

Flammability

Sileather® silicone fabrics are inherently flame resistant thanks to the protective nature of silicone. Our silicone fabrics, since the start of our design to abandon the use of adding flame retardants into our fabric, have met international flammability standards including:

ASTM E84

The ASTM E-84 is the standard test method for assessing the surface burning characteristics of building products to explore how the material might contribute to flame spread in the event of a fire. The test reports the Flame Spread index and Smoke Developed index of the tested products.

BS 5852 #0,1,5(crib)

BS 5852 #0,1,5 (crib) assesses the ignitability of material combinations (like covers and filling) when subjected to an ignition source like a smoldering cigarette or match flame equivalent.

CA Technical Bulletin 117-2013

This standard measures flammability using both open flame and lighted cigarettes as the ignition sources. All upholstery components are to be tested. This test is mandatory in the State of California. It is used nationwide as a minimum voluntary standard and is also cited as a minimum standard by the General Services Administration (GSA).

EN 1021 Part 1 and 2

This standard is valid throughout the EU and examines a fabric's reaction to a burning cigarette. It replaces a number of national tests, including DIN 54342: 1/2 in Germany and BS 5852: 1990 in the UK. Ignition source 0 - this ignition source is used as a "smolder" test rather than a "flame" test as no flame is generated by the ignition source itself. The cigarette is left to smolder along its length, and no smoldering or flaming of the fabric should be observed after 60 minutes.

EN45545-2

EN45545-2 is a European standard for the fire safety of railway vehicles. It specifies the requirements and testing methods for materials and components used in railway vehicles to reduce the risk of fire. The standard is divided into several hazard levels, with HL3 being the highest level. Sileather has been tested and meets HL1, HL2, and HL3 (per report SL-Z-260/EN45545-R21/359a).

FMVSS 302

This is a horizontal rate of burning test procedure. It is mandatory for all automotive interiors throughout the United States and Canada.

NFPA 260

NFPA 260 assesses the cigarette ignition resistance of upholstery cover fabric, and is commonly referenced by fire marshals for public-occupancy furniture (hotels, restaurants, healthcare facilities). Sileather's cover fabric has been tested and rated Class I.

IMO FTP 2010 Code, Part 8

This test procedure prescribes methods for assessing the ignitability of material combinations, e.g. covers and filling used in upholstered seating, when subjected to either a smoldering cigarette or a lighted match as might be applied accidentally in the use of upholstered seats. It does not cover ignition caused by deliberate acts of vandalism. Annex I, 3.1 measures flammability using a lighted cigarette and Annex I, 3.2 measures flammability with a butane flame as the ignition source.

IMO FTP 2010 Code, Part 5

This standard governs the surface flammability of bulkhead, wall, and ceiling linings aboard a vessel, measuring critical flux at extinguishment, total heat release, and peak heat release rate under a radiant heat source. Materials meeting the required thresholds are classified as low flame spread. Sileather has passed Part 5 testing (SGS Report #SDFTS26004468R01), extending its marine certifications from seating into wall and ceiling panel applications.

UFAC

The UFAC procedures assess the cigarette ignition properties of the individual upholstery components. During the test, the individual component is tested in conjunction with a standard component. For example, during the fabric test, the candidate fabric is used to cover a standard filling material. During the filling material test, the candidate filling material is covered with a standard fabric.

GB 8410

This standard specifies the technical requirements and test methods for the horizontal flammability of automotive interior materials.

M1 (NF P 92-501 to 507, France)

M1 is a French reaction-to-fire classification for wall coverings, curtains, and hanging textiles. Sileather has been tested via the electrical burner method and rated M1 (FCBA Fire Laboratory, Certificate No. CM-20-P-101). This classification applies to wall-hung coverings, sheers, and curtains; seating and furniture fire performance is addressed by the standards above (CAL 117, BS 5852, EN 1021, IMO Part 8, UFAC, NFPA 260).