

TABLE 513.2 Other Articles

Requirement	Division Classified Locations	Zone Classified Locations
Area classification	500.5, 500.6	505.5, 505.6, 505.7
Equipment	Part III of 501, 500.7, 500.8, 501.5	505.8, 505.9, 505.20, 505.22
Wiring	Part II of 501	505.15, 505.16, 505.17, 505.18, 505.19, 505.26, 505.30

Informational Note: The term “Class I” was originally included as a prefix to Zone 0, Zone 1, and Zone 2 locations and references as an identifier for flammable gases, vapors, or liquids to differentiate from Class II and Class III locations. Zone 0, Zone 1, and Zone 2 only apply to flammable gases, vapors, or liquids so the “Class I” prefix is redundant and has been deleted, except for text that is extracted from other documents or to remain consistent throughout this article.

(A) Below Floor Level. Any pit or depression below the level of the hangar floor shall be classified as a Class I, Division 1 or Zone 1 location that shall extend up to said floor level.

(B) Areas Not Separated or Ventilated. The entire area of the hangar, including any adjacent and communicating areas not suitably separated from the hangar, shall be classified as a Class I, Division 2 or Zone 2 location up to a level 450 mm (18 in.) above the floor.

(C) Vicinity of Aircraft.

Δ **(1) Aircraft Maintenance and Storage Hangars.** The area within 1.5 m (5 ft) horizontally from aircraft power plants or aircraft fuel tanks shall be classified as a Class I, Division 2 or Zone 2 location that shall extend upward from the floor to a level 1.5 m (5 ft) above the upper surface of wings and engine enclosures.

Information on aircraft parking patterns, the types of aircraft, and the operations to be performed in the hangar are needed to properly classify hangar areas. Much of the hangar area classification is dependent on the dimensional outline of the aircraft; therefore, consideration of future aircraft and parking patterns is appropriate to avoid costs associated with changes in the area classification. Exhibit 513.1 illustrates area classifications in aircraft hangars. In aircraft painting hangars, the classified areas expand to include the entire surface area of the aircraft per 513.3(C)(2), not only the engines and fuel tanks.

Δ **(2) Aircraft Painting Hangars.** The area within 3 m (10 ft) horizontally from aircraft surfaces from the floor to 3 m (10 ft) above the aircraft shall be classified as Class I, Division 1 or Zone 1. The area horizontally from aircraft surfaces between 3.0 m (10 ft) and 9.0 m (30 ft) from the floor to 9.0 m (30 ft) above the aircraft surface shall be classified as Class I, Division 2 or Zone 2.

Informational Note: See NFPA 33, *Standard for Spray Application Using Flammable or Combustible Materials*, for information

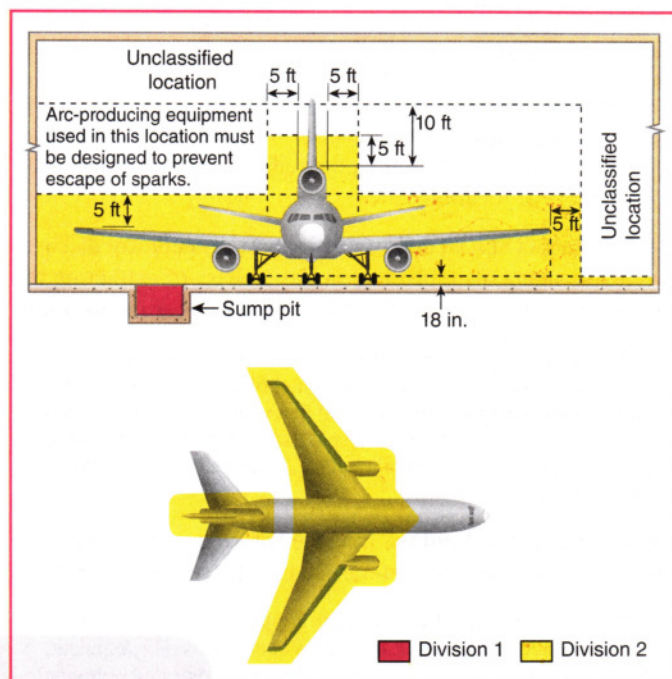


EXHIBIT 513.1 Area classification in aircraft hangars.

on ventilation and grounding for static protection in spray painting areas.

Δ **(D) Areas Suitably Separated and Ventilated.** Adjacent areas in which flammable liquids or vapors are not likely to be released, such as stock rooms, electrical control rooms, and other similar locations, shall be unclassified where mechanically ventilated at a rate of four or more air changes per hour, designed with positive air pressure, or effectively separated from the hangar itself by walls or partitions.

513.4 Wiring and Equipment in Class I Locations.

Δ **(A) General.** All wiring and equipment that is installed or operated within any of the hazardous (classified) locations defined in 513.3 shall comply with the applicable requirements of the hazardous (classified) locations.

Attachment plugs and receptacles shall be identified for the location or shall be designed so they cannot be energized while the connections are being made or broken.

Δ **(B) Stanchions, Rostrums, and Docks.** Electrical wiring, outlets, and equipment (including lamps) on or attached to stanchions, rostrums, or docks that are located in a hazardous (classified) location as defined in 513.3(C) shall comply with the applicable requirements of Parts II and III of Article 501 or 505.17 through 505.30, as applicable.

513.7 Wiring and Equipment Not Installed in Class I Locations.

(A) Fixed Wiring. All fixed wiring in a hangar but not installed in a Class I location as classified in 513.3 shall be