



PERFORMANCE, ROOF SYSTEMS FABRIC, INTERIOR

WSS-M8P27-B1

1. SCOPE

The material defined by this specification is any flexible (soft) cover fabric, or laminate, to be bonded to an interior roof system substrate base or interior part above the belt –line. This includes applications such as headliner, pillar, sun visor, roller shade, and moon/sun roof.

2. APPLICATION

This specification was released originally for all materials (not including polymeric films) used for soft interior cover stock such as headliner, pillar, sun visor, roller shade and moon/sun roof, which includes knits, woven or non-woven construction. This includes any combination of composites with foam, scrim or fabric that is applicable to the part assembly.

Testing must be conducted according to Table 1 for each approval phase with the appropriate backing for the application.

3. REQUIREMENTS

3.1 APPROVED SOURCES

This specification is performance based and does not have approved sources

3.2 PERFORMANCE SPECIFICATION

For lamination requirements refer to Performance Lamination for Seating and Interior Trim Specification WSS-M8P30-A1.

In addition, applicable system requirements that must be met are:

- Headlining Performance – WSS-M15P27-G/latest
- Sun Visor Performance – WSS-M98P3-C/latest
- Moonroof Performance – WSS-M8P23-B/latest
- Interior Wrapped Components – WSS-M15P45-C/latest
- Polyurethane Foam Performance – WSS-M99P48-A1-A3/latest

3.3 CONDITIONING AND TEST CONDITIONS

All test values are based on material conditioned for not less than 24 h prior to testing in a controlled environment of 23 +/- 2 °C and 50 +/- 5% relative humidity. Testing of the material should occur in the conditioning environment or soon after removal.

- 3.4 In addition to the requirements listed herein, the face fabric shall meet all requirements of the applicable material specification. The material specification shall take precedence over the performance specification, for any requirement that differs from the performance specification.

Date	Action	Revision	Rev. 03
2018 06 15	Revised	Added weathering for new constructions	L. Rabideau, NA
2018 04 17	Revised	See Summary of Revisions	L. Rabideau, NA
2017 07 27	Released		L. Rabideau, NA



3.5 CONSTRUCTION

Face fabric shall be specified in the individual material specification. Backing materials to face fabric (scrim, foam or coatings) should be applied as required to meet application and process requirements and should be present for composite approval.

3.6 APPEARANCE

The color, pattern, finish and hand shall match the approved Corporate Design master sample.

3.7 FOGGING (PHOTOMETRIC)

(SAE J1756, 3 h at 100 °C heating, 21 °C
Cooling plate, post testing conditioning 16 h)

Fog Number 70 min

Formation of clear film, droplets or crystals is cause for rejection

All materials, parts and components should be stored in an open environment for 14-28 days after manufacture, and then must be bagged in sealed polyethylene (PE) or PE coated aluminum bags for shipping. Parts for testing must be labelled with supplier and date of manufacture.

Sample shall be tested as part of a production assembly composite if it is 100% bonded. If not 100% bonded, test each component separately.

3.8 ODOR

(FLTM BO 131-03)

Condition 1	Rating 3 max
Condition 2	Rating 3 max
Condition 3	Rating 3 max

3.9 FLAMMABILITY

(ISO 3795)

Burn Rate 100 mm/minute max

Headliner fabric/foam composite shall be tested as 100% fully bonded to the headliner substrate as specified in WSS-M15P27-G/latest.

Sun Visor fabric/foam laminate must use appropriate foam to meet the 100mm/min. max as a fabric/foam composite if not 100% fully bonded to substrate.

Pillar/Roller Shade fabric/foam or fabric/scrim laminate must use appropriate foam or backing to meet the 100mm/min. max as a composite if not 100% fully bonded to substrate.

3.10 CONSTRUCTION PROPERTIES

3.10.1 Breaking Strength 150N min
(ASTM D5034 Grab Method, 300 mm/min speed
Average of 5 samples in each direction)

3.10.1.1 Breaking Strength Retention after Resistance to Interior Weathering
(FLTM BO 116-01, ASTM D5034 Grab Method,
300 mm/min speed Average of 5 samples in each direction)





Headliner, Roller Shade, Moon Roof Face
Fabric application 225.6 kJ/m²

150N min

Sun Visor, Pillar and Backing Fabric of Roller Shade,
Moon Roof application 977.6 kJ/m²

150N min

3.10.2 Resistance to Abrasion (SAE J948, 500 g, CS-10 wheels)

150 cycles

No evidence of excessive surface deterioration. The resistance to abrasion of production materials shall be equal to or better than that exhibited by the sample originally approved by the Materials Engineering Activity. The print on printed fabrics shall not be removed. See Figures 1 through 4 for pass fail conditions.

Design intent of pattern can be observed in pass conditions. Little to no wear is exhibited.



Figure 1: Taber Abrasion – Pass Condition – Knit Fabric