Product Evaluation Report

Product Manufacturer	Product Name, Model, Series and/or Description
Sunset Windows and Doors, LLC 910 Warehouse Road, Unit 110104 Orlando, FL 32803	Series V-750 Vinyl Impact Single Hung Window Large Missile Impact - HVHZ

Code: Current Edition of the Florida Building Code including the 8th Edition (2023) Florida Building Code

Compliance Methods:

- Product Approval Rule 61G20-3.005(1)(a) – Certification Mark or Listing

Product Testing, Materials and Certification:

- NCTL Test Report No. 210-4227-03, dated 11/1/21, signed and sealed by Douglas J. McDougall, PE No. 28392 on 1/27/22.
    - PRODUCT TYPE: O/X
    - SERIES/ MODEL: V-750 Single Hung Window
    - TAS 201, 202 and 203, 2020 FBC HVHZ Test Protocols
    - Certification by National Accreditation and Management Institute, Inc.
        - NAMI Notice of Product Certification No. NI015538 (Kuraray America Trosifol PVB Interlayer)
        - NAMI Notice of Product Certification No. NI015538.01 (Kuraray America SG Interlayer)

- Intertek Test Report No. N2982.01-106-18, Dated 1/8/23, signed and sealed by Tanya A. Dolby, FL PE No. 93536 on 1/11/23; Lineal UPVC Plastics Testing.
    - Rate of Burning ASTM D635-14; Class CC1G155
    - Self-Ignition Temperature ASTM D1929-16; 860 deg. F > 650 deg. F
    - Average Smoke Density Rating ASTM D2843-16; 71.6 < 75
    - ASTM G155-13, Cycle 1, Accelerated Weathering for 4500 Hours
    - Tensile Strength Difference: Exposed & Unexposed ASTM D638-03 +0.6 % < 10%, Exposed per Section 2615 of The Florida Building Code.

Product Installation Instructions:

- Sunset Windows & Doors, Series Vinyl Impact V-750 Single Hung - Large Missile Impact, Installation Instructions Drawing No. NL-0146, dated 1/24/22, signed and sealed by Robert J. Amoruso, P.E.

Performance Testing:

- TAS 201, 202 and 203 per 2020 FBC HVHZ Test Protocols
- ASTM D635-14
- ASTM D1929-16
- ASTM D2843-16
- ASTM D638-03
- ASTM G155-13

Engineering Analysis: The following engineering and/or rational analysis/calculations have been performed.

- Anchorage has been verified by calculation prepared by Robert J. Amoruso, P.E. in accordance with the current edition of the Florida Building Code.
- Window glazing verified using ASTM E1300-12AE1 and 2016.

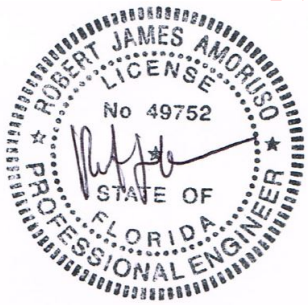
Limitations & Conditions of Use:

- The following product has been evaluated for use inside the HVHZ (High Velocity Hurricane Zone).
  - Sunset Windows & Doors, Series Vinyl Impact V-750 Single Hung - Large Missile Impact
- The following product is Impact Resistance and will not require an impact protective device when used in wind borne debris regions.
  - Sunset Windows & Doors, Series Vinyl Impact V-750 Single Hung - Large Missile Impact
- Refer to Product Installation Instructions noted above for:
  - Maximum allowable wind loads at related maximum allowable size(s).
  - Overall dimensions and material/grade of main product components, accessories, etc.
  - Illustrated diagrams of the attachment of the product to the structure.
  - Anchor type(s), size(s), substrate(s), embedment, edge distance, and spacing/locations.
- Site wind pressures shall be determined by a licensed professional engineer in accordance with the current edition of the Florida Building Code (and/or ASCE 7 as referenced in the current edition of the Florida Building Code) for components and cladding based on allowable stress design.
- Site conditions not covered in this product evaluation document are subject to additional engineering analysis by a licensed professional engineer or registered architect as required by the authority having jurisdiction.
- Adequacy of the existing structural substrates as a main wind force resisting system capable of withstanding and transferring applied product loads to the foundation is the responsibility of the licensed professional engineer or registered architect acting as the design professional of record for the project of installation.

Certificate of Independence per Product Approval Rule 61G20-3.009

Robert J. Amoruso, P.E. does not have, nor will acquire, any financial interest in the company manufacturing or distributing product(s) covered by this Product Evaluation Report.

Robert J. Amoruso, P.E. does not have, nor will acquire any financial interest in any other entity involved in the approval process or testing of the product(s) covered by this Product Evaluation Report.



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Date: 2023.11.30 19:51:46 -05'00'

Evaluated by:
Robert J. Amoruso, P.E.
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