requirements for the “A”, “B”, “D”, or “E” categories. Each Class C compartment must comply with the following:

1. It must have a separate approved smoke or fire detector system to give warning at the pilot or flight engineer station.
2. It must have an approved built-in fire-extinguishing system controlled from the pilot or flight engineer station.
3. It must be designed to exclude hazardous quantities of smoke, flames, or extinguishing agents from entering into any compartment occupied by the crew or passengers.
4. It must have ventilation and draft controlled so that the extinguishing agent provided can control any fire that may start in the compartment.
5. It must be lined with fire-resistant material, except that additional service lining of flame-resistant material may be used.

(e) Class D. Cargo and baggage compartments are classified in the “D” category if they are so designed and constructed that a fire occurring therein will be completely confined without endangering the safety of the airplane or the occupants. Each Class D compartment must comply with the following:

1. It must have a means to exclude hazardous quantities of smoke, flames, or noxious gases from entering any compartment occupied by the crew or passengers.
2. Ventilation and drafts must be controlled within each compartment so that any fire likely to occur in the compartment will not progress beyond safe limits.
3. It must be completely lined with fire-resistant material.
4. Consideration must be given to the effect of heat within the compartment on adjacent critical parts of the airplane.

(f) Class E. On airplanes used for the carriage of cargo only, the cabin area may be classified as a Class “E” compartment. Each Class E compartment must comply with the following:

1. It must be completely lined with fire-resistant material.
2. It must have a separate system of an approved type smoke or fire detector to give warning at the pilot or flight engineer station.
3. It must have a means to shut off the ventilating air flow to or within the compartment and the controls for that means must be accessible to the flight crew in the crew compartment.
4. It must have a means to exclude hazardous quantities of smoke, flames, or noxious gases from entering the flight crew compartment.
5. Required crew emergency exits must be accessible under all cargo loading conditions.

§ 121.223 Proof of compliance with §121.221.

Compliance with those provisions of §121.221 that refer to compartment accessibility, the entry of hazardous quantities of smoke or extinguishing agent into compartments occupied by the crew or passengers, and the dissipation of the extinguishing agent in Class “C” compartments must be shown by tests in flight. During these tests it must be shown that no inadvertent operation of smoke or fire detectors in other compartments within the airplane would occur as a result of fire contained in any one compartment, either during the time it is being extinguished, or thereafter, unless the extinguishing system floods those compartments simultaneously.

§ 121.225 Propeller deicing fluid.

If combustible fluid is used for propeller deicing, the certificate holder must comply with §121.255.

§ 121.227 Pressure cross-feed arrangements.

(a) Pressure cross-feed lines may not pass through parts of the airplane used for carrying persons or cargo unless—

1. There is a means to allow crewmembers to shut off the supply of fuel to these lines; or
2. The lines are enclosed in a fuel and fume-proof enclosure that is ventilated and drained to the exterior of the airplane.

However, such an enclosure need not be used if those lines incorporate no fittings on or within the personnel or cargo areas and are suitably routed or protected to prevent accidental damage.