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PRODUCT EVALUATION

Ecolite Double Hung Window

REPORT TO:

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

REPORT NUMBER: NCTL-110-24425-4
REPORT DATE: 07/29/21

Joseph A. Reed, PE
FL PE 58920
FL REG 33474



Subject: Ecolite Double Hung Window
ProVia LLC
2150 State Route 39
Sugar creek, 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, 7th Edition (2020):
§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)	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
<i>Ecolite</i> Double Hung (Glazing Type G1)	+50/-50 psf	N/A	36" x 72"	30" x 33"
<i>Ecolite</i> Double Hung (Glazing Type G1)	+40/-40 psf	N/A	40" x 62"	34" x 28"

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 G8487.02-501-47 (AAMA/WDMA/CSA 101/I.S.2/A440-11)
Revision -, 06/10/21
Intertek. Springdale, Pennsylvania (TST7110)

Calculation Report NCTL-110-24425-3
Revision -, 07/29/21
Joseph A. Reed, PE (FL PE 58920)

Certification of Independence: In accordance with Rule 61G20-3 Florida Administrative Code,
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Reference Drawings: *Ecolite Double Hung*. Drawing 24425-1-1002. Revision -, 07/29/21.

Revision Log

<u>Identification</u>	<u>Date</u>	<u>Page & Revision</u>
Original Issue	07/29/21	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:

0.375" dia. Vinyl T-slot bulb.	One row at head.
0.187"x0.250" center fin w/pile.	One row at sill, top rail, bottom rail and lock rail.
0.187"x0.250" center fin w/pile.	Two rows at stiles.
T-slot foam filled bulb.	One row at bottom rail

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:

- Sloped sill
- 1-3/8" weep notch at screen track; two each end
- 1"x1/8" weep slot at sill; one each end
- 3/8" x 3/16" wee slot; bottom rail and keeper rail; one each end.

Hardware:

Cam lock and keeper.	Two (2) total	Lock rail, 6" from each end.
Constant force balance.	Four (4) total	Two per jamb.
Pivot bar	Four (4) total	Bottom rail, lock rail; one each end.
Tilt latch	Four (4) total	Top rail and lock rail; one each end
Night latch	Two (2) total	Top sash stiles; one per stile.

Reinforcement:

Lock rail:	Extruded aluminum
Keeper rail:	Extruded aluminum