



Tip: Knowing the construction of your basic automotive products
Reference: TMT 007 Revision 001

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The window film industry is a funny beast. We use legacy names and descriptions, even if the terms are slightly antiquated. Currently, we have High Performance, Non-reflective, and the newest terms of Nano-Ceramic, Nano Particle, Nano or just plain ceramic. No matter the name they are all just sandwiches of a different flavor.

High Performance in the past was an easy concept. The addition of nano technology into window film has truly changed the landscape. As the nano products actually now out perform the high performance lines. I guess that's what happens when newer technologies come around, the world changes and so must we.

High Performance Films: Originally titled to explain the significantly higher performance in heat and solar energy rejection, these films all include a layer of metal. That metal is for the most part aluminum so they enjoy the higher rejection properties of the aluminum. These products can be 2 or 3 ply's (layers) dependent upon the color trying to be achieved. Each dyed and metal film in the sandwich causes a different shade and has different properties. Each layer protects the layer under it, from the damaging effects of the sun as each layer has solar properties of its own.

The superior performance of the high performance products, with respect to heat and solar rejection, make them a perfect fit in areas that experience higher than average temperatures, at a reasonable price point.

Non-Reflective Films: As the title says non-reflective, so no metal. The rejection numbers on these products are normally lower than the high performance products. These are available in primarily 2 layers. But, the construction of any non-reflective product is much more than just a conversation with respect to layers. We need to know what each layer truly is. Some suppliers alter the descriptions, in such a way as to hide the truth. We see descriptions of product A: dyed/dyed 2 ply, or perhaps product B: 2 ply dyed. Do these two descriptions mean the same thing? Not to me they don't, but I am old school after all. ;-)

The description of product B: 2 Ply dyed could be a layer of clear film, that either does or does not contain an UV Inhibitor in the film itself. The presence of the inhibitor would help to protect the dyed layer. Without the inhibitor, we will see a fading (or color shift) in the dyed material at a much faster rate as explained in TMT 006 "Color Stable versus Deep Dyed films".

Dyed products are deemed non-conductive and therefore signal friendly. They are an excellent choice for vehicles with radio antennas located in the glass, and are compatible with GPS and other radio signal devices.

For more information on the newest kid on the block: Nano Ceramic see Tint Man Tip # 008.



Best Regards,

THE TINT MAN

