



VINYL FILM, (PVC), UNSUPPORTED

WSS-M2F173-B1

VINYL FILM, (PVC), UNSUPPORTED
BI-AXIAL ORIENTATION TYPE

WSS-M2F173-B2

1. SCOPE

The material defined by these specifications is an unsupported polymeric film used in soft interior components that require a flexible (soft) cover skin material. This cover material is to be used over a hard substrate with or without foam or spacer fabric. WSS-M2F173-B2 describes material with bi-axial orientation characteristics.

2 APPLICATION

These specifications were released originally for unsupported polymeric film materials to be used in applications such as in the manufacture of sun visors, door panels, interior tonneau covers, and quarter trim panels. The HF-welding procedure may be used as specified on Engineering Drawings.

3. REQUIREMENTS

3.1 STANDARD REQUIREMENTS FOR PRODUCTION MATERIALS

3.1.1 This specification requires the use of approved sources. Only the sources identified on the Ford Approved Source List (ASL) can be used when this specification is listed on the drawing, CAD file, or other documents. The list of approved sources is located within Ford at www.mats.ford.com or available externally through a Ford Materials Engineer.

3.1.2 Vehicle Interior Environment Quality Materials/Component Performance Requirements

Materials used in interior applications must meet the requirements outlined in WSS-M99P2222-D1/latest.

3.1.3 In addition to the requirements listed herein, these materials must meet all the applicable requirements:

- Flexible Polymeric Film Performance -- WSS-M8P3-E1/latest
- Sunvisor Assembly -- WSS-M98P3-B/latest

Refer to Table 1 within WSS-M8P3-E1/latest for new construction and color approval requirements.

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 CONSTRUCTION PROPERTIES

3.3.1 Weight 430 - 600 g/m²
(FLTM BN 106-01)

Date	Action	Revisions	Rev. 02
2016 10 17	Revised	Revised weight requirement	L. Rabideau, NA
2016 05 02	Editorial	See Summary of Revisions	A. Wagenhals, NA
2015 03 27	Released		A. Wagenhals, NA



3.3.2	Thickness (ISO 4591)	As specified on Engineering Drawing
	Tolerances	+/- 10%
3.3.3	Tensile Strength (FLTM BN 150-04, Test Speed 500 mm/minute)	
	WMD	173 kgf/cm ² min
	AMD	173 kgf/cm ² min
3.3.4	Breaking Strength	
3.3.4.1	Unsupported Films (ISO 37 type 1 dumbbell/ASTM D 412, Method A, Die C)	Report, MPa
3.3.4.2	Supported Films (ASTM D751, grab method)	Report, N
3.3.4.3	Foam Laminated Films (ASTM D751, grab method)	Report, N
3.3.5	Elongation at Break (FLTM BN 150-04, Test Speed 500 mm/minute)	
	WMD	200% min
	AMD	200% min
3.3.6	Resistance to Taber Abrasion (FLTM BN 108-02, CS-10 wheels, 1000 g load)	250 cycles

The abraded area must exhibit compatible color and appearance with the adjacent unbraided area. There shall be no loss of grain or other detrimental effects. The abrasion resistance of production material shall be equal to or better than the sample approved by Materials Engineering. All three specimens must pass.

3.4 COLOR PROPERTIES

3.4.1	Soiling and Cleanability (FLTM BN 112-08: ISO 105-A02/ AATCC Evaluation Procedure 2))	
	Agents: Standard Soil Grease	Rating 4 min Rating 4 min
3.4.2	Resistance to Fade (FLTM BO 116-01, ISO 105-A02/ AATCC Evaluation Procedure 1)	
	977.6 kJ/m ²	Rating 4 min