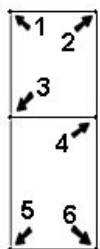


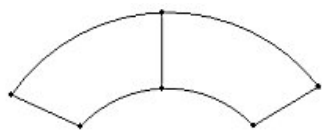
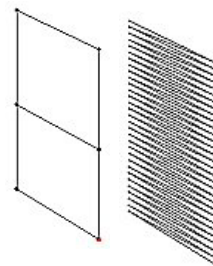
## ✓□ Lesson #16: Column Fill Basics

Column fill is a series of parallel stitches that can be used for outlines, lettering, appliqué, and some detailing. It can also be called satin stitch or stiehl stitch. Digitizing with column fill requires using pairs of stitches which move from left to right like the zig-zag stitch on a sewing machine. The bar between the left and right points shows the direction of the stitches.



The graphics at the left show a column fill section done with six points. The bars between points 1 and 2, 3 and 4, and 5 and 6 represent the angle of the stitches. In this case, you would get horizontal stitches across the bar.

Graphics on the right show angled stitches. This is created by dropping points 2, 4, and 6 below the level of the points 1, 3, and 5 to give more direction to the stitches.



To give a sense of flow to the stitches, use the arced line and change the angle of the stitches so they move across the section.



It is important to remember that column fill sections need some kind of underlay. The type of underlay you use will be determined by the width of the column fill section, the type of fabric you are embroidering, and the look you want to create. Read Appendix D for an explanation of the three types of underlay and how to use them.

Watch the video labeled as “**EM2-16a Column Fill Basics**” to learn how to create different types of column fill sections. Note that none of the column fill sections on this video include underlay. This is just a lesson to teach you how to create basic column fill sections.

### Preparing the redwork apple for column fill



To practice using column fill, we want to use the redwork apple file that was used for the running stitch lessons. There are two ways to use this file. One involves using the finished apple, deleting the sections we do not need, adding a new section to eliminate a trim and moving the new section into place. This prevents you from digitizing the details a second time, but it is more advanced because it requires you to move a new section into place. This information will come in handy in many situations. Watch the video labeled as “**EM2-16b Preparing the Redwork Apple for Column Fill**” if you want to learn how to combine different features of the program to add new sections to the middle of a design. Here are the basic instructions for preparing the finished redwork apple for column fill.

1. Hide needle #1 by right clicking on it. Hide the green and black stitches too so the worm does not get deleted.
2. Select All to select the stem and highlight colors and delete them. These are the two sections that we will be digitizing with column fill.
3. Now unhide the red, green and black stitches by right clicking on the needle numbers.
4. With only the apple outline, details, and the worm on the screen, use the object selector to select the apple outline section that ends to the left of the stem. Change the color of this section to any color at the bottom of the color bar.
5. Digitize the new line of running stitches using a different color from the color bar. This line should begin where the left redwork outline ends and it should end at the bottom of the stem where the apple details begin.
6. Select the new row of running stitches and use the Sew Before Previous Object icon to move the new section so that it stitches in the correct order. It may take many clicks to get it there if you used separate running stitch sections for the details as the new section needs to move through all of those sections to get to the new position.
7. When the new section is moved into the proper sewing sequence and while it is still selected, click on Needle #1 so it changes to red. Then click on the redwork section that is the wrong color and change it to red.
8. After the new stem and highlight sections have been digitized with column fill, they will be moved into the proper sewing order.