

Standard for Reducing Structure Ignition Hazards from Wildland Fire

2018



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ISBN: 978-145591713-6 (Print) ISBN: 978-145591714-3 (PDF) ISBN: 978-145591779-2 (**Park)

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NFPA® 1144

Standard for

Reducing Structure Ignition Hazards from Wildland Fire

2018 Edition

This edition of NFPA 1144, Standard for Reducing Structure Ignition Hazards from Wildland Fire, was prepared by the Technical Committee on Wildland and Rural Fire Protection and acted on by NFPA at its June Association Technical Meeting held June 4–7, 2017, in Boston, MA. It was issued by the Standards Council on August 17, 2017, with an effective date of September 6, 2017, and supersedes all previous editions.

This edition of NFPA 1144 was approved as an American National Standard on September 6, 2017.

Origin and Development of NFPA 1144

The basis for NFPA 1144, Standard for Reducing Structure Ignition Hazards from Wildland Fire, was NFPA 224, Fire Protection and Prevention for Summer Homes in Forested Areas, originally created in 1935. That document was developed by the Forest Committee of NFPA and was presented and adopted at the 1935 Annual Meeting of the Association. In 1952, the document was renumbered NFPA 224-T, and in 1953 the title was revised to Fire Prevention Standards for Homes and Camps in Forested Areas. The document was designated NFPA 224M, Recommended Good Practice for Homes and Camps in Forest Areas, when it was revised in the 1962, 1969, and 1972 editions.

In 1974, NFPA 224M was renamed *Standard for Homes and Camps in Forest Areas*, and was revised in progressively up-to-date editions in both 1979 and 1985. In 1988, the NFPA Forest Committee and the Correlating Committee on Suburban and Rural Fire Protection and Prevention were combined into the Technical Committee for Forest and Rural Fire Protection.

In 1991, NFPA 224, Standard for Homes and Camps in Forest Areas, was withdrawn, and the Forest and Rural Technical Committee incorporated parts of the document into the 1991 edition of NFPA 299, Protecting Life and Property from Wildfire. Following the tragic wildfires in the United States in 1985, which had resulted in the loss of 44 lives and 1400 homes, the 1991 edition was revised with a new approach to fire protection. Recent wildland/urban interface fires, such as the conflagrations in Oakland, CA (1991), Laguna Beach, CA (1993), and Malibu, CA (1996), had shown that fire fighters often are placed in dangerous situations due to inadequate planning and design of roadways, signs, water supplies, and other infrastructure considerations. Those fires also demonstrated that the growing population of residential areas increasingly is encroaching into wildland areas. The fire season of 2000 resulted in renewed interest in seeking more creative alternative methods to reduce the historical trend of catastrophic fires.

In 2002, NFPA 299 was renumbered NFPA 1144 to bring it into sequence with other Forest and Rural Committee documents. NFPA 1144 was officially adopted by state and local governments and adapted for use by numerous jurisdictions involved in planning Firewise Communities. The 2002 edition clarified numerous requirements in the earlier editions and included a significant revision of the Wildland Fire Risk and Hazard Severity Assessment system in Annex B. The committee tested various assessment system versions in several Firewise Communities workshops, sponsored by the National Wildland/Urban Interface Fire Program, before arriving at the relative values and hazard levels given in the document. The committee increased the severity values for non-rated roofing, inadequate separation of vegetation from structures, and separation of structures from one another.

The 2008 edition, retitled Standard for Reducing Structure Ignition Hazards from Wildland Fire, focused on individual structure hazards and excluded subdivision requirements, which were incorporated into the 2008 edition of NFPA 1141, Standard for Fire Protection Infrastructure for Land Development in Suburban and Rural Areas. The 2008 edition also required a new spatial approach to assessing and

mitigating wildfire hazards around existing structures and included improved ignition-resistant requirements for new construction.

In the 2013 edition of NFPA 1144, the committee provided additional clarification for the definitions of *combustible*, *noncombustible*, and *ignition-resistant material*. In addition to updating references, new requirements for the maintenance and use of noncombustible roof gutters, downspouts, and connections were included in the document.

NFPA 1144 presents basic criteria for fire agencies, land use planners, architects, developers, and local government for planning development in areas that might be threatened by wildfire. This standard, when used as part of a cooperative approach among key disciplines, will provide guidance in the design and development of Firewise Communities in or near wildland fire–prone areas. It is hoped that the requirements set forth in this document will, first, help protect the lives of both residents and fire fighters when wildfires strike and, second, reduce property damage.

In the 2018 edition of NFPA 1144, the committee clarifies definitions, including defensible space, fire resistive, ignition-resistant material, immediate landscaped area, noncombustible material, slope, structure ignition zone, water supply, wildland/urban interface, and intermix. The technical committee added hydrants, cisterns, and water sources to the map elements. Structural assessment will include an evaluation of the site for conflagration hazards. Significant revisions were made to construction design and materials of the structure and components supported by ASTM testing standards and specific compliance elements found in Chapter 5 and include roof design and materials; vents for attics, subfloors, and walls; all projections, including balconies, carports, decks, and patio covers; enclosed roofs and floors; exterior vertical walls; and exterior openings.