



May 16, 2012

CALIFORNIA ENERGY COMMISSION Dockets Office 1516 Ninth Street, MS-4 Sacramento, CA 95814-5512

Re: Docket Number 12-BSTD-01

Dear CEC Staff:

Thank you for the consideration of our 45 day comment regarding the definitions of insulated siding, insulating sheathing, and continuous insulation. It is apparent that the 15 day language has incorporated part of these comments and we believe it has been improved as a result. This comment is focused on the 15 day definition of continuous insulation and a few tweaks that are intended to help further clarify the definition. Changes to the 15 day language that we are proposing for the definition of continuous insulation are as follows:

SECTION 100.1 – DEFINITIONS AND RULES OF CONSTRUCTION

CONTINUOUS INSULATION (c.i.) is insulation board insulation, sheet insulation, or insulated siding that is continuous across all an opaque assemblyies that separates conditioned from unconditioned space and has a minimum R-value of R-2. It is installed on the exterior or interior or is integral to any opaque surface of the building envelope and has no thermal bridges other than fasteners, fenestration, and necessary service openings.

Reasons for these changes proposed to the 15 day language are as follows:

- The list of qualifying product types provided within the 45 day language (board insulation, sheet insulation, and insulated siding) is helpful for builders to easily recognize the type of products that qualify. For example, structural sheathing is intentionally excluded because its R-value contribution is typically very low (less than R-1) and it has not historically been recognized by CEC as a form of continuous insulation (i.e., not previously recognized as "insulating sheathing", which was required to be a minimum R-2).
- Requiring insulation to be continuous across "all assemblies that separate conditioned from unconditioned space" is too broad, as it would require continuous insulation products that are intended to be installed on just one assembly (e.g., a wall assembly) to also be installed on all other assemblies separating conditioned from unconditioned space (e.g., ceiling assemblies, floor assemblies, etc.). For this reason, we've narrowed the scope to say "an opaque assembly".
- Removing the definition of insulating sheathing was a good decision for the 15 day language, since that term is no longer used within BEES. However, by removing the definition of insulated sheathing and not reinserting the minimum R-2 requirement within the definition of continuous insulation, CEC is removing a long established minimum R-value for continuous insulation. This would inadvertently reduce the impact of requiring continuous insulation

for buildings, as designers would now be able to take credit for the R-value of structural sheathing.

• The list of permissible thermal bridges currently only includes fasteners and necessary service openings, but not fenestration. So, a wall assembly with a door might be expected to have the continuous insulation across the door as well. Adding fenestration to the list of permissible thermal bridges would clarify this exception.

Thank you for the opportunity to provide these comments.

Sincerely,

mike moore

Mike Moore, P.E.