AERONAUTICAL MATERIAL SPECIFICATION

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

AMS 3851

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Revised

FIRE RESISTANT PROPERTIES FOR AIRCRAFT MATERIALS

1. ACKNOWLEDGMENT: A vendor shall mention this specification number in all quotations and when acknowledging purchase orders.

2. APPLICATION: Primarily intended to cover materials which may be used without further treatment in areas in air carrier aircraft where a fire resistant material is required.

3. TECHNICAL REQUIREMENTS: The material as supplied shall be capable of meeting the following test:

   If the material is rigid an 8 x 8 in. specimen shall be used. If flexible, the material shall be placed in a frame, exposing an area 8 x 8 in. Where backing material is used, the specimen shall be provided with the same backing. The test specimen shall be supported at an angle of 45 degrees. The Bunsen or Tirrill burner shall rest upon a horizontal surface. The burner shall be adjusted for no air intake, giving a yellow tipped, 1-1/2 in. flame. Suitable precautions shall be taken to avoid drafts. The period of application shall be 30 sec with 1/3 of the flame in contact with the material at the approximate center of the specimen. Upon removal of the flame source from the specimen, the flame shall extinguish itself within 15 sec and no smoldering or glowing shall be visible 10 sec thereafter. No complete penetration of the material shall result.

4. REPORTS: Unless otherwise specified, the vendor shall furnish, with the original sample submitted for approval, three copies of a notarized report of the results of the test noted above showing duration of flaming, time of smoldering, char width, and penetration. After approval, unless otherwise specified, vendor shall furnish with each shipment three copies of a notarized report of the results of the above test made on each grade or type of each lot or shipment of material contained in the order. This report shall include the purchase order number, this specification number, vendor's material number, and quantity.

5. PACKING AND IDENTIFICATION:

5.1 Packaging shall be accomplished in such a manner as to insure that the materials being shipped will not be torn or damaged and will be protected against exposure and undue weathering and harmful materials of any kind.

5.2 Each package shall be permanently and legibly marked, and the material tagged or stamped to give the following information:

MATERIAL DESCRIPTION_____
AMS 3851
MEETS FIRE RESISTANCE REQUIREMENT AMS 3851
VENDOR'S IDENTIFICATION_____
PURCHASE ORDER NUMBER_____

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