Tip: Window Film Impact on Fading
Reference: TMT 005 Revision 001

Author: Tint Man
March 29, 2017

A common misconception that I am presented with on an almost daily basis is the misplaced belief that fading is caused 100% by UV Light, when in fact there are multiple factors involved.

The Association of International Metallizer's, Coaters and Laminators (AIMCAL) determined that there are 3 major causes of fading. According to AIMCAL, the causes of fading are 40% UV Light, 25% Heat and 25% Visible Light; the remaining 10% is classified as miscellaneous causes, over which we have no control.
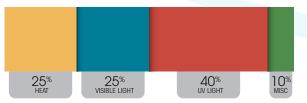
While most window film products block all of the UV Light, 99.9% it is the other causes that we need to understand in order to determine the true affect of window film on fading. I am always asked which film does the best in reducing fading. This question cannot be answered, as nothing is that simple.

In order to explain the impact of various films, I like to draw a picture showing the impact in a more visual way; I feel this helps the customer to understand a very technical question without making them look uninformed. Say, we determine that the best film for our test case is, NS07. Now we need to perform a little math exercise to obtain the true reduction numbers, before we make the drawing.
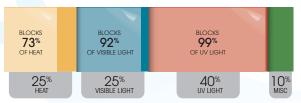
- Visible light = 25% of fading | NS07 blocks 92% of the light
  Our math looks like: .25 x .92 = 23% light blocked, leaving 2%

- Heat = 25% of fading | NS07 blocks 73% of the heat
  Our math looks like: .25 x .73 = 18% heat blocked, leaving 7%

This leaves us with 2% UV light, 7% heat and the original 10% attributed to miscellaneous causes (19%), in other words 100% - 19% = 81% reduction in the causes of fading. So when you are asked which film you recommend, don't do it, instead try your own math exercise, and make your own drawing to better explain the amount of fading reduction for any given single film applied. I find it works better than just spouting numbers, an informed customer is a satisfied customer.

Without Film

After the application of NS07

Best Regards,

THE TINT MAN

Johnson® Window Films