



BUILDING DROPS

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Product Evaluation Report *of*

**Atrium Corporation
Series 130 1.25" Tube Mullion**

for

Florida Product Approval

FL# FL16972

Report No. 5237

Current Florida Building Code

Method:	2 – B (Engineering Evaluation)
Category:	Windows
Sub – Category:	Mullions

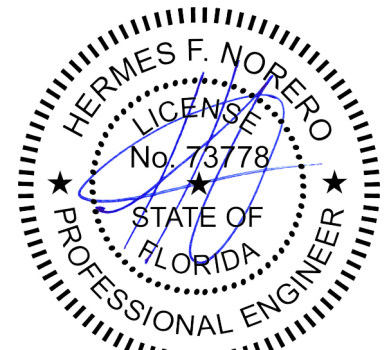
Product:	Series 130 1.25" Tube Mullion
Material:	Aluminum 6063-T6

Prepared For:
Atrium Corporation
9001 Ambassador Row
Dallas, TX 75247

Prepared by:
Hermes F. Norero, P.E.
Florida Professional Engineer # 73778
Date: 10/20/2017

Contents:
Evaluation Report Pages 1 – 3

Digitally signed by Hermes F. Norero, P.E.
Reason: I am approving this document
Date: 2017.10.22 18:07:14 -04'00'



Hermes F. Norero, P.E.
Florida No. 73778



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Date: 10/20/2017

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Manufacturer: Atrium Corporation

Product Category: Windows

Product Sub-Category: Mullions

Compliance Method: State Product Approval Method (2)(b)

Product Name: Series 130 1.25" Tube Mullion
(Non-Impact)

Scope: This is a Product Evaluation Report issued by Hermes F. Norero, P.E. (FL # 73778) for **Atrium Corporation** based on Method 2b of the Florida Department of Business and Professional Regulation - Florida Building Commission.

Hermes F. Norero, P.E. does not have nor will acquire financial interest in the company manufacturing or distributing the product or in any other entity involved in the approval process of the product named herein.

This product has been evaluated for use in locations adhering to the current Florida Building Code.

See Installation Instructions **ATR110**, signed and sealed by Hermes F. Norero, P.E. (FL # 73778) for specific use parameters.

Limits of Use:

1. This product has been evaluated and is in compliance with the current Florida Building Code, excluding the "High Velocity Hurricane Zone" (HVHZ).
2. Product anchors shall be as listed and spaced as shown on details. Anchor embedment into substrate material shall be beyond wall dressing or stucco.
3. When used in areas requiring wind borne debris protection this product complies with Section 1609.1.2 of the current Florida Building Code and does require an impact resistant covering.
4. All configurations shown in installation instructions **ATR110** have been qualified as required by section 1709.8, 6th Edition (2017) Florida Building Code.
5. Site conditions that deviate from the details of drawing **ATR110** require further engineering analysis by a licensed engineer or registered architect.
6. See Installation Instructions **ATR110** for size and design pressure limitations.



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Referenced Code Sections: 1. Section 1709.8, 6th Edition (2017) Florida Building Code

Analysis: The following horizontal & vertical one-way & two-way **clipped mullions** were analyzed to a maximum design pressure of +/- 150 PSF to comply with the 6th Edition (2017) Florida Building Code, Section 1709.8:

1. Standard End Clip
2. Offset End Clip
3. U-Clip

- Installation:**
1. Approved anchor types and substrates are as follows:
 - A. For two by (2X) wood frame substrate, use (3) **#14 Wood Screw** type wood frame anchors per end clip of sufficient length to achieve minimum embedment of 1.50" into wood framing.
 - B. For concrete or masonry substrate where one by (1X), non-structural, wood bucking is employed, use two (2) **1/4" diameter ITW Tapcon** type concrete screw anchors per clip of sufficient length to achieve minimum embedment of 1.25" into concrete or masonry. Alternatively, use one (1) **3/8" Hilti Kwik Bolt III** expansion anchor per clip of sufficient length to achieve minimum embedment of 2.5" into concrete or masonry.
 - C. For concrete or masonry substrate where wood bucking is NOT employed, use two (2) **1/4" diameter ITW Tapcon** type concrete screw anchors per clip of sufficient length to achieve minimum embedment of 1.25" into concrete or masonry. Alternatively, use one (1) **3/8" Hilti Kwik Bolt III** expansion anchor per clip of sufficient length to achieve minimum embedment of 2.5" into concrete or masonry.
 - D. For steel stud substrate, use (3) **1/4" TEK Screw** type self-tapping anchors per end clip of sufficient length to achieve 3 threads minimum penetration beyond steel structure.

Refer to Installation Instructions (**ATR110**) for anchor locations, design load tables, and further details of the installation requirements.

Conclusion: All horizontal & vertical one-way & two-way **clipped mullions** evaluated meet the requirements for use as outlined by section 1709.8 of the 6th Edition FBC.

Hermes F. Norero, P.E.
Florida No. 73778
Page 3 of 3