

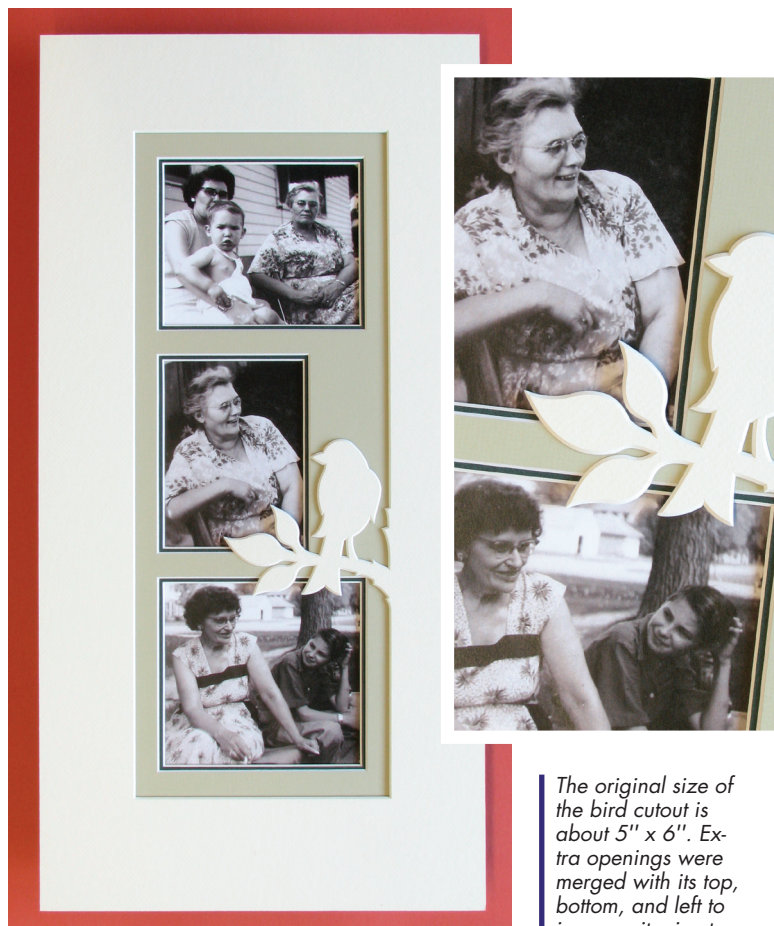
# Openings Behind Decoration

*Multiple openings and a decorative cutout show what your CMC can do.*

One promise of the computerized mat cutter was that any artistic conception could be designed and cut. The time spent on drawing and testing would be divided over the dozens of times it would be cut, making these kinds of projects practical. The reality for those adventurous designers is that once that one project for that one customer was finished, that design remained filed away unused.

Another promise of the computerized mat cutter was that multiple-opening projects would be a snap to design and effortless to cut. This has indeed become a reality—and for many shops, an important product line. But how exciting can an arrangement of openings really be?

Perhaps one can help the other. It is possible to transform a neglected artistic cutout into a large opening, and behind it there can be a multiple-opening arrangement. The artistic part would recede in prominence and play a supporting role in telling the story of the framed pictures. It could then be used again and again for other multiple-opening arrangements, each one having its own unique size and character.



The original size of the bird cutout is about 5" x 6". Extra openings were merged with its top, bottom, and left to increase its size to 18" high and 7" wide—but the bird itself remains about 4" high. The three openings are  $\frac{5}{8}$ " apart (measured on the top layer). There is also  $\frac{5}{8}$ " of the light green mat showing all around the photos. There is a matboard spacer lifting the top layer so that there are shadows around the decorative cutting.

## Engineering

For this idea to work, the artistic cutouts must be a little different. The images in these examples, the bird and the buildings, are designed as positive shapes—shapes of matboard attached to the inside of an opening—not free-standing cutouts as usually seen. Look at the first illustration on page 14 to see one of these cutouts. The light green area is cut away. The light gray area, the bird, and the



**Brian Wolf** began framing pictures while attending Iowa State University. In 1973, he won the Janice Petersen Andersen award for outstanding design student. He began demonstrating his hand-carving technique for mats at conventions and teaching for the PPFA. Brian started his own framing business in Cedar Rapids, IA, in 1983. Since 1989, he has focused on leading workshops around the world on his matting techniques. He has authored books, appeared in videos, and contributed to trade magazines. He joined Wizard International, where he contributed his artistic touch to product development. He continues his work with Wizard through education, events, and design content.

right side, is the mat. This is the transformation that engineers a way to change its placement and the size of its perimeter without any further drawing program work.

The key aspect is that there is open space around the cutout image. The size of the open space will be changed to suit each project by adding extra rectangular openings snapped and merged to the artistic cutout's sides. Using this process, the artistic part is unchanged—not stretched and not distorted.

This requires that the image is attached to the inside of a rectangular opening that is standing up straight (so that the rectangle's sides can be extended), none of the image extends beyond the outer rectangle (so that it is easy to snap precisely to every edge), and at least one side of the outer rectangle is not connected to the image (so that there is open space beyond the image that can be extended).

## The Bird Design

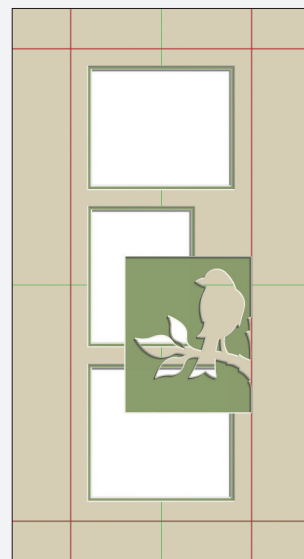
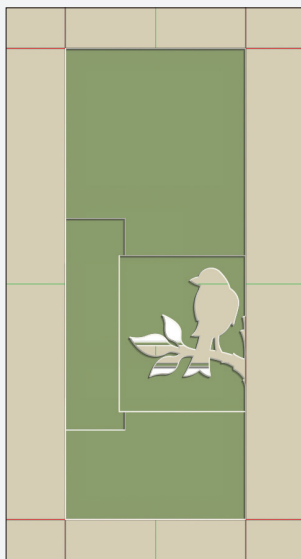
The beginning example illustrates the marriage of an artistic cutout with a multiple opening arrangement in its ideal form. The three openings are arranged, and the decorative bird cutout is positioned. The cutout is the beginning of the top layer. Extra rectangular openings are added along its top, bottom, and left to extend the cutout's edges and create a top layer that is the correct size to surround the three photos.

The following step-by-step section illustrates the process and answers practical questions of this particular project: how to determine the size of the top layer, where the extra openings are positioned, and the steps of cutting the project.

## STEP BY STEP

First, arrange the group of openings. In this example, their left edges are flush. There are guides (the red lines) positioned  $\frac{5}{8}$ " away from the openings. These guides form the outside edges of a new top layer that will include the bird cutout.

The bird cutout is added with its right edge snapped to the vertical guide at the right. Its vertical position is an artistic choice. Here, the bird overlaps the two bottom openings in spots that will not cover critical parts of the image.



To make the bird cutout into the new top layer around the openings, it cannot be simply stretched to a new size. Extra openings are added to extend the top, bottom, and left of the bird cutout.

Note that the openings' outer edges are snapped to the guides. It is difficult to see, but the openings' interior edges overlap slightly onto the edges of the bird cutout, but they do not cover any of the image of the bird.

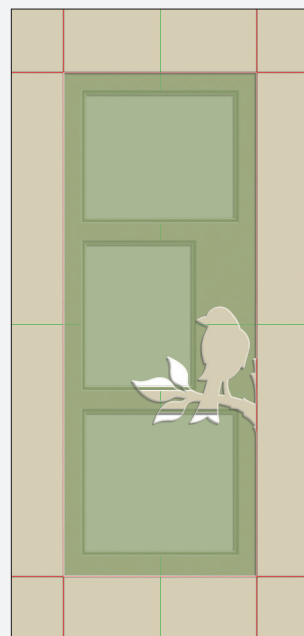
The bird cutout and the three extra rectangles are merged to form one large shape that includes the bird connected to the right edge. This will be the top layer of the design. It is shown slightly transparent so that the three openings behind it can be seen.

This project will have three layers. The top layer will be the merged rectangles with the bird cutout. The middle layer will be the top layer of the three openings. The bottom layer will be the bottom layer of the three openings.

Though the project looks ready to cut in the illustration, there are only two layers in the present design. A new layer could be generated in the drawing program, but it is easier to cut the layers of this design separately.

Begin by deleting the three openings.

Cut the decorative top layer first, then restore the three openings, delete the decorative top layer, and cut the two layers of the openings.







Unlike the single-layer bird cutout, this cityscape cutout is three layers. Only the top two continue as visible layers around the open area on the left, so it appears to be a double mat. The bottom layer of the cutout is even with the top layer, hidden under the middle layer. The extra openings merged to extend the left and the bottom also need to be three layers so they match the reveals of the cutout. As a result, when the items are merged, the sides will cut smoothly without interruptions at the junctions. In this example, the reveal for the middle layer is  $\frac{1}{8}$ " and the reveal for the bottom layer (the hidden layer) is negative  $\frac{1}{8}$ ".

As the design develops, consider that the image of the bird is only about 4" high. It is neither so large nor so solid that it cannot overlap the photos here and there. Overlapping is not something that picture frame design often allows, but there are advantages here. Overlapping helps to unify the openings with the artistic cutting. And it allows the bird cutout to be included without increasing the size of the project.

## A Cityscape Design

The cityscape cutout above is made with three layers. To render the feeling of height, depth, and density, these three layers are necessary. But only the top two layers of the cityscape cutout continue as visible

layers around the open area on the left. The intention is to keep the area around the openings from becoming cluttered with too many layers, and to focus the activity of the design on the cityscape.

The arrangements of the openings for both these projects are as simple as they can possibly be—one vertical column. This is fine for demonstrating the concept. In fact, it may be ideal for emphasizing the feeling of height in the cityscape project. However, it should be clear to see that this idea is adaptable to any collection of pictures that need to be included.

I encourage you to tap into your artistic side and create several decorative cutouts like these

that you can use to embellish multiple-opening mat designs. Keep in mind that if you design your cutouts to be evocative of a subject, rather than specific, you will be able to use them more often. You'll notice the bird cutout was designed that way; it calls to mind a feeling of nature and wildlife without pointing to a specific species. The cityscape, too, can be used in future projects as a symbol of just about any city; it doesn't look like any one specific skyline. Most of your customers have either a city- or nature-related story to tell (many will have both!). You can use decorative accents like these to help tell their stories with beautiful framing packages they'll treasure in their homes. **PFM**