

# **INSTALLATION GUIDE**

**Interior Walls** 

Technical Services December 2019



Product Lines: DPF 4200 Matte/Canvas, DPF 4300, DPF 206

# Wall Compositions and Definitions

**Interior Wall:** A wall located inside an enclosed building, with mild to no surface variation or temperature variations. Some typical surfaces vinyl can be applied to:

- Painted or primed drywall with smooth to mild texture finish
- Aluminum composite material (ACM)
- Powdered or enamel coated metal
- Acrylic or melamine coated wood
- Glass
- Ceramic tiles\*

For recommended paints and primers: Read Tip 33 bit.ly/2PPOmcR

**Existing Graphics**: preexisting vinyl graphics that will become the substrate for another vinyl graphic.

**Barricade**: wall/surface made out of bare wood, sometimes painted wood, typically with light texture (ie: wooden walls used inside malls when a new store being is built).

#### Photo Examples of Interior Wall Textures



*\*vinyl will not adhere to grout lines* 



# Photo Examples of Interior Wall Textures

Painted Drywall Mild Unsmooth Texture

Products Recommended: DPF 4200 Matte/Canvas, DPF 4300, DPF 206



#### Painted Drywall Moderate Unsmooth Texture

*Products Recommended: DPF 4200 Matte/Canvas* 





## **Tools Needed**

APPLICATION TOOLS	USES
Squeegee with Felt Tip	For applying graphics to a smooth wall
Felt Squeegee Block	
Bill Collector	
RollePro	For applying graphics to a textured wall
Rivet Brush	
Heat Gun	Used to post heat edges and seams
GENERAL TOOLS	USES
Masking Tape	Positioning the graphic
Level/Laser Level	Alignment of graphic
9mm snap-off blades	Trimming excess material
IR Thermometer	Checking surface temperature
Moisture Meter	Checking surface moisture level
Marking Pencil	Marking positions of graphics
Measuring Tape	Positioning and alignment
Plumb Bob	Vertical alignment
Spring Gauge	Bond strength testing
Rigid Scraper	To scrape off 3D contaminants
Microfiber Towels	For cleaning the substrate or vinyl



#### Preparation

RECOMMENDED PRACTICES	PURPOSE
<i>1. Test wall for vinyl compatibility</i> Recommended to test 3 materials simultaneously over a 24 hour period.	To ensure that you have the appropriate material for the job. Read Tip #39 for how to test vinyl compatibility bit.ly/2EkJIfI Watch Video Testing an Interior Wall for Media Compatibility bit.ly/2YSjyKE
2. Dust off the wall Remove any loose debris or dust using a broom.	This removes any possible loose particles on the wall which would negatively affect the adhesion of the graphic.
<ul> <li>3. Clean wall with 35%-75% alcohol solution         Wipe down the wall thoroughly with a lint free cloth dampened         with the solution. Allow surface to dry for 24hours after cleaning.     </li> <li>*CAUTION: A higher concentration of alcohol may an have adverse     reaction with certain surface coatings/paints.</li> </ul>	To remove any oils or residues that could cause the wrap to fai and to ensure maximal adhesion contact with wall surface.
<b>4. Allow new paint to dry for 30 days before application</b> Ensure that the paint on the wall has been left to dry for at least 30 days.	This allows the paint to fully adhere to the wall and to give the paint the best chance of remaining intact during vinyl removal.
5. Check for moisture in the wall Make sure the wall is dry or take into account any possible sources of moisture nearby such as AC units, water pipes, water sources, etc.	To prevent premature graphic failure due to moisture and to see if primer is needed.
6. Inspect and repair any damage to the surface If possible, patch holes, sand surfaces, and remove loose surface contaminants.	To create the smoothest surface possible and increase the flat surface area for the adhesive to bond.
7. Allow prints to outgas for 48hrs or more (all print systems) If kept in rolls, recommended to loosely unwind the rolls during the drying period.	To allow the solvents in the ink to fully cure and to prevent any lamination, adhesion, or removal.



#### Preparation

RECOMMENDED PRACTICES	PURPOSE
<b>8. Prepare printed material for overlaps/paneling/tiling</b> This is done in the designing of the graphics and the RIP software.	For seamless overlaps and best image quality, design prints to accommodate for overlaps. Highly recommended 1⁄42" – 1" overlap of material.
Clearly number panels for installation organization and to ensure proper install order.	Watch Video: Tiling for Large Wall Graphics <a href="https://bit.ly/2Ptkx11">bit.ly/2Ptkx11</a>
<b>9. Use Primer</b> This is optional, and should only be used in permanent applications where damage to the surface during removal is not a concern.	To improve vinyl adhesion on difficult, hard-to-stick surfaces.

PRACTICES TO AVOID	PURPOSE
AVOID applying vinyl to certain paints that may hinder the adhesion like anti-graffiti, easy to clean, etc.	The nature of these paints do not allow adhesive to properly bond with the surface.
AVOID use of vinyl on highly textured walls	Due to the nature of highly textured walls, premature failure of vinyl films may occur.



#### Installation

RECOMMENDED PRACTICES	PURPOSE
<ul> <li>1. Anchoring</li> <li>Top Hinge: Use a piece of tape to secure the top of the graphic to the top of the wall. Lift the vinyl from the wall and remove several inches of the release liner, exposing the adhesive. Use one hand to keep the graphic taut and with the other apply the graphic to the wall. Repeat removing the liner and applying down the wall.</li> <li>Center Hinge: Use masking tape to position the graphic onto the wall and apply a piece of tape down the vertical center of the graphic, ensure to keep the graphic smooth and taut throughout. Starting on one side, remove the liner from the graphic. Hold the graphic tight with one hand and apply with the other hand moving outwards from the center of the graphic.</li> </ul>	<b>Top Hinge:</b> works best for panels that are much taller than wide. <b>Center Hinge:</b> works best for panels that are much wider than tall.
<i>2. Panel Alignment</i> Utilize available alignment tools such as masking tape, pencil, plumb bob, or laser level to line up the first panel as straight as possible.	Every panel after the first panel will follow the first panel alignment, thus starting off aligned as possible is crucial. Watch Video: Installing Large Interior Wall Graphics bit.ly/38JDeVM
<i>3. Repositioning</i> If repositioning is needed, perform as soon as possible but take care as to not pick the film up too quickly.	Repositioning as soon as possible prevents the film from adhering to the wall and makes it easier to move adjust the vinyl.
<ul> <li>4. Tool Selection         Smooth walls:             Use a squeegee with a leather buffer/felt tip or a bill collector.         </li> <li>Textured walls:         RollePro or any rolling vinyl application tool with heat source recommended for textured walls.     </li> </ul>	In general, adhesive contact to the wall is crucial to a successful installation. Therefore, the proper tool selection is critical to obtain optimal adhesive contact.
<b>5. Application Tape Removal</b> Ensure that the graphic has built sufficient adhesion before removing the application tape.	This allows the graphic adhesive bond to build and prevent lifting of the graphic when removing the application tape.
6. Hold farther into the graphic when touching the adhesive side Rather than grabbing the edges of the vinyl, grab farther into the vinyl to protect the edges from contamination which are vulnerable to premature failure.	This will prevent oil from fingers or dirt from collecting at the edges of the graphic causing edge or corner lifting.



PRACTICES TO AVOID	PURPOSE
AVOID using butt seams to panel graphics during installation	Vinyl films tend to shrink, causing the wall to be exposed overtime and would ruin the seamless look of a paneled graphic.
DO NOT wet apply or use application fluid to install	Water may damage the wall and will cause the graphic to fail prematurely.
AVOID installing on dusty substrates	Loose particles on the substrate will affect the adhesion of the graphic and may cause premature failure.
<b>AVOID stretching the graphic</b> Properly align the graphic before applying as to avoid the need to stretch the graphic to fit alignment.	This is to prevent placing any tension on the graphic which could potentially cause the graphic to pop back or lift due stretching during installation.



# Finishing/Post-Installation

RECOMMENDED PRACTICES	PURPOSE
<ol> <li>Post-heat edges and overlaps         Temp range: 130-160F         Use a heat source in tandem with a rolling vinyl application tool or wrap glove, to post-heat edges and overlaps.     </li> </ol>	This helps the adhesive reach its ultimate bond quicker and ensures the graphic does not begin lifting at its weakest points.
2. Inspect and post heat if necessary	To double check the application and ensure that all areas of the graphic are applied properly.

# Maintenance

RECOMMENDED PRACTICES	PURPOSE
<b>1. Regularly Wash and Dust</b> Use soapy water and/or diluted cleaning solutions to remove residues and disinfect the vinyl. Use a dusting broom to remove any loose particles.	To keep the wall wrap looking its best for the life of the installation. Watch Video: Cleaning Large Wall Graphics <u>bit.ly/35tbAu8</u>

#### Removal

RECOMMENDED PRACTICES	PURPOSE
1. Apply heat to the vinyl no higher than 180°F (80°C) for the easiest removal, except for applications on drywall	Heating the graphic loosens the adhesive bond which makes removing the graphic while hot easier.
<i>2. Starting from the top of the graphics, pull downward no more than 60 degrees from the wall</i>	This angle is best practice to make removal easier.

PRACTICES TO AVOID	PURPOSE
<b>DO NOT snap up vinyl</b> Remove the vinyl slowly and at a controlled speed	Removing vinyl quickly may damage the surface of the wall.