

## Wall Graphic Installation & Removal Instructions

Print Media

The following are recommended instructions for the application and removal of pressure sensitive wall graphic films to ensure that the products perform as designed. Successful application will result in a good bond between the adhesive and substrate. **Due to the wide variety of substrates, sealants, paints, and printing methods, the end-user/applicator is responsible for testing the products in their final format for the intended surface.**

### Read the following instructions prior to application.

Prior to application or lamination, prints must be sufficiently dried in order to prevent any negative effects on film or adhesion properties. In general, 24 hours (full solvent) or 48 hours (eco-/mild solvent) of dry time should be sufficient. Material may need up to 72 hours to dry if a lot of ink is used.

When drying, the material should not be tightly wound on a core as the solvents may be unable to evaporate. The material should dry while loosely wound on a core or stacked as sheets in racks. Properly dried images are a must in order to benefit from each film's specific properties.

### SURFACE PREPARATION



Proper cleaning and preparation of the substrate prior to application is critical to the success of the graphic. It is recommended that walls have little or no surface variation and a smooth texture that, if necessary, has been properly primed, painted and cured. **It is impossible to identify proper surface preparations for every wall finish/type or paint formulation as these constantly change.**

### NOTE:

***The end-user/applicator is responsible for ensuring all painted substrates have been processed and cured according to the paint manufacturer's specifications. Failure to follow these specifications may cause loss of adhesion, and therefore, reduce the graphic's durability and performance. This may lead to graphic failure and/or removal problems.***

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 using a flat (or matte) finish, as its matting agents can reduce film adhesion and may cause graphics to fail.
- Avoid paint with migratory agents, such as chlorinated waxes and silicones, as they may cause adhesion failure.

## Wall Graphic Installation & Removal Instructions

Print Media

- 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.
- Avoid low-VOC paints.
- Do not apply to wallpaper.

### Precautions to Consider

- 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.

### NOTE:

***It may take months for some paints to fully cure.***

- Chalked and weathered paint surfaces must be refurbished.
- Primer and paint should be compatible. Check with paint manufacturer for details.

### NOTE:

***Always test adhesion and paint/adhesive compatibility prior to use. To test adhesion, apply a small strip of film in an inconspicuous area and let dwell for 2-3 days. Before applying the test strip, prepare the wall according to the instructions below. After a 2-3 day dwell period, the film should be moderately difficult to remove without causing damage to the wall surface.***

### Inspecting, Cleaning and Preparing the Substrate

The surface to which wall graphic films are applied must be completely smooth, clean and dry prior to final preparation. Before applying graphics, ensure the substrate is both clean and in good condition. Any contaminants (e.g., dust, dirt and grease) or defects (e.g., loose paint) on the substrate may cause loss of adhesion, and therefore, reduce the graphic’s durability and performance.

### Inspection / 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 the graphic over wallpaper.
- Contamination by other products that were not properly cleaned from the wall.
- Cuts made to the graphic that penetrated both the film and substrate during installation.

### Cleaning



## Wall Graphic Installation & Removal Instructions

Print Media

- 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.
- After the surface dries, immediately brush it to remove any dust or dirt that may have collected during the drying period.
  - A heavy surface texture will cause the adhesive to only make contact with the high points of the wall, which is not sufficient for proper application.
  - In some cases, cast film with an overlaminates may be used on these surfaces. Use a heat gun and rivet brush to work the film into crevasses.
  - 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.

### Preparation / Painting

- 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 texturizing 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, outgassing may occur. Outgassing - when certain gases are released - takes place during the drying/curing process. If a graphic is applied before paint has sufficiently cured, these gasses will become trapped and may result in lifting, air bubbles or premature graphic failure.**

### NOTE:

**Since the products are designed to work together, Drytac recommends using primer and paint from the same manufacturer. The goal is to achieve a strong bond between the substrate, primer and paint. Drytac does not endorse any one paint manufacturer and recommends testing the painted surface before graphic application.**

## APPLICATION

### Temperature

Temperature plays an important role in how well vinyl sticks to a substrate. Follow the guidelines for minimum and maximum application temperatures and required service conditions before and after application. This information can be found on the TDS for each film.

Monitor both the ambient and surface temperature as both can affect application. 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.

# Wall Graphic Installation & Removal Instructions

Print Media

- Ambient Temperature - Temperature of environment (i.e., the room where the application is occurring)
- Surface Temperature - Temperature of wall (i.e., the surface where the graphic is being applied)

## Application Tools

- Lint-free cleaning cloths – for substrate cleaning
- Masking tape – for positioning
- Tape measure – for positioning
- Air release tool – for removing air bubbles
- Marking pencil – for marking position of the graphic
- Squeegee – for applying the graphic
- Rivet brush – for working film into textured surfaces
- Razor knife (with break-off blades) – for trimming away excess vinyl
- Heat gun – for heating vinyl during difficult applications
- Surface Temperature Thermometer / IR Thermometer – for checking surface and ambient temperature

## Application Guidelines

The surface and texture of the wall directly impacts graphic adhesion and removal. Identify the film to be used for graphic installation and ensure that it is appropriate for the intended application.

## Application Considerations

- Before installing the graphic, unroll the film and allow it to lay flat and relax. Wait for at least 1 hour for the film to reach room temperature.
- Pre-mask / application tape is not recommended for wall graphic applications.
- Before starting the application process, use masking tape to temporarily tape up the panels and ensure graphic size and position.
- When handling the graphic, hold the film as far into the graphic as possible without wrinkling the film. This will avoid the transfer of dirt and oil from fingers to the edges of the graphic, which could result in edges peeling or lifting and eventual adhesion problems.
- Pull the liner from the film with two hands, using care

not to stretch the film.

### NOTE:

**Always remove the liner from the graphic rather than the graphic from the liner.**

- Pull the squeegee or rivet brush across the graphic. Do not push as this will cause the film to stretch.
- Move the squeegee or rivet brush in a straight line, not in an arc.
- Use firm, overlapping strokes.
- Once the graphic is applied, re-squeegee the edges of the graphic to ensure good adhesion. This will reduce the risk of damage or lifting at the edges of the graphic.
  - Trim graphics 1cm from inner and outer wall corners.
  - Work the rivet brush in small circles around the entire outer 7cm of the graphic to finish it.

## Application Method

When applying wall graphics, the “dry application” method must be used. Do not use application fluid or the “wet application” method during installation. Water or application fluid may cause wall damage and premature graphic failure.

## Overlap of Multi-Panel Graphics

When multi-panel graphics are installed, overlap seams are recommended. The overlap should be at least 10mm. Butt seams are not recommended.

## Trimming Requirements

The graphic is susceptible to damage in areas around doors, outside and inside wall corners, and high-traffic areas. To reduce the risk of damage and potential lifting of the graphic, trim the graphic approximately 5mm from the edge. After application and trimming, brush the edges with a rivet brush to ensure good adhesion of the graphic edges.

## REMOVAL

### Removable Adhesive Films

## Wall Graphic Installation & Removal Instructions

Print Media

Removable adhesives (e.g., Drytac's ReTac<sup>®</sup> ultra removable adhesive) are designed for clean, easy film removal. The removability of the film may vary depending on the substrate and how it was prepared.

### **Permanent Adhesive Films**

Permanent adhesives are designed for optimum adhesion to a variety of substrates. They are generally difficult to remove and may cause damage to some wall surfaces. Films with permanent adhesives are good for textured wall surfaces.

### **Graphic Removal**

**Due to the wide variety of surface types and finishes, including low-VOC paints, Drytac does not warrant damage to interior wall surfaces caused by film removal, even if a removable adhesive is used.** Removing a graphic can cause wall damage. This is especially true if a permanent adhesive is used. Due to the variety of wall surfaces, Drytac cannot guarantee damage-free removal. The amount of damage can be reduced or eliminated by following the inspection, cleaning and preparation guidelines provided in this document.

### **Removal Considerations**

- Since there is less adhesive contact, it is easier to remove graphics from a textured surface than a smooth surface.
- Not all films are designed to be removable, and no Drytac film is warranted for removal when directly applied to interior walls.
- Clean removal from a painted wallboard may be not be possible even when a removable film is used. If the bond of the film to the paint is greater than the bond of the paint to the wallboard, then paint and possibly the paper covering on the wallboard could be damaged during graphic removal.
- Moisture that has penetrated wallboard may destroy the painted surface when graphics are removed.

### **Removal Tips**

- Start at the top of the graphic and pull away from the

wall at a 120-180° angle.

- Do not use chemicals for interior wall graphic removal.
- If the substrate is not wallboard, heat may be used.
- If the substrate appears stained after graphic removal, it may be caused by poor quality paint, exposure to heat and light, migrating particles in the paint, or adhesive residue.

### **IMPORTANT NOTE:**

***This document provides information on how to apply pressure sensitive wall graphic films. These instructions are designed to help ensure success across a broad range of applications. Depending on the size and complexity of the application, a specific level of expertise may be required. A more experienced applicator/installer may be needed for larger and more complicated graphics whereas a less experienced applicator/installer may be better suited for applying smaller poster-sized graphics. Large multi-panel graphics should be left to an experienced applicator/installer. Professional applicators/installers may be hired to ensure proper application of finished graphics. Consider hiring a professional for more complex installations.***

### **IMPORTANT NOTE:**

The technical information, recommendations and other statements contained in this document are based upon testing and experience Drytac believes to be reliable, but the accuracy and or completeness is not guaranteed. Drytac recommends a small test be performed to determine suitability beforehand. This document does not constitute a warranty of any kind.