

Part 3

Basic Perforating and Grid Work

You will need: PCA®: straight grid (Fine or Bold); and: Uni tool, Twin Tool, and optionally Quad Tool, Oct Tool, Grid Square and I also use the Fine Large Corner in some examples.

Note: if you want you can use the single needle PCA® Uni for all perforations; however, there are certain commonly used patterns where it is just so much easier, faster and simpler to use the multi needle tools, this of course, is up to you.

Hint: perforations are always done from the front towards the back of your work.

This section makes no difference with size, if you are more comfortable with using Bold or Fine grids, or tools then it is simply your choice of preference. Be aware though, that I will be demonstrating the fine grids and tools in this section and that there is a considerable size difference between the finished pieces when the fine is compared to the bold, so please make allowances for this, by reducing the number of repeats in any submitted work. Where possible, I will guide you by giving you the dimensions. Some tools are not available in the Bold size.

Apart from the fine and bold sized grids there are also two variations: straight and diagonal; and circle and oval (these last two are not used in this course). Out of the two you will find that the straight is used more, but I demonstrate both in the following pages. For embossing on the grids, you need to use the correct ball tool for the grid used: the micro ball with the fine and the small ball with the bold and always emboss your dots through the grid on a hard surface, and **never** on a soft mat. Where there is no perforating to be done first, then you are well advised to use low tack tape to secure your work to the grid before starting, as the paper will be very likely to move when embossing.

Hint: Remember that you should only ever use fine tools on the fine grid and bold tools on the bold grid, otherwise they could get damaged.

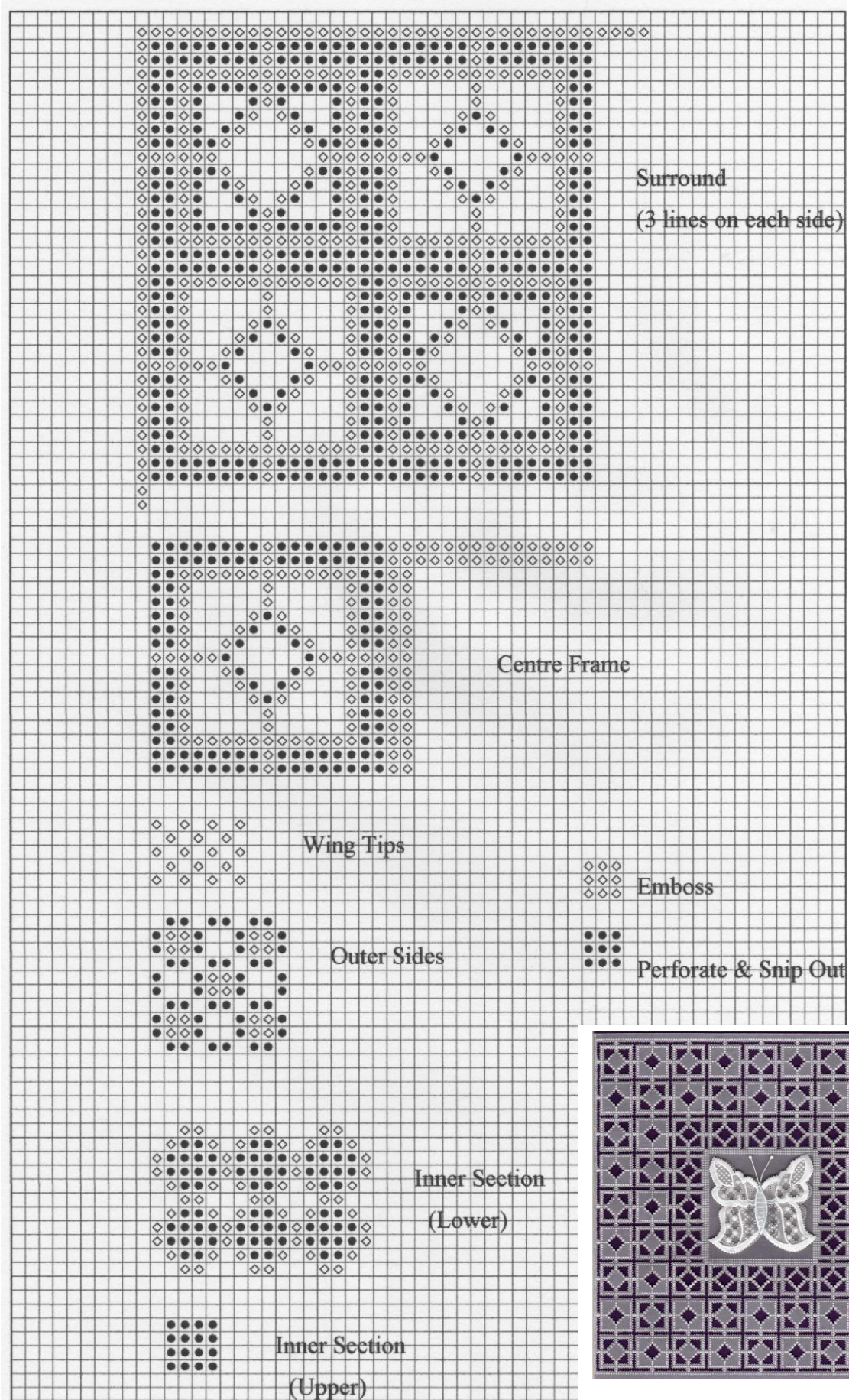
Hint: always have a dry tumble drier sheet in reach, to wipe over your parchment on the side you will be embossing. This really helps the embossing tools to slide across the paper without sticking. Also if you put a sheet between your mat and the paper when using the cutting edging tools; and between your paper and the grid you will find the act of perforating so much easier and it will also keep your tools in tip top condition.

In the annex you will find a tool chart and also a list of the multi needle tools which can be used with the grids. Never try to use any not on this list, as you may damage the points or the grids!

In this section we are going to concentrate on perforating using the straight and diagonal grids and snipping out to create lacy patterns. We are going to start with some explanation of patterns and the grid charts. There will usually be a legend with the pattern; most designers use a black dot for perforation and a circle for embossing. However this will vary with designers. Keep an eye on the legends of each pattern. See next page for an example of a pattern I designed for Parchment Craft Magazine in January 2009.

So let's get started with the different styles we can use to create those lovely lacy effects. Firstly, put your paper (and at this stage it can be a scrap of parchment) on the grid and secure it with low tack tape. Have your magnifier handy – (I would be lost without mine), and also you need a good light source, either close to a window for natural light or a daylight lamp.

Crosses: we are going to perforate using the PCA® Uni (Bold or Fine) or the PCA® Quad. Place your grid and paper on a perforating mat, and keeping the tool straight upright push the needle point/s through the paper into the grid. Now make a square of four holes, leaving a two-hole spaces before making another group of four (see how the grid chart illustrates this, in image 1).



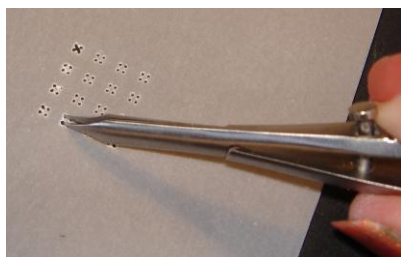
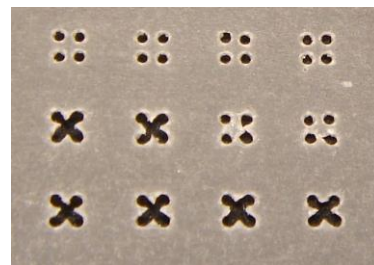
Don't let this seem complicated, all will be explained so you can follow it (with practice)!

Image 1

	1	1				
2	•	•	4		•	•
2	•	•	4		•	•
	3	3				
	•	•			•	•
	•	•			•	•

The groups of four solid dots in image 1 show where the pattern has to be perforated. Now take the paper off the grid, by peeling it off. For the best results, it is advisable to re-perforate the same holes **off** grid, directly on the perforating mat, this is called “deep perforating”.

If using scissors for the first time, you need to hold them as per the photo right, with the curved blades pointed down and your index and middle fingers through the handle holes and supported with the side of your thumb. You will need to practice this to get the feel of this unusual way. I never did and always use my snips!



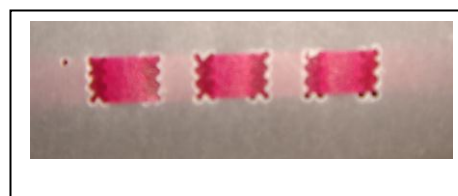
Now take your scissors or snips which should have curved and sharply pointed blades. Insert the tip of your blades no more than 1mm into the holes (marked 1 in the chart above “Image 1”) and with a slight turn of your wrist to the left (or if you are left handed, turn to the right) and at the same time gently push the scissors as flat as you can down towards the paper, and snip (you will hear a satisfying “snip”). So the action is **in, twist, down, snip**. Remove the scissors **without** bringing any paper with them! Now turn the paper a quarter turn to the left (or right if left handed) and snip as before moving on to 2, then 3 then 4. Don’t try any other combination like 1, then 3, then 2 then 4 because you won’t get a good cross. Well you can try it just to see what I mean, go on!

The right hand photo above shows (in order the top line): one, two, three and finally four snips. My image isn’t perfect because it is shown in macro, but it looks fine to the naked eye. The 2nd photo shows the slight twist whilst snipping to help get that “V” shape in the middle of the cross. And finally the 3rd image shows you how to hold your scissors. View the video to get the correct procedure “live”.

The process of cutting crosses with grid and scissors/snips, takes a lot of practice, and I mean a lot of practice. So keep at it. You will get the feel for “twist and snip” as we progress to other examples. PCA® has a tool for those of you who cannot get results with scissors – the “Easy Cross” which is discussed later.

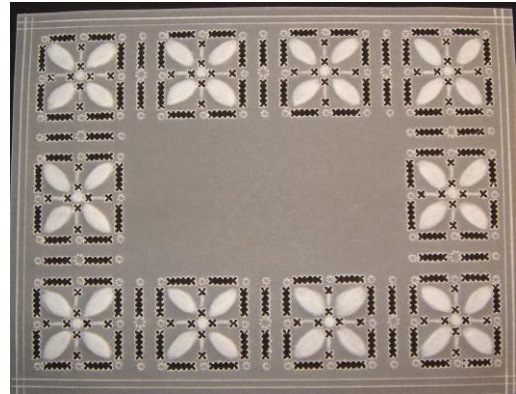
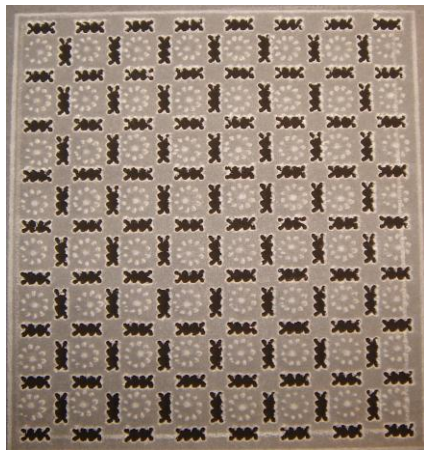
Slots: PCA® has a Slot tool available in both sizes, which I find is a very handy tool. Again you may use a PCA® Uni if you don’t have a slot tool, but it may be worth considering adding to your personal range of tools. Slots are lovely; I often put a slotted beribboned frame around cards, which just sets it off perfectly. So once again, put your paper on the grid as before, this time perforate using your slot tool, or make two rows of four holes as per the chart below. Then as per previous item, snip the top holes, turn snip one end, turn snip the next row and turn and snip the final bridge. You will now have a lovely slot like the one illustrated below. Just to show you how effective it is with the ribbon, cut a thin ribbon of coloured parchment paper and thread it through, like the third image. Make sure you have cut an even number of slots.

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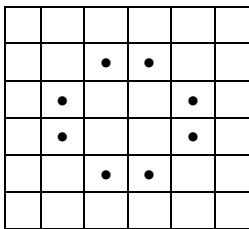
You can further decorate the slots by using embossed dots or sun tools between the ribbons.

Using the PCA® multi tools with the grids will give you design opportunities limited only by your imagination. Before we progress to more patterns, here are some other examples of what can be achieved with crosses and slots:



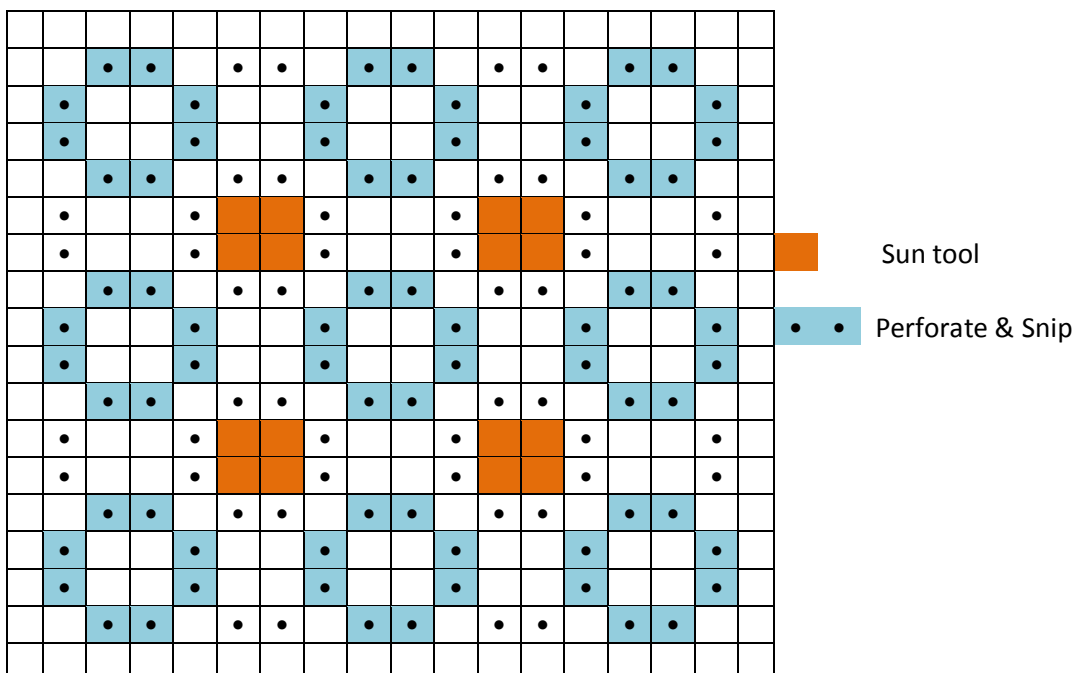
So that gives you an idea of the type of designs you can make with just the first two processes of crosses and slots. Look at them well, as they could feature again later on!

PCA® **Oct Tool** is an eight needle tool shaped in an Octagon (another great favourite):

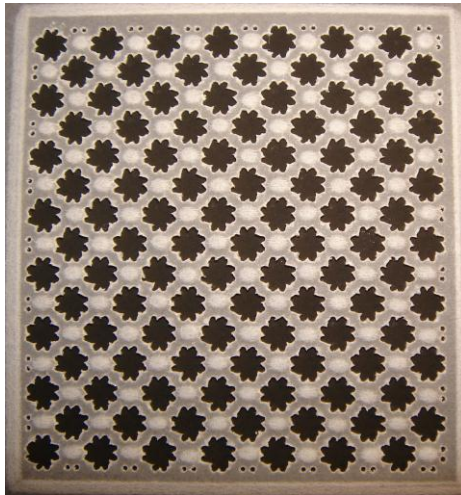


Care needs to be taken when using the Oct tool on the grid, so you need to concentrate even more. This is because you need to think about the way you hold the tool, to make it fit into the holes on the grid. I always use a magnifying glass and a daylight lamp when doing my grid work, but especially with the Oct tool. The results of grid lace patterns using this tool can be really stunning, but can I stress again that you need to concentrate? You will find that in many patterns this particular process is used to fill larger spaces, but beautifully so. **HINT:** when snipping out your Oct shapes, cut the longer spaced bits (on the diagonal) first then go and cut the shorter ones, this will give you a neater finish. If you feel more comfortable simply use the one-needle tool to make the oct shape, I do this.

Here is a typical pattern:



Which translates to this when finished: in the first image, instead of a PCA® Sun Tool, I have used a ball tool to emboss between the perforated and snipped areas.

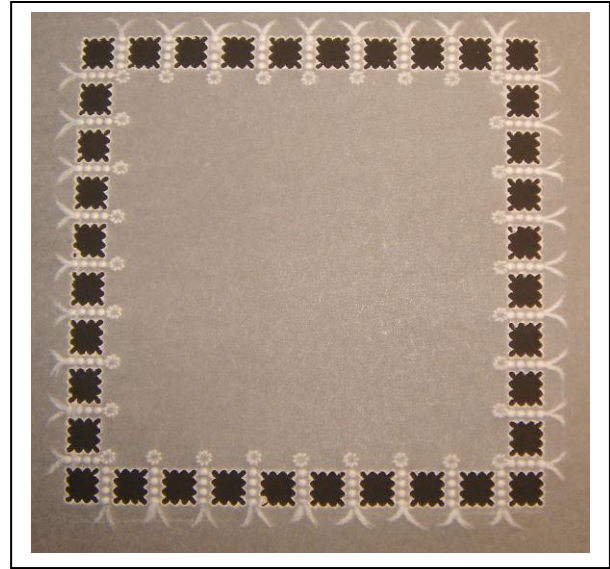
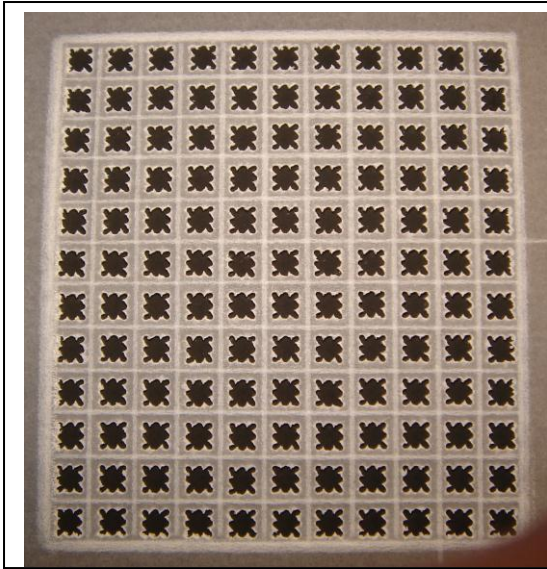


And here I have used the sun tool between. You can see that it does make a lovely frame as well as filling in larger areas.

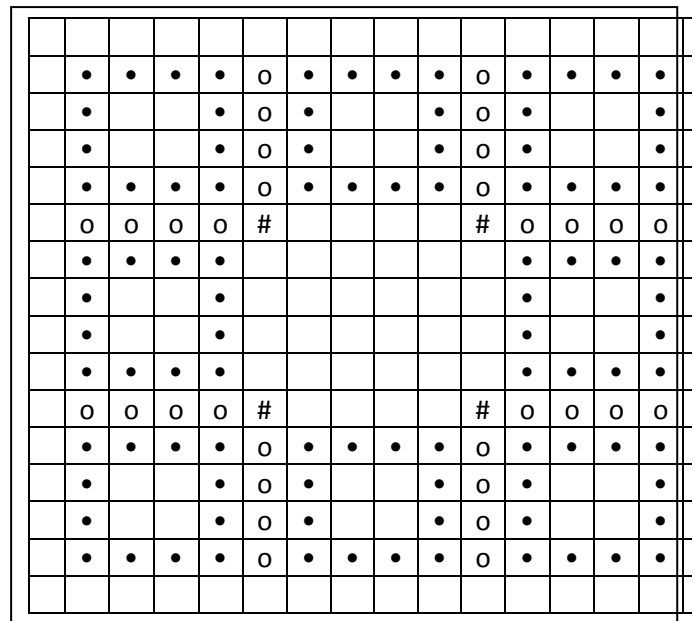
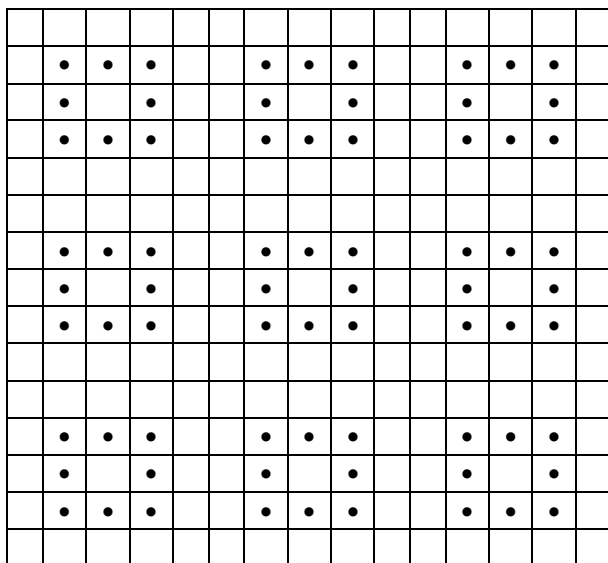


The principle for using the PCA® Oct Tool is the same as outlined before. Put your paper on the grid, secure it and following the chart make your first perforation, then using the two outside holes as your guide, put the needles back in them to make your next Oct perforation and continue until you have sufficient for your chart. Then come to the next row and for your first perforation, use the two bottom holes from the upper line as your guide. When you have finished making your perforations, turn your paper to the back, and emboss, using either the sun tool (easiest) or one of the ball tools to emboss each alternate Oct shape. Turn to the front again and start snipping out each Oct without the embossing on it. You should be making eight snips to cut out each Oct.

The process is basically the same for most of the multi tools; and the next example I am going to show you is the PCA® **Grid Square**. This is another favourite (OK I admit it, I do love them all!):



The first one (above) is the PCA® Grid Square and the second one is making a square using the PCA® Fine Corner to make a larger square. Firstly we'll look at the Grid Square (left hand side):



Attach your paper to the grid with low tack tape as before, and following the grid chart, make your perforations with the PCA® Grid Square (or single needle), making sure to leave two empty spaces around each square. When you have enough to make your example, peel the paper off the grid, turn to the back, and with a ruler and either a small ball tool or mini shader, make embossed lines half way between each perforated pattern; taking your time to make sure it is all equal. Then turn to the front and snip out each square, side by side.

This time I have added "o" to the pattern to show where you need to emboss on the grid (from the back of course) and also "#" to represent a sun tool impression (again from the back). The black dots are where you are going to perforate (from the front) using your Large Corner tool, but you need to make two perforations to make the square shape. When you have finished your perforating and embossing, you can snip out your square shapes, remember the twist of the snips to give you a nice neat picot edging.

The next page is going to describe in brief, some of the other multi tools available (but not all of them – refer to the tool chart at the back for more information on all tools available).

Name	Fine Ref	Bold Ref	Description of Perforating Tools
Quin	F1007 F1019	B2008 B2016	5-needles, 4 in a square with one in the middle (dice shape) also available in small sizes in both bold and fine. Used for decorative border work in the main. Can be used with a slight twist to give a flower shape perforation.
Diamond Duo	F1011	B2010	7 needles in a double diamond shape. Can be used to great effect for decorating borders.
Daisy	F1013	B2012	7 needles, six on outside with one in the middle. Again as with the Quin, can be used to create flower shapes when perforated with a slight twist – and I mean slight – twist too much and you will make a lovely circle hole! Great for borders and adding extra dimension to a flower spray.
Semi Circle	F1015	B2013	6 needles in a scallop shape. Versatile tool for creating circles, scallops, semi circles, and undulating waves (used in opposite directions). Can also be used to snip out after perforating to create lacy edges.
Twig	F1016	B2014	5 needles in a Y shape. Can be used for delicate border work in a long line, or alternate to give a diamond in the middle, or upright or upside down!
Leaf	F1018	B2015	6 needles in a long diamond shape (one at each end and two either side), looks lovely in border work, and can be embossed or left to its own beauty
Corner	F1020	B2018	The fine tool (used on last page) comes in seven needles; the bold version has five needles. I am mentioning again here because they have more uses than as demonstrated above. As well as making squares, you can make zigzags and diamond borders, so quite a versatile multi-use tool
Bow	F1021	B2019	What it says on the packet, it is a multi-needle in the shape of a bow tie, or I have seen it used as a dog bone!
Hex	F1025	B2023	This is an 8 needle tool – hexagon shape, again good for perforating and snipping to create lacy patterns and lovely lacy borders
Crescent Moon	F1027		Only available as a fine tool, this is what it says, a crescent shape, lovely for adding dimensions to borders and flower sprays. Also can be perforated and snipped out of course.

Diamonds	F1035 F1036	B2030	Three versions available, small eight needle in fine, large 12 needle in fine and also a bold version. Good for borders, and again can be perforated and snipped to make a lacy effect
Circles	F1037 F1038	B2032	Again three versions, two in fine: small and large, and in bold. Useful tool for flower sprays and “bubble” work for under-sea designs.
Love Heart	F1026		Only available in fine, this is a heart shaped perforator, and once again very useful for creating lacy borders.
V perforator	F1043 F1044	B2031	These are in the newest range of tools, great for perforating zigzags in borders – and great if you want to do your own snipping afterwards. (there are also cutters/edgers available in this shape, see tool chart)
Half Star	F1057		This is again one of the newest ranges. Is it again what it says, a star or it would be with two impressions back to back. Lovely for decorative borders again.
Others			There are quite a few new tools including Marquise, Ruby, Pear, and interesting symmetrical shapes, see the tool chart for more information
Name	Fine Ref	Bold Ref	Description of Cutting/Edging Tools
Easy Cross	F1006		This clever tool allows perforation and cutting of cross in one movement
Stamp & Mini Stamp Edge	F1004 F1003	B2004 B2003	The Stamp Edges are four needles in a row which cut as they perforate The Mini Stamp Edges are two needles which also cut picot edges as they perforate
Scallop Edge Cutters Arc Edge	F1014 F1029 F1022 F1028	B2017	The fine tools come in three different sizes, small, medium and large (in order in reference column). The final Fine is the Arc Edge which is a shallower scallop. The bold comes in one size. All tools cut scallop shapes as they perforate. A very popular range.
V edgers	F1033 F1034	B2028 B2029	Both ranges come in two sizes, large and small. They cut a V as they perforate.
Of course this chart is only the tip of the number of tools available from PCA®, the tool chart is in the annex and will give you the full range available and an image of their use.			

Perforating off-grid

Of course you don't always have to use the grid when perforating; and indeed not all multi tools are suitable to use with the grid due to their shape (again a list is available in the annex). I have found that the best way to ensure you get your tools placed as evenly as possible to ensure a pleasing design is to place your parchment paper on top of a paper grid. You can either use graph paper, or you can print one off here (<http://www.incompetech.com/graphpaper/plain/>) which will give you the option to make your own grid paper to your own size and colour.

Once you have your grid, you can ensure that you make your perforations straight by lining up with a ruler; get your corners in the right position and generally make a tidy job of something which is difficult to judge by your own eye. Another way is to simply draw a white pencil line where you would like your perforations to be. This last method is particularly useful if you are not perforating in a straight line.

Hint: where possible, use the last perforated hole as the starting point for the next, it will keep your work pattern regular.

Hint: With the finest PCA® scallop and V edgers, it is always a very good idea to use a thinner sponge mat when working freehand. This protects the paper from bending under the pressure. You can always double perforate on a deeper perforating mat later, if required. Also if your paper still tends to tear, try using a sheet of ordinary printer paper underneath the parchment to add strength.

Hint: work slowly making sure you make your edges as straight as possible!

PCA® Scallops, Arc and V-edgers/cutters

This same method is used for all the edging cutters (apart from the finest scallop and finest V as mentioned above). **Use a thicker perforating mat.** Once you have marked out where you want the perforations, either by pencil or using your graph paper, make sure you hold your tool upright and right up to the pencil line and perforate through the paper with slow, but firm pressure. Lift the tools out straight up. Then using the last hole perforated as your guide, continue on your way.

Hint: when perforating inside a circle or oval, it isn't always easy to gauge if the shapes are going to meet evenly. There is no exact science to this. So what I do, is I follow the advice given (using the last hole as a guide for the next) and when you are about 10 shapes away from the end, try to count by using the tool as a guide, how many you are likely to fit in and then very carefully gauge to space them as evenly as possible, either slightly closer together or minutely further apart.

Hint: The scallops will look lovely and lacy if you take time to decorate them with either the ball tools or the sun tools; or even a bit of both, by embossing a dot inside the embossing sun tool, from the back of course.

PCA® Easy Cross

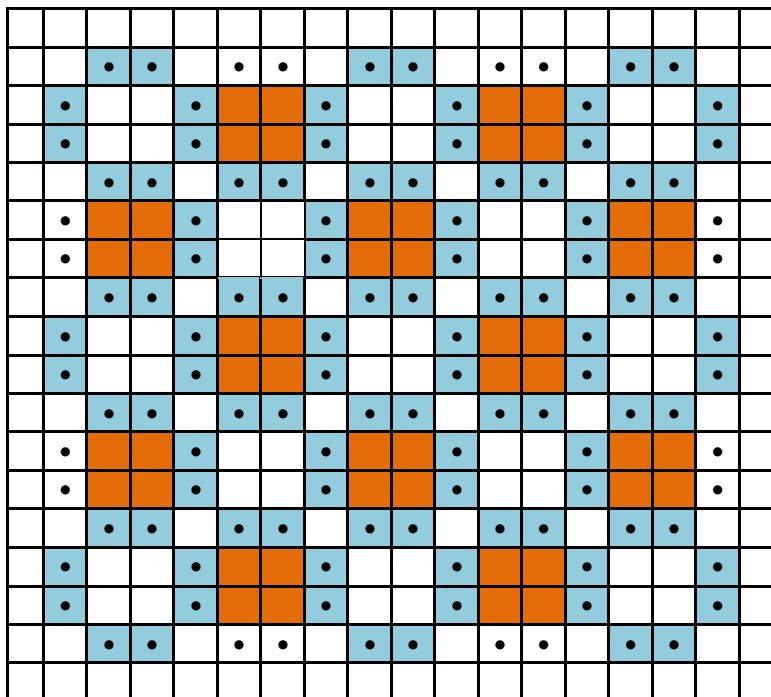
I mentioned this tool at the beginning of this section. It is a tool for making crosses and can be a good place to start if you are having difficulty making the crosses with the perforating and snipping method. However, much better results will come if you use a quad tool and snip out (see video).

You will need to use your thin mat first. Holding the tool upright, push the needles just through the paper and withdraw. Now take a piece of ordinary weight paper, and a thicker perforating mat. Put the paper between your parchment and the mat. Re-insert the needles in the same holes as before and push right through the parchment this time, right through the paper and into the mat as far as you can go. As you push, you should hear a little popping noise as you break through the paper to form the cross and stop immediately. Lift the needles straight off the paper, **not** at an angle. Practice thoroughly before using on precious work!

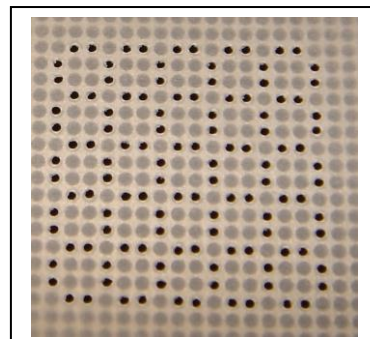
Submission Pieces

Grid work – submit all **FIVE** pieces

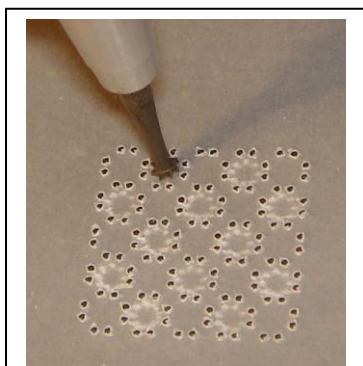
1. OCT



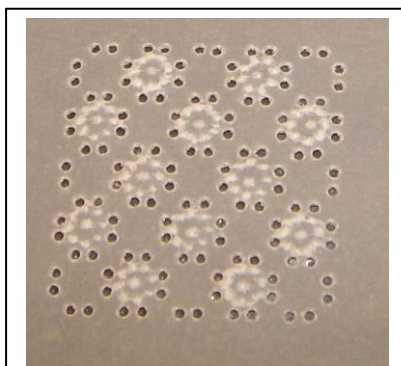
•	•	Perforate & snip
•	•	Sun Tool
•	•	perforate only



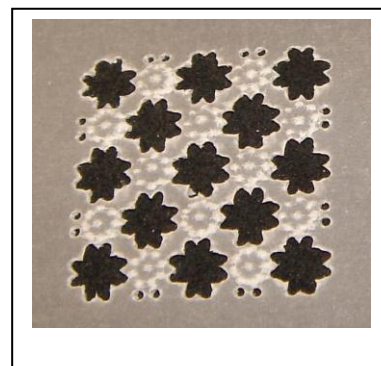
Stage 1 - Perforate



Stage 2 Sun Tool



Stage 3 single dot embossed

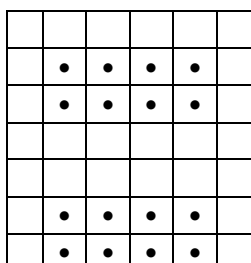


Stage 4 Snipped out

Work as per the chart above. The finished piece needs to be approximately 12 cms x 12 cms, which will give you practice on how many repeats are required for a square card. You can decide for your self if you use the design as a solid piece or as a border. If you decide on a border, they need to be at least three rows/columns deep. You can present it as a card, or as a mounted piece of work. If you are making a border for a card, you may put an image in the middle or leave it blank as this will not be marked.

2. SLOT

Please make a **card** of your choice with a beribboned slotted border (as shown previously). This can be completely your own shape, size, colour etc. All is asked of you is that you **use ribbon made of paper** to thread through and that you leave a two hole gap between slots. Please decorate with Sun tool impressions, the areas which are going to be left exposed after the ribbon has been threaded. Once again, you may put an image in the centre of your card to show it to its best, but this will not be marked.



You can copy this if you can't think of your own decoration

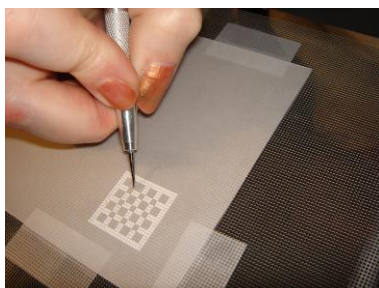
3. CROSSES & GRID SQUARES

Following the chart below, make up the design on a piece of paper and mount it in any way you choose to present it. You may use both the PCA® Quad Tool and Snips/Scissors to cut your crosses or the PCA® Easy Cross tool. **You must label the piece as to which method you have used.** If you don't have the PCA® Grid Square tool, you can use the Uni to the same effect. Please note that the legend is slightly different in this pattern, as each designer uses different legends, you would be as well to take note of this each time.

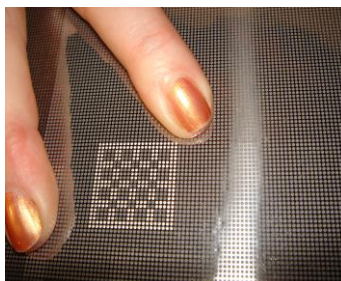
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- dot emboss
- perforate quad and snip to crosses
- perforate quad (no snip)
- perforate grid square and snip out

This may look complicated at first glance, but it is only a square of 22.5mm on the fine grid. Please make four of these patterns leaving a two hole space between each repeat. You may put the four in a line, or in a block, as you please.

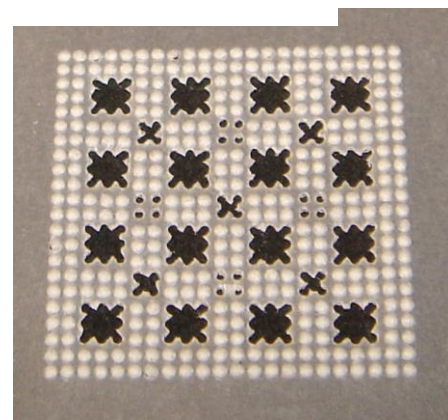


Embossing the dots with the Micro Ball

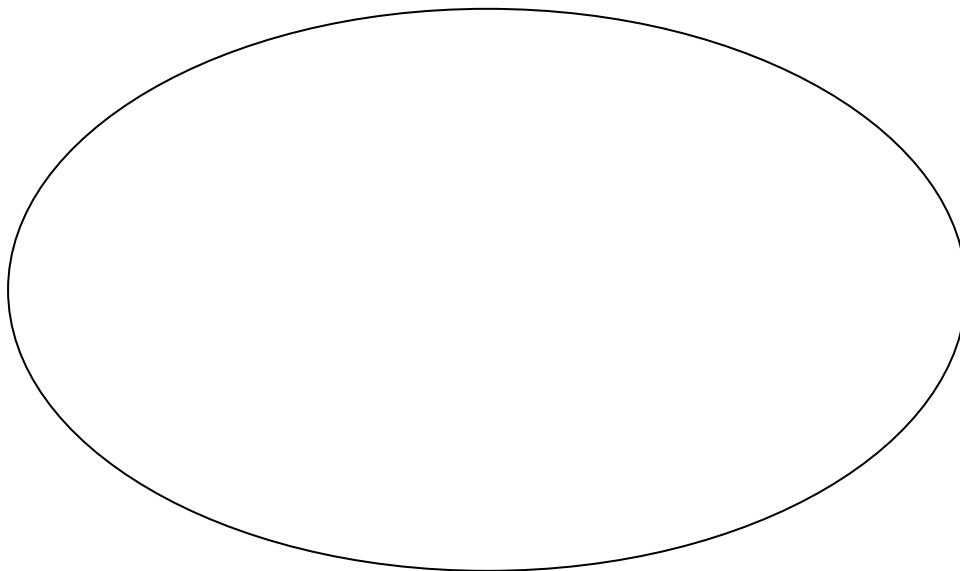


View from behind, you can perforate from this side but use the PCA® Uni Tool only, not a multi tool.

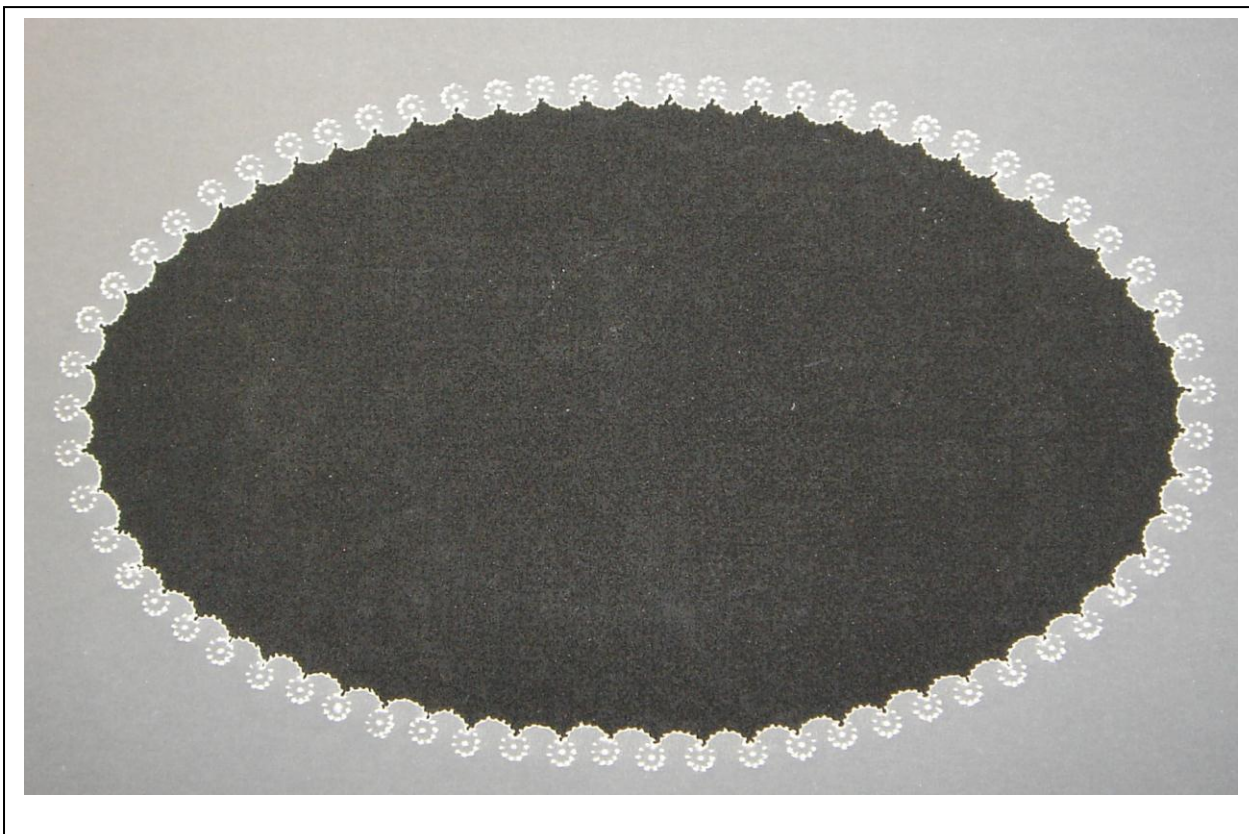
Example of one repeat – you need to make four



4. OFF-GRID PERFORATING



Trace the oval in white pencil. Or if preferred, perforate on top of a printed oval. Using the scallop tool of your choice, perforate out the inside of the design, and then decorate the scallops with either sun tools or ball tools, as you like. Remember to erase the pencil line before embossing.



In my example, I have embossed with the PCA® Large Sun tool at the point of each scallop and then added one dot with the PCA® Micro Ball tool – you can emboss within the scallop instead. Please tidy up any straggling ends with your scissors or snips. Please feel free to mount it or turn it into a card for marking, however as before only the scalloped work will be marked.

5. FREE HAND PIECE

Please submit a decorative **border** piece using any of the PCA® multi tools to make the perforations. You may also emboss where you think it is required, and you may snip out where you think it is required. Completely free hand - not on the grid. The finished work needs to fit into an A6 card size (approx 15 x 11 cms), and up to you how you present it. You can use your own idea or use one from a pattern – it is the work that is important, not the design.