Learn and be inspired.

Template Shapes: 102
A Few Opening Shapes to Consider

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There is a Wizard in the shop. You are thinking how to use more of the machine's potential. Expanding the range of opening shapes beyond rectangles is a good beginning.

Let's look through the **Template Library** and find a few shapes that will be useful every day as openings for pictures. Better yet—let's ask some framers. Here are some decorative template shapes that framers tell us they find useful again and again.

For this beginning, we will look at two different design directions—rectangles with curved tops, and straight line geometric ornaments.
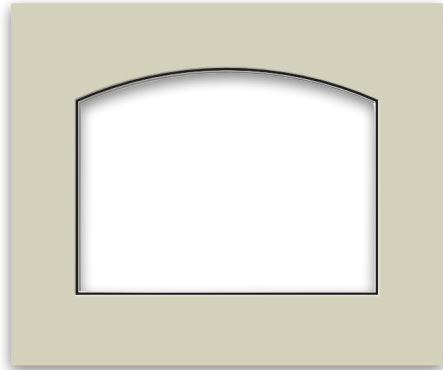
Rectangles with Curved Tops

There are several templates in **Menu 3** with decorative tops. The 3 templates shown here are rectangles with curves at the top. They are not such a radical change from a simple rectangle.

Any of them are perfectly appropriate for any pictures with a touch of romance.
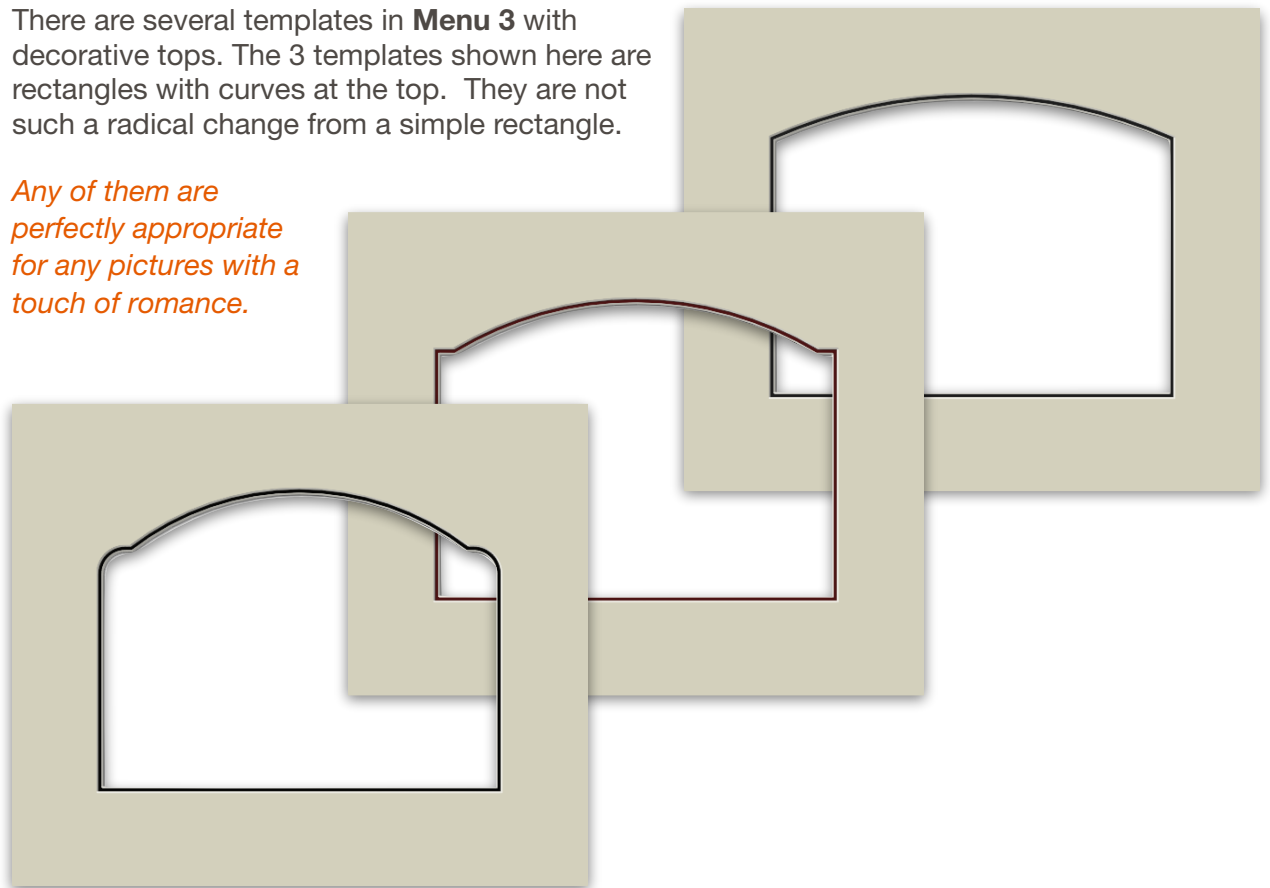
Template 302

This template is a rectangle with one simple arc across its top. This arc can be varied to suit the size and attitude of each individual project.

It has one parameter: **Arc Height**.

‣ Click the **Plus** button beside the parameter and the arc will curve higher.

As you watch the curve change, note that the overall size remains the same.

‣ Click the **Minus** button and the arc will be less pronounced.

There will be projects that will benefit from both high and from low settings.

Of course, the overall size will also be a factor of this setting, too. Larger openings, larger **Arc Height** settings, probably.

The **Arc Height** setting is an artistic choice. Few cutting problems will be encountered— even with extreme values in this parameter.
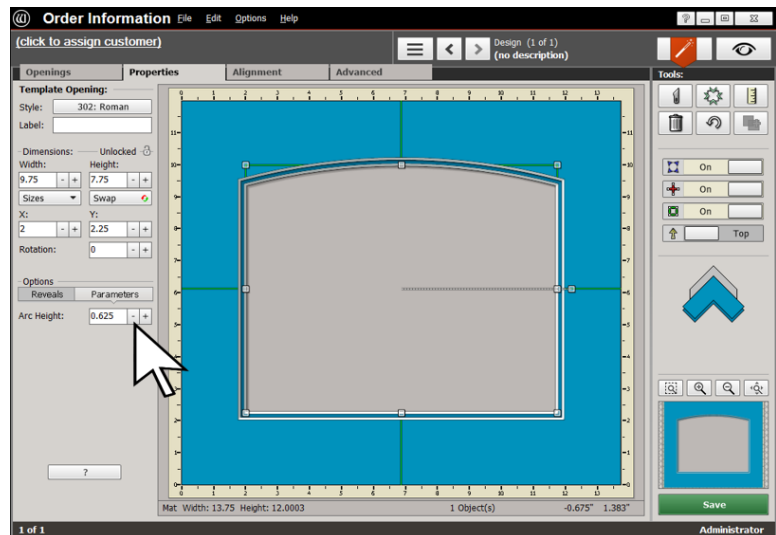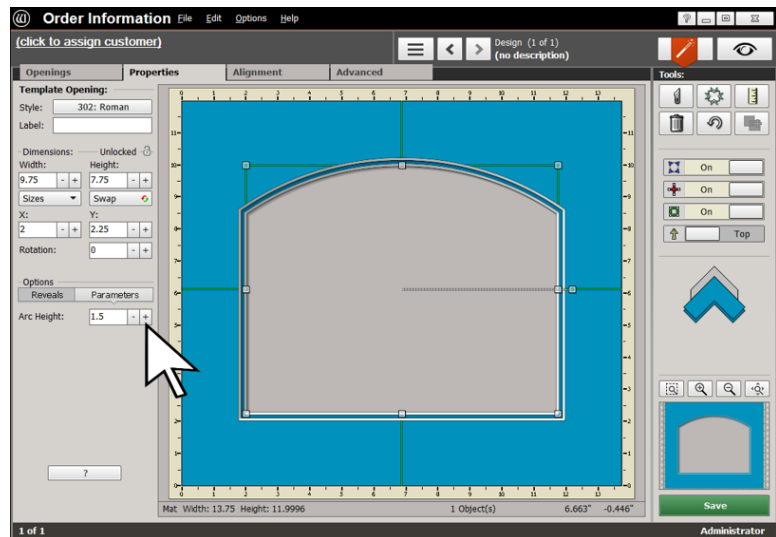
Three-Layer Variations

The narrow reveal in the opening illustration is 0.14 inch—a little more than an eighth inch. A narrow contrasting inner reveal like this is a gracefully shaped outline for the opening.

Experiment with 3-layer versions of this—or any other shape. Make sure that one reveal is narrow —an eighth inch, for example—and the other is markedly wider—3/8 inch, as in these examples.

The traditional color formula is for the wider reveal to be a muted middle value color. But these are modern times with few immutable rules, so experiment.
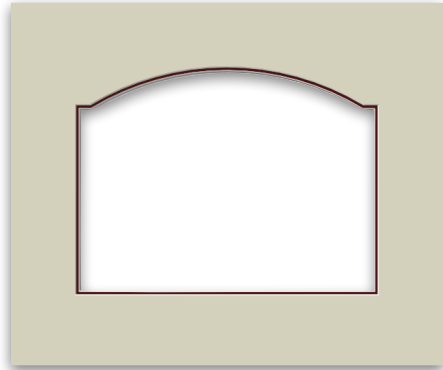
Also note the placement of the narrow reveal. Sometimes the narrow contrasting outline looks best next to the picture. Other times, it looks best between the top and innermost layers.

These 2 illustrations also show 2 different settings of the **Arc Height** parameter.
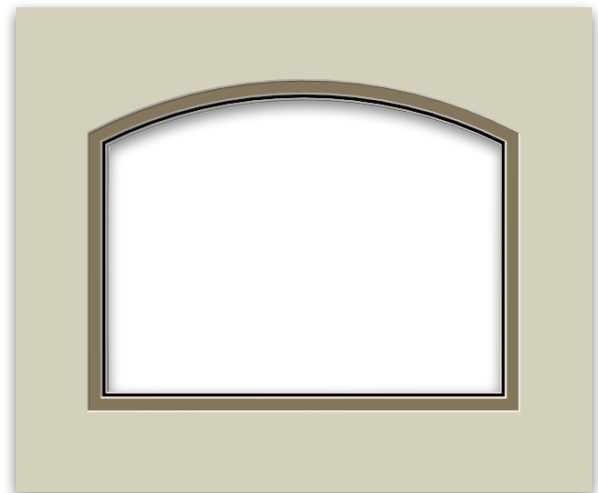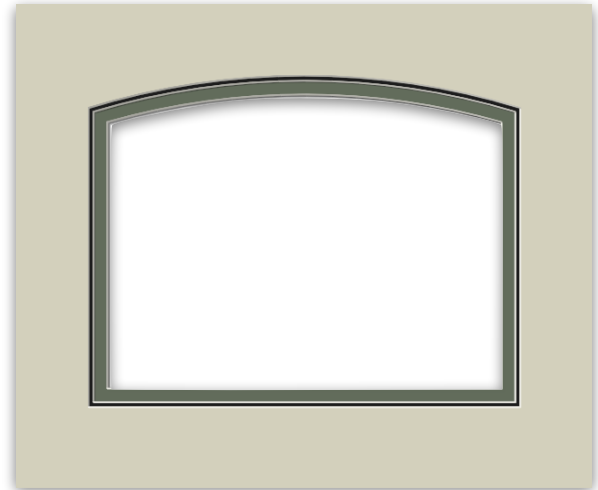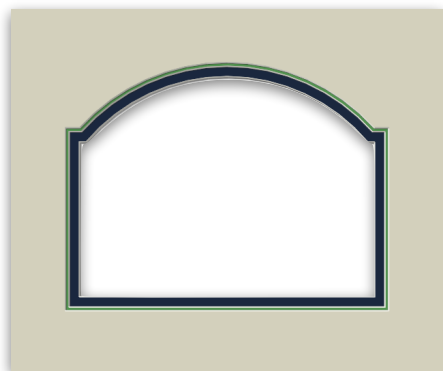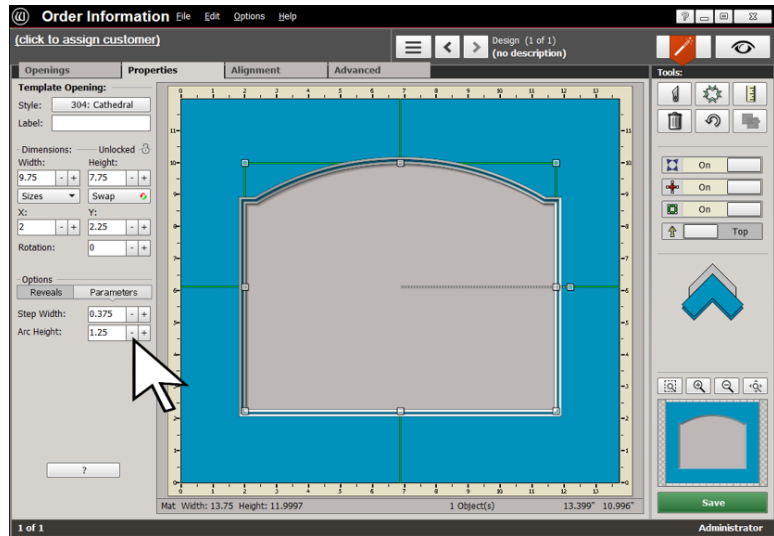
Template 304

There is the same arc across its top, but straight horizontal lines connect the arc at the top corners of this template.

There are 2 parameters for this template: **Step Width** and **Arc Height**. The settings for both these parameters are artistic choices.

The **Step Width** parameter sets the length of the horizontal lines at the top corners.

Here it is set to 0.375 inch.

Just as with Template 302, with every setting of the **Arc Height**, the height of the opening will remain constant.

In this 3-layer version, the **Step Width** parameter is set to 0.25 inch.
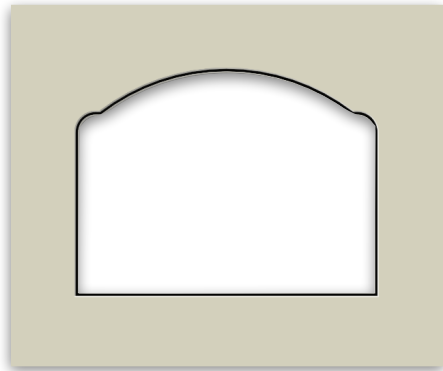
The **Arc Height** is set to 2.25 inches.

The narrow **Reveal** is 0.14 inch.

The wider innermost **Reveal** is 0.375 inch.

Template 307

In this template, there are arcs at the sides with horizontal lines connecting them to the center arc.

The **Parameter Settings** on the previous 2 templates have been artistic choices, but there are cutting questions on this template as you set the **Radius** and **Step Width** parameters.

The **Radius** parameter sets the size of the arcs at the top corners. Experiment and decide for yourself, but 0.375 inch seems to be a reliable recommendation for a minimum setting.

In this 2-layer version, the **Radius** is 0.625 inch, the **Step Width** is 0.1875 inch, and the **Arc Height** is 1.5 inches.

A more serious question lies with the **Step Width** setting.

In **Template 307**, there is a horizontal line between the arc at the corners and the central arc. The **Step Width** determines the length of this horizontal line.

Often, we would like the curves at the corners to gracefully flow into the central arc without the straight line being obvious. If the opening has multiple layers, the **Step Width** parameter can be small—like ¼ inch—but it cannot be zero. As the program offsets the shape to generate the outer layers, extra shapes may appear at the intersection of the arcs.

This illustration shows that with a 3-layer opening and a **Step Width** setting of 0.125 inch, there are spurious lines on the top 2 layers that will cause cutting problems. Zoom in and look closely. The arrow at the bottom right points to the **Zoom to Window** button.

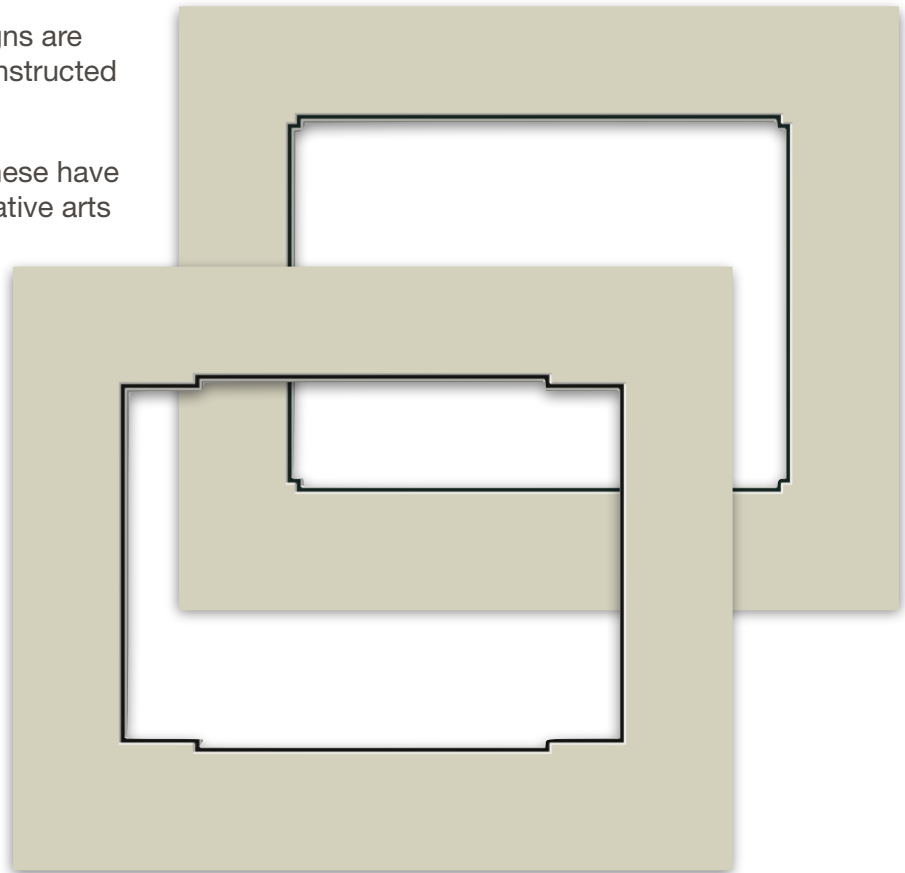‣ Increase the **Step Width** setting until these extra shapes disappear.
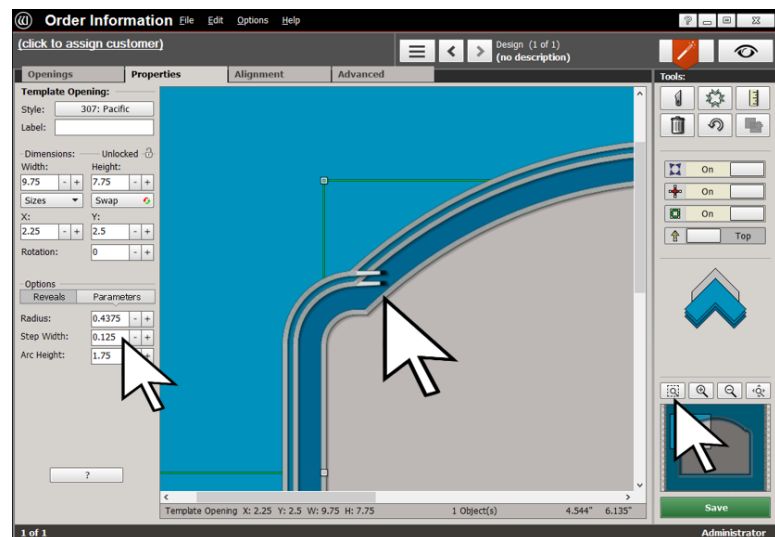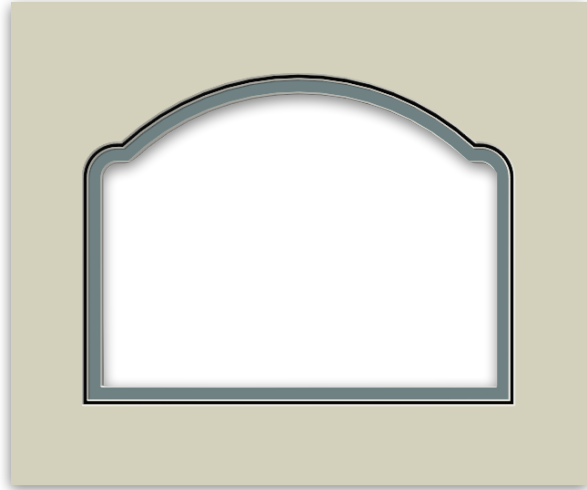
In the completed design pictured here, the junction looks good with a **Step Width** setting of 0.3125 inch.
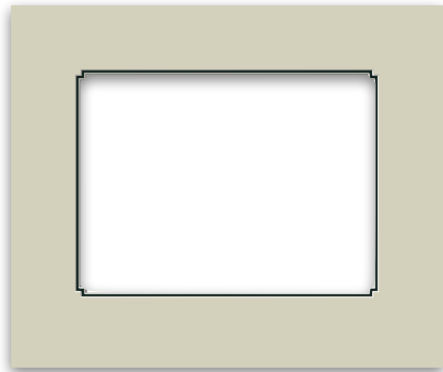
Geometric Templates

The second group of designs are geometric—decoration constructed with lines.

Geometric additions like these have been a staple in the decorative arts since the ancient Greeks.
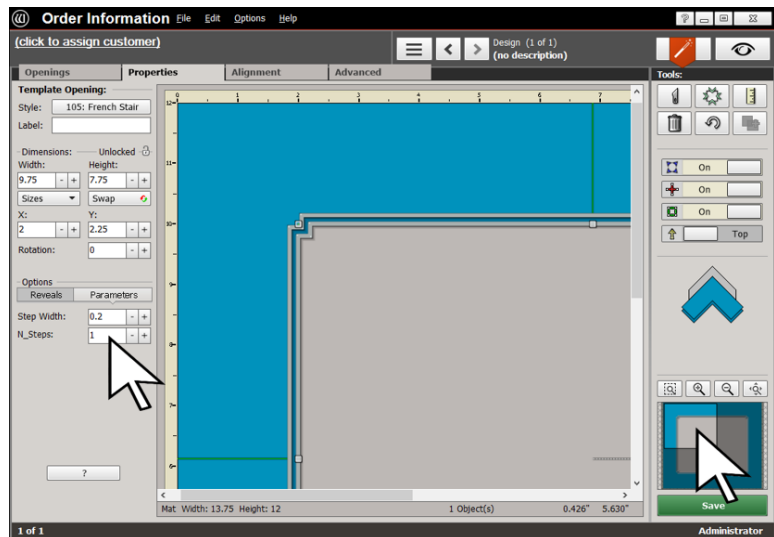
Template 105

This design has also been a favorite of picture framers since the advent of manual mat cutters.

When **Template 105** opens, it has 3 Steps.

‣ Change the **Number of Steps** to 1.

‣ The **Step Width** can be as small as 0.15 inch.

Remember that we have a computer here, and we are not tied to the decimal equivalents of 16ths of an inch.

‣ Here the **Step Width** is set to 0.2 inch.

It is easy to see the improvement from this simplification. The decorative corners remain evident, but in the background—illustrating again that the most useable shapes are the ones that do not stray too far from being rectangles.

‣ **Zoom** in on the corner to see the details better. The arrow on the lower right points to the area shown on the screen.

‣ Move this highlighted area around to see different parts of the design.

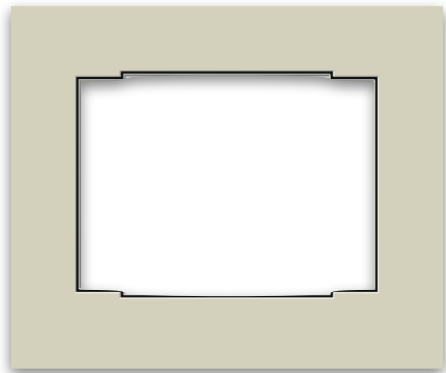*This is a shape that can be varied through layers, too.*

A double mat with a contrasting narrow reveal outlines the opening with a shaped line. A wider reveal adds a quiet expansive area for the picture.

This offset corner shape with these simplified parameter settings is another example of a shape that can be used every day.
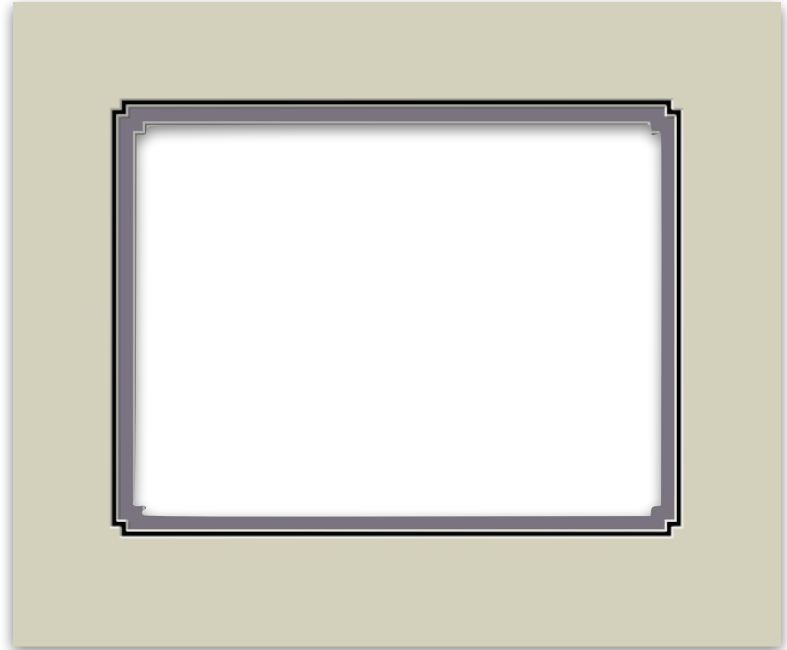
Template 201

This template offers so many options with its parameters. In fact, we will make 2 completely different shapes with it.

The first idea is to fashion an Asian inspired shape.

‣ Begin by changing the **Number of Steps** from 3 to 1.

‣ Change the **Step Height** to 0.2 inc—a little less than a quarter inch.

‣ Change the **Step Width** to 1.5 inch.

The top and bottom now have an architectural look and the sides appear straight and unadorned.

Experiment with different layers, reveals, and settings of the **Step Width** parameter.

When the picture is larger, the **Step Height** may need to be slightly larger, and the **Step Width** will certainly need to be larger to keep the details of the mat proportionate with the overall size of the mat.
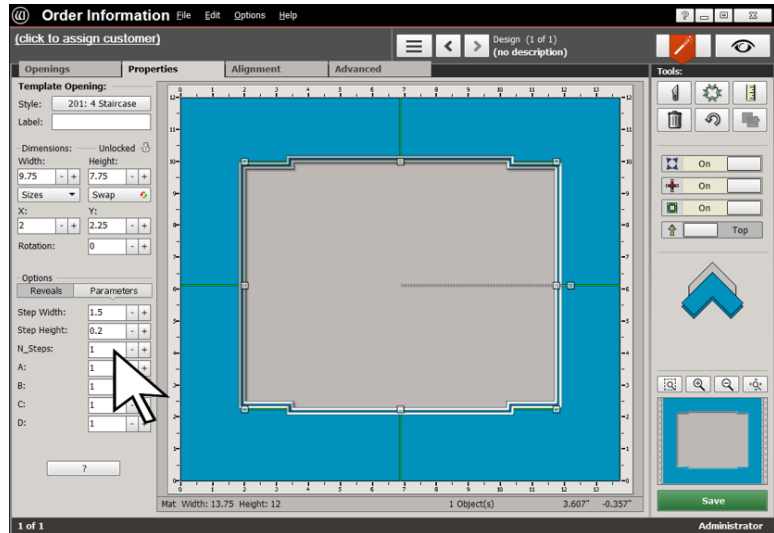
The second idea for **Template 201** has rectangular top corners and ornaments at the bottom corners.

There are several templates that have parameters named A, B, C, and D.

‣ Click the **Question Mark** button at the bottom left to open the **Parameter Map** and see what the A, B, C, and D parameters are.
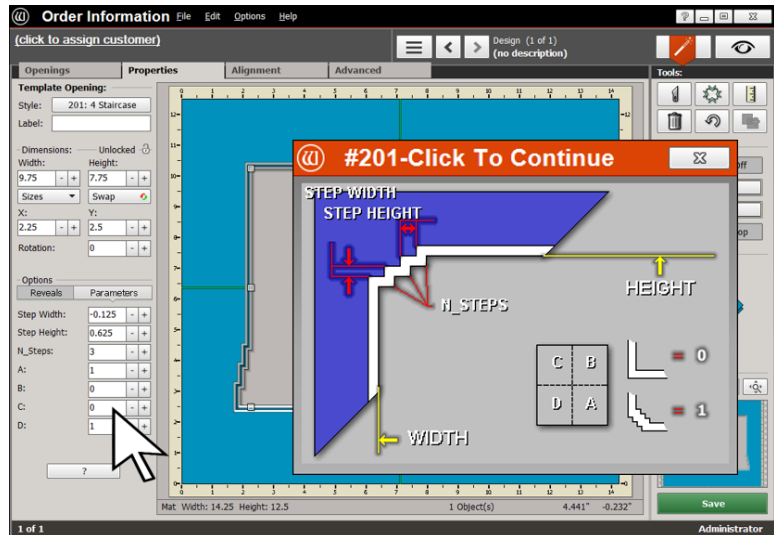
A, B, C, and D refer to the corners.

Setting one of them to zero removes the decoration from that particular corner.

‣ To leave the top 2 corners rectangular, set B and C to zero.

‣ Set the **Number of Steps** to 2 or 3.

‣ Set the **Step Height** to about 0.5 inch.

‣ Click the **Minus** button beside **Step Width** several times and watch as it approaches zero.
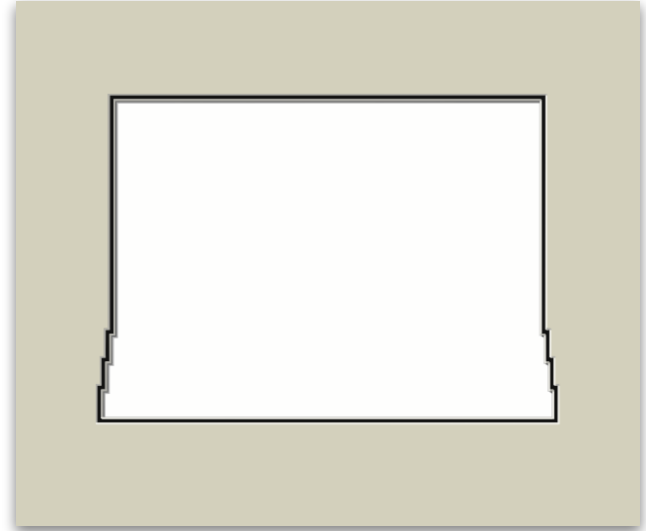
When it is zero, the entire shape is a rectangle. But it can be a negative value, too.

In this example it is set to negative 0.125 inch.

This setting generates steps at the bottom corners—to the outside of the shape.

*The shape is still geometric, but the attitude is completely different from the shape created in the first example using **Template 201**.*

Things to Remember

In a **Template Library** with over 70 choices, it may seem funny to see just 5 possibilities presented, but even this limited look shows a wide range of shapes and variations. You will find many like **Template 201**, where entirely different styles can be generated by changing the parameter settings.

Though style is the big reason for changing the opening shape, no one shape will be appropriate for every picture. That is one reason for the two different directions presented here —ideas using curved tops, and ideas using geometric constructions.

★ Continue experimenting in the **Template Library**. Be watchful for situations where parameter settings might generate cutting problems, as we saw in **Template 307**.

★ Through experimentation, everyone will find their favorites, but the common thread from talking with other framers is that the most useable shapes have simplified decorative elements. They do not vary too far from an unadorned rectangle.

★ And whether the shape is rectangular, round top, or geometric, never forget that double and triple mats are always effective ways to add color and excitement to your designs.