



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

www.miamidade.gov/buildingcode

NOTICE OF ACCEPTANCE (NOA)

Jeld-Wen, Inc.
3737 Lakeport Blvd.
Klamath Falls, OR 97601

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: Clipped Aluminum Tube Mullion – L.M.I.

APPROVAL DOCUMENT: Drawing No. **JELD0042**, titled "Standard Aluminum Tube Mullion", sheets 1 through 7 of 7, dated 10/03/06, with revision B dated 04/11/08, prepared by PTC, LLC, signed and sealed by Eric S. Nielsen, 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:

Jeld-Wen, Inc.
355 Center Court
Venice, Florida 34285

Jeld-Wen, Inc.
62845 Boyd Acres Rd.
Bend, Oregon 97701

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

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

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

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

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official. This NOA consists of this page 1 and evidence page E-1, as well as approval document mentioned above. The submitted documentation was reviewed by **Manuel Perez, P.E.**



NOA No. 07-0629.03
Expiration Date: June 12, 2013
Approval Date: June 12, 2008
Page 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Manufacturer's die drawings and sections.
2. Drawing No **JELD0042**, Sheets 1 through 7 of 7, titled "Standard Aluminum Tube Mullion", dated 10/03/06, with revision B dated 04/11/08, prepared by PTC, LLC, signed and sealed by Eric S. Nielsen, P.E.

B. TESTS

1. Test reports on 1) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
2) Large Missile Impact Test per FBC, TAS 201-94
3) Cyclic Wind Pressure Loading per FBC, TAS 203-94
along with marked-up drawings and installation diagram of Jeld-Wen Premium Atlantic Vinyl Fixed Windows (8300) mullied together with aluminum tube mullion, prepared by National Certified Testing Laboratories, Test Report No. **NCTL-210-3383-2**, dated 10/22/07, signed and sealed by Gerard J. Ferrara, P.E.

C. CALCULATIONS

1. Anchor verification calculations and structural analysis, complying with FBC-2004, prepared by Al-Farooq Corporation, dated 5/23/06, signed and sealed by Humayoun Farooq, P.E.

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

1. None.

F. STATEMENTS

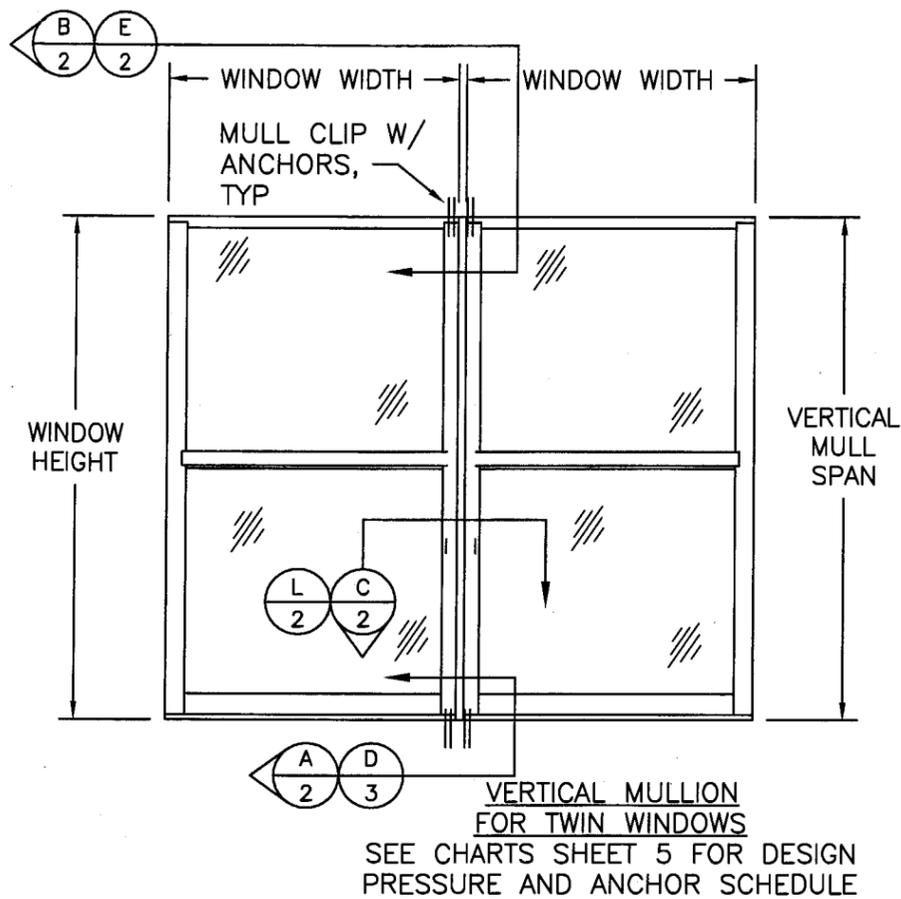
1. Statement letter of conformance, dated April 17th 2008, signed and sealed by Eric Nielsen, P.E.
2. Statement letter of no financial interest, dated April 17th 2008, signed and sealed by Eric Nielsen, P.E.
3. Laboratory Certification no. 06-0119.04 for Test Report no. 210-3383-2, issued by National Certified Testing Laboratories, dated September 12th, 2007, signed and sealed by Gerard J. Ferrara, P.E.

G. OTHER

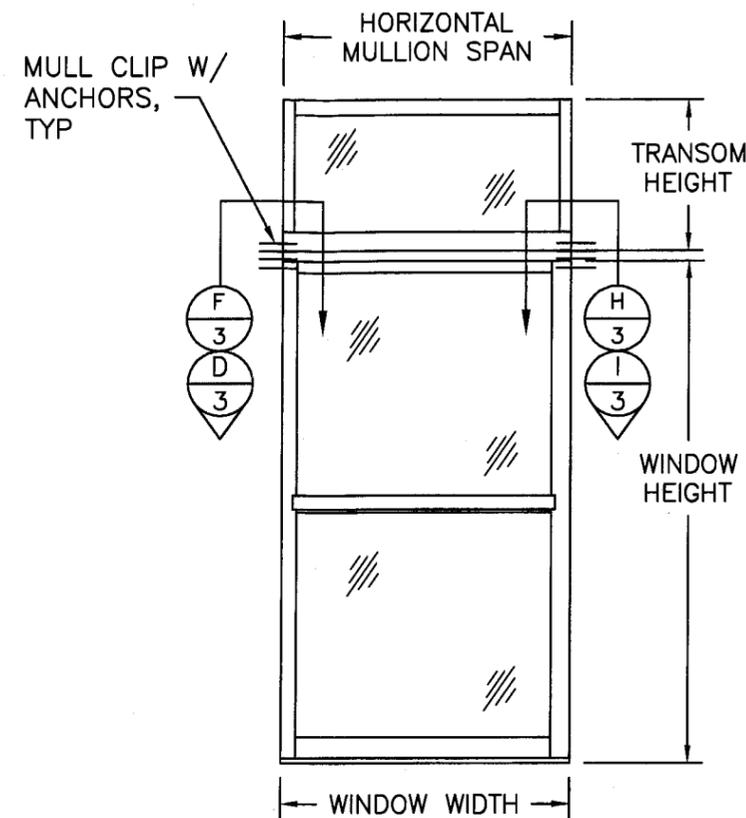
1. None.


Manuel Perez, P.E.
Product Control Examiner
NOA No. 07-0629.03

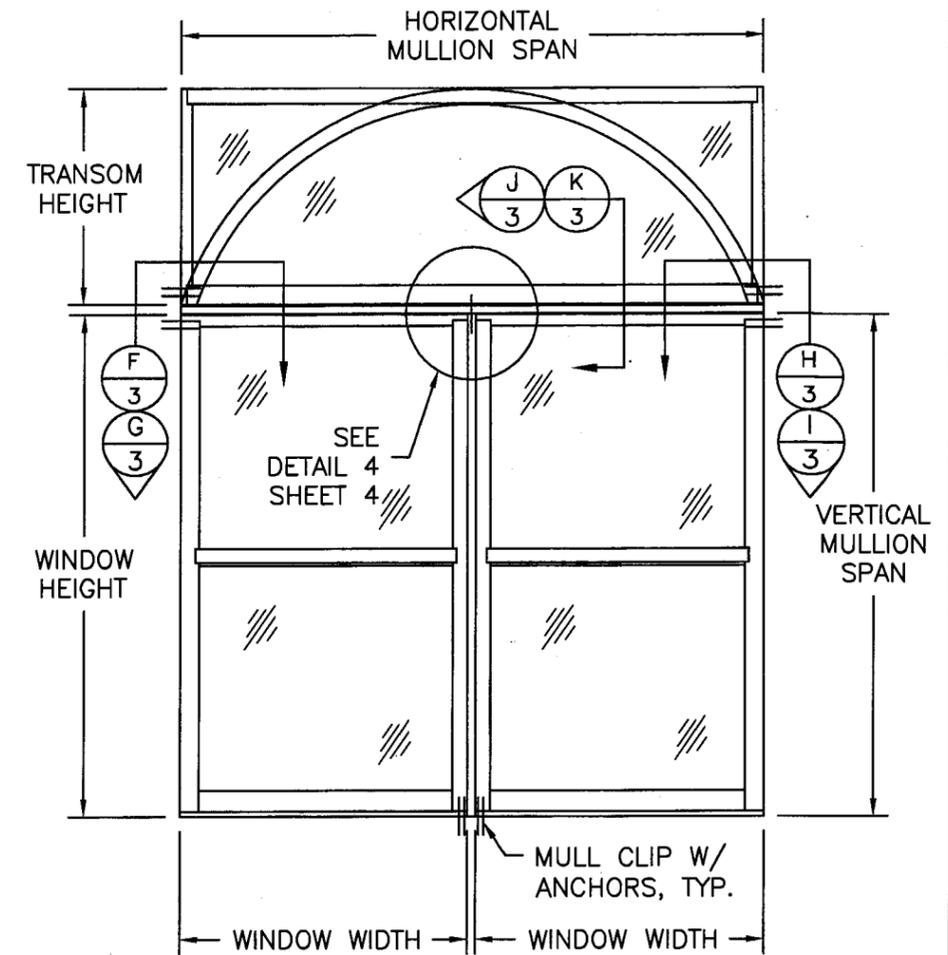
Expiration Date: June 12, 2013
Approval Date: June 12, 2008



SEE CHARTS SHEET 5 FOR DESIGN PRESSURE AND ANCHOR SCHEDULE



SEE CHARTS ON SHEETS 6 & 7 FOR DESIGN PRESSURE AND ANCHOR SCHEDULE



SEE CHARTS ON SHEETS 6 & 7 FOR DESIGN PRESSURE AND ANCHOR SCHEDULE

NOTE:

- 1) THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH THE 2007 FLORIDA BUILDING CODE, SECTION 1714.5.5.
- 2) MULLION INSTALLATION DETAILS APPLY TO STANDARD ALUMINUM TUBE MULLION GAH-49023, 1.00 X 4.00 X 0.125 (GAH-35086) WHEN USED TO MULL WINDOWS OVER AND/OR BESIDE EACH OTHER. VINYL AND ALUMINUM WINDOWS AS SHOWN ON NOTE 1, SHEET 2 MAY BE MULLED WITH THIS PRODUCT.
- 3) APPROVED IMPACT PROTECTIVE SYSTEM IS NOT REQUIRED ON THIS PRODUCT IN AREAS REQUIRING IMPACT RESISTANCE.
- 4) USE 3/16" ELCO TAPCONS ANCHOR OF SUFFICIENT LENGTH TO ACHIEVE MINIMUM EMBEDMENT OF 1 1/4" INTO MASONRY OR CONCRETE. 3/16" ELCO TAPCON MUST HAVE A 2 1/2" MINIMUM EDGE DISTANCE FROM EDGE OF MASONRY OR CONCRETE. (SEE CHARTS & NOTES ON SHEETS 5, 6 & 7 FOR DESIGN PRESSURE AND ANCHOR NOTES).
- 5) USE #10 WOOD SCREW OF SUFFICIENT LENGTH TO ACHIEVE MINIMUM EMBEDMENT OF 1 1/2" INTO WOOD FRAMING. (SEE CHARTS & NOTES ON SHEETS 5, 6 & 7 FOR DESIGN PRESSURE AND ANCHOR NOTES).
- 6) USE #8 TEK SCREWS OF SUFFICIENT LENGTH TO ACHIEVE A MINIMUM EMBEDMENT OF 3 THREADS PAST THE ANCHOR MATERIAL. (SEE CHARTS & NOTES ON SHEETS 5, 6 & 7 FOR DESIGN PRESSURE AND ANCHOR NOTES).
- 7) MASONRY, 1X & 2X WOOD BUCKS TO BE DESIGNED AND ANCHORED TO PROPERLY TRANSFER ALL LOADS TO STRUCTURE AND IS THE RESPONSIBILITY OF THE ARCHITECT OR ENGINEER OF RECORD.
- 8) THIS MULLION IS ONLY VALID WHEN USED IN CONJUNCTION WITH ALL APPLICABLE JELD-WEN PRODUCTS. SEE NOTE 1 ON SHEET 4 FOR SPECIFIC MODEL #.
- 9) ALL WINDOWS USED WITH THIS MULLION SHALL BE QUALIFIED UNDER SEPARATE APPROVAL.

Approved as complying with the Florida Building Code
 Date JUNE 12, 2008
 NOA# 07-0629.03
 Miami Dade Product Control Division
 By *[Signature]*

| | | | |
|-----|-------------------------|----------|-----|
| A | TITLE BLOCK CORRECTION | 10/09/06 | ESN |
| B | PER MIAMI DADE 11/10/07 | 4/11/08 | BB |
| SYM | REVISION | DATE | BY |

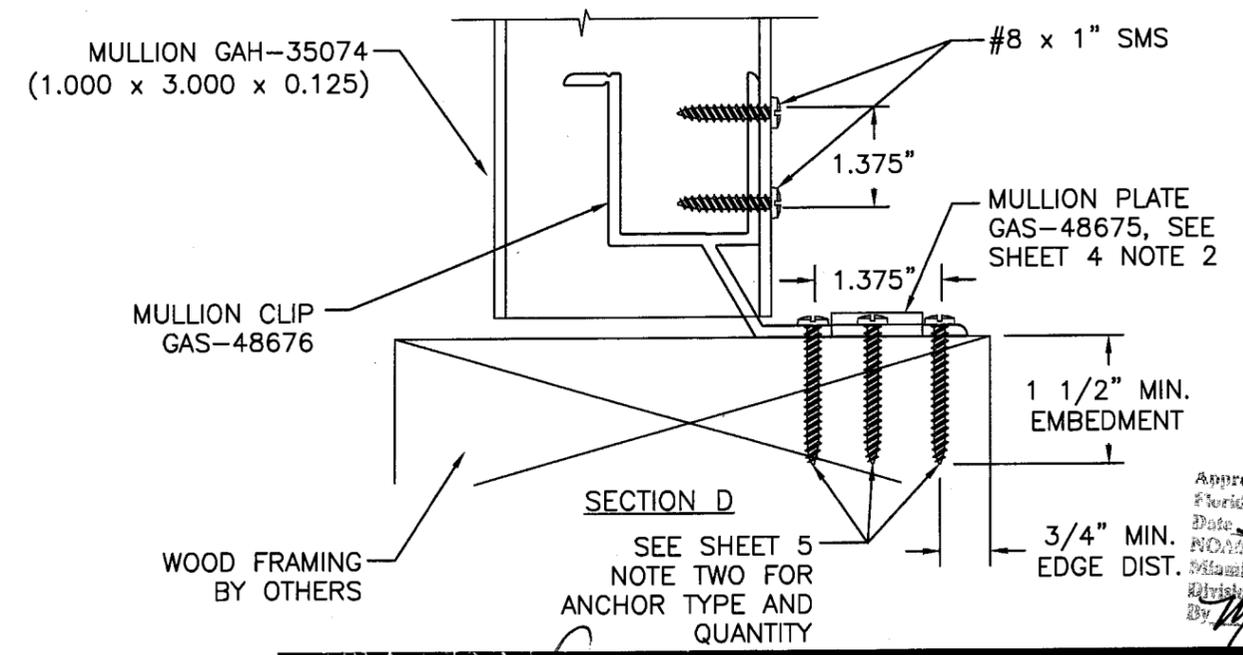
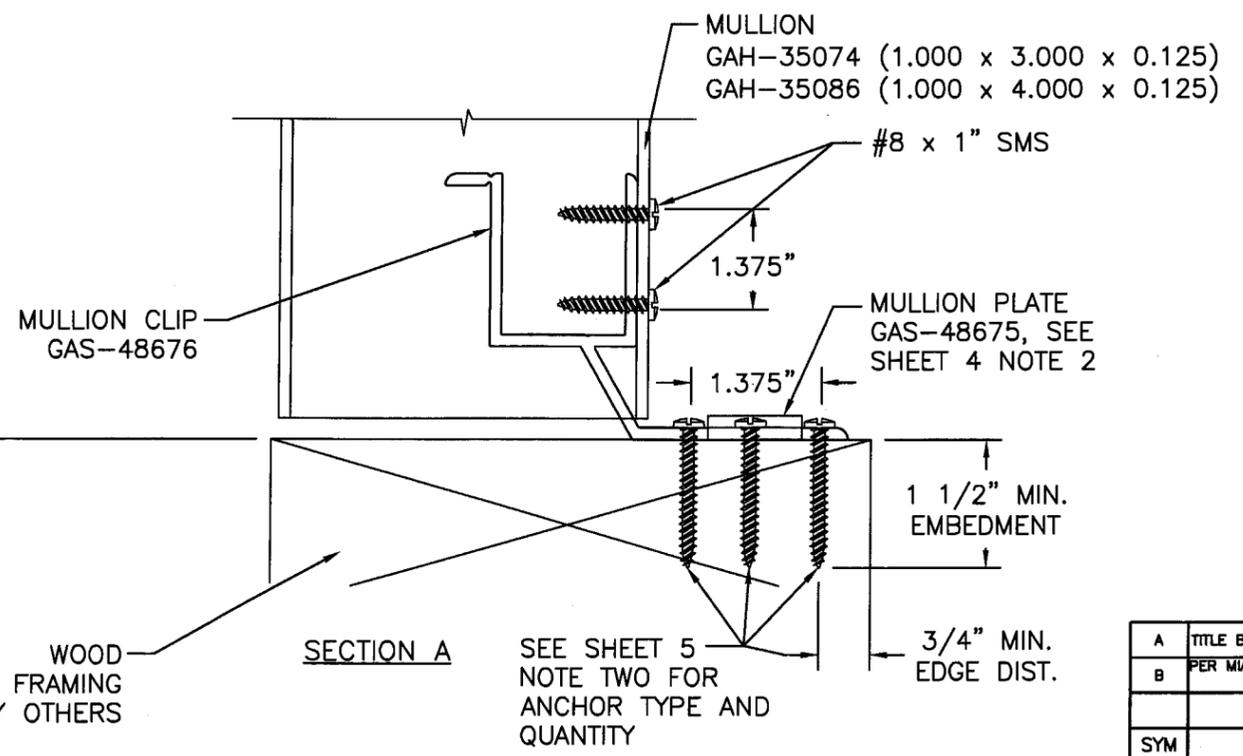
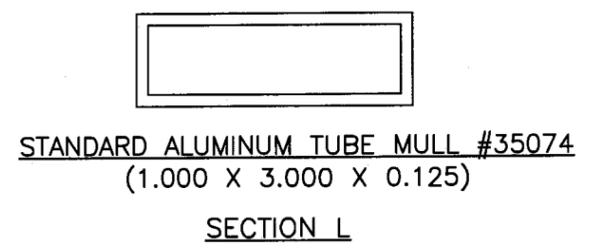
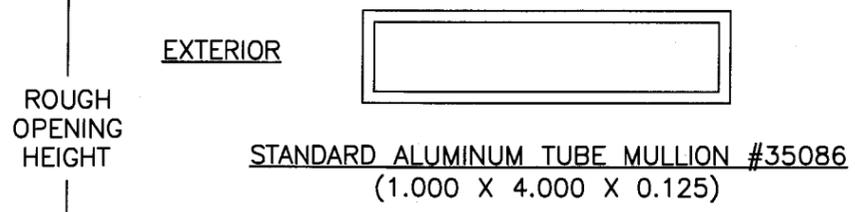
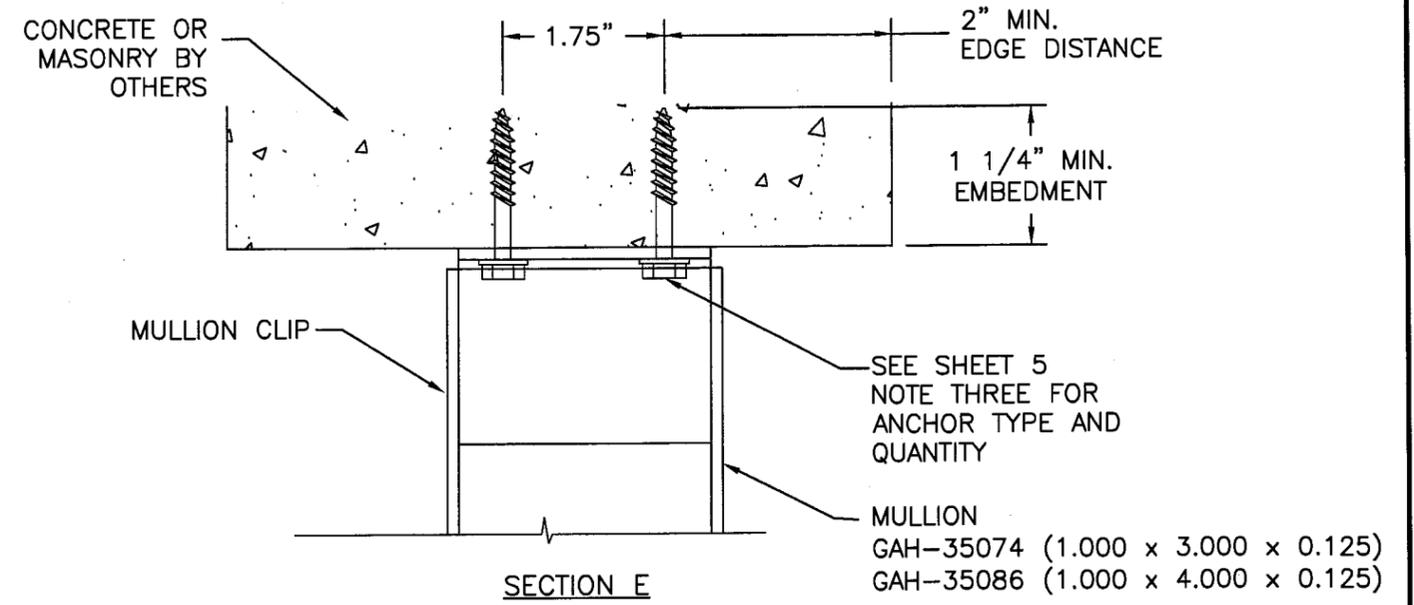
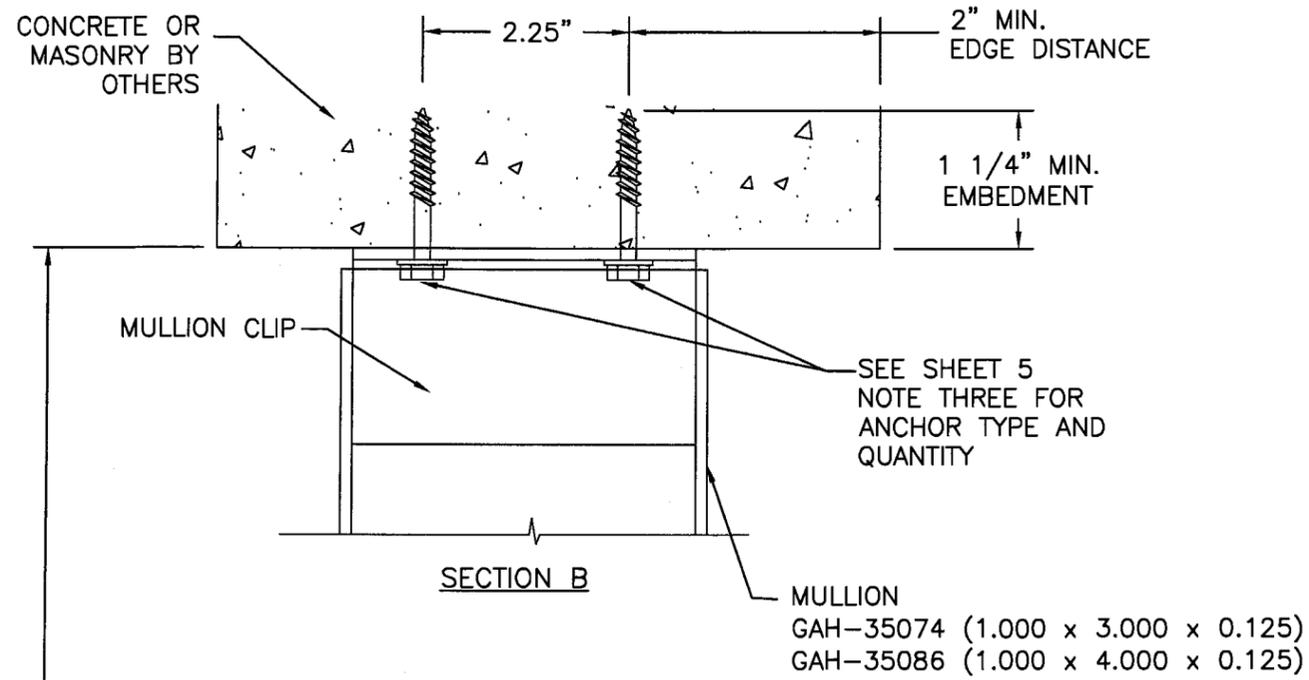
[Signature]
 Eric S. Nielsen
 Florida P. E. No. 41323
 PTC, LLC
 1535 Cogswell Street, Suite C25
 Rockledge, Florida 32955
 FBPE Certificate of Authorization NO. 25935

JELD-WEN, INC.
 355 CENTER CT., VENICE, FLORIDA 34285

TITLE: STANDARD L.M.I. ALUM. TUBE MULLION (1" X 4")
 VERT. & HORIZ. MULLION ELEVATIONS AND NOTES

PREPARED BY: **PTC** PTC, LLC
 Phone 321.690.1788 Fax 321.690.1789

DRN: CM DATE: 10/03/06
 SCALE: N.T.S. DWG. NO: JELD0042
 REV: B SHEET: 1 OF 7



Approved as complying with the Florida Building Code
Date JUNE 12, 2008
NOA 07-0629-03
Miami Dade Product Control Division
By Mamuel Perez

| | | | |
|-----|-------------------------|----------|-----|
| A | TITLE BLOCK CORRECTION | 10/09/06 | ESN |
| B | PER MIAMI DADE 11/10/07 | 4/11/08 | BB |
| SYM | REVISION | DATE | BY |

Eric S. Nielsen
4/17/08
Eric S. Nielsen
Florida P. E. No. 41323
PTC, LLC
1535 Cogswell Street, Suite C25
Rockledge, Florida 32955
FBPE Certificate of Authorization NO. 25935

JELD-WEN, INC.
355 CENTER ST., VENICE, FLORIDA 34292

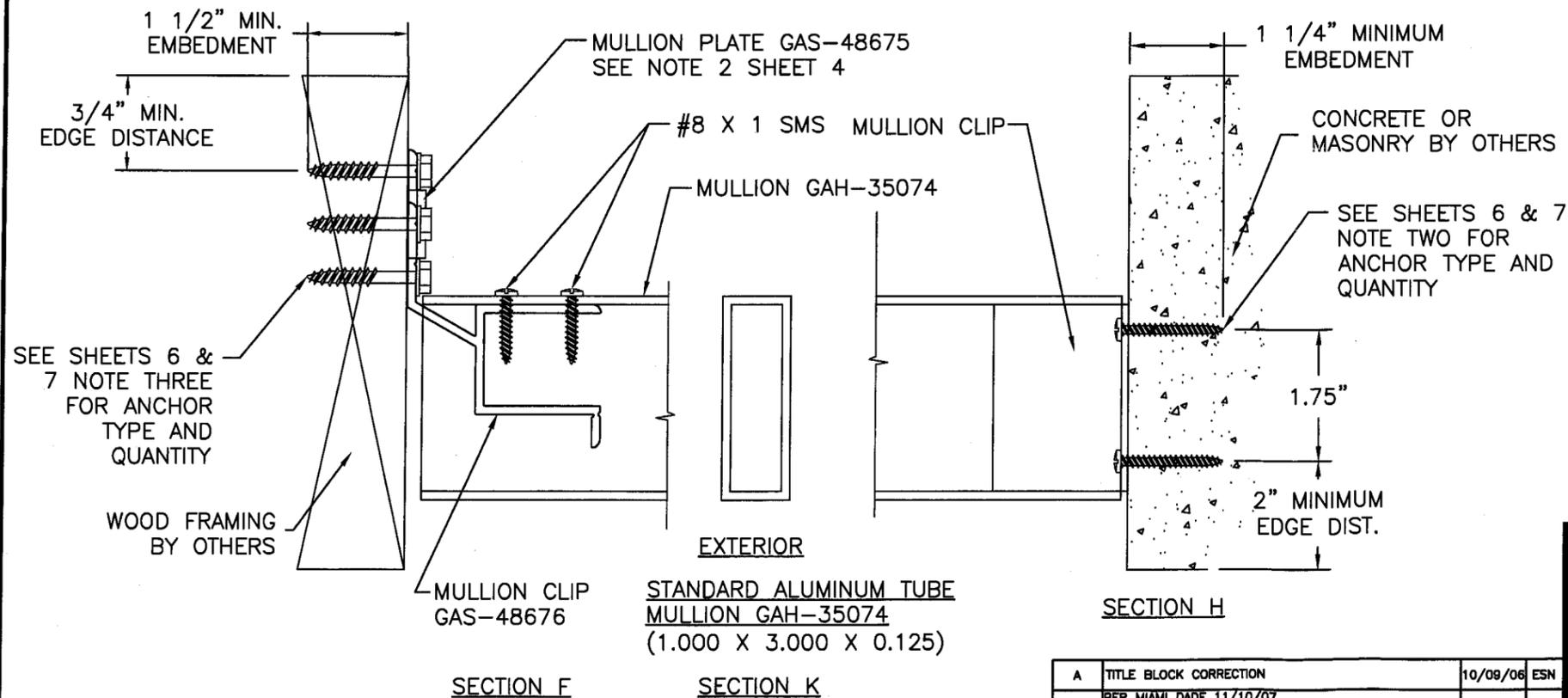
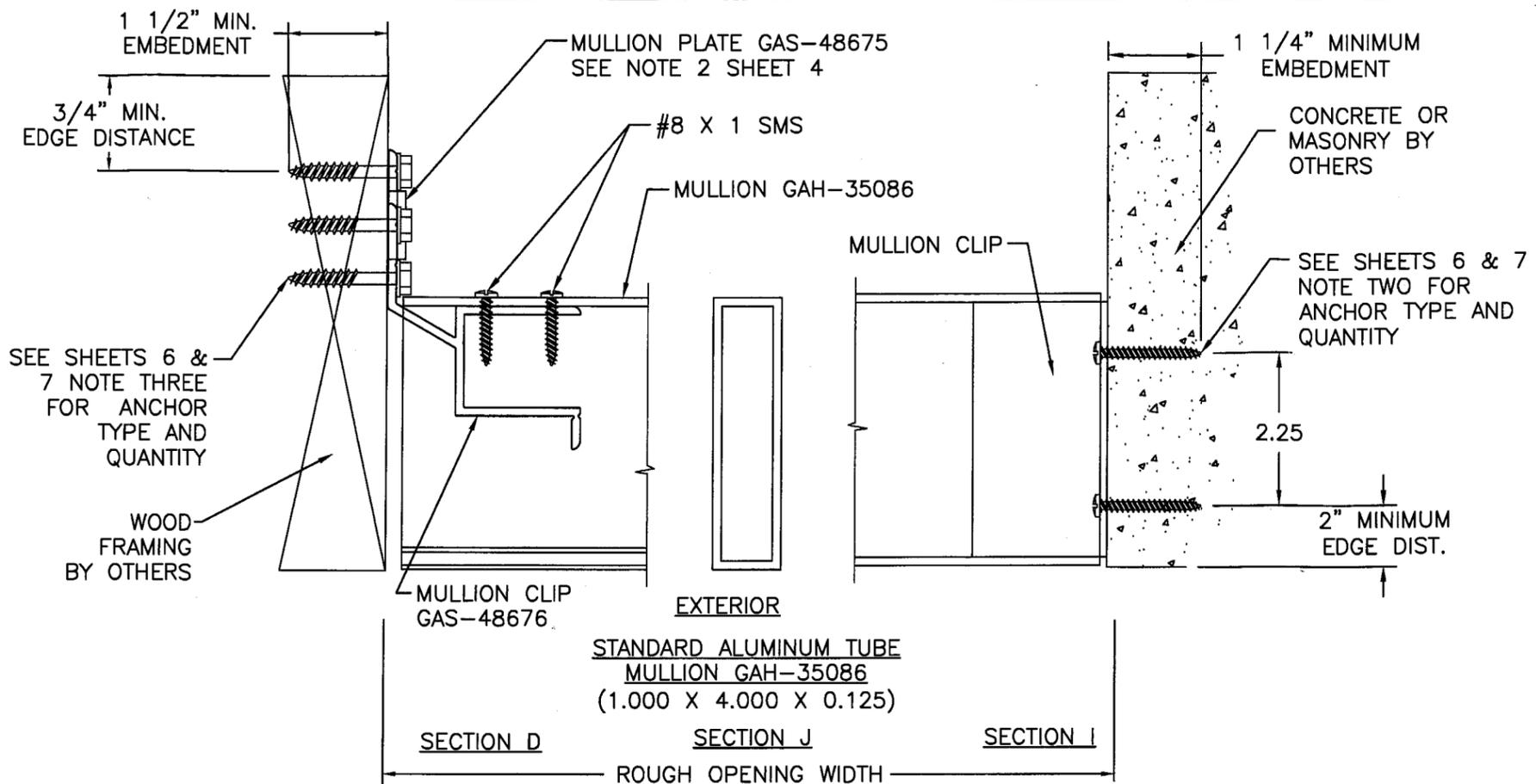
TITLE: STANDARD ALUMINUM TUBE MULLION
VERTICAL INSTALLATION DETAILS

PREPARED BY: **PTC**
PTC, LLC

DRN: CM
SCALE: N.T.S.
REV: B

DATE: 10/03/06
DWG. NO: JELD0042
SHEET: 2 OF 7

Phone 321.690.1788 Fax 321.690.1789

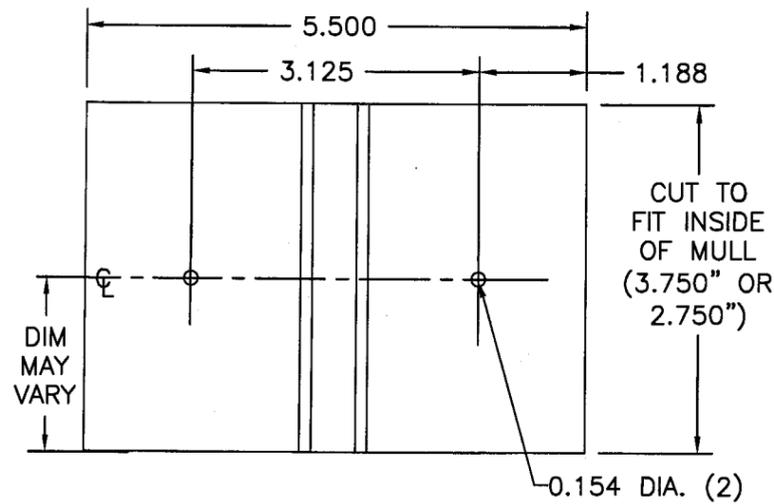


Approved as complying with the
Florida Building Code
Date June 12, 2008
NOA# 07-0629.03
Miami Dade Product Control
By Maurice Perez

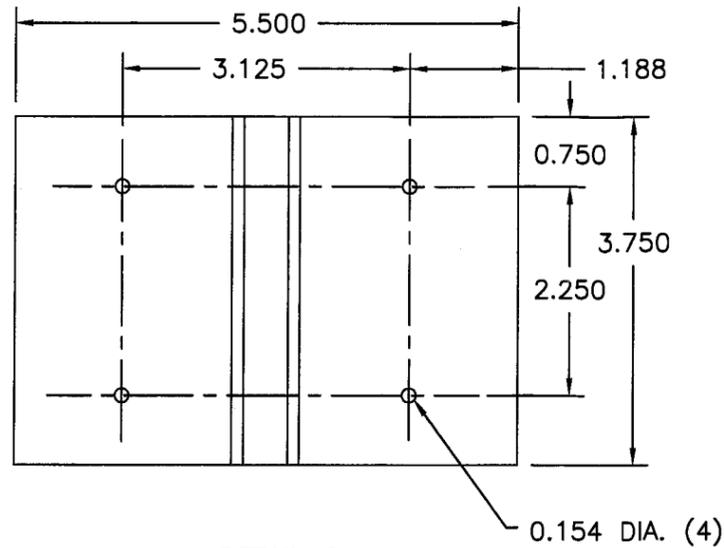
| SYM | REVISION | DATE | BY |
|-----|-------------------------|----------|-----|
| A | TITLE BLOCK CORRECTION | 10/09/06 | ESN |
| B | PER MIAMI DADE 11/10/07 | 4/11/08 | BB |
| | | | |

Eric S. Nielsen
4/17/08
Eric S. Nielsen
Florida P. E. No. 41323
PTC, LLC
1535 Cogswell Street, Suite C25
Rockledge, Florida 32955
FBPE Certificate of Authorization NO. 25935

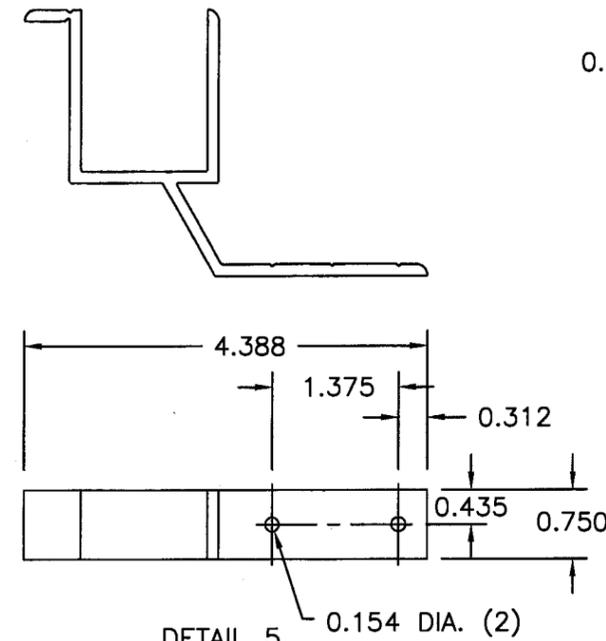
| | | | |
|--|--|------------------|----------------------|
| JELD-WEN, INC. | | | |
| 355 CENTER CT., VENICE, FLORIDA 34285 | | | |
| TITLE: STANDARD ALUMINUM TUBE MULLION HORIZONTAL INSTALLATION DETAILS | | | |
| PREPARED BY: PTC PTC, LLC | | DRN: BB | DATE: 10/03/06 |
| Phone 321.690.1788 Fax 321.690.1789 | | SCALE: N.T.S. | DWG. NO: JELD0042 |
| | | REV: B | SHEET: 3 OF 7 |



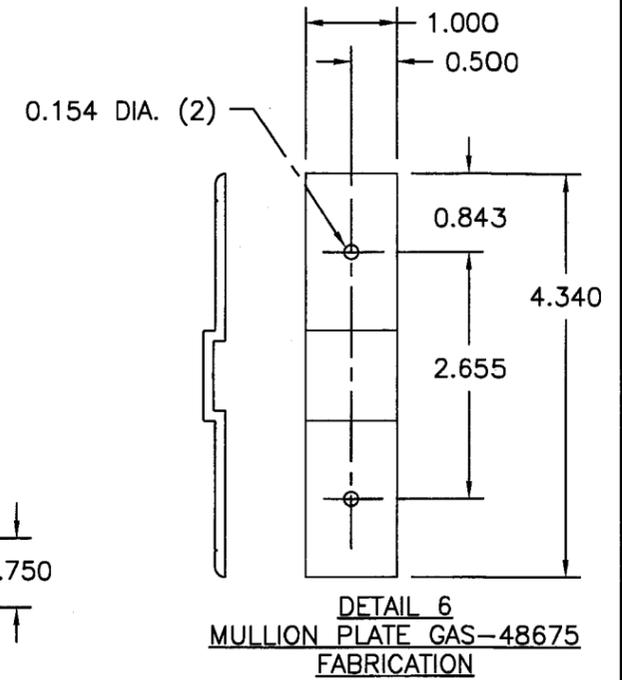
DETAIL 1
MULLION CLIP FABRICATION
 FROM DIE R12321-6 3/16" DIA.
 TAPCONS AND #8 TEK SCREWS



DETAIL 2
MULLION CLIP FABRICATION
 FROM DIE R12321-6 FOR GAH 35086
 (1.000 X 4.000 X .125 - #10 WOOD SCREWS)



DETAIL 5
MULLION CLIP GAS-48676
FABRICATION



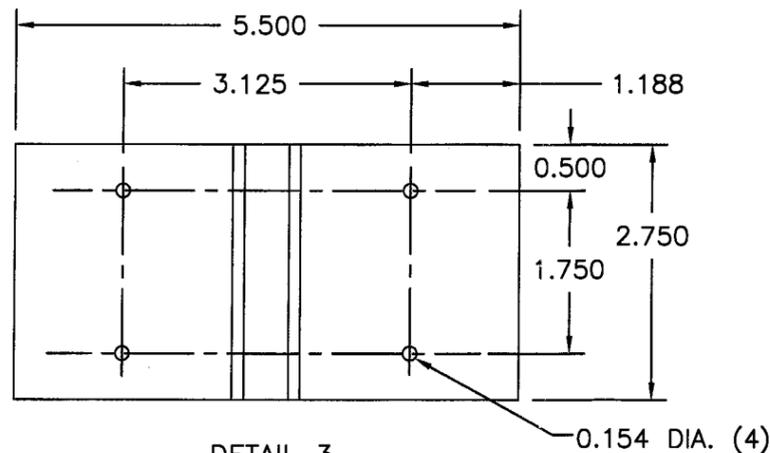
DETAIL 6
MULLION PLATE GAS-48675
FABRICATION

NOTES:

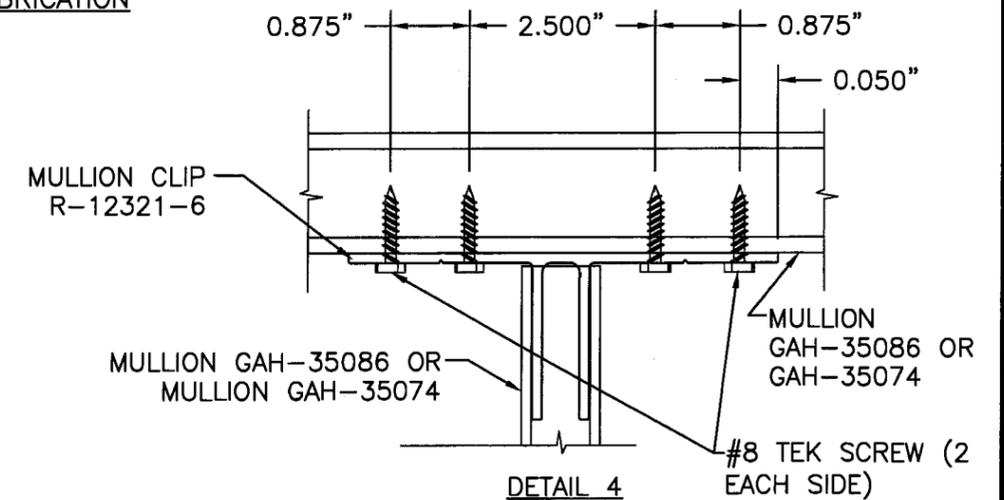
1) STANDARD ALUMINUM TUBE MULLION, SEE DIE DRWGS GAH-35074 (1.000 X 3.000 X 0.125) & GAH-35086 (1.000 X 4.000 X 0.125), TO BE ONLY USED WITH THE FOLLOWING PRODUCTS:

- PREMIUM ATLANTIC VINYL SINGLE HUNG (8100)
- PREMIUM ATLANTIC VINYL HORIZ. ROLLER (8200)
- PREMIUM ATLANTIC VINYL FIXED (8300)
- PREMIUM ATLANTIC VINYL CASEMENT OPERATING (8700)
- PREMIUM ATLANTIC VINYL CASEMENT FIXED (8700)
- PREMIUM ATLANTIC VINYL AWNING (8800)
- PREMIUM ALUMINUM DOUBLE HUNG (6400)
- PREMIUM ALUMINUM HORIZ. ROLLER (6500)
- PREMIUM ALUMINUM FIXED (6600)

2) MULLION PLATE GAS-48675 TO BE USED ONLY WITH #10 W.S. & WOOD SUBSTRATE.



DETAIL 3
MULLION CLIP FABRICATION
 FROM DIE R12321-6 FOR GAH 35074
 (1.000 X 3.000 X .125 - #10 WOOD SCREWS)



DETAIL 4
VERTICAL MULLION INTERSECTION
TO HORIZONTAL MULLION

Approved as complying with the Florida Building Code
 Date JUNE 12, 2008
 NOAR 07-0629-03
 Miami Code Product Control Division
 By Manuel Perez

| SYM | REVISION | DATE | BY |
|-----|-------------------------|----------|-----|
| A | TITLE BLOCK CORRECTION | 10/09/06 | ESN |
| B | PER MIAMI DADE 11/10/07 | 4/11/08 | BB |

| | | | |
|--|---|--------------------------|-------------------------------------|
| Eric S. Nielsen Florida P. E. No. 41323 PTC, LLC 1535 Cogswell Street, Suite C25 Rockledge, Florida 32955 FBPE Certificate of Authorization NO. 25935 | JELD-WEN, INC. 355 CENTER CT., VENICE, FLORIDA 34285 | | |
| | TITLE: STANDARD ALUMINUM TUBE MULLION COMPONENTS AND INSTALLATION DETAILS | | |
| | PREPARED BY: PTC, LLC | DRN: BB SCALE: N.T.S. | DATE: 10/03/06 DWG. NO: JELD0042 |
| | REV: B | SHEET: 4 OF 7 | |

Maximum design pressure capacity chart (psf)
1" X 3" X 0.125" Atlantic Vinyl Aluminum Mullion (Vertical, Twin, 48676)
 Design pressures are limited either by mullion or anchor screws or anchor clip capacity
 Report No. 438

| Height (in) | MULLION (1" x 3" 0.125") & GAS 48676 CLIP - WINDOW WIDTH (in) | | | | | | | | | | | |
|-------------|---|------|------|------|------|------|------|------|------|------|------|------|
| | 18.0 | 21.0 | 24.0 | 27.0 | 30.0 | 33.0 | 36.0 | 39.0 | 42.0 | 45.0 | 48.0 | 53.0 |
| 24.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 |
| 30.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 |
| 36.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 |
| 38.4 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 |
| 42.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 |
| 48.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 73.9 | 73.0 | 72.7 | 72.7 | 72.7 |
| 50.6 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 74.4 | 71.3 | 69.0 | 67.3 | 66.2 | 65.5 | 65.4 |
| 54.0 | 75.0 | 75.0 | 75.0 | 75.0 | 71.6 | 67.7 | 64.6 | 62.3 | 60.4 | 59.1 | 58.2 | 57.5 |
| 60.0 | 75.0 | 75.0 | 72.7 | 66.7 | 62.1 | 58.4 | 55.4 | 53.0 | 51.1 | 49.6 | 48.5 | 47.2 |
| 63.0 | 75.0 | 75.0 | 68.4 | 62.7 | 58.2 | 54.6 | 51.7 | 49.4 | 47.5 | 46.0 | 44.7 | 43.3 |
| 66.0 | 75.0 | 71.9 | 64.6 | 59.1 | 54.8 | 51.3 | 48.5 | 46.2 | 44.3 | 42.8 | 41.6 | 40.0 |
| 72.0 | 73.9 | 64.9 | 58.2 | 53.0 | 49.0 | 45.7 | 42.7 | 40.0 | 37.8 | 36.0 | 34.4 | 32.4 |
| 76.0 | 69.5 | 60.9 | 54.4 | 48.8 | 44.4 | 40.8 | 37.9 | 35.5 | 33.5 | 31.8 | 30.4 | 28.4 |

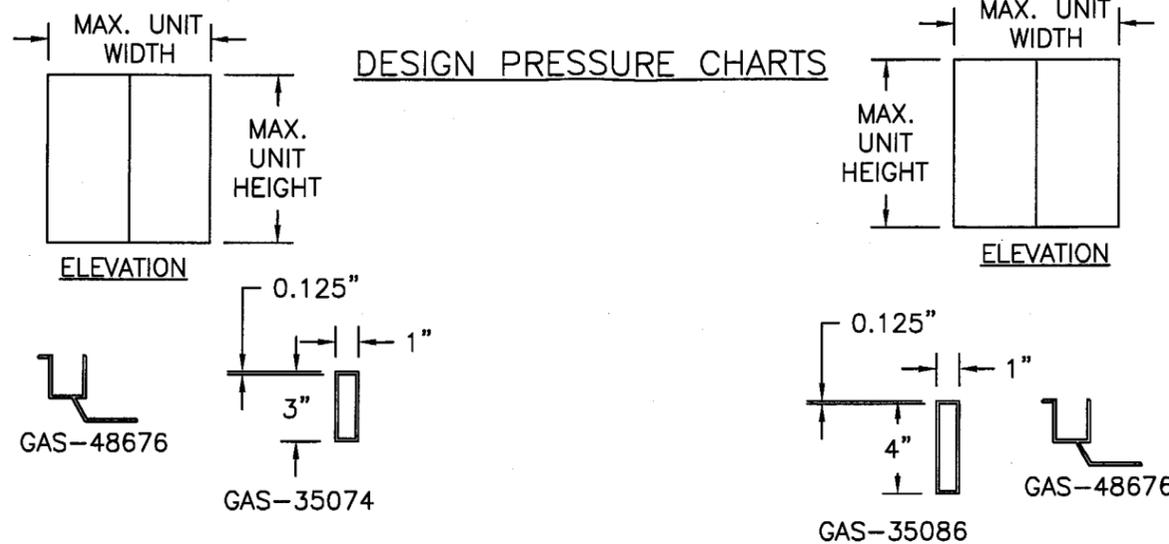
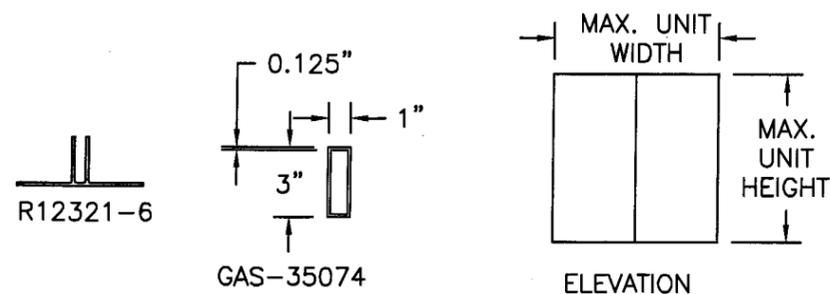
NOTES FOR 1.000 X 3.000 X 0.125 VERTICAL MULLION (GAH-35074) WITH GAS-48675 MULL CLIP

- 1) THE DESIGN PRESSURES IN THIS CHART IS FOR THE MULLIONS LISTED ABOVE WHEN USED WITH THE CLIPS LISTED ABOVE.
- 2) FOR VERTICAL MULL CLIPS IN WOOD FRAMING INSTALLATION USE (2) TWO #10 WOOD SCREWS AT EACH ANCHOR CLIP. MUST BE OF SUFFICIENT LENGTH TO ACHIEVE A 1 1/2" MINIMUM EMBEDMENT INTO FRAMING. SEE SHEETS 2 & 3 FOR DETAILS.
- 3) FOR VERTICAL MULL CLIPS IN MASONRY INSTALLATION USE (2) TWO 3/16" ELCO TAPCONS AT EACH ANCHOR CLIP WITH SUFFICIENT LENGTH TO ACHIEVE A 1 1/4" MINIMUM EMBEDMENT INTO SUBSTRATE. SEE SHEETS 2 & 3 FOR DETAILS.
- 4) CHART APPLIES ONLY TO 1.000 X 3.000 MULLION(S) AS SPECIFIED ABOVE WHEN USED TO MULL WINDOWS SIDE BY SIDE.
- 5) READ WINDOW WIDTH AND MULL SPAN IN INCHES. DESIGN PRESSURE VALUES ON THIS CHART ARE POSITIVE AND NEGATIVE PSF.
- 6) DESIGN PRESSURE VALUES APPLY TO MULLION WHERE TWO OR MORE WINDOWS ARE LISTED IN A SINGLE OPENING.
- 7) REFER TO REPORT #438 FOR MORE MULLION SPECIFICATIONS.

Maximum design pressure capacity chart (psf)
1" X 3" X 0.125" Atlantic Vinyl Aluminum Mullion (Vertical, Twin, R12321-6)
 Design pressures are limited either by mullion or anchor screws or anchor clip capacity
 Report No. 439

| Height (in) | MULLION (1" x 3" 0.125") & R12321-6 CLIP - WINDOW WIDTH (in) | | | | | | | | | | | |
|-------------|--|------|------|------|------|------|------|------|------|------|------|------|
| | 18.0 | 21.0 | 24.0 | 27.0 | 30.0 | 33.0 | 36.0 | 39.0 | 42.0 | 45.0 | 48.0 | 53.0 |
| 24.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 |
| 30.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 |
| 36.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 |
| 38.4 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 |
| 42.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 |
| 48.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 74.2 | 73.3 | 73.0 | 73.0 | 73.0 |
| 50.6 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 74.7 | 71.6 | 69.3 | 67.6 | 66.4 | 65.8 | 65.6 |
| 54.0 | 75.0 | 75.0 | 75.0 | 75.0 | 71.9 | 68.0 | 64.9 | 62.5 | 60.7 | 59.3 | 58.4 | 57.7 |
| 60.0 | 75.0 | 75.0 | 73.0 | 67.0 | 62.3 | 58.6 | 55.6 | 53.2 | 51.3 | 49.8 | 48.7 | 47.4 |
| 63.0 | 75.0 | 75.0 | 68.7 | 62.9 | 58.4 | 54.8 | 51.9 | 49.6 | 47.7 | 46.1 | 44.9 | 43.5 |
| 66.0 | 75.0 | 72.2 | 64.9 | 59.3 | 55.0 | 51.5 | 48.7 | 46.4 | 44.5 | 43.0 | 41.7 | 40.2 |
| 72.0 | 74.2 | 65.1 | 58.4 | 53.2 | 49.2 | 45.9 | 42.7 | 40.0 | 37.8 | 36.0 | 34.4 | 32.4 |
| 76.0 | 69.7 | 61.1 | 54.4 | 48.8 | 44.4 | 40.8 | 37.9 | 35.5 | 33.5 | 31.8 | 30.4 | 28.4 |

NOTES FOR 1.000 X 3.000 X 0.125 VERTICAL MULLION (GAH-35074) WITH R12321-6 MULL CLIP



Maximum design pressure capacity chart (psf)
1" X 4" X 0.125" Atlantic Vinyl Aluminum Mullion (Vertical, Twin, 48676)
 Design pressures are limited either by mullion or anchor screws or anchor clip capacity
 Report No. 440

| Height (in) | MULLION (1" x 4" 0.125") & GAS 48676 CLIP - WINDOW WIDTH (in) | | | | | | | | | | | |
|-------------|---|------|------|------|------|------|------|------|------|------|------|------|
| | 18.0 | 21.0 | 24.0 | 27.0 | 30.0 | 33.0 | 36.0 | 39.0 | 42.0 | 45.0 | 48.0 | 53.0 |
| 24.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 |
| 30.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 |
| 36.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 |
| 38.4 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 |
| 42.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 |
| 48.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 73.9 | 73.0 | 72.7 | 72.7 | 72.7 |
| 50.6 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 74.4 | 71.3 | 69.0 | 67.3 | 66.2 | 65.5 | 65.4 |
| 54.0 | 75.0 | 75.0 | 75.0 | 75.0 | 71.6 | 67.7 | 64.6 | 62.3 | 60.4 | 59.1 | 58.2 | 57.5 |
| 60.0 | 75.0 | 75.0 | 72.7 | 66.7 | 62.1 | 58.4 | 55.4 | 53.0 | 51.1 | 49.6 | 48.5 | 47.2 |
| 63.0 | 75.0 | 75.0 | 68.4 | 62.7 | 58.2 | 54.6 | 51.7 | 49.4 | 47.5 | 46.0 | 44.7 | 43.3 |
| 66.0 | 75.0 | 71.9 | 64.6 | 59.1 | 54.8 | 51.3 | 48.5 | 46.2 | 44.3 | 42.8 | 41.6 | 40.0 |
| 72.0 | 73.9 | 64.9 | 58.2 | 53.0 | 49.0 | 45.7 | 42.7 | 40.0 | 37.8 | 36.0 | 34.4 | 32.4 |
| 76.0 | 69.5 | 60.9 | 54.5 | 49.6 | 45.8 | 42.7 | 40.1 | 38.0 | 36.3 | 34.8 | 33.6 | 31.9 |

NOTES FOR 1.000 X 4.000 X 0.125 VERTICAL MULLION (GAH-35086) WITH GAS-48676 MULL CLIP

- 1) THE DESIGN PRESSURES IN THIS CHART IS FOR THE MULLIONS LISTED ABOVE WHEN USED WITH THE CLIPS LISTED ABOVE.
- 2) FOR VERTICAL MULL CLIPS IN WOOD FRAMING INSTALLATION USE (4) FOUR #10 WOOD SCREWS AT EACH ANCHOR CLIP. MUST BE OF SUFFICIENT LENGTH TO ACHIEVE A 1 1/2" MINIMUM EMBEDMENT INTO FRAMING. SEE SHEETS 2 & 3 FOR DETAILS.
- 3) FOR VERTICAL MULL CLIPS IN MASONRY INSTALLATION USE (2) TWO 3/16" ELCO TAPCONS AT EACH ANCHOR CLIP WITH SUFFICIENT LENGTH TO ACHIEVE A 1 1/4" MINIMUM EMBEDMENT INTO SUBSTRATE. SEE SHEETS 2 & 3 FOR DETAILS.
- 4) CHART APPLIES ONLY TO 1.000 X 4.000 MULLION(S) AS SPECIFIED ABOVE WHEN USED TO MULL WINDOWS SIDE BY SIDE.
- 5) READ WINDOW WIDTH AND MULL SPAN IN INCHES. DESIGN PRESSURE VALUES ON THIS CHART ARE POSITIVE AND NEGATIVE PSF.
- 6) DESIGN PRESSURE VALUES APPLY TO MULLION WHERE TWO OR MORE WINDOWS ARE LISTED IN A SINGLE OPENING.
- 7) REFER TO REPORT #441 FOR MORE MULLION SPECIFICATIONS.

Maximum design pressure capacity vertical chart Vertical Twin
1" X 4" X 0.125" Atlantic Vinyl Aluminum Mullion (12321)
 Design pressures are limited either by mullion or anchor screws or anchor clip capacity
 Report No. 441

| Height (in) | MULLION (1" x 4" 0.125") & R12321-6 CLIP - WINDOW WIDTH (in) | | | | | | | | | | | |
|-------------|--|------|------|------|------|------|------|------|------|------|------|------|
| | 18.0 | 21.0 | 24.0 | 27.0 | 30.0 | 33.0 | 36.0 | 39.0 | 42.0 | 45.0 | 48.0 | 53.0 |
| 24.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 |
| 30.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 |
| 36.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 |
| 38.4 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 |
| 42.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 |
| 48.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 |
| 50.6 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 |
| 54.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 |
| 60.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 |
| 63.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 |
| 66.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 |
| 72.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 73.7 | 68.6 | 64.3 | 60.8 | 57.8 | 55.3 | 52.1 |
| 76.0 | 75.0 | 75.0 | 75.0 | 75.0 | 71.4 | 65.7 | 61.0 | 57.1 | 53.8 | 51.1 | 48.8 | 45.7 |

NOTES FOR 1.000 X 4.000 X 0.125 VERTICAL MULLION (GAH-35086) WITH R12321-6 MULL CLIP

Approved as complying with the Florida Building Code
 Date: June 12, 2008
 NOAH: 07-0629.03
 Miami Dade Product Control
 Division
 By: Manuel Perez

| SYM | REVISION | DATE | BY |
|-----|-------------------------|----------|-----|
| A | TITLE BLOCK CORRECTION | 10/09/06 | ESN |
| B | PER MIAMI DADE 11/10/07 | 4/11/08 | BB |

Eric S. Nielsen
 4/17/08
 Eric S. Nielsen
 Florida P. E. No. 41323
 PTC, LLC
 1535 Cogswell Street, Suite C25
 Rockledge, Florida 32955
 FBPE Certificate of Authorization NO. 25935

JELD-WEN
 355 CENTER CT., VENICE, FLORIDA 34285
 TITLE: STANDARD ALUMINUM TUBE MULLION
 DESIGN PRESSURE CHARTS
 PREPARED BY: **PTC** PTC, LLC
 DRN: BB DATE: 10/03/06
 SCALE: N.T.S. DWG. NO: JELD0042
 REV: B SHEET: 5 OF 7
 Phone 321.690.1788 Fax 321.690.1789

DESIGN PRESSURE CHARTS

Maximum design pressure capacity chart (psf)

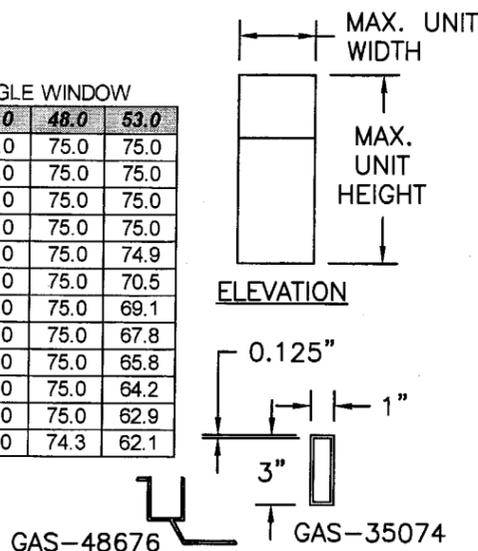
1" x 3" x 0.125" Aluminum Mullion, (Horizontal, Single with transom, 48676)

Design pressures are limited either by mullion or anchor screw or anchor clip capacity.

Report No. 442

| Window Transom | 18.0 | 21.0 | 24.0 | 27.0 | 30.0 | 33.0 | 36.0 | 39.0 | 42.0 | 45.0 | 48.0 | 53.0 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| 24.0 | 12.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 |
| 30.0 | 15.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 |
| 36.0 | 18.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 |
| 38.4 | 19.2 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 |
| 42.0 | 21.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 74.9 |
| 48.0 | 24.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 70.5 |
| 50.6 | 25.3 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 69.1 |
| 54.0 | 27.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 67.8 |
| 60.0 | 30.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 65.8 |
| 66.0 | 33.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 64.2 |
| 72.0 | 36.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 62.9 |
| 76.0 | 38.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 74.3 | 62.1 |

NOTES FOR 1.00 X 3.00 X 0.125 HORIZONTAL MULLION (GAH-35074) WITH 48676 MULLION CLIP



Maximum design pressure capacity chart (psf)

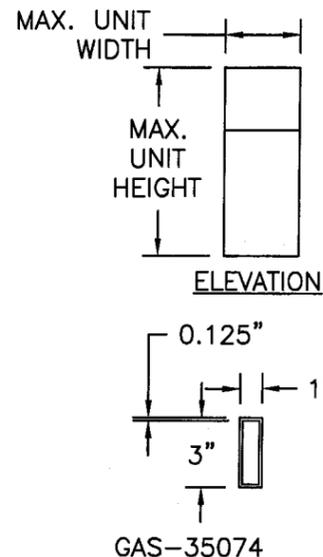
1" x 3" x 0.125" Aluminum Mullion, (Horizontal, Single with transom, R12321-6)

Design pressures are limited either by mullion or anchor screw or anchor clip capacity.

Report No. 443

| Window Transom | 18.0 | 21.0 | 24.0 | 27.0 | 30.0 | 33.0 | 36.0 | 39.0 | 42.0 | 45.0 | 48.0 | 53.0 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| 24.0 | 12.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 |
| 30.0 | 15.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 |
| 36.0 | 18.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 |
| 38.4 | 19.2 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 |
| 42.0 | 21.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 |
| 48.0 | 24.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 |
| 50.6 | 25.3 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 |
| 54.0 | 27.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 |
| 60.0 | 30.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 |
| 66.0 | 33.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 |
| 72.0 | 36.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 |
| 76.0 | 38.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 |

NOTES FOR 1.00 X 3.00 X 0.125 HORIZONTAL MULLION (GAH-35074) WITH R12321-6 MULLION CLIP



- 1) THE DESIGN PRESSURES IN THIS CHART IS FOR THE MULLIONS LISTED ABOVE WHEN USED WITH THE CLIPS SHOWN ON SHEET 1.
- 2) FOR HORIZONTAL MULL CLIPS IN WOOD FRAMING INSTALLATION USE (2) TWO #10 WOOD SCREWS AT EACH ANCHOR CLIP. MUST BE OF SUFFICIENT LENGTH TO ACHIEVE A 1 1/2" MINIMUM EMBEDMENT INTO FRAMING. SEE SHEETS 2 & 3 FOR DETAILS.
- 3) FOR HORIZONTAL MULL CLIPS IN MASONRY INSTALLATION USE (2) TWO 3/16" ELCO TAPCONS AT EACH ANCHOR CLIP WITH SUFFICIENT LENGTH TO ACHIEVE A 1 1/4" MINIMUM EMBEDMENT INTO SUBSTRATE. SEE SHEETS 2 & 3 FOR DETAILS.
- 4) FOR VERTICAL MULL CLIPS IN WOOD FRAMING INSTALLATION USE (4) FOUR #10 WOOD SCREWS AT EACH ANCHOR CLIP. MUST BE OF SUFFICIENT LENGTH TO ACHIEVE A 1 1/2" MINIMUM EMBEDMENT INTO FRAMING. SEE SHEETS 2 & 3 FOR DETAILS.
- 5) FOR VERTICAL MULL CLIPS IN MASONRY INSTALLATION USE (2) TWO 3/16" ELCO TAPCONS AT EACH ANCHOR CLIP OF SUFFICIENT LENGTH TO ACHIEVE A 1 1/4" MINIMUM EMBEDMENT INTO SUBSTRATE. SEE SHEETS 2 & 3 FOR DETAILS.
- 6) FOR VERTICAL MULL CLIPS IN HORIZONTAL MULLION INSTALLATION USE (2) TWO #8 TEK SCREWS AT EACH ANCHOR CLIP OF SUFFICIENT LENGTH TO ACHIEVE A MIN. EMBEDMENT OF THREE THREADS PAST ANCHOR SUBSTRATE. SEE SHEET 3 FOR DETAILS.
- 7) CHART APPLIES ONLY TO 1.0 X 4.0 X 0.125 MULLION AS SPECIFIED ABOVE WHEN USED TO MULL TRANSOMS ABOVE WINDOWS.
- 8) READ WINDOW WIDTH AND HEIGHT IN INCHES. DESIGN PRESSURE VALUES ON THIS CHART ARE POSITIVE AND NEGATIVE PSF.
- 9) DESIGN PRESSURE VALUES APPLY TO MULLION WHERE TWO OR MORE WINDOWS ARE LISTED IN A SINGLE OPENING.
- 10) REFER TO REPORT #442 & 444 FOR MORE MULLION SPECIFICATIONS.

- 1) THE DESIGN PRESSURES IN THIS CHART IS FOR THE MULLIONS LISTED ABOVE WHEN USED WITH THE CLIPS SHOWN ON SHEET 1.
- 2) FOR HORIZONTAL MULL CLIPS IN WOOD FRAMING INSTALLATION USE (4) FOUR #10 WOOD SCREWS AT EACH ANCHOR CLIP. MUST BE OF SUFFICIENT LENGTH TO ACHIEVE A 1 1/2" MINIMUM EMBEDMENT INTO FRAMING. SEE SHEETS 2 & 3 FOR DETAILS.
- 3) FOR HORIZONTAL MULL CLIPS IN MASONRY INSTALLATION USE (2) TWO 3/16" ELCO TAPCONS AT EACH ANCHOR CLIP WITH SUFFICIENT LENGTH TO ACHIEVE A 1 1/4" MINIMUM EMBEDMENT INTO SUBSTRATE. SEE SHEETS 2 & 3 FOR DETAILS.
- 4) FOR VERTICAL MULL CLIPS IN WOOD FRAMING INSTALLATION USE (4) FOUR #10 WOOD SCREWS AT EACH ANCHOR CLIP. MUST BE OF SUFFICIENT LENGTH TO ACHIEVE A 1 1/2" MINIMUM EMBEDMENT INTO FRAMING. SEE SHEETS 2 & 3 FOR DETAILS.
- 5) FOR VERTICAL MULL CLIPS IN MASONRY INSTALLATION USE (2) TWO 3/16" ELCO TAPCONS AT EACH ANCHOR CLIP OF SUFFICIENT LENGTH TO ACHIEVE A 1 1/4" MINIMUM EMBEDMENT INTO SUBSTRATE. SEE SHEETS 2 & 3 FOR DETAILS.
- 6) FOR VERTICAL MULL CLIPS IN HORIZONTAL MULLION INSTALLATION USE (2) TWO #8 TEK SCREWS AT EACH ANCHOR CLIP OF SUFFICIENT LENGTH TO ACHIEVE A MIN. EMBEDMENT OF THREE THREADS PAST ANCHOR SUBSTRATE. SEE SHEET 3 FOR DETAILS.
- 7) CHART APPLIES ONLY TO 1.0 X 4.0 X 0.125 MULLION AS SPECIFIED ABOVE WHEN USED TO MULL TRANSOMS ABOVE WINDOWS.
- 8) READ WINDOW WIDTH AND HEIGHT IN INCHES. DESIGN PRESSURE VALUES ON THIS CHART ARE POSITIVE AND NEGATIVE PSF.
- 9) DESIGN PRESSURE VALUES APPLY TO MULLION WHERE TWO OR MORE WINDOWS ARE LISTED IN A SINGLE OPENING.
- 10) REFER TO REPORT #443 & 445 FOR MORE MULLION SPECIFICATIONS.

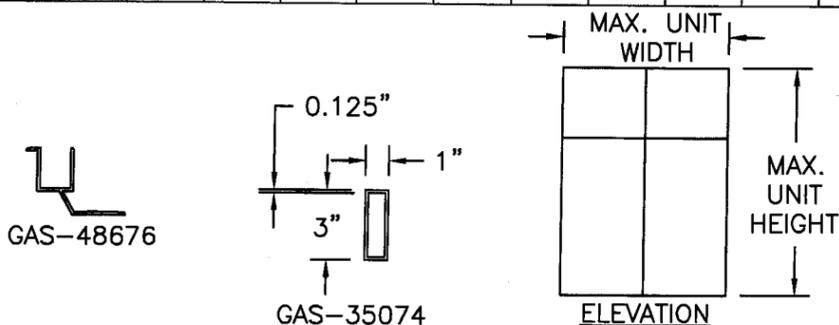
Maximum design pressure capacity chart (psf)

1" x 3" x 0.125" Aluminum Mullion Horizontal (Twin Units with transom, 48676)

Design pressures are limited either by mullion or anchor screw or anchor clip capacity.

Report No. 444

| Window Transom | 36.0 | 42.0 | 48.0 | 54.0 | 60.0 | 66.0 | 72.0 | 78.0 | 84.0 | 90.0 | 96.0 | 106.0 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 24.0 | 12.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 68.4 | 58.9 | 48.6 | 39.9 | 29.5 |
| 30.0 | 15.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 69.6 | 62.6 | 55.1 | 47.4 | 39.5 | 32.4 |
| 36.0 | 18.0 | 75.0 | 75.0 | 75.0 | 75.0 | 68.4 | 60.7 | 54.4 | 46.2 | 39.7 | 33.4 | 27.4 |
| 38.4 | 19.2 | 75.0 | 75.0 | 75.0 | 74.4 | 65.2 | 57.9 | 51.2 | 43.5 | 37.4 | 31.5 | 25.8 |
| 42.0 | 21.0 | 75.0 | 75.0 | 75.0 | 69.5 | 60.9 | 54.1 | 47.0 | 39.9 | 34.3 | 29.1 | 23.8 |
| 48.0 | 24.0 | 75.0 | 75.0 | 72.7 | 62.8 | 55.1 | 48.9 | 41.4 | 35.1 | 30.2 | 25.9 | 21.1 |
| 50.6 | 25.3 | 75.0 | 75.0 | 69.9 | 60.3 | 52.9 | 47.0 | 39.4 | 33.4 | 28.7 | 24.7 | 20.2 |
| 54.0 | 27.0 | 75.0 | 75.0 | 66.6 | 57.5 | 50.4 | 44.4 | 37.1 | 31.4 | 27.0 | 23.3 | 19.1 |
| 60.0 | 30.0 | 75.0 | 73.1 | 61.6 | 53.1 | 46.5 | 40.3 | 33.6 | 28.5 | 24.4 | 21.2 | 17.4 |
| 66.0 | 33.0 | 75.0 | 68.4 | 57.5 | 49.5 | 43.3 | 36.9 | 30.8 | 26.1 | 22.4 | 19.4 | 16.0 |
| 72.0 | 36.0 | 75.0 | 64.5 | 54.1 | 46.5 | 40.6 | 34.1 | 28.4 | 24.1 | 20.6 | 17.9 | 14.8 |
| 76.0 | 38.0 | 75.0 | 62.3 | 52.1 | 44.7 | 39.1 | 32.5 | 27.1 | 22.9 | 19.6 | 17.0 | 14.1 |



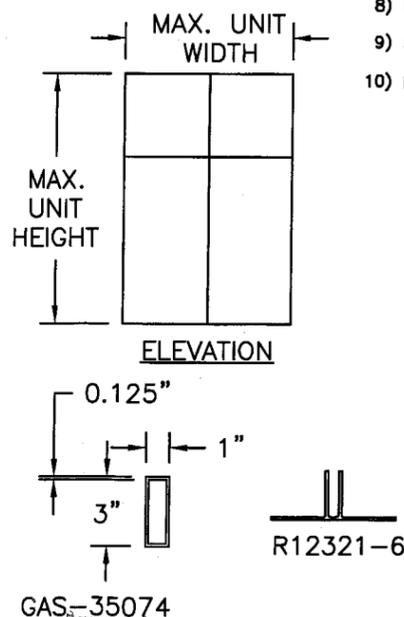
Maximum design pressure capacity chart (psf)

1" x 3" x 0.125" Aluminum Mullion Horizontal (Twin Units with transom, R12321-6)

Design pressures are limited either by mullion or anchor screw or anchor clip capacity.

Report No. 445

| Window Transom | 36.0 | 42.0 | 48.0 | 54.0 | 60.0 | 66.0 | 72.0 | 78.0 | 84.0 | 90.0 | 96.0 | 106.0 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 24.0 | 12.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 68.4 | 58.9 | 48.6 | 39.9 | 29.5 |
| 30.0 | 15.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 69.6 | 62.6 | 55.1 | 47.4 | 39.5 | 32.4 |
| 36.0 | 18.0 | 75.0 | 75.0 | 75.0 | 75.0 | 68.4 | 60.7 | 54.4 | 46.2 | 39.7 | 33.4 | 27.4 |
| 38.4 | 19.2 | 75.0 | 75.0 | 75.0 | 74.4 | 65.2 | 57.9 | 51.2 | 43.5 | 37.4 | 31.5 | 25.8 |
| 42.0 | 21.0 | 75.0 | 75.0 | 75.0 | 69.5 | 60.9 | 54.1 | 47.0 | 39.9 | 34.3 | 29.1 | 23.8 |
| 48.0 | 24.0 | 75.0 | 75.0 | 72.7 | 62.8 | 55.1 | 48.9 | 41.4 | 35.1 | 30.2 | 25.9 | 21.1 |
| 50.6 | 25.3 | 75.0 | 75.0 | 69.9 | 60.3 | 52.9 | 47.0 | 39.4 | 33.4 | 28.7 | 24.7 | 20.2 |
| 54.0 | 27.0 | 75.0 | 75.0 | 66.6 | 57.5 | 50.4 | 44.4 | 37.1 | 31.4 | 27.0 | 23.3 | 19.1 |
| 60.0 | 30.0 | 75.0 | 73.1 | 61.6 | 53.1 | 46.5 | 40.3 | 33.6 | 28.5 | 24.4 | 21.2 | 17.4 |
| 66.0 | 33.0 | 75.0 | 68.4 | 57.5 | 49.5 | 43.3 | 36.9 | 30.8 | 26.1 | 22.4 | 19.4 | 16.0 |
| 72.0 | 36.0 | 75.0 | 64.5 | 54.1 | 46.5 | 40.6 | 34.1 | 28.4 | 24.1 | 20.6 | 17.9 | 14.8 |
| 76.0 | 38.0 | 75.0 | 62.3 | 52.1 | 44.7 | 39.1 | 32.5 | 27.1 | 22.9 | 19.6 | 17.0 | 14.1 |



| A | TITLE BLOCK CORRECTION | 10/08/08 | ESN |
|-----|-------------------------|----------|-----|
| B | PER MIAMI DADE 11/10/07 | 4/11/08 | BB |
| SYM | REVISION | DATE | BY |

Approved as complying with the Florida Building Code
 Date: JUNE 12, 2008
 NO. 07-0629-03
 Revised Date Product Control
 By: *Manuel Perez*

Eric S. Nielsen
 Eric S. Nielsen
 Florida P. E. No. 41323
 PTC, LLC
 1535 Cogswell Street, Suite C25
 Rockledge, Florida 32955
 FBPE Certificate of Authorization NO. 25935

JELD-WEN
 355 CENTER CT., VENICE, FLORIDA 34292
 TITLE: STANDARD ALUMINUM TUBE MULLION DESIGN PRESSURE CHARTS
 PREPARED BY: **PTC** PTC, LLC
 DRN: BB DATE: 10/03/06
 SCALE: N.T.S. DWG. NO: JELD0042
 REV: B SHEET: 6 OF 7

Maximum design pressure capacity chart (psf)

1" x 4" x 0.125" Aluminum Mullion (Horizontal, Twin Units with transom, 48676)

Design pressures are limited either by mullion or anchor screw or anchor clip capacity.

Report No. 448

| Height (in) | Window Transom | 36.0 | 42.0 | 48.0 | 54.0 | 60.0 | 66.0 | 72.0 | 78.0 | 84.0 | 90.0 | 96.0 | 106.0 |
|-------------|----------------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 24.0 | 12.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 68.4 | 62.9 | 58.2 | 54.1 | 48.5 |
| 30.0 | 15.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 69.6 | 62.6 | 56.8 | 52.1 | 48.0 | 44.6 | 39.8 |
| 36.0 | 18.0 | 75.0 | 75.0 | 75.0 | 75.0 | 68.4 | 60.7 | 54.4 | 49.2 | 45.0 | 41.4 | 38.3 | 34.1 |
| 38.4 | 19.2 | 75.0 | 75.0 | 75.0 | 74.4 | 65.2 | 57.9 | 51.9 | 46.9 | 42.8 | 39.3 | 36.4 | 32.3 |
| 42.0 | 21.0 | 75.0 | 75.0 | 75.0 | 69.5 | 60.9 | 54.1 | 48.5 | 43.9 | 40.0 | 36.7 | 33.9 | 30.0 |
| 48.0 | 24.0 | 75.0 | 75.0 | 72.7 | 62.8 | 55.1 | 48.9 | 43.9 | 39.7 | 36.2 | 33.2 | 30.6 | 27.1 |
| 50.6 | 25.3 | 75.0 | 75.0 | 69.9 | 60.3 | 52.9 | 47.0 | 42.2 | 38.2 | 34.8 | 31.9 | 29.4 | 26.0 |
| 54.0 | 27.0 | 75.0 | 75.0 | 66.6 | 57.5 | 50.4 | 44.7 | 40.2 | 36.4 | 33.2 | 30.4 | 28.1 | 24.8 |
| 60.0 | 30.0 | 75.0 | 73.1 | 61.6 | 53.1 | 46.5 | 41.3 | 37.1 | 33.6 | 30.6 | 28.1 | 25.9 | 22.9 |
| 66.0 | 33.0 | 75.0 | 68.4 | 57.5 | 49.5 | 43.3 | 38.5 | 34.5 | 31.2 | 28.5 | 26.1 | 24.1 | 21.3 |
| 72.0 | 36.0 | 75.0 | 64.5 | 54.1 | 46.5 | 40.6 | 36.0 | 32.3 | 29.2 | 26.7 | 24.5 | 22.6 | 20.0 |
| 76.0 | 38.0 | 75.0 | 62.3 | 52.1 | 44.7 | 39.1 | 34.6 | 31.0 | 28.1 | 25.6 | 23.5 | 21.7 | 19.2 |

NOTES FOR 1.00 X 4.00 X 0.125 HORIZONTAL MULLION (GAH 35086) WITH 48676 MULLION CLIP

- 1) THE DESIGN PRESSURES IN THIS CHART IS FOR THE MULLIONS LISTED ABOVE WHEN USED WITH THE CLIPS SHOWN ON SHEET 1.
- 2) FOR HORIZONTAL MULL CLIPS IN WOOD FRAMING INSTALLATION USE (2) TWO #10 WOOD SCREWS AT EACH ANCHOR CLIP. MUST BE OF SUFFICIENT LENGTH TO ACHIEVE A 1 1/2" MINIMUM EMBEDMENT INTO FRAMING. SEE SHEETS 2 & 3 FOR DETAILS.
- 3) FOR HORIZONTAL MULL CLIPS IN MASONRY INSTALLATION USE (2) TWO 3/16" ELCO TAPCONS AT EACH ANCHOR CLIP WITH SUFFICIENT LENGTH TO ACHIEVE A 1 1/4" MINIMUM EMBEDMENT INTO SUBSTRATE. SEE SHEETS 2 & 3 FOR DETAILS.
- 4) FOR VERTICAL MULL CLIPS IN WOOD FRAMING INSTALLATION USE (4) FOUR #10 WOOD SCREWS AT EACH ANCHOR CLIP. MUST BE OF SUFFICIENT LENGTH TO ACHIEVE A 1 1/2" MINIMUM EMBEDMENT INTO FRAMING. SEE SHEETS 2 & 3 FOR DETAILS.
- 5) FOR VERTICAL MULL CLIPS IN MASONRY INSTALLATION USE (2) TWO 3/16" ELCO TAPCONS AT EACH ANCHOR CLIP OF SUFFICIENT LENGTH TO ACHIEVE A 1 1/4" MINIMUM EMBEDMENT INTO SUBSTRATE. SEE SHEETS 2 & 3 FOR DETAILS.
- 6) FOR VERTICAL MULL CLIPS IN HORIZONTAL MULLION INSTALLATION USE (2) TWO #8 TEK SCREWS AT EACH ANCHOR CLIP OF SUFFICIENT LENGTH TO ACHIEVE A MIN. EMBEDMENT OF THREE THREADS PAST ANCHOR SUBSTRATE. SEE SHEET 3 FOR DETAILS.
- 7) CHART APPLIES ONLY TO 1.0 X 4.0 X 0.125 MULLION AS SPECIFIED ABOVE WHEN USED TO MULL TRANSOMS ABOVE WINDOWS.
- 8) READ WINDOW WIDTH AND HEIGHT IN INCHES. DESIGN PRESSURE VALUES ON THIS CHART ARE POSITIVE AND NEGATIVE PSF.
- 9) DESIGN PRESSURE VALUES APPLY TO MULLION WHERE TWO OR MORE WINDOWS ARE LISTED IN A SINGLE OPENING.
- 10) REFER TO REPORT #446 & 448 FOR MORE MULLION SPECIFICATIONS.

Maximum design pressure capacity chart (psf)

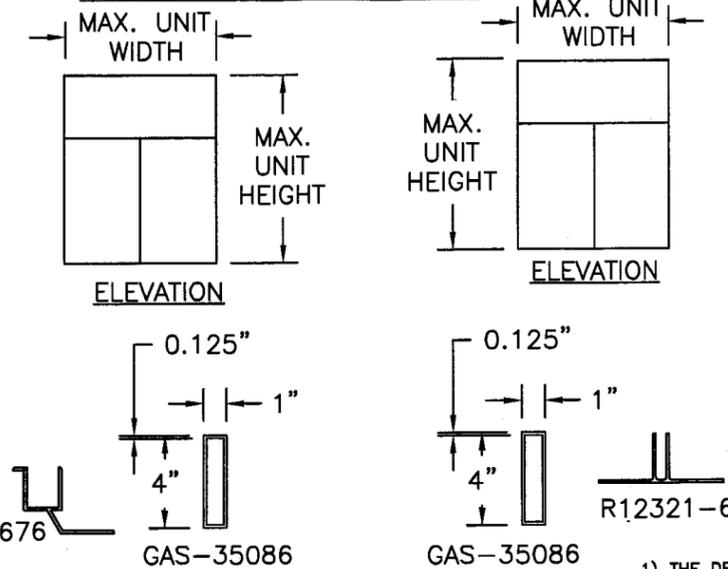
1" x 4" x 0.125" Aluminum Mullion, (Horizontal, Single with transom, 48676)

Design pressures are limited either by mullion or anchor screw or anchor clip capacity.

Report No. 446

| Height (in) | Window Transom | 18.0 | 21.0 | 24.0 | 27.0 | 30.0 | 33.0 | 36.0 | 39.0 | 42.0 | 45.0 | 48.0 | 53.0 |
|-------------|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| 24.0 | 12.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 |
| 30.0 | 15.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 |
| 36.0 | 18.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 |
| 38.4 | 19.2 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 |
| 42.0 | 21.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 74.9 |
| 48.0 | 24.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 70.5 |
| 50.6 | 25.3 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 69.1 |
| 54.0 | 27.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 67.8 |
| 60.0 | 30.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 65.8 |
| 66.0 | 33.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 64.2 |
| 72.0 | 36.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 62.9 |
| 76.0 | 38.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 74.3 | 62.1 |

DESIGN PRESSURE CHARTS



Maximum design pressure capacity chart (psf)

1" x 4" x 0.125" Aluminum Mullion (Horizontal, Twin Units with transom, R12321-6)

Design pressures are limited either by mullion or anchor screw or anchor clip capacity.

Report No. 449

| Height (in) | Window Transom | 36.0 | 42.0 | 48.0 | 54.0 | 60.0 | 66.0 | 72.0 | 78.0 | 84.0 | 90.0 | 96.0 | 106.0 |
|-------------|----------------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 24.0 | 12.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 72.2 | 59.1 |
| 30.0 | 15.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 66.2 | 47.5 |
| 36.0 | 18.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 74.3 | 63.9 | 55.5 | 48.7 | 39.8 |
| 38.4 | 19.2 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 69.9 | 60.1 | 52.2 | 45.8 | 37.4 |
| 42.0 | 21.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 64.1 | 55.1 | 47.9 | 42.0 | 34.3 |
| 48.0 | 24.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 66.6 | 56.5 | 48.5 | 42.1 | 30.2 |
| 50.6 | 25.3 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 63.3 | 53.7 | 46.1 | 40.0 | 28.6 |
| 54.0 | 27.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 71.4 | 59.6 | 50.5 | 43.4 | 37.7 | 33.0 | 26.9 |
| 60.0 | 30.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 64.8 | 54.1 | 45.8 | 39.3 | 34.1 | 29.9 | 24.4 |
| 66.0 | 33.0 | 75.0 | 75.0 | 75.0 | 75.0 | 70.0 | 59.4 | 49.5 | 41.9 | 36.0 | 31.2 | 27.3 | 22.3 |
| 72.0 | 36.0 | 75.0 | 75.0 | 75.0 | 75.0 | 65.7 | 54.9 | 45.7 | 38.7 | 33.2 | 28.7 | 25.2 | 20.5 |
| 76.0 | 38.0 | 75.0 | 75.0 | 75.0 | 72.3 | 63.1 | 52.3 | 43.5 | 36.8 | 31.6 | 27.3 | 23.9 | 19.5 |

NOTES FOR 1.00 X 4.00 X 0.125 HORIZONTAL MULLION (GAH 35086) WITH R12321-6 MULLION CLIP

- 1) THE DESIGN PRESSURES IN THIS CHART IS FOR THE MULLIONS LISTED ABOVE WHEN USED WITH THE CLIPS SHOWN ON SHEET 1.
- 2) FOR HORIZONTAL MULL CLIPS IN WOOD FRAMING INSTALLATION USE (4) FOUR #10 WOOD SCREWS AT EACH ANCHOR CLIP. MUST BE OF SUFFICIENT LENGTH TO ACHIEVE A 1 1/2" MINIMUM EMBEDMENT INTO FRAMING. SEE SHEETS 2 & 3 FOR DETAILS.
- 3) FOR HORIZONTAL MULL CLIPS IN MASONRY INSTALLATION USE (2) TWO 3/16" ELCO TAPCONS AT EACH ANCHOR CLIP WITH SUFFICIENT LENGTH TO ACHIEVE A 1 1/4" MINIMUM EMBEDMENT INTO SUBSTRATE. SEE SHEETS 2 & 3 FOR DETAILS.
- 4) FOR VERTICAL MULL CLIPS IN WOOD FRAMING INSTALLATION USE (4) FOUR #10 WOOD SCREWS AT EACH ANCHOR CLIP. MUST BE OF SUFFICIENT LENGTH TO ACHIEVE A 1 1/2" MINIMUM EMBEDMENT INTO FRAMING. SEE SHEETS 2 & 3 FOR DETAILS.
- 5) FOR VERTICAL MULL CLIPS IN MASONRY INSTALLATION USE (2) TWO 3/16" ELCO TAPCONS AT EACH ANCHOR CLIP OF SUFFICIENT LENGTH TO ACHIEVE A 1 1/4" MINIMUM EMBEDMENT INTO SUBSTRATE. SEE SHEETS 2 & 3 FOR DETAILS.
- 6) FOR VERTICAL MULL CLIPS IN HORIZONTAL MULLION INSTALLATION USE (2) TWO #8 TEK SCREWS AT EACH ANCHOR CLIP OF SUFFICIENT LENGTH TO ACHIEVE A MIN. EMBEDMENT OF THREE THREADS PAST ANCHOR SUBSTRATE. SEE SHEET 3 FOR DETAILS.
- 7) CHART APPLIES ONLY TO 1.0 X 4.0 X 0.125 MULLION AS SPECIFIED ABOVE WHEN USED TO MULL TRANSOMS ABOVE WINDOWS.
- 8) READ WINDOW WIDTH AND HEIGHT IN INCHES. DESIGN PRESSURE VALUES ON THIS CHART ARE POSITIVE AND NEGATIVE PSF.
- 9) DESIGN PRESSURE VALUES APPLY TO MULLION WHERE TWO OR MORE WINDOWS ARE LISTED IN A SINGLE OPENING.
- 10) REFER TO REPORT #447 & 449 FOR MORE MULLION SPECIFICATIONS.

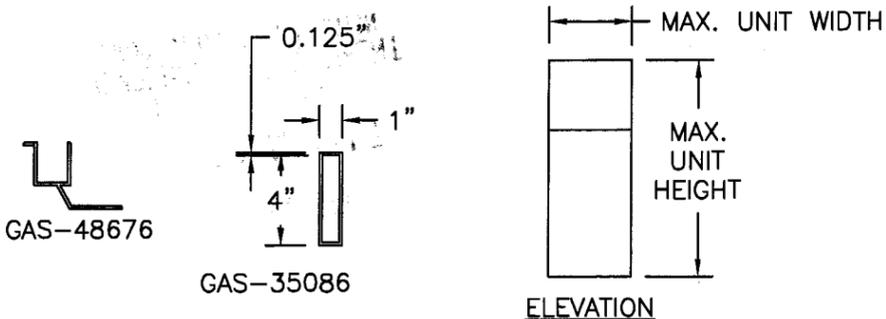
Maximum design pressure capacity chart (psf)

1" x 4" x 0.125" Aluminum Mullion, (Horizontal, Single with transom, R12321-6)

Design pressures are limited either by mullion or anchor screw or anchor clip capacity.

Report No. 447

| Height (in) | Window Transom | 18.0 | 21.0 | 24.0 | 27.0 | 30.0 | 33.0 | 36.0 | 39.0 | 42.0 | 45.0 | 48.0 | 53.0 |
|-------------|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| 24.0 | 12.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 |
| 30.0 | 15.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 |
| 36.0 | 18.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 |
| 38.4 | 19.2 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 |
| 42.0 | 21.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 |
| 48.0 | 24.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 |
| 50.6 | 25.3 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 |
| 54.0 | 27.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 |
| 60.0 | 30.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 |
| 66.0 | 33.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 |
| 72.0 | 36.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 |
| 76.0 | 38.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 |



Approved as complying with the Florida Building Code
 Date: **JUNE 12, 2008**
 NOAC: **07-0629.03**
 Michael Perry
 Michael Perry

| SYM | REVISION | DATE | BY |
|-----|-------------------------|----------|-----|
| A | TITLE BLOCK CORRECTION | 10/09/06 | ESM |
| B | PER MIAMI DADE 11/10/07 | 4/11/08 | BB |

Eric S. Nielsen
 Eric S. Nielsen
 Florida P. E. No. 41323
 PTC, LLC
 1535 Cogswell Street, Suite C25
 Rockledge, Florida 32955
 FBPE Certificate of Authorization NO. 25935

JELD-WEN, INC.
 355 CENTER CT., VENICE, FLORIDA 34292

TITLE: STANDARD ALUMINUM TUBE MULLION DESIGN PRESSURE CHARTS

PREPARED BY: **PTC** PTC, LLC

DRN: BB DATE: 10/03/06

SCALE: N.T.S. DWG. NO: JELD0042

REV: B SHEET: 7 OF 7

Phone 321.690.1788 Fax 321.690.1789