

Product Evaluation Report

Rule 61G20 F.A.C. | Report No. ACE-2023-111 | Report No. PER-ACE-1047, Rev. 3 | 8/16//23 | Page 1 of 3

Product Manufacturer

Ventana USA
6001 Enterprise Drive
Export, PA 15632-8969

Product Name, Model, Series and/or Description

Series 4760 Picture Window
Non-impact and L.M. Impact

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:

- National Certified Testing Laboratories Test Reports
 - No. NCTL-210-4076-01 and associated laboratory drawings, signed and sealed by Gerard J Ferrara, P.E., FL No. 11985.
 - 54x77 to +/-50 psf Design Pressure
 - Test Protocols
 - TAS 201-94
 - TAS 202-94
 - TAS 203-94
 - Certification by Keystone Certification, Inc.
 - CAR No. 010-123.0
 - No. NCTL-210-4076-02 and associated laboratory drawings, signed and sealed by Gerard J Ferrara, P.E., FL No. 11985.
 - 54x77 to +/-80 psf Design Pressure
 - Test Protocols
 - TAS 202-94
 - Certification by Keystone Certification, Inc.
 - CAR No. 010-124.0
 - No. NCTL-210-4076-01A and associated laboratory drawings.
 - 54x77 to +/-50 psf Design Pressure
 - Test Protocols
 - AAMA/WDMA/CSA 101/I.S.2/A440-11
 - ASTM E1886-05
 - ASTM E1996-05 and 09
 - Certification by Keystone Certification, Inc.
 - CAR No. 010-125.0
 - CAR No. 010-202
 - No. NCTL-210-4076-02A and associated laboratory drawings.
 - 54x77 to +/-80 psf Design Pressure
 - Test Protocols
 - AAMA/WDMA/CSA 101/I.S.2/A440-11
 - Certification by Keystone Certification, Inc.
 - CAR No. 010-126.0
- Laminated Glazing Interlayers
 - Kuraray America Trosifol PVB Interlayer: Per current Miami-Dade NOA found [here](#).
- Materials
 - Window Frame Material: Rigid Vinyl

Robert J. Amoruso, P.E., 734 S. Center St., Ormond Beach, FL 32174
rjaengpe@gmail.com | FBPE FL P.E. No. 49752

Product Evaluation Report

Rule 61G20 F.A.C. | Report No. ACE-2023-111 | Report No. PER-ACE-1047, Rev. 3 | 8/16//23 | Page 2 of 3

Product Installation Instructions:

- Drawing No. NL-0091, Rev. 2 dated 8/16/23, signed and sealed by Robert J. Amoruso, P.E.

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.

Performance Testing:

- AAMA/WDMA/CSA 101/I.S.2/A440-11
- ASTM E1886-05
- ASTM E1996-05 and 09
- TAS 201-94
- TAS 202-94
- TAS 203-94, Large Missile Impact

Limitations & Conditions of Use:

- The following products have been evaluated for use inside the HVHZ (High Velocity Hurricane Zone).
 - FL22382.1
 - Certification Agency Certificate No. CAR No. 010-123.0
 - Tested to TAS 201, TAS 202 and TAS 203.
 - The product is acceptable for HVHZ use.
 - The product is Impact Resistant. Therefore, it does not require an impact protective system if used in a windborne debris region.
 - FL22382.2
 - Certification Agency Certificate No. CAR No. 010-124.0
 - Tested to TAS 202.
 - The product is acceptable for HVHZ use.
 - The product is NOT Impact Resistant. Therefore, it does require an impact protective system if used in a windborne debris region.
- The following products have not been evaluated for use inside the HVHZ (High Velocity Hurricane Zone).
 - FL22382.3
 - Certification Agency Certificate No. CAR No. 010-125.0 and No. 010-202
 - Tested to AAMA/WDMA/CSA 101/I.S.2/A440-11, ASTM E1886-05/ASTM E1996-05/09.
 - The product is NOT acceptable for HVHZ use.
 - The product is Impact Resistant. Therefore, it does not require an impact protective system if used in a windborne debris region.
 - FL22382.4
 - Certification Agency Certificate No. CAR No. 010-126.0
 - Tested to AAMA/WDMA/CSA 101/I.S.2/A440-11.
 - The product is NOT acceptable for HVHZ use.
 - The product is NOT Impact Resistant. Therefore, it does require an impact protective system if used in a windborne debris region.
- The product has been tested with and without Impact Resistant glazing.
 - The impact glazed product (Glazing Details 1 & 2) does not require an impact protective system if used in a windborne debris region.
 - The non-impact glazed product (Glazing Details 3 & 4) requires the use of an impact protection device if used in a windborne debris region.

Product Evaluation Report

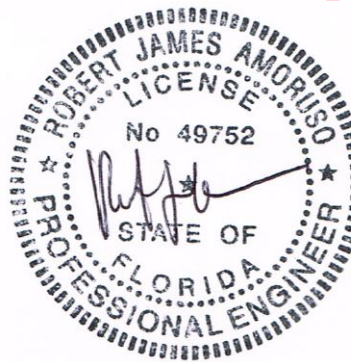
Rule 61G20 F.A.C. | Report No. ACE-2023-111 | Report No. PER-ACE-1047, Rev. 3 | 8/16//23 | Page 3 of 3

- Glass shall meet safety glazing requirements per the Florida Building Code. Installation Drawings No. NL-0091, Sheet 8 details the glazing usage as follows.
 - Glazing Detail 2 & 4 (tempered exterior monolithic lite) shall be used when the product is installed in HVHZ locations.
 - Glazing Detail 1 & 3 (annealed exterior monolithic lite) shall be used when the product is installed in non-HVHZ locations.
 - Optionally, Glazing Detail 2 & 4 can be used when the product is installed in non-HVHZ locations.
- 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.



Digitally signed
by Robert J
Amoruso
Date:
2023.08.16
18:03:48 -04'00'

Evaluated by:
Robert J. Amoruso, P.E.
FL P.E. License No. 49752