



# AMERICAN NATIONAL STANDARD

*ANSI/ASSE Z9.3 - 2017*

*Spray Finishing Operations: Safety Code for  
Design, Construction and Ventilation*

ANSI/ASSE Z9.3 – 2017



AMERICAN SOCIETY OF  
SAFETY ENGINEERS

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**ANSI/ASSE Z9.3 – 2017**

**American National Standard**

**Spray Finishing Operations:  
Safety Code for Design,  
Construction and Ventilation**

Secretariat

**American Society of Safety Engineers**  
**520 N. Northwest Highway**  
**Park Ridge, Illinois 60068**

**Approved August 24, 2017**

**American National Standards Institute, Inc.**

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## **Foreword** (This Foreword is not a part of American National Standard Z9.3 – 2017.)

The requirements of this standard are intended to prevent the emission into the workroom atmosphere of gases, vapors, mists or dusts from spray finishing operation in quantities tending to:

- injure health through inhalation;
- cause injury due to contact with the skin;
- condense or collect on floors, ceilings or walls of any workroom to produce unsanitary, unhealthy or unsafe conditions.

These requirements are also intended to guide operators of these processes in attaining reasonable safety from fire and explosion.

It is recognized that uniform treatment of subjects covered by industry codes and standards such as this ANSI/ASSE Z9.3 standard is desirable because it:

- promotes confidence that there is widespread agreement concerning principles relating to the subject which, in turn, facilitates compliance.
- facilitates enforcement by code-enforcing authorities.
- facilitates the manufacture of equipment that will comply with code requirements.

### **How to Read This Standard**

The standard is presented in a two-column format. The left column presents the requirements of the standard, the right column provides clarification and explanation of the requirements plus "how to comply" information.

This standard also contains appendices, which are informative and are not considered a mandatory part of this standard.

This standard is not meant to be all encompassing. Rather, it establishes minimum acceptable criteria for the design, construction and ventilation of spray finishing operations.

Suggestions for improvement of this standard are welcome. They should be sent to the American Society of Safety Engineers, 520 N. Northwest Highway, Park Ridge, Illinois 60068.

This standard was processed and approved for submittal to ANSI by the Z9 Accredited Standards Committee on Health and Safety Standards for Ventilation Systems. Committee approval of the standard does not necessarily imply that all committee members voted for its approval. At the time it approved this standard, the Z9 Committee had the following members:

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**AMERICAN NATIONAL STANDARD Z9.3  
SPRAY FINISHING OPERATIONS:  
SAFETY CODE FOR DESIGN, CONSTRUCTION AND VENTILATION**

**STANDARD REQUIREMENTS**

**EXPLANATORY INFORMATION**

*(Not part of American National  
Standard Z9.3)*

**1. SCOPE**

This standard is intended to help manufacturers and users protect the health of personnel from injurious effects of contact with gases, vapors, mists, dusts, powders or solvents used in, created, released or disseminated during or by spray finishing operations.

This standard is not intended to cover the health and safety requirements for personnel involved in the spraying the exteriors of buildings, inside fixed tanks or similar structures. The safety requirements of this standard also do not cover personnel involved in spraying operations in which small hand spray cans are used. However, the fundamental safeguards prescribed in this standard can and should be followed when applicable.

**2. REFERENCED AND RELATED STANDARDS AND PUBLICATIONS**

**2.1 General.** This standard is intended to be used in conjunction with the publications listed in 2.2, 2.3 and 2.4. The related standards cited in 2.5 contain additional information, but are not essential for completing conformance with the requirements of this standard.

**2.2 American National Standards.** When the American National Standards referred to in this document are superseded by a revision approved by the American National Standards Institute, Inc., the revision should be applied.

*ANSI/ASSE Z9.1, Open-Surface Tanks –  
Ventilation and Operation*