

White Ink and White Layer Explained

White ink and the white “layer” can be confusing at first, especially coming from a printing or online design background. Here, I will explain exactly why white ink is needed, how it works and how to implement it into your design. This will not be an all-encompassing description but a primer that hopefully will allow you to understand and utilize white ink.

Basics

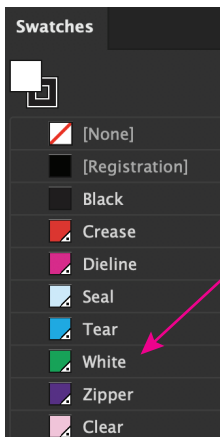
The reason we need white ink in our process is simply this, we print on a clear film or a film that is semi-transparent using inks that are also transparent. Because of this we add a layer of white ink between the color inks (CMYK) and the film. If we do not add white ink what happens is the substrate that is laminated to the print film will show. Sometimes this is desirable, when a window or metallic effect is required, but when it is not then white ink needs to be printed. Unless a white laminated material is used instead of clear or metallized laminate.

Exceptions to the Rule

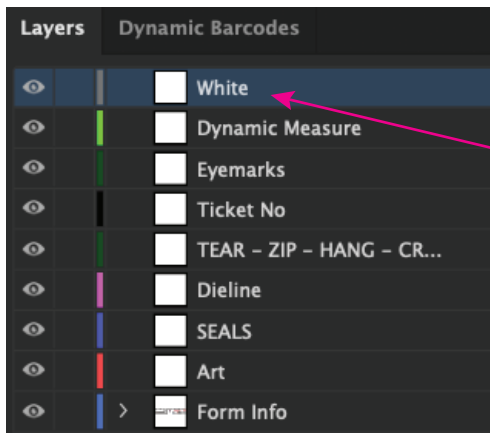
Sometimes there are exceptions to the rule. As noted above when your film will be laminated to a white lam then no white ink is needed. The white laminate takes the place of the white ink. Also, when you are looking for a clear window in your packaging then no ink (white or color) will be utilized in the window area. There is a 3rd instance when no white ink is used, this is when you DO want the laminate to show through. When using a metallized laminate, removing the white ink under the CMYK will allow the metallized lam to show through the CMYK. This creates what we call a metallic effect.

I will now describe how to recognize and build the white ink layer.

When you receive a dieline from your contact here at ePac you will notice 2 things in regards to the White ink.




First is in the Swatches Palette there will be a swatch called White. This swatch is REPRESENTED in Green. The reason we do this is because if we left it as White you would not be able to see it. This swatch will be a Spot Color and must remain so for it to work.



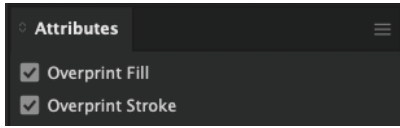
Second is in the Layers Palette there will be a layer called White. This is where all WHITE INK elements need to be built

There are 3 rules for the white ink objects you will create. These are hard and fast rules.

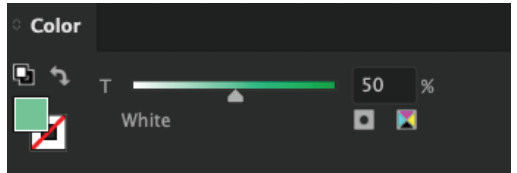
- 1. Any objects on the white layer MUST be filled or stroked with the White swatch. NOT the White Square in the Color Palette**
 - 2. Any objects on the white layer filled or stroked with the White swatch MUST be set to Overprint in the Attributes Palette**
 - 3. Any objects on the white layer filled or stroked with the White swatch can NEVER use transparency.**
- If a percent of White Ink is desired apply a Tint to the object in the Color Palette instead of transparency**



Never use this to show White INK



Set objects to Overprint



Object filled with 50% White Ink

How to Create White Ink Objects

Creating a White Ink Object may seem complicated or confusing but it really is not. Once you understand the basics and the fundamentals it really is quite simple. Let me show you how with these 2 examples.

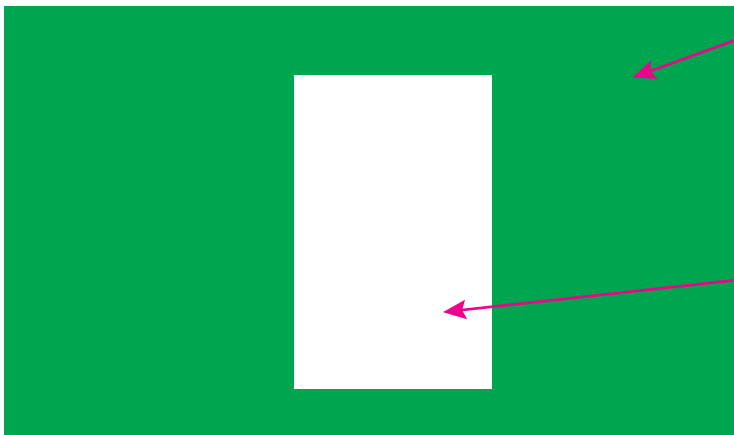
How to create a Simple Window



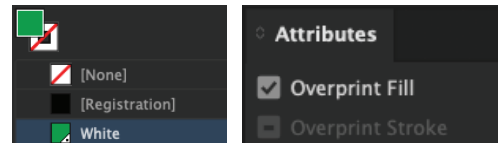
Start out with a basic design.

All your artwork on the **Art Layer**.
Nothing on the **White Layer**.

Here we want White Ink to print wherever there is CMYK Ink. And NO White Ink where we want the Window.

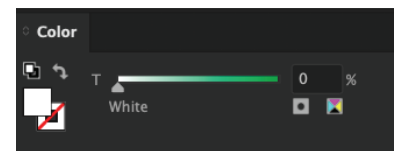


On the **White Layer** simply make a box filled with White (Swatch) set this to overprint in the Attributes Palette.



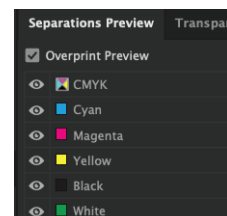
Then, put a box where the window will be OVER the White Ink Box.

Then fill that box with White (Swatch) set to overprint Tint of 0% in the Color Palette



Double-check your work.

Select Overprint Preview under the Separations Preview Palette. This shows your White ink OVERPRINTING the design and also your window.



Thus we have created a window in our design where your product can show through the bag.

Creating a metallic effect



To demonstrate I will use the same design as before

The intent will be to create a metallic effect in the RED areas of the design.

The way this is achieved is by printing no White Ink in the red areas. But 100% White behind everything else



Here on the White Layer is the White Ink at 100% with no White Ink where the Red is.

This allows the Metallic Laminate to show through only in the Red ink areas.

White Ink. Blocks out the Metallic Laminate

No White Ink. Reveals the Metallic Laminate



Here is the design with overprint preview turned on in Separations Preview

You can see the design behind the White Ink. this is because the White Ink is set to overprint and Overprint Preview is selected.