# How to create International Color Consortium (ICC) profiles for the Double-sided Day Night kit

Printers equipped with the Double-sided Day Night kit are able to print backlit and outdoor advertising with great color appearance under any lighting condition, even when using translucent substrates. This document outlines the steps to create a new ICC profile to match the color needs.

**Related Links**

www.hp.com/go/latex/

www.printos.com/ml/#/medialocator

**Printers related to this article**

HP Latex 1500 Printer Series

HP Latex 3X00 Printer Series



**NOTE:** There are many different translucent media that can be used for Double-sided Day Night applications.

## Requirements for the ICC Profiling process

The ICC profiling process requires a full understanding of color management. An external spectrophotometer and professional RIP software are also necessary.

- **Spectrophotometer** with the ability to measure both reflection and transmission target color patches.
- **RIP software** that is compatible with Latex 1500/3x00 printers with the functionality of generating an ICC profile.

## Steps to create an ICC profile

If you would like to use a type of media that does not currently have a profile in the HP Latex Media Solution Locator, you may choose to create your own that matches your color needs.

When printing Double-sided Day Night jobs, it is necessary to:

- Print the Side 'A' images with the Side 'A' ICC profile
- Print the Side 'B' images with the Side 'B' ICC profile

To create your own profiles, you will need to **perform the following steps** for new media:
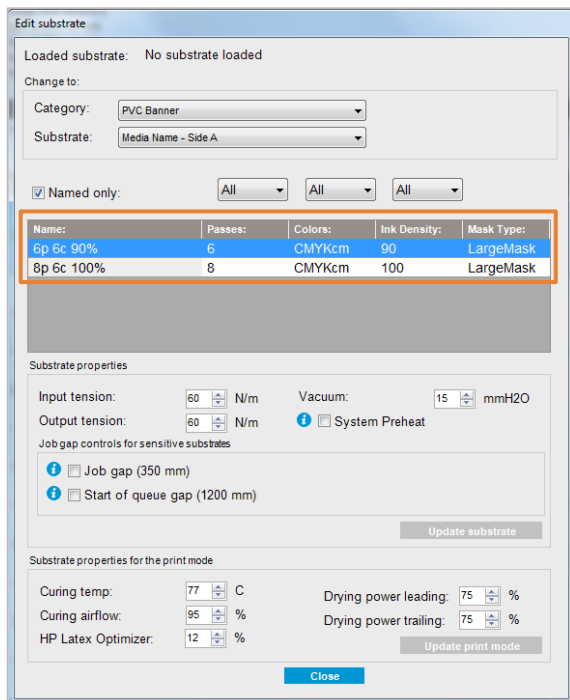
### 1. Print only the 'Side A' target without the ICC profile

1a. **Load the media** so that the printer will print on the front side (Side A).

1b. **Clone a generic profile** and rename it.
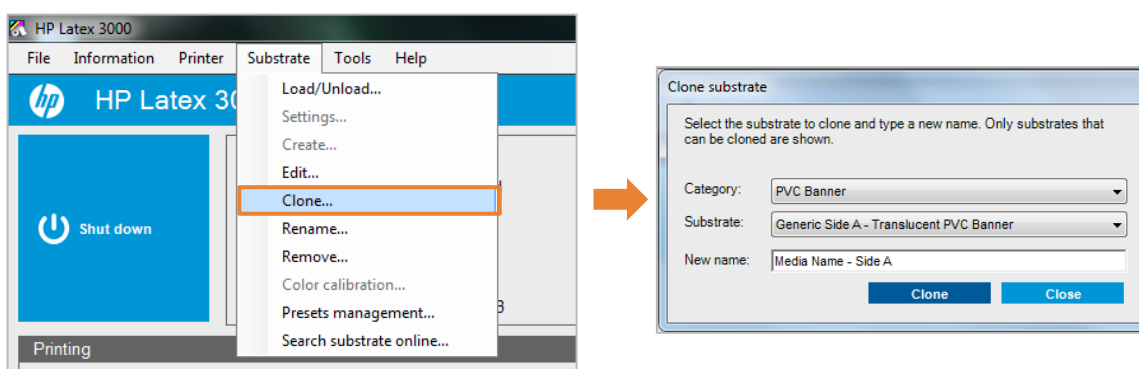


1c. **Select the number of passes and ink density** you intend to use.



1d. **Optimize the printer settings** if needed. In this case, make sure the modifications do not negatively impact the media.

NOTE: Also, verify that the printheads are well aligned before printing. It is also very important to you're your media flat for the best alignment on both sides.

1e. **Perform the color calibration**.
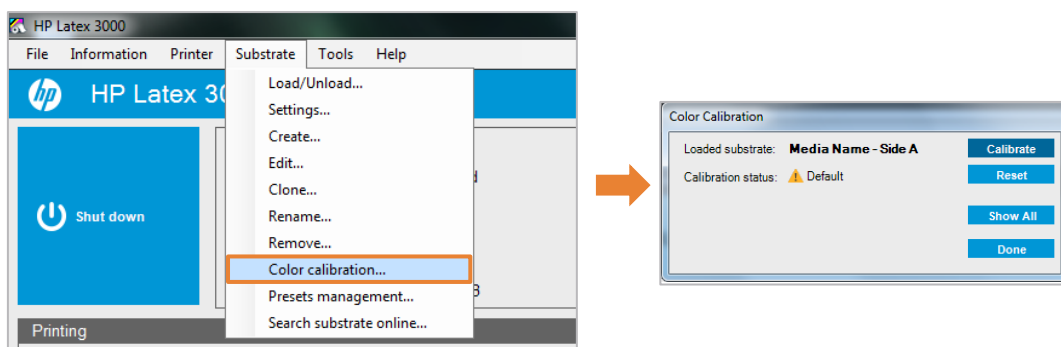


1f. **Synchronize the media preset** to your RIP software.

1g. **Print the ICC target color patch without any color management**.

## 2. Measure your target in transmission mode

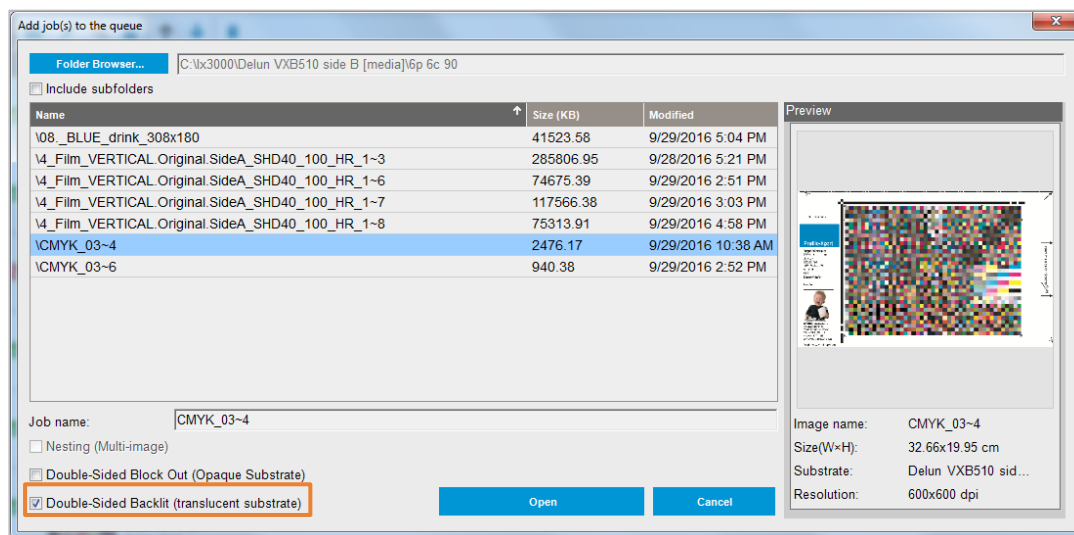2a. **Use the spectrophotometer's reflection mode** to measure the target color patches.

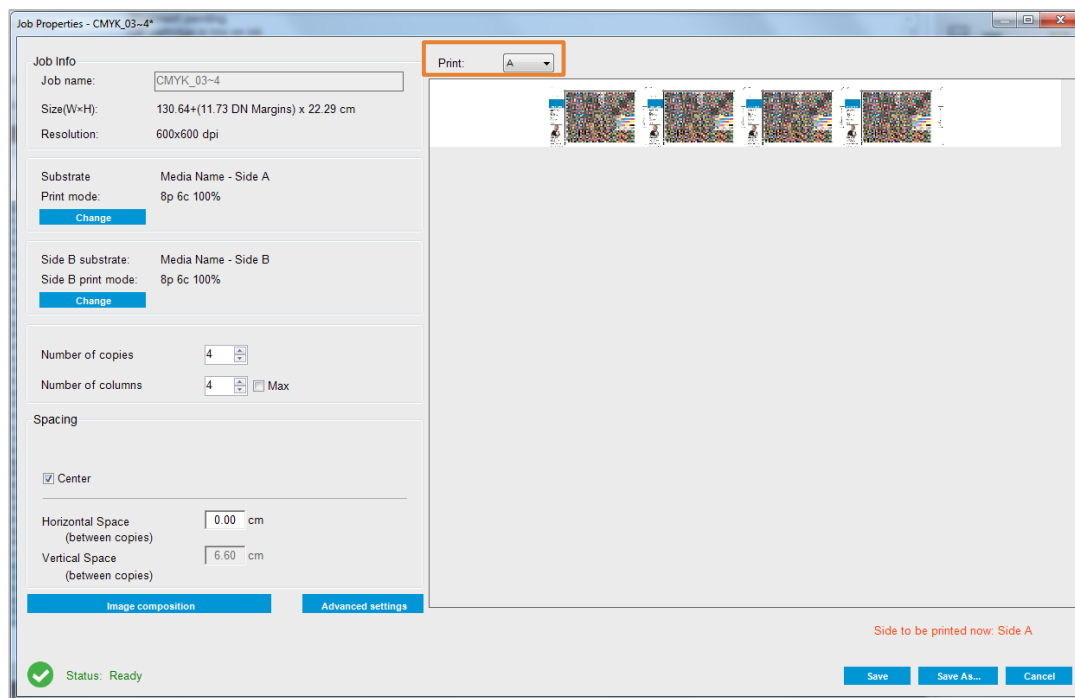2b. **Generate the ICC profile from your RIP software** with the correct ICC settings.
NOTE: Print some different images to verify that there are no printing issues.

2c. Now you have your 'Side A' ICC profile.

## 3. Print the 'Side A' target with the ICC profile

3a. **Print the ICC target color patch for 'Side A' using the 'Side A' ICC profile with Color Management ON**.
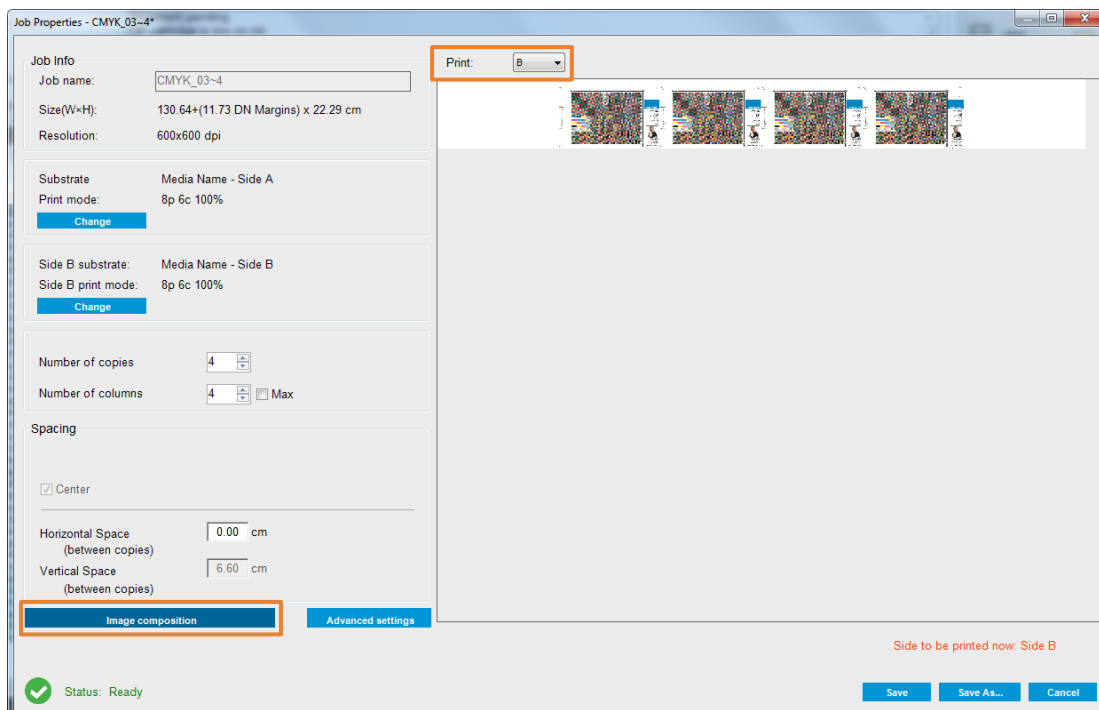
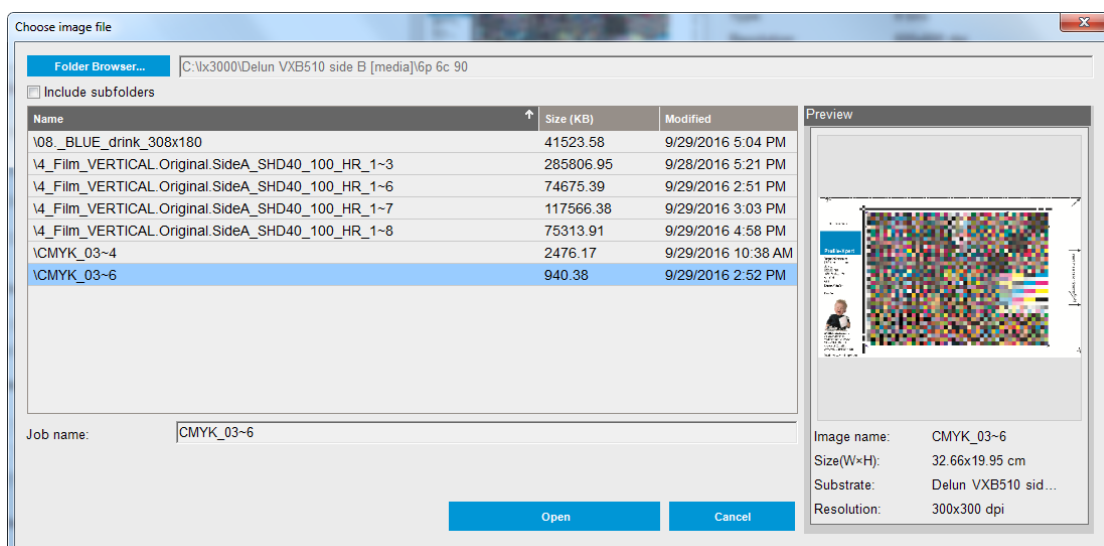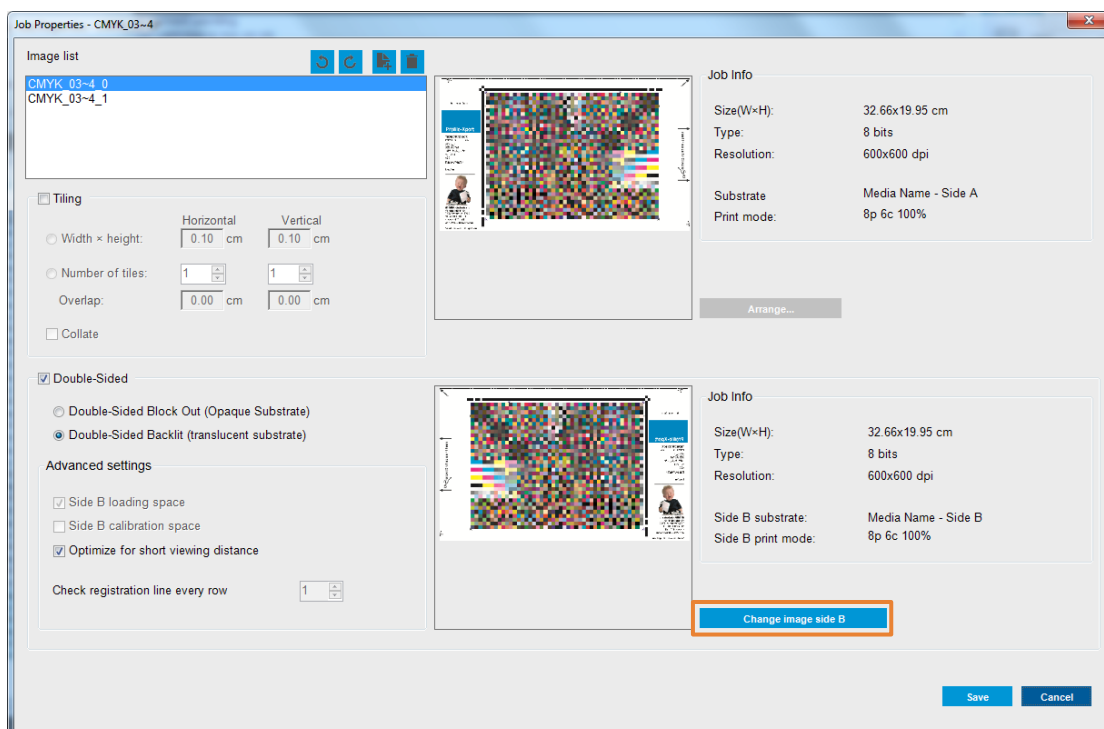3b. **Unload the media** in order to print on the back side later.

3c. **Load your media as 'Side B.'**

## 4. Print 'Side B' without the ICC profile

4a. **Repeat steps 1b to 1f** for 'Side B's' printer settings.

4b. **Print the ICC target color patch for 'Side B' without any color management**.

## 5. Measure your target in transmission mode

5a. **Use the spectrophotometer's reflection mode** to measure the target color patches' patch from 'Side A.'
NOTE: Please select the target color patch with the best alignment on both sides.

5b. **Generate the ICC profile from your RIP software** with the correct ICC settings.
NOTE: Print some different images to verify that there are no printing issues.

5c. Now you have your 'Side B' ICC profile.

## 6.  Print 'Side A' and 'Side B' with the ICC profile

6a.  **Print the ICC target color patch on 'Side A' and 'Side B' with the ICC profiles** you created for each side.

## 7.  Measure your target in reflection mode

7a.  **Use the spectrophotometer's reflection mode** to re-measure the target color patch from the new **'Side A.'**

7b.  **Generate your new ICC profile from your RIP software** using the fine-tuning ICC setting for **'Side A.'**

7c.  Now you are ready to print a Double-Sided Day and Night piece.

## Summary
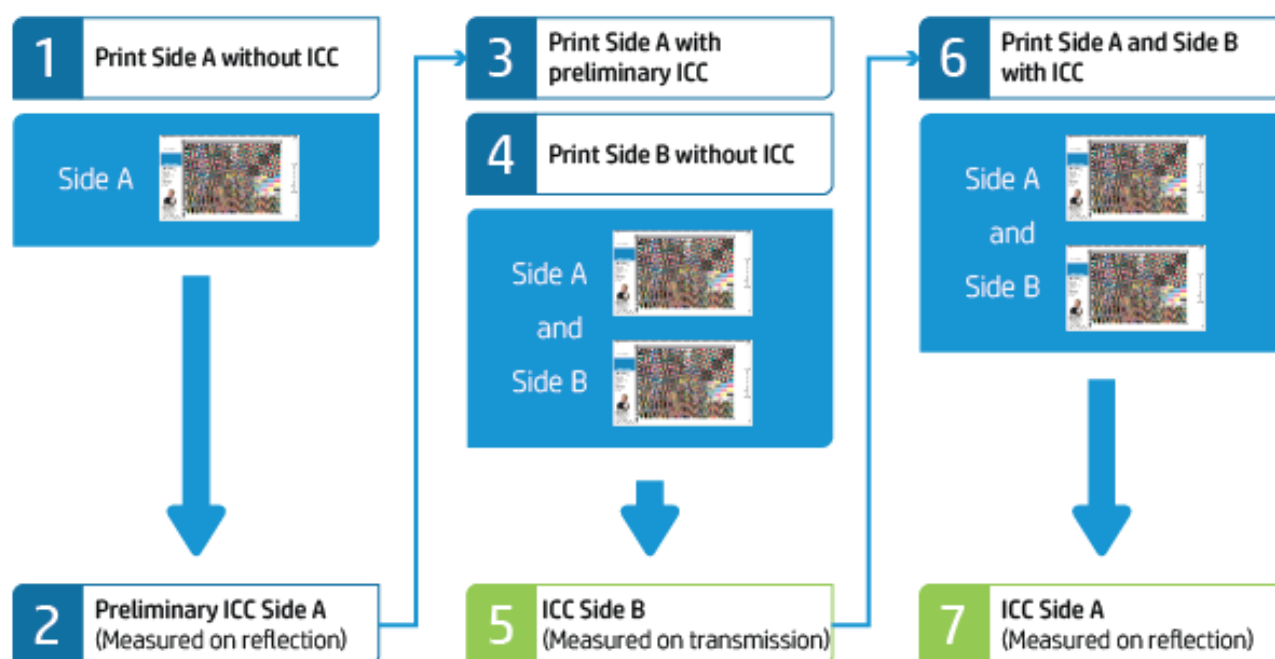


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