

# **Mat Cutting Orientation & Shrink Wrapping**

**Sertoma Arts Center  
Raleigh Parks and Recreation Department**

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# **Using Sertoma Arts Center Matting Equipment**

## **Terms of Use:**

1. Anyone wishing to use any of this equipment must take this orientation class regardless of previous experience.
2. Use of this equipment is by Advanced Reservation Only, call the Sertoma Arts Center to make reservations.
3. People less than 16 years of age may not be in the matting area for any reason.
4. Every user of this equipment must have a current Raleigh Parks and Recreation Department Studio Card.
5. Only the person who has reserved and is using the equipment may be in the matting area.
6. Any problem with the equipment must be reported to the Center staff; repairs and adjustments are not to be attempted by anyone other than Center staff.

## **General Safety:**

1. Always be aware of sharp blades.
2. Dispose of blades by wrapping them in masking tape or tape between two pieces of mat board before putting in the trash.
3. Remove the blade from the cutoff side (right side) of the mat cutter before using the bevel cutting side. In most cases there will be no blade in the cutoff side.
4. The shrink wrap roller is very hot. Do not touch.
5. The cutting wire on the double shrink wrap gets **Red Hot**. Use with caution.
6. The shrink blower can be very hot. Do not lay it on the table.

**Special Note: Do not use the hot shrink wrap roller on the double shrink wrap.**

## **Supplies you need for mat cutting & mounting:**

1. **Mat Cutting**
  - a. A quality measuring device, T-Square or Steel rule
  - b. Mat Board
  - c. Bevel cutting blades for the mat cutter. \*\*
  - d. Transfer tape \*\*
  - e. Straight cut blades Stanley #1991\*\*. This blade is needed to cut the mat board when the mat being created is more than 36 inches in any direction.
2. **Mounting**
  - a. Foam core
  - b. Hinging tape
  - c. Transfer tape, same as above

\*\* These items may be purchased at the Arts Center

**Clean up the Mat Cutting Area When You Are Finished with Your Work.**

## Equipment Operation:

### Platform Paper Cutter:

See the figure below to identify the various parts of the paper cutter:

### Operating Components:

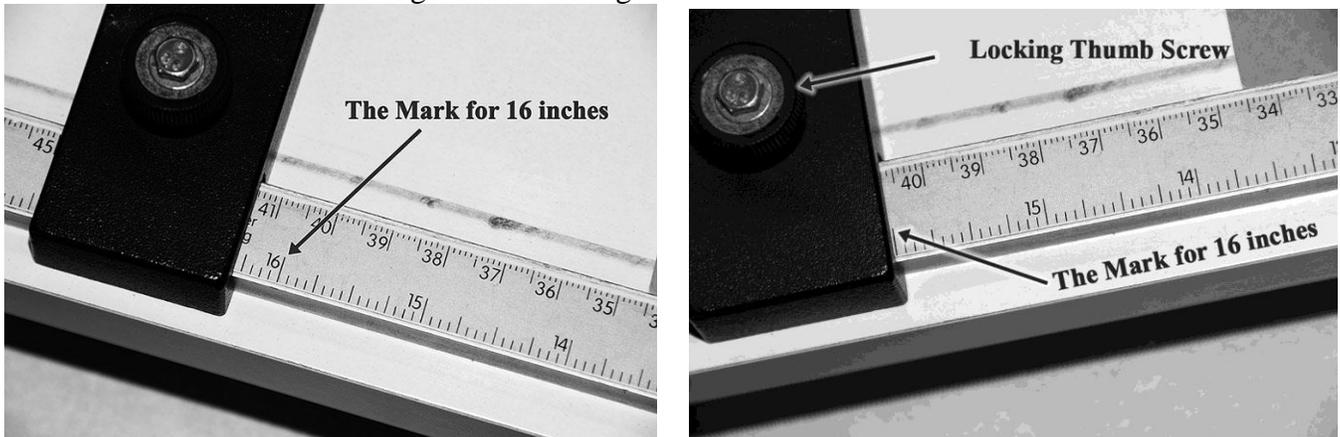


### Measuring Scale

The measuring guide and scale runs the entire width of the mat cutter and has both metric and inch scales on the guide. The metric scale is on the upper side next to the matboard being cut and the inch scale is on the lower side. This makes it necessary to use the stop bar to transfer the selected measurement accurately to the work.

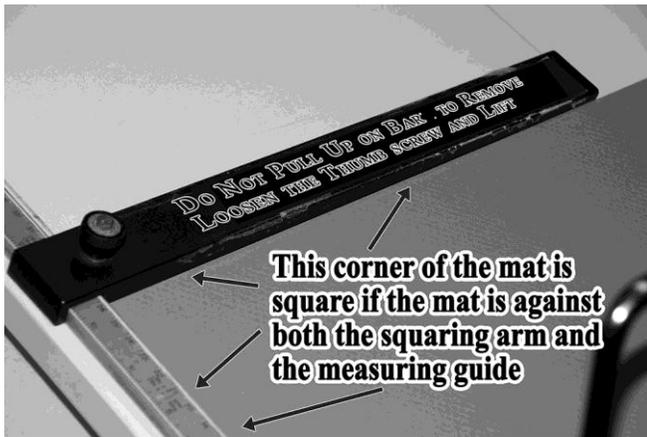
### Stop / Squaring Bar

The stop bar serves two purposes, it is used to insure that the item being cut will be cut to the intended size and it provides a good indication of the squareness of the lower left corner of the matboard being cut. When positioning the stop bar, place the bar just to the left of the mark on the measuring scale that defines the selected measurement and tighten the locking screw. Do not cover the mark.



It is important that the locking screw locks the bar solidly to the measuring scale. If the bar does not lock in place when the locking screw is tightened then loosen the locking screw several turns and reposition the locking cam on the underside of the bar. Then replace the bar on the measuring scale and retighten the locking screw, it should now be firmly clamped to the measuring scale.

When the squaring bar is locked to the measuring scale it forms a near perfect right angle to the measuring scale allowing you to assess the squareness of the lower left corner of the matboard being cut.



**DO NOT ATTEMPT TO REMOVE THE STOP / SQUARING BAR BY PULLING UP ON THE BAR WITHOUT LOOSENING THE THUMB SCREW.**

### **Hold Down Bail**

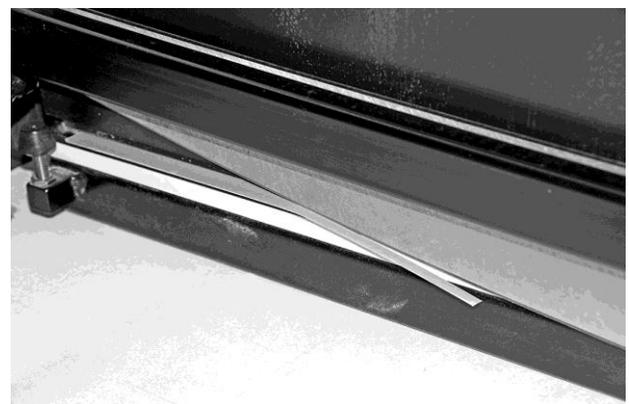
The chrome hold down bail operates on a cam and causes pressure to be applied to the matboard being cut. This pressure insures that the matboard is not pulled out of position during the cutting operation. It is important to always apply pressure to the hold down bail to hold the matboard in position as the blade cuts the matboard.



Do not apply too much pressure on the hold down bail when cutting foam core to prevent crushing the foam core.

### **Cutting Matboard on the Platform Paper Cutter:**

First raise the blade to allow the matboard to be placed under the hold down bar and safety shield. The matboard should be inserted into the cutter from the left side of the hold down bar.



The matboard that is being cut to size will be on the left side of the blade and the discard is on the right side of the blade. Insure that the left side of the matboard is firmly against the stop bar and the bottom side of the matboard is firmly against the measuring scale. When the matboard is in position, place your

left hand on the hold down bail to apply hold down pressure and then lower the cutting blade to cut the mat.

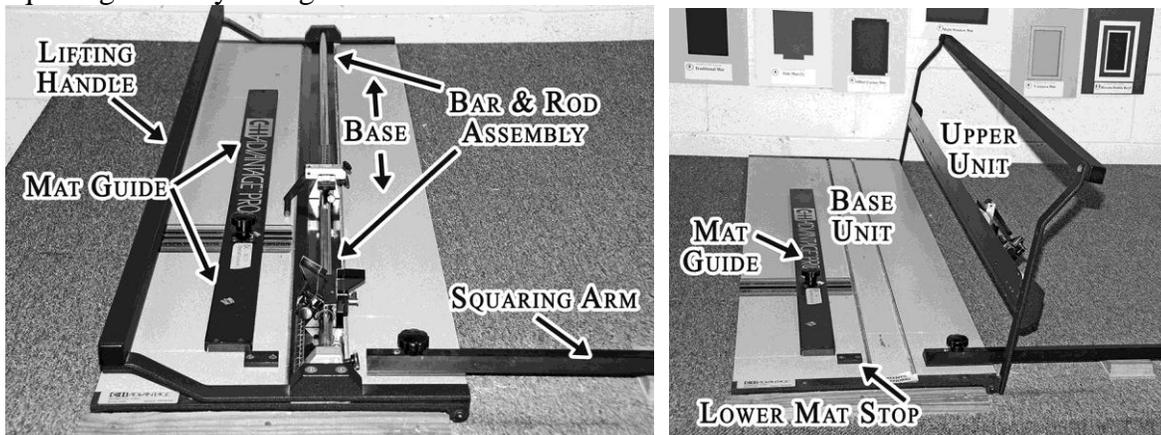
If the matboard is being trimmed and squared prior to being cut to size then the stop / squaring arm should be moved to the left end of the measuring scale to get it out of the way. When squaring a mat, start by placing the bottom of the matboard against the measuring scale and trim a small amount from the right side of the mat. Don't forget to use the hold down. When that cut is completed, rotate the matboard clockwise 90 degrees or ¼ of a turn. Place the newly cut edge firmly against the measuring scale and trim a small amount from what is now the right side of the matboard. Again rotate the matboard clockwise 90 degrees. The lower left corner of the matboard should now be perfectly square and be ready to cut to size. Set the stop bar on the measuring scale at the exact spot that defines the first dimension to be cut. When that cut has been made again rotate the matboard 90 degrees clockwise and set the stop bar on the measuring scale to define the second dimension and make your final cut. At this point you should have a piece of matboard that is exactly the size you specified and with four perfectly square corners.

## C&H Mat Cutter Components and Operation:

This is the machine that will be used to cut the opening or window in your mat. It can also be used as a matboard cutter in place of the Platform Paper Cutter for very large mats.

The mat cutter consists of two main units, the upper unit and the base unit, that are fastened together with hinges at the ends. The upper unit can be raised or opened by lifting on the handle that runs the full length of the cutter. When the upper unit is raised all the way up it will stay open for mat insertion.

The mat cutter is generally operated by standing at the end with the upper unit handle to your left and the squaring arm to your right.



### **Base Unit Components:**

#### **Squaring Arm:**

The squaring arm is a long arm that extends to the right from the bottom of the mat cutter base. This arm is used for cutting mats to size using the straight cut blade. The squaring arm has a measuring scale to define the cut dimension much the same as the scale on the platform cutter. **Caution, this scale is not as accurate as the scale on the platform cutter.** Make a test cut to quantify any inaccuracy in the scale and adjust your specifications accordingly. The scale is not adjustable but it should be accurate within less than 1/8 inch. There is an adjustable stop that clamps to the squaring arm to establish the dimension being cut. Place the left side of the stop to the right of the scale mark that defines the dimension being cut.

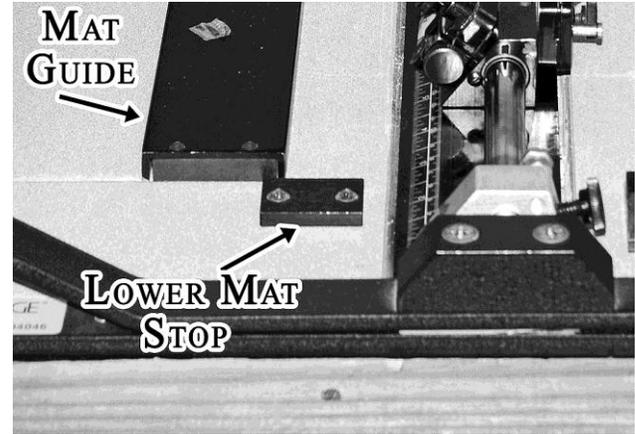
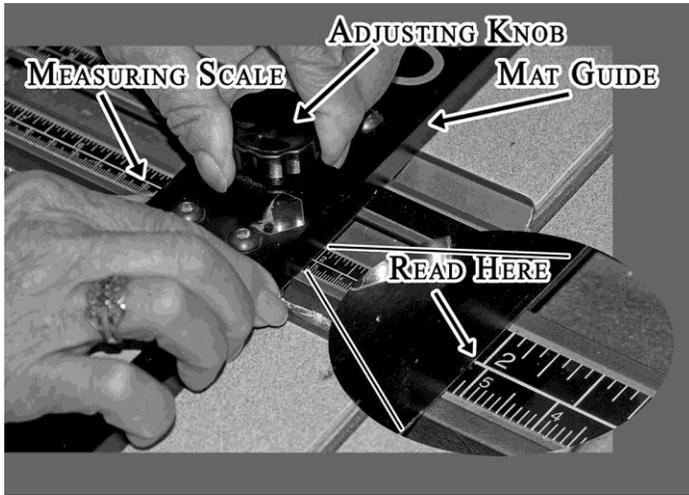
The squaring arm and the straight cutting blade would only be used in the event that you were cutting a matboard that is too large for the platform paper cutter, a mat that is greater than 36 inches on a side.



**Illustration is from table side not operator's side**

## Mat Guide:

The mat guide is probably the most important guide on the mat cutter. The mat guide is on the left side of the base and mounted on a width scale with a locking knob in the center. Do not over tighten this locking knob or it will very difficult to loosen. This guide is parallel to the travel of the bevel cutting blade and establishes the width of the mat border being cut.

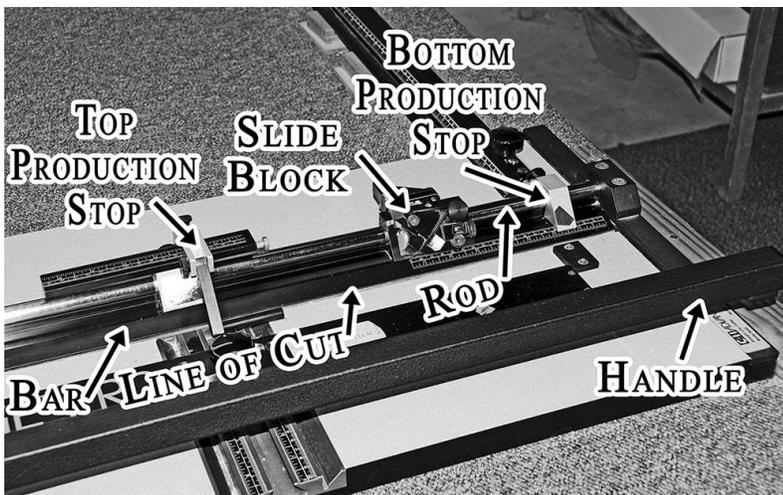


## Lower Mat Stop.

The lower mat stop is near the bottom left of the base and forms a right angle with the mat guide. When a mat is being cut the lower left edge should be against this guide.

## Upper Unit Components:

### Bar and Rod Assembly:



The bar and rod assembly run the full length of the mat cutter. The bar is the flat part of this assembly and it serves as a hold down plate for the mat being cut. The left side of this bar defines the line of cut for the bevel mat cutting blade. The rod is the sliding surface for the slide block that holds the bevel cutting blade as well as the straight cutting blade. The top and bottom production stops are mounted on the rod and held in place with locking screws.

## Slide Block:

The bevel cutting blade mounts on the left side of the slide block and the straight cutting blade mounts on the right side of the slide block. The slide block allows the cutting blades to travel the whole length of the mat cutter, 48 inches, and insures the blades move exactly parallel to the mat guide and 90 degrees to the squaring arm.

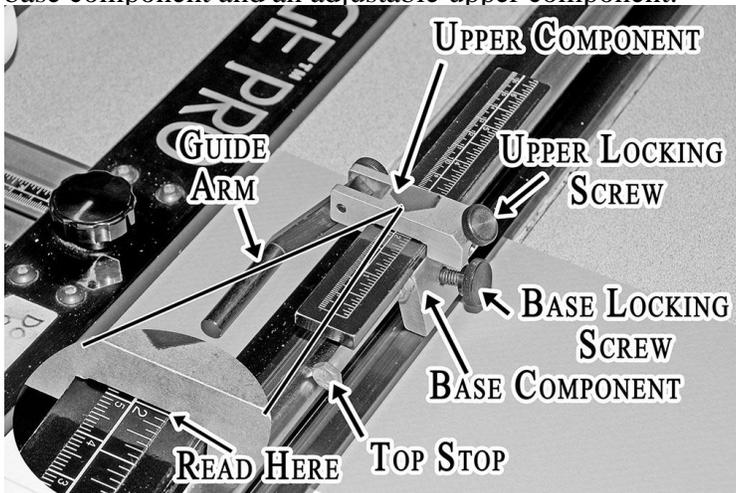


## Freehand guide:

There are measuring marks cast into the lower part of the bevel blade holder. They are to assist the user when cutting mats freehand. That is, cutting a mat to lines drawn on the back of the mat and without using the mat cutter guides and stops.

## Top Production Stop:

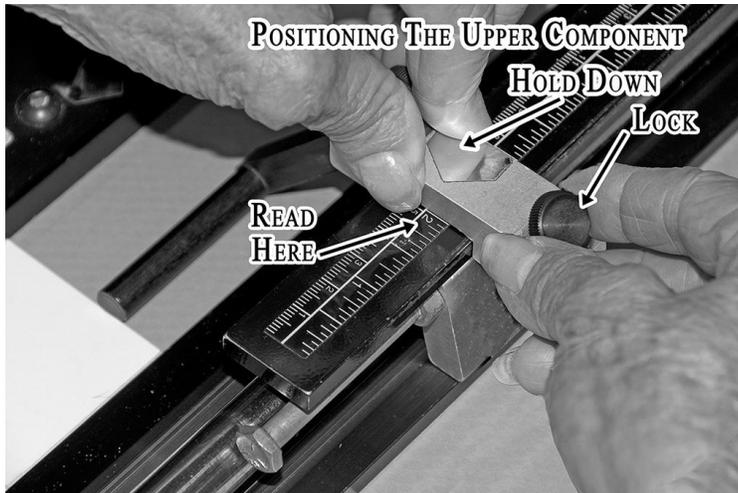
The top production stop establishes the starting position of the bevel cutting blade which in turn defines the width of the top mat border that is adjacent to the mat border being cut. The top production stop has a base component and an adjustable upper component.



## Base Component:

The base rides on the rod portion of the bar and rod assembly and is locked in place with the thumb screw on the right side of the base. This stop must always be held down with one hand while locking the thumb screw with the other hand to obtain proper placement. This component supports a measuring scale for use with the upper component.

### *Upper component:*



The upper component has a bar that slides on a measuring scale that is on the base component and the bar has a locking thumb nut to hold it in place. The placement of this bar establishes the starting position of the bevel cutting blade which in turn defines the width of the top mat border that is adjacent to the mat border being cut at the time. This bar should be placed just above the mark on the measuring scale that defines this border's width. Like the base, this bar must always be held down with one hand while locking the thumb screw with the other hand to obtain proper placement.

### *Positioning the Top Production Stop:*

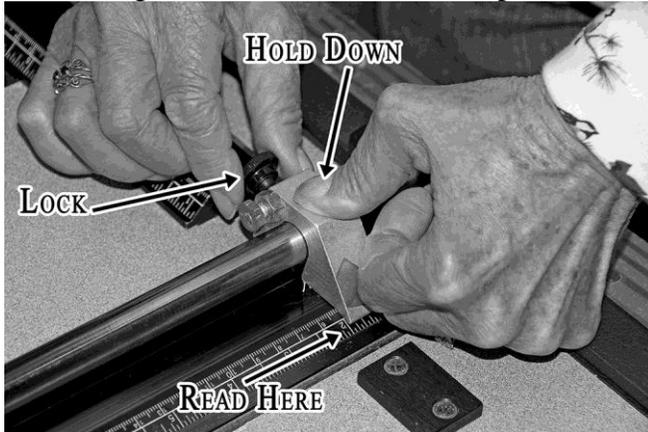


Now that you have the bar properly placed on the top production stop it is time to place the stop in position. You will note that there is an "L" shaped arm extending from the left side of the stop. This lever determines the final placement of the top production stop. Note: This arm is not a handle to be used in positioning the stop. It is important that this arm float freely on the mat cutter base. To position the top production stop, loosen the locking thumb screw on the base and slide the production stop up on the rod until it is well above the top of the mat being cut. Then slide it down until the "L" arm is stopped by the top of the mat. Now hold down the stop with one hand and tighten the base locking screw with the other hand. If the stop is properly positioned there should be no space between the end of the "L" arm and the top of the mat.

## Bottom Production Stop:

The bottom production stop establishes the stopping position of the bevel cutting blade and therefore the width of the bottom mat border that is adjacent to the mat border being cut.

Positioning the Bottom Production Stop:



Loosen the thumb screw on right side of the bottom production stop and move this stop to a point just below the mark on the mat cutter base measuring scale that defines the width of this border.

## Mat cutting blades and Installation:

### Bevel Cutting Blades:

The following blades are for sale at the Sertoma Arts Center:

1. The C&H 1200SE:

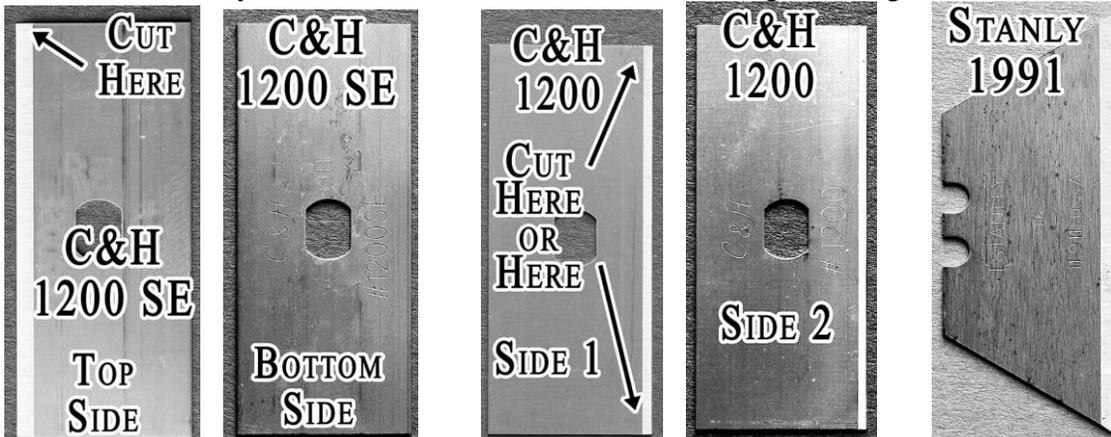
This blade is ground and honed on one side only. This makes it more rigid than the traditional mat cutting blade. This gives a straighter cut and makes it possible to cut through the thicker boards and black core boards with greater ease. Only one end of this blade may be used because the honed edge must be up.

2. The C&H1200:

This blade is 1200th's of an inch thick and ground on both sides. It is recommended for use with the lower grades of matboard. Since this blade is ground on both sides both ends can be used.

3. Stanley 1991

The Stanley 1911 is the correct blade to use for straight cutting

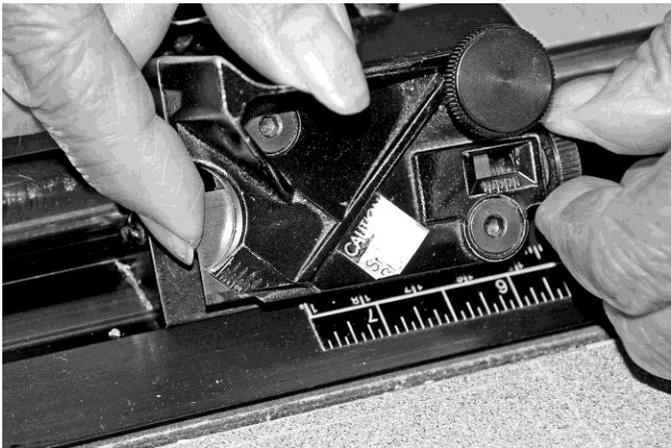


## Installing a Bevel Cutting Blade:

The bevel cutting blade is installed in the blade holder that is on the left side of the slide block. Loosen the knurled knob on the left side of the blade holder and slip the blade in the slot



Be sure to have the honed surface of the blade facing up/out if using a 1200SE blade. The blade should project from the blade holder so that it cuts through the board being cut and scores the slip sheet underneath. Test this out with two scrap pieces of matboard. To adjust the blade depth, loosen the knurled locking screw. While holding the blade in from the front, adjust the blade depth with the blade adjustment thumb screw on the back of the holder.



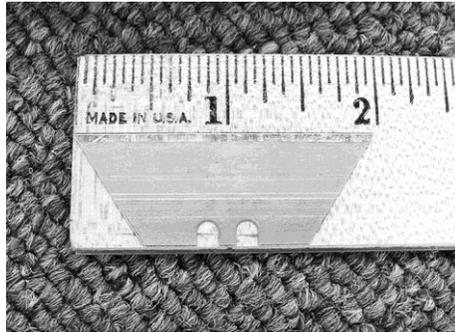
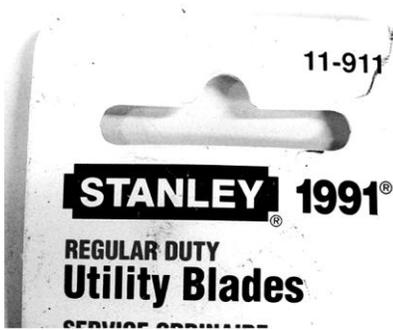
Retighten the knurled locking screw to hold the blade in position.

See the [Using the Equipment](#) of this document for more information.

## Installing a Straight Cutting Blade:

This blade is somewhat difficult to install properly so the instructions will start with an orientation on the blade and blade holder.

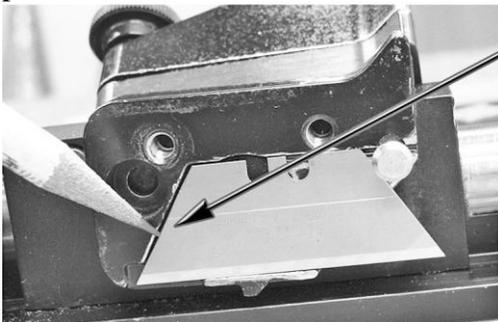
*First what is the proper blade?*



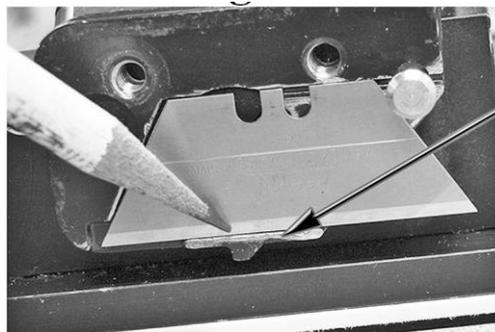
The proper blade is a Stanley 1991 that is only two inches long

*Now where should the blade be placed?*

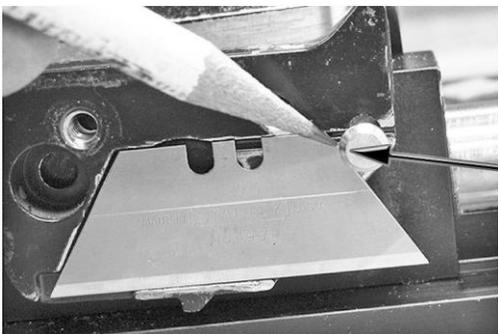
The following pictures were taken with the blade carrier disassembled to better show the blade placement.



When the blade is installed properly it will be against the back stop.

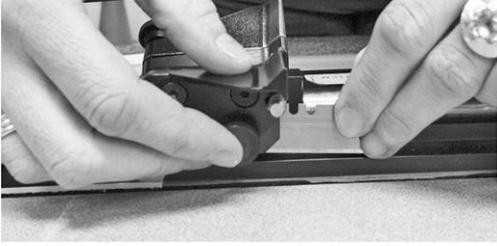


It will be above the bottom guide.

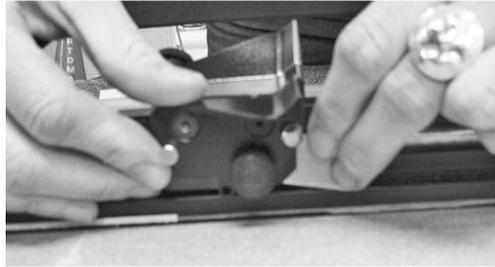


It will be behind the push button. There is a groove in the push button shaft that will align with the blade when the button is pushed in and this allows the blade to slip behind the push button. When the push button springs back out the groove is no longer aligned with the blade and the push button shaft holds the blade in position.

***Installing the blade:***



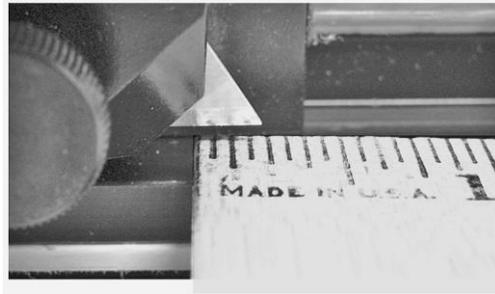
Loosen the thumb screw and hold the blade as shown in the picture to left.



Aim the blade up slightly to get it on to the bottom guide.



While holding the push button depressed, push the blade all the way in to the back stop. Now tighten the holding thumb screw.



When the blade is properly positioned the blade will extend about 3/16 to 1/4 inch.

# Designing and Cutting Mats

## Mat Design

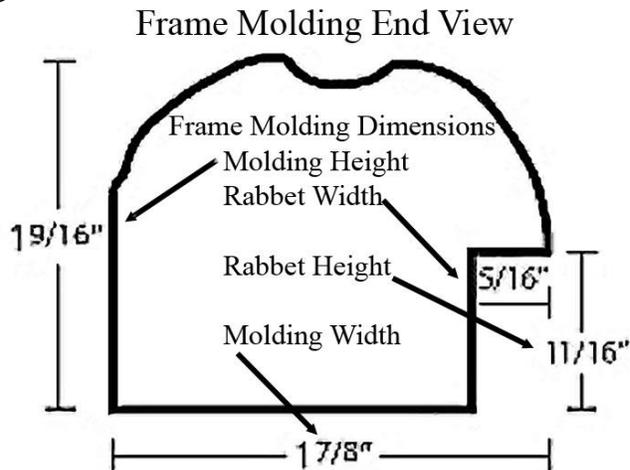
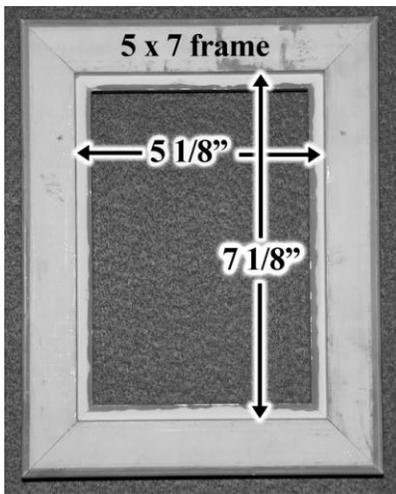
### **General Matting & Framing Considerations:**

#### **Framing Information:**

Your mat designing task will be easier if you know what size of frame you are going to use. If you don't know the frame size then proceed to design your mat and when you are finished take note of the overall size. Then check the standard frame sizes and see if one of them would be acceptable.

#### **Frame Nomenclature and Sizing:**

The size of a frame is determined by measuring at the outside of the rabbet in the back of the frame. As can be seen in the pictures below a 5x7 frame has a window that is smaller than 5x7. It is also important to consider the depth of the rabbet. You want to be sure it is deep enough to accommodate your mounted art work. The over all size of your framed art work will be the size of the window in the frame plus two times the width of the frame molding.



#### **Standard Frame Sizes:**

The following is a list of "standard" frame sizes:

4"x5"	11"x14"
4"x6"	12"x16"
6"x8"	14"x18"
5"x7"	16"x20"
8"x10"	20"x24"
8"x12"	22"x28"
8 1/2 "x11"	24"x30"
9"x12"	24"x36"
10"x13"	30"x40"

All of these frame sizes are available; however there is a much greater variety of some of the sizes. As an example, the 8 1/2 by 11 is primarily a certificate frame size and therefore usually fairly plain.

If you are creating a matted art work to be framed, create the mat with dimensions that are in full inches rather than fractional inches. If you stick with full inches custom frames can be ordered from many sources. The 8 ½ x 11 mat is an exception.

## Designing the Mat:

### Overall Mat Size and Window Size Considerations:

Determining the size of the window that you want in you mat is probably the most complex and important part of mat design.

- Window Size Considerations:
  - Image Cropping
  - Are the edges uneven or inconsistent as is often the case with water color
  - Is there a printed border around the image like an image on the face of a greeting card
  - In the case of a photograph, is it printed edge to edge or is there a border around the image?
  - If there is a border around the image, how wide is it.

Measure the width and height of the image to be matted. Keep in mind that at least 1/8 inch of each side of the image must go under the mat.

#### **Cropping:**

Many pictures would make more interesting images if cropped; the following is an example.

The size of the selected image area is 4 inches wide by 5 inches high. Taking into consideration that at least 1/8 inch of the image must be under the mat, then the vertical dimension of the mat window can be no larger than 4 ¾ inches. Therefore the mat window will be 3 ¾ inches wide to maintain the cropped proportion even though there is more than enough image on the sides.

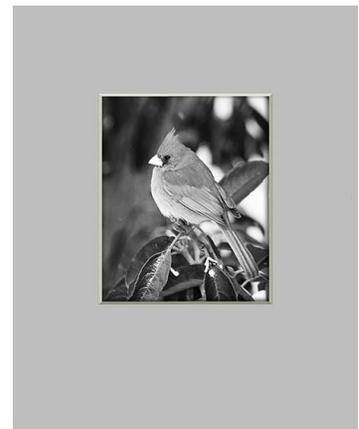
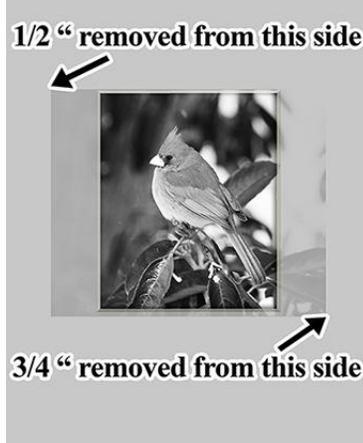


The first picture is about 5” x 7 “



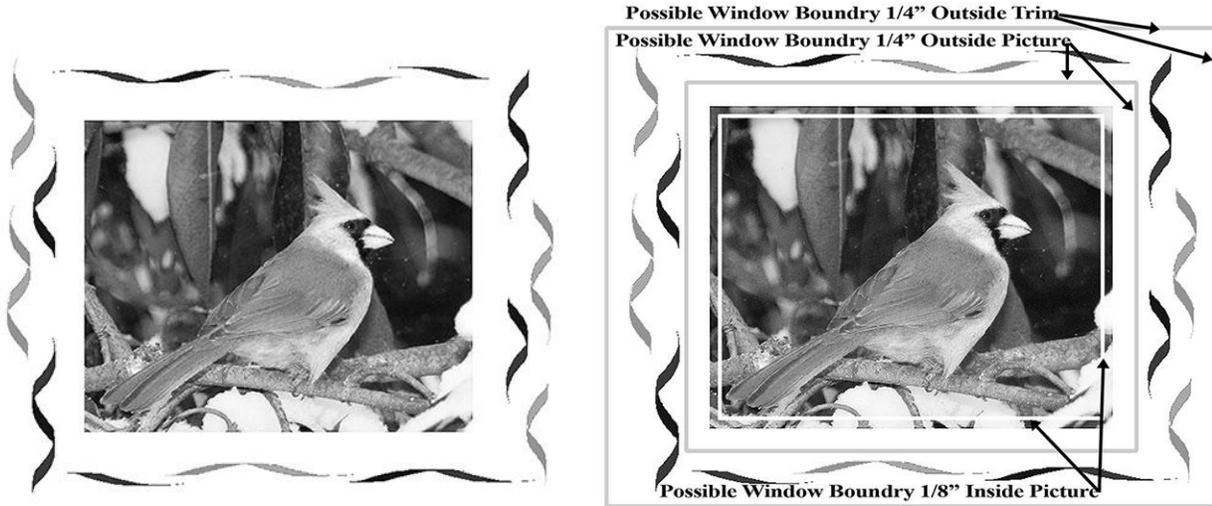
This is how it would look cropped to 4” x 5”

For illustration the image will be placed under an 8 inch x 10 inch mat with 3 ¾ by 4 ¾ inch window.

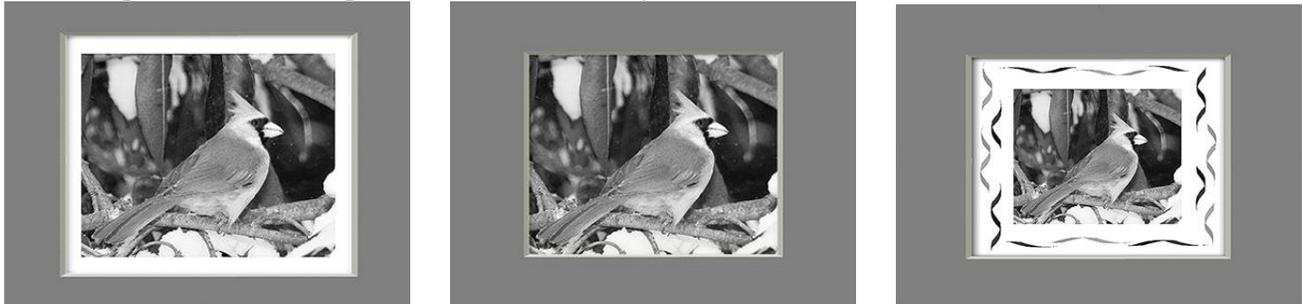


As can be seen by the first illustration, the image covers too much of the area under the mat on the sides. An image this large in relation to the mat size would not allow for proper mounting of the mat to the backing. In the second illustration  $\frac{1}{2}$  inch has been trimmed from the left and  $\frac{3}{4}$  inches has been trimmed from the right side. The minimum amount of  $\frac{1}{8}$  inch over lap exists at the top and bottom and no trimming is necessary.

***Other Window Placement Considerations:***

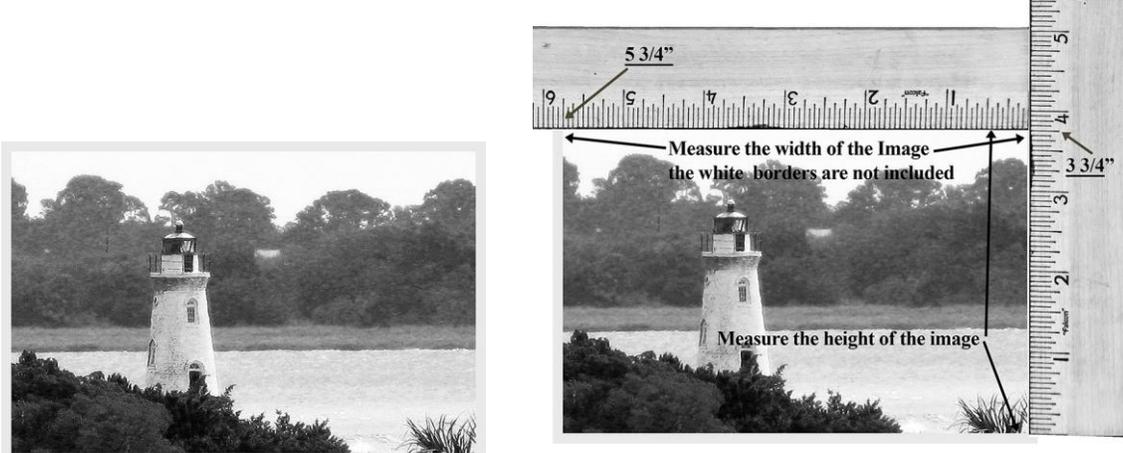


In some cases you will have an image that has a trim or border around it. The following illustration identifies possible window placement and how they would look matted.



## Designing a Single Mat:

Select the image that you are going to mat like the light house below. It may be difficult to see in this document, but this image is a 4"x6" photograph that was printed with 1/8" white borders. The first thing that you need to do is determine the window size for your mat by measuring the image size.

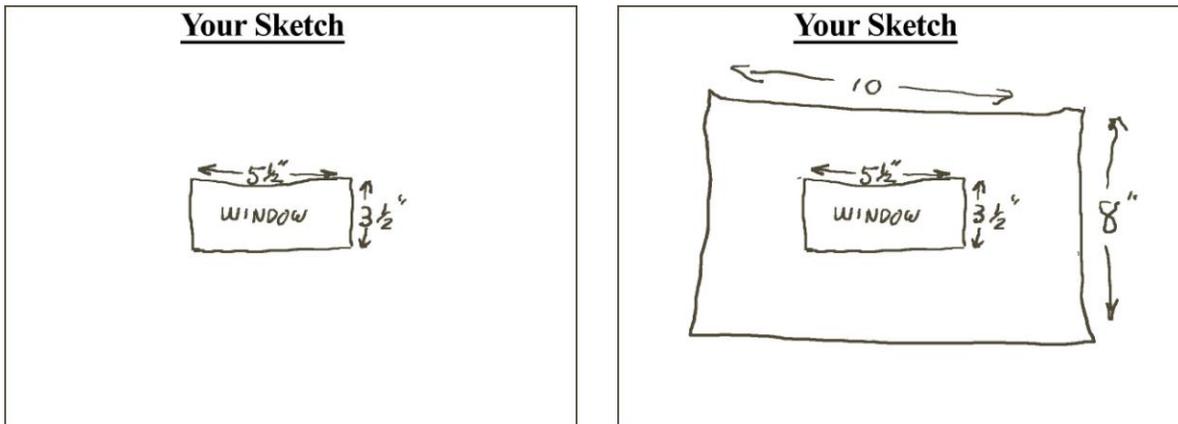


Measure the part of the image that you would like to see in the mat window, in this case picture is  $5 \frac{3}{4}$ " x  $3 \frac{3}{4}$ ". If we were to cut a mat with a  $5 \frac{3}{4}$ " x  $3 \frac{3}{4}$ " window for this image the window would have to be perfect and the mount would have to be perfect. When working with paper, this is not likely. For that reason we will subtract 1/4 inch from each of our measurements, 1/8 for each side, and make the window  $5 \frac{1}{2}$ " by  $3 \frac{1}{2}$ ".

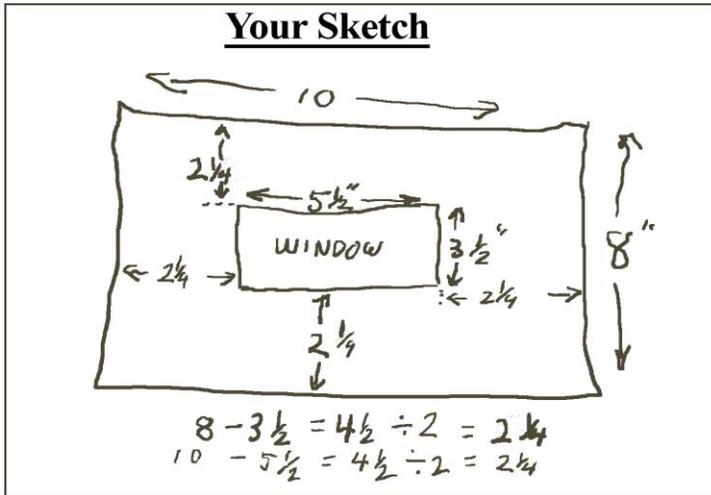
## Making a Sketch:

Making a freehand sketch of the mat that you are designing is **essential** to a successful mat cutting experience. So let's get started.

### Known Frame Size:



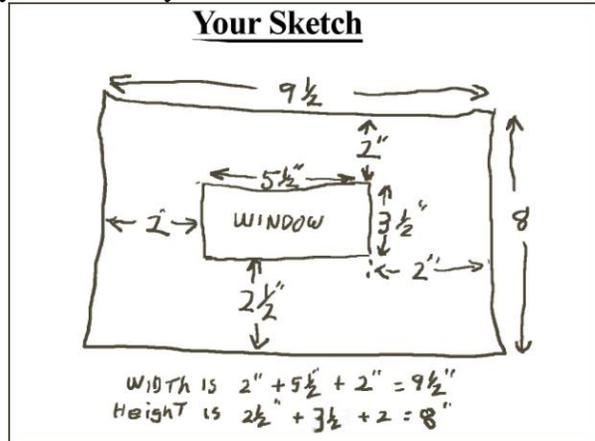
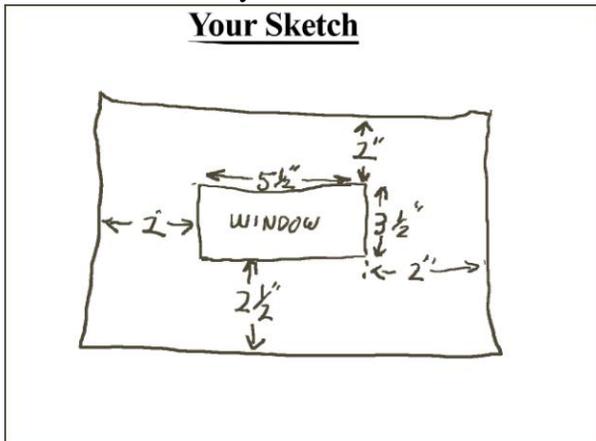
From the work that you did measuring the lighthouse picture you know that the window should be  $5 \frac{1}{2}$  by  $3 \frac{1}{2}$  so draw that window in the center of your sketch. Now let's assume that you know you want to put this mat in a 8" by 10" frame. Now add the assumed frame to your sketch as in the right hand picture above.



With the information that you have in your sketch calculate the border sizes and place these dimensions in your sketch. The calculation is done by subtracting the width of the window from the width of the mat; in this case the result is 4 ½ inches. That 4 ½ inches can be divided up in any way you like to create the right and left borders. In this case I chose to have even left and right borders of 2 ¼ inches. The top and bottom border is calculated the same way and in this case the result is also 2 ¼ inch top and bottom borders. If you wanted a traditional mat with a weighted bottom you could have made the bottom border 2 ¾ inches and the top border 1 ¾ inches. The total of the height of the window plus the 2 borders would still be 8 inches.

**Known Mat Border Size:**

Now let's assume you know the size of borders you want on your mat but not the frame size.

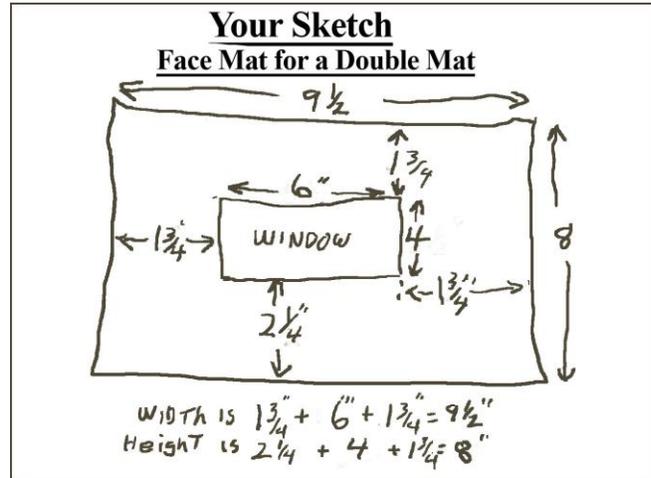
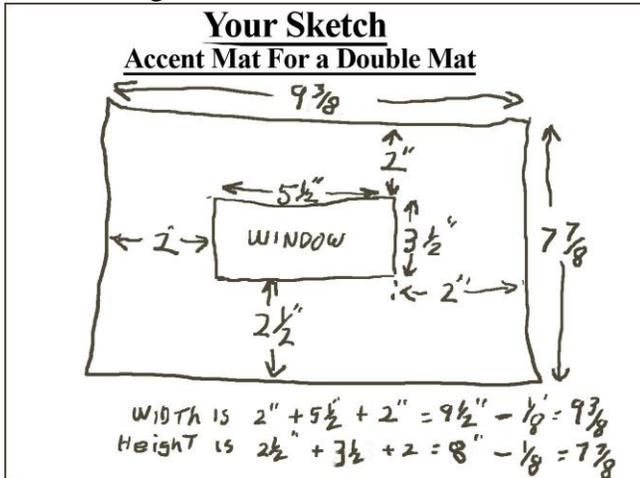


In this case you record your border sizes on the sketch, then using these dimensions determine the frame or mat size. To determine the width add the window width to the left border width and the right border width,  $2 + 5\frac{1}{2} + 2 =$  a total width of 9 ½ inches. The total height is determined in the same manner,  $2 + 3\frac{1}{2} + 2\frac{1}{2} = 8$  inches. So the frame or mat size will be 9 ½ by 8 inches. As discussed in the standard frame size section of this document, you may want to consider adjusting the border sizes to make the 9 ½ inch dimension a whole number, either 9 or 10 inches. As an example, the left and right borders could be increased to 2 ¼ inches: then the overall length would be 10. This would result in your mat fitting in a standard 8x10 frame.

## Designing a Double Mat:

When designing a double mat the process used above results in the proper dimensions for the accent or bottom mat. This is because the viewing window is in the accent mat. There is one change that must be made to the accent mat. An  $\frac{1}{8}$  of an inch needs to be trimmed from the top and one side. This results in the overall size of the mat being  $\frac{1}{8}$  inch smaller than the face mat. The reason for this will become clear when the double mat is cut. There is no change to any of the other dimensions. Now your original single mat sketch, with the  $\frac{1}{8}$  inch modification is a sketch for the accent mat. Refer to the sketch below.

To determine the dimensions for the face or top mat, simply increase the window size by an amount that represents how much of the accent you would like to be visible. As an example let's use the original single mat sketch as a starting point and make the window  $\frac{1}{2}$  inch taller and  $\frac{1}{2}$  inch wider. A new sketch with the larger window for the face mat is below..



A double mat cut to these dimensions will have an accent of  $\frac{1}{4}$  inch. Refer to the next section for cutting instructions.

## Cutting a mat on the C&H mat cutter:

Before using the C&H mat cutter to cut the window in your mat you must have a properly sized piece of mat board. Using the dimensions from your sketch, select a piece of matboard that is large enough for your mat. Using the Platform Paper Cutter square the mat and cut it to size.

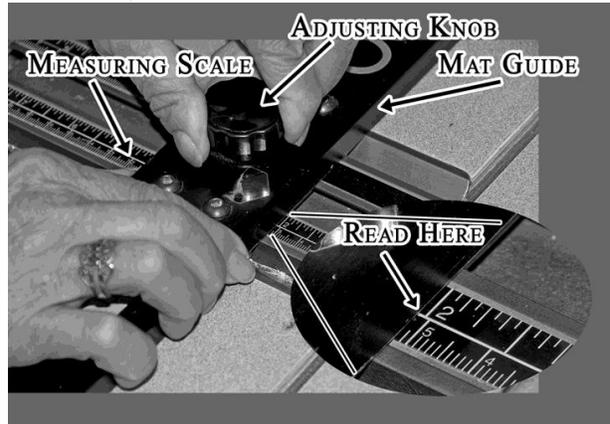
## **Cutting a Single Mat:**

Before proceeding with the mat cutting process, be sure that you have read and understand the section on the C&H Mat Cutter Components and Operation.

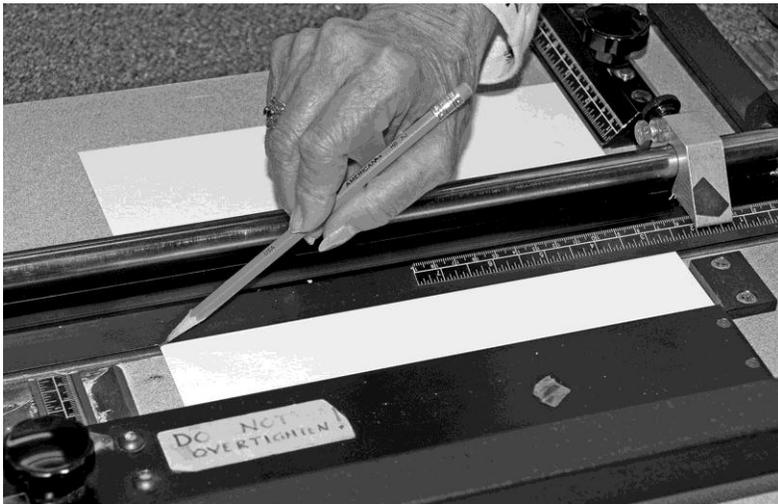
Insure that the correct blade is in the machine and it is properly adjusted.

### Mats are cut face down on the C&H mat cutter.

- The first step is to draw lines on the back of the matboard that represent where the mat will be cut. Using your sketch as a reference set the mat guide to the dimensions of one of the borders.
- Remove the top stop from the rod assembly and lay it aside.
- Use the handle to open the mat cutter and insert the mat, face down



- Set the mat guide to the width of the first border to be cut. Refer to the sketch for dimensions. Illustration above right.
- Place the mat firmly against the mat guide and using a sharp pencil draw a line along the hold down bar from one side of the mat to the other.



- Now turn the mat  $\frac{1}{4}$  turn and set the mat guide to that border dimension and repeat as above. Continue drawing until all four sides have been completed.

- Take the mat out of the machine and compare the size of the window that you have drawn to the

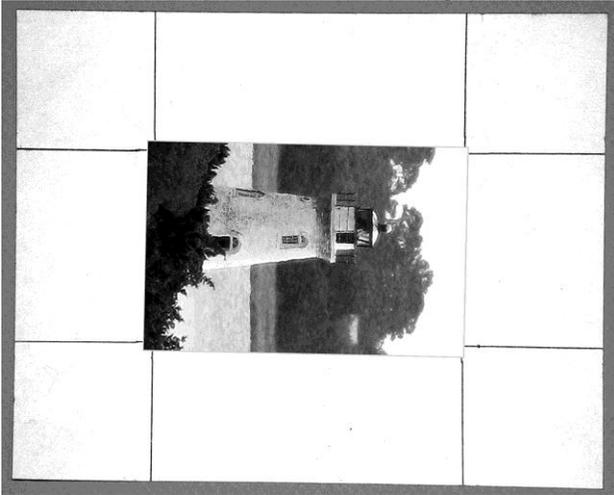
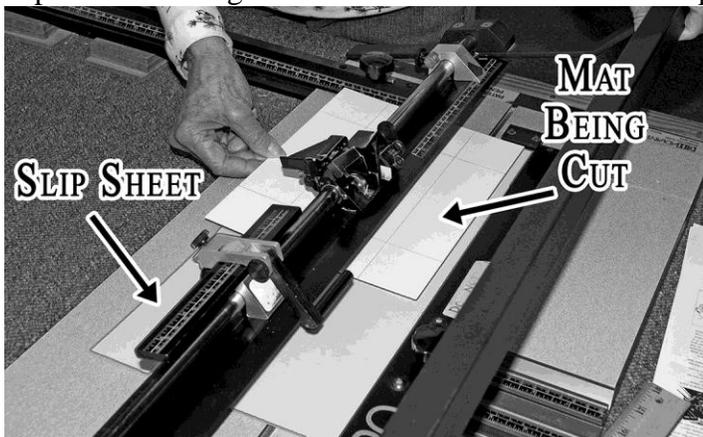


image.

- Is the window the right size for the image?
- Will at least 1/8 inch be under the mat?
- Will your intended crop show through the window?
- If all of the above conditions are met proceed to setting the guides and cut the mat. If not, return to the design phase.

### Using a Slip Sheet:

A slip sheet is a scrap piece of mat board that is at least as long as the largest dimension of the mat being cut and at least six inches wide. The slip sheet is placed in the mat cutter under the mat you are cutting and against the mat guide. With the slip sheet in place, the cutting knife cuts through the mat and into the slip sheet resulting in a much cleaner cut than if the slip sheet was not used.



*You will need to remove the slip sheet before moving the mat guide.*

### Setting the guides:

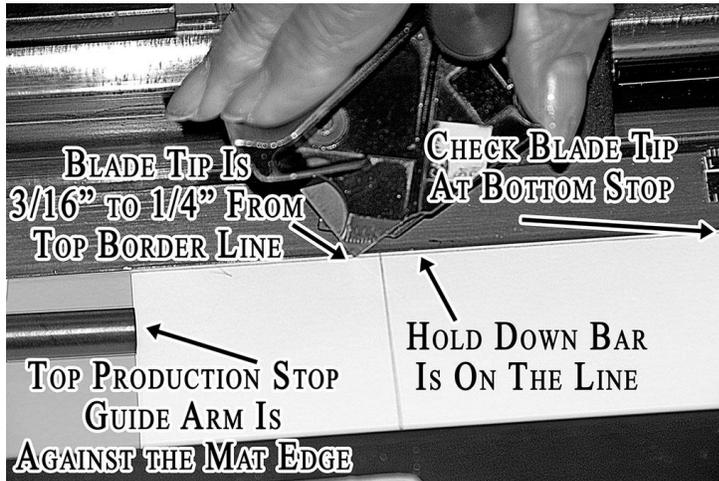
**Refer to the C&H Mat Cutter Components and Operation section of this document for details.**

- Remove the slip sheet.
- Set the mat guide to the width of the first border to be cut. Refer to your sketch for dimensions.
- Set the lower stop to the width of the lower border.
- Set the upper stop to the width of the upper border.
- Replace the slip sheet.
- Place the mat in the machine face down with the left side against the mat guide and all the way down to the lower mat stop.
- Move the upper mat stop assembly down against the top of the mat, hold it in place and tighten the thumb screw.

## Check Before Cutting:

With all of the guides and stops set properly and the mat in its proper place, check for the following:

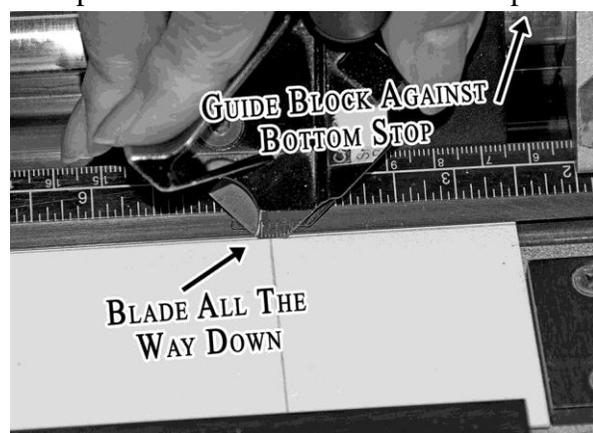
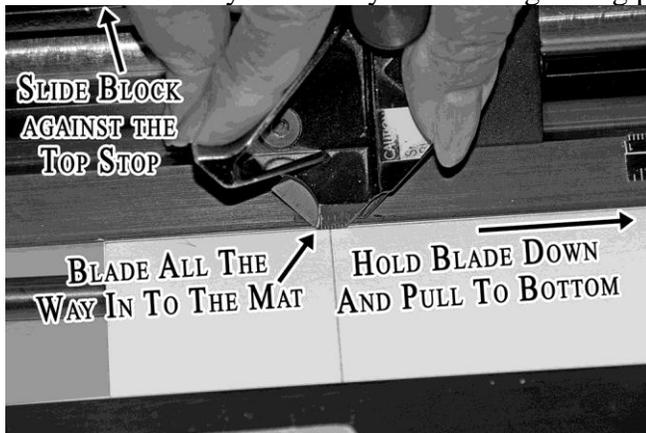
- The left side of the hold down bar will be on the line defining the border to be cut.
- Push the knife holder all the way up to the upper stop. Press the blade down just far enough to touch the tip of the blade on the mat and the tip should be about 3/16" to 1/4" above the line defining the top border.
- Pull the knife holder all the way back to the bottom stop. Press the blade down just far enough to touch the tip of the blade on the mat and the tip should be about 3/16" to 1/4" above the line defining the bottom border.



- **If any of the above are not correct, recheck** the stop settings and the mat placement.

## Making the Cut

- Move the knife holder slide up against the upper stop.
- While holding the slide firmly in place swing the knife all the way into the matboard.
- Pull the knife holder slide down to the bottom stop while holding the knife down.
  - Raise the knife and return the slide to the upper stop and repeat the cut. If the cut was made cleanly you should feel no new cutting taking place.
  - When the slide stops at the bottom it should be against the bottom stop and the blade all the way down.
  - If you feel any new cutting taking place repeat until the cut is clean and complete.

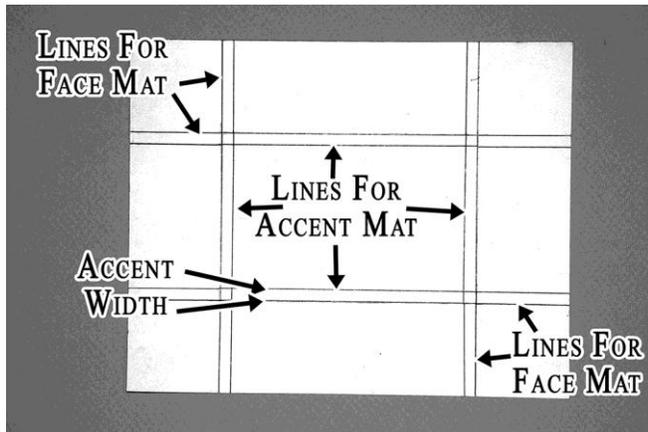


- When the first border is cut rotate the mat 1/4 turn.
- Remove the slip sheet and set the mat guide and stops for the next border.
- Return to the "Check Before Cutting" step and cut the current border.
- Repeat until all four borders have been cut.

## Cutting a Double Mat:

Only the differences between cutting a single mat and a double mat will be covered in this section.

- There are three steps to cutting a double mat:
  1. Cut the face mat.
  2. Fasten the accent mat to the back of the cut face mat.
  3. Cut the accent mat.
- Two blank mat boards are needed to cut a double mat. Refer to the “**Designing a Double Mat**” section for dimension information.
- An important step in mat cutting is the drawing of the window on the back of the mat and comparing its size to the image being matted. Since the face mat is going to be cut first the borders that define the viewing window for the accent mat as well as the borders for the face mat will be drawn on the back of the face mat.
- Compare the window size to the image being matted.
- Check the width of the accent.



- If any errors are identified go back to the design phase.

### Start Cutting.

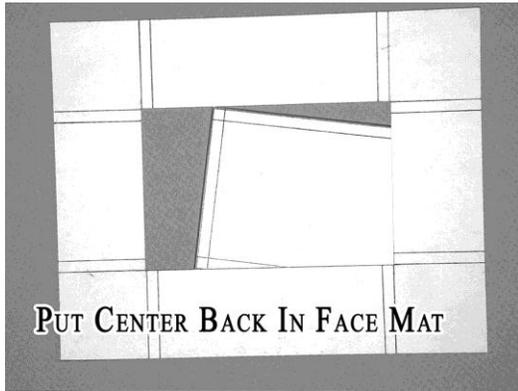
Cut the face mat first, just like you would cut a single mat.

After cutting the face mat do the following:

### Fasten the uncut accent mat to the back of the face mat

**Note:** The accent mat dimensions must be at least 1/8” smaller than the face mat. Refer to the Designing a Double Mat Section.

- Illustrations on the next page.
- Remove the face mat from the machine
- Place the cutout window on a flat surface face down
- Place the face mat over the cutout.
- Place transfer tape on all four borders about ½ inch from the outside edge.
- Place a small X of transfer tape in the center of the window cutout.
- Fasten the face of the accent to the back of the face mat. Take care to center the accent mat on the face mat. Since the accent mat is smaller than the face mat the face mat should extend beyond the accent mat on all sides.
- Remove the slip sheet from the mat cutter. The face mat window cutout will act as the slip sheet for the accent mat.



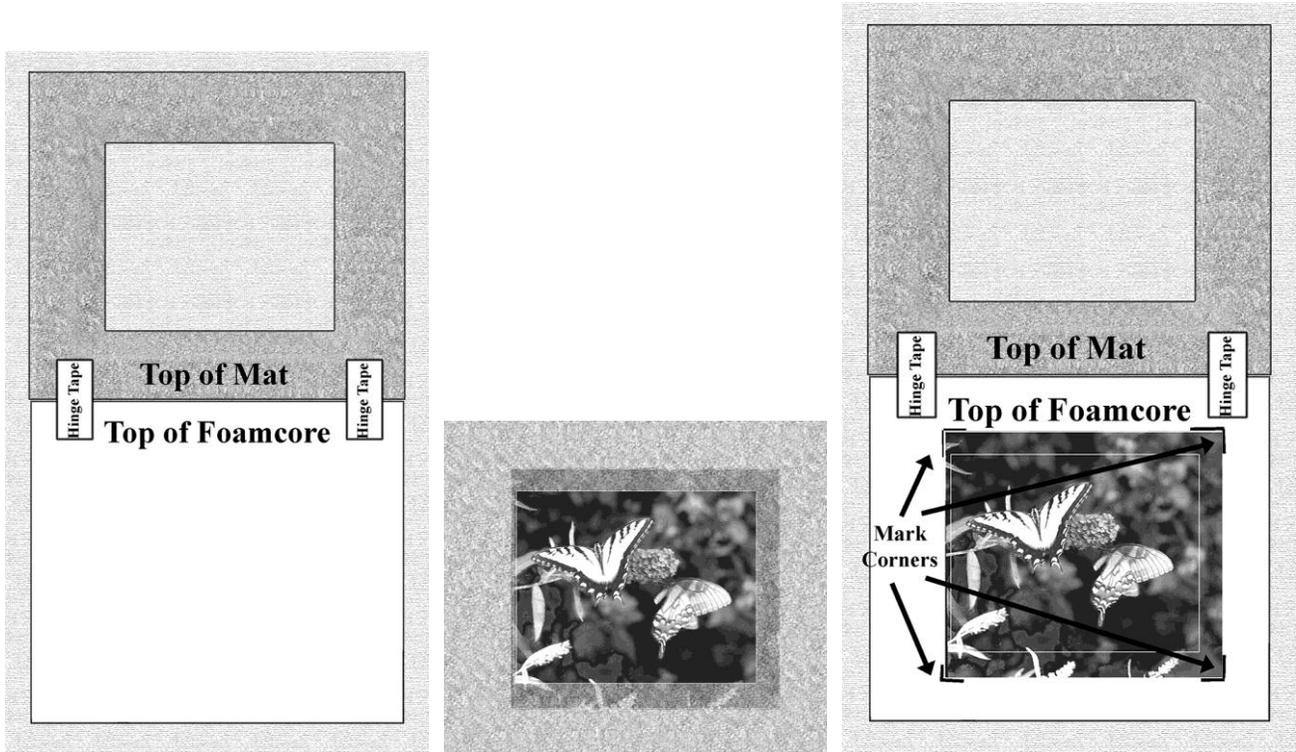
Cut the accent mat using the measurements from the accent mat sketch.  
The Double Mat is complete.



## Mounting the Image and Mat to the Backing:

This mounting process is preferred by many galleries and allows the image to be removed from its mounting without damage. It also allows the image to float between the mat and the foam core to prevent wrinkling with temperature or humidity changes.

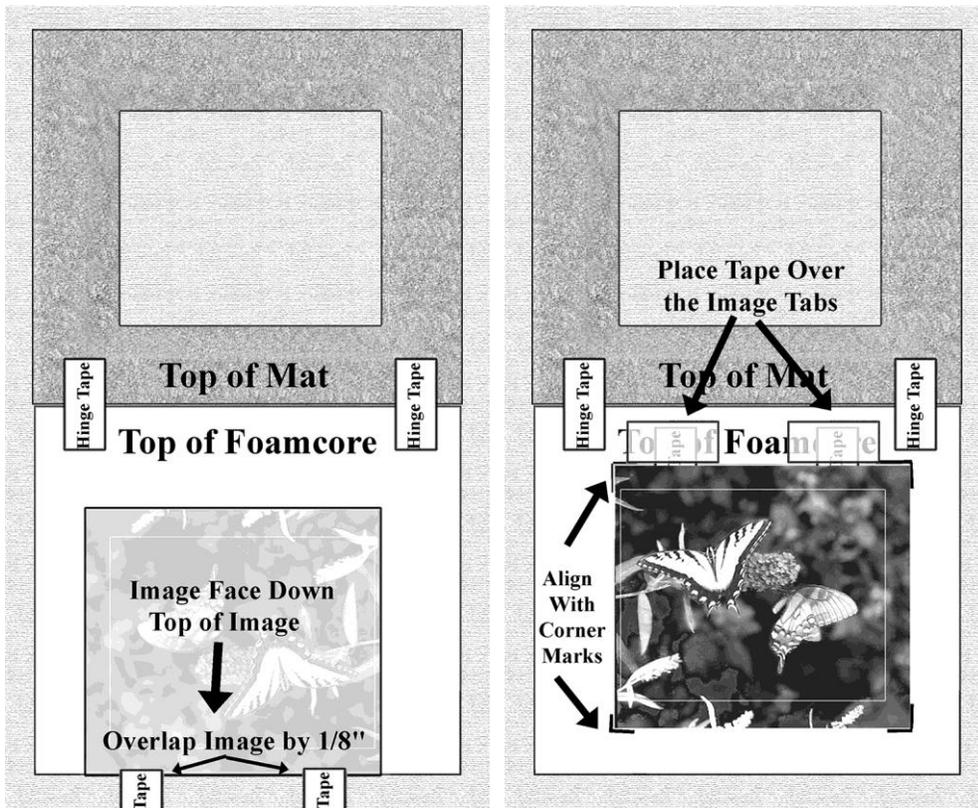
1. Cut a piece of foam core that is 1/8 inch smaller than the mat. Example: For an 8x10 inch mat cut the foam core 7 7/8" x 9 7/8"
2. Use hinging tape and hinge the top of the mat to the foam core.
3. Place the image on the foam core and fold the mat down over the image. Position the image under the mat so the selected view of the image is visible through the mat window. Be sure the mat is centered over the foam core.



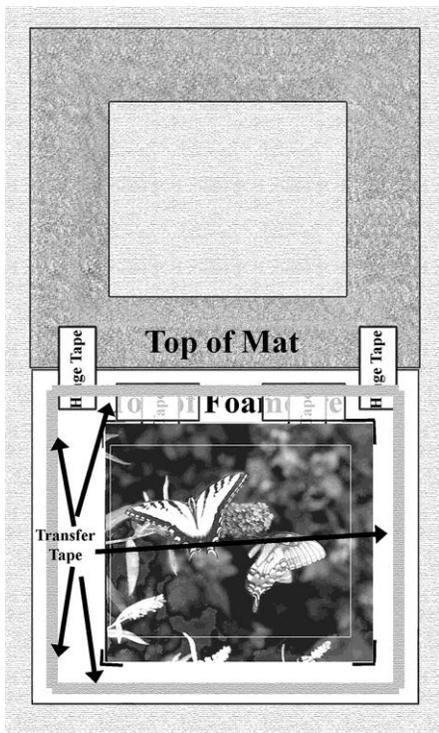
4. When you are satisfied with the position of the image, hold the image in position and raise the mat. Mark the foam core to locate the position of the image on the foam core. As indicated in the illustration above right

**Illustrations for the next three steps are on the next page.**

5. Turn the image face down and place the top of the image at the bottom of the foam core. Attach two small pieces of hinging tape on the top of the image which is now at the bottom of the foam core. The image is moved to the bottom of the foam core to prevent the tape from sticking to the foam core as well as the image.
6. Turn the image face up and align the corners with the marks made in step 3.
7. Place two pieces of tape over the image tabs as shown. Do not cover any of the image edge with the tape.



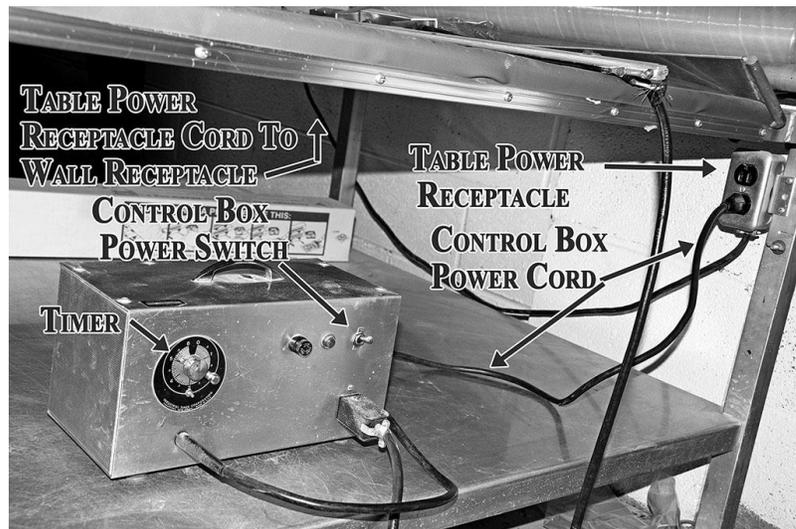
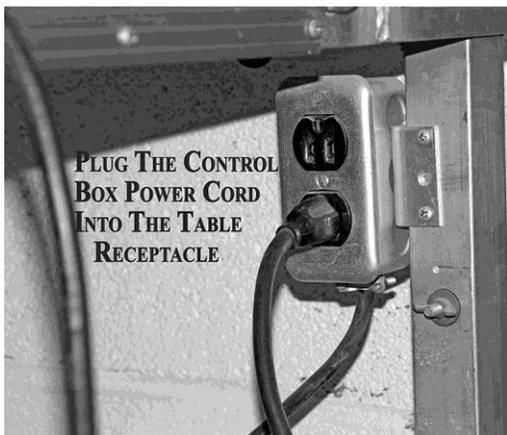
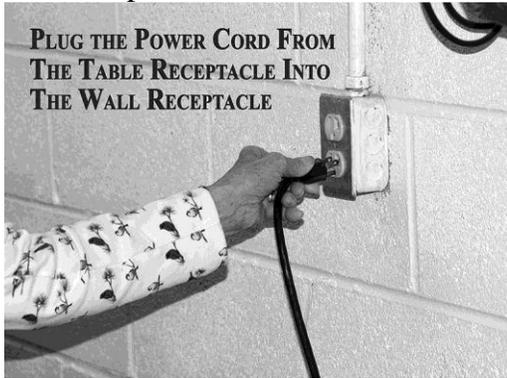
8. Place transfer tape around the border area. Stay well clear of the image. Do not cover any part of the image edge with tape.
9. Fold the mat down over the foam core and image. Be sure the mat is positioned correctly over the foam core.



10. When you are satisfied with the position of the mat and image press the mat down on the foam core and the mat will be stuck to the foam core.

## **Shrink Wrap Sealer/Cutter and Heat Gun:**

The shrink wrap table electrical receptacle must be plugged in to the wall to provide power. If the shrink wrap controller has been unplugged from the table receptacle then it will have to be plugged in. The heat gun also plugs in to this receptacle. When you finish working with the shrink wrap equipment unplug the table receptacle from the wall and return the shrink heat gun to the front desk.



## **Identifying Shrink Wrap Equipment and Components:**

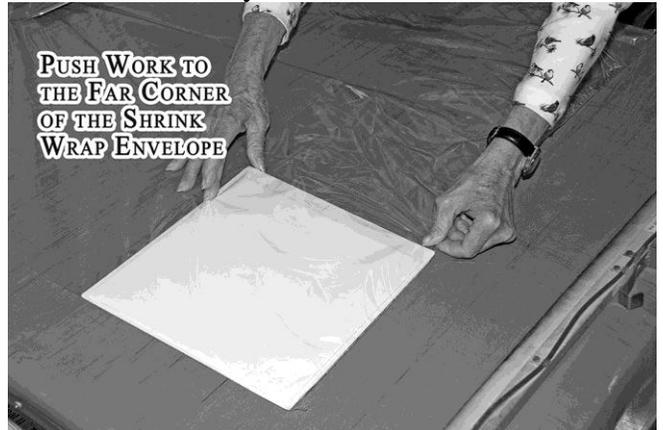
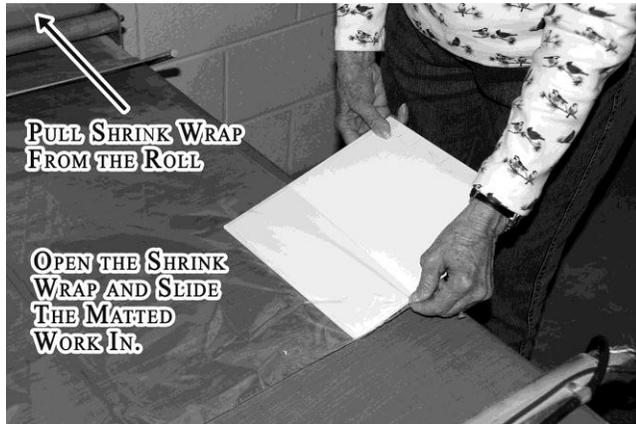
1. Table Electrical Receptacle
2. Control Box
  - a. Power on Switch
  - b. Timer
3. Cutting Arm
  - a. Power Push Button Switch
  - b. Cutting Wire
  - c. Guide pins
4. Heat Gun
  - a. High Low Switch

## **Cutting Shrink Wrap**

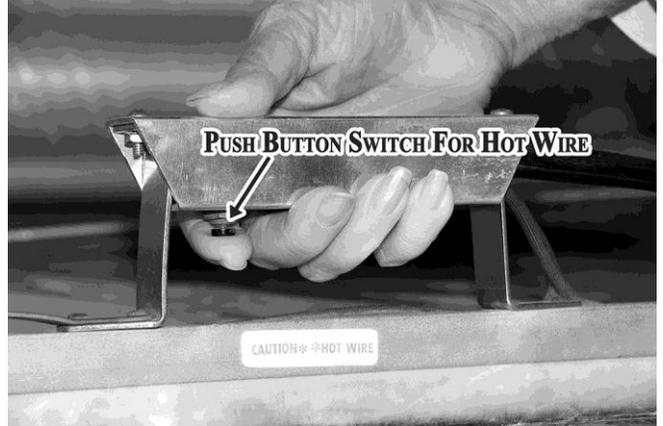
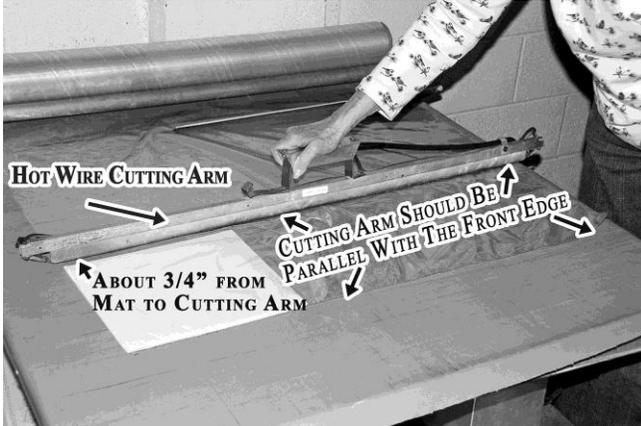
1. Turn on the toggle switch on shrink wrap control box. See the under the table picture above.
2. Clean the cutting wire by rubbing it with the edge of a matboard scrap.



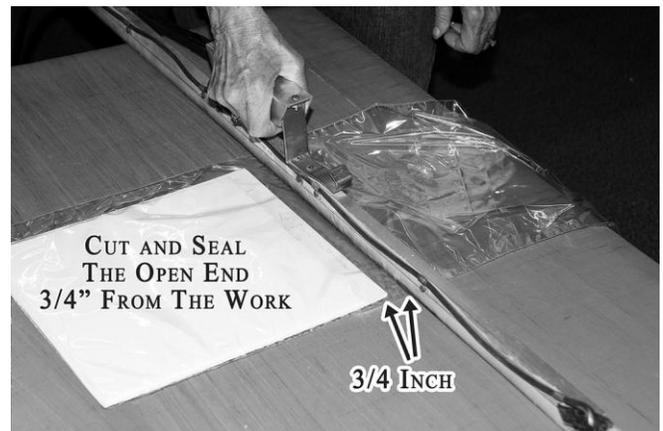
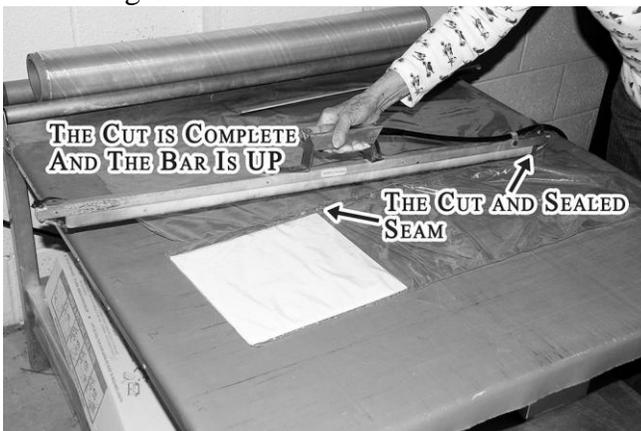
3. Pull out the shrink wrap plastic towards the front of the table.
4. The shrink wrap is double thickness, separate the front and back layers.



5. Insert the work to be wrapped all the way to the far side and place in the far left corner.
6. Center the cutting arm on the shrink about 3/4 inch from your work.



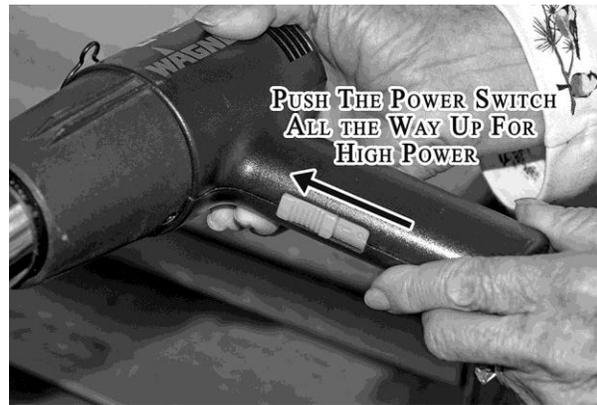
7. Hold the cutting arm firmly against the shrink wrap and push the power button.
8. Immediately after you hear the transformer quit buzzing push cutting bar forward and up in a sawing motion



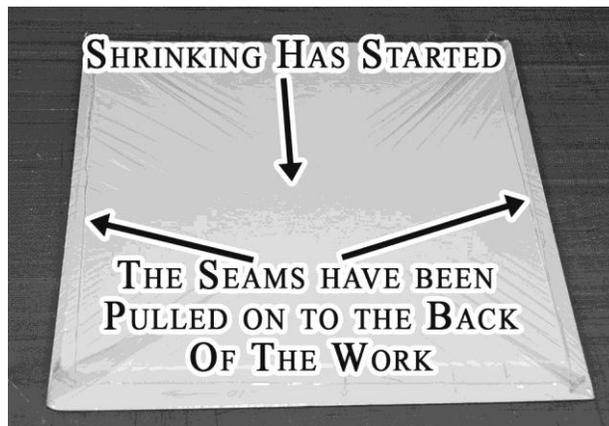
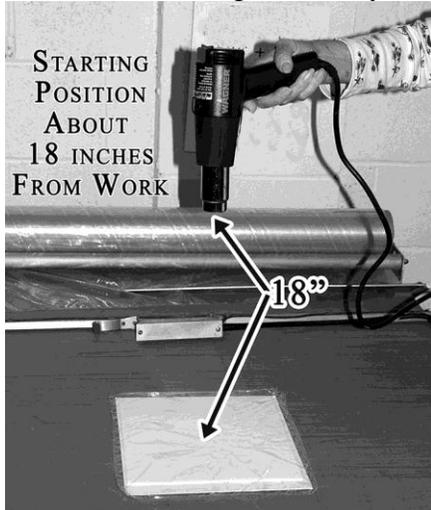
9. Lay the cutting bar aside, not on the shrink wrap, because it will melt the shrink wrap.
10. Turn the shrink wrap with your work still in the corner and make one more cut  $\frac{3}{4}$  inch from your work.
11. Now your work is sealed in the shrink wrap and it is time to use the heat gun to shrink the plastic.

## Shrinking the Plastic Shrink Wrap:

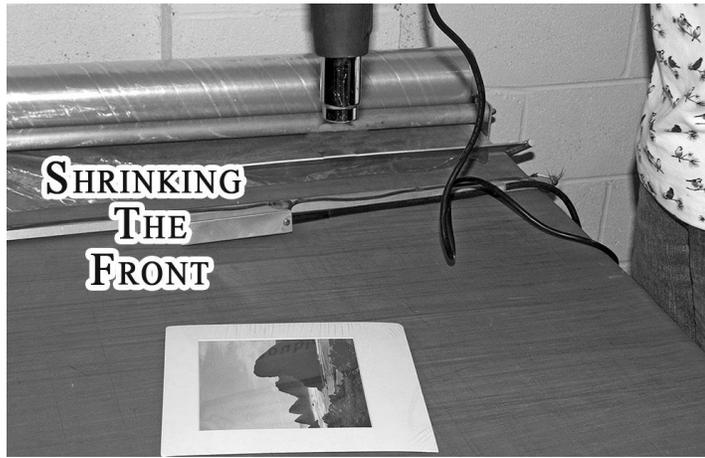
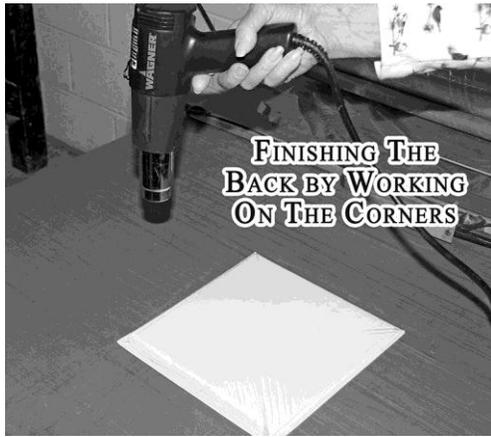
1. Clear the table work surface of all shrink wrap except the work that has been sealed into the shrink wrap envelope.
2. Turn the sealed work so it is face down on the table and center it in the plastic envelope.
3. Turn the heat gun to the high heat setting



4. Hold the heat gun directly over the center of the work and about 18 inches above the work.



5. With the heat gun pointed straight down towards the center of the work start lowering the heat gun slowly.
6. When the plastic starts to shrink hold that position until the center section is smooth.
7. When the center is smooth then move out towards the corners to finish shrinking the back. Do not angle the gun, always keep it straight up and down. The back does not need to be perfectly smooth just enough to pull the sealed seams around to the back of the work



8. Turn the work over, face up
9. Repeat the shrinking process on the front until all of the plastic is smooth.

## Shrink Wrap Clean Up

When you finish working with the shrink wrap equipment unplug the table receptacle from the wall and the heat gun from the table receptacle. Return the shrink wrap heat gun to the front desk. **Caution, the heat gun barrel may be very hot. Do not wrap the cord on a hot gun.** Pay for the shrink wrap material that you used.

## Paying for Shrink Wrap:

Shrink wrap is sold by the linear foot. Please keep track of the total length of shrink wrap used and report the amount used to the front desk when you have completed your work.