



## SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

### ELEMENT MATERIALS TECHNOLOGY CANADA INC.

Oakville Laboratory

2475 Speers Road

Oakville, Ontario, Canada L6L 6S2

Luiz Rios Phone: 905-822-4111

### MECHANICAL

Valid To: October 31, 2026

Certificate Number: 6524.02

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory for the following tests on Building Products, Automotive, Military and Defense Products and Systems, within the equipment parameters listed at the end of this document:

| <b><u>Test Method:</u></b>   | <b><u>Test Description:</u></b>  |
|--|--|
| <b>Accelerated Aging, Product Durability &amp; Energy Systems:</b> |  |
| ASTM D642  | Standard test method for determining compressive resistance of shipping containers, components, and unit loads                                 |
| ASTM D880  | Standard test method for impact testing for shipping containers and systems (samples up to 1000 lbs.)  |
| ASTM D999  | Standard test methods for vibration testing of shipping containers   |
| ASTM D1499   | Standard practice for filtered open-flame carbon-arc exposures of plastics (except ISO 4892-4)   |
| ASTM D2126   | Standard test method for response of rigid cellular plastics to thermal and humid aging  |
| ASTM D2565   | Standard practice for xenon-arc exposure of plastics intended for outdoor applications (except D1293 and ISO 4892-2)                           |
| ASTM D4169   | Standard practice for performance testing of shipping containers and systems (except D951, D4003, D5265, D5277, D5487, D6344 and D7386)        |
| ASTM D4332   | Standard practice for conditioning containers, packages, or packaging components for testing   |
| ASTM D4459   | Standard practice for xenon-arc exposure of plastics intended for indoor applications  |
| ASTM D4587   | Standard practice for fluorescent UV-condensation exposures of paint and related coatings  |
| ASTM D4728   | Standard test method for random vibration testing of shipping containers   |
| ASTM D4798/D4798M  | Standard practice for accelerated weathering test conditions and procedures for bituminous materials (xenon-arc method) (except D1670 and D36) |
| ASTM D5276   | Standard test method for drop test of loaded containers by free fall   |
| ASTM D6055   | Standard test methods for mechanical handling of unitized loads and large shipping cases and crates  |

| <b><u>Test Method:</u></b> | <b><u>Test Description:</u></b>  |
|----------------------------|--|
| ASTM D6179                 | Standard test methods for rough handling of unitized loads and large shipping cases and crates   |
| ASTM D6653/D6653M          | Standard test methods for determining the effects of high altitude on packaging systems by vacuum method   |
| ASTM E604                  | Standard Test Method for Dynamic Tear Testing of Metallic Materials  |
| ASTM F1980                 | Standard guide for accelerated aging of sterile barrier systems for medical devices  |
| ASTM G152                  | Standard practice for operating open flame carbon arc light apparatus for exposure of nonmetallic materials (except ISO 4892-4)  |
| ASTM G153                  | Standard practice for operating enclosed carbon arc light apparatus for exposure of nonmetallic materials (except ISO 4892-4)  |
| ASTM G154                  | Standard practice for operating fluorescent ultraviolet (UV) lamp apparatus for exposure of nonmetallic materials (except ISO 4892-4)                                    |
| ASTM G155                  | Standard practice for operating xenon arc light apparatus for exposure of nonmetallic materials (except ISO 4892-2; ISO 105 B04, ISO 105 B05, ISO 105 B06, and ISO 1134) |
| DIN 75 220                 | Ageing of Automotive Components in Solar Simulation Units  |
| ISO 8301                   | Determination of steady-state thermal resistance and related properties - Heat flow meter apparatus  |
| ISTA 1A                    | Packaged products weighing 150 lb. (68 kg) or less   |
| ISTA 1B                    | Packaged products weighing over 150 lb. (68 kg)  |
| ISTA 1C                    | Extended testing for packaged products 150 lb. (68 kg) or less   |
| ISTA 1D                    | Extended testing for packaged products over 150 lb. (68 kg)  |
| ISTA 1E                    | Unitized loads of same product   |
| ISTA 1G                    | Packed products 150 lb. (68 kg) or less (random vibration)   |
| ISTA 1H                    | Packaged products over 150 lb. (68 kg) (random vibration)  |
| ISTA 2A                    | Packaged products 150lb (68 kg) or less  |
| ISTA 2B                    | Packaged products over 150lb (68 kg)   |
| ISTA 3E                    | Similar packaged-products in unitized loads  |
| ISTA 7D                    | Temperature test for transport packaging (thermal cycling only)  |
| ISTA 6-Samsclub            | Packaged products for Sam's Club® distribution system shipment (ISTA)  |
| JIS D 0205                 | Test method of weatherability for automotive parts   |
| MIL-STD-810E               | Environmental test methods and engineering guidelines (only for sections 500.3 (except III and IV), 501.3, 502.3, 507.3)   |
| MIL-STD-810E               | Environmental test methods and engineering guidelines - Method 505.3 Solar Radiation (Sunshine)  |
| MIL-STD-810E               | Environmental test methods and engineering guidelines (method 512.3)   |
| MIL-STD-810E               | Environmental test methods and engineering guidelines (only for 514.4, 516.4)  |
| MIL-STD-810F               | Environmental engineering considerations and laboratory tests (only for sections 500.4 (except III and IV), 501.4, 502.4, and 507.4)                                     |
| MIL-STD-810F               | Environmental engineering considerations and laboratory tests (method 505.4)   |
| MIL-STD-810F               | Environmental engineering considerations and laboratory tests (only for 514.4, 516.5 except V, VII and VIII)   |
| MIL-STD-810G               | Environmental engineering considerations and laboratory tests (only for Sections 500.5 (except III and IV), 501.5, 502.5, and 507.5)                                     |

| <b><u>Test Method:</u></b>        | <b><u>Test Description:</u></b>  |
|-----------------------------------|--|
| MIL-STD-810G                      | Environmental engineering considerations and laboratory tests (only for 514.6, 516.6 except for V, VII and VIII)                       |
| NISSAN NES M0135                  | Weatherability and light resistance test methods for synthetic resin   |
| RTCA/DO-160D                      | Environmental conditions and test procedures for airborne equipment (only for section 5)   |
| RTCA/DO-160D                      | Environmental conditions and test procedures for airborne equipment (only for 7 [samples up to 1000 lbs.], 8)                          |
| RTCA/DO-160E                      | Environmental conditions and test procedures for airborne equipment (only for section 5)   |
| RTCA/DO-160E                      | Environmental conditions and test procedures for airborne equipment (only for 7 [samples up to 1000 lbs.], 8)                          |
| RTCA/DO-160F                      | Environmental conditions and test procedures for airborne equipment (only for section 5)   |
| RTCA/DO-160F                      | Environmental conditions and test procedures for airborne equipment (only for 7 [samples up to 1000 lbs.], 8)                          |
| RTCA/DO-160G                      | Environmental conditions and test procedures for airborne equipment  |
| SAE J1885                         | Accelerated exposure of automotive interior trim components using a controlled irradiance water cooled xenon-arc apparatus             |
| SAE J1960                         | Accelerated exposure of automotive exterior materials using a controlled irradiance water-cooled xenon arc apparatus                   |
| SAE J2412                         | Accelerated exposure of automotive interior trim components using a controlled irradiance xenon-arc apparatus                          |
| SAE J2527                         | Performance based standard for accelerated exposure of automotive exterior materials using a controlled irradiance xenon-arc apparatus |
| Toyota TSH1585G                   | Accelerated weathering resistance of paint film  |
| <b>Heating &amp; Cooling:</b>     |  |
| CAN/CSA C439                      | Laboratory methods of test for rating the performance of heat/energy-recovery ventilators  |
| <b>Physical Characterization:</b> |  |
| AREMA CH4                         | Slow Bend  |
| AREMA CH4                         | Rolling Load   |
| AREMA CH8                         | Ballast Impact Test (Section 29.9.10)  |
| AATCC 127                         | Water resistance: hydrostatic pressure test  |
| ANSI/BIFMA X5.1                   | General-purpose office chairs - tests  |
| ANSI/BIFMA X5.4                   | Lounge seating   |
| ANSI/BIFMA X5.41                  | Large Occupant Public and Lounge Seating   |
| ANSI/BIFMA X5.5                   | Desk products  |
| ANSI/BIFMA X5.6                   | Panel systems - tests  |
| ANSI/BIFMA X5.9                   | Storage units  |
| ANSI/BIFMA X5.11                  | General-purpose large occupant office chairs   |
| ANSI/BIFMA X6.1                   | Educational seating  |
| ANSI/BIFMA X6.4                   | Occasional-Use Seating   |
| ANSI/BIFMA/CMD 1                  | Universal measurement procedure for the use of the BIFMA chair measuring device  |
| SEFA-8M                           | Laboratory furniture casework, shelving and tables recommended practices – metal (except 8)  |

| <b><u>Test Method:</u></b> | <b><u>Test Description:</u></b>  |
|----------------------------|--|
| SEFA-8W                    | Laboratory furniture casework, shelving and tables recommended practices – wood (except 8.1)   |
| ANSI/KCMA A161.1           | Performance and construction standard for kitchen and vanity cabinets  |
| CKCA Standard              | Construction and Material Testing Standard for Kitchen Cabinets and Vanities   |
| ANSI/SOHO S6.5             | Small office/home office furniture – tests American national standard for office furnishings   |
| CAN/CGSB 44.227            | Free-standing office desk products and components (except 4.3, 4.4, 5, 5.2, 5.4, 5.6, 6.1.2)   |
| CAN/CGSB 44.229            | Interconnecting panel systems and supported components (except 4.3, 4.4, 5.2, 5.4, 6.1.4, 6.1.5, 6.1.6, 6.1.9, 6.1.10, 6.1.11, 6.2.5, and 6.9) |
| CAN/CGSB 44.232            | Task chairs for office environments (except 4.3, 4.4, 4.14)  |
| GPD 2                      | Decking Systems (except 5.4, 9.2, 9.3, 9.4, 9.5)   |
| GPD 6                      | Side Chairs with Metal Frame (except 7.4 and 7.7)  |
| GPD 10                     | Metal Filing and Storage Cabinets (except 5.13 and 6)  |
| PD-1                       | Purchase Description to Accompany CAN/CGSB 44.227 - General Office Furniture (except 6.3)  |
| PD-3                       | Purchase Description to Accompany CAN/CGSB 44.227 – Executive Furniture (except 5.1, and 5.2)  |
| PD-4                       | Purchase Description to Accompany Interconnecting Panels and Supported Components (except 6.5, 6.6, and 6.8)                                   |
| ASTM C165                  | Standard test method for measuring compressive properties of thermal insulations (except for E4, E177 and E240)                                |
| ASTM C167                  | Standard test methods for thickness and density of blanket or batt thermal insulations   |
| ASTM C203                  | Standard test methods for breaking load and flexural properties of block-type thermal insulation   |
| ASTM C302                  | Standard test method for density and dimensions of preformed pipe-covering-type thermal insulation   |
| ASTM C303                  | Standard test method for dimensions and density of preformed block and board-type thermal insulation   |
| ASTM C446                  | Standard test method for breaking load and calculated modulus of rupture of preformed insulation for pipes                                     |
| ASTM C550                  | Standard test method for measuring trueness and squareness of rigid block and board thermal insulation   |
| ASTM C794                  | Standard test method for adhesion-in-peel of elastomeric joint sealants  |
| ASTM C836/C836M            | Standard specification for high solids content, cold liquid-applied elastomeric waterproofing membrane for use with                            |
| ASTM C1304                 | Standard test method for assessing the odor emission of thermal insulation materials   |
| ASTM C1305                 | Standard test method for crack bridging ability of liquid-applied waterproofing membrane   |
| ASTM C1335                 | Standard test method for measuring non-fibrous content of man-made rock and slag mineral fiber insulation                                      |
| ASTM C1511                 | Standard test method for determining the water retention (repellency) characteristics of fibrous glass insulation (aircraft type)              |
| ASTM C1559                 | Standard test method for determining wicking of fibrous glass blanket insulation (aircraft type)   |

| <b><u>Test Method:</u></b> | <b><u>Test Description:</u></b>  |
|----------------------------|--|
| ASTM D523                  | Standard test method for specular gloss  |
| ASTM D618                  | Standard practice for conditioning plastics for testing  |
| ASTM D751                  | Standard test methods for coated fabrics   |
| ASTM D882                  | Standard test method for tensile properties of thin plastic sheeting   |
| ASTM D897                  | Standard test method for tensile properties of adhesive bonds  |
| ASTM D903                  | Standard test method for peel or stripping strength of adhesive bonds  |
| ASTM D1056                 | Standard specification for flexible cellular materials—sponge or expanded rubber (except ASTM standards D471 and D575)                         |
| ASTM D1621                 | Standard test method for compressive properties of rigid cellular plastics   |
| EN 826                     | Compressive Strength   |
| EN1602                     | Apparent Density   |
| ASTM D1622                 | Standard test method for apparent density of rigid cellular plastics   |
| ASTM D1623                 | Standard test method for tensile and tensile adhesion properties of rigid cellular plastics  |
| ASTM D1761                 | Standard test methods for mechanical fasteners in wood   |
| ASTM D2136                 | Standard test method for coated fabrics—low-temperature bend test  |
| ASTM D2244                 | Standard practice for calculation of color tolerances and color differences from instrumentally measured color coordinates                     |
| ASTM D2842                 | Standard test method for water absorption of rigid cellular plastics   |
| ASTM D3045                 | Standard practice for heat aging of plastics without load  |
| ASTM D3359                 | Standard test methods for measuring adhesion by tape test  |
| ASTM D3363                 | Standard test method for film hardness by pencil test  |
| ASTM D3389                 | Standard test method for coated fabrics abrasion resistance (rotary platform abrader)  |
| ASTM D3574                 | Standard test methods for flexible cellular materials—slab, bonded, and molded urethane foams  |
| ASTM D4060                 | Standard test method for abrasion resistance of organic coatings by the taber abraser  |
| ASTM D5420                 | Standard test method for impact resistance of flat, rigid plastic specimen by means of a striker impacted by a falling weight (Gardner impact) |
| ASTM E96/E96M              | Standard test methods for water vapor transmission of materials  |
| EN 1609                    | Water permeability   |
| ASTM F2096                 | Standard test method for detecting gross leaks in packaging by internal pressurization (bubble test)   |
| BS EN 50155                | Railway applications – Rolling stock – Environmental Tests   |
| BS EN 61373                | Railway applications – Rolling stock – Shock and Vibration Tests   |
| ASTM C578                  | Standard specification for rigid, cellular polystyrene thermal insulation  |
| ASTM C591                  | Standard specification for unfaced preformed rigid cellular polyisocyanurate thermal insulation (except C177, C871, C1114 and D2856)           |
| ASTM C592                  | Standard specification for mineral fiber blanket insulation and blanket-type pipe insulation (metal-mesh covered) (industrial type)            |
| ASTM C610                  | Standard specification for molded expanded perlite block and pipe thermal insulation (except C177)   |
| <b>Polymers</b>            |  |
| ASTM D695                  | Standard Test Method for Compressive Properties of Rigid Plastics  |
| ASTM D790                  | Standard Test Methods for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials                      |
| ASTM D3330                 | Standard Test Method for Peel Adhesion of Pressure-Sensitive Tape  |

| <b><u>Test Method:</u></b> | <b><u>Test Description:</u></b>   |
|----------------------------|---|
| ASTM D624                  | Standard Test Method for Tear Strength of Conventional Vulcanized Rubber and Thermoplastic Elastomers   |
| ASTM D638                  | Standard Test Method for Tensile Properties of Plastics   |
| ASTM D412                  | Standard Test Methods for Vulcanized Rubber and Thermoplastic Elastomers—Tension  |
| ASTM D1002                 | Standard Test Method for Apparent Shear Strength of Single-Lap-Joint Adhesively Bonded Metal Specimens by Tension Loading (Metal-to-Metal)    |
| ASTM C273                  | Standard Test Method for Shear Properties of Sandwich Core Materials  |
| ASTM D395                  | Standard Test Methods for Rubber Property—Compression Set   |
| ASTM D6226                 | Standard Test Method for Open Cell Content of Rigid Cellular Plastics   |
| ASTM D1505                 | Standard Test Method for Density of Plastics by the Density-Gradient Technique  |
| ASTM D2240                 | Test Method for Rubber Property—Durometer Hardness  |
| ASTM D573                  | Standard Test Method for Rubber—Deterioration in an Air Oven  |
| ASTM D1238                 | Standard Test Method for Melt Flow Rates of Thermoplastics by Extrusion Plastometer   |
| ASTM D570                  | Standard Test Method for Water Absorption of Plastics   |
| ASTM D696                  | Standard Test Method for Coefficient of Linear Thermal Expansion of Plastics Between –30°C and 30°C with a Vitreous Silica Dilatometer        |
| OPSS.MUNI 1202             | Material Specification for Bearings – Elastomeric Plain and Steel laminated (Except ASTM 518)   |
| OPSS.PROV 1202             | Material Specification for Bearings – Elastomeric Plain and Steel laminated (Except ASTM D1149)   |
| MTO LS-427                 | MTO LS-427 Method of Test for Compressive Deformation of Plain Bearings   |
| MTO LS-428                 | MTO LS-428 Method of Test for Compressive Deformation of Laminated Bearings   |
| MTO LS-429                 | MTO LS-429 Method of Test for Measurement of Tolerances for Steel Laminated Bearings  |
| ASTM D4014 (Annex A1)      | Standard Specification for Plain and Steel-Laminated Elastomeric Bearings for Bridges (A1. DETERMINATION OF SHEAR MODULUS)                    |
| ASTM D429 (Method B)       | Standard Test Methods for Rubber Property—Adhesion to Rigid Substrates (METHOD B—90° STRIPPING TEST—RUBBER PART ASSEMBLED TO ONE METAL PLATE) |

| <b>Equipment Parameters</b>                                |   |
|--|---|
| Environmental: Temperature and humidity capabilities       | Temperature Chamber -60°C to + 100°C<br>Humidity 5% RH to 95%RH   |
| Vibration: Electrodynanic vibration and shock capabilities | Displacement: ±1 inch(25mm) 2 inch (50 mm) total displacement.<br>Frequency: 0 – 3,000H2<br>Force rating:4,000 lfb (17.8kN0)<br>Shock: 60Gs |



## Accredited Laboratory

A2LA has accredited

**ELEMENT MATERIALS TECHNOLOGY CANADA INC.**

*Oakville, Ontario, Canada*

for technical competence in the field of

**Mechanical Testing**

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 *General requirements for the competence of testing and calibration laboratories*. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).



Presented this 28<sup>th</sup> day of February 2025.

A blue ink signature of the name "Mr. Trace McInturff".

Mr. Trace McInturff, Vice President, Accreditation Services  
For the Accreditation Council  
Certificate Number 6524.02  
Valid to October 31, 2026  
Revised December 5, 2025

*For the tests to which this accreditation applies, please refer to the laboratory's Mechanical Scope of Accreditation.*