

ENGINEERING MATERIAL SPECIFICATION

Material Name

Specification Number

FIBERBOARD (PANEL), LAMINATED-POLYETHYLENE LINED-DIELECTRIC GRADE

▽ **ESB-M2E4-C2**

1. SCOPE

The material defined by this specification is a moisture resistant laminated panel board with good formability, dimensional stability and a dielectric bonding resin on the areas as indicated on the engineering drawing.

2. APPLICATIONS

This specification was released originally for material used as a trim foundation for door panels on the 1979 Fairmont/Zephyr and Pinto/Bobcat.

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).

3.2 CONSTRUCTION

The board shall be constructed with a core of kraft and mixed fibers laminated on each side with polyethylene lined kraft paper. The core shall be free of residual asphalt or other contaminants which might cause sew line stains. The kraft paper liner shall form the outer faces of the board.

3.3 THICKNESS (SAE J 315)	As specified on engineering drawings
3.4 MOISTURE CONTENT, (SAE J 315)	4 – 6 %
3.5 WATER ABSORPTION, max (SAE J 315, 24 h immersion)	20 %
3.6 WARP, max (FLTM BS 2-1, 24 h water immersion)	4 %
3.7 BURSTING STRENGTH, min (SAE J 315)	4 psi/0.001 in (1.1 MPa/mm) of thickness

Date	Action	Revisions
2003 01 29	Revised	Para 3.0 inserted ; Para 3.1, 3.17, 4 deleted
1978 10 20		Released B9B-3329/CBH1-CEH1 PA-574970-4BC CJH1-CEJ1

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3.8 TENSILE STRENGTH, min
(ASTM D 828)

WMD	5 lb/0.001 in (876 N/mm) of thickness
AMD	2 lb/0.001 in (350 N/mm) of thickness

3.9 DIMENSIONAL STABILITY, % max
(SAE J 315, Method "B", 24 h)

	Expansion	Contraction
WMD	+0.5	-0.7
AMD	+0.5	-0.7

3.10 TRANSVERSE STRENGTH, min
(FLTM BS 5-1, 6 in (152 mm) span)

WMD	0.11 lb/0.001 in (20 N/mm) of thickness
AMD	0.06 lb/0.001 in (11 N/mm) of thickness

3.11 ADHESION, min
(FLTM BN 113-01)

Original ply adhesion	16 oz/2 in (88 N/m) of width
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3.12 STAINING, minimum rating
(FLTM AN 101-03, Method "A" and AATCC chart for measuring transference of color.)

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3.13 BONDING REQUIREMENTS

3.13.1 Objectionable Contaminants

Any board used for dielectric bonding shall be free of metallic particles, and shall be suitable for the intended application.

3.13.2 Compatibility

The dielectric grade boards must bond satisfactorily in the dielectric operations in conjunction with approved component materials in the assembly, under approved conditions. The type and weight of adhesive will vary depending on application and should be agreed upon between supplier and Manufacturing Engineering.