

Tint Man Tips

Tip: High IR Rejecting Products Terminology

Reference: TMT 016 Revision 001

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In today's instant information age, where anyone can become an 'expert' on any topic, it is important to make sure we have the correct information not just "I read it on the internet therefore it must be true".

This is even true with window film, the technical nature of these products allows for certain words to be used interchangeably without any real detailed explanation as to why some manufacturers use one set of words and another uses different terms.

Let's take the term nano – ceramic, it seems to be the current "must have" term when discussing high IR Rejecting products. Somewhere along the way I started to believe that in order to have high IR rejecting properties, they must be produced using nano-ceramic technology. I recently found this not to be true, so I tasked myself to look into the topic in a bit more detail.

It seems that the term Nano-Ceramic is just a type of nano-particle one which just happens to be composed of ceramics. Nano-particles are used in many industries currently everything from fuel cells to medical applications are being developed and produced with a nano component.

There is no evidence to suggest that there is any real difference between window film products made with Nano-Ceramic or Nano-Particle technology. Different particles have different properties, some companies use one and some use another. As long as the IR Rejection numbers are published on a consistent basis across all manufacturers, the choice can then be left to the informed customer and installer.

It is important to note that when comparing IR rejecting properties on any window film that you ensure that the properties are measured consistently. Some distributors or manufacturers use only a narrow portion of the solar spectrum, allowing them to report better numbers than other companies that report across the complete spectrum. The correct way to report these numbers is in the complete 780 to 2,500 nanometer range. There is that term again – nano. According to the IWFA using a nanometer range of anything other than 780 - 2,500 is misleading to the customer.

Not all high IR Rejection window film is produced with Nano-Ceramic technology. I feel that I absolutely must supply the customer with the correct term, just a quirk in my nature. Not that I always need to be right, I just need to be as informative as possible. Otherwise how can I help my customers know what product would be best for them? Using technical terms and jargon is hard enough for us in the industry.

Nano Particle versus Nano Ceramic really makes no difference. The only thing that matters is that I compare the properties within the same nanometer range. Double checking to make sure I am not comparing apples to oranges.



Johnson Window Films