



Fire and Flammability Testing of Transportation Textiles

TEXTILES/FM USED IN AIRCRAFT INTERIORS:

Product End Use	Test Description	Test Standard		
		FAA Appendix F	Airbus	Boeing
All textiles/fm	Combustion Toxicity	N/A	AITM 3.0005	BSS 7239
Applied to walls	Rate of Heat Release (OSU)	Part IV	AITM 2.0006	BSS 7322
Applied to walls	Smoke Density	Part V	AITM 2.0007A	BSS 7238
Applied to walls	Vertical Flammability (60 second flame application)	Part I (a)(1)(i)	AITM 2.0002A	BSS 7230 F1
Miscellaneous categories	Horizontal Flammability	Part I (a)(1)(iv) Part I (a)(1)(v)	AITM 2.0003	BSS 7230 F3 BSS 7230 F4
Seat covers	Vertical Flammability (12 second flame application)	Part I (a)(1)(ii)	AITM 2.0002B	BSS 7230 F2

TEXTILES/FM USED IN PASSENGER VESSELS:

Product End Use	Test Description	Test Standard
Bedding	Cigarette ignition & butane flame ignition	IMO 2010 FTP Part 9 8.1 & 8.2
Carpeting (primary deck coverings)	Smoke & Combustion Toxicity ISO Smoke Box w/ FTIR	IMO 2010 FTP Part 2
Carpeting (primary deck coverings)	Surface Flammability Lift apparatus	IMO 2010 FTP Part 5
Draperies	Vertical Flammability	IMO 2010 FTP Part 7
Upholstery	Cigarette ignition & butane flame ignition	IMO 2010 FTP Part 8 3.1 & 3.2
Wallcoverings (bulkhead finish)	Smoke & Combustion Toxicity ISO Smoke Box w/ FTIR	IMO 2010 FTP Part 2
Wallcoverings (bulkhead finish)	Surface Flammability Lift apparatus	IMO 2010 FTP Part 5

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TEXTILES/FM USED IN BUS / VAN / RAILCAR INTERIORS (North American Test Methods):

Product End Use	Test Description	Test Standard
Carpeting Floor coverings	Flooring Radiant Panel	ASTM E 648
Seat covers Draperies	Vertical Flammability (12 second flame application)	FAA Appendix F Part I (a)(1)(ii)
Seat covers Draperies Wall or ceiling coverings	Combustion Toxicity 1 6 gases	BSS 7239
Seat covers Draperies Wall or ceiling coverings	Combustion Toxicity 2 8 gases	SMP 800C Modified
Seat covers Draperies Wall or ceiling coverings	Smoke Density	ASTM E 662
Wall or ceiling coverings	Radiant Panel	ASTM E 162

Product End Use	Test Description	Test Standard
School Bus	Seat / Burning Paper Bag	National School Transportation Specifications and Procedures (NSTSP)

TEXTILES/FM USED IN PRIVATE VEHICLE INTERIORS:

Test Description	Test Standard
Horizontal Flammability ISO Standard	ISO 3795
Horizontal Flammability North American Standards	FMVSS 302 (US) CMVSS 302 (Canada)

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TEXTILES/FM USED IN RAILCAR INTERIORS (ISO Test Methods):

Product End Use	Test Description	Test Standard
Blankets (R Set 20)	Vertical Flammability	EN ISO 11925-2
	Cone Calorimeter	ISO 5660-1 25 kW
	Smoke Box w/ FTIR	EN ISO 5659-2 25 kW
Carpeting Floor coverings (R Set 10)	Flooring Radiant Panel	EN ISO 9239-1
	Cone Calorimeter	ISO 5660-1 25 kW
	Smoke Box w/ FTIR	EN ISO 5659-2 25 kW
Curtains (R Set 1)	Lift apparatus	ISO 5658-2
	Cone Calorimeter	ISO 5660-1 50 kW
	Smoke Box w/ FTIR	EN ISO 5659-2 50 kW
Upholstery & head rests (R Set 21)	Cone Calorimeter	ISO 5660-1 25 kW
	Smoke Box w/ FTIR	EN ISO 5659-2 25 kW
Wallcovering (R Set 1)	Lift apparatus	ISO 5658-2
	Cone Calorimeter	ISO 5660-1 50 kW
	Smoke Box w/ FTIR	EN ISO 5659-2 50 kW