§ 25.855 Cargo or baggage compartments.

For each cargo or baggage compartment, the following apply:
(a) The compartment must meet one of the class requirements of §25.857.
(b) Class B through Class E cargo or baggage compartments, as defined in §25.857, must have a liner, and the liner must be separate from (but may be attached to) the airplane structure.
(c) Ceiling and sidewall liner panels of Class C compartments must meet the test requirements of part III of appendix F of this part or other approved equivalent methods.
(d) All other materials used in the construction of the cargo or baggage compartment must meet the applicable test criteria prescribed in part I of appendix F of this part or other approved equivalent methods.
(e) No compartment may contain any controls, lines, equipment, or accessories whose damage or failure would affect safe operation, unless those items are protected so that—
(1) They cannot be damaged by the movement of cargo in the compartment, and
(2) Their breakage or failure will not create a fire hazard.
(f) There must be means to prevent cargo or baggage from interfering with the functioning of the fire protective features of the compartment.
(g) Sources of heat within the compartment must be shielded and insulated to prevent igniting the cargo or baggage.
(h) Flight tests must be conducted to show compliance with the provisions of §25.857 concerning—
(1) Compartment accessibility,
(2) The entries of hazardous quantities of smoke or extinguishing agent into compartments occupied by the crew or passengers; and
(3) The dissipation of the extinguishing agent in Class C compartments.
(i) During the above tests, it must be shown that no inadvertent operation of smoke or fire detectors in any compartment would occur as a result of

§ 25.854 Lavatory fire protection.

For airplanes with a passenger capacity of 20 or more:
(a) Each lavatory must be equipped with a smoke detector system or equivalent that provides a warning light in the cockpit, or provides a warning light or audible warning in the passenger cabin that would be readily detected by a flight attendant; and
(b) Each lavatory must be equipped with a built-in fire extinguisher for each disposal receptacle for towels, paper, or waste, located within the lavatory. The extinguisher must be designed to discharge automatically into each disposal receptacle upon occurrence of a fire in that receptacle.

§ 25.856 Thermal/Acoustic insulation materials.

(a) Thermal/acoustic insulation material installed in the fuselage must meet the flame propagation test requirements of part VI of Appendix F to this part, or other approved equivalent test requirements. This requirement does not apply to “small parts,” as defined in part I of Appendix F of this part.

(b) For airplanes with a passenger capacity of 20 or greater, thermal/acoustic insulation materials (including the means of fastening the materials to the fuselage) installed in the lower half of the airplane fuselage must meet the flame penetration resistance test requirements of part VII of Appendix F to this part, or other approved equivalent test requirements. This requirement does not apply to thermal/acoustic insulation installations that the FAA finds would not contribute to fire penetration resistance.

§ 25.857 Cargo compartment classification.

(a) Class A; A Class A cargo or baggage compartment is one in which—

(1) The presence of a fire would be easily discovered by a crewmember while at his station; and

(2) Each part of the compartment is easily accessible in flight.

(b) Class B; A Class B cargo or baggage compartment is one in which—

(1) There is sufficient access in flight to enable a crewmember to effectively reach any part of the compartment with the contents of a hand fire extinguisher;

(2) When the access provisions are being used, no hazardous quantity of smoke, flames, or extinguishing agent, will enter any compartment occupied by the crew or passengers;

(3) There is a separate approved smoke detector or fire detector system to give warning at the pilot or flight engineer station.

(c) Class C; A Class C cargo or baggage compartment is one not meeting the requirements for either a Class A or B compartment but in which—

(1) There is a separate approved smoke detector or fire detector system to give warning at the pilot or flight engineer station;

(2) There is an approved built-in fire extinguishing or suppression system controllable from the cockpit.

(3) There are means to exclude hazardous quantities of smoke, flames, or extinguishing agent, from any compartment occupied by the crew or passengers;

(4) There are means to control ventilation and drafts within the compartment so that the extinguishing agent used can control any fire that may start within the compartment.

(d) [Reserved]

(e) Class E; A Class E cargo compartment is one on airplanes used only for the carriage of cargo and in which—

(1) [Reserved]

(2) There is a separate approved smoke or fire detector system to give warning at the pilot or flight engineer station;

(3) There are means to shut off the ventilating airflow to, or within, the compartment, and the controls for these means are accessible to the flight crew in the crew compartment;

(4) There are means to exclude hazardous quantities of smoke, flames, or noxious gases, from the flight crew compartment; and

(5) The required crew emergency exits are accessible under any cargo loading condition.

§ 25.858 Cargo or baggage compartment smoke or fire detection systems.

If certification with cargo or baggage compartment smoke or fire detection