

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

### ELEMENT MATERIALS TECHNOLOGY CANADA INC.

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### **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 <u>Building Products</u>, <u>Automotive</u>, <u>Military and Defense Products and Systems</u>, <u>within the equipment parameters listed at the end of this document:</u>

<b>Test Method:</b>	Test Description:	
Accelerated Aging, Product Durability & Energy Systems:		
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	

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<b>Test Method:</b>	Test Description:	
ASTM D6179	Standard test methods for rough handling of unitized loads and large shipping	
4 CTD 6	cases and crates	
ASTM	Standard test methods for determining the effects of high altitude on packaging	
D6653/D6653M	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	
1101111 0102	exposure of nonmetallic materials (except ISO 4892-4)	
ASTM G153	Standard practice for operating enclosed carbon arc light apparatus for	
ASTWO133	exposure of nonmetallic materials (except ISO 4892-4)	
ASTM G154	Standard practice for operating fluorescent ultraviolet (UV) lamp apparatus for	
ASTM G134	exposure of nonmetallic materials (except ISO 4892-4)	
ASTM G155	Standard practice for operating xenon arc light apparatus for exposure of non-metallic 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 150 lb. (68 kg) of less  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	
WHE STE OTOE	Radiation (Sunshine)	
MIL-STD-810E	Environmental test methods and engineering guidelines (method 512.3)	
MIL-STD-810E	Environmental test methods and engineering guidelines (method 512.5)  Environmental test methods and engineering guidelines (only for 514.4, 516.4)	
MIL-STD-810E	Environmental engineering considerations and laboratory tests (only for	
MIIT-91D-910L	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)	
MIL-STD-810G	Environmental engineering considerations and laboratory tests (only for 514.6,	
212 212 0100	516.6 except for V, VII and VIII)	
L	1 5 10.0 except for 1, 111 und 1111)	



<b>Test Method:</b>	Test Description:	
NISSAN NES M0135	Weatherability and light resistance test methods for synthetic resin	
RTCA/DO-160D	Environmental conditions and test procedures for airborne equipment (only 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	
Heating & Cooling:		
CAN/CSA C439	Laboratory methods of test for rating the performance of heat/energy-recovery ventilators	
Physical		
Characterization:		
AREMA CH4	Slow Bend	
AREMA CH4	Rolling Load	
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)	
SEFA-8W	Laboratory furniture casework, shelving and tables recommended practices – wood (except 8.1)	



<b>Test Method:</b>	Test Description:	
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	
A CITY & C4 54 6	slag mineral fiber insulation	
ASTM C1511	Standard test method for determining the water retention (repellency)	
A CITA & C1.7.70	characteristics of fibrous glass insulation (aircraft type)	
ASTM C1559	Standard test method for determining wicking of fibrous glass blanket	
A CITA A D COO	insulation (aircraft type)	
ASTM D523	Standard test method for specular gloss	
ASTM D618	Standard practice for conditioning plastics for testing	



Test Method:	Test Description:	
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)	
Polymers		
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	
ASTM D624	Standard Test Method for Tear Strength of Conventional Vulcanized Rubber and Thermoplastic Elastomers	

<b>Test Method:</b>	Test Description:	
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	

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

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# **Accredited Laboratory**

A2LA has accredited

## **ELEMENT MATERIALS TECHNOLOGY CANADA INC.**

Oakville, Ontario, Canda

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 28th day of February 2025.

Mr. Trace McInturff, Vice President, Accreditation Services

For the Accreditation Council

Certificate Number 6524.02

Valid to October 31, 2026

Revised September 4, 2025

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