

Automatic Stop

IECC: C403.4.2.3

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2018 International Energy Conservation Code

Revise as follows:

C403.4.2.3 Automatic start and stop (Mandatory). Automatic start and stop controls shall be provided for each HVAC system. The automatic start controls shall be configured to automatically adjust the daily start time of the HVAC system in order to bring each space to the desired occupied temperature immediately prior to scheduled occupancy. The automatic stop controls shall be configured to reduce the HVAC system's heating temperature setpoint and increase the cooling temperature setpoint by at least 2°F before scheduled unoccupied periods based upon the thermal lag and acceptable drift in space temperature that is within comfort limits.

Reason Statement: The IECC currently requires Automatic Start but neglects to include Automatic Stop controls which can further reduce energy use with minimal cost. This feature has been commonplace on DDC and BMS control systems for many years and is now becoming commonplace with standalone building thermostats as well, making this feature a market-ready solution to further reduce energy costs.

The primary economic impact is a reduction in energy consumption through the use of existing building controls. There is a direct benefit to the building owner, tenants, and businesses via a reduction in energy costs related to reduced cooling and heating loads.

Cost Impact: The code change proposal will not increase or decrease the cost of construction. Systems that include Automatic Start are capable of implementing Automatic Stop as well. The financial impact on construction is effectively zero as the additional labor to program the Automatic Stop control algorithm into a BMS or DDC system that is already required to have Automatic Start is minimal.

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