

## APPENDIX E — AIRCRAFT INDUSTRIES INTERNAL TEST METHODS AND GUIDELINES

As written, Federal Aviation Administration (FAA) test procedures for meeting the requirements set forth in Federal Aviation Regulation (FAR) Part 25 sometimes contain incomplete documentation (e.g., the firewall test). In order to establish standardized guidelines for these test procedures, including more detailed instructions and safety precautions, individual aircraft manufacturers have established some of their own internal documentation. This documentation, as well as having detailed instructions, is at times also used to certify different materials to applicable FARs. Table E-1 contains a listing of each FAR fire test and the equivalent company internal test method document number, as well as the applicable American Society for Testing and Materials (ASTM) standard, if any. Other testing related to fire safety (such as toxicity) is also listed. These documents are normally available from the listed company.

*Table E-1. Industry Test Documentation*

FAA Regulation							
Burn Test Description	FAR Paragraph No.	Airbus	British Aerospace	Boeing	Douglas	Shanghai Aircraft Research Institute	ASTM
Piping/hose assemblies	25.1183 (a)		ISO/DIS 2685				
Fire zone wire	25.1359 (b)		ISO/DIS 2685		MIL-C-25038		
Wire insulation	25.1359 (d)	ABD0031/AITM 2.0005 (2)	BACM 1555A		DMS 1501		ASTM-F 777
60-second vertical	25.853 (a)	ABD0031/AITM 2.0002A(2)	BACM 1551A	BSS 7230 F1	DMS 1510		ASTM F 501
OSU heat release	25.853 (a-1)	ABD0031/AITM 2.0006 (2)	BAEP 4508	BSS 7322	DMS 2277		ASTM Modified E 906*
12-second vertical	25.853 (b)	ABD0031/AITM 2.0002B(2)	BACM 1555A	BSS 7230 F2	DMS 1511		ASTM F 501
2.5-in/min horizontal	25.853 (b-2)	ABD0031/AITM 2.0003 (2)	BACM 1555A	BSS 7230 F3	DMS 1505		ASTM F 776
4-in/min horizontal	25.853 (b-3)	ABD0031/AITM 2.0003 (2)	BACM 1555A	BSS 7230 F4	DMS 1507		ASTM F 776
Oil burner seats	25.853 (c)	ABD0031/AITM 2.0009 (2)	BAEP 4508	BSS 7303	DMS 2274	HB 7263	*
Fire containment	25.853(d)		BACM 1555A	Document No. D6T11679	DMS 1513		
30 second, 45 degree	25.855 (a)	ABD0031/AITM 2.0004 (2)	BACM 1555A	BSS 7230 F5	DMS 1508		ASTM F 1103
Oil burner, cargo liner	25.855 (a-1)	ABD0031/AITM 2.0010 (2)	BAEP 4508	BSS 7323	DMS 2273		*
Radiant heat test	TSO-C69a, Appendix 2	TSO		BSS 7315			ASTM F 828
Other NBS smoke	25.853 (a-1)	ABD0031/AITM 2.0007 (2)	BAEP 4625	BSS 7238	DMS 1500		ASTM F 814
NBS smoke (wire)		ABD0031/AITM 2.0008 (2)					
Toxicity		ABD0031/AITM 3.0005 (2)	BAEP 4623	BSS 7239	DMS 2294	HB 7066	
Lot							ASTM D 2863

\*ASTM test method being written by subcommittee F7.06.