



MATERIALS LABORATORY

Description

CSA Group Leyland has a purpose built ISO 17025 materials testing laboratory to support testing of automotive interiors against physical, chemical, mechanical and environmental elements. Testing and support is provided at both the Design Verification and Production Validation stages, in which test procedures are developed, executed, analysed, and a comprehensive report is produced. The Lab can support a wide variety of testing, ranging from materials and small components to full vehicles.

Typical Applications

Environmental

- Cycling heat (up to 180C), humidity (up to 98%) and Cold (down to -40C)
- Static conditions (as above)
- 1m3 up to full vehicle
- Solar load (infrared & metal halide)
- Salt spray, CASS + other corrosions
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- Weathering
- Airbag deployment
- Dimensional stability (gauges, photogrammetry etc)

Physical Testing

- Tensile, flexural, impact
- Adhesion, peel
- Scratch / Mar / Scuff / Abrasion / Scrape

Chemical

- Odour
- Fogging
- Chemical resistance
- Fuel / Fluid Resistance
- Cleaning
- Staining (migration, amine, water, perspiration etc)
- VIEQ

Durability

- Automated actuation (glove box, sunvisor, console etc)
- Seat testing (mechanical, robotic & live)
- Door / Armrest testing (rolling sphere, elbow rub etc)
- Load deflection
- Vibration / KLT (plus environmental)
- Insertion / removal tests, serviceability

Flammability

- ISO 3795 / FMVSS 302 etc