



Top Tips for Successful Embroidery

The secret to achieving great looking embroidery is to:

- Use a machine that is in tune, with proper tension settings
- Choose a well-prepared design with underlay stitching
- Select the correct needle and thread for the fabric
- Hoop and stabilise fabric properly, using temporary fabric

Fabric Choice

It's important to understand that all designs are not suitable for all fabrics. Dense designs can stress certain fabrics e.g. knits and light weight fabrics, or be too stiff for fluid fabrics. Small, less densely stitched designs don't provide enough coverage for thick pile fabrics. When choosing your fabric, consider whether it is - Stable vs. stretchy? Lightweight vs. heavyweight? Plain vs. pile? Opaque vs. transparent? Drapable vs. stiff?

Design Considerations

There are three basic types of embroidery designs:

- Filled designs
- Open, airy designs ('sketched look', lacy designs, cross stitch)
- Outline designs (redwork, satin stitch outline, single stitch outline, quilting, satin stitch dots outline, candlewicking outline)

Choose designs based on the fabric you will be using – large, dense designs need a firmer fabric and/or more stabiliser, as they cause more pulling than open designs.

Add or increase the amount of underlay based on the fabric. You can also increase or decrease the density of the design (the stitch spacing in the software) to suit.

Stock designs (available on cards, diskettes, CDs, USB sticks, Internet) are created for firmly woven, medium weight, non-stretchy fabrics with no nap, no texture, and no pattern, and are designed to be stitched with 40 weight thread.

Always do a test stitch-out using the same or similar fabric, thread, stabiliser, and hooping method; check the underlay, jump stitches, and direction of fill stitches.

Stabiliser Decisions

Always select a stabiliser appropriate for the fabric – it must support both fabric and stitching. In choosing a stabiliser, ask yourself: Is the fabric washable? Does the stabiliser need to remain with the fabric or does it need to disappear? Is the stabiliser weight appropriate for both the fabric and the design?

Here is some advice to help you choose the best stabiliser for your project:

- The more dense the design, the more layers of stabiliser you will need
- If the fabric has body and stability, a lightweight stabiliser may be used
- For lightweight fabrics you will need to stabilise the fabric on the top and bottom
- Use iron-on stabiliser to decrease distortion
- Consider use of a fusible interfacing in addition to stabiliser, to prevent stretching the fabric while hooping
- Fabrics that stretch must be immobilised during AND after embroidery; use a fusible cut-away stabiliser, fusible tear-away + cut-away, or fusible interfacing with cut-away
- Use a good tear-away stabiliser with medium weight wovens

Hooping Techniques

Hooping techniques are influenced by the fabric surface and weight, and by the size and shape of the piece. Select a hoop close to the size of your embroidery. Using a hoop that is too large can cause shifting and puckering. Hoop fabric taut, but not drum tight - the screw should be tight, but the fabric should be at rest and undistorted.

For standard hooping, place the fabric between the inner and outer hoop, giving it the best control and support. In some situations however you will need to hoop the stabiliser only, then adhere the fabric to the stabiliser using a temporary fabric adhesive such as HRFive (or using a sticky stabiliser). Use this technique for:

- Fabric that stretches or distorts easily
- Fabrics that are too thick to hoop
- Fabrics that may be permanently marred by hooping
- Pieces that are too small or irregularly shaped to hoop



Selecting Needles

An embroidery needle is generally the best choice because of its larger eye. Use a size 75/11 for most fabrics and size 90/14 for heavier fabrics or dense designs. With non-traditional threads you should use a specialised needle such as a Metallica needle for metallics or a Topstitch needle for larger threads. Make sure you change to a new needle just before stitching the outline of dense designs and embroider only 3-4 large designs between needle changes.

Thread Options

Most embroidery designs are digitised for 40 weight thread, however 50 weight thread may be a better choice for lightweight fabrics and 30 weight thread may be best for heavy fabrics. Of course design density can be increased or decreased based on the type of thread you are using. If there is high contrast between the fabric and thread colours, use a layer of vinyl topping material such as Hoop-It-All's Dry CoverUP.

Causes of Puckering

Puckering in your embroidery is something you will want to avoid. Understanding the causes of puckering will help you prevent it from occurring. Puckering can be due to:

- A design that is too dense for the fabric weight or weave
- A design that is too large for the fabric type
- Fabric that is stretched too tightly in the hoop
- Fabric that is not on grain in the hoop
- Overly tight thread tension(s)
- Stabiliser that is too lightweight and/or too few layers of stabiliser
- A hoop that is too large for the size of the design
- Fabric that is not hooped securely
- The wrong size and/or type of needle, or a needle that is too old

Additional Tips

- Baste around the edge of the hoop to prevent fabric from shifting
- Baste with a water-soluble basting thread in the bobbin to make stitches easy to remove
- Test fabric for needle holes before basting