

Miami-Dade County, Florida

Building Code Compliance Office

Suite 1603

140 West Flagler Street

Miami, Florida 33130-1563

(305) 375-2901

Fax (305) 375-2908

Lab Certificate



This certifies that South Florida Test Service located at 16100 SW 216th Street, Miami, FL 33170 is an approved Testing Laboratory in accordance with Miami-Dade County Building Code Compliance and Protocol TASS301-94, and is Certified to perform the following tests:

Listed in: American Association for Laboratory Accreditation:
Certificate No. 0717.02

Results of the above mentioned test shall be properly submitted to the Miami-Dade County Building Code Compliance Office per TASS301-94, along with all other documentation required for the approval of products. Approved engineer(s) for this laboratory:

Mark Mosbat, P.E.

This Certification and Registration Approved: February 07, 2008

This Certification and Registration Expires : March 27, 2013

Certification No. : 07-1102.04 Renews: 03-0225.14

A handwritten signature in black ink, appearing to read "Jaime Gascon".

Jaime D. Gascon, P.E.

Chief

Product Control Division

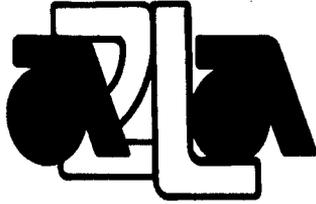
A handwritten signature in black ink, appearing to read "Americo Segura".

Americo Segura

Senior Quality Assurance Inspector

Product Control Division

The Miami-Dade County Building Code Compliance Office reserves the right to remove this certification for non-compliance with rules and regulations as set by Protocol TASS301-94.



**THE AMERICAN
ASSOCIATION
FOR LABORATORY
ACCREDITATION**

ACCREDITED LABORATORY

A2LA has accredited

ATLAS WEATHERING SERVICES GROUP
Miami, FL

for technical competence in the field of

Mechanical Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005 *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 18 June 2005*).

Presented this 23rd day of May 2006.





President
For the Accreditation Council
Certificate Number 717.02
Valid to May 31, 2008

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

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

ATLAS WEATHERING SERVICES GROUP
SOUTH FLORIDA TEST SERVICE
17301 Okeechobee Road
Miami, FL 33018
Richard Slomko Phone: 305 824 3900
 Fax: 305 362 6276

MECHANICAL

Valid To: May 31, 2008

Certificate Number: 0717.02

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

Weathering in a Sub-Tropical Environment: Direct and under glass exposures at fixed or variable angle using standard panel racks, special mounting racks; black boxes; automotive interior large component/assembly cabinets; outdoor accelerated exposures using solar tracking racks with and without wetting; special fixtures designed to meet specific client needs, complete climatological data acquisition and reporting.

Laboratory Accelerated Weathering: Using single and twin enclosed carbon arc, open flame (sunshine) carbon arc, and controlled irradiance xenon arc Weather-Ometer[®] and Fade-Ometer[®], fluorescent-ultraviolet condensation apparatus, HPUV indoor actinic exposure system, laboratory oven, controlled temperature bath.

Evaluations: Visual inspection for all property changes detectable to the unaided eye or under magnification. Instrumental determination of loss of adhesion, chalking, instrumental color, color change, gloss, thickness, transmittance, whiteness index, yellowness index.

On the following products or materials: adhesives & sealants, agricultural & forest products, automotive products (including whole cars), aviation & aerospace materials, building materials (most applications & substrates), coatings, composites, geosynthetics, dyes, glass, inks, leather, packaging, photodegradables, plastics, rubber, textiles, windows & doors, wood & wood products

Using the following types of test methods and specifications:

AATCC (American Association of Textile Chemists & Colorists)

- AATCC – 001 Gray Scale for Color Change
- AATCC – 016 Colorfastness to Light (except. Section 23)*
- AATCC – 111 Weather Resistance (Options A and B) Exposure (Section 10) Colorfastness
(Section 11.1.3 only)
- AATCC – 169 Weather Resistance of Textiles: Xenon Lamp Exposure*

ASTM (American Society for Testing and Materials)

- ASTM B499 Standard Test Method for Measurement of Coating Thicknesses by Magnetic Method: Nonmagnetic Coatings on Magnetic Basis Metals
- ASTM D523 Specular Gloss
- ASTM D610 Evaluating Degree of Rusting on Painted Steel Surfaces
- ASTM D660 Evaluating Degree Checking of Exterior Paints
- ASTM D661 Evaluating Degree Cracking of Exterior Paints
- ASTM D662 Evaluating Degree Erosion of Exterior Paints
- ASTM D714 Evaluating Degree Blistering of Paints
- ASTM D772 Evaluating Degree Flaking (Scaling) of Exterior Paints
- ASTM D822 Conducting Tests on Paint and Related Coatings and Materials Using Filtered Open-Flame Carbon-Arc Light and Water Exposure Apparatus*
- ASTM D904 Exposure of Adhesive Specimens to Artificial (Carbon-Arc Type) and Natural Light*
- ASTM D1006 Conducting Exterior Exposure Tests of Paints on Wood
- ASTM D1014 Conducting Exterior Exposure Tests of Paints on Steel
- ASTM D1400 Nondestructive Measurement of Dry Film Thickness of Nonconductive Coatings Applied to a Nonferrous Metal Base
- ASTM D1435 Outdoor Weathering of Plastics
- ASTM D1654 Evaluation of Painted or Coated Specimens Subjected to Corrosive Environments
- ASTM D1729 Visual Evaluation of Color Difference of Opaque Materials
- ASTM D2244 Calculation of Color Difference from Instrumentally Measured Color Coordinates
- ASTM D2565 Operating Xenon-Arc Type Light Exposure Apparatus With and Without Water for Exposure of Plastics*
- ASTM D2616 Evaluation of Visual Color Difference of Opaque Materials
- ASTM D3274 Evaluating Degree of Surface Disfigurement of Paint Films by Microbial (Fungal or Algal) Growth or Soil and Dirt Accumulation
- ASTM D3359 Measuring Adhesion by Tape Test
- ASTM D3424 Evaluating the Lightfastness and Weatherability of Printed Matter*
- ASTM D3679 Standard Specifications for Rigid Poly (Vinyl Chloride) (PVC) Siding (Section 6.10, 6.11, and 6.13)
- ASTM D3815 Accelerated Aging of Pressure Sensitive Tape by Carbon-Arc Exposure Apparatus*
- ASTM D4141 Conducting Accelerated Outdoor Exposure Tests of Coatings (Proc. A, C)
- ASTM D4214 Evaluating Degree of Chalking of Exterior Paint Films
- ASTM D4303 Lightfastness of Pigments Used in Artists' Paints (Procedure A, C, and D)*
- ASTM D4329 Operating Light- and Water-Exposure Apparatus (Fluorescent UV-Condensation Type) for Exposure of Plastics*
- ASTM D4355 Deterioration of Geotextiles from Exposure to Ultraviolet Light and Water (Xenon-Arc Type Apparatus) (except. 9.5)*

ASTM (American Society for Testing and Materials) (cont.)

- ASTM D4459 Operating an Accelerated Lightfastness Xenon-Arc-Type (Watercooled) Light Exposure Apparatus for the Exposure of Plastics for Indoor Applications*
- ASTM D4674 Accelerated Testing for Color Stability of Plastics Exposed to Indoor Fluorescent Lighting and Window-Filtered Daylight*
- ASTM D4726 Standard Specifications for Rigid Poly (Vinyl Chloride) (PVC) Exterior Profile Extrusions Used for Assembled Windows and Doors (Section 7.1 only)
- ASTM D4798 Accelerated Weathering Test Conditions and Procedures for Bituminous Materials (Xenon-Arc Method)*
- ASTM D4799 Accelerated Weathering Test Conditions and Procedures for Bituminous Materials (Fluorescent UV Condensation Method)*
- ASTM D5031 Testing Paints, Varnishes, Lacquers, and Related Products Using Enclosed Carbon Arc Light- and Water-Exposure Apparatus*
- ASTM D5071 Operating Xenon Arc-Type Exposure Apparatus with Water for Exposure of Photodegradable Plastics*
- ASTM D6675 Accelerated Outdoor Cosmetic Corrosion Testing of Organic Coatings on Automotive Sheet Metal*
- ASTM D6695 Xenon-Arc Exposures of Paint and Related Coatings*
- ASTM D6864 Standard Specification for Color and Appearance Retention of Solid Colored Plastic Siding Products
- ASTM E308 Practice For Computing the Colors of Objects by Using the CIE System
- ASTM E313 Indexes of Whiteness and Yellowness of Near-White Opaque Materials
- ASTM E1331 Reflectance Factor and Color by Spectrophotometry Using Hemispherical Geometry
- ASTM E1348 Color by Spectrophotometry Using Hemispherical Geometry
- ASTM E1349 Reflectance Factor by Spectrophotometry Using Bi-directional Geometry*
- ASTM G7 Atmospheric Environmental Exposure Testing of Nonmetallic Materials
- ASTM G24 Conducting Exposures to Daylight Filtered Through Glass
- ASTM G147 Conditioning and Handling of Nonmetallic Materials for Natural and Artificial Weathering Tests
- ASTM G151 Exposing Non-Metallic Materials in Accelerated Test Devices That Use Laboratory Light Sources*
- ASTM G152 Operating Open Flame Carbon Arc Light Apparatus for Exposure of Nonmetallic Materials*
- ASTM G153 Operating Enclosed Carbon Arc Light Apparatus for Exposure of Nonmetallic Materials*
- ASTM G154 Operating Fluorescent Light Apparatus of UV Exposure of Nonmetallic Materials*
- ASTM G155 Operating Xenon Arc Light Apparatus for Exposure of Nonmetallic Materials*

CLTM (Chrysler Laboratory Test Methods)

- LP 463 KB 19 01 Outdoor Exposure Trim Materials
- LP 463 PB 16 01 Weather-O-Meter Test*
- LP 463 PB 17 01 Fade-O-Meter Test*

DIN (Deutsches Institut für Normung)

- DIN 6174 Colorimetric Evaluation of Color Difference of Surface Colors According to the CIE Lab Formula*
- DIN 53209 Designation of Degree of Blistering of Paint Coatings*
- DIN 67530 Refractometers as a Means for Gloss Assessment of Plane Surfaces of Paint Coatings and Plastics*
- DIN 75220 Aging of Automotive Components in Solar Simulation Units

ELTM (Ford Laboratory Test Methods)

BI (Paints and Solvents, Physical Test Method):

- 160-01 Florida Outdoor Exposure

BO (Plastics, Physical Test Methods):

- 101-01 Resistance to Artificial Weathering*
- 116-01 Exposure of Interior Trim Materials in a Controlled Irradiance Water-Cooled Xenon Arc Apparatus*

GM (General Motors Engineering Standards - Procedures)

- GM 9071P Tape Adhesion Test for Paint Finishes
- GM 9125P Procedures for Laboratory Accelerated Exposure of Automotive Materials*
- GM 9163P Outdoor Weathering of Automotive Exterior Materials
- GM 9327P Exterior Weatherability of Integrally Colored Plastics
- GM 9538P Weathering Exposure Tests for Interior Trims
- GMW 3414 Artificial Weathering of Automotive Interior Trim Materials*

ISO (International Standards Organization)

- ISO 105 A02 Color Fastness to Artificial Light
- ISO 105 B01 Color Fastness to Light; Daylight
- ISO 105 B03 Color Fastness to Weathering: Outdoor Exposure
- ISO 105 B04 Color Fastness to Artificial Weathering*
- ISO 105 B05 Detection and Assessment of Photochromism*

ISO (International Standards Organization) (cont.)

- ISO 105 B06 Color Fastness to Artificial Light at High Temperatures*
- ISO 877 Plastics-Methods of Exposure to Direct Weathering, to Weathering Under Glass-Filtered Daylight, and to Intensified Weathering by Daylight Using Fresnel Reflector (Methods A, B)
- ISO 2810 Paint and Varnishes - Notes for Guidance on the Conduct of Natural Weathering Tests
- ISO 2813 Measurement of Specular Gloss of Non-Metallic Paint Films
- ISO 4628 Paints and Varnishes-Evaluation of Degradation of Paint Coatings-Degradation of Intensity, Quality and Size of Common Types of Defect
- ISO 4892 Exposure to Laboratory Light Sources (Options 2, 3, 4)*

JIS (Japanese International Standards)

- JIS B7753 Light and Water Exposure Apparatus (Open-Flame Sunshine Carbon Arc Type)*
- JIS D0205 Weatherability for Automotive Parts (except 7.5)*

Loreal

- QAC-MC-151/K Accelerated Aging Under Light*

MIL (Military Standard)

- MIL 810F Solar Radiation (Sunshine) -Steady State for Prolonged Actinic Effects. Method 505.4 Procedure II*

SAE (Society of Automotive Engineers)

- SAE J576 Plastic Materials for Use in Optical Parts Such as Lenses and Reflectors of Motor Vehicle Lighting Devices. Optical and Chromaticity Measurements (Sections 4.4 and 5.2.2) Conducted at Atlas (DSET).
- SAE J1545 Instrumental Color Difference Measurement for Exterior Finishes, Textiles, and Colored Trim (A)
- SAE J1767 Instrumental Color Difference Measurement of Colorfastness of Automotive Interior Trim Materials
- SAE J1885 Accelerated Exposure of Automotive Interior Trim Components*
- SAE J1960 Accelerated Exposure of Automotive Exterior Materials Using a Controlled Irradiance Water Cooled Xenon-Arc Apparatus*
- SAE J1976 Outdoor Weathering of Exterior Materials
- SAE J2020 Accelerated Exposure of Automotive Exterior Materials Using a Fluorescent UV and Condensation Apparatus*
- SAE J2412 Accelerated Exposure of Automotive Interior Trim Components (Xenon-Arc)*
- SAE J2527 Accelerated Exposure of Automotive Exterior Materials (Xenon-Arc)*