Designing with and Using Clear Toner for Xerox 800
Clear Toner can be used to create fantastic designs that catch the eye. However, there are a few considerations that need to be made. Designing with clear is different from normal design in the sense that there is some additional design considerations and slightly more file set-up that needs to be done in order to create successful designs.

Clear toner is a fifth color that prints on top of the other colors used in conventional printing (Cyan, Magenta, Yellow, and Black) and has almost no color itself. Instead, it is typically used to create visually-distinct areas in a design by increasing the reflectivity or ‘shine’ of a design where it is applied.

Here, I will briefly mention some design considerations that should be taken into account in your design to help assure that it will be successful. All steps are described for workflows using Adobe InDesign since it is the industry standard for the creation of printed documents, but I have also included steps for use in Adobe Illustrator. If you use a different program and can set up your file with the equivalent settings, that should work as well.
1. Background Contrast

It is important to choose a low-contrast background for your design. Choosing a background that is too busy can make it difficult to see where the clear is applied. Using low-contrast backgrounds allows contrast to be primarily seen between the background and the clear areas, rather than just between different elements of the background.

**Top:** The area in purple represents the area in which clear was applied in both of the following designs.

**Middle:** A high-contrast background with lots of color causes the clear ring to be barely visible (look for the upper portion of the ring near the lake area).

**Bottom:** A low-contrast background with low variabilities in color (this image could have just as easily been in color, black and white images do not necessarily make better designs) results in a much more successful design.
Design
Visually-Distinct Objects

2. Visually-Distinct Objects
It is a common mistake to want to outline objects in a photo or design in clear. However, the photo or design itself already has visually distinct areas and simply placing clear over an already-distinct object has little noticeable effect. Clear is, in fact, clear (aka not a color), so the only way to distinguish clear from non-clear areas is through a contrast in sheen, which is difficult to see along the border of objects which already have clear edges.

**Top:** The area in clear is shown in purple for both designs.

**Middle:** Each cookie is already a distinct object, so covering it in clear does not achieve a very successful effect (the clear is applied over the middle cookie, look closely along the right side).

**Bottom:** The clear doesn’t cover any specific area of Ryan Reynolds (compared to if we covered his whole head in clear for example) so it stands out. He does look a bit weird though.
3. Coated v. Uncoated

Another one of the most important design considerations is stock choice. Choosing a stock choice that is coated (with a therefore smoother finish and shinier image) produces clear designs much better than uncoated stocks. The thickness of the stock does not matter, only that it is coated (which causes the clear to ‘shine’ more and become more noticeable. You can talk to any employee and they can help you find the best coated stock for your project. In addition, the clear produces much sharper edges.

**Top:** The area in clear is shown in purple for both designs.

**Middle:** The uncoated stock produces a rather unflattering and dull effect in the areas where clear is applied.

**Bottom:** Using a coated paper stock helps the sheen of the clear stand out more readily and results in a sharper, more-successful design.
Design
Clear Area Size

4. Clear Area Size
The size of the area that the clear covers is not a critical component to how a design ultimately turns out. If the clear has high contrast with its background and the other design considerations are used when creating the design, the final product should be successful. While you ponder all the great design ideas mulling about in your head right now, please enjoy this picture of this puppy. God, that's a cute puppy...

Top: The area in clear is shown in purple for both designs.

Middle: The lines around the puppy have ample contrast with the background so they are successful.

Bottom: The lines, although a bit thicker, are still just as effective.
5. Background Lightness

Having a light background means that it is easier to see the clear without bringing it up to the light in order to see the difference in shine between clear and non-clear areas. Having a medium dark background, on the other hand, can make the clear areas just as visible, you just have to put the piece up to the light to see them. This can sometimes be more effective as the clear ‘magically appears’ when light reflects off the paper at just the right angle, and is more hidden when it is not.

**Top:** The area in clear is shown in purple for both designs.

**Middle:** The sandy foreground (and entire image) is very light so the clear is immediately seen.

**Bottom:** The darker blue helps hide the areas in clear until the design is held in the light. However, the darkest areas at the corners of the image are too dark and, as a result, the clear is very difficult to see.
File Preparation
Setting the Clear Swatch
& Adjusting Settings

1. Setting the Clear Swatch
Setting the clear swatch is the most important part of the process. It is critical that the swatch is named ‘Clear’ with a capital ‘C’ and a lowercase ‘lear’ (top). If this is not done correctly, the printing press’s software will not be able to recognize what areas you wanted to print using the clear toner, and will not print clear in those areas at all.

1. To open the Swatches panel, choose Window > Color > Swatches (Window > Swatches in Illustrator)

2. To add a swatch, click the second icon from the bottom right of the swatches panel.

3. Double click the swatch (or right click and choose Swatch Options) to set the swatch options (bottom)

4. Rename the swatch to ‘Clear’ and change the Color Type to ‘Spot’ instead of ‘Process.’

5. Changing the sliders to adjust the color only affects how the color will be displayed on your screen, not how it will print. It is suggested that you use a color not common in your design so you can keep track of your clear.
2. Adding a ‘Clear’ Layer

It is important to add all of your clear objects to a separate layer on top of your other layers so all of your clear objects are printed on top of your other artwork. If it were on the bottom layer, the clear would not get printed at all (since the other layers would get printed over the clear and you would therefore not be able to see the clear).

1. To open the Layers panel, choose Window > Layers (this is the same in Illustrator)

2. To add a new layer, click the second icon from the bottom right of the layers panel (top). It is suggested that you name your clear layer ‘clear’ but correct spelling and capitalization is not necessary here.

3. Select all of your clear objects, and cut and paste them into the new layer, making sure to have the clear layer selected when you paste (bottom). Make sure that the clear layer is positioned above the other layer(s) as well in the layers panel. To make sure that all clear objects are in the correct layer, click the eye icon next to the clear layer in the layers panel and all clear objects should disappear. *This is also a good time to make sure that your clear swatch is applied to all clear objects (and not simply created but sitting unused in your Swatches panel).*
3. Setting Object Overprints

Making sure that all of your clear objects are overprinted. If this is not set, the clear area will knockout the other colors underneath it, and print on a patch of white the same area as the clear instead.

1. To get to the Attributes panel, choose Window > Output > Attributes (Window > Attributes in Illustrator)

2. You will also need the Separations Preview panel. To get to it, choose Window > Output > Separations Preview (Window > Separations Preview in Illustrator)

3. To overprint the clear objects, go to the Attributes panel with the clear objects selected, and choose ‘Overprint Fill’ or ‘Overprint Stroke’ (top). If the objects have both a clear fill and stroke, choose both.

4. To check if your overprints are applied correctly, open the Separations Preview panel, change View to ‘Separations,’ and click on the eye icon next to Clear. If the image gets knocked-out like the image to the right (aka white can be seen under the areas where clear is), go back and make sure the clear is set to overprint (right).
4. Exporting the Project

After you have finished your design and made sure that all of your clear settings are properly set, you are ready to export your project.

1. Before you export, double-check that you have:

   » created your clear swatch as a spot color and named it correctly
   » applied your clear swatch to all clear objects
   » created your clear layer and moved all clear objects to this layer
   » set all clear objects to overprint

2. To export, choose File > Export (File > Save As in Illustrator. Then you will have to change the file type from ‘Adobe Illustrator’ to ‘Adobe PDF’)

3. At the top of the Export Window, set the Adobe PDF Preset to ‘[High Quality Print]’ and click ‘Export’ at the bottom.

3. If everything else is properly set-up in your file, you are ready to print. Have fun designing and making a final piece that really stands out! And, most importantly:

   Have Fun!