

WCAF Expo 2024

## Get More Out of Your Wizard A Quick Course

Each design illustrates a feature of the software. There are hints beside each that explain how to begin using all the things the Wizard can do. All the examples are constructed only with the features on the design screen - there are no extra steps in Trace.

There are four sections of designs.
Part 1: Opening Shapes in the Template Library
Part 2: Multiple Opening Ideas
Part 3: Lettermat Design Ideas
Part 4: Decorative Matting Ideas

## This Design File

All these designs are already WZX files in FrameShop 7.
Click Browse on the opening screen.
Expand FrameShop Content and look toward the bottom of the left column.
Expand Wizard Content.
The following designs - and more - are in the Projects folder.

## Part 1: Opening Shapes in the Template Library Everyday Opening Shapes - Practical and Decorative

As you are thinking about how to benefit from more of the Wizard's potential, expanding the opening shapes you use beyond rectangles is a good beginning.

To change the opening shape, click the Template ID button at the top left under the opening's Properties. The Template Library opens and there are over a hundred choices. Over 70 of the templates are decorative shapes with parameters that offer infinite variations and a handful of surprises.

## TEMPLATE 302-CURVED TOP.WZX

There are several templates that generate curved top opening shapes.

This shape has a simple arc across the top.
There is one Arc Height parameter to adjust the arc's prominence.


## TEMPLATE 315 - CURVED TOP.WZX

Open this design and notice all the parameters for this template. The parameters can form elements across the top and at the sides.

In this design, the parameters that form elements on the sides are set to zero. This leaves only these curves across the top.

Experiment with these parameters to see the possibilities.

Understand, too, that when the opening is wider, the elements at the top of most every curved top shape will be stretched out. When the opening is narrower, the elements will be compressed. Both these curved top shapes' parameters will require adjustments as the width is changed to keep the


## MIXED TEMPLATE WITH 402 AND 401.WZX

This opening uses the Mixed template - a mode of operation where each layer of an opening can be set to a different template shape.

This design illustrates the obvious idea for the mixed template - set each layer to a different shape. The top layer is set to template 402. The bottom layer is set to template 401.

Together they form unique corner elements.
Experiment with other shape combinations and parameter settings.

## MIXED TEMPLATE WITH 614.WZX

Another useful idea for the Mixed template is to set both layers to the same template shape. In this design, they are set to template 614.

The mixed template allows each layer's parameters to be set independently.

The effect in this design is that the reveals along the sides are wide, while the reveals on the angled elements at the corners are quite narrow.

As you are making changes to the parameters for these Mixed designs, remember that you can hold the Alt key on the keyboard as you click the plus and minus buttons beside any measurement field. This will change the values only 0.01 inch per click ( 0.2 mm in metric) instead of the usual sixteenth inch per click ( 1 mm in metric).


## MIXED TEMPLATE WITH 605.WZX

A third useful idea for the Mixed template is to create these peeking elements.

In this design, the top and bottom layers are set to be rectangles.
The middle layer is set to template 605.
The reveal widths and parameters are set so that only the elongated parts of the middle layer are visible between the rectangular layers. The corners of the middle layer are hidden under the top layer.

The Plat Length parameter of template 605 can adjust the length of the peeking side elements.


TEMPLATE 508 - HEART.WZX
There are many handy shapes in the Template Library.

Experiment with the Dimple and Side Height parameters to refine the heart shape as you change the size for different projects.

You will find that the heart looks its best if the size is square or slightly horizontal.


## TEMPLATE 911 - DROP CUTOUT.WZX

An often-needed addition is a drop down cutout.
This template has parameters to adjust the size and position of the cutout.

The NP Height parameter can even set to a negative value to form an indentation.

There are also several other templates in the template library with different shapes for their cutouts.


## TEMPLATE 705 - NEWS CLIPPING.WZX

Odd shapes are common enough, and this template has parameters that can form extensions or indentations at the top corners.


## TEMPLATE 507 - PENNANT.WZX

Nearly any flag shape can be formed with this template.

Its two parameters adjust the taper of the flag and the indentation of the tail.


## TEMPLATE 507-TRAPEZOID.WZX

With the Tail parameter set to zero, this template can form a trapezoid with different side heights.

In other collections, you will see this template used as a decorative element, too.


## TEMPLATE 509 - FAN.WZX

Experiment with the parameters of this fan template to form curved openings like this.

The curves can be adjusted separately, and the bottom width can be set.


## TEMPLATE 509-TRAPEZOID.WZX

With the Arc Height parameters set to zero, this template can form a trapezoid with different top and bottom widths and tapering sides.


## TEMPLATE 506-STAR.WZX

Template 506 has a few parameters that require explanation.

Spikiness adjusts the angle between the points.
It is a percentage, not a measurement.
Experiment.
Mode set to zero stretches the shape to fit inside the Width and Height dimensions. Mode set to 1 makes the shape with equal angles and line lengths, then fits it into the Width and Height dimensions.

Click the Question Mark button at the lower left for an illustrated look at what each parameter adjusts - for this, or for any other template.

## TEMPLATE 506-HEXAGON.WZX

Set the Spikiness parameter to zero, and this template forms polygons.

The Number of Points parameter sets the number of sides.

Mode set to 1 makes the shape with equal angles and line lengths, then fits it into the Width and Height dimensions.

The Rotation field will turn the polygon. For example, if the top and bottom of this hexagon need to be flat (rather than points as they are here) enter 30 in the Rotation field.


## Part 2: Multiple Opening Ideas <br> The tools in FrameShop make any arrangement of openings a snap

Ours is a world full of people with drawers and cameras full of snapshots - and everyone's images should be matted and framed on their walls to tell the stories of their lives. Once it was the most feared project in all of picture framing, but the Wizard has made cutting several openings in a mat easy, impressive, and profitable.

The example designs are ready to cut, but chances are slim that any of them will fit your projects. Their primary purpose is instructional.

The first designs show rows and columns of openings. Click the Alignment tab, and along the left are the spacing and alignment utilities that will be ideal for these projects.

The next example shows the Array feature.
Then there are some more artistic ideas for arranging multiple openings.
The last example is not pretty, but it is a practical illustration of what we are so often called to do. It is also an illustration of why guides are such a helpful tool. Study the section at the end. It details how guides work and how they can be used.

And who knows, multiple opening projects could become one of the most important product lines in your shop.

## MULTIPLES - VERTICAL COLUMN.WZX

These openings are arranged in a symmetrical vertical column using the Align Openings to Center button under the Alignment tab.

Note that in that row of buttons, there are also buttons to align the openings' left or right edges.

They are spaced 0.5 inch apart using the Space Vertically button at the top left.


## The Positioning Button

There is a button under Options at the right of the design screen with an arrow inside it.

When it is clicked to point down, all the alignment tools will reference the bottom layer of a multiple layer opening.

To make most designs easier, though, click it so that its arrow points up. The alignment tools will then reference the top layer.


## MULTIPLES - HOTIZONTAL ROW.WZX

These openings are arranged in a horizontal row using the Align Openings to Middle button under the Alignment tab.

Note that in that row of buttons, there are also buttons to align the openings' tops or bottoms.

They are spaced 0.5 inch apart using the Space Horizontally button at the top left.


## MULTIPLES - ROTATED SECOND OPENING.WZX

There is a full Rotation utility under the Advanced tab.

There is also a Rotation field on the Properties tab for the opening.
Enter a value and the opening will rotate.
It is always a surprise to see the dramatic effect of just a little rotation.


## MULTIPLES - ARRAY.WZX

 One of the tabs at the top of the New Opening screen is named Array.Click it and you can design an arrangement of rows and columns with any number of identical openings.

Click OK at the bottom and the arrangement will appear on the design screen where further changes can be made to the design if necessary.


## MULTIPLES - FANNED OPENINGS.WZX



Any number of any size openings can be fanned.
Select all the openings to be fanned.
Click the Advanced tab at the top.
Click the Set Fan button beside Horizontal Fan Distance.
Notice that there is also a vertical fan option below.
All the openings will jump into a row, evenly spaced with their centers in line.
There will be a pink line through the openings with 3 square handles.
Drag the square handle at either end of the pink line to the outside of the design. The openings will spread horizontally, and they will always be evenly spaced.

Drag the square handle in the middle up (or down) and the openings will fan. It is also possible to enter a value in the Fan Distance field.

## MULTIPLES - RANDOM SIZES WITH GUIDES.WZX

The previous examples were devised to illustrate particular alignment and arrangement situations.

Every framer knows, though, that the typical multiple opening project has an untidy mix of sizes that must be assembled in some orderly arrangement.

Open this design to see the red guides spaced from openings and at the centers of openings.

Guides provide snap points so that one opening can be positioned correctly with respect to another opening - without disturbing the rest of the arrangement.


There is a section here at the end that explains how guides work, how to enter them into the design, how to move them. There are step by step illustrations that demonstrate how practical guides are to use.

Pay close attention. Many framers report that once they understand guides, they can do so many things so easily that no other alignment tools are necessary.

## Part 3: LetterMat Design Ideas <br> Names, monograms, places, and dates

In the days when the Wizard could only make cutouts, several fonts were designed with alterations to curves and spaces so that the letters could be nicely cut just a few inches high. There are now over twenty fonts with styles from austere modern to old English. There is a condensed font so that the word takes less space and another whose capitals can be cut just an inch high. And in FrameShop 7, all these fonts have been updated to include common punctuation marks.

The examples illustrate many of the fonts and several approaches for integrating letters into an arrangement. There are monograms, photo mats, and a few typographical tricks.

## LETTERMAT - MONOGRAM.WZX

This is a common, versatile formula for using letters in a mat design. A monogram can be either centered or off to one side at the bottom. It could also be close to the left or the right edge of the opening.

Monograms should be close to the opening. Start by spacing them 0.25 inch apart. Make a test cut and adjust according to the needs of the design and your preference.

Monograms should be small, but pay attention to a font's Minimum Height. This monogram uses the Roman and Greek Capitals font.
Its Minimum Height is 1.75 inches
Experiment with colored paper behind the monogram - or any decorative cutout - for less contrast than the dark against light in this example.


## LETTERMAT - ROMAN AND GREEK.WZX

In the Roman and Greek Capitals font, the lower-case characters a through j are capital Greek letters.

Enter $\mathbf{A}, \mathbf{a}$, and $\mathbf{b}$ for these 3 characters.

The remainder of lower-case characters in this font are dingbats - old typesetter's jargon for random, but useful decorative shapes.


## LETTERMAT - YEAR.WZX

The Inch High Caps font has many angled arcs so that its uppercase letters can be cut one inch high.

The numbers in this example are separate so that the 9 can be slightly larger and the spacing can be adjusted to make this date look its best.

The small dashes at the sides are elongated hyphens. This, like nearly all Lettermat fonts, has a question mark, period, exclamation point, hyphen, apostrophe, and comma.


## LETTERMAT - MONSTER.WZX

Some Lettermat fonts are more whimsical just as some presentations need not be so formal.

This caption illustrates how capital letters can be entered separately so that its size and position can be altered. The exclamation point is also entered separately so that it can be larger and rotated.


## LETTERMAT - PHOTO NAME.WZX

The characters in the Photo 2 font are not classic letterforms. They are openings for snapshots in the shapes of letters. The popularity for this idea comes and goes, but it is always an interesting idea.

The upper-case letters in this font are designed for maximum exposure of the snapshot.

In the lower case, the $\mathbf{c}, \mathbf{d}, \mathbf{e}, \mathbf{f}, \mathbf{h}, \mathbf{I}$, $\mathbf{j}, \mathbf{k}, \mathbf{m}, \mathbf{n}, \mathbf{p}, \mathbf{r}, \mathbf{u}, \mathbf{y}$, and $\mathbf{z}$ are designed to look more like normal letters.
However, more of the snapshot is
 covered as a result of this compromise.

Though the primary reason to use the Photo 2 font is to present multiple snapshots, the caption will benefit from some typographic tricks - like the larger capital in this example and the fanning in the next.

## LETTERMAT - PHOTO FANNED.WZX

Under the Advanced tab, click Explode Font to separate the caption's letters.

Select all the letters and click the Set Fan button.


Refer to the Multiple Openings Ideas reference sheet for more details on fanning openings.

Once the letters are fanned, it is possible to select groups of letters and move them using the arrow keys to improve the spacing. The MAR section is moved closer to the $\mathbf{J}$ so that the name looks more nicely spaced. The $\mathbf{M}$ and the $\mathbf{E}$ are also moved down a bit so that the arc across the top of the letters appears more continuous.

## LETTERMAT - DEFAULT INSIGNIA.WZX

This monogram is made into an insignia in the presentation. There is an added color and extra depth to add interest. The monogram is no longer simply a cut out letter.

In the design file, the letter is randomly placed.
Delete the openings and cut just the letter on a separate matboard and the color you choose.
Return to the design screen and restore the openings. Delete the letter and cut the mat.

In the assembly, mount another color behind the monogram.

Mount the monogram into its opening, perhaps with a spacer to add more dimension.


## LETTERMAT - OVERLAP.WZX

Though we are always wishing to cut letters as small as possible, if the letters are nicely formed, where is the problem if they are quite large?

This monogram can be from 4 to 14 inches tall. The openings are strategically overlapped then merged using the Group Selection button under Tools at the upper right.

Experiment by overlapping the opening onto the letter in various ways to test your ideas. Not every overlapping idea will be possible.

This example illustrates two easy overlapping ideas using an easy letter - one that is a shape without an enclosed inside shape.

The letters that have inside shapes, like $A, B, D, O, P, Q$, and $R$ in this font, will work, but they require a little extra care in designing. And there will always be the extra piece to glue into place during assembly.

## Part 4: Decorative Matting Ideas Show customers you indeed are the innovative master

One promise of the computerized mat cutter has always been about those extra artistic touches in matting. The machine would transform them from a skill to a machine function - available to all at the touch of a button. This is largely true, but the questions have become - what are these touches and how do I add them?

The examples begin with V-Grooves. The examples range from plain to accented. All the files are meant to be used as the beginnings of your projects. There are hints beside each design.

The next examples show grouping, a software process that merges multiple overlapped shapes into one. Grouping is useful in both practical and decorative projects.

The Wizard CutArt Library has over a thousand cutout shapes that can be added to any design. Click the Add CutArt button at the left under the Openings tab on the design screen. You will see animals, odd shapes, and endless items of interest. The examples show several ways CutArt might be incorporated into an arrangement.

## VG - BEGINNING.WZX

V-Grooves are the mat cutting machine's interpretation of the classic line around an opening.

This design is meant to be the beginning of every V-Groove project.

The groove is attached to the opening. Change the size of the opening. The V-Groove will automatically resize, maintaining its spacing with the opening.

To adjust the spacing between the opening and the V-Groove, change the Attach Distance under the Properties tab of the groove.


## VG - AROUND MULTIPLE.WZX

Design an arrangement of openings.
Group them. Then add a V-Groove around the group of openings.

Attach the groove to the group of openings.
Then it will be easy to adjust the distance between the groove and the openings.


## VG - OVERLAP 504.WZX

V-Grooves on light colored mats are only shadows. Add decorative V-Groove elements, and they remain understated.

These triangles are V-Grooves set to template 504, rotated, and spaced symmetrically at the sides of the rectangular groove.

Grooves should be at least 0.18 inch apart to make sure they cut nicely.


## GROUPING - AT BOTTOM.WZX

Though the template library is full of interesting opening shapes, often just a small addition is decoration enough. Coincidentally, these small additions are also from the template library.

Here, the shape at the bottom overlaps the rectangular opening for the picture.

Select both items and click the Group Selection button at the upper right.

The two shapes become merged into one.
Open the design and ungroup the opening to see that the small shape is formed by template 505.

Change the size of the large opening to fit your project, snap the shape back to the center, and group them.

## GROUPING - AT SIDES.WZX

These small shapes grouped with the rectangular opening are formed with template 509.

Guides are the best tool for aligning and positioning any decorative shapes aside the openings.

In all these examples - whether the elements are grooves, tiny opening shapes, or CutArt you will see the red vertical and horizontal guides that were used.

At the end of this reference sheet is an explanation about working with guides.


## CUTART - AMONG OPENINGS.WZX

There are a thousand cutout shapes in the CutArt library.

Explore the dozens of folders full of shapes to find your favorites.

The examples illustrate several ways CutArt might be included in mat designs.

This example demonstrates the simplest possible use - add the CutArt and arrange it as if it was another opening.

Slip a sheet of colored paper behind it to add a third color to the design.


## CUTART - VIGNETTE.WZX

This CutArt is made into another image in the presentation. There is also added color and extra depth to add interest.

In the design file, the CutArt is randomly placed. Delete the openings and cut just the CutArt using the color you choose.

Return to the design screen and restore the openings.
Then delete the CutArt and cut the mat.

In the assembly, mount another color behind to show through the CutArt.

## CUTART - MERGED AT BOTTOM.WZX

There are CutArt that are images, and there are CutArt that are abstract decorative shapes.

The abstract CutArt shapes work beautifully merged with the opening exactly as the small template shapes were in the earlier examples.

Open these example designs and ungroup the openings to see which CutArt are used and how they are positioned.

## CUTART - MERGED AT SIDES.WZX

This CutArt is overlapped onto the opening to show only a part of it. Many CutArt can be used like this.

To make symmetry easy, review the next section that explains how to use guides.


## WORKING WITH GUIDES

Guides are moveable snap points.
They are a versatile tool for alignment.

The red line in the illustration is a vertical guide.

As we move an opening in the work area, the edges and the center of the opening snap to the guide.

The first illustration shows the left edge of the opening snapped to the guide.

The second illustration shows the center of the opening snapped to the guide.

The third illustration shows the right edge of the opening snapped to the guide.

Horizontal guides work the same. The top, center and bottom of an opening snap to the guide.


## Dragging Guides in from the Edges

The simplest way to add guides in the work area is to pull them in from any edge of the mat.
Move the cursor to the ruler at the edge of the mat and it turns into a cross of white arrows.

Click, and a red guide will appear.


Keep the mouse button depressed.

Drag the guide into the work area.

When the guide is where you want it, release the mouse button.

Drag in as many vertical and horizontal guides from the top, bottom, left, and right as you like.


The most important way to add guides in the work area is yet to come.
Pay close attention to the Adding Guides Relative to an Opening section.
But first, more details about how guides operate.

## Moving Guides

From looking over the previous illustrations, it is clear that you can drag guides to move them as you please. But there are more accurate - that is, useful - ways to move guides.

## The Arrow Keys

Click on a guide to select it. Red boxes appear at each end.
Use the arrow keys on the keyboard and the guide will move a sixteenth of an inch with each click ( 1 mm in metric).
Hold the Control key on the keyboard, and it moves a quarter inch with each click ( 5 mm in metric).
Hold the Alt key, and the guide will move 0.01 inch per click ( 0.2 mm in metric).

## Specifying the Guide's Position

With the guide selected, click the Properties tab.
At the left, there will be Position fields.
With vertical guides, there is a field that displays the distance from the left, and another field that displays the distance from the right.

With horizontal guides, there is a field that displays the distance from the top, and another field that displays the distance from the bottom.

You can click the Plus and Minus buttons beside the fields to move the guides.
 Remember the Control and Alt keys to move the guides different increments with each click.

You are also able to enter new values into the fields to move the guides.

## Snapping Guides to Openings

Not only do openings snap to guides, but as you move them around, guides snap to openings, too.

Move a guide.
Drag the cursor right through one of the openings in the design.

Notice that the guide snaps to the outsides and to the middle of that particular opening.

Feel it jump and remain momentarily locked to the edges and middle of that opening.


Notice that the guide ignores the edges and middles of all the other openings in its path.

Now move that same guide again, but drag the cursor through a different opening.

The guide will now snap to the outsides and to the middle of the second opening - ignoring the edges and middles of all the other openings in its new path.


## Moving a Guide to the Opposite Side of the Mat

Symmetry is important in arrangements. In this example the large opening is centered in the work area. There are 2 small openings that need to be spaced evenly on the sides of the large opening.

When the guide is selected, click on the Properties tab.
Look at the column on the left.

A surprisingly handy tool for symmetry is the Swap Position button.

Click it and the numbers in the Position fields swap.

The guide moves to the equivalent position on the other side of the mat.

The small opening on the right can then be snapped into position on the right side of the large opening.

There will be many projects where the Swap Position button for guides will be the ideal tool.


## Adding Guides Relative to an Opening

Guides are most useful when they are known distances from a reference opening.
Another opening can then be snapped into place along the guide - and the openings will be automatically spaced correctly with respect to the reference opening.

The best way to present all the options of this method is with a project.

The middle-sized opening at the top right will be 0.625 inch to the right of the large opening.

The middle-sized opening's top will be 1 inch lower than the top of the large opening.

The small opening at the lower right will be 0.625 inch below and centered under the middle-sized opening.

Select the large opening and click the Alignment tab.


Click New Guide at the bottom left. A list of choices will appear.

Select New Guide From Other and the Add Other Guide dialog box will appear.
In this example, the Distance From Top is negative 1 (1 inch down from the top) and the Distance From Right is 0.625 inch.

Click OK and the specified guides will appear.

## Snapping the Middle-Sized Opening into Place

The middle-sized opening can now be snapped into position with its top against the horizontal guide and its left against the vertical guide.

The large opening and the middle-sized opening are now in their final positions.


## Positioning the Small Opening

Select the middle-sized opening and click the Alignment tab.

Click New Guide at the bottom left. A list of

Select New Vertical Guide from the choices that appear.

Then select Middle.

A vertical guide will appear down the middle of the middle-sized opening.


The middle-sized opening is still selected and the Alignment tab is still active.

Click New Guide at the bottom left.

Select New Guide From Other and the Add Other Guide dialog box will appear just as before.

This time, we want to add a guide 0.625 inch from the bottom of the middle-sized opening.

Enter 0.625 inch in the Distance From Bottom field.


Click OK and the new horizontal guide will appear 0.625 inch from the bottom of the middlesized opening.

The small opening can now be snapped into position with its top against the new horizontal guide and its center against the new vertical guide.

All 3 openings are now positioned correctly with respect to each other.

The last step to finish the project is to set the outside size.


Make sure the border widths are set as you want them, and activate Dynamic Outsides.
The outside size will be automatically set, and the design will be ready to cut.

## Other Settings to Remember

## Auto Align Openings

There is a feature in FrameShop that operates somewhat like guides as you move openings around the work area.

Auto Align Openings can be toggled on and off.

Click Options at the top.
On the menu, check Auto Align Openings to activate it.


The small opening on the right is being moved.

When its middle is lined up with the middle of another opening - in this example, the large center opening a blue horizontal line appears.

Similarly, the blue line will appear when tops, bottoms, and sides of openings are lined up.


Then move the small opening on the left so that its middle, too, is lined up with the middle of the center opening.

## The Positioning Button

There are 1, 2, and 3-layer openings in any typical design. Any time we talk of alignment whether it involves snapping or setting distances - we need to know whether the top or the bottom layer is the reference point.

Remember that the Positioning button at the right selects either the top layer or the bottom layer as the snap point.

When the arrow on the Positioning button points down, the snap points are on the bottom layer.

When the arrow on the Positioning button points up, the snap points are on the top layer.


In nearly every design situation involving multiple layer openings, setting the Positioning button to reference the top layer (as shown here) is the more practical choice.

To illustrate this, when the spacing between openings is 0.5 inch, it will be measured on the top layer. You will immediately know that there is a 0.5 inch strip of matboard between the openings. If the Positioning button was set to reference the bottom layer, it would be necessary to stop and subtract the widths of the inner reveals from the spacing distance to calculate the width of the strip of matboard between the openings.

## Dynamic Outsides

At the top of the group of 4 horizontal buttons at the right is the toggle for Dynamic Outsides. When it is inactive, the outside size remains unchanged as items are moved in the arrangement.
When it is active, every time an opening is moved, the borders are rebuilt around the changed arrangement, and the outside size changes.

This tool is most handy once an arrangement is complete. Set the border widths you want, activate Dynamic Outsides, and the outside size will be automatically set.

## Undo

If something is done in error, click Undo at the upper right under Tools to restore the arrangement to its previous state. You can click Undo an unlimited number of times.

