

# MEASURING & CUTTING MAT BOARD

Everyone loves to see their artwork displayed properly. Frames protect and preserve the appearance of artwork while giving it a finished and professional look, but not everything works with framing. You don't have to be a professional framer to know how to properly prepare your artwork for display, however, you just need a little bit of knowledge.

## Methods and Parts of Framing

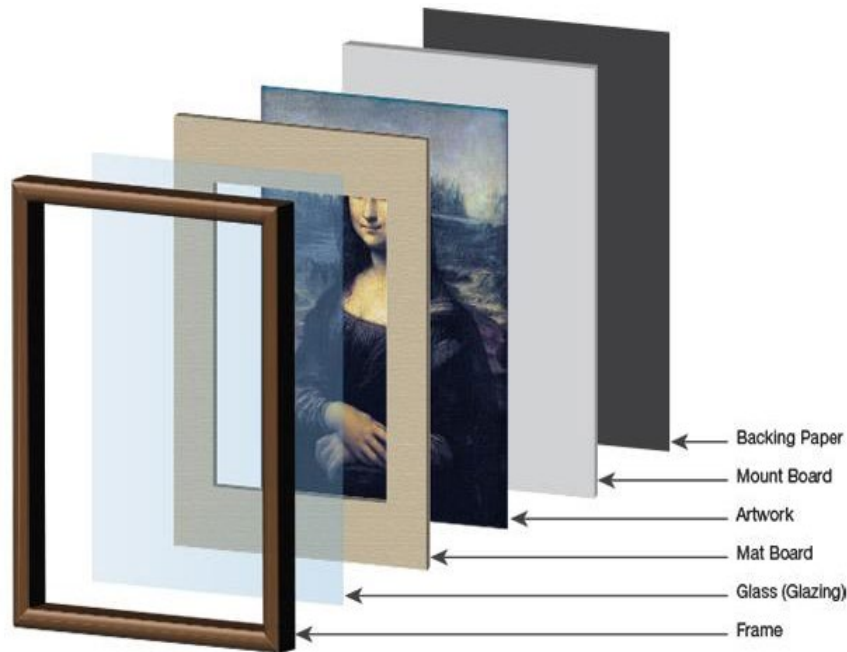
**Mounting** – artwork is adhered to the top surface of a **mounting board** to provide it with stability. The edges of the artwork are visible. Sometimes artists will deckle the edges of the artwork when using this method.

**Matting** – artwork is placed behind an opening cut into a **mat board**. A mounting board is then to the adhered back of the artwork to provide it with stability.

**Glass Framing** – Artwork that has been mounted and matted is placed below a **glass** pane set with a wooden or metal frame.

**Float or Open Framing** – canvases or thick board may be set or floated within a **frame** without glass.

**Backing Paper** – often, **backing paper** is applied to the back of a frame to protect its contents.



To properly frame and display a work of art you need to know what methods work best with which art surfaces. Look at the chart below to see what methods are recommended and why.

Surface	Mounting	Matting	Glass Framing	Open Frame	Why?
Less than 1/16 <sup>th</sup> “	Yes	Yes	Yes	No	Low profile surfaces need mounting to provide stability, mat board to keep the artwork from touching the glass, and a glass surface to protect the artwork from being touched.
1/16-1/8 <sup>th</sup> ”	No	Yes	Yes	No	
Canvas/Board	No	No	*No	Yes	Standard frame depths don't allow room for matting and mounting is not needed for stability.

*\*It is not recommended to frame paintings behind glass because this can trap moisture and erode the painting over time.*

# Methods of Measuring for a Mat

Mat board comes in many sizes, colors, and textures, though most have a thin surface of color with a white center and back. You will want to **make all measurement marks on the white BACK surface** of your mat board and cut it with the back facing up.

There are two methods to measuring a mat, based on whether you will be framing your artwork or simply displaying it. If you are framing your artwork, you begin with the frame size and subtract the inside measurements to determine the border. If you are simply hanging it within a mat, you do the opposite, starting with the inside measurement and adding the border to determine the outside measurement. We will look at both methods.

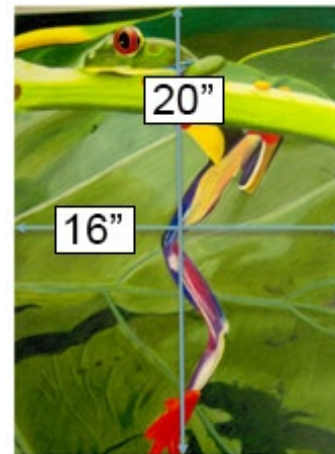
## Framing Method

- 1) Measure the width and height of your artwork. For this example, we will say that this drawing is 16" wide and 20" tall.

**Artwork = 16" x 20"**

- 1) SUBTRACT  $\frac{1}{4}$  of an inch from this measurement. This is the **inside measurement** of your mat board. *This step is crucial because if we simply cut a hole in the matboard the same size as your artwork, it would fall through the opening.*

$$\begin{array}{r}
 \text{Artwork} \rightarrow 16 \times 20 \\
 \underline{-\frac{1}{4} \quad -\frac{1}{4}} \\
 15 \frac{3}{4} \times 19 \frac{3}{4} \leftarrow \text{Inside Measurement}
 \end{array}$$



- 2) You will want to use a frame at least 1-2" larger than the height and width of your art. Here is a list of just some of the standard frame sizes available.

4"x6"	8"x10"	11"x14"	18"x24"
5"x7"	9"x12"	16"x20"	24"x36"

- 3) Determine the height and width of the opening of your frame size. This measurement will be the **outside measurement** of our mat board. For this example, we will select a standard 18" x 24" frame.

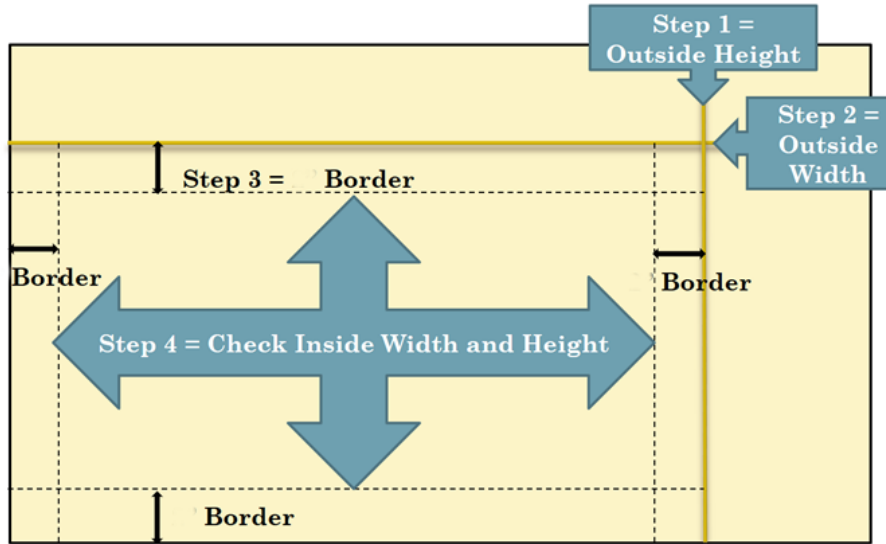
**Outside Measurement = 18" x 24"**

- 4) Now we will calculate the border sizes by subtracting the outside measurement (the frame size) from the inside measurement we just calculated. After subtracting, you must divide that measurement in half. We divide the border in half because you will need half of the border for the top edge of your mat board and half for the bottom edge. See the diagram and equation here for an example.

$$\begin{array}{r}
 18 \times 24 \leftarrow \text{Outside Measurement} \\
 \underline{-15 \frac{3}{4} \times -19 \frac{3}{4}} \leftarrow \text{Inside Measurement} \\
 2 \frac{1}{4} \times 4 \frac{1}{4} \\
 \underline{\div 2 \quad \div 2} \\
 1 \frac{1}{8} \quad 2 \frac{1}{8} \leftarrow \text{Border}
 \end{array}$$



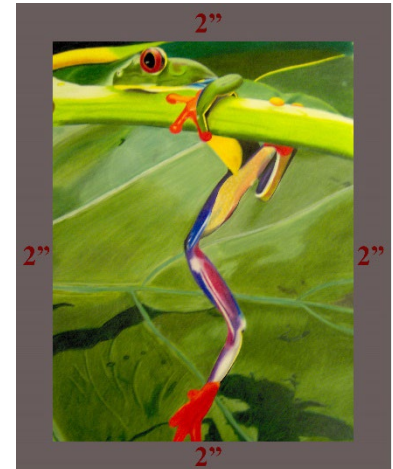
- 5) On the BACK (white) side of your mat board, draw out your outside measurements first. Cut off any excess mat board by cutting along these lines (shown as the gold solid lines)
- 6) Measure in from each of the four sides of the outside measurement the width or that side's border (shown as black arrows).
- 7) Check your measurements: place the artwork on top of the lines you just drew (shown as black dotted lines). If it covers all 4 lines, you did it right and can now cut out the mat!



### No Frame Method

- 1) Same as step 1 from the framing method above to measure the artwork.
- 2) Same as step 2 from the framing method to calculate the inside measurement.
- 3) This is the step that is different from the previous method. Here you will decide how big you want your mat border to be. **You must double the border measurement.** In the previous method you had to divide the combined border measurement in half. Here we must double the single border measurement to account for the borders on both the top/bottom and left/right sides of the mat board. In this example, we want a 2" border all the way around our artwork, therefore we must add 4 to the inside measurement.

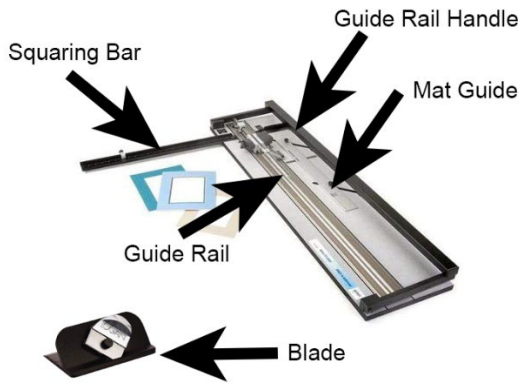
$$\begin{array}{r}
 15 \frac{3}{4} \times 19 \frac{3}{4} \quad \leftarrow \text{Inside Measurement} \\
 +4 \quad \quad +4 \quad \leftarrow \text{Border} \\
 \hline
 19 \frac{3}{4} \times 23 \frac{3}{4} \quad \leftarrow \text{Outside Measurement}
 \end{array}$$



- 4) Continue with steps 5-7 from the framing method to draw out your measurements on the back of your mat board.

### Cutting A Mat

To remove the inside of the mat you will want to use a mat cutter, or a metal ruler and box cutter. Mat cutters are preferable because they not only ensure that your cut lines are straight and at a perfect 90-degree angle, but they allow your cut edge to be beveled. A **bevel** is when the knife cuts at a 45-degree angle, ensuring that 1/16<sup>th</sup> of an inch of the white interior of the mat board shows next to your artwork.



**Squaring Bar** – this bar provides a support to ensure that the mat board cuts straight lines at 90-degree angles to the other sides.

**Guide Rail** – this rail holds the mat board in place while providing a track along which the blade is harnessed for cutting.

**Mat Guide** – this adjustable bar can be used to provide further support and stabilization to the mat board.

**Blade** – the mat cutting blade is angled at 45-degrees to provide a beveled cut. The blade housing hooks to the guide rail and keeps the razor disengaged until the blade trigger is pressed down.

1. Lift the guide rail handle and place your mat FACE DOWN and flush with the squaring bar. Lower the guide rail handle.
2. Adjust the mat board until your pencil line is directly underneath the edge of the guide rail, as seen here.
3. Adjust the mat guide so that it lays against the back of the mat board, as seen here.
4. Place the mat cutting blade along the guide rail. Most blades hook onto the guide rail so that they glide along the track smoothly without shifting.
5. Locate the mark on the front of the blade that indicates where the blade begins cutting. Line this mark up with where you want to begin cutting. Lower the blade trigger completely to engage the blade. While holding it down, guide the blade down along the guide rail until the mark on the blade reaches just past where you want to stop cutting.
6. Release the blade trigger and remove the blade from the track in the guide rail. Lift the guide rail handle and turn your mat board 90-degrees. Lower the guide rail handle.
7. Repeat until all 4 lines have been cut. When finished, the center panel should fall out. If not, check your lines and recut any areas needed.



## Creative Matting and Framing Ideas

<p>Deckled edges.</p>	<p>Canvas floats inside open frame.</p>	<p>Hinge matting with backboard.</p>
<p>Multiple mats used in one frame. Mix and match colors.</p>	<p>Artwork is suspended between 2 glass panes without any frame.</p>	<p>Artwork is suspended on thread above the backing board, within a mat board.</p>