

State of Arizona Risk Management Loss Prevention PAINT SPRAYING OPERATIONS USING FLAMMABLE AND COMBUSTIBLE MATERIALS

The Occupational Safety and Health Administration's Spray Finishing Using Flammable and Combustible Materials regulation (29CFR1910.107) was developed to protect employees who spray combustible or flammable materials. A spray booth is described as a power-ventilated structure provided to enclose or accommodate a spraying operation. A **spray booth** must be designed to limit the escape of spray, vapors, and residue and direct them to an exhaust. The regulation requires certain safety specifications for the construction and use of spray booths and equipment. A **spraying area** is defined as any area in which dangerous quantities of flammable vapors or mists or combustible residues, dusts, or deposits are present due to spraying processes. This checklist provides safety designs and elements to look for when checking a paint spray booth.

Before beginning a spraying operation, check with the Arizona Department of Environmental Quality and your county Air Quality section for information on the necessity of obtaining an air permit.

	YES	NO	N/A
Is the spray booth constructed of steel, concrete or other noncombustible material?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If the spray booth is used ONLY for low volume or intermediate spraying, it may be constructed of aluminum or other substantial noncombustible material.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is the booth designed to sweep air currents toward the exhaust outlet?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is the interior of the booth smooth, without edges and designed to prevent pocketing of residues and facilitate cleaning with out injuries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is the floor covered with non-combustible material to facilitate the safe removal and cleaning of the floor?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are baffle plates, if installed, constructed of non-combustible material, removable or accessible on both sides for easy cleaning?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is air flow into the booth over 100 linear ft/m (60 linear ft/m, electrostatic)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is there a visible gage or an alarm for low air flow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are filters checked for restrictions of air flow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do openings greater than 9 sq. ft. have a 2.5 in. deflector above them?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are sprinklers located in areas upstream and downstream of filters?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is the spray booth separated from other operations by at least 3 feet or a wall?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is there a three foot area on all sides kept clear of all storage or construction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is fixed lighting used to illuminate the spray booth protected by sealed glass panels or other transparent noncombustible materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is there an open flame or spark producing equipment within 20 feet?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	YES	NO	N/A
If there is an open flame or spark producing equipment within 20 feet of the spray booth is it separated by a partition?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are any hot surfaces located in the spraying area where combustible residues may accumulate?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is wiring approved for Class I Division I area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is electrical wiring in rigid conduit?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are lamps within 20 feet of the spraying operation fully enclosed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are any portable lamps or heaters used during spraying operations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are all metal parts of the spray booth, exhaust ducts and piping systems properly grounded?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do all spraying areas have mechanical ventilation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have all employees who spray been trained in proper techniques and to use the ventilation at all times?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are exhaust ducts constructed of steel and exhausted to the exterior of the building?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is air exhausted so it will not be recirculated into the building?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is the fan rotating element made of nonferrous metal?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are any electric motors located inside the booth or ducts?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does the quantity of flammable or combustible material kept in the vicinity of spraying operations exceed the quantity needed for one shift?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are all chemicals used in the spraying process properly labeled?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have employees received training on the chemicals?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are the employees provided with the proper personal protective equipment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have the employees received training for the personal protective equipment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are glass, open or unapproved containers used in the spray operations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are containers grounded during the transfer of liquids?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are sprinklers installed in the booth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are sprinkler heads kept clean?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are fire extinguishers located within 50 ft. of the spray booth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is spraying done outside the designated spray booth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are all spraying areas free of combustible residues?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are all residues properly disposed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	YES	NO	N/A
Are "No Smoking" signs conspicuously posted?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do solvents used for cleaning have a flash point of 100 degrees F or less?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are covered metal waste cans used for oily or paint soaked rags?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are emergency eye wash and shower facilities located within the work area where employees may be exposed to corrosive materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

How are used filters disposed? _____

Additional Comments: _____

Note that this checklist is to be used as a "tool" to assist in determining if the basic requirements for a spray booth are being met. The checklist is not all inclusive. OSHA Standard, 29CFR1910.107, should be used for a more detailed reference. The OSHA internet website, www.OSHA.gov, is an excellent resource for all occupational related safety and health requirements.