



**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



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 (ASTM D 792)

Report +/- 5%

3.7 PHYSICAL PROPERTIES

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

1000 cycles

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 (SAE J323 Method A, except fold on itself Instead of on mandrel)

Shall not crack
when folded on itself

3.7.3 Aged Cold Flexibility (SAE J323 except 1000 h at 80 +/- 1 °C then fold on itself instead of on mandrel)

Shall not crack
when folded on itself

3.7.4 Cold Temperature Curl (WSS-M9P11-A, calendared/extruded mats only) (SH-0033/ RQT-010516/012924, 12x12 inch section)

Part must lay within 5
mm of flat 25 mm
from the edge of the
mat within 60 minutes

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

2.00 min

Test against non woven and tufted floor carpets.

3.8 ENVIRONMENTAL TESTING

3.8.1 Short Term Environmental Cycling (FLTM BO 040-01 Procedure A, 80 °C, 300 x 300 mm plaque)

Rating 4 min
2% max Shrinkage/
Expansion

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

3.8.2 Long Term Heat Exposure (FLTM BO 040-01 Procedure B, 80 °C)

Rating 4 min
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 (FLTM BN103-01 except 24 h under weight, AATCC Evaluation Procedure 2)

Rating 5 min



- 3.9.2 Resistance to Interior Weathering
(FLTM BO 116-01,
AATCC Evaluation Procedure 1)
- 225.6 kJ/m² 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