

InspectToProtect.org Website

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Building Code Basics

- **How do building codes protect my family and home in a disaster?**
 - Experience shows that people taking refuge in homes built using current model building codes have the best chance of survival during disasters because codes and beyond-code construction practices include resilient building methods that are proven performers when disasters strike. Recent disaster events demonstrate this profoundly, as seen in this powerful [video](#) that tells story after story about Florida families and homes that survived recent hurricanes and tornadoes. Building codes also protect your home from non-disaster events like thunderstorms and house fires while saving money through reduced maintenance and increased durability and energy efficiency.
- **Can building codes save me money?**
 - Yes! Strong building codes save you money by reducing and preventing disaster losses. According to FEMA, structures built using codes are 77% less likely to experience damage. Additionally, they help qualify you for lower homeowners and flood insurance rates because they score favorably on the ISO Building Code Effectiveness Grading Schedule (BCEGS), a score automatically factored into your insurance premium rating. Additionally, modern codes include protective features that may qualify you for insurance discounts and make your home more insurable overall.
 - Many economic studies validate building code savings. One entitled, [Economic Effectiveness of Implementing a Statewide Building Code: The Case of Florida](#), found that the statewide Florida Building Code reduced windstorm losses by up to 72% and resulted in 5 dollars in losses saved for every 1 dollar of added costs with a payback period of approximately ten years.
 - Another study by the [National Institute of Building Sciences](#) found that buildings designed to meet the 2018 International Code Council (ICC) model code generated a benefit of \$11 for every \$1 invested.
- **Does it cost more when you build with building codes?**
 - Building codes may introduce a modest, increased cost at the time of new construction; however, the increase is offset by savings delivered throughout the lifetime of homeownership. Your well-built home is safer, more durable, energy-efficient, and valuable at the time of resale. Further, when the modest upfront cost is included as part of a mortgage, it may amount to as little as pennies per day,

making new construction the most cost-effective and efficient time to strengthen buildings.

▪ **What are model building codes, and which perils do they address?**

- Model building codes are created by Standards Developing Organizations and are updated regularly, including incorporating building science advances and changes to underlying engineering standards. Jurisdictions can adopt model building codes and sometimes make amendments that may strengthen or weaken the performance of homes built according to the building code.
- The International Code Council (ICC) and the National Fire Protection Association are two major model building code organizations. The ICC develops the International Residential Code (IRC) that governs the construction of approximately 80% of U.S. single-family houses, two-family houses, and townhouses with three or more units. ICC also develops the International Building Code (IBC) that governs new construction of all other types of structures, including multifamily homes like apartments, commercial buildings, and structures outside the scope of the IRC.
- While the IRC does not have comprehensive tornado or wildfire-resistant requirements, some provisions can increase safety against these perils. For example, the high wind requirements for windborne debris regions can significantly increase a home's protection from tornadoes. However, tornado winds can exceed the anticipated design wind speeds for high-wind construction measures. For this reason, tornado storm shelters and safe rooms should be considered as they provide near-absolute life-safety protection, even in extreme tornadoes up to 250 mph. The 2024 IBC addresses tornado resilience through a new standard and new requirements.
- While the IRC does not comprehensively address wildfire, some provisions increase wildfire protection for homes, including those addressing the spread of fires from house to house. Examples include the IRC provisions on Fire-Resistant Construction (Section R302) and fire ratings for roof coverings. The International Wildland-Urban Interface Code and the Standard for Wildland Fire Protection (NFPA 1140) are two Wildland-Urban Interface (WUI) Codes designed to reduce wildfire risk.

▪ **How is the International Building Code used for this site?**

- The International Building Code is for commercial structures and multifamily housing, such as apartments and structures outside the International Residential Code. The site will provide general structural resilience features that an individual owner or renter could consider for their unit. It will also provide building code history, when available, and a list of previous disasters for the jurisdiction.

▪ **Where can I learn more about building codes?**

- For more information on building codes, visit the FEMA [Building Codes Toolkit for Homeowners and Occupants](#), FEMA [Protecting Communities and Saving Money: The Case for Adopting Building Codes](#), and FEMA [Building Codes Adoption Playbook For Authorities Having Jurisdiction](#).