



ENGINEERING MATERIAL SPECIFICATION

FABRIC, VINYL COATED

▽ ESB-M2F67-B

1. SCOPE

The material defined by this specification is vinyl copolymer or vinyl chloride, coated knit fabric of good quality and uniform composition.

2. APPLICATION

This specification was released originally for material used in applications specified on Engineering Chart 534.

3.0 STANDARD REQUIREMENTS FOR PRODUCTION MATERIALS

Material suppliers and part producers must conform to the Company's Standard Requirements For Production Materials (WSS-M99P1111-A).

3.2 APPEARANCE (FLTM BI 109-01)

The color, pattern, and finish shall match the approved Design Center master sample, or shall be as specified on the engineering drawing.

3.3 BACKING ESB-M9H1-A

3.4 WEIGHT, min (FLTM BN 106-01)

Coating	9.5 oz/yd ² (0.322 kg/m ²)
Total	14.0 oz/yd ² (0.475 kg/m ²)

3.5 WIDTH Specified on Chart 534

3.6 TENSILE STRENGTH, 10% Tolerance (ASTM D 1682, Grab Method)

Warp	100 lb (445 N)
Fill	65 lb (289 N)

3.7 STRETCH AND SET (SAE J 855)

	Stretch	Set
Warp	1-5%	0-2%
Fill	7-13%	0-4%

Date	Action	Revisions
2003 08 26	Revised	Para 3.0 inserted; Para 3.1, 3.30, 4 deleted
1979 10 12	Activated	Metricated and Retyped CAHI-RD572066-255
1971 08 20		Released 4B1-302-16



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**3.8 STIFFNESS**

(ASTM D 747, direct reading at 60 ° angle with 0.1 in-lb (0.01 N-m) load)

	Non-metallic	Metallic
Warp	15	18
Fill	13	13

The test specimen shall be 2 in (50 mm) x 1 in (25 mm) with 1 in (25 mm) of the 2 in (50 mm) dimension clamped in jaw, 1/2 in (13 mm) span from clamp to bending plate, fabric side up.

3.9 TEAR STRENGTH (trapezoid), min
(ASTM D 5733)

Warp and Fill	3.5 lb (15.6 N)
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3.10 SHRINKAGE, max
(FLTM BN 105-01)

Warp	3.0%
Fill	1.5%

**3.11 ADHESION OF COATING
TO BACKING FABRIC**, min

(ASTM D 413, Machine Method; the coating of the test specimen shall be separated from the backing fabric, by hand and without the use of solvents, prior to pulling. The movable jaw of the testing machine shall move at the rate of 12 in (305 mm)/min.)

4 lb/in (701 N/m) width

3.12 SEAM STRENGTH, min
(FLTM BN 119-01)

Warp	85 lb (378 N)
Fill	50 lb (222 N)

Note: The above values apply to fabric breaks only. Thread breaks which exceed the above requirements shall be accepted. However, results below the above requirements which are due to thread breaks shall be disregarded and the tests repeated.

3.13 COLD FLEXIBILITY
(FLTM BN 102-01, -34 °C)

No failure

3.14 CROCKING
(FLTM BN 107-01)

Rating 5

3.15 MIGRATION STAINING
(FLTM BN 103-01)

The coated surfaces shall show no evidence of injurious exudation, adhesion (tackiness), separation, color transfer, or flattening of embossing, when placed face to face with itself, or materials of the 2F4-9-62-67 etc., series.