



How to easily create your own profiles for HP Latex 500 series

This document provides information about how to generate a media preset using only the printer and the internal spectrophotometer and how to reuse media presets from other HP Latex printers – HP Latex 100, 300, 3000 and 1500 series.

Related Links:

www.hp.com/go/latex/

Printers related to this article

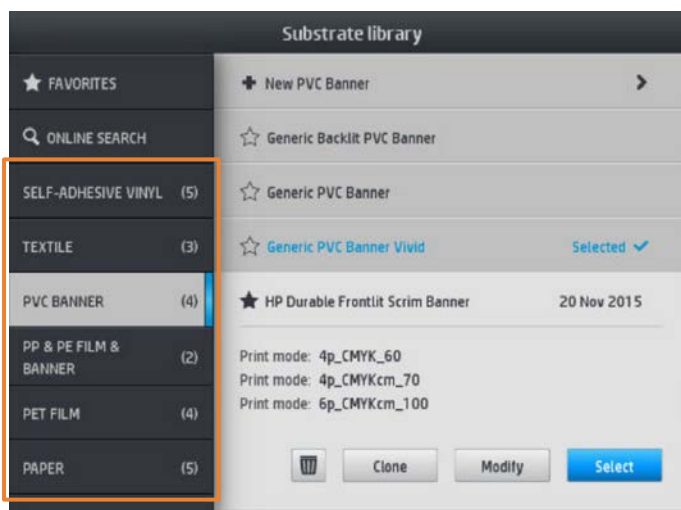
[HP Latex 500 Printers Series](#)

Add a new substrate

If you cannot find a ready-made preset for your substrate, and prefer not to use a generic preset or edit an existing preset, you can make your own preset from scratch.

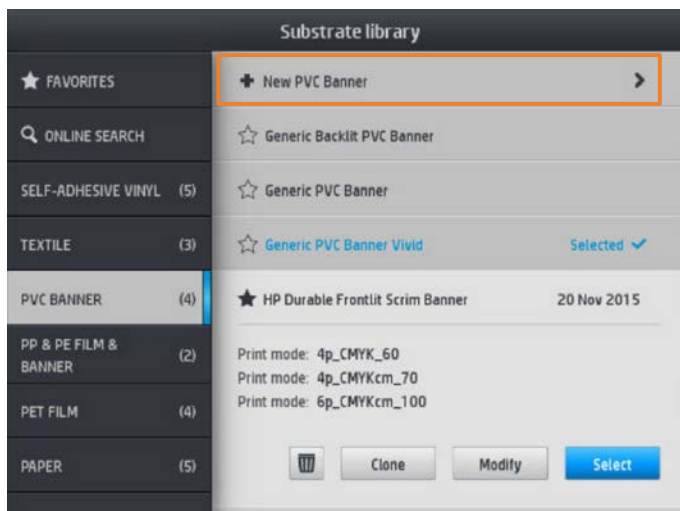
The **Add New Substrate wizard** guides you to work out the best settings for your substrate. It first requests some information about the substrate and your intended use of it, then prints some test prints and asks you to evaluate them. From this information, it creates the new preset.

1. **Ensure that the printer is in the Ready state.**
2. **Stop the job queue.**
3. **Load your new substrate**, selecting the most similar substrate when asked to do so; or select None of these.
4. When the substrate has been loaded, **go to the Substrate Library** on the front panel.
5. **Choose the substrate category** in the left column of the Substrate Library screen (PVC BANNER in this example).

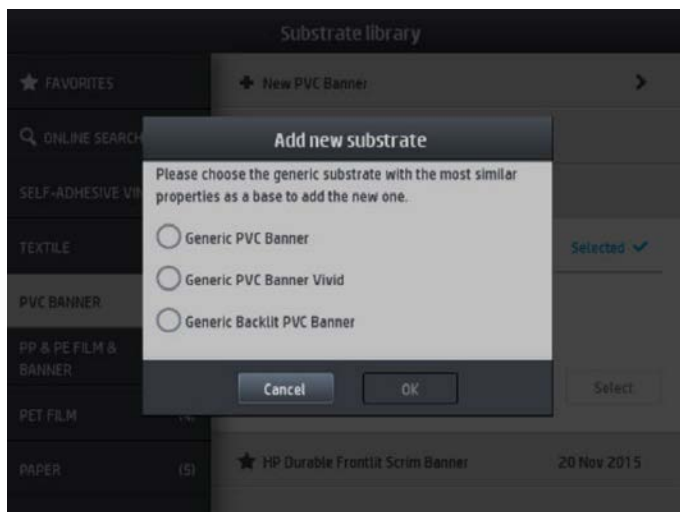


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6. Click + New *substrate category* at the top of the right column (+ New PVC BANNER in this example).

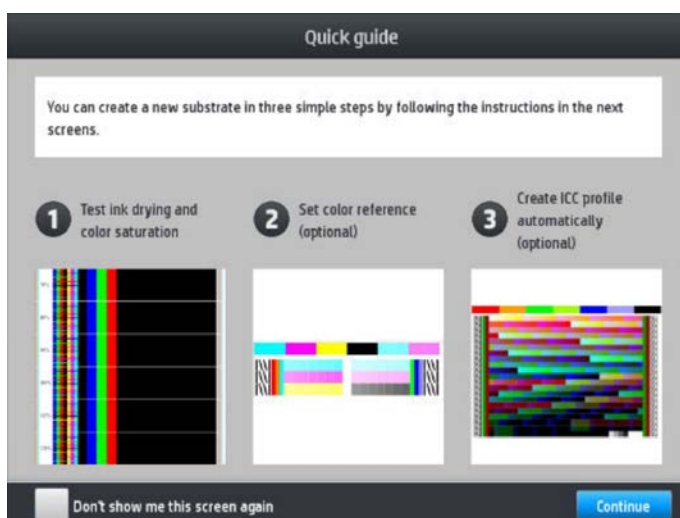


7. Your new preset will be based on a generic preset.

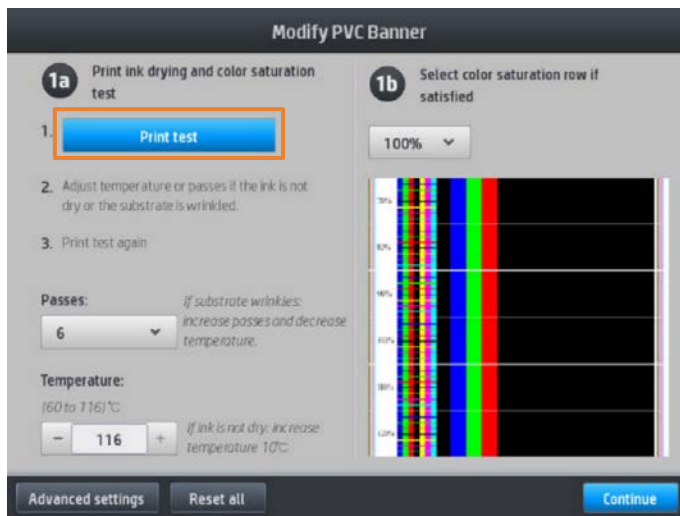


NOTE: If there are multiple generic presets in that category, the front panel asks you to choose one of them.

8. Follow the front panel guides through the subsequent steps to create your new preset.

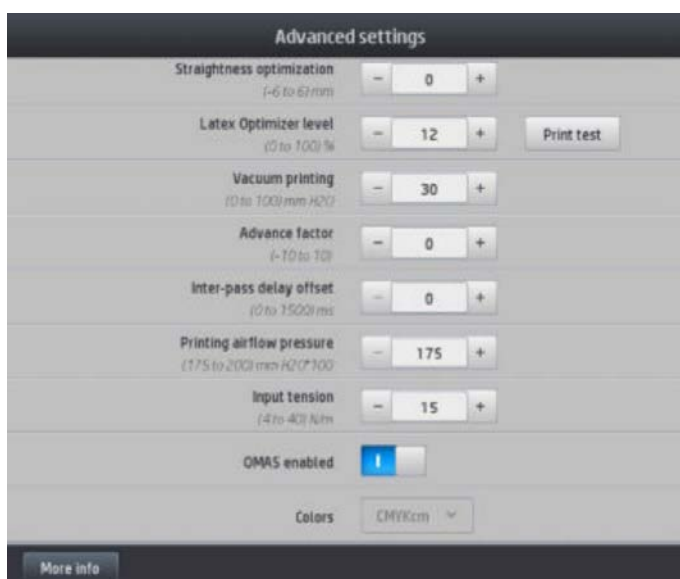
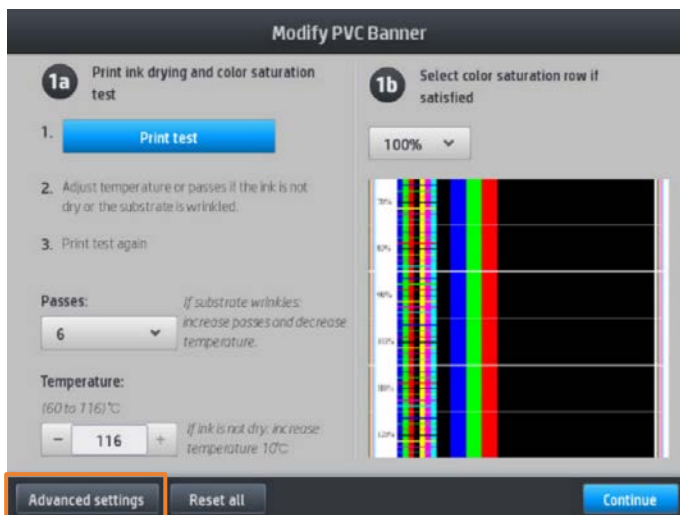



- The following screen is displayed. **Press the Blue Print test button** to produce the ink drying and color saturation test print; then continue adjusting the settings and printing again until you are satisfied with the result.



NOTE: You can omit this step if you already know the settings that you want to use.

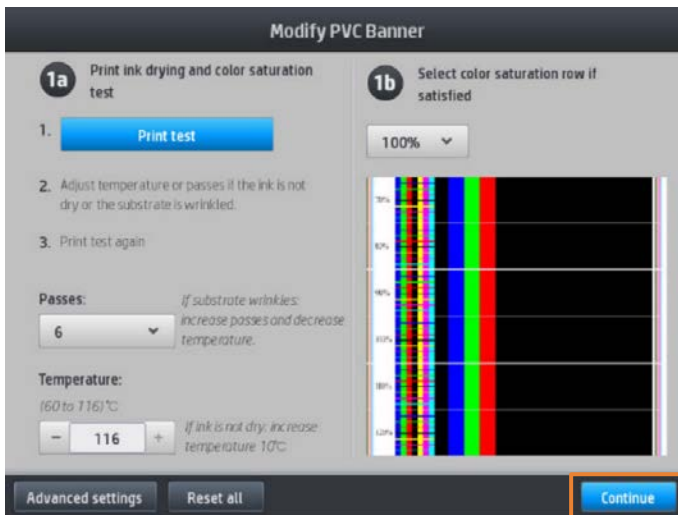
- If you cannot reach a satisfactory result, you may want to **press Advanced settings** and try adjusting those settings, which are intended for people who understand their implications.



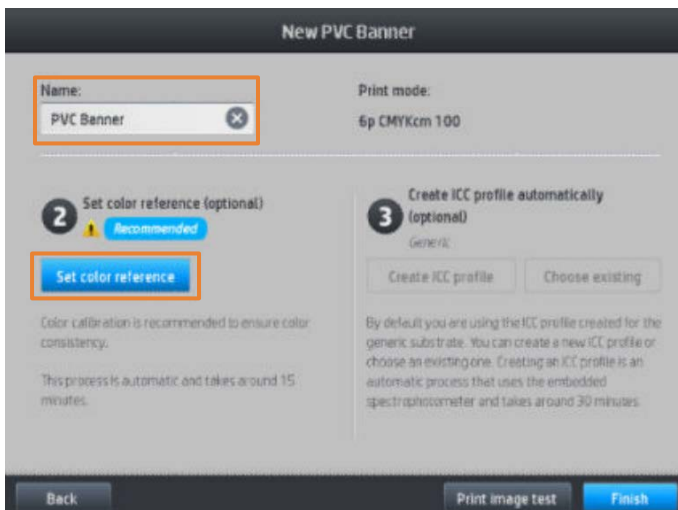
NOTE: To go back to the previous screen, press .

- **Straightness optimization:** Allows you to compensate for barrel-shaped substrate deformation. The value represents the distance that the center of the substrate has moved with respect to the left and right edges.
- **Latex optimizer level:** If you have ink bleed or coalescence, you can increase the optimizer level until you see a significant impact on gloss or color saturation.
- **Print test:** You can press this button to print the advanced optimizer test and select the best optimizer level for your substrate.
- **Vacuum printing:** Sets the vacuum value in the print zone to hold the substrate flat. Increase if the substrate suffers from crashes or smears, decrease if you see banding or graininess.
- **Advance factor:** Use only when printing without the substrate-advance sensor, to increase or decrease the substrate advance in each carriage pass.
- **Inter-pass delay offset:** The time delay between passes to allow for smoother drying. Increase the delay if you have seen banding on your prints.
- **Input tension:** Substrate rewinder tension, increase in case of wrinkled substrate in the print zone.
- **OMAS enabled:** Automatic substrate-advance tracking and correction. Disable only if advised to do so on the front panel at loading time.
- **Colors:** Print four (CMYK) or six (CMYKcm) colors.
- **Leading edge** release: Enable this setting to advance the leading edge of the paper, if a specific substrate is likely to crash under the curing module.

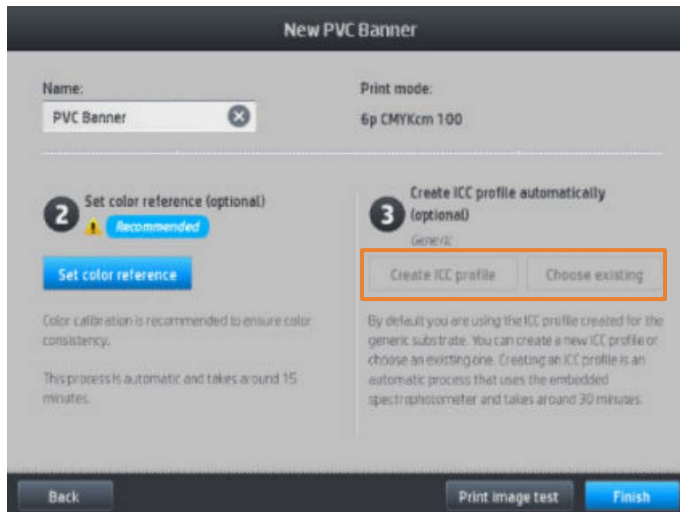
11. When you have finished, press Continue to perform color calibration.



12. Enter your substrate name and click Set color reference.



13. After the automatic color calibration process has completed, we recommend using the generic ICC profile; alternatively, you can choose to create a new profile or to copy a profile already assigned to a different print mode for this substrate (if there are any such profiles).



NOTE: The Create ICC profile button is disabled until color calibration is complete.

Color emulation of other printers models

You can set up an HP Latex 500 series printer to emulate the colors printed by another printer that belongs to a different family, such as the HP Latex 36x/37x, 1500, or 3000 Series Printer.

The emulation process is done by importing a source (any other HP Latex series) substrate preset into the destination (HP Latex 500 series) printer that was created, color-calibrated, and, CC-profiled in the source printer. The original or source substrate preset contains a number of paper modes and a color-calibration reference.

A new substrate preset is then added to the destination substrate library that keeps the same name as the source substrate preset, suffixed by Emulated. This destination preset contains the paper modes that are the closest equivalent to the source ones in terms of ink density and number of passes. Color emulation between source and destination, for the given substrate material, can then be achieved by performing color calibration and profiling of the destination substrate preset.

If the source substrate preset has not been color-calibrated, it can still be imported into the destination printer. A translated set of paper modes will still be created, but color emulation of the source printer cannot be optimized.

Recommendations

Color emulation between printers of different models is **based on the same principle as color consistency between printers of the same model**. That is, exporting a source color-calibrated substrate preset, then importing that preset, and color-calibrating it in a destination printer. When the printer model is the same, most print settings and color resources are implicitly matched. Those include printing engine and mechanical settings, paper mode and associated ICC profiles.

However, when emulating the colors of a different printer model, you are advised to follow these recommendations:

- **Use the same substrate type** in both source and destination printer (this is also recommended between printers of the same model).
- **Choose a paper mode in the destination substrate preset that is as close as possible to the active paper mode** in the source substrate preset.
- **Use the same workflow in your RIP software** for printing to the source and destination printers.

TIP: The best color emulation can be achieved by setting the rendering intent to 'relative colorimetric' in the RIP for printing both source and destination printers.

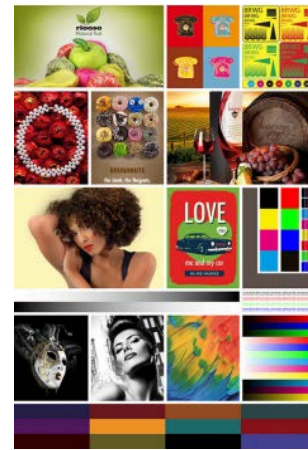
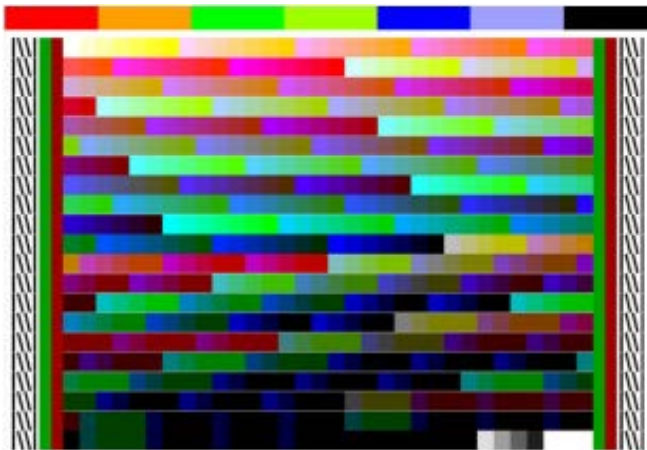
- **Choose ICC profiles** in the source and destination paper modes that are both **made with the same type of spectrophotometer and profiling software**. For example, use either ICC profiles made with external software using 'Brand A' spectrophotometer in both cases, or ICC profiles made with the HP Embedded Spectrophotometer and internal ICC profiler in both cases.

Emulating an HP Latex 36X/37X/15XX/3XXX printer

To set up a new substrate preset in an HP Latex 560/570 printer that provides color emulation of a source substrate preset in a HP Latex 36X/37X/15XX/3XXX printer:

	Emulating an HP Latex 36X/37X	Emulating an HP Latex 15XX/3XXX printer
1.	Using the source HP, select the desired substrate preset . Refer to the printer's own documentation whenever necessary.	
2.	Perform color calibration.	
3.	<p>Create an ICC profile for each paper mode to be emulated, using the HP Embedded Spectrophotometer.</p> <p>Use the Embedded Web Server to export the calibrated and profiled substrate preset</p>	Use the Internal Print Server to export the calibrated substrate preset.
4.	Using the destination HP Latex 560/570 printer, import the new substrate preset .	
5.	After a successful import, a confirmation popup window appears in the front panel. Press OK to continue .	
6.	Go to the substrate library, and select the just-created emulation substrate preset by pressing the Select button.	
7.	Press the Modify button to see the color emulation status of the preset. The initial color emulation status is Not ready.	
8.	Press Calibrate color button to start color calibration. After a successful color calibration, the color emulation status changes to Ready, and the color calibration status changes to OK.	
9.	Press Create ICC profile for every paper mode that you want to use for color emulation.	Do not press Create ICC profile . ICC color profile must be created externally. ^{1, 2}
10.	Press Done to finish the process.	

TIP: To emulate the same source printer on several HP Latex 560/570 destination printers, you can export the newly created preset from the HP Latex 560/570, and then import it into other HP Latex 560/570 printers.



Learn more at:

www.hp.com/communities/lkc

¹ ICC profiles that are needed for printing, in both the source and the destination printers, must be created externally using the same external spectrophotometer and external profiling software. Most RIP applications support stand-alone spectrophotometers for creating ICC profiles.

² This process, based on an external spectrophotometer, can also be used for color matching the HP Latex 36x/37x printer and the HP Latex 560/570.