

Construction and Fire Risk: An Insurance Perspective

August 1, 2024 | Session Overview

Speakers

Jeff Benson, Vice President and Program Manager, Victor Insurance

Shamim Rashid-Sumar, Senior Vice President, Codes and Standards,
National Ready Mixed Concrete Association

Dr. Anne Cope, Chief Engineer, Insurance Institute for Business &
Home Safety

Moderator

Sarah Swango, Vice President of Corporate and Foundation Relations,
National Institute of Building Sciences

Construction and Fire Risk Overview

Buildings are built using a variety of construction types, methods, and materials. There are many risks to property and occupants, including fire, water, intrusion, extreme weather, and other natural disasters.

Developers and owners of multifamily buildings must insure these buildings during construction and occupancy over the building lifetime against these risks.

However, fire continues to result in more fatalities in the United States than all other disasters combined.

On August 1, 2024, NIBS hosted this webinar with subject matter experts Jeff Benson, Vice President and Program Manager, Victor Insurance; Shamim Rashid-Sumar, Senior Vice President, Codes and Standards, National Ready Mixed Concrete Association; and Dr. Anne Cope, Chief Engineer, Insurance Institute for Business & Home Safety.

Benson presented on the current state of the construction insurance marketplace, focusing on underwriting issues

related to the increasing wildfire exposures around the country and how construction materials affect availability and cost of insurance for projects under construction.

Rashid-Sumar provided an overview of a 2024 survey of insurance costs for multifamily buildings constructed with wood-frame and concrete, quantifying differences in costs to insure buildings of combustible versus non-combustible construction.

Dr. Cope discussed the ongoing wind and wildfire research of IBHS. She provided insights on how the findings lead to actionable resiliency guides and voluntary designation programs.

Sarah Swango, Vice President of Corporate and Foundation Relations, National Institute of Building Sciences, served as moderator for the webinar.

What is Builder's Risk Insurance?

Builder's risk insurance is also known as "course of construction insurance." This provides coverage for property

and construction materials throughout the duration of the project.

Builder's risk policies are designed to safeguard both commercial and residential projects, ensuring that potential risks and damages are adequately covered.

Jeff Benson, Vice President and Program Manager, Victor Insurance, said construction times are taking longer.

With these longer build times, there is "more exposure for longer periods of time."

"[There are] fewer players insuring structures ... they're charging more and more," Benson said.

Coverage terms also are becoming more restrictive, with insurers treating wildfires like floods, which impacts availability and pricing of coverage.

Construction Classifications

Benson said when he looks at a building, he first looks at what it's made of. If it's framed, that comes with the highest rating and risk.

Construction classifications include:

- Frame
- Non-combustible
- Joisted masonry
- Masonry non-combustible
- Fire resistive

Concrete building with steel superstructure has one of the lowest ratings. These are fire resistive. In coastal areas, this also stands strongly against wind.

Property Damage Due to Structural Fires

Rashid-Sumar provided the background and methodology of the Survey of Insurance Costs for Multifamily Buildings. One of the drivers of the study in 2017 was increasing property

damage due to structural fires, which continues to result in significant injuries and loss of life.

According to NFPA, there were 499,000 structure fires in 2017, causing 2,815 civilian deaths, 12,160 civilian injuries, and \$23 billion in damages. NFPA estimates that 262,500 of those fires occurred in homes resulting in 2,290 deaths, 7,470 injuries, and \$6.1 billion in damages. Property damages from fires have been increasing over time.

Fire kills more Americans than all natural disasters combined, Rashid-Sumar said.

The 2017 NRMCA Insurance Cost Study revealed that insurers are aware of the risks of building with combustible construction and the benefits of building with noncombustible construction. Some agents suggested that the gap between rates for wood frame and concrete is likely to grow in the future and that a growing number of insurers are declining to serve as sole insurer for wood-frame apartment buildings. To see if this trend held true, NRMCA commissioned a refresh of the study in 2023. Quotes gathered from the US insurance companies once again consistently confirmed that the cost of insuring multifamily residential buildings construction of concrete is lower than those constructed of wood. This applies to both builder's risk insurance and commercial property insurance. For builder's risk insurance, the most significant difference was 80% less for the concrete building, and the smallest was 36% less. For commercial property insurance, the greatest and smallest differences found were 63% and 4% less, respectively.

Other findings: A source in Florida stated that their company does not insure wood frame structures and this was a common practice for companies insuring buildings along the cost. Another sources in Southern California shared that their company had a policy against insuring wood frame buildings with solar panels on the roof.

Science-Backed Mitigation Programs of IBHS

Dr. Cope discussed the ongoing wind and wildfire research of IBHS and illustrated how the findings lead to actionable resiliency guides and voluntary designation programs. Information about IBHS's programs is available at www.fortifiedhome.org and www.wildfireprepared.org.

In the wind and wind-driven rain arena of hurricanes and severe storms, the IBHS FORTIFIED program aims to reduce a property's overall risk by incorporating known mitigation strategies based on lab science and post-event damage assessments. For homes, the FORTIFIED Program has 3 levels. The goal of FORTIFIED Roof, Dr. Cope said, is to "keep the roof on, keep the water out, and keep the wind out." Beyond that, homeowners can go for the added resilience of FORTIFIED Home Silver, which focuses on protection for damage amplifiers like garage doors; or homeowners can go for the best protection offered by FORTIFIED Home Gold, which adds structural connectivity for wind design. For commercial and multifamily properties, owners can look to the FORTIFIED Commercial and FORTIFIED Multifamily standards.

Research and resiliency modeling in wildland fire impacts to homes and other structures is newer, and the body of information is smaller than the area of hurricane-focused work. In the summer of 2022 IBHS rolled out the newly developed Wildfire Prepared Home Program, which incorporates lab-proven strategies that have also been observed in post-event assessments. The program has two levels: a base level and a Plus Designation. The base level focuses on significantly reducing the ignition potential from ember attack and the Plus Designation goes further to add resilience against radiant heat and flame contact.

Building Innovation Webinar Series

As part of our mission to continue conference education, NIBS launched a [webinar series](#) to reach more professionals on new technology, trends, groundbreaking tools, best practices, and workforce solutions.

It's our way of extending the Building Innovation annual conference beyond the in-person meeting.

The next webinar – [Integrating BIM and Digital Twins: Unveiling a Position Paper for the AECO Industry](#) – is scheduled for September 4, 2024.