



Tint Man Tips

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Tip: Why Window Film can not be applied to plastics
Reference: TMT 003 Revision 001

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Plexiglass, polycarbonate and lexan are only a few names of the plastics that are sometimes used to replace traditional glass. These plastics can be found in skylights, sidelights on front doors, storm door panes, and garage door windows. The advantage of these "plastic" materials is that they are more impact-resistant than glass.

Once the plastic is exposed to any heat, it slowly begins to release the chemicals and absorbed moisture that was a part of the original manufacturing. This is referred to as out-gassing; the amounts of the release are small and for the most part go un-noticed. However, if window film is applied it will trap the gasses and thereby, cause bubbles of gas between the plastic and the adhesive. This in very short order becomes unsightly and the customer will demand a redo.

The removal of the window film adhesive, which is now firmly adhered to the plastic, is the real problem. Normal removal would involve the need to scrape the substrate in order to remove the old adhesive. Plastic is quite soft, especially when compared to glass, we know it takes a diamond to scratch glass. You can not use a blade of any kind, to remove the left behind adhesive; even the most careful application of any scraper or blade will cause small scratches to the plastic. Should you try to use a chemical, you run the risk of crazing, cracking or permeation loss on the substrate.

I admit I have heard in my time in the industry that there are films out there, which are recommended for plastic applications, you just need to do a bit of research to find the current ones. It seems these films have some kind of vinyl or static cling that is made to be replaced and therefore is not firmly adhered to the plastic, like normal window film would be on glass.

Best Regards,

THE TINT MAN



Johnson Window Films