



AEROSPACE MATERIAL SPECIFICATION

Society of Automotive Engineers, Inc.
TWO PENNSYLVANIA PLAZA, NEW YORK, N.Y. 10001

AMS 4012B

Superseding AMS 4012A

Issued 1/15/58

Revised 11/1/69

ALUMINUM SHEET, LAMINATED Edge Bonded

1. **ACKNOWLEDGMENT:** A vendor shall mention this specification number and its revision letter in all quotations and when acknowledging purchase orders.
2. **APPLICATION:** Primarily for shims of special shapes in which thickness is to be adjusted by removal of laminations as required.
3. **COMPOSITION:**
 - 3.1 **Laminations:** Shall be 1100, 1145, 3003, or 5052 aluminum alloy foil. Unless otherwise specified, the choice of alloy shall be at the discretion of the producer.
 - 3.2 **Solid Base:** Shall be AMS 4041 aluminum alloy sheet.
 - 3.3 **Adhesive:** Shall be a composition which will meet the fabrication and quality requirements of this specification.
4. **FABRICATION:**
 - 4.1 Laminated shim stock shall be fabricated from hard or extra hard laminations, in combination with a solid base when required, precut to the desired shape, stacked to the desired thickness, and then bonded around all edges with adhesive. Laminations shall be 0.003 in. $\pm$ 0.0003 thick unless 0.002 in. $\pm$ 0.0002 laminations are specified or required to produce the nominal laminate thickness.
 - 4.2 Unless otherwise specified, the product shall be of the following thicknesses and combinations of laminations and solid base:

Nominal
Thickness
of Shim
Stock
Inch

All Laminated

Half Solid
Half Laminated

Three Quarters Solid
One Quarter Laminated

0.006
0.008
0.010
0.016
0.020
0.032
0.047
0.062
0.094
0.125
0.190

X
X
X
X
X
X
X
X
X
X
X

X
X
X
X
X

X
X

5. **QUALITY:**

- 5.1 Material shall be uniform in quality and condition, clean, sound, and free from foreign materials and from internal and external imperfections detrimental to fabrication or to performance of parts.