

California Energy Commission Attention: **Docket No. 12-BSTD-1** Dockets Office 1516 Ninth Street, MS-4 Sacramento, CA 95814

Via email to: ryasny@energy.ca.gov

Your reference:

2013 Building Energy Efficiency Standards Docket No. 12-BSTD-1

April 9, 2012

To whom it may concern:

I am writing to you in regards to the proposed new California Building Codes as it pertains to fenestration for the proposed year 2013. I am very concerned that the new U-Factor requirements of .32 will dramatically affect the consumer's ability to choose healthy natural daylighting in their homes not only in new construction but also in the remodel and replacement markets. There are numerous studies out that show the benefit of natural daylight on our health, our learning abilities and our visual acuity to name just a few. The Danish Building Institute's study shows that natural daylight from above far out performs the traditional vertical window as well as the dormer window. The study shows that you can get twice as much light into a room, reduce the glare and spread the light more evenly in the space by bringing natural daylight in from the roof plane as opposed to a vertical window. By this fact alone, you can reduce the amount of square footage of fenestration thus increasing the building efficiency through the use of skylights.

Through the use of skylights, you also reduce the usage of artificial lighting in a home which reduces the heat generated by artificial lighting which in turn reduces the amount of cooling needed. The lighting efficacy of skylights is far superior to that of artificial lighting even using the most energy efficient light bulbs available today.

As we build our homes tighter to increase energy efficiency, the need for ventilation becomes more important. Since heat rises, it makes perfect sense to allow the use of ventilating skylights to allow the heat to leave the home again reducing the need for air conditioning.

Back in the 1970s and 1980s a large number of in-efficient acrylic skylights were installed in our homes to bring in natural daylight. These acrylic skylights are now beginning to fail and with all the new technology in glass coatings, low E, we have the opportunity to replace them with much more energy efficient glass skylights. With this new code requirement however, it makes that impossible leaving the consumer with the choice of either leaving the less efficient skylight in place or removing the skylight completely. In either case it is more costly than allowing the replacement with a more energy efficient product.

This new code does not take into account the economic impact it will have on the California economy. The cost of re-tooling to a manufacturer will prohibit most from continuing production of products for California thus forcing them to reduce their work force or close their business all together. The trickledown effect will be devastating to our economy at a time that it can least afford.

I respectfully request that you re-consider this code and use the Energy Star requirements as the guideline for skylights in the California Building Code.

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