

Provided courtesy of the International Code Council's Fire Service Membership Council



Using Inflatable Spray Booths Indoors

* Something New

You are inspecting a local autobody shop when you notice several cans of paint, spraying equipment, and freshly painted bumpers drying outside the building in the sun. You do not recall this business ever having a spray booth, so you ask the business owner if this is something new. She informs you that they just started a new spraying process and says it is great because they are the only place in town that do smaller paint jobs at a good price.

You start thinking about spray booths and how a permit is required by the International Fire Code (IFC). You also remember how spray booths are supposed to be inspected, tested, and maintained on a routine basis as well. When you ask her to see the new spray booth, she brings you around the corner. To your surprise, there is not a large metal spray booth but what looks like an adult version of a children's bounce house. This is an inflatable spray booth (ISB). As you start to examine it, you ask the owner for any information on the ISB and she hands you a manufacturer's information sheet and says that the ISB is much less expensive than installing a typical spray booth. Your first thought is if it meets code requirements? More importantly: are there any code requirements?

* Unfortunately, codes don't address them yet

ISBs are an emerging technology that are not currently addressed in the IFC or the National Fire Protection Association's Fire Code Standard (NFPA 1) or its Standard for Spray Application Using Flammable or Combustible Materials (NFPA 33). Fortunately, the code development process is actively addressing this technology. It is being vetted through both the ICC and the NFPA with the help of manufacturers, engineers, and code officials. However, it will be at least three years before publication of any specific code requirements and longer still before communities adopt them. The issue now is that code officials are being asked to approve the use of ISBs with little else than the manufacturer's information sheet.

* Spraying operations inside a building

Code development aside, the use of ISB's inside a building would be subject to the same requirements of other interior spray booths or limited spray spaces. Spray-finishing operations using flammable or combustible liquids conducted in Group A, E, I, or R occupancies are required to be in a spray room with fire sprinkler protection and a one-hour, fire-rated separation from the rest of the building. In other occupancies, spray-finishing operations must be conducted in a spray room, spray booth, or limited spraying space which needs to be approved for such use. ISBs do not meet the construction, material, or fire suppression requirements for spray rooms or spray booths. This makes their use inside a building prohibited, not even for limited spray finishing.

* Summary: Best if used outside for a one-time use

Until applicable codes are adopted for ISBs, their suggested use could be for short-term, temporary, outdoor use. For outdoor use at a commercial occupancy, items to consider should be:

- The authority having jurisdiction's temporary structure provisions like anchoring, exiting, and separation distances (IFC chapter 31)
- If there are any required permits from the local enforcing building and fire officials
- Suppression
- Hazardous material storage and handling requirements (IFC chapter 50)
- Environmental health requirements as applicable
- Zoning requirements as applicable

