How to create stickers with HP Latex 700 and HP Latex 800 Printer Series

This document will explain how to print and cut stickers of different types, including those printed with white ink and those with metallized effects.

A deep-dive training about stickers on the HP Latex 700/800 Printer series is available in the Learn App from your PrintOS account. See more details in <u>this article</u>.





What you will need





Self-adhesive vinyl or PVC-free film



Cutting device HP Latex Cutter Plus



Weeding tool (optional)





SW tools (RIP, edition, etc.)



Printer



Film laminate (optional)



Film laminator (optional)

Transfer tape (optional)

Preparing the substrate



1. Types of self-adhesive substrates for stickers

By raw material

- Calendered monomeric
- Calendered polymeric
- PVC-free substrates
- Polyester films

2. Usage

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

- - a)
 - b)
 - C)
- Download and install.

NOTE: If you cannot find the substrate presets, you can always use the generic presets for self-adhesive vinyls or other generics 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.



Surface finish

- Gloss or Matte
- Color
- Transparent
- Metallic

By adhesive type

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

• Normally, graphics will be **short-term** (promotions and temporary events) and applied on **flat surfaces**.

• For mid- and long-term uses or high-transit areas, it is recommended to protect the graphics with film lamination.

Check that the material you are going to use has its own substrate preset:

On the **web**, in the HP PrintOS Media Locator: www.printos.com/ml/#/medialocator

On the printer's **front panel** online search (Substrate Library)

On the **web**, from the substrate vendor's or RIP vendor's websites

Preparing the job



1. Software for designing and editing

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

A. HP Signage Suite

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





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

2. Job edition

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

- a poster-like cut.
- CutContour, CutContourKiss, CutThrough...).

NOTE: Normally, cutting paths are added in Adobe. HP Flexi Print and CUT RIP allows you to add them directly from the RIP. Please refer to the specific RIP manuals.

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How does it work?



1. Draw the cutting path: it can follow the graphic's silhouette or can be

2. Create a new color swatch: define it as a spot color and name it (e.g.

3. Assign the color swath for cutting to the cutting path.





Make your decision based on your needs

Preparing the job



A. Adding contour marks - With Adobe



B. Adding contour marks - With SAi HP Flexi Print and Cut Editor





Make your decision based on your needs

- Create a **new color swatch**
- Assign an identifiable name, e.g. CutContourKiss
- Select color type: **Spot Color**
- Create the cutting path with that color swatch



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will not fall in undesired areas

Preparing the job



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.

A. Substrate & Printmode selection

- specific substrate you have loaded on the printer.
- at Odpp.

B. Image size & copies

- Select the image for your sticker.
- Modify the image size
- Set the number of copies

NOTE: To work with white ink layers, learn how to create one with Illustrator and Photoshop by enrolling in 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.



Make your decision

based on your needs

• Choose the substrate type (Self-adhesive vinyl), then select the

• Next, choose the printmode. Normally, **6p mode** gives good quality prints with SAV. For higher IQ, choose 8p mode.

• If graphics are going to be **laminated**, activate the **optimize for** lamination option in your RIP or select a printmode with Overcoat

		6
SAi Flexiprint	Onyx	Caldera
View more	View more	View more
	\square	

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

Position ↓ 6.304cm ↓ Job size ↓ 7.540cm ↓ ↓ 7.447cm ↓ ↓ 0.954cm ↓ ↓ 0.254cm ↓ ↓ 0.254cm ↓ ↓ 1 ↓ times ↓	
μα η F H Reset	

Preparing the job



C. Option to optimize lamination

Media: Generic Cast SAV [Self-Adhesive Vinyl] Media Type: Generic Cast SAV
Print Mode 8pass 110 OC 0
Double-sided Printing Settings
Color White Color Settings
Optimize for lamination 3

Caldera

- 1. Open your printer options menu.
- 3. Under the Advanced parameters menu, select Optimized for lamination.



ONYX

In the job queue:

- 1. Right-click on your job.
- 2. Select Edit Printer Settings.
- 3. Click Optimize for lamination.

2. Click on Specific settings for printer (wrench icon).

500.0 x 384.9 mm	Generic Self-Adhesive Vinyl CMYK8 / 600 / 8p_6c_110 Save Reload
	■ Horizontal compensation (%) : 0.00 ⁺ / ₋ Compute
	□ Vertical compensation (%) : 0.00 ⁺ / Compute
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Resolution : 600	Conserie media line
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Action : Print	Sman chokes pixels amount . 128
☐ Keep Ripped file	
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SAi

In the job properties menu:

- 1. Select the **Printer Options** tab.
- 2. Select Optimize for lamination.



Make your decision based on your needs

Preparing the job



D. Registration marks and the HP barcode

Registration marks ensure the right cutting accuracy and correct compensation. The HP barcode enables unattended cutting, with automatic job retrieval direct from the new HP Latex Cutting Plus Solutions.

• Select the OPOS option that better suits your job.

OPOS – A row graphic. Used

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OPOS XY2 - Registration marks and a horizontal line are printed for deformation correction. The OPOS sensor reads the bottom line to correct for the deformation, if any.



• Add the HP barcode for an automatic workflow.





OPOS XY2 - Registration marks and multiple horizontal lines are printed for deformation correction. The OPOS sensor reads the horizontal lines by panels to correct for deformation.

(IP)	(IP)	(IP)	(IP)	(IP)	(hp
(IP)	Ø	(p)	Ø	(hp	(hp
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NOTE: Find more information on HP cutting solutions at the following link:

- hplatexknowledgecenter.com/printers
- HP Latex Plus Cutter User Guide

Preparing the job



E. Cutting parameters

The most common parameters to adjust for the cutter are the cutting **pressure** and the cutting **speed**. Cutting parameters need to be **adjusted for each cut type** that is present in your cutting job.

- Kiss cut cutting path
- Cut through cutting path (optional)
- 1. Set the **default** cutting parameters in the RIP

2. Before cutting your job, adjust **pressure** and settings menu





Preparing the job



4. Tips for print&cut jobs with white ink on special subtrates - SAi

Some specific settings are required to work with substrates such as:



A. Select printmode

• Select a white printmode: UF, SP, OF or SW of W100 density

B. Color separation

- Select Channel Spot1
- Edit
- Select Print as White

C. HP barcode

- Select the OPOS desired and HP barcode
- Select "Add white background". See picture (C1)
- OPOS and HP barcode are printed with white borders so they can be read by the OPOS sensor. See picture (C2)







Transparent substrates with transparent liners

С	
C	

(C1) Job Propertie - 8 8 2 5 8 🖳 🖓 🗒 🛃 • 👎 🚹 🤷 OPOS O OPOS XY Job name Job size Dither type Starting time of RI Page number Number of copies OPOS XY2 Resolution ICC output pro Preset Tile number Overlap O OPOS Xtra HP Barcod Place barcode at the V DPI Place barcode on tor Print file ID Choke... Add white background ~ <u>E</u>dit... Mark size: 3.000mm HP Barcod (2) Edit... basics Edition OK Cancel

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Preparing the job



SAi & ColorLogic

you can get metallized effects.



A. Load image file

- Load your **pdf** file.
- Right-click on it to open the Job properties menu.



5. Metallized effects with white ink | using metallic finish subtrates,

Thanks to HP Latex white ink, ColorLogic software, and a metallic finish substrate such as KernowJet Metalik Inkjet,

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Preparing the job



B. Color correction

• Click the **Color managemen** and select **Use linearization**

C. Rendering intent

 Click on Advanced to set the rendering intents and tick
 Normalize color space whe rendering PDF.

D. Color separation

Click the Separations tab, so the CL 4713 SILVER channel click Edit

E. White channel

• Change **Print as** to **White**

F. Inverting channel

- Go to the **Color Adjustment** and select the **White chann**
- At the bottom of the graph on the #0, and enter 100% Output text box.
- Then click on the **#100**, an **0%** in the **Output** text box.



nt tab n only. S ne	Color correction Use linearization only Output profile: KERNOWJET MetaliK Inkjet Silver (076SS \ Media: State Silver (076SS \ Dither: Dither: DIther: DIther: Edit Advanced Create DeviceLinks on the fly	Advanced Color Management Input Profiles Rendering Intents CMYK: Others: Bitmap: Relative colorimetric Vector: Relative colorimetric Vector: Relative colorimetric Vector: Relative colorimetric Pure Hue Gradent: Relative colorimetric Print transparent as white Apply ink splt and linearization to DCS files Normalize color space when rendering PDF Reset OK
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The printing process



Prepare the TUR

• Attach an empty core on the TUR.

Move substrate

 Advance substrate until the leading edge levels with the TUR.

Release substrate from pinches 3

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

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

most common).

Activate the TUR

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

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

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

eve required tension





Substrate source (4) a) Roll (\mathbf{O}) Attach substrate to take-up reel core. End ould be left for a proper attachn (5) 6 Take-up reel ubstrate attached $(\bigcirc$ nplete a full rotation to pr

The printing process



Load the roll

1

• By default, this is in automatic mode.

Select the right substrate preset

∠ If your substrate is new, select the **Generic** self-adhesive vinyl preset.

Check print IQ status

3. Perform the Printhead nozzle check and Printhead alignment.

Start printing position

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

Send the job to print from the RIP 5.

- Check that 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 the SAV+laminate combination.



2.Cut

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

sticker.





(!) IMPORTANT!: Recommended for long-term usage, high-transit areas, and 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.

"Kiss cut" cutting type will be the most common, but on some occasions, a "cut through" can be added to separate each



Sticker with cut through



Weeding after a kiss cut

Post-print finishing



3. Cutting special medias – white ink OPOS

A. Load the plot correctly



B. Calibrate media (OPOS)







Position the plot so that the first pinch partly rolls over the white part of the HP barcode (see picture).

Print calibration boxes (3x3 cm) in black (100 CMYK) and white (Spot W100) on the substrate for your print&cut jobs.

(!) IMPORTANT!: The unattended workflow will not work with the HP barcode with a white background. After the first job is cut, you will have to position the OPOS sensor just below the HP barcode of the next job.



On the cutter's front panel, tap: Calibrations > Calibrate media (OPOS). Follow the front panel instructions; you will be asked to position the OPOS sensor above each color patch, including the non-printed area.

Ö TIP: Perform all the necessary calibrations on your cutter before continuing with your print&cut job. For further information, check the HP Cutter user quide.

Installation



1. Different print&cut applications















Remarks

- Colorful and elegant stickers with sharper text.
- Cut borderless stickers with no curling.
- 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.

Certifications:





Inks meet stringent health and environmental criteria²



Unrestricted, full room. No-wait installation or lamination³

¹Zero 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 roadm ntozero com

or greenguard.org.

In partnership with:



Legendary Performance









Learn more at:

- HP Latex Knowledge Center •
- Learn with HP •

related to human health and environmental considerations (see <u>ul.com/EL</u>). HP is the only printing company with UL ECOLOGO® Certified inks in the "Printing Inks and Graphics Film" product category, see <u>spot.ul.com/main-app/products/catalog/</u>. ²Applicable 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

³Applicable 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 m² (360 ft²) in an office environment, 94.6 m²(1,018 ft²) in a classroom environment. For more information, visit ul.com/qq





