



Carlisle SynTec Incorporated

June 3, 2005

California Energy Commission
Bill Pennington
Building Standards
Media & Public Communications Office
1516 Ninth Street, MS-29
Sacramento, CA 95814-5512

Dear Bill:

I am writing in response to the call for changing the language on the requirements for coatings in the 2005 Title 24. I have reviewed the RCMA letter requesting certain modifications to increase the opportunity for coating compliance to the standard. First, I must state that the recommended changes are okay as long as the field application thickness requirements remain. These referenced standards are not application standards and the one application standard does not state a minimum dry film thickness. Second, I would recommend the following wording for the RCMA's suggestion and the reasons why:

"Liquid applied roof coatings applied in the field as the top surface of a roof covering shall meet the requirements of TABLE 118-C or ~~meet the requirements of~~ ASTM C836, C957, ~~D1227~~, D3468, ~~D4586~~, D6083, D6694, **whichever is more stringent.**"

> The standards D1227 and D1586 were removed for they do not have film physical property testing spelled out nor do they set any specific requirements. The standards only state the requirements for the type of asphalt used in the coating and some guidelines for the formula makeup.

> Standard D836 requires only 500 hours of UV exposure which is very minimal especially with the test method using a carbon arc device. The roofing industry has been on xenon for years. For that reason, I do not believe CEC would want to lower their requirement from a 1000 hours therefore the "more stringent" phrase is used.

> Only standards D957, D6083, and D6694 have dry film thickness requirements spelled out and it is only in one of the test methods. They are

D957 - 20-mils (bottom coat)

D6083 - 20-mils

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D6694 - 50-mil

This is not an issue but would indicate that the coatings industry has yet to tie-in the field requirements with the basic coating classification and how this relates to perform. There is one standard, D957, that does require an abrasion test method to give some type of outdoor performance standard.

In Exception 1, they reference the installation method ASTM D3805 which seems to a reasonable application procedure. However, it does not define a dry film thickness or a wet film thickness. They do state gallons per square foot coverage rate but depending on the solids content, application technique and absorption rate, final thickness will not be known unless it is physically checked is made which is not required.

In Exception 3, I am not sure why they are referencing AC 75 for that is a standard for membrane roof coverings made of modified bitumen, thermoplastic polymers, and thermoset polymers. Coatings are not included in the standard. It is recommended that the sentence just end after the word "compliance". I did a quick review of ICC test criteria and did not find one that pertained to coatings, which may be the reason they referenced AC 75. If the RCMA were to go to ICC-ES, they could get a standard developed.

I hope this is of some help. To me it looks like the coating industry needs to go back and begin to pull their standards together so similar test methods are used in all the standards allowing one material to be compared more easily to another then what is presently available as well as define what the minimum coating thickness is for the material.

Best regards,



Dick

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