

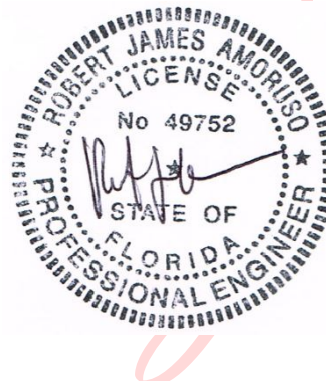


Product Evaluation Report

Date:	October 18, 2023
Report #:	1382
Report Revision No.:	4
Project #:	423-0203
Product Mfg.:	Loewen Windows 77 Highway 52 West, Box 2260 Steinbach, Manitoba R5G 1B2, Canada
Product Description:	Aluminum Clad StormForce Sliding Patio Doors - LMI
Product Category:	Exterior Doors
Product Sub-Category:	Sliding Exterior Door Assemblies
Compliance Method:	Product Approval Rule 61G20-3.005(1)(a) – Certification Method
Prepared By:	Robert J. Amoruso, P.E. Florida P.E. No. 49752 PTC Product Design Group, LLC, PO Box 520775, Longwood, FL 32752-0775 Florida C of A No. 25935

CERTIFICATE OF INDEPENDENCE

PTC Product Design Group, LLC and Robert J. Amoruso, P.E. do not have, nor will acquire, any financial interest in the company manufacturing or distributing product(s) covered by the aforementioned Product Evaluation Report. PTC Product Design Group, LLC and Robert J. Amoruso, P.E. do not have, nor will acquire any financial interest in any other entity involved in the approval process or testing of the product(s) covered by the aforementioned Product Evaluation Report.



Digitally signed
by Robert J
Amoruso
Date:
2023.11.22
09:01:03 -05'00'

Evaluated by:
Robert J. Amoruso, P.E.
Florida P.E. License Number 49752



SCOPE

Evaluate Loewen Windows Aluminum Clad StormForce Sliding Patio Doors – LMI for conformance to the 8TH Edition (2023) Florida Building Code – Building and Residential Volumes including the High Velocity Hurricane Zone (HVHZ).

The engineering analysis (Reference 3) determines the anchorage of the product to the supporting substrate and the product evaluation report (this document) summarizes Current Edition of the FBC compliance verification and appropriate Limitations and Conditions of Use.

DESCRIPTION OF PRODUCT – INSTALLATION REQUIREMENTS

See Reference 1 for a description of the product, its installation and other pertinent data related to its approved use.

CODE CONFORMANCE

This product is designed to comply with the 8TH Edition (2023) Florida Building Code (FBC) requirements including the High Velocity Hurricane Zone (HVHZ).

LIMITATIONS AND CONDITIONS OF USE

This product evaluation contains or makes reference to specifications, technical details and installation details and/or methods that pertain to the proper use and/or installation of the product specified herein. Specific limitations and conditions of its use including but not limited to the following are contained in Reference 1 and are the subject of Product Approval in accordance with the State of Florida Product Approval Rule 61G20-3.

- Design Pressure Rating (psf)
- Installation substrate requirements.
- Installation anchor requirements.
- Installation restrictions.
- Product description.
- Product components.

MATERIAL CERTIFICATIONS

Material certifications for Laminated Glass interlayers are as follows:

1. Kuraray America SentryGlas interlayer material certification per current Miami-Dade Notice of Acceptance (NOA) and can be found [here](#).



PERFORMANCE AND TESTING STANDARDS

Reference 2 conducted testing to the following standard(s).

1. TAS 201-94 - Impact Test Procedures
2. TAS 202-94 - Criteria for Testing Impact & Nonimpact Resistant Building Envelope Components Using Uniform Static Air Pressure
3. TAS 203-94 - Criteria for Testing Products Subject to Cyclic Wind Pressure Loading

The revisions to the above test standards as part of the 8th Edition (2023) FBC revision have been reviewed (Reference 3.b) and found not to affect the method of testing, acceptance criteria, or reporting criteria in such a manner as to result in any change in the performance of the aforementioned product. As such, test results obtained as a result of testing to these standards are valid for demonstrating compliance to the 8th Edition (2023) FBC.

REFERENCES & SUPPORTING DOCUMENTS

1. Drawings
 - a. Drawing No. LOEW0002, Revision D, dated 10/18/23, signed and sealed by Robert J. Amoruso, P.E., Loewen Windows, *Aluminum Clad StormForce Sliding Patio Doors Installation Anchorage Details*.
2. Test Reports
 - a. Testing conducted to TAS201-94, TAS202-94 and TAS203-94 and documented in Test Report No. ATI 89339.03-201-44, signed, and sealed by Joseph A. Reed, FL PE No. 58920 on 3/23/09, by Architectural Testing Inc., 849 Western Ave. North, St. Paul, MN 55117.
3. Reports
 - a. PTC Report No. 1383, Rev. 4, Loewen Windows, *Aluminum Clad StormForce Sliding Patio Doors - LMI, Anchorage Engineering*, Dated 4/16/15, signed and sealed by Robert J. Amoruso.
 - b. PTC Report No. 1382, Rev. 4, Loewen Windows, *Aluminum Clad StormForce Sliding Patio Doors - LMI, Equivalency Evaluation Report*, dated 10/18/23, signed and sealed by Robert J. Amoruso.
4. Florida Building Code
 - a. 8TH Edition (2023) Florida Building Code (FBC), Building Volume
 - b. 8TH Edition (2023) Florida Building Code (FBC), Residential volume