



# **FIRE & FLAMMABILITY TESTING** **PHYSICAL & MECHANICAL TESTING**

**GOVMARK IS NOW PART OF SGS, THE WORLD'S LEADING INSPECTION, VERIFICATION, TESTING AND CERTIFICATION COMPANY.**

**SGS** | **GOVMARK**



# SGS GOVMARK TESTING SERVICES



As a leader in the fire and flammability testing industry since 1971, SGS Govmark's knowledge of Federal and State fire and flammability testing codes is unparalleled, a service that our customers have grown to rely on. As a SGS Govmark client, there will be no guesswork in which tests are needed. We provide exemplary guidance throughout the entire testing process to ensure that our clients' products are being tested in accordance with the proper test methods.

As a full service laboratory, SGS Govmark offers a wide range of evaluation services for the physical performance, chemical properties and sustainability of materials, products and packaging. Our extensive industry knowledge, technical expertise and global network provide specialized services at every stage of product development.

Our physical testing capability ranges from abrasion, tensile strength, compression, and colorfastness testing. Our expertise spans varied industries and fields such as transportation (aircraft, rail and mass transit interiors), building materials, home furnishings, and camping products, etc.

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**FOR MORE INFORMATION ON SGS  
GOVMARK'S TESTING CAPABILITIES, VISIT  
OUR WEBSITE AT [WWW.GOVMARK.COM](http://WWW.GOVMARK.COM)**



# FIRE & FLAMMABILITY TESTING SERVICES

SGS Govmark fire and flammability test reports are recognized and accepted by many of the world's leading authorities including Airbus, Boeing, ASTM, CPSC, FAA, IMO, ISO, NFPA, and many others. Our clients can rest assured that years of experience and industry knowledge are behind every test performed in our laboratory. Test results are always held with the strictest confidentiality.

SGS Govmark has done extensive work with major manufacturers in building specimen support systems and open flame ignition systems as well as issuing customized reports which include charts and graphs. Our design

department works with the latest versions of AutoCAD (2D drafting) and Inventor (3D modeling). We have full manufacturing capabilities to customize a multitude of test scenarios.

Full use of SGS Govmark's laboratory is available for those interested in research and development projects which includes access to our elite staff of engineers and skilled technicians.

We can customize our testing capability to support product defect analysis, failure mode assessment, and help develop a product that complies with the governing standard(s).



## TESTS BY AGENCY

Airbus Industries

(ANSI) American National Standards Institute

(ASTM) American Society for Testing & Materials

(BFD) Boston Fire Department

(BIFMA) Business & Institutional Furniture Manufacturers Assoc.

Boeing

(BS) British Standards Institute

California Bureau of Home Furnishings & Thermal Insulation

California Fire Marshal

Canadian Standards

(CFR) Code of Federal Regulations

(CG) Coast Guard

(CPSC) Consumer Product Safety Commission

(DOD) Department of Defense

(DOT) Department of Transportation

European Railway

(FAA) Federal Aviation Administration

(ICC) International Code Council

(FRA) Federal Railroad Administration

(IFAI) Industrial Fabrics Association International

(IMO) International Maritime Organization

(ISO) International Standards Organization

Miami Fire Department

(MIL-SPEC) Military Specifications and Standards

(MSHA) Mine Safety & Health Administration

New York City

(NFPA) National Fire Protection Association

Port Authority of New York & New Jersey

(SAE) Society of Automotive Engineers

(TAPPI) Technical Assoc. of the Pulp & Paper Industry

(UFAC) Upholstered Furniture Action Council

(UMTA) Urban Mass Transportation Administration

## FIRE & FLAMMABILITY TESTS BY PRODUCT CATEGORY

Apparel

Building Products

Cargo Liners

Carpeting

Children's Sleepwear

Draperies

Healthcare

Hospitality

Mattress Pads

Mattresses

Panel Walls

Passenger Vessel Materials

Plastics

Protective Clothing

Sleeping Bags

Tents

Textiles

Upholstered Furniture

Upholstery Materials

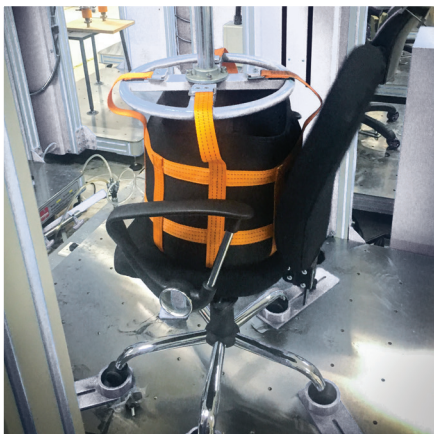
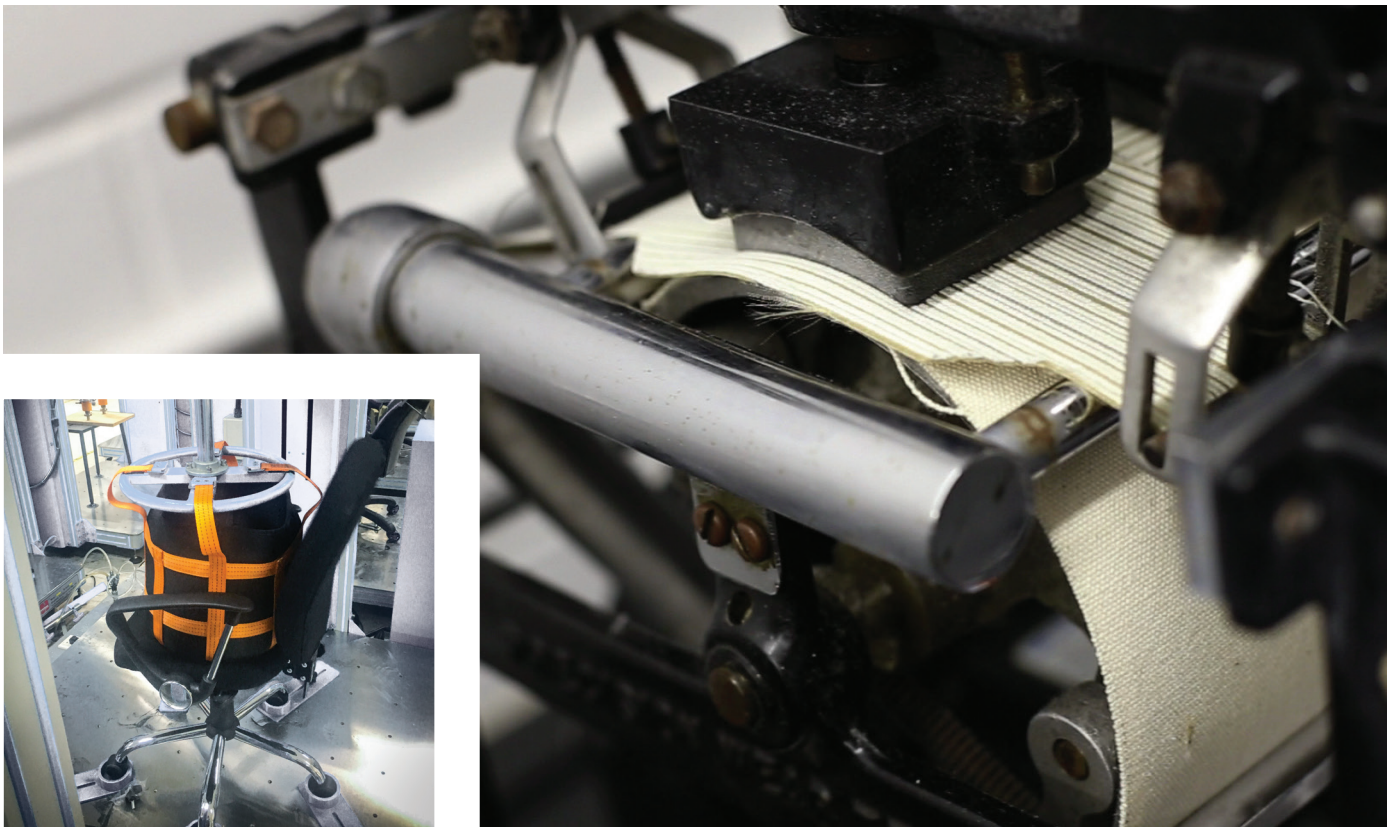
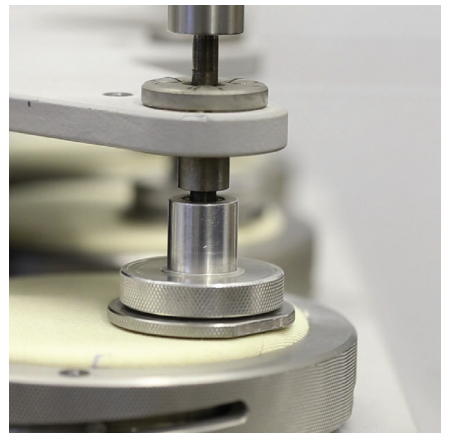
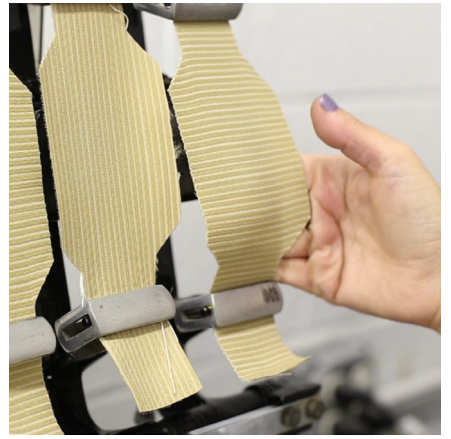
Wallcoverings



## FIRE & FLAMMABILITY TESTS BY DOCUMENT

ASTM C 1166	ASTM F 501	CAN/CGSB 4.2, 27.1	IMO A.688	NFPA 255
ASTM D 568	ASTM F 814	CAN/CGSB 4.2, 27.3	IMO MSC 61(67)	NFPA 258
ASTM D 635	ASTM F 963	CAN/CGSB 4.2, 27.4	IMO MSC 88	NFPA 259
ASTM D 1230	ASTM F 1506	CAN/CGSB 4.2, 27.5	ISO 1182	NFPA 260
ASTM D 1692	ASTM F 1939	CAN/CGSB 4.2, 27.7	ISO 1210	NFPA 261
ASTM D 1929	ASTM F 2700	CAN/CGSB 4.2,27.10	ISO 3795	NFPA 262
ASTM D 2863	ASTM F 2703	CAN/CGSB 155.1	ISO 4589-2	NFPA 265
ASTM D 3675	BFD IX-1	CAN/ULC-S102	ISO 5658-2	NFPA 266
ASTM D 3801	BFD IX-10	CAN/ULC S109	ISO 5659-2	NFPA 267
ASTM D 4108	BFD IX-11	14 CFR Part 25	ISO 5660 Part 1	NFPA 286
ASTM D 4151	BS 476	16 CFR 1500.44	ISO 5660 Part 2	NFPA 701
ASTM D 4372	BS 5438	16 CFR 1610	ISO 6925	NFPA 702
ASTM D 4986	BS 5690	16 CFR 1611	ISO 6940	NFPA 705
ASTM D 5048	BS 5852	16 CFR 1615	ISO 6941	NFPA 1971
ASTM D 5132	BS 6307	16 CFR 1616	ISO 7176	NFPA 1975
ASTM D 5238	BS 6807	16 CFR 1630	ISO 8191-1	NFPA 1976
ASTM D 6413	BS 7175	16 CFR 1631	ISO 9239-1	NFPA 1977
ASTM D 7140	BS 7176	16 CFR 1632	ISO 9239-2	NFPA 1981
ASTM D 7309	BS EN 597	16 CFR 1633	ISO 9772	NFPA 2112
ASTM E 84	BS EN 1021	16 CFR 1634	ISO 11925-2	RTCA/DO-160E
ASTM E 108	CA TB 106	49 CFR	ISO 12236	SAE J369
ASTM E 136	CA TB 116	CMVSS 302	ISO 12945-2	SBCC 9-88
ASTM E 162	CA TB 117	CPAI 75	ISO 12947-2	SMP 800C
ASTM E 648	CA TB 121	CPAI 84	ISO 12952-1 & -2	TAPPI T461
ASTM E 662	CA TB 129	FMVSS 302	ISO 12952-3 & -4	UBC 8-2
ASTM E 906	CA TB 133	FTM 5903	ISO 15025	UBC 31-1
ASTM E 1352	CA TB 603	FTM 5906	MIL-STD 1623	UBC 42-1
ASTM E 1353	CA TB 604v	IMO A.471	MIL-STD 2031	UBC 42-2
ASTM E 1354	CA Title 19	IMO A.472	NFPA 101	UBC 55-1
ASTM E 1534	Can. Hazard Prod.	IMO A.652	NFPA 102	UFAC
ASTM E 1537	CAN-2-4.2	IMO A.653	NFPA 130	UL 94
ASTM E 1590	CAN/CGSB 2-4.162	IMO A.687	NFPA 253	UL 214









# PHYSICAL & MECHANICAL TESTING SERVICES

SGS Govmark offers a full range of testing and analytical services for determining physical properties of textile products. We verify that your materials confirm to the industry requirements for such performance characteristics as strength, wear, colorfastness, and many others. Testing is performed by experienced technicians in accordance with standard test procedures issued by such associations as ASTM and AATCC. Procedures can be customized to accommodate a client's specific requirements.

## PHYSICAL TESTS

### ABRASION RESISTANCE

ASTM D 3884 – Taber Abrasion

ASTM D 4157 - Wyzenbeek Abrasion

ASTM D 4966 – Martindale Abrasion

### COLORFASTNESS

AATCC 8 – Crocking

AATCC 16 – Lightfastness

ASTM G 154 – UV Exposure

### DIMENSIONAL STABILITY

AATCC 96 – Commercial Laundering

AATCC 135 – Home Laundering

### PILLING

ASTM D 3511 – Brush Pilling

ASTM D 3512 – Random Tumble Pilling

ASTM D 4970 – Martindale Pilling

### SNAG RESISTANCE

ASTM D 3939 – Mace Snag

ASTM D 5362 – Bean Bag Snag

### STRENGTH

ASTM D 434/4034 – Seam Slippage

ASTM D 2262 – Tongue Tear

ASTM D 3786 – Mullen Burst

ASTM D 3787 – Ball Burst

ASTM D 5034 – Tensile Strength

### OTHER

AATCC 100 – Antibacterial Finish on Textiles

AATCC 130 – Stain Release

ASTM D 737 – Air Permeability

ASTM D 3776 – Fabric Weight (Mass)

### PHYSICAL TESTING BY ASSOCIATION

(AATCC) American Association of Textile Chemists and Colorists

(ACT) Association for Contract Textiles

(ASTM) American Society for Testing & Materials

(CFFA) Chemical Fabrics and Film Association

(JIFSG) Joint Industry Fabric Standards and Guidelines

(TCFFA) The Casual Furniture Fabrics Association

(BIFMA) Business & Institutional Furniture Manufacturers Association



# WIRE & CABLE FIRE & FLAMMABILITY TESTING SERVICES

SGS Govmark has added wire and cable to our core testing capabilities. We've also expanded our facilities to now include approximately 4,000 square feet dedicated solely to wire and cable fire and flammability testing.

Testing is performed in strict accordance with specific test methods. SGS Govmark also offers experimental testing customized to meet our clients' needs. Our state of the art fire rooms are equipped with computer interfaced instrumentation for data acquisition.

## WIRE & CABLE TESTS

CSA-FT1 (Small Scale Vertical)

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CSA-FT2 (Small Scale Horizontal)

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IEC 60607

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IEC 60695-11-10

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IEC 60695-11-20

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IEEE 383

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IEEE 1202

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IEC 60331-21 (Fire Test Under Load)

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IEC 60332-1-2 (Small Scale Vertical)

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IEC 60332-1-3 (Small Scale Vertical)

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UL-1685 Section 4 (Vertical Tray with Smoke)

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UL 1685 Section 12/FT4 (Vertical Tray with Smoke)

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UL 1581 Section 1160 (Vertical Tray)

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UL 1581 Section 1164 (Vertical Tray with Smoke)

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UL 1581 FT1 (Small Scale Vertical)

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UL 1581 FT2 (Small Scale Horizontal)

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UL 2556

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### ASTM D 2863

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Measuring the Minimum Oxygen Concentration to Support Candle-Like Combustion of Plastics by Oxygen Index

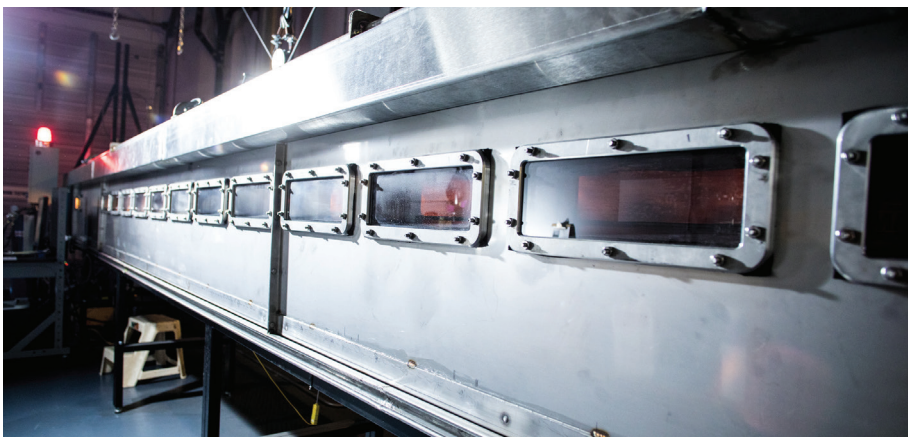
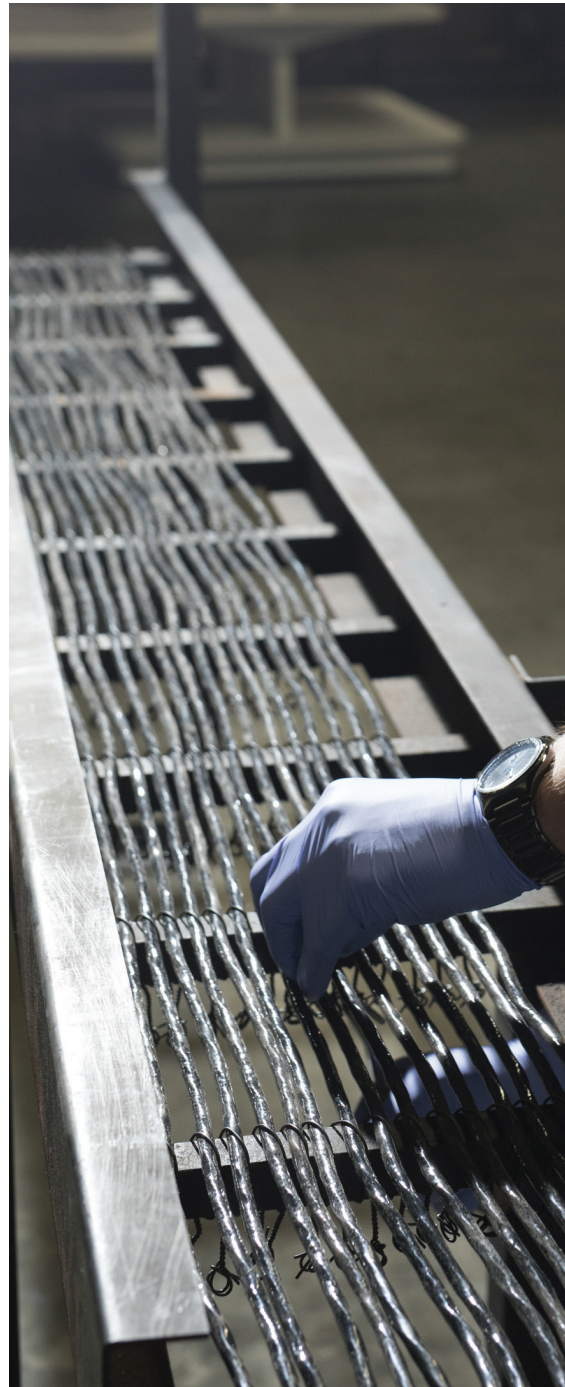
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### ISO 4589-2

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Plastics—Determination of Burning Behavior by Oxygen Index







# AEROSPACE, RAIL, & TRANSPORTATION FIRE & FLAMMABILITY TESTING SERVICES

SGS Govmark's fully staffed laboratory is knowledgeable and well-versed in the major fire and flammability testing methods and procedures for aerospace, rail, and transportation as required by such agencies as FAA, DOT, FRA, European Railway, and IMO. Our experienced technicians test in compliance with the specifications and standards issued by these authorities.

SGS Govmark offers DER services to expedite the submission and approval process for the FAA's 8110-3 form. As an added convenience, SGS Govmark's in-house Designated Engineering Representative (DER) is also available to witness the testing.





## AEROSPACE, RAIL, & TRANSPORTATION TESTS

AITM 2.0002A	BSS 7239	ISO 5658-2
AITM 2.0002B	BSS 7303	ISO 5660-1
AITM 2.0003	BSS 7310	ISO/TR 9705-2
AITM 2.0004	BSS 7322	NFPA 130
AITM 2.0005	BSS 7323	SAE J 369
AITM 2.0006	BSS 7365	SMP 800C
AITM 2.0007A	BSS 7387	
AITM 2.0007B	49 CFR	<b>BY AGENCY</b>
AITM 2.0008	CMVSS 302	Airbus
AITM 2.0009	Docket 90	Boeing
AITM 2.0010	EN 45545-2	(DOT) Department of Transportation
AITM 2.0053	EN ISO 1182	European Railway
AITM 2.0056	EN ISO 4589-2	(FAA) Federal Aviation Administration
AITM 3.0005	EN ISO 5659-2	(FRA) Federal Railroad Administration
ASTM C 1166	EN ISO 9239-1	(IMO) International Maritime Organization
ASTM D 3675	EN ISO 11925-2	
ASTM D 5132	FAR Part 23	<b>BY PRODUCT CATEGORY</b>
ASTM E 162	FAR Part 25	Aircraft Components
ASTM E 648	FAR Part 29	Automobile Interiors
ASTM E 662	FAR Part 23, 25, 29	Bus Interiors
ASTM E 119	FAA Handbook Chapter 12	Passenger Vessel Interiors
ASTM E 1354	FAA Handbook Chapter 13	Railcar Interiors
ASTM E 1357	FMVSS 302	
BSS 7230	IMO 2010 FTP	
BSS 7238	ISO 3795	

# SGS GOVMARK ACCREDITATIONS & MEMBERSHIPS



## NADCAP ACCREDITATION

SGS Govmark has been issued a certificate of accreditation by Nadcap for quality flammability testing for non-metallic materials. This accreditation entitles SGS Govmark to appear on the Qualified Manufacturers List (QML).



## AIRBUS

SGS Govmark is qualified and authorized to perform Fire and Flammability Testing for Airbus, including but not limited to: Resistance of Materials, Smoke Density, and Fire Resistance.



## A2LA ACCREDITATION — CERT NO. 2947.01

SGS Govmark Testing Services has been accredited in accordance with the recognized ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration Laboratories, demonstrating technical competence for a defined scope and the operation of a laboratory quality management system in the field of Thermal Testing.



## IFAI MEMBERSHIP — INDUSTRIAL FABRICS ASSOCIATION

SGS Govmark Testing Services is a member in good standing of the Industrial Fabrics Association International and is pledged to abide by its code of ethics.



## TESTING AGENCY — THE CITY OF LA DEPARTMENT OF BUILDING & SAFETY

Testing Agency Compliance for the City of Los Angeles—Municipal Code, section 98.0503 and Information Bulletin PC/BC 2002-05A Part III.



## SGS GLOBAL NETWORK

### AMERICAS

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USA (Farmingdale)

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USA (Fairfield)

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USA (Appleton)

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### EUROPE

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France (Aix En Provence)

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France (St Etienne Du Rouvray)

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Germany (Taunusstein)

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Netherlands (Spijkenisse)

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Turkey (Istanbul)

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United Kingdom (Bradford)

### ASIA

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China (Anji, Guangzhou, Ningbo, Qingdao, Shanghai, Shenzhen, Shunde, Tianjin, Xiamen)

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Hong Kong

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India (Gurgaon)

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Indonesia (Jakarta)

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Malaysia (Shah Alam)

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Philippines (Makati)

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Taiwan (Taipei)

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Vietnam (Ho Chi Minh City)

[WWW.SGS.COM](http://WWW.SGS.COM)

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**WHEN YOU NEED TO BE SURE**

