



Spraying and Dipping Operations

Purpose: Fire Inspection Checklists are provided so that the general public has an idea of what may be required during an inspection.

Please note that this list only covers the most frequently observed violations or conditions, and is not all inclusive. All occupancies are subject to the report of violations issued by the fire inspector conducting the inspection.

Scope: Occupancies conducting spraying and dipping operations are subject to annual inspections, and require a permit which will be issued upon inspection. See the California Fire Code, Chapter 24 for further requirements.

- Smoking shall be prohibited in spray-finishing areas and in the vicinity of dip tanks. No smoking signs shall be posted. (CFC 2403.2.6)
- Spray booths shall be substantially constructed of steel or other approved noncombustible materials. (CFC 2404.3.2.1)
- Interior surfaces of spray booths shall be smooth and continuous without edges and otherwise designed to prevent pocketing of residue. Aluminum shall not be used. (CFC 2404.3.2.2)
- No welding signs shall be posted in the vicinity of spraying areas, dipping operations and paint storage rooms. (CFC 2403.2.7)
- Floors of spray booths shall be on noncombustible materials or shall be covered with a noncombustible, non-sparking material. (CFC 2404.3.2.3)
- All portions of spray booths shall be readily available for cleaning and a 3-foot minimum space shall be kept free of storage or combustible materials on all sides. (CFC 2404.3.2.5)
- When spray booths are illuminated, fixed lighting units which transmit light into the spray booth through heat-treated or hammered wire glass shall be used. (CFC 2404.6.2.1)
- Filters are to be changed as needed to maintain airflow of 100 lineal feet per minute. (CFC 2404.6.2.4)
- Open-flame and spark-producing equipment shall not be located in spraying areas and shall not be located within 20 feet of spraying areas unless separated by a partition. (CFC 2403.2.2)
- Discarded filter pads shall be immediately placed in a noncombustible container with a tight fitting lid and disposed of in accordance with hazardous waste regulations. (CFC 2404.7.8.5)
- Electrical equipment in spraying areas shall be specifically approved for flammable atmospheres.
- Portable electric lamps shall not be used in spraying areas during spraying operations. Portable electric lamps, if used during cleaning or repairing operations, shall be of a type approved for hazardous locations. (CFC 2404.6.2.4)



Spraying and Dipping Operations

- Spray booths, spray rooms and limited spray areas shall be protected by an approved fire extinguishing system. Systems shall extend into exhaust plenums, ducts and both sides of dry filters. Sprinkler heads shall be protected from the accumulation of over spray with thin paper or polyethylene. (CFC 2404.4)
- A minimum of one 40BC portable fire extinguisher shall be properly hung within 30 feet of the spraying area. (CFC 2404.4.1, CFC Table 906.3(2))
- Spraying areas shall be kept free from the accumulation of combustible residues and debris.
- Spray gun and equipment cleaning machines shall be separated from ignition sources by a minimum distance of 3 feet. Solvent used outside of spray booths, rooms or listed and approved spray gun cleaning machines shall be restricted to Class II and III liquids.

DIPPING OPERATIONS

- Dip tanks using flammable or combustible liquids shall be provided with mechanical ventilation.
- Dip tanks of over 150 gallons or 10 sq. feet in liquid surface area shall be equipped with a properly trapped overflow pipe leading to a safe location outside the building. Dip tanks over 500 gallons shall be equipped with automatic and manual bottom drains arranged to quickly drain the tank in the event of fire. Such drains shall be trapped and discharged to a closed, properly vented salvage tank or a safe outside location. (CFC 2405.3.1)
- Electrical wiring and equipment in vapor areas shall be of an explosion-proof type approved for use in Class I, Division I hazardous locations. (CFC 2403.2.1)
- Electrical wiring within 10 feet of the floor and 20 feet horizontally of the limited spraying space shall be designed for Class I, Division 2 hazardous locations. (CFC 2404.9.4)
- Areas in the vicinity of dip tanks shall be provided with fire extinguishers, minimum rating of 40BC, located within 30 feet of the tank. (CFC 2405.4.2)
- Dip tanks over 150 gallons, a 10 sq. foot liquid surface area, or tanks containing a liquid with a flash point below 110 degrees F. shall be provided with an automatic extinguishing system. Dip tanks less than 150 gallons or a 10 sp. Ft. surface area can have either a fire extinguishing system or an automatic-closing cover. (CFC 2405.4.1)
- Covers shall be kept closed with tanks are not in use. (CFC 2405.3.4.3)