



MolimoTM
Architectural Product Testing

PRODUCT EVALUATION

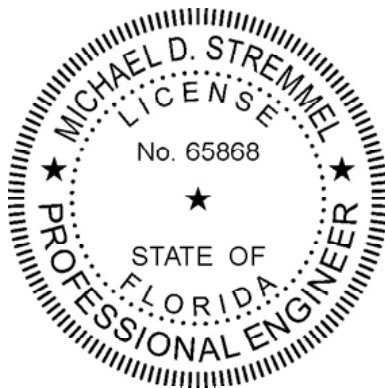
Aspect/Endure Fixed Casement Window

REPORT TO:

**PROVIA LLC
2150 STATE ROUTE 39
SUGARCREEK, OHIO 44681**

REPORT NUMBER: 27501.03-107-16-D

REPORT DATE: 11/17/2023



2023.11.17 06:33:11 -05'00'

Michael D. Stremmel, PE
FL PE 65868
FL REG 37122

This item has been digitally signed and sealed by Michael D. Stremmel, PE on the date adjacent to the seal.

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Subject: Aspect/Endure Fixed Casement Window
ProVia LLC
2150 State Route 39
Sugarcreek, Ohio 44681

Scope: Product Evaluation per Chapter 61G20-3.005(1)(d) Florida Administrative Code, Evaluation report from a Florida Registered Architect or a Licensed Florida Professional Engineer.

Building Code Compliance: This product has demonstrated compliance with the Florida Building Code, Building, 8th Edition (2023):
§1709.5 Exterior window and door assemblies
§2404 Wind, Snow, Seismic and Dead Loads on Glass

Performance Standards: AAMA/WDMA/CSA 101/I.S.2/A440-11
ASTM E1300-12ae1

Product Description: Window Frame Extruded Rigid Poly (Vinyl Chloride) (PVC)
Miter-cut corners and thermally welded.

Window Sash Extruded Rigid Poly (Vinyl Chloride) (PVC)
Miter-cut corners and thermally welded.

Glazing: Validate Glazing with ASTM E1300

Glazing Type	Glazing Construction
G1 (Insulating Glass)	3/16" Annealed to Exterior 3/16" Annealed to Interior
G2 (Insulating Glass)	1/8" Annealed to Exterior 1/8" Annealed to Interior

Exterior glazed against double-sided adhesive tape and secured with rigid vinyl glazing bead. 1/2" bite.

Anchorage Various anchorages (see *Installation*)

For additional product information see Appendix A.

- Installation:**
- Wood: Minimum Spruce-Pine-Fir 2x (G = 0.42).
#8 Wood Screw (Shall conform to ANSI/ASME B18.6.1 and be corrosion resistant).
 - Steel Stud: Minimum 18 gauge (0.043" thick) 33 KSI steel stud.
#10-16 TEKS screw (see ICC ESR 1976).
 - Aluminum: Minimum 0.093" thick 6063-T5 aluminum.
#10-16 TEKS screw (see ICC ESR 1976).
 - Concrete: Minimum $f'_c = 3,000$ psi.
3/16" ITW Tapcon with Advanced Threadform Technology
Concrete and Masonry Anchors (see NOA 16-1222.06).
 - Concrete Masonry: ASTM C90, minimum $f'_m = 1,500$ psi.
3/16" ITW Tapcon with Advanced Threadform Technology
Concrete and Masonry Anchors (see NOA 16-1222.06).

Installation shall follow manufacturer's instructions, product approvals and the referenced installation drawings.

Limitations of Use:

Product	Maximum Design Pressures	Impact Resistance	Maximum Overall Size	Maximum Glazing Size
Aspect/Endure Fixed Casement Window (Glazing Type G1)	+55/-55 psf	N/A	71" x 71"	66-3/8" x 66-3/8"
Aspect/Endure Fixed Casement Window (Glazing Type G2)	+55/-50 psf	N/A	56" x 56"	51-3/8" x 51-3/8"

Products have not been tested for windborne debris resistance and will require protective devices (i.e. shutters) if installed in a windborne debris region.

Products are not approved for use in High Velocity Hurricane Zone (HVHZ).

Supporting Evidence: Test Report D2360.04-501-47 (AAMA/WDMA/CSA 101/I.S.2/A440-11)
Revision -, 02/19/16
Intertek. Springdale, Pennsylvania (TST7110)

Calculation Report 27501.03-107-16-C by Molimo
Revision -, 11/16/2023
Michael D. Stremmel, PE (FL PE 65868)

Certification of Independence: In accordance with Rule 61G20-3 Florida Administrative Code,
Molimo, LLC hereby certifies the following:

1. Molimo, LLC does not have, nor does it intend to acquire or will it acquire, a financial interest in any company manufacturing or distributing products tested or labeled by the agency.
2. Molimo, LLC is not owned, operated or controlled by any company manufacturing or distributing products it tests or labels.
3. Michael D. Stremmel, P.E. does not have nor will acquire, a financial interest in any company manufacturing or distributing products for which the reports are being issued.
4. Michael D. Stremmel, P.E does not have, nor will acquire, a financial interest in any other entity involved in the approval process of the product.

Reference Drawings: *Aspect/Endure Fixed Casement.* Drawing 27501.03-1002. Revision -, 11/16/23.

Revision Log

<u>Identification</u>	<u>Date</u>	<u>Page & Revision</u>
Original Issue	11/17/23	Not Applicable

Appendix A – Detailed Product Description

Glazing Details: Exterior glazed against double-sided adhesive tape and secured with rigid vinyl glazing bead. 1/2" bite.

Weatherstripping: 1/4" dia. Vinyl foam-filled bulb. One row at sash perimeter.
0.280" co-extruded fin. One row at sash perimeter.
0.400" foam-filled jacket leaf. One row at sash perimeter.

Frame Construction: Extruded Rigid Poly (Vinyl Chloride) (PVC). Miter-cut corners and thermally welded.

Sash Construction: Extruded Rigid Poly (Vinyl Chloride) (PVC). Miter-cut corners and thermally welded. Located by fixed lite spacer between sash and frame and secured through fixed lite spacer to frame with two (2) #8 x 3/4" screws per each side of sash.

Drainage: 3/8"x3/16" weep slot at bottom rail glazing pocket; one each end.
3/8"x3/16" weep slot at bottom rail of sash; one each end

Hardware: None

Reinforcement: None