

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.

Code Change Title: System Sizing in Residential Alterations **REPI-151-21**

Summary: New equipment installed in alterations has to be right sized based on the alteration.

Revise text as follows:

R503.1.2 Heating and cooling systems. New heating and cooling and duct systems that are part of the alteration shall comply with Section R403 and this section.

R503.1.2.1 Ducts. HVAC ducts newly installed as part of an alteration shall comply with Section R403.

Exception: Where ducts from an existing heating and cooling system are extended to an addition.

Add new text as follows:

R503.1.2.2 System Sizing. New heating and cooling equipment that is part of an alteration shall be sized in accordance with Section R403.7 based on the existing building features as modified by the alteration.

Exception: Where it has been demonstrated to the code official that compliance with this section would result in heating or cooling equipment that is incompatible with the remaining portions of the existing heating or cooling system.

Historically, HVAC equipment has been routinely oversized, yet the sizing for many equipment replacements is based on the size of the old equipment. This oversized equipment is less efficient and less effective, resulting in higher costs and worse performance. This proposal requires that replacement equipment in alterations be based on the existing building loads as modified by any alterations that accompany the equipment replacement.