

Building Energy Codes

2024 Update

International Energy Conservation Code (IECC)

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Agenda



Introduction



Proposed Timeline



Electric Vehicle and
Electric Readiness



Other Energy Code Items



Next Steps and Q&A

Proposed Adoption Timeline

2024 Update to International Energy Conservation Code (IECC)



IECC
In Development

IECC
Code to be published
Q1 2024

Austin Energy
Internal staff review
Internal stakeholder engagement



Affordability
Impact
Statement
& Energy Modeling

Stakeholder
Engagement
and Board
Briefing

Boards and
Commissions

Legal Review

City Council
Public Hearings

Codes Effective
January 1, 2025

Electric Vehicle Readiness 2024 IECC (Proposed)

Residential

- One- and two-family dwellings and townhouses = **one** EV-capable, EV-ready or EVSE per dwelling unit
- R-2 occupancies = EV-capable, EV-ready or EVSE space for **40%** of dwelling units or automobile parking spaces, whichever is less

Commercial

EV-capable, EV-ready, or EVSE quantities required determined by building occupancy type(s)

Required EV Power Transfer Infrastructure

Occupancy	EVSE Spaces	EV Ready Spaces	EV Capable Spaces
Group A	10%	0%	10%
Group B	15%	0%	30%
Group E	2% 15%	0%	5% 30%
Group F	2%	0%	5%
Group H	1%	0%	0%
Group I	2% 15%	0%	5% 30%
Group M	10% 15%	0%	10% 30%
Group R-1	20%	5%	75%
Group R-2	20%	5%	75%
Group R-3 and R-4	2%	0%	5%
Group S exclusive of parking garages	1%	0%	0%
Group S-2 parking garages	1% 15%	0%	0% 30%

Definitions:

- **EV-Capable** - Capacity and conduit
- **EV-Ready** - Capacity, conduit, wiring and outlet
- **EVSE** - Capacity, conduit, wiring and charging station

Electric Readiness

2024 IECC (Proposed)



Residential

- Capacity to be included in load calculations
- Dedicated branch circuit outlets shall be installed and terminate within three feet of and with a rating not less than
 - Cooking appliances: 240-volts, 40-amps
 - Clothes dryers: 240-volts, 30-amps
 - Water heaters: either 240-volts, 30-amps or 120V, 20-amps
- Exceptions allowed for equipment not installed or serving multiple dwelling units



Commercial

- Combustion space heating
- Combustion service water heating
- Combustion cooking/clothes drying
- Reserved space for future electric equipment
- Dedicated branch circuits

Other Expected Changes – Residential

2024 IECC (Proposed)

- Conversion of the current Additional Energy Efficiency requirement into a point system with envelope, mechanical, demand response, and onsite solar options for prescriptive path users. Modeling path users to demonstrate up to 20% energy savings.
- Demand response controls must be included on electric water heaters (currently allowed in Austin Energy Code).
- Bathrooms with intermittent exhaust fans must include controls to help remove excess moisture. Can include timers, occupant sensors, humidity control or contaminant control (similar to requirement in AEGB program).
- Air leakage target reduction from 5 ACH50 to 4 ACH50 for our climate zone.
- Prescriptive attic insulation requirement decreased from R49 to R38.

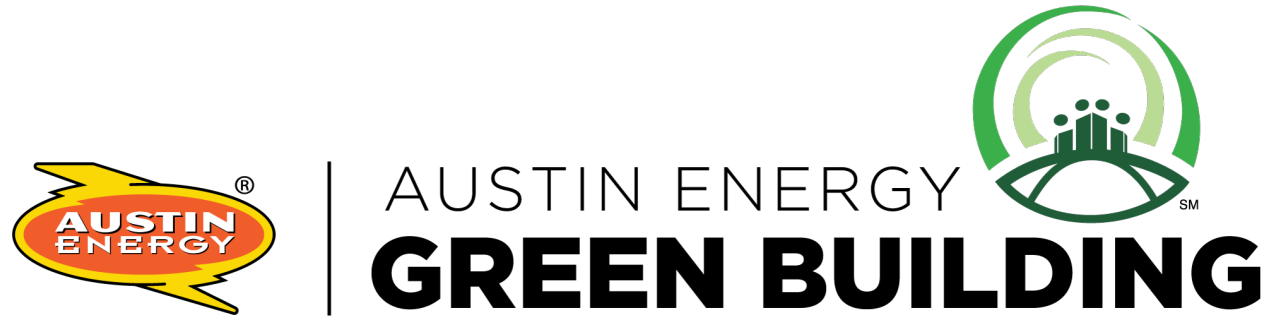


Other Expected Changes - Commercial

2024 IECC (Proposed)



- Updates to Additional Efficiency section C406 to align with ASHRAE standard 90.1 2019 addendum AP, for buildings except low rise residential buildings. The addendum from ASHRAE – American Society of Heating, Refrigerating and Air-Conditioning Engineers – provides:
 - additional credit paths.
 - higher minimum requirements for projects without heat pumps.
- Buildings must be built with electrical energy storage systems (ESS) installed or be ESS ready (C405.16)
- Clarified lighting control requirements for sleeping and dwelling units (C405.2.10)



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