



BUILDINGS
2020-009
BULLETIN
TECHNICAL

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SUPERSEDES
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PURPOSE: This document clarifies conditions under which an addition, alteration, or repair to HVAC and/or service water heating systems may not be required to comply with the 2020 New York City Energy Conservation Code (NYCECC), pursuant to NYCECC Chapters R5, C5, and Appendix CA (amendments to 90.1-2016).

SUBJECT(S): Additions, mechanical system; Alterations, mechanical system; Repairs, mechanical system; Replacement, mechanical system; Additions, service water heating system; Alterations, service water heating system; Repairs, service water heating system; Replacement, service water heating system; Additions, HVAC; Alterations, HVAC; Repairs, HVAC; Replacement, HVAC; Commissioning, HVAC; Insulation, HVAC; New York City Energy Conservation Code; Energy Code

In accordance with NYCECC Chapter R5, Chapter C5, sections R403, C403, C404, C408 and ASHRAE 90.1 sections 6, 7 and 10, additions to mechanical and/or service water heating systems shall comply with such sections for new construction. Alterations and/or repairs to mechanical, service water heating systems, and/or insulation shall be as follows, provided that energy use of the building is not increased:

I. EQUIPMENT

Replacement of head-end or terminal equipment, ductwork and/or piping regulated by sections NYCECC R403, C403, C404 and/or ASHRAE 90.1 sections 6, 7 and/or 10 shall be required to comply with the NYCECC, except where there is insufficient space or access to meet ductwork and/or piping requirements. Replacement of equipment parts, such as tubes within a boiler, is not regulated by the NYCECC. Any deviation from the Energy Code due to existing building conditions must be indicated in the energy analysis of the construction documents.

Exception for Terminal Unit

Where replacement equipment is a terminal unit of a non-compliant system and there is no compliant equipment that would fulfill the function of the equipment, the replacement equipment need not comply, provided the energy use of the building is not increased.

II. SYSTEMS INCLUDING BUT NOT LIMITED TO CONTROL SYSTEMS AND DEVICES

Alterations and/or repairs to systems, including heating systems, cooling systems, ventilation systems and/or service water heating systems, shall be required to comply with the NYCECC as follows:

A. Whole system replacement. Replacement of an entire building system, or of a whole system serving a portion of the building, shall comply with the provisions of the NYCECC.

B. Partial system replacement. For replacement of a partial building system, or of a partial system serving a portion of the building, the applicant shall make distribution runs or zones comply with the provisions of the NYCECC or ASHRAE 90.1, but shall not be required to alter the system outside of the original scope of work. Any deviation from the Energy Code due to existing building conditions described in this Bulletin must be indicated in the energy analysis of the construction documents.

III. SEALING & INSULATION

Sealing and insulation of ducts, piping and penetrations shall be provided wherever applicable to the scope of work as required by the NYCECC. Any deviation from the Energy Code due to existing building conditions described in this Bulletin must be indicated in the energy analysis of the construction documents.

IV. TRADE-OFFS

Where mechanical and/or service water heating systems or equipment have previously been used in trade-offs to compensate for energy use exceeding NYCECC allowance in any system or unit outside of the scope of work, replacement of such equipment or alterations to such systems shall not increase the energy use of the system unless the building undergoes energy modeling to demonstrate whole-building compliance with the NYCECC.

V. COMMISSIONING

New heating, cooling and duct system components and new service water heating systems that are part of the addition or alteration and the controls that serve them shall comply with the commissioning provisions of the NYCECC or ASHRAE 90.1. Where the scope of the alteration includes, but is not limited to, the head-end or terminal equipment, ductwork and/or piping, the connected load capacity of these systems shall provide the basis for determining compliance with the commissioning requirements.

RELATED CODE/ZONING

NYCECC 101.2.41	NYCECC Chapter R5	ASHRAE 90.1 7.1.1.2
NYCECC R403	NYCECC Chapter C5	ASHRAE 90.1 7.1.1.3
NYCECC C403	RCNY 5000-01	ASHRAE 90.1 Section 6
NYCECC C404	ASHRAE 90.1 6.1.1.2	ASHRAE 90.1 Section 7
NYCECC C408	ASHRAE 90.1 6.1.1.3	ASHRAE 90.1 Section 10