



AEROSPACE MATERIAL SPECIFICATION

AMS3673™

REV. D

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Superseding AMS3673C

Cloth, Glass, Aluminum Face, Silicone Rubber Back

RATIONALE

This document has been determined to contain basic and stable technology which is not dynamic in nature.

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1. SCOPE

1.1 Form

This specification covers one type of glass cloth coated on one face with aluminum and the other face with silicone rubber.

1.2 Application

Primarily for use as a thermal curtain for protection of personnel and equipment from short-time exposure to high intensity thermal radiation.

1.3 Safety - Hazardous Materials

While the materials, methods, applications, and processes described or referenced in this specification may involve the use of hazardous materials, this specification does not address the hazards which may be involved in such use. It is the sole responsibility of the user to ensure familiarity with the safe and proper use of any hazardous materials and to take necessary precautionary measures to ensure the health and safety of all personnel involved.

2. APPLICABLE DOCUMENTS

The issue of the following documents in effect on the date of the purchase order forms a part of this specification to the extent specified herein. The supplier may work to a subsequent revision of a document unless a specific document issue is specified. When the referenced document has been cancelled and no superseding document has been specified, the last published issue of that document shall apply.

2.1 U.S. Government Publications

Available from the Document Automation and Production Service (DAPS), Building 4/D, 700 Robbins Avenue, Philadelphia, PA 19111-5094, Tel: 215-697-6257, <http://assist.daps.dla.mil/quicksearch/>.

FED-STD-4 Glossary of Fabric Imperfections

FED-STD-191 Textile Test Methods

MIL-STD-1487 Glossary of Cloth Coating Imperfections

2.2 ASQ Documents

Available from American Society for Quality, Quality Press, 600 North Plankinton Avenue, Milwaukee, WI 53203, Tel: 800-248-1946, <http://qualitypress.asq.org>.

ANSI/ASQ Z1.4 Sampling Procedures and Tables for Inspection by Attributes

3. TECHNICAL REQUIREMENTS

3.1 Materials

3.1.1 Base Cloth

The warp and filling yarns used in the manufacture of the base cloth shall be 100% continuous filament glass yarns.

3.1.2 Coated Cloth

The cloth shall consist of a base fabric of glass yarn which has been evenly and uniformly coated on one surface with a suitably-compounded silicone rubber. On the opposite surface shall be a highly-reflective layer of vacuum distilled aluminum directly adhered to the warp face by means of a curable, highly-flexible, solvent resistant adhesive bonding composition.

3.2 Properties

Cloth shall conform to the following requirements, determined in accordance with specified test methods of FED-STD-191 except as otherwise specified herein:

3.2.1 Base Cloth

Shall be as follows:

TABLE 1

Paragraph	Property	Requirement	Test Method
3.2.1.1	Construction, ends and picks per inch (25.4 mm)	64 x 60	5050
3.2.1.2	Thickness, maximum	0.008 inch (0.20 mm)	5030
3.2.1.3	Weight, maximum	6.70 ounces/square yard (227.2 g/m ²)	5041
3.2.1.4	Breaking Strength, minimum Warp Filling	130 pounds force/inch (22 766 N/m) 90 pounds force/inch (15 761 N/m)	5102
3.2.1.5	Weave	Crowfoot Satin	Visual

3.2.2 Coated Cloth

Shall be as follows:

TABLE 2

Paragraph	Property	Requirement	Test Method
3.2.2.1	Weight	16 ounces/square yard $\pm$ 2 (542 g/m ² $\pm$ 68)	5041
3.2.2.2	Thickness	0.0150 inch $\pm$ 0.0015 (0.381 mm $\pm$ 0.038)	5030
3.2.2.3	Width	As Ordered	5020
3.2.2.4	Breaking Strength (Cut Strip), minimum Warp Filling	150 pounds force/inch (26 269 N/m) 150 pounds force/inch (26 269 N/m)	5102
3.2.2.5	Tear Strength, minimum Warp Filling	3.0 pounds force (13.3 N) 3.0 pounds force (13.3 N)	5134
3.2.2.6	Cold Crack Rubber Coating Warp and Filling Aluminum Coating Warp and Filling	No Cracking No Cracking	4.5.1
3.2.2.7	Coating Adhesion, minimum	4.0 pounds force/inch (701 N/m)	5970
3.2.2.7.1	Adhesive shall be cured in accordance with FED-STD-191, Method 5970, except that the cure cycle shall be 48 hours $\pm$ 1 at 77 °F $\pm$ 5 (25 °C $\pm$ 3)		

