**Miami-Dade County, Florida**
Department of Regulatory and Economic Resources
Board and Code Administration Division
Product Control Section
11805 S.W. 26 Street-Room 208
Miami, Florida 33175-2474
T (786) 315-2590 Fax (786) 315-2599

# Laboratory Certificate

This certifies that UL Laboratory Canada, Inc. located at 1320 Lionel-Boulet Boulevard, Varennes, QC J3X 1P7 is an approved Testing Laboratory in accordance with Miami-Dade County Department of Regulatory and Economic Resources and Protocol TAS301-94, and is Certified to perform the following tests:

TAS201
TAS202
TAS203
IAS Accreditation Report No.TL-851

Results of the above mentioned test shall be properly submitted to the Miami-Dade County Department of Regulatory and Economic Resources per TAS301-94, along with all other documentation required for the approval of products. Approved engineer(s) for this laboratory:

Alexis Spyrou, P.E.

***This Certification and Registration Approved:*** **February 22, 2024**
***This Certification and Registration Expires :*** **February 7, 2029**

***Certification No.*** : **24-0126.01** *Renews: 23-0126.02*

*Helmy A. Makar, P.E., MS*
*Product Control Section Supervisor*
*Product Control Section*

*Americo Segura, M.S., CGC*
*Quality Assurance Unit Supervisor*
*Product Control Section*

The Miami-Dade County Department of Regulatory and Economic Resources reserves the right to remove this certification for non-compliance with rules and regulations as set by Protocol TAS301-94.

# CERTIFICATE OF ACCREDITATION

*This is to attest that*

## UL LABORATORY CANADA INC.

1320 LIONEL-BOULET BOULEVARD
VARENNES, QUEBEC J3X 1P7, CANADA

**Testing Laboratory TL-851**

has met the requirements of AC89, *IAS Accreditation Criteria for Testing Laboratories*, and has demonstrated compliance with ISO/IEC Standard 17025:2017, *General requirements for the competence of testing and calibration laboratories.* This organization is accredited to provide the services specified in the scope of accreditation.

Effective Date June 13, 2023

***President***

Visit www.iasonline.org for current accreditation information.

# SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | www.iasonline.org

## UL LABORATORY CANADA INC.

www.ul.com/building envelope

**Contact Name** Gunsimar Paintal **Contact Phone** +1-416-288-2217

*Accredited to ISO/IEC 17025:2017* *Effective Date June 13, 2023*

| **Physical Testing** | |
|---|---|
| AAMA 450 | Voluntary Performance Rating Method for Mulled Fenestration Assemblies |
| AAMA 501 | Method of Test for Metal Curtain Walls. (Only Sections 501.1, 501.2, 501.3, 501.4, 501.5, 501.6, 501.7 and 501.8) |
| AAMA 502 | Voluntary Specification for Field Testing of Windows and Sliding Glass Doors |
| AAMA 503 | Voluntary Specification for Field Testing of Storefronts, Curtain Walls and Sloped Glazing Systems |
| AAMA 506 | Voluntary Specifications for Impact and Cycle testing of Fenestration Products |
| AAMA 508 | Voluntary Test Method and Specification for Pressure Equalized Rain Screen Wall Cladding Systems |
| AAMA 509 | Voluntary test and classification method for drained and back ventilated rain screen wall cladding systems |
| AAMA 513 | Standard Laboratory Test Method for Determination of Forces and Motions Required to Activate Operable Parts of Operable Windows and Doors in Accessible Spaces |
| AAMA 901 | Voluntary Specifications for Rotary & Linear Operators in Window Applications |
| AAMA 902 | Voluntary Specification for Sash Balances |
| AAMA 904 | Voluntary Specification for Multi-Bar Hinges in Window Applications |
| AAMA 906 | Voluntary Specification for Sliding Door and Lift and Slide Roller Assemblies |
| AAMA 910 | Voluntary “Life Cycle” Specifications and Test Methods for Architectural Windows and Doors |
| AAMA 920 | Specification for Operating Cycle Performance of Side-Hinged Exterior Door Systems |
| AAMA 925 | Specification Determining the Vertical Loading Resistance of Side-Hinged Door Leaves |

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| AAMA 930 | Voluntary Specification for the Water Penetration Resistance and Structural Load Performance of Locking/Latching Hardware Used in Side-Hinged Door System |
| AAMA 1304 | Voluntary Specification for Forced Entry Resistance of Side-Hinged Door Systems |
| AAMA 1701.1 | Voluntary Standard for Utilization in Manufactured Housing for Primary Windows and Sliding Glass Doors |
| AAMA 1702.2 | Voluntary Standard for Utilization in Manufactured Housing for Swinging Exterior Passage Doors |
| AAMA/WDMA/CSA 101/I.S.2/A440 | Standard/Specification windows, doors, and unit skylights (Except for: Materials and component requirements) |
| AAMA/WDMA/CSA 101/I.S.2/A440S1 | Canadian Supplement to AAMA/WDMA/CSA/ 101/I.S.2/A440 |
| AAMA/NWWDA 101/I.S.2-97 | Voluntary Specifications for Aluminum, Vinyl (PVC) and Wood Windows and Glass Doors |
| ANSI Z97.1 | American National Standard for safety glazing materials used in buildings (only Sections 5.1 and 5.2) |
| ANSI/BHMA A156.1 | American National Standard for Butts and Hinges |
| ANSI/DASMA 108 | Standard Method for Testing Sectional Garage Doors and Rolling Doors: Determination of Structural Performance Under Uniform Static Air Pressure Difference |
| ANSI/SDI A250.4-201 | Test Procedure and Acceptance Criteria for- Physical Endurance for Steel Doors, frames and Frame Anchors |
| ASTM C1153 | Standard Practice for Location of Wet Insulation in Roofing Systems Using Infrared Imaging |
| ASTM D3161 | Standard test method for wind resistance of steep slope roofing products (fan-induced method) |
| ASTM D5206 | Standard test method for wind load resistance of rigid plastic siding |
| ASTM E283 | Standard Test Method for Determining the rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen |
| ASTM E330 | Standard Test Method for Structural Performance of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference |
| ASTM E331 | Standard Test Method for Water Penetration of Exterior Windows, Curtain Walls, and Doors by Static Air Pressure Difference |
| ASTM E405 | Standard Test Methods for Wear Testing Rotary Operators for Windows |

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| ASTM E547 | Standard Test Method for Water Penetration of Exterior Windows, Curtain Walls, and Doors by Cyclic Air Pressure Differential |
| ASTM E576 | Standard Test Method for Frost/Dew Point of Sealed Insulated Glass Units in the Vertical Position |
| ASTM E779 | Standard Practice for Determining Air Leakage Rate by Fan Pressurization |
| ASTM E783 | Standard Test Method for Field Measurement of Air Leakage Through Installed Exterior Windows and Doors |
| ASTM E935 | Standard Test Methods for Performance of Permanent Metal Railing Systems and Rails for Buildings |
| ASTM E96 | Standard Test Methods for Water Vapor Transmission of Materials |
| ASTM E987 | Standard Test Methods for Deglazing Force of Fenestration Products |
| ASTM E1105 | Standard Test Method for Field Determination of Water Penetration of Installed Exterior Windows, Curtain Walls, and Doors by Uniform or Cyclic Static Air Pressure Difference |
| ASTM E1186 | Standard Practice for Air Leakage Site Detection in Building Envelopes and Air Barrier Systems |
| ASTM E1886 | Standard Test Method for Performance of Exterior Windows, Curtain Walls, Doors, and Impact Protective Systems Impacted by Missile(s) and Exposed to Cyclic Pressure Differentials |
| ASTM E1996 | Standard Specification for Performance of Exterior Windows, Curtain Walls, Doors, and Impact Protective Systems Impacted by Windborne Debris in Hurricanes |
| ASTM E2068 | Standard Test Methods for Determination of Operating Force of Sliding Windows and Doors |
| ASTM E2178 | Standard Test Method for Air Permeance of Building Materials |
| ASTM E2357 | Standard Test Method for Determining Air leakage of Air Barrier Assemblies |
| ASTM F476 | Standard Test Methods for Security of Swinging Door Assemblies |
| ASTM F588 | Standard Test Methods for Measuring the Forced Entry Resistance of Window Assemblies (except Glazing Impact) |
| ASTM F842 | Standard Test Methods for Measuring the Forced Entry Resistance of Sliding Door Assemblies (Except Glazing Impact) |
| CSA A500 | Building Guards (Only No.5 Testing) |
| CAN/CSA A123.24-15 | Standard test method for wind resistance of modular vegetated roof assembly |
| CAN/CSA A440 | Windows (only Sections 11.2, 11.3, 11.4, 11.5, 11.6, 11.7, 11.8, 11.9, 11.10, 11.11, 11.12, 11.13 and 11.14) |

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| CAN/CGSB 63.14-M89 | Plastic Skylights (only Sections 7.2.3, 7.2.4 and 7.2.5) |
| CAN/CGSB 82.1-M89 | Sliding Doors (only Sections 7.3, 7.4, 7.5, 7.6, 7.7, 7.8, 7.9 and 7.10) |
| CAN/CGSB 149.10 [M86] | Determination of the Airtightness of Building Envelopes by the Fan Depressurization Method |
| CAN/ULC S741 | Standard for Air Barrier Materials – Specification |
| CAN/ULC S742 | Standard for Air Barrier Assemblies – Specification |
| CAN2-12.1-M | Glass, Safety, Tempered or Laminated |
| ICC AC17 | Acceptance Criteria for Glass Glazed Unit Skylights and Sloped Glass Glazing (AC17) - Part A |
| NFRC 400 | Procedure for Determining Fenestration Product Air Leakage |
| NFRC 500 | Procedure for Determining Fenestration Product Condensation Resistance Values |
| TAS 201-94 | Impact Test Procedures |
| TAS 202-94 | Criteria for Testing Impact & Nonimpact Resistant Building Envelope Components using Uniform Static Air Pressure |
| TAS 203-94 | Criteria for Testing Products Subject to Cyclic Wind Pressure Loading |
| WDMA T.M.-7 | Test Method for Determining the Physical Endurance of Wood Doors & Associated Hardware Connections under Operating Conditions |
| **Thermal Transmittance** | |
| AAMA 1503 | Voluntary Test Method for Thermal Transmittance and Condensation Resistance of Windows, Doors and Glazed Wall Sections |
| AAMA 1506 | Voluntary Test Method for Laboratory Heat Build-Up Effects on Fenestration Products |
| ANSI/DASMA 105 | Test Method for Thermal Transmittance and Air Infiltration of Garage Doors |
| ASTM C518 | Standard Test Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus. Only for: measurements of specimens of thermal insulation without any metal, foil-covered or dense plastic facers. |
| ASTM C1060 | Standard Practice for Thermographic Inspection of Insulation Installations in Envelope Cavities of Frame Buildings |
| ASTM C1199 | Standard Test Method for Measuring the Steady-State Thermal transmittance of Fenestration Systems using Hot Box Methods |
| ASTM C1363 | Standard Test Method for the Thermal Performance of Building Assembly by means of a Hot Box Apparatus |

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| ASTM C1371 | Standard Test Method for Determination of Emittance of Materials Near Room Temperature using Portable Emissometers |
| ASTM D4803 | Standard Test Method for Predicting Heat Buildup in PVC Building Products |
| ASTM E1423 | Standard Practice for Determining Steady State Thermal transmittance of fenestration Systems |
| CAN/ULC S-770 | Standard Test Method for Determination of Long-term thermal Resistance of Closed-Cell Thermal insulating Foams |
| CAN/CSA A440.2 | Energy Performance of Windows and other Fenestration Systems [Exclude: (SHGR measurement) NFCR 201; (Visible Transmittance) NFCR 202] |
| NFRC 100 | Procedure for Determining Fenestration Product U-Factors |
| NFRC 101 | Procedure for Determining Thermophysical Properties of Materials for Use in NFRC-Approved Software Programs |
| NFRC 102 | Test Procedure for Measuring the Steady-State Thermal Transmittance of Fenestration Systems |
| NFRC 200 | Procedure for Determining Fenestration Product Solar Heat Gain Coefficient and Visible Transmittance at Normal Incidence |

*AAMA: American Architectural Manufacturers Association*

*ANSI: American National Standards institute, Inc.*

*ASTM: American Society for Testing and Materials*

*BHMA: Builders Hardware Manufacturers Association*

*CAN/CGSB: Canadian Test Method from the Canadian General Standard Board*

*CAN: Canadian Test Method*

*CAN/CSA: Canadian Test Method from the Canadian Standard Association*

*CAN/ULC: Canadian Test Method from the Canadian Underwriters Laboratory*

*CGSB: Canadian General Standard Board*

*CSA: Canadian Standard Association*

*DASMA: Door & Access Systems Manufacturers' Association, International*

*ICC: International Code Council*

*NWWDA: National Wood Window & Door Association*

*SDI: Steel Door Institute*

*WDMA: Windows & Doors Manufacturing Association*