

**AEROSPACE  
MATERIAL  
SPECIFICATION**



**AMS3722**

**REV. B**

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Superseding AMS3722A

Paper Honeycomb  
125 lb (55 kg) Paper

**RATIONALE**

This document has been determined to contain basic and stable technology which is not dynamic in nature.

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THIS REVISION CONTAINS ONLY EDITORIAL CHANGES.

1. SCOPE:

- 1.1 Form: This specification covers paper base honeycomb material having a cell size of 0.440 in. (11.18 mm). Unless otherwise ordered, size 0.440 in. (11.18 mm) will be supplied.
- 1.2 Application: Primarily for use as a core in sandwich construction of light weight partitions, space fillers, and non-structural parts. This product is not intended for aircraft structural or exterior applications.

2. APPLICABLE DOCUMENTS: The following publications form a part of this specification to the extent specified herein. The latest issue of Aerospace Material Specifications shall apply. The applicable issue of other documents shall be as specified in AMS 2350.

- 2.1 SAE Publications: Available from SAE, 400 Commonwealth Drive, Warrendale, PA 15096.

2.1.1 Aerospace Material Specifications:

AMS 2350 - Standards and Test Methods

- 2.2 ASTM Publications: Available from American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103.

ASTM D774 - Bursting Strength of Paper

- 2.3 U.S. Government Publications: Available from Commanding Officer, Naval Publications and Forms Center, 5801 Tabor Avenue, Philadelphia, PA 19120.

### 2.3.1 Military Standards:

MIL-STD-794 - Parts and Equipment, Procedures for Packaging and Packing of

## 3. TECHNICAL REQUIREMENTS:

3.1 Material: Shall consist of Kraft paper suitably bonded together along the applied glue lines in such a manner as to form a hexagonal, cellular structure after impregnating with a thermosetting phenolic type laminating resin and thoroughly curing by the application of heat.

3.1.1 Paper: Shall be a resin sized, 100% unbleached sulfate fiber No. 2 Kraft wrapping paper meeting the following requirements:

Ream Weight (500 sheets 24 x 36 in. [610 x 915 mm])	125 lb ± 5 (55 kg ± 2)
Average Bursting Strength, min	92 lb (410 N)      ASTM D774
Thickness, in.	0.0110 - 0.0120 (0.279 - 0.305 mm)
pH	7.0 ± 1.0

3.1.2 Impregnating Resin: Shall not adversely affect the strength or life of the paper and shall contain no additional agents which will adversely affect the strength or life of either the glue line or paper.

### 3.2 General:

3.2.1 Alignment: The matching flats of each cell shall be accurately aligned during the bonding operation so that 100% of the available bonding width of each flat is in contact, and no block shall have any corrugations misaligned or partially overlapping. Product shall contain not more than one misplaced sheet per in. (25 mm) of length. The overlap of such misplaced sheet shall not exceed 25% of the available matching flat area.

3.2.2 Bonding: The glue lines shall be completely bonded over their entire width. There shall be not more than one unbonded glue line in any 10 in. (250 mm) sq area of the sheet after slicing or band-sawing the sheet into slabs.

3.2.3 Trimming: The honeycomb shall be neatly trimmed so that the trimmed edges exhibit a uniform structure free from trim scraps. The faces shall be sawed, sanded, or otherwise trimmed to provide parallel surfaces suitable for bonding.

3.2.4 Impregnation: The impregnating resin shall completely cover the honeycomb in a uniformly thin film free from starved areas. Occasional bubbles or pinholes will not be cause for rejection.

3.2.5 Corrosion: The product shall have no corrosive effect on other materials when exposed to conditions normally encountered in service. Discoloration of metal shall not be considered objectionable.