

Preparation for Wall Graphics

The following cleaning and surface preparation conditions must be followed. They are general recommendations for painted surfaces. It is essential that the paint manufacturer's instructions for complete surface preparation and adequate drying/curing time are followed prior to film application.

Types of Paint

- Flat (or matte) paint provides a non-reflective finish and has a porous texture that can hold dirt and make cleaning difficult. Due to its porous texture, it may be harder to adhere film to a flat painted surface. In turn, this may cause premature failure of the graphic.
- Satin or low luster paint is more lustrous than flat paint. While they are not as porous as a flat finish, the matting agents used in these paints can negatively affect adhesion of the graphic.
- Semi-gloss paint provides a smooth, slightly shiny finish and is a suitable surface for graphic application.
- Gloss paint provides a smooth, shiny finish. A gloss painted surface is also a suitable surface for graphic application.

Paint Surfaces to Avoid

- Avoid LOW-VOC and NO-VOC paints.
- Avoid using a flat (or matte) finish, as its matting agents can reduce film adhesion and may cause graphics to fail.
- Avoid heavily textured paint, as the texture allows film to adhere to "high spots" only. This can significantly reduce film adhesion and may cause graphics to fail.
- Avoid latex paint on wooden substrates.
- Avoid oil alkyd primers and enamels, as they dry slowly and will adversely affect film adhesion.

Paint Surfaces to Avoid

• If applying film to a newly painted surface, follow the drying/curing instructions provided by the paint manufacturer.

- Air-drying paints should be allowed to dwell at near room temperature and in regular humidity conditions for at least 14 days prior to film application. Refer to the paint manufacturer's instructions for actual curing time.
- Chalked and weathered paint surfaces must be refurbished.
- Primer and paint should be compatible. Check with paint manufacturer for details.
- Avoid oil alkyd primers and enamels, as they dry slowly and will adversely affect film adhesion.

Inspection and Repair

 Repair any wall damage and return walls to "like new" condition. Walls that are not properly repaired may cause poor graphic adhesion or further damage during graphic removal. Examples of unsound walls include those with cracks, loose paint, and damaged or inconsistent surfaces.

The following are examples of walls in need of repair

- Holes or incomplete patches Patch, prime and paint.
- Loose wallboard joints Repair seams.
- **Overly textured paint** Smooth surface with sandpaper or scouring pad, then prime and paint.
- Chipped, loose, flaking, or peeling paint Scrape away loose paint, then prime and paint.
- Moisture behind wallboard This may cause the wallboard paper to release. Pay special attention to areas where condensation may occur, including walls around cooling units, overhead windows, or water pipes that could drip on the graphic.



- Dust, dirt or vehicle exhaust contamination Clean walls of dust, dirt, grease, and other contaminants before applying the graphic.
- Wallpaper not securely bonded in all areas Do not apply graphics over wallpaper.

Cleaning the Wall Prior to Painting

- Clean the wall prior to priming and painting.
- For most interior painted drywall surfaces, simply wipe down the substrate with a clean, lint-free towel. Some surfaces may require extra cleaning.
 If the surface is greasy, use a solution of trisodium phosphate (TSP) that has been mixed according to the manufacturer's directions. TSP is available for purchase at most hardware stores.
- For surfaces other than painted drywall, remove all dirt and grime with warm water and a commercial synthetic detergent solution. Avoid detergents with lotions, waxes, creams, or oils.
- For smooth, poured concrete walls or concrete block walls (interior only), remove grease or exhaust contaminants by power washing or hand washing with a stiff brush and detergent. Rinse with clean water. Dry the surface with a clean, lint-free towel. Allow the surface to dry for at least 24 hours before applying the graphic.
- Smooth, primed, painted, and cured wallboard with little to no surface variation is recommended for successful graphic application and adhesion.
- Textured walls can be smoothed down with sandpaper or a scouring pad. After sanding, the wall must be properly primed, painted and cured before graphics can be installed.

Preparing Walls for Paint

- For a smooth surface, apply paint with a short nap paint roller (approximately 5mm), sponge roller or spray unit.
- Prime the wall with a primer that is compatible with the paint. Apply two coats of primer, if necessary,

to ensure good coverage. Refer to the paint manufacturer's instructions for recommended dwell time between coats.

• Paint the wall with a quality, semi-gloss or gloss paint.

NOTE: *Do not use flat (or matte) paint or paint with silicone, graffiti-resistant or texturing additives.*

- Allow at least 14 days for the final coat of paint to dry before applying the graphic. Reference the paint manufacturer's instructions for actual curing time.
- Do not apply the graphic if the wall does not have an excellent bond between paint and substrate.

NOTE: If paint is not allowed to properly cure, out-gassing may occur. Out-gassing - when certain gases are released - takes place during the drying/ curing process. If a graphic is applied before paint has sufficiently cured, these gases will become trapped and may result in lifting, air bubbles or premature graphic failure.

NOTE: Since the products are designed to work together, we recommend using primer and paint from the same manufacturer. The goal is to achieve a strong bond between the substrate, primer and paint. We doe not endorse any one paint manufacturer and recommend testing the painted surface before graphic application.

Application Temperatures

- Temperature plays an important role in how well vinyl sticks to a substrate. Higher temperatures will make the film soft and more pliable. However, higher temperatures also make the adhesive more aggressive, which can lead to pre-tack and increased stretching if film repositioning is necessary. Lower temperatures will make the film more rigid and reduce the tack of the adhesive.
- Ambient temperature is the temperature of the environment where the application is occurring.
- Surface temperature is the temperature of the surface where the graphic is being applied.

Copyright $\ensuremath{\textcircled{C}}$ ARC Document Solutions, LLC 2019.

ARC, ARC Document Solutions and the ARC logo are registered trademarks of ARC Document Solutions, LLC in the U.S. and/or other countries.