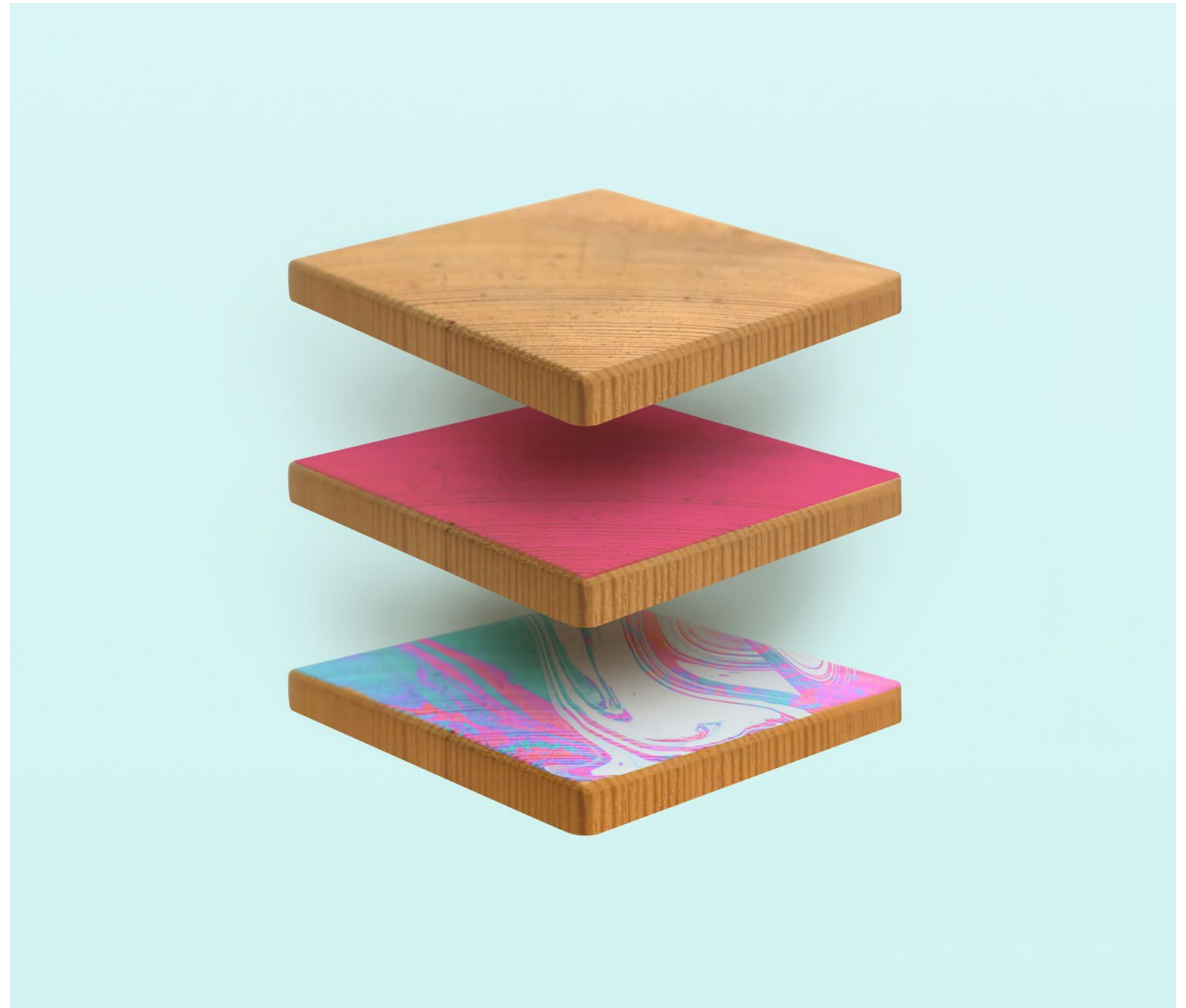


# How to print with white

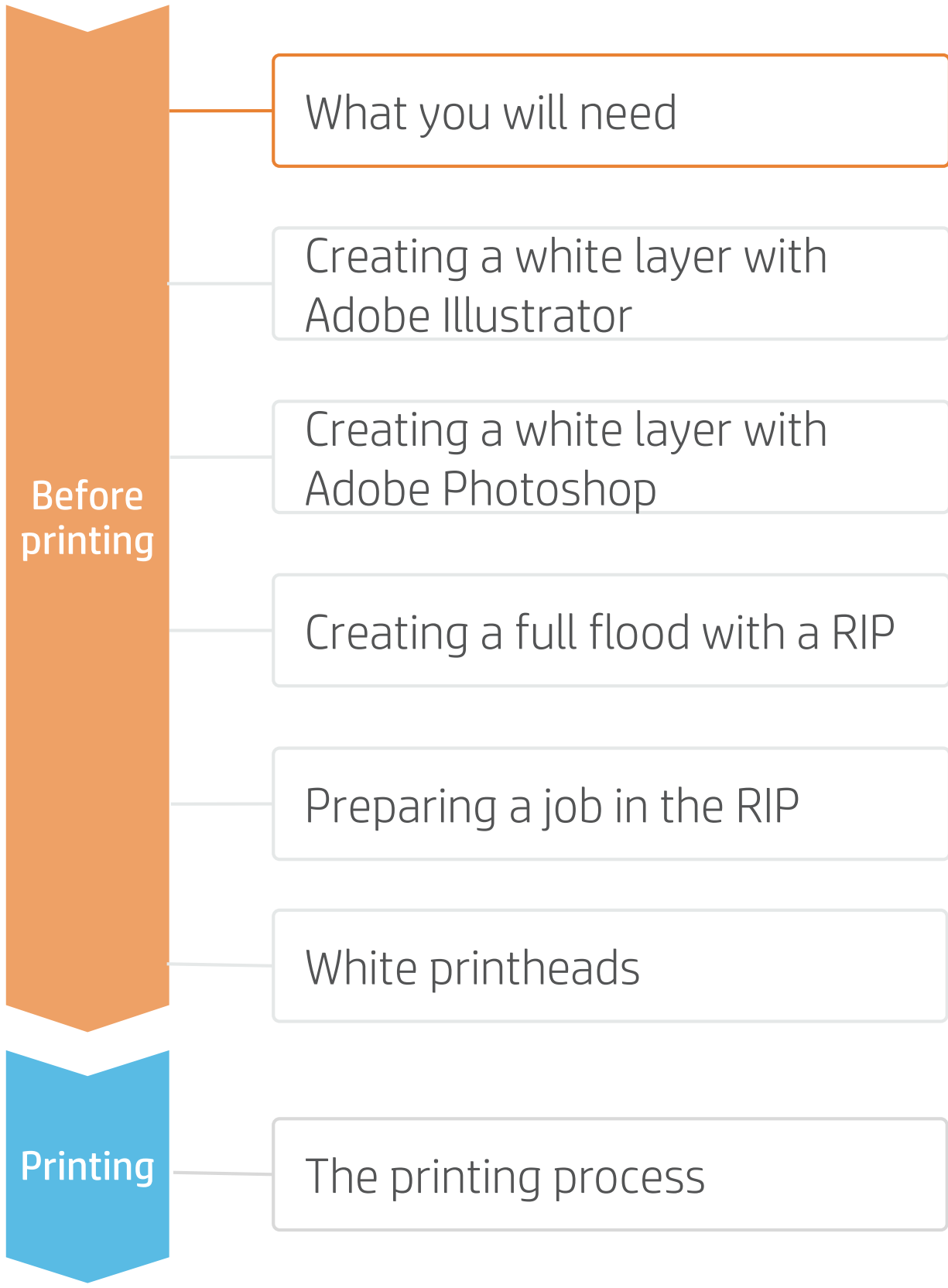
This document will explain how to create and manage white layers with Adobe Illustrator, Photoshop, Caldera and ONYX.



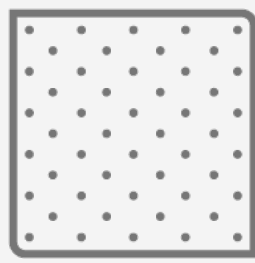
# How to print with white



## What you will need



Colored or transparent media



Clean lint-free cloth



Isopropyl alcohol (IPA)



SW tool  
(Photoshop/Illustrator and RIP)

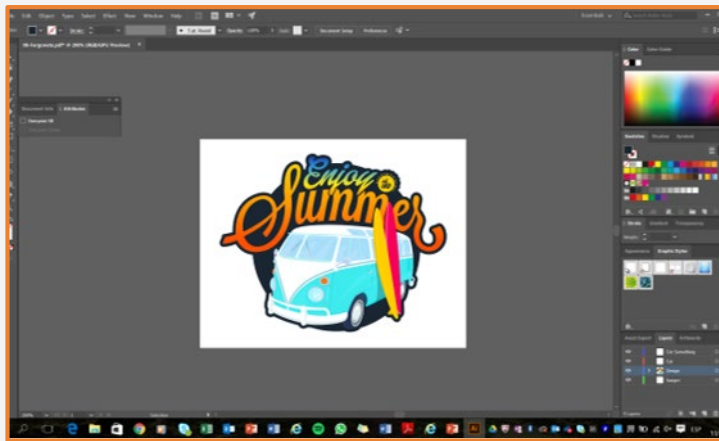
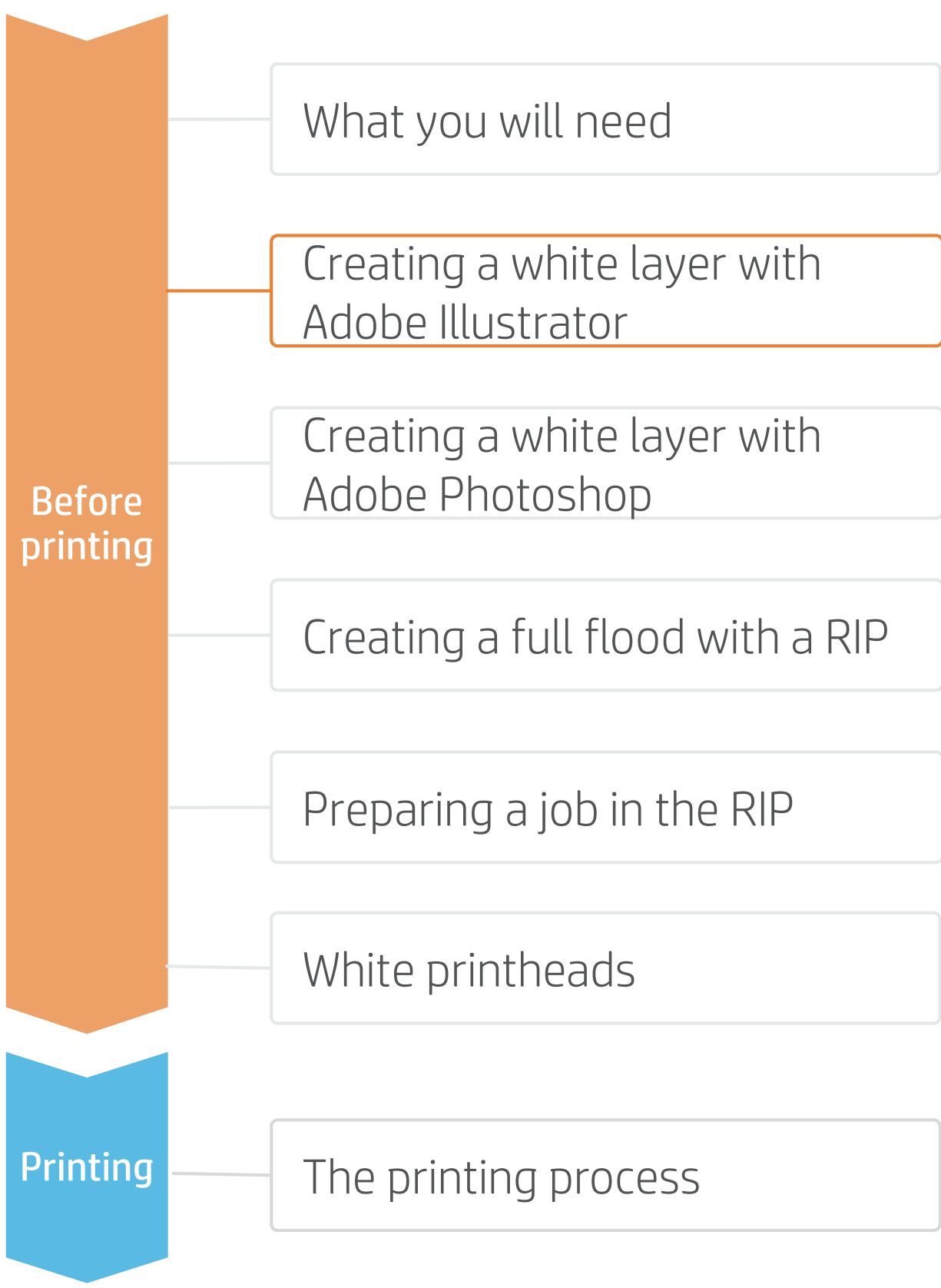


Printer

# How to print with white

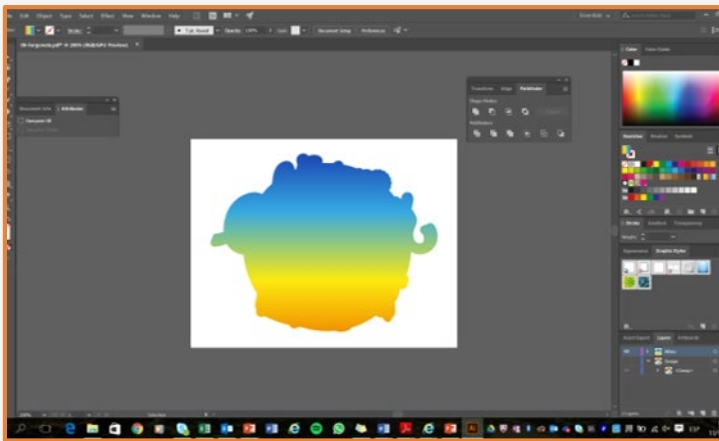


## Preparing a file: Adobe Illustrator



### 1. Open a file

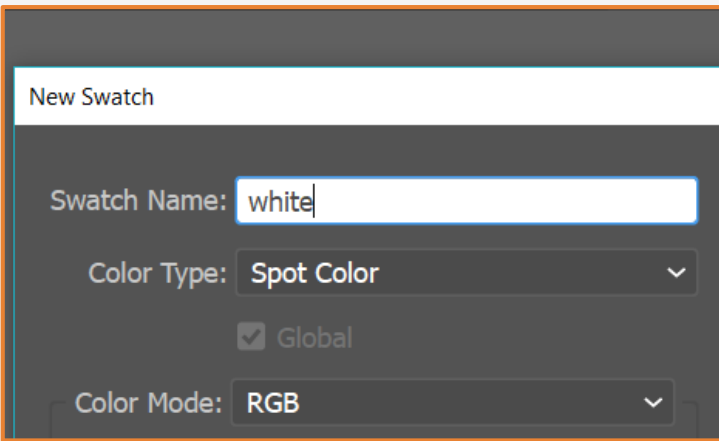
Open the file you will print using white ink.



### 2. Select

Select and/or create the part of the file that will be filled with white.

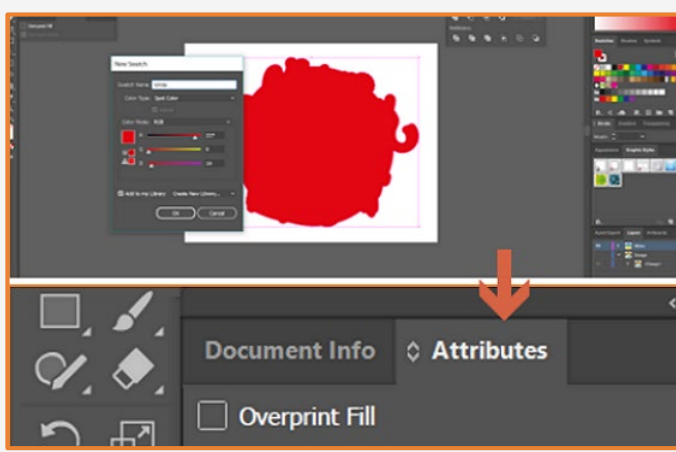
**TIP:** Use **CTRL+C** to copy and then **CTRL+SHIFT+V** to paste a shape in the exact same position as the original.



### 3. Create a new swatch

Create a new swatch color as a spot color.

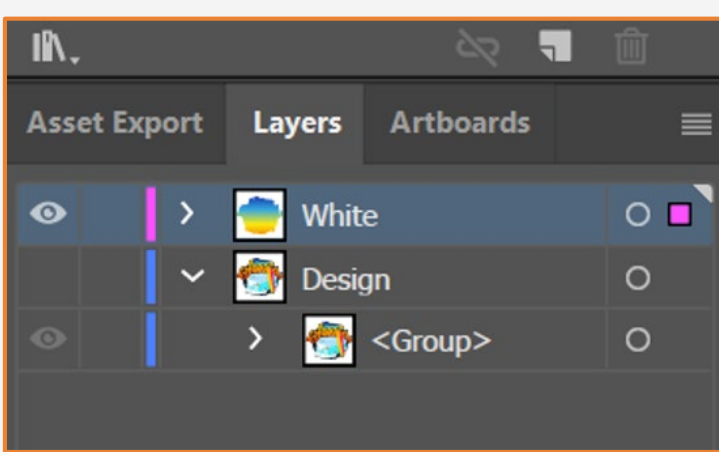
**NOTE:** Call the layer **White** for Caldera and **Spot1** for ONYX.



### 4. Fill and overprint fill

Fill the white layer with the white spot color.

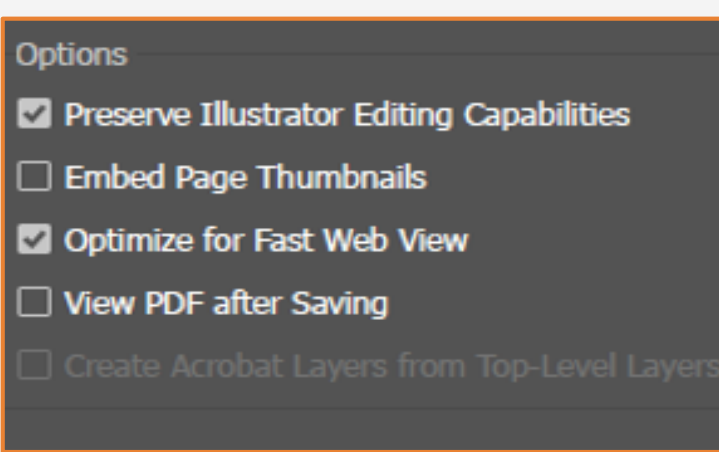
Then go to **Window/Attributes**  
Select the **Overprint Fill Option**



### 5. Bring the white layer to the front

You must bring the white layer to the front. If not, the RIP won't recognize it.

**TIP:** Use **Object > Arrange > Bring to Front** to bring a layer to the front.



### 6. Save the file

Save the file as a PDF and select the option to Preserve Illustrator Editing Capabilities.



# How to print with white



## Preparing a file: Adobe Photoshop



What you will need

Creating a white layer with Adobe Illustrator

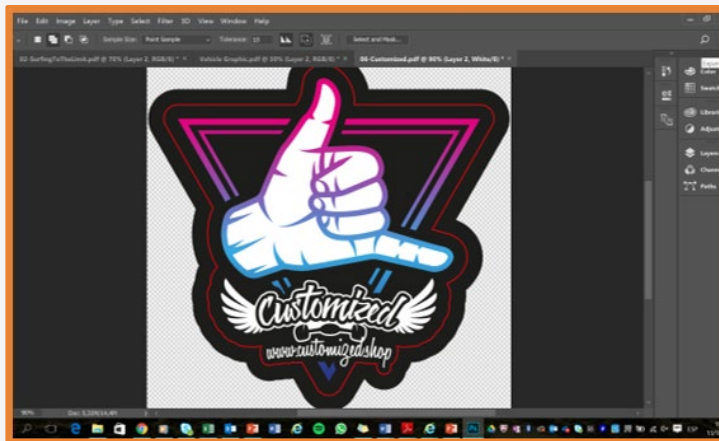
Creating a white layer with Adobe Photoshop

Creating a full flood with a RIP

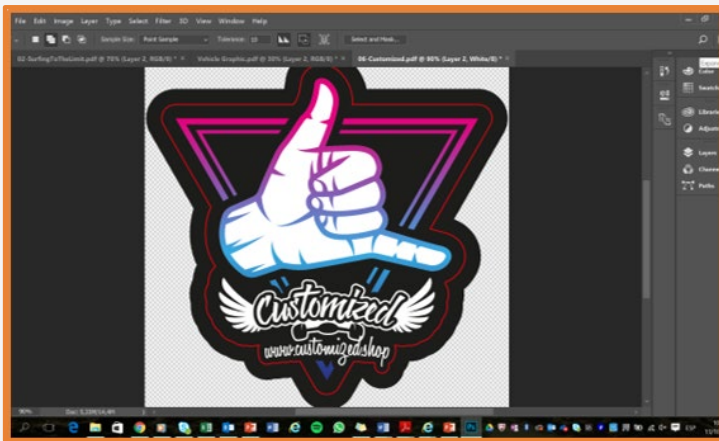
Preparing a job in the RIP

White printheads

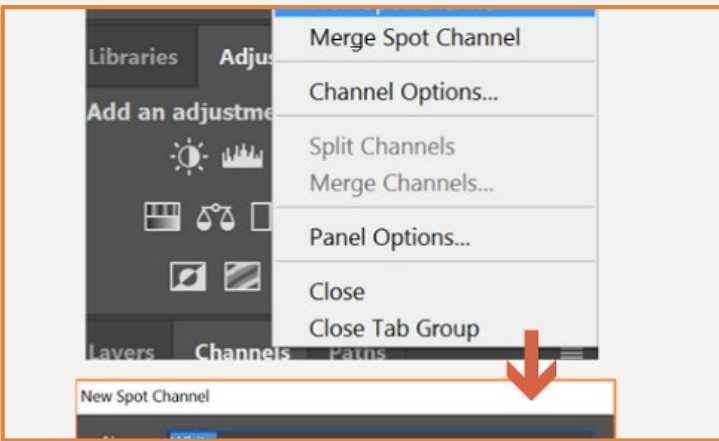
The printing process



1. Open a file  
Open the desired file.

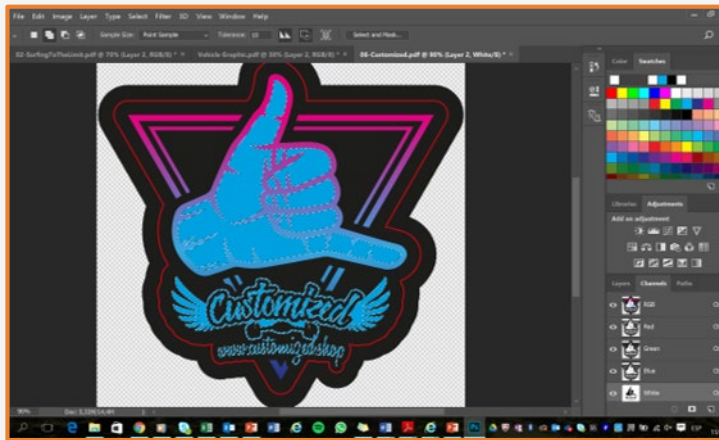


2. Select  
Select the part of the file that needs to be printed with white.  
All of the selected white part will be filled with white ink.

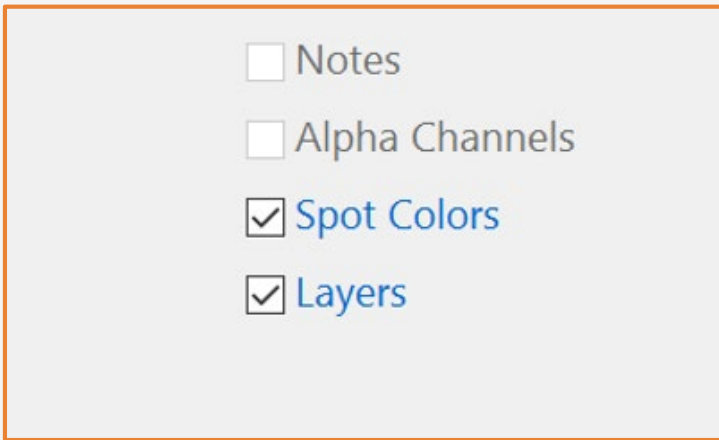


3. Create a new channel  
Go to the channel menu.  
Add a new spot channel. Select a color, for visual purposes.

**NOTE:** Call the layer **White** for Caldera and **Spot1** for ONYX.



4. File done  
In this example, the color cyan was selected. The image components filled with cyan are the ones defined to print with white ink.

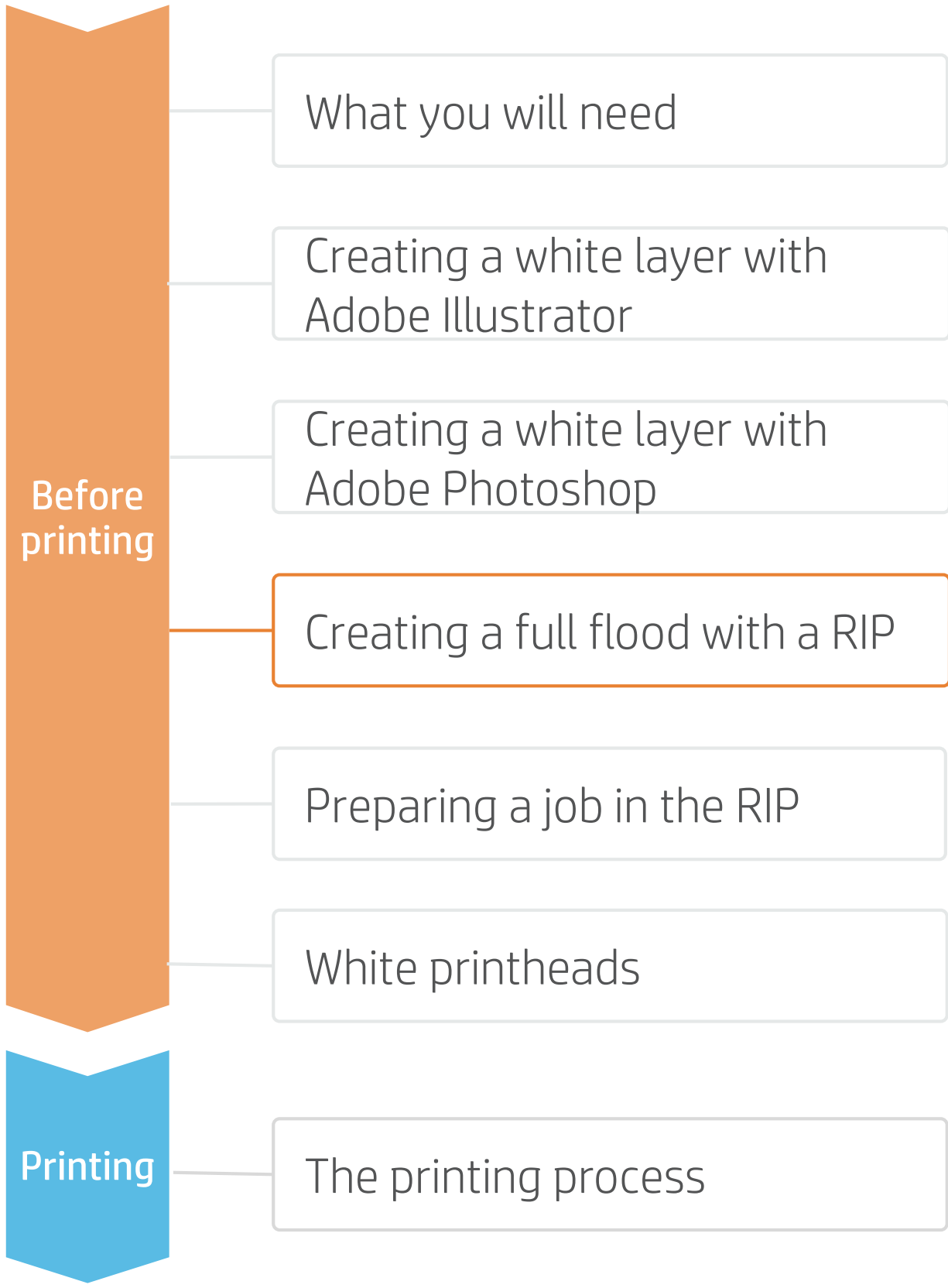


5. Save the file  
Save your file in TIFF format. Make sure the Spot Colors option is selected.

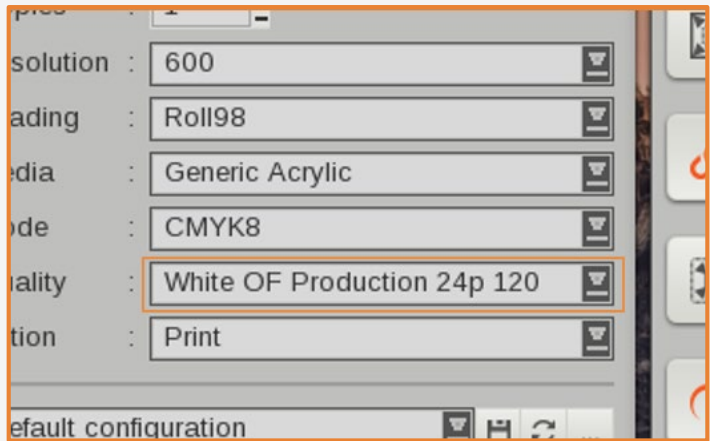
# How to print with white



## Preparing a job in the RIP

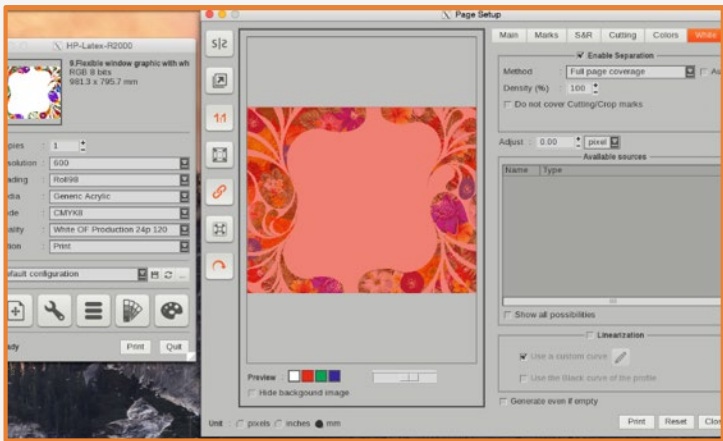


### In Caldera



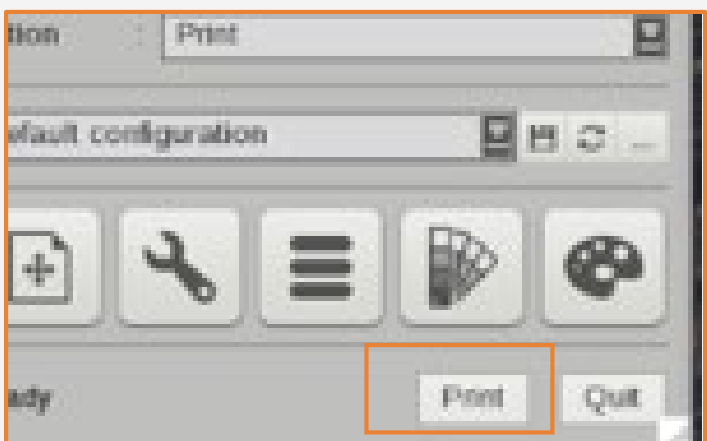
1. Open the file
- Open the desired file.
- Select the print mode UF, or OF.

**NOTE:** In this case, a full flood of white will be applied to our image.



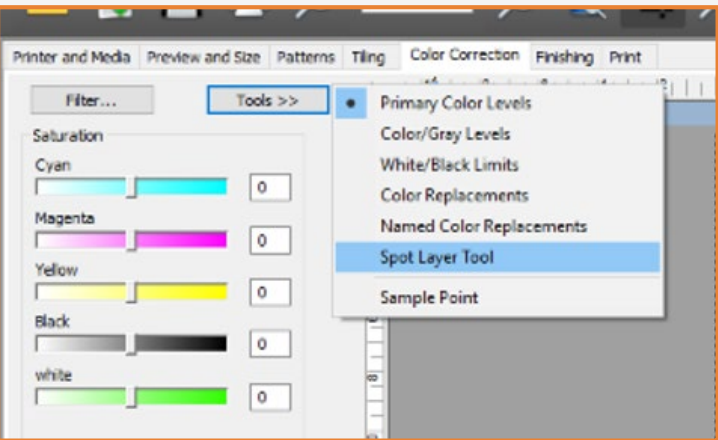
2. White layer
- Go to Page Setup.
- White/Enable Separation.
- Choose Full page coverage.

**TIP:** Use the cursor and one of the colors available to visualize where the white layer goes.

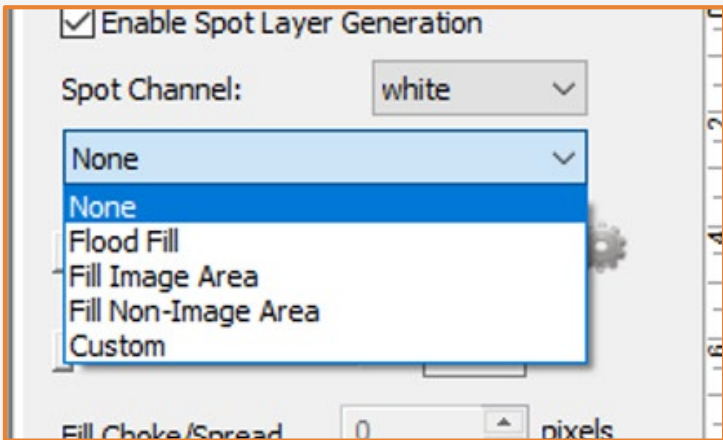


3. Send the job to print
- Send the job to print.

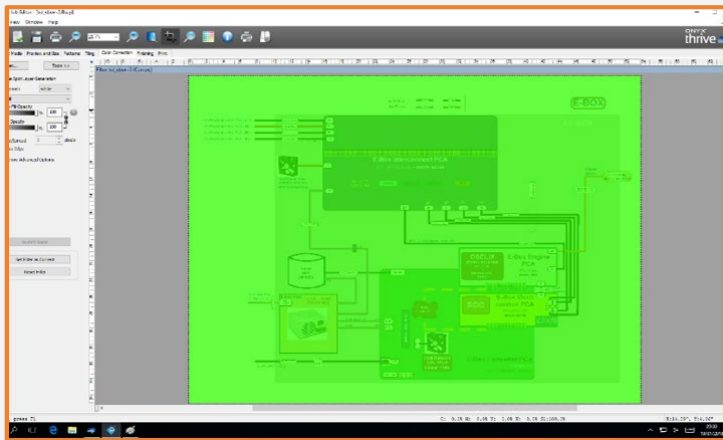
### In ONYX



1. Open the file
- Open the file with job editor.
- Select a white print mode.
- Go to Color Correction/Tools/Spot Layer Tool.



2. Enable the channel
- Tick Enable Spot Layer Generation.
- Select your **white** spot channel.
- Select Flood Fill.

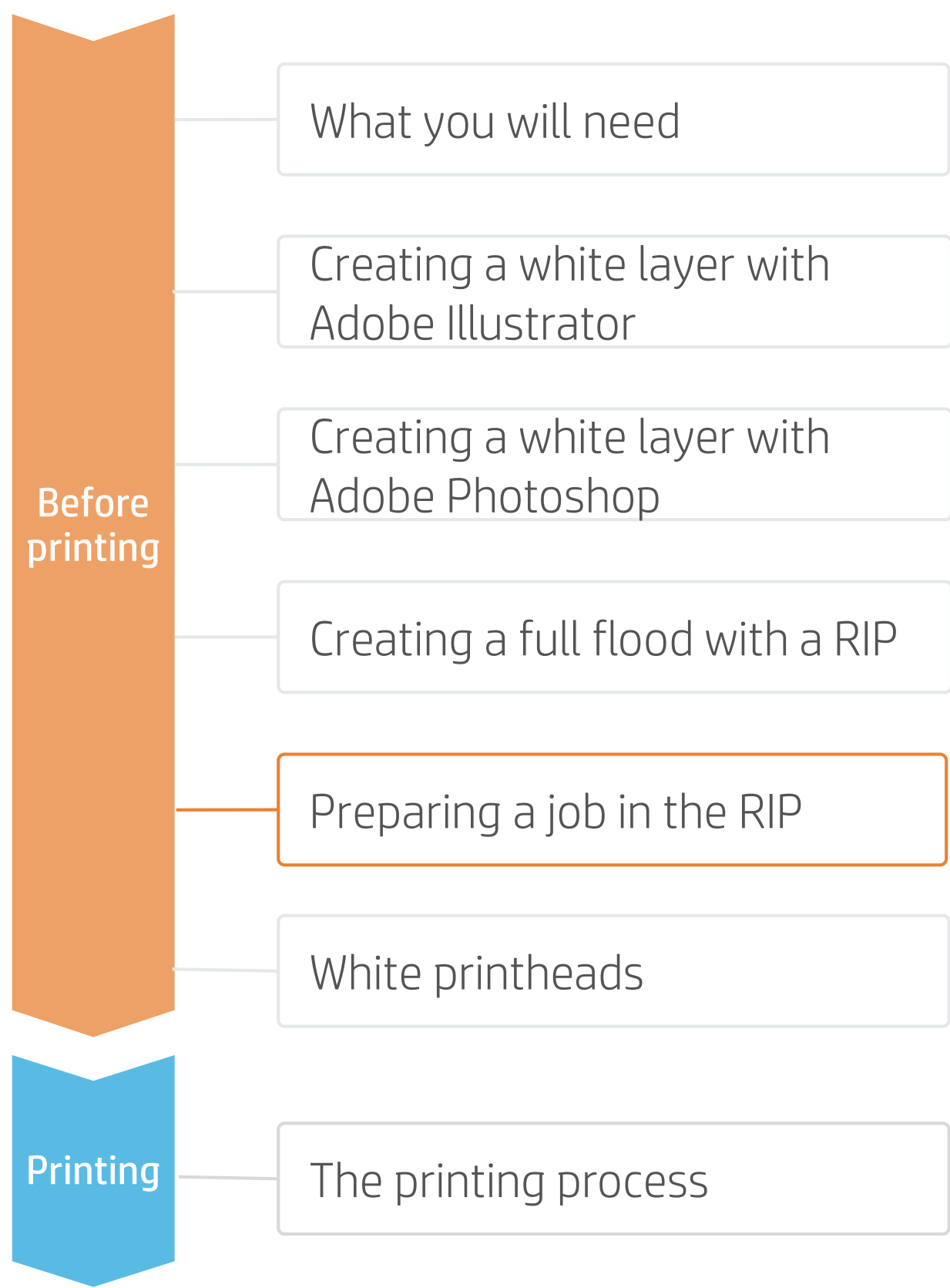


3. Send the job to print
- Send the job to print.

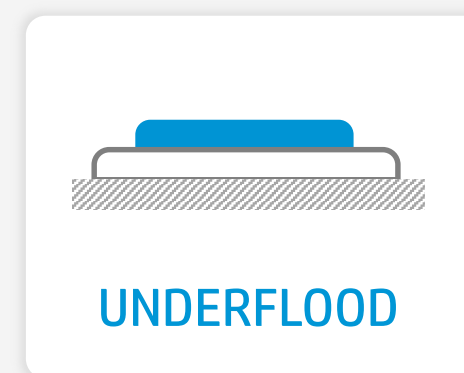
**NOTE:** In Onyx, the white layer is visualized with a green color.

# How to print with white

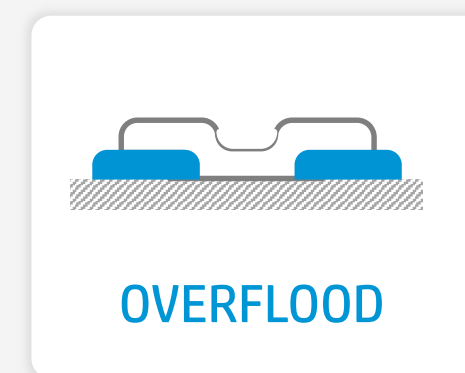
## Preparing a file



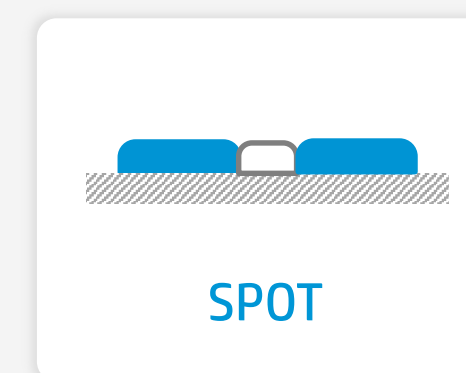
The job and media type will play a key role in determining:



**Underflood mode**  
Putting white first and color after.



**Overflood mode**  
Putting color first and white after.



**Spot mode**  
Using white as a 7th color.

**TIP:** When printing in Overflood, the image has to be put in mirror from the RIP.

Choose from three different levels of white, depending on the desired speed, opacity and available print modes.



**W100 – High speed / low opacity**

**W160 – Medium speed / medium opacity**

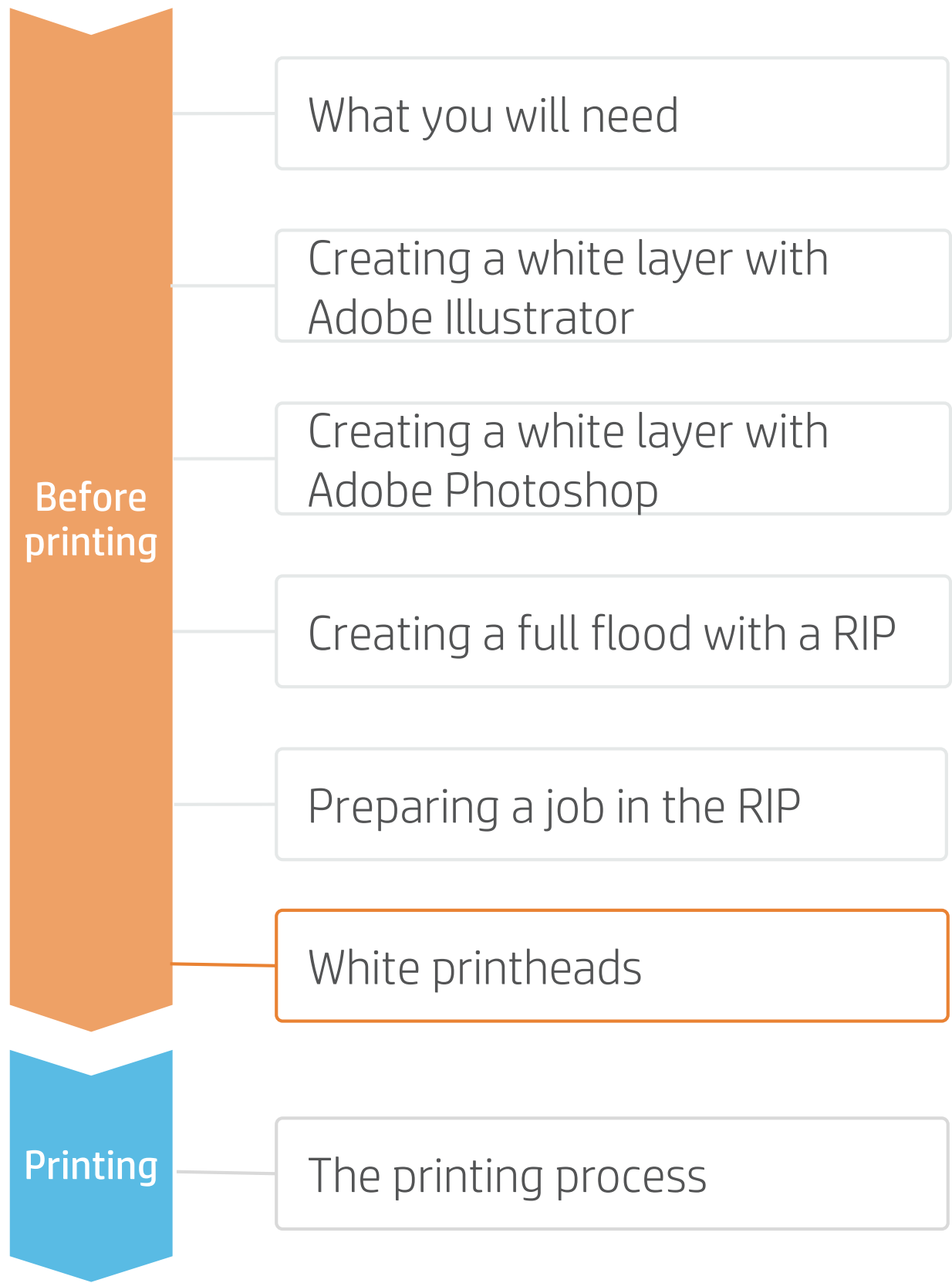
**W260 – Low speed / high opacity**

**TIP:** To print an image on a transparent media, putting full flood of white, it is faster to do it from the RIP than to create a layer or channel from Photoshop or Illustrator.

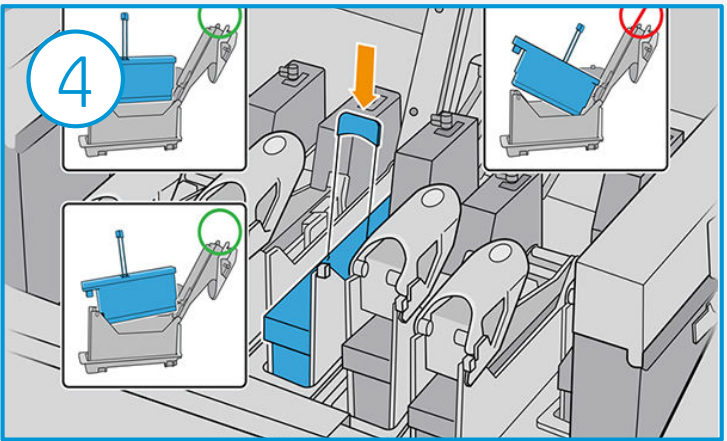
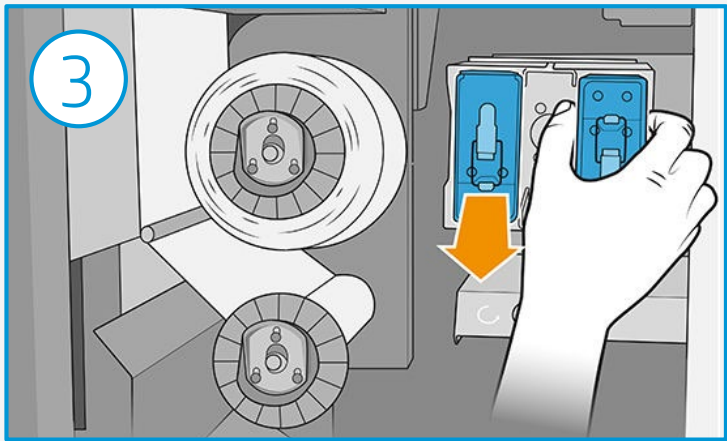
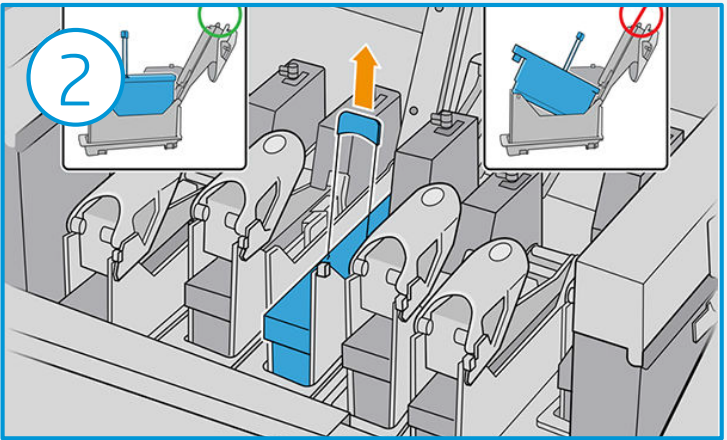


# How to print with white

## Before printing



1. Go to the IPS Printhead Menu, select **Replace**.
2. Remove the **auxiliary printhead** from the carriage.
3. Remove the **white printheads** from the offline rotation chamber.
4. Insert the white printhead into the carriage, push the button **Finish and Check**.



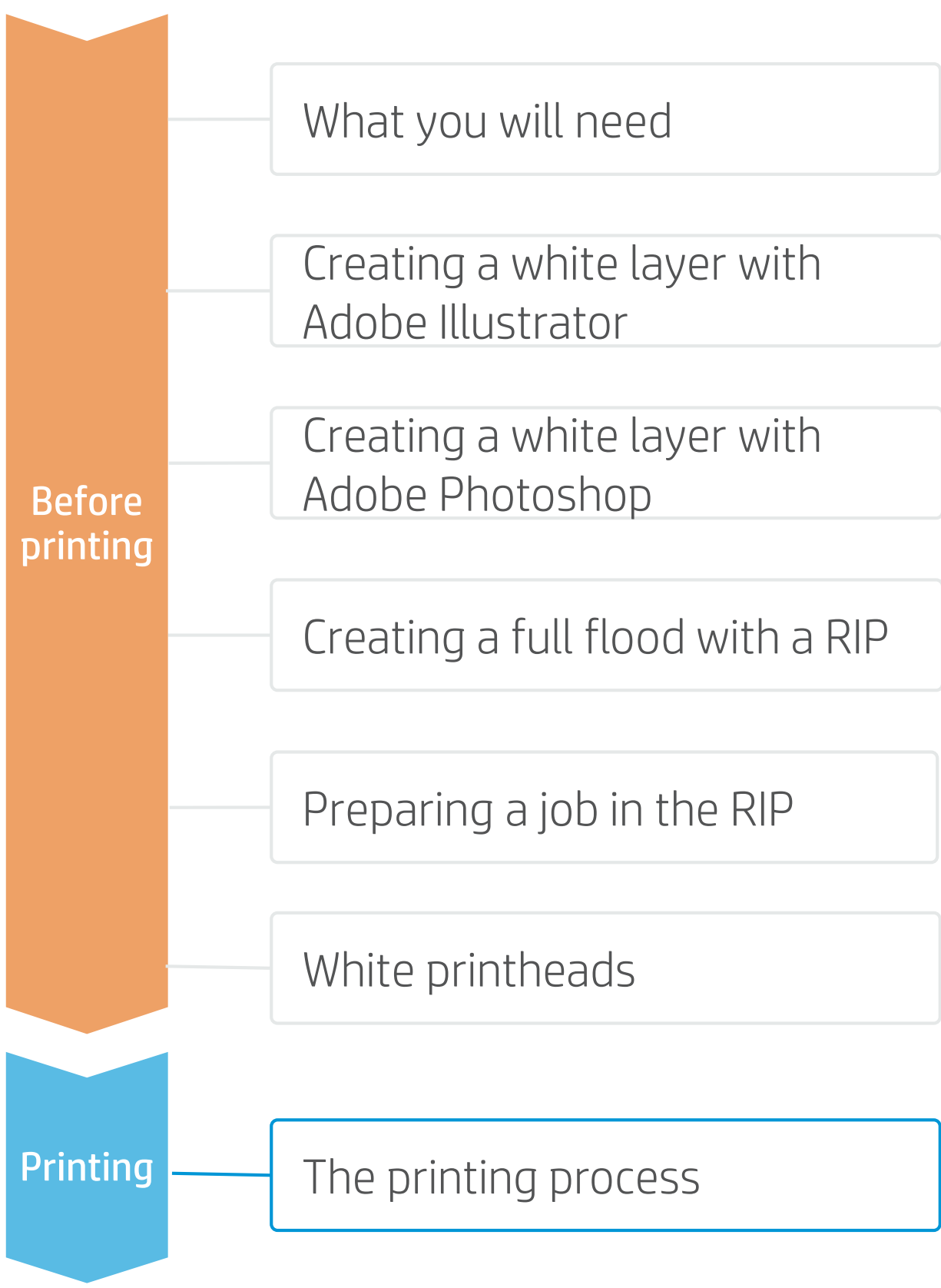
**NOTE:**  
It is crucial to put the printheads in their correct slots to have a correct alignment.

**NOTE:**  
It is critical to return the white printheads back into the offline rotation chamber when the need for printing with white ink has been completed, and is not needed any further.

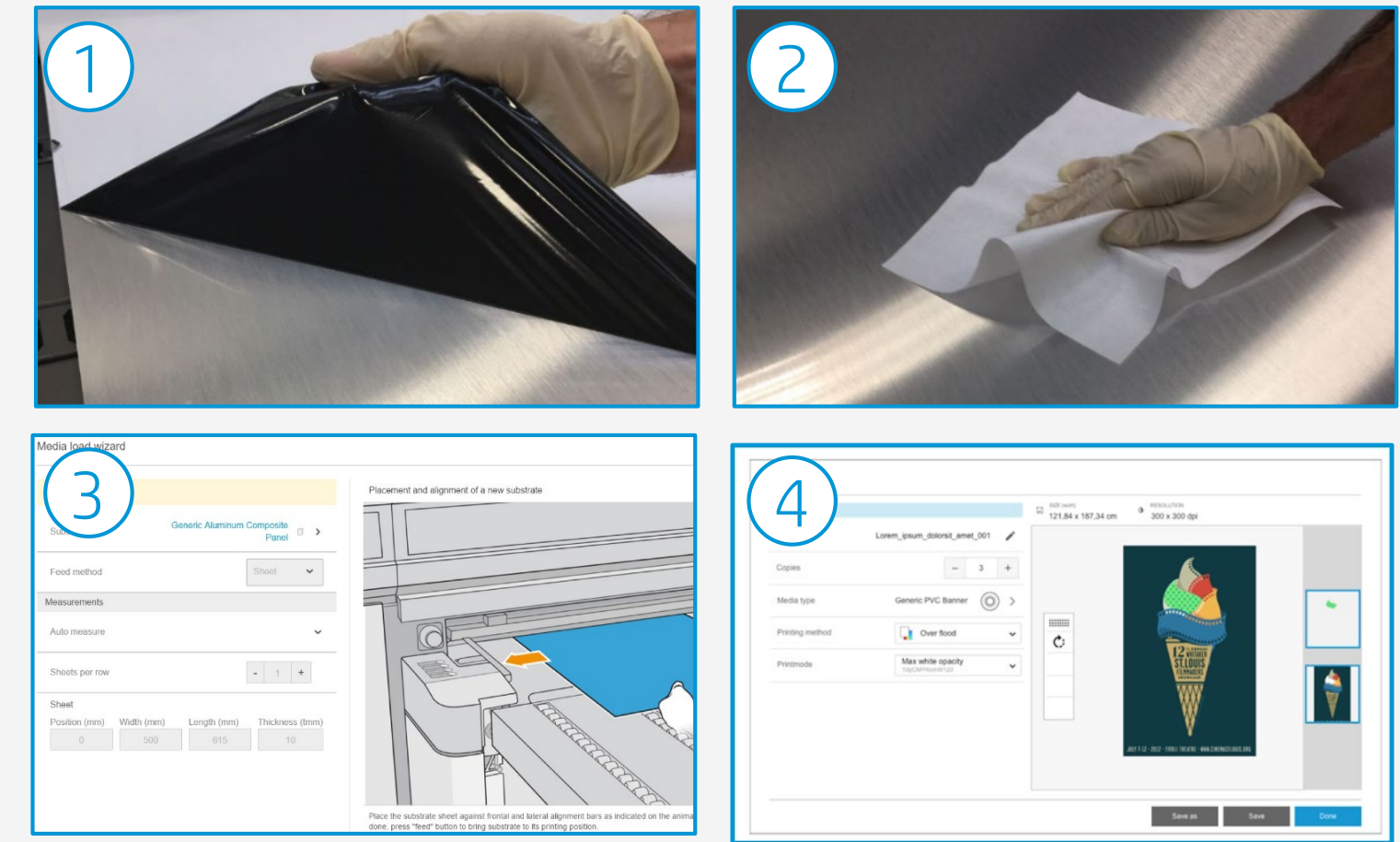
# How to print with white



## The printing process



1. If the substrate has a protective film, peel it off from one side, leaving the other side protected until finishing or installation of the finished graphic.
2. Clean the substrate with IPA and a lint-free cloth to remove any dust or static. Wait for it to be dry before printing.
3. Load the substrate onto the printer with the same substrate family used in the RIP.
4. Select the RIPped substrate and drag it to the printer job.




**NOTE:**  
Most media printed with white ink are not detectable. This means that the dimensions and position have to be entered manually.  
But, be careful to keep the thickness measurement in automatic to avoid issues.



# How to print with white



## Remarks



It is really important to put the white printheads back in the offline rotation chamber when not in use. This ensures a longer printhead life and no waste while printing normally (6 colors).

Learn more at:  
[hp.com/communities/lkc](http://hp.com/communities/lkc)

In partnership with:

