SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

SOUTHWEST RESEARCH INSTITUTE
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MECHANICAL

Valid to: March 31, 2024  Certificate Number: 1110.02

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following crash tests:

| **Test Technology/ Equipment Capabilities**[1] | **Test Method(s)**[2,3] |
|---|---|
| Full Scale Vehicle Crash Tests of Highway Safety Features[4] | NCHRP Report 350, MASH; EN1317 |
| Standard Test Method for Vehicle Crash Testing of Perimeter Barriers[4] | ASTM F2656 |
| Test Method for Vehicle Crash Testing of Perimeter Barriers and Gates[4] | Dept. of State SD-STD-02.01 |
| Surrogate Testing of Vehicle Impact Protective Devices at Low Speeds[4] | ASTM F3016 |
| Testing Forced Entry, Ballistic and Low Impact Resistance of Security Fence Systems[4] | ASTM F2781 |
| Temperature Tests:<br>High and Low Temperature (-65 to 175) ºC | Telcordia GR-63-CORE;<br>MIL-STD-810, Methods 501, 502;<br>ECE R100; UN38.3;<br>UL 2580, UL 2271; SAE J2464 |
| Humidity Tests: (10 to 96) %RH | Telcordia GR-63-CORE;<br>MIL-STD-810, Method 507 |



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| **Test Technology/ Equipment Capabilities**[1] | **Test Method(s)**[2,3] |
|---|---|
| Thermal Shock<br>(-65 to +175) ºC | Telcordia GR-63-CORE;<br>MIL-STD-810, Method 503;<br>ECE R100; UN38.3;<br>SAE J2464 |
| Altitude<br>Up to 100,000 ft., (-65 to +175) ºC | Telcordia GR-63-CORE;<br>MIL-STD 810, Method 500;<br>ECE R100; UN38.3 |
| Vibration<br>Sine, Random, Sine-on-Random<br>2" Stroke<br>20,000 Pounds Force<br>(5 to 3,000) Hz | Telcordia GR-63-CORE;<br>MIL-STD 810, Method 514;<br>ECE R100; UN38.3<br>UL 2580, UL 2271; SAE J2380 |
| Mechanical Shock<br>Up to 40 g's<br>Up to 25 mSec pulse | Telcordia GR-63-CORE;<br>MIL-STD-810, Method 516;<br>ECE R100; UN38.3<br>UL 2580, UL 2271; SAE J2464 |
| High Level Mechanical Shock<br>Up to 1,000 g's<br>(.5 to 25) mSec pulse | EN 60068-2-27;<br>DEF-STAN 00-35;<br>FMVSS 218 |
| Drop Shock<br>Packaged and Unpackaged | Telcordia GR-63-CORE;<br>MIL-STD-810, Method 516;<br>10 CFR Part 71;<br>UL 2580, UL 2271; SAE J2464 |
| Rain, Drip | Telcordia GR-63-CORE;<br>MIL-STD-810, Method 506, Procedure III;<br>IEC/EN 60529 |
| Rain, Spray | IEC/EN 60529;<br>NEMA |
| Rain, Blowing<br>Up to 70 mph | Telcordia GR-487-CORE;<br>MIL-STD-810, Method 506, Procedure I |
| Dust, Settling | IEC/EN 60529;<br>NEMA |
| Salt Fog | MIL-STD-810, Method 509<br>ASTM B117; UL 2580 |

| **Test Technology/ Equipment Capabilities**[1] | **Test Method(s)**[2,3] |
|---|---|
| Acoustic Pressure & Power | ANSI S12.54;<br>Telcordia GR-63-CORE |
| Solar Radiation, Simulation of Effects | MIL-STD-810, Method 505;<br>ASTM G154, ASTM G155 |
| Seismic Simulation (Earthquake) | Telcordia GR-63-CORE;<br>ICC-ES AC156;<br>IEEE 344 |
| Structural Load Testing[4]<br>Up to 15,000 lbf | ANSI/ROHVA 1; ASTM E564,<br>ASTM F3059 |
| Accelerated Weathering | ASTM D2898 |
| Structural Performance and Water Penetration by Uniform Static Air Pressure Difference | ASTM E330, ASTM E331 |

[1] Including customer supplied and industry specifications directly related to the test technologies and parameters listed above.

[2] When the date, revision or edition of a test method standard is not identified on the scope of accreditation, the laboratory is required to be using the current version within one year of the date of publication, per part C., Section 1 of A2LA *R101 - General Requirements- Accreditation of ISO-IEC 17025 Laboratories*.

[3]In addition to the requirements of Section 1 of A2LA R101. The laboratory may perform testing to historical versions of the standards listed above if those standard versions were previously accredited by A2LA. These tests are covered under the scope of accredited testing listed above.

[4] This laboratory performs field testing activities for these tests.

# Accredited Laboratory

A2LA has accredited

## SOUTHWEST RESEARCH INSTITUTE

*San Antonio, TX*

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 May 2022.

Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 1110.02
Valid to March 31, 2024

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