BUILDING DROPS
398 E DANIA BEACH BLVD. SUITE 338, DANIA BEACH, FL 33004

Product Evaluation Report

of

Windsor Windows and Doors
Pinnacle Clad 4" LVL Composite Mullion
(WZ3)(Impact)

for

Florida Product Approval

FL# FL21905

Report No. 8335

Current Florida Building Code

Method:	**2 – B (Engineering Evaluation)**
Category:	**Windows**
Sub – Category:	**Mullions**
Product:	**Pinnacle Clad 4" LVL Composite Mullion**
Material:	**Glulam LVL and Common Pine**
Product Dimensions:	**See Installation Instructions WWD003**

Prepared for:
Windsor Windows and Doors
900 S. 19th Street
West Des Moines, IA 50265

Prepared by:
Hermes F. Norero, P.E.
Florida Professional Engineer # 73778
Date: 02/14/2023

HERMES F. NORERO
LICENSE
No. 73778
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

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Digitally signed by Hermes F. Norero, P.E.
Reason: I am approving this document
Date: 2023.08.09 17:35:28 -04'00'

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Manufacturer: **Windsor Windows and Doors**

Product Category: Windows

Product Sub-Category: Mullions

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

Product Name: **Pinnacle Clad 4" LVL Composite Mullion (WZ3) (Impact)**

Scope: This is a Product Evaluation Report issued by Hermes F. Norero, P.E. (FL # 73778) for **Windsor Windows and Doors** based on Method 2b of the State of Florida Product Approval, 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 **WWD003**, 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 Chapter 16 of the current Florida Building Code and **does not** require an impact resistant covering in Wind Zones 3 or less.
4. When used in areas requiring wind borne debris protection this product complies with Chapter 16 of the current Florida Building Code and **does** require an impact resistant covering in Wind Zones 4.
5. All configurations shown in installation instructions **WWD003** have been qualified as required by section 1709.8 of the current FBC.
6. Site conditions that deviate from the details of Installation Instructions **WWD003** require further engineering analysis by a licensed engineer or registered architect.
7. See Installation Instructions **WWD003** for size and design pressure limitations.

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Quality Assurance: The manufacturer has demonstrated compliance of products in accordance with the Florida Building Code for manufacturing under a quality assurance program audited by an approved quality assurance entity through **Windows and Door Manufactures Association** (FBC Organization #: QUA2515).

Performance Standards: The product described herein has been tested per:

- AAMA/WDMA/CSA 101/I.S.2/A440-08/11
- AAMA 506-16
- ASTM E1886-13
- ASTM E1996-14

Referenced Code Sections:

1. 1709.8 of the current FBC

Referenced Data:

1. Product Testing performed by **Element Materials Technology**

Report:	Dated:
ESP020503P.Rev	09/29/2015
ESP020503P-Rev2.ASTM	11/04/2016

2. Quality Assurance Agency
   Windows and Door Manufactures Association
   (FBC Organization #: QUA2515)

Installation:

Refer to Installation Instructions (**WWD003**) for anchor spacing and more details of the installation requirements.

Design Pressure:

Refer to Installation Instructions (**WWD003**) for allowable sizes and design pressures.

Conclusion:

All horizontal & vertical one-way & two-way clipped mullions evaluated meet the requirements for use as outlined by section 1709.8 of the current FBC.

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Equivalence of Test Standards:
Various test standards have been evaluated for differences in test methodology, if any, between tested editions of the test standards listed below and those editions referenced in the current Florida Building Code. The manufacturer has tested their products to the following test standard edition(s):

1) AAMA 506-11
2) ASTM E1886-02
3) ASTM E1996-02/05/06/09/12

Chapter 35 of the current Florida Building Code references the following editions of the above mentioned test standards:

1) AAMA 506-16
2) ASTM E1886-13
3) ASTM E1996-14

After review of the above mentioned referenced standards and editions, it has been found that no significant technical changes have been made to the test standards that would affect the results. All referenced standards have been found to be equivalent.

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