

S1.4.3 AIRCRAFT CABIN AIR FILTERS: DESIGN AND TESTING CONSIDERATIONS

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Air quality in aircraft cabins has many issues arising from solid particles, microbial and odor/gases contaminants. These contaminants are generated both by the people in the aircraft as well as materials such as seats, galley items, and floor covering. In order to design a filter that addresses the removal of all these contaminants can become quite difficult. Further, there are no comprehensive studies to provide guidance on the acceptable concentrations of these contaminant in cabin air environments. Hence, in general, filter design s usually based on very high concentration of these contaminants. Good outcomes require the integration of filter testing with the design of the filter. Testing is often tailored to the end use and the prevailing protocols and standards.