

Test Procedures and Performance Criteria for the Flammability and Smoke Emission Characteristics of Materials Used in Passenger Cars and Locomotive Cabs

CATEGORY	FUNCTION OF MATERIAL	TEST METHOD	PERFORMANCE CRITERIA	
Cushions, Mattresses	All ^{1, 2, 3, 4, 5, 6, 7, 8}	ASTM D 3675-98	$I_s \leq 25$	
		ASTM E 662-01	$D_s(1.5) \leq 100$ $D_s(4.0) \leq 175$	
Fabrics	Seat upholstery, mattress ticking and covers, curtains, draperies, wall coverings, and window shades ^{1, 2, 3, 6, 7, 8}	14 CFR 25, Appendix F, Part I, (vertical test)	Flame time ≤ 10 seconds Burn length ≤ 6 inches	
		ASTM E 662-01	$D_s(4.0) \leq 200$	
Other Vehicle Components ^{9, 10, 11, 12}	Seat and mattress frames, wall and ceiling panels, seat and toilet shrouds, tray and other tables, partitions, shelves, opaque windscreens, end caps, roof housings, and component boxes and covers ^{1, 2}	ASTM E 162-98	$I_s \leq 35$	
		ASTM E 662-01	$D_s(1.5) \leq 100$ $D_s(4.0) \leq 200$	
	Flexible cellular foams used in armrests and seat padding ^{1, 2, 4, 6}	ASTM D 3675-98	$I_s \leq 25$	
		ASTM E 662-01	$D_s(1.5) \leq 100$ $D_s(4.0) \leq 175$	
	Thermal and acoustic insulation ^{1, 2}	ASTM E 162-98	$I_s \leq 25$	
		ASTM E 662-01	$D_s(4.0) \leq 100$	
	HVAC ducting ^{1, 2}	ASTM E 162-98	$I_s \leq 35$	
		ASTM E 662-01	$D_s(4.0) \leq 100$	
	Floor covering ^{12, 13}	ASTM E 648-00	C.R.F. ≥ 5 kW/m ²	
		ASTM E 662-01	$D_s(1.5) \leq 100$ $D_s(4.0) \leq 200$	
	Light diffusers, windows and transparent plastic windscreens ^{2, 14}	ASTM E 162-98	$I_s \leq 100$	
		ASTM E 662-01	$D_s(1.5) \leq 100$ $D_s(4.0) \leq 200$	
	Elastomers ^{1, 10, 11}	Window gaskets, door nosings, inter-car diaphragms, roof mats, and seat springs	ASTM C 1166-00	Average flame propagation ≤ 4 inches
			ASTM E 662-01	$D_s(1.5) \leq 100$ $D_s(4.0) \leq 200$
Structural Components ¹⁵	Flooring ¹⁶ , Other ¹⁷	ASTM E 119-00a	Pass	