

**MCKINNEY FIRE DEPARTMENT  
FIRE MARSHAL'S OFFICE**

**SPRAY FINISHING  
SPRAY BOOTHS AND ROOMS**

These guidelines are to be followed when a business proposes to perform spray finishing operations using flammable/combustible liquids within a Spray Booth or Spray Room

**INSTALLATION REQUIREMENTS**

1. In A, E, I or R occupancies, all areas used for spray finishing shall be protected with an approved automatic sprinkler system and separated from other areas in accordance with the 2015 International Building Code.
2. All spray booths and spray rooms shall be protected by an approved automatic fire suppression system in accordance with the 2015 International Fire Code.
3. Fire extinguishers shall be provided in accordance with IFC Section 906 for an extra (high) hazard occupancy.

**SPRAY BOOTH REQUIREMENTS**

4. Design and construction of the spray booth shall be in accordance with IFC 2404 and NFPA 33. At a minimum spray booths shall be constructed of approved noncombustible materials in accordance with Section 2404.
5. All surfaces shall be smooth and continuous, permit the free passage of exhaust air and shall be designed to confine any residue within the booth.
6. Flooring shall be non-sparking and non-combustible.
7. Area of the spray booth shall not exceed 1,500 sq. ft., 10 percent of the floor area, of a single booth of 500 sq. ft.
8. Minimum of 3 ft. clearance is required around all sides of booth.
9. Lighting and illumination within the spray booth shall be Class 1, Division 2 or Class 2, Division 2.
10. Electrical wiring and equipment interior to the spray booth and paint mixing room shall be Class I, Division 1 or Class II, Division 1.
11. Electrical wiring and equipment outside of the spray booth, 5 feet horizontally and 3 feet vertically shall be Class I, Division 2 or Class II, Division 2
12. Upon activation of the fire suppression system, the spray/drying operations shall be shut-off.
13. Interface to the main building FACP, if provided, that will automatically shut-off the spraying and cooking operations upon fire alarm system activation.
14. Interlocks shall be provided to: 1) prevent spraying while drying operations are in progress, 2) automatically shunt the drying operation upon a ventilation failure, and 3) shunt the drying operation if the temperature exceeds 200 degrees.
15. Emergency controls for the spraying and cooking operations shall be interfaced into the FACP.
16. A minimum of one (1) manual fire alarm and emergency system shutdown shall be readily accessible to personal within the area of the spraying operations.
17. Appropriate labeling and signs in accordance with IFC Section 2403.2.6 & 2403.2.7, must be provided;
  - a. "Smoking or Open Flames Prohibited".
  - b. "No Welding" See IFC Section 1503.2.7 for required wording.
18. A placard specifically identifying the flammable/combustible material therein. An NFPA 704 placard may be required.
19. Ventilation for the spraying and drying operations shall be in accordance with the 2015 International Mechanical Code and IFC Section 2404.7.
20. The Class 1 oven for the drying operation, if provided, shall meet the requirements of the IMC.
21. A minimum air velocity of 100 feet per minute shall be provided across the spray booth cross section during operation.

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22. Provide a manometer to measure the airflow.
23. Air exhausted from spray operations shall not be recirculated.
24. Termination points for the exhaust ducts shall be in accordance with IFC Section 2404.7.6.
25. Air filters shall be Class 1 or 2 IAW UL 900.
26. Provide the total amount of flammable/combustible paint materials to be within the paint mixing or storage room.
27. Illumination of the spray booth shall be in accordance with Section 2404.6.2.
28. All electrical wiring shall be in accordance with NFPA 70 and NFPA 33.
29. Any other requirements of the 2015 IMC, 2015 IBC and 2015 IFC Chapter 24, not listed within this guideline shall also be met.

### SPRAY ROOMS REQUIREMENTS

30. When approved, spray rooms shall be constructed in accordance with the IBC. Flooring shall be non-sparking and non-combustible. All walls, floors and ceilings shall be protected by minimum 1-hour rated construction.
31. All of the above requirements shall also apply to spraying rooms unless otherwise noted in the IFC Chapter 24.

To expedite the plan review and inspection processes, please refer to the information listed below.

### PERMITTING REQUIREMENTS

32. Provide a written description of the operation and any associated systems.
33. Equipment location drawings of the actual configuration to include:
  - a. Location(s) of spray rooms, booths, mixing/storage areas/rooms and ovens in relation to the interior/exterior layout.
  - b. Location(s) of all means of egress (exits).
  - c. Plans shall be dimensioned and scaled.
34. A full equipment listing.
35. Manufacturer documentation for all parts and materials used in the project. This is to include all UL or NRTL listings and evaluations.
36. Drawings shall be submitted for review and approval, PRIOR to installation.
37. Drawings shall be generated by the installing company specific to the installation, and shall not be copied. Drawings shall show plan view and other pertinent information.
38. The submittal package must include all above requirements and be identified in the submittal package.
39. No spray finishing booths, mixing rooms, industrial ovens or spray rooms shall be installed on the site until a Permit has been issued. Any work performed prior to the issuance of this permit may result in a citation being issued for violation of Section 113.3 of the 2015 International Fire Code.

### GENERAL SUBMITTAL REQUIREMENTS

40. Each submittal shall have a completed McKinney Fire Department Plan Review Permit Application.
41. Plans approved by the Fire Marshal's Office give authorization for installation. Final approvals are subject to field verification. Any approval issued by the Fire Marshal's Office does not release the contractor or property owner from the responsibility of full compliance with all applicable codes and ordinances.
42. All fire department inspection forms and permits shall be kept on the job site until final inspection.
43. All installations shall comply with the approved plans. Any deviation from the approved plans requires a re-submittal to the Fire Marshal's Office.

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All spray finishing operations for the purposes of this guideline and any other guidelines or requirements of the Fire Department shall conform to the 2015 International Fire Code, as adopted and amended by City of McKinney, and NFPA 33.

This guide does not replace, nor supersede any codes and/or ordinances adopted by the City of McKinney, or determinations and positions of the Fire Chief or Fire Marshal.