



DEPARTMENT FIRE MARSHAL'S OFFICE

INFORMATION LINE:

Spray Booths

Revised 07/2016

Fire Chief Wes Rhodes

Fire Marshal Paul Smith

EFD-FMO 20-3
2015 Edition
International Fire
Code As Amended

NFPA Standard 33
NFPA Standard 70
NFPA Standard 13

BASIS FOR REQUIREMENTS

- Adopted edition of the International Fire Code and revised deletions or additions.
- Adopted edition of the International Building Code and revised deletions or additions.
- Adopted edition of the International Mechanical and Plumbing Codes and revised deletions or additions.
- Nationally recognized NFPA standards.
- Manufacturer specifications and recommendations of commercial spray booths.
- Policy and procedures of the Euless Fire Marshal's Office.

MINIMUM SPECIFICATIONS FOR SPRAY BOOTHS AND SPRAYING ROOMS

OBTAINING PERMIT

Prior to issuance of any permit, an applicant must provide a blueprint quality drawing to scale indicating size of spray booth or spraying area, location within room area, or place of building. The submittal must include the manufacturer's specifications, if applicable, and responsible party for the installation or construction of the spray booth or area.

Submittal agency should allow a minimum of ten (10) working days for review of plans prior to permit issuance.

Questions should be directed to 817-685-1600.

MINIMUM REQUIREMENTS

- Booths shall comply with the provisions of Chapter 24 of the *2015 International Fire Code*.
- Spray booths shall be substantially constructed of steel not less than No. 18 gauge (.044 inch) in thickness or other approved noncombustible materials.
- The area of a single paint spray booth shall not exceed fifteen hundred (1,500) square feet. The aggregate area of spray booths in a building may not exceed ten (10) percent of the area of any floor or building or the basic area permitted for an H-2 occupancy in Table 506.2 of the *2015 International Building Code*, whichever is less. (See 2404.3.2.6)
- The interior surfaces of spray booths shall be smooth and continuous without edge and otherwise designed to prevent pocketing of residue, to permit the free passage of exhaust air from all parts of the interior and to facilitate washing and cleaning without injury.
- The floor shall be of noncombustible material or shall be covered with a noncombustible, non-sparking material of such character to facilitate the safe cleaning and removal of residue.
- Means of egress must be provided in accordance with Chapter 10 of the *2015 International Fire Code*.
- If installed, baffle plates shall be of a noncombustible material readily removable or accessible to facilitate cleaning and designed to provide an even flow of air through the booth and to prevent the deposit of overspray before it enters the exhaust duct. Such plates shall not be installed in the exhaust ducts.
- Each spray booth having a frontal area of more than nine (9) square feet and which is not equipped with doors shall have a metal deflector or fire curtain not less than four and one-half (4 ½) inches deep installed at the upper outside edge of the booth over the booth opening.
- Each spray booth shall be separated from other operations by not less than three (3) feet or by a wall or partition or by a greater distance as the Fire Marshal or his designated representative may require.
- All portions of a spray booth shall be readily available for cleaning, and a clear space of not less than three (3) feet shall be kept free of storage or combustible materials.
- When spray booths are illuminated, it shall be done through heat-treated or hammered wire glass. Fixed lighting units only shall be used as a source of illumination and panels shall be arranged so as to minimize breakage and so that normal accumulation of residue on the exposed surface of the panel will not be raised to a dangerous temperature by radiation or conduction from the source of illumination.
- An approved automatic fire protection system is required.
- Booths and components must be electrically grounded.

- Spray booths and rooms shall be designed in such a manner that spray operations cannot be conducted whenever any door into the booth is open.
- Air lines shall be equipped with a solenoid or other approved method to stop the flow of air in the event of a fire protection system activation.
- Signage to include “No Smoking” and “No Welding. The use of welding or cutting equipment in or near this area is dangerous because of fire and explosion hazards. Welding and cutting shall be done only under the supervision of the person in charge.”

ELECTRICAL

All electrical wiring and equipment shall be of explosion proof design conforming to that which is required and outlined in the NFPA Standard No. 70, the National Electric Code and NFPA Standard No. 33. In addition 2403.2.1 of the *2015 International Fire Code* must be met. This requires all electrical equipment and wiring within flammable vapor areas to be explosion proof and designed for use in such areas. Such areas will be considered Class I, Division 1 or Class II, Division 1 hazardous locations in accordance with the NEC and NFPA 70. Areas within 5 feet horizontally and 3 feet vertically of an opening to a spray booth or in areas subject to residue deposits must be in compliance with 2403.2.1.2 through 2403.2.1.4 of the *2015 International Fire Code* under 2404.7.3

VENTILATION OF SPRAY BOOTHS

All spray areas shall be provided with mechanical ventilation adequate to prevent the dangerous accumulation of vapors. Specific requirements on ventilation are based on the type of booth and are found in the *2015 International Fire Code*

FIRE PROTECTION EQUIPMENT

All spray booths or spray rooms shall be protected by an approved automatic fire extinguishing system.

When approved by the fire code official, spray booths protected with water sprinkler systems may be connected to the domestic water supply subject to the following:

- Existing domestic water supply system can meet hydraulic calculations as specified by manufacturer to provide adequate water supply and pattern distribution in addition to normal occupancy demand.
- Domestic water system is protected with a back flow preventer to protect against system contamination.

NOTE: Water systems not adequate to meet connection to domestic water supply will be required to provide an additional water tap dedicated for spray booth protection.

Alternate protection to automatic sprinkler systems (water application) may be extinguishing systems conforming to NFPA Standard No. 17 (dry chemical systems) or NFPA Standard No. 12 (carbon dioxide systems).

PORTABLE FIRE PROTECTION

Portable fire protection shall conform to NFPA Standard No. 10, Section 906 and 2404.4.1 of the IFC, and minimum requirements as established by City of Eules Fire Marshal's Office policy and procedures.

Normal situations shall be required a minimum of one (1) ten (10) pound ABC fire extinguisher (4A-40BC rated).