



# Tint Man Tips

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**Tip: Dangers of interior window film on laminated glass**  
**Reference: TMT 002 Revision 002**

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Laminated glass's primary purpose is to reduce one of glass's most basic characteristics, which is to shatter during impact. Laminated glass consists of two panes of glass, "fused" together with a bonding agent, thereby fusing the panes in order to reduce shattering.

Solar control products should not be installed on the interior of laminated glass. One of the primary reasons to install window film is its superior heat rejection. This high heat rejection is the result of reflected and absorbed energy. Reflection will cause the solar heat having once passed through the glazing system to be re-radiated back through the same glass causing the two panes of glass to experience additional amounts of heat. The absorption part happens on the inside layer of glass causing higher heat build up on that layer.

The exterior pane is more easily cooled by the weather, including wind. The interior pane is trapped between the bonding agent and the window film, causing it to retain more of the heat. The interior pane gets hotter and will expand, while the exterior pane will not, causing a higher risk of glass breakage.

Another thing, to know is that laminated glass by its very nature can not be cut to size easily. This often results in the edges not being polished, and can result in rough edges hidden behind the frame. Bad edges weaken the break strength and cause added complications when the glass is under thermal stress or high levels of solar absorption.

I admit that many window film companies will tell you that as long as the solar absorption rating of the window film is below 50% an interior application is safe. Personally, I would not risk it. No installer wants to apply film to laminated glass, and hear from the customer that they have glass breakage.

We recommend that if you have laminated glass, that you only apply a low absorption product recommended and installed externally. SS20EXT and SS35EXT are a great exterior solution for laminated glass. Be sure that you use only products designed for exterior applications, which are identified by the presence of EXT in the part number. Using interior films on the outside will lead to rapid failure.

Best Regards,

***THE TINT MAN***

