

# GreenStar Wall Decal Vinyl Usage & Application

**Wall graphics do not perform well when applied to zero VOC latex paint coatings.**

## **What is VOC free paint?**

The term VOC is an acronym for Volatile Organic Compounds. These compounds are called volatile because they are chemically unstable and degrade over time. VOCs are also found in a great many things including solvent based inks, plastics, and adhesives. The out-gassing of these compounds in newly manufactured vehicles produces what is commonly known as “that new car smell.” VOCs are also found in interior and exterior house paint. As the paint dries, these compounds are given off in the fumes. This curing process generally takes three or four weeks. This is why freshly painted walls cannot be decorated with vinyl until they’re completely cured. The VOCs get trapped under the vinyl and begin to chemically interact with the adhesive, causing it to fail, or become permanently fused to the wall.

Given this problem, one might think that VOC free paint would be an improvement designed to aid graphics installation. Not quite. The reason for VOC free paints is concern over the long term health effects of exposure to these fumes as they outgas. VOC free or “zero VOC” paint is being marketed as a healthier and more environmentally friendly alternative to paints that contain formaldehyde and other volatile organic compounds.

## **For best usage results of GreenStar Wall Vinyl, follow these guidelines:**

Wall graphics must be applied to a clean, smooth, dry and non-porous interior surface. Freshly applied paint should be allowed to cure for a minimum of three full weeks before wall graphic application. Finished graphics shipped to customers should be removed from packaging and stored flat at room temperature for 24 hours before application.

## **For best usage results of GreenStar Wall Vinyl, follow these guidelines:**

When preparing a wall for a graphic, keep in mind that not all surfaces are suitable for vinyl film application. Wall graphics can be applied successfully only to surfaces that are clean, dry, smooth and non-porous. Any of the following conditions can cause poor adhesion or product failure:

- Highly textured paint
- Poor initial paint bond
- Poorly painted wall edges
- Patched areas that have not been primed before painting
- Moisture behind the drywall, which can cause the drywall paper to release. Walls with cooling systems or water pipes behind them may be prone to condensation.
- High humidity areas including (but not limited to) garages, entryways, and bathrooms
- Dust, dirt, or other contaminants on the wall
- Wallpaper or other wall coverings
- Cuts made to the graphic during the installation process may cause curling or lifting.
- Freshly painted walls that have not had ample time to cure. Wall graphics tend to bubble and release from the wall while paint is in the curing process.

## **Painted Surfaces:**

When applying graphics to heavily tinted paints that have more than 1 oz. of tint per gallon, keep in mind that the surfactants (AKA TiO<sub>2</sub> or Titanium Dioxide) and colorants that make up darker paint colors often take longer to outgas. Avoid matte or flat finish latex paints and paints that use anti-graffiti agents. When applying the paint, use a 3/8" nap roller cover to reduce stippling.

Once the paint has had ample time to cure, it's important to clean the surface immediately before applying the film. Dust and other contaminants can collect quickly on the wall and prevent the film from adhering properly. Wipe down the wall with a dry tack cloth or a lint-free microfiber cloth to remove any dust, paying attention to the wall's edges and corners.

## **Printing and Laminating**

- If printing on film, use the correct color profiles. The profile will automatically set the ink levels, heater settings, resolution, and pass count necessary to help ensure quality printing.
- Before trimming, plotting, or laminating, it is very important that the graphic sit for 48 hours or more to allow the graphic to outgas. Prints heavy in ink coverage need to outgas for approximately 72 hours. This is crucial to ensure your wall graphics do not curl around the edges or lose adhesion altogether. Keep in mind that because of widely varying production shop environments, curing times may vary.
- Be diligent and always test the finished product internally to ensure adequate adhesion before using or distributing the graphic to the end-user. Make certain that you or your customer apply a test piece before installing the actual graphic. This will help ensure compatibility between the graphic and the wall.
- For best results on contour-cut wall graphics, utilize vinyl, and leave a 1/8" to 1/4" unprinted white border all the way around the graphic to minimize potential edge curl. Lamination is not required with this product, but can be used for additional protection where needed.
- When choosing a laminate it's important to know what the lighting conditions are in the room. If there is an abundance of lighting, you may want to choose a matte laminate to reduce reflections. For short-term removable mural applications, utilize.