



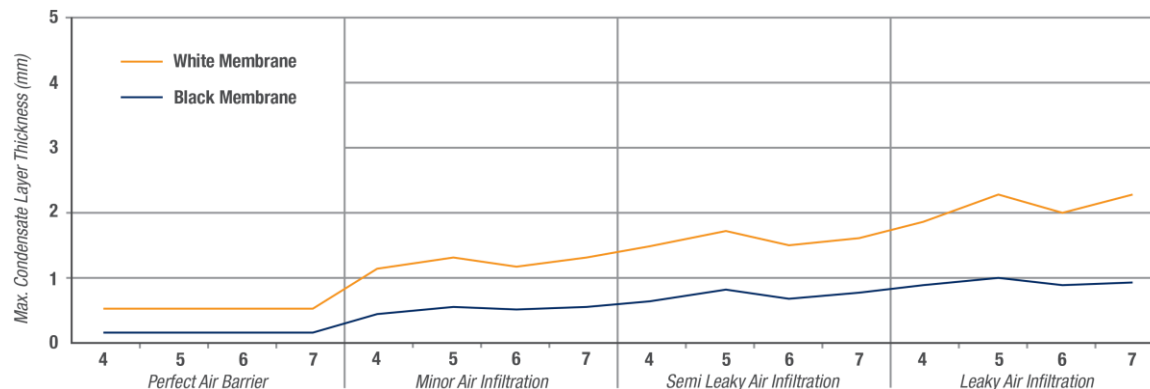
Dear Facility Manager, Building Owner, or Government Official,

Black EPDM membrane provides a safety factor against condensation.

Scientists at Oak Ridge National Laboratory and the Chalmers University of Technology published the results of their experiments in a paper titled, "Condensation Risk of Mechanically Attached Roof Systems in Cold Climate Zones."

Mechanically Fastened membranes are popular over steel decks and since steel decks are not sealed they allow air from the interior of the building to infiltrate the roofing system. Their testing evaluated the impact of several variables on the propensity to accumulate moisture within the roofing system from condensation. The main variables in the study were membrane color, humidity levels, climate zone, and air infiltration.

"The results emphasize the importance of solar reflectance at the roof surface. Comparing the maximum condensate layer thickness, dl , in Figure 6 and Figure 7 reveals that **the amount of accumulated moisture is almost doubled in a cool roof construction** compared to a traditional black roof. Further, **a cool roof will accumulate approximately twice as much moisture below the surface membrane as a black surface.**"



Maximum condensate layer thickness with normal indoor moisture supply.

This study indicates that roofing system performance can begin to be compromised when condensation accumulation exceeds 1mm. Black EPDM membrane in a mechanically fastened system is a significant safety factor with regards to minimizing condensation issues. This added safety factor along with the superior UV weathering, hail resistance and reduction in heating costs make Black EPDM a logical choice for heating dominated climates.

Sincerely,

Ronald L. Goodman



Marketing Manager, EPDM Roofing Systems