



PERFORMANCE, ARMREST, FOAM IN PLACE

WSS-M15P26-D

1. SCOPE

This specification defines the performance requirements for a foam-in-place molded armrest assembly.

2. APPLICATION

This specification was released originally for automotive door or seat armrests. This is not applicable for wrap – around applications.

Molded foam used in assemblies must also meet WSS-M15P20-B1/B2 requirements.

The face materials must meet the requirements of material specifications (eg M1F, M2F, M1H) and the appropriate Performance Specification

3. REQUIREMENTS

3.1 APPROVED SOURCES

This specification is performance based and does not have approved sources.

3.2 SAMPLE SELECTION

Testing must be conducted on part at each prototype and production build phase unless specified otherwise by Ford Engineering. See Table 1 for DV/PV testing.

3.3 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.

3.4 CONSTRUCTION

The parts consist of face/cover material laminated to foam, which are cut and sewn to the desired shape and injected with foam.

Cover - As specified on the engineering drawing

Foam - As specified on the engineering drawing

Substrate - As specified on the engineering drawing

Date	Action	Revisions	Rev. 01
2017 08 02	Revised	See Summary of Revisions	A. Collins, NA
2010 05 25	Activated		M. Dumitrescu, G. Eaton



3.5 ENVIRONMENTAL TESTING

3.5.1 Sample Preparation

All parts shall be fully trimmed including all components packaged in the environment (eg. speakers, hardware, wiring, etc.) and assembled onto actual or representative production support foundations that include not only all attaching points but also any boundary conditions that may restrict movement, unless otherwise specified by the affected Materials Engineering Activity. The retention methods, attachments and supporting garnish moldings (if any) shall be the same as proposed for production.

3.5.2 Short Term Heat, Humidity and Cold Cycle

5 h at -30 ± 2 °C
30 min at 23 ± 2 °C and 50% R.H.
5 h at 90 ± 2 °C
30 min at 23 ± 2 °C and 50% R.H.
2 h at 50 ± 2 °C and 95 ± 5 % R.H.
30 min at 23 ± 2 °C and 50% R.H.
5 h at -30 ± 2 °C
30 min at 23 ± 2 °C and 50% R.H.
5 h at 90 ± 2 °C

3.5.3 Long Term Heat Exposure (7 days at 90 ± 2 °C)

Requirements: The trimmed assemblies shall remain relatively unaffected by the exposure cycles during and after the tests as demonstrated.

Tactually/visually: The assembly shall not become tacky, lose surface-grain definition, or exhibit surface-color change; no wrinkling, distortion, blistering, delamination, blushing, hazing, milking, staining, or other objectionable visual appearance.

Functionally: No expansion, shrinking, or warping that will interfere with normal functional operations.

3.6 FATIGUE TEST

(FLTM BO 113-04, 2000 cycles)

3.6.1 Original

3.6.2 After exposure per para 3.5.2

3.6.3 After exposure per para 3.5.3

The cover material shall not delaminate from the foam and there shall be no evidence of foam crumbling. There shall be no permanent deformation greater than 2 mm. Results of this test shall be determined by cutting a cross section of the armrest after fatigue flexing.