



BUILDING DROPS

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Certificate of Authorization: 29578

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Product Evaluation Report of Ventana USA Series 2050 Garden Window

for

Florida Product Approval

FL# FL

Report No. 3289

Current Florida Building Code

Method: 1 – A (Certification)
Category: Windows
Sub – Category: Casement

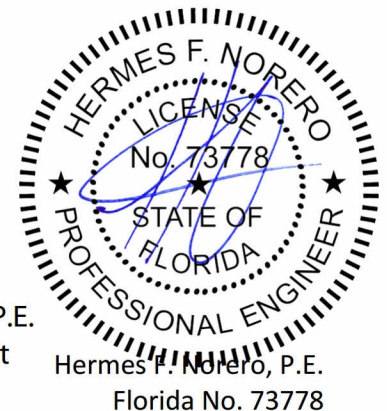
Product: Series 2050 Garden Window
Material: Poly Vinyl Chloride
Product Dimensions: 63" x 63"

Prepared For:
Ventana USA
6001 Enterprise Drive
Export, PA 15632-8969

Prepared by:
Hermes F. Norero, P.E.
Florida Professional Engineer # 73778
Date: 10/23/2014

Contents:
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Digitally signed by Hermes F Norero, P.E.
Reason: I am approving this document
Date: 2015.01.02 11:37:06 -05'00'





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Date: 10/23/2014

Report No: 3289

Manufacturer: Ventana USA

Product Category: Windows

Product Sub-Category: Casement

Compliance Method: State Product Approval Method (1)(a)

Product Name: Series 2050 Garden Window

Scope: This is a Product Evaluation Report issued by Hermes F. Norero, P.E. (FL # 73778) for **Ventana USA** based on Method 1a of the State of Florida Product Approval, Florida Department of Business and Professional Regulation - Florida Building Commission.

Hermes F. Norero, P.E. does not have nor will acquire financial interest in the company manufacturing or distributing the product or in any other entity involved in the approval process of the product named herein.

This product has been evaluated for use in locations adhering to the current Florida Building Code.

See Installation Instructions **VEN001** provided by manufacturer for specific use parameters.

Limits of Use:

1. This product has been evaluated and is in compliance with the current Florida Building Code, excluding the "High Velocity Hurricane Zone" (HVHZ).
2. Product anchors shall be as listed and spaced as shown on details. Anchor embedment into substrate material shall be beyond wall dressing or stucco.
3. When used in areas requiring wind borne debris protection this product complies with Section 1609.1.2 of the current Florida Building Code and does not require an impact resistant covering in Wind Zones 3 or less.
4. Site conditions that deviate from the details of **VEN001** require further engineering analysis by a licensed engineer or registered architect.
5. See Installation Instructions **VEN001** for size and design pressure limitations.



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Certification Agency: The manufacturer has demonstrated compliance of products in accordance with the Florida Building Code for manufacturing under a certification program audited and approved by **Keystone Certifications, Inc.** (FBC Organization #CER1523).

Performance Standards: The product described herein has been tested per:

- AAMA/WDMA/CSA 101/I.S.2/A440-08
- ASTM E1886-05
- ASTM E1996-12

Referenced Data:

1. Product Testing performed by **Architectural Testing**
(FBC Organization # TST7110)
Report #: D4389.01-501-44, Report Date: 10/09/14
Report #: E2513.01-501-44, Report Date: 12/11/14
2. Certification Agency
Keystone Certifications, Inc.
(FBC Organization #CER1523)

Equivalence of Test Standards:

The ASTM E1996 test standard has been evaluated for differences in test methodology, if any, between tested editions of the test standard listed below and the edition referenced in the 2010 Florida Building Code. Ventana USA has tested their products to the following test standard edition:

- 1) ASTM E1996-12

Chapter 35 of the 2010 Florida Building Code references the following edition of the above mentioned test standard:

- 1) ASTM E1996-06

After review of the above mentioned referenced standard and edition, it has been found that no significant technical changes have been made to the test standard that would affect the results or compliance with the code. The referenced standard has been found to be equivalent.

Hermes F. Norero, P.E.
Florida No. 73778
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Installation: 1. Approved anchor types and substrates are as follows:

- A. For two by (2X) wood frame substrate (Min. S.G. = 0.55), use **#10 Wood Screw** type wood frame anchors of sufficient length to achieve minimum embedment of 1.50" into wood framing.
- B. For concrete (Min $f'c = 3000$ psi) or masonry (shall comply with ASTM C90) substrate where one by (1X), non-structural, wood bucking is employed, use **3/16" diameter ITW Tapcon** type concrete screw anchors of sufficient length to achieve minimum embedment of 1.25" into concrete or masonry.
- C. For concrete (Min $f'c = 3000$ psi) or masonry (shall comply with ASTM C90) substrate where wood bucking is NOT employed, use **3/16" diameter ITW Tapcon** type concrete screw anchors of sufficient length to achieve minimum embedment of 1.25" into concrete or masonry.
- D. For Steel Stud substrate (Min 18 ga., $F_y = 33$ ksi) use **#12 TEK Screws** of sufficient length to achieve a minimum of 3 threads penetration beyond steel structure.

Refer to manufacturer Installation Instructions **VEN001** for anchor spacing and more details of the installation requirements.

Design Pressure: +/- 50 PSF