

INFORMATION BULLETIN

SPRAY FINISHING REQUIREMENTS

Code Reference:

**California Fire Code (CFC), 2001 Edition, Article 45
California Fire Code Standard No. 10-1**

The following are excerpts from the 2001 Edition of the CFC. These are only general requirements, and all paint spray booths will comply to these and all other State and Local laws:

1. A permit is required from the City of Redding Building and Fire Departments, and approval is required from Shasta County Air Quality Management District.
2. If spray booths are to be located outside the buildings, a City of Redding use permit may be required from the Planning Department.
3. Smoking shall be prohibited in spray finishing areas and in the vicinity of dip tanks. NO SMOKING signs with lettering of approved size shall be conspicuously posted in such areas (CFC 4501.4).
4. When conducted in buildings used for assembly, educational, institutional or residential occupancies, spray finishing operations shall be located in a spraying room protected with an approved automatic sprinkler system and separated vertically and horizontally from other areas in accordance with the UBC, Section 4502.1.

In other occupancies, spray finishing operations shall be conducted in a spray booth, spraying area or spraying room approved for such use. Limited spraying areas for touch-up or spot painting may be approved by the Chief, provided they meet the requirements of this article (CFC 4502.6).

5. Spray booths shall be substantially constructed of steel not less than 0.44 inch (18 gauge) in thickness or other approved noncombustible materials (CFC 4502.2.1).
6. Interior surfaces of spray booths shall be smooth and continuous without edges and otherwise designed to prevent pocketing of residue, to allow free passage of

exhaust air from all parts of the interior and to facilitate washing and cleaning without injury (CFC 4502.2.3).

7. Spray booths shall be separated from other operations by not less than 3 feet, by a wall or partition, or by a greater distance as required by the Chief (CFC 4502.2.7).
8. All portions of spray booths shall be readily available for cleaning, and a clear space of not less than 3 feet shall be kept free of storage or combustible materials (CFC 4502.2.8).
9. 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. Glass panels shall be arranged to minimize breakage and so that normal accumulation of residue on the exposed surface of a panel will not be raised to a dangerous temperature by heat from the source of illumination (CFC 4502.2.9).
10. 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 4502.4.1).
11. 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 4502.4.3.3).
12. Spraying areas shall be provided with mechanical ventilation adequate to prevent the dangerous accumulation of vapors (CFC 4502.5.1).

Mechanical ventilation shall be kept in operation at all times while spraying operations are being conducted, and for a sufficient time thereafter to allow vapors from drying coated articles and finishing material residue to be exhausted. Spraying equipment shall be interlocked with the ventilation of the spraying area such that spraying operations cannot be conducted, unless the ventilation system is in operation (CFC 4502.5.1).

13. Each spray booth shall have an independent exhaust duct system discharging to the building's exterior (CFC 4502.5.3).
14. Electric motors driving exhaust fans shall not be placed inside booths or ducts. Fan rotating elements shall be nonferrous or non-sparking, or casings shall consist of or be lined with such material (CFC 4502.5.4).

15. Where the quantity of liquid in 5 gallon and smaller containers, other than original sealed containers, exceeds a total of 10 gallons, such liquids shall be stored in a storage cabinet, liquid storage room or a room or building for using, dispensing and mixing liquids in quantities exceeding exempt amounts. Open containers and glass containers shall not be used (CFC 4502.7.2).
16. Spray booths and spraying rooms shall be protected by an approved automatic fire extinguishing system. Such systems shall be extended to protect exhaust plenums, exhaust ducts and both sides of dry filters, when such filters are used. For installation of automatic sprinklers in ducts, see Mechanical Code (CFC 4502.8.1).

Portable fire protection equipment shall be provided near spraying areas as required for extra hazardous occupancies in CFC Standard No. 10-1.
17. Spraying areas shall be kept free from the accumulation of deposits of combustible residues, as practical, with cleaning conducted daily if necessary (CFC 4502.9.1).
18. Flammable and combustible liquids shall be dispensed through listed and approved spray guns and equipment (CFC 4502.9.4.1.1 and 4502.9.4.2).