

# Certificates/Standards

updated on March 31 2025

## ▼ NFRC (National Fenestration Rating Council) Certified

The number of CPDs in the NFRC website shows 347 (38+167+142). Add the number of 5 mm EHD which is the same number as 6 mm EHD (12+58+50):  
The total number is **467**.

<https://search.nfrc.org/search/Searchdefault.aspx>

### from simulation test reports

- ANSI/NFRC 100-2017 Procedure for Determining Fenestration Product U-factors
- ANSI/NFRC 200-2017 Procedure for Determining Fenestration Product Solar Heat Gain Coefficients and Visible Transmittance at Normal Incidence
- NFRC 500-2017 Procedure for Determining Fenestration Product Condensation Resistance Value
- THERM 7/ WINDOW 7 NFRC Simulation Manual (July 2017)
- NFRC 2010 Technical Interpretations Manual (November 2017)
- NFRC 601 Units and Measurement Policy

### from NFRC Thermal Test Summary Report

- NFRC 102-2017 Procedure for Measuring the Steady-State Thermal Transmittance of Fenestration Systems
- NFRC 400-2017 Procedure for Determining Fenestration Product Air Leakage
- ANSI/NFRC 400
- ASTM E283-04(12)
- NCTL is a testing lab accredited by A2LA to ISO/IEC 17025
- ASTM C1363
- ASTM C1199

▼ **California Title 24**

We cover both prescriptive method and performance method.

- California Title 24 prescriptive method
- California Title 24 performance method

▼ **ANSI Accredited**

ANSI: American National Standard Institute

Refer to NFRC Certified

## ▼ Florida Product Approval - Hurricane/High Wind

We have two FL numbers and eight variants.

### FL numbers

FL35364-R1

Category: Exterior Doors

Subcategory: Swinging Exterior Door Assemblies

FL41797-R1

Category: Exterior Doors

Subcategory: Swinging Exterior Door Assemblies

### Variants

35364.1

35364.2

41797.1

41797.2

41797.3

41797.4

41797.5

41797.6

[https://www.floridabuilding.org/pr/pr\\_app\\_lst.aspx](https://www.floridabuilding.org/pr/pr_app_lst.aspx)

from 'Florida TAS .... Structural, Impact & Cycling Test Report Summary'

- Florida Building Code TAS 201-94 Impact Test Procedures
- Florida Building Code TAS 202-94 Criteria for Testing Impact and Non-Impact Resistant Building Envelope Components using Uniform Static Air Pressure
- Florida Building Code TAS 203-94 Criteria for Testing Products Subjected to Cyclic Pressure Loading
- ASTM E283: Air leakage Resistance
- ASTM E331: Water Resistance Test
- ASTM E330: Static Air Pressure Tests
- ASTM F842: Forced Entry Resistance

from 'AAMA/WDMA.... Test Report Summary'

- AAMA/WDMA/CSA 101/I.S.2/A4407-17
- AAMA/WDMA/CSA 101/I.S.2/A4407-11

NAFS - North American Fenestration Standard/Specification for windows, doors, and skylights

- ASTM E1886-05
- ASTM E1996-05/09 (WZ4)
- ASTM E283-04(12): Air leakage Resistance
- ASTM E547-00(16): Water Penetration Resistance
- ASTM E330-14: Uniform Load Deflection at Design Pressure
- ASTM E330-14: Uniform Load Structural Test
- ASTM F842-14: Forced Entry Resistance
- ASTM E987-88(09): Deglazing Test
- ASTM E1996 (section 6): Large Missile Impact Performance Test
- ASTM E1996-05: Cycle Wind Pressure Loading
- AAMA A440
- ASTM E1886
- ASTM E1996

▼ **ICC/TAS Tested - Hurricane/High Wind**

ICC (International Code Council) / TAS (TESTING APPLICATION STANDARD):  
TAS 201 / TAS 202 / TAS 203 : Refer to **Florida Product Approval - Hurricane/ High Wind**

▼ **Miami Dade NOA (Notice of Acceptance) - Hurricane/ High Wind**

Florida + HVHZ covers Miami Dade. Refer to 'Florida Product Approval'

▼ **HVHZ Impact Certified - Hurricane/ High Wind**

HVHZ: High Velocity Hurricane Zone

Refer to 'Florida Product Approval'

▼ **Texas Department of Insurance Approved - Hurricane/ High Wind**

<https://www.tdi.texas.gov/wind/prod/thirdpartydrhgalumim.html>

FL 41797.1

FL 41797.2

FL 41797.3

▼ **WDMA Tested** - Hurricane/ High Wind

WDMA: Window and Door Manufacturers Association

Refer to 'Florida Product Approval'

▼ **CAS Tested** - Hurricane/ High Wind

CAS: Canadian Standards Association

Refer to 'Florida Product Approval'

▼ **AAMA Tested**

AAMA: American Architectural Manufacturers Association

Refer to 'Florida Product Approval/Fropon/AZON/'

▼ **ASTM Tested**

Refer to 'NFRC/Hurricane&High Wind/Fropon/SentryGlas/AZON/Jasan'

▼ **IGMA Approved**

IGMA + AAMA => FGIA (Fenestration and Glazing Industry Alliance)

Glass Fabrication

▼ **IGCC Certified**

Glass Fabrication

▼ Fropon - Aluminum finish

- AAMA 2605 Mortar Resistance
- AAMA 2605 Window Cleaner Resistance
- AAMA 2605 Muriatic Acid Resistance
- ASTM D523 Gloss
- ASTM D3363 Pencil Hardness
- ASTM D3359 Adhesion
- ASTM D2794 Impact Resistance
- ASTM D968 Abrasion Resistance
- ASTM D2248 Detergent Resistance
- ASTM D2244 Nitric Acid Resistance
- ASTM D2247 Humidity Resistance
- ASTM B117 Salt Spray Resistance
- ASTM D523 Weathering - Gloss Retention
- ASTM D659 Weathering - Chalk Retention
- ASTM B244 Weathering - Resistance to Erosion

▼ Jasan - Glass fabrication

- ASTM E2190

in compliance with ASTM E2190 for seal durability of insulating glass units and passing gas content initial and after weathering (GCIA) certification requirements as indicated. (for Jasan Glass - JSG)

▼ AZON - Thermal Break

- AAMA TIR-A8 (16)
- ASTM D638 Tensile strength
- ASTM D638 Elongation at break
- ASTM D638 Modulus of elasticity
- ASTM D256 Notched izod impact
- ASTM C518 Thermal conductivity K-factor
- ASTM D648 Heat distortion temperature at 0.46 MPa (66 psi)
- ASTM D696 Coefficient of linear thermal expansion
- ASTM D1622 Mixture density
- ASTM D2240 Hardness
- LEED
- ISO 9001
- Energy Star
- AIA

▼ SentryGlas - PVB glass

- ASTM D4065 Dynamic mechanical analysis and creep tests
- EN ISO 1288-3 Four-point bend test
- ASTM C158
- ASTM E1300 Effective thickness
- prEN 13474
- ASTM D1003 Haze
- ANSI Z26.1 Impact test 227 g (0.5 lb)
- ANSI Z26.1 boil test 2 hr
- ANSI Z26.1 bake test 2 hr
- ASTM D5026 Young's Modulus
- ASTM D638 Tear Strength
- ASTM D638 Tensile Strength
- ASTM D638 Elongation
- ASTM D792 Density
- ASTM D790 Flex Modulus
- ASTM (DSC) Melting Point
- ASTM D696 Coef. of thermal expansion
- ASTM D1925 Test Method for Yellowness Index of Plastics
- EN ISO 673 Ug-value
- EN 410 g-value, reflection, absorption, transmittance
- EN ISO 52022-3 gtotal-value, previously EN ISO 13363
- ISO 15099/ ASHRAE Ug-value, SHGC-value, reflection, absorption, transmittance
- ASTM C 1172 Minimum and maximum thickness tolerance
- ASHRAE Shading Coefficients (SC) and summer U-value
- EN 410/ISO9050
- ASTM E90 Laboratory Measurement of Airborne Sound Transmission of Building Partitions
- ASTM E413
- ASTM E1332
- Edge Stability Number (ESN)
- ANSI Z971 Safety Glazing Materials Used in Buildings - Safety Performance Specifications and Methods for Test

- EN 12543
- ASTM B117-11 Salt spray fog testing
- ASTM C1087, ETAG 002, IFT-Guideline DI-02engll/1/2/3
- GANA LD 103-14
- IFT Guidelines DI-02/1
- CQP 593-7, IFT Guideline DI-02/1
- ANSI Z26.1 (5.3 -3) Coffin
- ASTM G151, 154-06, ISO 4892-1 & 4582 UV (UVA-340)
- ASTM G 7-05 & G 147-02 Natural Weathering
- CPSC 16 CFR 1201 safety glazing standards
- ASTM D1929: Standard test method for determining ignition temperature of plastics
- ASTM E84 Standard test method for surface burning characteristics of building materials
- ASTM D635 Standard test method for rate of burning and/or extent and time of burning of plastics in a horizontal position