



398 E DANIA BEACH BLVD. SUITE 338, DANIA BEACH, FL 33004

Product Evaluation Report

of

**YKK AP America, Inc.
YHS 50 TU OG Aluminum Storefront System
(HVHZ) (Impact)**

for

Florida Product Approval

FL# FL14218

Report No. 6948

Current Florida Building Code

Method:	1 – D (Engineering Evaluation)
Category:	Panel Walls
Sub – Category:	Storefronts
Product:	YHS 50 TU OG Aluminum Storefront System
Materials:	Aluminum 6063-T5
Product Dimensions:	See Installation Instructions, YKK161

Prepared for:

**YKK AP America, Inc.
1229 Hwy 441 Bypass
Dublin, GA 31021**

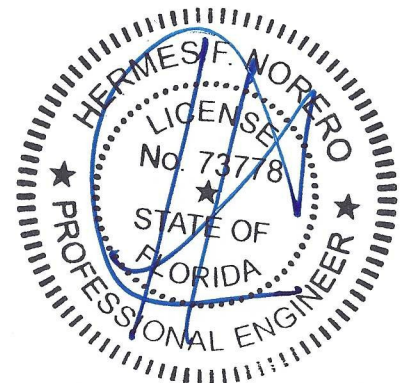
Prepared by:

Hermes F. Norero, P.E.
Florida Professional Engineer # 73778
Date: 07/02/2020

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Hermes F. Norero, P.E.
Florida No. 73778

398 E DANIA BEACH BLVD. SUITE 338, DANIA BEACH, FL 33004

Manufacturer: YKK AP America, Inc.

Product Category: Panel Walls

Product Sub-Category: Storefronts

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

Product Name: YHS 50 TU OG Aluminum Storefront System (HVHZ) (Impact)

Scope: This is a Product Evaluation Report issued by Hermes F. Norero, P.E. (FL # 73778) for **YKK AP America, Inc.** based on Method 1d of the State of Florida Product Approval, 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 **YKK161**, signed and sealed by Hermes F. Norero, P.E. (FL # 73778) for specific use parameters.

Limits of Use:

1. This product has been evaluated and is in compliance with the current Florida Building Code, **including** 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 Chapter 16 of the current Florida Building Code and **does not require** an impact resistant covering.
4. Site conditions that deviate from the details of drawing **YKK161** require further engineering analysis by a licensed engineer or registered architect.
5. See Installation Instructions **YKK161** for size and design pressure limitations.

Quality Assurance: The manufacturer has demonstrated compliance of manufacture of products in accordance with the current Florida Building Code for manufacturing under a quality assurance program audited by an approved quality assurance entity through **Architectural Testing, Inc.** (FBC Organization # QUA1844).

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

- AAMA 501-15
- ASTM E1886-13a
- ASTM E1997-17
- TAS 201-94
- TAS 202-94
- TAS 203-94

Referenced Data:

1. Product Testing performed by **Architectural Testing, Inc.**
(FBC Organization # TST3892)
Report #: 3925.01-550-18, Report Date: 12/12/11
Report Signed and Sealed by Vinu J. Abraham, FL PE No. 53820
Report #: G7229.01-550-18, Report Date: 03/13/17
Report Signed and Sealed by Justin P. McDonald, FL PE No. 77418
2. Product Testing performed by **Hurricane Testing Laboratory**
(FBC Organization # TST3892)
Report #: 0231-0704-04, Report Date: 10/26/04
Report #: 0231-1203-08, Report Date: 12/18/08
Report #: 0231-1001-10, Report Date: 10/22/10
Report #: 0231-0306-11, Report Date: 04/25/11
Reports Signed and Sealed by Vinu J. Abraham, FL PE No. 53820
3. Product Testing performed by **America Test Lab of South Florida**
(FBC Organization # TST3782)
Report #: 0809.01-06, Report Date: 11/08/06
Report Signed and Sealed by William Mehner, FL PE No. 7496
4. Quality Assurance
Architectural Testing, Inc.
(FBC Organization # QUA1844)

5. Material Certification
Miami-Dade County Notice of Acceptance
Kuraray America Inc (Previously DuPont)
SentryGlas Interlayer
6. Material Certification
Miami-Dade County Notice of Acceptance
Eastman Chemical Company
Saflex CP (Vanceva Composites) PVB Interlayer

Equivalence of Test Standards:

Various test standards have been evaluated for differences in test methodology, if any, between tested editions of the test standards listed below and those editions referenced in the current Florida Building Code. YKK AP America, Inc. has tested their products to the following test standard edition(s):

- 1) ASTM E283, ASTM E330, ASTM E331, TAS 202-94
- 2) ASTM E1886-05
- 3) ASTM E1996-06

Chapter 35 of the current Florida Building Code references the following editions of the above mentioned test standards:

- 1) AAMA 501-15
- 2) ASTM E1886-13a
- 3) ASTM E1996-17

After review of the above mentioned referenced standards and editions, it has been found that the results and tests carried out meet the requirements for compliance. All referenced standards have been found to be equivalent.

Installation:

Refer to Installation Instructions (**YKK161**) for anchor spacing and more details of the installation requirements.

Design Pressure:

Refer to Installation Instructions (**YKK161**) for design pressures based on size, configuration, and glass types.