## Digital Reproductions

Digital printing is a new option for reproducing historic wallpapers that can provide custom work at a lower cost than the traditional methods allow. Computer design programs are used to recreate and color correct historic patterns from photographs of old wallpaper—or even from wallpaper fragments—which can then be digitally printed onto rolls of paper. The process is even easier for a pattern that survives in a partial roll of wallpaper, as the digital image will need few if any corrections. To overcome the limitations of digital printing—such as the inability to print metallic colors—some innovative companies use screen printing or other traditional techniques on top of the digitally printed paper to complete the process.

The following images are courtesy of EverGreene Architectural Arts.



In the foreground, an artist at EverGreene Architectural Arts is working on a wallpaper design on her computer while a technician is printing on the digital printers in the background. With digital printing, all colors are printed at once and do not require drying time unless additional layers need to be added for metallic elements or flocking.



Fragments of historic wallpapers were all that survived in the Clara Barton House in Washington, DC, like the strip that was preserved behind a baseboard in this hallway (now behind Plexiglas).



From the surviving fragment, the entire design was recreated digitally and then printed to restore the walls of the hallway to their post-Civil War appearance.

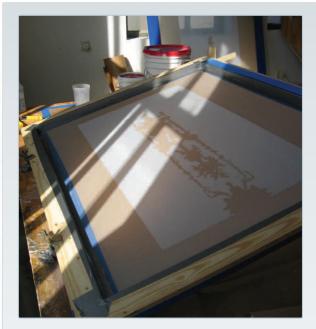




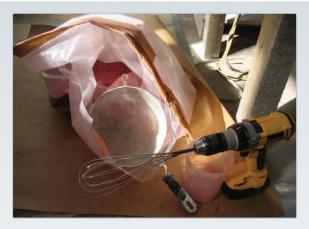
Artists work on a digitally printed base pattern to recreate a raised metallic design.



This is the base print from the digital printer for a panel that is to have the background color flocked. Flocking is a technique for attaching finely chopped felt to parts of the paper to create the effect of velvet that was very popular for a time in the nineteenth century.



This screen-printed stencil will mask the printed elements of the design while allowing adhesive to be squeegeed onto the background.



Tools for flocking include a bag of flock, a strainer to sift the flock, and a beater in a hand drill to vibrate the paper, which causes the flock to bounce around and settle lightly into the adhesive.



A close-up view of the flock.



The color-tinted adhesive.



Applying the adhesive through the screen with a squeegee before lifting off the screen to begin the flocking.



## **Machine-Printed Reproductions**

Machine-printed wallpapers were developed in the mid nineteenth century using printers with multiple rollers to print different colors nearly at the same time. These metal rollers had thin metal outlines filled with an absorbent felt for the areas of color. Ink was absorbed by the felt and transferred to the paper as it passed over the roller. The expense of making these printing rollers, one for each color in the design, means that a lot of wallpaper must be sold to turn a profit. Some historic wallpaper patterns are popular enough today to be produced by machine printing.

Exercise caution when buying from "historic" collections of the major wallpaper manufacturers. Such patterns are based on historic designs but not necessarily on wallpaper designs. Instead, they might be taken from needlework, fabric prints, carpet designs, or even bed quilts. Sometimes, historic wallpaper patterns are reproduced in colors that were not used during the period. If your goal is to hang wallpapers that are accurate to your home's period of significance, spend some time researching what patterns were available then. There are several good books on historic wallpapers listed in Chapter 20, along with several excellent online collections of historic papers.