



BUILDING DROPS

A Perfect Solution in Every Drop

Certificate of Authorization: 29578

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Product Evaluation Report

of

**YKK AP America, Inc.
Series “YHS 50 TU” Aluminum Storefront System
HVHZ Impact Rated**

for

Florida Product Approval

FL# FL14218

Report No. 4013

Current Florida Building Code

Method: 1 – D (Engineering Evaluation)
Category: Panel Walls
Sub – Category: Storefronts

Product: YHS 50 TU Storefront System
Material: Aluminum 6063-T5
Product Dimensions: See installation instructions, YKK161

Prepared For:
YKK AP America, Inc.
332 Firetower Road
Dublin, GA 31021

Prepared by:
Hermes F. Norero, P.E.
Florida Professional Engineer # 73778
Date: 12/18/2015

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Date: 12/18/2015

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Manufacturer: YKK AP America, Inc.

Product Category: Panel Walls

Product Sub-Category: Storefronts

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

Product Name: Series "YHS 50 TU" Aluminum Storefront System

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, Florida 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 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 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 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.



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Quality Assurance:

The manufacturer has demonstrated compliance of manufacture of products in accordance with the Florida Building Code for manufacturing under a quality assurance program audited by an approved quality assurance entity through **Architectural Testing, Inc.** (FBC Organization #: QUA 1844).

Performance Standards:

The product described herein has been tested per:

- AAMA 101/I.S.2/NAFS-02
- AAMA 501-05
- ASTM E283-99
- ASTM E330-02
- ASTM E331-00
- ASTM E1886-05
- ASTM E1996-09
- TAS 201-94
- TAS 202-94
- TAS 203-94

Referenced Data:

1. Product Testing performed by **Hurricane Testing Laboratory**
Report #: 0231-0704-04, Report Date: 10/26/04
Report #: 0231-1203-08, Report Date: 12/18/08
Report #: 0231-0306-11, Report Date: 04/25/11
Report #: 0231-1001-10, Report Date: 10/22/10
2. Product Testing performed by **Architectural Testing**
(FBC Organization # TST3892)
Report #: 3925.01-550-18, Report Date: 12/12/11
3. Product Testing performed by **America Test Lab of South Florida**
(FBC Organization # TST3782)
Report #: 0809.01-06, Report Date: 11/08/06
4. Material Certification
Miami-Dade County Notice of Acceptance
E.I. DuPont De Nemours & Co. Inc. (now Kuraray America)
SentryGlas Interlayer
5. Material Certification
Miami-Dade County Notice of Acceptance
Eastman Chemical Company (Previously Solutia)
Vanceva Storm (Saflex CP)

Hermes F. Norero, P.E.

Florida No. 73778

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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.

Equivalence of Test Standards:

- I. Various test standard(s) 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 has tested their products to the following test standard edition(s):
 - 1) ASTM E283-99

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

- 1) ASTM E283-04

After review of the above mentioned referenced standards and editions, it has been found that no significant technical changes have been made to the test standards that would affect the results. All referenced standards have been found to be equivalent. All materials test results meet minimum requirements of the current Florida Building Code.

- II. 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 has tested their products to the following test standard edition(s):
 - 2) ASTM E283
 - 3) ASTM E331
 - 4) ASTM E330
 - 5) TAS 202-94

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

- 2) AAMA 501-05

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 with AAMA 501-05. All referenced standards have been found to be equivalent.