



PERFORMANCE, FLEXIBLE MATERIAL FOR SHIFT BOOTS AND PARKING BRAKE BOOTS

WSS-M15P46-B

1. SCOPE

This specification defines the performance requirements for interior materials cut and sewn into boots for floor mounted shift levers and parking brakes. These materials must have good resistance to flex cracking at cold temperatures.

2. APPLICATION

Interior floor mounted transmission shift boots and parking brake boots. This specification was originally written for polyurethane coated fabrics.

3. REQUIREMENTS

3.1 STANDARD REQUIREMENTS FOR PRODUCTION MATERIALS

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

3.1.1 Materials used in interior applications must meet the requirements outlined in WSS-M99P2222-B1/Latest. *Performance, Vehicle Interior Environment Quality Material/Component Requirements*. Data must be included in material submission package.

3.2 APPEARANCE

The color, grain, visual aesthetics, hand and finish shall be approved by Ford Design/Mastering.

3.3 FINISHING

Color matched finish coating. The material must be through dyed to prevent un-dyed fibers from showing through after sewing and the dye must be similar in color to the surface coating.

3.4 PHYSICAL PROPERTIES

3.4.1	Thickness (ASTM D 1813)	0.7 - 1.2 mm
3.4.2	Breaking Strength (ASTM D 751 grab method)	250 N min
3.4.3	Tear strength (Trapezoid) (ASTM D 751)	44 N min
3.4.4	Seam Strength (FLTM BN 119-01)	250 N min

Date	Action	Revisions
2011 06 21	Released	Activated



3.4.5	Stiffness (ASTM D 747, 25 x 50 mm specimen)	Report Value
3.4.6	Dimensional Stability (FLTM BN 105-03, 3 cycles)	
	Wet	+/- 3% max
	After Drying	+/- 3% max

3.5 COLOR PROPERTIES

General Acceptance Criteria

The material shall not exhibit any change in appearance such as color change, fading or gloss change in excess of the required AATCC rating. In addition, the material shall not exhibit staining, blistering, loss of paint adhesion, flaking, chipping, checking, chalking, cracks, splits, sinks, bulges, tackiness, peeling or delamination.

3.5.1	Resistance to Fade (Filtered Xenon FLTM BO 116-01, ISO 105-A02/AATCC Evaluation Procedure 1)	
	601.6 kJ/m ²	Rating 4 min
	In addition, the material must remain flexible and exhibit no cracking when bent around a 6.4 mm mandrel.	
3.5.2	Resistance to Heat Aging (7 days at 90 +/- 2 °C, ISO 105-A02/ AATCC Evaluation Procedure 1)	Rating 4 min
3.5.3	Soiling and Cleanability (FLTM BN 112-08, ISO 105-A03/ AATCC Evaluation Procedure 2)	Rating 4 min
	Test grease, coffee, and standard soil	

3.5 FINISH PROPERTIES

3.6.1	Coating Adhesion	No top coat removal.
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Test Method:

Using a knife cut, an "X" approximately 25 mm wide down to the base coat of sample. Apply acetate fiber tape (3M #898, 25 mm wide, or equivalent) over the "X". Rub the tape until good contact has been achieved. Grip one end of the tape and with a quick steady pull remove the tape off the face of the sample.

