City of Belle Isle

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

PERMIT CARD – PLEASE POST AT JOB SITE

THIS DOCUMENT BECOMES YOUR PERMIT WHEN PROPERLY VALIDATED

Per FBC 105.3.3: An enforcing authority may not issue a building permit for any building construction, erection, alteration, modification, repair or addition unless the permit either includes on its face or there is attached to the permit the following statement: **"NOTICE: In addition to the requirements of this permit, there may be additional restrictions applicable to this property that may be found in the public records of this county, and there may be additional permits required from other governmental entities such as water management districts, state agencies, or federal agencies."** The issuance of this permit does not grant permission to violate any applicable City, Orange County, State of Florida and/or Federal codes and/or ordinances. Separate permits are required for Signs, Roofing, Electrical, Gas, Plumbing and Mechanical services. This permit becomes VOID if the work authorized is not commenced within 6 months, or is suspended or abandoned for a period of 6 months after commencement. WORK SHALL BE CONSIDERED SUSPENDED IF AN APPROVED INSPECTION HAS NOT BEEN MADE WITHIN A 6 MONTH PERIOD. PERMISSION IS GRANTED TO DO THE FOLLOWING WORK ACCORDING TO THE CONDITIONS HEREON AND THE APPROVED PLANS AND SPECIFICATIONS, SUBJECT TO COMPLIANCE WITH THE ORDINANCES OF THE CITY OF BELLE ISLE, FLORIDA.

Scope of Work: BUILDING: 8 windows, 3 doors all size for size

Comments: None

Project Information
Address: 3532 Country Lakes Drive, Belle Isle, FL 32812
Parcel ID: 20-23-30-4980-00-040
Property Owner: Heringhaus, William
Phone Number: None

****

Company Name: Pella Windows and Doors
Contractor Name: Rowland, James S.
License Number: CBC046712
Address: 350 SR-434 West, Longwood, FL 32750
Phone Number: 407-831-0600

Permit Number: 2017-04-077

Date of Application: 04/21/2017
Date Permit Issued: 04/25/2017

***WARNING TO OWNER*: "YOUR FAILURE TO RECORD A NOTICE OF COMMENCEMENT MAY RESULT IN YOU PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR AN ATTORNEY BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT." ON THE JOB INSPECTION(S) MUST BE MADE BEFORE PROCEEDING WITH SUBSEQUENT WORK. THIS CARD MUST BE DISPLAYED OUTSIDE AND BE PROTECTED FROM THE WEATHER WHILE BEING VISIBLE FROM THE STREET UNTIL THE FINAL INSPECTIONS HAVE BEEN APPROVED.**

BUILDING FEATURES

IMPACT FEES
School $
Traffic $

ZONING FEES
Zoning Fee $

UNIVERSAL ENG - BUILDING FEES

Cert of Occ	$
Demo	$
Building	$
Fence	$
Driveway	$
Shed	$
Window(s)	$
Door(s)& Window	$103.50
PrePower	$
Electrical	$
Temp Pole	$
Plumbing	$
Mechanical	$
Gas	$
Roofing	$
Boat Dock	$
Screen Encl	$
Swimming Pool	$
Sign	$

SURCHARGE FEES

Surcharge Fee	$2.00
Surcharge Fee	$2.00

TOTAL FEES $107.50

Date Paid 4-27-17

CC or Check # VISA 5842

Amount Paid 107.50

The person accepting this permit shall conform to the terms of the application on file and construction shall conform to the requirements of the Florida Building Code (FS 553).

BUILDING INSPECTOR USE ONLY

IF APPLICABLE:
Have Zoning Approval Conditions Been Met? YES NO **Have Stormwater Approval Conditions Been Met?** YES NO **Silt fencing in place?** YES NO **Turbidity Barrier in place?** YES NO

☐ **BUILDING**
1st _____ (Footing/Foundation)
Survey specific foundation plan must be onsite before slab pour. Approved Plan on Site? ____

2nd _____ (Slab)

3rd _____ (Lintel)(Wall Reinforcing on Masonry Building)

4th _____ (Exterior Framing)(Roof/Wall Sheathing)

5th _____ (Framing) (To be made after Plumbing/ Mechanical/ Electrical Rough-Ins & Windows/Doors Installed)

6th _____ (Insulation to be Made After Roof Installed)

7th _____ (Drywall)

8th _____ (Sidewalk/Driveway)

9th _____ (Other)

10th _____ (Final – After MEP and Other Applicable Finals)

☐ **ROOFING**
1ST ROOFING Deck Nailing/Dry-in/Flashing _____

2nd ROOFING Covering In-Progress _____

3rd ROOFING Covering Final _____

☐ **PLUMBING** (Pool-Piping, Solar, Irrigation, Water Treatment Equip, Etc...)
☐
1ST _____ (Underground) 2nd _____ (Sewer)

3rd _____ (Rough-In/Tub Set) 4th _____ (Final)

CHECK APPROPRIATE BOX
☐ **GAS** __**Natural** ___**LP** ☐ **MECHANICAL** ☐**ELECTRICAL** ☐ **LOW VOLTAGE**

1st _____ (Rough-In) 2nd _____ (Final)

Inspection requests are to be emailed to BIDscheduling@UniversalEngineering.com; a confirmation email will be sent back to you upon scheduling. Next-Day Inspection requests must be made by 4pm. Please include the following in your request: Permit #, project address, type of inspection, date of the requested inspection, a contact name & a contact phone number. AM or PM may be requested but cannot be guaranteed.

For a copy of your permit, or to check inspection results, please visit https://universalengineering.sharefile.com

login ID = cobi@universalengineering.com password = universal13

RECEIVED
APR 21 2017
BY

City of Belle Isle

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Tel 407-581-8161 * Fax 407-581-0313 * www.universalengineering.com

APPLICATION FOR SIZE-FOR-SIZE WINDOW / DOOR PERMIT

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 OF APPLICATION: _____ **PERMIT NUMBER** 2017-04-077

PLEASE PRINT. The undersigned hereby applies for a permit to make installations as indicated below:

Project Address 3532 Country Lakes Dr., Belle Isle, FL ☐ 32809 ☑ 32812

Property Owner William Heringhaus Phone _____

Property Owner's Mailing Address 3532 Country Lakes Dr. City Belle Isle

State FL Zip Code 32812 **Parcel Id Number:** 20-23-30-4980-00-040

REQUIRED! To obtain this information, please visit http://www.ocpafl.org/Searches/ParcelSearch.aspx

Type of Building: Residential ☑ Commercial ☐ Other ☐

- **REQUIRED! Florida Product Approval Screen Printout from www.floridabuilding.org showing the Code Version**
- **REQUIRED! Florida Product Approval Installation Instructions from www.floridabuilding.org (not the manufacturer instructions)**
- **REQUIRED! Copies of your General Liability & Worker's Comp Insurance Certificate & State and Local Licenses**

Please indicate the nature of work by completing the information below:

Number of Size-for-Size Windows: 8 **Number of Size-for-Size Doors:** 3 **Job Valuation:** 11658.00

I hereby certify that the above is true and correct to the best of my knowledge and make Application for Permit as outlined above, and if same is granted I agree to conform to all Florida Building Code Regulations and City Ordinances regulating same and in accordance with plans submitted. The issuance of this permit does not grant permission to violate any applicable Town and/or State of Florida codes and/or ordinances. By signing below, I recognize Republic Services is by legal contract the sole authorized provider of garbage, recycling, yard waste, and commercial garbage and construction debris collection and disposal services with the city limits of the City. Contractors, homeowners and commercial businesses may contact Republic Services at 407-293-8000 to setup accounts for Commercial, Construction Roll Off, or other services needed. Rates are fixed by contract and are available at City Hall or from Republic Services. The City enforces the contract through its code enforcement office. Failure to comply will result in a stop work order.

BY SIGNING THIS APPLICATION, YOU ARE CERTIFYING THAT YOU ARE ACTING AS THE OWNER'S AGENT FOR THIS PERMIT:

LICENSE HOLDER SIGNATURE _____ LICENSE # CBC046712

LICENSE HOLDER NAME James Rowland COMPANY NAME Pella Windows and Doors

Street Address 350 W SR 434

City Longwood State FL Zip Code 32750 Phone Number 407-831-0600

Email Address jonathon.thomas@expeditepermit.com

Building Official: _____ Date 4-25-17

Verified Contractor's Licenses & Insurance are on file SD Date 4-25-17

Zoning Fee	$ 0
Permit Fee	$ 69
Review Fee	$ 34.50
3% Florida Surcharge	$ 4.00
Total Permit Fee	$ 107.50

1ST 11K 25
11X4 44
69 : 2

69
34.50
103.50

NOC

DOC # 20170219357
04/21/2017 08:30 AM Page 1 of 1
Rec Fee: $10.00
Deed Doc Tax: $0.00
Mortgage Doc Tax: $0.00
Intangible Tax: $0.00
Phil Diamond, Comptroller
Orange County, FL
Ret To: SIMPLIFILE LC

Permit Number 247-04-07
Parcel ID Number 20-23-30-4980-00-040

NOTICE OF COMMENCEMENT

State of Florida
County of Orange

The undersigned hereby gives notice that the improvement(s) will be made to certain real property, and in accordance with Chapter 713, Florida Statutes, the following information is provided in this Notice of Commencement.

1. Description of property (legal description of the property, and street address if available)
   Address 3532 Country Lakes Dr.
   Legal Description The Landings at Lake Conway 9/125 Lot 4
2. General description of improvement(s)
   replace windows/doors
3. Owner Information
   Name William Herringhaws Phone & Fax Number
   Address 3532 Country Lakes Dr Belle Isle, FL 32812
   Interest in Property
4. Fee Simple Title Holder (If other than owner shown above)
   Name Phone & Fax Number
   Address
5. Contractor
   Name Atla Windows and Doors Phone & Fax Number
   Address 350 W SR 434 Longwood, FL 32812
6. Surety (if any)
   Name N/A Phone & Fax Number
   Address N/A
7. Lender (if any)
   Name N/A Phone & Fax Number
   Address N/A
8. Persons with the State of Florida designated by Owner upon who notices or other documents may be served as provided by 713.13(1) (a) 7, Florida Statutes.
   Name Phone & Fax Number
   Address
9. In addition to himself or herself, Owner designates the following to receive a copy of the Lienor's Notice as provided in 713.13(1) (b), Florida Statutes.
   Name Phone & Fax Number
   Address
10. Expiration date of Notice of Commencement (the expiration date is one year from the date of recording unless a different date is specified:

WARNING TO OWNER: ANY PAYMENTS MADE BY THE OWNER AFTER THE EXPIRATION OF THE NOTICE OF COMMENCEMENT ARE CONSIDERED IMPROPER PAYMENTS UNDER CHAPTER 713, PART 1, SECTION 713.13, FLORIDA STATUTES, AND CAN 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 YOUR LENDER OR AN ATTORNEY BEFORE COMMENCING WORK OR RECORDING YOUR NOTICE OF COMMENCEMENT.

11. [signature] William Herringhaws
    Signature of Owners or Owners Authorized Officer/Director/Partner/Manager — Print Name

Sworn to (or affirmed) and subscribed before me this 17 day of April 2017 by William Herringhaws as Owner (type of authority, e.g. officer, trustee, attorney in fact) for self (name of party on behalf of whom instrument was executed. ___ personally known to me or ✓ produced FL as identification.

[signature]
Signatory of Notary
Jonathon Thomas
Name (print)

(Seal)

JONATHON ALLEN THOMAS
NOTARY PUBLIC
STATE OF FLORIDA
Comm# FF055234
Expires 9/18/2017

—AND—

Verification pursuant to Section 92.525, Florida Statutes. Under penalties of perjury, I declare that I have read the foregoing and that the facts stated are true to the best of my knowledge and belief.

[signature]
Signatory of Natural Person Signing (in line #11) Above

c/o Belle Isle

Contract - Detailed

Pella Window and Door Showroom of Longwood
350 West State Road 434
Longwood, FL 32750
Phone: (407) 831-0600 Fax: (407) 937-3282

Sales Rep Name: Piper, Benjamin
Sales Rep Phone: 386-316-5384
Sales Rep Fax:
Sales Rep E-Mail: piperbj@Pella.com

Customer Information	Project/Delivery Address	Order Information
William Heringhaus 3532 Country Lakes Dr BELLE ISLE, FL 32812-3505 Primary Phone: (419) 3463174 Mobile Phone: Fax Number: E-Mail: Contact Name: Great Plains #: 1004163078 Customer Number: 1008099132 Customer Account: 1004163078	Heringhaus,William,1838711 3532 Country Lakes Dr Lot # Belle Isle, FL 32812-3505 County: Owner Name: William Heringhaus Owner Phone: (419) 3463174	Quote Name: encompass doors 250 windows Order Number: 7217BPM9N **Quote Number: 8690729** Order Type: Installed Sales Wall Depth: Payment Terms: 1% /Cash In Advance Tax Code: CAP IMP 2 Cust Delivery Date: 05/01/2017 Quoted Date: 2/17/2017 Contracted Date: 3/8/2017 Booked Date: 3/9/2017 Customer PO #:

Line #	Location:	Attributes	Qty
10	None Assigned	ADDPRRMCOR020001 - Delivery & Disposal	1

☐ Project Checklist has been reviewed

William C. Heringhaus
Customer Name (Please print)

Customer Signature

2/25/17
Date

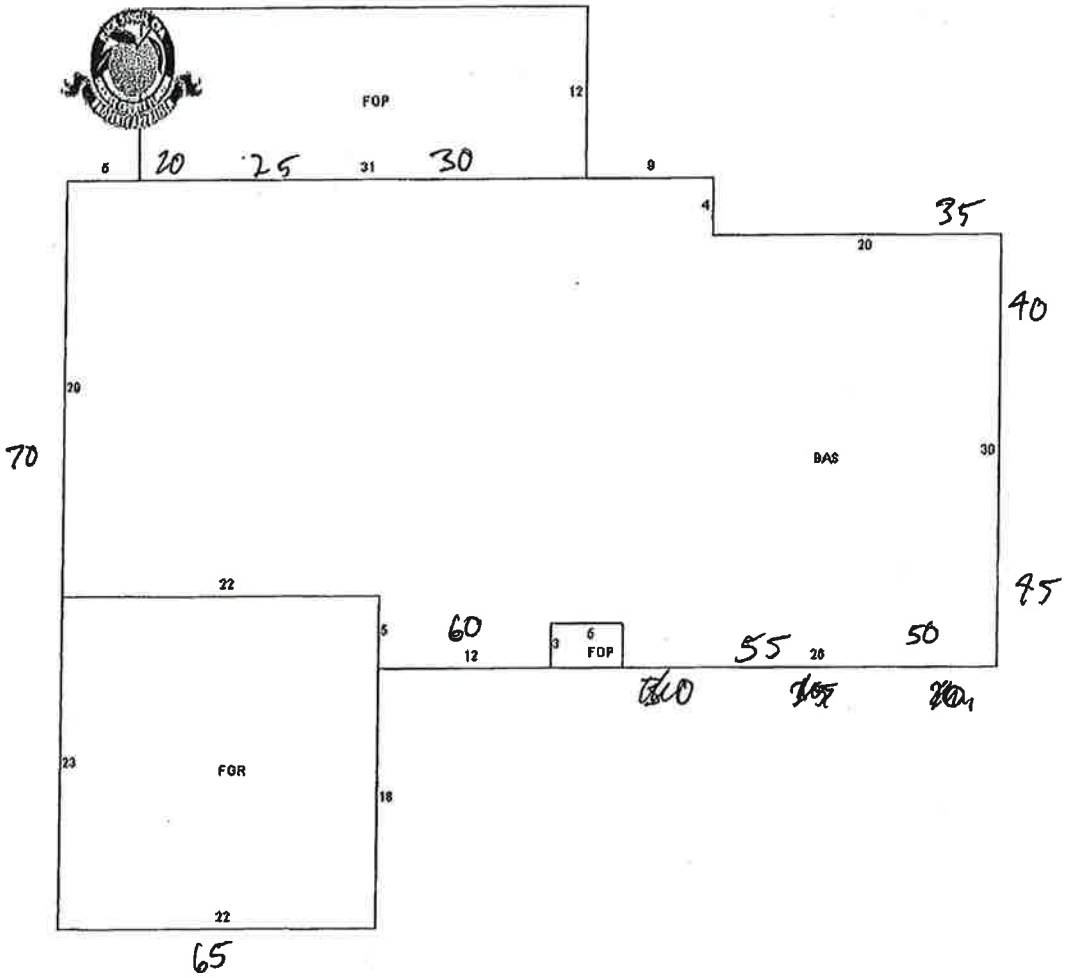
Credit Card Approval Signature

Ben Pfau
Pella Sales Rep Name (Please print)

Pella Sales Rep Signature

2-25-17
Date

Order Totals	
Taxable Subtotal	$7,256.07
Sales Tax @ 0%	$0.00
Non-taxable Subtotal	$4,401.93
Total	$11,658.00
Deposit Received	$0.00
Amount Due	$11,658.00



City of Belle Isle

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Product Approval Form

DATE: _____ PERMIT # 2017-04-077

PROJECT ADDRESS 3532 Country Lakes Dr., Belle Isle, FL ☐ 32809 ☑ 32812

As required by Florida Statue 553.842 and Florida Administrative Code 9B-72m, please provide the information and approval numbers of the building components listed below if they will be utilized on the building or structure. FL Approved products are listed online at **www.floridabuilding.org** or can be obtained from the local product supplier. The following information must be turned in with permit application and available onsite for inspections:

1. **This Product Approval Cover Sheet**
2. **Internet screen from FloridaBuilding.org showing PA#, approval and code edition stamped**
3. **Manufacturer's *installation* details from FloridaBuilding.org and requirements for each product stamped**

Product Type	Manufacturer	Model/Series	FL Product Approval #	Product Type	Manufacturer	Model/Series	FL Product Approval #
EXTERIOR DOORS				**WALL PANELS**			
Swinging				Sliding			
Sliding	Pella Corp	Vinyl	16461.3	Soffits			
Sectional/Rollup				Storefront			
Other				Glass Block			
				Other			
WINDOWS				**ROOFING PRODUCTS**			
Single/Dbl Hung	Pella Corp	250 Series	16812.1, .3	Asphalt Shingles			
Horizontal Slider				Non Struct Metal			
Casement				Roofing Tiles			
Fixed				Single Ply Roof			
Mullion	Pella Corp	Mullion	14653.2	Other			
Skylights							
Other							
STRUCTURAL COMPONENTS				**OTHER**			
Wood Connectors							
Wood Anchors							
Truss Plates							
Insulation Forms							
Lintels							
Other							

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Universal Engineering Sciences

It is the applicant's responsibility to verify that specific products have been installed in accordance with their limitations and with the minimum required design pressures for the structure. Specific compliance will be verified during field inspections.

Applicant Signature _____ Date 4/20/17

FLORIDA DEPARTMENT OF
Business & Professional Regulation

Florida dbpr

Product Approval
USER: Public User

OFFICE OF THE SECRETARY

FL #	FL2646-R9
Application Type	Revision
Code Version	2014
Application Status	Approved *Approved by DBPR. Approvals by DBPR shall be reviewed and ratified by the POC and/or the Commission if necessary.
Comments	set to reapply per applicants request 10/01/15-rb
Archived	☐
Product Manufacturer	Pella Corporation
Address/Phone/Email	102 Main St. Pella, IA 50219 (641) 621-6096 pellaproductapproval@pella.com
Authorized Signature	TROY FARR tbfarr@pella.com
Technical Representative	Joseph Hayden
Address/Phone/Email	102 Main Street Pella, IA 50219 (641) 621-6096 jahayden@pella.com
Quality Assurance Representative	Pat Bortscheller
Address/Phone/Email	102 Main Street Pella, IA 50219 (641) 621-1000 PJBortscheller@pella.com
Category	Exterior Doors
Subcategory	Sliding Exterior Door Assemblies
Compliance Method	Certification Mark or Listing
Certification Agency	Window and Door Manufacturers Association
Validated By	CBUCK Engineering, Inc. ☐ Validation Checklist - Hardcopy Received

Reviewed for Code Compliance
Universal Engineering Sciences

Referenced Standard and Year (of Standard)

Standard	Year
AAMA/WDMA/CSA 101/I.S.2/A440-08	2008
AAMA/WDMA/CSA 101/I.S.2/A440-11	2011

Equivalence of Product Standards Certified By

Product Approval Method: Method 1 Option A

Date Submitted	09/29/2015
Date Validated	10/01/2015
Date Pending FBC Approval	
Date Approved	10/01/2015

Summary of Products

FL #	Model, Number or Name	Description
2646.1	Series 10/20/25 Sliding Glass Door	Vinyl 2-Panel "OX" Sliding Glass Door (96" x 96")
Limits of Use **Approved for use in HVHZ:** No **Approved for use outside HVHZ:** Yes **Impact Resistant:** No **Design Pressure:** +25/-25 **Other:** Configurations of glass shall conform to the current ASTM E1300 standard & be safety glazed for use in hazardous locations.		**Certification Agency Certificate** FL2646_R9_C_CAC_CCL-411-H-963.30.pdf **Quality Assurance Contract Expiration Date** 11/30/2021 **Installation Instructions** FL2646_R9_II_Drawing 1248.pdf Verified By: Warren Schaefer, P.E. 44135 Created by Independent Third Party: Yes **Evaluation Reports** FL2646_R9_AE_Drawing 1248.pdf Created by Independent Third Party: Yes
2646.2	Series 10/20/25 Sliding Glass Door	Vinyl Single Panel Fixed "O" Door (Sidelite, 34-15/16" x 81-1/2")
Limits of Use **Approved for use in HVHZ:** No **Approved for use outside HVHZ:** Yes **Impact Resistant:** No **Design Pressure:** +35/-35 **Other:** Configurations of glass shall conform to the current ASTM E1300 standard & be safety glazed for use in hazardous locations.		**Certification Agency Certificate** FL2646_R9_C_CAC_CCL-411-H-960.18.pdf **Quality Assurance Contract Expiration Date** 03/26/2022 **Installation Instructions** FL2646_R9_II_Drawing 1248.pdf Verified By: Warren Schaefer, P.E. 44135 Created by Independent Third Party: Yes **Evaluation Reports** FL2646_R9_AE_Drawing 1248.pdf Created by Independent Third Party: Yes
2646.3	Series 10/20/25 Sliding Glass Door	Vinyl 2-Panel "OX" Sliding Glass Door (72" x 82")
Limits of Use **Approved for use in HVHZ:** No **Approved for use outside HVHZ:** Yes **Impact Resistant:** No **Design Pressure:** +35/-35 **Other:** Configurations of glass shall conform to the current ASTM E1300 standard & be safety glazed for use in hazardous locations.		**Certification Agency Certificate** FL2646_R9_C_CAC_CCL-411-H-963.21.pdf **Quality Assurance Contract Expiration Date** 10/05/2019 **Installation Instructions** FL2646_R9_II_Drawing 1248.pdf Verified By: Warren Schaefer, P.E. 44135 Created by Independent Third Party: Yes **Evaluation Reports** FL2646_R9_AE_Drawing 1248.pdf Created by Independent Third Party: Yes
2646.4	Series 10/20/25 Sliding Glass Door	Vinyl Single Panel Fixed "O" Door (Sidelite, 47-1/2" x 95-1/2")
Limits of Use **Approved for use in HVHZ:** No **Approved for use outside HVHZ:** Yes **Impact Resistant:** No **Design Pressure:** +25/-25 **Other:** Configurations of glass shall conform to the current ASTM E1300 standard & be safety glazed for use in hazardous locations.		**Certification Agency Certificate** FL2646_R9_C_CAC_CCL-411-H-960.15.pdf **Quality Assurance Contract Expiration Date** 03/26/2022 **Installation Instructions** FL2646_R9_II_Drawing 1248.pdf Verified By: Warren Schaefer, P.E. 44135 Created by Independent Third Party: Yes **Evaluation Reports** FL2646_R9_AE_Drawing 1248.pdf Created by Independent Third Party: Yes

Back Next

FLORIDA DEPARTMENT OF
Business & Professional Regulation

Product Approval
USER: Public User

OFFICE OF THE SECRETARY

FL #	FL16812-R2
Application Type	Revision
Code Version	2014
Application Status	Approved
	*Approved by DBPR. Approvals by DBPR shall be reviewed and ratified by the POC and/or the Commission if necessary.
Comments	
Archived	☐
Product Manufacturer	Pella Corporation
Address/Phone/Email	102 Main St. Pella, IA 50219 (641) 621-6096 pellaproductapproval@pella.com
Authorized Signature	TROY FARR tbfarr@pella.com
Technical Representative	TROY FARR
Address/Phone/Email	18600 NE WILKES ROAD PORTLAND, OR 97230 (503) 405-9176 tbfarr@pella.com
Quality Assurance Representative	Pat Bortscheller
Address/Phone/Email	102 Main Street Pella, IA 50219 (641) 621-1000 PJBortscheller@pella.com
Category	Windows
Subcategory	Single Hung
Compliance Method	Certification Mark or Listing
Certification Agency	Window and Door Manufacturers Association
Validated By	Terrence E. Lunn, PE
	☑ Validation Checklist - Hardcopy Received

Reviewed for Code Compliance
Universal Engineering Sciences

Referenced Standard and Year (of Standard)	**Standard**	**Year**
	AAMA/WDMA/CSA 101/I.S.2/A440-08	2008
	AAMA/WDMA/CSA 101/I.S.2/A440-11	2011

Equivalence of Product Standards Certified By	
Product Approval Method	Method 1 Option A

Date Submitted	03/09/2016
Date Validated	03/10/2016
Date Pending FBC Approval	
Date Approved	03/17/2016

Summary of Products

FL #	Model, Number or Name	Description
16812.1	250 Series Single Hung Window	36" x 63" vinyl non-impact single window
Limits of Use **Approved for use in HVHZ:** No **Approved for use outside HVHZ:** Yes **Impact Resistant:** No **Design Pressure:** +35/-35 **Other:** Configurations of glass shall conform to the current ASTM E1300 standard.		**Certification Agency Certificate** FL16812_R2_C_CAC_CCL 411-H-1462.06_.07.pdf **Quality Assurance Contract Expiration Date** 08/06/2021 **Installation Instructions** FL16812_R2_II_Drawing 1867.pdf Verified By: Warren W. Schaefer P.E. 44135 Created by Independent Third Party: Yes **Evaluation Reports** FL16812_R2_AE_Drawing 1867.pdf Created by Independent Third Party: Yes
16812.2	250 Series Single Hung Window	48" x 84" vinyl non-impact single window with fully reinforced stiles & rails
Limits of Use **Approved for use in HVHZ:** No **Approved for use outside HVHZ:** Yes **Impact Resistant:** No **Design Pressure:** +35/-35 **Other:** Configurations of glass shall conform to the current ASTM E1300 standard.		**Certification Agency Certificate** FL16812_R2_C_CAC_CCL 411-H-1462.08_.09.pdf **Quality Assurance Contract Expiration Date** 08/06/2021 **Installation Instructions** FL16812_R2_II_Drawing 1867.pdf Verified By: Warren W. Schaefer P.E. 44135 Created by Independent Third Party: Yes **Evaluation Reports** FL16812_R2_AE_Drawing 1867.pdf Created by Independent Third Party: Yes
16812.3	250 Series Single Hung Window	54" x 66" vinyl non-impact single window with fully reinforced stiles & rails & HP package
Limits of Use **Approved for use in HVHZ:** No **Approved for use outside HVHZ:** Yes **Impact Resistant:** No **Design Pressure:** +50/-50 **Other:** Configurations of glass shall conform to the current ASTM E1300 standard.		**Certification Agency Certificate** FL16812_R2_C_CAC_CCL 411-H-1462.14_.15.pdf **Quality Assurance Contract Expiration Date** 08/13/2021 **Installation Instructions** FL16812_R2_II_Drawing 1867.pdf Verified By: Warren W. Schaefer P.E. 44135 Created by Independent Third Party: Yes **Evaluation Reports** FL16812_R2_AE_Drawing 1867.pdf Created by Independent Third Party: Yes
16812.4	250 Series Single Hung Window	48" x 72" vinyl non-impact single window with fully reinforced stiles & rails & HP package
Limits of Use **Approved for use in HVHZ:** No **Approved for use outside HVHZ:** Yes **Impact Resistant:** No **Design Pressure:** +50/-50 **Other:** Configurations of glass shall conform to the current ASTM E1300 standard.		**Certification Agency Certificate** FL16812_R2_C_CAC_CCL 411-H-1462.16_.17.pdf **Quality Assurance Contract Expiration Date** 08/13/2021 **Installation Instructions** FL16812_R2_II_Drawing 1867.pdf Verified By: Warren W. Schaefer P.E. 44135 Created by Independent Third Party: Yes **Evaluation Reports** FL16812_R2_AE_Drawing 1867.pdf Created by Independent Third Party: Yes
16812.5	250 Series Single Hung Window	72 1/2" x 63" vinyl non-impact double window
Limits of Use **Approved for use in HVHZ:** No **Approved for use outside HVHZ:** Yes **Impact Resistant:** No **Design Pressure:** +35/-35 **Other:** Configurations of glass shall conform to the current ASTM E1300 standard.		**Certification Agency Certificate** FL16812_R2_C_CAC_CCL 411-H-1462.00_.01.pdf **Quality Assurance Contract Expiration Date** 06/14/2021 **Installation Instructions** FL16812_R2_II_Drawing 1867.pdf Verified By: Warren W. Schaefer P.E. 44135 Created by Independent Third Party: Yes **Evaluation Reports** FL16812_R2_AE_Drawing 1867.pdf Created by Independent Third Party: Yes
16812.6	250 Series Single Hung Window	96" x 72" vinyl non-impact double window with fully reinforced stiles & rails

Reviewed for Code Compliance Universal Engineering Sciences

Limits of Use **Approved for use in HVHZ:** No **Approved for use outside HVHZ:** Yes **Impact Resistant:** No **Design Pressure:** +35/-35 **Other:** Configurations of glass shall conform to the current ASTM E1300 standard.		**Certification Agency Certificate** FL16812_R2_C_CAC_CCL 411-H-1462.18_.19.pdf **Quality Assurance Contract Expiration Date** 08/09/2021 **Installation Instructions** FL16812_R2_II_Drawing 1867.pdf Verified By: Warren W. Schaefer P.E. 44135 Created by Independent Third Party: Yes **Evaluation Reports** FL16812_R2_AE_Drawing 1867.pdf Created by Independent Third Party: Yes
16812.7	250 Series Single Hung Window	72" x 65 1/2" vinyl non-impact double window with fully reinforced stiles & rails & HP package
Limits of Use **Approved for use in HVHZ:** No **Approved for use outside HVHZ:** Yes **Impact Resistant:** No **Design Pressure:** +50/-50 **Other:** Configurations of glass shall conform to the current ASTM E1300 standard.		**Certification Agency Certificate** FL16812_R2_C_CAC_CCL 411-H-1462.20_.21.pdf **Quality Assurance Contract Expiration Date** 08/09/2021 **Installation Instructions** FL16812_R2_II_Drawing 1867.pdf Verified By: Warren W. Schaefer P.E. 44135 Created by Independent Third Party: Yes **Evaluation Reports** FL16812_R2_AE_Drawing 1867.pdf Created by Independent Third Party: Yes
16812.8	250 Series Single Hung Window	108" x 63" vinyl non-impact triple window
Limits of Use **Approved for use in HVHZ:** No **Approved for use outside HVHZ:** Yes **Impact Resistant:** No **Design Pressure:** +35/-35 **Other:** Configurations of glass shall conform to the current ASTM E1300 standard.		**Certification Agency Certificate** FL16812_R2_C_CAC_CCL 411-H-1462.00_.01.pdf **Quality Assurance Contract Expiration Date** 06/14/2021 **Installation Instructions** FL16812_R2_II_Drawing 1867.pdf Verified By: Warren W. Schaefer P.E. 44135 Created by Independent Third Party: Yes **Evaluation Reports** FL16812_R2_AE_Drawing 1867.pdf Created by Independent Third Party: Yes
16812.9	250 Series Single Hung Window	48" x 84" vinyl non-impact single window with transom with fully reinforced stiles & rails
Limits of Use **Approved for use in HVHZ:** No **Approved for use outside HVHZ:** Yes **Impact Resistant:** No **Design Pressure:** +35/-35 **Other:** Configurations of glass shall conform to the current ASTM E1300 standard.		**Certification Agency Certificate** FL16812_R2_C_CAC_CCL 411-H-1462.04_.05.pdf **Quality Assurance Contract Expiration Date** 08/09/2021 **Installation Instructions** FL16812_R2_II_Drawing 1867.pdf Verified By: Warren W. Schaefer P.E. 44135 Created by Independent Third Party: Yes **Evaluation Reports** FL16812_R2_AE_Drawing 1867.pdf Created by Independent Third Party: Yes
16812.10	250 Series Single Hung Window	42" x 83.5" vinyl non-impact single window with fully reinforced stiles & rails & HP package
Limits of Use **Approved for use in HVHZ:** No **Approved for use outside HVHZ:** Yes **Impact Resistant:** No **Design Pressure:** +50/-50 **Other:** Configurations of glass shall conform to the current ASTM E1300 standard.		**Certification Agency Certificate** FL16812_R2_C_CAC_CCL- PEL-H-1462.pdf **Quality Assurance Contract Expiration Date** 11/04/2025 **Installation Instructions** FL16812_R2_II_Drawing 1867.pdf Verified By: Warren W. Schaefer 44135 Created by Independent Third Party: Yes **Evaluation Reports** FL16812_R2_AE_Drawing 1867.pdf Created by Independent Third Party: Yes

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FLORIDA DEPARTMENT OF
Business & Professional Regulation

Florida dbpr

Product Approval
USER: Public User

OFFICE OF THE SECRETARY

FL #	FL14653-R4
Application Type	Affirmation
Code Version	2014
Application Status	Approved
Comments	
Archived	☐
Product Manufacturer	Pella Corporation
Address/Phone/Email	102 Main St. Pella, IA 50219 (641) 621-6096 pellaproductapproval@pella.com
Authorized Signature	Joe Hayden Sandi Robinson pellaproductapproval@pella.com
Technical Representative	Joseph Hayden
Address/Phone/Email	102 Main Street Pella, IA 50219 (641) 621-6096 jahayden@pella.com
Quality Assurance Representative	Pat Bortscheller
Address/Phone/Email	102 Main Street Pella, IA 50219 (641) 621-1000 PJBortscheller@pella.com
Category	Windows
Subcategory	Mullions
Compliance Method	Certification Mark or Listing
Certification Agency	Window and Door Manufacturers Association
Validated By	Charles A. Pagen P. E., Ph. D. Fenestration Technology
	☐ Validation Checklist - Hardcopy Received

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Referenced Standard and Year (of Standard)

Standard	Year
AAMA 450	2006

Equivalence of Product Standards Certified By

☐ I affirm that there are no changes in the new Florida Building Code which affect my product(s) and my product(s) are in compliance with the new Florida Building Code.

Documentation from approved Evaluation or Validation Entity ○ Yes ○ No ○ N/A

Product Approval Method	Method 1 Option A
Date Submitted	04/08/2015
Date Validated	04/08/2015
Date Pending FBC Approval	
Date Approved	04/12/2015

Summary of Products

FL #	Model, Number or Name	Description
14653.1	Pella Vinyl 350 Series Windows	1/2" Light Duty Aluminum Mullion with End Anchors - Window to Window Combinations
Limits of Use **Approved for use in HVHZ:** No **Approved for use outside HVHZ:** Yes **Impact Resistant:** Yes **Design Pressure:** N/A **Other:** Compliant in areas requiring up to Missile D, Windzone 3 protection. See page 6 of Product Evaluation Report for applicable Pella Window Products.		**Certification Agency Certificate** FL14653_R4_C_CAC_411-H-1317-03.pdf **Quality Assurance Contract Expiration Date** 03/21/2019 **Installation Instructions** FL14653_R4_II_EngReportNo1786_LightDutyMull_Rev2.pdf Verified By: Robert J. Amoruso 49752 Created by Independent Third Party: Yes **Evaluation Reports** FL14653_R4_AE_PERNo1799_Series 350Mull-All_Rev2.pdf Created by Independent Third Party: Yes
14653.2	Pella Vinyl 350 Series Windows	1/2" Standard Aluminum Mullion with End Anchors - Window to Window Combinations
Limits of Use **Approved for use in HVHZ:** No **Approved for use outside HVHZ:** Yes **Impact Resistant:** Yes **Design Pressure:** N/A **Other:** Compliant in areas requiring up to Missile D, Windzone 3 protection. See page 6 of Product Evaluation Report for applicable Pella Window Products.		**Certification Agency Certificate** FL14653_R4_C_CAC_411-H-1317-05.pdf **Quality Assurance Contract Expiration Date** 03/21/2019 **Installation Instructions** FL14653_R4_II_EngReportNo1789_StdMull_Rev2.pdf Verified By: Robert J. Amoruso 49752 Created by Independent Third Party: Yes **Evaluation Reports** FL14653_R4_AE_PERNo1799_Series 350Mull-All_Rev2.pdf Created by Independent Third Party: Yes
14653.3	Pella Vinyl 350 Series Windows	1/2" Standard Aluminum Mullion with Reinforcement and End Anchors - Window to Window Combinations
Limits of Use **Approved for use in HVHZ:** No **Approved for use outside HVHZ:** Yes **Impact Resistant:** Yes **Design Pressure:** N/A **Other:** Compliant in areas requiring up to Missile D, Windzone 3 protection. See page 6 of Product Evaluation Report for applicable Pella Window Products.		**Certification Agency Certificate** FL14653_R4_C_CAC_411-H-1317-05.pdf **Quality Assurance Contract Expiration Date** 03/21/2019 **Installation Instructions** FL14653_R4_II_EngReportNo1792_StdMullReinf_Rev2.pdf Verified By: Robert J. Amoruso 49752 Created by Independent Third Party: Yes **Evaluation Reports** FL14653_R4_AE_PERNo1799_Series 350Mull-All_Rev2.pdf Created by Independent Third Party: Yes
14653.4	Pella Vinyl 350 Series Windows	1" Aluminum Mullion with End Anchors - Window to Window Combinations
Limits of Use **Approved for use in HVHZ:** No **Approved for use outside HVHZ:** Yes **Impact Resistant:** Yes **Design Pressure:** N/A **Other:** Compliant in areas requiring up to Missile D, Windzone 3 protection. See page 6 of Product Evaluation Report for applicable Pella Window Products.		**Certification Agency Certificate** FL14653_R4_C_CAC_411-H-1317-04.pdf **Quality Assurance Contract Expiration Date** 03/21/2019 **Installation Instructions** FL14653_R4_II_EngReportNo1795_HPMull_Rev2.pdf Verified By: Robert J. Amoruso 49752 Created by Independent Third Party: Yes **Evaluation Reports** FL14653_R4_AE_PERNo1799_Series 350Mull-All_Rev2.pdf Created by Independent Third Party: Yes
14653.5	Pella Vinyl 350 Series Windows	1" Aluminum Mullion with Reinforcement and End Anchors - Window to Window Combinations
Limits of Use **Approved for use in HVHZ:** No **Approved for use outside HVHZ:** Yes **Impact Resistant:** Yes **Design Pressure:** N/A **Other:** Compliant in areas requiring up to Missile D, Windzone 3 protection. See page 6 of Product Evaluation Report for applicable Pella Window Products.		**Certification Agency Certificate** FL14653_R4_C_CAC_411-H-1317-01.pdf **Quality Assurance Contract Expiration Date** 03/21/2019 **Installation Instructions** FL14653_R4_II_EngReportNo1798_HPMullReinf_Rev2.pdf Verified By: Robert J. Amoruso 49752 Created by Independent Third Party: Yes **Evaluation Reports**

	FL14653_R4_AE_PERNo1799_Series 350Mull-All_Rev2.pdf Created by Independent Third Party: Yes

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Engineering Report

Date:	February 16, 2015
Report No.:	1789
Report Revision No.:	2
Project No:	414-1104
Product Mfg.:	Pella Corporation 102 Main St. Pella, IA 50219
Project Description:	Series 350 Vinyl Window Mulling System: ½" Standard Aluminum Mullion with Fin Frame and Block Frame Mullion End Clips, Non-Impact and Impact (Wind Zone 3, Missile Level D)
Product Category:	Windows
Product Sub-Category:	Mullion
Compliance Method:	Product Approval Rule 61G20-3.005(1)(d) – Evaluation Report by a Licensed Florida Professional Engineer
Prepared By:	Robert J. Amoruso, P.E. Florida P.E. No. 49752 PTC Product Design Group, LLC, PO Box 520775, Longwood, FL 32752-0775 Florida C of A No. 25935

CERTIFICATED OF INDEPENDENCE

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PTC Product Design Group, LLC and Robert J. Amoruso, P.E. do not have, nor will acquire, any financial interest in the company manufacturing or distributing product(s) covered by the aforementioned Product Evaluation Report.

PTC Product Design Group, LLC and Robert J. Amoruso, P.E. do not have, nor will acquire any financial interest in any other entity involved in the approval process or testing of the product(s) covered by the aforementioned Product Evaluation Report.

ROBERT JAMES AMORUSO
LICENSE
No 49752
2/16/15
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

Evaluated by:
Robert J. Amoruso, P.E.
Florida P.E. License Number 49752

TABLE OF CONTENTS

OBJECTIVE

The objective of this report is to summarize engineering information and installation instructions related to the mulling systems products listed in the Scope section above.

PTC Product Design Group, LLC was contracted by Pella Corporation to perform engineering evaluations of various mulled window combinations. This report is based on using the properties of the aluminum reinforcing mull only, and does not include the section properties of the window head, sill or jambs as demonstrated in the Product Evaluation Report (PER) in accordance with the AAMA 450-06, Option 3.

CODE COMPLIANCE

The mullion system was (a) tested for mulled assembly Air Infiltration and Water Penetration Resistance, (b) engineered for mullion stress and deflection and (c) engineered for alternate substrate anchoring in accordance with AAMA 450-06, Option 3 and the current edition of the Florida Building Code as documented in Reference 1.

Load Width vs. Mull Span Design Pressure tables shown in Appendix 3 and 4 of this report are based on results of Reference 2.

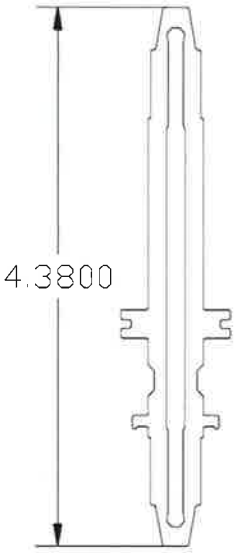
The mullion system complies with the current edition of the Florida Building Code and AAMA 450-06, Option 3.

SCOPE

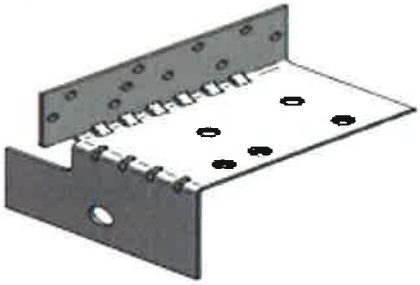
The scope of this summary report includes the following components shown below used in various mulled window assemblies.

- ½" Standard Aluminum Mullion, and
- used with the following mullion end clips:
  - 4 ½" Nailing Fin Frame Mullion End Clips, and
  - 4 ½" Block Frame Mullion End Clips,

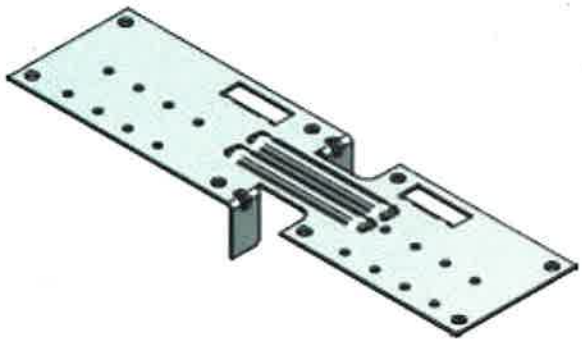
½" Standard Aluminum Mullion



4 ½" Nailing Fin Frame Mullion End Clip



4 ½" Block Frame Mullion End Clip



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Fenestration Products applicable to and for use with this mulling system include the following Series 350 Vinyl Window product line.

- Single Hung Window
- Double Hung Window
- Fixed (Picture) Window (including shapes)
- Sliding (Horizontal) Window
- Casement Window
- Awning Window

Frame configurations applicable to the Series 350 Vinyl Window product line include the following.

- 4 ½" Nailing Fin Frame,
- 4 ½" Block Frame, and
- 4 ½" J-Channel Frame (Nail Fin Frame with snap-in J-Channel Cover)

RESULTS

Result summaries include Design Pressure Capacities for Load Width vs. Mullion Span tables in various combinations of widths and spans for the following assemblies.

Table 1 – Vertical Mullion in 2-Way, Side-by-Side window assembly

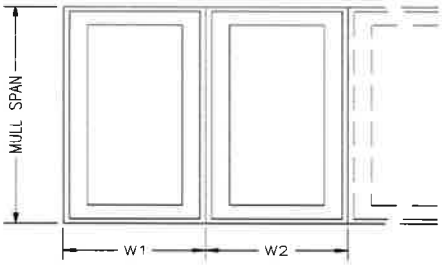


Table 2 – Horizontal Mullion in 2-Way, One-over-One window assembly

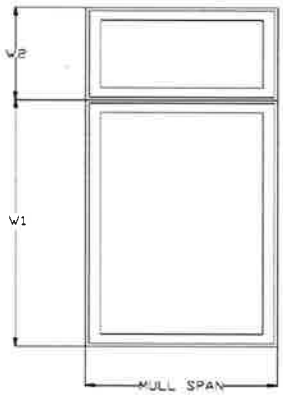


Table 3.1 – Vertical Mullion in 3-Way, Transom/Side-by-Side window assembly

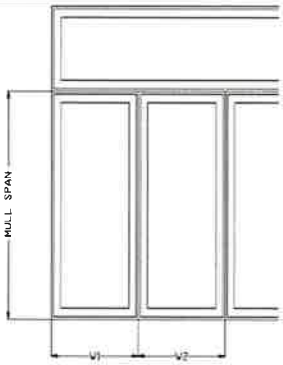


Table 3.2 – Horizontal Mullion in 3-Way, Transom/Side-by-Side window assembly

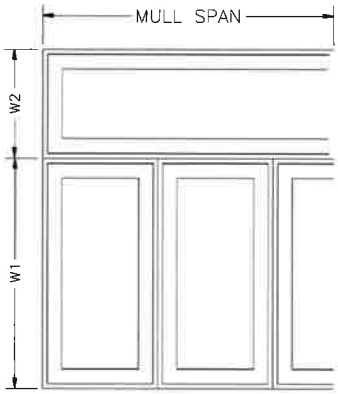


Table 4.1 – Vertical Mullion in 4-Way, Side-by-Side/Side-by-Side window assembly

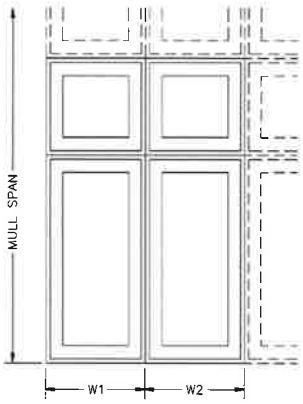
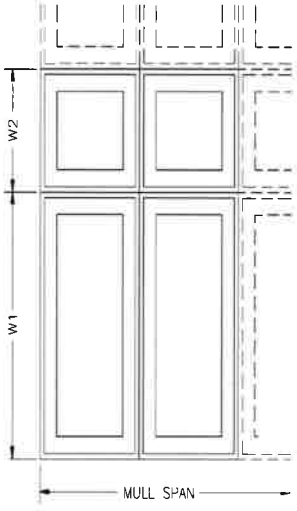


Table 4.2 – Horizontal Mullion in 4-Way, Side-by-Side/Side-by-Side window assembly



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RESULTS (continued)

Installation Specifics are summarized in the following Appendixes to this report.

- Appendix 1 – 4 ½" Nailing Fin and J-Channel Frame, Installation Specifics
- Appendix 2 – 4 ½" Block Frame, Installation Specifics

Load Width vs. Mullion Span results are summarized in the following Appendixes to this report.

- Appendix 3 – 4 ½" Nailing Fin and J-Channel Frame, Load Width vs. Mullion Span Results Summary
- Appendix 4 – 4 ½" **Block Frame**, Load Width vs. Mullion Span Results Summary

USING THIS REPORT

The results contained in this report shall be utilized as follows.

Load Width vs. Mullion Span Results Summary Tables

- Based on the frame type; Nailing Fin or Block Frame employed in the mulled assembly, go to either Appendix 3 or 4 for the Load Width vs. Mullion Span Results Summary Tables.

- Match the mulled window assembly with one of four possible configurations.

  - 2-Way, Side-by-Side window assembly
    - Vertical Mullion
  - 2-Way, One-over-One window assembly
    - Horizontal Mullion
  - 3-Way, Transom/Side-by-Side window assembly
    - Vertical Mullion
    - Horizontal Mullion
  - 4-Way, Side-by-Side/Side-by-Side window assembly
    - Vertical Mullion
    - Horizontal Mullion

- For the 3-Way window assembly and 4-Way window assemblies, Tables 3.1 & 3.2 and Tables 4.1 & 4.2 cover either the horizontal or vertical mullion respectively. See RESULTS section above for illustrations.

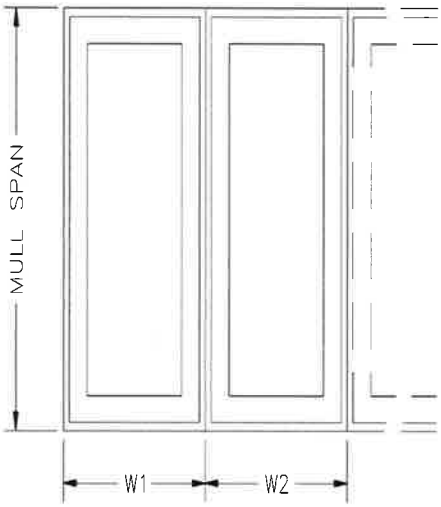
- The Design Pressure Capacity for the Load Width vs. Mullion Span is derived from the results summaries shown in Appendix 3 and 4 as follows.

Using the 2-Way, Side-by-Side window assembly with a Vertical Mullion as an example (see illustration below), parameters required for table usage are:

Load Width = LW = [W1 + W2]/2

Mull Span is the length of the vertical height of the window.

The table shows resulting Design Pressure Capacity for various sizes of LW and Mull Span.



Installation Specific Requirements

The installation requirements are shown in the following Appendixes.

- Appendix 1 – 4 ½" Nailing Fin and J-Channel Frame, Installation Specifics
- Appendix 2 – 4 ½" Block Frame, Installation Specifics

Those requirements include the following.

- Installation Anchor Schedule showing:
  - approved anchors,
  - Min. Embedment into substrate,
  - Min. Edge Distance to substrate edges,
  - Min. Spacing of anchors at the mull clip, and
  - substrate strengths used in determining anchor capacity.

- Basic illustration showing:
  - fastener placement on mull end clips.

The quantities of anchors required at each mull clip end are summarized on the Load Width vs. Mullion Span Results Summary Tables.

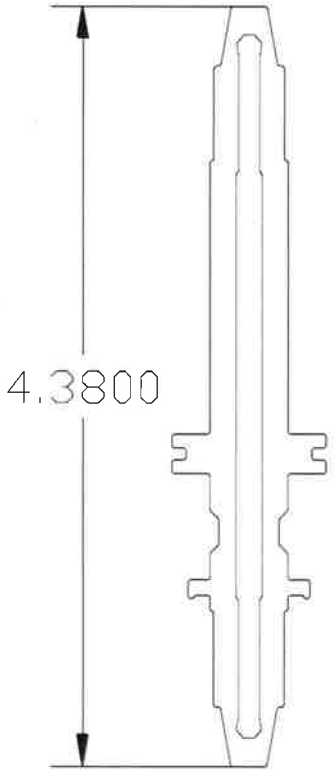
REFERENCES

1. PTC Product Evaluation Report No. 1799, Rev. 2, *Series 350 Vinyl Window Mulling System: ½" Light Duty, ½" Standard, ½" Standard w/reinforcement, 1" Structural and 1" Structural w/reinforcement Aluminum Mullion with Fin Frame, Block Frame and Flange Frame Mullion End Clips, Non-Impact and Impact (Wind Zone 3, Missile Level D)*, signed and sealed by Robert J. Amoruso, P.E. dated 2/16/15.
2. PTC Engineering Evaluation Report No. 1788, *Anchorage Engineering and Mullion Stress Analysis of Series 350 Vinyl Window Mulling System: ½" Standard Aluminum Mullion with Fin Frame and Block Frame Mullion End Clips*, signed and sealed by Robert J. Amoruso, P.E. dated 6/17/11.

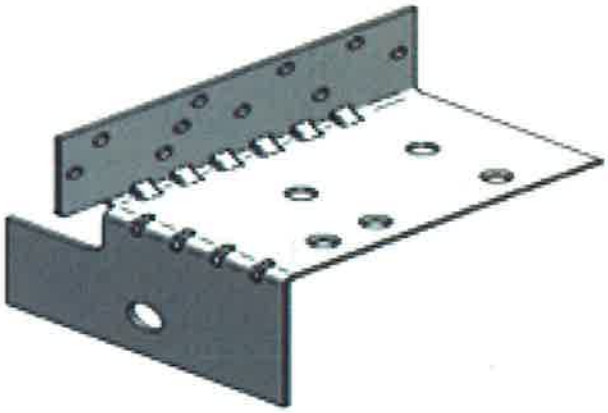
Appendix 1 – Nailing Fin and J-Channel Frame, Installation Specifics

Components Employed

- ½" Standard Aluminum Mullion shown in Figure 1 below, and
- used with the following mullion end clip:
    - 4 1/2" Nailing Fin Frame Mullion End Clips shown in Figure 2 below.



½" Standard Aluminum Mullion
Figure 1



Nailing Fin Frame Mull Clip
Figure 2

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Appendix 1 – Nailing Fin and J-Channel Frame, Installation Specifics

Anchor Installation Requirements

- Window assemblies and associated mulling clips and mulls shall be assembled and installed in accordance with the manufacturer's written instructions.
- Windows shall be attached to the structural substrate (including attachment to the mullion) in accordance with the manufacturer's Florida Building Code approved installation instructions.
- Anchors shall be installed through the window framing at the mounting holes shown in the following illustration (Figure 3).
- Anchors shall be as required by the *INSTALLATION ANCHOR SCHEDULE* table in this Appendix 1 below.
    - Edge distances shall be maintained and are measured from the centerline of the anchor to the structural substrate edge.
    - Embedment into the structural substrate shall be beyond any finishing and shall meet or exceed that shown in the table.
    - Spacing from centerline to centerline of the anchors shall meet or exceed the "Minimum Spacing" shown in the INSTALLATION ANCHOR SCHEDULE.
- Anchor quantities are specified in the *LOAD WIDTH vs. MULL SPAN* tables below and are applicable to each end of the mulls where they attach to structural substrate.
    - Mull clips are NOT used at mullion-to-mullion intersections in 3-Way and 4-Way assemblies.

Appendix 1 – Nailing Fin and J-Channel Frame, Installation Specifics

Mull Clip Substrate Anchor Locations

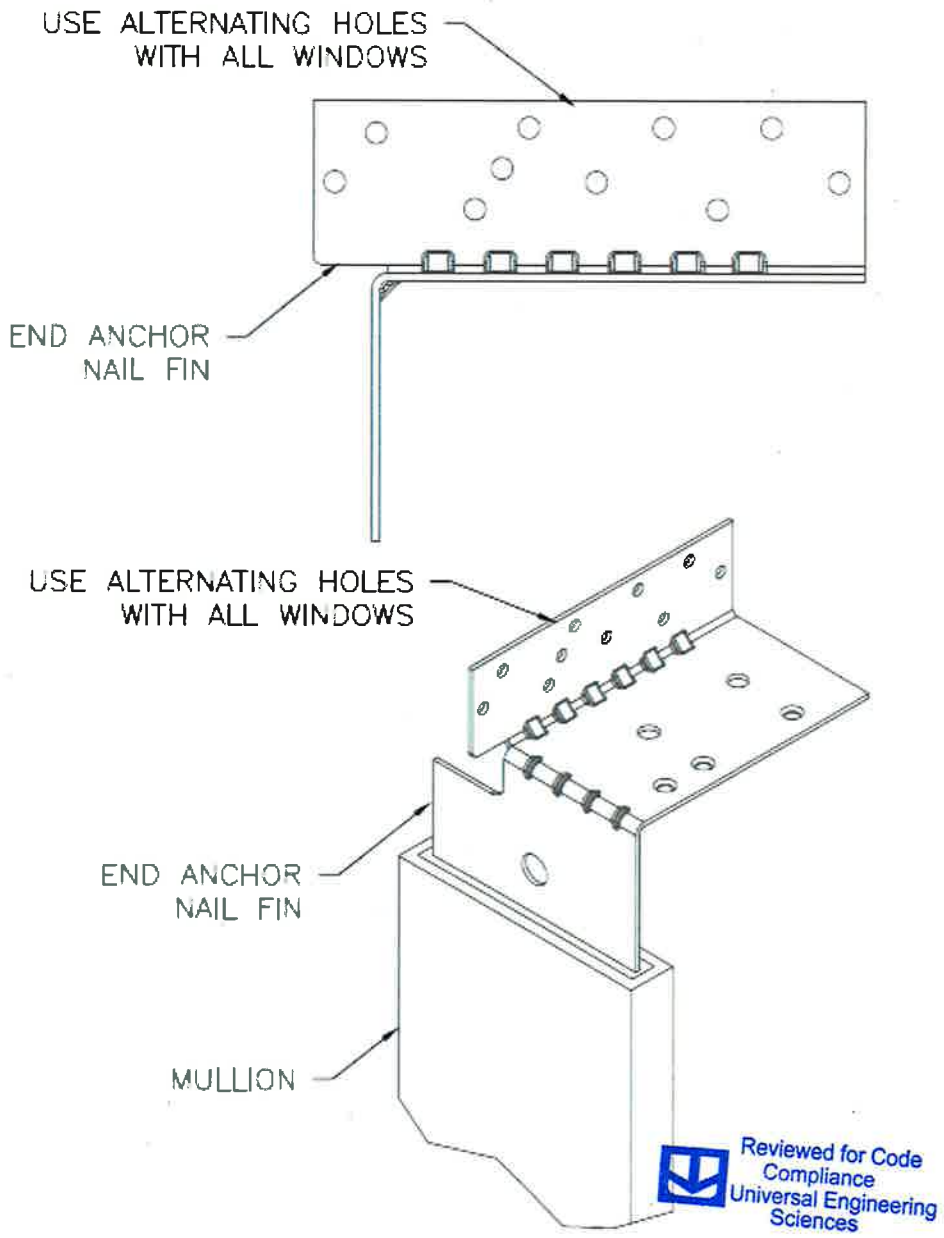


Figure 3 – Fin Frame Substrate Anchor Locations

Appendix 1 – Nailing Fin and J-Channel Frame, Installation Specifics

INSTALLATION ANCHOR SCHEDULE								
INSTALLATION TYPE	SUBSTRATE	HEAD TYPE	SIZE	MANUFACTURER AND/OR SPECIFICATION	MIN. EMBEDMENT (IN)	MIN. EDGE DISTANCE (IN)	MIN. SPACING (IN)	CAPACITIES USED ENGINEERING (LBS/ANCHOR
4 1/2" NAILING FIN FRAME	WOOD (1)	PAN HEAD	NO. 10	ANSI B18.6.1 (WOOD SCREW) ASME B18.6.4 (TAPPING SCREW)	1-1/2"	0.285"	0.57"	152 lbs
NOTES: 1) FOR WOOD AND TAPPING SCREWS IF SPLITTING IS A CONCERN, DRILL 3/32" PILOT HOLE FOR NAILING FIN INSTALLATION.								

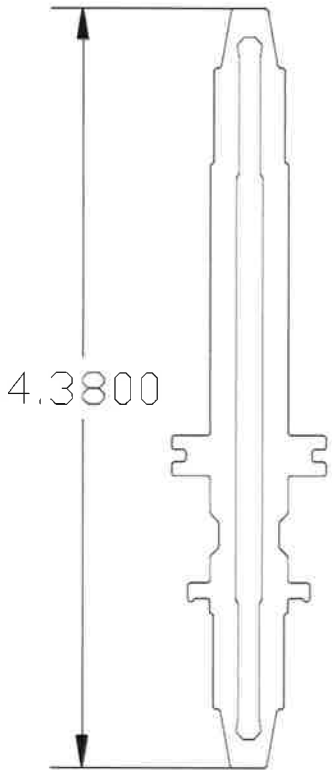
The INSTALLATION ANCHOR SCHEDULE table above lists the specific installation parameters (Min. Embedment, Min. Ec and substrate strengths) and well as the specific fastener specifications (type, size, and industry specification).

For specific anchor quantities, refer to Appendix 3 Mullion Design Pressure Ratings tables.

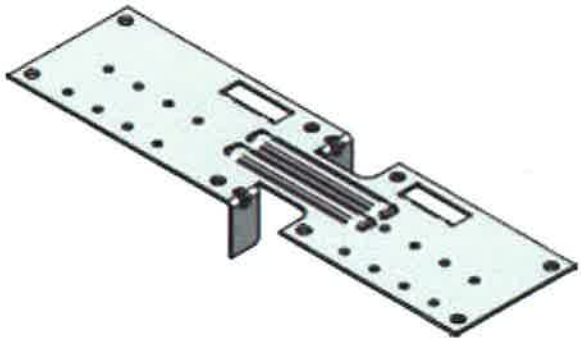
Appendix 2 – Block Frame, Installation Specifics

Components Employed

- ½" Standard Aluminum Mullion shown in Figure 1 below, and
- used with the following mullion end clips:
    - 4 ½" Block Frame Mullion End Clip shown in Figure 2 below, and



½" Standard Aluminum Mullion
Figure 1



Block Frame Mull Clip
Figure 2

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Appendix 2 – Block Frame, Installation Specifics

Anchor Installation Requirements

- Window assemblies and associated mulling clips and mulls shall be assembled and installed in accordance with the manufacturer's written instructions.
- Windows shall be attached to the structural substrate (including attachment to the mullion) in accordance with the manufacturer's Florida Building Code approved installation instructions.
- Anchors shall be installed through the window framing at the mounting holes shown in the following illustration (Figure 3).
- Anchors shall be as required by the *INSTALLATION ANCHOR SCHEDULE* table below.
    - Edge distances shall be maintained and are measured from the centerline of the anchor to the structural substrate edge.
    - Embedment into the structural substrate shall be beyond any finishing and shall meet or exceed that shown in the table.
    - Spacing from centerline to centerline of the anchors shall meet or exceed the "Minimum Spacing" shown in the INSTALLATION ANCHOR SCHEDULE.
- Anchor quantities are specified in the *LOAD WIDTH vs. MULL SPAN* tables below and are applicable to each end of the mulls where they attach to structural substrate.
    - Mull clips are NOT used at mullion-to-mullion intersections in 3-Way and 4-Way assemblies.

Appendix 2 – Block Frame, Installation Specifics

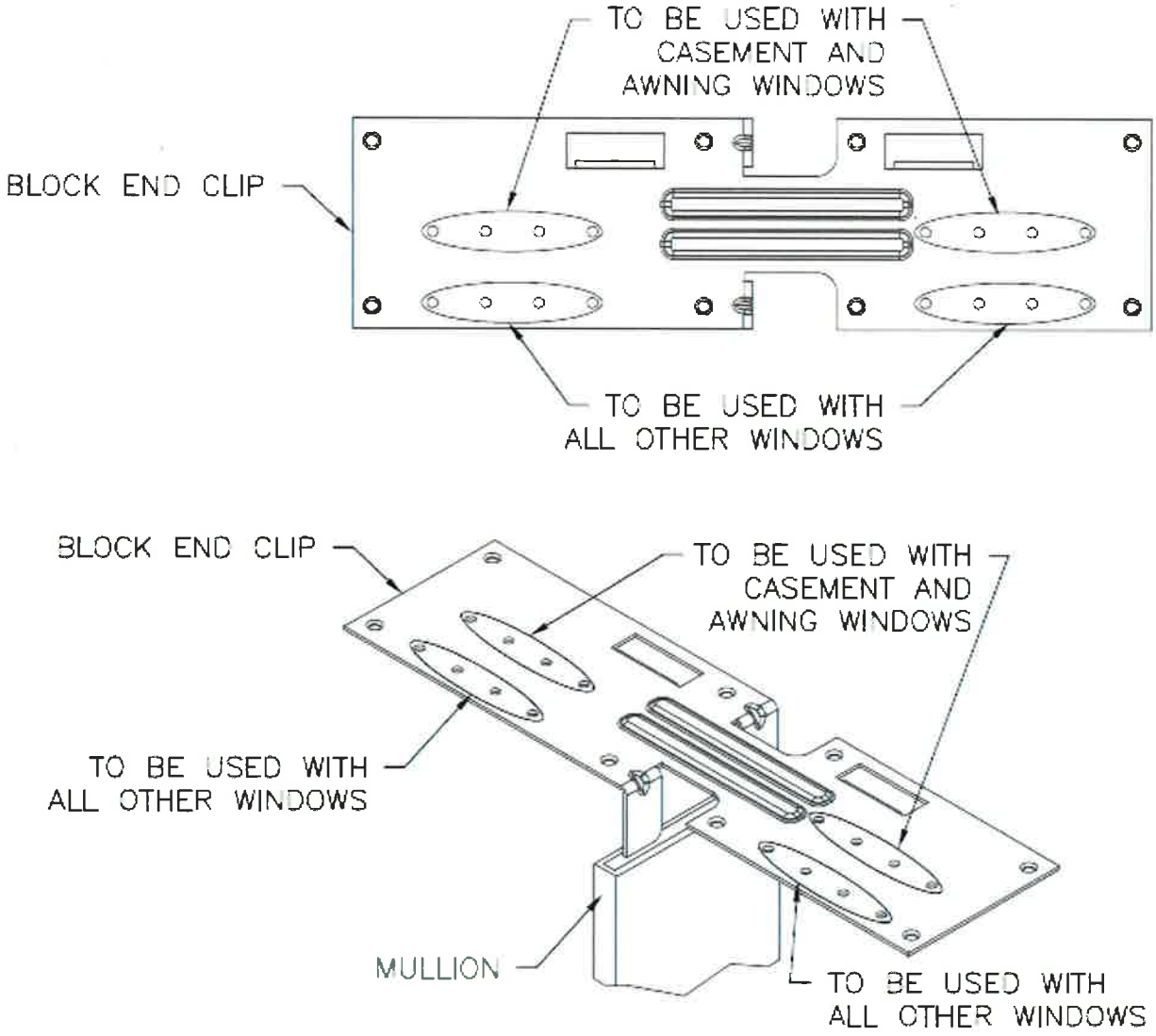

Figure 3 – Block Frame Substrate Anchor Locations

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Appendix 2 – Block Frame, Installation Specifics

INSTALLATION ANCHOR SCHEDULE

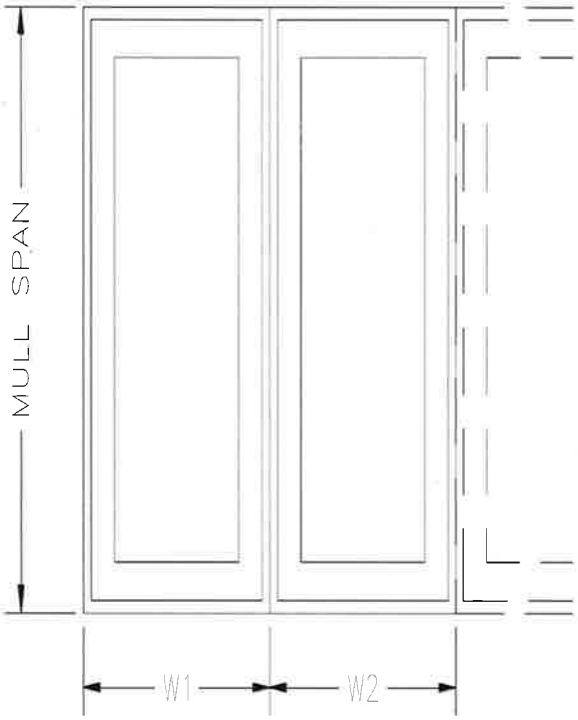
INSTALLATION TYPE	SUBSTRATE	HEAD TYPE	SIZE	MANUFACTURER AND/OR SPECIFICATION	MIN. EMBEDMENT (IN)	MIN. EDGE DISTANCE (IN)	MIN. SPACING (IN)	CAPACITIES USED ENGINEERING (LBS/ANCHOR
4 1/2" BLOCK FRAME	CONCRETE	FLAT OR PAN HEAD	3/16"	ITW TAPCONS (3)	1-3/4"	1-1/8"	2"	208 lbs (2)
				ELCO CRETE-FLEX SS4	2"	1-7/8"	2"	208 lbs
				HILTI KWIK-CON II	1-1/2"	1-1/8"	2"	208 lbs
	MASONRY (BLOCK/CMU)	FLAT OR PAN HEAD	3/16"	ITW TAPCONS (3)	1"	2"	3"	205 lbs (2)
				ELCO CRETE-FLEX SS4	1-1/4"	1-7/8"	3"	205 lbs
				HILTI KWIK-CON II	1"	1-1/8"	3"	205 lbs
	WOOD (1)	FLAT OR PAN HEAD	NO. 10	ANSI B18.6.1 (WOOD SCREW) ASME B18.6.4 (TAPPING SCREW)	1-1/2"	3/4"	3/4"	143 lbs
	1/8" THK. ALUMINUM	FLAT OR PAN HEAD	NO. 10	ASME B18.6.4 (TAPPING SCREW)	FULLY PENETRATE SUBSTRATE WITH 3 THREADS PROTRUDING INTERNALLY	3/8"	5/8"	172 lbs
	1/8" THK. STEEL	FLAT OR PAN HEAD	NO. 10	ASME B18.6.4 (TAPPING SCREW)		3/8"	5/8"	172 lbs
	20 GAUGE (0.0346" MIN. THK.) STEEL INCLUDING STEEL STUDS	FLAT OR PAN HEAD	NO. 10	ASME B18.6.4 (TAPPING SCREW)		3/8"	5/8"	172 lbs

NOTES:
1) FOR WOOD AND TAPPING SCREWS IF SPLITTING IS A CONCERN, DRILL 7/64" PILOT HOLE FOR BLOCK FRAME INSTALLATION.
2) ITW TAPCONS CONCRETE AND MASONRY (BLOCK/CMU) ANCHOR CAPACITIES ARE BASED ON PAIRS OF ANCHORS AT THE SPACING SHOWN. THE PER ANCHOR CAP DOUBLED TO ARRIVE AT THE PAIRED ANCHOR CAPACITY.
3) WHEN ITW TAPCONS ARE USED FOR CONCRETE/MASONRY INSTALLATION, THEY SHALL BE THE ADVANCED THREADFORM TECHNOLOGY TYPE.

The INSTALLATION ANCHOR SCHEDULE table above lists the specific installation parameters (Min. Embedment, Min. Ec and substrate strengths) and well as the specific fastener specifications (type, size, and industry specification).

For specific anchor quantities, refer to Appendix 4 Mullion Design Pressure Ratings tables.

Appendix 3 – Nailing Fin and J-Channel Frame, Load Width vs. Mullion Span Results Summary



LOAD WIDTH = (W1 + W2) / 2

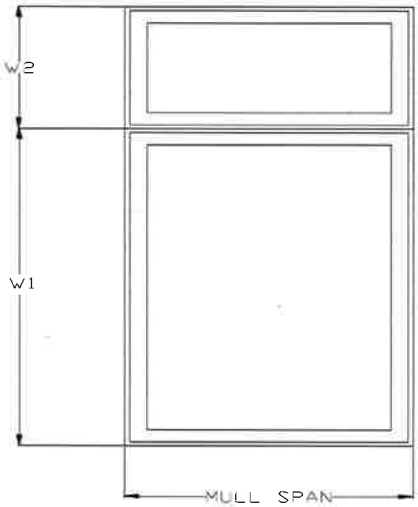
1) This table applies to multi-wide combination using a Vertical Structural Mullion.
2) LOAD WIDTH must be calculated using two largest adjacent (side by side) window widths.
3) Mull spans are restricted to the longest span shown in the Table. For Mull spans between those shown in the table, use the next longest span.
4) Windows may be Fixed, Sliding, Double Hung, Casement, Single Hung and Awning Windows.
5) Allowable pressures on the mulled assembly shall be controlled by the lesser of the mullion or individual window unit.

Anchor Quantities (per clip end)		
Substrate	**Anchor**	**Min. Quantity**
Wood	Wood or Tapping Screw	6
1. See Appendix 1 for anchor requirements. 2. Anchor Quantities are for each clip end.		

MULLION TABLE 1
(VERTICAL SPAN — 1/2" Standard Aluminum Reinforcing Mullion)

MULL SPAN	LOAD WIDTH	DP (PSF)	MULL SPAN	LOAD WIDTH	DP (PSF)	MULL SPAN	LOAD WIDTH	DP (PSF)
24	24	75.0	60	24	75.0	96	24	54.5
	30	75.0		30	75.0		30	44.2
	36	75.0		36	75.0		36	37.5
	42	75.0		42	75.0		42	32.8
	48	75.0		48	75.0		48	29.4
	54	75.0		54	75.0		54	26.9
	60	75.0		60	75.0		60	25.0
	66	75.0		66	75.0		66	23.58
	72	75.0		72	75.0		72	22.5
30	24	75.0	66	24	75.0	102	24	45.3
	30	75.0		30	75.0		30	36.7
	36	75.0		36	75.0		36	31.1
	42	75.0		42	75.0		42	27.1
	48	75.0		48	75.0		48	24.3
	54	75.0		54	75.0		54	22.1
	60	75.0		60	73.3		60	20.5
	66	75.0		66	72.4		66	19.2
	72	75.0		72	72.4		72	18.2
36	24	75.0	72	24	75.0	108	24	38.1
	30	75.0		30	75.0		30	30.8
	36	75.0		36	75.0		36	26.0
	42	75.0		42	71.9		42	22.7
	48	75.0		48	65.5		48	20.2
	54	75.0		54	61.0		54	18.4
	60	75.0		60	58.0		60	17.0
	66	75.0		66	56.3		66	15.9
	72	75.0		72	55.8		72	15.0
42	24	75.0	78	24	75.0	114	24	32.3
	30	75.0		30	75.0		30	26.1
	36	75.0		36	68.2		36	22.0
	42	75.0		42	60.1		42	19.2
	48	75.0		48	54.4		48	17.1
	54	75.0		54	50.3		54	15.5
	60	75.0		60	47.4		60	14.2
	66	75.0		66	45.4		66	13.3
	72	75.0		72	44.2		72	12.5
48	24	75.0	84	24	75.0	120	24	27.7
	30	75.0		30	66.8		30	22.3
	36	75.0		36	57.0		36	18.8
	42	75.0		42	50.2		42	16.3
	48	75.0		48	45.4		48	14.5
	54	75.0		54	41.9		54	13.1
	60	75.0		60	39.4		60	12.1
	66	75.0		66	37.5		66	11.2
	72	75.0		72	36.2		72	10.5
54	24	75.0	90	24	66.4			
	30	75.0		30	54.0			
	36	75.0		36	45.9			
	42	75.0		42	40.3			
	48	75.0		48	36.2			
	54	75.0		54	33.3			
	60	75.0		60	31.1			
	66	75.0		66	29.5			
	72	75.0		72	28.3			

Appendix 3 – Nailing Fin and J-Channel Frame, Load Width vs. Mullion Span Results Summary



LOAD WIDTH = (W1 + W2) / 2

1) This table applies to one-wide, multi-high combinations using a Horizontal Structural Mullion.
2) LOAD WIDTH must be calculated using two largest adjacent (side by side) window widths.
3) Mull spans are restricted to the longest span shown in the Table. For Mull spans between those shown in the table, use the next longest span.
4) Windows may be Fixed, Sliding, Double Hung, Casement, Single Hung and Awning Windows.
5) Allowable pressures on the mulled assembly shall be controlled by the lesser of the mullion or individual window unit.

Anchor Quantities (per clip end)		
Substrate	**Anchor**	**Min. Quantity**
Wood	Wood or Tapping Screw	6
1. See Appendix 1 for anchor requirements. 2. Anchor Quantities are for each clip end.		

MULLION TABLE 2
(HORIZONTAL SPAN — 1/2" Standard Aluminum Reinforcing Mullion)

MULL SPAN	LOAD WIDTH	DP (PSF)	MULL SPAN	LOAD WIDTH	DP (PSF)	MULL SPAN	LOAD WIDTH	DP (PSF)
48	24	75.0	72	24	75.0	96	24	54.5
	30	75.0		30	75.0		30	44.2
	36	75.0		36	75.0		36	37.5
	42	75.0		42	71.9		42	32.8
	48	75.0		48	65.5		48	29.4
	54	75.0		54	61.0		54	26.9
	60	75.0		60	58.0		60	25.0
	66	75.0		66	56.3		66	23.6
54	24	75.0	78	24	75.0	102	24	45.3
	30	75.0		30	75.0		30	36.7
	36	75.0		36	68.2		36	31.1
	42	75.0		42	60.1		42	27.1
	48	75.0		48	54.4		48	24.3
	54	75.0		54	50.3		54	22.1
	60	75.0		60	47.4		60	20.5
	66	75.0		66	45.4		66	19.2
60	24	75.0	84	24	75.0	108	24	38.1
	30	75.0		30	66.8		30	30.8
	36	75.0		36	57.0		36	26.0
	42	75.0		42	50.2		42	22.7
	48	75.0		48	45.4		48	20.2
	54	75.0		54	41.9		54	18.4
	60	75.0		60	39.4		60	17.0
	66	75.0		66	37.5		66	15.9
66	24	75.0	90	24	66.4	114	24	32.3
	30	75.0		30	54.0		30	26.1
	36	75.0		36	45.9		36	22.0
	42	75.0		42	40.3		42	19.2
	48	75.0		48	36.3		48	17.1
	54	75.0		54	33.3		54	15.5
	60	73.3		60	31.1		60	14.2
	66	72.4		66	29.5		66	13.3
						120	24	27.7
							30	22.3
							36	18.8
							42	16.3
							48	14.5
							54	13.1
							60	12.1
							66	11.2

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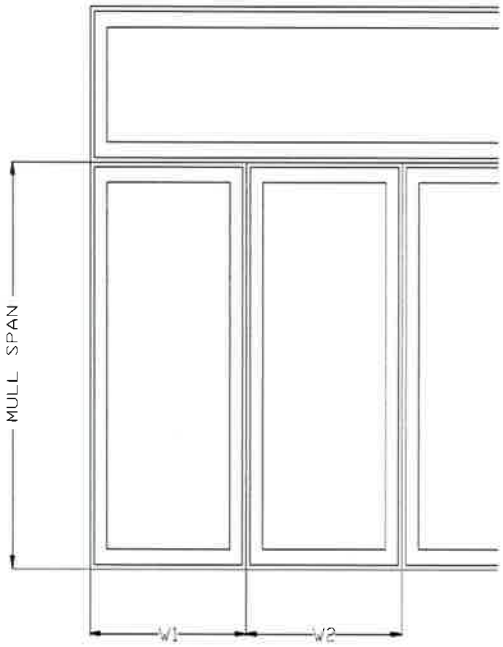
Appendix 3 – Nailing Fin and J-Channel Frame, Load Width vs. Mullion Span Results Summary



LOAD WIDTH = (W1 + W2) / 2

1) This table applies to a transom over a multi-wide combination using a Vertical Structural Mullion.
2) LOAD WIDTH must be calculated using two largest adjacent (side by side) window widths.
3) Mull spans are restricted to the longest span shown in the Table. For Mull spans between those shown in the table, use the next longest span.
4) Windows may be Fixed, Sliding, Double Hung, Casement, Single Hung and Awning Windows.
5) Allowable pressures on the mulled assembly shall be controlled by the lesser of the mullion or individual window unit.

Anchor Quantities (per clip end)		
Substrate	**Anchor**	**Min. Quantity**
Wood	Wood or Tapping Screw	6
1. See Appendix 1 for anchor requirements. 2. Anchor Quantities are for each clip end.		

MULLION TABLE 3.1

(VERTICAL SPAN — 1/2" Standard Aluminum Reinforcing Mull)

Vertical mull in 3-way transom/side-by-side assembly. Covers the transom and window heights shown in Tables 3.2 for Substrate Clip.

MULL SPAN	LOAD WIDTH	DP (PSF)	MULL SPAN	LOAD WIDTH	DP (PSF)	MULL SPAN	LOAD WIDTH	DP (PSF)
24	24	75.0	48	24	75.0	72	24	75.0
	30	75.0		30	75.0		30	75.0
	36	75.0		36	75.0		36	75.0
	42	75.0		42	75.0		42	71.9
	48	75.0		48	75.0		48	65.5
	54	75.0		54	75.0		54	61.0
	60	75.0		60	75.0		60	58.0
	66	75.0		66	75.0		66	56.3
30	24	75.0	54	24	75.0	78	24	75.0
	30	75.0		30	75.0		30	75.0
	36	75.0		36	75.0		36	68.2
	42	75.0		42	75.0		42	60.1
	48	75.0		48	75.0		48	54.4
	54	75.0		54	75.0		54	50.3
	60	75.0		60	75.0		60	47.4
	66	75.0		66	75.0		66	45.4
36	24	75.0	60	24	75.0	84	24	75.0
	30	75.0		30	75.0		30	66.8
	36	75.0		36	75.0		36	57.0
	42	75.0		42	75.0		42	50.2
	48	75.0		48	75.0		48	45.4
	54	75.0		54	75.0		54	41.9
	60	75.0		60	75.0		60	39.4
	66	75.0		66	75.0		66	37.5
42	24	75.0	66	24	75.0	90	24	66.4
	30	75.0		30	75.0		30	54.0
	36	75.0		36	75.0		36	45.9
	42	75.0		42	75.0		42	40.3
	48	75.0		48	75.0		48	36.3
	54	75.0		54	75.0		54	33.3
	60	75.0		60	73.3		60	31.1
	66	75.0		66	72.4		66	29.5
						96	24	54.5
							30	44.2
							36	37.5
							42	32.8
							48	29.4
							54	26.9
							60	25.0
							66	23.6

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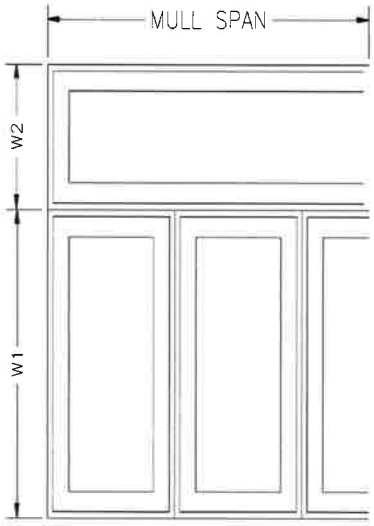
Appendix 3 – Nailing Fin and J-Channel Frame, Load Width vs. Mullion Span Results Summary



LOAD WIDTH = (W1 + W2) / 2

1) This table applies to a transom over a multi-wide combination using a Horizontal Structural Mullion.
2) LOAD WIDTH must be calculated using two largest adjacent (side by side) window widths.
3) Mull spans are restricted to the longest span shown in the Table. For Mull spans between those shown in the table, use the next longest span.
4) Windows may be Fixed, Sliding, Double Hung, Casement, Single Hung and Awning Windows.
5) Allowable pressures on the mulled assembly shall be controlled by the lesser of the mullion or individual window unit.

Anchor Quantities (per clip end)		
Substrate	**Anchor**	**Min. Quantity**
Wood	Wood or Tapping Screw	8
1. See Appendix 1 for anchor requirements. 2. Anchor Quantities are for each clip end.		

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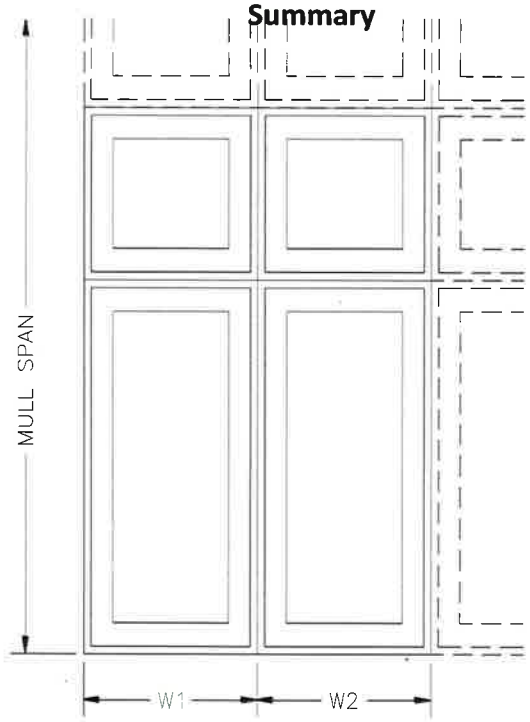
MULLION TABLE 3.2
(HORIZONTAL 3-WAY SPAN — 1/2" Standard Aluminum Reinforcing Mullion)

MULL SPAN	LOAD WIDTH	DP (PSF)	MULL SPAN	LOAD WIDTH	DP (PSF)	MULL SPAN	LOAD WIDTH	DP (PSF)
48	24	75.0	78	24	75.0	108	24	38.8
	30	75.0		30	75.0		30	31.8
	36	75.0		36	71.6		36	27.2
	42	75.0		42	62.7		42	23.9
	48	75.0		48	56.2		48	21.4
	54	75.0		54	51.1		54	19.5
	60	75.0		60	47.1		60	18.0
	66	75.0		66	43.8		66	16.8
	72	75.0		72	41.2		72	15.8
54	24	75.0	84	24	75.0	114	24	32.9
	30	75.0		30	70.0		30	26.9
	36	75.0		36	60.2		36	22.9
	42	75.0		42	53.3		42	20.1
	48	75.0		48	47.8		48	18.0
	54	75.0		54	43.4		54	16.4
	60	75.0		60	39.9		60	15.1
	66	75.0		66	37.1		66	14.1
	72	75.0		72	34.8		72	13.2
60	24	75.0	90	24	68.4	120	24	28.1
	30	75.0		30	56.3		30	22.9
	36	75.0		36	48.3		36	19.5
	42	75.0		42	42.7		42	17.1
	48	75.0		48	38.5		48	15.3
	54	75.0		54	35.3		54	13.9
	60	75.0		60	32.7		60	12.8
	66	75.0		66	30.6		66	11.9
	72	75.0		72	28.8		72	11.2
66	24	75.0	96	24	56.0			
	30	75.0		30	46.0			
	36	75.0		36	39.4			
	42	75.0		42	34.7			
	48	75.0		48	31.3			
	54	74.2		54	28.6			
	60	68.7		60	26.5			
	66	64.4		66	24.7			
	72	60.7		72	23.2			
72	24	75.0	102	24	46.4			
	30	75.0		30	38.0			
	36	75.0		36	32.5			
	42	74.6		42	28.6			
	48	66.9		48	25.7			
	54	61.0		54	23.5			
	60	56.4		60	21.7			
	66	52.6		66	20.2			
	72	49.6		72	19.0			

Appendix 3 – Nailing Fin and J-Channel Frame, Load Width vs. Mullion Span Results Summary



LOAD WIDTH = (W1 + W2) / 2

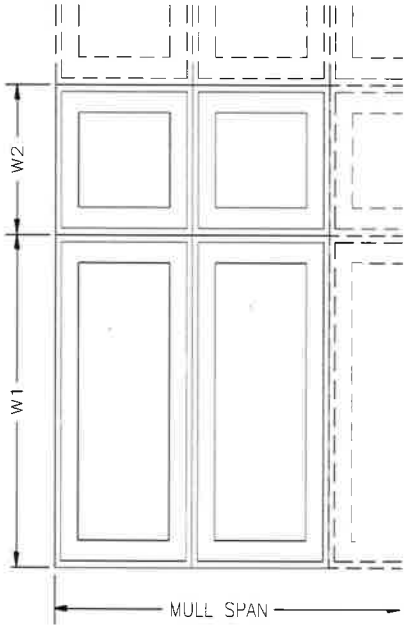
1) This table applies to a 4-way multi-wide, multi-high combination with a Vertical Structural Mullion running through the intersection.
2) LOAD WIDTH must be calculated using two largest adjacent (side by side) window widths.
3) Mull spans are restricted to the longest span shown in the Table. For Mull spans between those shown in the table, use the next longest span.
4) Windows may be Fixed, Sliding, Double Hung, Casement, Single Hung and Awning Windows.
5) Allowable pressures on the mulled assembly shall be controlled by the lesser of the mullion or individual window unit.

Anchor Quantities (per clip end)		
Substrate	**Anchor**	**Min. Quantity**
Wood	Wood or Tapping Screw	6
1. See Appendix 1 for anchor requirements. 2. Anchor Quantities are for each clip end.		

MULLION TABLE 4.1
(VERTICAL 4-WAY SPAN — 1/2" Standard Aluminum Reinforcing Mullion)

MULL SPAN	LOAD WIDTH	DP (PSF)	MULL SPAN	LOAD WIDTH	DP (PSF)	MULL SPAN	LOAD WIDTH	DP (PSF)
36	24	75.0	66	24	75.0	96	24	56.0
	30	75.0		30	75.0		30	45.4
	36	75.0		36	75.0		36	38.3
	42	75.0		42	75.0		42	33.3
	48	75.0		48	66.4		48	29.5
	54	75.0		54	59.0		54	26.6
	60	75.0		60	53.1		60	24.2
	66	75.0		66	48.3		66	22.1
	72	75.0		72	44.2		72	20.4
42	24	75.0	72	24	75.0	102	24	46.5
	30	75.0		30	75.0		30	37.7
	36	75.0		36	74.4		36	31.8
	42	75.0		42	63.7		42	27.6
	48	75.0		48	55.8		48	24.5
	54	75.0		54	49.6		54	22.0
	60	75.0		60	44.6		60	20.0
	66	75.0		66	40.6		66	18.4
	72	75.0		72	37.2		72	17.0
48	24	75.0	78	24	75.0	108	24	39.1
	30	75.0		30	75.0		30	31.6
	36	75.0		36	63.4		36	26.7
	42	75.0		42	54.3		42	23.1
	48	75.0		48	47.5		48	20.5
	54	75.0		54	42.2		54	18.4
	60	75.0		60	38.0		60	16.8
	66	75.0		66	34.6		66	15.4
	72	75.0		72	31.7		72	14.2
54	24	75.0	84	24	75.0	114	24	33.1
	30	75.0		30	65.6		30	26.8
	36	75.0		36	54.6		36	22.6
	42	75.0		42	46.8		42	19.6
	48	75.0		48	41.0		48	17.3
	54	75.0		54	36.4		54	15.6
	60	75.0		60	32.8		60	14.2
	66	72.1		66	29.8		66	13.0
	72	66.1		72	27.3		72	12.0
60	24	75.0	90	24	68.1	120	24	28.3
	30	75.0		30	55.3		30	22.9
	36	75.0		36	46.7		36	19.3
	42	75.0		42	40.7		42	16.7
	48	75.0		48	35.7		48	14.8
	54	71.4		54	31.7		54	13.3
	60	64.2		60	28.6		60	12.1
	66	58.4		66	26.0		66	11.1
	72	53.5		72	23.8		72	10.3

Appendix 3 – Nailing Fin and J-Channel Frame, Load Width vs. Mullion Span Results Summary



LOAD WIDTH = (W1 + W2) / 2

1) This table applies to a 4-way multi-wide, multi-high combination with a Horizontal Structural Mullion running through the intersection.
2) LOAD WIDTH must be calculated using two largest adjacent (side by side) window widths.
3) Mull spans are restricted to the longest span shown in the Table. For Mull spans between those shown in the table, use the next longest span.
4) Windows may be Fixed, Sliding, Double Hung, Casement, Single Hung and Awning Windows.
5) Allowable pressures on the mulled assembly shall be controlled by the lesser of the mullion or individual window unit.

Anchor Quantities (per clip end)		
Substrate	**Anchor**	**Min. Quantity**
Wood	Wood or Tapping Screw	6
1. See Appendix 1 for anchor requirements. 2. Anchor Quantities are for each clip end.		

MULLION TABLE 4.2
(HORIZONTAL 4-WAY SPAN — 1/2" Standard Aluminum Reinforcing Mullion)

MULL SPAN	LOAD WIDTH	DP (PSF)	MULL SPAN	LOAD WIDTH	DP (PSF)	MULL SPAN	LOAD WIDTH	DP (PSF)
36	24	75.0	66	24	75.0	96	24	53.8
	30	75.0		30	75.0		30	46.8
	36	75.0		36	75.0		36	40.0
	42	75.0		42	75.0		42	34.2
	48	75.0		48	69.8		48	29.5
	54	75.0		54	63.8		54	25.9
	60	75.0		60	59.1		60	22.8
42	24	75.0	72	24	75.0	102	24	43.5
	30	75.0		30	75.0		30	38.4
	36	75.0		36	74.4		36	33.2
	42	75.0		42	64.4		42	28.6
	48	75.0		48	57.6		48	24.8
	54	75.0		54	52.5		54	21.7
	60	75.0		60	48.5		60	19.3
48	24	75.0	78	24	75.0	108	24	35.4
	30	75.0		30	75.0		30	31.7
	36	75.0		36	63.5		36	27.8
	42	75.0		42	54.4		42	24.1
	48	75.0		48	48.4		48	21.0
	54	75.0		54	43.9		54	18.4
	60	75.0		60	39.7		60	16.4
54	24	75.0	84	24	75.0	114	24	29.1
	30	75.0		30	68.3		30	26.3
	36	75.0		36	55.2		36	23.4
	42	75.0		42	46.8		42	20.5
	48	75.0		48	41.3		48	17.9
	54	75.0		54	37.3		54	15.8
	60	75.0		60	32.8		60	14.0
60	24	75.0	90	24	67.3	120	24	24.1
	30	75.0		30	57.6		30	22.0
	36	75.0		36	48.6		36	27.8
	42	75.0		42	40.9		42	17.5
	48	75.0		48	35.6		48	15.4
	54	75.0		54	31.0		54	13.6
	60	73.4		60	27.2		60	12.1

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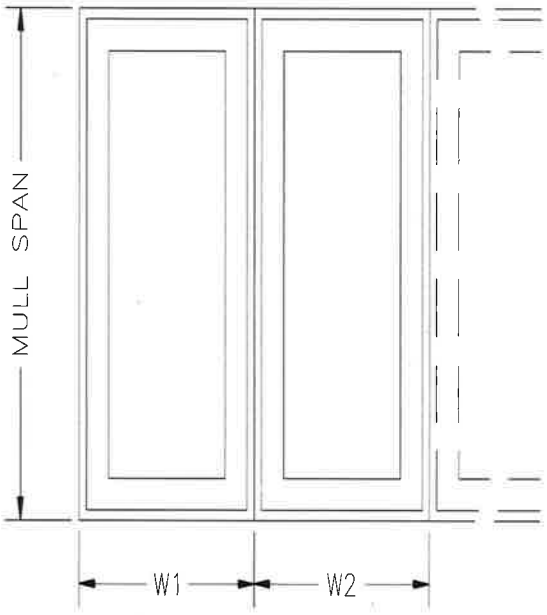
Appendix 4 – Block Frame, Load Width vs. Mullion Span Results Summary



LOAD WIDTH = (W1 + W2) / 2

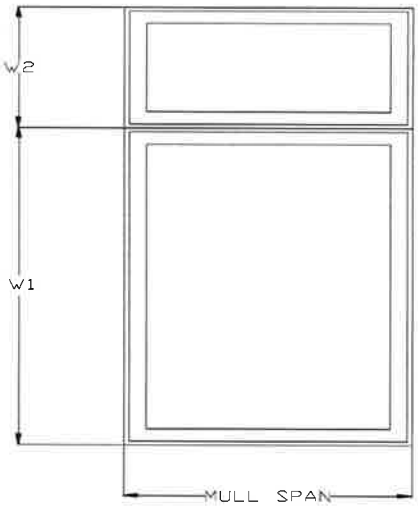
1) This table applies to multi-wide combination using a Vertical Structural Mullion.
2) LOAD WIDTH must be calculated using two largest adjacent (side by side) window widths.
3) Mull spans are restricted to the longest span shown in the Table. For Mull spans between those shown in the table, use the next longest span.
4) Windows may be Fixed, Sliding, Double Hung, Casement, Single Hung and Awning Windows.
5) Allowable pressures on the mulled assembly shall be controlled by the lesser of the mullion or individual window unit.

Anchor Quantities (per clip end)		
Substrate	**Anchor**	**Min. Quantity**
Concrete/Masonry	Concrete Screw	4
Wood	Wood or Tapping Screw	6
Aluminum or Steel Substrate	Tapping Screw	6
1. See Appendix 2 for anchor requirements. 2. Anchor Quantities are for each clip end.		

MULLION TABLE 1
(VERTICAL SPAN — 1/2" Standard Aluminum Reinforcing Mullion)

MULL SPAN	LOAD WIDTH	DP (PSF)	MULL SPAN	LOAD WIDTH	DP (PSF)	MULL SPAN	LOAD WIDTH	DP (PSF)
24	24	75.0	60	24	75.0	96	24	54.5
	30	75.0		30	75.0		30	44.2
	36	75.0		36	75.0		36	37.5
	42	75.0		42	75.0		42	32.8
	48	75.0		48	75.0		48	29.4
	54	75.0		54	75.0		54	26.9
	60	75.0		60	75.0		60	25.0
	66	75.0		66	75.0		66	23.6
	72	75.0		72	75.0		72	22.5
30	24	75.0	66	24	75.0	102	24	45.3
	30	75.0		30	75.0		30	36.7
	36	75.0		36	75.0		36	31.1
	42	75.0		42	75.0		42	27.1
	48	75.0		48	75.0		48	24.3
	54	75.0		54	75.0		54	22.1
	60	75.0		60	73.3		60	20.5
	66	75.0		66	72.4		66	19.2
	72	75.0		72	72.4		72	18.2
36	24	75.0	72	24	75.0	108	24	38.1
	30	75.0		30	75.0		30	30.8
	36	75.0		36	75.0		36	26.0
	42	75.0		42	71.9		42	22.7
	48	75.0		48	65.5		48	20.2
	54	75.0		54	61.0		54	18.4
	60	75.0		60	58.0		60	17.0
	66	75.0		66	56.3		66	15.9
	72	75.0		72	55.8		72	15.0
42	24	75.0	78	24	75.0	114	24	32.3
	30	75.0		30	75.0		30	26.1
	36	75.0		36	68.2		36	22.0
	42	75.0		42	60.1		42	19.2
	48	75.0		48	54.4		48	17.1
	54	75.0		54	50.3		54	15.5
	60	75.0		60	47.4		60	14.2
	66	75.0		66	45.4		66	13.3
	72	75.0		72	44.2		72	12.5
48	24	75.0	84	24	75.0	120	24	27.7
	30	75.0		30	66.8		30	22.3
	36	75.0		36	57.0		36	18.8
	42	75.0		42	50.2		42	16.3
	48	75.0		48	45.4		48	14.5
	54	75.0		54	41.9		54	13.1
	60	75.0		60	39.4		60	12.1
	66	75.0		66	37.5		66	11.2
	72	75.0		72	36.2		72	10.5
54	24	75.0	90	24	66.4			
	30	75.0		30	54.0			
	36	75.0		36	45.9			
	42	75.0		42	40.3			
	48	75.0		48	[illegible]			
	54	75.0		54	[illegible]			
	60	75.0		60	31.1			
	66	75.0		66	29.5			
	72	75.0		72	28.3			

Appendix 4 – Block Frame, Load Width vs. Mullion Span Results Summary



LOAD WIDTH = (W1 + W2) / 2

1) This table applies to one-wide, multi-high combinations using a Horizontal Structural Mullion.
2) LOAD WIDTH must be calculated using two largest adjacent (side by side) window widths.
3) Mull spans are restricted to the longest span shown in the Table. For Mull spans between those shown in the table, use the next longest span.
4) Windows may be Fixed, Sliding, Double Hung, Casement, Single Hung and Awning Windows.
5) Allowable pressures on the mulled assembly shall be controlled by the lesser of the mullion or individual window unit.

Anchor Quantities (per clip end)		
Substrate	**Anchor**	**Min. Quantity**
Concrete/Masonry	Concrete Screw	4
Wood	Wood or Tapping Screw	6
Aluminum or Steel Substrate	Tapping Screw	6
1. See Appendix 2 for anchor requirements. 2. Anchor Quantities are for each clip end.		

MULLION TABLE 2
(HORIZONTAL SPAN — 1/2" Standard Aluminum Reinforcing Mullion)

MULL SPAN	LOAD WIDTH	DP (PSF)	MULL SPAN	LOAD WIDTH	DP (PSF)	MULL SPAN	LOAD WIDTH	DP (PSF)
48	24	75.0	72	24	75.0	96	24	54.5
	30	75.0		30	75.0		30	44.2
	36	75.0		36	75.0		36	37.5
	42	75.0		42	71.9		42	32.8
	48	75.0		48	65.5		48	29.4
	54	75.0		54	61.0		54	26.9
	60	75.0		60	58.0		60	25.0
	66	75.0		66	56.3		66	23.6
54	24	75.0	78	24	75.0	102	24	45.3
	30	75.0		30	75.0		30	36.7
	36	75.0		36	68.2		36	31.1
	42	75.0		42	60.1		42	27.1
	48	75.0		48	54.4		48	24.3
	54	75.0		54	50.3		54	22.1
	60	75.0		60	47.4		60	20.5
	66	75.0		66	45.4		66	19.2
60	24	75.0	84	24	75.0	108	24	38.1
	30	75.0		30	66.8		30	30.8
	36	75.0		36	57.0		36	26.0
	42	75.0		42	50.2		42	22.7
	48	75.0		48	45.4		48	20.2
	54	75.0		54	41.9		54	18.4
	60	75.0		60	39.4		60	17.0
	66	75.0		66	37.5		66	15.9
66	24	75.0	90	24	66.4	114	24	32.3
	30	75.0		30	54.0		30	26.1
	36	75.0		36	45.9		36	22.0
	42	75.0		42	40.3		42	19.2
	48	75.0		48	36.3		48	17.1
	54	75.0		54	33.3		54	15.5
	60	73.3		60	31.1		60	14.2
	66	72.4		66	29.5		66	13.3
						120	24	27.7
							30	22.3
							36	18.8
							42	16.3
							48	14.5
							54	13.1
							60	12.1
							66	11.2

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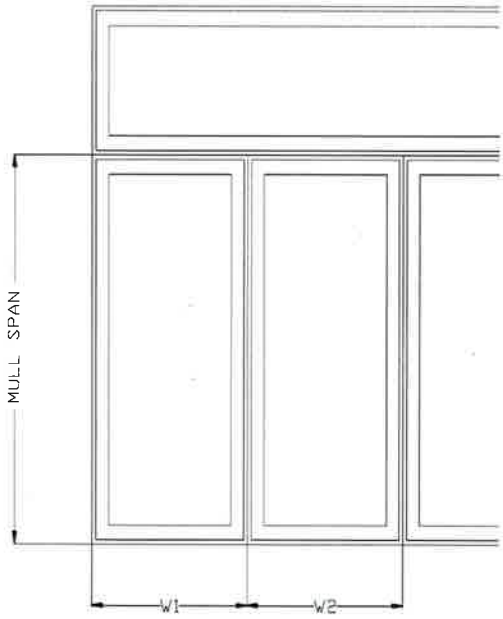
Appendix 4 – Block Frame, Load Width vs. Mullion Span Results Summary



LOAD WIDTH = (W1 + W2) / 2

1) This table applies to a transom over a multi-wide combination using a Vertical Structural Mullion.
2) LOAD WIDTH must be calculated using two largest adjacent (side by side) window widths.
3) Mull spans are restricted to the longest span shown in the Table. For Mull spans between those shown in the table, use the next longest span.
4) Windows may be Fixed, Sliding, Double Hung, Casement, Single Hung and Awning Windows.
5) Allowable pressures on the mulled assembly shall be controlled by the lesser of the mullion or individual window unit.

Anchor Quantities (per clip end)		
Substrate	**Anchor**	**Min. Quantity**
Concrete/Masonry	Concrete Screw	4
Wood	Wood or Tapping Screw	6
Aluminum or Steel Substrate	Tapping Screw	6
1. See Appendix 2 for anchor requirements. 2. Anchor Quantities are for each clip end.		

MULLION TABLE 3.1

(VERTICAL SPAN — 1/2" Standard Aluminum Reinforcing Mullion)
Vertical mull in 3-way transom/side-by-side assembly. Covers the transom and window heights shown in Tables 3.2 for Substrate Clip.

MULL SPAN	LOAD WIDTH	DP (PSF)	MULL SPAN	LOAD WIDTH	DP (PSF)	MULL SPAN	LOAD WIDTH	DP (PSF)
24	24	75.0	48	24	75.0	72	24	75.0
	30	75.0		30	75.0		30	75.0
	36	75.0		36	75.0		36	75.0
	42	75.0		42	75.0		42	71.9
	48	75.0		48	75.0		48	65.5
	54	75.0		54	75.0		54	61.0
	60	75.0		60	75.0		60	58.0
	66	75.0		66	75.0		66	56.3
30	24	75.0	54	24	75.0	78	24	75.0
	30	75.0		30	75.0		30	75.0
	36	75.0		36	75.0		36	68.2
	42	75.0		42	75.0		42	60.1
	48	75.0		48	75.0		48	54.4
	54	75.0		54	75.0		54	50.3
	60	75.0		60	75.0		60	47.4
	66	75.0		66	75.0		66	45.4
36	24	75.0	60	24	75.0	84	24	75.0
	30	75.0		30	75.0		30	66.8
	36	75.0		36	75.0		36	57.0
	42	75.0		42	75.0		42	50.2
	48	75.0		48	75.0		48	45.4
	54	75.0		54	75.0		54	41.9
	60	75.0		60	75.0		60	39.4
	66	75.0		66	75.0		66	37.5
42	24	75.0	66	24	75.0	90	24	66.4
	30	75.0		30	75.0		30	54.0
	36	75.0		36	75.0		36	45.9
	42	75.0		42	75.0		42	40.3
	48	75.0		48	75.0		48	36.3
	54	75.0		54	75.0		54	33.3
	60	75.0		60	73.3		60	31.1
	66	75.0		66	72.4		66	29.5
						96	24	54.5
							30	44.2
							36	37.5
							42	32.8
							48	29.4
							54	26.9
							60	25.0
							66	23.6

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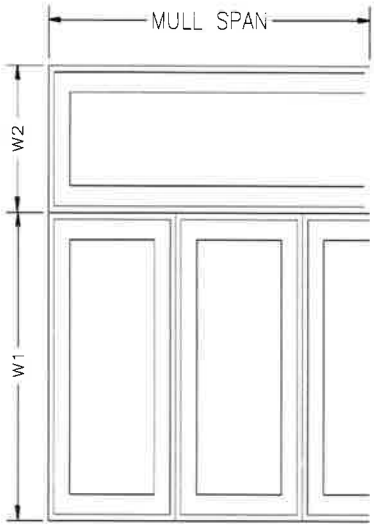
Appendix 4 – Block Frame, Load Width vs. Mullion Span Results Summary



LOAD WIDTH = (W1 + W2) / 2

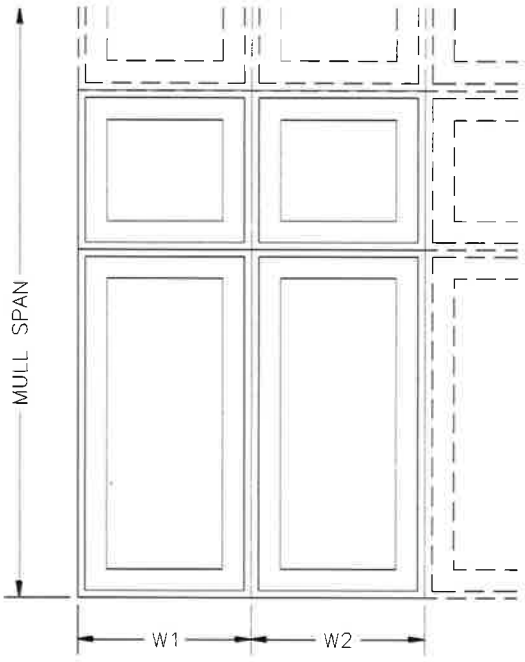
1) This table applies to a transom over a multi-wide combination using a Horizontal Structural Mullion.
2) LOAD WIDTH must be calculated using two largest adjacent (side by side) window widths.
3) Mull spans are restricted to the longest span shown in the Table. For Mull spans between those shown in the table, use the next longest span.
4) Windows may be Fixed, Sliding, Double Hung, Casement, Single Hung and Awning Windows.
5) Allowable pressures on the mulled assembly shall be controlled by the lesser of the mullion or individual window unit.

Anchor Quantities (per clip end)		
Substrate	**Anchor**	**Min. Quantity**
Concrete/Masonry	Concrete Screw	4
Wood	Wood or Tapping Screw	6
Aluminum or Steel Substrate	Tapping Screw	6
1. See Appendix 2 for anchor requirements. 2. Anchor Quantities are for each clip end.		

MULLION TABLE 3.2
(HORIZONTAL 3-WAY SPAN — 1/2" Standard Aluminum Reinforcing Mullion)

MULL SPAN	LOAD WIDTH	DP (PSF)	MULL SPAN	LOAD WIDTH	DP (PSF)	MULL SPAN	LOAD WIDTH	DP (PSF)
48	24	75.0	78	24	75.0	108	24	38.8
	30	75.0		30	75.0		30	31.8
	36	75.0		36	71.6		36	27.2
	42	75.0		42	62.7		42	23.9
	48	75.0		48	56.2		48	21.4
	54	75.0		54	51.1		54	19.5
	60	75.0		60	47.1		60	18.0
	66	75.0		66	43.8		66	16.8
	72	75.0		72	41.2		72	15.8
54	24	75.0	84	24	75.0	114	24	32.9
	30	75.0		30	70.0		30	26.9
	36	75.0		36	60.2		36	22.9
	42	75.0		42	53.3		42	20.1
	48	75.0		48	47.8		48	18.0
	54	75.0		54	43.4		54	16.4
	60	75.0		60	39.9		60	15.1
	66	75.0		66	37.1		66	14.1
	72	75.0		72	34.8		72	13.2
60	24	75.0	90	24	68.4	120	24	28.1
	30	75.0		30	56.3		30	22.9
	36	75.0		36	48.3		36	19.5
	42	75.0		42	42.7		42	17.1
	48	75.0		48	38.5		48	15.3
	54	75.0		54	35.3		54	13.9
	60	75.0		60	32.7		60	12.8
	66	75.0		66	30.6		66	11.9
	72	75.0		72	28.8		72	11.2
66	24	75.0	96	24	56.0			
	30	75.0		30	46.0			
	36	75.0		36	39.4			
	42	75.0		42	34.7			
	48	75.0		48	31.3			
	54	74.2		54	28.6			
	60	68.7		60	26.5			
	66	64.4		66	24.7			
	72	60.7		72	23.2			
72	24	75.0	102	24	46.4			
	30	75.0		30	38.0			
	36	75.0		36	32.5			
	42	74.6		42	28.6			
	48	66.9		48	25.7			
	54	61.0		54	23.5			
	60	56.4		60	21.7			
	66	52.6		66	20.2			
	72	49.6		72	19.0			

Appendix 4 – Block Frame, Load Width vs. Mullion Span Results Summary



LOAD WIDTH = (W1 + W2) / 2

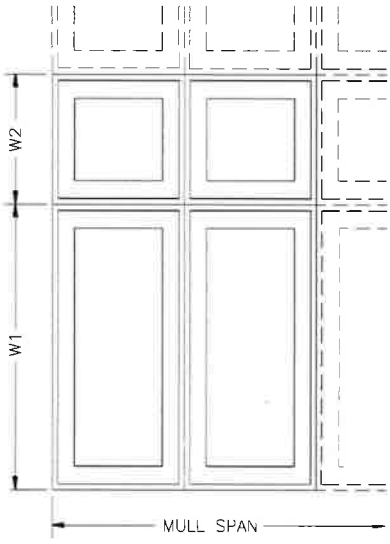
1. This table applies to a 4-way multi-wide, multi-high combination with a Vertical Structural Mullion running through the intersection.
2. LOAD WIDTH must be calculated using two largest adjacent (side by side) window widths.
3. Mull spans are restricted to the longest span shown in the Table. For Mull spans between those shown in the table, use the next longest span.
4. Windows may be Fixed, Sliding, Double Hung, Casement, Single Hung and Awning Windows.
5. Allowable pressures on the mulled assembly shall be controlled by the lesser of the mullion or individual window unit.

Anchor Quantities (per clip end)		
Substrate	**Anchor**	**Min. Quantity**
Concrete/Masonry	Concrete Screw	4
Wood	Wood or Tapping Screw	6
Aluminum or Steel Substrate	Tapping Screw	6
1. See Appendix 2 for anchor requirements. 2. Anchor Quantities are for each clip end.		

MULLION TABLE 4.1
(VERTICAL 4-WAY SPAN — 1/2" Standard Aluminum Reinforcing Mullion)

MULL SPAN	LOAD WIDTH	DP (PSF)	MULL SPAN	LOAD WIDTH	DP (PSF)	MULL SPAN	LOAD WIDTH	DP (PSF)
36	24	75.0	66	24	75.0	96	24	56.0
	30	75.0		30	75.0		30	45.4
	36	75.0		36	75.0		36	38.3
	42	75.0		42	75.0		42	33.3
	48	75.0		48	66.4		48	29.5
	54	75.0		54	59.0		54	26.6
	60	75.0		60	53.1		60	24.2
	66	75.0		66	48.3		66	22.1
	72	75.0		72	44.2		72	20.4
42	24	75.0	72	24	75.0	102	24	46.5
	30	75.0		30	75.0		30	37.7
	36	75.0		36	74.4		36	31.8
	42	75.0		42	63.7		42	27.6
	48	75.0		48	55.8		48	24.5
	54	75.0		54	49.6		54	22.0
	60	75.0		60	44.6		60	20.0
	66	75.0		66	40.6		66	18.4
	72	75.0		72	37.2		72	17.0
48	24	75.0	78	24	75.0	108	24	39.1
	30	75.0		30	75.0		30	31.6
	36	75.0		36	63.4		36	26.7
	42	75.0		42	54.3		42	23.1
	48	75.0		48	47.5		48	20.5
	54	75.0		54	42.2		54	18.4
	60	75.0		60	38.0		60	16.8
	66	75.0		66	34.6		66	15.4
	72	75.0		72	31.7		72	14.2
54	24	75.0	84	24	75.0	114	24	33.1
	30	75.0		30	65.6		30	26.8
	36	75.0		36	54.6		36	22.6
	42	75.0		42	46.8		42	19.6
	48	75.0		48	41.0		48	17.3
	54	75.0		54	36.4		54	15.6
	60	75.0		60	32.8		60	14.2
	66	72.1		66	29.8		66	13.0
	72	66.1		72	27.3		72	12.0
60	24	75.0	90	24	68.1	120	24	28.3
	30	75.0		30	55.3		30	22.9
	36	75.0		36	46.7		36	19.3
	42	75.0		42	40.7		42	16.7
	48	75.0		48	35.7		48	14.8
	54	71.4		54	31.7		54	13.3
	60	64.2		60	28.6		60	12.1
	66	58.4		66	26.0		66	11.1
	72	53.5		72	23.8		72	10.3

Appendix 4 – Block Frame, Load Width vs. Mullion Span Results Summary



LOAD WIDTH = (W1 + W2) / 2

1. This table applies to a 4-way multi-wide, multi-high combination with a Horizontal Structural Mullion running through the intersection.
2. LOAD WIDTH must be calculated using two largest adjacent (side by side) window widths.
3. Mull spans are restricted to the longest span shown in the Table. For Mull spans between those shown in the table, use the next longest span.
4. Windows may be Fixed, Sliding, Double Hung, Casement, Single Hung and Awning Windows.
5. Allowable pressures on the mulled assembly shall be controlled by the lesser of the mullion or individual window unit.

Anchor Quantities (per clip end)		
Substrate	**Anchor**	**Min. Quantity**
Concrete/Masonry	Concrete Screw	4
Wood	Wood or Tapping Screw	6
Aluminum or Steel Substrate	Tapping Screw	6
1. See Appendix 2 for anchor requirements. 2. Anchor Quantities are for each clip end.		

MULLION TABLE 4.2
(HORIZONTAL 4-WAY SPAN — 1/2" Standard Aluminum Reinforcing Mullion)

MULL SPAN	LOAD WIDTH	DP (PSF)	MULL SPAN	LOAD WIDTH	DP (PSF)	MULL SPAN	LOAD WIDTH	DP (PSF)
36	24	75.0	66	24	75.0	96	24	53.8
	30	75.0		30	75.0		30	46.8
	36	75.0		36	75.0		36	40.0
	42	75.0		42	75.0		42	34.2
	48	75.0		48	69.8		48	29.5
	54	75.0		54	63.8		54	25.9
	60	75.0		60	59.1		60	22.8
42	24	75.0	72	24	75.0	102	24	43.5
	30	75.0		30	75.0		30	38.4
	36	75.0		36	74.4		36	33.2
	42	75.0		42	64.4		42	28.6
	48	75.0		48	57.6		48	24.8
	54	75.0		54	52.5		54	21.7
	60	75.0		60	48.5		60	19.3
48	24	75.0	78	24	75.0	108	24	35.4
	30	75.0		30	75.0		30	31.7
	36	75.0		36	63.5		36	27.8
	42	75.0		42	54.4		42	24.1
	48	75.0		48	48.4		48	21.0
	54	75.0		54	43.9		54	18.4
	60	75.0		60	39.7		60	16.4
54	24	75.0	84	24	75.0	114	24	29.1
	30	75.0		30	68.3		30	26.3
	36	75.0		36	55.2		36	23.4
	42	75.0		42	46.8		42	20.5
	48	75.0		48	41.3		48	17.9
	54	75.0		54	37.3		54	15.8
	60	75.0		60	32.8		60	14.0
60	24	75.0	90	24	67.3	120	24	24.1
	30	75.0		30	57.6		30	22.0
	36	75.0		36	48.6		36	27.8
	42	75.0		42	40.9		42	17.5
	48	75.0		48	35.6		48	15.4
	54	75.0		54	31.0		54	13.6
	60	73.4		60	27.2		60	12.1

Reviewed for Code Compliance
Universal Engineering Sciences

STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION

CONSTRUCTION INDUSTRY LICENSING BOARD (850) 487-1395
2601 BLAIR STONE ROAD
TALLAHASSEE FL 32399-0783

ROWLAND, JAMES SAMUEL
PELLA WINDOWS AND DOORS
8326 CREEDMOOR LANE
NEW PORT RICHEY FL 34654

Congratulations! With this license you become one of the nearly one million Floridians licensed by the Department of Business and Professional Regulation. Our professionals and businesses range from architects to yacht brokers, from boxers to barbeque restaurants, and they keep Florida's economy strong.

Every day we work to improve the way we do business in order to serve you better. For information about our services, please log onto **www.myfloridalicense.com**. There you can find more information about our divisions and the regulations that impact you, subscribe to department newsletters and learn more about the Department's initiatives.

Our mission at the Department is: License Efficiently, Regulate Fairly. We constantly strive to serve you better so that you can serve your customers. Thank you for doing business in Florida, and congratulations on your new license!

STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION

CBC046712 ISSUED: 07/06/2016

CERTIFIED BUILDING CONTRACTOR
ROWLAND, JAMES SAMUEL
PELLA WINDOWS AND DOORS

IS CERTIFIED under the provisions of Ch.489 FS.
Expiration date: AUG 31, 2018 L1607060000783

DETACH HERE

RICK SCOTT, GOVERNOR KEN LAWSON, SECRETARY

STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION
CONSTRUCTION INDUSTRY LICENSING BOARD

LICENSE NUMBER
CBC046712

The BUILDING CONTRACTOR
Named below IS CERTIFIED
Under the provisions of Chapter 489 FS.
Expiration date: AUG 31, 2018

ROWLAND, JAMES SAMUEL
PELLA WINDOWS AND DOORS
8326 CREEDMOOR LANE
NEW PORT RICHEY FL 34654

ISSUED: 07/06/2016 DISPLAY AS REQUIRED BY LAW SEQ # L1607060000783

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 8/26/2016

9/1/2017

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Lockton Companies 444 W. 47th Street, Suite 900 Kansas City MO 64112-1906 (816) 960-9000	CONTACT NAME: PHONE (A/C, No, Ext): FAX (A/C, No): E-MAIL ADDRESS:
INSURED 1381272 PWD-ORLANDO, INC. 350 WEST STATE ROAD 434 LONGWOOD, FL 32750	INSURER(S) AFFORDING COVERAGE — NAIC # INSURER A : Steadfast Insurance Company — 26387 INSURER B : Old Republic Insurance Company — 24147 INSURER C : INSURER D : INSURER E : INSURER F :

COVERAGES * CERTIFICATE NUMBER: 12959679 REVISION NUMBER: XXXXXXX

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
B	X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE [X] OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: POLICY [ ] PRO-JECT [ ] LOC X OTHER: SIR Applies Per Policy Terms & Conditions	N	N	MWZY-308159	9/1/2016	9/1/2017	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$ 1,000,000 $ Excluded $ Excluded $ 1,000,000 $ 4,000,000 $ 7,000,000 $
	AUTOMOBILE LIABILITY X ANY AUTO OWNED AUTOS ONLY [ ] SCHEDULED AUTOS X HIRED AUTOS ONLY [X] NON-OWNED AUTOS ONLY	N	N	MWTB-308158	9/1/2016	9/1/2017	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$ 2,000,000 $ XXXXXXX $ XXXXXXX $ XXXXXXX $ XXXXXXX
A	X UMBRELLA LIAB [X] OCCUR EXCESS LIAB [ ] CLAIMS-MADE DED RETENTION $	N	N	IPR346040108	9/1/2016	9/1/2019	EACH OCCURRENCE AGGREGATE	$ 1,000,000 $ 1,000,000 $ XXXXXXX
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) Y/N [ ] If yes, describe under DESCRIPTION OF OPERATIONS below	N/A		NOT APPLICABLE			PER STATUTE / OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	$ XXXXXXX $ XXXXXXX $ XXXXXXX

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CERTIFICATE HOLDER

12959679
CITY OF BELLE ISLE
1600 NELA AVENUE
ORLANDO, FL 32809

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Judy M Arnold

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 08/31/2016

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER 1-800-247-7756 Holmes Murphy & Assoc - WDM PO Box 9207 Des Moines, IA 50306-9207	CONTACT NAME: PHONE (A/C, No, Ext): FAX (A/C, No): E-MAIL ADDRESS:
INSURED PWD-Orlando, Inc. dba Pella Windows and Doors 350 West State Road 434 Longwood, FL 32750	INSURER(S) AFFORDING COVERAGE — NAIC # INSURER A: SENTRY CAS CO — 28460 INSURER B: INSURER C: INSURER D: INSURER E: INSURER F:

COVERAGES **CERTIFICATE NUMBER: 47694585** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
	GENERAL LIABILITY							
	☐ COMMERCIAL GENERAL LIABILITY						EACH OCCURRENCE	$
	☐ CLAIMS-MADE ☐ OCCUR						DAMAGE TO RENTED PREMISES (Ea occurrence)	$
							MED EXP (Any one person)	$
							PERSONAL & ADV INJURY	$
	GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE	$
	☐ POLICY ☐ PRO-JECT ☐ LOC						PRODUCTS - COMP/OP AGG	$
								$
	AUTOMOBILE LIABILITY							
	☐ ANY AUTO						COMBINED SINGLE LIMIT (Ea accident)	$
	☐ ALL OWNED AUTOS ☐ SCHEDULED AUTOS						BODILY INJURY (Per person)	$
	☐ HIRED AUTOS ☐ NON-OWNED AUTOS						BODILY INJURY (Per accident)	$
							PROPERTY DAMAGE (Per accident)	$
								$
	☐ UMBRELLA LIAB ☐ OCCUR							
	☐ EXCESS LIAB ☐ CLAIMS-MADE						EACH OCCURRENCE	$
	☐ DED ☐ RETENTION $						AGGREGATE	$
								$
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY			9003379	09/01/16	09/01/17	X WC STATU-TORY LIMITS ☐ OTH-ER	
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) Y/N: N	N/A					E.L. EACH ACCIDENT	$ 1,000,000
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE	$ 1,000,000
							E.L. DISEASE - POLICY LIMIT	$ 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

CERTIFICATE HOLDER

City of Belle Isle

1600 Nela Ave

Orlando, FL 32809 USA

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

2016 - 2017

8/11/16

City of Longwood
175 W. Warren Avenue, Longwood, FL 32750

LOCAL BUSINESS TAX

Receipt # 17-00014399

STATE #

LOCATION: 350 W SR 434

For the Occupation:
RETAIL MERCHANTS/1 TO 5 EMP

PELLA WINDOWS AND DOORS
350 W SR 434
LONGWOOD FL 32750

LIND, MIKE

CITY TAX	$	70.00
ADMINISTRATIVE FEE	$	10.00
TRANSFER FEE	$	.00
PENALTY %	$	.00
COUNTY TAX	$	25.00
TOTAL$		105.00

SEAL — CITY OF LONGWOOD, FLORIDA IN SEMINOLE COUNTY

YEAR: 10/16-09/17

DIRECTOR OF FINANCE

RECEIPT MUST BE CONSPICUOUSLY DISPLAYED AT BUSINESS LOCATION.

PELLA WINDOWS AND DOORS
350 W SR 434
LONGWOOD FL 32750

RICK SINGH, CFA - ORANGE COUNTY PROPERTY APPRAISER

Searches | Sales Search | Results | Property Record Card | My Favorites | Sign up for e-Notify...

3532 Country Lakes Dr < 20-23-30-4980-00-040 >

Name(s)
Heringhaus William Craig

Mailing Address On File
3532 Country Lakes Dr
Belle Isle, FL 32812-3505
Incorrect Mailing Address?

Physical Street Address
3532 Country Lakes Dr

Postal City and Zipcode
Orlando, Fl 32812

Property Use
0103 - Single Fam Class III

Municipality
Belle Isle

View 2016 Property Record Card

Values, Exemptions and Taxes | Property Features | Sales Analysis | Location Info | Market Stats | Update Information

Note: 2017 values will be available in Spring of 2017.

Property Description View Plat

THE LANDINGS AT LAKE CONWAY 9/125 LOT 4

Total Land Area 21,633 sqft (+/-) | 0.50 acres (+/-) GIS Calculated Notice

Land

Land Use Code	Zoning	Land Units	Unit Price	Land Value	Class Unit Price	Class Value
0131 - Sfr - Canal Front	R-1-AA	1 LOT(S)	working...	working...	working...	working...

Page 1 of 1 (1 total records)

Buildings

	Important Information		Structure			
More Details	Model Code:	01 - Single Fam Residence	Actual Year Built:	1996	Gross Area:	2898 sqft
	Type Code:	0103 - Single Fam Class III	Beds:	4	Living Area:	2005 sqft
	Building Value:	working...	Baths:	2.0	Exterior Wall:	Concrete Block Stucco
	Estimated New Cost:	working...	Floors:	1	Interior Wall:	Drywall

Page 1 of 1 (1 total records)

Extra Features

Description	Date Built	Units	XFOB Value
FPL2 - Average Fireplace	12/31/1996	1 Unit(s)	working...
BD3 - Boat Dock 3	12/31/1996	1 Unit(s)	working...
BC3 - Boat Cover 3	12/31/1996	1 Unit(s)	working...
PL2 - Above Average Pool	06/09/2005	1 Unit(s)	working...
SCR2 - Scrn Enc 2	06/09/2005	1 Unit(s)	working...
SPA2 - Spa 2	06/09/2005	1 Unit(s)	working...
SHNV - Shed No Value	01/01/2010	1 Unit(s)	working...

Page 1 of 1 (7 total records)

This Data Printed on 04/20/2017 and System Data Last Refreshed on 04/19/2017