2023 Building Code Adoption Tracking: FEMA Region 1

This fact sheet provides a high-level overview of the status of hazard-resistant building code adoption in each state and territory within a FEMA region. The regional fact sheets show an annual metric of the percent of communities adopting hazard-resistant¹ building codes.

Why Building Codes?

Disaster resilience starts with building codes because they enhance public safety and property protection.

Why Track Codes?

- Represent the best evidence for disaster resistance
- Create best overall return on investment
- Comply with Technology Transfer Act
- Cornerstone of effective mitigation to reduce losses in future disasters
- Codes = better built buildings, better performance
- Hazard codes for seismic, high winds, water and fire enable uniformity, efficiencies, and predictable performance
- Recognize the disaster preparedness of communities when determining level of federal funding



Figure 1. FEMA Region 1

Purpose of Building Code Adoption Tracking

- Track the adoption rate of the latest consensus-based codes across the nation
- Track the results of adoption in improving disaster-resistant buildings in natural hazard areas
- Use the emerging data to inform FEMA policies and laws in pre-disaster and post-disaster goals
- Federal funding assistance requirements may be correlated to adoption of the latest published building code editions as required by legislation and/or FEMA policies such as the Disaster Recovery Reform Act of 2018 and the associated Federal Cost Share Reform Incentive

¹ Hazard-resistant codes mean the 2018 or later International Building Code and International Residential Code, without weakening of any resilience provisions related to any of the five tracked hazards for which the jurisdiction is at high risk.



FEMA's Role Will Be Continuous

- Proposing building code changes to maintain consistency with the National Flood Insurance Program (NFIP) and to incorporate best practices identified in post-disaster investigations.
- Defending against changes that weaken flood, wind, and seismic provisions.
- Contributing to requests for interpretations by International Code Council.
- Supporting the training of state, local, tribal and territorial officials.



Figure 2. Building Code Adoption Tracking Process

The following percentages indicate the tracked jurisdictions which have adopted hazard-resistant² building codes within each state. The percentages are based upon jurisdictions within each state which are at high risk³ to one or more hazard types (Region 1's hazards are flood, damaging wind, hurricane wind, and seismic):

NEW HAMPSHIRE

99.2%

HIGHER RESISTANCE



State adopts the 2018 edition of the International Building Code (IBC).



State adopts the 2018 edition of the International Residential Code (IRC).

Note: State is not fully resistant because some jurisdictions with high flood risk do not participate in the NFIP.

CONNECTICUT



LOWER RESISTANCE

State adopts the 2021 IBC.

Note that state removes NFIP-related criteria for granting a variance in a flood hazard area (Sec. 104.10.1).

² Hazard-resistant codes mean the 2018 or later IBC and IRC, without weakening of any resilience provisions related to any of the five tracked hazards for which the jurisdiction is at high risk.

³ High-risk is defined according to national consensus-based standards, the National Flood Insurance Program, and the Building Code Effectiveness Grading Schedule. For a detailed description of the high-risk methodology, visit the FEMA Building Code Adoption Tracking landing page at www.fema.gov/emergency-managers/risk-management/building-science/bcat/.

State adopts the 2021 IRC. State adds new section R301.2.1.4.1 which matches American Society for Civil Engineers (ASCE) Standard 7-16 section 26.7.1, but introduces ambiguity by not also including language similar to ASCE 7-16 sections 26.7.4.2 (Envelope Procedure) and 26.7.4.4 (Components and Cladding) which clarify the application of wind directions and sectors. The addition of R301.2.1.4.1 without the accompanying two sections from ASCE 7-16 can lead to less conservative design wind pressures and can result in confusing requirements.

MAINE

0.0%

LOWER RESISTANCE

State adopts the (outdated) 2015 edition of the IBC.

Note that Maine only requires jurisdictions with populations of at least 4,000 to enforce the code.

State adopts the (outdated) 2015 edition of the IRC.

Note that Maine only requires jurisdictions with populations of at least 4,000 to enforce the code.

MASSACHUSETTS

LOWER RESISTANCE

0.0%

Commonwealth adopts the (outdated) 2015 IBC and weakens flood resistance by deleting all references to Coastal A Zone Standards as referenced in ASCE 24-14, Flood Resistant Design and

Commonwealth adopts the (outdated) 2015 IRC and weakens flood resistance by removing the Coastal A Zone freeboard requirements, and weakens hurricane resistance by defining Windborne Debris Region more narrowly in R202 (Definitions).

RHODE ISLAND

LOWER RESISTANCE

State adopts the 2018 IBC but weakens wind resistance by replacing all model code wind figures with Rhode Island Table 1608.1, which specifies design wind speeds for Jamestown that are less conservative than the model code, and which removes Jamestown from the windborne debris region.

State adopts the 2018 IRC but weakens flood resistance by removing "most restrictive flood hazard area" language from R322.2.1. State weakens hurricane resistance in R301.2.1.1 by allowing old ICC standard SSTD 10, Hurricane Resistant Construction Standard, to be used instead of current standard ICC 600, Standard for Residential Construction in High-Wind Regions, and by not requiring cold-formed steel structures to conform to American Iron and Steel Institute S230, Standard for Cold-Formed Steel Framing – Prescriptive Method for One and Two Family Dwellings in wind-design-required locations. And in R301.2.1.2, state further weakens hurricane resistance: (1) by applying protection of openings to Wind Zone 3 only, rather than the whole windborne debris region, (2) by changing "openings" to "windows," and (3) by excluding garage doors.

VERMONT

0.0%

LOWER RESISTANCE

State adopts the (outdated) 2015 IBC.

Note that Vermont's replacement of IBC Ch. 1 omits several NFIP-related administrative flood provisions.

No statewide residential code.