

Standard for the Fire Protection of Information Technology Equipment





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Text revisions are shaded. A \triangle before a section number indicates that words within that section were deleted and a \triangle to the left of a table or figure number indicates a revision to an existing table or figure. When a chapter was heavily revised, the entire chapter is marked throughout with the \triangle symbol. Where one or more sections were deleted, a • is placed between the remaining sections. Chapters, annexes, sections, figures, and tables that are new are indicated with an **N**.

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NFPA® 75

Standard for the

Fire Protection of Information Technology Equipment

2020 Edition

This edition of NFPA 75, *Standard for the Fire Protection of Information Technology Equipment*, was prepared by the Technical Committee on Electronic Computer Systems. It was issued by the Standards Council on November 4, 2019, with an effective date of November 24, 2019, and supersedes all previous editions.

This edition of NFPA 75 was approved as an American National Standard on November 24, 2019.

Origin and Development of NFPA 75

The Committee on Electronic Computer Systems was formed by the action of the NFPA Board of Directors in January 1960, following a request for standardization of fire protection recommendations by the computer industry.

The committee first submitted the *Standard for the Protection of Electronic Computer Systems* to the 1961 NFPA Annual Meeting, and it was tentatively adopted. At the 1962 Annual Meeting, it was officially adopted as an NFPA standard. Revisions were adopted in 1963, 1964, 1968, 1972, 1976, 1981, 1987, and 1989. The document was completely rewritten for the 1992 edition. The document was revised in 1995, 1999, and again in 2003. The 2003 edition incorporated the *Manual of Style for NFPA Technical Committee Documents* revisions.

In editions of this standard prior to 2003, the terms *electronic computer/data processing equipment* and *electronic computer system* were used where the current terms *information technology equipment* and *information technology equipment system*, respectively, are used. Similarly, the terms *computer room* and *computer area* were replaced by *information technology equipment room* and *information technology equipment* system, respectively, are used. Similarly, the terms *computer room* and *computer area* were replaced by *information technology equipment room* and *information technology equipment* area, respectively. The title was changed from *Standard for the Protection of Electronic Computer/Data Processing Equipment* to *Standard for the Protection of Information Technology Equipment*. While the title and some terminology were changed in the 2003 edition to more closely align this standard's terminology with terminology being used in other standards, such as *NFPA 70, National Electrical Code*, and UL 60950, *Safety of Information Technology Equipment*, the scope of this standard and any definitions associated with those like terms remained the same.

For the 2009 edition, Section 4.2, Telecommunications Risks, was updated; many of the UL references were updated; new requirements were added for signage to indicate that equipment will remain energized where continuous power is provided; and flame spread indexes were provided for many of the materials listed in the standard.

For the 2013 edition, the title was again changed, to *Standard for the Fire Protection of Information Technology Equipment*, to better reflect the scope of the document and to be clear that the standard is strictly for fire protection. The 2013 edition featured a new section on the emerging use of aisle containment systems for information technology equipment and how such systems must be assessed for their interaction with fire protection features. A number of definitions were extracted from *NFPA* 70 to define words used in the body of the standard that previously were not defined.

The 2017 edition of the standard was revised to permit performance-based designs for specific provisions of the standard. Chapter 4 was revised to state the approaches that are permitted to be followed (prescriptive or performance-based), and a new Chapter 5 was added that details the requirements when a performance-based approach is selected. This was done to account for changes in the operation of data centers that can require more flexibility than is often provided by prescriptive approaches.

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Extensive annex material that provides guidance on designing detection for high airflow environments, including detector sensitivity and spacing, was added to the standard based on Fire Protection Research Foundation reports.

For the 2020 edition of the standard, air sampling detector port location and coverage was clarified. The requirement for inside hose stream was deleted as the fire department utilizes their own hose and will most likely not use the inside hose located in the structure. New Chapter 13, Modular Data Centers, was added to specify which requirements from other chapters apply to modular data centers. The requirements for 1- and 2-hour fire barriers were clarified for structures that contain multiple occupancies. Battery requirements were extracted from Chapter 52 of NFPA 1, *Fire Code*.