

## WMA 100 CERTIFICATION: BUILT FOR THE DOOR INDUSTRY - NOW LET'S PLAY BALL!

Earlier this year WMA rolled out a new fenestration product certification program to better serve its members' certification needs. WMA also revised its structural performance standard, ANSI/WMA 100-2018, as part of the association's commitment to ensuring that the standard is kept relevant and up-to-date with industry requirements. Both these activities, though on the surface they may appear to be unrelated, are intricately connected in creating a unique opportunity for the door industry at large.

### What's Offered in the NEW WMA Certification Program

The WMA Certification Program is aimed at offering the door industry, and particularly door pre-hangers/distributors, a simplified and streamlined means to product certification while providing competitive product differentiation in the marketplace and ensuring products demonstrate code compliance. This is a one-of-a-kind service being offered to the industry, based on a professional and solid infrastructure established by WMA, as the sponsor of the certification program, and [Keystone Certifications, Inc.](#), as the independent third-party certification and inspection agency for the program.



There are multiple certifications offered under the WMA Certification Program that are widely used in the industry today: structural, thermal, hurricane impact, insulating glass, and manufactured housing. Additionally, Quality Assurance services are offered for the assessment of manufacturer quality management systems in compliance with requirements for Florida Product Approval.

### Why is the ANSI/WMA 100 Standard Relevant to the Door Pre-hanging Industry?

But what is unique to the WMA Certification Program is the addition of structural certification to WMA's very own standard, [ANSI/WMA 100: Standard Method of Determining Structural Performance Ratings of Side-Hinged Exterior Door Systems and Procedures for Component Substitution](#). The standard offers a streamlined, cost-effective, and standardized procedure for obtaining design pressure ratings for side-hinged exterior doors (SHEDs) and is recognized in the International Codes as a referenced standard for wind load requirements.

The standard is streamlined in that it avoids duplicative testing; cost-effective in that it provides allowances for the substitution of a component without having to retest the originally rated door system with the substituted component; and standardized in that it uses the ASTM E330 test method and establishes a systematic way to evaluate components for substitution purposes.



Certification to the WMA 100 is unique in that the standard not only provides a test method for design pressure ratings of SHEDs in residential applications using the ASTM E330 test method, but it also establishes procedures for door component substitution qualification using, among other criteria, a test method for comparing relative door slab stiffness to determine a component's qualification for substitution. As set forth in the standard, in instances when engineering analysis is unable to determine the appropriateness of substituting one component for another, component testing is necessary to determine whether or not that component can be substituted without negatively impacting the original rating of the door system.

When WMA successfully advocated for the adoption of the WMA 100 standard into the 2015 International Residential Code (IRC), compliance to wind load requirements in the I-codes became much more feasible for the door pre-hanging industry, because now there was a comparable alternative standard to NAFS referenced in the code that addresses the component-based nature of side-hinged exterior doors (SHEDs), while being cognizant of the unique structure of the industry's distribution chain. And unlike simply testing to the ASTM E330, which is also an optional compliance path in the code, pre-hangers do not have to test each and every door system they fabricate when they want to switch out a component. The launch of the new WMA Certification Program, which includes certification to the WMA 100, couldn't have come at a better time.

**ATTENTION COMPONENT MANUFACTURER MEMBERS!**  
**Assistance in Developing a Door Component Library**

The task before us now, however, in getting WMA 100 structural certification to run as efficiently as possible is to establish an electronic library of component test data which can grow over time and serve as a repository of component performance information that can be readily accessed for the purpose of substitution qualification.

Door component structural test data, which has been third-party tested to ASTM E330, currently exists; so rather than duplicate this testing time and time again each time you wish to qualify a component, why not house this information in one database for use as needed?

**MEMBERSHIP CALL TO ACTION:**

WMA is asking component manufacturer members to assist in this very important data collection process. Specifically,



- If you are a component manufacturer of door slabs, sidelights, transoms, doorglass assemblies, astragals, or thresholds and have current ASTM E330 test reports that you are willing to donate to the component library, please **contact [Jessica Ferris, Director of Codes and Standards](#)**, who will direct you in providing those test reports to Keystone Certifications.
- **Test data will be kept confidential in the library** and only released upon written authorization from the component manufacturer of the test report.

**Slab Stiffness Testing**

Slab stiffness data will also be included in the component library. Slab stiffness testing is conducted in accordance with Section 9 of the WMA 100 and will need to be performed by an accredited testing laboratory to be used in the library. Deflection measurement results can then be reported to Keystone Certifications. Doorslab manufacturers who can begin this testing now have a head start in offering slab data to their customers wanting to certify to the WMA 100.

Slab stiffness plays a key role in determining component substitution qualification. The stiffness of the slab used in component testing must be equal to or greater than the stiffness of the originally rated door slab before a tested component can be considered for substitution.

**Conclusion**

WMA hopes that component suppliers and distributors will come together and take advantage of this unique opportunity to differentiate their products and demonstrate to code officials and consumers alike that their SHEDs meet specified wind load requirements and are structurally sound. We have built it; we hope you come. **Now is the time to certify to WMA 100.**

For those of you more visually inclined, **the flowchart below** shows component data input and output for component substitution.

# Component Data Library

