



MolimoTM
Architectural Product Testing

PRODUCT EVALUATION

Aspect/Endure Casement Window

REPORT TO:

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

REPORT NUMBER: 27501.02-107-16-B
REVISION 1 DATE: 12/16/2024



2024.12.06 06:50:22 -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 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/A440-17
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)	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 24-0102.06).
- Concrete Masonry: ASTM C90, minimum $f'_m = 1,500$ psi.
3/16" ITW Tapcon with Advanced Threadform Technology
Concrete and Masonry Anchors (see NOA 24-0102.06).

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 Casement Window (Glazing Type G1)	+50/-50 psf	N/A	36" x 75"	32" x 71"

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 N2841.01-501-47 (AAMA/WDMA/CSA 101/I.S.2/A440-11)
Revision -, 04/06/22
Intertek. Springdale, Pennsylvania (TST7110)

Calculation Report 27501.02-107-16 by Molimo
Revision 1, 12/16/24
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 Casement*. Drawing 27501.02-1001. Revision 1, 12/16/24.

Revision Log

<u>Identification</u>	<u>Date</u>	<u>Page & Revision</u>
Original Issue	11/16/23	Not Applicable
Rev. 1	12/6/24	Updated per new testing and certification

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"x5/16" Vinyl foam-filled bulb. One row at vent perimeter.
 3/16" dia. Vinyl foam-filled bulb. One row at frame perimeter.
 1/4" dia. Vinyl foam-filled bulb. One row at frame 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.

Drainage: 1/4"x1/8" weep slot at bottom rail glazing pocket; one each end.
 1/4"x1/8" weep slot at bottom rail; two each end.
 1" notch each end of bottom rail weatherstripping.
 1" notch each end of frame weatherstripping at sill.

Hardware:	Lever lock with multi-point lock.	One (1) with 5 keepers	Lock jamb.
	Die-cast snubbers	Two (2) sets	Hinge jamb.
	Dual-arm rotary operator with guide track.	One (1)	Sill/bottom rail.
	Concealed single-arm hinge w/ track.	Two (2)	One at head, one at sill.
	Metal stud bracket	One (1)	Vent bottom rail.

Reinforcement: None