



DEPARTMENT OF ADMINISTRATIVE SERVICES

PROPOSED CHANGE OF THE CONNECTICUT STATE BUILDING CODE AND FIRE SAFETY CODE

DATE SUBMITTED: 10/17/2024

CODE INFORMATION

Proposed change to: [X] Building Code [] Fire Safety Code

Code section(s): R402.1.3 and

R408.2.9

PROPONENT INFORMATION

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PROPOSAL INFORMATION

Description of change and reason for change (attach additional information as needed): Keep table R402.1.3 to 2021 IECC level and remove R408.2.9 – see attachment

Proposed text change, addition or deletion (attach additional information as needed): Keep table R402.1.3 to 2021 IECC level and remove R408.2.9 – see attachment

Supporting data and documents (attach additional information as needed) See attachment

- [] This Proposal is original material. (Note: Original material is considered to be the submitter’s own idea based on or as a result of his/her own experience, thought or research and, to the best of his/her knowledge, is not copied from another source.)
[] This Comment is not original material, its source (if known) is as follows: (such as material / code development proposal from a prior development cycle or proposal submitted to model code committee etc.)
[] I would like to make an in-person presentation of my proposal.

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Dragana Thibault
Proponent’s Signature

Dragana Thibault
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PLEASE EMAIL (PREFERRED) TO DAS.CodesStandards@CT.GOV OR MAIL OR FAX (SEE BELOW)

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Submitted via Email

Department of Administrative Services
Office of the State Building Inspector
450 Columbus Boulevard, Suite 1303
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Re: Proposed Change of the Connecticut State Building Code and Fire Safety Code

Northeast Energy Efficiency Partnerships (NEEP) commends the Connecticut Department of Administrative Services, Office of the State Building Inspector for its leadership in adopting the 2024 International Energy Conservation Code (IECC). With [buildings responsible for 33% of Connecticut's annual greenhouse gas \(GHG\) emissions](#),¹ these updates are critical in addressing the state's largest source of emissions.

NEEP is a nonpartisan, non-profit organization that advances energy efficiency and building decarbonization in the Northeast and Mid-Atlantic to improve energy affordability, reduce greenhouse gas emissions, lower air pollution, promote economic development, and advance energy justice.

Proposal for Code Changes

NEEP supports Connecticut's adoption of the 2024 IECC as a key step in advancing the state's energy and climate goals. While the 2024 IECC includes important advancements, there are certain areas where the 2021 IECC would provide stronger energy efficiency standards. To ensure that Connecticut achieves the highest level of energy performance, reduces greenhouse gas emissions, and lowers energy bills for customers, we recommend incorporating provisions from the 2021 IECC in cases where they are more robust. Specifically, we propose two key changes to the residential chapter of 2024 IECC:

- 1. Restore Prescriptive Ceiling Insulation Requirements (Keep Table R402.1.3 to 2021 IECC level)**

Under the 2021 IECC, ceiling insulation requirements for Connecticut Climate Zone 5 were set at R-60. The 2024 IECC reduced energy efficiency levels to R-49 as part of a broader compromise. Unfortunately, that broader compromise failed to materialize, and this rollback to R-49 would lead to more inefficient buildings. We strongly recommend that Connecticut maintain the R-60 insulation requirement to avoid this

¹ Connecticut Department of Energy & Environmental Protection, Connecticut Greenhouse Gas Emissions Inventory, April 2024. https://portal.ct.gov/-/media/deep/climatechange/1990-2021-ghg-inventory/deep_ghg_report_90-21_pre-22.pdf.



efficiency rollback. Ceiling insulation is one of the most cost-effective and durable efficiency measures that provides long-term energy savings and comfort for building occupants. Techniques for achieving R-60 are already well-known and feasible in Connecticut's climate zones, making this a highly doable and impactful requirement.

2. Remove Wall Insulation Trade-offs (Remove R408.2.9)

Section R408.2.9 in the 2024 IECC creates an efficiency loophole by allowing wood framed wall insulation to be reduced from U-0.045 to U-0.060 if one of four additional measures are met. These alternative measures, however, do not provide the same long-term efficiency as wall insulation. Some have shorter lifespans, for example. In addition, the vague language risks double-counting measures, weakening the overall energy performance of buildings. To prevent a reduction in wall insulation efficiency levels, we strongly recommend removing Section R408.2.9 entirely.

Incorporating and maintaining robust energy efficiency measures will yield substantial benefits for all Connecticut residents. Energy-efficient buildings reduce utility bills, lower carbon emissions, and improve indoor air quality, which in turn mitigates health risks and related medical costs. Energy-conserving buildings also enhance resilience and protect occupants by extending building habitability during extreme temperature events that may be caused by power outages or fuel supply disruptions.²

NEEP encourages the Department of Administrative Services to address the areas of the 2024 IECC that could potentially weaken building efficiency, as outlined above. Strengthening these provisions will help Connecticut achieve its climate goals and promote long-term energy affordability for its residents.

Sincerely,

Dragana Thibault

Dragana Thibault, Senior Associate for Codes and Standards

Northeast Energy Efficiency Partnerships (NEEP)

² Pacific Northwest National Laboratory (PNNL), Enhancing Resilience in Buildings through Energy Efficiency, 2023. https://www.energycodes.gov/sites/default/files/2023-07/Efficiency_for_Building_Resilience_PNNL-32727_Rev1.pdf.