

2024 IECC

NBI has submitted proposals into the ICC process to advance the 2024 IECC. The proposed amendments cover a wide range of measures and improve the code by adding additional efficiency, clarifying requirements, and creating greater flexibility for code users and local jurisdictions. Learn more at newbuildings.org/code_policy/2024-iecc-national-model-energy-code-base-codes.

Grid-Integrated Thermostats

Add new definitions as follows:

GRID-INTEGRATED CONTROL. An automatic control that can receive, automatically respond to demand response requests from and send information back to a utility, electrical system operator, or third-party demand response program provider.

Add new text as follows:

R403.1.1.1 Grid-integrated thermostat controls. The thermostats shall be provided with *grid-integrated controls* that comply with AHRI 1380 capable of the following:

1. Automatically increasing the zone operating cooling set points by a minimum of 4°F (2.2°C)
2. Automatically decreasing the zone operating heating set points by a minimum of 4°F (2.2°C)
3. Automatically decreasing the zone operating cooling set points by a minimum of 2°F (1.1°C)
4. Automatically increasing the zone operation heating set points by a minimum of 2°F (1.1°C)
5. Both ramp-up and ramp-down logic to prevent the building peak demand from exceeding that expected without the DR implementation.

The thermostat shall be capable of performing all other functions provided by the control when the *grid-integrated controls* are not available.

Exception: Assisted living facilities.

Revise text as follows:

R407.2 Tropical climate region. Compliance with this section requires the following:

1. Not more than one-half of the *occupied* space is air conditioned and is controlled by a thermostat in accordance with Section R403.1.1.

Add new standard as follows:

ANSI

American National Standards Institute (ANSI)
25 West 43rd Street
New York, NY 20036, United States
1-212-642-4900; www.ansi.org

Standard	Title	Referenced
reference number		in code section number
<u>AHRI 1380</u>	<u>Demand Response through Variable Capacity HVAC Systems in Residential and Small Commercial Applications</u>	<u>R403.1.1.1</u>

According to a new report from the National Association of Home Builders (NAHB), in 2021, homeowners will be seeking out features for their homes that improve comfort, wellness and efficiency. One of these common home features homeowners are seeking out are ways to improve their overall home energy use. To help lower energy bills, home builders install a smart thermostat to regulate temperatures and install ENERGY STAR appliances. Major builders D.R. Horton and Toll Brothers are both partners with smart home technology which are installed in the homes they build (these include smart thermostats).

Grid-integrated controls for thermostats are added based on language from California Title 24 and integrated into the current requirement for thermostats. Any thermostat listed as “Title 24 compliant” would meet this requirement, and are available directly through major retailers.