Static Cling versus Low Tack Adhesive for Window Applications

Pros and cons of static cling and low tack adhesive when selecting a new window film.

Often times, people are unsure when to choose static cling films vs. a film with low tack adhesive when selecting a window film. Each can be used to produce short term decorative window signage. When and why you would choose one over the other is application dependent. Here’s a little information to use as a reference when selecting the best vinyl decal:

**Static Cling**

“Cling” refers to vinyl decal material that clings to the surface using alternative methods of adhesion. Static cling doesn’t actually use static electricity to adhere to the surface. This decorative window film works due to the highly plasticized thin vinyl. When pressed onto a surface, it reacts like a mini suction cup to ‘like surfaces’, or items with similar cohesive force. Smooth, non-porous surfaces work best for cling, such as windows or glass display cases.

**Cohesive Force:** Cohesive force is the action or property of like molecules sticking together, being mutually attractive.

**Pros:**
- Static cling does not contain any form of adhesive, which can be desirable in certain applications, as it allows the vinyl decal to be reused if cleaned and maintained properly.
- Generally thicker material and therefore easier to handle. (i.e. 8 mil thick vs. 4 mil thick)
- More repositionable
- Can be easily applied and removed by store personnel without chemicals or tools, which could potentially damage glass surfaces.
- Generally lower in price compared to low tack adhesives.

**Cons:**
- Debris build up on the static cling, or on the surface it is being applied to, can affect its ability to ‘stick’
• Short shelf life. Over time, the “suction” will release, and when gone unused for a prolonged period of time, the effect of the plasticizers relax and can render the material useless. Tekra’s static cling material has a six month shelf life guarantee.
• Cling does not perform as well in cold temperatures, up against condensation or in high humidity environments, therefore products placed in car windows (think oil change stickers and parking passes) or retail freezer doors could ‘droop’ over time due to climate exposure.
• Static cling is an ‘indoor only’ substrate.
• Inks will affect the ability for the window decal to cling to a surface, so this needs to be considered when deciding the graphics and if they need to reverse print their image.
• Minimal surfaces have a similar cohesive force, which means there are limited surfaces that ‘cling’ will adhere to.

Low Tack Adhesive (a.k.a. Ultra Removable Adhesives)
Some companies will still refer to low tack adhesives as “clings”. These materials use pressure sensitive adhesives that bond to the surface, which makes them more versatile.

Pros:
• Easier to coat and print
• Easier to die cut
• These window decals are more versatile when adhering to various surfaces.
• Better withstands environmental conditions up to the specific adhesive specifications.
• Low tack adhesives have a better bond than a static cling to all surfaces it can be applied to.
• Longer shelf life

Cons:
• More difficult to handle due to typically thinner gauges and ability to ‘stick to itself’.
• Potentially less respositionable than a static cling.
• Generally higher in price compared to static clings.
• Cannot be re-used or re-stuck once removed.
• A low tack adhesive, exposed to environmental factors and/or time will allow the adhesive bond to grow and become permanent. Low tack adhesives are not meant for long-term use.

There are pluses and minuses to both products. It is important to understand what the differences are and what the application is when choosing a film. Being able to answer the following questions may help you make the right choice:
• What surfaces will it need to stick to?
• How long does it need to stick to that surface?
• Who will be applying these materials?
• What is the environment that this material will be in?

When in doubt, always call Tekra to discuss the offerings available for both products to help you make the right selection for your application.