

18° Circle Segment Ruler plus 3" finished circle for centers and curved edges. Use this ruler to cut 18° segments for fan designs, Dresden Plates and stacked layer designs - the outer edge of each segment may be pointed or curved.

## Choosing the size of the segment:

For fan designs, choose the size of the finished block. The curved segment for the fan needs to be about 2" - 3" less than this measurement. For example, for a 12" finished block, use a 9" to 10" segment - depending on how much background fabric you want to show around the edge of the fan. For a Dresden Plate design use the table below. First choose the finished block size. The table gives the size of the finished plate for this block and most importantly the size of segment to be cut to make this plate.

| Finished<br>Block<br>Size | Finished<br>Size of<br>Plate | Size<br>of Cut<br>Segment |
|---------------------------|------------------------------|---------------------------|
| 8"                        | 61/2"                        | 2"                        |
| 9"                        | 71/2"                        | 21/2"                     |
| 10"                       | 81/2"                        | 3"                        |
| 11"                       | 91/2"                        | 31/2"                     |
| 12"                       | 101/2"                       | 4"                        |
| 13"                       | 111/2"                       | 41/2"                     |
| 14"                       | 121/2"                       | 5"                        |
| 15"                       | 131/2"                       | 51/2"                     |
| 16"                       | 14"                          | 6"                        |
| 17"                       | 141/2"                       | 61/2"                     |
| 18"                       | 15"                          | 7"                        |
| 19"                       | 151/2"                       | 71/2"                     |
| 20"                       | 16½"                         | 8"                        |

# Cutting The Background Blocks

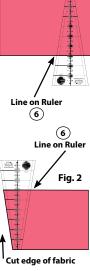
The table gives the finished size of the block. Cut the background square ½" larger to include the seam allowances.

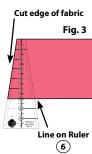
## **Cutting the Segments**

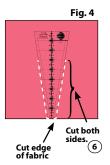
- 1. Cut a strip of fabric the width of the segment in the Design. For instance, if the chosen segment is 6", cut a 6" wide strip. If possible, layer several strips of fabric for speedy cutting.
- 2. Place the ruler on the right hand end of the strip with the narrow end of the ruler matching the top cut edge of the fabric strip (Fig. 1). Left-handers should place the ruler on the left hand end. The bottom edge of the fabric should line up with the appropriate measurement marked in a circle on the ruler. For instance, if the strip is cut 6" wide, place the top on the line on the ruler marked 6. Ignore the smaller non-circled numbers on the ruler.
- 3. Cut along the right hand side of the ruler. Turn the strip of fabric so that the cut end is on the left hand side. Left-handers should turn the fabric so the cut end in on the right hand side and work from right to left.
- 4. Rotate the ruler 180° do not turn the ruler over. Place the ruler on the strip, lining it up with the cut edge of the fabric as in Fig. 2. Place the narrow end of the ruler even with the bottom edge of the fabric strip, with the top edge of the fabric lined up with the same number marked in a circle on the ruler as before. Cut along the other angled edge of the ruler to make the first segment. Remove the cut piece.
- 5. Rotate the ruler 180° and line it up with the cut edge of the fabric as in Fig. 3. Place the narrow end of the ruler even with the top edge of the fabric strip as before.
- 6. Cut along the right side of the ruler to make a second segment (left-handers cut along the left side of the ruler).
- 7. Continue to cut segments from the strip, rotating the ruler each time.

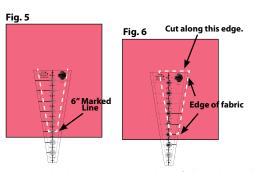
#### **Fussy-Cutting Segments**

If you are using odd scraps or need to focus on a particular part of a fabric design, place the ruler over the fabric in the chosen position.









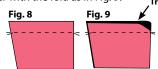
- 1. Cut along the bottom narrow edge of the ruler and along both sides just beyond the chosen measurement, following the numbers on the ruler markings that are in a circle (not the smaller non-circled numbers) i.e. if you want to cut a segment 6" long, find the 6 marking on the ruler. Cut both sides of the ruler, stopping just beyond this 6 marking (Fig. 4).
- 2. Move the ruler down until the bottom cut edge of the fabric lines up with the same number this time the non-circled version. For example, if the segment being cut is 6" long, line up the bottom fabric edge with the 6" number on the ruler that is not in a circle (Fig. 5).
- 3. Move the ruler to one side slightly so that one long edge lines up with a cut edge of fabric. Cut along the top edge (Fig. 6).

#### **Making a Pointed Segment**

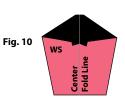
1. Fold each segment in half with right sides facing (Fig. 7). Press lightly.



2. Stitch a ¼" seam along the top edge (Fig. 8). Trim the corner with the fold as in Fig. 9.



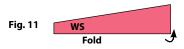
3. Finger-press the seam open. Turn the segment right side out and center the seamline on the central fold in the segment (Fig. 10). Press the folded edges carefully, making sure the diagonal folded edges are balanced and equal.



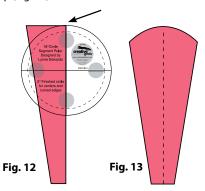
- 4. Pin and sew 5 segments together to make a fan, or 20 segments to make a complete circle.
- TIP: When joining the pointed segments together, begin stitching ¼" from the top edge; back stitch to the top edge, and then stitch the rest of the seam. This makes a neater inner point to the segments of the fan or plate. Press the joining seams open. Position the completed fan or plate on the background square. If it does not lie flat, try steaming it to pull it into shape or adjusting the adjoining seams slightly. Pin it into place on the background.
- 5. Stitch the pointed edges onto the background square either by hand or machine.

### **Making a Curved Top to Each Segment**

1. Fold each segment in half and press (Fig. 11).



- 2. Place the Creative Grids  $3\frac{1}{2}$ " circle on the wider end of the folded segment with one of the circle's center lines lying on the folded edge of the segment and the top of the circle exactly matching the top of the segment (Fig 12).
- 3. Use a small rotary cutter (28mm) to cut around the curved edge of the segment. Open out the segment to show the curved top (Fig. 13).



4. Join 5 segments together to make a fan or 20 segments to make a Dresden plate design. When stitching segments together, begin stitching ¼" from the top end of the seam to allow for the outer curved edges to be turned under when appliquéd to the background square. Press the joining seams open.

- 5. Position the completed fan or plate on the background square. If it does not lie flat, try steaming it to pull it into shape or adjusting the joining seams slightly. Pin it into place on the background.
- 6. The outer edge of the design needs to be turned to the back of the work and tacked or basted before it is stitched to the background. Use the Creative Grids circle to mark the turning line on the fabric. Lay the design right side down on a piece of batting. Position the circle on one of the segments ¼" from the outer curved edge (Fig. 14). Using a large blunt tapestry needle, trace around the curved edge of the circle, holding the needle at an angle away from the edge of the circle and press firmly. The needle will crease the fabric. Do this on all segments.



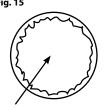
- 7. Turn the design to the front and, following the creased lines, turn under the outer edges to the back of the work, tacking them with small running stitches as you go. Do not press this edge as it will make a smoother curve if the edge is unpressed so that any little irregularities can be adjusted as it is stitched.
- 8. Position the design on the background square and pin in place.
- 9. Stitch the design onto the background by hand or by machine. Remove the tacking after stitching the design in place.

#### **Making the Centers**

The center of the plate design is a circle while the corner of the fan design is a quarter circle. To make these use the Creative Grids 3½" circle.

- 1. Place the circle on the chosen fabric and cut around it using a small (28mm) rotary cutter. Each circle will be used whole for the center of the plate or cut into 4 quarters to make corners for four fan blocks.
- 2. Cut a 3" circle out of freezer paper.
- 3. Place the freezer paper circle shiny side UP centrally on the BACK of the fabric circle and pin it on, using 2 pins to stop the paper from moving.

4. Using the setting on an iron without steam, nudge the seam allowance of fabric over on to the freezer paper, easing in the fullness a little at a time so that it sticks to the paper. Don't worry too much if the iron touches the surface of the freezer paper. Take care not to press any tiny little pleats in the outer edge but keep the curve smooth (Fig. 15). If there are any areas you are not happy with, just peel the fabric back and press in the correct position.



- 5. For the plate design place the circle of the fabric in the center of the plate and press. This will fix it to the background while you stitch it into place. Turn the circle so that the weave or grain of the circle matches the weave of the background square. Add a couple of pins to hold in place if you wish.
- 6. After stitching by hand or machine, turn to the back and cut away the background fabric within the center circle to remove the freezer paper and reduce the layers for quilting.
- 7. To make the quarter circles for the corners of the fans, follow steps 1-4 above. Cut the circle of fabric into 4 quarters. Position one on the design and stitch into place. After stitching, slide the freezer paper out at the corner of the block.



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