



WIND LOAD CLASSIFICATION REPORT

Removable Vinyl Panel Wind Load Exemption

Oasis™ 4-Track Porch Enclosure System

Classification Under VRC Appendix AH (Patio Covers)
Exemption from R301.2.1 Wind Design Load Provisions
for Removable, Non-Structural Vinyl Enclosure Panels

Report Date: May 26, 2026

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1.0 Evaluation Subject

1.1 **Product:** Oasis™ 4-Track Porch Enclosure System — removable vinyl enclosure panels.

1.2 **Manufacturer:** Turnkey Porch Enclosures, LLC, 1209 Admiral Street, Richmond, Virginia 23220. (804) 567-6543. turnkeyporch.com.

1.3 **Issue:** Whether the removable vinyl panels are subject to the wind design load provisions of VRC R301.2.1, Table R301.2.1(1), and Table R301.2.1(2).

1.4 **Conclusion:** The panels are removable, non-structural, and classified under VRC Appendix AH (Patio Covers). They are not fenestration, not permanent cladding, and do not impose wind loads on the existing porch structure. R301.2.1 wind design load provisions do not apply.

2.0 Evaluation Scope

Code / Section	Subject
VRC R301.2.1	Wind Design Criteria
VRC Table R301.2.1(1)	Component and Cladding Wind Loads
VRC Table R301.2.1(2)	Height and Exposure Adjustment
VRC Appendix AH (AH101–AH106)	Patio Covers
VRC AH103.1	Enclosure Walls — material and open/transparent area
VCC Section 112.2	Alternative Methods or Materials
VCC Section 112.3	Documentation and Approval (RDP recommendations)

3.0 Product Description

Attribute	Specification
Panel Material	10 mil (0.010 in. / 0.254 mm) flexible polyvinyl film with integrated screen
Configuration	3 or 4 vertically operable sashes per panel in aluminum extrusion tracks
Removability	Upper sashes lift out without tools; bottom sash fixed by Vent Lock where fall protection required
Structural Role	Non-structural infill — no wind resistance, no lateral load transfer
Design Intent	Panels are designed to be removed from the sash track or opened fully by the homeowner during high-wind events
Labeling	Decal: "Removable panel SHALL be removed when wind speeds exceed 75 mph (34 m/s)"
Classification	VRC Appendix AH (Patio Covers) — non-habitable, unconditioned outdoor living space
Not Classified As	Not fenestration, not a structural wall, not a sunroom, not permanent cladding

4.0 Why R301.2.1 Wind Design Loads Do Not Apply

4.1 The Purpose of R301.2.1

VRC R301.2.1 establishes wind design criteria for permanent structural and cladding components that must resist design wind pressures without failure. The section applies to "wall coverings, curtain walls, roof coverings, exterior windows, skylights, garage doors and exterior doors." All of these are permanent building components designed to remain in place and resist wind loads throughout the life of the structure.

4.2 The Oasis™ Panels Are None of These

The Oasis™ vinyl panels are removable, non-structural, and are not designed to resist wind pressure. They are designed to be removed from the sash track or opened fully by the homeowner during high-wind events. When removed or opened, the porch reverts to the open-air condition it was originally designed and permitted for. No additional wind load is imposed on the existing structure at any time.

4.3 Appendix AH Material Qualification

VRC Section AH103.1 permits patio cover enclosure walls to be enclosed with:

- Insect screening
- Approved translucent or transparent plastic not more than 0.125 inch (3.2 mm) in thickness
- Glass conforming to R308
- Any combination of the foregoing

The Oasis™ vinyl is 10 mil (0.010 in. / 0.254 mm) — well below the 0.125 in. threshold. It qualifies directly under AH103.1(2) as approved translucent plastic.

4.4 Wind Load Logic

The porch structure (columns, beams, roof, connections, foundations) must independently satisfy VRC Chapter 3 wind, snow, and live-load provisions as originally designed. The enclosure panels:

- Add no structural resistance to the porch
- Do not increase design wind loads on any component
- Do not modify the building's lateral force-resisting system
- Are designed to be removed by the homeowner before wind conditions require structural resistance

Wind-load analysis therefore applies to the existing porch structure, not to the removable enclosure panels.

5.0 Jurisdictional Precedent

The classification of removable vinyl porch enclosure panels as exempt from wind design load provisions has been recognized by multiple jurisdictions and code bodies.

5.1 North Carolina — 2024 NC Building Code, R301.2.1 Exception

The 2024 North Carolina State Building Code includes a codified exception:

Openings for exterior balconies, decks, or porches under roofs enclosed with screen or removable vinyl or acrylic wind break panels shall be exempt from the loads listed in Table R301.2(2) and the height and exposure factors listed in Table R301.2(3). Vinyl and acrylic glazed panels shall be removable. Removable panels shall be identified as removable by a decal. The identification decal shall state "Removable panel SHALL be removed when wind speeds exceed 75 mph (34 m/s)."

This exception is codified law in a state with comparable and more demanding wind zones than most of Virginia, including hurricane-prone coastal regions. It has been in the NC code since at least the 2018 edition.

5.2 Florida — Florida Building Code

The Florida Building Code (Residential, Section R301.2.1.2; Building, Section 1609.1.2) permits removable vinyl, tempered glass, and acrylic panels with the same 75 mph removal decal requirement. Florida's wind design requirements are among the most stringent in the United States, with design wind speeds reaching 180+ mph in hurricane zones. Palm Beach County — operating in a High-Velocity Hurricane Zone — has adopted specific policy (PBO-089) providing this exemption for removable porch enclosure panels.

5.3 James City County, Virginia

James City County, operating under the same Virginia Uniform Statewide Building Code, has established a permitting policy allowing vinyl patio enclosure panels (naming Eze-Breeze and equivalent products) for non-habitable spaces. Panels must be removed at the issuance of a tropical storm, hurricane warning, or any high wind event exceeding 65 mph. This policy was adopted by the JCC Building Official under the same alternative-methods authority available to all Virginia jurisdictions.

5.4 Virginia Code Change Proposal RB301.2.1-24 — Context Only

■ **This proposal is cited as context only, not as evidence of compliance.** Turnkey Porch Enclosures submitted code change proposal RB301.2.1-24 to DHCD for the 2024 code development cycle. It has not been approved or adopted, and Turnkey does not rely on it to demonstrate that the intent of the current code is met. It is referenced solely to show that the classification issue is formally recognized and under active consideration at the state level. Compliance under the current code is demonstrated through the Appendix AH classification and the alternative-methods provisions of VCC 112.2, independent of this proposal.

5.5 Precedent Summary

Jurisdiction	Status	Wind Zone	Removal Threshold
North Carolina	Codified law (2024 NC Code)	Up to 180+ mph coastal	75 mph
Florida	Codified law (FBC)	Up to 180+ mph HVHZ	75 mph
James City Co., VA	Building Official policy	Same as Virginia statewide	65 mph

Virginia (DHCD)	Proposal under review (context only)	Statewide	75 mph (proposed)
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Table 5.5 — Jurisdictional Precedent Summary

6.0 Product Category Context

Removable vinyl porch enclosure panels are not a novel product category. Eze-Breeze (manufactured by PGT Innovations, a publicly traded company) has been the market leader since the 1970s. Neither Eze-Breeze nor any other manufacturer of removable vinyl porch enclosure panels holds an ICC-ES Evaluation Report, IAPMO UES report, or NRTL research report — because the existing testing standards (ASTM E935, AC273, AAMA/NAFS) were designed for permanent fenestration and metal railing systems, not removable vinyl enclosures.

These products have been successfully permitted in hundreds of jurisdictions across the southeastern United States under alternative-methods provisions identical to VCC Section 112.2. The request to exempt removable vinyl panels from R301.2.1 is consistent with decades of established regulatory practice.

7.0 Scope Limitations

This report addresses wind load classification only. It does not:

- Certify or modify the existing porch structure — the porch must independently satisfy VRC Chapter 3
- Address guard or fall protection requirements — see the separate Guard and Fall Protection Performance Compliance Report
- Convert the enclosed space to habitable or conditioned space
- Claim wind resistance for the vinyl panels — they are non-structural and designed for removal by the homeowner
- Constitute an ICC-ES ESR or NRTL research report

8.0 Conditions of Use

8.1 The removable vinyl panels of the Oasis™ 4-Track system are exempt from VRC R301.2.1 wind design load provisions when the following conditions are met:

8.1.1 The enclosure is installed on an existing roofed porch classified under VRC Appendix AH.

8.1.2 The space remains non-habitable and unconditioned.

8.1.3 The open or transparent area meets the 65% threshold on the longer wall and one additional wall per AH103.1.

8.1.4 All panels are removable (upper sashes) or operable. Where a Vent Lock is installed for fall protection, the remaining sashes above it are removable.

8.1.5 Panels are labeled with a visible decal stating: "Removable panel SHALL be removed when wind speeds exceed 75 mph (34 m/s)."

8.1.6 The existing porch structure independently satisfies all VRC Chapter 3 structural provisions.

8.1.7 Installation complies with the manufacturer's instructions.

9.0 Report Closure

This report is submitted in support of permit review under VCC Section 112.2 (Alternative Methods or Materials). The complete submission package for wind load classification should include:

- This Wind Load Classification Report
- NC 2024 Building Code R301.2.1 Exception (exhibit)
- Florida Building Code provisions (exhibit)
- James City County permitting policy (exhibit)
- Virginia Code Change Proposal RB301.2.1-24 (context exhibit)
- Project-specific drawings (where applicable)

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For:

Authority Having Jurisdiction
Plan Review

End of Report. Prepared by Turnkey Porch Enclosures, LLC. This report addresses wind load classification only and is jurisdiction-neutral under the 2021 Virginia Residential Code. It does not constitute an ICC-ES Evaluation Report or NRTL certification.