

ENGINEERING MATERIAL SPECIFICATION

Material Name

Specification Number

**DEADENER, CREPED PAPER/MASTIC/POLYETHYLENE OR
TISSUE PAPER**

**ESB-M2E87-A
▽ ESB-M2E87-B**

1. SCOPE

The material defined by these specifications is a 3 ply laminated deadener, composed of virgin creped kraft paper, asphalt mastic and polyethylene or tissue paper.

2. APPLICATION

These specifications were released originally for use as a floor pan deadener.

3. REQUIREMENTS

3.0 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 THICKNESS OF TOTAL PRODUCT (ASTM D 461, except use a 1.0 lb (454 g) load and a 1.0 in (25 mm) diameter foot)	0.060-0.080 in (1.52-2.03 mm)
3.2 WEIGHT OF TOTAL PRODUCT (ASTM D 461)	45-60 lb/100 ft ² (2197-2930 g/m ²)
3.3 COMPOSITION (FLTM AV 1-1)	
3.3.1 Mastic Weight	43-58lb/100 ft ² (2100-2832 g/m ²)
3.3.1.1 Extender	65 – 75 %
3.3.2 Creped Kraft	1.3-1.5 lb/100 ft ² (63.5-73.3 g/m ²)
3.3.3 Polyethylene or Tissue	0.20-0.50 lb/100 ft ² (9.8-24.4 g/m ²)
3.4 BREAKING STRENGTH, min (ASTM D 461)	
WMD	15 lb/in (26 N/cm) of width
AMD	10 lb/in (18 N/cm) of width

Date	Action	Revisions
2003 01 29	Revised	Para 3.0 inserted ; Para 3.11 & 4 deleted
1978 08 11		Metricated, Renumbered & Retyped CAH1-RD572066-78
1965 08 02		Released ESB-M2E87-A AV1-979

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|--|---|------------------------------------|
| 3.5 | STIFFNESS, max
(ASTM D 747, direct reading at 30°
angular deflection, 2.0 in (51 mm) span
with 0.25 lb (1.1 N) total load) | 35 |
| 3.6 FLEXIBILITY | | |
| 3.6.1 | At 23 +/- 2 °C

Test Method: Bend 180° slowly, around a 0.5 in (13 mm) mandrel. | No cracking |
| 3.6.2 | At -18 +/- 1 °C

Test Method: Condition a 2 x 6 in (50 x 150 mm) sample at -18 +/- 1 °C for a minimum of 4 h. Bend 180° slowly, around a temperature conditioned 2.0 (51 mm) mandrel. | No cracking |
| 3.7 PALLETIZING | | |
| | | Material shall be easily separated |
| | Test Method: | |
| | Ply up 10 (4 x 4 in (100 x 100 mm) samples. | |
| | Place a 20 lb (9.1 kg) static load over the material and place in a mechanical convection oven maintained at 54 +/- 1 °C for 72 h. | |
| | Cool samples to 23 +/- 2 °C and peel by hand. | |
| 3.8 HEAT STABILITY | | |
| | No dripping of mastic composition or fall off of kraft paper or backing. | |
| | Test Method: Suspend samples of material in a vertical position for 2 h at 88 +/- 1 °C in a mechanical convection oven. | |
| 3.9 SOUND PROPERTIES
(As tested by EED, PEO) | | |
| 3.9.1 | Transmission, max
(Average of 100-1000 cps) | 90 dB |
| 3.9.2 | Dampening, min
(Average at 21 °C loose) | 50 dB/s |