Ford Engineering Material Specification

Material Name | **Specification Number**

FIBERBOARD, CELLULOSE-HIGH STRENGTH PHENOLIC RESIN IMPREGNATED | **ESB-M2E93-A**

1. SCOPE

The material defined by this specification is a cellulose fiberboard impregnated with a high strength phenolic resin.

2. APPLICATION

This specification was released originally for material used for body panel to rocker panel shims.

3. REQUIREMENTS

All specimens and/or production parts shall be treated with a polymeric coating and post cured to case harden and seal.

All tests shall be conducted in accordance with ASTM F 104, Type 3 materials, unless otherwise specified.

3.1 COMPRESSIBILITY, max (4000 psi (27.6 MPa) load) — 15%

Recovery, min — 80%

3.2 TENSILE STRENGTH, min — 6400 psi (44.2 MPa)

3.3 DENSITY, min — 60 lb/ft^3 (962 kg/m^3)
ASTM F 104, Section A 2.14 Density (Type 2)

3.4 IMMERSION IN LIQUIDS
(22 h at 23 ± 2°C)

Immersion Fluid	Weight Increase, % max	Thickness Change, % max
ESE-M97B18 Antifreeze	12	6
ASTM Reference Fuel "B"	15	5
ASTM Oil #1	10	5
ASTM Oil #3	10	5
Distilled Water	25	25

3.5 SUPPLIER'S RESPONSIBILITY

Material supplied to this specification must be equivalent to that originally approved. Changes in formulation or processing shall not be made without prior approval as described in Supplier Procedure I-A.

Date	Para. No.	Revisions
1978 12 01	✓	Metricated, Renumbered & Retyped CAH1-RD572066- 197 M.J.K. 24
1973 09 13		Released AC1-6000-376

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4. APPROVAL OF SUPPLIERS

Suppliers to this specification must be approved by the affected product engineering office. Procedure for gaining approval of a specific material to a new/existing ES-M specification is contained in Supplier Procedure I-A. Approved new suppliers will be added to the Engineering Materials Approved Source List.

1978 12 01
Eng Res June 77 3948-b EPF

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