

Vertical Flame Propagation Test for Composite Structure, Air Ducting, and Wire Insulation

Tina Emami

A lab-scale vertical flame propagation test method was developed with the intention to be used to determine the propensity of materials to propagate flames. This test is developed for extensively used materials located in inaccessible areas of a passenger airplane. Extensively used materials include non-metallic composite fuselage structure, air ducts, and electrical wire insulation, and sleeving. Ongoing work includes confirming repeatability of the test, development of the individual test methods, and understanding the tests effects on various types of materials.