

TIPS & TRICKS

Photography

The Framing Issue



Cover Photo by Jimmy Brown

ISSUE ELEVEN

Introduction

This issue is entirely dedicated to framing your photos.

Preface

I thought I should preface this issue before diving into the details of each article. This issue is dedicated to displaying photos, we all enjoy taking photos we have at the very least a few photos that we are particularly proud of however, it's been my experience that the majority of these wonderful works of art remain stored away on a hard drive and only reach the status of screen saver, if that!

When you take the time to have a photo framed it's no longer a photo, it's a work of art, a conversation piece. Alternatively, if you are a photographer who is interested in selling photographs you will almost certainly have a better chance of selling a print if it's displayed in such a manner to promote the photo. So why am I rambling on about this? Well, to display a photo doesn't mean running out to your local big box store buying the standard size frame and putting it on the wall; if you want to justify your photos it involves selectively cropping a photo and choosing a frame that accents the photo, a custom framing is your best bet.

Hold on! I bet many of you when you read the words CUSTOM FRAMING suddenly got turned off, well I don't blame you, custom framing can be very expensive. I priced out a few frame jobs at my local framing store and on average the price for an 8x10 framing is about \$100-150! No wonder why photographers sell framed photos for hundreds of dollars, they need to recoup their costs associated with framing! Now what if I told you that there is a way of custom framing your work, but for a lot less, well it can be done, but it does require some work, patience and skills.

This issue is not for everyone, in this issue the articles will be discussing ideas involving woodworking, arts and crafts and glass cutting. Have you clued in yet! In my opinion, there is no better person to custom frame a photo than that of the photographer, after all it's their vision that needs to come through and framing is part of that process. Not all photos should be cropped to 8x10, 5x7 or 11x14, some work best when cropped to 5x9 or 8x8 or 20x6. You have likely experienced this yourself when ordering prints, you take a beautiful photo you want to make a print that fits in an 8x10 generic frame, however when you go to crop your photo you quickly realize that there are some important elements in the photo that won't fit into an 8x10 format. Custom framing allows you to focus on cropping a photo to suit your vision, not what frame sizes your local store has. So if you're up for a bit of a challenge, learning a few new skills and have some patience this issue may be for you.

Keep this in mind if you decide to give it a shot, these are new techniques and despite how simple they may seem there is a learning process to them, so take your time, think things through and practice on scrap materials until you get a feel for it. Lastly, these articles have much text associated with them, I tried to put in

photos to break up the monotony of looking at text and to help illustrate some points, but it can be a longer read than usual. So take your time, reflect and think about how you plan to perform the work and enjoy the learning experience.

Safety

Creating your own frames can be a relaxing and creative way to display your photos, however if you are not sure how to work with the tools involved in making a picture frame things can become very dangerous very fast. Making frames safely requires woodworking knowledge and experience with the tools involved. If you do not have this knowledge or experience, take some time to learn basic woodworking, power tools use and craft techniques before trying to make your own picture frames. This issue is not written by a professional woodworker, it's intent is to show you how I personally create frames, not show proper woodworking techniques or safe use of the tools involved.

The following articles involve working with various craft and woodworking tools which if not used correctly can be dangerous and harm you. If you decided to try any of these techniques you do so at **YOUR OWN RISK**. For your own safety before you use any tool suggested in this issue make sure you read and understand the entire instruction manual that came with your tool before attempting to operate.

With particular respect to working with power tools, make sure you keep any guards in place. Keep children away from the work area and tools, do not force any machine or attachment to do a job for which it was not designed. Always wear proper apparel and always use safety glasses.

Kids and minors should not attempt to build frames without permission and proper supervision from an adult or parent.

Be Careful and Enjoy!

Choosing and Making Mats

Working from the inside out. Start with the photo and build around it



Before we get into anything we should first discuss different ways to frame a photograph. The goal of framing is to achieve a well displayed photo that coincides with the photographer's vision. There is no set rules for how to properly frame a photo, it's a matter of taste, style and vision. Some photographers choose to not use mats and just have the photo extend to the wooden or metal frame, others choose to use a mat. Those who decide to use a mat have many choices to make,

what kind of mat, a single, double or triple mat? Single mats work well in separating the photo and making it a distinct border between the photo and a frame, as well the wall. Double and triple mats are much more prominent and give a sense of depth to a photo, they also have an added advantage of allowing the viewer to examine the details of a photo with different mat colours (more on that in a bit). Generally, mats are designed to lead the viewer's eyes to the photograph, and provide

an environment with minimal distracting elements. A well designed mat can also trick the viewer into perceiving a larger image. Lastly, mats are also great at keeping your photos around longer, they increase the photos archival properties by protecting it from general damage and stopping moisture buildup between the photo and the glass. Probably the most important aspect of a well done mat is that it looks great, whether you are going to hang the photo around your house or as

a selling feature of your photo. Lets face it, a matted photo is likely to sell better than just the print, it presents a completed art piece, no additional work necessary, and that is a great selling feature. After all who wants to buy a print and then have to also spend time and money having it properly mounted.

Choosing a Mat

Mat colours are an important choice when deciding how to frame your photograph. The general rule when working with mat colours is to decide first if your photograph warrants a bold mat colour or subtle colour. For example, a peaceful landscape photo would probably warrant a subtle colour that blends well with the photograph perhaps an off white, whereas a photo depicting intensity or rage may demand a dramatic bold colour like a crimson red. Keep in mind the mat is not designed to overpower the photo just complement it.

Often mat colours are also chosen to accent subtle colours of the photograph. Take a look at the photo you want to mat, often there are a few colours that are noticeable but not really standing out, choosing a mat of a similar colour helps boost the colour in the photo out more.

Double and triple mats often have different colours to accomplish this. If you have a photo with two subtle colours you want to bring out, a double mat with similar colours is in order.

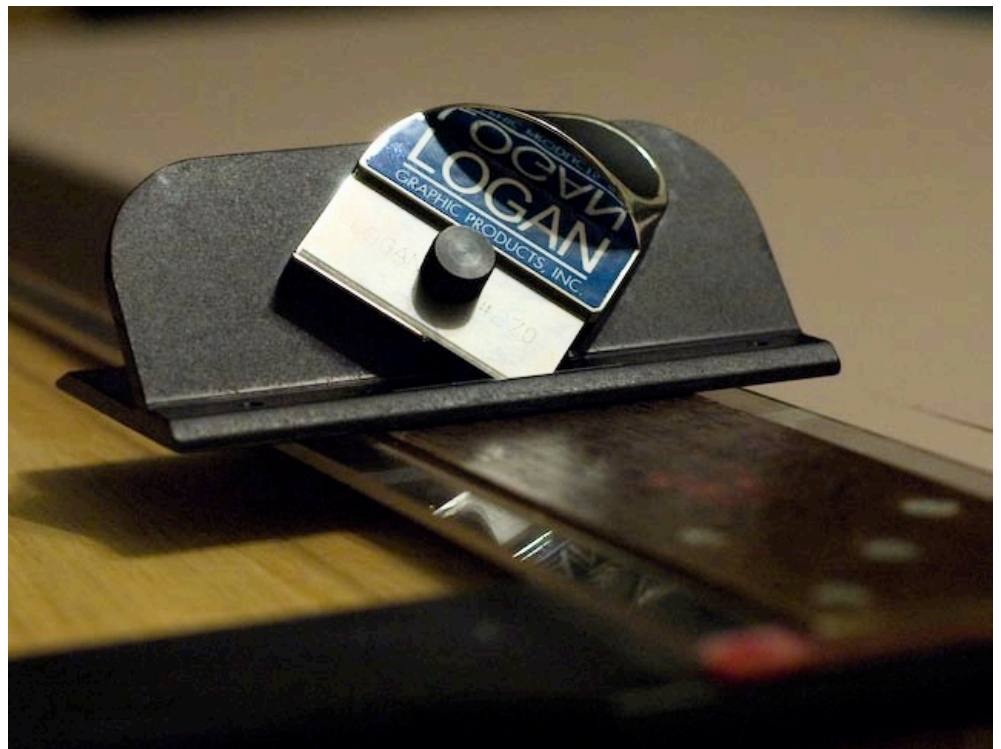
Mat size is also a strong consideration. Generally the width of the mat should be a minimum of double the width of the frame. For example, if you decide to go with a frame of that is 2 inches wide than the minimum mat width would be 4 inches. This minimum provides enough space to keep the photo distinct from the frame and the wall, however keep in mind this

is a guideline going larger or smaller is always an option. If you want to create a feeling of isolation or a dramatic effect having a much bigger distance between the photo and frame can create this.

Consider mat depth too, using a double mat can add a sense of depth to a photograph, alternatively, if you want a sense of depth, but not through the use of a double or triple mat (triple mats are rare) you can use thicker mat board.

Cutting a Mat

Okay how about a reality check, I've been talking up mats and



A mat cutter. You can see the angled design of how the blade cuts. Using this and a straight edge to run the cutter against you can ensure a straight beveled cut.

featuring the good qualities and what to consider when matting a photo, but honestly lets look at what a mat is. Essentially it's an elegant piece of cardboard with a hole in the middle. Now do you need to pay someone \$120 to cut a hole in cardboard! I didn't think so, you can do it yourself with a mat cutter. A mat cutter is a simple tool, its basically a utility knife mounted at a 45° angle. You can pick up a mat cutter from a local arts and crafts store for around \$20.

Now while your at the arts and crafts store you might as well pick up some uncut mats. You can get large sheets for around \$5 to 15. The only other items you need is a straight edge, ruler, utility (craft) knife and a protective work surface (so you don't destroy the kitchen table!

There are two basic mat cuts, straight and beveled. A straight cut is just as it sounds, the blade is put perpendicular to the mat and a straight downward cut is made. This kind of cut can be done with a hobby knife and a straight edge, however its ascetically a dull boring cut. The bevel cut is generally a more attractive and preferred cut. This involves angling the blade to a 45° angle and making a cut. This is the type of cut your mat cutter is designed for.

Placing your mat window is a matter of simple arithmetic, you will know the size of your frame (we will talk about frames in the next article), you know the size of your picture, now its just a matter of taking the difference

mat in the frame and move your picture around and see what you like. Remember it's a matter of personal preference, landscape mounts will not have the same guides as vertical.



This photo (10"x24") required a custom frame. I decided to use a double mat. This is the underlaying mat cut to the photos size. A second mat will be cut with a slightly larger window to expose a portion of the underlaying mat.

in the sizes and "centering" the photo on the mat. I put "centering" in quotations, because some framers suggest that the exact centre is fine for mounting while others suggest making the bottom part of the mat slightly bigger than the top by about 1 inch. The top and sides should be the same size. Keep in mind these are suggestions, my personal preference would be to take the frame put the uncut

A few tips to help make the mat cutting experience easier:

- Keep your mat blade sharp, these are precision cuts that are designed to look good, a sharp blade is crucial for making clean cuts.
- Use a straight edge, despite how precise and steady you think your hands are.



The second mat (green) is cut and roughly placed on top of the underlying mat. The double mat creates a colour contrast and provides a sense of depth. You can also see the white beveled cuts.

- Much like the woodworking motto: Measure twice and cut once.
- Make all your pencil marks and cuts on the backside of the mat.
- Make sure you cut the correct way! Remember this is a bevel cut, which means it can cut two ways, the angle facing in or the

angle facing out. Remember to angle the blade to the outside edge (when cutting on the back of the mat), make practice cuts on scrap cardboard and make sure it will face the correct way.

- Cutting a mat is not too difficult to do but keep in mind that we are dealing with sharp blades, so take all the necessary safety precautions.

•Practice on scrap mats, mat cutting is fairly easy, but if you first try to do it without any practice its very possible to go off your edge, a few practice cuts until you get the feel for it will make your cuts more precise. After all, a screw up means your remeasuring and redoing everything you just planned.

Something to Consider:

If you plan on doing several mats its well worth investing into a mat cutter, a mat cutter is around \$20 and a 36"x48" uncut mat sheet is around \$10. So your initial investment is around \$30, if you were to buy a standardized precut mat (8x10, 5x7) you would likely be spending around \$10, so after about 3 mats, you have recouped your costs. Alternatively, if your picture has "nonstandard" dimensions, and you need to have a custom mat made, you just recouped your costs and more in the first mat!



Building the Frame

It's not as difficult as you are thinking

The frame is the essence of displaying a photo, the photo is the primary attraction, but the frame provides a good secondary feature to be admired. A well designed and crafted frame can make a photo look even better, how? Well, it's a matter of creating a viewing experience. Think of the reasons you would choose a frame, why would you choose wood over metal or ceramic over plastic? Generally, there are two reasons: The first reason and the most common thinking is that they want the frame to match or blend with the decor of the room they plan on putting the photo in. After all, it doesn't make sense placing a kid's frame with bright colours and a picture of a clown in

the formal dining room! The second reason many don't consider is what the photograph warrants. If I am going to display an industrial print that shows machinery that has lots of metal than a metal frame may compliment my photo better than a ceramic or wood frame. Alternatively, a photo of a forested landscape may work best with a wooden frame.

Now all that being said, sadly I don't have much experience with ceramics or metal, so for the rest of this article I will be focusing on creating wooden frames.

Wooden Frames

A wooden frame is by far the most popular of photo frames; however

the frames at your local box store are generally bad quality, they typically are made out of cheap soft wood such as pine or plastic that look like wood. Generally these frames are made of the same material and usually there are only a few styles and colours to choose from. At the other extreme end you can go to a custom framer, he/she will have a much wider selection of frames, types of wood, colours and styles, but you're going to be paying through the nose. Building your own frame allows you to pay the price of the cheap box store frames (in materials) and with a bit of talent, patience and a willingness to learn, end up with a custom frame that rivals a custom framer's product.

Choosing the Wood

Wood types are vast and various, they all have different colours, wood grains, hardness. My suggestion if your not sure what type of wood you want to use is to avoid the big box hardware stores and find a local wood dealer. The big box stores tend to have a small selection and a large portion of that wood is warped. In my area their are only 5 types of wood to choose from, pine, cedar, poplar, oak and maple, my local dealer on the other hand has over 50 kinds of wood including a wide range of exotics. The selection and quality is often much better. I tend to choose wood for it's wood grain and patterns, colour is often a secondary choice, it's nice if you can find a piece of wood that meets your preference for colour and pattern, but if you can't you do have the option of finishing your wood with a stain to achieve the colour you want. Take a look at [this website](#) if your interested in learning the basics of wood types and to see different example of woods. If you don't have a local dealer, and are going to a big box

home hardware store, be careful when choosing the wood, examine it from all directions to make sure there aren't any significant twists or bends.

The width of the wood is a matter of taste and entirely up to you, a wide piece of wood will create a large frame bringing much attention to the frame. If your photo requires a minimalist kind of style than a thin frame may be in order. The key for me is to create a frame that looks good, but doesn't overpower the photo.

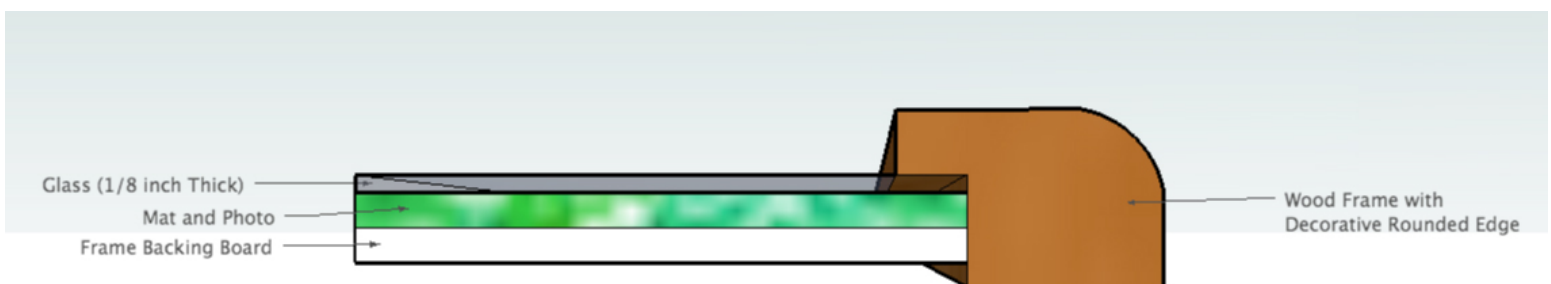
The next step is make sure you have a piece that will fit your project. Common wood sizes you can buy are 6', 8' or 10'. For most framing jobs any one of these sizes is more than enough, however if you have a large project to frame, make sure you have a size that when cut into the four sides provides enough material. Take it from experience, it sucks when you get home, cut the first three sides only to find out that your last side is short. The mat I cut out is 30"x17" so the total wood used is 94" or just under 8 feet (2x30" +

2x17" = 94"). Remember, this is the inside edge of the frame, so when I make cuts to create the frame I will need more than that, I will also lose wood from cutting the mitres, so a 10' size assures me I have enough wood.

The Frames Construction

The frame construction can as simple or as complex as you would like to make it. For this article I'll describe the basics of constructing a basic 'nice looking' frame. It uses the same tools as the more complex frames, but requires less technical skills. That's not to say that you can't make a very detailed frame it just requires more woodworking skills. My reasoning for showing a basic frame is to show you the basic techniques so once you see my process and methods you can later modify your own to create more detailed frames.

A frame in its most basic form is just four pieces of wood that go together to make a rectangle and provide a uniform inside edge that will support the glass, mat, photo



and backing board. The difficult part of the frame is making the edge. My preference is before cutting any wood to length, make the outer and inner edge, the best way I know to make an edge is with a router.

Safety

If you don't know how to SAFELY use a router than consider this a warning. Improper use of power tools such as these can be very dangerous, so if your new to woodworking or not familiar with using a power tool correctly my best advice is before you even turn on one of these tools that you take some time and learn how they work. Read all manuals and safety procedures before using these tools. In the hands of a knowledgeable person they can create works of art, in the hands of someone who doesn't know anything about them they can become very dangerous. Once your comfortable with how they work, how

to safely use them and aware of the dangers associated with them comeback to this article and try frame constructing. Lastly, always use protective gear when working with any power tool, after all, custom framing is nice, but keeping yourself injury free and safe is always a better idea.

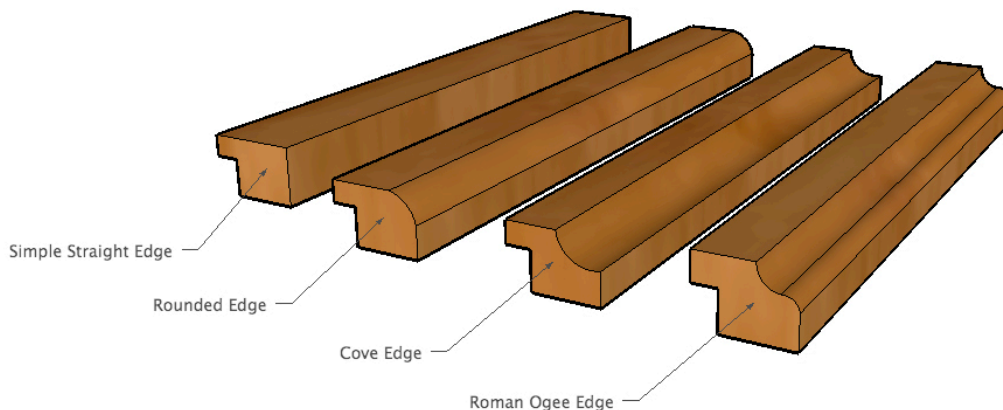
For those of you who would like to see a brief video on what a router is and what it can do take a look at [this clip](#) or [this one](#).

Making the Edges

Okay so if you know how to properly use a router my suggestion is to put the support edge (the one that holds the glass, mat and photo) and any decorative edges on your wood first before cutting. The reason I suggest putting these edges on before cutting the wood is to ensure evenness. Since the whole piece has an edge put on it will eliminate minor errors that may accumulate if you were to treat each piece separately. Now

to put an edge on requires setting up your router table and creating a rabbet. A rabbet is a groove cut into the edge of a piece of wood. The depth of your rabbet depends on how thick your glass and mat(s) are. Glass is 1/8" inch thick, the mats thickness depends on how thick your mat is and how many your using. You should also budget 1/8" to 1/4" inch for the back board to hold the mat and glass to the edge.

A decorative edge can also be put on at this time for the outside of the frame that will be facing the viewer. The amount of router bits available for different edges is amazing and depending on how creative and talented you are using a router you can use multiple bits on the same edge to create very detailed edges. Below I have a sketch of a few common router bits and the edge they create. You can leave your wood alone and use the factory edge (Simple straight edge), a round-over bit





I chose Red Oak, 1x3 inches for this frame I feel the size complimented the size of the photo and mat. I chose to use a Roman Ogee edge for the outside (edge on the left). Wood was removed from the inside edge to provide a ledge for the glass, mat and backing. A forty-five degree mitre has been cut.

will round the straight edge making a smooth connection between the top and side, a cove bit makes

a concave edge; lastly the other common edge bit is the Roman Ogee, this bit creates a convex and

concave edge at the same time.

Making the Cuts

After your long piece of wood has its support edge and a decorative edge the next step would be to cut them to size. The difficult part is not the cut itself, that can easily be done making handsaw cuts at 45° angle and using a [shooting board](#) and a [plane](#) to make the angles precise so they fit perfectly. The tricky part for me is figuring out the proper measurements after accounting for the support edge. What do I mean by that? Well, remember the size of the mat (in my case 30"x17") is going to be on the supportive edge, so when you measure out a side you need to



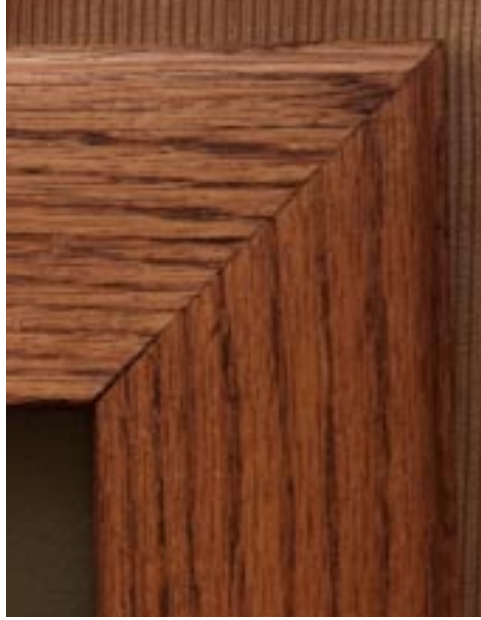
A Picture Frame Jig - The screw in the centre is tightened putting equal pressure on all corners. Put wax paper down to ensure excess glue doesn't glue your frame to the jig.

measure from where the support edge connects to the wood that makes the frame. By doing that you will ensure that when the frame is put together it will properly fit the outer edges of the mat.

Making the Frame

Once the edge is done and the mitres cut to the proper length the last step is assembling the frame. For frames that are reasonably small, you can likely get away with simply gluing the wood together. I suggest roughing up the miter with sand paper to create a surface that allows the glue to bond to. Place glue on the ends of the mitre cuts and fit the frame together. To ensure that the frame holds a tight bond while the glue dries, I suggest making a simple picture frame jig. This jig you can make out of cheap wood and allows the frame to be held and clamped tightly until the glue is dry. For a plan on how to create this jig, check out this [website](#). The jig uses a screw that can be tightened and as it tightens applies

equal pressure to each of the frames corners pressing the miters closer together. While a few well placed clamps can also apply good



Two piece glued together to make up a corner of the frame.

pressure to the corners, the ease of this jig makes it a much preferred choice, particularly if you plan to make several frames.

Frames that are large often carry much weight from the glass and thus should be reinforced. I suggest gluing the frame together

much like a smaller frame however after the glue is dry reinforce the joints using mechanical fasteners. I'll be honest, mechanical fasteners are not my preferred choice, I would much prefer to create a strong wooden joint, however for a first frame mechanical fasteners are easy to use and work well. If you are interested in creating a well designed wood joint, check out this [website](#).

Finishing

After your frame is secure, the last part is to sand and finish it. Sand the frame to get rid of minor imperfections, uneven edges and glue that may have dried onto the wood. Sanding provides a uniform surface to apply a stain (if desired). For some tips on applying a finish to the wood, I suggest checking out the [Wood Whisper Podcast](#) it is a great woodworking podcast filled with useful instructions and woodworking ideas, including how to professionally finish a project.



Glass Cutting and Putting it Together

Putting it all together

Cutting glass may sound like a difficult task, but it's easy provided you understand a few properties about glass.

1) The important thing to remember when cutting glass is that you're not cutting it, you are scoring it (creating a weak line within the glass) and breaking it at the score.

2) Glass will always break at its weakest point and tends to break in a straight line. By scoring the glass you are creating the weak point, so when it comes time to break the glass the chances that it breaks along the score are very good.

3) The table or workbench that you are scoring your glass on **MUST** be free from debris. This is crucial, any little piece of debris on the table can ruin you

glass. Scoring glass requires putting pressure on the glass, if your glass is on a perfectly flat and debris free surface your score will work. However, if there is even a small piece of debris such as a pebble, or a previous piece of glass (even the size of a ball point pen tip) it can create a bump. If there is a bump, the pressure you exert on the glass when scoring is

enough to break the glass at that bump.

4) Most importantly, glass is sharp and dangerous, wear appropriate safety gear. Breaking glass can allow glass shards to fly into the air, so safety goggles are a necessity. The edges of glass are razor sharp and can cut very easily, so protect yourself and be careful when handling glass.

Scoring the Glass

Before you score the glass, the first thing you must do is measure your square picture frame. Measure the frame from the supporting edges, this is where the glass will be placed. Remember, measuring and cutting glass is similar to working with wood “Measure twice, cut once”. Once a piece of glass is scored, there is no going back. Once you know the dimensions for the size of glass you need, trace out the pattern on the glass using a permanent marker (Don’t worry, permanent marker is erasable on glass). Use a straight edge to help you create straight lines when forming your square. Again, check the measurements of your traced pattern to those you measured on the frame.

Once you have your square pattern measured out, you are ready to score. To score a piece of glass, you need a glass cutter, these can range from a few dollars at your local hardware store to 50+ if you want a professional cutter much like stained glass artists use. Now place your straight edge along the traced line and place the glass cutter at one edge of the glass. Apply strong and even pressure to the glass cutter and begin rolling the cutter across the glass. If you are doing it correctly your glass cutter should make a “zip” sound. You should also be able to see the score you created. Continue to move along the glass right to the end of the glass sheet. Practice on scrap material to get a feel for it. Congrats you just scored the glass, the next thing to do would be to now break the glass along the score. Breaking glass can be done typically 1 of



A glass cutter and breaking pliers

2 ways, you could purchase a pair of running pliers, these pliers work by having a ridge in the middle and apply even pressure on both sides of the score, the pressure on each side of the glass bends the glass at the score, causing the glass to break at the score and running the length of the score. Alternatively, you can also break the glass by lining up the score with a table edge and applying pressure to the overhanging piece of glass. Regardless, of what method you use, be careful, glass can fly when the break occurs. Now repeat for the 3 additional edges, scoring and breaking one at a time.

Make the backing

The backing of a picture frame will hold the glass, mat(s) and photo to the frame, probably the easiest way to create a backing is to buy some thin (1/8") sheet of composite type wood that is readily found at hardware stores and is cheap, such as MDF. Take the same measurements as used for the glass and transfer the pattern onto the composite wood. Composite wood tends to be easily cut, so using a straight edge and a utility knife should be able to cut through with a few slices.



Back of the frame showing the backing board in place and secured with window points (glazing points). The corners stained differently than the rest, because I did not remove all the glue when sanding. Make sure you give at the front a good sanding to remove any glue and avoid this.

Assembly

The assembly is simple, however there are a few tips to consider.

1) Wash your hands or wear some gloves. Finger prints on the glass detract from the photo your displaying, even worse is trying to wipe away fingerprints only to find that they are on the inside of the glass when your frame is assembled. Washing your hands or using cotton gloves will minimize the chances of this happening.

2) Wash the glass and completely dry it before placing into the frame. With all the handling of the glass when cutting its almost certain the glass will have prints, or dirt on it. By taking the time to clean the glass you can ensure that it does not detract from your photo.

Place the frame upside down and place the clean glass into the frame, next place the mat(s) into the frame on top of the glass. If you are using a double or triple mat, make sure you get the order correct. Likewise, if you have cut your mat(s) so the

picture is slightly above centre make sure the mats line up. Next is the photo, I typically attach the photo either directly to the mat and tape it down or to the backing board. Either way works fine. Next place the backing board into frame. To complete the assembly of a frame a custom framer would use framing points to ensure that once the frame is stood up nothing falls out. Framing points are the little metal tabs you typically see in store bought frames, they are malleable metal that is shot into the wooden frame using a framing gun that can bend to secure the backing board. If you want to use framing points they do work well, however the gun to shoot them into the wood runs about 50-60 dollars. Window points (also called glazing points) on the other hand do the same thing and can be pushed into the wood using a putty knife. My preference is to use window points, simply because of the cost factor.

Press on the backing board slightly to make sure the components are tight (don't press too hard or you could crack the glass. Now place a window point at the frame and use a putty knife to press it into the

wood. Depending on the type of wood you may have to use some pressure to secure the window points. Place as many

window points as needed to ensure the contents are safely secured.

Voila, your frame is complete and ready for display.



The Final Product!

The photo is double matted set in a 1x3 Red Oak Frame was stained with a Walnut colour. I immediately wiped off the stain to ensure it did not stain the wood to dark. The frame itself is held together with glue, I did not need any additional fasteners or joints. The glass was purchased from a local stain glass shop for 7 dollars and all is held together by a 1x8 MDF backing board and window points.