



**CODES &
STANDARDS**
nahb.org/codes

State Adoptions of the Residential Provisions of the IECC – International Energy Conservation Code



The International Energy Conservation Code (IECC) is developed and published on a three-year cycle. It is the most widely adopted energy code for residential construction in the United States.

When a state or jurisdiction goes through the code adoption process, there are typically public hearings and an opportunity to amend the code prior to adoption. NAHB has developed a series of adoption kits that include highlights of changes from the previous model code edition, associated cost impacts, and a list of suggested amendments that offer more cost-effective and affordable energy conservation provisions than available in the model codes.

Updated November 2024

Contact codes@nahb.org for questions and visit the [Code Adoption Kit page](#) for more.

Summary of Information Provided in This Guide

This document provides information on the residential energy code provisions adopted by each of the 50 U.S. states, the District of Columbia, and Puerto Rico. When states adopt residential energy codes, they typically adopt one of the editions of the national model energy code, the International Energy Conservation Code (IECC), which is published every three years by the International Code Council (ICC). Many states also choose to amend the model code to address local conditions. Information on the most impactful amendments (if applicable) *as compared to the model code edition* adopted by the state are included in each listing, which also provides the effective date of the state’s most recent code update plus links to the adopted code language and relevant state adoption authority.

Please note: Several states do not adopt any mandatory *statewide* residential energy code, though there may be codes adopted by local jurisdictions (which are generally not reflected in this document). Some states choose to develop their own energy codes that are not based any edition of the IECC. This guide does *not* cover the *commercial (or nonresidential)* energy code provisions adopted by states or jurisdictions.

The color-coded table below reflects the number of states that have adopted mandatory statewide residential energy codes based on each edition of the IECC (as of the publication date on the cover page). Neither the table nor this guide comments on the relative energy efficiency of a state’s amended code as compared to the model code edition on which it is based.

Residential Energy Code Adoption Summary by State	
<i>Model Residential Code Adopted (Prior to State Amendments)</i>	<i>States + DC + PR</i>
2024 IECC	1
2021 IECC	12
2018 IECC	12
2015 IECC	8
2012 IECC	2
2009 IECC	4
No Mandatory Statewide Code	9
State-Developed Code	4
Total	52

State / Territory <i>Click link for adopted code language</i>	Model Residential Energy Code Adopted	Model Code Amended ?	Effective Date	Upcoming Adoption Date?	IECC Climate Zone(s)	State Amendments Summary	Additional Code Link(s)
Alabama	2015 IECC	Yes	10/1/2016		2,3	The Alabama Residential Energy Code has reduced 2015 IECC insulation requirements for attic hatches/doors R-value, equipment trade-offs have been added, and the programmable thermostat requirement was removed. Air leakage testing maximum thresholds have been increased from 3 ACH50 to 5 ACH50 in CZ 3 so that the threshold is the same for both CZs.	State Agency
Alaska	No Mandatory Statewide Code	Yes	11/28/2018		7,8*	Alaska has no mandatory statewide energy code , but for homes to qualify for financial assistance from Alaska Housing Finance Corporation, they must demonstrate compliance with the AHFC-approved Building Energy Efficiency Standards based on the 2018 IECC: *Certain southern and coastal census areas have been reclassified into 2018 IECC CZ 6. One census area (North Slope) has been reclassified into a BEES-specific Climate Zone 9 with its own requirements. Ceiling insulation levels are slightly increased, except in CZ 6 & 7 where it is slightly reduced when using a 13" energy-heel truss. Continuous exterior insulation is not required. Insulation levels were increased for floors and slabs. Fenestration U-factors are increased in CZ 8 (and CZ 9). Air leakage testing maximum threshold was raised from 3 ACH50 to 4 ACH50. Chapter 5 for existing buildings is listed as "Advisory Only. Best Building Practices".	State Agency
Arizona	No Mandatory Statewide Code				2,3,4,5	Arizona has no mandatory statewide energy code . Two major jurisdictions (Phoenix, Tucson) have adopted the 2018 IECC with minimal amendments (Phoenix increased its ERI compliance threshold from 57 to 64). Chandler has adopted the 2021 IECC with amendments reducing ceiling insulation, raising the ERI compliance threshold, and removing R408 additional efficiency requirements. Cave Creek adopted the 2021 IECC with amendments similar to Chandler. Scottsdale adopted the 2021 IgCC on 1/1/2023 for commercial and multifamily projects.	SWEEP
Arkansas	2009 IECC	Yes	1/1/2015		3,4	Duct testing is optional under the 2014 Arkansas Energy Code . Window U-factors have been reduced to 0.50 in CZ 4. Ceiling R-value has been decreased to R-30. New SHGC requirements were added. The requirements for a programmable thermostat and high efficacy lighting have been removed. Arkansas was reviewing suggested amendments to the 2018 IECC in 2020 and 2021, but no further updates are available on the state's website as of Sep. 2024.	State Agency
California	State-Developed Code		8/30/2022		2,3,4,5,6	California develops and adopts its own energy code (which is not based on the IECC) – the 2022 Building Energy Efficiency Standards (also known Title 24, Part 6). It is generally considered at least as stringent as the 2021 IECC.	State Agency
Colorado	No Mandatory Statewide Code (some jurisdictions required to adopt 2021 IECC, some are exempted)	Yes	7/1/2023 (for jurisdictions updating a building code)	7/1/2026 (state model low energy and carbon code for some jurisdictions)	4,5,6,7	Following the passage of legislation in June 2022, Colorado has significantly changed requirements for local jurisdictions updating their building codes. Cities and counties with building codes must adopt the 2021 IECC along with the state-developed Colorado Model Electric Ready and Solar Ready Code when adopting or updating any building code between July 1, 2023 and June 30, 2026. Municipalities can make any amendment to the energy code they deem appropriate for local conditions but cannot decrease its effectiveness or energy efficiency. After July 1, 2026, cities and counties with codes must also adopt a state model low energy and carbon code (under development) when updating their local building code. The state is also developing a model green code that jurisdictions may adopt voluntarily. State law does provide limited exemptions for rural counties that apply for, but do not receive, a grant from a state fund that significantly assists in energy code adoption and enforcement training. These counties may instead adopt and enforce an energy code that achieves equivalent or better energy savings than one of the three most recent IECC editions. The Colorado Energy Office Local Energy Code Adoption Map tracks which municipalities have adopted which energy code editions.	State Agency
Connecticut	2021 IECC	Yes	10/1/2022		5	The Connecticut State Building Code has amended air leakage testing requirements from 3 ACH50 to 5 ACH50 for low-rise attached dwellings greater than 850 sq ft and to 6.5 ACH50 for dwellings less than 850 sq ft. It added an exception to duct leakage testing where an existing HVAC system is extended to an addition with less than 40 linear ft of new duct in unconditioned space shall not be required to test. The code changed the rough-in and post construction test to 8 cfm/100 sf.	State Agency
Delaware	2018 IECC		12/11/2020		4	No amendments to the technical requirements of the 2018 IECC have been adopted for the Delaware Residential Building Energy Conservation Code .	State Agency
District of Columbia	2015 IECC	Yes	5/29/2020		4	In the 2017 DC Energy Code , the fenestration U-factor increased in stringency to 0.30. Wood-frame wall insulation increased to R-13+10 or equivalent, and there is no option permitted for cavity-only wall insulation. Basement wall insulation has been increased to R-13+10 or equivalent.	District Agency
Florida	State-Developed Code		12/31/2023		1,2	Florida now adopts changes to the previous edition of its energy code instead of amendments to each new edition of the IECC. Major differences in the 2023 Florida Building Code (8th Edition) compared to the 2021 IECC include: Ceiling insulation is R-38 in CZ 2 (instead of R-49). Unlike the IECC, the FBC allows mechanical equipment efficiency tradeoffs (according to a Florida Solar Energy Center analysis , since both codes' performance paths set an overall efficiency requirement, the FBC path is no less stringent than the 2021 IECC path). Section R405 also adds a requirement that site-wrapped supply ducts not completely inside the thermal envelope must be insulated R-8 instead of R-6, regardless of diameter. Air leakage testing requirements are 7 ACH50 (instead of 5 ACH50 in the 2021 IECC) in both CZs. Clarifies existing requirement that whole-house mechanical ventilation is required for dwelling units with air leakage lower than 3 ACH50. There is no requirement for additional efficiency measures like those required in Section R408 of the 2021 IECC. One significant difference from the 2021 IECC is a prohibition on electric resistance space heating from being the primary heat system for new construction and for complete central equipment replacements in CZ 2.	State Agency
Georgia	2015 IECC	Yes	1/1/2020	1/1/2025 (but only 2018 IBC and 2023 NEC – no IECC update)	2,3,4	Under the Georgia State Minimum Standard Energy Code , several categories of R402 prescriptive table requirements from the 2015 IECC have been changed to correlate across all CZs. Fenestration U-factor maximum in CZ 2 is 0.35 instead of 0.40, and SHGC maximum in CZ 4 is 0.27 instead of 0.40. Wood frame wall R-value minimum is R-13 in CZ 3 & 4 instead of R-20 (or R-13+5). No slab insulation is required in CZ 4. Ceiling insulation in CZ 4 is decreased from R-49 to R-38 and is lower for under HVAC attic platforms and for attic access hatches/doors. Building tightness of less than 5 ACH50 (or under 7 ACH50 for multifamily, where sampling is also allowed for low-rise R-2 dwellings) is required for all CZs. The maximum ERI for CZ 2/3/4 was raised from 52/51/54 in the IECC to 57/57/62.	State Agency

State / Territory <i>Click link for adopted code language</i>	Model Residential Energy Code Adopted	Model Code Amended ?	Effective Date	Upcoming Adoption Date	IECC Climate Zone(s)	State Amendments Summary	Additional Code Link(s)
Hawaii	2021 IECC		1/29/2023	Future code updates suspended by Governor's proclamation (affordable housing)	1	The State Building Code Council (SBCC) reviews and amends model codes and standards for adoption. If the SBCC does not adopt a model code within two years of its official publication date, that model code shall automatically become part of the Hawaii State Building Codes until the SBCC adopts a superseding amended version. Due to the suspension of the authority and duties of the SBCC per the Governor's Proclamations Relating to Affordable Housing in 2023 and 2024, no code amendments have been adopted by the SBCC during this time. However, updates to the state's codes, without any amendments from the SBCC, have automatically become part of the Hawaii State Building Codes per HRS§107-24(c) , including the 2021 IBC, IRC, UPC, NFPA 1, and 2020 NEC. Therefore, the Hawaii State Energy Code is the 2021 IECC without amendment. The state energy code was then sent to its four counties for adoption. Counties may still update county building codes as authorized by law. As of 2024, all counties have adopted the 2018 IECC with county specific amendments and these are the currently enforced energy codes for new construction. DOE considers the state building code (including the 2021 IECC) to be the adopted code in effect for Honolulu, Maui, and Kauai counties.	State Agency
Idaho	2018 IECC	Yes	1/1/2021		5,6	The 2020 Idaho Energy Conservation Code has reduced 2018 IECC requirements for fenestration in CZ (maximum U-factor is 0.32 instead of 0.30) and ceiling insulation (R-38 instead of R-49), and wood frame wall insulation in CZ 6 (R-22 or R-13+5 instead of R-20+5 or R-13+10). Air leakage testing threshold is now 5 ACH50 instead of 3 ACH50, and sampling is allowed for single-family developments along with visual inspection. Duct insulation requirements are slightly increased such that all supply and return ducts located in an attic space must be at least R-8 (regardless of size). The high efficacy lighting requirement was reduced from 90% to 75%. The maximum allowed ERI was raised from 61 to 68 in CZ 5 and 6. Special log home wall provisions were introduced in a new Table R402.6.	State Agency
Illinois	2021 IECC	Yes	1/1/2024	Yes (TBD) A public proposal period for '24 IECC is open to 12/31/2024	4,5	The 2021 Illinois Energy Conservation Code has reduced requirements for ceiling insulation (from R-60 to R-49) and basement wall insulation, which can now extend to within 6 in. of the basement floor. Duct leakage testing requirements are reduced for systems serving less than 1,500 sf of conditioned floor area. Additional requirements for mechanical ventilation system design, controls, exhaust, and recirculation of air have been added to R403.6. PHIUS has been added as an alternative compliance option in a new Section R409. The state is also developing the Illinois Stretch Energy Code based on the 2021 IECC with amendments that should be available for municipalities to adopt (if they choose) by October 31, 2024.	State Agency
Indiana	2018 IECC (via 2018 IRC Ch. 11)	Yes	12/26/2019		4,5	Under the 2020 Indiana Residential Code , energy conservation construction documents for 1- and 2-family homes (Class 2 structures) only need to be submitted if required by the local jurisdiction. Requirements have been reduced for fenestration U-factor (now 0.35 for both CZs), skylight U-factor (now 0.60 for both CZs) ceiling insulation (now R-38 instead of R-49 for both CZs), wood frame wall insulation (now R-15 instead of R-20 or R-13+5 in CZ 4), mass wall insulation (now R-5/10 instead of R-8/13 for CZ 4), basement wall insulation (now R-10/13 instead of R-15/19 for CZ 5). The building official may not require inspection by a third party. Air leakage testing threshold is now 5 ACH50 instead of 3 ACH50, but verification through visual inspection is also allowed.	State Agency
Iowa	2012 IECC	Yes	6/1/2014		5,6	The Iowa State Energy Code has reduced 2012 IECC requirements for wood frame wall insulation (now R-20 or R-13+5 in CZ 6 instead of R20+5 or R-13+10), air leakage testing thresholds (now 4 ACH50 instead of 3ACH50), and duct leakage testing (now 6 cfm/100 sf). Panned duct returns are allowed but must meet duct tightness requirements.	State Agency
Kansas	No Mandatory Statewide Code				4,5	There is no mandatory statewide code . According to state law, the Kansas Corporation Commission has no authority to adopt or enforce energy efficiency standards for residential, commercial, or industrial buildings. Jurisdictions are free to adopt any code or standard they choose.	State Agency
Kentucky	2009 IECC	Yes	9/1/2019		4	The 2018 Kentucky Residential Code has modified the basement wall insulation requirements of the 2009 IECC to only require from the top of the basement wall below grade to the design frost depth (24 to 33 inches). The state's residential code is a minimum/maximum code, meaning that local governments may not adopt or enforce any other code.	State Agency
Louisiana	2021 IECC	Yes	1/1/2023	Additional amendments to the 2021 IECC were published 3/20/2024	2-3	The Louisiana State Uniform Construction Code was updated in 2023 to include the 2021 IECC, with additional amendments effective as of March 2024. NGBS 2020 and ENERGY STAR certification are deemed to exceed the state code. All parishes (counties) have been classified as Climate Zone 2A for the energy efficiency requirements of the code. The R401.2.5 additional efficiency requirements have been removed. Ceiling insulation has been reduced from R-49 to R-38. Air leakage testing requirements for CZ 2 are now 7 ACH50 instead of 5ACH50. For multifamily buildings with 8 or more testing units, at least 7 units or 20% of units must be tested (whichever is greater). Duct insulation requirements slightly increased such that all supply and return ducts located outside conditioned space must be at least R-8 (regardless of size). Additional minor changes have been made to duct testing procedures and requirements. The maximum allowable ERI score for CZ 2 has been raised from 52 in the IECC to 58.	State Agency
Maine	2015 IECC		7/1/2021		6,7	The Maine Uniform Building and Energy Code (MUBEC) did not make significant amendments to the technical requirements of the 2015 IECC residential provisions. Maine has adopted (as a stretch code) the 2021 IECC (including Appendix RA, RB, and RC), which municipalities may choose to adopt as mandatory.	State Agency
Maryland	2021 IECC	Yes	5/29/2023	Late 2025 or early 2026 (TBD)	4, 5	For the Maryland Building Performance Standards , the state added a new Section R408.3 (Maryland Alternative Additional Energy Efficiency Package Options) to offer additional compliance paths that allow for ceiling and wall insulation to be realigned to the 2018 IECC values and also requires additional measures to achieve at least 6% energy savings. This option allows for R-49 ceiling insulation (instead of R-60) and R-20 or R-13+5 wood frame wall insulation (instead of R-20+5 or R-13+10) in both CZs. NGBS 2015 Silver is considered in compliance with this code. After new editions of the I-Codes are published, the state is required to adopt the new codes within 18 months. All local jurisdictions have up to 12 months to amend and adopt these new state codes for local enforcement.	State Agency
Massachusetts	2018 IECC	Yes	11/8/2020	2024 (TBD)	5	The Massachusetts State Building Code (9th Edition) includes a base energy code based on the 2018 IECC and a stretch code based on the 2021 IECC (which municipalities can choose to adopt as mandatory). These remain in effect following delays in the planned 2023 release of the 10th edition of the state building code. The new 10th edition will include a new base energy code based on the 2021 IECC with MA amendments, a stretch code based on the 2021 IECC with additional amendments, and a "specialized code" to achieve net zero energy based on the 2021 IECC with specialized appendices.	State Agency

State / Territory <i>Click link for adopted code language</i>	Model Residential Energy Code Adopted	Model Code Amended ?	Effective Date	Upcoming Adoption Date	IECC Climate Zone(s)	State Amendments Summary	Additional Code Link(s)
Michigan	2015 IECC	Yes	9/20/2017		5,6,7	The 2015 Michigan Energy Code has reduced requirements for ceiling insulation (now R-20 or R-13+5 for all CZs instead of R-20+5 or R-13+10 in CZ 6 and 7), wood frame wall insulation (now R-38 instead of R-49 in CZ 5), and basement wall insulation (now R-10/13 in CZ 5). Air leakage testing maximum thresholds have been raised to 4 ACH50 from 3 AHC50. Duct leakage testing at the rough-in test can pass with 4 cfm/100 sf conditioned floor area whether an air handler is installed or not.	State Agency
Minnesota	2012 IECC	Yes	2/14/2015	Law passed to improve EE 70% over 2006 IECC by 2038. Next update: 2026	6,7	While the state has most recently updated the state building code in 2020 and the state commercial energy code in 2024, the 2015 Minnesota Residential Energy Code based on the 2012 IECC remains in effect. Requirements have been reduced for wood frame wall insulation (now R-20 or R-13+5 for CZ 6 and R-21 for CZ 7 instead of R-20+5 or R-13+10). Special foundation/crawl space insulation installation requirements were added for R-15 on concrete/masonry foundations and allowing for R-10 continuous insulation on the exterior of each foundation wall if air leakage does not exceed 2.6 ACH50. All exhaust, supply, and return air ducts require a vapor retarder. Balanced mechanical ventilation is required for all homes.	State Agency
Mississippi	No Mandatory Statewide Code				2,3	There is no mandatory statewide residential code , which would require legislation. Local jurisdictions may adopt their own codes, and some have adopted codes based on the IRC.	State Agency
Missouri	No Mandatory Statewide Code				4,5	There is no mandatory statewide energy code in Missouri, which would require legislation. However, jurisdictions may adopt their own energy codes, and many have (including major municipalities such as the City of St. Louis, St. Louis County, Kansas City, Springfield, Independence, and Columbia).	State Agency
Montana	2021 IECC	Yes	6/10/2022		6	Montana has adopted the 2021 IECC with state amendments . Requirements have been reduced for wood frame wall insulation (allowing R-21 instead of R-30, while maintaining R-20+5/13+10/0+20). Air leakage testing maximum thresholds have been raised to 4 ACH50 from 3 ACH50. Building cavities may be used for return ducts. Most hot water piping insulation requirements were removed.	State Agency
Nebraska	2018 IECC	Yes	7/1/2020		5	No substantial technical amendments were included in the legislation adopting the 2018 IECC as the Nebraska Energy Code . Jurisdictions may adopt their own energy code if it is equivalent to the state code. If a municipality has not adopted an energy code, the state will enforce the state code in that jurisdiction.	State Agency
Nevada	2021 IECC		7/28/2021		3,4,5	The Governor's Office of Energy is required to adopt the most recently published version of the IECC on a three-year cycle, adopting the 2021 IECC unamended for use in Nevada in 2021. Local governments shall follow suit and are authorized to adopt amendments and/or provisions which are more stringent than the standards published and adopted by the state. Nevada included optional EV-ready appendices available for jurisdictions to adopt if they choose. Local jurisdictions are currently on a version of the 2018 IECC or earlier edition and may adopt the state code with amendments. Amendments in Southern NV raised the maximum air leakage testing threshold from 3 ACH50 to 4 ACH50 (or 4.5 ACH50 when sprinklered). The Total UA Alternative may be used to meet the ERI Compliance Alternative. The ERI reference design ventilation rate was modified.	State Agency
New Hampshire	2018 IECC		7/1/2024		5,6	Under the latest New Hampshire Building Code , there are no substantial revisions to the technical requirements of the 2018 IECC adopted by the state, effective July 1, 2024. A 6-month transition period is in effect until January 1, 2025.	State Agency
New Jersey	2021 IECC	Yes	3/6/2023		4,5	Under the current energy subcode of the New Jersey Uniform Construction Code , there are no substantial revisions to the technical requirements of the 2021 IECC adopted by the state, although Chapter 5 on existing buildings has been deleted.	State Agency
New Mexico	2021 IECC	Yes	1/30/2024		3,4,5	The 2021 New Mexico Residential Energy Conservation Code allows above code programs recognized by the state (including LEED for Homes, Build Green New Mexico) to show compliance. Ceiling insulation requirements were reduced (now R-38 instead of R-49 in CZ 3 and R-49 instead of R-60 in CZ 4 and 5). The state clarified that EV chargers and residential fire sprinkler systems are not required. Envelope and duct tightness may be visually inspected.	State Agency
New York	2018 IECC	Yes	5/12/2020		4,5,6	The 2020 Energy Conservation Construction Code of New York State allows for two prescriptive options for CZ 6: Either the 2018 IECC requirements for ceiling insulation (R-49) and wood frame wall insulation (R-20+5 or R-13+10) or R-60 ceilings with R-23 wall cavity insulation. Lighting loads were amended for residential buildings more than 3 stories.	State Agency
North Carolina	2015 IECC	Yes	1/1/2019	Legislation enacted in 2023 prevents state code updates before 2031	3,4,5	The 2018 North Carolina Energy Conservation Code exempted detached or attached garages on the same lot as dwelling from having to comply with energy conservation provisions. Amended insulation requirements (now R-4.2) for supply and return air ducts located in ventilated or non-ventilated unconditioned spaces (other than attics). Supply and return air ducts located in ventilated or non-ventilated unconditioned attic spaces shall be insulated to a minimum R-6. Exempted duct systems smaller than 750 sf from being tested. For the ERI pathway, the state code uses the minimum efficiency backstops from the 2012 state energy code instead of the 2009 IECC.	State Agency

State / Territory <i>Click link for adopted code language</i>	Model Residential Energy Code Adopted	Model Code Amended ?	Effective Date	Upcoming Adoption Date	IECC Climate Zone(s)	State Amendments Summary	Additional Code Link(s)
North Dakota	No Mandatory Statewide Code (state publishes a voluntary code based on 2021 IECC)	Yes	1/1/2023		6,7	The state adopts and amends a voluntary statewide building code but does not enforce it. If a municipality chooses to adopt and enforce a building code, it must adopt and enforce the state code, but is permitted to further amend it to conform to local needs. All jurisdictions that enforce a building code (as of 2023) have elected to adopt the same individual codes that make up the state code (including Fargo). The most recent edition of the voluntary state code incorporated an amended version of the 2021 IECC. Requirements have been reduced for ceiling insulation (now R-49 instead of R-60 for both CZs), wood frame wall insulation (now R-21 or R-13+5 instead of R-30/20+5/13+10/0+20 for both CZs), and basement wall insulation (now R-10/13 instead of R-15/19 in both CZs). Air leakage testing maximum thresholds have been raised to 5 ACH50 from 3 ACH50, and visual inspections are permitted. Multifamily and townhouses may use commercial requirements for air leakage.	State Agency
Ohio	2018 IECC	Yes	7/1/2019		4,5	The Residential Code of Ohio provides multiple compliance pathways, including the 2018 IECC, whose requirements for basement wall insulation and crawl space insulation (now R-10/13 instead of R-15/19 for CZ 5) have been reduced. Air leakage testing maximum thresholds have been raised to 5 ACH50 from 3 ACH50, and building cavities may be used as return plenums. The RCO also adds the Ohio Home Builder's Association (OHBA) Alternative Energy Code Option , which offers two compliance paths. Compliance Path #1 with a lower fenestration U-factor (now 0.32) and wood frame wall insulation (now R-15 or R=13+3) and increases floor insulation (now R-30). Compliance Path #2 lowers fenestration U-factor (now 0.32) and wood frame wall insulation (now R-13) and increases floor insulation (now R-30). The builder option allows sampling for air leakage testing.	State Agency
Oklahoma	2018 IECC (via IRC Ch. 11)	Yes	9/14/2022		3,4	Under the Oklahoma Uniform Building Code , 2018 IECC requirements have been amended for fenestration U-factor (now 0.38 instead of 0.32 in CZ 3), fenestration SHGC (now 0.25 instead of 0.30 in CZ 3), ceiling insulation (now R-30 instead of R-38), wood frame wall insulation (now R-13 instead of R-20 or R-13+5). Air leakage testing maximum thresholds have been raised for CZ 3 to 5 ACH50 from 3 ACH50, and visual inspection is permitted. The duct testing section has been modified to specify it is not mandatory and adds a third exception for visual testing. The maximum ERI for CZ 3 is now 64 instead of 57.	State Agency
Oregon	State-Developed Code		10/1/2023		4-5 Single state CZ	The 2023 Oregon Residential Specialty Code is based on the 2021 IRC. Chapter 11 covers energy efficiency, but the requirements are state-developed and do not conform with those in the IRC or IECC. The state also publishes a list of incentives available for exceeding the ORSC. The code requires all conditioned spaces within covered residential buildings to comply with the prescriptive requirements in Table N1101.1(1) as well as <u>one</u> of eight available additional efficiency measures in Table N1101.1(2). There are no separate requirements based on climate zone (although CZ 5B and 4C typically share the same requirements), and the code also offers alternative prescriptive component requirements for log homes. When compared to the 2021 IECC, requirements are reduced for ceiling insulation (now R-49 instead of R-60) and above grade wall insulation (R-21 vs. R-30/20+5/13+1-0/0+20) but increased for below grade wall insulation (R-21+0/0+15 vs. R-19+0/0+15/13+5). Fenestration U-factors for windows (0.27) skylights (0.50), and exterior doors (0.20) would be increased. Section N1105.3 requires all new duct systems and air handling equipment and appliances to be located fully within the building thermal envelope. However, the code does allow for exceptions for deeply buried ducts in attics, ducts in unvented crawlspaces, and deeply buried ducts in vented crawlspaces, but homes using those approaches must comply with <u>two</u> of the eight available additional efficiency measures in Table N1101.1(2). Existing buildings: Section 1101.3 covers additions. Section 1101.2 defines the application of the code to existing buildings (alterations, repairs, change of occupancy/use, and historic buildings) including prescriptive requirements in Table N1101.2, which "shall be used to the maximum extent technically practical due to existing constraints, which may include...the available cavity depth, matching existing features and similar constraints."	State Agency
Pennsylvania	2018 IECC	Yes	2/14/2022		4,5,6	The Uniform Construction Code (UCC) incorporates the 2018 IECC unamended. However, UCC regulations provide for the use of the 2021 Pennsylvania Alternative Energy Provisions , or PA-Alt (developed by the Pennsylvania Housing Research Center at Penn State University), to demonstrate compliance with the energy conservation requirements of the UCC. This alternative compliance path allows for some reductions in energy efficiency that allow simplified enforcement and construction but requires at least one of the energy enhancement options in Table PA104. Reduced PA-Alt prescriptive requirements include ceiling insulation in CZ 4 (now R-38 instead of R-49), basement wall insulation in CZ 5 and 6 (now R-10/13 instead of R-15/19), and crawlspace wall insulation in CZ 5 and 6 (now R-10/13 instead of R-15/19). It also reduces the requirement for high efficacy lamps in permanently installed lighting fixtures (now 90% instead of 100%).	State Agency
Puerto Rico	2018 IECC	Yes	11/15/2018		1	The commonwealth has adopted the 2018 IECC with some modifications to fenestration requirements in CZ 1A: Glazing in conditioned spaces requires an SHGC of 0.40 or less, or for vertical fenestration shaded by opaque permanent projections, compliance is demonstrated by reducing the equivalent SHGC of the fenestration product by using the multipliers in a new Table 402.3.2. The solar-ready provisions of 2018 IECC Appendix RA are mandatory. Any luminary or building sign that is illuminated shall be replaced with full-cutoff lamps.	Commonwealth Agency
Rhode Island	2024 IECC		11/14/24	11/14/25 (appendices)	5	The State of Rhode Island Energy Conservation Code will be the first mandatory statewide code based on the 2024 IECC. The state passed legislation in July 2023 adopting the 2024 IECC unamended three months after publication. The 2024 IECC was published August 14, 2024, so the new code will be effective November 14, 2024 (with an additional grace period of three months). In 12 months, on November 14, 2025, the state will also adopt as mandatory 3 electric-ready appendices: Appendix RE (EV charging infrastructure), Appendix RK (electric appliances), and Appendix RL (solar-ready).	State Agency
South Carolina	2009 IECC		1/1/2013		3	The legislature enacted the South Carolina Building Energy Efficiency Standard , adopting the 2009 IECC without amendments for all new and renovated buildings and additions. Future code updates require legislation.	State Agency
South Dakota	No Mandatory Statewide Code				5,6	There is no mandatory statewide residential code . In 2011, the state enacted a voluntary residential energy standard based on the 2009 IECC. The law required builders to provide an energy efficiency disclosure statement providing information on whether the new building meets the standards of the 2009 IECC, including the actual values of certain efficiency components of the new home compared to the same required values for those components in new homes in CZ 5 and CZ 6 of the 2009 IECC. Jurisdictions also have the ability to adopt their own energy standards.	State Agency

State / Territory <i>Click link for adopted code language</i>	Model Residential Energy Code Adopted	Model Code Amended ?	Effective Date	Upcoming Adoption Date	IECC Climate Zone(s)	State Amendments Summary	Additional Code Link(s)
Tennessee	2018 IECC	Yes	7/16/2020		3,4	The Tennessee State Fire Marshal adopted the 2018 IECC with multiple sections of requirements deleted and replaced with corresponding sections from the 2009 IECC . Air leakage testing maximum thresholds have been raised from 3 ACH50 to 7 ACH50 and now permitting visual inspection. Duct leakage sealing and testing is now optional. Table R402.1.2 and Table R402.1.4 with equivalent U-factors now reflects 2009 IECC values with modified prescriptive requirements for fenestration U-factor (now 0.50 in CZ 3 and 0.35 in CZ 4 instead of 0.32), skylight U-factor (now 0.65 in CZ 3 and 0.60 in CZ 4 instead of 0.55), fenestration SHGC (now 0.30 instead of 0.25 in CZ 3 and NR instead of 0.40 in CZ 4), ceiling insulation (now R-30 instead of R-38 in CZ 3 and R-38 instead of R-49 in CZ 4), wood frame wall insulation (now R-13 in both CZs instead of R-20 or R-13+5), and mass wall insulation (now R-5/8 in CZ 3 and R-5/10 in CZ 4 instead of R-8/13).	State Agency
Texas	2015 IECC (via IRC Ch. 11)	Yes	9/1/2016		2,3,4	Since September 1, 2022, the Texas Building Energy Code includes an ERI Compliance Alternative whose maximum thresholds have been raised to 59 in CZ 2 (instead of 52), 59 in CZ 3 (instead of 51), and 63 in CZ 4 (instead of 54). While this is a minimum statewide code, Texas allows local jurisdictions to adopt amendments to the as long as the code changes are determined to be as stringent or more stringent than state code by the Energy Systems Laboratory at Texas A&M University. Major municipalities that have adopted local codes based on the 2021 IECC (with or without local amendments) include Austin, Dallas, Houston, San Antonio, El Paso, and Killeen. Local jurisdictions are responsible for code implementation and enforcement.	State Agency
Utah	2021 IECC	Yes	7/1/2024		3,5,6	The state legislature passed H.B. 518 in March 2024 updating the 2021 Utah State Energy Conservation Code to incorporate the 2021 IECC with Utah amendments. NGBS 2020 Gold is deemed to exceed the state code. Section R401.2.5 with additional efficiency requirements is deleted. Prescriptive table requirements have been modified for fenestration U-factor (now 0.32 instead of 0.30 in all CZs), fenestration SHGC (now 0.35 instead of 0.25 in CZ 3), ceiling insulation (now R-38 instead of R-49 in CZ 3 and now R-49 instead of R-60 in CZ 5 and 6), wood frame wall insulation (now R-21/15+5/0+15 instead of R-30/20+5/13+10/0+20 in CZ 5 and 6), basement wall insulation (now R-15+0/0+11/11+5 in CZ 5 and now R-19+0/0+13/11+5 in CZ 6 instead of R-19+0/0+15/13+5), slab insulation (now NR instead of R-10, 2ft in CZ 3 and now R-10, 2ft instead of R-10, 4 ft in CZ 5), crawl space insulation (now R-15+0/0+11/11+5 in CZ 5 and now R-19+0/0+13/11+5 in CZ 6 instead of R-19+0/0+15/13+5), and mass wall insulation (adding a footnote directing to ICC 400). Adds a new section allowing compliance to be demonstrated with REScheck using the 2012 Utah state energy code if the design is 5% more efficient than the code. Air leakage testing maximum thresholds were raised to 4 ACH50 and to 5 ACH50 (or 0.30 cfm/sf) for the exception noted. Supply and return duct insulation has been reduced (now R-6 instead of R-8 where more than 3 inches in diameter and now R-4.2 instead of R-6 where less than 3 inches). Duct leakage testing thresholds have been raised (now 6 cfm/100 sf for rough-in test [or 5 cfm/100 sf where air handler is not installed] and 5 cfm/100 sf for postconstruction test). Reduces the requirement for high efficacy lamps in permanently installed lighting fixtures (now 90% instead of 100%). The ERI compliance thresholds have been raised (now 65 instead of 51 in CZ 3, now 69 instead of 55 in CZ 5, and now 68 instead of 54 in CZ 6). Section R408 additional efficiency requirements have been deleted.	State Agency
Vermont	2021 IECC	Yes	1/1/2024		6	The 2024 Vermont Residential Building Energy Standards (RBES) include 2021 and 2018 IECC energy efficiency requirements as well as select language updates and additional, more stringent Vermont energy efficiency requirements. The Residential Energy Code includes two levels of stringency: Base Code and Stretch Code . The Base Code is the minimum standard all covered construction must meet, while the Stretch Code is the required standard for all Act 250 (the state's 1970 land use and development law) projects and municipalities that choose to implement a higher energy standard. The Stretch Code includes requirements for installing a solar ready zone, a higher points requirement (see below). Instead of a traditional prescriptive compliance path, the RBES builds on the "Package Plus Points" approach to code compliance introduced in the 2020 RBES to provides builder and designers greater flexibility (outlined in this draft handbook). This state code update simplified the Packages and makes them applicable to both the Base Code and the Stretch Code, with the only difference being the number of Points needing to be achieved. RBES also maintains performance (REScheck) and ERI compliance paths and attempts to better address multifamily construction by aligning the standards between RBES and the Commercial Building Energy Standards (CBES) so that the energy standards should be consistent for multifamily buildings whether they are up to three stories in height (complying with RBES or they are four stories or higher (complying with CBES).	State Agency
Virginia	2021 IECC	Yes	1/18/2024		3,4,5	The 2021 Virginia Construction Code adopted the 2021 IECC with amendments. Prescriptive requirements have been modified for wood frame wall insulation (now R-15 or R-13+1 for all CZs instead of R-20/13+5/0+15 for CZ 3 and R-30/20+5/13+10/0+20 for CZ 4 and 5). Insulation for access hatches and doors has been reduced. Air leakage testing maximum thresholds have been raised from 3ACH50 to 5 ACH50. Added a prohibition for electric resistance heat as the primary heat source for electric space heating if a ducted or ductless heat pump can be installed (electric resistance space heating may be used for defrost, supplemental, or emergency heat). Building framing cavities can be used as ducts or plenums. Adds exceptions to the requirement for heating and cooling equipment and appliance sizing to be determined in accordance with ACCA Manual S where any of the certain conditions apply.	State Agency
Washington	State-Developed Code		3/15/2024		4,5,6	The 2021 Washington State Energy Code has reclassified some counties into different CZs than their placement in the 2021 IECC. The three counties in CZ 6B (Ferry, Pend Oreille, Stevens) have been reclassified into CZ 5B. Four counties in CZ 5C (Clallam, Island, Kitsap, San Juan) have been reclassified into CZ 4C. Compared to the 2021 IECC, prescriptive requirements for skylight U-factor have been increased (now 0.50 instead of 0.55), and some wood frame wall insulation options (R-30 or R-0+20) have been removed (leaving only R-20+5 or R-13+10). Below-grade wall insulation requirements can be met with either R-10 continuous insulation on the exterior of the wall, or R-15 continuous insulation on the interior of the wall, or R-21 cavity insulation plus an R-5 thermal break between the slab and the basement wall at the interior of the basement wall. Air leakage testing maximum thresholds have been raised for all CZs to from 3 ACH50 to 4 ACH50, with an exception for additions tested with an existing home (built prior to 2009) to comply with a combined leakage rate of 7 ACH50. Required insulation for mechanical system piping is increased from R-3 to R-6. Unlike the 2021 IECC, there is no R406 ERI compliance path or R408 additional efficiency package requirements. However, a new Section R406 with additional EE requirements has been added, with all new covered construction (and additions) required to achieve both credits from Section R406.2 (energy equalization) and R406.3 (energy). The number of credits each dwelling unit based on certain square footage or occupancy type are specified. Finally, there is a new R407 certified Passive House section.	State Agency
West Virginia	2015 IECC	Yes	8/1/2022		4,5	The West Virginia State Building Code incorporates the 2015 IECC with state amendments. Air leakage testing maximum thresholds have been raised for all CZs from 3 ACH50 to 5 ACH50, and visual inspection is permitted. Each local jurisdiction that adopts the state building code is responsible for enforcement.	State Agency

State / Territory <i>Click link for adopted code language</i>	Model Residential Energy Code Adopted	Model Code Amended ?	Effective Date	Upcoming Adoption Date	IECC Climate Zone(s)	State Amendments Summary	Additional Code Link(s)
Wisconsin	2009 IECC	Yes	1/1/2016		6,7	The Wisconsin Uniform Dwelling Code includes a prescriptive compliance option that requires only federal minimum equipment efficiencies, but increases requirements for window U-factors (now 0.30 instead of 0.35), wood frame wall insulation (now R-21 or R-19+5 instead of R-20 or R-13+5 in CZ 6 and R-21 in CZ 7), crawl space wall insulation (now R-15/19 instead of R-10/13), and heated slab floor insulation (now R-10/20 instead of R-5). The efficient equipment compliance option maintains most thermal envelope requirements in the 2009 IECC model code but requires 90 AFUE gas furnaces and boilers (or 83 AFUE for oil-fired). Air leakage testing maximum thresholds are 7 ACH50 like the 2009 IECC, but visual inspection is also permitted. Both paths require supply and return ducts in unconditioned space to be insulated to R-8 (instead of only supply ducts in attics) and hot water pipes in unconditioned spaces to be insulated to R-4.	State Agency
Wyoming	No Mandatory Statewide Code				5,6,7	Wyoming has no mandatory statewide energy code . The state's residential and commercial building codes are voluntary for private construction. Jurisdictions may adopt and enforce their own codes. The 2018 IECC was adopted with amendments in both Casper and Cheyenne.	SWEEP