2024 Building Code Adoption Tracking: FEMA Region 9

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. Notes in *italics* indicate non-weakening notes relating to administrative, enforcement, or other non-design provisions.

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 <u>Technology Transfer Act</u>
- Cornerstone of effective mitigation to reduce losses in future disasters
- Codes = better built buildings, better performance during natural hazards
- 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

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 <u>Disaster Recovery Reform Act of 2018</u> 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.







Figure 1. FEMA Region 9

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 and territory. The percentages are based upon jurisdictions within each state and territory which are at high risk³ to one or more hazard types (Region 9's hazards are flood, damaging wind, hurricane, and seismic):

COMMONWEALTH OF THE NORTHERN MARIANA ISLANDS



CALIFORNIA



BC

HIGHER RESISTANCE

State adopts the 2021 IBC. State strengthens seismic resilience in IBC § 1613.2.5 by setting Seismic Design Category D as the mandatory minimum category for structures under the jurisdiction of the Office of Statewide Health Planning and Development (OSHPD) and by prohibiting the alternative Seismic Design Category determination of § 1613.2.5.1 and the simplified design procedure of § 1613.2.5.2 for structures under the jurisdiction of the Division of the State Architect—Structural Safety and those under the jurisdiction of OSHPD.

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 <u>www.fema.gov/emergency-managers/risk-management/building-science/bcat/</u>.

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BC

BC

State adopts the 2021 IRC.

Note that state does not adopt R322.1.9 (containing flood design specifications for manufactured homes) nor R327.1 (requiring, via application of the International Swimming Pool and Spa Code, swimming pools in coastal high-hazard areas to conform to ASCE 24).

NEVADA



State has adopted the 2018 IBC for state construction, with some exceptions. There is no statewide mandatory building code for new non-residential construction generally. State has adopted the 2018 IRC for state construction, with some exceptions. There is no

statewide mandatory residential code for new residential construction generally.

ARIZONA



MODERATE RESISTANCE No statewide IBC.

MODERATE RESISTANCE

No statewide IRC.

AMERICAN SAMOA



GUAM

	LOWER RESISTANCE
0.0%	Territory adopts an outdated IBC (2009 edition).
	Territory adopts an outdated IRC (2009 edition).

HAWAII

0.0%

LOWER RESISTANCE

State adopts the 2018 IBC. Hawaii weakens hurricane protection in Section 1609.2, item 5, exception 3 by excepting from the openings protection requirement certain Risk Category II buildings that would have required openings protection under the model version. Hawaii also weakens hurricane resilience by adding new Sec. 429, Hawaii Residential Safe Rooms (See Appendix U – Hawaii hurricane sheltering provisions for new construction). Specifically, Sec. 429.5.1, item 4 requires that Hawaii residential safe rooms be designed to resist "145 mph BC 3-second peak gust ultimate design wind speed, determined in accordance with ASCE 7, Minimum Design Loads for Buildings and Other Structures." The model code requires residential safe rooms to be built in accordance with ICC 500- 2014, with a design wind speed of 165mph in Hawaii. By changing the reference standard from ICC 500 to ASCE 7, and subsequently reducing the design wind speed from 165mph to 145mph, Hawaii's IBC adoption weakens the wind load design requirements for residential safe rooms when compared with model code requirements.

State adopts the 2018 IRC.