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PATCHWORK AND APPLIQUÉ STITCHES, TECHNIQUES, AND BLOCK DESIGNS

Maggi Gordon

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Previously published in The Needlecraft Book

QUILTING step by step



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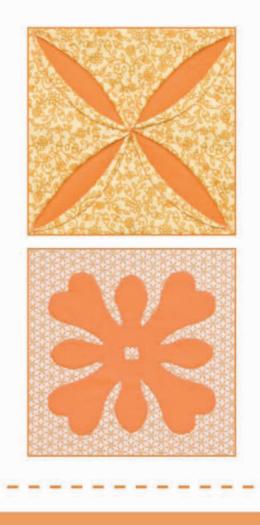
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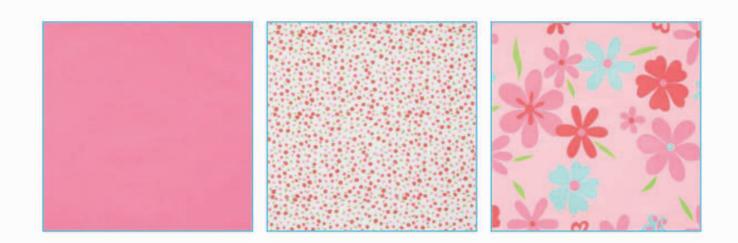
INTRODUCTION

Although quilts, defined as textiles consisting of layers held together by stitching, have been made specifically as bedcovers for only a few hundred years, the techniques used to create them and countless other quilted items, from garments to tent walls, have been employed in almost every civilization throughout the history of humankind. Quilt making, once viewed as a make-do-and-mend necessity, has become a creative outlet for practitioners around the world, and *Quilting Step by Step* will help you learn the skills you need to join their ranks.

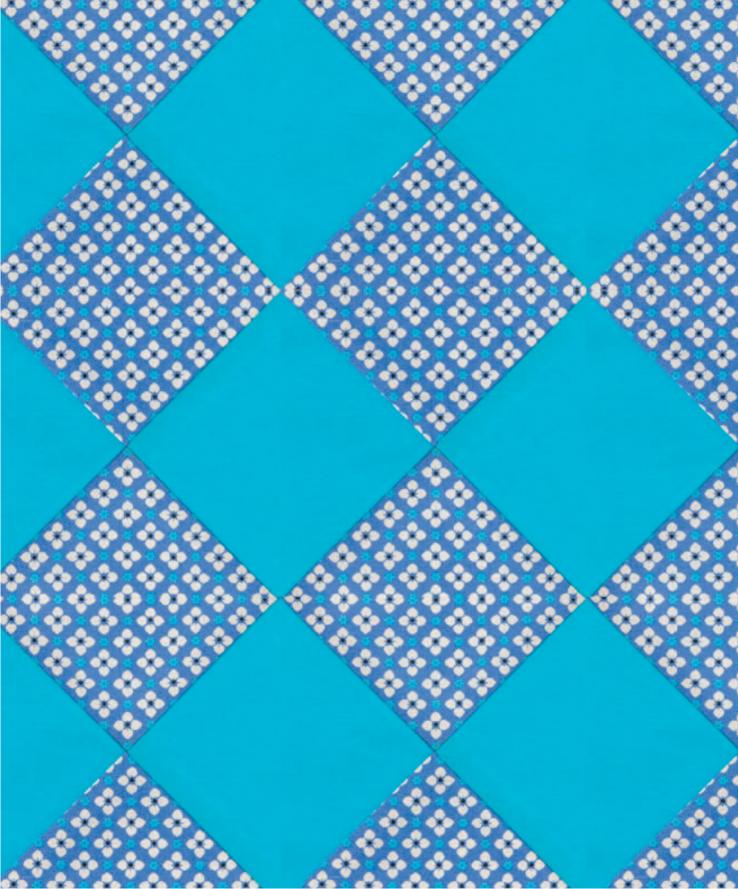
The book covers the important techniques associated with patchwork, and making quilts, wall hangings, and other quilted items. Beginning with the essential tools, materials, and design principles, it moves to Patchwork, which involves cutting fabric into strips or shapes and joining them with seams; Appliqué, in which fabric shapes are applied to a background with invisible or decorative stitching; and Quilting, the stitching that holds the layers—top, padding, and back—together. Separate chapters provide instructions, hints, and tips on finishing and embellishing projects, and the information throughout the book is detailed in clear, easy-to-follow, step-by-step photographs. In addition, there is a Gallery of popular patchwork block patterns and a Glossary, as well as information about caring for quilts.

I hope it will provide inspiration and be a valuable reference tool, so that you too can experience the pleasure that I find in creating quilts and other quilted and patchwork items.

Maggi Jordon



TOOLS AND MATERIALS



ALTERNATING SQUARES

Squares can be cut with scissors or rotary equipment (pages 23 and 37) and assembled into rows or blocks (pages 57–60), then turned on point (page 154) to create an under-and-over pattern.

Tools and materials

Making a quilt does not require a lot of equipment. If you are a beginner, you probably won't need more than needles and thread or a sewing machine, scissors, pins, ruler or measuring tape, a pencil, and a thimble. There is, however, a huge selection of specialized tools that have been designed to make the process easier.

General sewing equipment

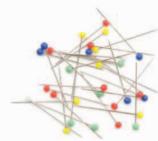
For quiltmaking you will need a set of hand-sewing needles—both "sharps" and "betweens." Both types come in several lengths, thicknesses, and eye sizes. Needles are sized by number: the higher the number, the finer the needle. Pins are essential for pinning the layers of a quilt together while you work (see page 168). Always press seams as you go, with an iron or by fingerpressing.



Quilters' pins ↑ Long quilters' pins with a decorative motif, such as a small paper flower on top, make them easy to spot in the fabric.



Glass quilters' pins ↑ These extra-long pins are easy to handle. Extra-short pins called appliqué pins are also available to secure pieces as you stitch.



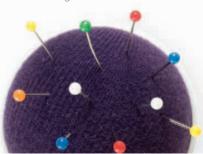
Glass-headed straight pins ↑ Ordinary dressmaking pins are used to hold pieces together during hand piecing.



Safety pins ↑ If the layers of the quilt are not too thick, you can use ordinary safety pins to hold them together.

Pin cushion \downarrow

Pin cushions range from traditional sawdust-filled felt shapes to magnetic pincatchers. Magnetic types can interfere with the smooth operation of computerized sewing machines.



Hera 1

A plastic, bladelike device for fingerpressing. A little wooden iron with a flat, chisel-shaped edge can also be used.



← Thimble

Thimbles are made from metal, leather, plastic, and even ceramic, and are designed to protect both the sewing finger and the hand underneath in quilting.

Tools and materials



Needles and threaders

Using the correct pin or needle for your work is so important, since the wrong choice can damage fabric or leave small holes. Needles are made from steel and pins from steel, or occasionally brass. Take care of them by keeping pins in a pin cushion and needles in a needle case—if kept together in a small container, they can become scratched and blunt.

Sharps

An all-purpose hand-sewing needle, with a small, round eye. Available in sizes 1 to 12. For most hand-sewing use a size 6 to 9.

Crewel

Also known as an embroidery needle, a long needle with a long, oval eye that is designed to take multiple strands of embroidery thread.

Milliners or straw

A very long, thin needle with a small, round eye. Good for hand-sewing and basting, since it doesn't damage fabric. A size 8 or 9 is the most popular.

Quilting or betweens

Similar to a milliner's needle but very short, with a small, round eye. Perfect for fine hand stitches and favored by quilters.

Beading

Long and extremely fine; used to sew beads and sequins to fabric. It is prone to bending, so wrap it in tissue when it is not in use.

Darners

A long, thick needle that is designed to be used with wool or thick yarns and to sew through multiple layers.

Bodkin

A strange-looking needle with a blunt end and a large, fat eye. Use to thread elastic or cord. There are larger eyes for thicker yarns.

Self-threading needle

A needle that has a double eye. The thread is placed in the upper eye through the gap, then pulled into the eye below for sewing.

Wire needle threader

A handy gadget, especially useful for needles with small eyes. Also helpful in threading sewing-machine needles.





Automatic needle threader

This threader is operated with a small lever. The needle, eye down, is inserted and the thread is wrapped around.



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General sewing equipment

Sewing machine

All the main manufacturers have sewing machines designed with the quiltmaker in mind, with numerous attachments available. For machine quilting, you will need to be able to drop the feed dogs. Machine needles in sizes 70–90 universal are recommended for quiltmaking. This machine is an example. Others may be configured differently.

Machine features

Before you buy a machine, decide which features will be most useful to you and, if you're planning to quilt, make sure it's sturdy enough to be able to stitch through the quilt top, batting, and backing fabric.

Threading guides

Markings to help guide you in threading the machine.

Tension dial

To control the stitch tension on the upper thread, i.e., how fast the thread feeds through the sewing machine.

Automatic needle threader

A pull-down gadget to aid threading the machine needle.

Needle

The machine needle. Replace regularly to ensure good stitch quality (see page 16).

Presser foot

To hold the fabric in place while stitching. Various feet can be used here to aid different sewing processes (see pages 16–17).

Removable free arm

14

This section of the machine will pull away to give a narrow work bed. It also contains a useful storage section. Feed dogs These metal teeth grip the fabric and feed it through the machine.

Shank

To hold the various feet in place.

.

Needle plate

A removable cover reveals the bobbin. This plate is gridded to help stitch seams of various widths.

Tools and materials

Speed control A slide, to control the . speed of your machine.

Spool holder

To hold your sewing thread in place.

.. Bobbin winder

Winds the thread from the spool onto the bobbin, keeping it under tension (see page 16).

. Balance wheel

This can be turned toward you to move the needle up or down manually.

.. LCD screen

An illuminated screen that indicates which stitch you are using.

. Touch buttons

Use these to change the type of stitch you are using and to increase and decrease the size and width of stitch.

Touch buttons

These quickly select the most popular stitches, such as zigzag and buttonhole.

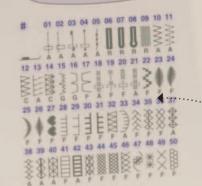
Stitch library

All the different stitches this machine can stitch. You just have to key in the number.

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Buttons

To provide various functions, such as reverse, locking stitch, and needle-in.



Sewing-machine accessories

Many accessories can be purchased for your sewing machine to make certain sewing processes so much easier. There are different machine needles not only for different fabrics, but also for different types of thread. There are also a huge number of sewing-machine feet, and new feet are constantly coming onto the market. Those shown here are some of the most popular.

PLASTIC BOBBIN

METAL BOBBIN



The bobbin is for the lower thread. Some machines take plastic bobbins, others metal. Always check which kind of bobbin your machine uses, since the incorrect choice can cause stitch problems.



Also known as a universal bobbin, this is used on many types of sewing machines. Be sure to check that your machine needs a metal bobbin before you buy.

FREE EMBROIDERY OR DARNING FOOT



A foot designed to be used when the feed dogs on the machine are lowered. This enables a free motion stitch to be worked.



OVEREDGE FOOT



A foot that runs along the raw edge of the fabric and holds it stable while an overedge stitch is worked.

EMBROIDERY FOOT



A clear plastic foot with a groove underneath that allows linear machine embroidery stitches to pass under.

MACHINE NEEDLES

There are different types of sewing machine needles to cope with different fabrics. Machine needles are sized from 60 to 100, a 60 being a very fine needle. There are special needles for machine embroidery and also for metallic threads.

WALKING FOOT



This foot "walks" across the fabric sandwich so the upper layer doesn't push forward. Great for machine quilting and for working on difficult fabrics.

ZIPPER FOOT



This foot fits to either the right- or left-hand side of the needle, enabling you to stitch close to a zipper.

INVISIBLE ZIPPER FOOT



A foot that is used to insert a concealed zipper—the foot holds open the coils of the zipper, enabling you to stitch behind them.

ROLLED HEM FOOT



This foot rolls the fabric while stitching with a straight stitch or a zigzag stitch.

BEADING FOOT, NARROW



This foot has a narrow groove and is used to attach small beads or decorative cords.

PIPING FOOT



A deep groove in this foot allows a piping cord to fit underneath, enabling close stitching to the cord.

RIBBON FOOT



A foot that will feed either one or two ribbons evenly under the machine needle to ensure accurate stitching.

FEET FOR PATCHWORK

All sewing machines come with a standard presser foot as well as a selection of specialized feet for various purposes. Among the most useful for quiltmaking are:

 $\frac{1}{10}$ mm sector because a seam of exactly $\frac{1}{10}$ mm, rather than the $\frac{3}{10}$ mm (10mm) presser foot that is standard in dressmaking.

Open-toe foot: Useful for appliqué and quilting.

Free-style quilting foot: "Floats" on a spring mechanism for free-motion quilting.

Twin-needle foot: Gives interesting textured effects.

Sewing-machine accessories

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Threads

There are many threads available and knowing which ones to choose can be confusing. There are specialty threads designed for special tasks, such as machine embroidery or quilting. Threads also vary in fiber content, from pure cotton to rayon to polyester. Some threads are very fine, while others are thick and coarse. Failure to choose the correct thread can spoil your project and lead to problems with the stitch quality of the sewing machine or serger.

Cotton thread \downarrow

A 100% cotton thread. Smooth and firm, this is designed to be used with cotton fabrics and is a favorite of quilters.



Quilting thread \downarrow

Quilting thread is heavier than sewing thread and is waxed to prevent breaks.





Silk thread \downarrow

A sewing thread made from 100% silk. Used mainly for hand appliqué and sewing on delicate silk fabrics. Also useful for basting in areas that need to be pressed, since it can be removed without leaving an imprint.



Button thread \downarrow

18

A thicker polyester thread used for decorative top-stitching and buttonholes. Also for hand-sewing buttons on thicker fabrics and some soft furnishings.



Polyester all-purpose thread \downarrow

A cotton-coated polyester thread that has a very slight "give," making it suitable for sewing all types of fabrics and soft furnishings. The most popular type of thread.



Serger thread \downarrow

A dull yarn on a larger reel designed to be used on the serger. This type of yarn is normally not strong enough to use on the sewing machine.



Metallic thread \downarrow

A rayon and metal thread for decorative machining and machine embroidery. This thread usually requires a specialized sewing-machine needle.



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Embroidery thread \downarrow

Often made from a rayon yarn for shine. This is a finer thread designed for machine embroidery. Available on much larger reels for economy.



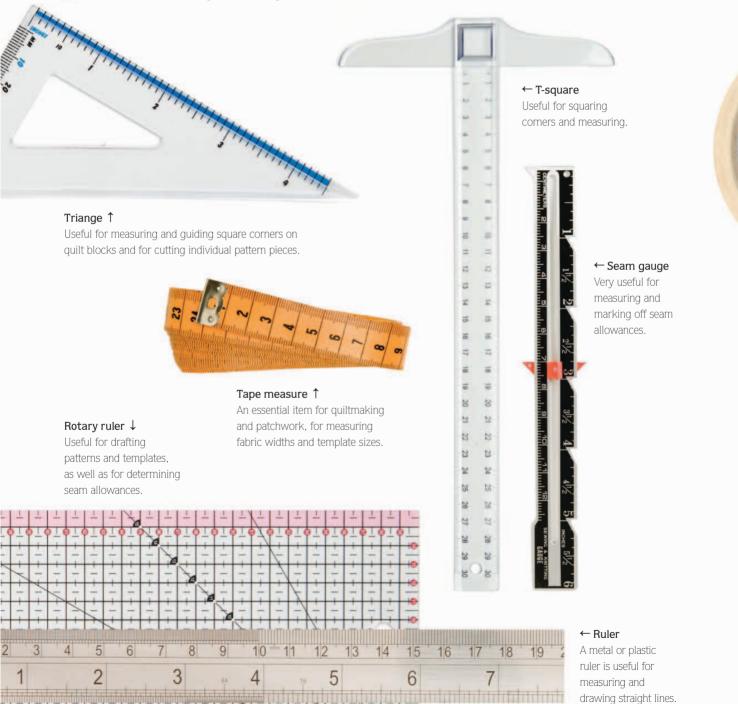






Measuring tools

Most of the basic measuring and marking tools that a quilter needs are standard items in a home office or workshop. Some can be found in a general sewing kit or a desk drawer.



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Marking tools

Various kinds of pencils and pens are used to draw designs and mark seam allowances on both paper and fabric. Some markers, such as tailor's chalk and water-soluble pen, are nonpermanent.



 $\frac{1}{4}$ -inch masking tape → Masking tape $\frac{1}{4}$ -inch wide can be used as an easily removable quilting guide.

Tailor's chalk ↑ The white line of tailor's chalk shows clearly on most fabrics and can be removed easily. Pencils \rightarrow

A selection of colored pencils can be used to mark clearly on fabric when tracing or transferring patterns or designs.

Blue washable pen \rightarrow

A water-soluble pen can be used for transferring patterns or drawing around templates.

Fine-point lead pencil → A sharp point is essential for drawing designs and templates.



Templates and stencils

Templates and stencils are more durable if they are cut from translucent template plastic, rather than cardboard. Cut using a craft knife to ensure accuracy. Freezer paper (see page 136) can also be used to create templates and is especially useful in some appliqué work.

Tracing paper \downarrow

This is essential for tracing motifs or pattern pieces onto template plastic, or cardboard, before cutting out.

Freezer paper \downarrow

A good option for appliqué templates, freezer paper can be ironed onto the fabric and removed later.

Ready-made window template \rightarrow

Made from sturdy template plastic or metal, a window template is used to mark both the outline and the seamline without the need for two templates.

Ready-made quilting stencil \rightarrow

A quilting stencil can be used to transfer a pattern onto the fabric. Trace the stencil design with tailor's chalk or a nonpermanent marker.

Cardboard

Stiff cardboard can be used to make templates but will not be as long-lasting as plastic.

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Miscellaneous items

Other useful items for quiltmaking can include graph paper, dressmaker's carbon paper, slivers of soap, flexible curves, drawing compasses, protractors, and erasers, which can all help with designing and transferring pattern pieces or motifs.

Flexible curve \rightarrow

Al Patrick and Survey Survey Survey

This is a useful device for marking and measuring curved patterns.



Drawing compass ↑ A compass is very useful for drafting curved templates or drawing circular appliqué motifs.

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Eraser ↑

A useful item to have on hand when drawing or tracing designs.

> **Graph paper** This is helpful in designing, transferring, or scaling designs.

Dressmaker's carbon paper \downarrow

This is a permanent method of transferring designs to the wrong side of the fabric, using a marking wheel or pencil.

Cutting equipment

Scissors are absolutely essential in quiltmaking and you should have at least three pairs: one dedicated to cutting fabric; one for paper and batting; and a small, sharp pair for snipping threads. A rotary cutter speeds up quiltmaking.

Rotary cutter ↑ Cutters come in numerous shapes and several blade sizes, as well as decorative-edge cutting blades.

Small sharp scissors \rightarrow

Use for snipping thread ends, clipping seams, and trimming and grading seam allowances. A specialized version of small scissors called appliqué scissors can be helpful in appliqué work. The blades are curved to protect layers that are not being trimmed from being damaged by sharp points, but they should not be seen as a replacement for your ordinary pair of small scissors. Seam ripper ↑ Used for removing stitching that has gone awry and for "reverse sewing."

Pinking shears ↑ Useful for cutting fabric that tends to fray.

Rotary ruler \rightarrow

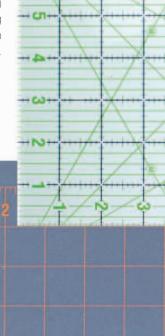
With measurements broken into ¹/_{sin} (3mm) segments and angled lines for measuring 45- and 60-degree angles, rotary rulers can be square, rectangular, or triangular.

Craft knife → This is invaluable for cutting stencils from template plastic.

Self-healing mat \rightarrow

Marked with a grid in 1 in (2.5cm) increments, the surface material "heals" itself after cutting with a rotary cutter, leaving it smooth again without slits or grooves to catch the cutter the next time you cut. Do not cut the top surface with a craft knife.

wi





Fabric scissors \uparrow

These have bent handles, which allow the fabric to lie flat on the surface while you are cutting out your pieces.

Fabric and batting

The standard quilting fabric is 100 percent cotton, which comes in a vast range of colors, patterns, and weaves and is easy to work. Batting is used as the filling between the quilt layers. Use large frames or hoops to hold the layers in place while you quilt.

$\leftarrow \text{Solid cotton fabrics}$

Solid-colored fabrics are often used for the foundation of quilt designs and borders, and for the quilt backing.

← Batting

Batting is the soft middle layer between the quilt top and the backing. It is available in polyester, cotton, or a combination of the two. Wool and silk batting is available for specialized work.

Printed fabrics \downarrow

Traditional patchwork quilts are constructed with printed fabrics, and small-scale prints work well together.

Check fabric \rightarrow

Checks work well combined with solids for simple patchwork or quilting designs.

Medium-scale prints \rightarrow

Ideal for patchwork, medium-scale prints can be successfully combined with solid fabric and small-scale prints for texture and interest.

↓ Hand-dyed fabric

The natural variations in hand-dyed fabrics look very attractive in quilted or patchwork projects.

↓ Large-scale prints

Large-scale prints work best in large-size blocks. Individual motifs can be cut out and used in appliqué, or fussy cut for patchwork.

Pressing aids

Hillin

Successful patchwork and appliqué rely on successful pressing. Correct pressing equipment can make all the difference in achieving a neat, professional finish.

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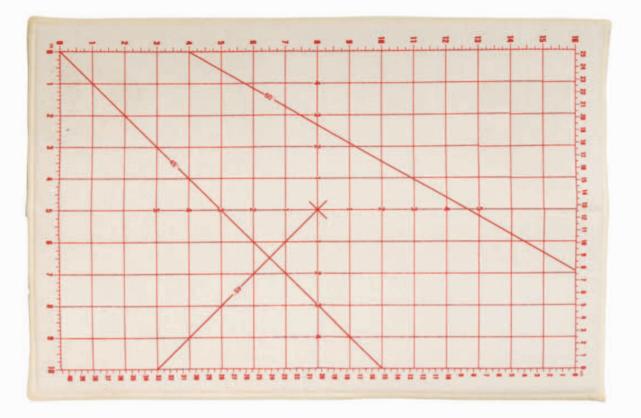
← Iron

A good-quality steam iron is a wonderful asset. Choose a reasonably heavy iron that has steam and a shot of steam facility.





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Pressing mat ↑ A heat-resistant mat for pressing small items and single blocks; often backed with a small cutting mat.

Ironing board \uparrow

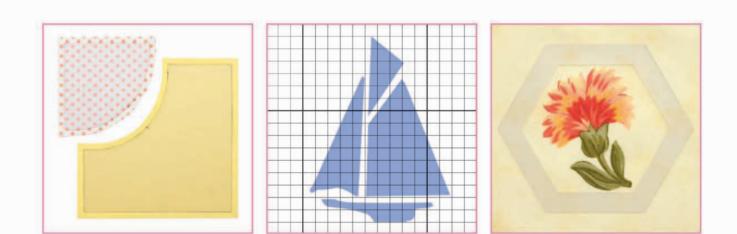
Essential to iron on. Make sure the board is height-adjustable.

Pressing cloth \rightarrow

Choose a cloth made from silk organza or muslin, since you can see through it. The cloth will stop the iron from marking fabric and keep delicate fabrics from burning.



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DESIGN PRINCIPLES AND GENERAL TECHNIQUES



PINWHEEL PATTERN

Identical half-square triangle patches (pages 61–63) have been alternated and combined with simple squares to make a lively Pinwheel star that takes the eye across the work.

Design principles

Most patchwork and many appliqué quilts are based on patterns comprised of blocks—that is, squares made following the same pattern, which are then assembled to make the quilt top. This means that they can be broken down into working units that are easier to cope with than a large overall design. There are literally hundreds of existing blocks that you can make in fabrics and colors of your own choice but, once you understand the basic principles, it's fun to come up with patterns of your own.

Planning your own blocks

The main patchwork block categories are four-patch (see pages 67–69), nine-patch (see pages 70–71), five-patch, and seven-patch (see pages 72–75). Each one lends itself to certain finished block sizes. Four-patch patterns can always be divided by even numbers, while nine-patch blocks are easiest to work with if the finished size is divisible by three. Five-patch and seven-patch patterns are more limited; they are multiples of 5×5 and 7×7 units (or patches) per block, respectively.

If you want to design your own block pattern, start by deciding what size you want your finished block to be and draw it on paper, subdividing it into the relevant number of patches. Further subdivide each patch into strips, triangles, smaller squares, or rectangles to create your design. When you are satisfied,

transfer each element to another piece of paper and add a seam allowance to each side of each separate element.

With appliqué patterns, enlarge or reduce the pattern if necessary (see page 36) and copy it onto tracing paper. Decide which elements should be cut as separate pieces and trace them individually onto another piece of tracing paper so they can be cut out and used as patterns.

Many blocks can be supersized by dramatically increasing the dimensions of a single block, making quilts of an ideal size for baby quilts. Combining several of these bigger blocks allows the quick creation of a full-size quilt.



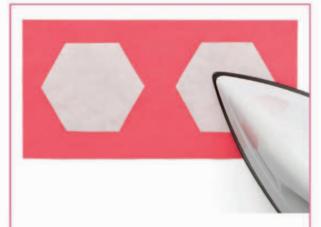
Patchwork block

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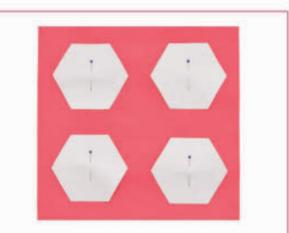
Appliqué block

Using templates

Some elements require templates, which are copies of the pieces of the pattern. Ready-made templates are available from quilt stores and online. Find out if the seam allowances have been added. Elements to be machine pieced must include the exact seam allowances, while appliqué patterns and those for hand piecing do not need a precise allowance, but are generally cut larger than the finished shape. Many templates are cut with a "window" that shows the area of fabric you will finish up with; this also enables you to mark the seamline and the cutting line without moving the template. Alternatively, you can make your own long-lasting or limited-use templates following these instructions.



Limited-use templates using freezer paper: Trace the pattern pieces onto freezer paper and cut them out. Iron onto the wrong side of the fabric and then cut out around the shape.



Limited-use templates using tracing paper: Pin the template in place and cut out the shape, again adding the seam allowances by eye.



Durable templates using heavy cardboard: Draw the shapes on paper or tracing paper. Cut them out; draw around them on heavy cardboard. Add the seam allowances and cut them out. Or glue the shapes to cardboard, add allowances, and cut out.



Durable templates using template plastic: Trace the shapes directly on to the template plastic or cut them from paper and glue them to the plastic sheet. Cut them out with a craft knife or paper scissors.

Fabric: prints and plains

The scale: The size of the image—its scale—is an important factor when working with print fabrics. A large-scale pattern is generally more difficult to work with, but it can be used successfully, especially in bigger blocks. Try combining large prints with plain fabrics, especially conversation prints with themed motifs. These are useful for making quick-and-easy baby and children's quilts. Medium-scale prints can be fussy-cut (see page 41) quite effectively, and small-scale patterns are usually simple to use, since they can be cut into small units that have a consistent look. There are also hand-dyed fabrics (or fabrics printed to look as if they have been hand dyed) and tone-on-tone fabrics that have tiny motifs printed on a background of the same color that look almost like plain colors from a distance. These give more visual texture than a solid plain color and can really help to bring a design to life.

Geometric-patterned fabrics: Fabrics like stripes, checks, and tartans can make fascinating secondary patterns when they are cut and reassembled. Widely used in country-style quilts, they need careful handling to be most effective. Stripes, in particular, can be set in different directions to create visual movement within

a block, while checks and plaids can be combined with each other or with solid fabrics to great effect.

Borders and sashing: A plain color can act as a foil to a busy print, giving the eye somewhere to rest and providing the avid quilter with a place to show off skills. Plain sashing (see page 156) can direct a viewer to the block pattern within, and, while borders can be patterned and pieced, plain borders frame and contain a quilt in a special way. Balance—between prints and solids, lights and darks, warmth and coolness—is key to any successful design, and the more quilts you look at, and make, the better your judgment will become. One way to work is to choose a main print first and then coordinate the solids and other prints around it.

Creating a design wall: Working on a design wall is a good way to test how fabrics will look, since it allows you to step back and view options from a distance. Hang a plain white sheet over a door to make a temporary version, or fashion a moveable one from foam board covered with white flannel over a layer of batting. If you have room for a permanent version, mount cork or foam board on a wall in your sewing area.

PRINTS

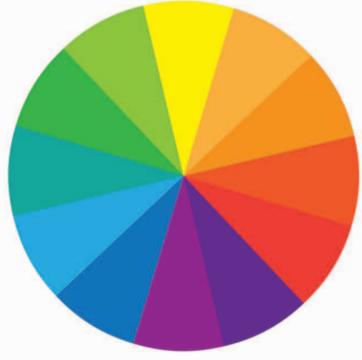


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Design principles and general techniques

Understanding color

Understanding the basic principles of color theory is crucial to designing a successful quilt. Even a simple design gains impact from good color choices. The three primary colors—red, yellow, and blue—can be placed side by side to create a color wheel. When two adjacent colors are combined, they create "secondaries." Red and yellow make orange, yellow and blue make green, and blue and red make purple. Intermediate colors, called tertiaries, occur when a secondary is mixed with the nearest primary.





Complementary colors: Colors that lie opposite one another on the wheel, such as red and green, or yellow and violet, are called complementaries. They provide contrasts that accent design elements and make both colors stand out. Don't forget black and white, the ultimate opposites.

Color temperature: Color has a visual "temperature," with some colors being perceived as "warm" and others as "cool." Many people tend to think of blue and its adjacent colors as being cool, while the reds and yellows are warm, but, in fact, there are warm and cool versions of all the primaries; think, for example, of a warm, azure blue and a cold, icy blue. Color temperature is an important element in whether a color recedes or advances—that is, in whether it stands out from or blends in with the background and surrounding colors.

Color tone: Tone, or value, is the relative lightness or darkness of a particular color. While some fabrics are obviously dark or light in value, others take their value from the colors surrounding them. Almost all successful quilts rely on contrasting values. These are not necessarily just differences in their qualities of lightness and darkness, but in how the colors react to each other. A quilt made entirely of middle values, even if the colors themselves are quite different, will lack impact and eye appeal.

Monochromatic designs: These use different versions of the same color. So a quilt based on greens will not stray into the red section of the color wheel, but might have shades and tints of yellow and blue mixed in, which can then become "harmonious" combinations of colors that are next to each other on the color wheel. These "adjacent" colors can also be combined to great effect, as long as there are differences in value between them.

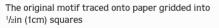
General techniques

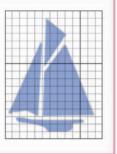
Quiltmaking involves different stages and different techniques, but some aspects of making a quilt, whether it is pieced or appliquéd, are the same. The skills outlined in this section will help you, whichever type of quilt you choose to make.

Altering the size of a design or pattern

The easiest way to alter the size of a motif is to photocopy it. To enlarge, take the size you want the motif to be and divide it by the actual size of the template. Multiply by 100% and set the copier to that number on the enlargement side. To reduce, divide the desired size of the motif by the actual size, multiply by 100%, and set the copier on the reduction side.

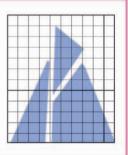
1 For nongeometric designs, trace the outline onto gridded paper. To make a pattern twice the size of the original, double the grid on another piece of paper. If you trace on ¹/₂in (1cm) squares, for example, increase the size of each square in your new grid to 1 in (2cm).





2 Transfer the lines within each square to correspond to the original image. Trace the pattern again to smooth out any distortions.

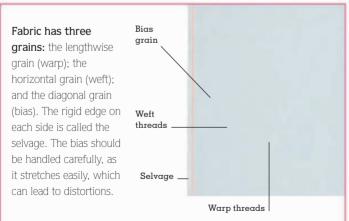
The motif enlarged onto a 1in (2cm) grid



Preparing fabric

All cotton fabrics shrink a little during the first wash. Shrinkage is usually minimal, but it can distort the finished quilt. Using fabrics that have been washed with those that haven't can cause seams to pucker. Always test fabrics for color

- fastness, especially dark ones. Before you start to cut, iron each piece and make sure the straight of grain is true by
- checking against the selvage.



TIPS

• If you think color may bleed, test it by pressing a small damp piece of white fabric on the fabric to be used.

• When prewashing fabric, snip off a small triangle at each corner to prevent fraying. Washing small pieces of fabric in a lingerie bag will help prevent fraying.

• Cut borders on the lengthwise grain to minimize stretching.

• To find the lengthwise grain, pull it gently along both straight grains. The stretch will be greater along the weft, or widthwise, grain.

• Try to position bias edges away from the edges of a block to minimize stretching and keep the size of the block accurate.

Rotary cutting

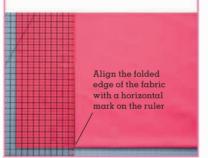
Many of the most popular patterns can be rotary cut. You will need a rotary cutter, transparent plastic ruler, and a self-healing mat. When cutting a square into other shapes, such as right-angled triangles, start with a square that is larger than a simple square in the same-sized block, to allow for a seam allowance on bias seams.

BASIC ROTARY CUTTING

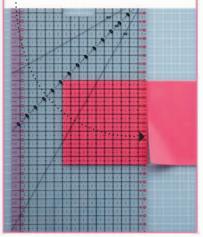
1 Fold washed and pressed fabric to fit on the mat. Place the ruler over the fabric that you intend to use. Level off the end of the fabric by cutting away from your body. Keep the hand holding the ruler steady and away from the cutter.



2 Turn the mat so as not to disturb the newly cut edge and place the ruler over the area that you want to use. Align the correct measurement on the ruler carefully along the vertical cut edge and line up the folded edge with a horizontal mark. Cut a strip of the desired width along the grain.

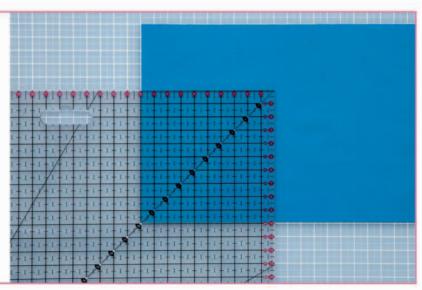


3 To cut strips into smaller units, position the cut strip horizontally on the mat and measure as before.

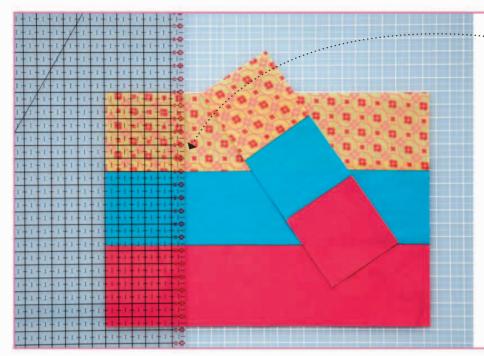


CUTTING SQUARES AND RECTANGLES

Squares and rectangles can also be cut using a square rotary ruler, which has a guideline marked across the diagonal from corner to corner. Add ⁷/ein (2.25cm) seam allowance for right-angle triangles and 1¹/ein (2.75cm) for guarter-square triangles.



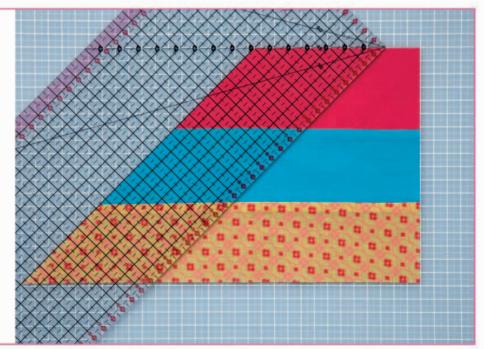
CUTTING PIECED STRIPS



Press the strip and place it right side up horizontally on the mat. If necessary, level the strip at one end, as in Step 1 of basic rotary cutting (see page 37). Turn it, cover the "good" fabric with the ruler, and cut pieced strips of the desired size.

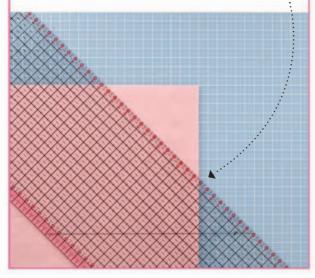
CUTTING PIECED STRIPS ON THE BIAS

Trim one end of the pieced strip at a 45-degree angle, using the line marked on the ruler. Cut strips of the desired width at the same angle by measuring along the straight edge of the ruler.



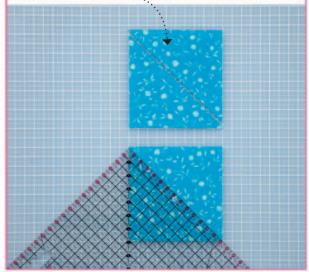
CUTTING TRUE BIAS STRIPS

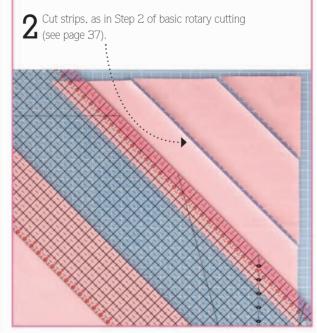
Level the straight grain as in Step 1 of basic rotary cutting (see page 37). Measure a 45-degree angle at the top leveled corner, and cut a short bias edge as a guideline.



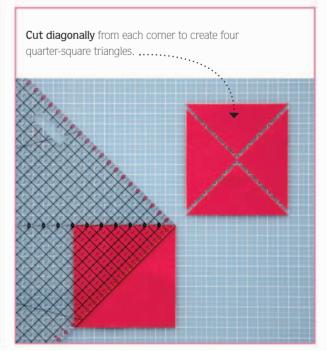
CUTTING HALF-SQUARE TRIANGLES

Cut half-square triangles across the diagonal of a square, taking particular care when cutting the sides that are not on the straight of the grain....



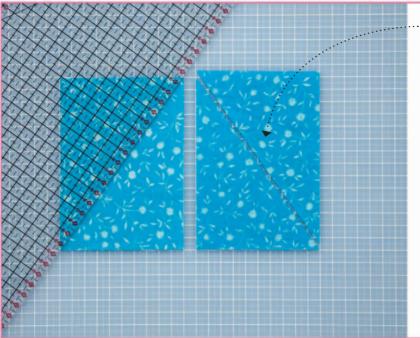


CUTTING QUARTER-SQUARE TRIANGLES



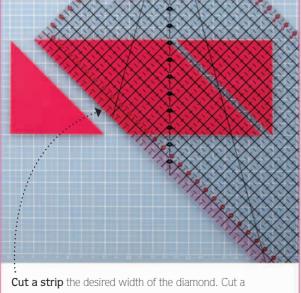


CUTTING IRREGULAR TRIANGLES



Cut a rectangle across the diagonal to create two irregular long triangles. For a matching pair, cut another rectangle starting at the opposite corner. Triangular rotary rulers are also available.

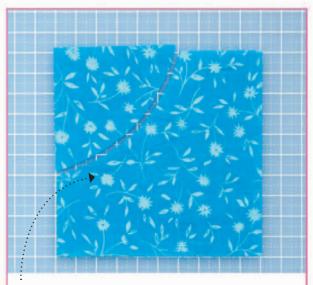
CUTTING 45-DEGREE DIAMONDS



Cut a strip the desired width of the diamond. Cut a 45-degree angle at one end of the strip and use the same measurement to cut the diamond shape.

40

CUTTING CURVES



Gentle curves can also be rotary cut, but it is advisable to use a small blade.

Cutting by hand

Quilters generally cut with scissors if the pieces are small, or intricate, or have unusual angles or shapes. Appliqué motifs are almost always best cut by hand. You should keep at least one pair of good-quality sharp dressmaker's scissors dedicated to cutting only cloth. Paper, template plastic, batting, and the like should not be cut with the same pair. Most quilters have several pairs of scissors in different sizes.

CUTTING WITHOUT A PATTERN

1 Mark the outline of the shape to be cut on the wrong side of the fabric and add a seam.

2 Using fabric scissors, cut out the shape along the marked cutting line—or cut a short distance away if only the stitching line is marked.



CUTTING WITH A PATTERN

Patterns made from paper are familiar to dressmakers, and sometimes they provide an easy way for quilters to cut a few similar shapes. Pin the pattern to the fabric and cut around it, adding the seam allowance, if necessary.



FUSSY CUTTING

This is a method of isolating particular motifs in printed fabric and cutting them to show as a feature in a block of patchwork or appliqué. It can seem wasteful of fabric, but the results are usually worth it. It is easier to delineate the desired area if you cut a window template to the finished size and shape.



Unpicking seams

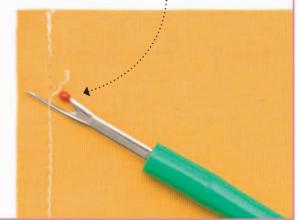
Everyone makes mistakes and sometimes seams must be removed; moreover, some patterns depend on taking out seams during construction. It is vital that the ripping-out process does not stretch the fabric edges. Unpicking works best on seams that haven't been pressed. Never use scissors to unpick a seam.

METHOD 1

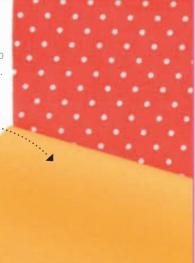


METHOD 2

1 Hold the seam taut and insert the point of the seam ripper into every third or fourth stitch, breaking the thread as you work your way along the seam.



2 Hold the bottom strip flat and pull gently on the top strip to separate the layers. Do not use this method on bias seams.



Starting and finishing

Securing the thread at the beginning and end of any stitching is, of course, essential. Traditional hand sewing begins and ends with a knot at the end of the thread, but knots can interfere with quilting and sometimes show on the quilt top. There are several knots that are useful for quiltmaking, including quilters' knots (see page 170). Backstitched loops have almost no depth to them and are a secure way of tying off.

THREADING A NEEDLE

 \mathbf{l} Thread the end of the thread that comes off the spool through the eye of the needle, then cut to the desired length. Working in the same direction as the spinning process that wraps the thread around the spool means that it is less likely to knot and tangle as you work.

2 The thread will feel smoother if you run it between your thumb and index finger in the direction of spinning. Trim the end, if necessary—it is easier to thread a cut end than a broken one.

TIPS

• Thread weight: Use a thread weight appropriate to the needle size and a needle size appropriate to the weight of the fabric.

• Thread length: Keep the thread length to no more than 20in (50cm) long, since it is less likely to kink and fray.

• Needle threader: Use a needle threader if you have difficulty getting the thread through the eye.

• Cutting direction: Cut away from your body, whenever possible.

• Knot size: Knots make a lump wherever they occur, so make sure that they are small so that they can be easily hidden.

WRAPPED KNOT



2 Anchor the wraps with your thumb and index finger. and pull the needle through gently with your other hand. Hold the wraps until the knot is tight at the end of the thread.



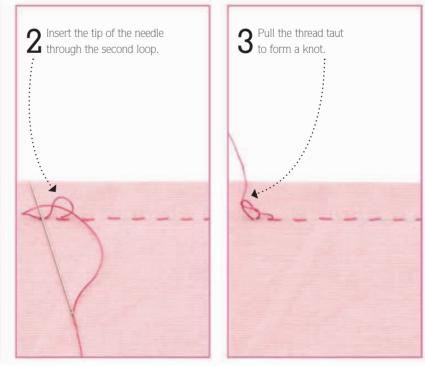


BACKSTITCHED LOOP

1 This method doesn't have the bulk of a knot but is secure. Backstitch once at the end of a line of stitching, and pull the needle through; do not pull the thread taut, but leave a small loop of thread.

DOUBLE BACKSTITCHED LOOP

1 This method is even more secure. Backstitch once at the end of a line of stitching, leaving a small loop of thread as in Step 1 of the back-stitched loop (above). Insert the tip of the needle through the loop and pull it through to form a second loop, creating a figure eight.



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Design principles and general techniques

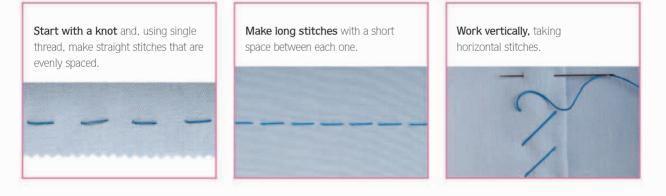
Basting stitches

Each of the many types of basting stitches has its own individual use. Basic bastes hold two or more pieces of fabric together. Long and short bastes are an alternative version of the basic basting stitch, often used when the basting will stay in the work for some time. Diagonal bastes hold folds or overlaid fabrics together, while slip bastes are used to hold a fold in fabric to another piece of fabric.

BASIC BASTES

LONG AND SHORT

DIAGONAL BASTES

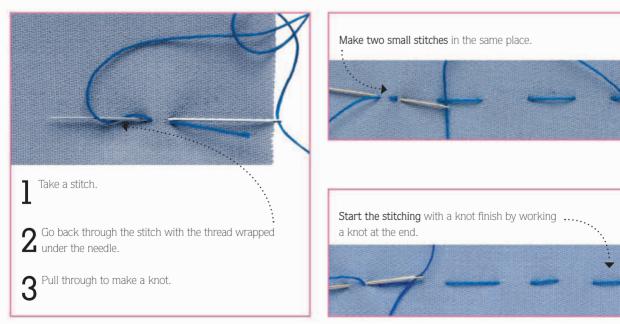


Securing the thread

The ends of the thread must be secured firmly, especially if the hand sewing is to be permanent. A knot is frequently used and is the preferred choice for temporary stitches. For permanent sewing, a double stitch is a better option.

BACKSTITCH

DOUBLE STITCH



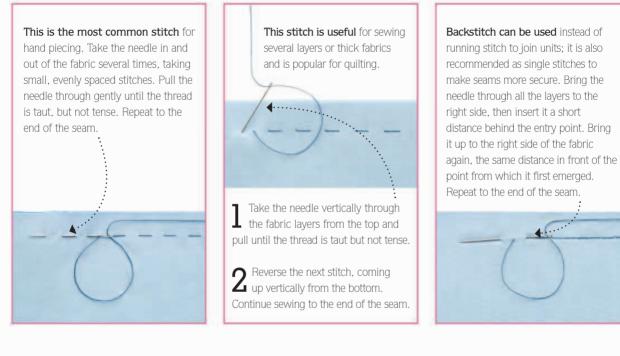
Hand stitches for quiltmaking

Although most quilts today are made on a machine, there are a number of techniques that are hand sewn and it is important to choose the correct stitch for the best result.

RUNNING STITCH

STAB STITCH

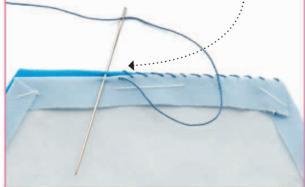




OVERCASTING

46

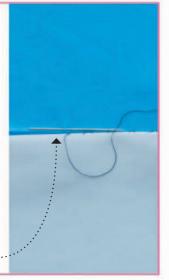
Also known as oversewing or whipstitch, overcasting is used to join two edges with an almost invisible seam. Bring the needle through the back edge to the front, picking up a few threads from each side. Pull gently and repeat.



SLIP STITCH

Used mainly in appliqué,

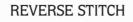
slip stitch makes an invisible line of stitching. Knot the thread and hide the knot in the folded edge of the top piece. Pull the needle through and pick up a thread or two on the back piece. Take the needle through the top piece next to this stitch and slide it along the fold in the fabric a short distance. Repeat, catching a few threads on each piece with each stitch.



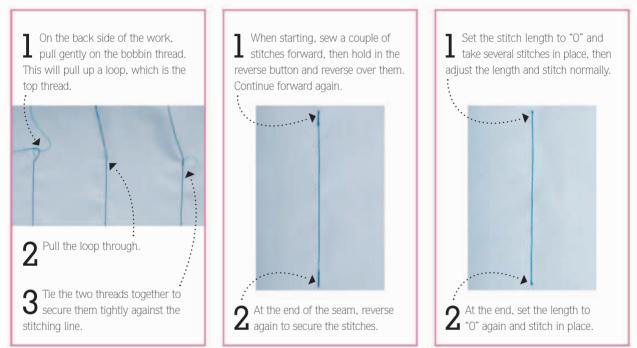
Securing the thread on a machine

Machine stitches need to be secured at the end of a seam to prevent them from coming undone. This can be done by hand, tying the ends of the thread, or using the machine with a reverse stitch or a locking stitch, which stitches three or four stitches in the same place.

TIE THE ENDS



LOCKING STITCH



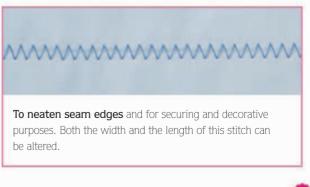
Stitches made with a machine

Unless you are embroidering or embellishing with decorative stitches, the machine stitches you will need in quiltmaking are straight stitch and occasionally zigzag.

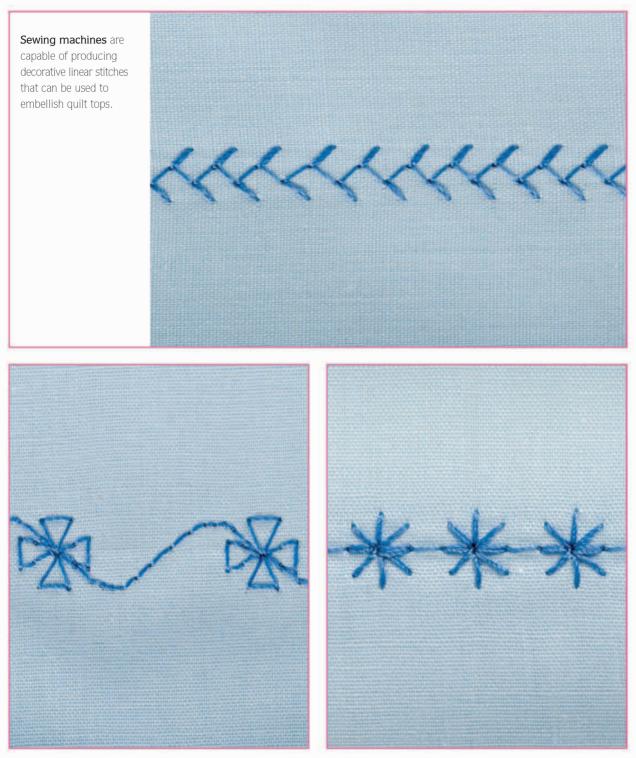
STRAIGHT STITCH



ZIGZAG STITCH



DECORATIVE STITCHES



48

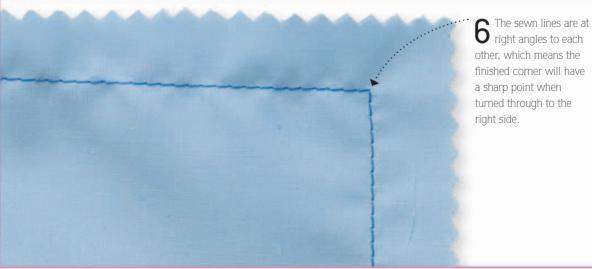
Design principles and general techniques

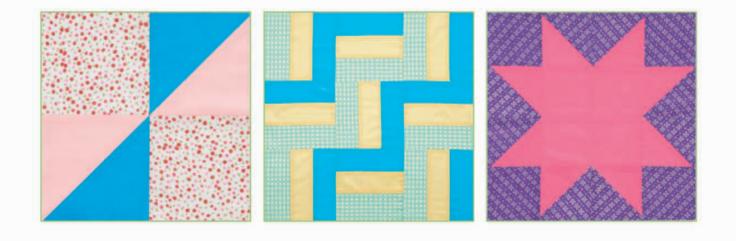
Sewing corners and curves

Not all sewing consists of straight lines. The work will have curves and corners that require manipulation, to produce sharp, clean angles and curves on the right side. The technique for sewing a corner shown below applies to corners of all angles. On a thick fabric, the technique is slightly different, with a stitch taken across the corner, and on a fabric that frays badly the corner is reinforced with a second line of stitches.

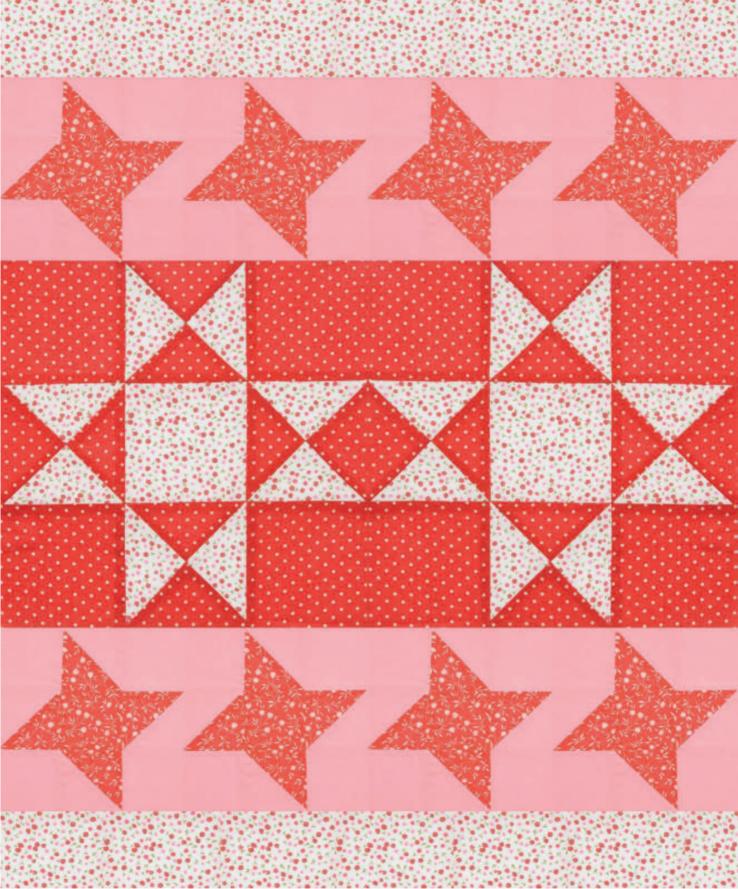
SEWING A CORNER







PATCHWORK





STARS AND STRIPES

Ohio star blocks (page 87) have been bordered with small Friendship stars (page 86) and strips of the central star fabric to create a patchwork table mat.

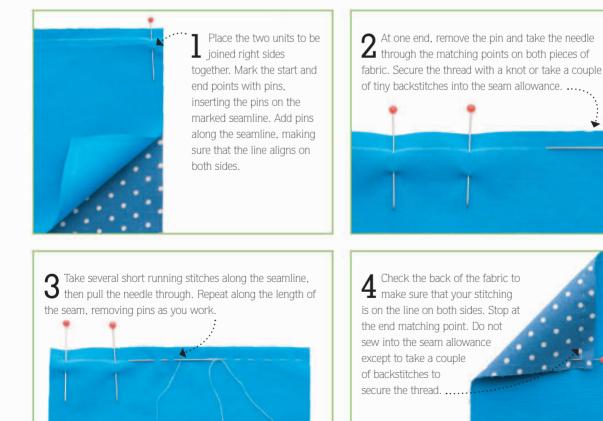
Patchwork

The majority of quilt tops, traditional and contemporary, are patchwork. While many of the basic techniques are the same or overlap, each method has its own issues and solutions. While making a patchwork quilt by machine is quicker, sewing by hand offers a satisfying pastime for many quilters.

Hand piecing

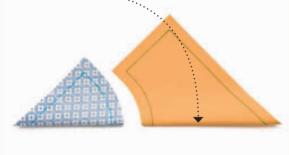
Mark all seamlines on the wrong side of the fabric as guides to accuracy. Take care when sewing seams on bias-cut edges (on diamond, triangle, or hexagon shapes) or around curves, since the raw edge is prone to stretching. Secure the seam with a small backstitch each time you bring the needle through and use a double backstitched loop (see page 44) at the end of a bias seam; do not sew into the seam allowance.

SEWING STRAIGHT SEAMS



SEWING CURVED SEAMS

 \mathbf{l} Mark the seamlines and any registration marks, especially the center point, on the wrong side of each piece. If the center isn't marked on the pattern, fold each piece in half, fingerpress it at the center seamline, and use the crease as the center mark.



 ${\bf 2}$ Place the smaller convex piece right sides together on the concave one, aligning the center points. Pin the center point through both pieces.



4 Take out the pin at one end and take the needle through the matching points. If you don't wish to use a knot, use a double backstitched loop in the seamline to secure the thread. (Do not sew into the seam allowance as you would for machine-piecing curved seams.)

5 Take several short running stitches along the seamline, then pull the needle through. Repeat along the length of the seam, removing pins as you work. The seam will be more secure if you take a small backstitch each time you bring the needle through.

6 Check the back to make sure your stitching is on the line on both sides and stop at the matching point at the end. Do not sew into the seam allowance, but use a double backstitched loop to secure the thread. Do not clip the seam allowance.

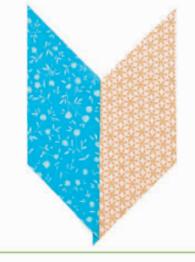


Press the seam toward the convex piece. If your

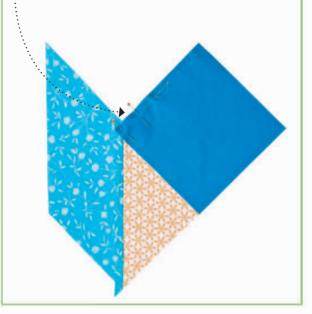
stitching is accurate, the piece will lie flat.

SETTING-IN BY HAND

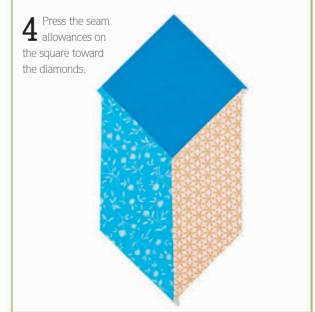
Diamonds and triangles sometimes meet at oblique angles. To set a piece into the resulting space requires careful pinning and sewing. Here, a square is to be set in the space between two diamond shapes. Cut the square to size and mark the seamlines. Match one corner of the square to the inner point on the first diamond and pin, right sides together. Then match the outer point and pin. Pin the edges together along the marked seamline.



 $2 \ \text{Sew}$ along the marked seamline from the outer point to the inner, removing pins as you work. Take a few small backstitches into the seam at the inner corner, avoiding the seam allowance. Do not cut the thread.







JOINING ROWS BY HAND

Because hand-pieced seams stop at the seam allowance, you need to match corners in a different way from machine piecing when joining rows.

1 Match the seamlines of the rows to be joined right sides together. Pin through both layers at the matching point at every corner of the row. Align the seamlines and pin at various points to make sure the seams are accurate on both sides.



2 Start sewing at one end of the row, working as for straight seams (see page 54), until you reach the first seam.

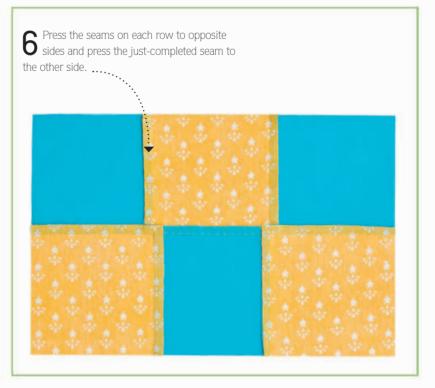
3 Sew through the matching points on both layers, avoiding all the seam allowances. ...



Take a stitch in the second pair of units, then backstitch next to the seam allowance.







7 Finished piece, right side

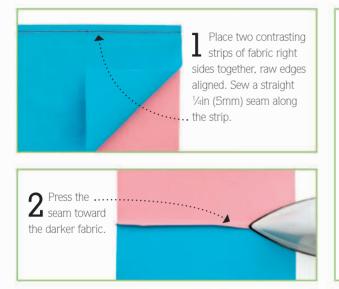




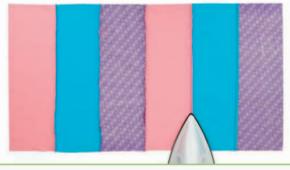
Machine piecing

- Stitching patchwork pieces by machine is a quick way of assembling a piece. As for hand piecing, always make
- sure that your fabrics are aligned with right sides together and with raw edges matching. Take a ¹/₄in (5mm) seam allowance and use a standard straight stitch.

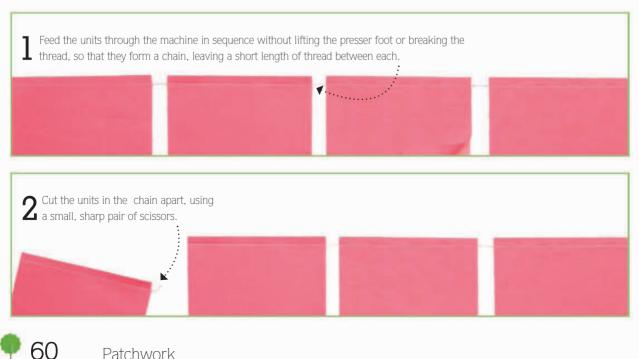
PIECED STRIPS



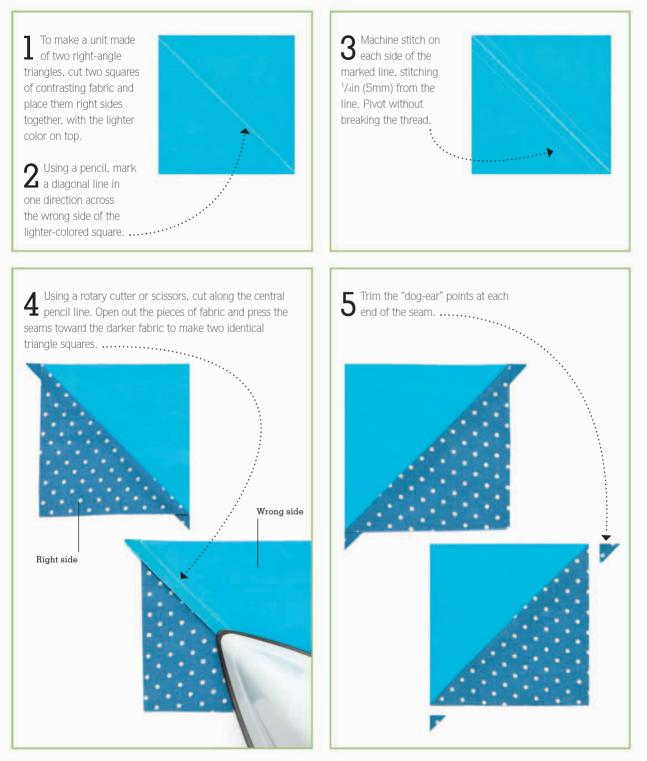
3 When piecing several strips together, reverse the direction each time you add a strip; this helps to eliminate bowing and keep the strips straight. The seams should all be pressed in the same direction. Then the strip can be cut into pieced units and combined into new patterns.



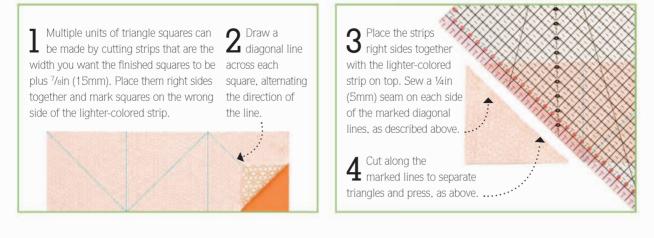
CHAIN PIECING



TRIANGLE SQUARES



MULTIPLE TRIANGLE STRIPS

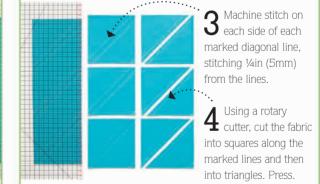


IDENTICAL MULTIPLE STRIPS

1 You can also make identical multiple triangle units by placing two large pieces of fabric together and marking a grid.

2 Mark diagonals in one direction. Remember that each square makes two units, so you will need half as many squares as finished units.



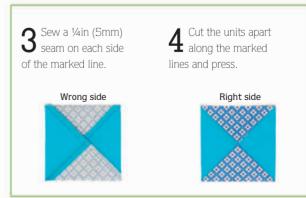


QUARTER-SQUARE TRIANGLES

Place the two triangle squares right sides together, with the seams aligned and the contrasting fabrics facing each other.

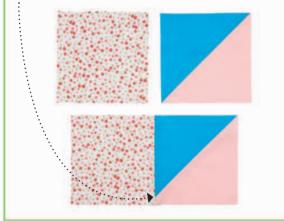
2 Using a pencil, mark a diagonal line at right angles to the seamline.

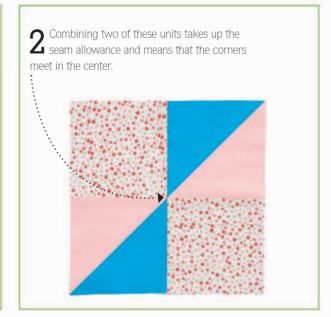




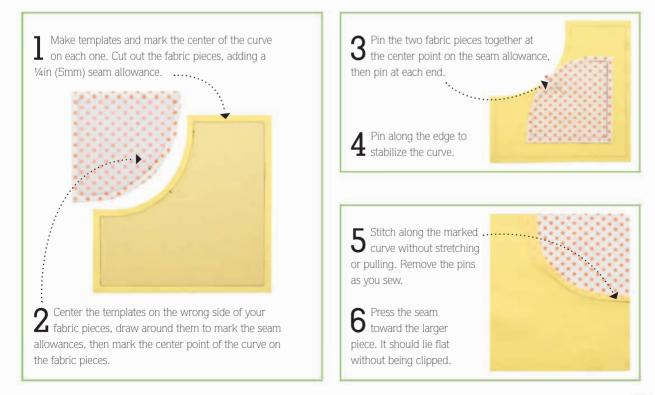
JOINING PIECED AND PLAIN UNITS

Place one pieced and one plain unit right sides together and sew a ¼in (5mm) seam. The corner of the triangle square will be caught in the seam with the visible corner ¼in (5mm) from the raw edge.



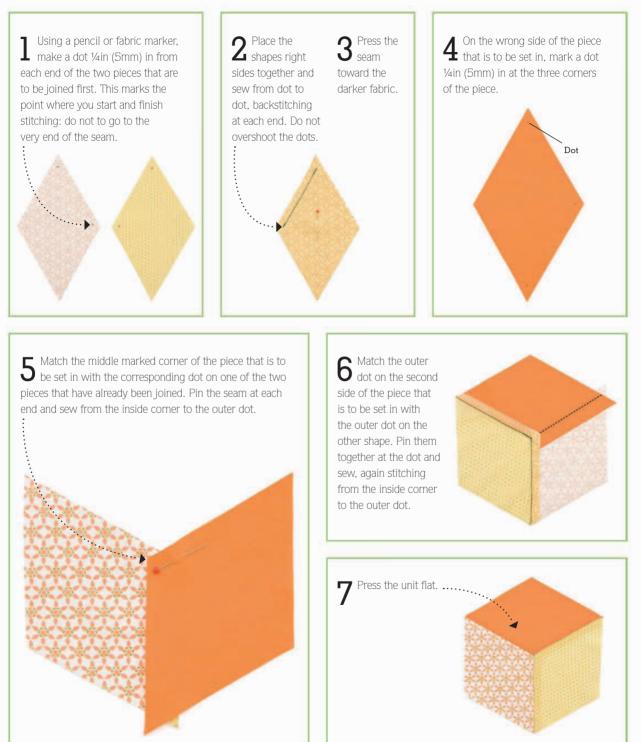


CURVED SEAMS





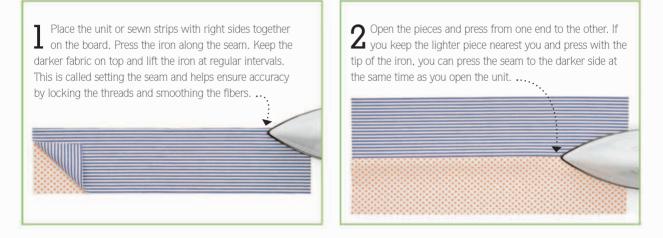
SET-IN SEAMS



Pressing

Pressing is essential when making accurate patchwork. When pressing, press down in one place, then lift the iron and move it before pressing down on another area. Ironing causes fabric and seams to distort. Set pieces aside to cool after each pressing and always press the seam toward the darker fabric to prevent darker colors from showing through. The temperature of the iron should be appropriate to the fabric.

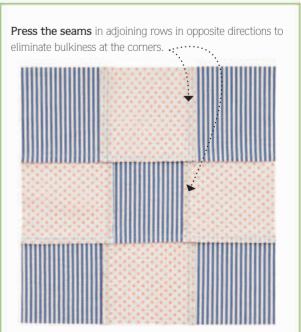
PRESSING STRAIGHT SEAMS



PRESSING BIAS SEAMS



WORKING IN ROWS





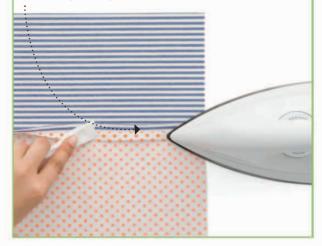
PRESSING A PIECED BLOCK

Place the block wrong side up on the ironing board. Do not press hard, but make sure the seams lie as flat as possible.



PRESSING SEAMS OPEN

Where several seams meet, you may need to press seams open to reduce bulk. After setting the seam as in Step 1 of pressing straight seams (see page 65), open the seam and press along the length with the tip of the iron.



THUMBNAIL

66

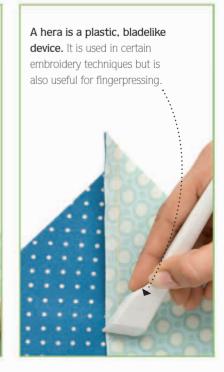
Work on a hard surface. Open the unit out and press first on the wrong side, then on the right, running your thumbnail gently but firmly along the seamline so that the fabric is pressed toward the darker fabric.



LITTLE WOODEN IRON

Place the flat, chisel-shaped edge of the tool on the seamline and run it gently along the seam.



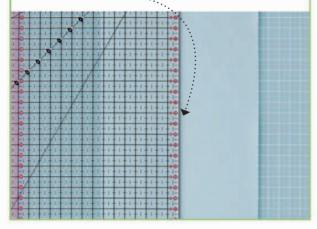


Four-patch blocks

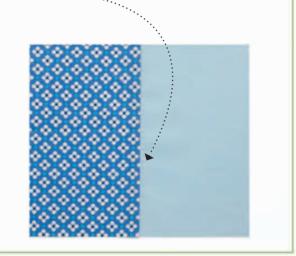
A simple four-patch block consists of four equal square units joined two by two. It relies on a strong contrast of value to be most effective. Individual units can be pieced to provide variety and secondary patterns. A double four-patch consists of 16 units made up of four four-patch units.

STRIP-PIECED FOUR-PATCH BLOCK

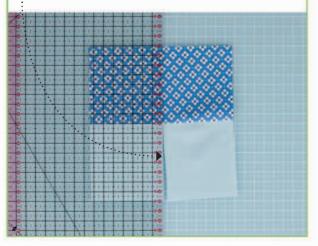
Using a rotary cutter, cut two contrasting strips across the width of the fabric. Here, the finished block will be 6in (15cm) square, so each unit will be 3in (7.5cm) wide, plus a ½in (1cm) seam allowance—so we cut 3½in (8.5cm) wide strips.



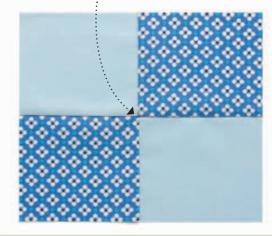
2 Taking a 1/4 in (5mm) seam allowance, join the strips lengthwise, right sides together. Press the seam toward the darker color.



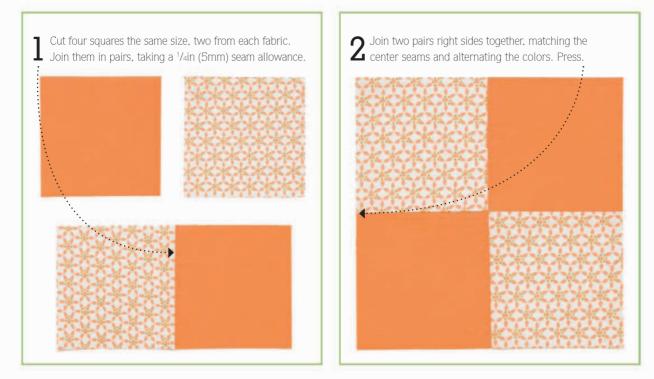
 $3^{\rm Yzin}_{\rm SM} (8.5 {\rm cm}) {\rm wide, the same width as the original strips.}$



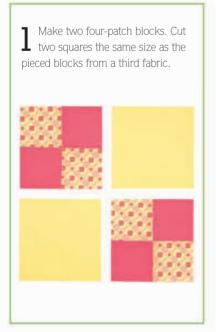
4 Join two units, matching the seams in the center and alternating the colors. Blocks can be chain-pieced (see page 60). Press.

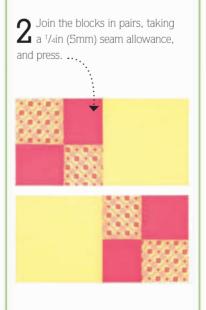


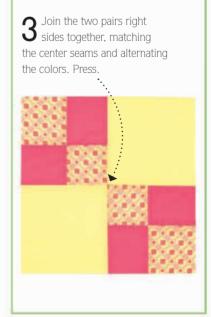
MAKING INDIVIDUAL BLOCKS



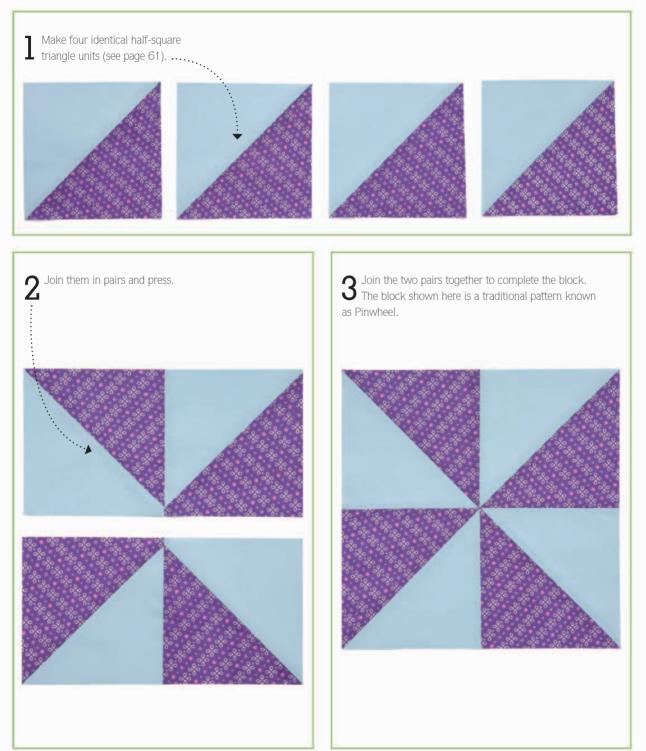
COMBINING PIECED AND PLAIN UNITS







PIECED FOUR-PATCH BLOCK



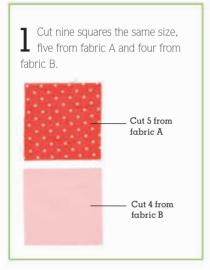


Nine-patch blocks

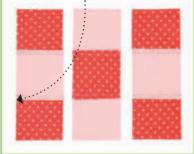
Nine-patch blocks, based on three rows of three squares each, are among the most versatile and widely used patchwork patterns. Each unit in the grid can either be a solid color or pieced, resulting in a huge variety of patterns. In double

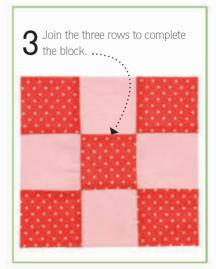
- nine-patch, small nine-patch units are combined in a larger nine-patch grid. As with four-patch blocks, units can be
- subdivided to form complex patterns.

INDIVIDUAL NINE-PATCH BLOCKS



2 Arrange the squares in a grid, A–B–A, B–A–B, A–B–A. Join them in three rows of three, matching the seams and taking a ¼in (5mm) seam allowance.





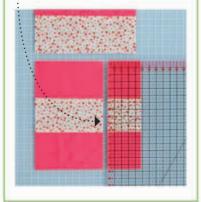
STRIP-PIECED NINE-PATCH BLOCK

LUSING a rotary cutter, cut strips across the width of the fabric from two contrasting fabrics. Here, the finished block will be 6in (15cm) square, so each strip will be 2in (5cm) deep plus a ½in (10mm) seam allowance. Arrange the strips to alternate fabrics, A–B–A and B–A–B, and join them taking a ¼in (5mm) seam. Press toward the darker fabric.



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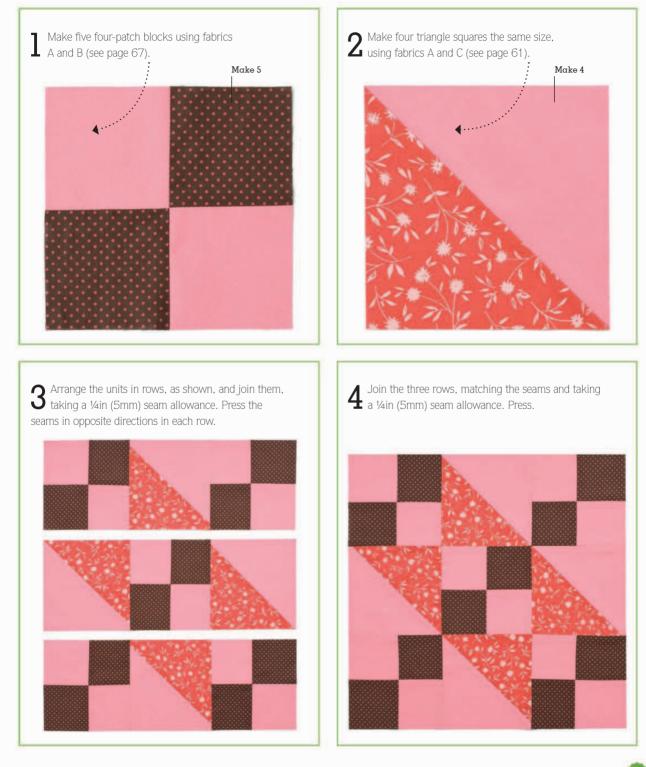
 $2^{\text{Cut both pieced strips across}}_{\text{the seams into units }2in + \frac{1}{2in}}_{(5cm + 1cm) wide. Note that the cut strips are the same width as the original strips.}$



Arrange the cut strips in rows of three, alternating the A and B fabrics, and join them, matching the seams. Blocks can be chain-pieced (see page 60). Press.



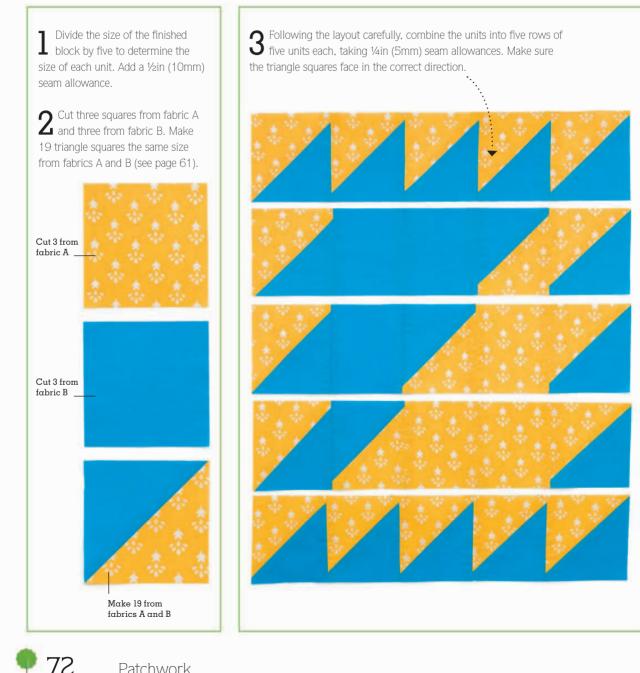
PIECED NINE-PATCH BLOCK: JACOB'S LADDER

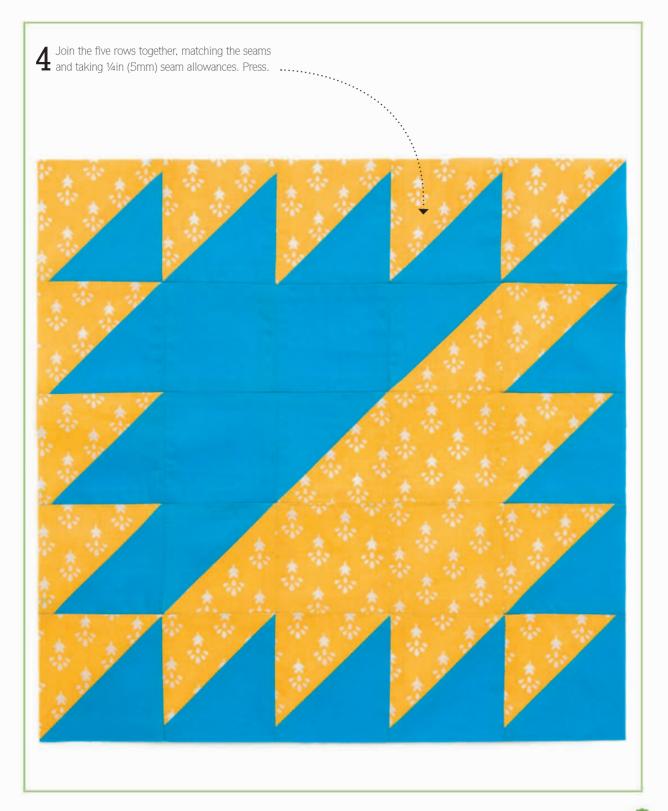


Five- and seven-patch blocks

Five-patch consists of a grid of five units in each direction, or 25 units in total. Seven-patch blocks have seven units each way, for a total of 49. Because these numbers don't divide easily, the size of the finished block should be considered carefully when planning a quilt, so as to make cutting easier. They lend themselves to larger finished blocks—14, 15, 20, or 21 in (35, 37.5, 50, or 52.5cm)—so you need fewer to make a guilt.

FIVE-PATCH: LADY OF THE LAKE



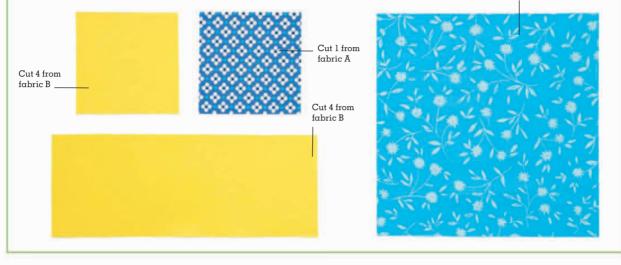




SEVEN-PATCH: BEAR'S PAW

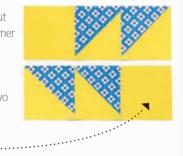
Divide the size of the finished block by seven to determine the size of each unit. Add a ½in (10mm) seam allowance to this measurement and cut one center square from fabric A. Cut four squares the same size from fabric B for the corner squares. The arms of the center cross are one unit wide and three units long. Add the seam allowance and cut four strips from fabric B. The large squares are two units by two. Add the seam allowance and cut four large squares from fabric C.

Cut 4 from fabric C



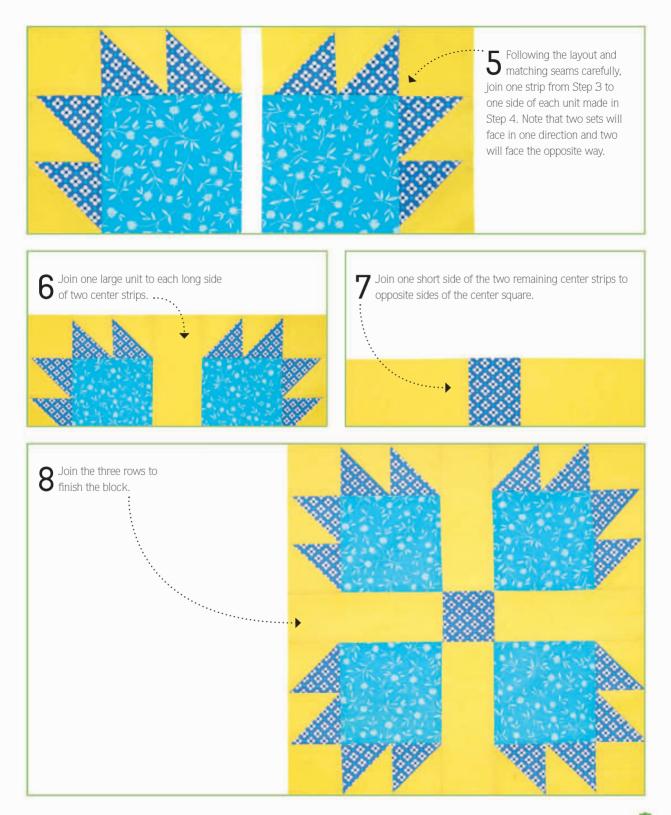


Make 16 from fabrics A and B **3** Following the layout carefully, add a corner square to four pairs of triangle squares, taking a ¼in (5mm) seam allowance. Note that two of the strips face in the opposite direction from the other two.



4 Join one of the remaining pairs of triangle squares to one side of each large fabric C square, taking a ¼in (5mm) seam allowance. Note that two of the strips face in one direction and two the opposite way.







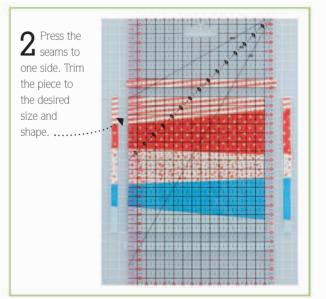
String piecing

- String piecing is similar to strip piecing, but the lengths of fabric are referred to as "strings" and are not necessarily
- straight strips. This is a good way of using up leftover pieces of uneven widths. String-pieced blocks can be
- combined to make larger units.

METHOD 1

Select a number of "strings" of fabric with plenty of contrast in color and pattern. Join them lengthwise, taking a ¼in (5mm) seam allowance. Alternate the angle in each piece and the direction of stitching to keep the finished piece even.

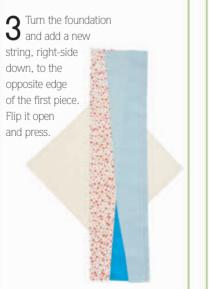


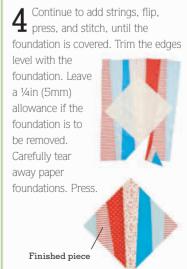


METHOD 2

Cut a muslin or paper foundation block, plus seam allowances. Place the first string right side up in the center of the foundation and lay the second piece right side down on top. Make sure both pieces are longer than the widest point on the foundation.

2 Machine stitch along one edge of the strips through all layers. Flip the pieces open and press.

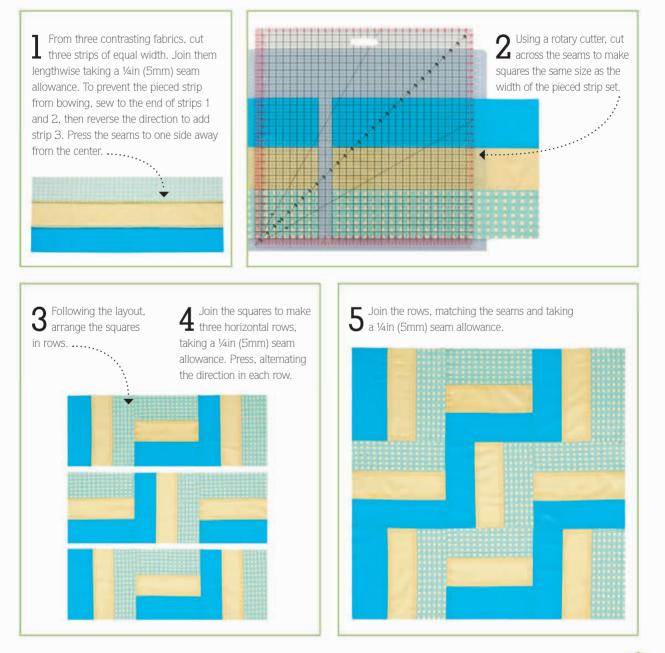




Strip piecing

Strip piecing is a good way to build blocks quickly. In principle, several long strips are joined and then cut apart before being stitched together again in a different sequence. It is the method by which many blocks are made, including Log cabin (see pages 78–81) and Seminole patchwork (see pages 82–85).

STRIP-PIECED BLOCKS: RAIL FENCE

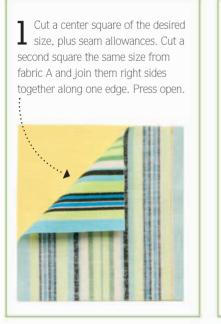




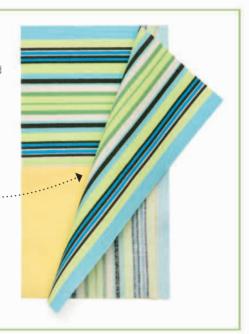
Log cabin

Log cabin is perhaps the most versatile block of all. Blocks can be made individually or chain-pieced. Log cabin lends itself to scrap quilting if the values have a strong contrast, and is stunning in simple two-color versions. The crucial center piece can be virtually any shape, and the order of piecing can vary. Blocks can be set (see page 154) in many ways to create secondary patterns. Always use a 1/4 in (5mm) seam allowance.

METHOD 1: INDIVIDUAL BLOCKS



2 Cut strip 3 from fabric A the width of the center square and the same length as the pressed unit and join it right sides together along the long side. Start at the corner of the second square and finish at the bottom of the center square. Press open.

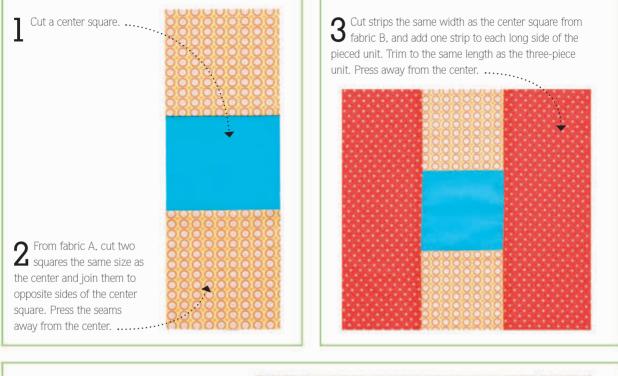


 $3 \hbox{ Now add two strips from fabric B in the same} \\ way, working in a clockwise direction to help the center stay square.}$

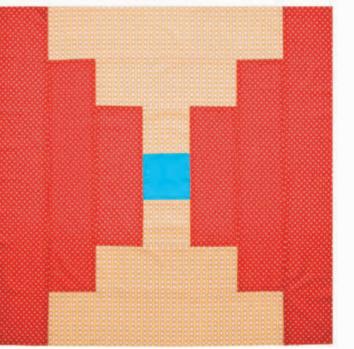


4 Continue adding strips, two from A and two from B, always working in a clockwise direction, until the block reaches the desired size.

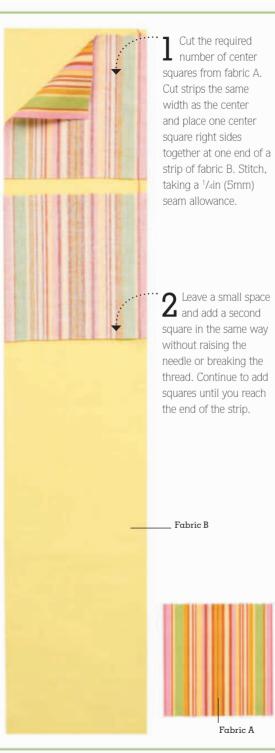
METHOD 2: COURTHOUSE STEPS



4 Continue adding strips—first two strips of fabric A, then two of fabric B—to opposite sides of the block until it reaches the desired size. Press each strip away from the center.



METHOD 3: CHAIN PIECING







Cut the units apart, making sure the two sides are the same size, and press. \ldots







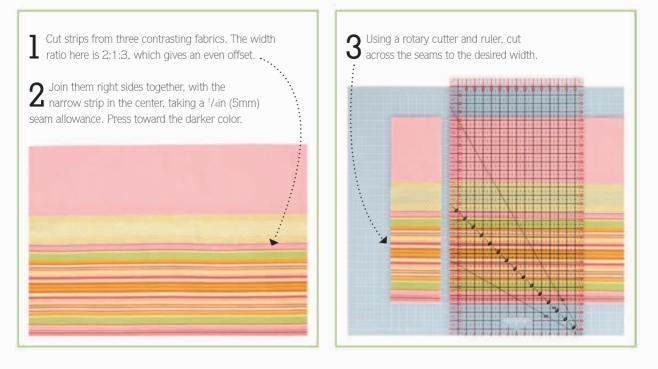
6 Repeat to add the fourth strip (fabric C) along the unstitched edge of the center square, always working clockwise. Continue adding strips—two B, and then two C—until the block reaches the desired size.

Wrong side

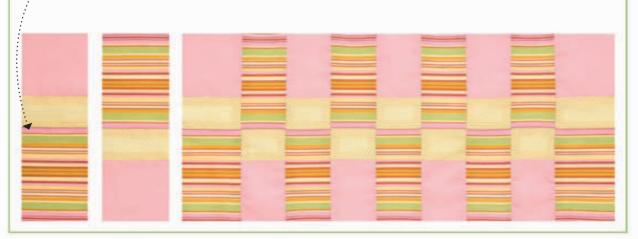
Seminole patchwork

Used by the Seminole tribe of Native Americans in Florida, this type of strip-pieced patchwork is useful for borders or blocks. The method often involves cutting pieced strips at an angle and rejoining them.

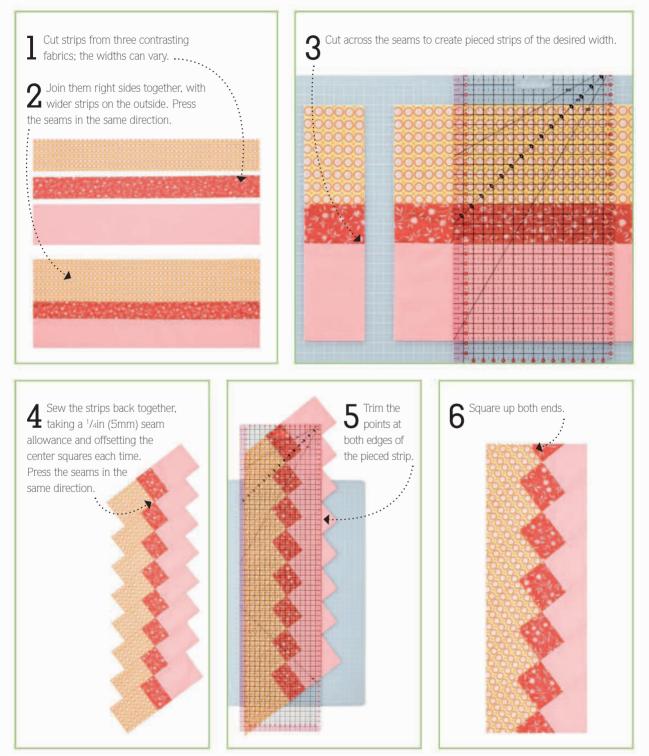
METHOD 1: STRAIGHT BAND



4 Alternating the top and bottom of each adjacent strip, sew them back together, taking a $^{1}/_{4}$ in (5mm) seam allowance. Press the seams in the same direction.



METHOD 2: ANGLED BAND



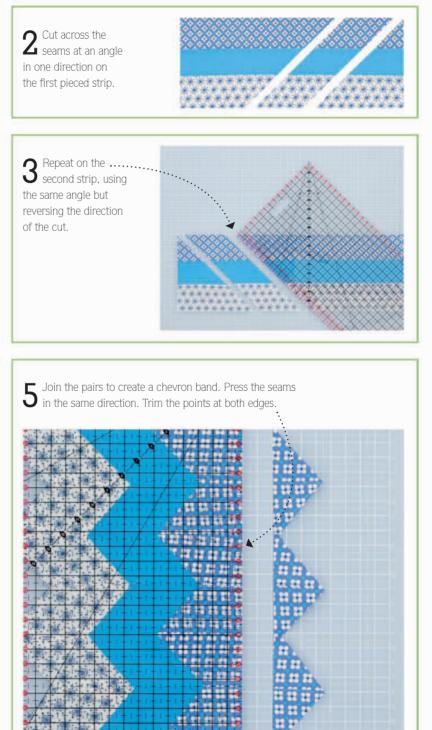
METHOD 3: CHEVRON BAND

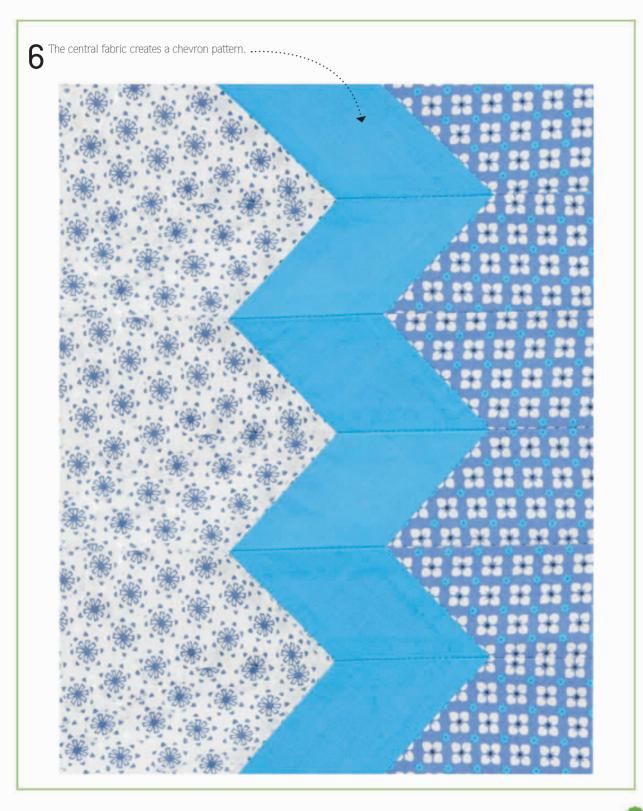
1 Cut strips the same width from three contrasting fabrics. Join them right sides together. Press the seams in the same direction. Make a second identical pieced strip.



4 Match the seams of a cut strip from strip 1 to the seams of a cut strip from strip 2 and join, taking a ¼in (5mm) seam allowance. Repeat to join in pairs.



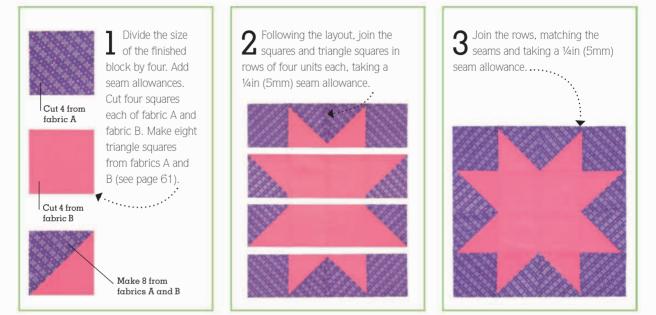




Star blocks

- Star designs make up the largest group of patchwork patterns, ranging from simple four-patch examples to highly
- elaborate ones with multiple points. They combine many techniques and the following patterns are the starting point
- for numerous variations.

SINGLE STAR: DOUBLE FOUR-PATCH



FRIENDSHIP STAR: NINE-PATCH

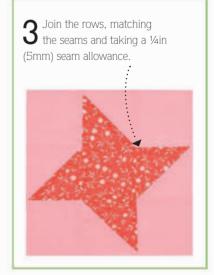


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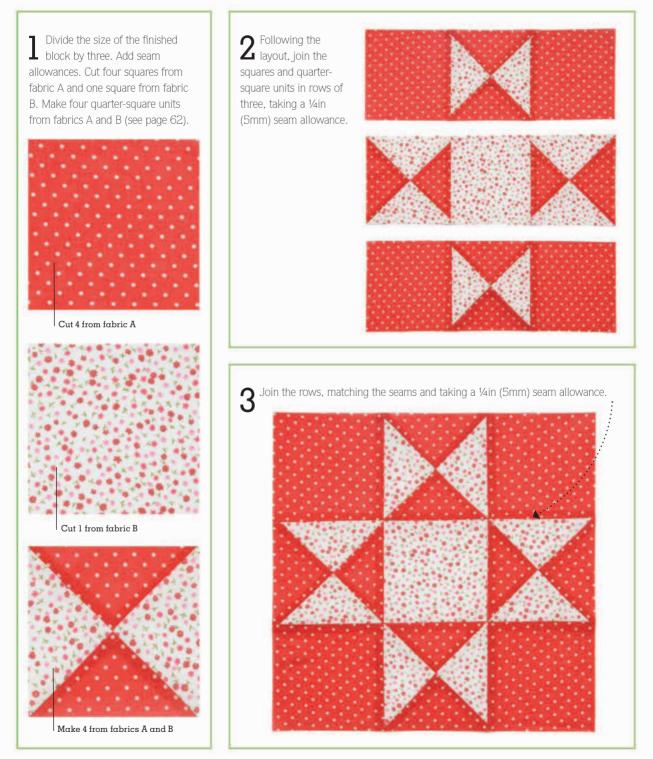
Divide the size of the finished block by three. Add seam allowances. Cut four squares from fabric A and one square from fabric B. Make four triangle squares from fabrics A and B (see page 61).

Make 4 from fabrics A and B 2 Following the layout, join the squares and triangle squares in rows of three units each, taking a 1/4 in (5mm) seam allowance.



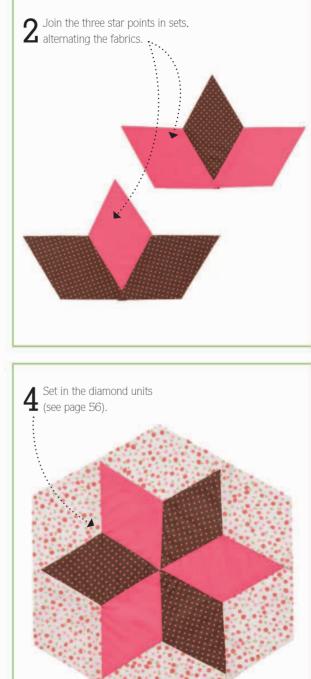


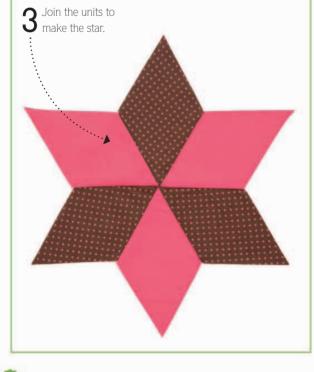
OHIO STAR: NINE-PATCH WITH QUARTER-SQUARE TRIANGLES



HEXAGON STAR: 60-DEGREE ANGLES

2 1 Copy the template to the desired size and cut a pattern. Cut three star points each from fabrics A and B, and six setting diamonds from fabric C, adding a seam allowance all around when you cut out each piece. Cut 3 from fabric B Cut 3 from fabric B Cut 6 from fabric C Cut 6 from fabric C Cut 6 from fabric C Cut 9 from fabric C Cut 9 from fabric B Cut 9 from fabric C Cut 9 from fabric B Cut 9 from fabric C Cut 9 from fabric B Cut 9 from fabric C Cut 9 from fabric C

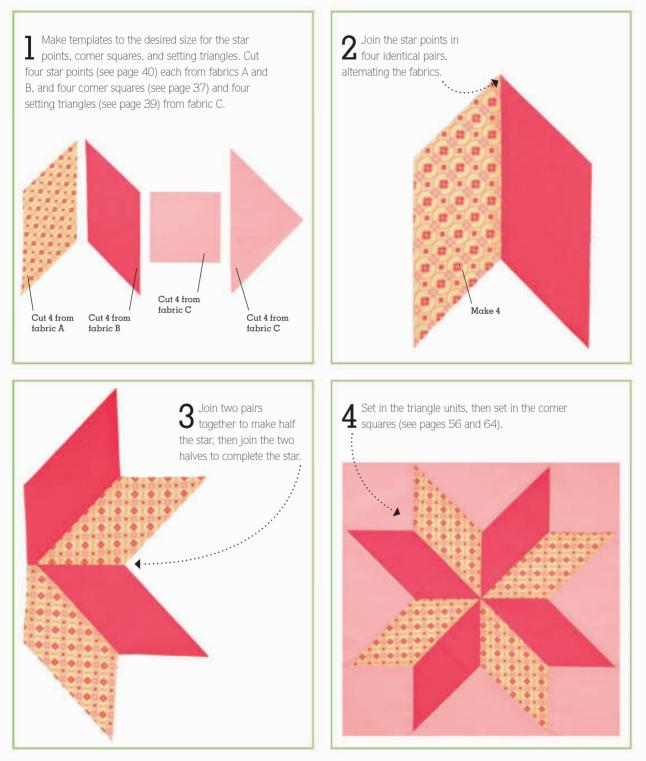




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Patchwork

EIGHT-POINT STAR: 45-DEGREE ANGLES

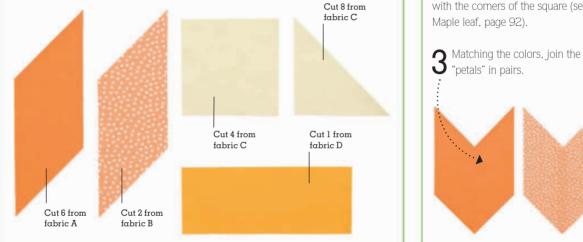


Pictorial blocks

Most pictorial quilt blocks are appliquéd, but there are a number of representational blocks, traditional and modern, that are pieced. Many of them, such as flowers and leaves, derive from nature, and most look best if they are spaced out on a quilt, not set together edge to edge. Sashing (see page 156) can be used to separate blocks to show them off, or they can be alternated with plain spacer blocks.

LILY: EIGHT-POINT STAR

Cut six "petal" points (see page 40) from fabric A, two petal points from fabric ■ B, and four corner squares and eight right-angled triangles (see page 39) from fabric C. From fabric D, cut a strip 1 in (2.5cm) wide and long enough to fit across the diagonal of one square for the "stem."



igcap Apply the strip diagonally across **Z** one of the fabric C squares. Turn the raw edges under on the long edges and level both short ends even with the corners of the square (see Maple leaf, page 92).

"petals" in pairs.

Add a right-angled triangle to both long sides 4 of each pair of "petals."

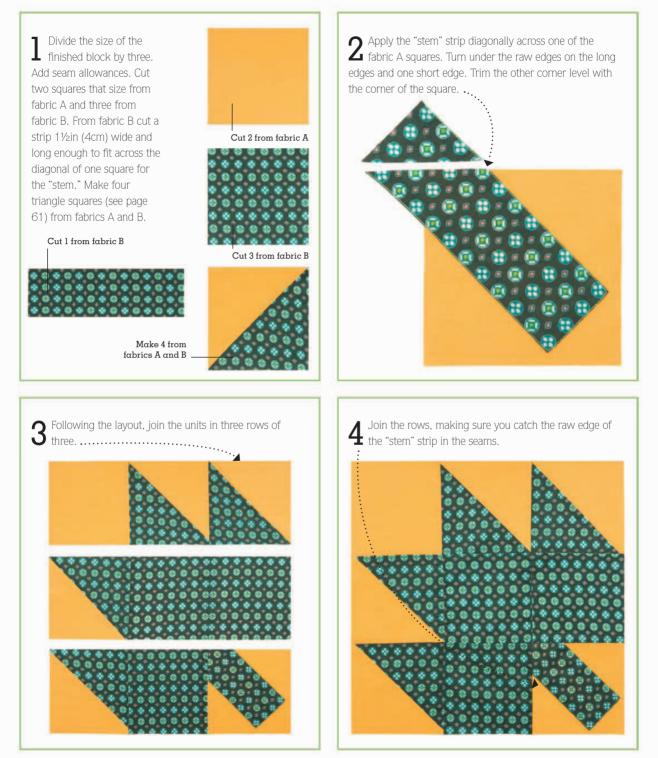


Set in the **J** corner squares to make four units. Make sure you catch the raw edges of the "stem" square in the seams.



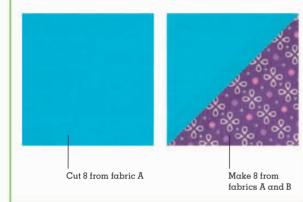


MAPLE LEAF: NINE-PATCH



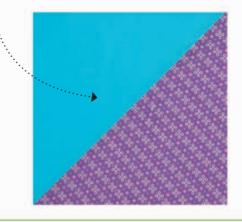
CAKE STAND BASKET: FIVE-PATCH

Divide the size of the finished block by five. Add seam allowances. Cut eight squares this size from fabric A. Make eight triangle squares (see page 61) from fabrics A and B.



Join three small triangle squares.

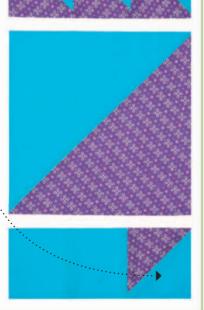
2 The finished center triangle square is three times the size of the outside squares. Cut one triangle from fabric A and one from fabric B to this size and join them on the diagonal.

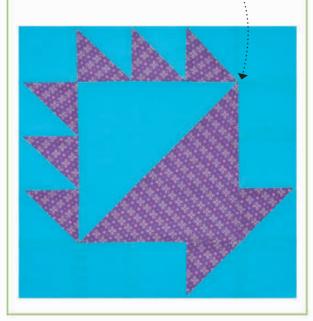


5 Following the layout, join the remaining small squares into two strips and add one strip to opposite sides of the large unit. Match all seams carefully....

4 Join one small triangle square to two small plain squares. Following the layout, add the strips to opposite sides of the large triangle square.

3

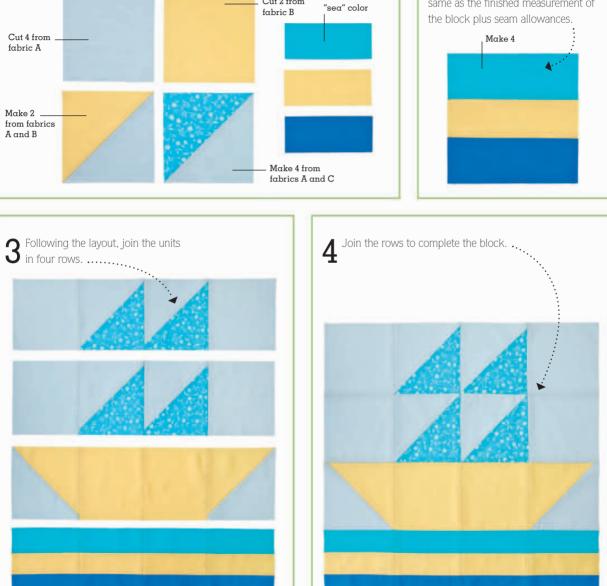




SHIP

Divide the size of the finished block by four. Add seam allowances. Cut four squares this size from fabric A and two from fabric B. Divide this by three and add ½in (10mm) to determine the size of the strips that make up the "sea." Cut four strips in each of three colors to that measurement times the width of the square units. Make two triangle squares from fabrics A and B and four from fabrics A and C (see page 61).

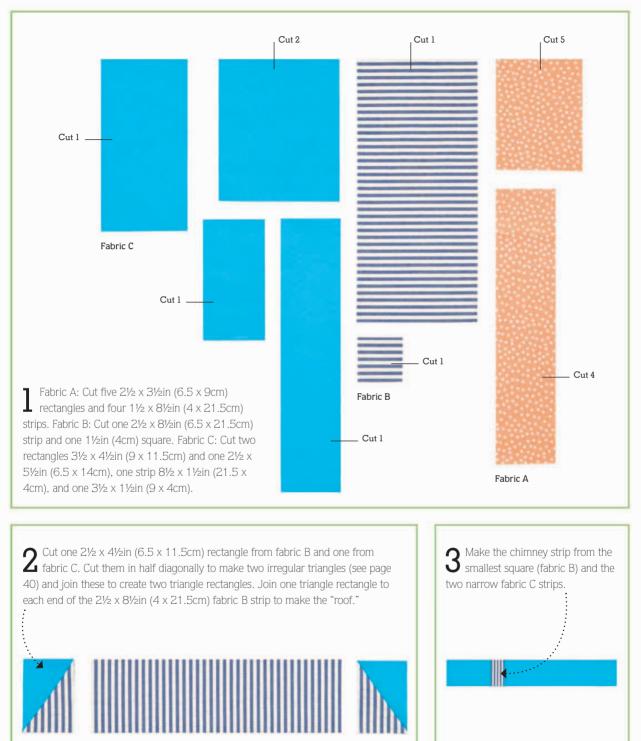
2 Join the sea strips to make four squares. You can make the "sea" from three long strips, if you prefer. They should be the width determined in Step 1. The length of each strip is the same as the finished measurement of the block plus seam allowances.



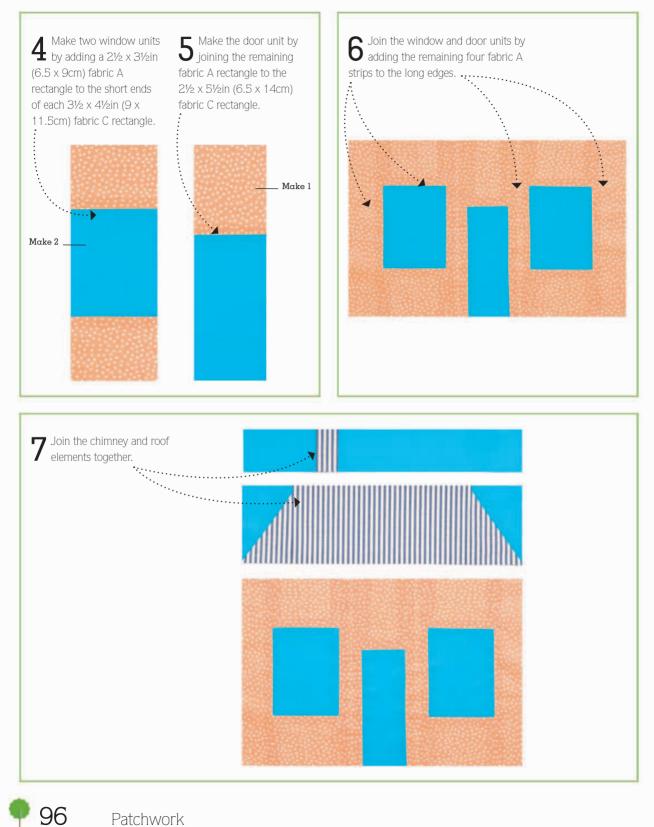
Cut 4 from each

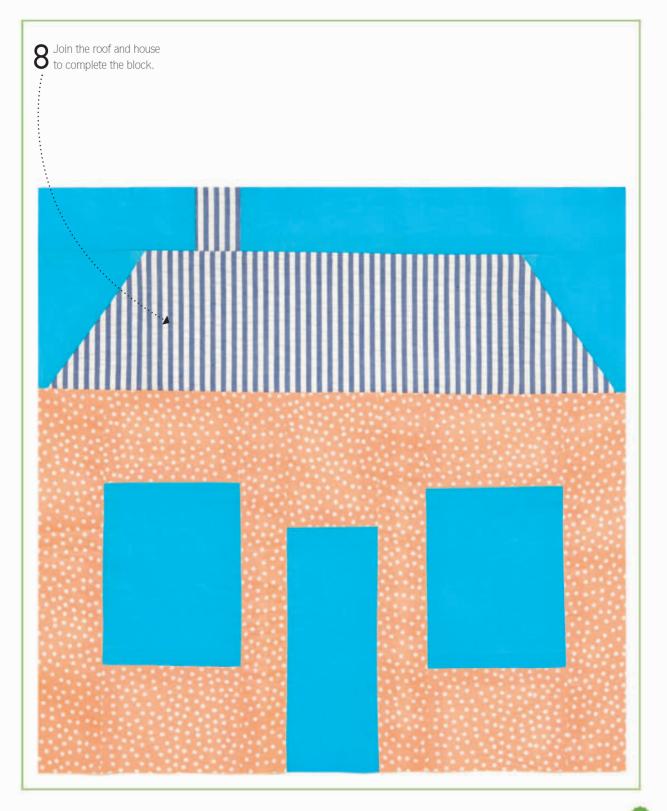
Cut 2 from

HOUSE





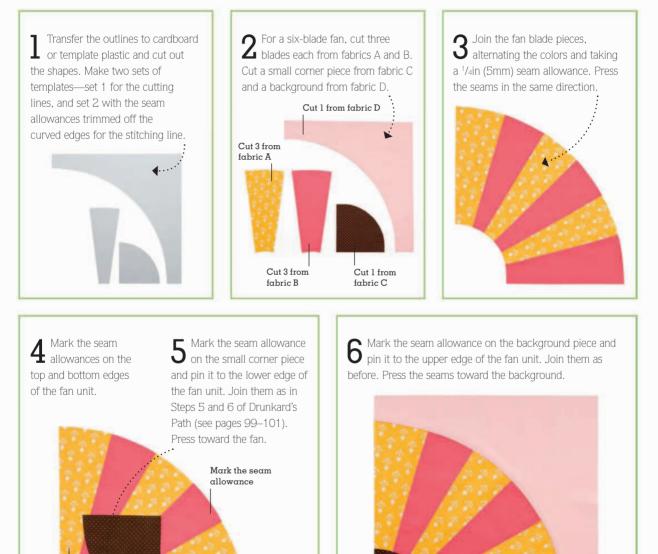




Curves

- Patchwork patterns based on curves are less common than those with straight seams, which are easy to cut and stitch.
- But although curves can be tricky, they give more options and, with careful preparation at every stage from template
- making to cutting and pinning, they are straightforward to sew. Many people find curves easier to work by hand, but
- it is not difficult to machine stitch them (see page 63).

FANS



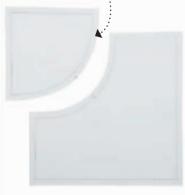
Mark the seam allowance

98

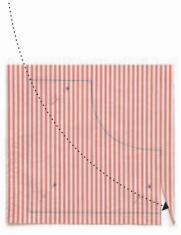
Patchwork

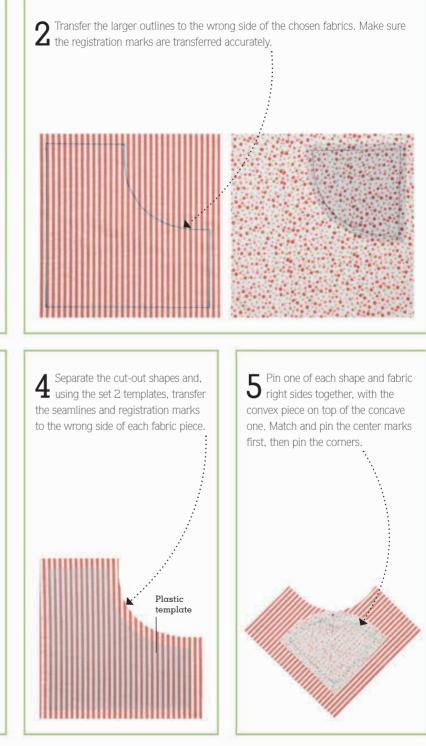
DRUNKARD'S PATH

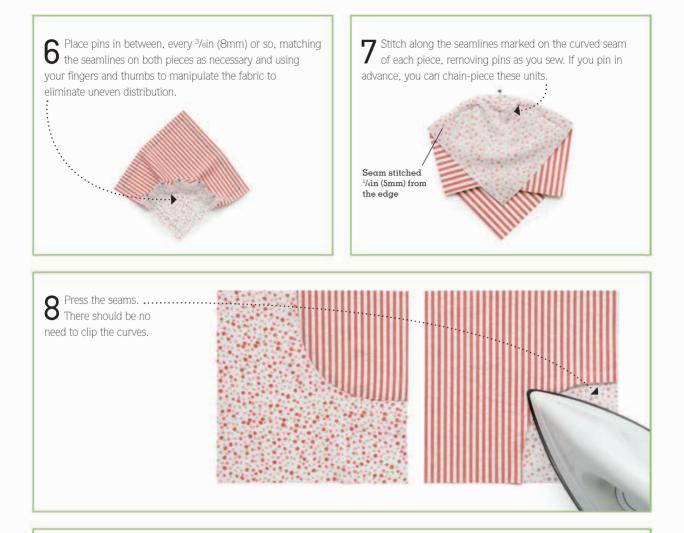
Make two sets of templates from cardboard or plastic—set 1 for the cutting lines, and set 2 with the seam allowances trimmed off the curved edges for the stitching line. Place the registration marks precisely on both sets.



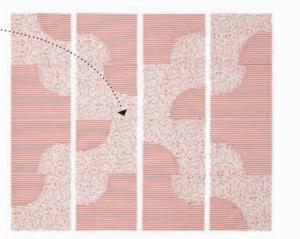
3 Cut out the shapes. If you are using scissors, cut around the curve, not into it. If you prefer to cut with rotary equipment, use the smallest size blade and a perfectly smooth cutting mat for best results.



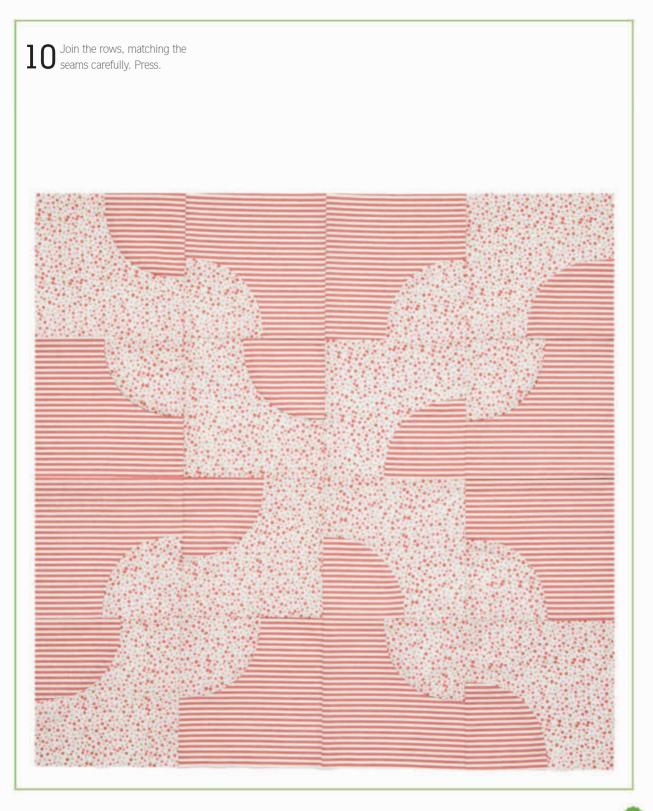




9 Following the layout and alternating colors, combine the units in four rows of four. Press the seams in opposite directions on alternate rows.



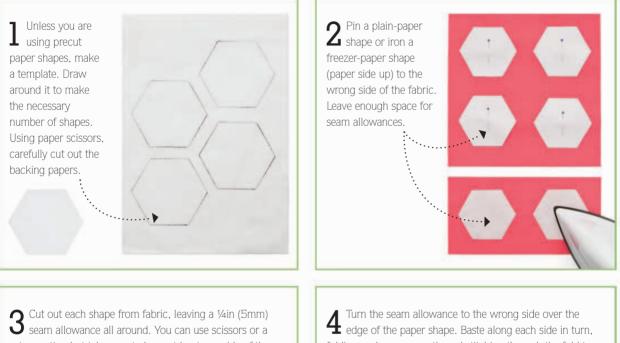
Patchwork



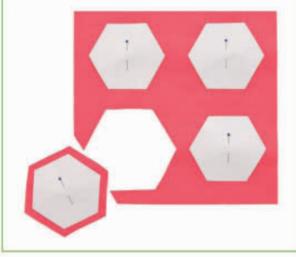
English paper piecing

This is a traditional method for making a guilt of mosaic shapes. The fabric pieces—hexagons, honeycombs, diamonds, and triangles, all of which have at least two bias edges—are basted to precut paper templates the size of the finished element. The technique is usually done by hand. The backing papers can be cut from virtually any heavy paper, but freezer paper can be ironed on quickly and is easy to remove.

BASIC PAPER-PIECING TECHNIQUE

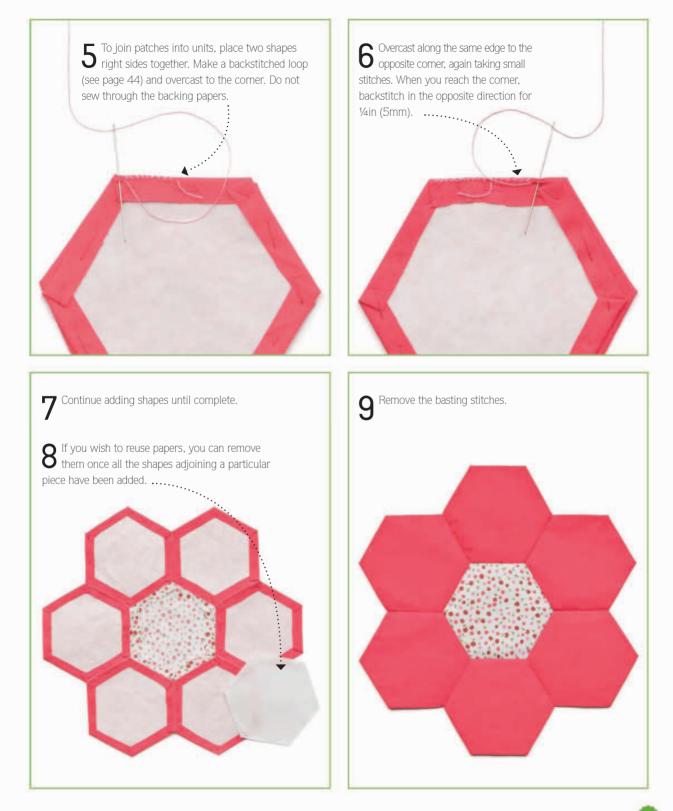


rotary cutter, but take care to keep at least one side of the shape along the straight grain of the fabric.



4 Turn the seam anowance to the menoy edge of the paper shape. Baste along each side in turn, folding each corner neatly and stitching through the fold to hold it securely.







SETTING IN HEXAGONS

 ${\bf l}\,$ To set in a third hexagon, oversew one side of the seam, starting at the center point.



2 Align the second sides to be joined at their outer points, folding back the pieces, as necessary, and stitch as before.

NEAT FOLDS

To make a neat fold at the sharp points when basting diamonds and triangles, start sewing in the middle of one side. When you reach the point, fingerpress the extended seam allowance.

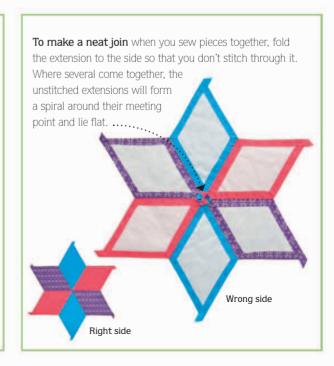


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2 Fold over the allowance from the next side neatly. Take a stitch through the fold and continue. Do not trim off the fabric extensions.



NEAT JOINS



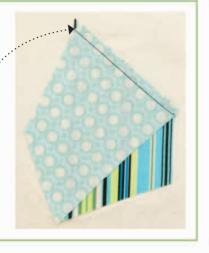
Working on a foundation

Several patchwork techniques are worked on a foundation, also known as stitch-and-flip. Crazy patchwork uses random shapes and is a great way to use up scraps. It is best made on a lightweight foundation fabric, such as muslin. Reverse-pieced foundation piecing (see page 106) ensures accuracy and is a quick way to make blocks. You can make patterns for each segment, or cut the shapes with generous seam allowances.

FOUNDATION PIECING: TOP PIECED

Cut a foundation of lightweight muslin the size you want the finished block to be plus a 1 in (2.5cm) seam allowance all around.

2 Gather a selection of straight-sided pieces of various shapes and colors. Starting in the center, place two pieces right sides together and sew along one side. Take a ¼in (5mm) seam allowance, whether you are working by hand or machine.



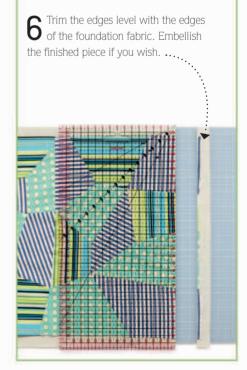


Add piece 3 along one edge of the combined shape made in Step 1. Open and press. If necessary, trim the seam allowance level before you add the next piece. Snip off thread ends if machining.



5 Continue clockwise around the center piece until the foundation is completely filled. Keep the arrangement random and avoid parallel lines. Run the seams in different directions and vary the angles. Press each piece open as you work.

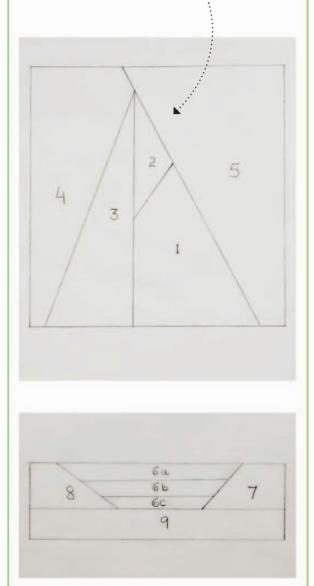




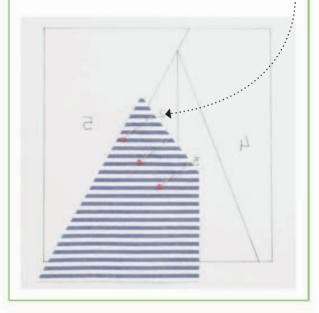
FOUNDATION PIECING: REVERSE PIECED

L Cut the chosen foundation (you can use paper, muslin, batting, or nonwoven interfacing) to size, with a generous amount added all around.

2 Trace or transfer the design to the foundation. Number the piecing order clearly on the foundation. You will be sewing from the back of the foundation, so the block will be the reverse of the foundation itself.

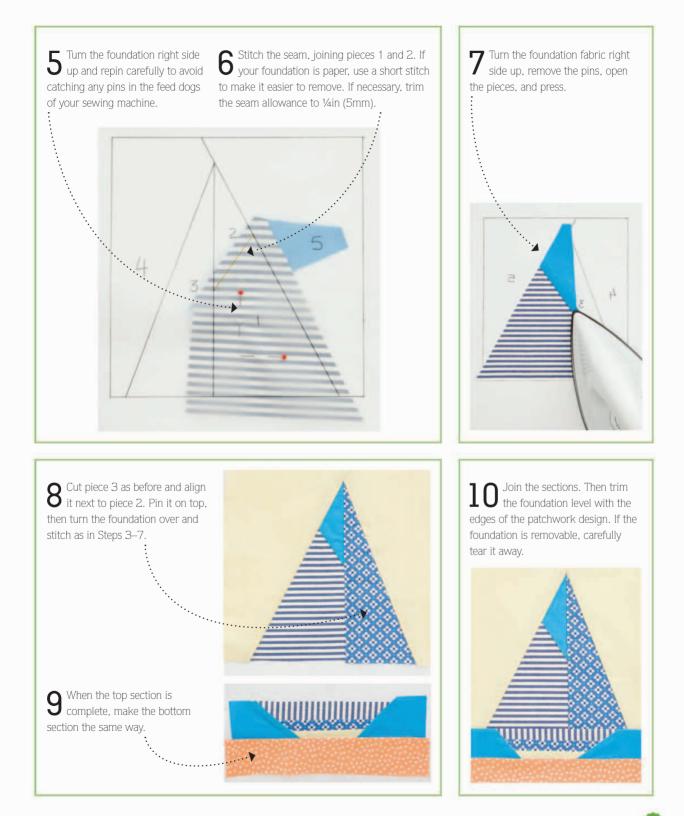


 ${\bf 3}$ Cut out piece 1 and pin it right side up on the reverse side of the foundation. Make sure that it extends beyond the stitching lines; you can check this by holding it up to the light.



4 Cut out piece 2 and place it right sides together on piece 1, along the seam to be sewn. Pin through all layers.







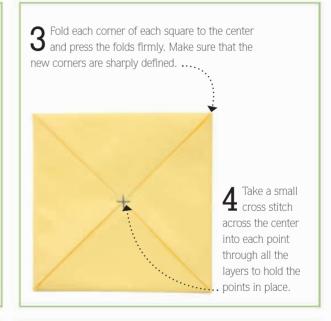
Folded patchwork

There are a number of specialized patchwork techniques that involve manipulating fabric by folding it in specific ways before joining pieces together. They can all be used to make quilts, but because they are, by definition, made from more than one layer, they are also good for making household items, such as placemats.

CATHEDRAL WINDOW

Decide the size of the finished square (4in/10cm) and multiply the measurement by two (8in/20cm). Add ½in (10mm) seam allowance and cut four squares this size from the background, fabric A.

2 Fold each square diagonally one way and press, then fold along the other diagonal and press firmly to mark the exact center. Open out. Turn the seam allowance to the wrong side on all sides of all squares. Press firmly.



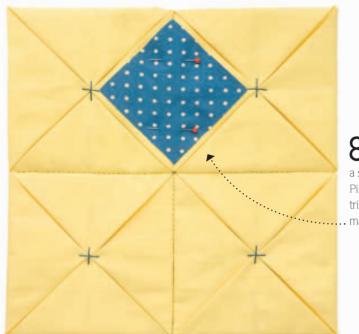
5 Fold each corner to the center again and press firmly. Take a small cross stitch as before through all the layers to hold the points in place. The square is now half the size of that cut in Step 1.



6 With folded edges together, join the four squares in pairs, overcasting with tiny stitches along the edge. Then join the two pairs to make a square. If you are making a large piece, you can also work in rows that are joined before the windows are added.



7 Cut four contrasting window squares from fabric B. (Each window square should just fit inside a quarter segment of the background square; to work out the size, measure the distance from the center of one folded square to the outside corner.)



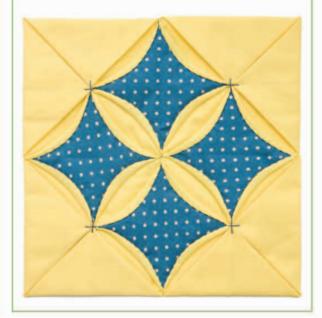
8 Place the first window square over a seam, on the diagonal. Pin in place. If necessary, trim the edges slightly to make it fit.

9 Roll one folded edge in the background square over the raw edge of the first window square.

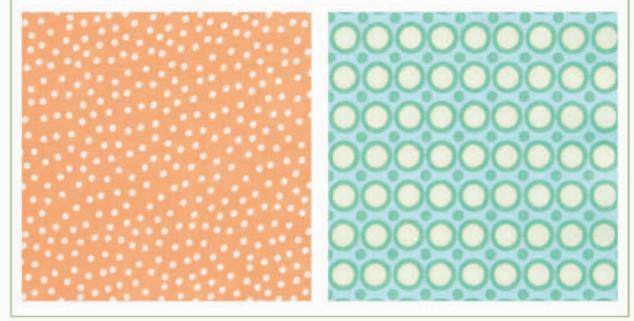


10 Matching the thread to the background fabric, sew the rolled, slightly curved overlap in place with tiny stitches, catching in the raw edge completely. Do not stitch through the background fabric. Repeat to catch in the other three edges of the window.

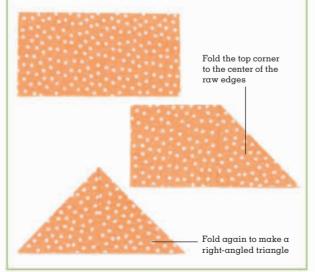
11 Repeat Steps 7–9 to fill the other spaces in the square. If you work in rows, add windows after you join rows together.



Cut a foundation from muslin the finished size plus 2in (5cm) on all sides. Our star has four rounds, or layers, each one in a contrasting fabric. For round 1, the central star, cut four 4in (10cm) squares. For rounds 2, 3, and 4, cut eight 4in (10cm) squares.

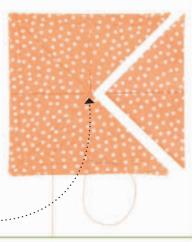


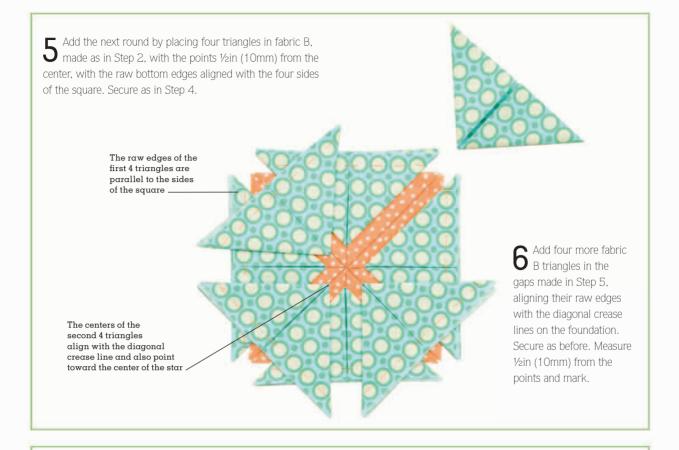
2 With wrong sides together, press each square in half. Fold the top corner of the resulting rectangle to the center of the raw edges and press, then repeat to make a right-angled triangle with the raw edges along the long side.



3 For a square foundation, fold the foundation fabric in half horizontally and vertically and press to create guidelines. Fold in half again along the diagonals and press. For a circle, fold the foundation in quarters and press.

4 Place the four folded squares (the right-angled triangles) along the pressed guidelines, so the points meet in the center, with folded edges on top. Pin or baste in place along the raw edges. Secure each point with a small hidden stitch. ...



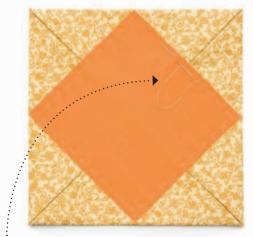


7 Add subsequent rounds in the same way. Trim the edges to match the foundation shape. Remove the basting and trim and finish the edges as desired.

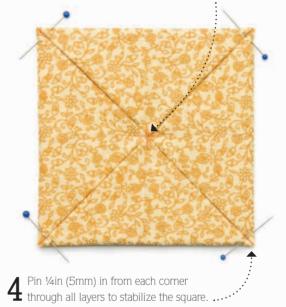


SECRET GARDEN

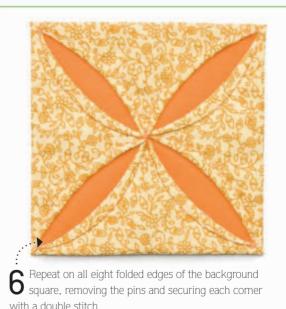
1 Make a folded square as for Steps 1–3 of Cathedral Window (see pages 108–109). Fold and press the corners, as in Step 4, but do not stitch in place. Cut a window square the size of the finished square.



2 Open the pressed corners and place the window square on point within the lines. If necessary, trim the raw edges to fit and anchor with small basting stitches.



Turn under one edge of the background square to form a curving "petal" shape. Sew in place, working outward from the center and using thread to match the background fabric.



Gathered patchwork

Yo-yos, also called Suffolk puffs, are fabric circles that have been gathered to make two layers. They are widely used as decorations in appliqué and can be further embellished. Joined edge to edge, they can be made into tablecloths, pillow covers, or openwork bedspreads. Yo-yo projects are a great way to use up small scraps of fabric.

YO-YOS

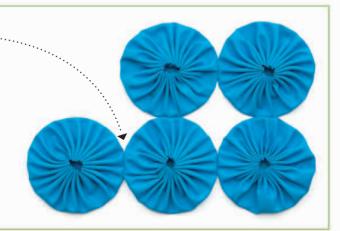
1 Cut circles of fabric twice the desired finished size. You can use almost anything circular as a template, from thread spools to bottles or cups.

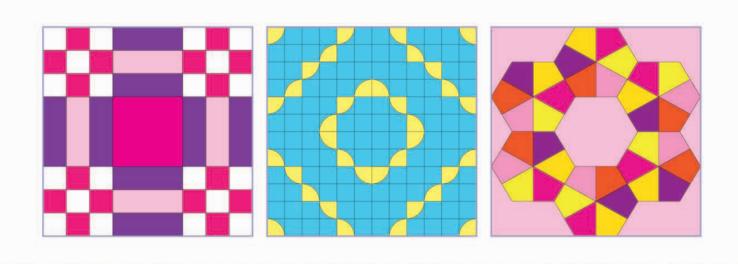
2 Knot a length of strong thread, doubled if necessary, and secure it close to the edge on the wrong side of the circle. Turn the raw edge ¼in (5mm) to the wrong side and take small gathering stitches through both layers all around the edge, to make a single hem.

3 Finish next to where you needle or cut the thread, but pull the thread gently to gather the circle into a smaller one, with pleats around the center. The raw edge will disappear inside the circle. Secure the thread with a couple of basting stitches or backstitches, then knot it. Cut the thread.

4 Flatten the circle by gently fingerpressing the edges. The gathered side is normally the front, but sometimes the back is used instead.

5 To join yo-yos, place them gathered sides facing and overcast the flattened edges for a short distance, making small, tight stitches. Join yo-yos together until you have a row that is the desired length; join rows together in the same way.





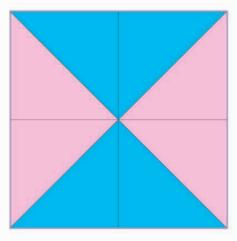
PATCHWORK BLOCK GALLERY

Patchwork block gallery

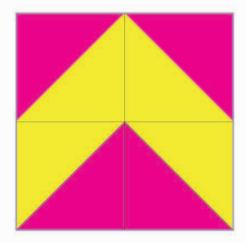
There are literally hundreds of traditional patchwork patterns and we have space to show only a few—but once you've mastered the basic construction techniques shown in the preceding pages, you will be able to look at a block pattern and work out both the constituent elements and how to piece it together.

Four-patch blocks

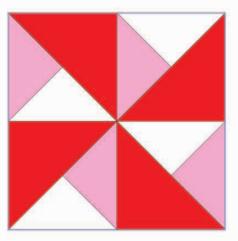
The simplest four-patch blocks are made up of just four squares (patches), but those four squares can also be created by piecing together two half-square triangles, or four quarter-square triangles, or various combinations thereof.



Yankee puzzle

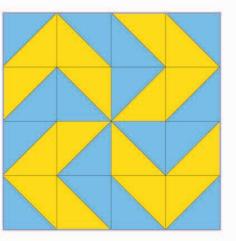


Chevron, or Streak of lightning



Broken pinwheel

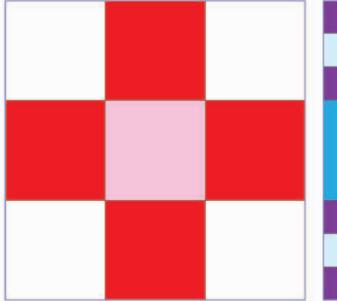
Patchwork block gallery

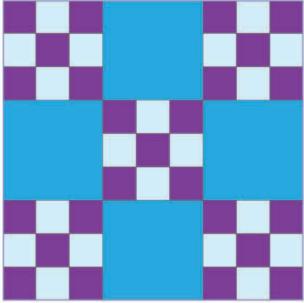


Flyfoot

Nine-patch blocks

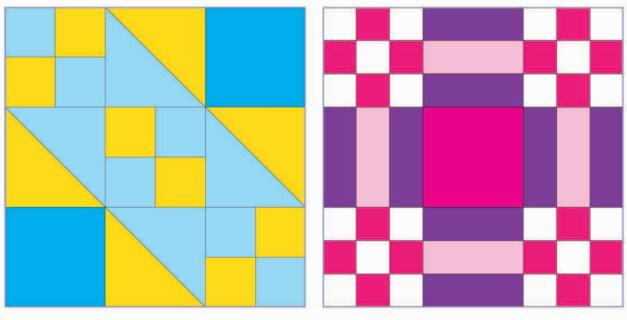
Nine-patch blocks are made of nine units in three rows of three. By adding a third color to a simple nine-patch of two colors, you can create myriad variations.





Red cross—Three-color nine-patch

Three-color double nine-patch



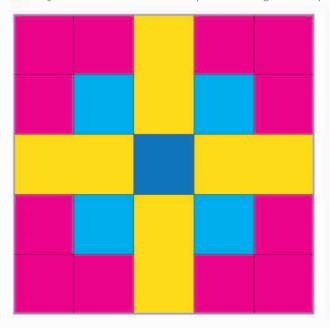
Rocky road to California

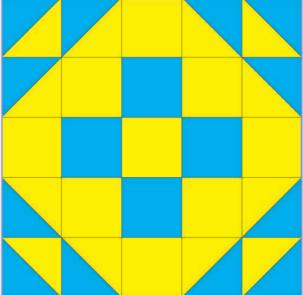
Building blocks



Five- and seven-patch blocks

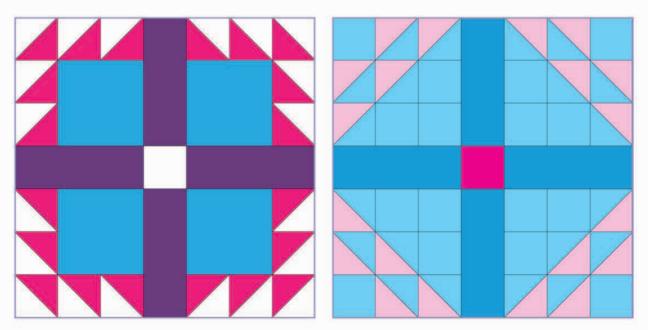
- Five-patch blocks consist of a grid of five units in each direction, or 25 units in total, while seven-patch blocks have no fewer than 49 units (seven in each direction). With so many elements, each one of which can be subdivided in several ways, there is almost infinite scope for creating different patterns.





Star and cross

Duck and ducklings



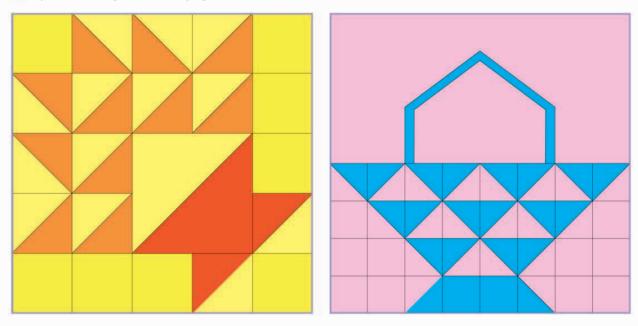
Hens and chickens

Dove in a window



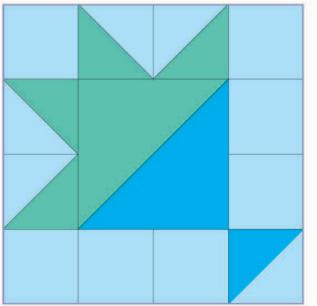
Pictorial blocks

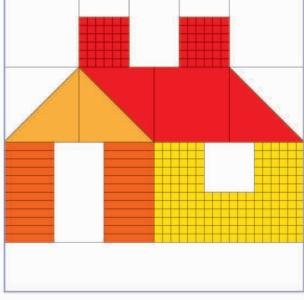
Patchwork pictorial blocks tend to be highly stylized, with the individual elements of the design being made up of square and triangle units in varying combinations.



Grape basket

Colonial basket



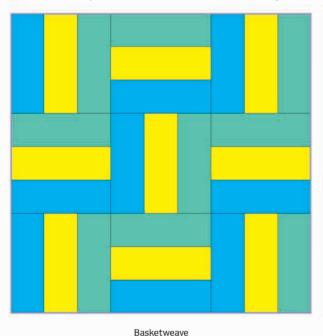


Basket of scraps

House with fence

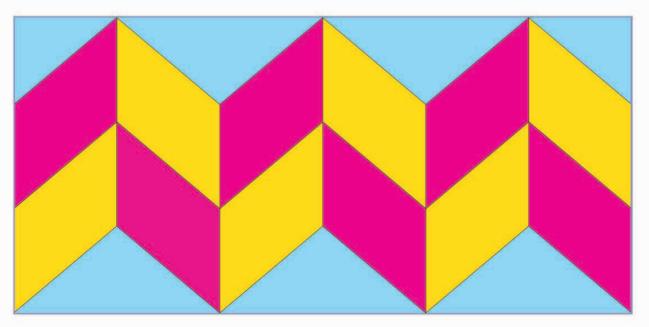
Strip-pieced blocks

- Strip-pieced patterns can be put together in random color and fabric combinations or in repeating patterns. If two fabrics are pieced A–B–A and B–A–B, the resulting squares can be alternated to create a Basketweave block. Use more fabrics for a more complex effect. Seminole bands can be angled or set square and are wonderful for creating pieced border strips.





String-pieced divided square

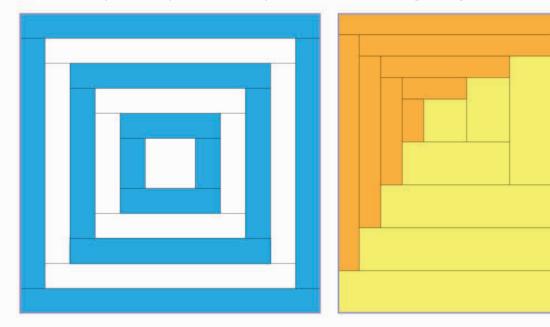


Double-chevron Seminole



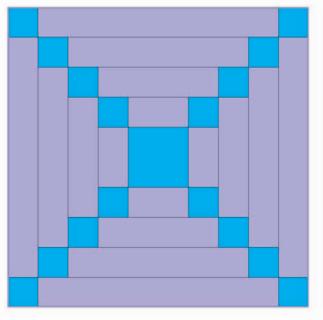
Log cabin blocks

There are many variations in Log cabin blocks and settings. Strips of light and dark fabrics can be alternated, placed on adjacent or opposite sides, made of varying widths, or pieced from a combination of smaller squares and rectangles. The center square can be pieced, turned "on point," or made from a rectangle, triangle, or diamond.

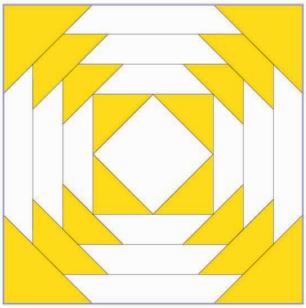


Cabin in the cotton

Thick and thin



Chimneys and cornerstones

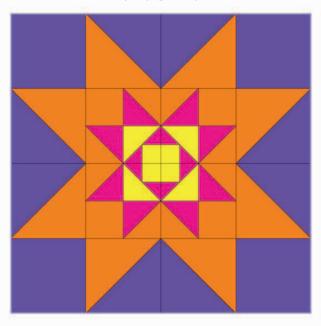


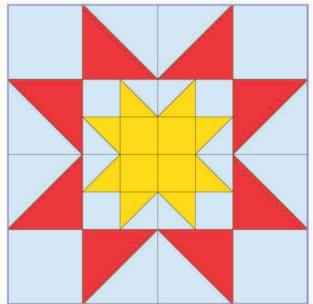
Pineapple



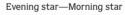
Star blocks

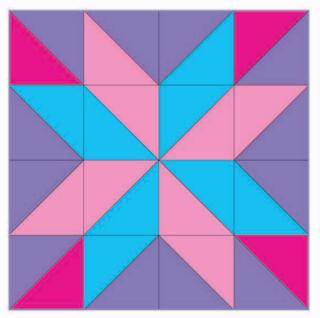
- There are probably more kinds of star block than any other patchwork motif; the construction ranges from simple four-patch stars to extremely complex designs created by cutting 60-degree diamonds in half lengthwise or crosswise. The basic eight-point star alone, with its 45-degree angles, is the starting point for numerous variations, including the
- The basic eignt-point star distribution intricate Lone star (see page 124).

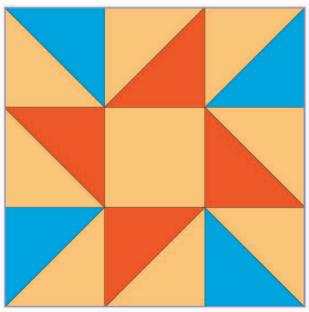




Repeating star



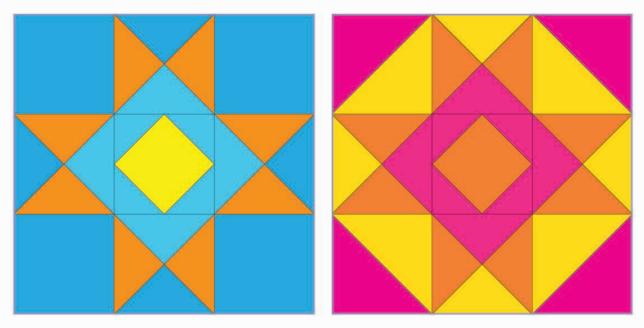




Constellation block

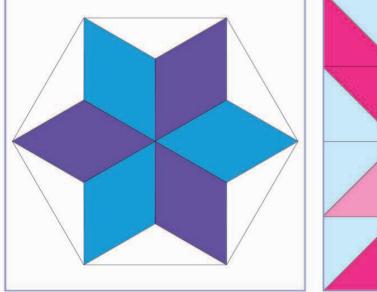
Nine-patch star

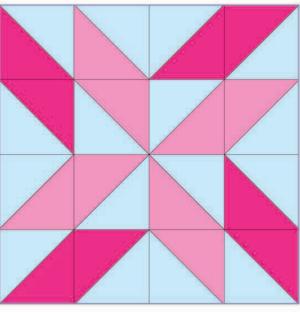




Braced star

Card basket

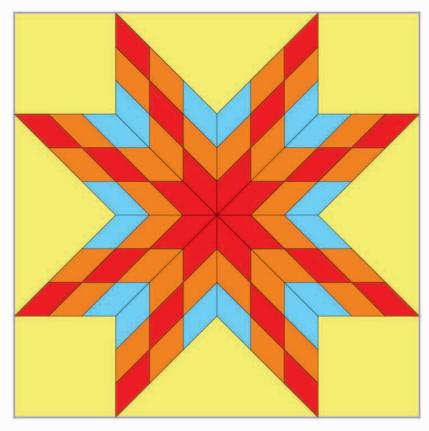




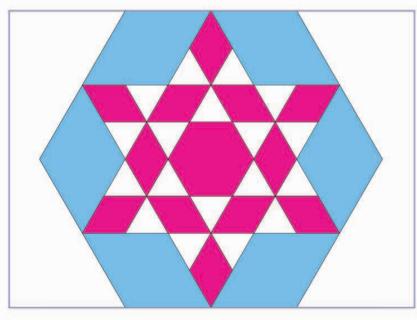
Eisenhower star

Trailing star

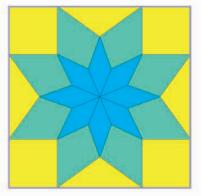




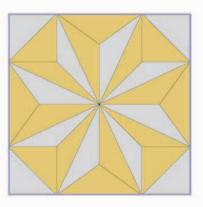
Tennessee star



Ozark diamonds



Lone star



Silver and gold

TIPS

• When marking, make sure the marker has a sharp point. If you mark with dashes, not a continuous line, the fabric is less apt to shift or stretch.

• Remember the rule: Measure twice, cut once. And keep in mind that measurements from one brand of ruler or mat are not always exactly the same as another brand. For accuracy, try to use the same ruler and mat, as well as the same machine foot, throughout the piecing process.

• If you make a sample block to begin, you can measure your finished blocks against it to ensure accuracy.

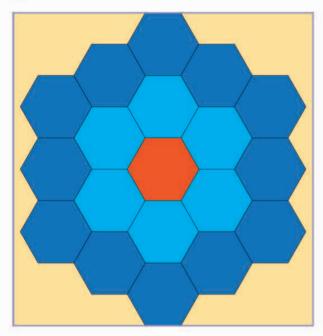
• Whenever possible, sew a bias edge to a straight edge to minimize stretching.

• If you need to trim a block to make it smaller, trim back an equal amount from all sides to keep the design of the block accurate.

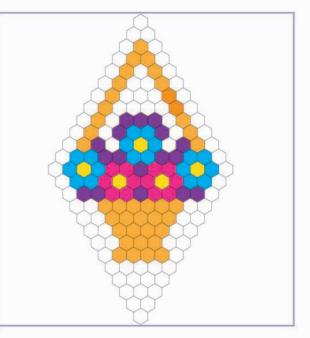
124 Patchwork block gallery

Mosaic blocks

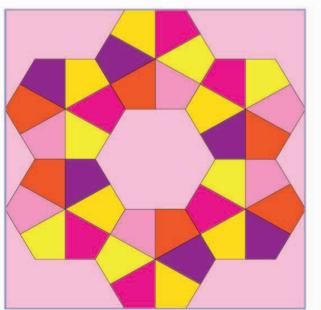
Though many of these can be machined, most are made by piecing together geometric shapes using the "English" paper-piecing method (see pages 102–103). The most familiar block is Grandmother's flower garden.

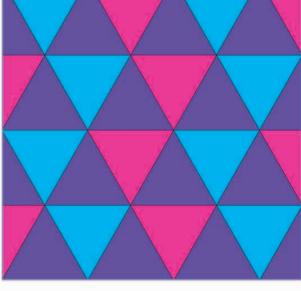


Grandmother's flower garden



Flower basket





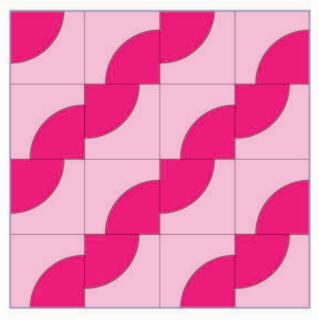
Tumbling hexagons

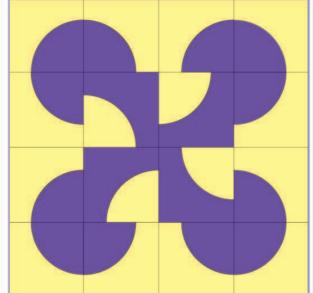
One thousand pyramids



Curved blocks

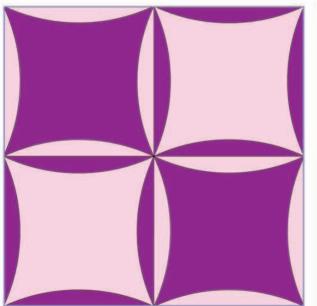
- Probably the most popular of all traditional curved blocks is the Drunkard's path (see pages 99–101)—a double four-patch. When the orientation or color values of the four units is altered, a number of complex curving patterns results. Changing the size and shape of the curves also alters the block considerably.

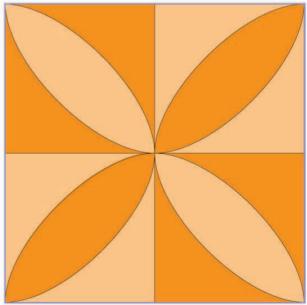




Falling timbers

Wonder of the world

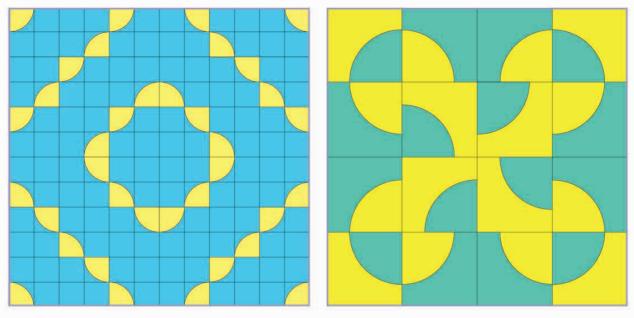




Robbing Peter to pay Paul

Orange peel



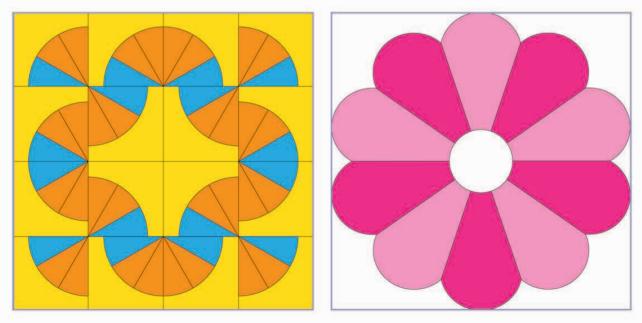


Chain links

Drunkard's puzzle

Fan blocks

Fans are based on quarter circles and can be arranged in a number of different ways. However they are arranged, a curving pattern results. Fan variations such as Dresden plate patterns are full circles and are often appliquéd to a background. The segments can be curved or pointed, or a combination of the two. The center can be open to allow the background to show through or applied separately for contrast.

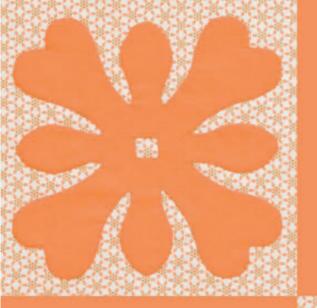


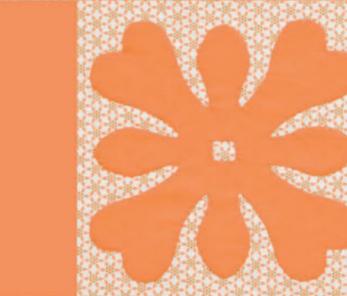
Mohawk trail

Dresden plate



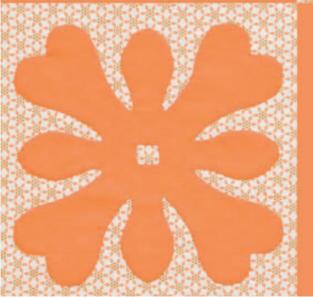
APPLIQUÉ

















HAWAIIAN FLOWERS

Squares of simple Hawaiian appliqué blocks (pages 138–139) alternate with plain squares of the same size.



Appliqué

Appliqué is a decorative technique in which shapes are cut from one fabric and applied to a background fabric. It has been used in quiltmaking for centuries and is found on many other items, from clothing to pillows. Hand appliqué is the traditional method, but working by machine can be effective.

TIPS FOR APPLIQUÉ

• Blanket stitch (opposite) is the most popular decorative stitch for hand appliqué, but many basic embroidery stitches can be used as decoration, including cross-stitch, herringbone, chain stitch, and feather stitch.

• Make sure that decorative stitches sit tightly against the turnedunder edge and are in proportion with the size of the applied pieces.

• In most appliqué techniques, a seam allowance has to be added to the shapes. The secret is to make an allowance that is wide enough to keep fraying at bay and narrow enough to be undetectable once it has been stitched.

• Most seam allowances for appliqué can be cut by eye, following the outline of the shape. Remember that you can trim away any excess as you work, but you can't add it once it has been removed. The ideal seam allowance is around 1/ain (3mm).

• If you need only one piece of a particular shape, draw it on tracing paper and cut it out. Pin the tracing-paper shape to the fabric and cut it out, in the same way as a dressmaking pattern.

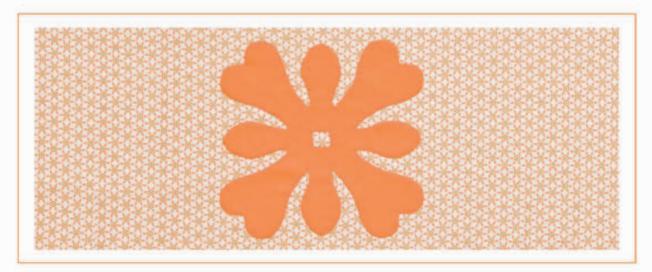
• Appliqué designs usually have a right and a wrong side. When transferring a design, make sure that the right side of the fabric will be the right way around when the shape is cut out and applied.

• Some methods call for the outline of a design to be marked on the background fabric. In this case, make sure that the outline will be covered or can be removed when the stitching is completed. Draw the design lightly on the right side of the fabric or baste around the outlines.

• When basting, make sure that any knots are on the wrong side of the background fabric, since this will make it easier to remove the thread later.

• If the fabric is light or you have access to a lightbox, you may be able to trace from an original pattern directly onto fabric.

• When working machine appliqué, work a practice row or two using the same fabrics as the design to make sure your settings are correct.



Needle-turned Hawaiian appliqué

Stitches for appliqué

Appliquéd shapes can be attached to the background in two ways, either hidden (using slip stitch) or calling attention to themselves as part of the design. Machine appliqué is almost always worked with decorative stitches such as zigzag or satin stitch, or with one of the many stitches programmed into modern sewing machines.

SLIP STITCH OR BLIND STITCH

Bring the needle up on the right side of the background fabric, next to the turnedunder edge of the shape being applied. Insert it a few threads into the folded edge. Go back through the background fabric and continue taking tiny stitches ¹/sin (3mm) apart around the entire shape.



BLANKET STITCH

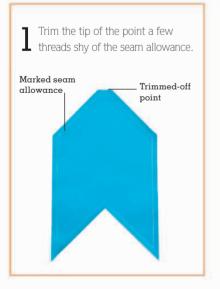
Bring the needle up on the right side of the background fabric, next to the turned-under edge of the shape being applied. Take a stitch into the shape ¹/₈–¹/₄in (3–5mm) to the right and perpendicular to the edge. Bring the needle out at the edge and loop the thread under the point. Pull tight and repeat.



Dealing with peaks and valleys

Both "peaks" (shapes that come to a sharp point) and "valleys" (sharp points between two sides of a shape) can be pointed or curved, and both can be difficult to work neatly. The points of peaks should, of course, be pointed, and you risk creating a lump under the point where you turn the edges under. The seam allowance in valleys needs to be clipped to make the edge neat.

PEAKS



2 Fold the sides of the point along the seam allowance. Make sure that the raw edge at the point is hidden. Press the edges.

VALLEYS

At the bottom of the valley, clip to within a few threads of the marked seam allowance. Fold the edges to the wrong side. When applying the piece, take several tiny stitches in the valley to secure the cut threads.



Dealing with curves

Curves can be difficult to keep smooth. The raw edge of an outward (convex) curve is slightly longer than the folded-under edge and can cause bunching under the fold unless the seam allowance is clipped. Inward (concave) curves will sometimes stretch smoothly, but shallow curves may need to be clipped before being stitched.

CONVEX CURVES



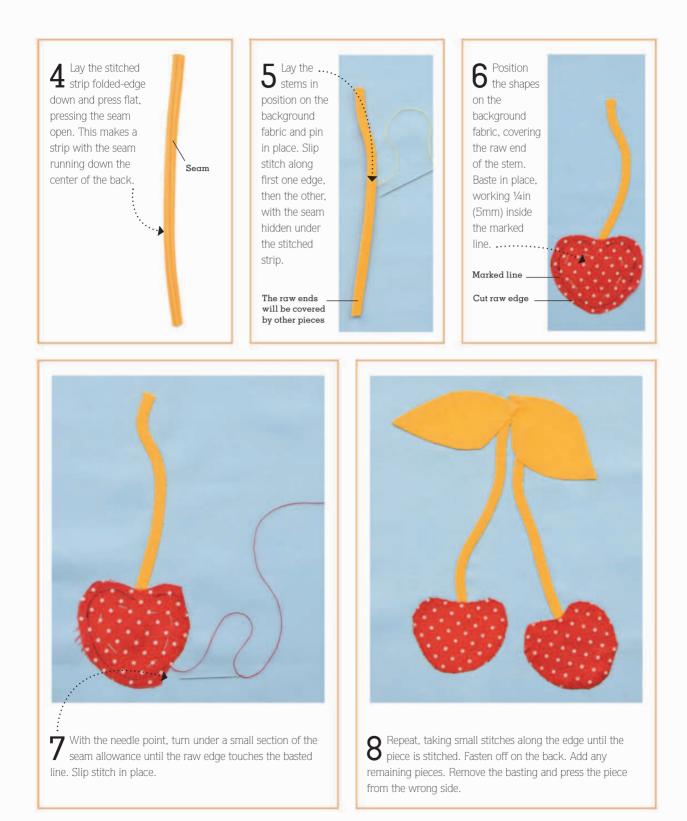
Needle-turned appliqué and bias stems

Needle-turned or turned-edge appliqué is the traditional method for applying shapes to a background. This motif also incorporates narrow bias strips that must be applied first.



3 Cut the bias stems finished width. Here they are ¾in (15mm) wide and cut on the true bias. With wrong sides together, fold each strip in half and machine stitch a seam ¼in (5mm) from the folded edge. Do not press. Trim the raw edge close to the seam.

CONCAVE CURVES





Freezer-paper appliqué

Freezer paper is a stiff, white paper coated on one side with a film that can be ironed on fabric and easily removed without leaving a residue. The paper side is ideal for drawing on patterns. It can be found in craft stores, at supermarkets, and online. Seam allowances can be pressed over the edge to the wrong side to give a hard crease that makes it easy to sew shapes in place accurately.

Trace the templates in reverse on the paper side of the freezer paper and cut out. Iron the paper pieces to the wrong side of the fabric.

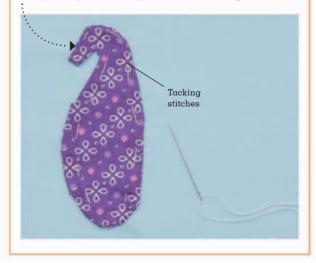
2 Cut out the fabric shapes, leaving a ¼in (5mm) seam allowance all around. Clip or notch any corners and difficult curves up to the paper. Press the seam allowance to the wrong side, using the edge of the freezer paper as a guide.



 $\label{eq:starses} 8 \ensuremath{\mathsf{Remove}}\xspace$ Remove the paper shapes by peeling them off gently. Make sure that the raw edges lie flat on the wrong side.



4 Decide on the order in which to work, making sure that any underlapping pieces are covered. Pin or baste the first piece in place, then slip stitch it to the background.

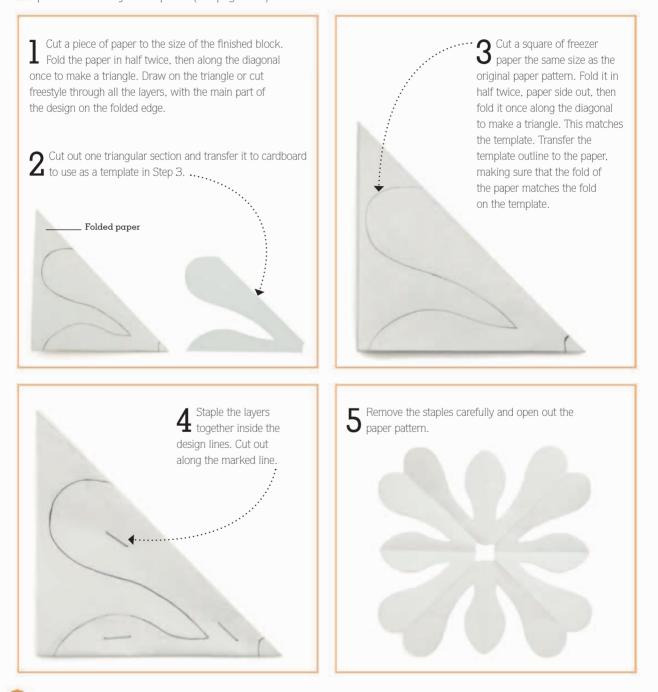


Add the remaining pieces in order, one at a time. If you pin the pieces in place, remove the pins as you work. If you baste them in place, remove all the basting stitches when the work is complete.



Hawaiian appliqué

Hawaiian appliqué originated in Hawaii when women native to the islands were taught to sew by early missionaries. The patterns are usually square and cut as eight-sided motifs from a single piece of folded fabric. The designs are traditionally based on flora indigenous to the Pacific outpost, but six-sided snowflake motifs can also be used. Finished pieces are usually echo guilted (see page 172).



6 Cut a square of the appliqué fabric and one of the background fabric, both 2in (5cm) larger than the pattern square. Fold both in half twice to find the center and position them, wrong side of the appliqué fabric to right side of the background.

7 Center the freezerpaper pattern on the right side of the appliqué fabric, sticky side down, and iron it in position.

9 Work a small section at a time by cutting away the appliqué (top) fabric along the edge of the pattern, leaving a ¼in (5mm) seam allowance outside the pattern. Turn the seam allowance under so that it's level with the edge of the pattern and slip stitch the fabric to the background.

10 Continue cutting and stitching until the entire pattern has been applied to the background (see page 134 for dealing with curves). Remove the basting and peel the pattern away.

 $8^{\rm Baste}$ the layers together 1/4 in (5mm) from the inside edge of

the paper pattern.



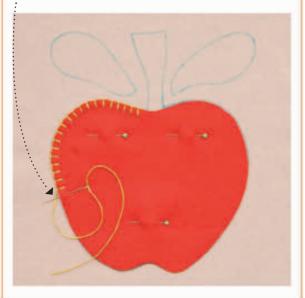


Raw-edge appliqué

Nonwoven fabrics, such as felt and felted wool, that won't fray can be used effectively in decorative appliqué, but remember that they cannot be laundered. No seam allowances are needed.



2 Cut out the appliqué pieces (without a seam allowance). Pin the first piece to the background and stitch in place, using a decorative stitch (see page 132).



 ${\bf 3}$ Add pieces in order. Remove all the pins and press from the wrong side.



Reverse hand appliqué

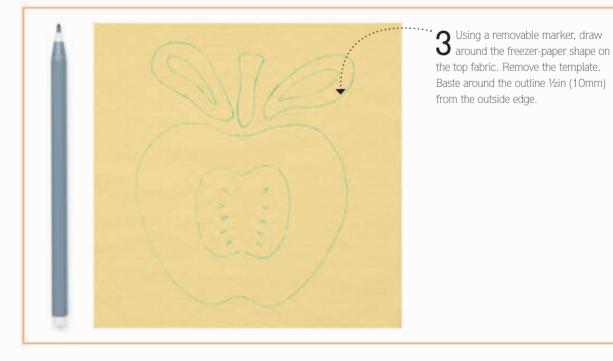
This technique uses two or more layers of fabric, cutting away the top layers to reveal the fabric beneath. The raw edges are turned under to finish the shape. Floral, pictorial, and geometric designs work well.

Choose two or three fabrics and baste them together, right sides up, around the outside edge.



2 Trace the motif onto the matte side of freezer paper and $_{\rm cut}$ it out. Iron it to the center of the fabric sandwich.

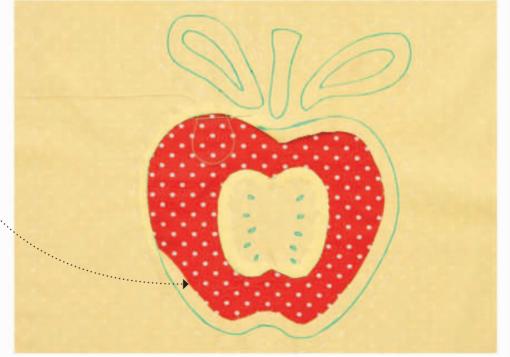


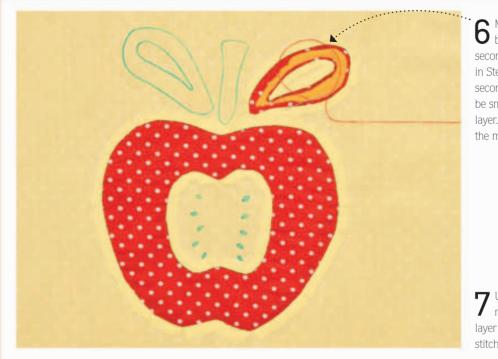


4 Using small sharp scissors, begin cutting away the shape ¼in (5mm) inside the marked line, being careful to cut only the top layer of fabric. Cut one section at a time, clipping or cutting small notches into any curves.



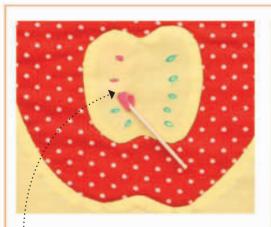






6 Mark the areas to be cut out from the second layer. Baste as in Step 3. Cut away the second layer, which will be smaller than the top layer. Always cut inside the marked line.

7 Using thread to match the second layer of fabric, slip stitch as in Step 5.



• To add small areas of different colors under the second layer, cut a piece of fabric slightly larger than the area to be filled. Insert it into the cutout area, using a toothpick or the tip of your needle. Turn under the edge on the second fabric and slip stitch. Remove all basting stitches.

Finished piece



Broderie perse

Persian embroidery, or broderie perse, is a technique in which motifs are cut from one printed fabric and applied to a different background. Several motifs, not necessarily from the same fabric, can be layered and rearranged to create a new design.

1 Cut out the motif with a generous ¼in (5mm) seam allowance. Clip any curves inside the seam allowance. If there are areas that are too small to cut away, leave the background fabric in place.



 $2 \ \mbox{Pin the motif in position on the background and baste} \\ 1 \ \mbox{it $\frac{1}{2}$in (10mm) inside the outline. For narrow areas} \\ such as stems, baste along the center. Trim outside seam allowances to reduce bulk wherever possible.}$



 $\mathbf{3}$ Using the needle tip, turn the seam allowance under and slip stitch the motif to the background, using thread to match the motif, or use a decorative stitch and contrasting thread as shown.



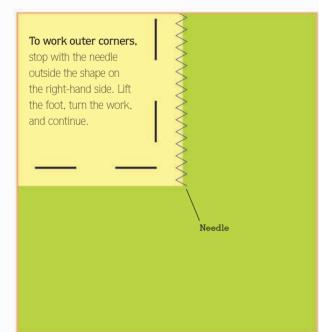
4 This appliqué technique allows you to make a small piece of expensive printed fabric go a long way, since individual motifs can be applied over a larger and less costly background fabric.



Machine appliqué general techniques

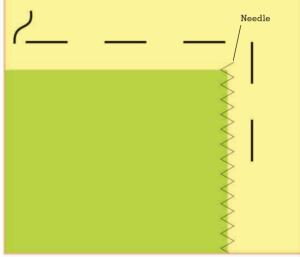
Machine appliqué is quick and will withstand many washes, especially if you use a tightly woven fabric and finish the edges with zigzag or satin stitch. Before you begin, it's a good idea to practice on scraps of your material. Try out different stitch widths and lengths to see what works best.

OUTER CORNERS

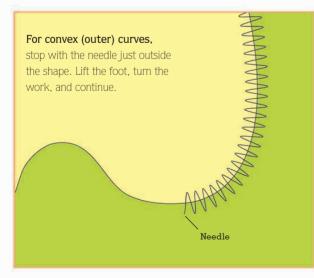


INNER CORNERS

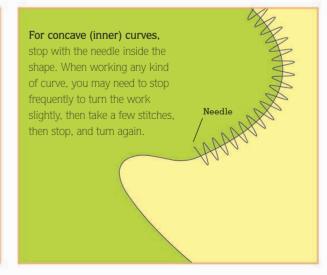
To work inner corners, stop with the needle inside the shape on the left-hand side. Lift the foot, turn the work, and continue.



CONVEX CURVES



CONCAVE CURVES

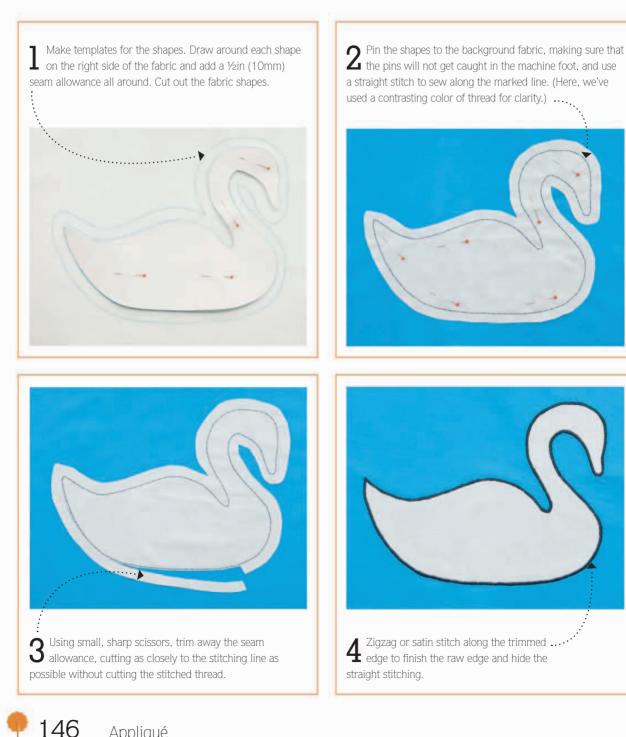


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Machine appliqué general techniques

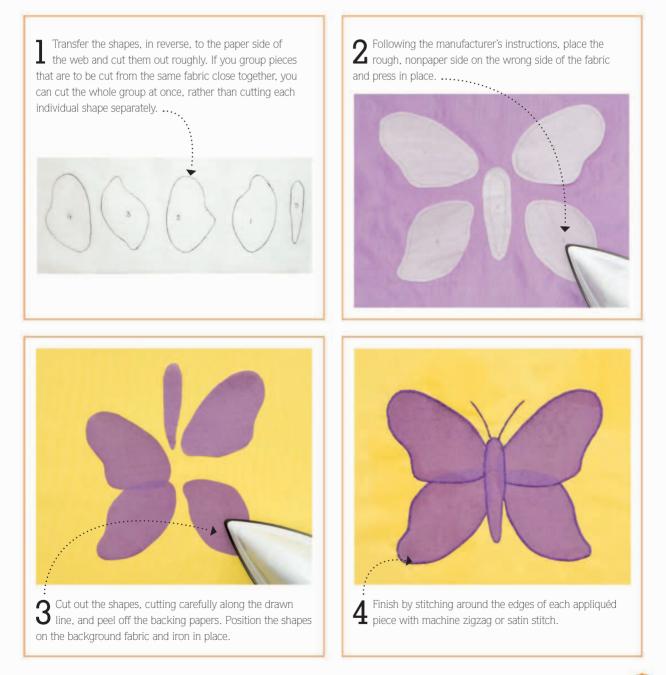
Stitch-and-cut appliqué

In this quick machine method, the motif is marked on the appliqué fabric and then sewn along the marked line before being cut out along the stitching line. The edges can then be finished by machine or by hand.



Fused appliqué

Fusible bonding web is a nonwoven fabric impregnated with glue that is activated by heat. One side is anchored to paper on which shapes can be drawn. When ironed to the wrong side of a shape and then to the background fabric, it forms a firm bond that is almost impossible to remove. It is most suitable for machine appliqué, because it creates a stiffness that is difficult to sew by hand.





Stained-glass appliqué

Stained-glass appliqué gets its name from the bias strips that separate the elements in the design, which resemble the metal in stained-glass church windows. You can make bias strips yourself (see pages 180–181) or purchase bias strips with fusible bonding web on the back, which can be ironed in place to secure the strip while you stitch it in place. If your design features straight lines, you can use strips cut on the straight grain.

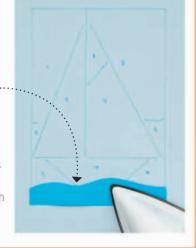
Transfer the pattern onto the background fabric. If the design is complicated, number the shapes on the background. .

2 Trace the appliqué pieces onto lightweight fusible bonding web, cut them out, and iron them to the wrong side of the appliqué fabrics. If you have numbered the background fabric, do the same with the appliqué pieces.

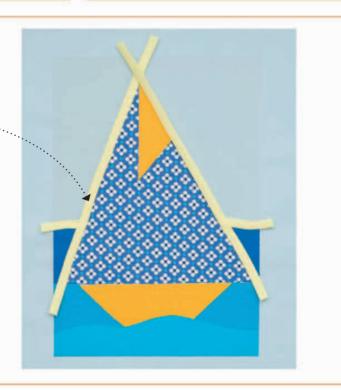


3 Cut out the appliqué shapes without adding any seam allowances. Iron them in place on the background.

4 Place each piece close to its neighbor, so that it will be easier to catch the raw edges under the bias strips.



5 Plan the order in which you apply the bias strips so that you can cover any raw ends with another strip. Iron on the strips and stitch them in place, using a machine slip stitch.

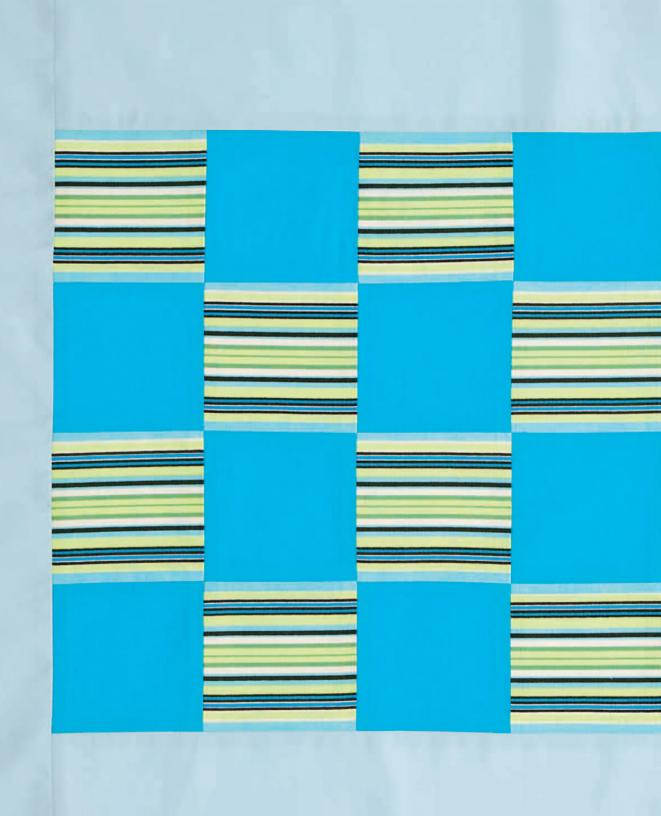








SETTING, SASHING, AND BORDERS



BORDER PATROL

A simple design of alternating striped and plain squares has been bordered (see pages 158–161) with a plain blue band that is the same width as the individual patches.

Setting

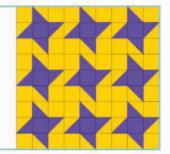
The way quilt blocks are arranged in a finished top is called the set, or setting. The following section can give only an outline of the virtually infinite possibilities for putting blocks together. The way to work out the best setting for a quilt is to lay the blocks out and view them from a distance.

Quilt layouts

Many quilt blocks, even fairly simple ones, can create interesting secondary patterns when they are joined, and rotating or reversing blocks makes a quilt look entirely different.

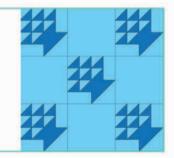
STRAIGHT SETS

The simplest sets are rows of repeating blocks stitched together edge to edge, referred to as "straight set."



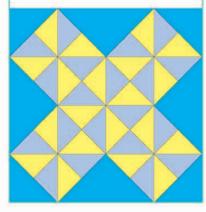
ALTERNATING PIECED AND PLAIN

Alternating a pieced block with a plain, unpieced one means fewer blocks to put together and allows large, open areas for quilting in the plain squares.



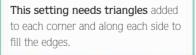
ON POINT: SOLID SET

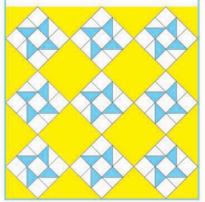
Blocks can be set "on point" (turned on the diagonal), with setting triangles around the edges.



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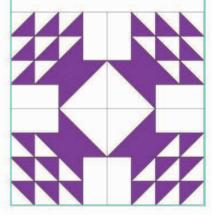
ON POINT: ALTERNATING PIECED AND PLAIN BLOCKS





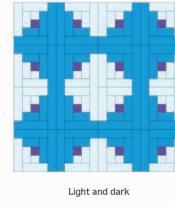
ROTATING BLOCKS

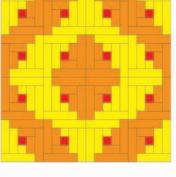
This setting creates new patterns once several blocks are set, particularly with asymmetrical patterns.

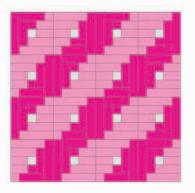


LOG CABIN

There are so many possible sets for Log cabin designs that each version has its own name. These examples all have the same number of identical blocks. In each case, the way each row is turned determines the final effect.



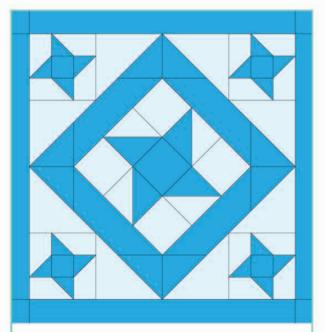




Barn raising

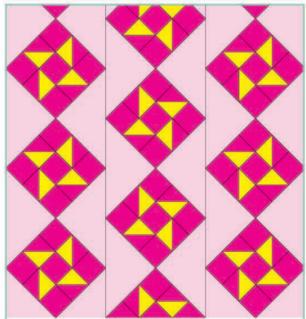
Straight furrow

FRAME SETTINGS



Also known as medallion settings, these have a central block, sometimes an elaborate appliqué, surrounded by several borders of various widths, some pieced, some plain and unpieced. The center can be set square or on point, as here.

STRIP QUILT



When blocks are arranged vertically, a strip quilt results. The first strip quilts were usually simple strips of fabric joined to make the width of a quilt, but beautiful strip quilts can be made from pieced blocks.

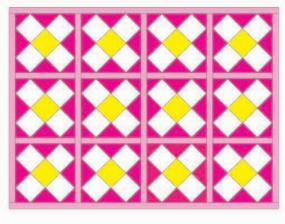


Sashing

Sashing is comprised of strips of fabric placed between blocks to frame them. Sampler quilts and star blocks are usually sashed to give each block the chance to shine. The space created by the sashing is flexible: Try out various widths and colors before you cut the strips. Squares, plain or pieced, can be placed at the corners of each block

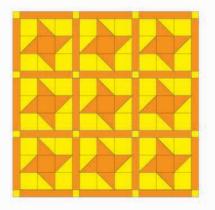
within sashing strips to delineate the pattern further or continue a chained effect.

Each block in this piece is framed by straight-set simple sashing.

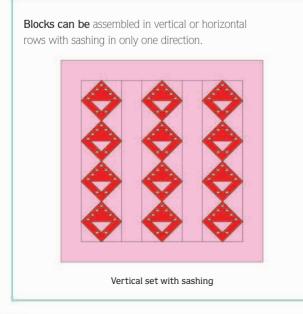


Straight-set simple continuous sashing

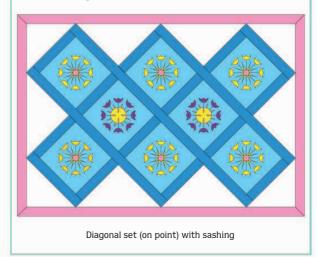
Adding a square in each corner between the blocks can create additional pattern. The corner squares can also be pieced; simple pinwheel, four-patch, and nine-patch designs work well.



Straight set with corner square sashing



Blocks set on point can be sashed and assembled in strips with side triangles added to make a chevron sash.



156 Setting, sashing, and borders

SIMPLE CONTINUOUS SASHING

Cut strips to the desired width plus ½in (10mm) seam allowance and the same length as the measurement of one side of the blocks. With right sides together, taking a ¼in (5mm) seam allowance, alternate strips and blocks to make a vertical row. Press seam allowances toward the sashing.



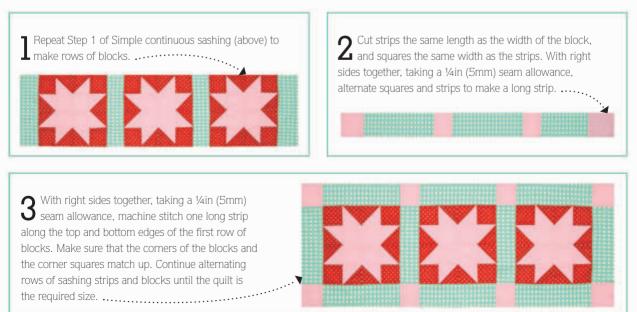
2 Cut strips to the desired width plus 1/2in (10mm) seam allowance and the same length as the joined row of blocks.



3 With right sides together, taking a ¼in (5mm) seam allowance, sew a strip along the top and bottom of the row of blocks. Press seam allowance toward the sashing.

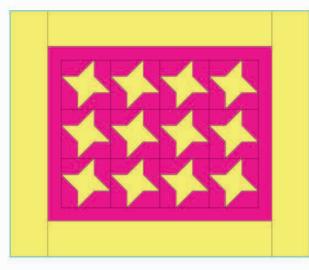


SASHING WITH CORNER SQUARES

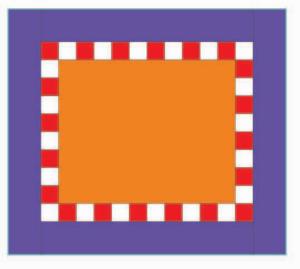


Borders

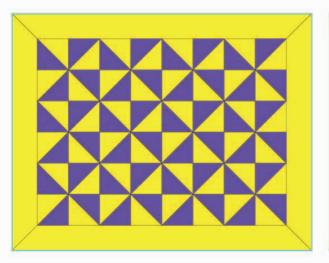
- The outside edges of most quilts are finished with strips, called the border, that frame the piece and protect the edges. They can be single or multiple, wide or narrow, pieced, or plain and unpieced. To help choose a size, try dividing the block measurement in half or three-quarters. If possible, strips should be cut along the lengthwise grain, selvages removed, in one long piece. Never cut borders on the bias.

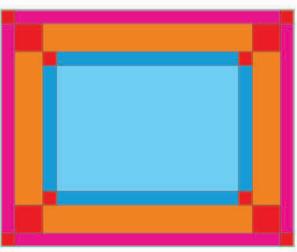


Straight borders



Pieced inner border with straight outer border



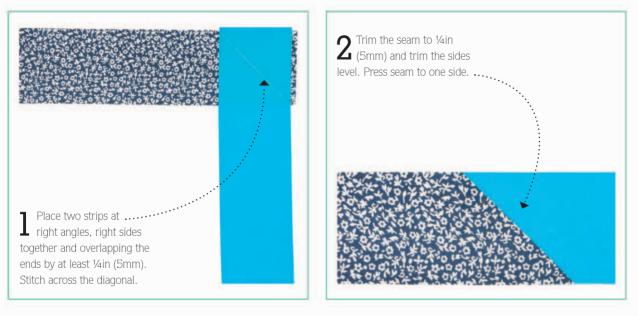


Mitered borders

Multiple borders with corner squares

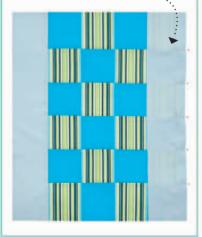


JOINING STRIPS TO MAKE A BORDER

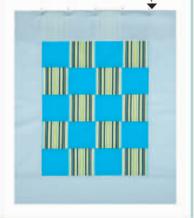


STRAIGHT BORDERS

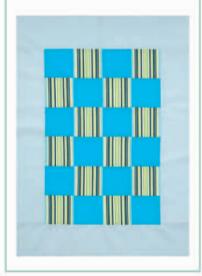
Cut or piece two border strips the same length as the sides of the quilt, plus ½in (10mm) seam allowances. Mark the center of the strips and the sides of the quilt, and pin right sides together. Join, taking a ¼in (5mm) seam allowance. Press seams toward border strips.



2 Measure the top and bottom of the quilt plus borders and cut two strips to that length. Mark the center of the strips and top and bottom of the quilt, as in Step 1, and pin right sides together. Join, taking a ¼in (5mm) seam allowance. Press seams toward the border strips. Repeat Steps 1 and 2 to add additional borders.



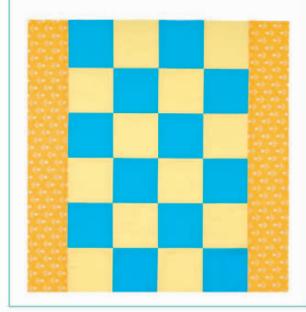
3 The quilt top is now completed and ready to be quilted (see pages 162–177).



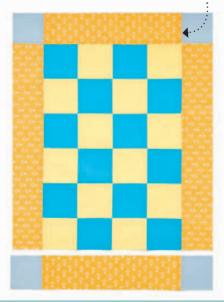


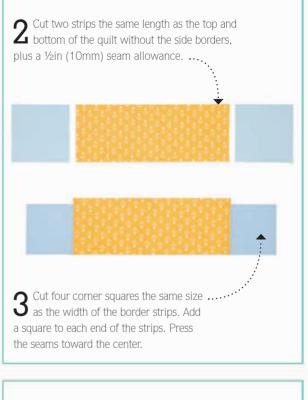
CORNER SQUARES ON A STRAIGHT BORDER

1 Follow Step 1 of straight borders (see page 159) to add the two side borders. Press seams toward the borders.

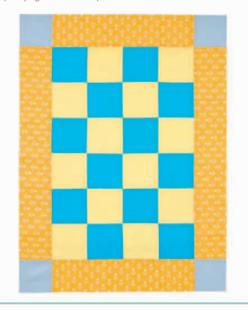


4 Add the pieced strips to the top and bottom of the quilt. Press the seams toward the border strips.



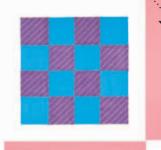


 ${\bf 5}$ The quilt top is now completed and ready to be quilted (see pages 162–177).



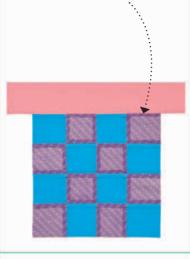
MITERED BORDERS

Cut border strips to the desired width, plus ½in (10mm) seam allowance and 4in (10cm) longer than the sides of the quilt.



2 Place a pin as a marker in the center of the strips and the top and bottom of the quilt. Pin them right sides together. Place a pin as a marker 1/4 in (5mm) from each corner.

3 Join the border strips to all sides of the quilt, taking a ¼in (5mm) seam allowance. Do not stitch into adjoining border strips. Press the seams toward the borders.

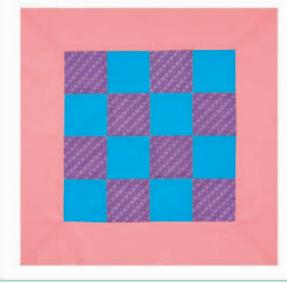


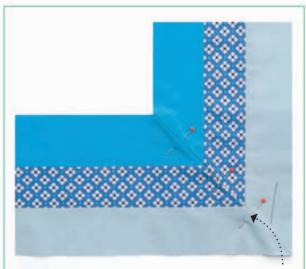
4 Place the quilt right side up on a flat surface and fold under each end of each strip to the wrong side, at a 45-degree angle. Pin the folds in place from the right side and make sure the angle is correct. Remove the pins and press the folds.



MULTIPLE MITERED BORDERS

5 Working from the wrong side, repin the miter along the pressed fold. Baste, if desired. Stitch from the quilt edge to the outside corner. Trim the seam allowance and press it open. Repeat to miter all corners.





If you are using multiple borders, join them together and attach to the quilt top as one piece, then miter as above, making sure you match the seams for each border in the miter.

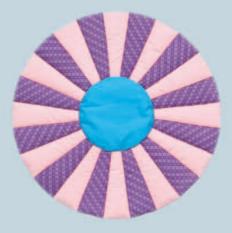


QUILTING









QUILTED PLATES

This pattern, called Dresden plate, has many seams and lends itself to being quilted "in the ditch" (page 177) either by machine or by hand.



Quilting

Quilting holds the layers of a quilt together, gives a quilt its texture, and should add to the overall beauty of the piece. Quilting motifs range from geometric grids and simple heart shapes to elaborate scrolls. Some appliqué motifs look best if they are outlined or echoed by quilting.

Transferring designs

Once the quilt top is finished, you need to transfer the quilting pattern onto it. Use equipment that can be removed, such as water- or air-soluble pens or light pencil marks, to mark the pattern. Tailor's chalk applied lightly can usually be removed. Slivers of soap can make effective and washable marks on dark fabrics. Dressmaker's carbon paper is indelible and not recommended.

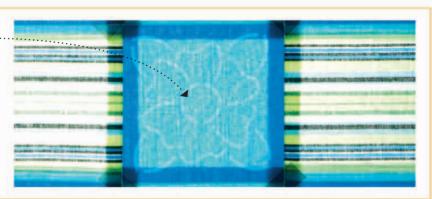
MASKING TAPE



TRACING

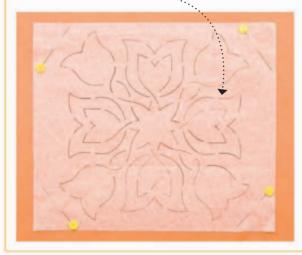
166

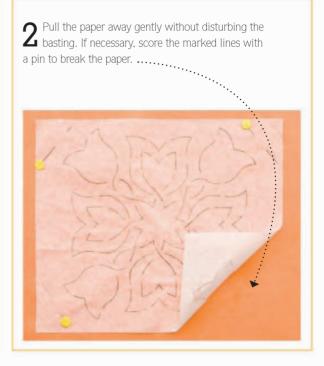
If your project is small and light in ... color, you can trace the pattern directly on the fabric. Place the quilt top over the pattern on a lightbox or a glass-top table with a table lamp underneath. Alternatively, tape it to a clean window. Trace the design lightly onto the fabric.



TRACE AND BASTE

 \mathbf{l} Use on fabrics that are hard to mark. Transfer the pattern to the quilt top before you layer it. Transfer the design to tissue paper and pin in place. With the knot on top, sew along the pattern lines with a small running stitch. Secure with a double backstitch.

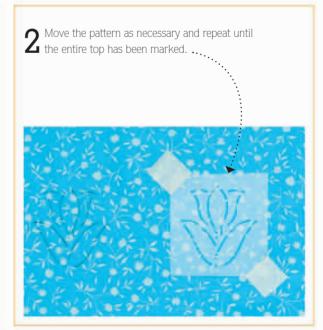




TEMPLATES OR STENCILS

 \mathbf{l} Mark the design on the finished top before you layer it. Place the pattern on the quilt top and secure it with masking tape or weights. Draw around a template or in the channels of a stencil with a very sharp pencil. Keep the line as light as possible.







Assembling the quilt layers

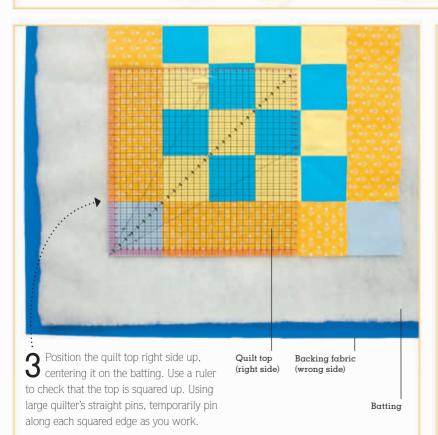
Once you have marked the quilting pattern on the quilt top, it is time to assemble the quilt "sandwich," which is the layers of top, batting, and backing that make up the quilt. If the batting has been folded, open it out flat and leave it for several hours to relax the wrinkles.

Trim the batting and backing 3–4in (7.5–10cm) larger all around than the finished top. Lay the backing wrong side up on the work surface and smooth it flat. Secure it to the surface with masking tape.

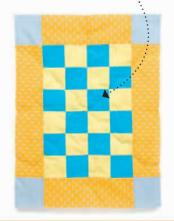
Backing fabric (wrong side)

Batting _

2 Center the batting on the backing, \ldots and smooth it out.



4 Working from the center out diagonally, horizontally, and vertically, baste or safety pin the layers together. Remove the pins along the edge as you reach them. Keep smoothing the layers. Take basting stitches 2in (5cm) long—first vertically and horizontally, then diagonally. If pinning, follow the same pattern and insert the pins at 3–4in (7.5–10cm) intervals.



Turning a quilt

Sometimes you may want to finish the edges of the quilt before you quilt it. The technique works well on smaller projects, such as baby quilts. Cut the batting and backing slightly larger than the quilt top.



Center the quilt top right side up on the batting. Center the backing on the quilt top, right side down. Pin or baste the layers together around the edge.

2 Start machine stitching at the bottom edge, about an inch (a few centimeters) from the corner, taking a ¼in (5mm) seam. Secure with backstitching. At the corners, stop ¼in (5mm) from the edge with the needle down. Raise the presser foot. Pivot the fabric, lower the presser foot, and continue sewing. On the fourth side, leave an opening of 5–10in (12– 25cm). Secure with backstitching.



4 Clip the corners to reduce bulk. If necessary, trim and grade the seams, then turn right side out through the opening.

 Image: Clip the opening.

 Imag

Making a bigger backing

Most bed quilts are wider than most fabrics, so it is often necessary to piece the backing. There are several ways to do this, but you should avoid having a seam down the vertical center of the quilt.



Hand quilting basics

Quilting by hand gives a soft look. Straight, even stitches are worked, ideally with the needle at an angle of 90 degrees, and the same stitch length on front and back. Because of the thickness of the quilt layers, the stitches are executed using a technique known as "rocking" the needle, which uses both hands. Use quilting threads and needles, and wear a thimble on your middle finger and a protective guard underneath.

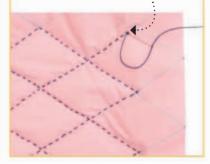
KNOTTING TO BEGIN



FINISHING OFF



2 Insert the needle point into the top layer only, next to where the thread emerges and in the opposite direction from the stitching. Slide the needle within the batting and bring it out about ¾in (2cm) from the end of the stitching. Gently pull the French knot through into the batting.



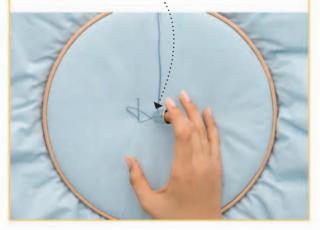




QUILTING OR ROCKING STITCH

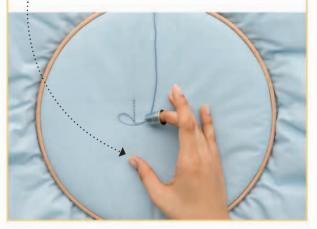
Bury the knot as in knotting to begin (see opposite). Place one hand under the quilt where the needle should emerge.

2 With the needle between thumb and index finger of your needle hand, push the needle with your thimbled finger straight down until you feel the point with your underneath hand. Stop pushing.

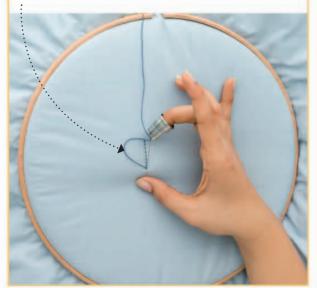


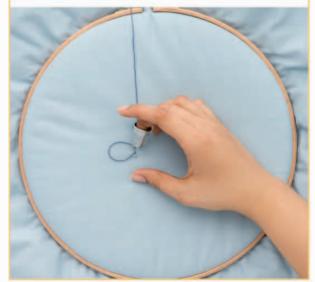
 $\mathbf{3}$ With your underneath finger, push up gently against the side of the needle and the quilt. At the same time, push down with your top thumb and make a bump in the layers while you push the needle to the top.

Stop when the length of the needle protruding on the top is the same length as the next stitch.



5 Use the thimbled finger to bring the eye of the needle upright again, while at the same time pushing in front of it with your thumb. When the needle is upright and the point breaks through the fabric, push down as in Step 1.







STAB STITCH

1 Stab stitch is an alternative way to work on thick quilts. Use a thimble on each middle finger. Bury the knot as in knotting to begin (see page 170). Push the upright needle straight down through all layers. Pull the needle and thread through to the back.

2 Push the upright needle back up through all layers, working a stitch length away from the previous stitch. Pull the needle and thread through to the top. Repeat.





Concentric quilting

Concentric quilting lines can be worked by hand or machine. Outline quilting emphasizes a pieced or appliquéd design and requires minimal marking. Straight lines can be marked with ¼in (5mm) masking tape; curves can be drawn lightly. Echo quilting is similar, but consists of a series of evenly spaced concentric quilted lines. It is most often used in Hawaiian appliqué (see pages 138-139).

OUTLINE QUILTING

Follow the seamlines or outlines of the motif, working ¼in (5mm) away inside or outside, or on both sides of the lines.



ECHO QUILTING

Make a row of outline quilting (see left). Then add evenly spaced rows to fill the background around the motif.



Seeding

Also known as stippling, this hand-quilting method uses small, straight stitches to fill the background.

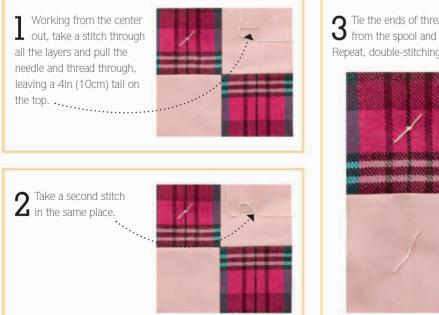
 \mathbf{l} Bury the knot (see page 170). Bring the needle and thread out near the motif. Take to the back and come up a short distance away from the first stitch.

2 Take another stitch straight down and pull the thread through and come up a short distance away. Work outward from the motif. Keep the stitches small on the front and back and position them randomly to look like seeds.



Tying

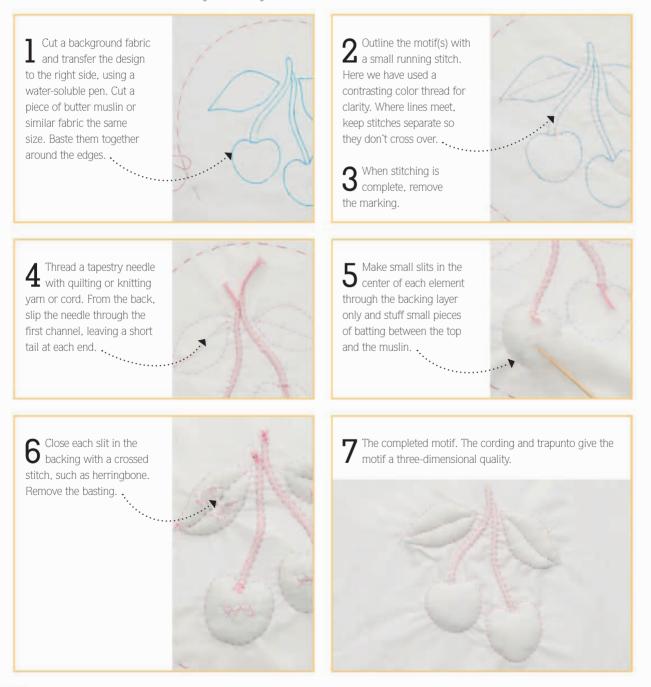
Tying involves tying lengths of thread, lightweight yarn, or ribbon through the layers of a quilt to hold them together. Pearl cotton and stranded floss both work well. You will need a sharp-pointed needle with an eye that is large enough to hold the thread but small enough not to make holes in the quilt. Space the ties according to the type of batting, the block pattern, and the size of the quilt. Cotton and wool batting shift easily and should be tied more closely than polyester. A general guide is 4–6in (10–15cm) apart.





Corded quilting and trapunto

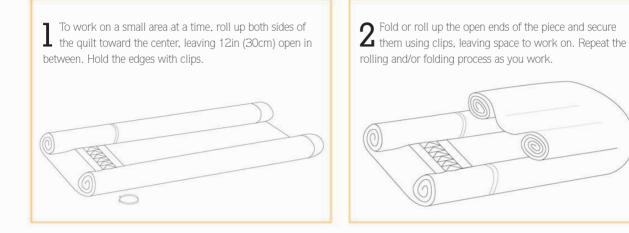
Corded quilting, or Italian quilting, and trapunto, or stuffed quilting, are techniques that can be used separately, but they work well together. Both involve stitching a design through a top and a thin backing layer, usually of butter muslin. The motif is then filled from the back with lengths of quilting, knitting yarn, or soft cord, or with stuffing material. The outline is traditionally worked by hand.



Machine quilting basics

Beautifully machined quilts are in no way second best to those worked by hand. Because the stitches are continuous, the finished product is usually flatter than a hand-quilted one. An even-feed, or "walking," foot, which feeds the layers through at the same speed top and bottom, is useful. Start and finish either by setting the stitch length to "O" and taking a few stitches before resetting, or leave a tail of thread to tie off.

PREPARING A QUILT FOR MACHINING



Freestyle quilting

Freestyle, or free-motion, quilting gives machine quilters a great deal of freedom to create their own designs. Mastering the technique requires practice, but the effort can be well rewarded with unique work. You need a darning foot or a free-motion foot and to know how to lower the feed dogs. If your machine has the option to stop work with the needle always down, use it.



With the presser foot down where you will start, take one stitch. Hold the top thread and use it to pull the bobbin thread gently to the top. Secure with a few very short stitches. Start slowly and take a few more short stitches. Cut away the thread tails.



 $2 \ \mbox{Guide the fabric with your hands, moving the work in any direction. Position your hands in an open circle around the machine foot and press the layers gently. Keep a moderate speed and make the stitches the same length. Tie off with a few short stitches, as in Step 1.$

Quilt as you go

If you work patchwork directly onto layers of batting and backing fabric, you will end up with a finished piece that needs no further quilting. The technique works best when piecing strips or assembling a medallion quilt (see page 155) with a border. Borders can be pieced and added as strips.



Add strips in your chosen order. Trim backing and batting to correct size and add binding (see page 182-183).

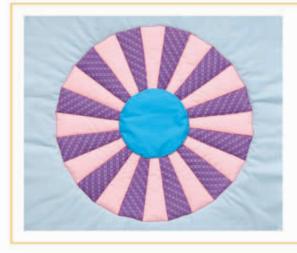
2 Cut a central medallion and the strips for the first border. Position the medallion face up in the center of the backing and apply the first strip, right sides together, sewing through all layers. Add side strips first, fingerpress open, then apply top and bottom strips. Fingerpress the first round open.





Quilting in the ditch

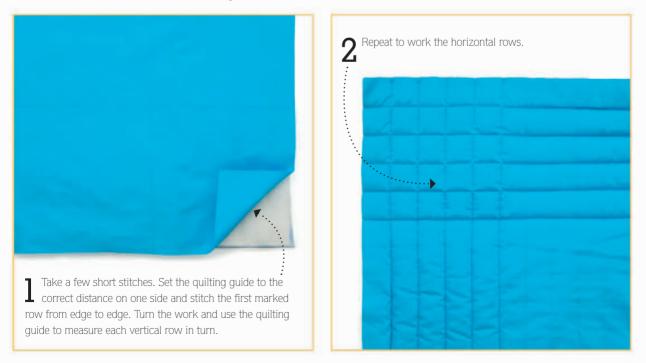
Here, the stitching follows the piecing lines on the quilt top and is hidden in the seams.



Secure the thread. Stitch along each row of piecing in turn. Stop and start as little as possible.

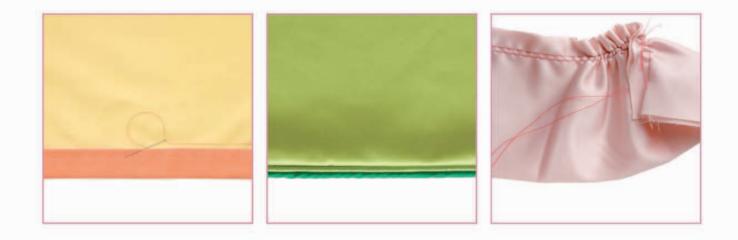
Grid patterns

Traditional gridded quilting patterns can be square or diamond shaped. Mark the grid by drawing the center line in each direction, or use ¼in (5mm) masking tape. If you set a quilting guide on your walking foot, you can use it to measure the distance between rows as you work.











FINISHING

Finishing

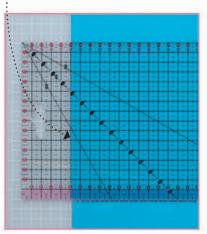
Finishing the edges of a quilt is the final stage in its creation. Quilts must always be bound, either with an applied straight or bias binding (either single or double), by turning the backing to the front (or vice versa), or by folding the edges of both top and backing to the center, a technique also known as creating a "knife edge."

Bindings

Bias binding is available in various colors and widths, or you can make your own. Bindings should be applied as a continuous strip. If possible, cut straight binding strips along the lengthwise grain of the fabric or join pieces before applying (see page 159). Bias binding has more stretch than straight binding, making it suitable for binding work with curved edges.

MAKING A STRAIGHT BINDING STRIP

1 Measure the edges of the piece being bound and decide on the width of the finished binding. Cut strips twice this width plus ½in (10mm), allowing extra length for mitering corners and joining pieces.



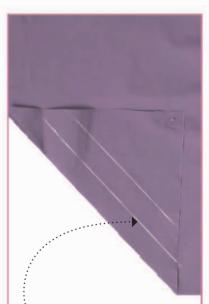
2 Make sure your edges are square and cut along the straight grain of the fabric. Add about 16in (40cm) to the length for full quilts; 12in (30cm) for baby quilts and wall hangings; and 8in (20cm) for small works.

180

MAKING A BIAS STRIP



Buy at least 1¾yd (1.5m) of fabric so you can cut very long strips. Cut off selvages and smooth the fabric flat. Straighten one comer of the fabric, then fold this edge back so that it aligns with the top edge and forms an exact 45-degree angle. Cut along this bias fold.



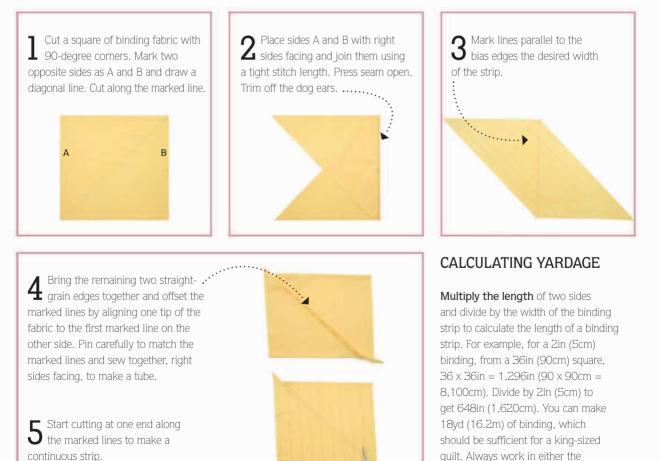
2 Using a metal ruler and a sharp piece of tailor's chalk, mark lines on the fabric parallel to the bias edge and 1½in (4cm) apart. Cut out the strips along the chalked lines. Cut as many strips as you need for your project, plus a little extra.

3 Join strips together to make a continuous strip. Pin the strips together at a 90-degree angle with right sides facing and sew a ¼in (5mm) seam on the bias. The seam should run from edge to edge of each strip, with a triangle of fabric left at either end of the seam.



4 Press the seam open and trim off dog-ear seam allowances. Fold to the center, wrong sides together, and press, or run the strip through a bias binding maker to prepare the strip for binding a quilt.

MAKING A CONTINUOUS BIAS STRIP

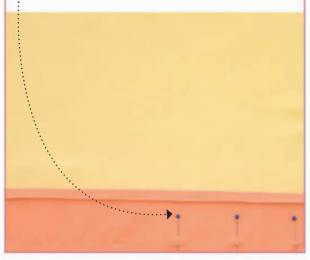


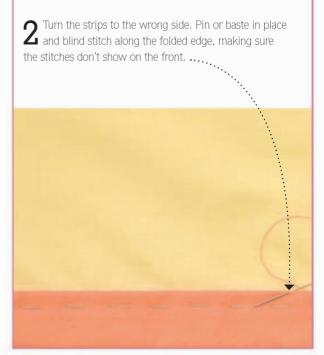
Imperial or metric system.

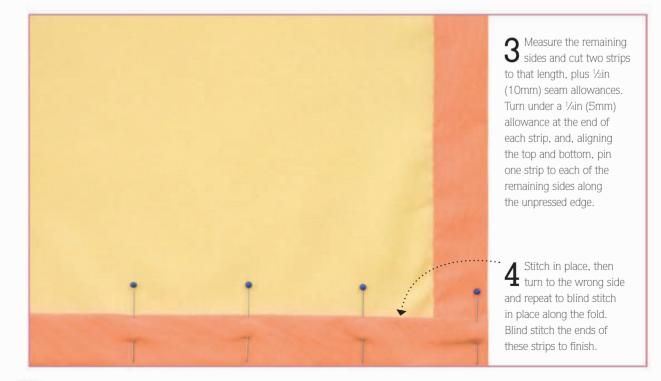


SINGLE BINDING

L Cut a binding strip to the desired width and press a ¹/4in (5mm) seam allowance along one long edge. Align the top of the binding strip with one corner of the piece and pin along the unpressed edge with right sides facing. Stitch the strip in place. Repeat on the opposite side.

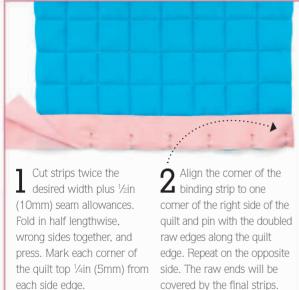






DOUBLE BINDING

Double binding is stronger than single binding and is recommended for binding bed quilts. Quilted wall hangings and other small, layered items that won't get routine wear and tear can be single-bound.



Align the corner of the binding strip to one corner of the right side of the quilt and pin with the doubled raw edges along the quilt edge. Repeat on the opposite side. The raw ends will be covered by the final strips.
 Start and finish stitching from the marked seam allowance along the raw edges. Turn the folded edge of the binding to the back and slip stitch in place. Repeat on the opposite side.

4 Turn under a ¹/₄in (5mm) allowance at each end of the two final strips and apply them in the same way.

Applying a flat trimming

On some items a flat trim braid or ribbon is added for a decorative effect. This may be right on the hem or edge, or placed just above it. To achieve a neat finish, any corners should be mitered.



Pin the trim to the fabric, wrong side of the trim to right side of the fabric.

2 At the corner point where the trim is to be mitered, fold the trim back on itself and secure with a pin.

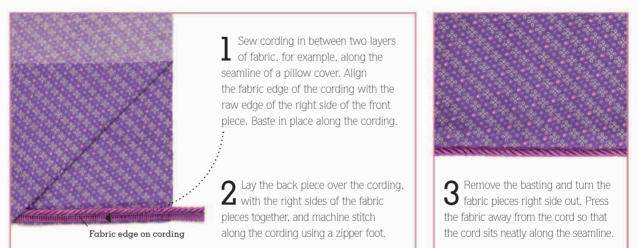


5 Open the trim out and press. 6 Machine stitch the inner and outer sides of the trim to the fabric, close to the edge. Be sure the stitching at the corners is sharp.

Cording and piping

Pillow covers, home accessories, or bags made up in various needlework techniques often require a contrasting decorative edging of cording or piping. Cording is the easiest to apply; however, with piping, your choice of color is endless.

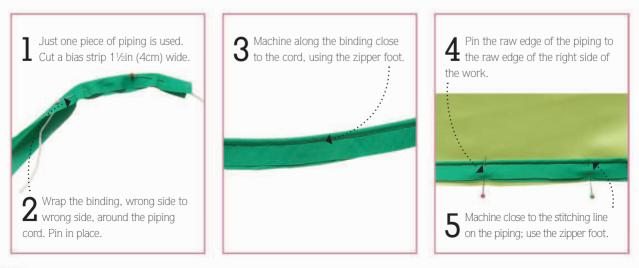
SEWING ON CORDING

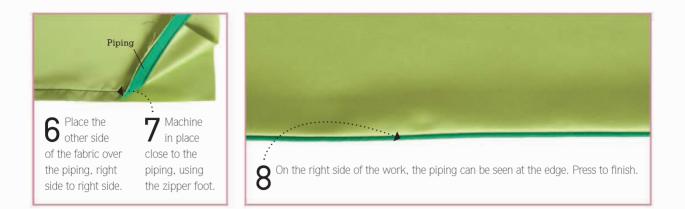


Piped edges

Piped edges can be single, double, or gathered. They add a stylish finishing touch to pillows and other home furnishings and are very effective when used on borders and edges of quilts.

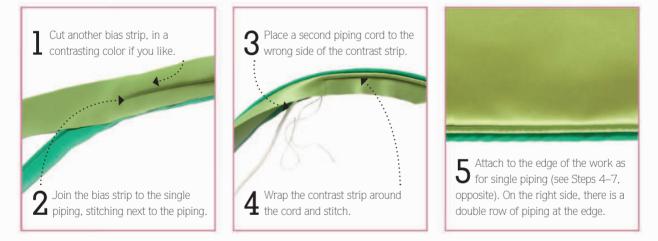
SINGLE PIPING





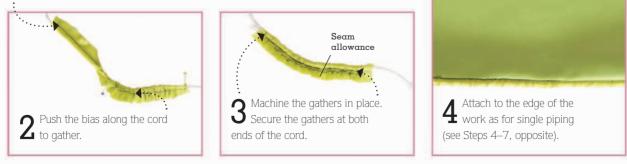
DOUBLE PIPING

Different thicknesses of piping cord can be used for this. Make up single piping (see Steps 1–3, opposite).



GATHERED PIPING

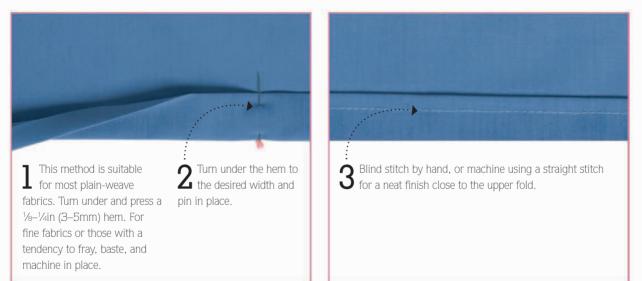
This is a great technique to try on pillows. Cut a bias strip 2in (5cm) wide. Stitch the bias strip loosely around a piece of piping cord. Secure the cord to the bias at one end.



Hemming needlework

Most quilted items are bound rather than hemmed, but sometimes a hem is needed instead. There is a choice of hems to use, depending on the fabric and the use of the finished piece, from simple turns to miters.

DOUBLE-TURNED HEM



SINGLE-TURNED HEM

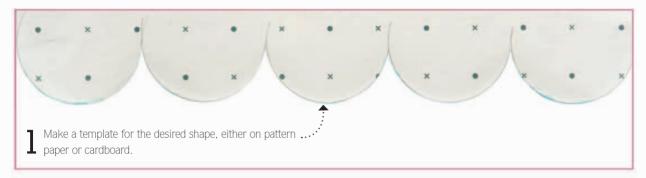




2 Either slip stitch in place by hand or blind stitch the hem $\dot{2}$ in place by machine. Remove basting.

Decorative facings

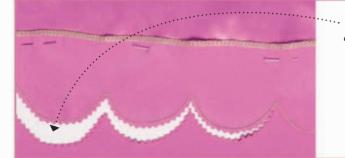
A faced hem can be decorative with scallops or points, or used for finishing a hanging or embellishing an edge on a pillow or a quilt.





2 Cut a facing 4in (10cm) wide on the straight grain and finish one edge. Use the template to mark the shapes on the facing strip using the finished edge as the top edge and allowing $\frac{5}{10}$ in (1.5cm) between the bottom of the template and the raw edge.

 $\label{eq:marked-outline} 3 \mbox{ Machine along the marked outline, pivoting the needle} at the top of each scallop or point.$



4 Use pinking shears to trim the fabric away from the bottom, cutting below the stitching line.

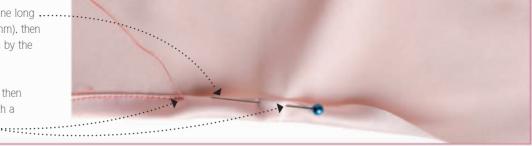


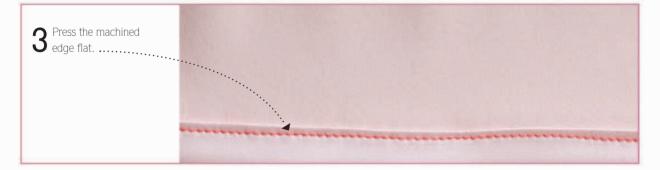
Ruffles

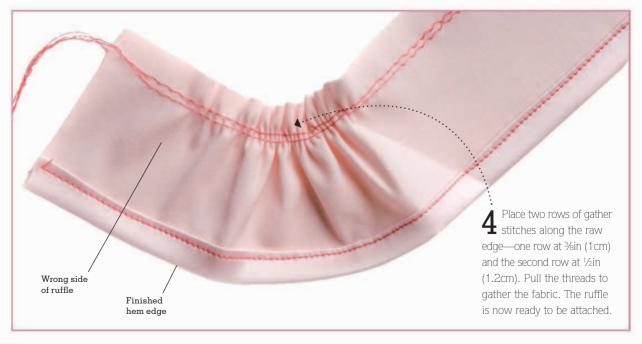
A plain ruffle is normally made from a single layer of fabric cut on the straight of the grain. The length of the fabric needs to be at least two and a half times the length of the seam into which it is to be inserted or of the edge to which it is to be attached. The width of the ruffle depends on where it is to be used.

1 Turn under one long edge ¼in (5mm), then turn under again by the same amount.

2 Pin in place, then machine with a straight stitch.

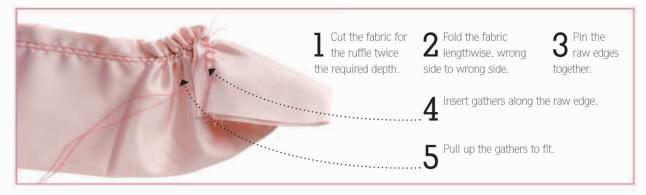






Double ruffles

This is a useful ruffle on a fabric that is prone to fraying.



Ruffles with a heading

This type of ruffle can give a decorative effect to soft furnishings.





Stitching a ruffle to an edge

If a ruffle is not in a seam then it will be attached to an edge. The edge of the seam will require neatening, which is often best done by using a binding method, since it is more discreet. A self-bound edge, where the seam is wrapped onto itself, is suitable for fine, delicate fabrics. For thicker fabrics, use a bias binding to finish the edge.

SELF-BOUND FINISH



BIAS-BOUND FINISH





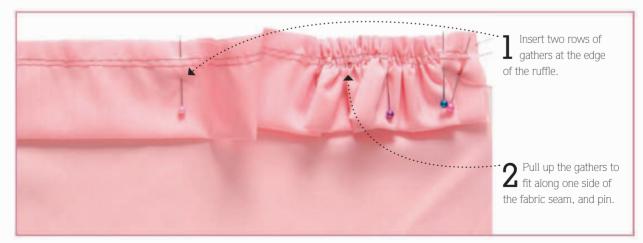
Stitching around a corner

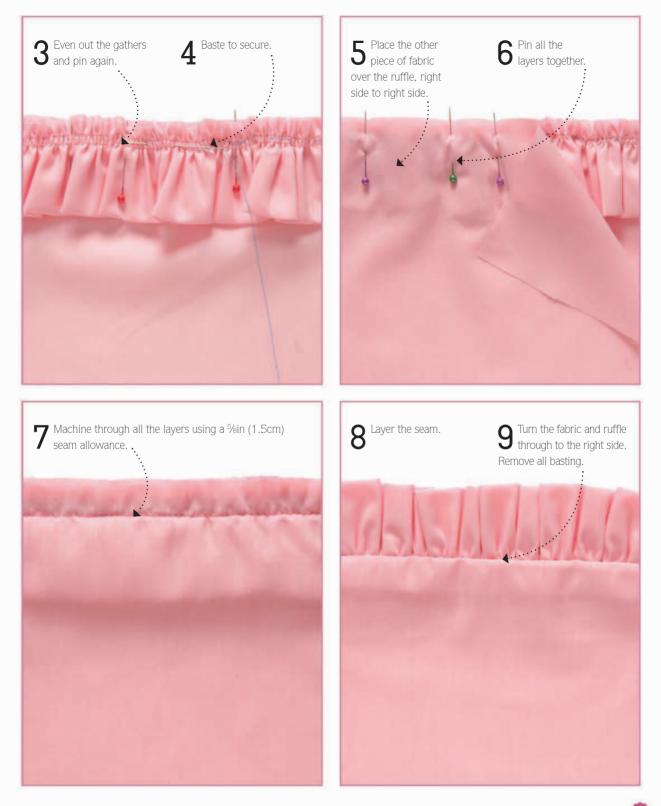
It can be difficult to stitch a ruffle to a corner and achieve a sharp point. It is easier to fit the gathers into a tight curve, which can be done as the ruffle is being applied to the corner.



Stitching into a seam

Once the ruffle has been constructed it can either be inserted into a seam or attached to the edge of the fabric (see page 190). The two techniques below apply to both single and double ruffles.







Fastenings

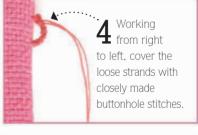
- Many items other than quilts are made using patchwork, appliqué, and quilting techniques, from bags and soft
- furnishings to toys and garments. Sometimes they will need fastenings such as buttons or zippers, and buttons, of

course, need buttonholes or loops.

MAKING SIMPLE BUTTON LOOPS

Work simple button loops directly into the seamline at the edge of the fabric so that the securing stitches are worked through four layers of fabric—the front fabric layer, the two seam allowance layers, and the back fabric layer.

2 Thread the needle with one strand of thick, strong buttonhole thread. Run it between the layers of fabric and out at the right of the loop position. Make three small stitches through the layers in the same place, close to the edge.

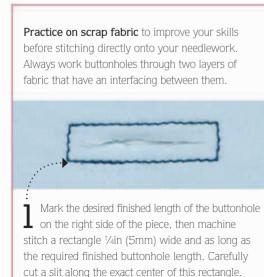




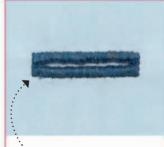
3 Insert the needle through the fabric to the left, leaving a gap the same width as the button's diameter. Create four loose strands of thread back and forth over this gap, making one stitch through the edge at each end of each loop.



HAND-STITCHED BUTTONHOLES

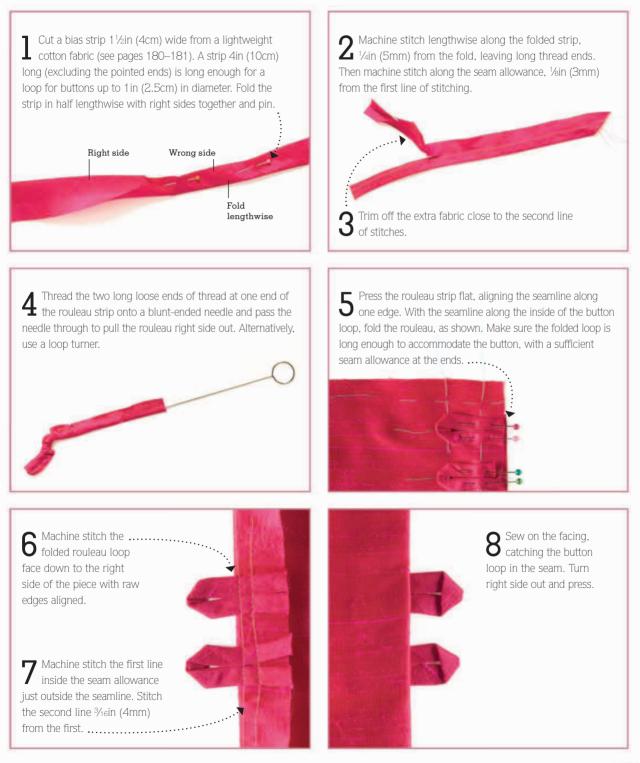


2 Using a thick, strong buttonhole thread, work tailor's buttonhole stitch (as shown) along both edges of the slit. Insert the needle through the fabric just outside the machine stitches, so that the stitches are 1/8 in (3mm) long.



3 Finish each end of the buttonhole with three or four stitches that are the same width as the total width of the buttonhole.

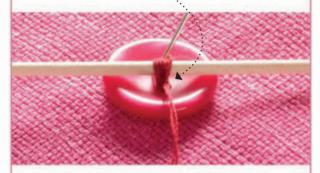
ROULEAU BUTTON LOOPS





SEWING ON BUTTONS

Thread your needle with a double strand of thread. Secure the thread to the fabric where the button is to be positioned. Pass the needle up through one hole of the button, down through the other hole to the back. Do not pull the thread taut yet—first, insert a toothpick (or matchstick) under the button and between the button's holes. Then pull the thread taut.



 $\mathbf{2}$ Continue working back and forth through the holes of the button and through the fabric, until at least five stitches have been worked.

Remove the toothpick. Wrap the working thread several times around the thread under the button to form a shank. Secure the thread end with three small stitches at the back.



SEWING ON PLASTIC SNAPS

Although snaps are not visible, align them carefully when sewing them on. Use a doubled thread and work three or more stitches through each hole around the edge of the snap pieces.



SEWING ON TIES

You can sew ties on a finished item with decorative stitching. Fold under the ends of the ties and baste them in place on the wrong side. Machine stitch a square with a cross at the center over the end. Remove the basting.



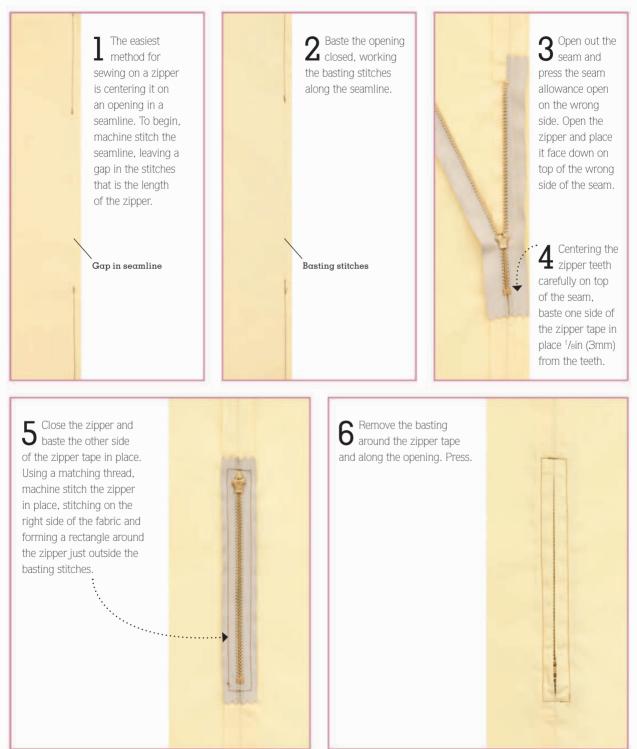
SEWING ON HOOKS AND EYES

Work a ring of straight stitches

through the loops provided. Work the stitches only through the back layer of fabric and the seam allowances underneath. Make sure that the hook and the eye remain aligned by basting the necks in position before stitching.



SEWING ON A ZIPPER





EMBELLISHMENTS

Embellishments

Finishing instructions sometimes involve the addition of simple handmade or ready-made embellishments. Here are some helpful tips for successfully applying these finishing touches.

Buttons

Buttons can be made from almost anything—shell, bone, coconut, nylon, plastic, brass, or silver. They can be any shape, from geometric to abstract to animal shapes. A button may have a shank or have holes on the surface to enable it to be attached to fabric.





Trimmings, decorations, fringes, and braids

Decorative finishing touches—fringes, strips of sequins, ric-rac braids, feathers, pearls, bows, flowers, and beads can add pizzazz and a flourish to quilted items, especially wall hangings and bags, and can be used to personalize soft furnishings.



Ribbons

From the narrowest strips to wide swathes, ribbons are made from a variety of yarns, such as nylon, polyester, and cotton. They can be printed or plain and may feature metallic threads or wired edges.



Trimmings, decorations, fringes, and braids



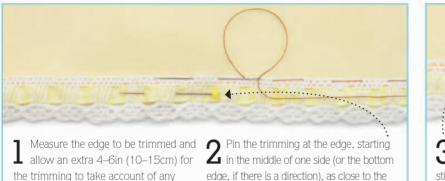
Applying decorative edgings

- A pretty decorative edging can bring a piece to life and add a professional touch. Sometimes trimming is applied only
- along one of its sides. These trimmings usually overhang the edge, adding a lacy or frilly outline. Depending on the fabric
- and personal preference, the trimming may be attached to the front or the back of the piece by hand or machine.

edge of the trimming as possible. Baste in

place, removing pins as you work.

APPLYING SINGLE-EDGE TRIMMING TO THE FRONT

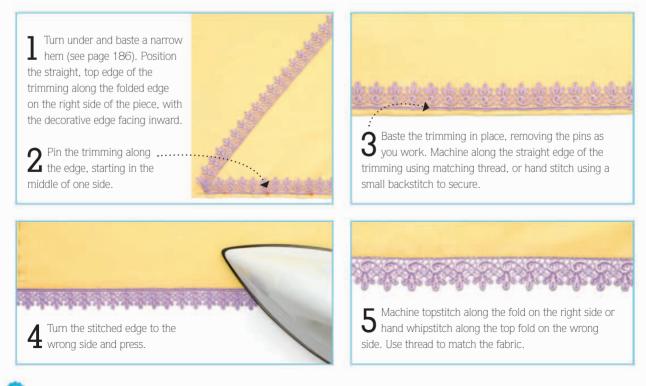




APPLYING SINGLE-EDGE TRIMMING TO THE BACK

mitered corners or overlaps at joins.

Hem the piece first (see page 186).



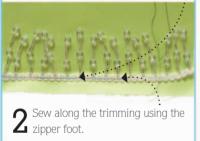
Embellishments

Applying other trimmings

There are many kinds of trimmings—ribbons, braids, beads, feathers, sequins, fringes, and so on—that can be applied to a fabric edge. If a trimming is made on a narrow ribbon or braid it can often be inserted into a seam during construction. Other trimmings are attached after the item has been completed.

INSERTING TRIMMING IN A SEAM







3 Place the other piece of fabric to the first one, right side to right side. Sew again to join them.



ATTACHING TRIMMING TO AN EDGE

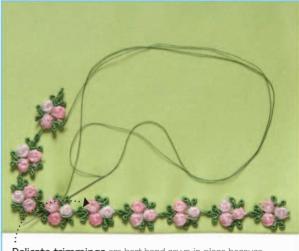


Pin the trimming in position along the finished edge of the work. Be sure the trimming is aligned to the edge. Baste in place.



2 Using the zipper foot, sew in place close to the upper edge, leaving the lower edge of the trimming free.

HAND STITCHING TRIMMING

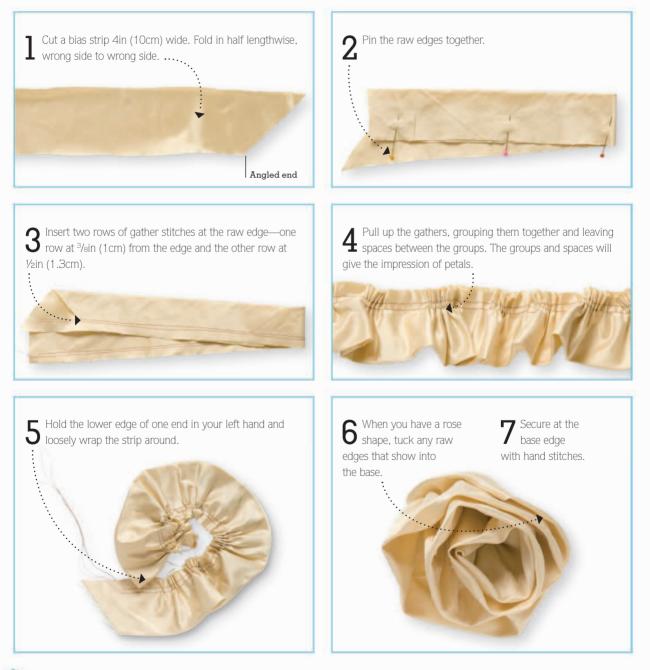


Delicate trimmings are best hand sewn in place because machine sewing the trimming may damage it. Place the trimming in position and carefully sew down with a flat fell stitch.

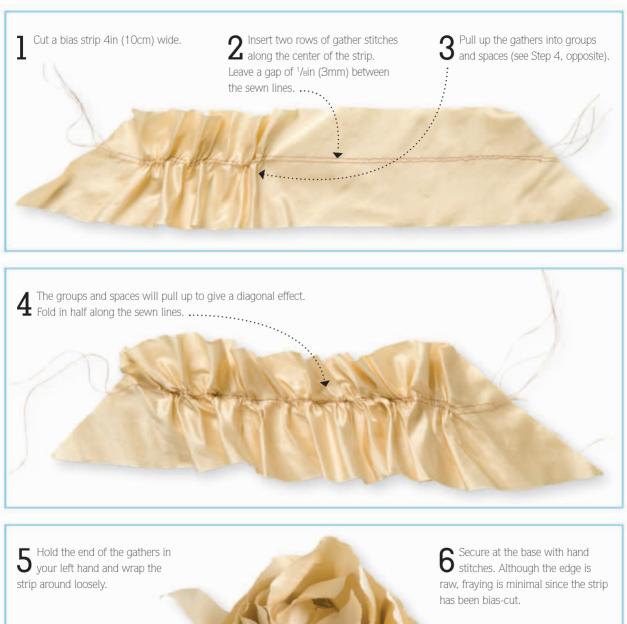
Roses and bows

Fabric roses can add a lovely touch to quilted bags and soft furnishings, and create special 3-D effects on wall hangings and appliquéd quilts, especially Baltimore album designs.

ROSE VERSION 1



ROSE VERSION 2





FANCY BOW



Embellishments

8 Next, make the two ends. Cut two pieces of fabric the required finished length and twice the required width, plus seam allowances.
9 Baste dress net to the fabric.
9 Instance of fabric the required width, plus seam allowances.
9 Baste dress net to the fabric.
9 Instance of fabric the required width, plus seam allowances.
9 Baste dress net to the fabric.
9 Instance of fabric the required width, plus seam allowances.
9 Baste dress net to the fabric.
9 Instance of fabric the required width, plus seam allowances.
9 Instance of fabric the required width, plus seam allowances.
9 Instance of fabric the required width, plus seam allowances.
9 Instance of fabric the required width, plus seam allowances.
9 Baste dress net to the fabric.



13 To assemble the bow, wrap a piece of fabric around the gathered center of the loops and sew in place by hand.

14 Scrunch the raw ends of the ends together and hand-sew behind the loop.

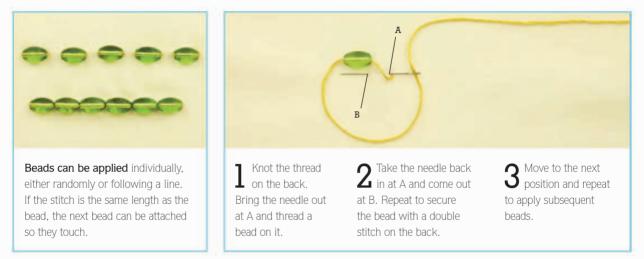




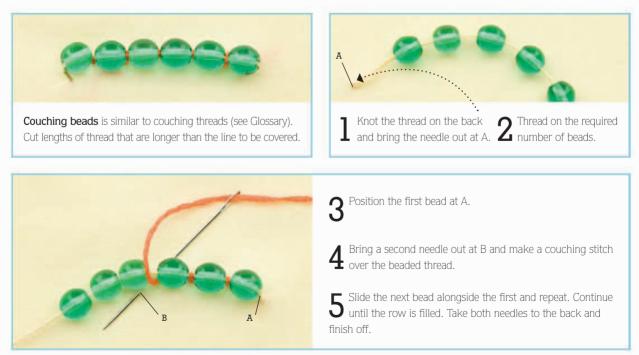
Beads

- Beads can be used as accents or applied in rows in several ways. It is best to use a beading needle, which is thin
- enough to pass through almost any bead, and a polyester thread. Invisible nylon thread is ideal on plain-weave fabrics;
- alternatively, you can choose a thread that matches either the beads or the fabric.

SINGLE BEAD



COUCHING



SPOT STITCH

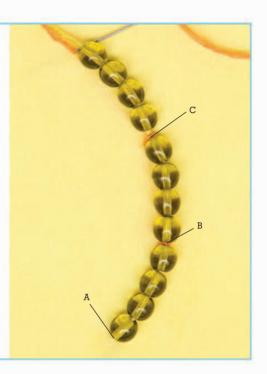


Spot stitch is another couching technique in which several beads are grouped between each couching stitch. It is quicker to work than individual couching, but it is also less secure. Work as for step 1 of couching, then slide 3 or 4 beads down to A.

2 Bring a second needle out at B and couch over the thread, holding the first group of beads.

3 Slide 3 or 4 more beads down to B and couch the beaded thread at C.

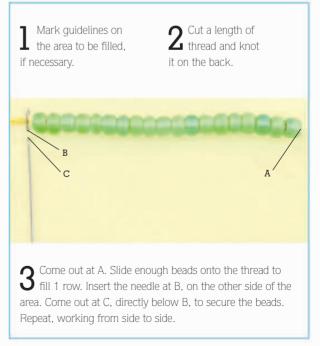
4 Continue until the row or line is filled, then take both needles to the back and finish both threads off securely.



LAZY SQUAW FILLING

--------------0.00

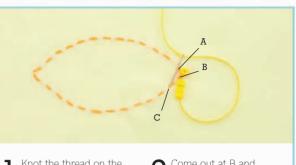
This is a quick method for filling an area with beads. Work in a hoop.



OJIBWA FILLING

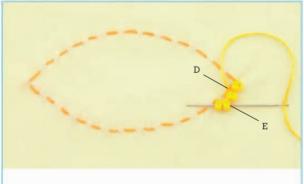


This is a very secure way of beading. Outline the area to be filled with basting, which will be covered by the beads. Work in a hoop.



Knot the thread on the back. Come out at A, on the edge. Thread on one bead and apply as for a single bead (see page 208).

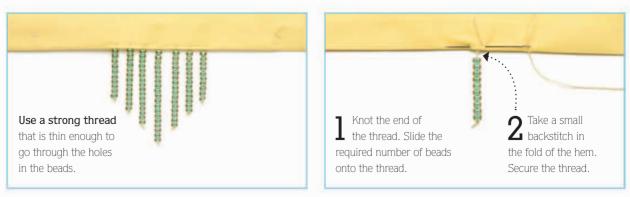
2 Come out at B and thread on three beads. Slide them next to the first bead. Insert the needle at C.



 $\label{eq:action} 3 \mbox{ Take a stitch back to D, coming out between the first and second beads of group of three. Insert the needle at E, through the second and third beads in the group.$



BEADED FRINGE



LOOP FRINGE



Sequins

A sequin is a small disk of metal or plastic with a hole in the center through which it can be attached to fabric. Traditionally, sequins are round, but they are available in a myriad of shapes and colors. They can be attached individually, in groups, or rows.

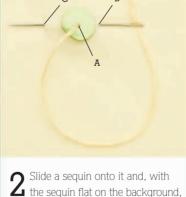
SINGLE SEQUIN



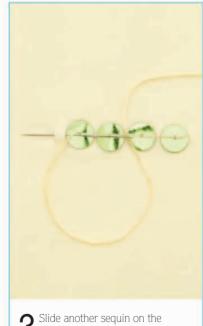
Single sequins can be attached on one or more sides. Sequins can be placed edge to edge or scattered across the surface.

To secure individual sequins with a single stitch, knot the thread on the back and bring the needle out at A.

C

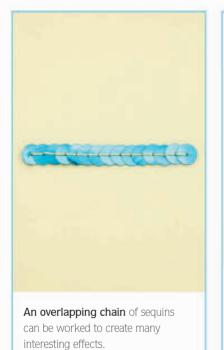


2 Slide a sequin onto it and, with the sequin flat on the background, take a backstitch at B on the right edge of the sequin, coming out at C, where the next sequin will be placed.

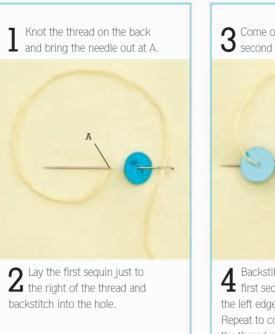


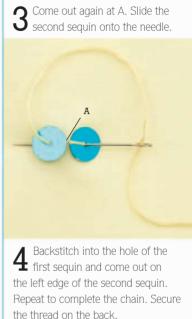
3 needle and pull the thread through. Repeat the backstitch and come out at the next position.

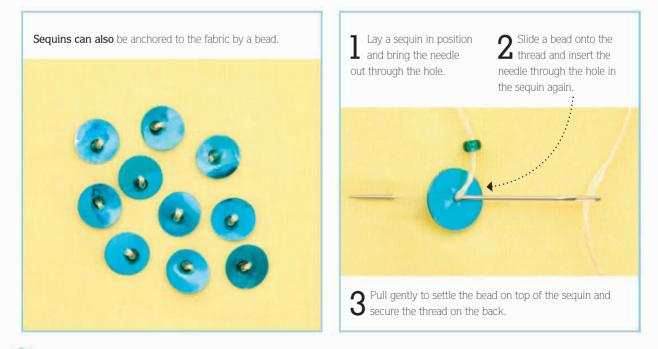
SEQUIN CHAIN



BEADED SEQUIN



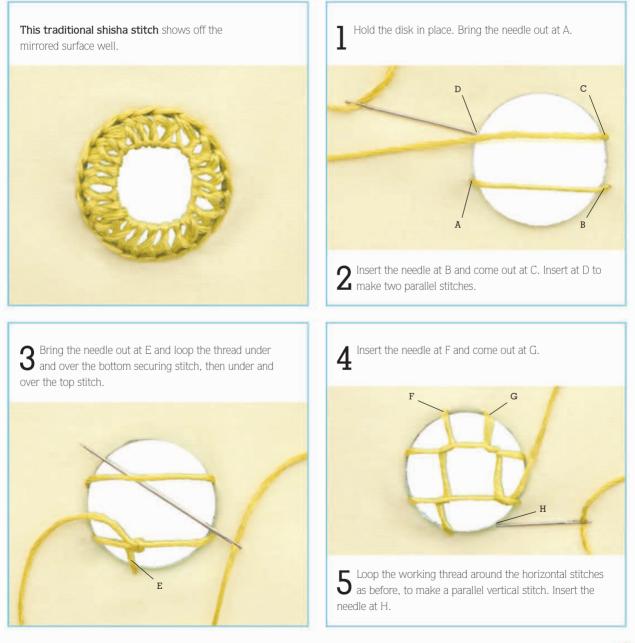


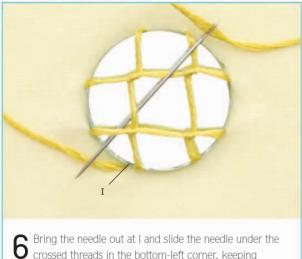


Mirrorwork

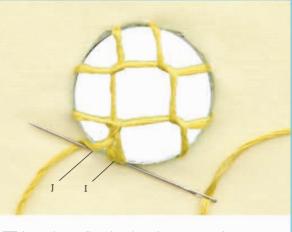
Also called shisha work, mirrorwork is a traditional form of textile decoration from Central Asia. Shisha are small disks of mirror, glass, or tin that are held in place by a foundation framework on which a decorative edge is stitched. On plain-weave fabrics, use a crewel needle and a single-ply thread or double-stranded floss with enough body to hold the disk securely and give a firm edge.

SINGLE THREAD METHOD

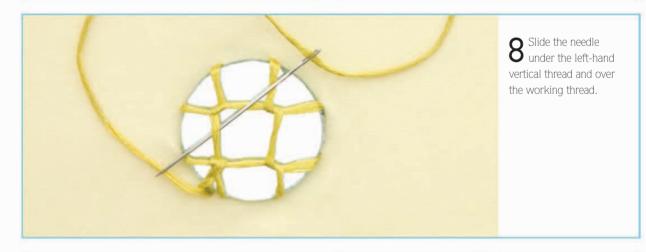


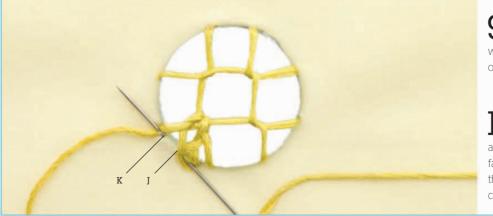


 $6\,$ Bring the needle out at I and slide the needle under the crossed threads in the bottom-left corner, keeping the thread left of the needle.



 $7\,$ Insert the needle at I again and come out at J, with the needle on top of the working thread.





9 Insert the needle at J and come out at K, with the needle on top of the working thread.

Repeat the **LU** sequence of taking a small stitch through the fabric and a loop under the foundation threads to create a decorative edge.

DOUBLE THREAD METHOD

LATTICE

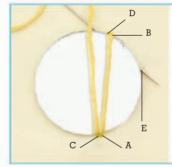


The mirror is held in

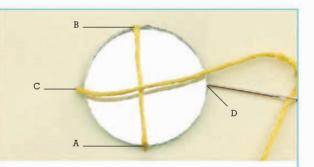
place by a "frame" of four pairs of straight stitches. To keep the disk securely in place, work all the stitches as tightly against the edge of the mirror as possible, inserting the needle vertically against the edge each time.

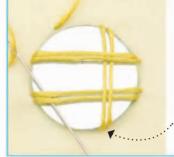


This is a simple, nontraditional mirrorwork method. Make sure that the edges of the disk are smooth so they don't cut into the thread.

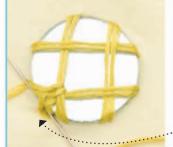


Hold the disk in place. Bring the needle out at A. Insert it at B and come out at C, next to A. Insert it at D, next to B, and come out at E.



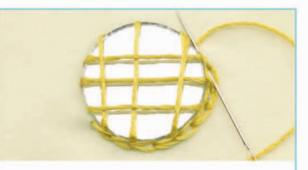


2 Repeat, making pairs of threads on all four sides. Each pair should cross on top of the previous pair; take the final pair under , the first pair of threads.



3 Working as closely to the edge as possible, repeat Steps 4–7 of single thread method (see pages 213–214). If you prefer, you can work a simple . buttonhole stitch.

Work a lattice of at least three threads. Holding the disk in place, bring the needle out at A and take it across to B. Then take a stitch horizontally across the center from C to D. Add a stitch in each direction on either side, alternating sides as you work.



 ${\bf 2}$ Add lattice threads as desired, then outline the disk with chain stitch or one of its variations, worked as closely as possible to the edge.

CARE OF PATCHWORK

Cleaning and storing quilts should be done carefully. Quilts of any size require an investment of time, energy, and patience to create, so they should be treated with care and respect. Start by taking account of the various textile components of the items, which will include fabrics and probably batting, as well as trimmings, before attempting to wash any quilt.

Cleaning quilts

Modern quilts in everyday use will probably be made from washable fabrics such as cotton and filled with polyester or cotton batting. Shake well when you change the bed and air outdoors, weather permitting. Dry-cleaning is not recommended for quilts.

Machine washing

If a quilt needs to be laundered, make sure there is no damage to the fabrics. Small items such as baby quilts can be laundered in the washing machine, as can bed quilts. Use a gentle cycle, a mild detergent, and lukewarm water.

Hand washing

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Large quilts can be soaked in the bathtub. Run the water lukewarm, fold the quilt until it fits into the tub, and leave to soak. Use a gentle washing solution if necessary, but bear in mind that it will need to be rinsed out completely. If the water looks murky, drain and refill the tub. Once the water remains clear, drain the bathtub and leave the quilt to continue to release water for several hours. Use a clean sheet to lift the quilt out.

Drying

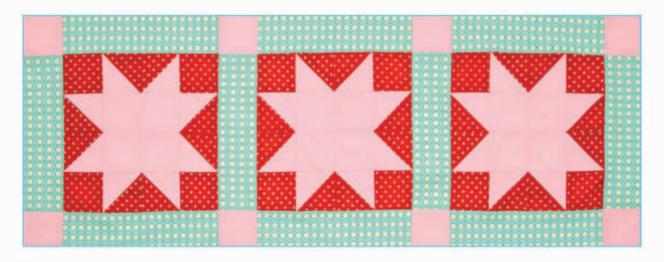
Dry washed quilts flat. Spread a white sheet on the floor, lay the quilt flat on top, and cover it with another white sheet. When the top side feels dry, turn the "sandwich" upside down.

Vacuuming

Fragile quilts can be vacuumed with extreme caution. Set the vacuum on low and use an upholstery brush to work lightly over the surface, which should be protected by a clean nylon screen or a piece of fine netting.

Storing quilts

Store flat: A bed is an ideal place. Fold quilts as few times as possible and store them on a closet shelf or in a blanket box. Refold them occasionally if they will be stored for a long time. An alternative is to hang them as a wall display.







Glossary

APPLIQUÉ

From the French verb appliquer, meaning "to apply"; a decorative technique in which shapes are cut from one fabric and applied to another, either by stitching them in place or by heat bonding with fusible bonding web.

BACKSTITCH

A hand stitch used to seam patchwork. A more secure alternative to running stitch.

BASTING

A temporary stitch used to hold pieces of fabric together or for transferring pattern markings to fabric. It can be worked by hand or machine and can be a straight line or individual doubled stitches.

BATTING

A layer of filling made from polyester, cotton, wool, or even silk and used to provide warmth and give body to a quilt.

BIAS

The diagonal grain of a woven fabric, at 45 degrees to the straight grain.

BINDING

A narrow fabric strip used to cover the raw edges of a quilt to provide a neat finish and prevent fraying. For straight edges, binding can be cut on the straight grain; bias-cut binding has more stretch and is always used for curved edges.

BLANKET STITCH

Decorative hand or machine stitch worked along the raw or finished edge of fabric. Often used in appliqué work.

BLOCK

A single design unit in patchwork and appliqué. Patchwork blocks traditionally fall into one of four main categories: fourpatch (two rows of two patches); nine-patch (three rows of three patches); five-patch (five rows of five patches); and seven-patch (seven rows of seven patches).

BUTTONHOLE

Opening through which a button is inserted to form a fastening. Buttonholes are usually machine stitched but may be worked by hand or piped for reinforcement or decorative effect.

BUTTONHOLE STITCH

A hand stitch that wraps over the raw edges of a buttonhole to neaten and strengthen it. Machine-stitched buttonholes are worked with a special close zigzag stitch.

CHAIN PIECING

A method of piecing together patchwork units by feeding them through the sewing machine in sequence without lifting the presser foot or breaking the thread so that they form a chain with a short length of thread between each one.

COUCHING

An embellishment technique in which a thread, ribbon, or string of beads is laid over the surface of the fabric and attached by means of tiny "tying" stitches worked vertically or diagonally across it.

DOUBLE RUFFLE

Decorative trimming made from doubled fabric. One side can be wider than the other. Attractive on home furnishings.

ENGLISH PAPER PIECING

A traditional patchwork method for making a quilt of mosaic shapes by basting the fabric pieces (all of which have some bias edges) to precut paper templates the size of the finished element.

FACING

A separate layer of fabric placed on the inside of an edge of fabric to finish off raw edges. A useful way to finish off shaped bindings such as scallops.

FOUNDATION PIECING

A patchwork technique in which fabric pieces, or patches, are stitched to a foundation, either a lightweight fabric or to paper that is removed once the design is completed.

FUSIBLE BONDING WEB

A nonwoven material impregnated with heat-activated adhesive. Widely used in machine appliqué work.

FUSSY CUTTING

Isolating an individual motif on a printed fabric and cutting it out to use as a feature in a patchwork or appliqué block.

GATHERS

Bunches of fabric created by sewing two parallel rows of loose stitching, then pulling the threads up so that the fabric gathers and reduces in size to fit a specific space. Used to trim home furnishings and to make trimmings like fabric flowers.

MEDALLION

A style of quilt in which a large central motif is surrounded by several borders.

MIRRORWORK

Also called shisha work, a traditional form of textile decoration from Central Asia and India that involves stitching around or over small disks of mirror, glass, or tin to hold them in place on the fabric.

MITER

To finish a corner by stitching adjacent sides of fabric together at a 45-degree angle.

OVERCASTING

Also known as whipstitch, this is a hand stitch used particularly in English paper piecing.

PATCH

An individual piece of fabric used to make a patchwork design. Patches may be whole squares or rectangles, or subdivided into triangle units, curved units, or combinations thereof.

PATCHWORK

The technique of stitching together small pieces of fabric to make a larger one.

PLAIN-WEAVE FABRIC

A tightly woven fabric in which the warp and weft form a simple crisscross pattern. The number of threads in each direction are not necessarily equal. Examples of plain-weave fabrics include cotton, linen, and silk.

QUILTING

The process of stitching the three layers of a quilt (top, batting, and backing) together. In addition to holding the layers together, the quilting stitch pattern often forms an integral part of the quilt design. It is normally marked out on the quilt top and may consist of a geometric grid of squares or diamonds, concentric lines that echo shapes within the design, intricate shapes such as hearts or feathers, or a continuous meandering pattern.

RAW EDGE

Any cut edge of fabric. Raw edges are usually hidden in seams or turned under and hemmed or stitched in place, as in appliqué. Some techniques depend for their effect on leaving the raw edge unstitched.

REVERSE STITCH

Machine stitch that stitches backward over a row of stitches to secure the threads.

RIGHT SIDE

The front of a piece of fabric; the side that will normally be in view when the piece is assembled.

ROCKING STITCH

The ideal stitch for hand quilting; several stitches are made up and down vertically before the thread is pulled through.

ROULEAU LOOP

Button loop made from a strip of bias binding, often found on home furnishings.

RUFFLE

Decorative gathered trimming made from one or two layers of fabric.

RUNNING STITCH

A simple, evenly spaced, straight hand stitch separated by equal-sized spaces; used for seaming and gathering.

SASHING

Strips of fabric interspersed between blocks when making a quilt top.

SEAM

The join formed when two pieces of fabric are sewn together.

SEAM ALLOWANCE

The amount of fabric allowed for on a pattern where sections are to be joined together by a seam. The standard seam allowance in patchwork is 1/2 in (5mm).

SEAM EDGE

The cut edge of a seam allowance.

SEAMLINE

The line along which a seam should be stitched.



SELVAGE

The rigid edge woven into each side of a length of fabric to prevent the fabric from fraying or unraveling. It occurs when the weft thread turns at the edge of the warp threads to start the next row.

SET OR SETTING

The way the blocks that make up a quilt top are arranged. Blocks may be straight set (stitched together edge to edge, with each block oriented the same way), or set "on point" (turned on the diagonal so that they appear as diamonds rather than squares). Pieced and appliqué blocks may be alternated with plain "spacer" blocks, or blocks may be rotated to create secondary patterns.

SETTING IN

In patchwork, sewing one shape or patch into an acute angle formed when two other shapes have been joined together.

SLIP STITCH

A hidden stitch used mainly in appliqué work.

STAB STITCH

An alternative hand-quilting stitch used particularly on thicker fabric layers. The needle is taken up then down to make individual stitches.

STRAIGHT GRAIN

The parallel threads of a woven fabric running at 90 degrees to either the lengthwise (warp) or crosswise (weft) direction of the weave.

STRAIGHT STITCH

Plain machine stitch, used for most applications. The length of the stitch can be altered to suit the fabric.

STRING PIECING

In patchwork, similar to strip piecing, but the strips can be of uneven width.

STRIP PIECING

A patchwork technique in which long strips of fabric are sewn together and then cut apart before being reassembled in a different sequence. The method is used to create many popular blocks, including Log cabin and Seminole patchwork.

TENSION

The tautness of the stitching in a seam.



TOP STITCH

Machine straight stitching worked on the right side of an item, close to the finished edge, for decorative effect. Sometimes stitched in a contrasting color.

TOP-STITCHED SEAM

A seam finished with a row of top stitching for decorative effect on soft furnishings and garments.

TURNING

A finishing technique that involves placing the quilt top and backing right sides together, on top of the batting, and then stitching around the edges before turning the quilt through to the right side—thereby eliminating the need for a separate binding.

TYING

A utilitarian quilting method in which a thread, string, or cord is stitched through the layers and tied in a secure knot.

WARP

The vertical threads of a woven fabric, also known as the lengthwise grain.

WEFT

The horizontal threads of a woven fabric, also known as the crosswise grain.

WRONG SIDE

The reverse of a piece of fabric; the side that will normally be hidden from view when the piece is made up.

YO-YO

A type of quilt made from rounds of fabric that have been gathered and joined together.

ZIGZAG STITCH

A machine stitch used to neaten and secure seam edges and for decorative purposes. The width and length of the zigzag can be altered.

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Acknowledgments

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