



1409 E. SADC Ave.
Sigourney, Iowa 52591
(641) 622-1079
(888) 500-3574
FAX (888) 501-3574
www.duro-last.com

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California Energy Commission
Dockets Office
1516 Ninth Street
Sacramento, CA 95814-5512
Sent by E-mail to: docket@energy.state.ca.us

DOCKET	
10-BSTD-01	
DATE	JUL 15 2011
RECD.	JUL 15 2011

Re: Docket No. 10-BSTD-01

This letter is to provide comments on the proposal to change the Title 24 aged reflectivity requirement from 0.55 to 0.70 or possibly 0.67. It is our understanding that this change, if adopted, would become effective January 1, 2014.

Duro-Last Roofing has long been a strong advocate for cool roofing. Since 1978 we have installed millions of square feet of roofing in California to protect some of the state's most important buildings.

The California Energy Commission has developed and implemented numerous positive guidelines in Title 24, most notably the use of cool roofing products. Also the State of California with legislation like Title 24 has been instrumental in driving changes in energy and environmental conservation nationwide. We recognize and support the CEC's desire to "raise the bar" within the State's Energy Code. We do however have numerous serious concerns about the proposed changes.

According to the CEC, only 40% of single ply membranes currently approved, and 55% of currently approved coatings would meet the proposed 0.70 threshold. By adjusting the value to 0.67 a few additional products would meet the new requirement. This still results in roughly a 50% reduction in the number of products currently used in the state that could meet the requirement. The manufacturers of these products have invested significant resources insuring compliance with the current requirements. Providing approximately 30 months' notice to allow these vendors the opportunity to modify their products or introduce new products to meet the proposed requirements is unreasonable and unrealistic.

Since the primary purpose of roof coverings is to protect the structure from the elements, they should be formulated to provide maximum durability. Extensive artificial weathering and accelerated age testing is done on roof membranes as they are developed, but only time and exposure in the field can provide real world data on long term performance. Any change in formulation can have a significant impact on the overall performance of the material, so formulation changes should

only be implemented after extensive laboratory and field testing.

The development cycle for roofing materials is a very lengthy process due to the exposed life spans of the products. Manufacturers not meeting the proposed requirement would need to rush new, unproven formulations into service and risk affecting product durability and life expectancy. Even if a product manufacturer had a new formulation ready for market immediately, and they submitted it to be rated by the CRRC today, they would still not have their three year aged data by the implementation date. Besides the short notice, increasing the requirement 27% or even 22% in a single step further compounds the challenge.

Although the CEC may be satisfied that “sufficient” products meet the proposed requirements, such an assessment is overly simplistic. Imposing the new requirements as proposed would eliminate products with some of the longest records of proven performance in the state.

Duro-Last has invested significant resources in the State of California, and supports hundreds of independent contractors, sales representatives and the people they employ. An immediate change of this magnitude in the Title 24 cool roofing requirements would have a serious negative effect on our business and would undermine our ability to do business in the state.

From a technology perspective, the most effective way to improve on the reflectivity of roofing materials is by increasing the content of high quality titanium dioxide (TiO₂). There is currently a significant worldwide shortage of TiO₂ causing prices to escalate and forcing suppliers to place customers on allocation. Increasing the TiO₂ requirement at this time would cause an additional burden on supply, and lead to roofing product availability issues and/or increase the cost of reflective roofs for building owners.

In summary, we believe that:

- The magnitude of the change is much too great
- The timeframe for implementation is too short and may force manufacturers to compromise their development processes, likely compromising overall product quality and durability
- Consumer choice will be dramatically reduced
- The timing for such a change is poor in light of the business climate

We strongly object to any changes being made and implemented in the 2013 code release. We recommend that changes be done incrementally not to exceed 0.05. The CEC should work with all stakeholders to develop a comprehensive plan that would set reasonable targets and time frames to allow for adequate product development cycles.

Proceeding in this manner will allow manufacturers to have clear, achievable targets to meet and will provide time for development and testing. Products with

a long history of proven performance will have the opportunity to meet the requirements without interrupting supply to customers. And companies with significant investments in the state will have the opportunity to adapt their products and businesses to meet the new requirements.

Thank you for the opportunity to comment on the proposed change. Feel free to contact us if you have any questions.

Sincerely,

Drew Ballensky
General Manager
Duro-Last Roofing, Inc.