



California Energy Commission

**DOCKETED**

**15-BSTD-01**

**TN # 75431**

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Sent via email to [docket@energy.ca.gov](mailto:docket@energy.ca.gov)

March 17, 2015

California Energy Commission  
Attention: Docket No. 15-BSTD-01  
Dockets Office 1516 Ninth Street, MS-4  
Sacramento CA 95814

Subject: Comments from the North American Insulation Manufacturers Association on Docket Number 15-BSTD-01 2016 Building Standards 45-day express language

To Whom It May Concern:

These comments are submitted on behalf of the North American Insulation Manufacturers Association regarding the proposed changes to the 2016 version of the California Building Energy Efficiency Standards, Title 24. NAIMA is the association for North American manufacturers of fiber glass, rock wool, and slag wool insulation products. Its role is to promote energy efficiency and environmental preservation through the use of fiber glass, rock wool, and slag wool insulation, and to encourage the safe production and use of these materials.

NAIMA strongly supports the California Energy Commission's mission "to reduce wasteful, uneconomical, and unnecessary uses of energy, thereby reducing the rate of growth of energy consumption, [and] prudently conserve energy resources." The Commission has been a leader in promoting building energy efficiency by promoting robust and cost-effective levels of insulation in buildings. NAIMA generally supports the proposed revisions to the 2016 Title 24 and would like to provide specific comments on the following issues:

Section 120.3, Table 120.3-A

NAIMA supports the added requirement for insulating the first 8 feet of piping for non-recirculating hot water piping and maintaining the pipe insulation thicknesses consistent with the ASHRAE 90.1 standard.

Section 120.7 (a) 3. C.

NAIMA supports the intent of the language, which prevents insulation on top of suspended ceilings from being used to meet the roof/ceiling insulation requirements. We believe the proposed language could be clearer. Please consider the following:

C. Insulation placed on top of a suspended ceiling with removable ceiling panels shall not be used to meet the Roof/Ceiling thermal requirement of Sections 140.3 and 141.0;  
and

We believe this makes it clear that insulation is not prohibited from being placed atop suspended ceilings for other purposes such as acoustics – but it does not count towards the thermal requirements for the roof.

NAIMA does support the exception to Section 120.7(a)3, which allows insulation on top of suspended ceilings to be accounted for in the heat loss calculations when the average height of the space between the ceiling and the roof is greater than 12 feet. NAIMA supports this exception as this is the most practical way of insulating this particular construction detail.

Section 120.7 (a) 3. D.

NAIMA requests the Commission consider a change to this section to clarify only insulation used to meet the thermal requirements must meet the water absorption requirements. With the increasing practice of green/vegetative roofs, there are designs, which may use board insulation with higher levels of moisture permeability as a part of the roof design. NAIMA requests the following language be considered:

D. Where insulation used to meet the thermal requirements is installed above the roofing membrane or above the layer used to seal the roof from water penetration, the insulation shall have a maximum water absorption of 0.3 percent by volume when tested according to ASTM Standard C272.

Section 140.3, Tables 140.3-B, C and D

NAIMA supports the proposed revisions to the U-factors contained in Tables 140.3-B, C and D and the simplification of table 140.3.

Section 150.0

Note: The first sentence in Section 150.0 MANDATORY FEATURES AND DEVICES contains the word “buildings” misspelled as “buildngs.”

Section 150.0 (a) 1.

NAIMA does not support the increase of the weighted average U-factor for ceilings and rafter roofs from 0.031 to 0.043 or the reduction of the R-value from R-30 to R-22. R-30 is the lowest prescriptive R-value contained in the International Energy Conservation Code (IECC) since 2006. A reduction of R-8 amount to approximately 2 inches of fiber glass insulation, which is inexpensive and easy to accommodate in most every attic and roof assembly.

Section 150.0 (a) 4.

Similar to our comments on Section 120.7 (a) 3. D above, with the increasing practice of green/vegetative roofs, there are designs which may use board insulation with higher levels of moisture permeability as a part of the roof design. Please consider adding the exception below to item 4:

4. Insulation shall be installed below the roofing membrane or layer used to seal the roof from water penetration unless the insulation has a maximum water absorption of 0.3 percent by volume when tested according to ASTM Standard C272.

Exception: Insulation not intended to meet the thermal requirements of the standard shall not be required to meet the water absorption requirements.

Section 150.1 (c) 1. A and B and Table 150.1-A

NAIMA strongly supports the proposed revisions to increase the thermal efficiency of the roofs, ceilings and walls for low-rise residential buildings. The addition of high performance attics and high performance walls will reduce home owners utility bills, are cost-effective as presented at the hearings and will save energy for the life of the building.

Although the issue is not included in the 45 day language, NAIMA has strong concerns about the proposal to allow photovoltaic systems to be used to tradeoff high performance attics and walls as well as other energy efficiency measures. NAIMA does not support provisions, which allow or encourage the reduction of permanent energy efficiency measures, like ceiling and wall insulation, to be reduced or eliminated using measures whose performance may change over time.

Thank you for your consideration of these comments. Please contact me if you have any questions regarding these comments NAIMA will continue.

Sincerely,

A handwritten signature in black ink, appearing to read "Charles C. Cottrell". The signature is fluid and cursive, with the first name "Charles" and last name "Cottrell" clearly distinguishable.

Charles C. Cottrell  
Vice President, Technical Services