

<b>DOCKETED</b>	
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<b>Project Title:</b>	2022 Energy Code Update Rulemaking
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*Comment Received From: Thomas D. Culp, Ph.D.*  
*Submitted On: 6/21/2021*  
*Docket Number: 21-BSTD-01*

**NGA and AEC comments on 2022 Energy Code express terms**

*Additional submitted attachment is included below.*



March 9, 2021

Docket 21-BSTD-01

2022 Energy Code Express Terms

Thank you for the opportunity to comment on the 2022 Energy Code Express Terms. I represent the National Glass Association and Aluminum Extruders Council, whom together have over 1800 member companies and manufacturing across North America. We represent broad interests across the commercial and residential fenestration industry from the primary glass manufacturers, to glazing fabricators and frame extruders, to curtain wall and commercial window and door system manufacturers, window and door dealers, to the final glazing contractors and installers.

Again, we want to thank the CASE teams and staff for all the hard work that has led to the proposed express terms for the 2022 energy code. We appreciate the iterative dialogue we have had with the teams. We have filed previous comments on a few items where we have minor disagreements in the proposed fenestration requirements, but these should not hold up the code, and we are **supportive** overall of the proposed fenestration changes for nonresidential buildings and in the new multifamily restructuring.

The one final item we do believe needs to be corrected is the removal of Exception 1 to Section 140.3(a)5B, which is actually a new requirement:

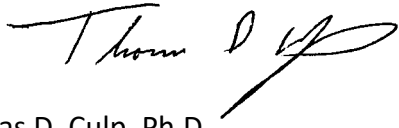
~~**EXCEPTION 1 to Section 140.3(a)5B: For school buildings less than 25,000 square feet and 3 stories or less in climate zones 1 and 16 shall have a U-factor of 0.26 or less.**~~

This exception came out of nowhere with *no* analysis, justification, or cost effectiveness – we could not find an analysis of this scenario in any of the CASE reports or anywhere else. Even for the colder climate zones 1 and 16, a U-factor of 0.26 is a drastic change, and simply not justified. For comparison, the nonresidential criteria range from U-0.34 to U-0.46 for different fenestration types, the relocatable school building requirement is U-0.47, and even the Zero-Energy Advanced Energy Design Guide for K-12 School Buildings published by DOE, ASHRAE, AIA, IES, and USGBC only has U-0.34-0.36 for this region. We wonder if this was some sort of mistake or typo, as the only place the number 0.26 even shows up in the CASE reports is for SHGC, not U-factor.

With no technical analysis or cost effectiveness, this exception does not comply with California code development procedures, and must be removed so that the main nonresidential requirements of Table 140.3-B apply.

Thank you again for the opportunity to comment, and please contact me with any comments or questions.

Best regards,

A handwritten signature in black ink, appearing to read "Thomas D. Culp". The signature is fluid and cursive, with a long, sweeping tail on the final letter.

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