

June 7, 2007

Payam Bozorgchami
California Energy Commission
1516 9th Street, MS-42
Sacramento, CA 95814-5504

Dear Payam:

In response to the California Energy Commission's (CEC) call for information on the installed cost, reflectivity, and life expectancy of single plies, Carlisle supplied some information in the letter send June 4, 2007. In that letter on the subject of life expectancy of single plies, it was recommended that CEC look at the no-dollar limit warranties that manufactures are offering on these systems as a benchmark for life expectancy to avoid the long debated subject of how long does a specific type of roof system last. After CEC received the letter, you came back with the question asking for further clarification.

To further explain the subject, the manufacturer warrants that if the membrane or system leaks at any point during warranty period whether it is 10 or 30 years, he will make the repair at his cost even if it would mean replacing the whole roof. With the profit margins pretty tight in the roofing market, a manufacture cannot afford to have a high percentage of repairs on a system. There have been some suppliers in the past that did not engineer their systems very well and are either struggling or have left the market because of the roof system failure cost put them in this situation. In most cases, the roof system will do a good 10 years beyond the warranty period but in many cases with single plies, they have not been out in the market long enough, even EPDM that has been around for over 30 years, to show their full potential. That is why it is hard to give an exact life of a system. EPDM has established itself as a good weathering material and rigorous testing methods have been development to supply laboratory data defining the key performance factors. Many roofing products like TPO use these same tests to confirm they meet the same key parameters but there is nothing like actual field data to confirm performance. With the warranty, the manufacture is guaranteeing to the owner he will get a roof system that will last at least the length of the warranty if not longer and is probably the best benchmark at this time.

Hope this helps.
Dick