



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

ELEMENT MATERIALS TECHNOLOGY ST. PAUL, INC.
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MECHANICAL

Valid To: December 31, 2026

Certificate Number: 0098.03

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory at the location listed above as well as the one satellite laboratory location listed below on the following products or types of products: adhesives and sealants; automotive components; coatings; consumer products; electronics and electromechanical assemblies; fasteners; fiberglass; furniture; glass; geotextiles; hoses; insulation; mattresses; medical devices; metal and alloys; packaging; plastics and polymers; pipes; tapes; valves and fitting; pressure vessels; rubber and elastomers; textiles; and weldments¹:

Test(s):

Test Method(s):

Acoustics

ASTM C423, E90, E413, E795;
ISO 354, 10140-2

Air Leakage and Operating Force
Anchors

ASTM E283; E2068
ACI 355.2, 355.4; ASTM E488, E1512;
ETAG001 (Parts 1, 2, 3, 4, 5 and 6 with Annex A, B and E (*except C2.4 and C2.5*)); ICC ES AC01 (Section 5.0), AC58 (Sections 4.0 and 5.0), AC106 (Section 4.0), AC193 (Sections 7, 8 and 9, and tables 4.1, 4.2 and 4.3), AC232 (Section 7.0), AC308 (Sections 3, 4, 7, 8 and 9, and tables 3.1-3.7, 3.8 (*Except tests 12 and 13*), and 3.9), AC320 (Sections 3.0 and 4.0), AC446 (Sections 3.0 and 4.0)

Bedding:

Standard Test Methods for Evaluation of
Innersprings and Box Springs

ASTM F1566 (Sections 6, 7, 8 and 9); NAVSEA
05Z6 PD 5-04A

Standard Test Methods for Flexible Cellular
Materials-Slab, Bonded, and Molded Urethane
Foams

ASTM D3574 (Tests A, B₁, B₂, D, E, F, H, I₃, K
and L)

Requirements and Test Methods for Full Body
Support Surfaces

ANSI/RESNA SS-1: Thermal: (Section 3, 4, 8)
Support Surface Characterization: (Section 2, 5, 6,
7)

Test(s):**Test Method(s):**

Environmental Simulation:

Humidity	MIL-STD-202 (Method 103B), MIL-STD-810 (Method 507)
Fluorescent UV- Condensation, Light- and Water-Exposure (QUV)	ASTM G154
Salt Spray (Fog)	ASTM B117; MIL-STD-202 (Method 101E), MIL-STD-810 (Method 509); IEC 60068-2-52
Modified Salt Spray	ASTM G85, Annex 5
Shock, Mechanical	IEC 60068-2-27; MIL-STD-810 (Method 516)
Shock, Thermal	MIL-STD-202 (Method 107G)
Temperature/Humidity/Pressure	IEC 60601-1-11
Xenon-Arc Light Exposure, With and Without Water	ASTM D2565, G155
Vibration	IEC 60068-2-64; MIL-STD-810 (Method 514)

Fall Protection Devices:

Anchorage Connectors for Active Fall Protection Systems	ANSI/ASSE Z359.18
Anchorage Connector, Personnel Hoist, Hoist Line, Primary and Secondary Brakes	ANSI/ASSE Z359.4

Flammability:

Flammability of Mattresses and Mattress Pads	16 CFR 1632
Flammability (Open Flame) of Mattress Sets	16 CFR 1633; NAVSEA 05Z6 PD 5-04A; TB 121
Flammability Test Procedure for Mattresses for US in Public Buildings	CA TB 129; ASTM E1590
Boston Mattress Fire Test	BFD IX-11
Requirements, Test Procedure and Apparatus for Testing the Smolder Resistance of Materials Used in Upholstered Furniture	CA TB 117-2013
Flammability for Textiles	16 CFR 1610

Test(s):

Flammability Test Method for Automobile Interior Materials

Flammability Test Procedure for Seating Furniture for Use in Public Occupancies

Wheelchair Cushion Flammability

Test Method(s):

FMVSS 302; Honda HES D6003; SAE J369

CA TB 133 (*withdrawn 2019*);
ASTM E1537

ISO 16840-10

Hardness:

Brinell (500 to 3000) kg

ASTM E10

Rockwell (A, BW, C, E, 15N, 30N, 45N, 15T, 30T, 45T)

ASTM E18; ISO 898-1; NASM 1312-6

Micro Hardness, Vickers and Knoop (HK100, HK500, HV25, HV100, HV 300, HV500, HV1000)

ASTM E384; NASM 1312-6; SAE J417

Material Testing:

Abrasion Resistance by the Taber Abraser

ASTM D4060

Compressive Properties of Rigid Plastics

ASTM D695

Durometer Hardness (Shore A, Shore D, Shore OO)

ASTM D2240

Flexural Properties of Plastics

ASTM D790

Standard Atmospheres for Conditioning and Testing

ASTM D618

Tensile Properties of Plastics

ASTM D638

Water Vapor Transmission

ASTM E96/E96M

Metallography:

Banding/Orientation (Non-Dimensional)

ASTM E1268

Carburization/Decarburization (Visual and Hardness) and Case Depth

ASTM A574, E1077, F2328; ISO898-1, 898-5, 4570; SAE J78, J81, J419, J423, J933

Examination and Evaluation of Pitting Corrosion

ASTM G46; BSS7219

Grain Size (Comparison)

ASTM E112, E930, E1181; ISO 643;
ASTM A262 (Practice A & E)



Test(s):**Test Method(s):**

Inclusions

ASTM E45 Method A

End Grain Pitting on Metals

ASTM F2111; BSS7219

Macroetching (Grain Flow)

ASTM A604/A604M, E340, E381, F788;
ISO 6157-1, 6157-3

Measurement of Coating Thickness

ASTM B487 (Using Computer Imaging)

Microetching

AMS 2643; ASTM E3, E407

Metals and Metal Products, Fasteners:

Axial Tensile Strength of Full-Sized Threaded Fasteners

AC 118, ASTM F606/F606M; BAC D2-2860;
ISO 898-1, ISO 6892-1; JIS B1051;
NASM 1312-8; SAE J82

Bend, Guided and Semi-Guided (Welds)

ASME Section IX; AWS D1.1/D1.1M,
D1.2/D1.2M, D1.3/D1.3M, D1.4/D1.4M,
D1.5/D1.5M, D1.6/D1.6M, D17.1/D17.1M,
D17.3

Bend Test (General)

ASTM A615/A615M, E290

Coating Weight

ASTM A90/A90M

Full Sized Eye Bolts: Bend Test, Breaking Strength and Proof Load

ASTM F541

Impact, Notched Bar
(Room Temperature to -321) °FASTM A370, A489, A673/A673M, E23;
AWS D1.5/D1.5M; DTW 766; ISO 148-1

Mechanical and Material Requirements for Externally Threaded Fastener

SAE J429²

Mechanical and Material Requirements for Metric Externally Threaded Steel Fasteners

SAE J1199²

Proof Load of Full Sized: Externally Threaded Fasteners

AASHTO T244; ASTM A370, F606/F606M;
ISO 898-1; JIS B1051

Tension Test-Ambient Temperature

AASHTO M31; ASTM A370, A615/A615M,
A706/A706M, B557, E8/E8M, F606/F606M;
ISO 898-1, 3506; JIS B1051; NASM 1312-8

Total Extension at Fracture of Externally Threaded Fasteners

ASTM F606/606M; ISO 898-1, 3506

Test(s):

Wedge Tensile of Full Sized Threaded Fasteners

Welder Procedure and Welder Qualification Testing

Nails and Fasteners:

Nails, Fasteners, Spikes and Staples

Power-Actuated Fasteners

Mechanical Fasteners in Wood

Package Testing:

Standard Practice for Performance Testing of Shipping Containers and Systems

Physical/Structural:

Basic Hardboard/Hardboard Siding

Mullen Burst Test

External Loading Characteristics of Plastic Pipe by Parallel-Plate Loading

Water Absorption of Core Materials for Sandwich Constructions

Wood-Based Fiber Materials and Particle Panel Materials

Thermal:

Thermal Transmittance and Condensation Resistance

Test Method(s):

AASHTO T244; ASTM A370, F606/F606M; ISO 898-1; JIS B1051; NASM 1312-8; SAE J82

Using the methods listed above and on Scope #0098.04 in accordance with AWS D1.1/D1.1M, D1.2/D1.2M, D1.3/D1.3M, D1.4/D1.4M, D1.5/D1.5M, D1.6/D1.6M, and D17.1/D17.1M, D17.3/D17.3M

ASTM D4442, F1575, F1667; ICC ES AC116 ((Test Methods Referenced in Sections 3.0) (Sections 3.2-3.10)); AC118 (Test Methods Referenced in Section 4.0); AC233; AC257 (Test Methods Referenced in Sections 3.0 and 4.0)

ASTM E1190; ICC ES AC70 (Sections 3.0 and 4.0)

ASTM D1761

ASTM D4169

ANSI A135.4, A135.6, A135.7

ASTM D3786/3786M

ASTM D2412

ASTM C272/C272M

ASTM D1037 (Except Abrasion Resistance)

AAMA 1503

Test(s):**Test Method(s):**

Measuring Compressive Properties of Thermal Insulations	ASTM C165
Breaking Load and Flexural Prop. of Block-Type Thermal Insulation	ASTM C203
Cellulose Fiber Insulating Board	ASTM C209 (Except Flame Spread Index)
Dimensions and Density of Preformed Block & Board Type Insulation	ASTM C303
Thermal Transmission Properties	ASTM C518
Rigid, Cellular Polystyrene Thermal Insulation	ASTM C578 (Except Oxygen Index)
Thermal Performance by Hot Box Apparatus	ASTM C1363
Compression, Density, Thermal and Humid Aging of Rigid Cellular Plastics	ASTM D1621, D1622, D2126

BAIID Testing:

Breath Alcohol Ignition Interlock Devices	AS-3547-1997 (Australia); CENELEC (Europe); EN 50436-1:2023 (<i>except clauses 6.7, 6.8 and 6.9</i>); 60068-2-78 (IEC 60068-2-78); CSTT-HVC-TR-114/CSTT-HVC-TR-150 (<i>Except Test 3.6</i>) (Canada); CSA Z627 (<i>Except Clause 8.7</i>); IEC 60529; 60068-2-30; ISO 16750-1, 16750-2:2010(<i>withdrawn</i>), 2012, 16750-3:2007 (<i>withdrawn</i>), 2012, 16750-4:2010; NHTSA Federal Register Vol. 78, No. 89 (<i>Except Test 14</i>)
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Failure Analysis:

SEM with EDS	SOP MT93 and MT94
Failure Analysis	Using the methods listed above in accordance with ASM handbook Volume 11

ELEMENT ST. PAUL
702a Prior Avenue North
St. Paul, MN 55104

Accreditation is granted to this satellite laboratory to perform the following tests on consumer products:

Test(s):

Test Method(s):

Fall Protection Devices:

Full Body Harnesses	ANSI/ASSE Z359.11
Personal Energy Absorbers and Energy Absorbing Lanyards	ANSI/ASSE Z359.13
Anchorage Connectors for Active Fall Protection Systems	ANSI/ASSE Z359.18
Anchorage Connector, Personnel Hoist, Hoist Line, Primary and Secondary Brakes	ANSI/ASSE Z359.4

¹ The Consumer Product Safety Improvement Act (CPSIA) requires that every children's product subject to a federal consumer product safety requirement be tested by a Consumer Product Safety Commission (CPSC) accepted laboratory for compliance with the applicable federal children's product safety requirements. Accreditation by A2LA does not infer acceptance by the CPSC. Please verify this organization's acceptance status by using the CPSC's searchable database, located at <http://www.cpsc.gov/cgi-bin/labsearch/>.

² The laboratory is only accredited for the test methods listed above. The accredited test methods are used in determining compliance with the material specifications identified above. The inclusion of these material specifications on this Scope does not confer laboratory accreditation to the material specifications.





Accredited Laboratory

A2LA has accredited

ELEMENT MATERIALS TECHNOLOGY ST. PAUL, INC.

St. Paul, MN

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 3rd day of December 2024.

A blue ink signature of Mr. Trace McInturff, written over a horizontal line.

Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 0098.03
Valid to December 31, 2026
Revised April 16, 2025

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