



City of Belle Isle

Universal Engineering Sciences 3532 Maggie Blvd., Orlando, FL 32811
Tel 407-581-8161 * Fax 407-581-0313 * www.universalengineering.com

REVISION APPLICATION

WARNING TO OWNER: YOUR FAILURE TO RECORD A NOTICE OF COMMENCEMENT MAY RESULT IN YOUR PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. A NOTICE OF COMMENCEMENT MUST BE RECORDED AND POSTED ON THE JOB SITE BEFORE THE FIRST INSPECTION. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR AN ATTORNEY BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT.

Date: 8-5-15

Permit Number: 2015-07-050
Original Permit Number Issued

Contact Name Jeana Young Phone: 407-489-8683

Project Address 5424 Ming Drive Belle Isle, FL 32809 ~~32812~~

Nature of Change Adding mullion to permit

Change in Job Cost none

Do revisions affect: Site Architectural Structural Mechanical Electrical Plumbing

Itemize below for each drawing specific proposed changes. Attach additional sheets, if necessary.

Examiner Approval: ecg 8-5-15

2nd type of mullion was missed and should have been in original permit. It is included in contract.

Date _____ Finalized/Inspected by: _____

Fee: \$ 26.00

Cash/Check #: VISA 4147 Date Rec'd: 8-5-15 Rec'd By: [Signature]

To schedule an inspection please email your request to: BI scheduling@UniversalEngineering.com

FLBCA 2014/2015
Business & Professional Regulation
 Florida Department of
Business & Professional Regulation
 Product Approval
 USER: Public User
 License Renewal, Renewal History



5424 Ming Dr

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Product Approval Menu > Product or Application Search > Application List > Application Detail

FL # FL14787-R2 ✓ 14787.1
 Application Type Revision
 Code Version 2014
 Application Status Approved

Comments
 Archived

Product Manufacturer Simonton Windows
 Address/Phone/Email 1 Cochrane Ave
 Pennsboro, WV 26415
 (614) 532-3596
 luanne.harris@simonton.com

Authorized Signature Luanne Harris
 luanne.harris@simonton.com

Technical Representative Tina Jenkins
 Address/Phone/Email 1 Cochrane Drive
 Pennsboro, WV 26415
 (304) 420-9352
 Tina.Jenkins@simonton.com

Quality Assurance Representative AAMA
 Address/Phone/Email 1827 Walden Office Square
 Suite 550
 Schaumburg, IL 60173
 (847) 303-5664
 webmaster@aamanet.org

Category Windows
 Subcategory Mullions

Compliance Method Evaluation Report from a Florida Registered Architect or a Licensed Florida Professional Engineer
 Evaluation Report - Hardcopy Received

Florida Engineer or Architect Name who developed the Evaluation Report Lucas A. Turner
 Florida License PE-58201
 Quality Assurance Entity Architectural Testing, Inc.
 Quality Assurance Contract Expiration Date 12/31/2018
 Validated By Scott Wolters, PE
 Validation Checklist - Hardcopy Received

Certificate of Independence FL14787_R2_COI_EvalReport-RM0015Br6.pdf

Referenced Standard and Year (of Standard)

Equivalence of Product Standards Certified By

Sections from the Code 1710.5.3

Product Approval Method Method 2 Option B

Date Submitted 04/27/2015
 Date Validated 05/01/2015
 Date Pending FBC Approval 05/10/2015
 Date Approved 06/23/2015

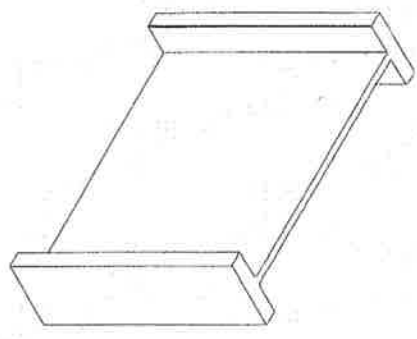
Summary of Products

FL #	Model, Number or Name	Description
14787.1	Reinforced Stand Alone Mullions Non-Impact	Extruded Vinyl Mullions with Aluminum Reinforcement
Limits of Use Approved for use in HVHZ: No Approved for use outside HVHZ: Yes Impact Resistant: No Design Pressure: N/A Other: Design pressure ratings vary by unit and mullion size. See Installation drawings for applicable design pressure rating.		Installation Instructions FL14787_R2_IL_RM0015Br6.pdf Verified By: Lucas A. Turner PE #58201 Created by Independent Third Party: Yes Evaluation Reports FL14787_R2_AE_EvalReport-RM0015Br6.pdf Created by Independent Third Party: Yes

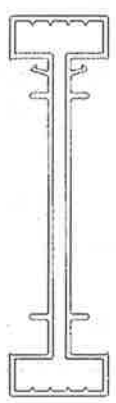
X

(waiting on Reuser Form)

SIMON-TON
 1 COCKSHU- AVE. DENVER, CO 80202
 PH. 303-733-2229
 EXTRUDED NON-IMPACT VINYL MULLIONS
 WITH ALUMINUM REINFORCEMENT
 ALI - NON-IMPACT WINDOW SERIES



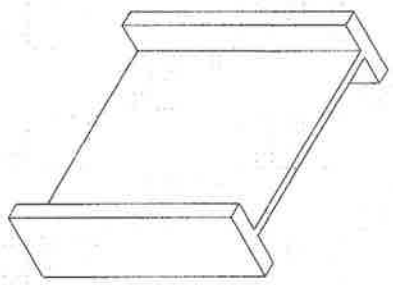
LARGE MULLION
 REINFORCEMENT CMO146
 ALUMINUM 6063-T6



5000 FIN & J FRAME VINYL
 H-MULLION COVER #VPI-573
 EXTRUDED VINYL 0.071" MIN.

PRODUCT DESCRIPTION:
 1. ALL MULLION REINFORCEMENTS ARE EXTRUDED ALUMINUM 6063-T6.
 2. ALL MULLION COVERS ARE EXTRUDED VINYL. SEE ABOVE FOR INDIVIDUAL MULLION THICKNESS.

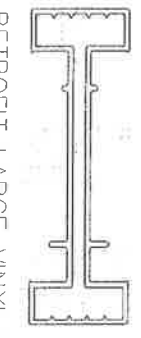
MULLIONS MEET THE REQUIREMENTS OF THE
 FLORIDA BUILDING CODE.



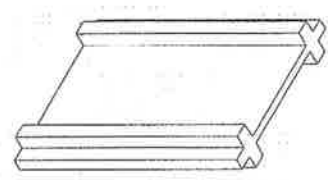
LARGE MULLION
 REINFORCEMENT #16991
 ALUMINUM 6063-T6



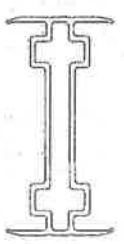
PROFINISH LARGE VINYL
 H-MULLION COVER #VPI-560
 EXTRUDED VINYL 0.079" MIN.



RETROFIT LARGE VINYL
 H-MULLION COVER #VPI-354
 EXTRUDED VINYL 0.071" MIN.

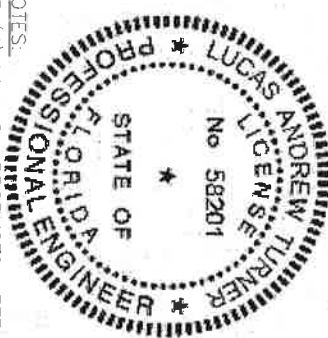


MEDIUM MULLION
 REINFORCEMENT #16990
 ALUMINUM 6063-T6



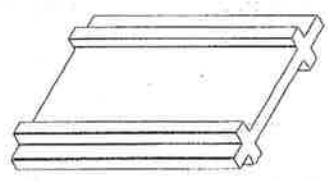
PROFINISH MEDIUM VINYL
 H-MULLION COVER #VPI-346A
 EXTRUDED VINYL 0.071" MIN.

Lucas A. Turner
 2015-05-01
 20:23-04:00

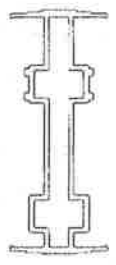


GENERAL NOTES:

1. THE FOUR (4) MULLION PRODUCTS MEET THE 5TH ED. (2014) FLORIDA BUILDING CODE SECTION 1710.5.3 INCLUDING L/175 DEFLECTION LIMIT, LOAD TRANSFER, AND FIBERSTRESS ANALYSES IN THE DESIGN PRESSURES SHOWN IN THE TABLES IN THIS DRAWING. THE ANALYSES DID NOT ADDRESS AIR OR WATER INFILTRATION OVERALL WINDOW ASSEMBLY ALLOWABLE DESIGN PRESSURES SHALL BE THE LOWER OF THE MULLION PER THIS APPROVAL OR THE SIMON-TON WINDOWS PER SEPARATE PRODUCT APPROVAL.
 2. PRODUCT ANCHORS SHALL BE AS LISTED AND SPACED AS SHOWN HEREIN.



MEDIUM MULLION
 REINFORCEMENT #20634
 ALUMINUM 6063-T6



RETROFIT MEDIUM VINYL
 H-MULLION COVER #VPI-436
 EXTRUDED VINYL 0.070" MIN.



4000 SERIES MEDIUM VINYL
 H-MULLION COVER #MP0347
 EXTRUDED VINYL 0.070" MIN.

TABLE OF CONTENTS

SHT	DESCRIPTION
1	INDIVIDUAL MULLION APPLICATIONS
2	DESIGN PRESSURES FOR REINFORCEMENT CMO146
3	DESIGN PRESSURES FOR REINFORCEMENT 16991
4	DESIGN PRESSURES FOR REINFORCEMENT 16990
5	DESIGN PRESSURES FOR REINFORCEMENT 20634
6	MULLION ATTACHMENT AND ANCHORING
7	MULLION CROSS SECTIONS- WOOD FRAME SUBSTRATE
8	MULLION CROSS SECTIONS- MASONRY/ CONG. SUBSTRATE

REVISIONS

REV.	DESCRIPTION	DATE	BY
2	Revised per 2007 Florida Building Code - Added Sheet 7	12/15/2008	TDD
3	Revised per 2007 Florida Building Code - Added Sheet 8	04/15/2011	JRM
4	Revised per 2010 Florida Building Code - updated general notes sht. 1	01/20/2012	CAP
5	Updated DP ratings chart and added new mullion covers.	06/20/2012	T.D.D.
6	Revised per 5th Ed. (2014) FBC	04/25/2015	LAT

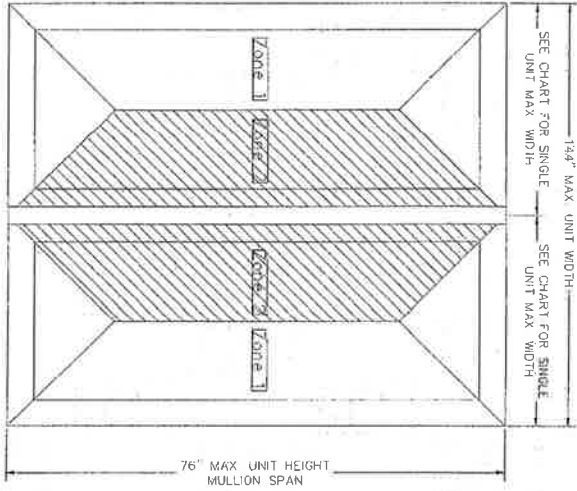
22

SIMON-TON
 1 COCKSHU- AVE. DENVER, CO 80202
 PH. 303-733-2229
 FAX. 303-733-2228
 WWW.SIMON-TON.COM

DATE: 07/20/12
 TOTAL: 0.75:1
 SHEET: 4 OF 8
 PROJECT: 17178/08
 DRAWING: 17178/08

EXTRUDED NON-IMPACT VINYL MULLIONS
WITH ALUMINIUM REINFORCEMENT
ALL NON-IMPACT WINDOW SERIES

SIMONTON
1 COCHRANE AVE. PERRISBORO, WV 26415
PH. 506-458-2280



WINDOW TYPE	WINDOW WIDTH
DOUBLE HUNG	56"
HORIZONTAL SLIDER	72"
CASEMENT	36"
FIXED	96"

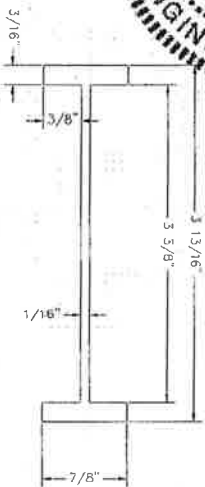
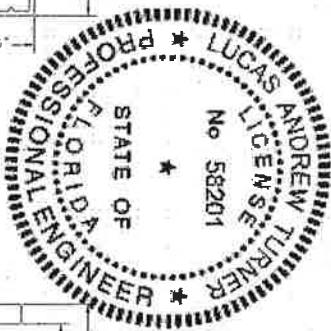
MAXIMUM SINGLE WINDOW WIDTH
MULLION TRIBUTARY WIDTH = SUM
OF ZONE 2 WINDOW WIDTHS

TABLE A - MAXIMUM DESIGN PRESSURES (PSF)
MULLION # CM0146

Mullion Length	Individual Unit Width												
	24	28	32	36	40	44	48	52	56	60	64	68	72
40													
44													
48													
52													
56													
60													
64													
68													
72													
76													
80													
84													
88													
92													
96													



ALL FIN & J FRAMES H-MULLION
LARGE VINYL MULLION COVER #VP1-573
EXTRUDED VINYL .071" MIN.



LARGE MULL REINFORCEMENT #CM0146
ALUMINIUM 6063-T6

REV	DESCRIPTION	DATE	BY
2	Revised per 2007 Florida Building Code, Added Sheet 7	12/15/2008	TDD
3	Revised per 2007 Florida Building Code, Added Sheet 8	04/15/2011	JRM
4	Revised per 2010 Florida Building Code, updated general notes sht.1	01/20/2012	CAP
5	Updated DP ratings chart and added new mullion covers.	06/20/2012	T.D.D.
6	Revised per 5th Ed. (2014) FBC	04/25/2015	LAT

SEE NOTES SHEETS 6, 7, AND 8 FOR REQUIRED ANCHORAGE INFORMATION.

72

SIMONTON
1 COCHRANE AVE. PERRISBORO, WV 26415
PH. 506-458-2280

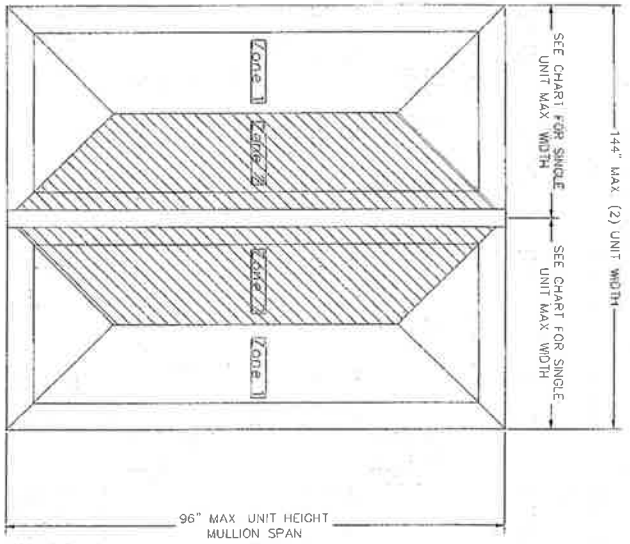
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REV: 2/18/08
REV: 12/18/08
REV: 07/20/12

PROJECT: RMO01591 5
DRAWN BY: JRM
CHECKED BY: JRM
DATE: 12/18/08

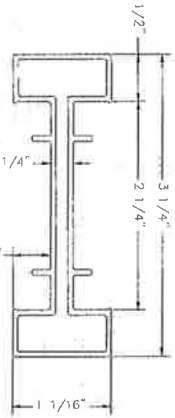
REVISIONS:
1. 07/25/11
2. 2/18/08
3. 12/18/08
4. 07/20/12

EXTRUDED NON-IMPACT VINYL MULLIONS
WITH ALUMINUM REINFORCEMENT
ALL NON-IMPACT WINDOW SERIES

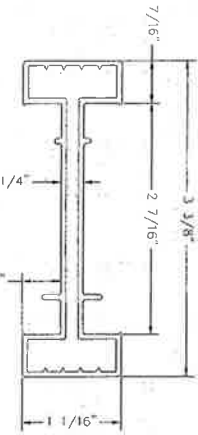
SHIMONTON
1 COCHRANE AVE PENNSBORO, VA 26113
PH: 800-428-2349



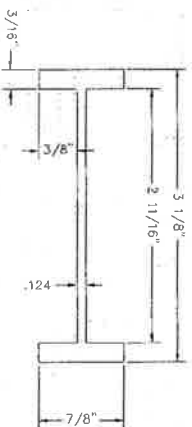
PROFINISH H-MULLION
LARGE VINYL MULLION COVER #VPI-560
EXTRUDED VINYL .079" MIN



RETROFIT H-MULLION
LARGE VINYL MULLION COVER #VPI-354
EXTRUDED VINYL .071" MIN



LARGE MULL REINFORCEMENT #16991
ALUMINUM 6063-T6



WINDOW TYPE	WINDOW WIDTH
SINGLE HUNG	52"
DOUBLE HUNG	56"
HORIZONTAL SLIDER	72"
CASEMENT	76"
FIXED	96"

MAXIMUM SINGLE WINDOW WIDTH
MULLION TRIBUTARY WIDTH = SUM
OF ZONE 2 WINDOW WIDTHS

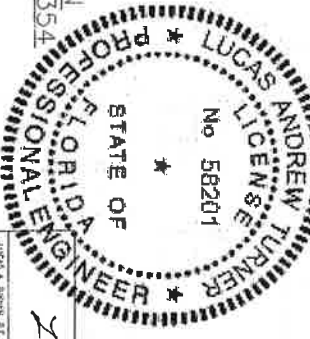
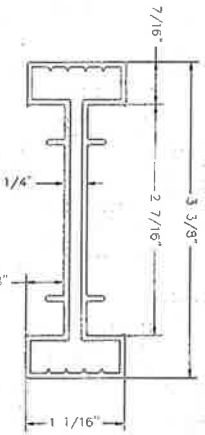
TABLE B.1 - MAXIMUM DESIGN PRESSURES (PSF)
MULLION #16991

Mullion Length	Individual Unit Width												
	24	28	32	36	40	44	48	52	56	60	64	68	72
40													
44													
48													
52													
56													
60													
64													
68													
72													
76													
80													
84													
88													
92													
96													

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5	Revised per 5th Ed (2014) FBC	04/25/2015	LAT

SEE NOTES SHEETS 6, 7, AND 8 FOR REQUIRED ANCHORAGE INFORMATION.

4000 SERIES RETROFIT H-MULLION
LARGE VINYL MULLION COVER #VPI-354
EXTRUDED VINYL .071" MIN

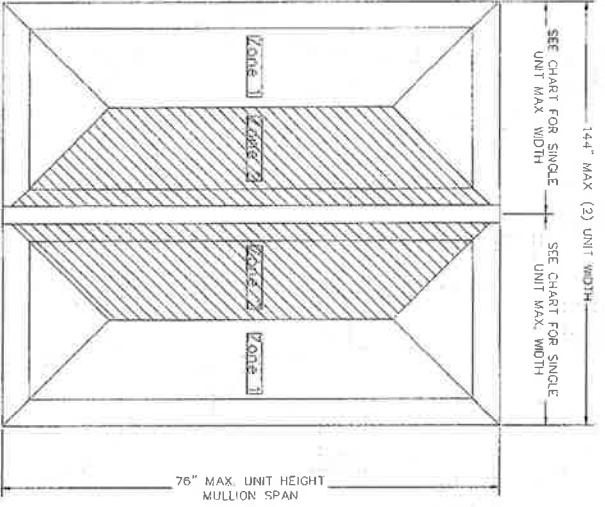


SHIMONTON
11200 W. UNIVERSITY BLVD
SUITE 100
FORT WORTH, TX 76149
PH: 817-335-1111
WWW.SHIMONTON.COM

DATE: 07/25/15
SCALE: 0.75"=1'
SHEET: 3 of 6
PROJECT: ALUMINUM VINYL MULLIONS

REVISED PER 5TH ED (2014) FBC

SIMONTON
 1 COOPERATE AVE. PENNSAUN, WV 26115
 PH. 505-428-2339
**EXTRUDED NON-IMPACT VINYL MULLIONS
 WITH ALUMINUM REINFORCEMENT
 ALL NON-IMPACT WINDOW SERIES**



MAXIMUM SINGLE WINDOW WIDTH

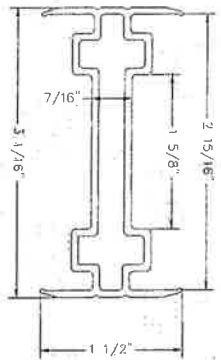
WINDOW TYPE	WINDOW WIDTH
SINGLE HUNG	52"
DOUBLE HUNG	56"
HORIZONTAL SLIDER	72"
CASEMENT	36"
FIXED	96"

MULLION TRIBUTARY WIDTH = SUM OF ZONE 2 WINDOW WIDTHS

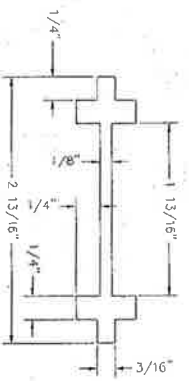
144" MAX (2) UNIT WIDTH
 SEE CHART FOR SINGLE UNIT MAX WIDTH
 SEE CHART FOR SINGLE UNIT MAX WIDTH
 76" MAX. UNIT HEIGHT
 MULLION SPAN

TABLE C - MAXIMUM DESIGN PRESSURES (PSF)
 MULLION #16990

Mullion Length	Individual Unit Width													
	24	28	32	36	40	44	48	52	56	60	64	68	72	
40														
44														
48														
52														
56														
60														
64														
68														
72														
76														



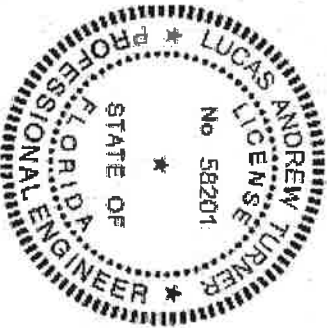
MEDIUM H-MULLION VINYL COVER #V346A
 ALL NEW CONSTRUCTION
 EXTRUDED VINYL .071" MIN.



MEDIUM MULL REINFORCEMENT #16990
 ALUMINUM 6063-T6

REVISIONS

REV	DESCRIPTION	DATE	BY
2	Revised per 2007 Florida Building Code, Added Sheet 7.	12/15/2008	TDD
3	Revised per 2007 Florida Building Code, Added Sheet 8.	04/15/2011	JRM
4	Revised per 2010 Florida Building Code, updated general notes sheet 1.	01/20/2012	CAP
5	Updated DP ratings chart and added new mullion covers.	06/20/2012	T.D.D.
6	Revised per 5th Ed. (2014) FBC	04/25/2015	LAT



22

4/29/2012

SIMONTON

DATE: 07/20/12

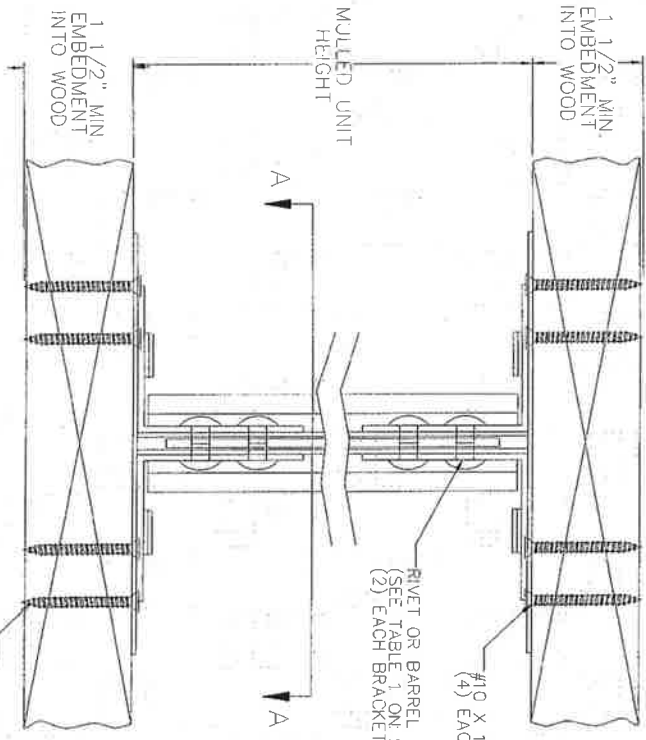
PROJECT: 10712/08

SCALE: 1/8\"/>

SEE NOTES SHEETS 6, 7, AND 8 FOR REQUIRED ANCHORAGE INFORMATION.

SIMONTON
 1 COORHANE AVE. PENNSYLVANIA, WV 26415
 PH. 800-458-2289

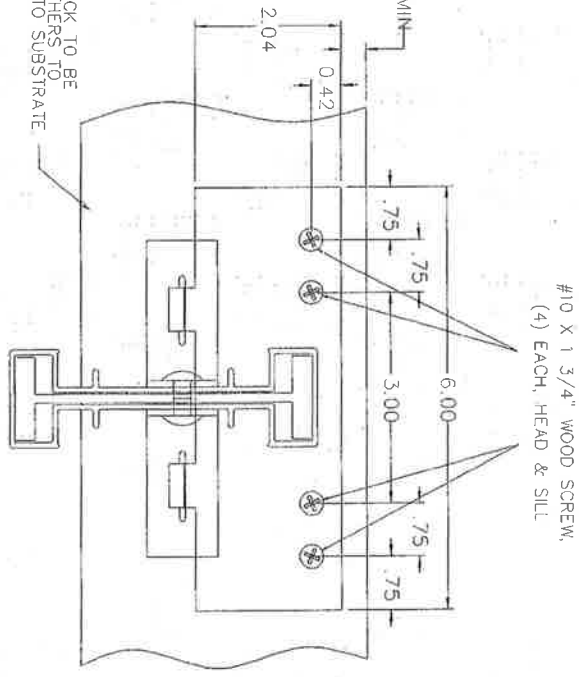
EXTRUDED NON-IMPACT VINYL MULLIONS
 WITH ALUMINUM REINFORCEMENT
 ALL NON-IMPACT WINDOW SERIES



VERTICAL CROSS SECTION WITH 2X WOOD SUBSTRATE

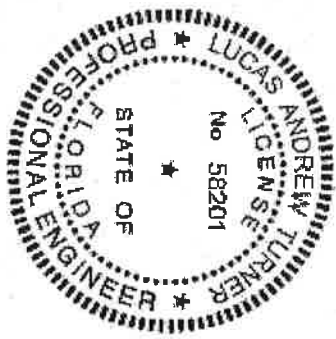
#10 X 1 3/4" WOOD SCREW, (4) EACH, HEAD & SILL

TREATED WOOD BUCK TO BE ENGINEERED BY OTHERS TO TRANSFER LOADS TO SUBSTRATE



REV.	DESCRIPTION	DATE	BY
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6	Revised per 5th Ed. (2014) FBC	04/25/2015	LAT

- NOTES:
1. THE MULLION PRODUCTS AND THEIR INSTALLATION COMPLY WITH THE 5TH EDITION (2014) FBC STRUCTURAL REQUIREMENTS AND ARE LIMITED TO USE OUTSIDE THE HVHZ.
 2. THE MULLIONS SHALL BE USED IN CONNECTION WITH FBC APPROVED PRODUCTS.
 3. ANCHORS SHALL HAVE 1 1/2" MINIMUM EMBEDMENT INTO WOOD AND 7/8" MINIMUM WOOD EDGE DISTANCE.
 4. ATTACHMENT OF ALL 2X TREATED WOOD BUGGS SHALL BE ENGINEERED SEPARATELY BY OTHERS.
 5. WOOD SHALL BE TREATED 2X SPRUCE, PINE, OR FIR.
 6. #10 WOOD SCREWS SHALL BE STEEL CONFORMING TO ASTM A 653.
 7. BASE PLATES AND L-BRACKETS ARE STAINLESS STEEL CONFORMING TO ANSI 302/304.
 8. SIMILAR INSTALLATIONS ARE USED ON HEAD AND SILL.
 9. WHEN INSTALLED IN LOCATIONS WHERE WINDBORNE DEBRIS PROTECTION IS REQUIRED, USE OF AN IMPACT PROTECTIVE SYSTEM IS REQUIRED.



22

4/23/2015

SIMONTON

PH. 800-458-2289

1 COORHANE AVE. PENNSYLVANIA, WV 26415

REVISED PER 2014 FBC

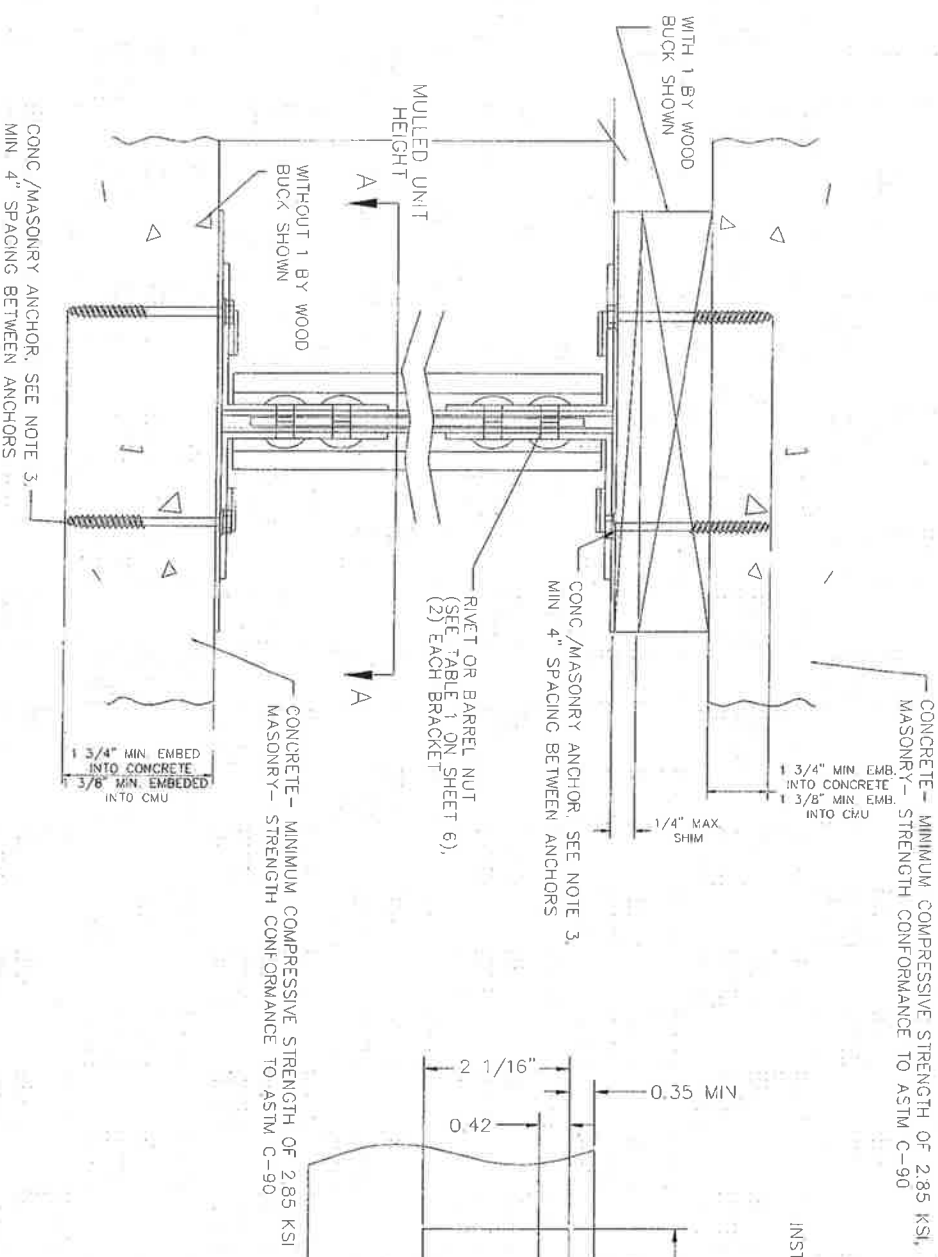
DATE: 07/20/12

BY: CAP

PROJECT: 15-00-08

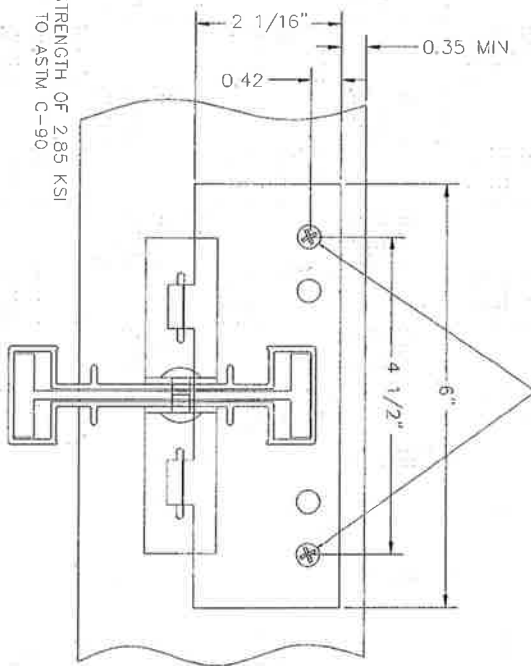
DATE: 07/20/12

SIMON-TON
 1 CORP. 1000 W. BROADWAY, SUITE 1000
 HOUSTON, TEXAS 77002-2234
 (713) 865-1100
**EXTRUDED NON-IMPACT VINYL MULLIONS
 WITH ALUMINUM REINFORCEMENT
 ALL NON-IMPACT WINDOW SERIES**

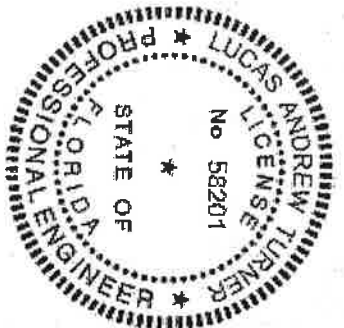


REV.	DESCRIPTION	DATE	BY
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2	Revised per 2010 Florida Building Code, Added Sheet 8.	04/15/2011	JRM
3	Revised per 2010 Florida Building Code, updated general notes sht. 1.	01/20/2012	CAP
4	Updated P-rollings chart and added new mullion covers.	06/20/2012	T.D.D.
5	Revised per 5th Ed. (2014) FBC	04/25/2015	LAT

INSTALL ANCHORS THROUGH OUTERMOST HOLES.
 SEE NOTE 3



SECTION A-A



- NOTES:
1. THE MULLION PRODUCTS AND THEIR INSTALLATION COMPLY WITH THE 5TH EDITION (2014) FBC STRUCTURAL REQUIREMENTS AND ARE LIMITED TO USE OUTSIDE THE HVHZ
 2. THE MULLIONS SHALL BE USED IN CONNECTION WITH FBC APPROVED PRODUCTS.
 3. ANCHORS IN GROUT-FILLED CMU BLOCK (ASTM C-90 COMPLIANT) SHALL BE 1/4" ELCO ULTRACONS WITH 1 3/8" MIN. EMBED. TO BLOCK, AND 1" MIN. EDGE DIST ANCHORS IN SOLID CONCRETE (2.85 KSI MIN.) SHALL BE 3/16" ITW TAPCONS OR 1/4" ELCO ULTRACONS WITH 1 3/4" MIN. EMBED. TO CONCRETE AND 1 1/8" MIN. EDGE DIST
 4. ATTACHMENT OF ALL 2X TREATED WOOD BUCKS SHALL BE ENGINEERED SEPARATELY BY OTHERS
 5. WOOD SHALL BE TREATED 2X SPRUCE PINE OR FIR.
 6. BASE PLATES AND L-BRACKETS ARE STAINLESS STEEL CONFORMING TO ANSI 302/304.
 7. SIMILAR INSTALLATIONS ARE USED ON HEAD AND SILL.
 8. WHEN INSTALLED IN LOCATIONS WHERE WINDBORNE DEBRIS PROTECTION IS REQUIRED, USE OF AN IMPACT PROTECTIVE SYSTEM IS REQUIRED.

4/23/2015	LUCAS A. TURNER, P.E., P.E. 68301	1000 W. BROADWAY, SUITE 1000	HOUSTON, TEXAS 77002-2234
12/15/2008	LUCAS A. TURNER, P.E., P.E. 68301	1000 W. BROADWAY, SUITE 1000	HOUSTON, TEXAS 77002-2234
04/15/2011	LUCAS A. TURNER, P.E., P.E. 68301	1000 W. BROADWAY, SUITE 1000	HOUSTON, TEXAS 77002-2234
01/20/2012	LUCAS A. TURNER, P.E., P.E. 68301	1000 W. BROADWAY, SUITE 1000	HOUSTON, TEXAS 77002-2234
06/20/2012	LUCAS A. TURNER, P.E., P.E. 68301	1000 W. BROADWAY, SUITE 1000	HOUSTON, TEXAS 77002-2234
04/25/2015	LUCAS A. TURNER, P.E., P.E. 68301	1000 W. BROADWAY, SUITE 1000	HOUSTON, TEXAS 77002-2234