Ford Engineering Material Specification

Material Name	Specification Number
FIBERBOARD (PANEL), PRESSED WOOD - NON-DIELECTRIC GRADE	∇ESB-M2E66-B
FIBERBOARD (PANEL), PRESSED WOOD - FORMABLE GRADE	∇ESB-M2E66-C
FIBERBOARD (PANEL), PRESSED WOOD - DIELECTRIC GRADE	∇ESB-M2E67-B

1. SCOPE

The materials defined by this specification are:

∇ESB-M2E66-B - Pressed wood panelboard, i.e., hardboard.
∇ESB-M2E66-C - More dense, higher impact, formable grade of panelboard.
∇ESB-M2E67-B - ∇ESB-M2E66-B panelboard, coated with a bonding resin in the areas as indicated on the engineering drawing.

2. APPLICATION

The specifications were released originally for materials used in the following applications:

∇ESB-M2E66-B - Foundation for door and quarter trim panels, sun visors, package trays, and front and rear seat backs.
∇ESB-M2E66-C - Structural rear seat back on the 1975 Mustang and Pinto.
∇ESB-M2E67-B - Foundation for dielectric bonded door and quarter trim panels.

3. REQUIREMENTS

3.1 CONDITIONING

All test values indicated herein are based on material conditioned in a controlled atmosphere of 23 ± 2°C and 50 ± 5% relative humidity for 24 h prior to testing and tested under the same controlled conditions.

3.2 THICKNESS (SAE J 315b)

As specified on engineering drawings

Thickness variation on any board used in heat bonding operations shall not exceed 0.25 mm or 10%, whichever is smaller.

3.3 DENSITY

∇ESB-M2E66-B	881 kg/m^3
∇ESB-M2E67-B	881 kg/m^3
∇ESB-M2E66-C	1442 kg/m^3

Date	Para. No.	Revisions
1983 02 16	3.9, 5	Revised, Retyped CAM1- RD588050-20
1981 07 16	3.5, 3.6	Revised Requirements B2D3386/CZL1-CDL1-DR589907-1
1971 08 17		Released AB1-302-14

9009160 0008060 554

Copyright by the Ford Motor Company

Wed Aug 31 00:08:03 2016

Full document details: FORD ESB-M2E66-C 1983

Documents Document Sharing Hub

3.4 MOISTURE CONTENT, based on original weight (SAE J 315 b)

∇ESB-M2E66-B	3 - 6%
∇ESB-M2E67-B	3 - 6%
∇ESB-M2E66-C	4 - 7%

3.5 WATER ABSORPTION, max (SAE J 315 b, 24 h immersion)

∇ESB-M2E66-B	40%
∇ESB-M2E67-B	40%
∇ESB-M2E66-C	25%

3.6 WATER SWELL, max (SAE J 315 b) 23%

3.7 WARP, max (FLTM BS 2-1, 24 h water immersion) 5%

3.8 BURSTING STRENGTH, min (SAE J 315 b)

∇ESB-M2E66-B	0.95 MPa/mm
∇ESB-M2E67-B	0.95 MPa/mm
∇ESB-M2E66-C	1.1 MPa/mm

3.9 FLEXURAL STRENGTH, min (ASTM D 790, Method I - Procedure "A," Avg. of 5) 31 MPa

3.10 DIMENSIONAL STABILITY, %, max (SAE J 315 b, 24 h water immersion)

	Expansion	Contraction
2.03 mm	+0.7	-0.7
2.54 mm	+0.5	-0.5

3.11 STIFFNESS, min (ASTM D 747, direct reading at 5° angle, 0.68 N m bending moment, 51 mm span, 25 x 100 mm samples, both directions, Tinius Olsen)

	Original	Soaked*
2.03 mm	30	15
2.54 mm	40	20
3.18 mm	50	25

*Immerse test specimens in tap water at 23 ± 2°C for 24 h. Determine stiffness immediately upon removal from the water bath.

9009160 0008061 490

Copyright by the Ford Motor Company

Wed Aug 31 00:08:03 2016

Full document details: FORD ESB-M2E66-C 1983

AVA Documents Document Sharing Hub