

Use of Magnesium in Airplane Cabins—Updated 11/15

Based on requests from industry, and considering the absence of recent research data, the FAA has worked extensively with industry to evaluate the potential use of magnesium alloys in airplane cabins. Specifically, magnesium alloys have been evaluated as seat structure.

The FAA's central concern regarding the use of magnesium in the cabin is flammability and the FAA and industry research has focused on identifying the large scale performance of different magnesium alloys under realistic fire threats, and characterizing that behavior in a laboratory scale test method.

The FAA has published report DOT/FAA/TC-13/52, "Development of a Laboratory-Scale Flammability Test for Magnesium Alloys Used in Aircraft Seat Construction". Applicants that wish to use magnesium alloy as seat structure can expect application of Special Conditions, using the test method in the above report to show that the level of safety required by the regulations is maintained.

Applicants wishing to use magnesium alloy in other cabin interior applications can also expect Special Conditions, but the specific criteria will need to be developed.