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***Staff Supplement to California Statewide Codes and Standards
Enhancement (CASE) Team Measure Proposal for Single-Family Envelope***

Date: March 28, 2024

Pages: 3

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Description of Proposed Regulatory Changes

The measure change proposal submitted by California Statewide Codes and Standards Enhancement (CASE) Team and titled “Single Family High Performance Windows and Walls” proposes to make the following changes to the 2025 Standards:

1. Windows – Mandatory & Prescriptive U-factors

- Reduce the mandatory maximum U-factor requirement for all fenestration products, including skylights, to $U=0.40$ in all Climate Zones.
 - Staff agrees with the proposed changes to Section 150.0(q) and have incorporated substantively similar changes into the proposed 2025 Express Terms.
- Reduce the prescriptive U-factor requirement as follows:
 - For New Construction, the current prescriptive requirement would be reduced to $U=0.27$ in Climate Zones 1-5, 11-14 & 16; with an exception for small homes ($\leq 500 \text{ ft}^2$) in Climate Zone 5-10 & 15.
 - Staff agrees with the proposed changes to Section 150.1(c)3 and Table 150.1-A and have incorporated substantively similar changes into the proposed 2025 Express Terms.
 - For Alterations, the current prescriptive requirement would be reduced to $U=0.27$ in all Climate Zones.
 - Staff does not agree with the proposed changes to Section 150.2(b)1A/B, and instead left the alterations

U-factor requirement as is, which point to the prescriptive requirements for new construction. This was done in an effort to simplify code requirements by aligning the U-factor requirements for new construction and alterations, so that there is just one U-factor requirement per climate zone.

2. Mandatory Wall U-factors

- Reduce the mandatory maximum Wall U-factor requirements as follows:
 - For 2x4 wood framed walls, the U-factor requirement would be reduced to U-0.095 for all Climate Zones.
 - Staff agrees with the proposed changes to Section 150.0(c) and have incorporated substantively similar changes into the proposed 2025 Express Terms.
 - For wood framed walls 2x6 or greater, the U-factor requirement would be reduced to U-0.069 for all Climate Zones.
 - Staff agrees with the proposed changes to Section 150.0(c) and have incorporated substantively similar changes into the proposed 2025 Express Terms.

Staff Analysis and Conclusion

Staff analyzed the submitted proposal and reached the following conclusions for the measures included in the Express Terms:

- Based on the evidence presented in the proposal, the measures, as proposed, are cost effective and the author appropriately followed the Energy Commission's Life Cycle Cost methodology.
- Measure costs premiums presented in the proposal are reasonable and appropriate for the measure proposed.
- Measure energy savings presented in the proposal appear are appropriately modeled and appear credible.
- Measure environmental impacts presented in the proposal are reasonable and appropriate for the measure proposed.