How to create retail decoration using self-adhesive vinyl with HP Latex 700 and HP Latex 800 Printer Series

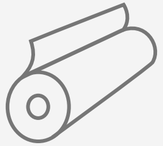
This document will explain how to create retail decoration and print on different types of self-adhesive vinyl, including post-print finishing.

A deep dive training about HP Latex 700/800 Printer series - **Retail decoration** is available in the Learn App from your PrintOS account. See more details in this article.

How to create retail decoration using self-adhesive vinyl

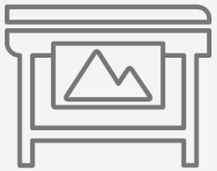
What you will need

- Before printing
  - What you will need
  - Preparing the substrate
  - Preparing the job
- Printing
  - The printing process
- After printing
  - Post-print finishing
  - Installation



Self-adhesive vinyl or PVC-free films

SW tools (RIP, edition, etc.)



Printer

Cutting device

Film laminate (optional)

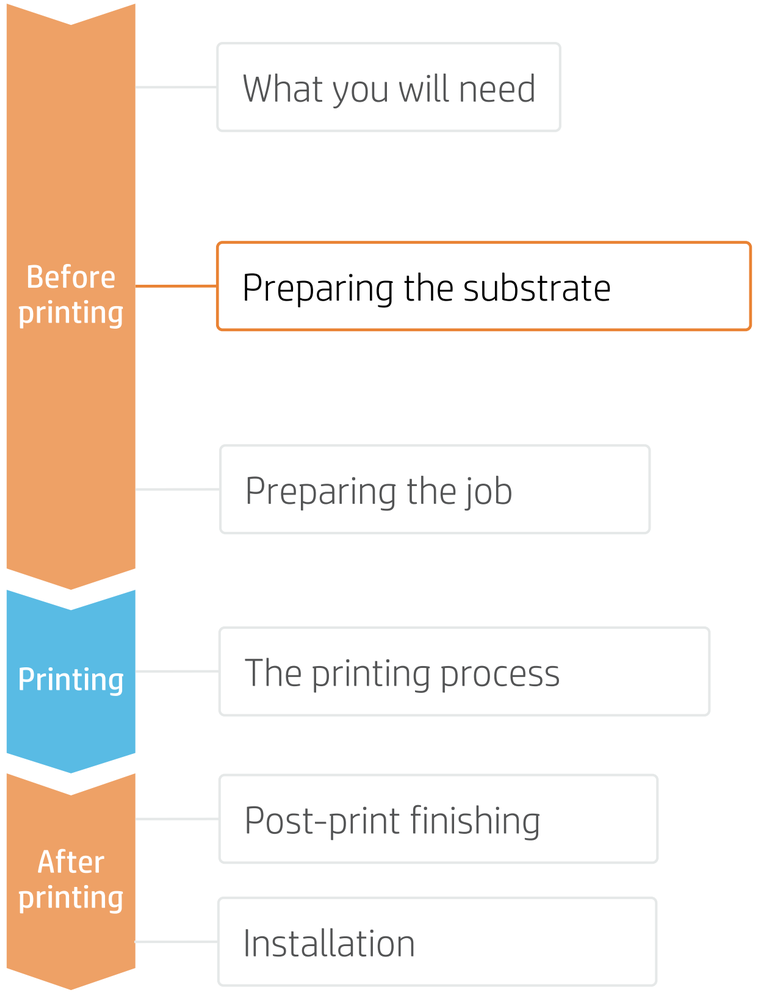
Film laminator (optional)

Plastic Squeegee with low friction sleeve

Water (optional)

How to create retail decoration using self-adhesive vinyl

Preparing the substrate



1. Types of self-adhesive vinyls (SAV) for retail decoration

By raw material

- Calendered monomeric
- Calendered polymeric
- PVC-free substrates

Surface finish

- Gloss
- Matte

By adhesive type

- Permanent
- Removable
- Repositionable
- Transparent or grey (opaque)

2. Usage

- Normally, graphics will be **short-term** (promotions and temporary events) and applied on **flat surfaces**.
- For **mid and long-term** usage or **high transit areas**, it is recommended to protect the graphics with **film lamination**.

NOTE: For **floor graphics** we recommend using SAVs indicated for this purpose. Special adhesives are used for better adherence to the floor. Special **anti-slippage laminates** are also recommended.

3. Substrate presets

- Check that the material you are going to use has its own substrate preset:
  a) On the **web**, in the HP PrintOS Media Locator: www.printos.com/ml/#/medialocator
  b) On the printer's **front panel** online search (Substrate Library)
  c) On the **web**, from the substrate vendor's or RIP vendor's websites
- Download and install.

NOTE: If you cannot find the substrate presets, you can always use the **generic presets for self-adhesive vinyls** already installed in your printer. If you need to fine-tune some settings, clone the existing generic preset and modify it, or create a new one with the **Add new substrate** function on the front panel.

TIP: Learn how to customize your profile by enrolling on the available training HP Latex 700/800 Printer series – Advanced main tasks and maintenance routines on the Learn with HP website.

How to create retail decoration using self-adhesive vinyl

Preparing the job

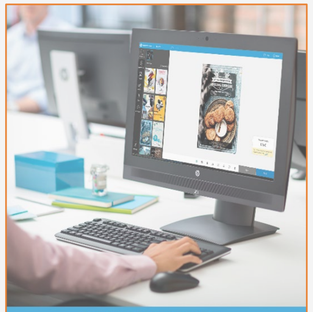
1. Software for designing and editing

Tools such as HP Application Center (HP Signage Suite apps), Adobe Illustrator, Photoshop, and InDesign help you design and edit jobs and adapt them to your needs.

Make your decision based on your needs

A. HP Signage Suite

HP Signage Suite is part of HP Applications center, a complete package of tools to boost your business



Easily design with HP Applications Center

How does it work?

1. **Join the platform**
   Simple, easy sign-in with your HP printer serial number
2. **Choose a web app**
   Select the standalone decorative web apps you want to produce with and allow your customers to create and visualize the design with a simulation for each unique environment.
3. **Manage orders**
   Manage production efficiently with automatic, reliable, print-ready PDF generation, as well as customer, order, and content management tools.

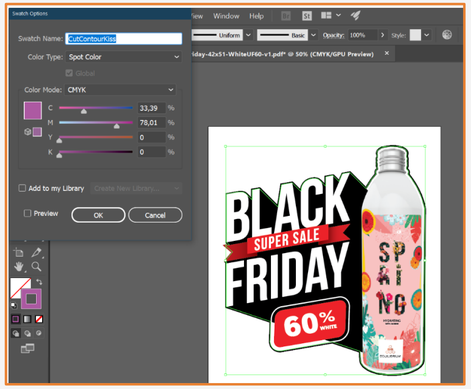
EXPAND YOUR KNOWLEDGE: For further detailed information regarding HP Applications center and how to log in for the first time, get the available **webinar** in this link !

2. Job edition

One of the most common editing attributes is the **cutting path definition**.

1. **Draw the cutting path:** it can follow the graphic's silhouette or can be a poster-like cut.
2. **Create a new color swath:** define it as spot color and name it (e.g. CutContour, CutContourKiss, etc.).
3. **Assign** the color swath for cutting to the cutting path.

NOTE: Image modification (size, bleed, copies, etc.) can be set either in the editing software or in the RIP.



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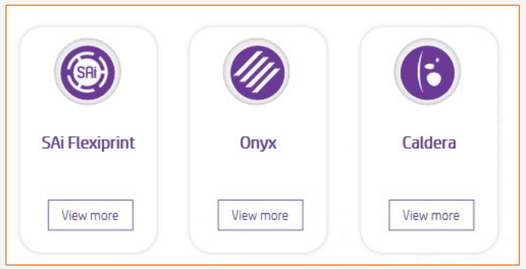
3. RIP processes

ONYX, CALDERA, and SAi RIPs have been certified for HP Latex 700/800 series printers.

All these rips have specific options for job editing.

Make your decision based on your needs



NOTE: Please refer to the specific trainings on RIPs at the PrintOS Learn App.

A. Substrate & Printmode selection

- Choose the substrate type (Self-adhesive vinyl), then select the specific substrate you have loaded on the printer.
- Next, choose the printmode: normally **6p mode** gives good quality prints with SAV. For higher IQ, choose 8p or 12p printmodes.

B. Image size & tiling

- Modify the image size, if required, to adapt it to the wall or piece of furniture it will be mounted on.
- If tiling, select the number of tiles and the size of the overlapping (normally 25 mm).

C. Finishing: cutting marks & other factors

- In the RIP, select the automatic cutter you will use for cutting your jobs, and configure the cutting marks for that cutter: trim box, placement, and type of barcode.
- The RIP will detect the cutting path thanks to the named Spot Color in your file.
- If graphics are going to be **laminated**, activate the "**optimize for lamination**" option in RIP or select a printmode with overcoat at 0dpp.

NOTE: Each RIP has different ways to set cutting marks. Please refer to the specific RIP manuals.

NOTE: To work with white ink layers, learn how to create it with Illustrator and Photoshop by enrolling on the available training HP Latex 700/800 Printer series - White ink on the Learn with HP website, or refer to the cookbook How to print on white.

Preparing the job

4. Tips for tiling applications

Two critical requirements for tiling applications are the **color consistency** and **length consistency** tile-to-tile.

Contiguous tiles with the same background solid color may show differences in color between the right side of the first tile and the left side of the second tile.

Also, non-uniform dimensional stability of substrates, e.g. specifc banners, can lead to differences in length side-to-side. Also, the dimensions of the print will not be correct when expansion or shrinkage of substrates occurs.

A. Color consistency tile-to-tile

- Ensure that your environmental conditions are suitable for best print quality: RH 40-60%, Temp. 20-25ºC.
- Start printing with substrate already attached to the TUR.
- Choose print modes of **8p or higher**, with the lowest density possible.
- Avoid printing with a **cold printer**; warm it up by printing a short job in advance: A **nozzle health check** is enough to warm up the printer.
- Invert alternate tiles, from the RIP feature.

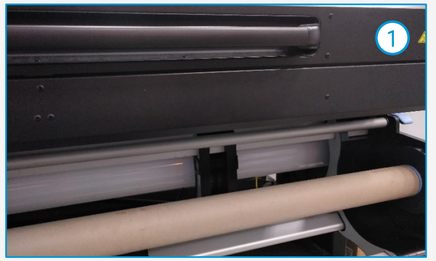
B. Length consistency tile-to-tile

- Ensure that the substrate-advance sensor is enabled in the RIP's substrate preset.
- Start printing with substrate already attached to the TUR.
- Invert alternate tiles, from the RIP feature.
- Tile together areas with similar amounts of ink. If this is not possible, print the areas with different amounts of ink as different jobs and modify the length of the job with less ink in the RIP to match its size with the job with high ink content.
- Print a sample and adjust the size of the image in the RIP accordingly.

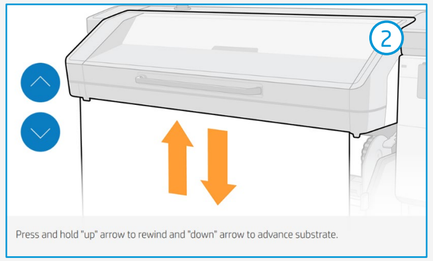
The printing process

Loading susbtrate | Connecting to the take-up reel (TUR)

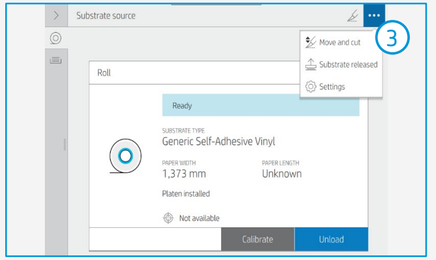
1. **Prepare the TUR**
   Attach an empty core on the TUR.



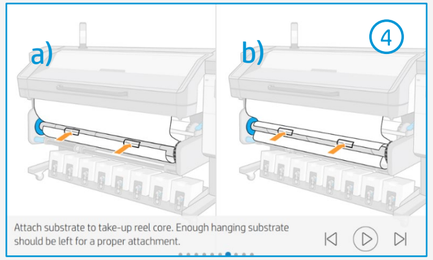
2. **Move substrate**
   Advance substrate until the leading edge levels with the TUR.



3. **Release substrate from pinches**
   Lift the pinchweels.
   Align right edge of substrate with the right edge of the input roll.
   Tap **Done** in the front panel to lower the pinchwheels.

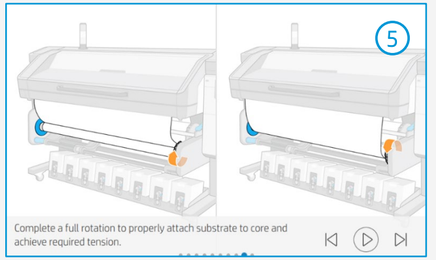


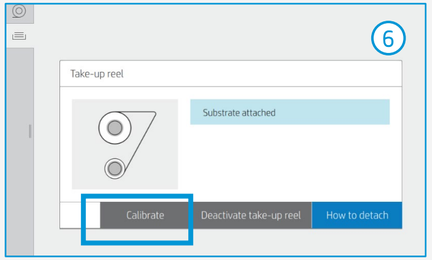
4. **Attach substrate to the TUR**
   You can attach the substrate so that the printed side is in (a) or out (b) (out is most common).



5. **Activate the TUR**
   Complete a full rotation of the TUR.

6. **Calibrate the TUR**
   Select **calibrate** on the front panel.

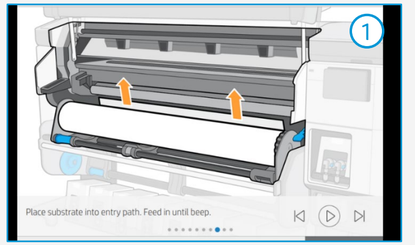




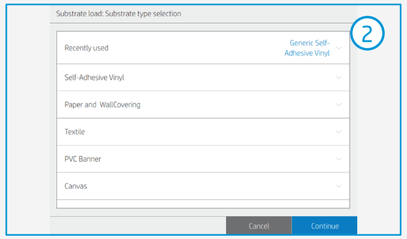
TIP: For **long jobs,** connect the substrate to the take-up-reel (TUR). For **tiling applications,** connect the TUR before start printing.

The printing process

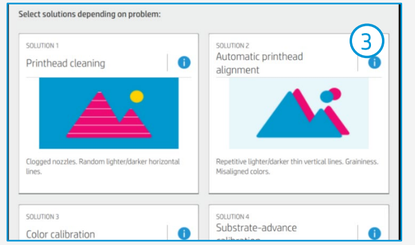
1. **Load the roll**
   By default, this is in automatic mode.



2. **Select the right substrate preset**
   If your substrate is new, select the **generic self-adhesive vinyl preset.**

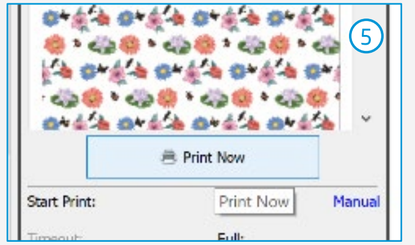


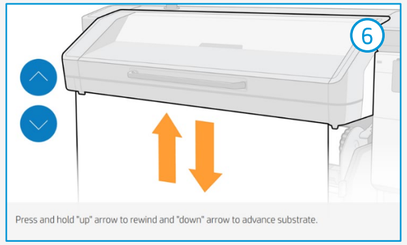
3. **Check print IQ status**
   Perform the printhead nozzle check and printhead alignment.



4. **Start printing position**
   Normally this is from the printing platen, but some vinyls might need to be positioned after the curing zone or even be attached to the TUR to avoid a substrate crash.

5. **Send the job to print from the RIP**
   Check the RIP has **synchronized** the loaded substrate with the printer.
   Select the correct printmode and any other settings (copies, placements, etc.).
   Click **Send to print**.





6. **Cut & retrieve the printed roll**
   This can be done in automatic mode or manually.

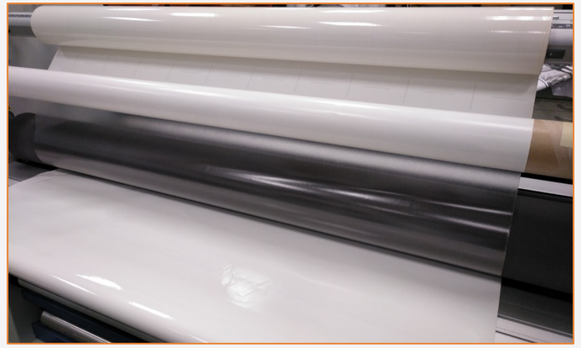
TIP: Before cutting the printed job, advance the substrate so that you protect the printed roll when it is unloaded.

Post-print finishing

1. Lamination (optional)

Use the film laminate recommended by the SAV manufacturer.

Follow the lamination settings (speed, pressure, and temperature) specific for SAV+laminate combination.



IMPORTANT!: Recommended for long-term usage, high transit areas, or surfaces that will be cleaned frequently.

TIP: Remember to select a printmode with NO overcoat when laminating, or check the option “Optimize for lamination” in the RIP’s printer settings.

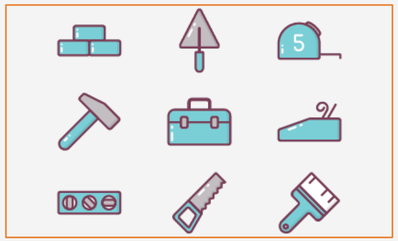
2.Cut

To cut the graphics automatically, you can use XY cutters or flat bed contour cutters.

Except for some decals, most jobs will be cut with a “cut through” cutting type.

Installation

1. Prior to installation



1

Prepare the surface

- Be sure the surface is clean
- Consider the presence of rivets, joints, or other elements on the surface

2

Test the adhesion

of your vinyl on the surface you intend to install the graphics on.

3

Vinyl instructions

In all cases, follow the vinyl manufacturer's instructions.

2. Installation on smooth surfaces: walls & furniture elements

Try to avoid the use of application fluids (e.g. water, soap solutions).

Apply the graphic using a squeegee with one edge protected with felt; this will avoid damaging the graphic.

TIP: SAVs with air-release adhesive systems are much easier to install and avoid the presence of bubbles. Dot patterned adhesive systems don't require the use of a squeegee.

Installation

3. Installation on panels

Graphics can also be installed on panels. In this case, the use of a roll laminator is recommended.

4. Cleaning

If graphics need to withstand regular cleaning, it is recommended to do the following:

1. Protect the prints, either with film or liquid lamination.
2. If not protected, clean with a dry soft cloth. In case extra cleaning is needed, we recommend to clean with water and a clean soft cloth only.
3. Do not use agents containing alcohol.

TIP: Follow these recommendations for disinfection: link.

Remarks

- New inks with higher pigment load deliver more vivid colors than ever, even at 6 pass printmodes.
- Get excellent grey neutrality.
- The new HP Latex inks are ideal for safe indoor applications. The newest HP Latex Inks are UL ECOLOGO and UL GREENGUARD GOLD certified, and conform to the Zero Discharge of Hazard Chemicals (ZDHC) manufacturing restricted substances list v1.1.
- We recommend protecting your prints with film lamination for long-term usage and high-transit areas.

Learn more at:

- HP Latex Knowledge Center
- Learn with HP

Certifications:

ROADMAP TO ZERO
Level 1- Zero Discharge of Hazardous Chemicals (ZDHC)[1]

ECOLOGO
Inks meet stringent health and environmental criteria[2]

GREENGUARD GOLD
Unrestricted, full room. No-wait installation or lamination[3]

[1]**Zero Discharge of Hazardous Chemicals.** Applicable to HP Latex Inks. The ZDHC Roadmap to Zero Level 1 demonstrates that an ink conforms to or meets the standards of the ZDHC Manufacturing Restricted Substances List (ZDHC MRSL) 1.1, a list of chemical substances banned from intentional use during production. ZDHC is an organization dedicated to eliminating hazardous chemicals and implementing sustainable chemicals in the leather, textile, and synthetics sectors. The Roadmap to Zero Program is a multi-stakeholder organization which includes brands, value chain affiliates, and associates, that work collaboratively to implement responsible chemical management practices. See roadmaptozero.com.

[2]**Applicable to R Series and 700/800 Printer series HP Latex Inks. UL ECOLOGO® Certification to UL 2801** demonstrates that an ink meets a range of multi-attribute, lifecycle-based stringent criteria related to human health and environmental considerations (see ul.com/EL). HP is the only printing company with UL ECOLOGO® Certified inks in the "Printing Inks and Graphics Film" product category, see spot.ul.com/main-app/products/catalog/.

[3]**Applicable to HP Latex Inks. UL GREENGUARD Gold Certification to UL 2818** demonstrates that products are certified to UL's GREENGUARD standards for low chemical emissions into indoor air during product usage. Unrestricted room size—full decorated room, 33.4 m^2 (360 ft^2) in an office environment, 94.6 m^2(1,018 ft^2) in a classroom environment. For more information, visit ul.com/gg or greenguard.org.

In partnership with:

ZÜND swiss cutting systems
Summa Legendary Performance
ONYX
CALDERA WIDE FORMAT IMAGING
SAi