THROW IN MAT ASSEMBLIES, PERFORMANCE, ELASTOMERIC, ALL WEATHER **WSS-M9P11-A**

CARGO/TRUNK MATS, PERFORMANCE, ELASTOMERIC, ALL WEATHER **WSS-M9P11-A2**

1. SCOPE

This specification defines the standard requirements for a good quality elastomeric all weather throw in mat which meets the minimum durability and performance requirements.

2. APPLICATION

This specification was released originally for material used as all weather floor mats to protect the floor carpeting and cargo mats for trunk and load floor coverings.

2.1 LIMITATION

For WSS-M9P11-A vacuum formed mats are not allowed due to the inability to create nibs sufficient to meet the coefficient of friction requirement.

3. REQUIREMENTS

3.1 APPROVED SOURCES

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

3.2 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.

3.3 PERFORMANCE CRITERIA

3.3.1 In addition to the requirements listed herein, the end-item floor mat assembly shall meet all requirements in the material specification WSS-M99D67-B1 and all relevant requirements in the INSUL and INTRIM SDS.

3.4 DV/PV TEST PLAN

PEC/FEC/PV testing must be conducted in compliance with program milestones unless otherwise specified by Ford Engineering. See Table 1 and Table 2 for sample size and testing requirements.

3.5 APPEARANCE PROPERTIES

3.5.1 Appearance

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

Date	Action	Revisions	Rev. 4
2017 10 27	Revised	See Summary of Revisions	L. Sinclair, NA
2015 05 08	Revised	See Summary of Revisions	L. Sinclair, NA
2013 07 26	Released		L. Sinclair, NA

Copyright © 2017, Ford Global Technologies, LLC
Licensee=/, User=,
Not for Resale,
Copyright Ford Motor Company
Provided by IHS Markit under license with FORD
No reproduction or networking permitted without license from IHS
Full document details: FORD WSS-M9P11-A2 2017
Documents
Document Sharing Hub

3.5.2 Surface Condition

The surface shall not be tacky to foreign material. Dirt and dust shall be capable of removal with soap and water.

3.6 SPECIFIC GRAVITY — Report +/- 5%
(ASTM D 792)

3.7 PHYSICAL PROPERTIES

3.7.1 Resistance to Abrasion — 1000 cycles
(FLTM BN 108-02, 1000g load, CS10 wheels
Document grain used)

Surface to be cleaned with mineral spirits prior to test.

The tested material shall exhibit no visual evidence of wear through or holes.

3.7.2 Original Cold Flexibility — Shall not crack when folded on itself
(SAE J323 Method A, except fold on itself
Instead of on mandrel)

3.7.3 Aged Cold Flexibility — Shall not crack when folded on itself
(SAE J323 except 1000 h at 80 +/- 1 °C then
fold on itself instead of on mandrel)

3.7.4 Cold Temperature Curl (WSS-M9P11-A, calendared/extruded mats only) — Part must lay within 5 mm of flat 25 mm from the edge of the mat within 60 minutes
(SH-0033/ RQT-010516/012924,
12x12 inch section)

3.7.5 Coefficient of Friction (WSS-M9P11-A only) — 2.00 min
(FLTM BN 057-01)

Test against non woven and tufted floor carpets.

3.8 ENVIRONMENTAL TESTING

3.8.1 Short Term Environmental Cycling — Rating 4 min
(FLTM BO 040-01 Procedure A, 80 °C, — 2% max Shrinkage/ Expansion
300 x 300 mm plaque)

For construction approval/new manufacturing location, use sample size 300 x 300 mm.

3.8.2 Long Term Heat Exposure — Rating 4 min
(FLTM BO 040-01 Procedure B, 80 °C) — 2% max Shrinkage/ Expansion

For construction approval/new manufacturing location, use sample size 300 x 300 mm.

3.9 COLOR PROPERTIES

3.9.1 Migration Staining — Rating 5 min
(FLTM BN103-01 except 24 h under weight,
AATCC Evaluation Procedure 2)

Copyright © 2017, Ford Global Technologies, LLC

Documents
Document Sharing Hub

Copyright Ford Motor Company
Provided by IHS Markit under license with FORD
No reproduction or networking permitted without license from IHS
Full document details: FORD WSS-M9P11-A2 2017

Licensee=/, User=,
Not for Resale,

3.9.2 Resistance to Interior Weathering
(FLTM BO 116-01,
AATCC Evaluation Procedure 1)

225.6 kJ/m^2 Exposure	Rating 4 min

3.9.3 Soiling and Cleanability
(FLTM BN 112-08,
AATCC Evaluation Procedure 2)

Standard Soil	Rating 4 min
Grease	Rating 4 min
Coffee	Rating 4 min

3.9.4 Crocking Test — Rating 4 min
(FLTM BN 107-01 Procedure A,
AATCC Evaluation Procedure 2, Wet & Dry Method)

3.10 PHOTOMETRIC FOGGING,
(SAE J1756, except paragraph 4.10
3 h at 100 °C heating, 21 °C cooling
plate, post test conditioning 16 h)

Fog Number	70 min

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

For shipping, all materials or parts shall be sampled immediately after manufacture, then bagged in a zipper- or slide-sealed polyethylene (PE) bag, PE-coated aluminum bag or wrapped in aluminum foil prior to bagging. Test specimens shall be cut, then stored in a clean, open environment for 14-28 days. After 14-28 days of air exposure, the specimens shall be tested immediately or re-bagged until testing can be performed. Bagged materials or parts must be labelled on the outside of the bag with the following information, and included in the test report: supplier, contact information, product code/trade name or part number, manufacturing location, date of manufacture, shipping date, start and end dates of conditioning period and test date.

3.11 ODOR
(FLTM BO 131-03, Variant C)

Condition 1	(23 +/- 2 °C)	Rating 3 max.
Condition 2	(40 +/- 2 °C)	Rating 3 max.
Condition 3	(65 +/- 2 °C)	Rating 3 max.

3.12 FLAMMABILITY
(ISO 3795)

Burn Rate	100 mm/minute max

4. GENERAL INFORMATION

The information given below is provided for clarification and assistance in meeting the requirements of this specification. Contact gmfs@ford.com for questions concerning Engineering Material Specifications.

4.1 APPROVAL OF MATERIALS

--`,,```,,,,`-`-`,,`,,`,`,,`---

Copyright © 2017, Ford Global Technologies, LLC

Documents
Document Sharing Hub

Copyright Ford Motor Company
Provided by IHS Markit under license with FORD
No reproduction or networking permitted without license from IHS
Full document details: FORD WSS-M9P11-A2 2017

Licensee=/, User=,
Not for Resale,