



NATIONAL CERTIFIED TESTING LABORATORIES

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December 1, 2021

Kevin Egle
FrontLine Building Products, Inc.
610 Jensen Drive
Medford, Wisconsin 54451

RE: Equivalence of ASTM E1996-12 to ASTM E1996-17

Dear Mr. Egle:

At your request, I have reviewed the ASTM test method standard used for your product approvals to evaluate its equivalence to the same test method standard referenced by the Florida Building Code, Building, 7th Edition (2020). Specifically, I am comparing:

ASTM E1996-12 Standard Specification for Performance of Exterior Windows, Curtain Walls, Doors, and Impact Protective Systems Impacted by Windborne Debris in Hurricanes

ASTM E1996-17 Standard Specification for Performance of Exterior Windows, Curtain Walls, Doors, and Impact Protective Systems Impacted by Windborne Debris in Hurricanes (Reference Standard of 2020 FBC)

Noted differences between the standards include:

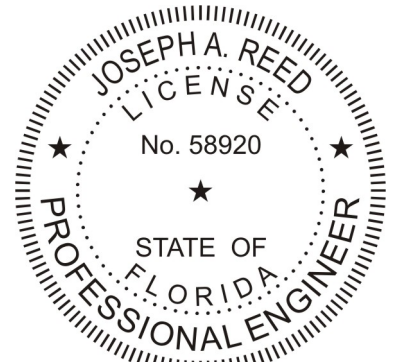
1. In ASTM E1996-17, deletion of Wind Zone 4 from the body of the standard and creation of Annex X4 to contain the language associated with Wind Zone 4.
2. In ASTM E1996-17, the wind speeds used to define the wind zones changed to reflect changes made in ASCE 7.
3. In ASTM E1996-17, a general revision to Annex A1 *Fenestration Substitutions*.

The noted differences do not affect the test specimen requirements, test methods or interpretation of results. And, the revised substitution criteria would only be relevant for additional testing beyond the initial three identical test specimens. Thus, it is my professional opinion that the test method standards are equivalent.

NATIONAL CERTIFIED TESTING LABORATORIES, INC.

Joseph A. Reed, PE
FL PE 58920
FL REG 33474

cc: 24798-1



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