 4- ALL RETROFIT WINDOWS TO BE EVALUATED IN A JOB BASIS FOR SYSTEM INTEGRITY AND ANCHORAGE CALCULATION. CONTRACTOR TO PROVIDE SITE SPECIFIC FOR EACH JOB.

MANUFACTURER:
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PRODUCT:
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Engineering:
EngCo Inc.
CA 8118
6971 W. Deerfield Blvd. #104
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ENGCO@AOL.COM
No. 52609
STATE OF
SEP 09 2010
PROFESSIONAL ENGINEER
Pedro De Figueiredo
PE 52609

DRAFTING:
PK DRAFTING & MORE

MIAMI-DADE BCCO:

Approved as complying with the
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Date Oct. 6, 2010
NOAH 09-1228-07
Miami Dade Product Control
By Manuel Perez

Date: 07/19/10
Scale: NA
Design by: PPMF

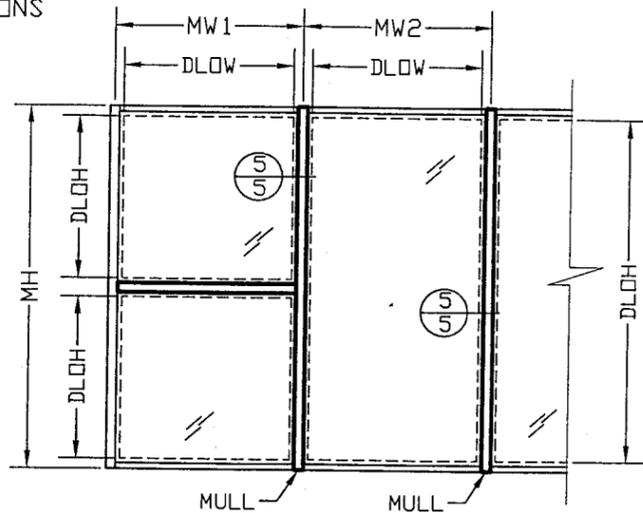
Drawing Number
09-050

SHEET
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TABLE 2 - MULLION TYPE 5A OR 5B
STOREFRONT RETROFIT VERTICAL MULLIONS
DESIGNED RATING (PSF) POS/NEG

MW	MH	MULLION TYPE	
		TYPE 5A	TYPE 5B
24	72	120	120
30		103	106
36		88	91
42		79	81
48		72	74
54		67	69
60		64	66
66		61	63
72		61	63
24	84	93	95
30		75	77
36		64	66
42		55	57
48		50	52
54		46	48
60		43	44
66		41	42
24	96	70	73
30		57	59
36		48	49
42		42	43
48		37	38
54		34	35
60		31	32
24	102	62	64
30		50	51
36		42	44
42		37	38
48		33	34
54		30	31
60		--	--
24	108	55	56
30		45	46
36		37	38
42		33	34
48		--	30
54		--	--
60		--	--
24	120	44	46
30		36	37
36		30	31
42		--	--
48		--	--
54		--	--
60		--	--

DESIGN RATING IN PSF
MW: MODULE WIDTH IN INCHES
MH: MODULE HEIGHT IN INCHES
INTERPOLATION ALLOWED



$$\text{MULLION SPACING: } MW = \frac{(MW1 + MW2)}{2}$$

SEE TABLE 1 FOR MAXIMUM DLOW X DLOW
AND TABLE 2 FOR MULLION
TYPE 5A OR 5B CAPACITY

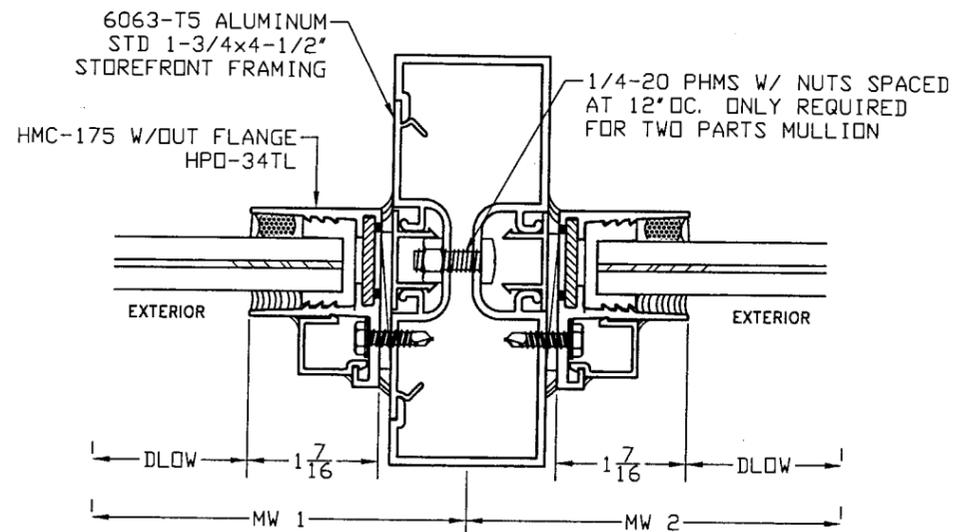
NOTES:

- 1- EXISTING WINDOW FRAMING TO HAVE 0.06" MINIMUM WALL THICKNESS AT RETROFIT WINDOW CONNECTION
- 2- EXISTING WINDOW MULLIONS PROPERTIES MUST BE EVALUATED PER JOB BASIS BY A PROFESSIONAL ENGINEER TO VERIFY ADEQUACY WITH ABOVE MULLION PROPERTIES.
- 3- INTERPOLATION IS ALLOWABLE ON TABLE 2
- 4- EXISTING MULLIONS AND PERIMETER FRAMING MUST BE PROPERLY ANCHORED IN ORDER TO TRANSFER LOADS TO THE MAIN STRUCTURE.
- 5- EXISTING FRAMING ANCHORAGE ARE TO BE CALCULATED ON A PER JOB BASIS.
- 6- MINIMUM (2) #10 SMS SECURING VERTICAL MULLION TO HORIZONTAL MEMBERS.

5A MULLION TYPE 5A MINIMUM PROPERTIES:

ALUMINUM EXTRUSION MADE OF
MINIMUM 6063-T5 ALUMINUM ALLOY
 $I_{xx} = 3.44 \text{ in}^4$ // $S_{xx} = 1.46 \text{ in}^3$
 $I_{yy} = 2.74 \text{ in}^4$ // $S_{yy} = 1.11 \text{ in}^3$

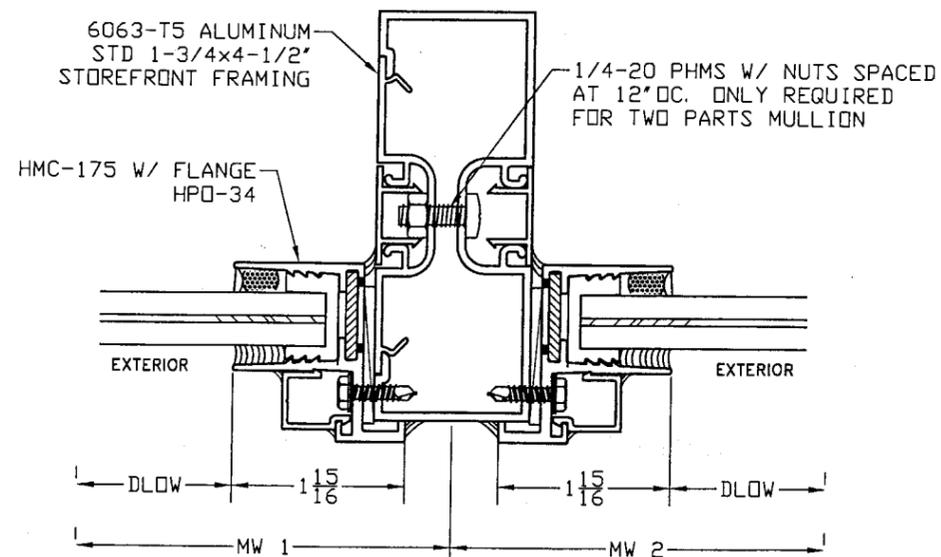
MAXIMUM END REACTION: $R_a \leq 1259 \text{ lb}$
MAXIMUM DEFLECTION: $L/180$



5B MULLION TYPE 5B MINIMUM PROPERTIES:

ALUMINUM EXTRUSION MADE OF
MINIMUM 6063-T5 ALUMINUM ALLOY
 $I_{xx} = 4.94 \text{ in}^4$ // $S_{xx} = 1.71 \text{ in}^3$
 $I_{yy} = 2.81 \text{ in}^4$ // $S_{yy} = 1.14 \text{ in}^3$

MAXIMUM END REACTION: $R_a \leq 1259 \text{ lb}$
MAXIMUM DEFLECTION: $K = L/180$



MANUFACTURER:

HMC

HURRICANE MANUFACTURING CORPORATION

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DRAFTING:

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MIAMI-DADE BCCO:

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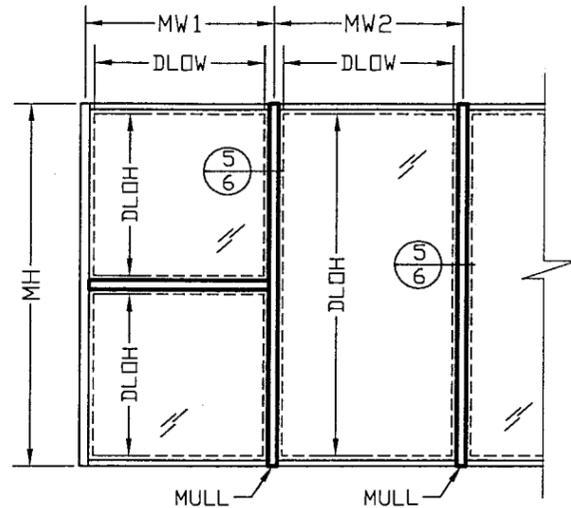
Drawing Number
09-050

SHEET
5 of 8

TABLE 3 - MULLION TYPE 5C OR 5D
STOREFRONT RETROFIT VERTICAL MULLIONS
DESIGNED RATING (PSF)

MW	MH	MULLION TYPE	
		TYPE 5C	TYPE 5D
24	72	120	120
30		120	120
36		120	120
42		120	120
48		120	120
54		120	120
60	84	120	120
66		120	120
72		120	120
24		120	120
30		120	120
36		120	120
42	96	120	120
48		120	120
54		118	118
60		112	112
66		108	108
72		120	120
78	102	120	120
84		120	120
90		112	120
96		110	115
102		98	105
108		89	97
114	108	83	92
120		72	83
24		120	120
30		117	120
36		98	112
42		86	99
48	77	88	
54	120	69	79
60		63	72
66		95	109
72		79	91
78		69	79
84		61	70
90	120	55	63
96		50	57

DESIGN RATING IN PSF
MW: MODULE WIDTH IN INCHES
MH: MODULE HEIGHT IN INCHES
INTERPOLATION ALLOWED



MULLION SPACING: $MW = \frac{MW1 + MW2}{2}$

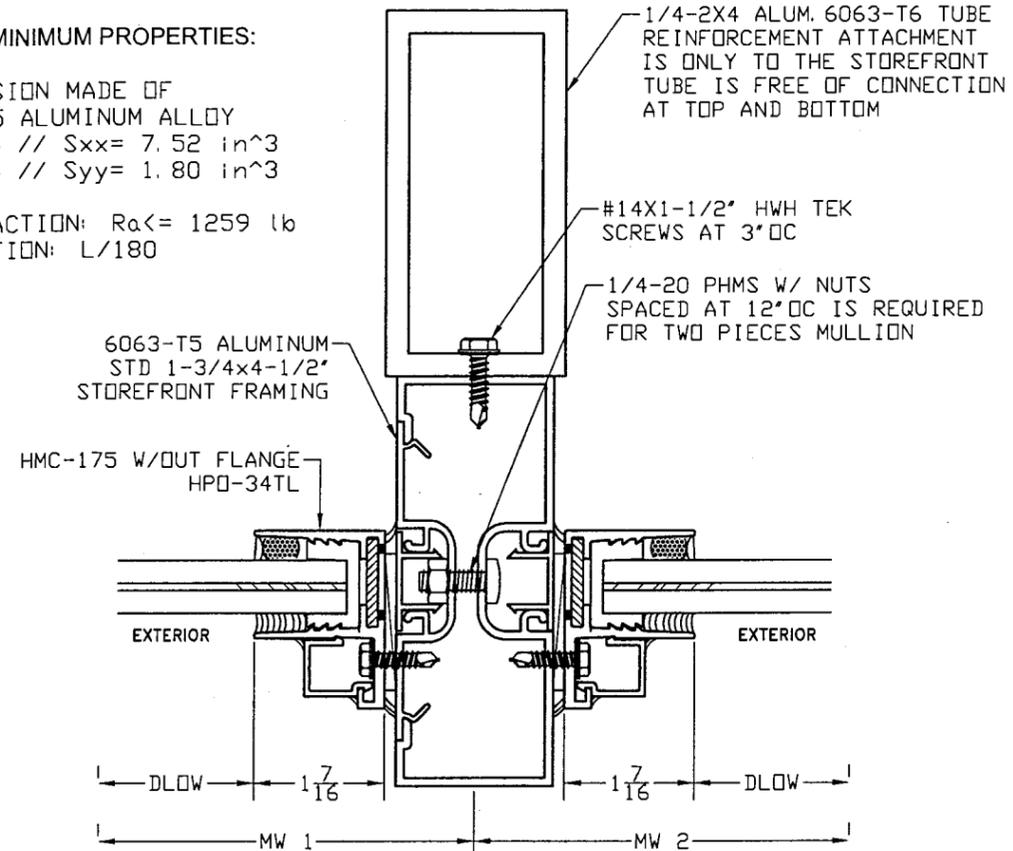
SEE TABLE 1 FOR MAXIMUM DLOW X DLOH AND TABLE 3 FOR MULLION TYPE 5C OR 5D CAPACITY

NOTES:
1- EXISTING WINDOW FRAMING TO HAVE 0.06" MINIMUM WALL THICKNESS AT RETROFIT WINDOW CONNECTION
2- EXISTING WINDOW MULLIONS PROPERTIES MUST BE EVALUATED PER JOB BASIS BY A PROFESSIONAL ENGINEER TO VERIFY ADEQUACY WITH ABOVE MULLION PROPERTIES.
3- INTERPOLATION IS ALLOWABLE ON TABLE 3
4- MULLIONS AND PERIMETER FRAMING MUST BE PROPERLY ANCHORED IN ORDER TO TRANSFER LOADS TO THE MAIN STRUCTURE.
5- EXISTING FRAMING ANCHORAGE ARE TO BE CALCULATED ON A PER JOB BASIS.
6- MINIMUM (2) #10 SMS SECURING VERTICAL MULLION TO HORIZONTAL MEMBERS.

5 MULLION TYPE 5C MINIMUM PROPERTIES:

ALUMINUM EXTRUSION MADE OF MINIMUM 6063-T5 ALUMINUM ALLOY
 $I_{xx} = 33.39 \text{ in}^4$ // $S_{xx} = 7.52 \text{ in}^3$
 $I_{yy} = 4.42 \text{ in}^4$ // $S_{yy} = 1.80 \text{ in}^3$

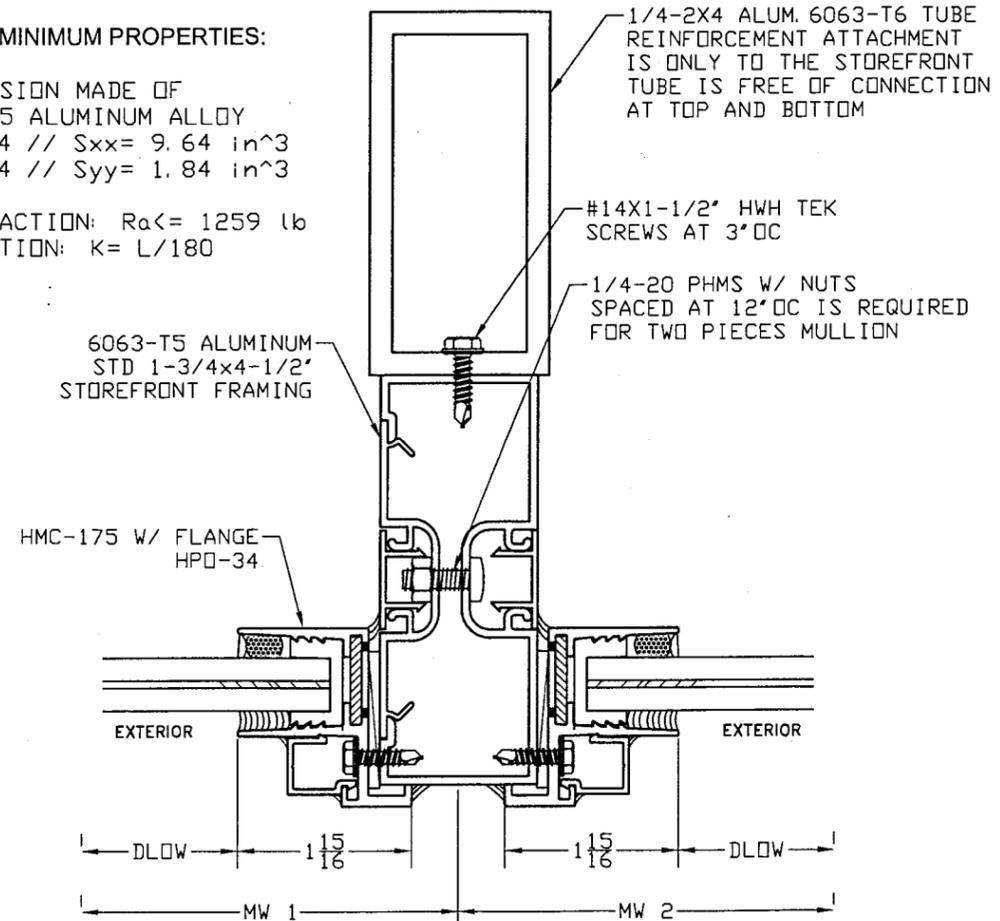
MAXIMUM END REACTION: $R_a \leq 1259 \text{ lb}$
MAXIMUM DEFLECTION: $L/180$



5 MULLION TYPE 5D MINIMUM PROPERTIES:

ALUMINUM EXTRUSION MADE OF MINIMUM 6063-T5 ALUMINUM ALLOY
 $I_{xx} = 42.33 \text{ in}^4$ // $S_{xx} = 9.64 \text{ in}^3$
 $I_{yy} = 4.50 \text{ in}^4$ // $S_{yy} = 1.84 \text{ in}^3$

MAXIMUM END REACTION: $R_a \leq 1259 \text{ lb}$
MAXIMUM DEFLECTION: $K = L/180$



MANUFACTURER:
HMC
HURRICANE MANUFACTURING CORPORATION
11850 MIRAMAR PKWY
MIRAMAR, FL. 33325
TEL.: (954) 392-7933
FAX: (954) 392-7356

PRODUCT:
HMC 175R
RETROFIT WINDOW SERIES
LARGE & SMALL MISSILE
IMPACT RATED

Engineering:
EngCo Inc.
CA 8116
6971 W. Sunrise Blvd. 104
Plantation, FL 33317
ENGCO@AOL.COM



DRAFTING:
PK DRAFTING & MORE

MIAMI-DADE BCCO:

Approved as complying with the Florida Building Code
Date: Oct. 6, 2010
NOA# 09-1228-02
Miami Beach Product Control
By: *Manuel Perez*

Date: 07/19/10
Scale: NA
Design by: PPMF

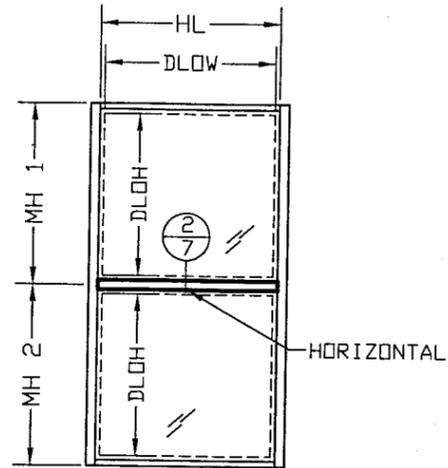
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TABLE 4 - HORIZONTALS TYPE 2A OR 2B
STOREFRONT RETROFIT INTERMEDIATE HORIZONTALS
DESIGNED RATING (PSF)

MH	HL	MULLION TYPE	
		TYPE 2A	TYPE 2B
24	24	120	120
30		120	120
36		120	120
42		120	120
48		120	120
54		120	120
60		120	120
24	36	120	120
30		120	120
36		120	120
42		120	120
48		120	120
54		120	120
60		120	120
24	48	120	120
30		109	119
36		98	109
42		91	104
48		89	102
54		89	102
60		91	102
24	60	81	99
30		66	80
36		58	71
42		52	63
48		48	59
54		46	56
60		46	56
24	72	55	67
36		38	47
42		34	42
48		31	38
54		29	36
60		28	34

DESIGN RATING IN PSF
HL: HORIZONTAL LENGTH IN INCHES
(DIM. BETWEEN VERTICAL FRAMING)
MH: MODULE HEIGHT IN INCHES
INTERPOLATION ALLOWED



HORIZONTAL SPACING: $MH = \frac{MH1 + MH2}{2}$

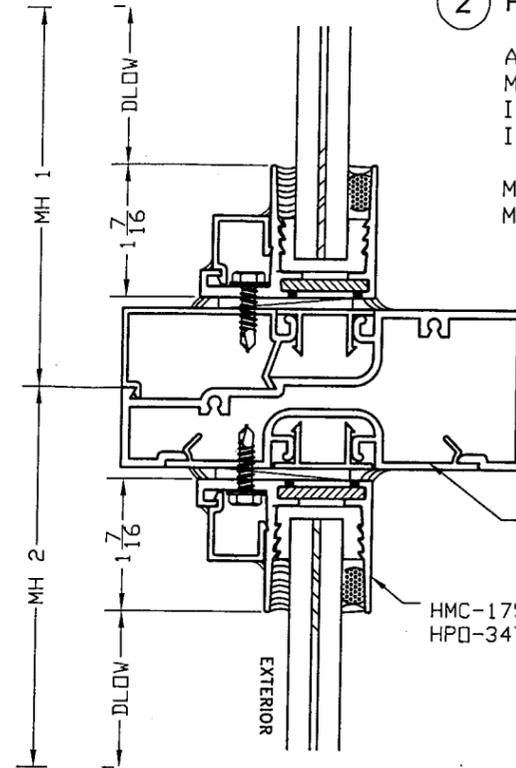
SEE TABLE 1 FOR MAXIMUM
DLOW X DLOH AND TABLE 4 FOR
HORIZONTAL TYPE 2A OR 2B CAPACITY

- NOTES:
- 1- EXISTING WINDOW FRAMING TO HAVE 0.06' MINIMUM WALL THICKNESS AT RETROFIT WINDOW CONNECTION
 - 2- EXISTING WINDOW FRAMING PROPERTIES MUST BE EVALUATED PER JOB BASIS BY A PROFESSIONAL ENGINEER TO VERIFY ADEQUACY WITH TESTED FRAMING PROPERTIES.
 - 3- INTERPOLATION IS ALLOWABLE ON TABLE 4
 - 4- PERIMETER FRAMING MUST BE PROPERLY ANCHORED IN ORDER TO TRANSFER LOADS TO THE MAIN STRUCTURE.
 - 5- EXISTING FRAMING ANCHORAGE ARE TO BE CALCULATED ON A PER JOB BASIS.
 - 6- MINIMUM (2) #10 SMS SECURING HORIZONTAL MEMBERS TO VERTICAL FRAMING.

2 HORIZONTAL TYPE 2A MINIMUM PROPERTIES:

ALUMINUM EXTRUSION MADE OF
MINIMUM 6063-T5 ALUMINUM ALLOY
 $I_{xx} = 3.74 \text{ in}^4$ // $S_{xx} = 1.56 \text{ in}^3$
 $I_{yy} = 2.73 \text{ in}^4$ // $S_{yy} = 1.10 \text{ in}^3$

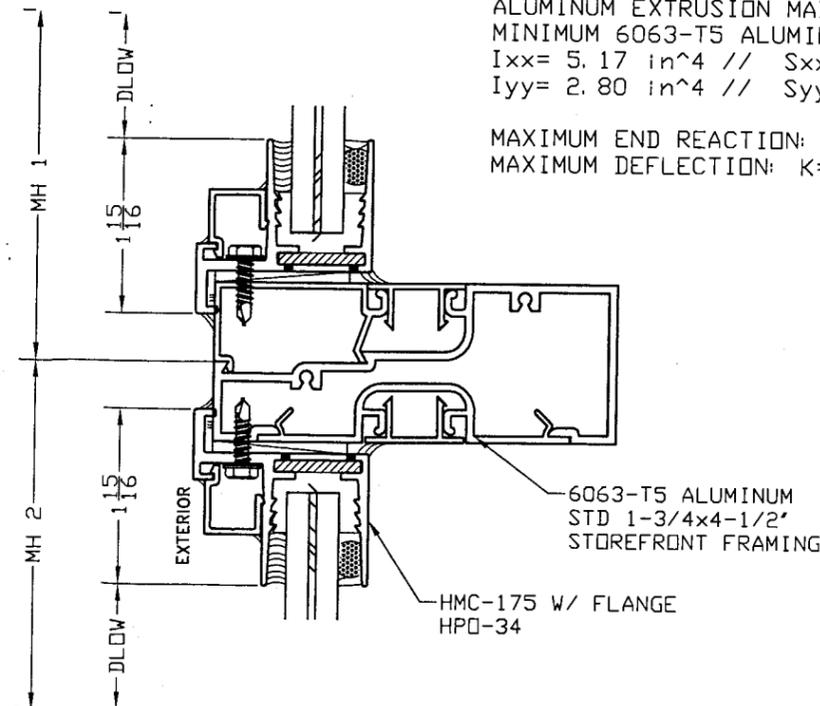
MAXIMUM END REACTION: $R_a \leq 408.5 \text{ lb}$
MAXIMUM DEFLECTION: $L/180$



2 HORIZONTAL TYPE 2B MINIMUM PROPERTIES:

ALUMINUM EXTRUSION MADE OF
MINIMUM 6063-T5 ALUMINUM ALLOY
 $I_{xx} = 5.17 \text{ in}^4$ // $S_{xx} = 1.79 \text{ in}^3$
 $I_{yy} = 2.80 \text{ in}^4$ // $S_{yy} = 1.13 \text{ in}^3$

MAXIMUM END REACTION: $R_a \leq 408.5 \text{ lb}$
MAXIMUM DEFLECTION: $K = L/180$



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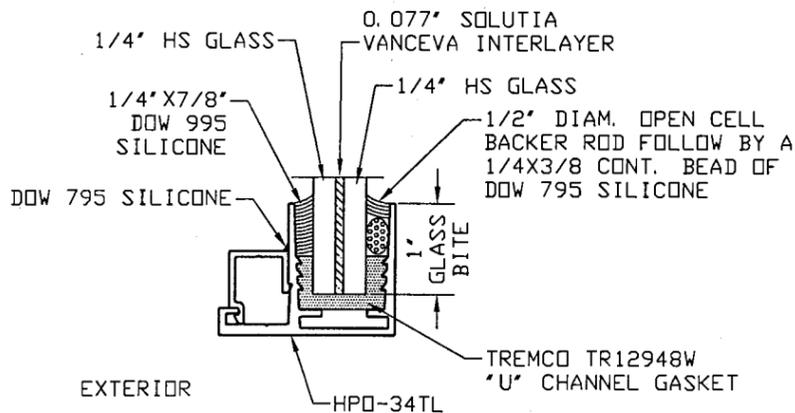
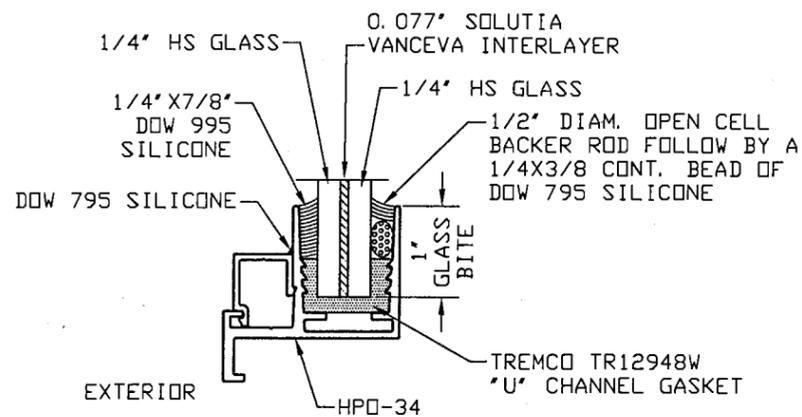
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Miami Dade Product Control
Div:
By: *Manuel Perez*

Date: 07/19/10
Scale: NA
Design by: PPMF

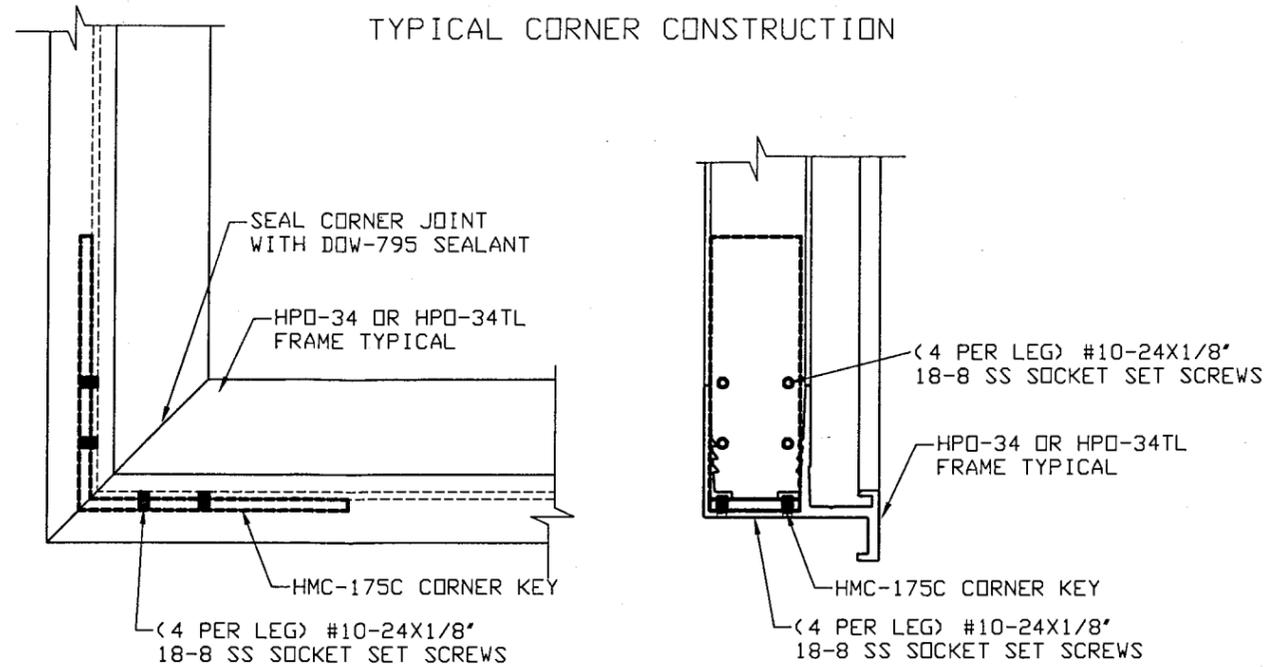
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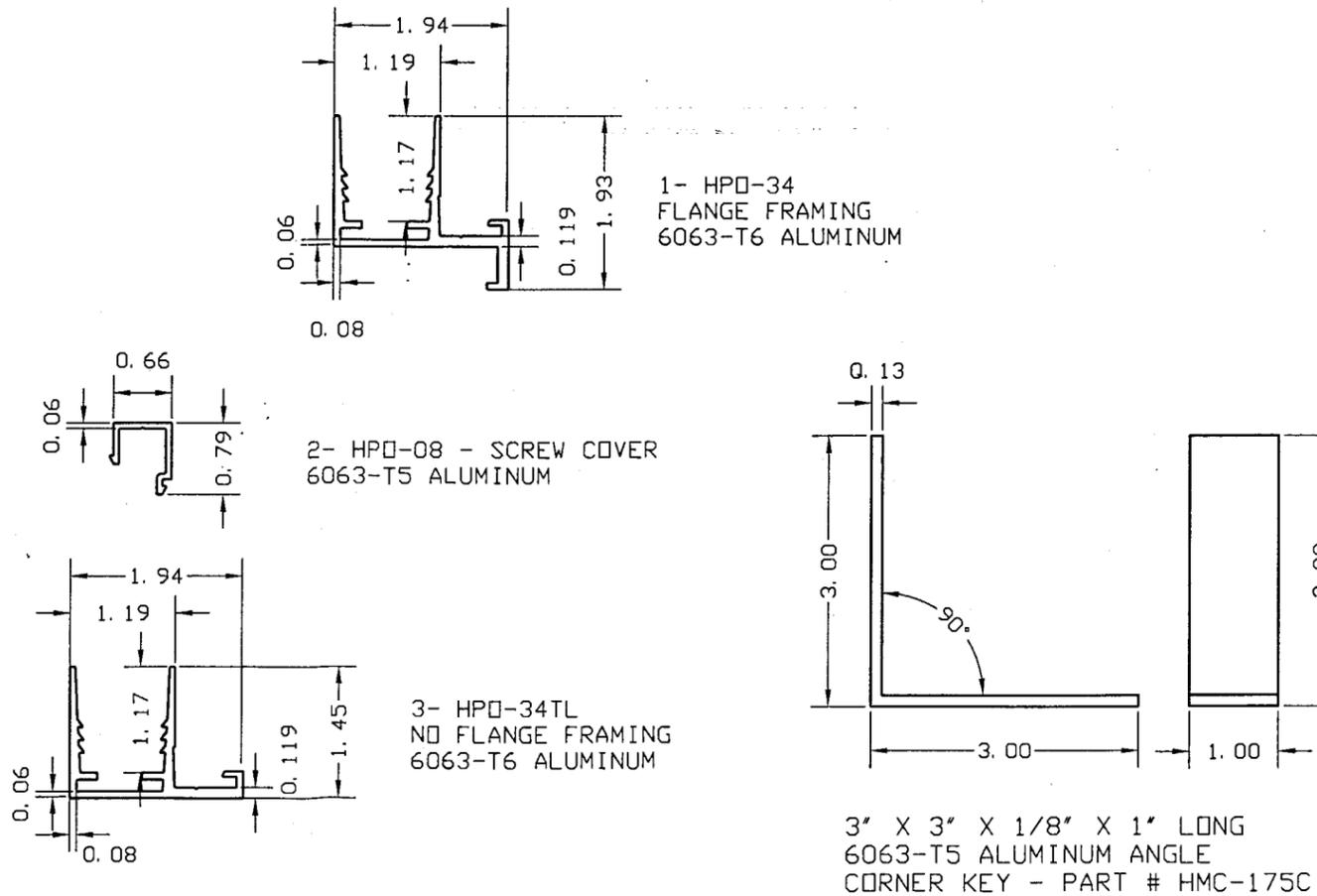
GLAZING OPTIONS
9/16" LAMINATED GLASS
LARGE MISSILE



TYPICAL CORNER CONSTRUCTION



PRODUCT COMPONENTS



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