Creating Your Own Counters

A guide by Gary Christiansen

The most daunting task in creating your DTP game is going to be the creation of the counters. It's not simply a matter of glue and cut, even when all you have is the sheet of counter graphics and a cardboard backing to attach it to. It's amazing how hard the process can become if you get picky about the appearance and quality.

- 1. Creating counter graphics
- 2. Scanning DTP counter sheets
- 3. Printing counters for mounting
- 4. Preparing the counters prior to mounting
- 5. Gluing the counters to the backing
- 6. Double Sided counters
- 7. Cutting counters apart (cutting by hand) & (cutting using 12" rotary cutter)

Making those pretty pictures

Assuming you're just creating replacement counters or creating a new set to replace your worn out counters... or perhaps generating your own counters for a game you are designing for yourself, there's a lot of effort to be done to create the image you start with. There are some challenges to doing this smoothly without making a mess of the counters.

What I use to create entirely new counter sheets is a program called Visio 2000 from Microsoft. A quick search of the web (on 1/26/2005 at <u>www.pricewatch.com</u>) turned up copies for sale running anywhere from \$35 to \$55. The current version is Visio 2003 and runs in the \$200-500 range... so I'll continue to use an old copy rather than shell out big bucks. The reason I use this tool specifically is it permits me pretty precise measurements in centering the numbers, the graphic images, and a wide range of font options. I found it's very easy to pick up and use without any experience. But this is not the only tool that can be used.



Paint Shop Pro will do the grids and permit measurements also, doing alignment without problems and other general purpose artistic work. Available from <u>Jasc Software</u> for about \$100-120, it has a wider range of more artistic features.



Corel Draw is pretty pricey at the current edition, but I can find a version 9 on the web for sale for \$35. Corel Draw is also a Jasc Software product.

Adobe Illustrator is pretty pricey, but should also provide the same functions. As I understand it, Illustrator has some very nice features. I just can't afford it.

The point is you should use the graphics program you are most comfortable with that will allow you to set up grid lines to work with, will do object alignment, can scale the graphics to the size you wish to work with, and permits you the degree of graphic quality you want when you're producing the graphics. Most of these tools will snap to grid and do object alignment, and layers in one form or another. These are all very useful tools because you don't want your grid to overlay the top of the counters after you've completed all the artwork.

A Grid to work with

No matter which of the above you use, you'll need a grid to work with in the graphics to measure the correct size of the counters when you're working to create them.

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Replacement counters for Seelowe (SPI 1974) - Grid on top

The above picture has a grid line for the size of the counters. These counters are 1/2" in size. Ideally, you also want a <u>gutter</u> area around the edge of the counter that no print will go into. I rarely actually define a gutter area, but strive instead to keep the printed area well away from the edges. That's not to say you can't make a counter with graphics from edge to edge, but when you cut the counters out, anything in the area close to the edge could be sliced onto both sides of the cut. I try to make sure there's nothing in that area because cutting is not a precision activity no matter how careful you are.

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Replacement counters for Seelowe (SPI 1974) - Grid shifted to the back

After the counters are all laid out, I move the grid to the back. The grid will be used for guides after printing for cutting the counters out. So it's useful to have later anyway. The reason I don't leave the grid on the top is that when I cut the counters out, no matter how careful I am, that very thin little line can still end up on the edge of one of the counters or the other and gives a lopsided appearance to the counter.

Another critical reason to have that grid around the edges is that if you're going to be matching up front and back print jobs on the counters, those marks give you useful registration points of reference to use when attaching the sheets to the backing.

Nato vs Silhouettes

Each of those counters in the pictures above represents the mix of 4 objects. There's a large rectangle in the background that has the color. It doesn't have to work that way, and the object with the unit type symbol could have the unit color embedded in it. There's the unit designation on the left, and the combat values at the bottom. Each of them are centered together as necessary. The NATO symbols in these counters come from one of the really cool fonts Tom Mouat created that I downloaded from his web page (http://www.mapsymbs.com/). I've had to do some tweaking of fonts to get some of the psuedo-NATO symbols that SPI used in their heyday, but one way or another, you can get most of the fonts you need to do NATO symbols that way.



But when you're doing your counters, you get some choices. Replacing missing units from old games using the NATO type of of military symbols isn't too hard. Perhaps you would rather have silhouettes. Some of Mouat's fonts include silhouettes, but you can also bring other graphics onto the grid and size them to fit. You can dig around for clip art or free images that have entered the public domain of which there are many, for this purpose. Keep in mind Tom Mouat's fonts are copyrighted but he gives permission for non-commercial use. Please, double check his copyright statement.







halftrack image at original size

The halftrack started the size it is on the right. To get it the size on the left took trial and error, resizing it inside Visio by dragging from the object corners, then resampling the image to fit the new size. The smaller size loses some detail, but it's still clear enough when printed.

The counters above use the CenturySchoolBook BT font, simply because I like the way the numbers look. You should experiment with the fonts on your computer if you are going to do this until you find a font you really like. It's very annoying to look at numbers that are too difficult to make out when gaming. The coloring of the unit designations is done to make it easier to spot other units from the same

division on the board. With a good printer, you can get a lot more definition than what was expected back in the days of Avalon Hill and SPI. So there's no reason not to play with hi-resolution images if you can find images that you can safely use.

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If you are doing two sided counters, make sure you reverse the order of the units across the row on the backside. You'll want the correct backs to match up when you turn the sheets over. Getting two sided counters to match up is especially difficult, so be very careful to leave extra space around the edges just in case the sheets are off placement by some undetermined fraction of an inch. Better to have one side's values not centered correctly than to be cutting through the printed area.

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Once you have the counters all created, it's a good idea to print off a draft copy on a plain sheet of paper, walk away and wait a bit. Then double check for errors, which you probably will find if you look carefully. The printer ink for color is expensive, no matter which printer you use. The ink is often the expensive part of this process simply because the printer manufacturers pretty much have their own proprietary cartridges no matter which you bought.

Scanning DTP Counter Sheets

If you bought this game you're mounting counter sheets for, it may be worth your while to scan the counter sheets and print out copies to work with. The main reason for doing this is so you can reproduce any missing counters later, or more likely, so you can redo the process when you screw up cutting them out.

No one likes the ugly counters they get when the counters turn out rectangular, or in odd shaped parallelograms, or even with bizarre nicks in them along the edge from using an x-acto knife. I find I always manage to ruin some counters, or get a few odd shapes I didn't intend if I'm careless, so being able to start over is a good idea and it won't be possible if you only have the counter sheets that came with the DTP game.

I've found I can scan the sheets at about 300 dpi to reproduce the original on label paper without problems, although even at that level, the image reproduces the print grain from other printers. Ideally, it would be nice if the DTP company would let me take a copy of their graphics to print so I don't have to do some adjusting of the digital image to correct for my miscreant scanner. It always seems to add artifacts that aren't there, requiring clean up and gamma adjustment to clean up the brightness.



To the left here, I have printed out the counter sheets for Fall of Tobruk (Todd Davis, Cool Stuff Inc.), and you can see I was treating them prior to mounting. I've used the same board for spraying with the Krylon anti-UV for some time. It's probably well protected now.



One of the problems I had was cutting these counters out. Because Todd had made them with a line for where to cut between the counters, I had to be very careful that I was cutting on the line, whether that made them perfectly square or not. The color slippage over the cut otherwise could cause some pretty odd visuals when you actually go to play the game. As it was, these counters turned out pretty square anyway, even not cutting by my usual methods.





It is best not to use a JPG format image from your scanner. JPG is a lossy format, meaning in it's compression algorithms it tends to lose detail. Tiff is a much better format for not losing detail, but it

takes up huge chunks of disk space by comparison. You have to make a judgment call on what format is best for you to reproduce the scanned sheet on your printer.

Remember that the copyright for that sheet from the publisher is theirs. You can scan and print to make counters, but don't go distributing them to others without permission.

Printing Counters

When you get to the point you believe you no longer have errors or you have a scanned image you can work with, you're going to want to print off the best quality image you can. There's a couple options for the medium you may wish to print on when you're ready.

Plain Paper	Just about any form of white paper will do for this. 20lb paper with a high rating for brightness is a good choice if you're going to just glue the paper onto the backing you plan to use. If you use regular paper, you have to keep in mind what glue you're going to use, and using cardboard backing is a must.
Card Stock	Depending on the backing you plan to use for making the counters, this could be necessary. I have a ream of 110lb card stock I use to print play aids on since it's pretty stiff and can be used for reinforcement charts in a way that lets me pick it up and any counters laid on it without shifting them around. The advantage to printing on this is it is easier to position on your backing than 20lb paper and if your backing is the 2mm <u>foamies</u> , it adds the missing stiffness to the counters.
Label paper	I prefer this method because I don't like messing around with glue. The downside is that once you've gotten the label paper attached to the cardboard backing, you cannot move it. The advantage is the glue on the back is pretty uniform and you won't have to worry about hollows where the glue missed. Avery makes good full size sheets of this stuff, but so do several other paper companies.
Colored paper or Colored Card stock	The advantage of this is that you can purchase the colors for the counters and merely print the units without printing color. The downside of this is you can't do fancy coloring on the counters otherwise, so the silhouettes will have to be all black without detail. If you do counters with a gradient hue from the top of the counter to the bottom, you won't be able to do this at all.

Depending on your printer, you can print at various different resolutions. If you really think you're going to see great detail on the silhouettes you've chosen on a 1/2" or 5/8" counter, you're probably mistaken, but sure, go for it. Print it at 1200 dpi. But realistically, you're going to do just fine at the normal or better quality printing (which may hit 600dpi, depending on your printer). You also have the option of taking the image on a disk or memory stick down to a print shop, perhaps Kinkos, and having them print it for you. Be aware that some of them expect at least 400dpi print quality, but if you have the image in a format they can print, you will be fine.



My printer is a Lexmark Z65, and I get very good high quality print from it. I've tried utilizing some cartridge refill services and products, but typically those cartridges won't register properly with the printer, resulting in odd white shadows or other color shadows around critical lettering or other elements.

To the left of the printer, you can see a box of 100 full sheet labels that I use to print counters. Staples has a house brand that is cheaper than using Avery label paper. And so do most of the office supply stores. I happened to pick up the Staples brand pretty inexpensively and have been using those to do counters for a while.

If you want, you can also generate a PDF file from the document and print from that. There are some circumstances where that can be useful, say in the event you want to enlarge the image at the printer by 10% for whatever reason. I do that if I'm going to also print a copy of a map off that will be set to be 10% larger than the original. As I age, my vision suffers, so it's useful if I get a chance, to enlarge games I'm going to play over and over.

Prior to Mounting

Even if you're not printing your own counter sheets, but using the sheets sent to you by the DTP company, I find that a little protection is worth a bundle. The ink on the counter sheets is vulnerable to a bunch of environmental issues you probably won't notice yourself. Either sweat from someone's hand, or a spilled drink, or even just sitting in the sunlight (ink jet ink will fade over a period of about 6 months under constant exposure to ultraviolet light), you may wish to protect your counters.

The best time to do so is before those counters are mounted on whatever backing you plan to use. Though you may wish to do this afterwards too to protect the sides and even to further bind the sheet to the backing.



I've found that Krylon makes a perfectly good ink fixative and anti-UV coating spray. It comes in both a Matt and a Gloss finish, but I have not yet noticed any difference in the two. It does provide good protection against both moisture and the UV fade.

I generally spray the counter sheet a couple times. It's important not to spray to make it look wet. Spray, step back, spray again. Give it a few sprays to get a coat on it that you feel good about, but don't worry if you can't see much. If it looks wet, you've put on too much and it will form all too solid a blot of the coating.

The spray dries quickly, so expect it to seem like you've not actually sprayed it.



Remember to tape the corners down when you spray. Otherwise the paper curls up on the edges. This ensures a smooth coating over the whole sheet. If the edges curl, when you try to flatten the sheet the coating may crack.

There are other brands of anti-UV spray on fixative. I find for a 5 dollar can, I get a lot of use from the Krylon brand. A clear spray isn't the same though as anti-UV. It's worth looking to find the anti-UV to protect the ink from fade. There are several other brands available through art supply stores and catalogues, if you look around a bit.

Attaching a Backing

Once you have a counter sheet to work with, you'll want to consider how you want to back it for the counters. There's a wide range of cardboards out there. You can even pick out various colors if you hit

the right art supply store. Most of the cardboards used for counter making are commonly used for mounting artwork or in picture frame mounting. There's a bunch of different thicknesses and sizes. Just walk into Dick Blick or Utrecht's and peruse their supply. Most hobby stores, such as Hobby Lobby, also carry a range of different cardboards.

Additionally, there is the option of using something else, say the <u>Foamies</u> I've already mentioned. They're the right thickness for counters at 2mm, and are very easy to cut with an x-acto knife. They feel awfully light and tend to bend very easily, so it's strongly recommended you use a heavy card stock for the counter sheets if you use them. Anything from 80lb up will do.



2 mm Foamies. Foam rubber, not stiff, but sturdy enough. I personally find the material too light for counters, but others have reported success with this as backing material. At less than a dollar for a large sheet, this can work out if you like the feel of the counters you create with it.

What I use is a 2mm cardboard available at Utrecht's Art Supply. It tends to run somewhere around \$1.50 for a large sheet suitable for cutting up into a dozen 8.5x11 sections. The weight is pretty good and ultimately it's pretty solid for cardboard, thicker by a small bit than the normal unit counter in diecut games, giving a comfortable weight for holding when making your moves.



2mm thick cardboard on the left (actually a very tiny amount less than 2mm), Foamie on the right (same thickness)

Assuming you want to glue the counters directly onto the backing, there's several options you have to choose from for the glue.



Rubber

Cement

Back in the days 'when', I used to use this. But it's really not very effective, and it has a disturbing tendancy to come undone over time. If you must use it, the best thing to do is to coat both surfaces that are going to be in contact, let them dry to a tacky stickiness, then attach them. Roll flat with an appropriate round tool. Then let the drying complete by letting sit a while longer. The major hazard is that when cutting the counters you will have the paper shift on the cardboard, causing some odd mismatches of the printed counters from the cardboard.



White Glue Forget it. This old water soluble method will last only until the first humid day you experience.

1	Roll on Glue	I've no experience with this, but it's problematic. If you miss any part of the paper with it, you'll have hollows you will be struggling to fix on individual counters.
	Spray Fixative	This stuff works very well but is very messy. Pictured left is the 3M remount fixative. You get a couple minutes to adjust the positioning of your mounted countersheet. Be very careful to screen the area around where you spray because this stuff stays tacky and won't come off easily. Foamies have a tendancy to not stick right away with spray on adhesives.
	Spray Fixative	This is the version that doesn't give you time to reposition the mounted counter sheets. Again, be very careful to screen the area around where you spray because this stuff stays tacky. But on the Foamies, the countersheet will float a bit after being attached with this glue. It will stick and stay stuck with cardboard though.
	Label Paper	My preference, gives a uniform fixative on the back, peel away only part of the protection at a time to expose only the area you're prepared to stick, and additionally you don't have to worry about spray from the glue getting on other things. The downside is that once you have it stuck to the backing, it's not coming off without ripping, so you have to get it right straight off. Pictured to the left is the Avery brand, but some times the store brand is noticeably cheaper for the same quality.
UNUstic	Glue Stick	I've found this to be useful for on the spot repairs, but not for making counters in the first place. The advantage is you're not going to be making a mess with it when it's time to pull it out and use. There are many different versions of this product, some are less vulnerable to moisture than others, and in my experience the effectiveness is only short term.

Attaching the front counter sheet to your backing is easy. Glue, put on, and just make sure you have covered all the area that is counters with backing from behind. Then if you have no back sheet to put on, you're pretty much done. When you have no back to put on, you may consider gluing a blank piece of paper to it anyway, or alternatively using a cardboard that has a finish on the back side so that you don't have a plain brown patch showing on the back.



Available at art and printing shops, you should be able to find a 4" brayer made of firm rubber. These are made for inking to do anything from wood block prints to any other form of print to get ink smoothly on the surface prior to making the impression. They also can make an excellent roller to press the paper in place for our purposes.

Any kitchen rolling pin will do to serve the purpose as well. The point is to ensure the entire surface has been pressed so the glue will adhere to both the backing and the counter sheet.

When you mount the counters, it's good to use a roller to smooth out the paper for the counter sheet and clear away any bubbles and thick glue to the sides. This is true even with the label paper, if only to ensure the paper and the backing are in contact everywhere. You can find these at art supply places or you can just use a rolling pin intended for the kitchen. But don't go using one you intend to bake cookies with later...

Double Sided Counters

Mounting the back side is a bit tougher though when you have to match up the counters from the front. This is why I print with registration marks at the sides that jut out so much. But no matter how well you print the counters with registration marks, or matching points to align with, you're going to have some slippage. This is why that gutter around the edges is so important if you design the counters yourself. It's easy enough to just add extra blank space around the edge for margin of error on mounting.

There's a couple options. You can assume the counters are printed perfectly in the middle of the paper where they'll match up the back. But you really can't count on the paper being exactly edged correctly to where the printing is, if for no other reason, the printer isn't that precise about placement of the edges.

The registration marks I put on the counters allow me to cut edges without slicing to the counters themselves yet at points that will be exactly the same on the front and the back. However if your DTP counter sheets don't have registration marks there are a couple other techniques you can use.

One method calls for the use of Pins or Thumbtacks. Push the point through at the corners of the counters on the front of the already mounted sheet. Then all you need to do is match up the corners of the back with the holes in the front. To do this, you can poke holes right at the corners on the back so you can simply slip the pins that are sticking through into the holes and ease the counter sheet down onto the back of the cardboard. This isn't a simple matter and may end up with you off a tiny fraction of an inch. But it will be closer than trying to eyeball it.

Another method is to slice along the edge of the counters on the front so you have an edge to the cardboard that matches exactly with the counter edge. You need two edges to do this, so the side and top are the best parts to do. Then you do the matching side and top on the back sheet before attaching it with a straight edge (see section on cutting the final product for how to cut the cardboard). Once you have matching edges, you can use an inside box corner to set the sheet smoothly to the matching edges.



Standard X-Acto Knife

Fiskars hand held rotary cutter

My preferred method is to mark with an x-acto knife (or my Fiskars hand rotary cutter) where the guideline or registration marks are at the edge of the cardboard and match the marks up on the back when I glue down the counter sheet back. With alignment slots cut from the registration marks on the front I can see where the registration marks on the back line up and by doing this on the top and one of the sides I square it up to the best of my ability.

Adding a backside to the counters is one of the parts of the process that I still don't get right without a lot of struggling. I've had to redo the printing and mounting on numerous occasions to get counter backs to match the fronts close enough to not have issues. A bit of experimenting should determine which method works best for you. My rather unsteady hands and less than sure eye have me doing what I can with registration marks and little tricks to hold the sheets in place so I get the back and front aligned and I still don't get it right the first time very often.

Cutting the Final Product

Once the counters have been bonded to the backing, you have a nice solid chuck of units to be. Obviously you're not done until they've been separated from each other. The board of units that needs cutting out will have alignment marks if you make your own, or may have lines between the counters, but in either case you have some means of gauging where you will need to make your cuts.

There are a couple common tools for doing the cutting of the counters...

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The X-acto Knife. A very sharp edge and useful if you have good steady hands. The only issue I have with the x- acto knife is you drag the edge over the counters and sometimes it will pull and tear the sheet you glued to the backing.	This is a hand held ro cutter (in this case the name is Fiskars). This is bit as sharp as the x-ac and rolls over the surfa cut the material under Usually available for ab 8 in a variety of brand shapes.	otary brand s every to knife ace to neath. out \$4- s and	This 12" rotary cutter works from a straight arm and uses the same rolling cutting edge the hand held model to the left has. There are many brands for this tool as well, but again this is a Fiskars. I find it cuts with a little effort through the 2mm cardboard I use. They sell this model for about \$30 if you don't pay the full retail price (usually between \$50-60). It also uses the same exact refill blades as my hand held model.
A good metal ruler is very used a hand held tool. These come and shapes. I do like the triang they slip around too much. So rubber backing to prevent slidi placed them. My own metal ru backing and I like that it won't it in a good position.	ful if you are cutting with in many different sizes gular shaped ones but me come with cork or a ng around after you've ler has the rubber easily slip once I've got	A self h basical knife. T undern cheap a sewing the pho supplie	lealing cutting pad. It's called self healing, but ly it just doesn't matter if you score it with the his is your best bet for protecting the surface eath where your working area is. They're pretty and you can pick them up at any hobby store, notions store, crafts place, and oddly some of tography places that sell scrapbooking s.

Cutting by Hand

If you're going to use the x-acto knife method, the metal ruler for the straight edge is a must. The method is to simply line up the registration marks at the ends and then score the counters. Don't try cutting all the way through in the first pass. All that will do is rip the surface and dull the blade. It also has the effect of making your fingers and wrist tired very fast. You'll have to hold the ruler securely in place so it doesn't shift around while cutting, lest you end up with a nice long diagonal cut.



you get a good straight line along the edge of the counters.

First score in using the tip as much as possible, so that Once you've scored the counters, you can go back over the initial cut until you have sliced all the way through.

This should give you a set of rows all cut along the width of the counters. If you are very careful at matching the registration marks with your straight edge guide, you will be able to center the counters nicely in your cuts. Don't rush, and be careful when cutting to get your knife blade into the groove you cut to begin with so you aren't cutting any little slices out of the counter sheet itself. Start past the edge of the counters and let the groove guide the blade after the first pass.



Doing this with the hand held rotary is almost exactly the same as doing the x-acto knife only you are pretty well guaranteed you won't be tearing the sheet by dragging the edge along the paper. This cuts by downward pressure and you have to be just as careful to align the straight edge properly before you get started.



If you cut carefully, you'll get nice long strips as you can see, with a good straight edge along the of the both top and bottom of the row. If you do a good even job, every row slice of counters will match up with all the rest of them. A good smooth edge will make working to keep the counters square easier.



When you get down to the strips, you need to trim the ends off. The best thing to do now is to use a ruler to center the printed part of the counters on the size of counter you are producing. For this the counters were a half inch in size, so I used the ruler on the edge of the cutting board to center them on the half inch marks. Then put the straight edge over the mark to get your position straight and cut the end off the strip at one end. You can do all the strips at once, or each in sequence, it's your life... spend the time as you wish.

Once the end is cut off, you will be working to make the counters as square as possible. In theory you can do the same thing I did above, measuring the half inch and laying the ruler across the mark in at the half inch mark on the cutting board to slice the counters individually. I find that taking one of the first counters I cut out and simply setting the straight edge using the height of the counter to measure the width makes the counters nice and square. Maybe not perfect, but close enough to not be able to tell much difference. If you sliced your strips thinner than the half inch the counters are set apart, you'll end up losing a little off each counter though. Be careful to examine if your print seems to be slowly shifting to one side as you actually cut the individual counters.



DO NOT try to cut the end or the individual counters by eyeball alone. If you do, you will likely get a few unpleasant surprises when you are cutting out individual counters.



As you can see below with a quick glance, just what happens.



Even with the most careful eye on where I'm cutting and how smoothly I try to work it, those counters on the left are the result of trying to eyeball the right spot to cut. The ones on the right were measured and are far more certain to be square. It doesn't matter if you're using the hand held rotary cutter or the x-acto knife, either can go off just on the basis of making a visual guess as to the right position to set the edge.

Cutting with 12" Rotary Cutter

I prefer to use a Fiskars 12" Rotary Cutter to do my counters now. There are several other brands including a higher quality tool from a company named Dahle that will cut through thicker cardboard and has a wider bed for it's guide rail. However I find the Fiskars cuts through the 2mm cardboard I use very well, and at the price it represented a much less expensive option for making the cuts. I had spent time

trying to find die cut tools that could do counters, with the discovery that it would cost a bundle for a hobbyist die cut of any sort to fit the need to separate counters.



With the guide rail up, you can see there is a rubber fitting to hold the object to be cut in place when it's being sliced. The bed easily accomodates the 8.5"x11" sheet normally used to produce counters. It could handle it sideways as well.

The same steps apply with the rotary cutter as doing it by hand with a straight edge. First I cut the counters into strips.



Just like the self healing cutting board, there's a plastic strip under the guide rail where the cutting edge will travel. After a few uses, you'll notice that a mark develops where the cutting edge has dug into the stick (they sell replacement parts for this, so you can turn it and use all 4 sides until it becomes more of an impediment than it should be). You can line up your registration marks with the grove in that, or eyeball to the rail.



I also find that if you press down on the cutting tool you can eyeball the edge's contact with the registration mark. You can only do this for one end, obviously, so it's really just a good visual means of double checking that you are getting in the right position.



After all the strips are cut they should be smoothly the same height. If you've done this right, they will be the ideal height for the width you plan to cut as well. Just like cutting by hand held tools, if you get the strip thinner than it should be, or thicker, you will have some serious issues getting square counters that are the same size.

One of the annoying things is, the cutter really is designed for doing larger sheets of paper or cardboard. They advertise it as being able to cut through 8-10 sheets of 30 lb paper. What the intent with this tool was to supply a nice paper cutter for people doing scrapbook work. I am thankful there are enough scrapbook people out there to make this tool both available and reasonably priced. But it really isn't set up for handling cutting a one inch by half an inch cardboard bit in two equal halves, nor even for handling a 1.5" by .5" section. The wall on the edge simply doesn't extend far enough to the cutting area to provide a stable position for the parts.



You can see to the left there is no edge wall to hold the last bit of counter strip straight so there is any assurance of a straight cut giving square angles. With the arm up, you can see the rubber strip for holding the material in position attached to the underside of the guide rail. Off to the right in this picture there's a clamping finger that goes through that hold off to the right. That just helps secure the guide rail down when in position.

This is the possible result of having nothing along the edge to hold the material in place. A cut that happens because the blade pulls the material into the open gap to the right. Now this picture is a bit extreme to make visible the odd angle since the rubber underside of the guide rail will hold the material pretty firmly. However you still need to position the material by hand in that case and are likely to be off by some amount anyway.





It is actually pretty simple to make a jig from the same cardboard you're going to be cutting. Just measure it out to as close as possible, and if anything make the material just a wee bit wider than the space available so when you force it into place by putting the guide rail down, it stays wedged in place. You obviously need to accommodate the locking finger, so just cut a small rectangular hold for it to slide through. Now you get straighter cuts on that last small bit of counter strip. It's a lot simpler to position the material with a right edge wall of some kind to fit the edge against.

The red arrow points to the bar that has the self healing surface. When this wears out (mine hasn't yet after a lot of use now), you'll need to replace it. And meanwhile, that cutting line in it will give you a clue where to position your cutting point on the counters.



When cutting off the counters from the strips, I have found using another Jig helps too, keeping the counters positioned best for the straightest cut. When I cut the top or bottom off I try to keep it handy to use, instead of discarding right away. It's got some useful registration marks that I use to position the counters for cutting. This is handy because when doing 5/8" counters, the bed of the cutter is not marked to accommodate that size. So the guide lines for the counter width let me get started by positioning the counters neatly between the lines.



First the end of the strip has to be trimmed off. While I'm doing that, I like to cut the temporary jig so it's exactly in position where the cut will occur. This helps position each counter as I go.



That edge piece I just cut off the end of the strip is now very useful for measuring the width of the counter I'm about to cut. I put it in place against the jig to measure with.

Then I slide the counter strip forward further than it's width should be. Then I use another small piece with a straight edge to push the counter strip back to an even position with my scrap that I cut off the end of the counter strip. Having turned it sideways, I'm measuring that the width will exactly match the height.

I do this with the guide rail down and holding the scrap from the top of the sheet firmly in place, letting only the counter strip slide at all.



Once the counter strip is positioned, I cut the individual counter off the end. It's going to be pretty precisely the same both in width and height. And by keeping it firmly in place against the side wall of the cutter, I'm pretty sure of getting a good square corner.

The result as you can see below is pretty square counters. The centering of the print is dependant pretty strongly on how well I trimmed off the end of each strip and how well I cut the strips on my initial pass cutting the whole board.



By now you've found out if you are doing double sided just how well you actually matched front and back. There isn't a lot you can do if you are too far off other than starting over again.

Once you're satisfied with the counters, it sometimes pays to spray them again on both sides with the anti-UV treatment again. You'll have to do so from enough distance that the counters don't flip over while you are spraying them though, or you will have them stick to the surface beneath. Doing so though can protect the edges of either side from peeling away during play.

Gutter - in this case, a section of object that's outside the legitimate print area, normally the white space on the edges of pages in printing.

Foamies - A craft product made of foam rubber that is light but thick enough to give a solid feel to the counters. Available not only in most crafts and hobby stores, but in such stores as Target, Meijer and Walmart for pretty low prices. Meant originally for scrapbooking, as you can see, they come in dozens of colors, which may accomodate being the color of the surface of the counters as well.



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