

NFPA® 92A

Standard for Smoke-Control Systems Utilizing Barriers and Pressure Differences

2009 Edition



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An International Codes and Standards Organization

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Standard for

Smoke-Control Systems Utilizing Barriers and Pressure Differences

2009 Edition

This edition of NFPA 92A, *Standard for Smoke-Control Systems Utilizing Barriers and Pressure Differences*, was prepared by the Technical Committee on Smoke Management Systems. It was issued by the Standards Council on May 30, 2008, with an effective date of July 18, 2008, and supersedes all previous editions.

This edition of NFPA 92A was approved as an American National Standard on July 18, 2008.

Origin and Development of NFPA 92A

The NFPA Standards Council established the Technical Committee on Smoke Management Systems in October of 1985 and charged it with addressing the need for guidelines and materials on building fire smoke management. With help from a former subcommittee on smoke control of the Technical Committee on Air Conditioning, members were appointed to the Smoke Management Systems Committee in 1986. As a first attempt at addressing smoke management, a draft was prepared of a new document, NFPA 92A, that addressed smoke control utilizing barriers, airflows, and pressure differences so as to confine the smoke of a fire to the zone of fire origin and thus maintain a tenable environment in other zones.

The 1993 edition helped to refine the science and art of smoke control by incorporating the latest in technology. The 1996 edition added guidelines on control system supervision and instrumentation; it also provided substantial appendix material on testing for leakage of smoke-control enclosures.

The 2000 edition was a complete revision and added information based on research on the design and testing of smoke-control systems for areas of refuge, elevator lobbies and hoistways, and vestibules. A chapter addressing computer models was added, and the criteria for control systems and fire fighters' control stations was refined and clarified.

The 2006 edition was a major revision of the previous edition. The document was rewritten as a standard with mandatory provisions regarding the design, installation, and testing of smoke-control systems. The document also was reorganized to comply with the *Manual of Style for NFPA Technical Committee Documents*. Additionally, other editorial changes were made to improve the application of the standard. Major technical changes addressed power supplies for smoke-control systems, openings, and leakage through smoke barriers, including egress doors in stairways, system wiring, design documentation, test procedures, and the zoning of elevator shafts and elevator lobbies.

The 2009 edition is an update of the 2006 edition with only minor editorial changes included.