

ENGINEERING MATERIAL SPECIFICATION

Material Name	Specification Number
FIBERBOARD (PANEL), BENDING GRADE, ASPHALT FREE	ESB-M2E12-A

1. SCOPE

The materials defined by this specification are either laminated, or cylinder machine built-up boards of good composition and of suitable construction to allow for scoring and bending.

2. APPLICATION

This specification was released originally for materials used for the construction of deck sides, glove compartments, luggage compartments, front and sides, and other applications specified by engineering requiring bending or scoring. The materials shall be suitable for use as a base for ink decorated, pyroxylin or equivalent coated panel boards.

3. REQUIREMENTS

3.1 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 APPEARANCE (FLTM BI 109-01)

The color, pattern, and finish shall match the approved Design Center master sample, or shall be as specified on the engineering drawing.

3.3 WEIGHT, min 1270 g/m² (1.78 - 1.91 mm)

3.4 SEASONING

To minimize warpage, distortions, and dimensional changes, the materials covered by this specification shall be properly seasoned for at least 5 days before being die cut.

3.5 MOISTURE CONTENT 4 - 9 % (ASTM D 644, 100 x 100 mm samples)

3.6 WATER ABSORPTION, max 30 % (SAE J315, 1-1/2 h immersion)

Date	Action	Revisions
2002 07 24	Revised	Updated & Renumbered
1991 06 20	NB00E10043064045	Updated, added para 3.14
1963 06 29	AS1-960	Released ESB-M2E12-A

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3.7 WARP, max
(FLTM BS 002-01, 1-1/2 h water immersion)

WMD 5 %

AMD 11 %

3.8 DIMENSIONAL STABILITY
(SAE J 315)

Expansion, %

Contraction, %

WMD + 0.5 - 0.5

AMD + 2.0 - 1.7

3.9 BURSTING STRENGTH
(ASTM D 2529, average of 5
bursts on each side of specimen)

1.1 MPa/mm

3.10 STIFFNESS, min
(ASTM D 747, direct reading at
5° angle, 0.28 N.m load, 51 mm
span, 25 x 100 mm sample)

WMD 1.78 - 1.91 mm 70

AMD 1.78 - 1.91 mm 18

3.11 STAINING
(FLTM AN 101-03)

The material shall contain no asphalt or other resins which will cause staining of the contact fabric.

3.12 FLAMMABILITY
(ISO 3795/SAE J369)

Burn Rate, max 100 mm/minute