



ANSI/AIHA Z9.3–2007

# American National Standard for

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



*A Publication by*  
**American Industrial Hygiene Association**

**ANSI/AIHA Z9.3–2007**

# American National Standard — Spray Finishing Operations: Safety Code for Design, Construction and Ventilation

Secretariat

**American Industrial Hygiene Association**

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**FOREWORD** (This foreword is not part of the American National Standard/AIHA Z9.3-2007)

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:

L. DiBerardinis, Chair  
J.M. Price, Vice Chair  
Mili Mavely, Secretariat Representative

<i>Organization Represented</i>	<i>Name of Representative</i>
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American Chemical Society	D. Walters
American Conference of Governmental Industrial Hygienists	G. Knutson
American Automobile Manufacturers Association	G.M. Adams
American Foundrymen's Society	R. Scholz
American Glovebox Society	S. Crooks
American Society of Heating, Refrigerating, and Air Conditioning Engineers	H.F. Behls
National Association of Metal Finishers	K.C. Hankinson
National Spray Equipment Manufacturers Association	D.R. Scarborough
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At the time of development, the Z9.3 subcommittee on Spray Finishing Operations: Safety Code for Design, Construction, and Ventilation, which developed this standard, had the following members:

G.M. Adams, Chair  
K.C. Hankinson  
K. Paulson

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# American National Standard — Spray Finishing Operations: Safety Code for Design, Construction and Ventilation

## 1. Scope and Purpose

- 1.1 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.

**NOTE:** It is recognized that uniform treatment of subjects covered by industry codes and standards such as this ANSI 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.
- It facilitates enforcement by code-enforcing authorities.
- It facilitates the manufacture of equipment that will comply with code requirements.

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.

- 1.2 Purpose.** 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.

## 1.3 Presentation and Coverage

**Format** – The Standard is presented in a two-column format. The left column presents the requirements for Users of the Standard. The right column describes the “why” and “how” of the recommendations, including alternative approaches for following the requirements, objectives and recommendations provided.

The Appendix provides references, sources, important information, educational materials, and an Audit Form.

**Overlap** – For Sections to be mutually exclusive and to stand alone, similar recommendations may occasionally be stated in more than one section of the Standard.

**Flexibility** – Requirements, recommendations and objectives are minimum “criteria” and can be adapted to the needs of the user. Demonstrably equal or better approaches are acceptable.

Where Standard recommendations are in conflict with other standards and codes, the more stringent should normally be applied.