



IATSE LOCAL
891



Spray Booths for Film and TV Productions

Guidance on how to determine what kind of Spray Booth is needed to meet existing regulations

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This resource addresses workplace safety concerns cited by IATSE 891 members.

In Spring 2022, IATSE 891 engaged Aura Health and Safety Corp and Ventilation Engineer, Ed Chessor, to meet with members to discuss, identify and work to address ongoing health and safety concerns common in Film and TV Production Workplaces.

DISCLAIMER: This resource is provided for informational purposes only. It is the responsibility of any users to ensure that their controls comply with applicable standards and guidelines e.g., building and fire codes as well as occupational health and safety regulations.

Concern: Spraying flammable and/or toxic products is dangerous.

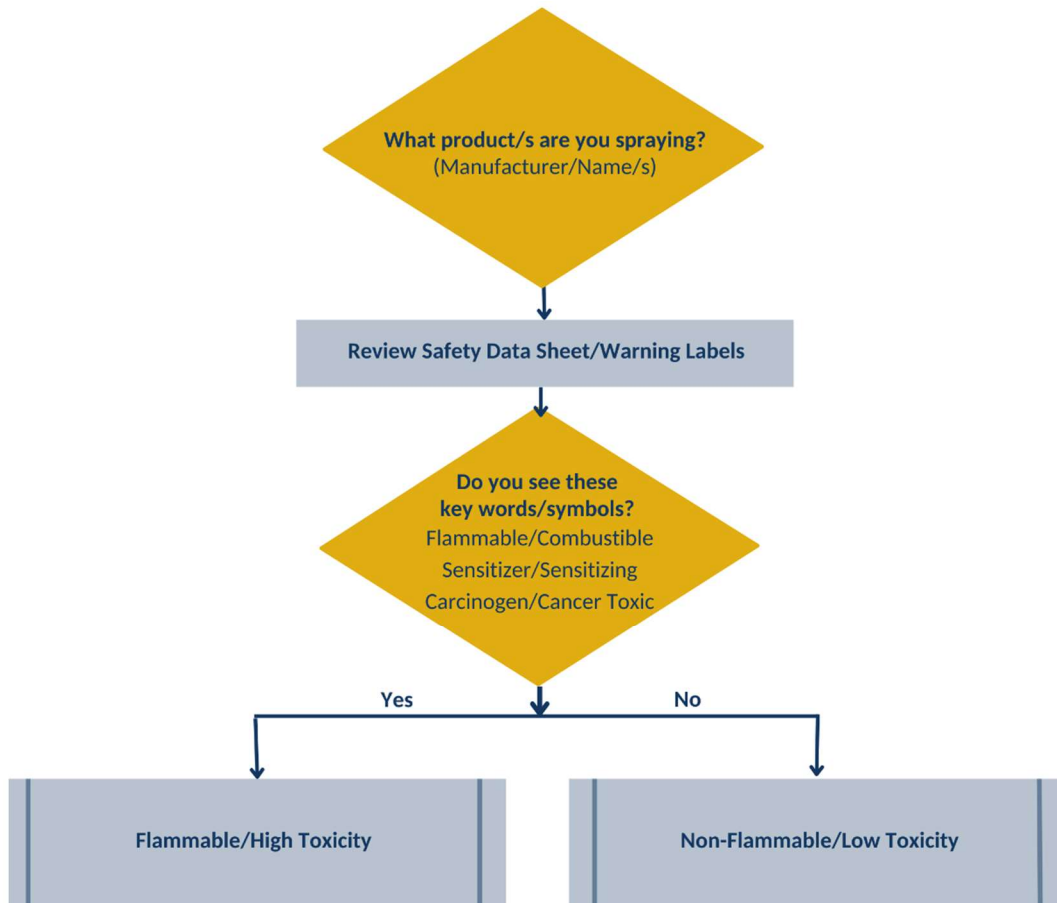
If a Production is going to spray any type of chemical, whether it is a paint for Set Dec or fabric dye for Costumes Department, there are several regulations and codes that must be considered. These include WorkSafeBC Occupational Health and Safety Regulation as well as electrical and fire codes which set out requirements for spaces where paint is sprayed.

Find in this document guidance to determine what type of Spray Booth is needed.

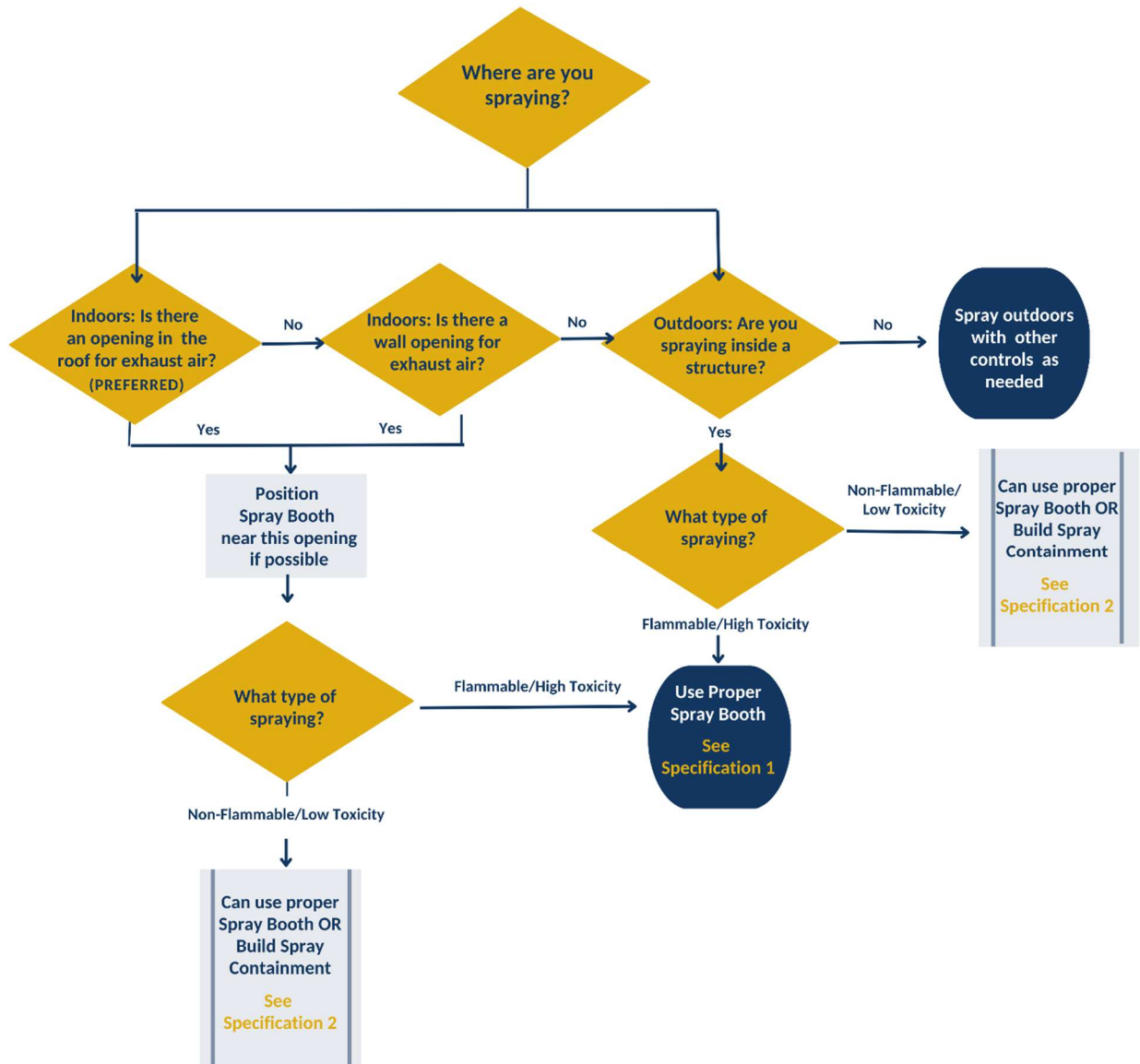
Needs will depend on what is being sprayed and space limitations. Take these steps:

- 1. Determine the flammability and toxicity of the spray product(s).**
> See *Flowchart I* in this document.
- 2. Determine what type of spray booth is needed.**
> See *Flowchart II* in this document.
- 3. Follow Specification 1 or 2 dependant on assessed need.**
> Consult specifications provided in this document.

Flowchart 1 - Determine the flammability and toxicity of the spray product(s).



Flowchart 2 - Determine what type of spray booth is needed.



Specification 1 - Proper Spray Paint Booth

Use	For spraying paint e.g., for Set Dec and spraying costumes with flammable/higher toxicity products. IMPORTANT: Check Safety Data Sheets (SDS). Any spraying of two-part products (containing isocyanates or epoxy) must be conducted in a proper spray booth with airline respirators and other controls as per WorkSafeBC.
Specifications	<p>There are two options:</p> <p>1) Purchase a proper spray booth.</p> <p>Purchased Spray Booth Example:</p> <ul style="list-style-type: none"> • 18-gauge G90 Galvanized steel construction • AMCA certified aluminum blade fans with TEFC motor • UL listed color correct fluorescent light fixtures • 20 x 20 Industry standard filters • 100 F.P.M. standard booth velocity • Welded tube steel product doors • Easy nut & bolt assembly with 3D exploded view drawings <p>2) Build a proper spray booth.</p> <p>Built Shipping Container Example:</p> <ul style="list-style-type: none"> • Size: 20' x 7'8" x 7'10" • Fan: explosion-proof 24-inch, 3500 CFM fan mounted 3 feet above the roof • Duct: 24-inch duct through roof and 15 feet beyond roof; with stack topped off with backdraft damper in a protective collar. • Paint arrestor filters on a rack at the fan end • Lights: three 2'x4' lights mounted on the roof <p>Heating:</p> <p>Indoors: Building needs a fan and duct system to bring in air from outside and distribute near ceiling, if building is at least 15,000 square feet with 25 ft. ceiling</p> <p>Outdoors: ***Do not place any heaters inside the spray booth*** Heaters should be located outdoors, and any compressors should be in clean areas and away from heater or booth exhaust.</p>
Location	Exhaust through building roof when possible Or possibly locate shipping container outdoors with exhaust through the roof
Tips for Installation	Preferred – steel rigid ducting, spiral wound or welded Many mill buildings have an exhaust fan with a roof opening 24 inches square or larger. You can move an existing fan aside to provide an opening for the spray booth stack. The booth can be relocated in a couple of days, making it practical for Productions to move to new locations, if needed.
Resources	For Spray Booth options contact: <ol style="list-style-type: none"> 1. Pacific Spray Booths: James Carruthers at (604) 420-4607 local 3. 2. Century Spray Booth: Downdraft Paint Booths for Sale Century Spray Booth

Specification 2 - Local Exhaust Ventilation for Built Spray Booth/Area

Use	For spraying less toxic products (e.g., water-based dyes for costumes). For dipping or hand-painting activities. IMPORTANT: Check Safety Data Sheets for information regarding flammability and toxicity.
Specifications	<p>There are a few options:</p> <p>1) Build a space/room.</p> <p>Built Space Example:</p> <ul style="list-style-type: none"> • Wood frame • Drywall • Non-combustible finishes • For a size of space that is 1280 cubic feet: Fan that is 24-inch, 3500 CFM fan mounted 3 feet above the roof • Duct: 24-inch duct through roof and 15 feet beyond roof; with stack topped off with backdraft damper in a protective collar. • Paint arrestor filters on a rack at the fan end. • Use spray booth curtains. <p>2) Use spray booth curtains.</p> <p>Spray Curtain Example:</p> <ul style="list-style-type: none"> • Meets fire code and regulations • 18 oz coated vinyl material • 16-gauge galvanized steel hardware • Rolling curtain hooks • Double-stitched hems for added reinforcement • For a size of space that is 1280 cubic feet: Fan that is 24-inch, 3500 CFM fan mounted 3 feet above the roof • Duct: 24-inch duct through roof and 15 feet beyond roof; with stack topped off with backdraft damper in a protective collar • Paint arrestor filters on a rack at the fan end.
Location	Exhaust through building roof when possible Or possibly locate space outdoors with exhaust through the roof.
Tips for Installation	<p>Preferred – steel rigid ducting, spiral wound or welded.</p> <p>Many mill buildings have an exhaust fan with a roof opening 24 inches square or larger. You can move an existing fan aside to provide an opening for the spray booth stack.</p> <p>Spray curtains should go up the roof. With ventilation, there will need to be make-up air.</p>
Resources	<p>For Built Spray Booths options contact:</p> <ol style="list-style-type: none"> 1. Custom Cubes. Create a custom container. 2. Spray curtains - Paint and Spray Booth Curtains AKON Curtain and Divider Custom Made (curtain-and-divider.com)