

AERONAUTICAL MATERIAL SPECIFICATION

Society of Automotive Engineers, Inc.
29 West 39th Street
New York City

AMS3552

Issued 3-1-44

Revised

CORRUGATED FIBREBOARD (Single Wall, Double Face)

1. ACKNOWLEDGMENT: A vendor must mention this specification number in all quotations and when acknowledging purchase orders.
2. MATERIAL: The material shall consist of a corrugated member of paper board faced on both sides with a water repellent paper sheet.
3. APPLICATION: This material shall be suitable for use in the construction of stepped exterior containers for air, rail or truck shipment and for interior containers for all methods of transportation.
4. CONSTRUCTION:
 - (a) Liners.— The liners shall be made from 100% sulphate kraft paper board of .023 inch minimum thickness and a minimum weight of 90 lb per 1000 sq ft.
 - (b) Corrugated Member.— The corrugated member shall be made from paper board of .010 inch minimum thickness and a minimum weight of 35 lb per 1000 sq ft. Corrugations shall be A or C flute with not less than 32 nor more than 45 corrugations per foot and shall be 1/8 to 3/16 inch in height.
 - (c) Bonding Material.— The bonding material shall be a water and oil soluble adhesive.
 - (d) Impregnation.— The liners and the corrugated member shall be completely impregnated with a moisture-resistant material.
 - (e) Components.— All component parts shall be combined with a water and oil insoluble adhesive that will prevent ply separation as specified in paragraph 5 (d). The corrugated member shall be bonded securely to the liners at the apex of all corrugations.
5. REQUIREMENTS:
 - (a) Tensile Strength of Corrugated Fibreboard.— In all cases, the tensile strength shall be taken as the average of at least six determinations.
 - (1) Dry.— Tensile specimens shall have a minimum original tensile strength of 185 lbs per inch width when cut across the corrugations and 148 lbs per inch width when cut parallel to the corrugations.
 - (2) Wet.— Tensile specimens after immersion for 2-1/2 hours in water at room temperature shall have a minimum tensile strength of 40 lbs per inch width when cut across the corrugations and 32 lbs per inch width when cut parallel to the corrugations. The test shall be conducted immediately after removing the board from the water.
 - (3) Retest Dry.— Upon drying, the material shall return to its original tensile strength.