



# R W Building Consultants, Inc.

Consulting and Engineering Services for the Building Industry

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Florida Board of Professional Engineers Certificate of Authorization No. 9813

## Product Evaluation Report

Report No.: FL-11174.14 R1  
Date: April 9, 2009  
Product Category: Exterior Doors  
Product sub-category: Swinging Exterior Door Assemblies  
Product Name: Opaque Premium Fiberglass Door  
Inswing / Outswing  
"Non-Impact"  
Manufacturer: Trinity Glass International  
4621 192<sup>nd</sup> Street East  
Tacoma, WA 98446

Scope: This is a Product Evaluation report issued by R W Building Consultants, Inc. and Lyndon F. Schmidt, P.E. (System ID # 1998) for Trinity Glass International based on Rule Chapter No. 9B-72.070, Method 1d of the State of Florida Product Approval, Department of Community Affairs-Florida Building Commission.

RW Building Consultants and Lyndon F. Schmidt, P.E. do 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 Florida Building Code (2007 Edition)

See Drawing No. FL-11174.14 prepared by R W Building Consultants, Inc. and signed and sealed by Lyndon F. Schmidt, P.E. (FL # 43409) for specific use parameters.

Lyndon F. Schmidt, P.E.  
FL No. 43409  
April 9, 2009

## Limitations

1. This product has been evaluated and is in compliance with the 2007 Florida Building Code (FBC) structural requirements including the "High Velocity Hurricane Zone" (HVHZ).
2. Product anchors shall be as listed and spaced as shown on details. Anchor embedment to base material shall be beyond wall dressing or stucco.
3. When used in the "HVHZ" this product is required to be protected with an impact resistant covering that complies with Section 1626 of the 2007 FBC.
4. When used in areas outside of the "HVHZ" requiring wind borne debris protection this product is required to be protected with an impact resistant covering that complies with Section 1609.1.2 of the FBC.
5. For 2x stud framing construction, anchoring of these units shall be the same as that shown for 2x buck masonry construction.
6. Site conditions that deviate from the details of drawing FL-11174.14 require further engineering analysis by a licensed engineer or registered architect.
7. Outswing configurations using threshold item #25 meet water infiltration requirements for "HVHZ".
8. Inswing configurations and outswing configuration using threshold item #27 do not meet the water infiltration requirements for the "HVHZ" and shall be installed only in non-habitable areas or at habitable locations protected by an overhang or canopy such that the angle between the edge of canopy or overhang to sill is less than 45 degrees.
9. See drawing FL-11174.14 for size and design pressure limitations.



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FL No. 43409  
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## Supporting Documents

### A Drawing

1. Drawing No. FL-11174.14 prepared by R W Building Consultants, Inc. (Florida Board of Professional Engineers Certificate of Authorization No. 9813), signed and sealed by Lyndon F. Schmidt, P.E.

### B Tests

1. Materials (Fiberglass door skins by Trinity International) approval number NOA 05-1206.01 issued by Miami-Dade BCCO.
2. Materials (PVC lite frames by Trinity International) approval number NOA 07-0828.01 issued by Miami-Dade BCCO.
3. Materials (Polyurethane foam core) testing per ASTM E84-05 (ASTM E84-05 is equivalent to ASTM E84-04 referenced in the 2007 FBC as evidenced by the comparison evaluation report EQ-E84-05-04 signed and sealed by Lyndon F. Schmidt, P.E.) as performed by ETC Laboratories and reported in test report ETC-05-781-17122.0, signed by Joseph L. Doldan, P.E.
4. Materials (Polyurethane foam core) testing per ASTM E1929-96 (2001) as performed by ETC Laboratories and reported in test report ETC-05-781-17122.0, signed by Joseph L. Doldan, P.E.
5. Testing per TAS 202-94 as performed by Testing Evaluation Laboratories, Inc. and reported in test report TEL 05-1026-1, signed by Wendell W. Haney, P.E.
6. Testing per TAS 202-94 as performed by Testing Evaluation Laboratories, Inc. and reported in test report TEL 01370046, signed by Wendell W. Haney, P.E.

### C Calculations

1. Product anchoring for tested specimens is in accordance with manufacturer's published recommendations as substantiated by tested specimens reported in test report TEL 05-1026-1 and TEL 01370046. Additional product anchor analysis for loading conditions prepared, signed and sealed by Lyndon F. Schmidt, P.E.
2. Buck anchor analysis for loading conditions prepared, signed and sealed by Lyndon F. Schmidt, P.E.
3. Glass load resistance calculations per ASTM E1300 prepared and signed by Lyndon F. Schmidt, P.E.

### D Other

1. Certificate of Participation issued by National Accreditation and Management Institute, certifying that Trinity Glass International is manufacturing products within a quality assurance program that complies with ISO/IEC 17020 and Guide 53.



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