

NFPA® 276

Standard Method of Fire Test for Determining the Heat Release Rate of Roofing Assemblies with Combustible Above-Deck Roofing Components

2015 Edition



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An International Codes and Standards Organization

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NFPA® 276

Standard Method of

Fire Test for Determining the Heat Release Rate of Roofing Assemblies with Combustible Above-Deck Roofing Components

2015 Edition

This edition of NFPA 276, *Standard Method of Fire Test for Determining the Heat Release Rate of Roofing Assemblies with Combustible Above-Deck Roofing Components*, was prepared by the Technical Committee on Fire Tests. It was issued by the Standards Council on November 11, 2014, with an effective date of December 1, 2014, and supersedes all previous editions.

This edition of NFPA 276 was approved as an American National Standard on December 1, 2014.

Origin and Development of NFPA 276

Fires involving roof deck assemblies have resulted in significant losses and damage to buildings and structures that otherwise had fire protection systems, construction features, or both in place to minimize the spread of fire. Perhaps the most famous of those fires is the 1953 fire at the General Motors Corporation facility in Livonia, MI. Analysis of that fire indicated that, while the exterior roof surface might have been able to minimize the propagation of fire, the interior portions of the roof decking that included combustible materials installed on the deck allowed the fire to spread along the interior underside of the roof deck assembly.

Although insurance company interests developed some test protocols to address the spread of fire along the underside of steel roof decks, no national test or evaluation standard had been devised to address this potential concern until 2006, when NFPA 276 was proposed. The fire performance of the roof assembly is evaluated by measuring the heat release rate below the roof deck where the assembly incorporates combustible construction components, a common construction technique.

The protocol includes a fire exposure test and an evaluation test with an auxiliary fuel package. To properly characterize the performance of the roof assembly, NFPA 276 specifies the requisite provisions for the furnace construction and configuration; instrumentation needs; size, attributes, and conditioning of the test sample; calibration of the furnace; procedure for running the tests; and the reporting requirements to describe the test results.

NFPA 276 can be referenced in model building codes, state or local regulations, and private sector loss prevention policies to allow for a full and complete evaluation of these common roofing assemblies.

There were no substantial changes in the 2015 edition.



Documents

Document Sharing Hub

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