Product Evaluation Report

Product Manufacturer	Product Name, Model and/or Description
Real Woods Inc. 1230 N. East Ave Sarasota, FL 34237	1 3/4" IS & OS Glazed/Opaque Single & Double Impact Door With & W/O Sidelites and Transom (RW0070) 1 3/4" Impact Glazed & Opaque Sidelights (for use with 1 3/4" IS and OS Impact Doors) (RW0071)

Code: Current Edition of the Florida Building Code

Compliance Method: 61G20-3.005(1)(d) – Product Evaluation Report by a Licensed Professional Engineer

Product Name, Model and/or Designation: Products covered by this evaluation include the following.

- 1 3/4" IS & OS Glazed/Opaque Single & Double Impact Door With & W/O Sidelites and Transom (RW0070)
- 1 3/4" Impact Glazed & Opaque Sidelights (for use with 1 3/4" IS and OS Impact Doors (RW0071)

Performance Testing Standards Summary:

Testing was conducted to the following standard(s). See Equivalency Evaluation Report for evaluation of test procedures to the Current Edition of the Florida Building Code.

- ASTM E283-99 & 04, Standard Test Method for Determining Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen
- ASTM E330-02, Standard Test Method for Structural Performance of Exterior windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference.
- ASTM E331-00, Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Uniform Static Air Pressure Difference
- ASTM E1886-02, Standard Test Method for Performance of Exterior Windows, Curtain Walls, Doors, and Impact Protective Systems Impacted by missile(s) and Exposed to Cyclic Pressure Differentials.
- ASTM E1996-02, Standard Test Method for Performance of Exterior Windows, Curtain Walls, Doors, and Impact Protective Systems Impacted by Windborne Debris in Hurricanes.
- TAS201-94, Impact Test Procedures.
- TAS202-94, Criteria for Testing Impact & Non-Impact Resistant Building Envelope Components Using Uniform Static Air Pressure.
- TAS203-94, Criteria for Testing Products Subjected to Cyclic Wind Pressure Loading.

Product Testing, Materials and Certification:

- Testing Evaluation Laboratories, Inc., 2002 Wood Court, Plant City, FL. 33563
    - Test Report No. TEL #2004-08-30-020, dated 8/30/04, signed and sealed by Wendell W. Haney, P.E., testing conducted to TAS 202-94, ASTM E330-02, ASTM E1886-02 and ASTM E1996-02.
    - Test Report No. TEL #06-0418-1, dated 11/30/07, signed and sealed by Wendell W. Haney, P.E., testing conducted to TAS 202-94, ASTM E283-99, ASTM E330-02, ASTM E1886-02 and ASTM E1996-02.

  - Test Report No. Tel #2004-08-30-021, dated 8/30/04, signed and sealed by Wendell W. Haney, P.E., testing conducted to TAS 202-94, ASTM E330-02, ASTM E1886-02 and ASTM E1996-02.
  - Test Report No. TEL #2005-02-22-003, dated 9/11/07, signed and sealed by Vivian K. Wright, P.E., testing conducted to ASTM E330-02 and ASTM E283-04.
  - Test Report No. TEL #05-1008-3-A, dated 11/15/07, signed and sealed by Wendell W. Haney, P.E., testing conducted to TAS 202-94, ASTM E330-02, ASTM E1886-02 and ASTM E1996-02.
- National Certified Testing Laboratories, 8350 Parkline BLVD., Orlando, FL. 32809
  - Test Report No. NCTL-210-3581-1, dated 2/11/09, signed and sealed by Gerard J. Ferrara, P.E. 3/4/09, testing conducted to TAS201-94, TAS202-94 and TAS203-94; ASTM E283-04 and ASTM E331-00.
- Laminating Interlayer
  - Kuraray America Sentryglas (SG) laminating interlayer in conformance with the current edition of the Florida Building Code in accordance with the latest Miami-Dade Notice of Acceptance (NOA) found here.
  - Eastman Chemical Co. Saflex (Keepsafe Max) laminating interlayers in conformance with the current edition of the Florida Building Code in accordance with the latest Miami-Dade Notice of Acceptance (NOA) found here.

Product Installation Instructions:

- PTC PDG Drawing No. RW0070, Original Issue, dated 8/7/20, signed and sealed by Robert. J. Amoruso, 1 3/4" IS & OS Glazed/Opaque Single & Double Impact Door With & W/O Sidelites and Transom; Installation and Anchorage Details.
- PTC PDG Drawing No. RW0071, Original Issue, dated 8/7/20, signed and sealed by Robert. J. Amoruso, 1 3/4" Impact Glazed & Opaque Sidelights (for use with 1 3/4" IS and OS Impact Doors); Installation and Anchorage Details.

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

- PTC Report No. 1427 and No. 1428, *Real Woods Inc. Doors, 1 3/4" IS & OS Glazed/Opaque Single & Double Impact Door W/ & W/Out Sidelites and Transom, Anchorage Engineering*, signed and sealed by Paul E. Winter, P.E.

Limitations & Conditions of Use:

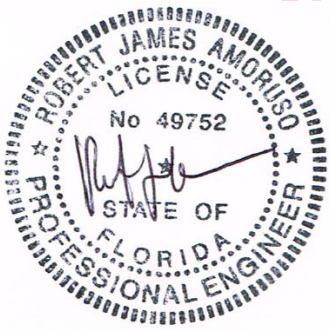
- This product has NOT been evaluated for use inside the HVHZ (High Velocity Hurricane Zone).
- Refer to Product Installation Instructions noted above for:
  - Maximum allowable wind loads at related maximum allowable size(s).
  - Maximum allowed sizes of fenestration components.
  - Anchor type(s), 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 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

PTC Product Design Group, LLC and 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.

PTC Product Design Group, LLC and Robert J. Amoruso, P.E. do 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: 2020.08.12 13:58:30 -04'00'

Evaluated By:
Robert J. Amoruso, P.E.
FL P.E. License Number 49752