

Welcome to

Quilting & Patchwork for Beginners

The homemade craft style has become incredibly popular in recent years, most likely because of the combination of beautiful style and unique keepsakes it provides. In Patchwork & Quilting for Beginners, you'll find everything you need to start completing gorgeous patchwork projects, from learning how to craft your own designs and which stitches to use, to full patterns that you can follow to create something spectacular. Whether you want to master the art of quilting to create an heirloom that tells a story, or you're looking to enhance your home with cushion covers or patchwork coasters, everything you need to learn is here. The simple step-by-step tutorials and guides to time-honoured techniques make this the essential companion for anyone looking to master the skills of patchwork and quilting.





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Tools and materials

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

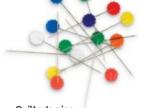
General sewing equipment

For quiltmaking you will need a set of hand-sewing needles - both "sharps" and "betweens". Both types come in several lengths, thicknesses, and eye size. 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. Always press seams as you go, with an iron or by fingerpressing.



Iron

"Sharps" are standard hand-sewing needles and are usually used for processes such as tacking, hand piecing, and finishing the edge of binding.



Quilter's pins

Long quilter's pins are useful for holding the layers of a quilt together as you work. Flowerheaded pins are easy to pick up.



Glass quilter's pins

Glass-headed pins are easy to handle and are not affected by a hot iron. These are extra long for quilting, too.



Glass-headed straight pins

Ordinary dressmaking pins are used to hold pieces together during hand piecing.



Betweens or

Shorter than sharps, these allow quick, even stitching for hand quilting and appliqué.



If the layers of the quilt are not too thick, you can use ordinary safety pins to hold



Safety pins

them together.





Thimble

Made from metal. leather or suede, plastic, or a combination, a thimble protects the middle finger when pushing the needle through the fabric.

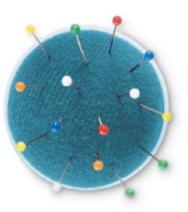


Curved safety pins

These are most commonly used for pin-tacking the layers of a quilt. The curve helps prevent the layers from shifting.



Pin cushions range from traditional emery-powderfilled shapes to magnetic pin-catchers. Magnetic types can interfere with the smooth operation of computerized sewing machines.





It is essential to press seams as you

work, so have an iron and ironing

Sewing machine

You can use any modern sewing machine for quilting as long as you can adjust the stitch length and the machine has a zigzag function. Other useful features to look for are feed dogs - the toothed bars in the needle plate that feed the fabric through - that can be dropped, and a large throat area - the area between the needle plate and the machine's horizontal arm. This is useful when working on a bulky item. Needle sizes are in metric (e.g. 70) and universal/ American (e.g. 10). For quilting you will need a range of needles in sizes from 70/10 to 90/14, depending on your project.



Feet

All sewing machines come with a standard presser foot as well as a selection of specialized feet for different purposes. You should have a ½in seam foot for piecing patchwork. Also useful for quiltmaking are:



Walking foot

This strange-looking foot "walks" across the fabric, so that the upper layer of fabric is not pushed forward. When used for quilting, it also guides the layers of fabric and wadding through the feed dogs at an even speed. Also commonly known as an even feed foot.



Zip foot

This foot fits to either the right- or left-hand side of the needle and is normally used for stitching close to the teeth of a zip. If you are finishing the edges of a quilt with piping, it enables you to stitch close to the piping cord.





Darning foot

Also known as a free-motion quilting foot, this foot "floats" on a spring mechanism for free-motion quilting of fancy patterns. The clear acrylic foot gives you a good view of your stitching area.

Measuring tools

Many of the basic measuring tools that a quiltmaker needs are standard items in a home office or workshop. Others can be found in a general sewing kit.

Tape measure

An essential item for quiltmaking and patchwork. Many have metric as well as imperial markings.

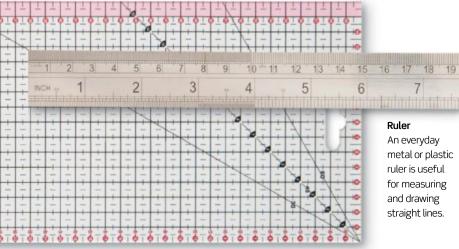


Set square

Useful for measuring and ensuring square corners on quilt blocks, and for cutting individual pattern pieces.

Quilter's ruler

Useful for drafting patterns and templates, as well as for determining seam allowances. Quilter's rulers can be square, rectangular, or triangular.



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Useful for squaring corners and measuring.

Seam gauge

With its centimetre and inch markings, this is very useful for measuring and marking small measurements such as seam allowances.

Marking tools

Various pencils and pens are used to draw designs and mark seam allowances on both paper and fabric. Some, such as tailor's chalk and removable markers, are non-permanent.

Low-tack masking tape Ideal as a guide for straight lines on large pieces of fabric, it should be removed promptly after use. Tailor's chalk This is available in a range of colours and the marks it makes are easily brushed away.

Soft pencils

Have a selection of these. Light-coloured pencils show up well on darker fabrics or paper when tracing or transferring patterns or designs.

Water-soluble pen

Marks made by a water-soluble pen are removed with a dab of water or by washing.

Hard pencil

Use a hard pencil with a fine point for drawing around templates.



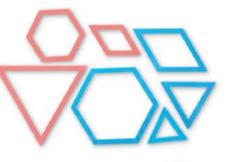
The most durable templates and stencils are cut from translucent template plastic, rather than card. Cut using a sharp scalpel to ensure accuracy. Freezer paper can also be used to create templates and is especially useful in some appliqué work.

Ready-made window template

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

A quilting stencil can be used to transfer a pattern onto the fabric. Trace the stencil design with a water-soluble pen.



Card

Stiff card can be used to make templates but will not last as long as plastic.

Freezer paper

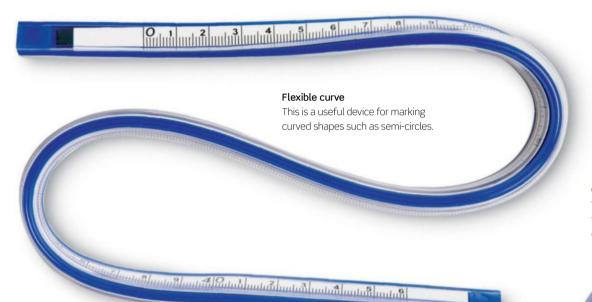
The shiny side sticks to fabric when ironed and can be reapplied several times. It is handy for appliqué.

Tracing paper

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

Miscellaneous items

Other useful items for quiltmaking 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.





This paper is for drafting triangles, hexagons, and diamonds. It is very useful for English paper piecing.

Graph paper

Useful for planning blocks and quilt layouts, and for rescaling designs.



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



Dressmaker's carbon paper

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



Very useful for drafting templates with curves and for drawing circles and semi-circles.

Cutting equipment

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

Pinking shears

Useful for cutting fabric that tends to fray.

Small sharp scissors

Use for snipping thread ends, clipping seams, and trimming seam allowances. A specialized version of small scissors called appliqué scissors can be helpful in appliqué work. The blades are curved to protect fabric that is not being trimmed from being damaged by sharp points, but appliqué scissors should not be seen as a replacement for ordinary small scissors.

Seam ripper

Used for removing stitching that has gone awry. It incorporates a small cutting blade.

Cutting shears

These come with blades of varying lengths. Buy good-quality shears, ideally ones that can be re-sharpened.

Rotary cutter

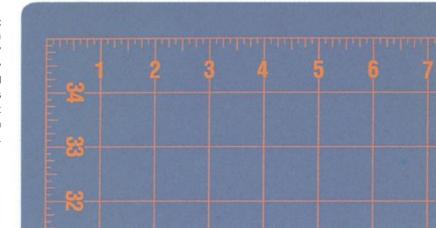
Used with a quilter's ruler and self-healing mat, this makes light work of cutting fabric, and especially of cutting through many layers at the same time. Handle with caution.

Craft knife

This is invaluable for cutting stencils from template plastic. Never use it on fabric.

Self-healing mat

Marked with a grid in 2.5cm (1in) increments, the surface "heals" itself after cutting with a rotary cutter, leaving it smooth and without any notches or grooves that might catch the cutter next time you cut. Do not use with a craft knife.



Threads

There are so many threads available and knowing which ones to choose can be confusing. There are specialist threads designed for special tasks, such as machine embroidery or quilting. Threads also vary in fibre 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

Cotton thread

A 100 per cent cotton thread. Smooth and firm, this is designed to be used with cotton fabrics and is much favoured by quilters.



Quilting thread

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



Silk thread

A sewing thread made from 100 per cent silk. Used for machining delicate fabrics. It is also used for tacking or temporary stitching in areas that are to be pressed, because it can be removed without leaving an imprint.



lead to problems with the stitch quality of the sewing machine. For piecing, it is important to match the thread to the fabric, such as cotton with cotton, to ensure they both shrink at the same rate. Match the colour to the lighter fabric or use a neutral shade. For appliqué, match the thread colour to the piece being stitched. Speciality threads include silk, metallics, and rayon.

Sewing thread

Threads come in a dazzling choice of colours, types, and weights. Sewing thread is used for hand- and machine-sewing.



Polyester all-purpose thread

A good-quality polyester thread that has a very slight "give", making it suitable to sew all types of fabrics. It is the most popular type of thread.



Topstitching thread

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



Metallic thread

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





Machine embroidery thread

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







Hand embroidery threads

Hand embroidery threads can be thick or thin. They can be made from cotton, silk, and linen as well as synthetic fibres. Some threads are single ply, while others are spun in multiple and can be divided into single strands: the fewer the filaments, the finer the embroidery line.



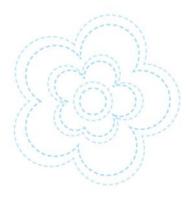
Pearl cotton

This is a strong, glossy thread with a twisted construction. It comes in three weights: No. 3 (the thickest), No. 5 (which comes in the greatest range of colours), and No. 8 (the finest).



Stranded cotton floss

This versatile thread consists of six fine strands of lustrous, mercerized cotton, which can easily be separated if desired.



Types of fabrics

The fabrics you choose to use for your project can make a world of difference to the final outcome. A single pattern can look completely different across many quilts depending on the fabric patterns and types used and how they are put together.

Denim

Denim is a versatile choice, especially for projects that will receive a lot of use. Because of its weight it causes bulky seams and it is not suitable for hand quilting. When sewing denim by machine, use a special denim needle with a walking foot. New denim should always be pre-washed to remove excess dye.

Quilting cotton

The usual fabric of choice when making a quilt is a good-quality cotton. Quilting cotton has a higher thread count than many other cottons, which means it is both strong and wears well. Available in solid colours as well as numerous prints, there are thousands of options to choose from. It's a good idea to pre-wash quilting cotton and to buy more than your pattern requires as it can shrink by up to five per cent.

Organza

A sheer fabric that can be used to add an artistic touch when layered over other fabrics.



Wool

Available in a variety of weights and colours, wool is a warm, durable, natural fabric. Heavy-weight wool can be difficult to patchwork with but can make interesting appliqué. Any unfelted wools must be dry cleaned.

Velvet

The nap of velvet can make it difficult to work with and attention must be paid to the direction of the nap when cutting and joining pieces. Velvet usually requires dry cleaning. Iron carefully so as not to destroy the nap. Always sew in the direction of the nap and use a fine needle.

Linen

Made from the flax plant, linen is a cool, breathable fabric that is perfect for quilting. It is available in many different weights and can sometimes be found blended with cotton (cotton-blend). It can be expensive and difficult to work with. Always pre-wash and zigzag stitch the raw edges to minimize fraying.

Calico

Calico is traditionally a simple, inexpensive, plain or unbleached cotton fabric. In contemporary quilting terms, however, calico can also refer to the print on the fabric rather than the fabric itself; meaning an all-over, small print, usually of a floral pattern.

Muelir

This soft, loosely woven cotton fabric is generally white or natural in colour and comes in a variety of different weights. It is typically used as a foundation fabric when foundation piecing. Good-quality muslin also makes a lovely backing fabric.

Hand-dyed and batik

With one-of-a-kind patterns, hand-dyed fabrics are becoming very popular among quilters thanks to their uniqueness. A variety of different fabrics are available hand-dyed, but cotton is best for quilting. Variations in colour and pattern can occur across a cut of hand-dyed fabric. Always pre-wash hand-dyed fabrics using a dye magnet – a product that picks up the loose dye – and a colour fixer.

Corduroy

Corduroy is soft and durable, but due to the nap and the ribs, it can
be difficult to work with. Narrow-rib and pinwale corduroy are the
best choices for quilting. Always use a walking foot and pre-wash
the fabric. Iron carefully so as not to destroy the nap.

Many fabrics are available as a blend between two different fibres. A fabric blend can often offer the best of both in one. For example, a silk-blend will be less expensive than a pure silk fabric.

Blends

Pre-cut and recycled fabric

Pre-cut fabrics are a package of coordinating fabrics from a manufacturer that have all been cut to the same size. This makes them very handy for patchwork projects in which you'd like a large variety of fabrics, but without buying fabric from the bolt. The popularity of pre-cut fabrics has grown dramatically in the last few years. Manufacturers have increased their ranges available in pre-cuts as well as the available shapes they produce. Many manufacturers have patterns made specifically from pre-cuts. Nowadays you can easily find Charm Squares™, Layer Cakes™, Jelly Rolls™, and even pre-cut triangles and hexagons in local shops and online. Using these pre-cuts is a quick and easy way to layout and sew together a quilt in hours, rather than days.

Fat quarters

Fat quarters are the most common type of pre-cut referring to a quarter-yard cut of fabric. A normal quarter-yard cut off the bolt would give you 23 \times 112cm (9 \times 44in), but a fat quarter is a 46cm (18in) cut from the bolt, which is folded selvedge to selvedge and trimmed in half down the middle to give you a 46 \times 56cm (18 \times 22in) piece of fabric, although sizes can vary slightly from manufacturer to manufacturer. Fat quarters are sometimes more useful than a 23cm (9 in) cut from the bolt, as they allow for a larger pattern repeat.

Fat eighths

Fat eighths are half of a fat quarter ($\frac{1}{6}$ yard), measuring approximately 23 x 56cm (g x 22in), rather than a typical $\frac{1}{6}$ yard cut off the bolt, which would give you 12 x 112cm ($\frac{4}{2}$ x 44in) of fabric.





Recycled fabric

The very first quilts were often made from whatever worn-out fabrics were available, giving them a second life and saving money. Recycled fabric can be salvaged from almost anything. A slightly stained shirt, old table linen, or denim from jeans can be used to create a personal project. Very often the fabric is well-broken-in giving it a soft feel and heirloom appearance. It also usually will not shrink any further or leach dye as it has most likely been laundered on many previous occasions. Take care when adding recycled fabrics to any project, as the weight of the fabrics may be different from that of the other fabrics you are using.





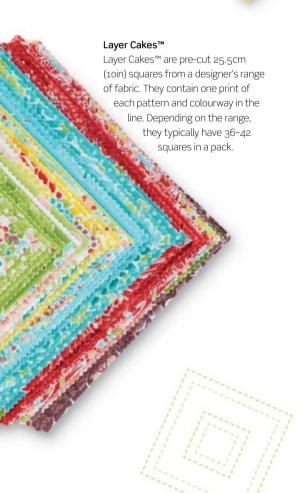
Diecut

Diecuts are specific shapes cut by the manufacturer. Hearts and hexagons are popular shapes, but they can be almost any other shape and come in a variety of sizes. Diecuts are often useful for appliqué projects.



Jelly Roll™

Jelly Rolls™ are pre-cut collections of 6.5×112 cm ($2\frac{1}{2}$ in x 44in) fabric strips. The strips are cut selvedge to selvedge across a piece of fabric. A Jelly Roll $^{\mathrm{IM}}$ typically contains 40 strips of fabric, but this can vary from manufacturer to manufacturer.



Charm Packs™ and Mini Charm Packs™

Charm Packs™ and Mini Charm Packs™ are the same as Layer Cakes™, but smaller in size. Charm Packs™ measure 12.5cm (5in) squares and Mini Charm Packs[™] measure 6.5cm ($2^{1}/_{2}$ in) square.

Waddings and fillings

Wadding is the soft middle layer between the quilt top and the backing that gives a quilt its plushness and warmth. It is available in a variety of different materials and thicknesses, depending on your preferences and needs. Knowing a little about what options are available will help you choose the right wadding or filling for your project. Always follow the manufacturer's instructions for washing and quilting the wadding you choose.

Cotton

100 per cent cotton is a natural, warm, and breathable choice. Cotton wadding can shrink significantly during washing (about 5 per cent), which gives the quilt a slight texture and a more traditional look. Because of this you may wish to pre-wash it.

Poly/cotton blend

A synthetic/natural blend gives you the best of both worlds. These waddings are machine washable and will not shrink as much as 100 per cent cotton waddings. The cotton part may shrink during washing though, so it may be wise to pre-wash it.

Polyeste

Polyester waddings are light in weight, available in many thicknesses, and usually inexpensive. But being synthetic, they do not breathe well and are more flammable than a natural wadding; therefore, they are not recommended for baby quilts. They do not shrink, so you should not need to pre-wash.

Bamboo

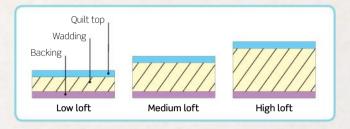
Natural and eco-friendly, bamboo is soft and strong. It generally has a low loft and will not shrink very much. Bamboo blends are also available, often as a 50/50 cotton blend.

Toy filling

Some projects in this book use toy filling to stuff a shape (see pp.124-125, the Door mouse doorstop). The most commonly used and inexpensive type of toy filling is made from polyester, but cotton (including organic cotton), wool, and even bamboo are also available.

Loft

Loft, or weight, refers to the thickness of a wadding. The higher the loft, the thicker the wadding, and the warmer the quilt. A low-loft wadding is typically less than 6mm (½/ain) thick and is easy to quilt. A medium-loft wadding is about 6-12mm (½/a-½in) in thickness and can still be machine or hand quilted. A high-loft wadding is generally over 1.2cm (½in) and is difficult to quilt. It should therefore be held together with evenly spaced ties (see p.163).



Quilting your wadding

The product label on your wadding should state the amount of space you can have un-quilted between quilting stitches for that specific type of wadding. If you are planning to have limited quilting on your quilt, you should take this into consideration when choosing your wadding to make sure it can accommodate the design. The distance can vary significantly, anywhere from approximately 5–25cm (2–10in), depending on what the wadding is made of and how it has been formed.

Buying wadding

Wadding is available to buy off the bolt in different widths and often in pre-cut standard bed quilt sizes. When buying wadding, you need to know the finished size of the quilt you are making first. The wadding should be at least 15cm (6in) larger in both width and length than the finished quilt top, to allow it to overhang on all sides when making your quilt sandwich (see p.44).

If you're not able to find a piece of wadding that is wide enough to fit your quilt, you will need to buy enough wadding so that you can piece together several lengths to meet your requirements. You can piece the wadding with either a vertical or horizontal seam depending on which will result in the least waste.

A quilt explained

The terms patchwork and quilting are very often confused with one another. Patchwork usually refers to piecing, or sewing, pieces of fabric put together to make a larger, more intricate, piece of fabric. The quilting is the stitches that hold the three layers of a quilt together. Read below to find out more about how a quilt comes together and its different elements.

The five elements of a quilt

There are five main elements needed to complete a quilt. The first element is a finished quilt top, often made of patchwork or appliqué. Your quilt top can be assembled using a repeating block pattern or several different blocks, such as in the diagram. You can also add sashing and borders (see pp.102–107) to either make the quilt fit a specific dimension or enhance the design.

The second element is wadding. Most quilters prefer to use 100 per cent cotton wadding or a 50/50 blend of cotton and silk, or cotton and bamboo. See pages 22–23 for more information on waddings.

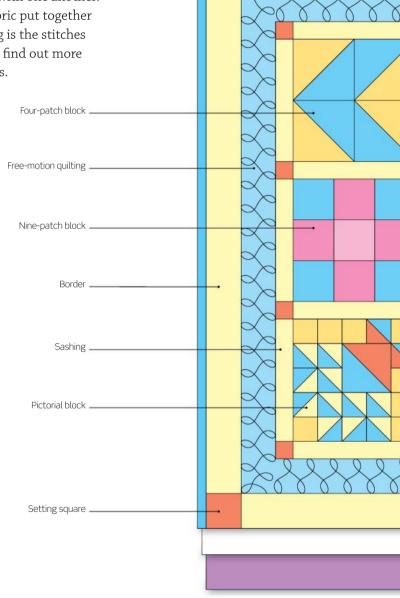
The third element is the backing, which needs to be larger than both the quilt top and the wadding. A quilt back can be made of a single print or pattern, or it can be pieced just like the top. Very often several pieces of fabric will need to be joined to make a large enough backing for a quilt (see p.45).

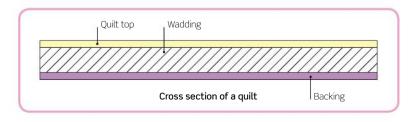
The fourth element is quilting. Quilting is a very important part of a quilt and has a double duty. The main purpose is to hold all three layers of the quilt (the "quilt sandwich") together securely. The second purpose is to create texture. The more a project is quilted, the more stiff it will become. A loose stitched pattern will give the quilt more softness. Quilting can either be done by hand or machine (see pp.152–155, 162–165).

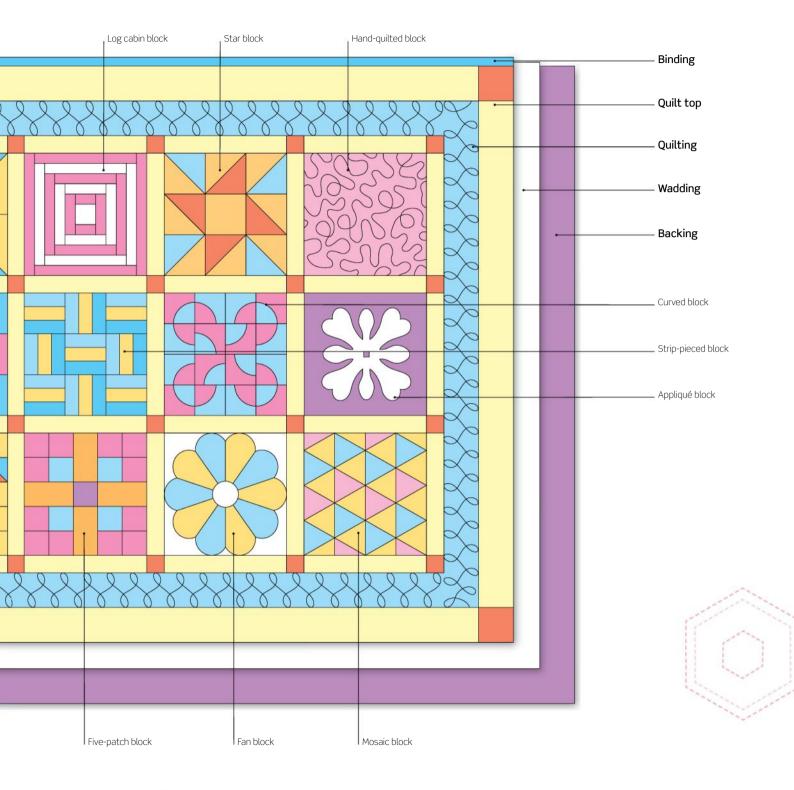
The fifth and final part of a quilt is the binding. The binding is a strip of fabric sewn around the perimeter of the quilt to enclose the raw edges (see pp.46–51). A traditional binding should be finished at the back by hand. This method will give the quilt a professional finish.

Quilt sandwich

The term "quilt sandwich" refers to the three basic layers in a quilt: the backing, wadding, and quilt top. Starting with the backing and quilt top as the bottom and top layers, the wadding is then placed between them to complete the sandwich. Once all of the layers have been stitched together, or quilted, the sandwich is squared up and the raw edges are enclosed with a binding.





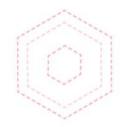


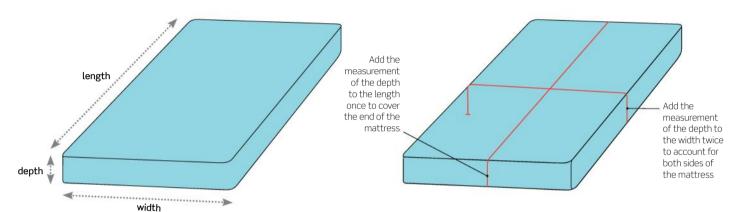




Quilt sizes and measurements

Standard bed sizes vary around the world, so depending on where you live you may need to adapt a pattern to fit your specific needs. Mattress depth is another factor that can vary significantly and will influence the way your finished quilt looks on a bed. A deep mattress will make a quilt look much smaller than a shallow mattress of the same size. Follow the simple instructions below to measure up your bed for the perfect quilt size.

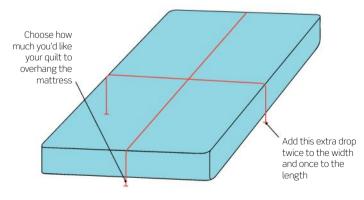




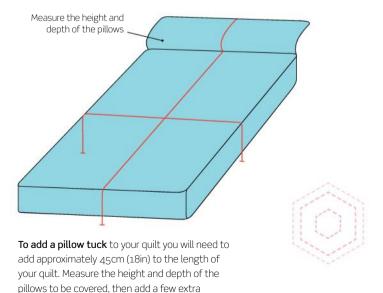
To calculate the quilt size needed for a specific bed, you will need to accurately measure the bed itself. Do so by using a measuring tape to record the width, length, and depth of the mattress. Using these three measurements you can design and fit a quilt to any size mattress.

When calculating the depth of the mattress be sure to add the measurement of the depth twice to the width (one for each side of the quilt) and only once to the length (for the bottom).

centimetres (inches) to allow for the tuck.



If you want the quilt to hang or drop below the mattress, you will need to add a few additional centimetres (inches), depending on your requirements. You will need to add the drop twice to the width and once to the length, as above.



Adapting a pattern

Once you have determined the dimensions of the quilt you'd like to make, you may need to make some adjustments to the pattern. If you are making a quilt without a pattern you may also find the following information helpful.

Number of blocks

Most quilts are made from blocks of one size. Once you have determined the size of the finished block (the size minus seam allowances), divide the total width of the quilt by that block size to find out how many blocks you will need per row. Then, divide the total length of the quilt by the block size to determine how many rows you will need. Chances are these numbers will not come out evenly, so round both numbers down. Multiply the two numbers together to determine the total number of blocks you will need for your quilt top.

Making up the difference

If the measurements for the number of blocks needed did not come out evenly there are several ways to remedy this. Adding borders around the quilt top (see pp.110–113) to make up the difference is the easiest way. Adding sashings between the blocks, or making them wider if they are already part of the design, can also make up the difference (see pp.108–109), but this will alter the look of the quilt top. The third, and most difficult, option is to change the size of the blocks until they meet your requirements.

Fabric requirements

If altering a pattern, it is important to take these changes into consideration when purchasing your fabrics for the quilt. It is usually a good idea to purchase more fabric than you need anyway, to allow for shrinkage during pre-washing and also for any mistakes when cutting or sewing. Don't forget to add any extra fabric you might need for the backing and binding, too.



Most quilts hang a bit below the depth of the mattress. The type of bed should also be taken into consideration when planning your quilt. Daybeds will only need extra to hang down on one side, for example.



Determine how you'd like the quilt to sit on the bed, as well as what it will be used for. For example, baby quilts are very often too small for a standard size bed, but still add a personal touch when on display.



A large quilt that falls all the way to the floor can look very plush and impressive. Don't make it too much longer though, otherwise it will look as if it was meant for a larger bed.



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 block designs that you can make in fabrics and colours of your own choice (see pp.54–57) but, once you understand the basic principles, it's fun to come up with patterns of your own.

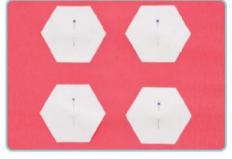
Using templates

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 the waxy side 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 card: Draw the shapes on paper or tracing paper. Cut them out, draw around them again on heavy card, and cut them out, or glue the shapes to the card and cut out.



Durable templates using template plastic:Trace the shapes directly onto the template plastic, or cut the desired shapes from paper and glue them to template plastic. Cut them out with paper scissors.

Planning your own blocks

The main patchwork block categories

are four-patch (see p.54), nine-patch (see p.54), five-patch and seven-patch (see p.55). 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 x 5 and 7 x 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, sub-dividing it into the relevant number of patches. Further sub-divide 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 p.34) 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 super-sized $\ensuremath{\mathsf{by}}$

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.

Understanding colour

Understanding the basic principles of colour theory is crucial to designing a successful quilt. Even a simple design gains impact from good colour choices. The three primary colours (red, yellow, and blue) can be placed side by side to create a colour wheel. When two primary colours are combined, they create

"secondaries". Red and yellow make orange, yellow and blue make green, and blue and red make purple. Intermediate colours called tertiaries occur when a secondary is mixed with the nearest primary.



Monochromatic designs:

These use different versions of the same colour. So a quilt based on greens will not stray into the other sections of the colour wheel, but will only use green fabric.



Complementary colours:

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



Analogous colours (side by side):

Starting with a primary or dominant colour, expand in each direction on the colour wheel by one colour. Similar to a Monochromatic colour scheme, but with a bit more variation.



Analogous with complementary:

Similar to an Analogous colour scheme, but with the addition of a complementary primary colour. The addition of a complementary colour provides a nice contrast to the analogous colour grouping.



Triadic:

A triadic or triangle uses three colours that are evenly spaced out around the colour wheel. This offers a strong contrast while retaining a harmony among the colours. On the colour wheel above, every fourth colour is grouped.



Temperature:

The temperature of a colour can usually be described as cool or warm. You can split the colour wheel in half between the green, blue, and blue-violet - cool - side and the yellow, red, and red-violet - warm - side. Cool colours will tend to recede and do well in the background while warm colours will advance and give the feeling of closeness.



Tint, shade, and tone:

When you add white to a colour it is called a tint of the colour and when you add black to a colour it is called a shade of a colour. Adding both black and white to a colour is called a tone of the colour and will leave the colour with a grey quality.





Scale, prints, and design

There are so many quilt designs and fabrics to choose from that getting started on designing your quilt can be a bewildering experience. Most quilts are a mixture of printed and plain fabrics. When using prints, first consider whether the pattern lends itself to being a primary or secondary pattern. The plain areas will act as a foil. Using a design wall can help with your planning.

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, especially conversation prints – prints that have themed motifs – with plain fabrics. Large prints are useful for making quick-andeasy baby and children's quilts. Medium-scale prints can be fussy cut (see p.38) quite effectively, and small-scale patterns are usually simple to use as they can be cut into small units that have a consistent look.

There are also hand-dyed and batik fabrics (or fabrics printed to look as if they are hand-dyed) and tone-on-tone fabrics that have tiny motifs printed on a background of the same colour that look almost like plain colours from a distance. These give more visual texture than a solid plain colour and can really help to bring a design to life.

Geometric-patterned fabrics

Fabrics such as stripes, checks, and tartans can make fascinating secondary patterns when they are cut and re-assembled. Widely used in country-style quilts, they need careful handling in order to be most effective. Stripes, in particular, can be set in different directions to create visual movement within a block, while checks and tartan can be combined with each other or with plain fabrics to great effect. Be careful to align stripes and checks when cutting and sewing.

Borders and sashing

A plain colour can act as a foil to a busy print, giving the eye somewhere to rest and providing the keen quilter with a place to show off skills. Plain sashing (see p.102) 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 plains, lights and darks, warmth and coolness – is key to any successful design, and the more quilts you look at, and make, the better your judgement will become. One way to work is to choose a main print first and then coordinate the plains and other prints around it.

Creating a design wall

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

Stripes

Stripes add interest that varies depending on the way the fabric is cut. Striped fabrics can be cut with the stripe, across the stripe, or at an angle to the stripe.

Plains

Plain fabrics are often used as the basis of a quilt design, as borders, and for the quilt backing.



General techniques

Quiltmaking involves different techniques at different stages, but many techniques are the same, whether the quilt is pieced, appliquéd, or wholecloth. The techniques outlined in this section are key, whichever type of quilt you choose to make. You will use them over and over again.

Pre-washing and preparing fabrics

While many people are divided on whether to pre-wash fabric or not, if you plan to wash a finished project in the future it is usually a good idea to pre-wash the fabrics before you cut or sew them together. Different fabrics shrink at different rates, so pre-washing will help avoid uneven shrinkage, and therefore puckering, when the finished item is first washed. Pre-washing fabrics can also help to remove any excess dye, which can leech out and discolour the other fabrics. Small pre-cuts do not need to be washed before use as the washing process may ruin them. Check before pre-washing any pre-cut fabrics.

Pre-washing fabrics

There are many things to consider when deciding whether to pre-wash your fabrics or not:

Shrinkage The quality and type of fabric will yield different percentages of shrinkage. You can expect the shrinkage of cotton to be anywhere from 3mm (½in) to 1.2cm (½in). If you choose not to pre-wash your fabric, but do wash them in the future, the fabrics may pucker or distort as they each shrink at different rates and in different directions to one another. Therefore, a quilt made from pre-washed fabrics will stay flatter and look more even after washing. However, many people prefer this crinkly look and feel it gives a quilt a vintage feel. Most manufacturers' washing instructions are given on the bolt, so note these down when purchasing the fabric.

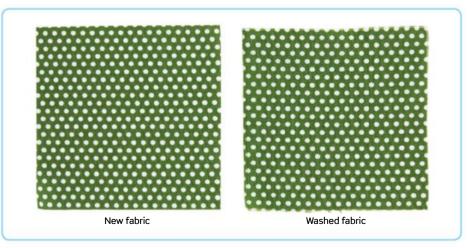
Bleeding While it is not a guarantee, pre-washing a fabric may help to remove any excess dye from it. Certain colours – such as reds, blues, and purples – are more prone to bleeding than others. You can test a small piece of the fabric for colourfastness by submerging it in a clear bowl of warm, soapy water and leaving it to sit. After about 30 minutes to an hour, place the bowl on a white surface and check to see if the water has changed colour. If the water has,

you know that the item is not colourfast and will bleed when washed. If the water has not changed colour, leave the wet piece of fabric to sit on a scrap of white fabric. If the colour transfers to the white fabric after a short period of time then the fabric is not colourfast. If it does not, the fabric is colourfast.

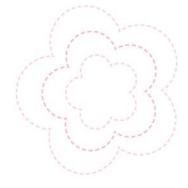
If the fabric is not colourfast, you should pre-wash it several times using a dye magnet or colour catcher. After each wash cycle, perform the colourfastness tests to check if any dye still remains. Continue to pre-wash the fabric until it no longer bleeds. You can also buy colour fastener to treat a fabric. Follow the manufacturer's instructions.

Handling and chemicals Fabric right off the bolt usually contains sizing and other chemicals to help protect it. These make the fabric easier to cut and machine sew, but may not be suitable for people sensitive to chemicals. If you pre-wash it to remove the chemical, pressing your washed fabric well will help to set the fibres and allow for more precise cutting and piecing.

What will the finished item be used for? If you are making an item for display, such as a wall hanging, there may be no need to pre-wash the fabrics, as they will probably never be washed in the future.



This swatch shows what can happen to a piece of cotton fabric during washing. Some of the dye bled out and the fabric shrunk.



Tips for pre-washing

- You should pre-wash fabric in the same manner you intend to launder the finished item in the future. For example, if you plan to wash the finished quilt on a cold wash cycle and dry it on a medium dryer setting, you should pre-wash the fabric in the same way.
- You can serge or zigzag stitch along the cut edges of some looser weave fabrics before washing to help prevent them from unravelling during pre-washing.
- Always pre-wash large pieces of fabric when you first buy them, so you don't forget to do it when you work with them at a later stage.
- When pre-washing 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.
- Hand-dyed or Batik fabric should always be washed and dried to set the dyes and keep them from running and fading. Use a dye catcher to help prevent the excess dye from spoiling the colours around them.

Preparing fabrics

After it has been washed here is not much that needs to be done to fabric before you use it, but there are a few things to keep in mind:

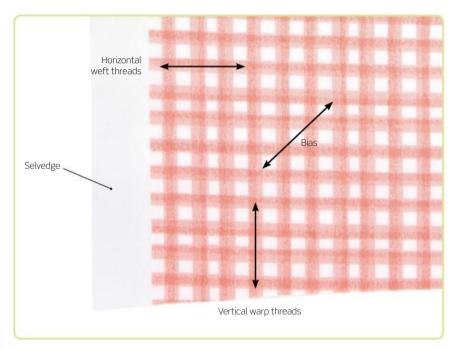
If using a tumble dryer, dry your pre-washed fabrics on a medium heat setting and remove them from the dryer before they are completely dry. Drying a fabric completely can set the wrinkles firmly into the fabric and make them difficult to remove.

Iron the fabric straight out of the dryer while it is still damp. Starching the fabric can make the ironing easier and more effective.

Before you cut, check the straight of grain is true by checking it against the selvedge of the fabric.

Tips for preparing

- Cut quilt borders on the lengthways grain to minimize stretching.
- To find the lengthways grain, pull the fabric gently along both straight grains. The stretch will be greater along the weft, or widthways, grain.
- Try to position any bias edges away from the edges of a block to minimize stretching and to keep the size of the block accurate.



Each fabric has three grains: the lengthways grain (warp), which runs parallel to the selvedges; the horizontal grain (weft), which runs perpendicular to the selvedges; and the diagonal grain (bias). The rigid edge on each side is called the selvedge. The bias should be handled carefully as it stretches easily, which can lead to distortions in the patchwork.



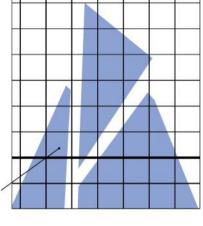
Altering the size of a motif

The easiest way to alter the size of a motif is to use a photocopier. Whether enlarging or reducing, divide your desired size by the actual size of the template. Multiply that figure by 100 to give the percentage of the enlargement or reduction you will need. You can also use gridded paper to alter the size of a motif, as below.

1 For non-geometric motifs, trace the outline onto gridded paper. To make a pattern twice the size of the original, draw a grid double the size on another piece of paper. If you start with 1.2cm (⅓in) squares, for example, increase the size of each square in your new grid to 2.5cm (1in).

to mess.

Transfer the lines within each square of the grid so they correspond to the lines of the original motif. When you have finished, trace the motif onto a new piece of paper to smooth out any distortions. You are now ready to transfer the newly sized motif to a template.



The original motif traced onto paper gridded into 1.2cm (½in) squares.

The motif enlarged onto a 2.5cm (1in) grid.

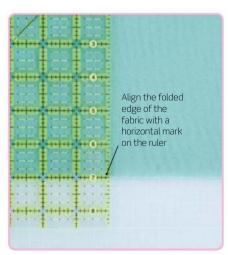
Rotary cutting

Many of the most popular patterns can be rotary cut. You will need a rotary cutter, a quilter's ruler, and a self-healing mat. When cutting a square into other shapes, such as half-square triangles that will be reassembled into a square, you must start with a square that is larger than your finished square will be, to allow for the seam allowances. Always keep your fingers away from the cutting edge.

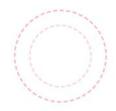
Cutting a strip

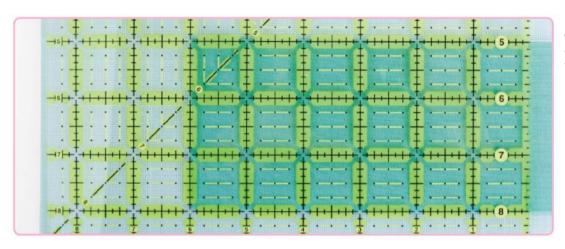


1 First you must straighten the edge of the fabric. Fold the washed and pressed fabric so the selvedges are together. Place it on the mat, with the folded edge aligned with the top of the ruler. Lay the ruler on top and cut along the edge of the ruler, away from your body, to remove the selvedges. Keep the hand holding the ruler steady.



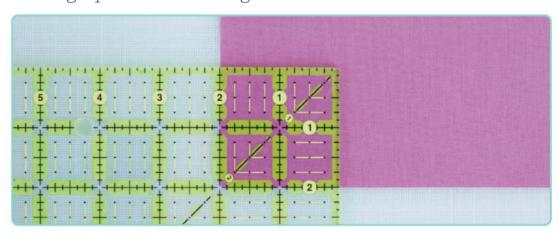
Turn the mat so as not to disturb the newly cut edge and reposition the ruler over the area of fabric that is to be your strip. Align the ruler carefully along the cut edge to give the desired width and line up the folded edge with a horizontal mark on the quilter's ruler. Cut the fabric strip along the grain.





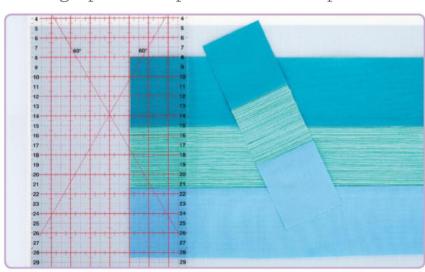
To cut the strip into smaller units, position it horizontally on the mat and measure using the ruler grid. Cut as before.

Cutting squares and rectangles

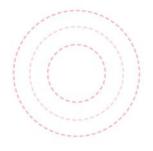


Squares and rectangles can also be cut using a quilter's ruler, which has a guideline marked across the diagonal from corner to corner. Add a 2.2cm (7/sin) seam allowance when cutting a right-angled triangle and a 2.75cm (13/sin) seam allowance when cutting a quarter-square triangle.

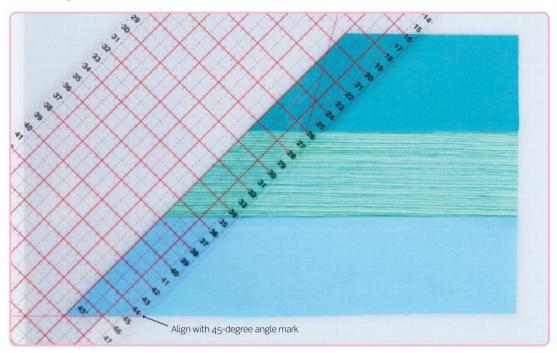
Cutting a pieced strip into smaller strips



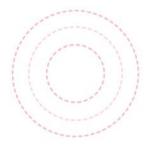
Press your pieced strip and position it right side up horizontally on the mat. If necessary, straighten the pieced strip at one end, as in Step 1 of Cutting a strip (see opposite). Turn the strip and reposition the ruler over the area that you want to use. Cut pieced strips of the desired width.



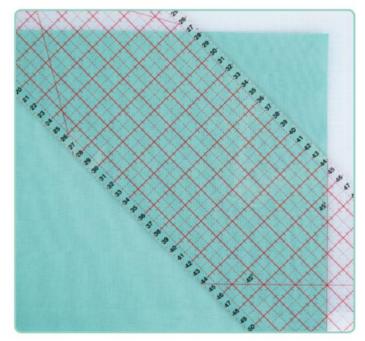
Cutting a pieced strip on the bias



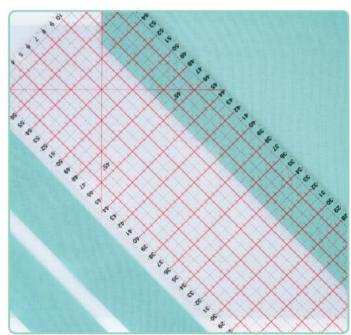
Trim one end of the pieced strip at a 45-degree angle, using the line marked on the quilter's ruler. Cut strips of the desired width at the same angle by measuring along the straight edge of the ruler.



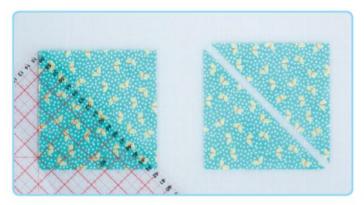
Cutting true bias strips



1 Straighten the edge of the fabric as in Step 1 of Cutting a strip (see p.34). Align the 45-degree mark on the ruler with the straightened edge and cut away the top corner of the fabric along the ruler.

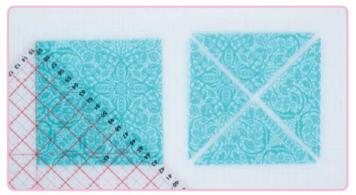


Align the ruler with the cut edge and cut strips of the desired width, as in Cutting a pieced strip on the bias, above. Be careful when using bias strips as the 45-degree cut brings stretch to the fabric.



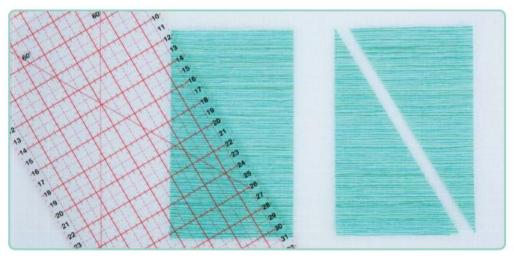
Cut half-square triangles across the diagonal of a square. Remember to cut the square large enough so that it includes a seam allowance.

Cutting quarter-square triangles



Cut a square diagonally from both corners to create four quarter-square triangles. Again, include a seam allowance when cutting the square.

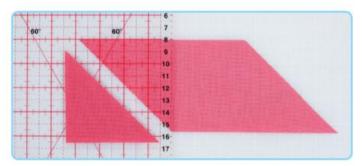
Cutting irregular triangles



Cut a rectangle across the diagonal to create two irregular long triangles. To make a matching pair of irregular triangles, cut another rectangle across the diagonal, starting at the opposite corner.



Cutting 45-degree diamonds / triangles



Cut a strip the desired width of the diamond, plus the seam allowances. Cut a 45-degree angle at one end. For the second cut, align the quilter's ruler along the cut edge according to the width of diamond required.

Cutting curves



Gentle curves can be cut with a rotary cutter, but it is advisable to use a small blade. Blades are available in standard 25, 45, and 90mm (1, 13/4, and 31/2 in) sizes.



Cutting by hand

Quiltmakers generally cut with scissors if the pieces are small or intricate, or if they 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 just for cutting cloth. Do not cut paper, template plastic, wadding, and the like with your fabric scissors. Most quiltmakers have several pairs of scissors in different sizes.

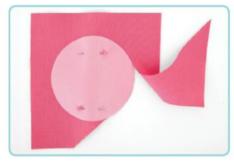
Cutting without a pattern



1 Mark the outline of the shape to be cut on the wrong side of the fabric and add the seam allowance, if you wish.

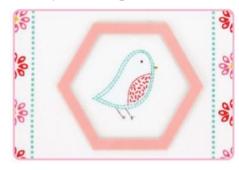
2 Cut out the shape along the marked cutting line - or cut a short distance away, if you have only marked the stitching line.

Cutting with a pattern



Patterns made from paper are familiar to dressmakers and can provide an easy way for quiltmakers to cut the same shape several times over. 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 so they 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 area you want if you cut a window template to the desired size and shape.

Unpicking a seam

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

Method 1



1 Working from the right side, insert the point of the seam ripper into the stitches to cut the thread.

Pull the layers of fabric apart gently as you work to the end of the seam.

Method 2



1 Working from the wrong side, hold the seam taut and insert the seam ripper into every third or fourth stitch to cut the thread. Work your way along the seam.



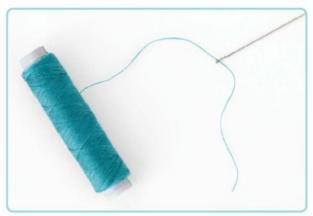
Hold the lower piece of fabric flat and pull gently on the top piece to separate the two. Do not use this method on bias seams.



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 top of the quilt. There are several knots that are useful for quiltmaking. Back-stitched loops (see p.40) lie almost flat and are a secure way of finishing off a seam.

Threading a needle



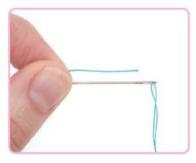
Trim the end of the thread. Insert the end of the thread through the eye of the needle, then cut to the desired length from the spool. Because of the way thread is twisted as it is made, threading the needle with the end that comes off the spool first will help prevent tangles.

After threading, run
the thread between
your thumb and forefinger in
the direction that the
thread came off the spool
to smooth it.

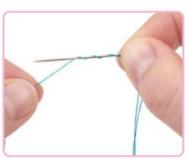
Tips

- Thread weight: Use a thread weight that is appropriate to the size of the needle and a needle size that is suited to the weight of the fabric.
- Thread length: Keep the thread length to no more than 50cm (20in) long; it will be less likely to kink and fray.
- Needle threader: Use a needle threader if you have difficulty getting the thread through the eye.
- Cutting direction: Always cut away from your body when possible.
- **Knot size:** Knots make lumps wherever they occur, so make sure that knots are as small as possible so that they can be hidden easily.

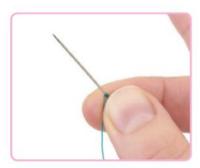
Wrapped knot



Thread the needle, then hold one free end of the thread parallel with the needle, as shown.



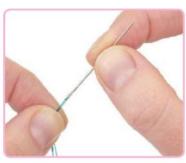
Take hold of the free end of the thread securely and wrap it around the needle a few times.



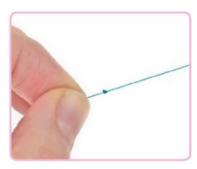
3 Slide the wraps towards the eye of the needle and hold them with your thumb and forefinger.



4 Grab the wraps between your index finger and thumb of the opposite hand.

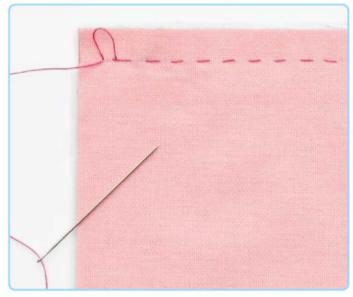


5 Slide the wraps down the end of the needle, over the eye and down the thread.

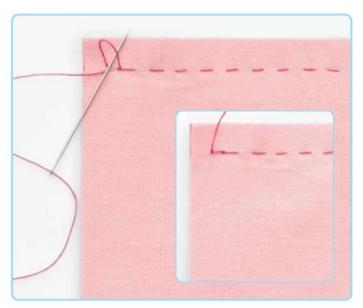


6 Keep pulling the knot down the thread until it reaches near the bottom of the length of thread.

Backstitched loop

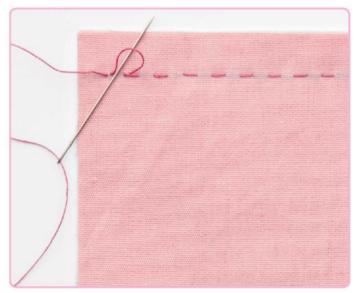


 ${\bf 1}$ This method doesn't have the bulk of a knot but is a secure way to finish a line of stitching. Backstitch once at the end of the stitching and pull the needle through; do not pull the thread taut, but leave a small loop of thread.

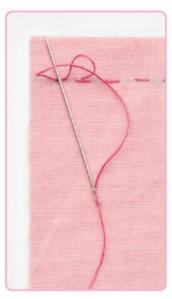


 $\label{eq:theory_problem} 2 \text{ Take the needle through the loop,} \\ \text{then pull the thread tight.}$

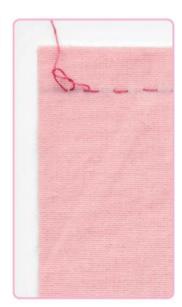
Double backstitched loop



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



2 Insert the tip of the needle through the second loop.

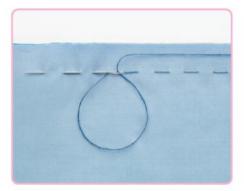


3 Pull the thread taut to form a knot.

Hand stitches for quiltmaking

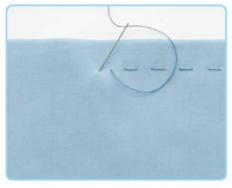
Although most quilts today are made on a machine, there are a number of techniques that require hand sewing; it is important to choose the correct stitch for the best result.

Running stitch



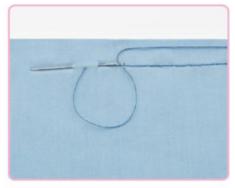
This is the most common stitch for hand piecing. Take the needle in and out of the fabric several times, making small, evenly spaced stitches. Pull the needle through gently until the thread is taut, but not tense. Repeat to the end of the seam.

Stab stitch



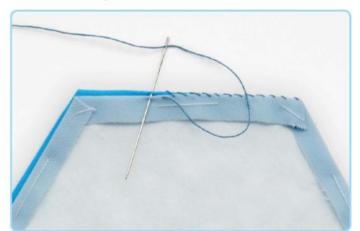
This popular quilter's stitch is useful for sewing through several layers or into thick fabric. Take the needle vertically through the fabric layers from the top and pull until the thread is taut but not tense. For the next stitch, bring the needle through vertically from below. Continue sewing to the end of the seam.

Backstitch



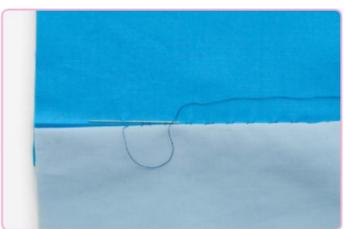
Backstitch can be worked in a row as an alternative to running stitch to join units together. Bring the needle through all the layers to the right side, then insert it a short distance behind the point where it emerged. Bring it back up to the right side again, the same distance in front of the point where it first emerged. Repeat to the end of the seam.

Oversewing



Also known as whipstitch or overcasting, oversewing is used to join two edges with an almost invisible seam. Bring the needle through the back edge to the front edge, picking up a few threads from each edge as you go. Pull gently on the thread until it is taut but not tense, and repeat.

Slip stitch



Used mainly in appliqué, slip stitch joins two pieces of fabric with an invisible line of stitching. Knot the thread and bring the needle to the front, hiding the knot in the folded edge of the top piece. Now pick up a thread or two on the back piece, then take the needle into the top piece right next to this stitch and slide it a short distance inside the fold. Bring the needle to the front again, then repeat, catching a few threads on the back piece with each stitch.

Pressing

Pressing is essential when making accurate patchwork. It is different to ironing, which can cause fabric and seams to distort. When pressing, press down in one place, then lift the iron and move it before pressing down on another area. Set

pieces aside to cool after each pressing and always press the seam towards the darker fabric to prevent darker colours from showing through lighter fabrics. The temperature of the iron should be appropriate to the fabric.

Pressing straight seams

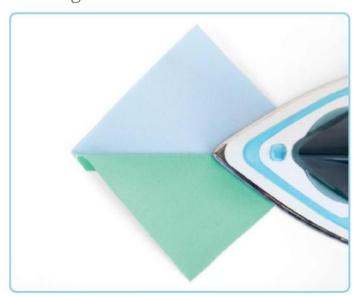


 $\mathbf{1}$ Place the unit or sewn strips with right sides together on the ironing board with the darker fabric on top. Press the iron along the seam, lifting the iron at regular intervals. This is called "setting the seam". It helps ensure accuracy by locking the threads in place and smoothing the fibres of the fabric.



2 Open the unit to the right side and press from one end to the other along the seam. If you keep the lighter piece nearest you and press with the tip of the iron, you can press the seam to the darker side at the same time as you open the unit.

Pressing bias seams



Work along the straight grain to prevent the seam from being pulled out of shape. Lift the iron and replace it rather than dragging it along the seam.

Working in rows



Press the seams in adjoining rows in opposite directions from one another to minimize bulkiness where the seams join.

Pressing a pieced block



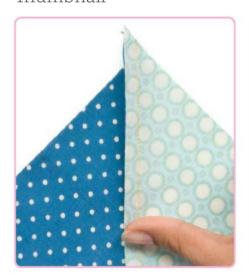
Place the block wrong side up on the ironing board. Do not press hard, but make sure the seams lie as flat as possible.

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 (opposite), turn the piece to the wrong side, open the seam, and press along the length with the tip of the iron.

Thumbnail



Work on a hard surface. Open the unit out and press first on the wrong side, then on the right side, running your thumbnail gently but firmly along the seamline and pressing the lighter fabric towards the darker fabric.

Small wooden iron



Working on the wrong side, place the flat, chisel-shaped edge of the tool on the seamline and run it gently along the seam.

Hera



A hera is a plastic, blade-like device. It is used in certain embroidery techniques but is also useful for creasing a temporary line on the fabric.

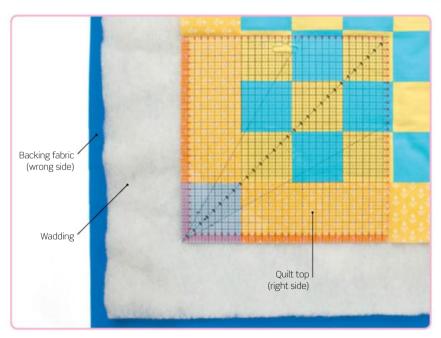
Assembling the quilt layers

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, wadding, and backing that make up the quilt. If the wadding has been folded, open it out flat and leave it for several hours to relax the wrinkles.



Trim the wadding and backing 7.5-15cm (3-6in) 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.

2 Centre the wadding on the backing, and smooth it out.



3 Position the quilt top right side up, centring it on the wadding. Use a ruler to check that the top is squared up. Using large quilter's straight pins, temporarily pin along each squared edge as you work.



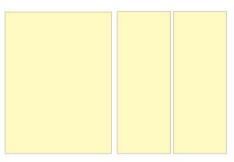


Working from the centre out diagonally, horizontally, and vertically, tack or pin the layers together.

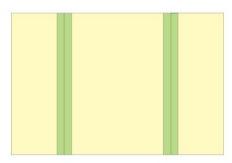
Remove the pins along the edge as you reach them. Keep smoothing the layers. Take tacking stitches 5cm (2in) long - first vertically and horizontally, then diagonally. If pinning using safety pins, follow the same pattern and insert the pins at 7.5-10cm (3-4in) intervals.

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 centre of the quilt.



1 Cut two full widths of fabric of the required length. Set one aside, and cut the other in half lengthways. Trim off all selvedges.



Add one half-width to each vertical side of the full width to get the required width.

Bagging out

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 wadding and backing slightly larger than the quilt top.



1 Centre the quilt top right-side up on the wadding. Centre the backing on the quilt top, right side down. Pin or tack the layers together around the edge.

2 Start machine stitching at the bottom edge, several centimetres (about an inch) from the corner, taking a 6mm (½in) seam. Secure with backstitching.



At the corners, stop 6mm (½in) 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 12-25cm (5-10in). 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.



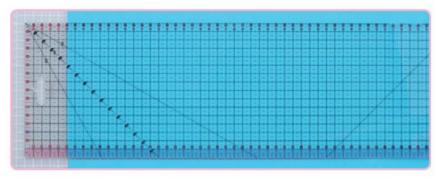
 $5\,$ Level the edges on the inside. Pin or press lightly. Blind stitch the opening closed.

Bindings

Pre-made bias binding is available in various colours and widths, or you can make your own. Bindings should be applied as a continuous strip. If possible, cut straight binding strips along the lengthways grain of the fabric or join pieces

before applying. Bias binding has more stretch than straight binding, making it suitable for binding work with curved edges.

Making a straight binding strip



Measure the edges of the piece being bound and decide on the width of the finished binding. Cut strips six times this width plus an additional 1.2cm (½in), allowing extra length for mitring corners and joining pieces.

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

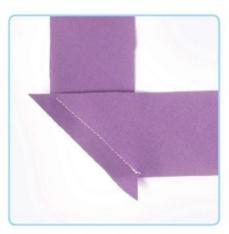
Making a bias strip



Buy at least 1.5m (59in) of fabric so you can cut very long strips. Cut off selvedges and smooth the fabric flat. Straighten the right-hand edge 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.



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

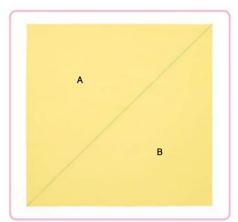


Join strips together to make a continuous strip. Pin the strips together at a go-degree angle with right sides facing and sew a 6mm (1/4in) seam on the bias. The seam should run from edge to edge of each strip, with a triangle of fabric left at either end of the seam.

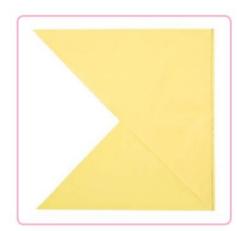


Press the seam open and trim off the seam allowances and the extending little triangles (dog ears). You can also make bias binding with these prepared strips. To do this, press under the edges or run the strip through a bias binding maker.

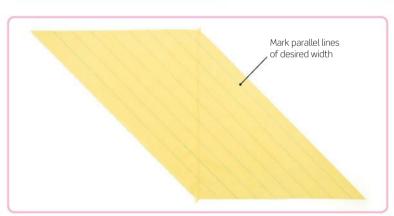
Making a continuous bias strip



1 Cut a large square of binding fabric with 90-degree corners. Mark two opposite sides as A and B and draw a diagonal line. Cut along the marked line.



Place the two triangles right sides together as shown and join them along the overlapping edges using a tight stitch length. Press the seam open. Trim off the dog ears.

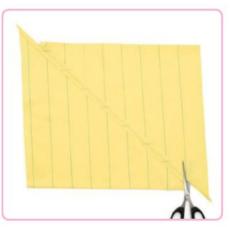


Mark lines parallel to the bias edges the desired width of the strip.





A Bring the remaining two straight-grain edges together and offset the marked lines by aligning one tip of the fabric to the first marked line on the other side. Pin carefully to match the marked lines and sew together, right sides facing, to make a tube.



5 Start cutting at one end along the marked lines to make a continuous strip.

Calculating meterage

To calculate how much binding you can make from a piece of fabric, multiply the length of the fabric by the width of the fabric, then divide by the width of the cut binding strip.

For example, for a 5cm (2in) wide binding strip cut from a 9ccm (36in) square of fabric you will get: 90 x 9ccm = 8,10ccm (36 x 36in = 1,296in). Divide by 5cm (2in) to get 1,62ccm (648in). You can make 16.2m (18yd) of binding, which should be sufficient for a king-size quilt.

Always work in either the metric or the imperial

Always work in either the metric or the imperial system when doing your calculations.

Binding with pre-made bias binding

Every quilt will need some form of binding to finish the raw edges and a pre-made bias binding, or bias tape, is a quick and easy way to do this. Bias tape can be used on small projects and projects that will not receive a lot of wear, such as wall hangings. Steps 3-8 show how to mitre a corner when binding. Mitring should be used when attaching any binding around a corner.



 $\bf 1$ After squaring up the quilt, measure all four sides, add them together, then add approximately 40cm (16in) to the total length. Cut the bias tape to this final measurement. Open up the long, folded edges of the bias tape and with right sides together, align the bias tape along one side of the quilt top, starting in the middle of the side, not a corner. Pin in place.



 $\label{eq:problem} 2^{\text{Beginning a few centimetres (inches) from the end of the bias} \\ \text{tape, with the quilt right side up, stitch along the outside edge} \\ \text{of the tape through all the layers. Use a seam allowance that is} \\ \text{one-quarter the width of the open bias tape. The stitch should land} \\ \text{approximately on the open fold of the binding.}$



Carefully stitch along the edge stopping a seam allowance's distance from the corner. Back stitch a few stitches.



Remove the quilt from under the machine foot, but do not cut the threads or pull it out too far.



 $5\,$ Create a mitred corner by folding the tape $_{45}$ -degrees to the right of the quilt top. The tape should run parallel with the bottom edge of the quilt.



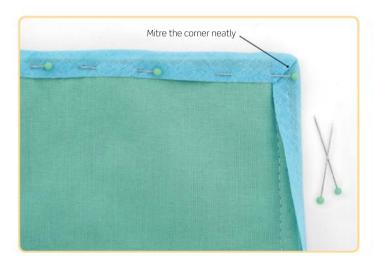
6 Carefully fold the binding back 180-degrees to the left, aligning the edge with the bottom edge of the quilt. Pin as needed.



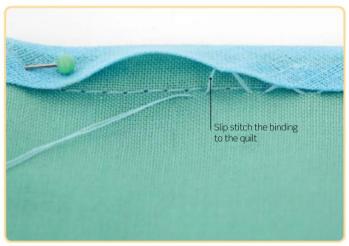
Turn the quilt go-degrees and place it back under the machine, inserting the needle back into the same place you last finished sewing. Continue stitching down the second side.



Repeat the process for the remaining sides until you are approximately 30cm (12in) from your starting point. Measure the distance between the finishing point and the beginning end of the binding tape. Trim and connect the two ends of the tape so they fit along the final section, then finish stitching the binding in place along the edge.



 $9\,$ Fold the binding to the back of the quilt, taking care to neatly mitre each corner as you do. Fold under the long raw edge of the binding tape that had previously been open. Pin the binding in place.



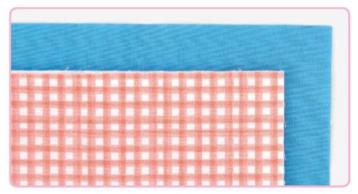
 10° With a needle and thread, slip stitch the binding (see p.41) to the back of the quilt, enclosing the raw edges of the quilt sandwich and covering the stitches made from sewing the binding to the front. Secure tightly and finish by embedding the knot inside the quilt.





Turned-edge binding

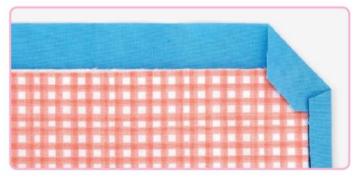
Adding a turned-edge binding is a simple way of finishing off the edge of a quilt. The binding is formed by folding the backing of the quilt to the front. It has the appearance of traditional bias binding.



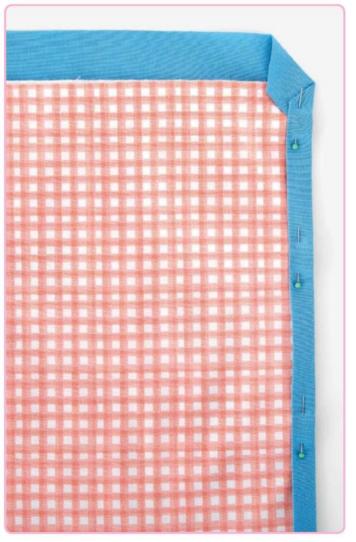
1 Pin the backing fabric out of the way and trim the wadding and quilt top so they are even and square with one another. Unpin the backing fabric and trim it to twice the width you want the finished turned-edge binding to be.



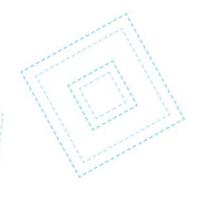
 $\label{eq:polyantimetric} 2 \text{ Fold one corner of the backing fabric over the corner of the quilt and pin it in place. Trim off the tip, as shown above.}$

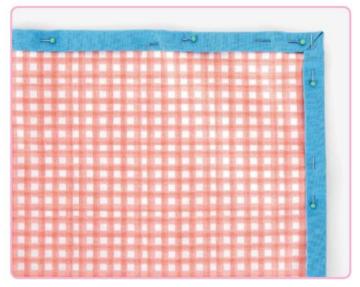


Fold the adjacent edge of the backing fabric over so that it aligns with the cut edges of the wadding and the quilt top.

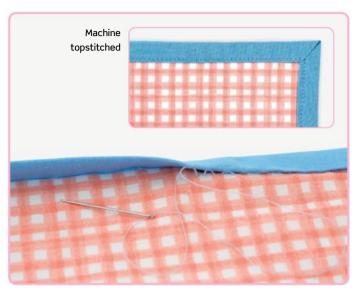


 $\label{eq:first-policy} \textbf{4} \text{ Fold the edge of the backing fabric over a second time so all the raw edges are enclosed. Neatly and evenly pin the folded edge in place along the entire length.}$





5 Repeat Steps 2–4 for the other corners and other edges, making sure adjacent edges meet in clean mitres at the corners, as shown above. If any trimmed corners from Step 2 are visible, you may need to trim them back some more.



 $6\,$ Neatly slip stitch (see p.41) the turned-edge binding to the quilt top or, for a much quicker finish, you can machine topstitch along the edge of the binding (see inset).

Double-fold binding

Double-fold binding is stronger than bias tape binding (see pp.50-51) 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 bound with a pre-made bias tape.



1 Cut strips of binding fabric six times the desired width of your finished binding, plus 6mm (½in) extra. Cut enough strips to fit around the perimeter of the quilt top, plus approximately 40cm (16in) extra. Join them all together (see p.46). Fold the strip in half lengthways, wrong sides together, and press.

2 Lay the doubled binding strip on the right side of the quilt, raw edges to raw edges. Pin the binding strip in place along the first side, starting about halfway down the side, and checking that none of the joined binding seams land on a corner. If they do, reposition the binding and pin again.



3 Start machine stitching about 20cm (8in) from the start of the binding using the seam allowance of the desired width of the binding. Stitch along the raw edges, mitring the binding when you reach a corner, then pin and continue to sew the next side (see pp.48–49) until all sides have the binding attached. Join the ends in whichever is your preferred method.

Turn the folded edge of the binding to the back of the quilt, taking care to mitre the corners on the back too. Neatly slip stitch (see p.41) the binding in place.



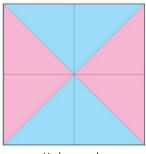
Patchwork

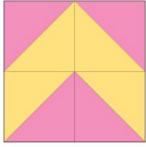
Patchwork block gallery

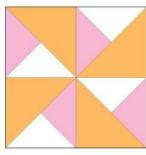
There are hundreds of traditional patchwork patterns and we have space to show only a few – but once you've mastered the basic construction techniques, you will be able to look at a block pattern and work out both the constituent elements and how to piece it together.

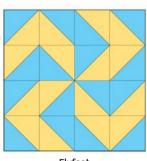
Four-patch blocks

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

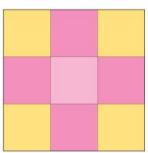
Flyfoot

Nine-patch blocks

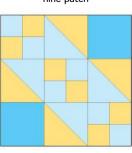
Nine-patch blocks are made of nine units in three rows of three. By adding a third colour to a simple nine-patch of two colours, you can create myriad variations.

Pictorial blocks

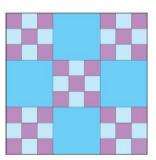
Patchwork pictorial blocks tend to be highly stylized, with the individual elements of the design being made up of square and triangle units in varying combinations.



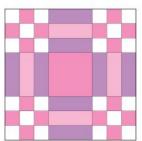
Red cross - Three-colour nine-patch



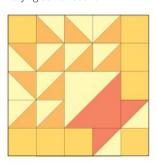
Rocky road to California



Three-colour double nine-patch



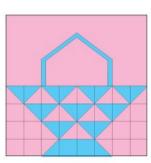
Building blocks



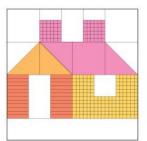
Grape basket



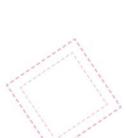
Basket of scraps



Colonial basket

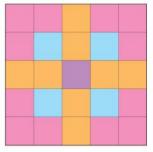


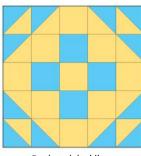
House with fence

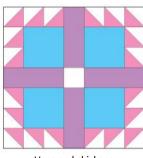


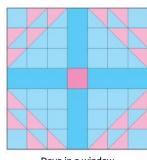
Five- and seven-patch blocks

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 sub-divided in several ways, there is almost infinite scope for creating different patterns.









Star and cross patch

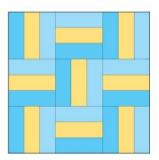
Duck and ducklings

Hens and chickens

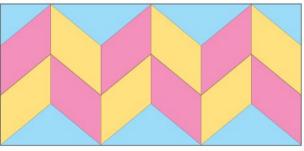
Dove in a window

Strip-pieced blocks

Strip-pieced patterns can be put together in random colour 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, similar to the one below. Seminole bands can be angled or set square and are wonderful for creating pieced border strips.







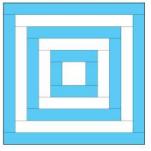
Basketweave

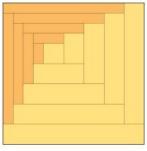
String-pieced divided square

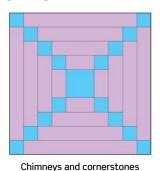
Double chevron seminole

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 centre square can be pieced, turned "on point", or made from a rectangle, triangle, or diamond.









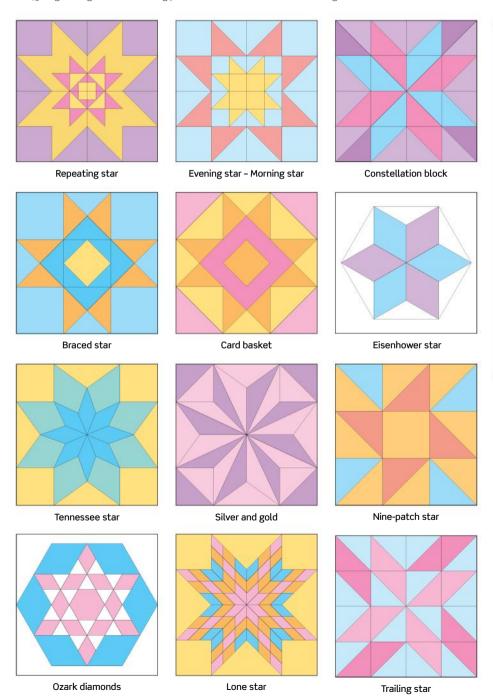
Cabin in the cotton

Thick and thin

Pineapple

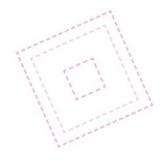
Star blocks

There are probably more kinds of star blocks than any other patchwork motif; the construction ranges from simple four-patch stars to extremely complex designs created by cutting 6o-degree diamonds in half lengthways or crossways. The basic eight-point star alone, with its 45-degree angles, is the starting point for numerous variations, including the intricate lone star.



Tips for making blocks

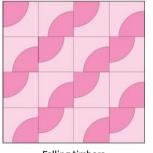
- When marking, make sure the marker has a sharp point. If you mark with dashes, not a continuous line, the fabric is less apt to shift or stretch.
- Remember the rule: measure twice, cut once. And bear in mind that measurements from one brand of ruler or mat are not always exactly the same as another 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 and centred.



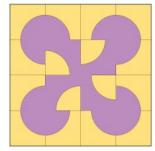


Curved blocks

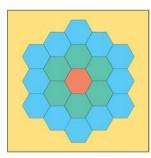
Probably the most popular of all traditional curved blocks is the drunkard's path (see pp.114-115). When the orientation or colour values of the four units is altered, a number of complex curving patterns result. Changing the size and shape of the curves alters the block considerably.



Falling timbers



Wonder of the world



flower garden.

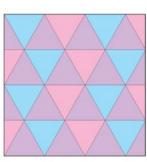
Mosaic blocks

Though many of these can be machined, most are made by piecing

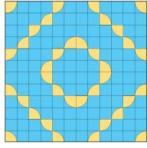
together geometric shapes using the English paper-piecing

method (see p.124). The most familiar block is grandmother's

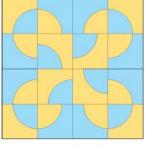
Grandmother's flower garden



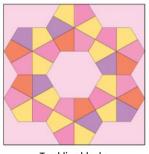
1,000 pyramids



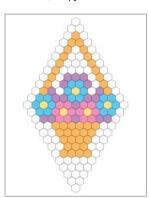
Chain links



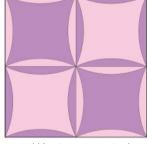
Drunkard's puzzle



Tumbling blocks



Flower basket



Robbing Peter to pay Paul



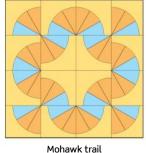
Orange peel



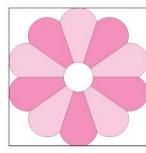


Fan blocks

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



Mohawk trail



Dresden plate

Piecing

Piecing, or sewing pieces of fabric (units or patches) together, lies at the heart of patchwork. In fact, piecing is, simply, creating patchwork. First you join smaller pieces, then you join these to make your final design. You can choose between hand and machine piecing. Piecing by machine obviously produces faster results.

Hand piecing

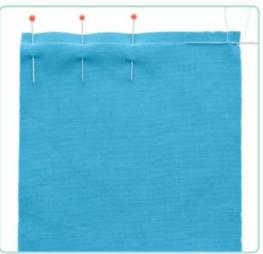
Mark all seamlines on the wrong side of the fabric to give you an accurate guide to where to sew. Take care when sewing seams on bias-cut edges (for instance on diamond, triangle, or hexagon shapes) or around curves, as the raw edge is

prone to stretching. Secure the seam with a small backstitch each time you bring the needle through and use a double backstitched loop (see p.42) at the end of a bias seam; do not sew into the seam allowance.

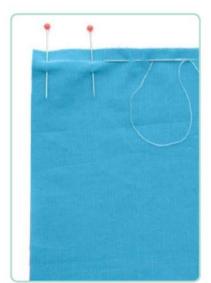
Joining two units with a straight seam



Place the two units to be joined right sides together. You must not sew across the seam allowance of the adjacent seam, so mark that seam allowance with pins at the start and end points of the seam you are about to sew. Add more pins along the seamline you are about to sew, making sure that the seamline aligns on both units.



Remove the first pin and take the needle through both the front and the back units at that point. Secure the thread with a knot or take a couple of tiny backstitches into the seam allowance.



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.



From time to time, check the back of the fabric to make sure that your stitching is on the seamline on both sides. Stop at the end point marked with a pin in Step 1. Finish with a couple of backstitches to secure the thread.

Joining hand-pieced rows

When joining rows of hand-pieced units together, you must avoid sewing into the seam allowances, just as you did when hand piecing two units together (see Joining two units with a straight seam, opposite).



 $\mathbf{1}$ Place two rows of hand-pieced units with right sides together. Match the seamlines front and back, and pin through both layers at each corner at the start and end points (see Step 1, opposite). Align the seamlines and pin at intervals to hold the rows in place.



2 Start sewing at one end, working as for straight seams (see opposite), until you reach the first seam intersection. Sew through the start and end points but do not sew across the seam allowance.



3 Make your first stitch in the second pair of units a backstitch right next to the seam allowance.



4 Continue in this way to the end of the row. Secure your stitching with a backstitched loop (see p.40).



 $5 \\ \text{Open the joined rows out and press the seams on each row to opposite sides.}$ Press the just-completed seam to one side.



Machine piecing

Stitching patchwork pieces by machine is a quick way of assembling a piece. As for hand piecing, always ensure that your fabrics are aligned with right sides facing and with raw edges matching. Leave a 6mm ($\frac{1}{4}$ in) seam allowance unless otherwise specified, and use a standard straight stitch.

Joining two or more strips



1 Place two strips of fabric right sides together, raw edges aligned. Sew a straight 6mm ($\frac{1}{4}$ in) seam along the length of the strip.



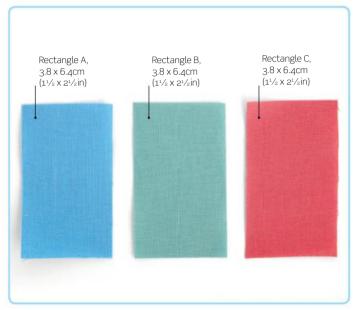
Press the seam towards the darker fabric.



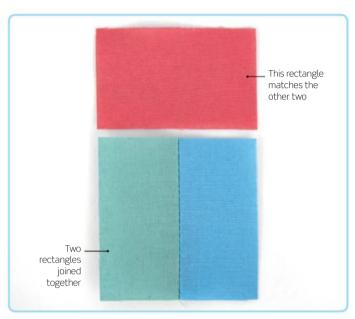
When piecing several strips together, each time you add a strip, reverse the direction of your sewing; this helps to keep the strips straight and prevents the fabric from bowing. The seams should all be pressed in the same direction. The pieced strip can be cut into pieced units, which can then be combined to make a new pattern.



Checking seam allowances

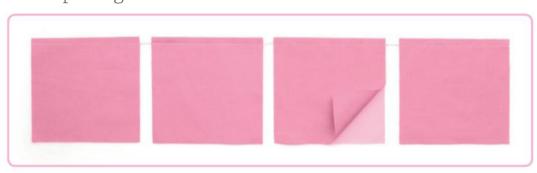


1 When sewing any pattern, for your finished pieces to fit together well, it is important to ensure you sew using the correct seam allowance. One way to check that your machine is sewing a standard 6mm ($^{1}/_{4}$ in) seam allowance is to cut three pieces of fabric, A, B, and C, each 3.8 x 6.4cm ($^{1}/_{2}$ x $^{2}/_{2}$ in).

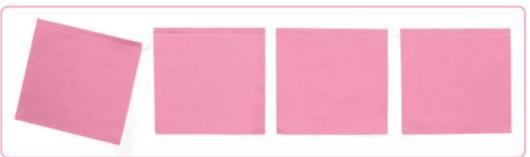


Pin and sew rectangles A and B, right sides together, along their long edges. Press the seam to one side. If your seam allowance is accurate, rectangle C should be an exact size match to the joined pieces, as shown. If it is not, adjust the needle position until the seam allowance is accurate.

Chain piecing



Place the pairs of units to be joined right sides together, then feed them through the machine in sequence without lifting the presser foot or breaking the thread. You will have a chain of units with a short length of thread between each.



2 Snip the units in the chain apart, using a small pair of sharp scissors.





Patchwork strip cushion

This super simple, visually appealing cushion can be made in less than an hour. Depending on the fabrics you choose, the design possibilities are endless and can produce any number of different effects. Try fussy cutting some of the patches.

Essential Information

DIFFICULTY Easy

SIZE 40 x 40cm (16 x 16in)

TOOLS AND MATERIALS

Rotary cutter

Cutting mat

Quilter's ruler

Sewing machine

Threads to match your fabrics

Pins

Iron and ironing board

Scissors

Cushion pad 40 x 40cm (16 x 16in)

FABRICS

Nine scraps of coordinating fabric to make nine squares, 6.5×6.5 cm ($2^{1}/_{2} \times 2^{1}/_{2}$ in) each go x 42cm ($35^{1}/_{2} \times 16^{1}/_{2}$ in) main fabric

SKILLS

Joining two or more strips (see p.6o)

SEAM ALLOWANCE

6mm (1/4in) throughout, unless otherwise stated





Lut nine scraps of coordinating fabric, each 6.5cm (2½in) square. Use the rotary cutter, mat, and quilter's ruler to make sure that each piece is perfectly square. If there is a particular part of a fabric that you'd like to appear in the centre of a square, centre it as you cut (see p.38, Fussy cutting).



2 Join the nine fabric squares into a patchwork strip (see p.6o) in the order you'd like to see them. Place each square in turn right sides together with the next square, pin along the edges to be joined, and sew them together. Secure each seam at the end with a few backstitches.



2 Lay the strip face down and press the seams flat to one side.





 $4^{\rm Cut}$ the two panels for the cushion front from the main fabric, one 24 x 42cm (9½ x 16½in) and another 14 x 42cm (5½ x 16½in). With right sides together, pin the long edge of the patchwork strip to one of the long edges of a front panel. Sew along the edge.



 $\label{eq:continuous} 5 \text{ Open up the two pieces and on the wrong side of the fabric, press} \\ \text{the seam towards the main fabric. With right sides together, pin} \\ \text{the other long edge of the patchwork strip to one of the long edges} \\ \text{of the other front panel. Sew along the edge.} \\$



6 Open up the two pieces and on the wrong side press the seam towards the main fabric. You have now completed the cushion front.



7 To make the cushion back, cut two pieces from the main fabric, each $_{42\,\text{X}\,26\text{cm}}$ (16½ x 10 in). Fold one of the long edges of one piece to the wrong side of the fabric by 1cm (3½ in). Fold it again by the same amount to create a neat hem. To enclose the raw edge, pin the hem in place, checking that it is straight, then sew along the edge of the second fold to secure the hem. Repeat on the other piece of fabric.



8 Lay the cushion front, right side up. Place one of the back pieces on top, right side down, aligning its long, unhemmed edge with the top raw edge of the cushion front. Place the second back piece right side down on top of the first, aligning its long, unhemmed edge with the bottom raw edge of the cushion front. The two back pieces should overlap. Pin along all four edges.



Deaving a 6mm (1/4in) seam allowance, sew around all four edges of the cushion cover to secure the back pieces to the cushion front. Forward and backstitch over the hemmed, overlapping edges of the flaps to secure them in place. Remove the pins as you work.



 $10 \\ \text{Snip off all four corners, taking care not to cut through the stitches. Turn the cushion cover to the right side through the opening in the back. Iron, then insert the cushion pad.}$



Brick quilt

Piecing simple strips together is a great way for a beginner to get into patchwork. You get fast results without having to master any complicated techniques. This colourful single quilt is set off beautifully by its contrast backing and binding.

Essential Information

DIFFICULTY Easy

SIZE 125 X 145Cm (49 X 57in)

TOOLS AND MATERIALS

Measuring tape

Ouilter's ruler

Rotary cutter

Cutting mat

Pins

Sewing machine

Threads to match your fabrics

Scissors

Iron and ironing board

Safety pins

Sewing needle

FABRICS

1 fabric Jelly Roll™

560cm (220in) pre-made bias binding or 46 x 112cm (18 x 44in) fabric for doublefold binding

 356×112 cm (140×44 in) backing fabric 140×16 ocm (55×64 in) wadding

SKILLS

Piecing strips (see p.60)

Chain piecing (see p.61)

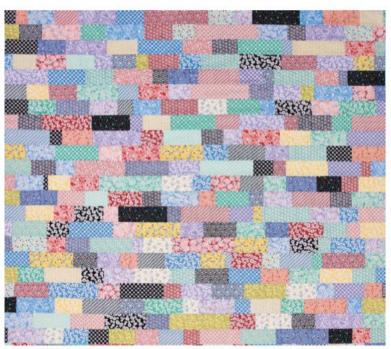
Making a bigger backing (see p.45)

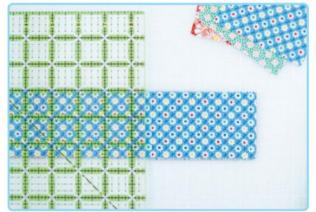
Binding (see pp.48-51)

Quilting in the ditch (see p.163)

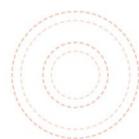
SEAM ALLOWANCE

6mm ($^{1}/_{4}$ in) throughout, unless otherwise stated









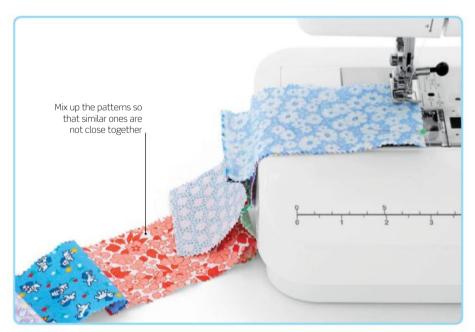




2 With right sides together, pair each fabric strip with a strip of a different length and pattern. Align the short edges and pin together. When each piece has been paired, chain piece them together (see p.61).



 $3\,$ Using scissors, cut the paired pieces apart by snipping through the short length of thread between them.



4 With right sides together and aligning the short edges, stitch each paired piece to another paired piece. Make sure that the same fabrics are not next to each other. Join all the paired pieces to form one long strip.



5 Press the strip. Using the measuring tape, cut the long strip into 125cm (49in) lengths. You should have about 30 strips, depending on the amount of fabric taken up by the seams.







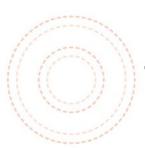
6 Lay the strips out on a large, flat surface and arrange them in a pleasing order in rows. Plan the layout of your pieces to make a quilt top that will be roughly 125 x 145cm (49 x 57in). Make sure the same fabrics are not placed together. When you are happy with the arrangement, turn each strip over and press the seams of each strip in the same direction.



7 Working from one edge of your arrangement and with right sides together, pin the first two strips together along their length. Stitch them, leaving a 6mm (½in) seam allowance (see p.61). Join five strips together in this way, then repeat until you have about six pieced units, each consisting of five joined strips. Your final number of pieces will depend on the number of strips you started with.



Pin one pieced unit to another, right sides facing, and stitch them together. Repeat until all six pieces are joined. Turn the quilt over and press the seams open. The quilt top is now complete.



The layout of the quilt is random so just arrange the strips in a pleasing order.



Piece the backing (see p.45) then lay the backing on a large, clean, flat surface with the wadding on top. Smooth out the two to make sure they are not bunched or folded, then lay the quilt top on the wadding (see p.44). The wadding and backing fabric will both extend slightly beyond the edges of the quilt top. Starting from the centre and working outwards, pin all three layers together using safety pins. Make sure that all the layers lie flat and check that the underside of the backing fabric also lies flat.



 10° Quilt the top according to your preference. Here, we have quilted in the ditch (see p.163) along every sixth strip. Roll up the end of the quilt in the throat area of the sewing machine to keep it out of the way as you work (see p.162). Remove any safety pins that get in the way as you work.



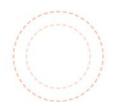
11 Using the quilter's ruler and the rotary cutter, trim away the excess wadding and backing fabric from the edges of the quilt.



12 Attach the bias tape, if used, to the edge of the quilt following the instructions on pages 48-49. Or, create a 7.5cm (3in) wide double-fold binding strip from fabric and attach it using the Double-fold binding technique on page 51.



13 Fold the binding to the back of the quilt, pin it in place, then sew it by hand slip stitching it in place (see p.49).

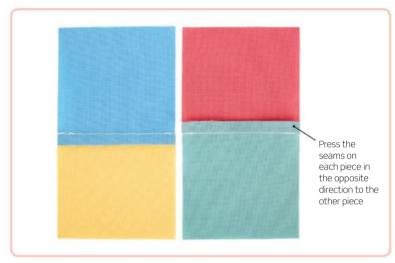




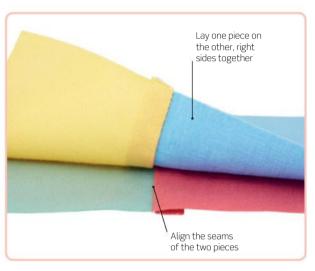
Sewing intersecting seams

When sewing together any two pieces of patchwork, it is important to match the seams so that they align perfectly with the seams on the adjoining piece. By pressing the seams in opposite directions and fitting them into one another, known as nesting, you can create smooth, accurate seams without any gaps or misalignments.

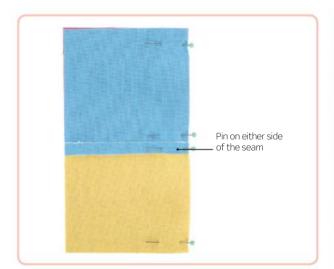
Matching straight seams



1 After piecing plain squares or rectangles together, press the seams on each strip to be joined in the opposite direction to the seams on the strip it will be joined to.



 $\begin{tabular}{ll} 2 Place the pieces right sides together, taking care to align the seams. \end{tabular}$



3 Nest the seams by running your finger over the spot where all four pieces of fabric meet, to feel for any gaps. Ensure that opposite seams butt right up against one another smoothly. Carefully pin on either side of the nested seams. If there are multiple joins along the two pieces, match each point, then work outwards from each pinned seam, towards the ends.

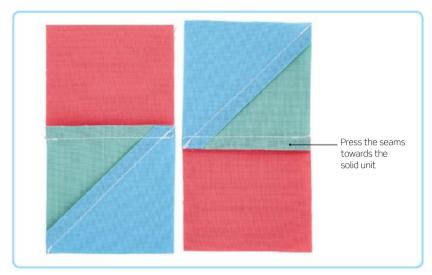


4 Using the same seam allowance you used to join the pieces, sew through the layers, taking care when sewing over the matched seams. Remove the pins as you work. Open out and press the finished item.



Matching seams with points

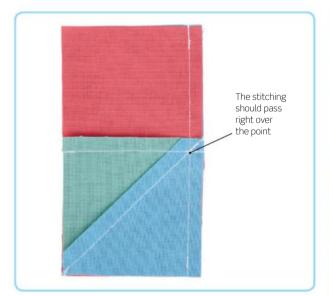
When joining pieces of patchwork that have points, it is important to match the seams correctly, so as not to lose the points in the seam.



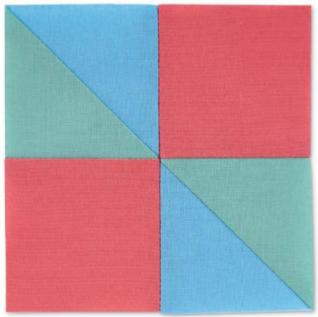
1 Press the seams on the two pieces to be joined in opposite directions, ideally away from the piece with the point.



 $\label{eq:place} 2 \text{ Place the two units right sides together. Insert a pin through the top piece, right at the end of the point. Insert the pin straight down through the bottom piece, at the tip of the point.}$



Nest the seam by running your finger over the spot where all the pieces of fabric meet to feel for any gaps. Carefully pin on either side of the seam to be matched, then continue pinning, working outwards. Sew along the seam using the same seam allowance previously used to join the pieces. Remove the pins as you work.



4 Open out the piece and press.



Simple squares tote Simple squares tote

This cheerful tote bag is perfect for popping to the shops, heading to the beach, or carrying your quilting supplies while you are on the go. The bag is assembled using a simple, square patchwork pattern with no quilting needed.

Essential Information

DIFFICULTY Medium

SIZE 30 x 22.5 x 15cm (12 x 83/4 x 6in)

TOOLS AND MATERIALS

Measuring tape

Rotary cutter or scissors

Cutting mat (optional)

Quilter's ruler

Pins

Threads to match your fabrics

Sewing machine

Iron and ironing board

Sewing needle

One 3.5cm (13/8in) button

FABRICS

- A, B, C, D, E, F, G, H, I: Assorted scraps of cotton fabric for the patchwork squares to make a total of 44 squares, each 9.5cm (3³/₄in)
- **J:** 50cm (20in) of 112cm (44in) wide cotton fabric for the lining
- **K:** 30cm (12in) of 112cm (44in) wide cotton fabric for the straps
- **L:** 14 x 18cm ($5^{1/2}$ x 7in) cotton fabric for the button flap

SKILLS

Piecing (see pp.58-61)

Sewing intersecting seams (see pp.72-73)

SEAM ALLOWANCE

1cm (3/8 in) throughout, unless otherwise stated



Front and back of bag (cut two batches of 18 squares)

٠,							
	А	В	С	D	E	G	Top row
	С	Н	I	F	А	Н	Middle row
	E	F	D	Н	G	I	Bottom row

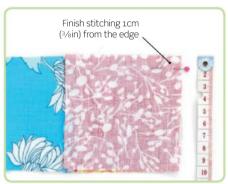
Base of bag (cut one batch of 8 squares)

А	E	В	D
Н	F	I	G

Cut the patchwork squares using the diagrams as a guide to how many squares of each fabric are needed and how to lay them out. Remember to cut squares for both the front and back of the bag. You only need to cut one batch of squares for the base of the bag.



1 Following the diagrams above, cut a total of 44 squares of fabric, each 9.5cm (3³/₄in) square. With right sides together, stitch together the squares for the top and middle rows of the front and back of the bag making four strips of six squares each.



With right sides together, stitch together the squares for the bottom row of the front and the bottom row of the back of the bag. Mark with a pin 1cm (3/6 in) from the lower edge of the first and last squares in each row and take care not to sew beyond the pins.



 $3\,$ With wrong sides facing up, press the seams of the top and bottom rows to the right, and of the middle row to the left.



To make the front, with right sides together, pin, then stitch the top and middle rows together, matching the seams (see p.72). Pin and stitch the bottom row to the middle row in the same way. Repeat to make the back. Press the seams of the front downwards and the seams of the back upwards.



5 With right sides together, stitch together the squares for the base in two rows of four squares. Pin, then stitch the two rows together, matching the seams. With the wrong side facing up, press this seam open.



6 With right sides together, pin the lower edge of the front of the bag to one long edge of the base, matching the centre seams. Sew together, taking care not to sew beyond the pins marked in Step 2. Stitch the lower edge of the back of the bag to the other long edge of the base in the same way. Press the seams away from the base.





Cut a pair of button flaps from fabric L using the template (see pp.172-175). With right sides together, pin, then stitch them together, leaving the upper edge open. Clip the corners as shown above.



8 Turn the flap to the right side and press. Stitch a buttonhole in the flap, large enough to accommodate your chosen button (see p.170).



Out two go x gcm (36 x 3½/2in) strips of fabric K to make the straps. With right sides together, fold the strips in half lengthwise and pin the raw edges together. Stitch, then turn to the right side and press.



 10° With right sides together, pin the open edge of the flap to the centre of the upper edge of the back of the bag, and pin the end of each strap 5.5cm (2½/4in) either side of the flap.Tack all the raw edges together.



11 With right sides together, fold the bag in half along the centre seam of the base. Pin both sides of the front and back of the bag together, matching the seams. Stitch the sides together, then press the seams open.



12 Bring the raw lower edges of the front and back of the bag to meet the short edges of the base. Match the bag's side seams to the centre seam of the base. Pin, then stitch between the ends of the seams that were sewn in Step 6. Turn the bag to the right side.



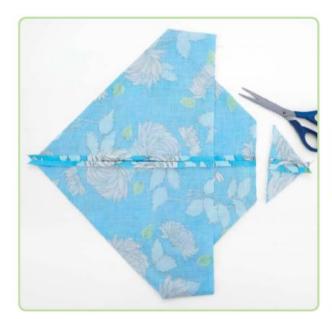
Make the lining



 13° Cut two 47 x 32cm (18³/4 x 12³/4in) rectangles of lining fabric. Pin them together with right sides facing. Stitch along one long side – the bottom edge – and along the two short sides, leaving a 16cm (6¹/4in) opening along one short side, 4cm (1¹/2in) from the upper edge.



14 To shape the lining to fit the base of the bag, with right sides of the lining facing, bring the lower part of one side seam to the adjacent part of the seam along the bottom of the lining. Starting at the corner where these seams intersect, measure and mark a point 15cm (6in) away. Sew across the lining, perpendicular to this mark, creating a triangle at the corner. Repeat on the opposite side of the lining.



 $15\,$ Trim the seam allowances to 1cm (3/8in) and cut off the triangles, as shown.



 $16\,$ lnsert the bag into the lining with right sides facing. Pin the upper raw edges together, matching the side seams. Remove the base of the sewing machine, then slip the bag over the sewing machine bed and stitch along the upper edge.



 $\label{eq:total_problem} 17 \text{ Turn the bag to the right side through the opening in the side} \\ \text{of the lining. Slip stitch (see p.41) the opening in the lining closed.} \\ \text{Press the lining to the inside.} \\$



18 Topstitch the bag 6mm ($^1\!/_4$ in) below the upper edge to keep the lining inside the bag. Sew the button to the centre seam of the top row of patchwork on the front of the bag, 4cm ($^1\!/_2$ in) below the upper edge.



It's important to match all the seams as you sew so that the patchwork squares align once your bag is complete.

Triangles

Triangles form the basis of many patchwork units and, after squares and rectangles, are the next easiest and most versatile to work with. They can be combined with other triangle units or with plain units to create a wide range of blocks. Triangle units also make a wonderful impact when used in sashings and borders.

Making a pair of half-square triangles

While a half-square triangle, which is a square made of two right-angled triangles, can be made by sewing two triangles together, a faster way is to start with two squares and use the method below.



1 Cut two squares, each 2.2cm (7/sin) larger than the desired finished size and place them right sides together, with the lighter colour on top.



2 Using a pencil, mark a diagonal line in one direction across the wrong side of the lighter-coloured square.



 $3^{\rm Pin}$, then machine stitch along each side of the marked line, stitching 6mm ($^{1}\!/_{\!4}$ in) from the line.

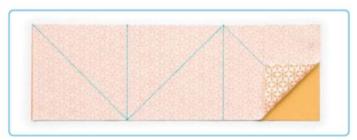


4 Using a rotary cutter or scissors, cut along the pencil line.

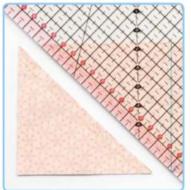


5 Open out the pieces of fabric and press the seams, usually towards the darker fabric, to make two identical half-square triangles.

Making multiple half-square triangles from strips



1 Start by cutting fabric strips that are the desired width plus 2.2cm (7/sin). Place them right sides together and mark squares on the wrong side of the lighter fabric. Draw a diagonal line across each square, alternating the direction of the line in each square.

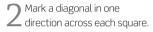


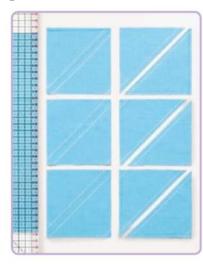
2 Sew a 6mm (½4in) seam on each side of the marked diagonal lines. Cut along the marked diagonal and vertical lines to separate the half-square triangles. Press the seams towards the darker fabric.

Making multiple half-square triangles from large pieces



1 You can also make multiple half-square triangles by placing two large pieces of fabric right sides together and marking a grid of squares, each 2.2cm (7/8in) larger than the finished size you want.



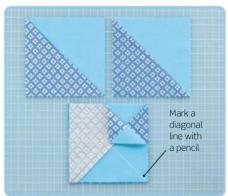


3 Sew a 6mm (½/4in) seam on each side of the marked diagonal lines. Cut along the marked diagonal and vertical lines to separate the half-square triangles. Then press all the seams towards the darker fabric.



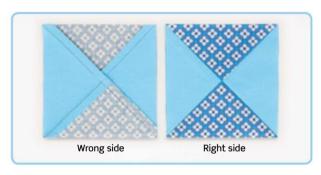
Making a pair of quarter-square triangles

Quarter-square triangles can be quickly made using the technique below. Start by making two half-square triangles using one of the techniques already described opposite and above. Begin with two squares each 2.75cm (13/ein) larger than the desired finished size.



Place the two half-square triangles right sides together, with the seams aligned and the contrasting fabrics face to face.

Using a pencil, mark a diagonal line from corner to corner in the opposite direction from the seamline that is on top. Sew a 6mm (½/4in) seam either side of the marked line.



3 Cut the units apart along the marked diagonal lines and press.

Joining pieced and plain units



 $\label{eq:local_problem} 1 \text{ Place one half-square triangle} \\ \text{ (the pieced unit) and one plain unit right sides together. Sew together, as shown, leaving a 6mm (4/in) seam allowance. On the right side, the corner of the half-square triangle will disappear in the seam allowance 6mm (4/in) from the raw edge. Repeat for the other pieced and plain unit.$



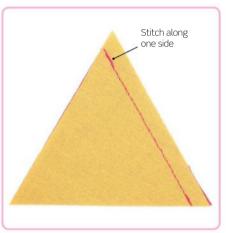
2 Combining two pairs of joined pieced and plain units, as shown, will accommodate the seam allowances and their corners will meet exactly in the centre of the four units.

Equilateral triangles

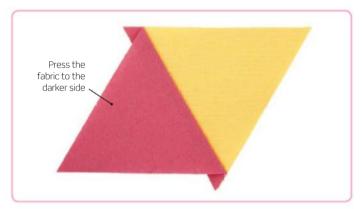
Joining equilateral triangles requires slightly off setting each triangle using the "dog ears" left by the previous seam. This will ensure that the finished row is straight and even.



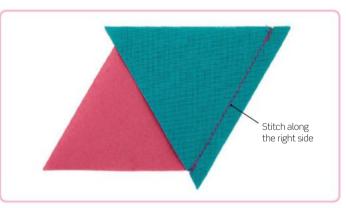
Using a rotary cutter and quilter's ruler with 60-degree guides, cut out your triangles.



Align two of the triangles, right sides together, and carefully stitch along one side.



 $\label{eq:controller} 3 \text{ Unfold and press the seam allowances towards} \\ \text{the darker fabric.}$



 $\begin{tabular}{ll} 4 & Using the ears from the first two triangles as a guide, align the third triangle and pin. Carefully stitch along the edge of the triangles. \\ \end{tabular}$



5 Unfold and press. Repeat Steps 2-4 adding as many triangles as your design requires.



Flying geese

Flying geese blocks are an easily adaptable and versatile design. They can be added to the borders of blocks to add more visual interest or can be used as a block on their own. They are often used to make star points in blocks.

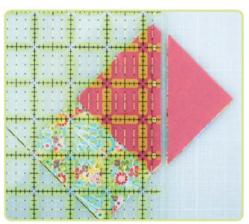


1 Cut a rectangle 1.2cm (1/2in) both wider and longer than the required finished size of your unit. Cut two squares of the same height and width as the short side of the rectangle. Draw a diagonal line from corner to corner on the wrong side of the squares.



2 Pin the square to the left side of the rectangle, right sides together, with the diagonal line positioned as shown.

Carefully stitch along the line.



3 Using your quilter's ruler, trim off the excess fabric from the corner, leaving a 6mm (1/4 in) seam allowance. Align your ruler with the stitching line, as shown.



4 Unfold and press the unit.



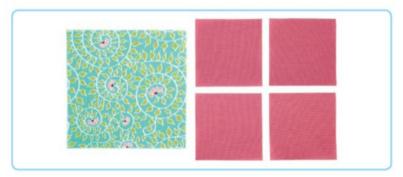
 $5\,$ Repeat the process on the right side of the rectangle, positioning the second square as shown. Pin in place and sew along the line.



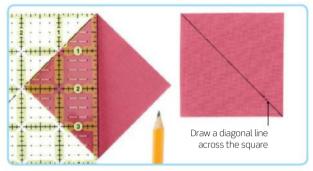
6 Trim away the excess as in Step 3 and press the seams open.

Triangle corners

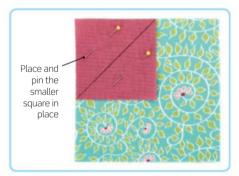
Triangle corners are made the same way as Flying geese (see p.83), but four corners are added around a square instead of two to a rectangle. This can be a good method of adding a border around a completed block, to tilt it on its point.



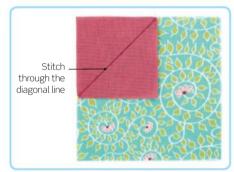
1 Cut one large square from a fabric to the required size. Cut four squares, each half the size of the larger square, plus 6mm ($^1\!\!/_4$ in) extra, from another fabric. Here we have used a 9cm ($3^1\!\!/_2$ in) large square and four 5.1cm (2in) small squares.



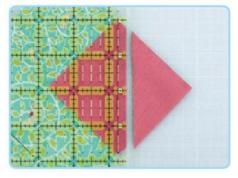
2 Draw diagonal lines on the wrong side of the smaller squares, as shown.



Place and pin the smaller square on the upper left corner of the larger square with the diagonal line as shown.



4 Carefully stitch through the diagonal line of the smaller square.



 $5 \ \text{Using a rotary cutter and quilter's} \\ \text{ruler, trim off the excess fabric,} \\ \text{leaving a 6mm (}^{1}\text{-}\text{/}_{4}\text{in)} \text{ seam allowance.} \\$



6 Unfold the smaller square and press into position.



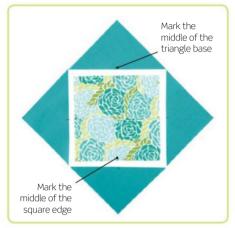
Repeat the process on the remaining three corners, working clockwise.



8 With the right side facing up, press flat.

Sewing triangles to squares

Attaching triangles to squares can be difficult, especially as the edges of the triangle may be cut on the bias. Follow Steps 2–4 below to attach one triangle to a square, but if you'd like to add them all around a square to create a block, complete the entire sequence.



1 Cut a square of your required size, then cut triangles with a long side of the same width, plus 6mm (¾in) extra. Make marks in the centre of all four sides of the square and the longest edge of each of the triangles.



With right sides together, place a triangle along the top edge of the square, aligning the centre points. Make sure the triangle is centred along the edge so the side points overhang by equal amounts.



Carefully stitch along the top edge using a 6mm (½/4in) seam allowance. Trim off the excess fabric on the sides to square up the block.



4 Unfold the triangle and press the seam towards the square.



5 Repeat the process, working clockwise, until all four sides of the centre square have a triangle attached. Press flat.



Chisholm trail quilt

While this quilt might look complicated, each individual unit within the block is simple to make. If you take care to accurately cut and sew all of the pieces and match the seams, your quilt will come together perfectly.

Essential Information

DIFFICULTY Medium

SIZE 210 X 210Cm (821/2 X 821/2 in)

TOOLS AND MATERIALS

Ouilter's ruler

Rotary cutter

Cutting mat

Scissors

Sewing machine

Pins

Threads to match your fabrics

Iron and ironing board

Curved safety pins

Quilting thread

Needle

FABRICS

A: $350 \times 112 \text{cm}$ ($138 \times 44 \text{in}$) solid cream fabric for the background and borders

B: $150 \times 112 \text{cm}$ ($59 \times 44 \text{in}$) red gingham fabric for the star points

 $\textbf{C:}\ 100\ x\ 112\text{cm}\ (391/2\ x\ 44\text{in})$ cream floral fabric for the block corners and the star centres

D: 50 \times 112cm (20 \times 44in) blue floral fabric for the star centres

E: One fat quarter of beige floral fabric for the star centres

 75×112 cm (291/2 × 44in) fabric for 1.2cm (½in) double-fold binding

450 x 112cm (177 x 44in) backing fabric 225 x 225cm (90 x 90in) wadding

SKILLS

Triangles (see pp.80-85)

SEAM ALLOWANCE

6mm (1/4in) throughout, unless otherwise stated

Cut the fabrics

From fabric A: Cut twenty-five 18.5cm (7¼in) squares for the star background. Cut seventy-five 9.8cm (3%in) squares (50 for the block corners and 25 for the star centres). Cut twenty 6.5 x 31.8cm ($2^{1}/2 \times 12^{1}/2$ in) strips for the vertical sashings. Cut eight 6.5 x 112cm ($2^{1}/2 \times 44$ in) strips for the horizontal sashings. (Sew two sashing strips together, to create four sashing strips). Cut eight 17.8 x 112cm (7 x 44in) wide strips for the borders. (Sew

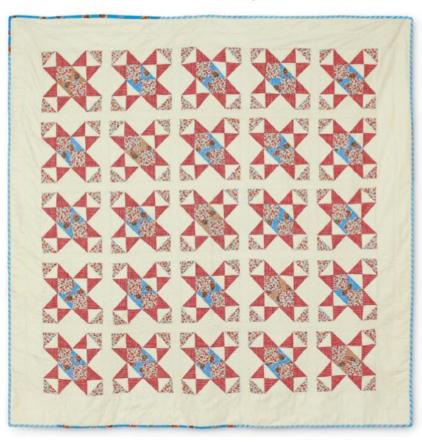
two strips together, to create four border strips).

From fabric B: Cut one hundred 9.8cm (3%in) squares for the star points.

From fabric C: Cut fifty 9.8cm (3%in) squares for the block corners and cut fifty 8.9cm ($3^{1}/2$ in) squares for the star centres.

From fabric D: Cut twenty 9.8cm (3⁷/sin) squares D for the star centres.

From fabric E: Cut five $9.8cm (3^7/sin)$ squares for the star centres.







Make the star points

Place two 9.8cm (3⁷/sin) fabric C squares onto a 18.5cm (7¼in) fabric A square, right sides together (see Figure 1) and pin. Draw a diagonal line on the wrong side of the fabric C squares, then stitch a 6mm (¼in) seam on either side of the line (see Figure 1). Cut along the drawn line. You will have two pieces. Open up and press the points out. Place another 9.8cm (37/8in) fabric C square right side down on top of one of the pieces, in the fabric A corner, see Figure 2. Draw a diagonal line on the wrong side of the fabric C square. Stitch a 6mm (¼in) seam on either side of the line (see Figure 2). Cut along the drawn line. You now have a pair of star points (see Figure 3).

Repeat with the remaining piece to create a further pair of star points. You need two pairs of star points (four star points in total) for each block. Repeat for the other 24 blocks.

Make the half-square triangle block corners

Place one 9.8cm ($3^7/\sin$) fabric C square right sides together with one 9.8cm ($3^7/\sin$) fabric A square. Draw a diagonal line on the wrong side of the fabric (see Figure 4) and pin. Stitch a 6mm ($^1/\sin$) seam on either side of the line then cut along the drawn line to create two half-square triangles (see Figure 5). Repeat to create four half-square triangles for each block (100 total) (see p.82).

Make the half-square triangle centres

Place one 9.8cm (3⁷/sin) fabric D square right sides together with one 9.8cm (3⁷/sin) fabric A square. Follow the instructions above (see Figure 4) to make a pair of half-square triangles. Make 20 pairs using fabric D and make five pairs using fabric E.

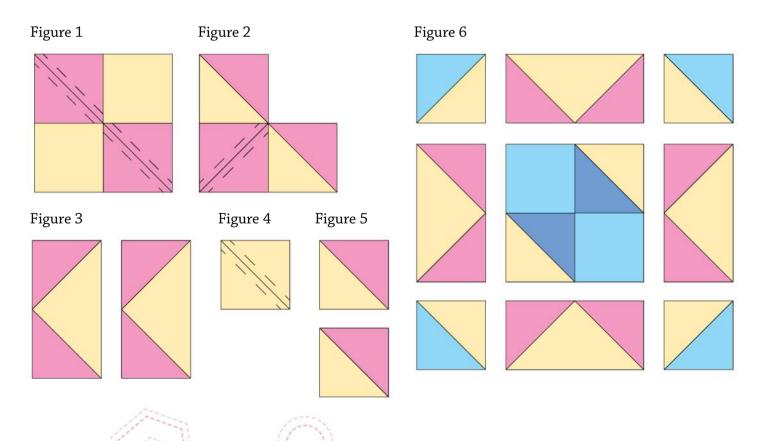
Make the blocks

Lay out the pieces in order following the diagram below (see Figure 6). Create the centre unit by sewing one 8.9cm (3¹/2in) fabric C square to one half-square triangle centre. Repeat. Sew the two pairs together, matching the seams (see pp. 74–75), to make the centre unit

Continuing to refer to Figure 6 below and sewing one row at a time, stitch one half-square triangle block corner to the left, short side of a star point. Add another half-square triangle block corner to the other short side of the star point to complete the row. Repeat this row for the bottom row of the block.

For the middle row sew one star point to the centre unit, then add the last star point to the opposite side of the centre unit. Once all rows have been joined, press the seams open and combine the rows to complete the block.

Repeat to make a total of 25 blocks.



Make the quilt top

Attach the sashings

Lay out the blocks in order, five rows of five blocks. Sew a 6.5 x 31.8cm ($2^{1}/2$ x $12^{1}/2$ in) sashing strip to the right-hand side of each block, except the last block in each row. Sew the block in each row together, row by row. Sew the four 6.5cm ($2^{1}/2$ in) wide sashing strips to the bottom of each row, except the last row, trimming the overhanging edges even with the quilt top. Sew all five rows together.

Attach the borders

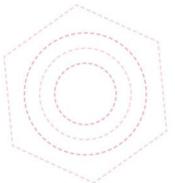
Measure the quilt top from top to bottom down the centre to obtain the length. Cut two of the 17.8cm (7in) wide border strips to fit. Sew these borders strips to the left and right sides of the quilt top. Square up the edges, then sew the remaining two border strips to the top and bottom of the quilt top. Trim the edges even with the quilt top.

Finish the quilt

Finish the quilt by assembling the quilt sandwich (see p.46), and quilt using the design and method of your choice. We've quilted using the free-motion quilting technique.

Square off the raw edges and attach the binding using the Double-fold binding method (see p.53), or the method of your choice (see pp.50-53).



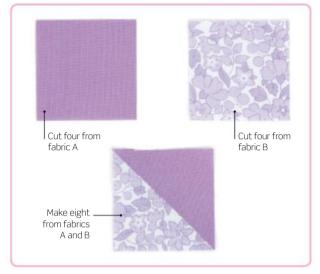


It is important to m_{atch} the seams carefully when piecing the star blocks.

Star blocks

Star designs make up the largest group of patchwork patterns. They range from simple four-patch blocks to highly elaborate blocks with multiple star points. Making them combines many techniques. The following patterns are the starting points for numerous variations.

Single star: Double four-patch



 $\label{eq:local_problem} 1 \text{ Divide the size of the finished block by four. Add seam allowances.} \\ \text{Cut and make eight half-square triangles from fabrics A and B} \\ \text{(see p.8o). Cut an additional four squares each of fabric A and fabric B.} \\$



Pollowing the layout and with right sides together, stitch the squares and half-square triangles together in rows of four, leaving a 6mm (½/4in) seam allowance.

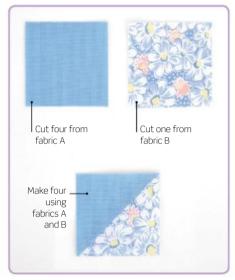


With right sides together, stitch the rows together, matching the seams and leaving a 6mm (1/4 in) seam allowance.





Friendship star: Nine-patch



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 half-square triangles from fabrics

A and B (see p.80).

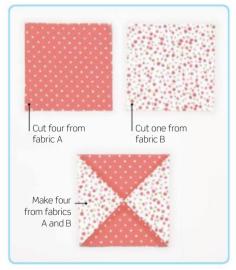


 $2^{\text{Following the layout and with right}} \\ \text{sides together, stitch the squares} \\ \text{and half-square triangles together in} \\ \text{rows of three, leaving a 6mm ($^{1}/_{4}$ in) seam} \\ \text{allowance.} \\$

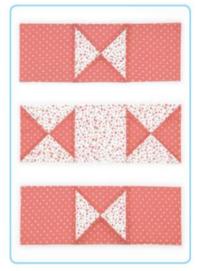


With right sides together, stitch the rows together, matching the seams and leaving a 6mm (1/4in) seam allowance.

Ohio star: Nine-patch with quarter-square triangles



1 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 quarter-square triangles from fabrics A and B (see p.81).



 $\label{eq:2.2} \begin{tabular}{ll} \bf 2 & \text{Following the layout and with right} \\ \textbf{sides together, stitch the squares} \\ \textbf{and quarter-square triangles together} \\ \textbf{in rows of three, leaving a 6mm (1/$_4$in)} \\ \textbf{seam allowance.} \\ \end{tabular}$





Hexagon star: 60-degree angles



 $\label{eq:local_$



With right sides together, stitch the three star points together in units of three, alternating the fabrics as above.

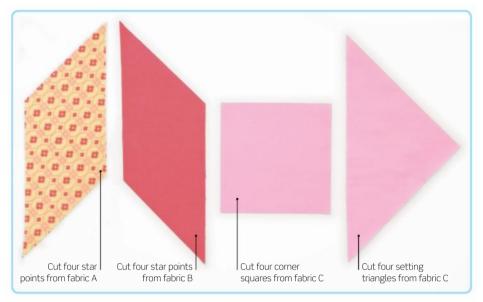


 $3 \\ \text{ With right sides together, stitch the} \\ \text{units together to make the star.} \\$



4 Set in the setting diamonds (see pp.98-99) to complete the block.

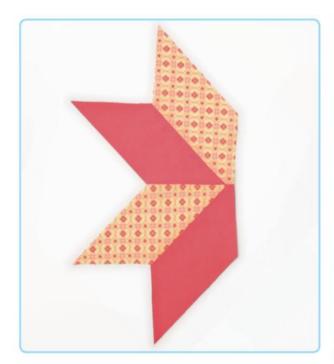
Eight-point star: 45-degree angles



Make four pairs

f 1 Make templates to the desired size for the points of the star, the corner squares, and the setting triangles. Cut four 45-degree-angle diamonds (see p.37) each from fabrics A and B for the points of the star, and four corner squares (see p.35) and four setting triangles (see p.37) from fabric C.

With right sides together, stitch the star points together in four identical pairs, using one fabric A point and one fabric B point for each pair.



With right sides together, stitch two pairs together to make half the star, repeat to make the other half, then stitch the two halves together to complete the star.



4 Set in the setting triangles, then set in the corner squares (see pp.98-99) to complete the block.



Heirloom star quilt

The photographed quilt is an heirloom quilt that grew organically, so it is not completely symmetrical. The pattern below will give you a very close representation of the original quilt, but will not match exactly.

Essential Information

DIFFICULTY Medium

SIZE 152 x 127cm (60 x 50in)

TOOLS AND MATERIALS

Rotary cutter and scissors

Cutting mat

Quilter's ruler

Measuring tape

Iron and ironing board

Pins

Threads to match the fabrics

Sewing machine

Safety pins or tacking thread

Quilting thread

Needle

FABRICS

Five dark and five medium-shade fat quarters in light and dark browns

Five dark and five medium-shade fat quarters in reds and greens

50 x 112cm (20 x 44in) each of six different cream fabrics

50 x112cm (20 x 44in) each of six different green fabrics

50 x 112cm (20 x 44in) each of six different red fabrics

320 x 112cm (126 x 44in) backing fabric 46 x 112cm (18 x 44in) binding fabric

SKILLS

Triangles (see pp.80-85) Seminole patchwork (see pp.144-147)

SEAM ALLOWANCE

6mm (1/4in) throughout, unless otherwise stated

Cut the fabrics

Finished block size is $29.2 \times 29.2 \text{cm}$ ($11\frac{1}{2} \times 11\frac{1}{2} \text{in}$), including seam allowances.

Cut twelve 15.2cm (6in) squares for star centres from the brown and blue fat quarters.

Cut ninety-six 8.3cm (3¼in) squares for the star points from the red and green fabrics. (You will need eight for each block, so be sure to cut eight of the same colour for each block).

Cut forty-eight 15.2 x 8.3cm (6 x 3½in) rectangles for the star backgrounds from mixed cream fabrics. (For each block be sure to cut four rectangles from the same cream fabric.)

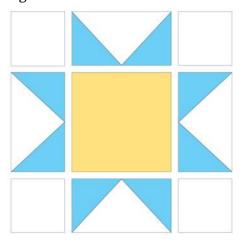
Cut forty-eight 8.3cm (3¼in) squares for star block corners from mixed cream fabrics. (For each block be sure to cut four squares from the same cream fabric to match the four star background rectangles.)

Make the star points

On each of the small red and green squares draw a diagonal line from one corner to the opposite corner. This will be your stitching line (see p.85, Flying geese).

Place one marked 8.3cm (3¼in) square on a rectangle piece, making sure that the line lands in the corner. Carefully pin in place and sew along the line. Trim away the excess to leave a 6mm (¼in) seam allowance. Press the piece open. Place the matching square fabric on the other side of the rectangle with the line facing the other direction. Pin and sew along the diagonal line. This creates one of the four star points for each block. Repeat the process three more times with the same fabrics to complete this block. Repeat to make the other 11 blocks.

Figure 1



Make the blocks

Sew a star point block to one side of a central square with the points facing away from the square (see Figure 1). Sew another star point block to the opposite side of the square. This will be the middle row. Sew a 8.3cm (3¼in) square background fabric to each end of the remaining two star blocks. These will be the top and bottom rows. Sew the top and middle rows together. Press the seams open and then attach the bottom row to complete the block. Press the seams open. Repeat the process for the remaining 11 blocks.

Make the quilt top

Lay out the blocks in three rows of four blocks. Sew the blocks in one row together and press the seams in one direction. Repeat sewing the rows together but pressing the seams of each row in the opposite direction to the previous row. Match the seams and sew the rows together. Press the horizontal seams open.

Make the sawtooth border

Cut forty-seven 8cm (3½in) squares from light fabrics. Cut forty-seven 8cm (3½in) squares from green and red fabrics. On the light squares, draw a diagonal line on the wrong side of the fabric. Place a marked light square right sides together with a green or red square. Pin and sew a 6mm (½in) seam on

either side of the drawn line. (A faster method is to sew in one direction, $6 \text{mm} / \frac{1}{4} \text{in}$ from the drawn line and then without breaking the thread, turn at the end of the seam and sew back on the opposite side of the line.)

Cut the block apart on the drawn line and press the seam allowance towards the dark fabric. You will have made 94 half-square triangle units.

Sew together three strips of 20 units and two strips of 17 units following the saw tooth pattern – all the light fabrics oriented to one side and all the dark fabrics oriented to the other side. Refer to the image below.



Make the Seminole border

From a dark brown fabric cut three strips, each 3.8cm (1½in) wide. From a cream fabric and a medium brown fabric, cut three strips each 6.5cm (2½in) wide.

Sew a cream strip and a medium-brown strip to either side of the dark-brown strip (see p.152, Steps 1 and 2). Use a short stitch length when stitching the Seminole border. Press the seam allowances towards the dark fabric; press the right side of the strip carefully, making sure that the seams are straight.

Cut pieces 3.8cm (1½in) wide from the strips, using a quilter's ruler to ensure they are cut at 90 degrees (see p.152, Step 3). Lay out all the cut pieces into an angled band (see p.152, Step 4) and sew together with a scant 6mm (¼in) seam allowance. Press carefully on the right side of the band ensuring that there is no distortion. Trim the points off the patchwork band making sure that the long edges are parallel to each other (see p.152, Step 5).

Make the four-patch border

From a variety of red and green fabrics cut five strips each 3.8×35.5 cm ($1\frac{1}{2} \times 14$ in). Also cut five cream strips each 3.8×35.5 cm ($1\frac{1}{2} \times 14$ in).

Sew a cream strip to a coloured strip and press the seam allowance towards the darker fabric. Using a rotary cutter and quilter's ruler, cut the strips into 6.5cm (2½in) wide units. You will need 45 units. Lay out the units in a four-patch checkerboard pattern strip and sew together, matching the seams.

Make the stripey border

From a selection of cream and green fabrics, cut a variety of strips between 3.8 x 6.5cm (1½–2½in) wide and between 10–12cm (4–5in) long. Sew the strips together, alternating light and dark colours. Once

your strip is 128.3cm (50½in) long, use your quilter's ruler to cut the strip to the final 9cm (3½in) width.

Make the plain borders

For both the first and second inner borders, cut strips 2.5cm (1in) wide from dark fabrics. Measure the quilt top and if needed, piece the strips together to get the required length. The second inner border needs to be several inches longer than the inner border.

For the outer border, cut strips 5cm (2in) wide from dark fabrics. Piece the strips until you have the required lengths (measure after attaching all of the other borders, to get the correct length).

Assemble the quilt

Sew the first inner border to the sides, top and bottom of the quilt top and press. To both long sides sew the 20-unit sawtooth border and press. Sew the 17-unit sawtooth border to the top and bottom of the quilt top. Sew the second narrow dark border to the sides, top, and bottom of the quilt top and press.

Centring the Seminole border along one of the long sides, pin and carefully sew in place. Press the seams. Sew the stripy border to the opposite long side. Sew the squares border to the top. Sew the remaining 20-unit sawtooth border to the top. Measure and sew the final 5cm (2in) outer border around all four sides.

Finish the quilt

Create the quilt sandwich making sure all of the layers sit flat with one another (see p.46) Hand- or machine-quilt as desired, trim the edges square. The original quilt was hand-quilted with a combination of outline quilting and motifs stitched onto the star centres.

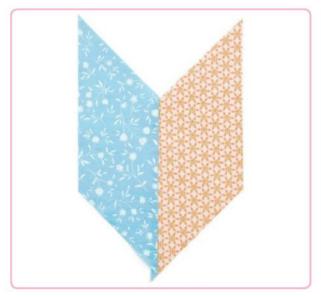
Cut and piece the binding fabric into one long strip (see pp.48–49), then attach to the quilt using the Double-fold binding method (see p.53), or the method of your choice.



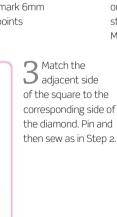
Set-in seams

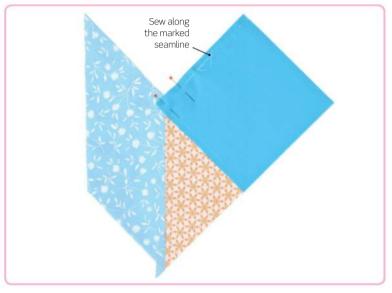
Most patchwork involves joining straight seams, but in some cases you will need to join three pieces of fabric into one corner. This is called a set-in seam or a Y-seam. You will need to measure, mark, and stitch carefully, starting and finishing the distance of your seam allowance away from each set-in corner.

Setting in by hand

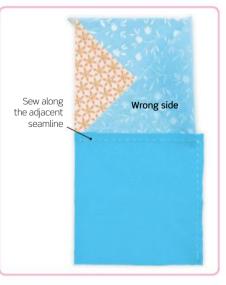


Diamonds and triangles sometimes meet at oblique angles. Setting a piece into the resulting space needs careful pinning and sewing. Here, a square is set in the space between two diamond shapes. Cut the square to size and mark 6mm (½/ain) seamlines. Mark the starting and finishing points 6mm (½/ain) from the edges.





Match one corner of the square to the inner point on the first diamond and pin, right sides together. Match the outer point and pin. Pin the edges together along the seamline. Sew along the marked seamline from the outer point to the inner, removing pins as you work. Take a few small back stitches into the seam at the inner corner, avoiding the seam allowance. Make sure not to cut the thread.

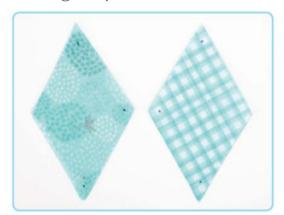




4 Press the seam allowances on the square towards the two diamonds.



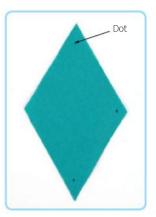
Setting in by machine



 $1 \ \ \, \text{Using a light pencil or water-soluble marker,} \\ \ \ \, \text{mark a dot 6mm ($^{1}\!\!/_{\!\!4}$ in) in from each end of the} \\ \ \ \, \text{two pieces that are to be joined first. This marks} \\ \ \ \, \text{the point where you start and finish stitching. Do} \\ \ \ \, \text{not stitch to the very end of the seam.} \\$



Place the shapes right sides together and sew from dot to dot, back stitching at each end. Do not overshoot the dots. Press the seam towards the darker fabric.



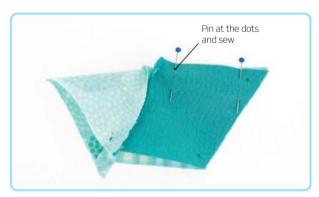
On the wrong side of the piece that is to be set in, mark a dot 6mm (¼in) in at the three set-in corners of the piece.



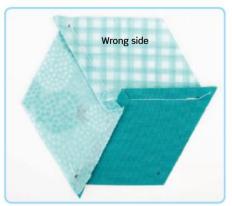




4 Match the middle marked corner of the piece that is to be set in with the corresponding dot on one of the two pieces that have already been stitched together. Pin the seam at each end and sew from the inside corner to the outer dot.



5 Match the outer dot on the second side of the piece that is to be set in with the outer dot on the free edge of the other piece. Pin them together at the dot and sew, again stitching from the inside corner to the outer dot.



6 Press the seams flat in one direction. Snip off the corners.







Pentagon bean bag

Sometimes kids need a space of their own. With this quick and easy bean bag chair they can sit and read a book in comfort. Made from fabrics with large, printed patterns, it can be made to suit any room in the house.

Essential Information

DIFFICULTY Easy

SIZE Approximately 68.5cm (27in) diameter

MATERIALS

Rotary cutter
Cutting mat
Quilter's ruler
Iron and ironing board
One 30cm (12in) minimum long zip
Approximately 0.12 cubic meter (4 cubic feet) of
polystyrene beads for filling, available online
Bean bag liner, available online (recommended)
Sewing machine with zip foot
Thread to match the fabrics

FABRICS

12 fat quarters of coordinating cotton fabrics Approximately 300cm (118in) of heavy interfacing, or enough to cover your fat quarters

SKILLS

Set-in seams (see pp.102-103)

SEAM ALLOWANCE

6mm (1/4in) throughout

Make the template

Make a template for the pentagon pieces by enlarging the pentagon template on page 298 so that each side of the pentagon is 28cm (11in) long. If you'd like a larger bean bag, make the template larger, but don't forget to adjust your fabric requirements.

Cut and line the patches

Iron interfacing onto the back of each of the 12 pieces of fabric. Using the template, cut out 12 pentagons, one from each of the lined fabric pieces. On the back of each pentagon, mark a dot 6mm ($\frac{1}{4}$ in) set in from each corner for your set-in seams (see p.103).

Add the zip

Lay the zip along one edge of one of the pentagons, with right sides together. Put a zip foot on your machine and stitch along the edge. Open up the zip and topstitch along the zipper seam for added strength. Take a second pentagon and pin it right sides together with the opposite side of the zip, making sure the two pentagons are even with one another on either side of the zip. Top stitch along the seam.

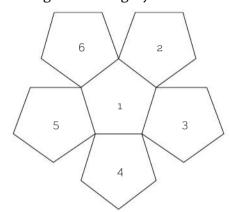
Make the bean bag

Using the regular sewing machine foot, stitch four more pentagons around the free edges of one of the two joined pentagons, stitching between the dots on each piece, to create a flower shape (see diagram, right).

Stitch the petals of the flower together, sewing between the dots, to join the flower into a bowl shape. Sew the remaining six pentagons in the same way, without the zip, to create a second bowl.

Open the zip. With right sides together, invert one bowl to sit in the other bowl. Pin the raw edges of one pentagon to the raw edges of a pentagon on the other bowl so that the point of one pentagon fits into the valley between two pentagons on the opposite bowl. Stitch between the two dots on the pinned edges.

Pentagon bean bag layout





Choosing a group of fabrics with a theme makes the bean bag fun for children. Choose fabrics to match their room, or their unique personality and interests.

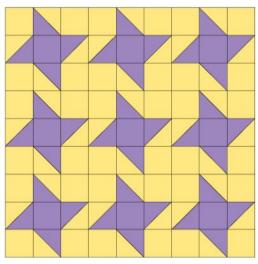
Pin and stitch the next pair of free edges, working your way around the entire perimeter. Turn the bean bag right side out through the open zip. Insert the bean bag liner, if you're using one. Fill with polystyrene beads.

Settings

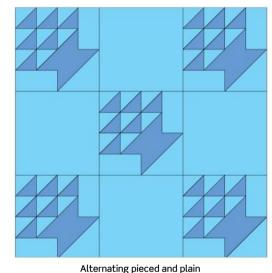
The way quilt blocks are arranged in a finished top is called the set, or setting. The following section can give only an outline of the virtually infinite possibilities for putting blocks together. The way to work out the best setting for a quilt is to lay out all of the blocks and view them from a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

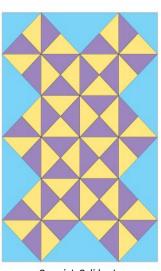


The simplest sets are rows of repeating blocks stitched together edge to edge, referred to as "straight set".



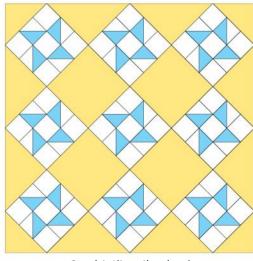
Alternating a pieced block with a plain block means there are fewer blocks to put together. It allows for large, open areas, perfect for showcasing elaborate quilting.





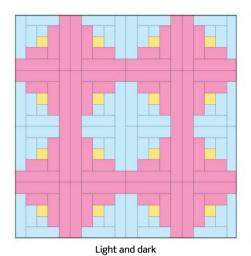
On point: Solid set

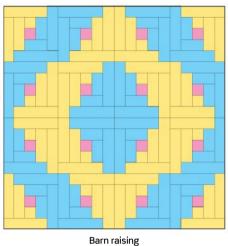
Blocks can be set "on point" (turned on the diagonal), with setting triangles around the edges and at each corner.

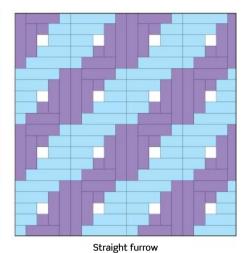


On point: Alternating pieced and plain blocks

This setting needs plain blocks betwen the pieced blocks as well as triangles added to each corner and along each side to fill the edges.

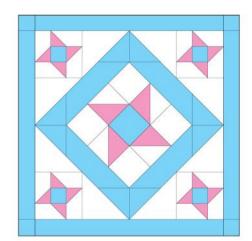






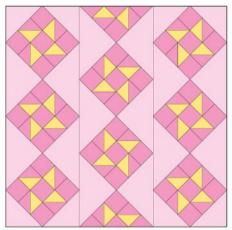
Log cabin

There are so many possible sets for log cabin designs that each version has its own name. The examples above all have the same number of identical log cabin blocks. In each case, the way each block is turned determines the final over-all effect.



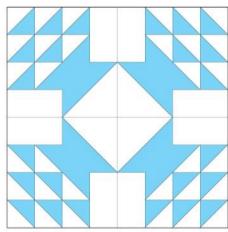
Frame settings

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. The centre can be set square or on point as here.



Strippy set

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

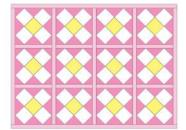


Rotating blocks

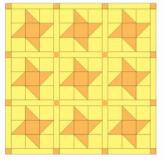
This setting creates new patterns once several blocks are set, particularly with asymmetrical patterns.

Sashing

Sashing is strips of fabric placed between blocks to frame them. Sampler quilts and star blocks usually have sashing to give each block the chance to shine. The width of the sashing is flexible: try out different widths before you cut the strips. Plain or pieced squares (known as setting squares or cornerstones) can be placed at the corners of a block to make the pattern even more interesting.



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



Straight-set sashing with setting squares Adding a square in each corner between the blocks creates more pattern. The setting squares can also be pieced; simple pinwheel, four-patch, and nine-patch designs work well.



Blocks can be assembled in rows with the sashing between them running vertically or horizontally.



Diagonal set (on point) with sashing Blocks set on point can be framed by sashing and assembled in strips with extra triangles added around the edges to give a chevron effect.

Simple continuous sashing



1 Cut sashing strips to the desired width plus a 1.2cm (½in) seam allowance, and to the same length as one side of the blocks.



2 With right sides together and leaving a 6mm (½in) seam allowance, alternate strips and blocks to make a row. Press the seams towards the strips. Repeat to make as many rows as needed.

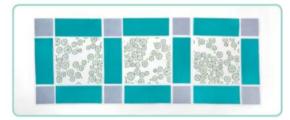


3 Cut two more sashing strips to the desired width plus a 1.2cm ($^{1}\!/_{\!\text{z}}$ in) seam allowance, and the same length as the joined row.



4 With right sides together and leaving a 6mm ($\frac{1}{4}$ in) seam allowance, sew the two strips either side of the row. Press the seams towards the sashing. Continue alternating sashing strips and rows of blocks with strips until the quilt top is the required size.

Sashing with setting squares



Repeat Steps 1 and 2 of Simple continuous sashing (opposite) to make a row of blocks. For the sashing, cut strips the same length as the width of a block, and setting squares the same width as the strips.



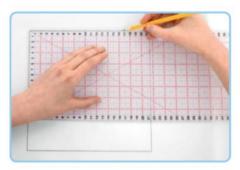
With right sides together and leaving a 6mm (½in) seam allowance, alternate squares and strips to make two long sashing strips.

3 With right sides together and leaving a 6mm ($^4\!\!/_4$ in) seam allowance, machine stitch the long sashing strips along the top and bottom edges of the row of blocks. Ensure that the corners of the blocks and the setting squares match up. Continue alternating rows of sashing strips and blocks until the quilt is the required size.

Tilted block setting



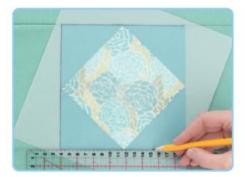
1 First make the central block, then frame it with a wide border made from four pieces of sashing, as shown left.



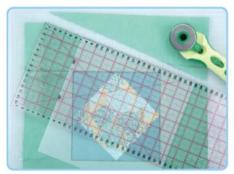
2 Create a template for the block by measuring and marking its size on tracing paper, adding 1.2cm (½in) seam allowances.



Centre the template on top of the block that was made in Step 1, then angle the template to the desired tilt.



4 In order to be able to tilt subsequent blocks at the same angle, use a ruler and pencil to mark the outline of the central block on the template.



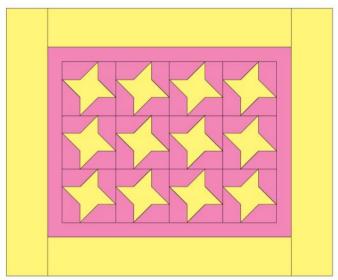
5 Cut away the fabric around the template. To reuse the template, ensure that all central blocks in the project align with the block marked on the template.



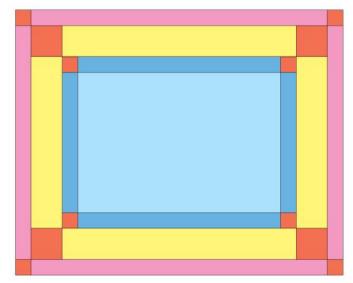
 $\label{eq:continuous} 6 \text{ When the finished block is placed so its outside edges are perpendicular, the central block will be tilted.}$

Borders

The outside edges of most quilts are finished with strips that make up the border. This frames the piece and protects the edges. Borders can be single or multiple, wide or narrow, pieced or plain. Whatever type you choose, the border

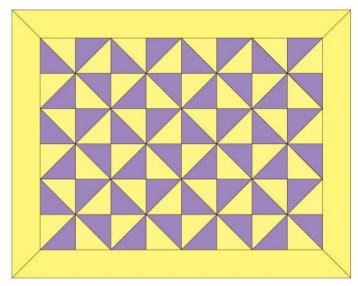


Straight borders Adding a plain, straight border is an easy-to-make, popular choice. When made from plain fabric, it gives an uncluttered look and is especially effective when framing a complex design.

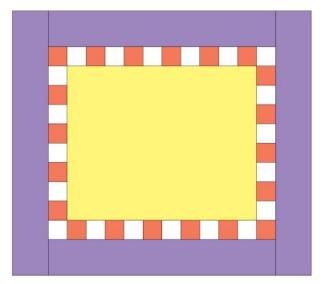


Multiple borders with setting squares You can add several borders to a quilt, together with setting squares in the corners. The effect is a little like a series of "retreating" picture frames.

should complement and enhance the overall design of the quilt. If possible, strips should be cut along the lengthways grain, in one long piece and with the selvedges removed. Never cut borders on the bias.



Mitred borders More complex than straight borders, well-executed mitred borders look very professional and neat. The corners are stitched at a 45-degree angle to the sides of the quilt.

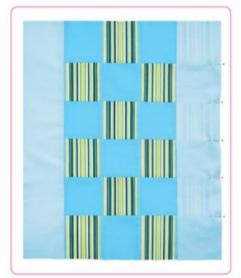


Pieced inner border with straight outer border Another variation on multiple borders uses a straight outer border framing an inner border made of pieced patchwork.

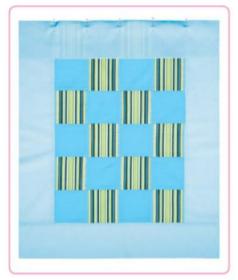




Making straight borders



1 Cut or piece two strips of the desired width, plus 1.2cm (½in) for seam allowances, and the same length as the sides of the quilt. Mark the centre of each strip and of the sides of the quilt. Pin the strips to the quilt, right sides together and matching the marks. Sew together, leaving a 6mm (½in) seam allowance.



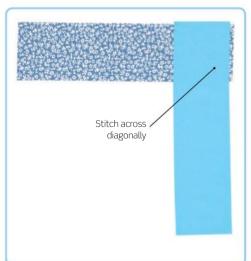
Press the seams towards the border strips.

Measure the top and bottom edges of the quilt plus borders, and cut two strips to that length. Mark the centre of each strip and of the top and bottom edges, as in Step 1. Pin with right sides together, matching the marks. Sew together, leaving a 6mm (1/4 in) seam allowance. Press the seams towards the border strips.

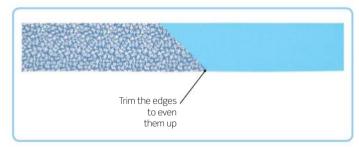


 $\label{eq:completed} 3 \text{ The quilt top is now completed and ready to be quilted.}$

Joining strips to make a border



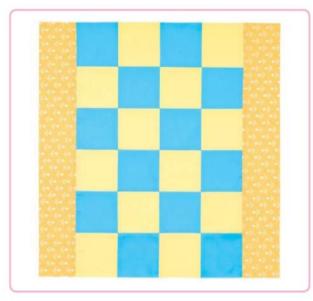
Place two strips at right angles with right sides together with the ends overlapping by at least 6mm (1/4 in). Mark a line across the diagonal and pin. Stitch along the line, as shown.



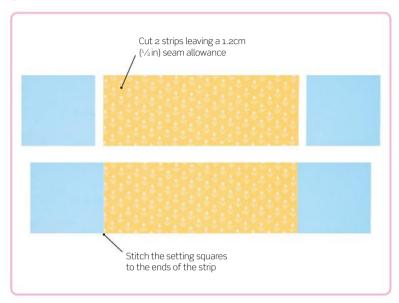
2 Trim the seam to 6mm (½/4in), then open out the joined strips to the right side. Trim the edges of the strip, if needed. Press the seam to one side.



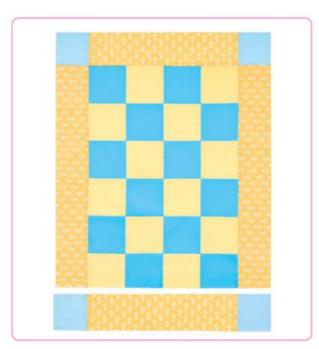
Making a straight border with setting squares



 $1 \\ \text{Follow Step 1 of Making straight borders (see p.107) to add a} \\ \text{border to the piece on either side. Press the seams towards the borders.}$



3 Cut four setting squares with sides the width of the borders. With right sides together, sew a square to each end of the strips. Press the seams towards the centre.

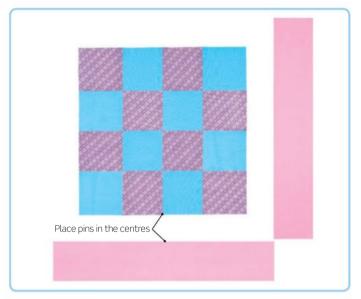


4 With right sides together, sew the pieced strips to the top and bottom edges of the quilt. Press the seams towards the border.



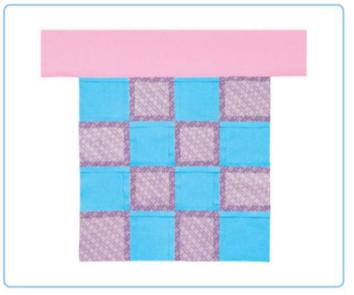
5 The quilt top is now completed and ready to be quilted (see pp.150-153, 160-163).

Making a mitred border



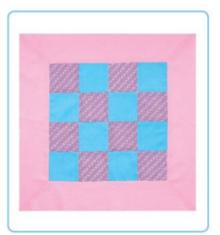
1 Square up the quilt top. Cut the border strips to the desired width plus 1.2cm (½in) for seam allowances. Measure the length of the quilt top sides, then add two times the width of the border, plus 15.5cm (6in) to calculate the length.

Place a pin in the centre of each side of the quilt top and each border. Aligning the centre pins, position the borders right side together with the corresponding side and pin in place. Position a pin 6mm (½/in) from each corner to mark your starting and stopping points for stitching.



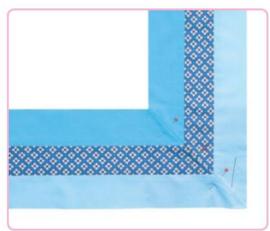
 $\label{eq:3.1} \begin{tabular}{ll} \bf 3 & \textbf{Join the border strips to all sides of the quilt, leaving a 6mm \\ \textbf{(1/$_{4}$in) seam allowance. Do not stitch into adjoining border strips.} \\ \begin{tabular}{ll} \bf 7 & \textbf{Join the border strips.} \\ \begin{tabular}{ll} \bf 7 & \textbf{Joint the border strips.} \\ \begin{tabular}{ll} \bf 7 & \textbf{Joint the border strips.} \\ \begin{tabular}{ll} \bf 7 & \textbf{Joint the border strips.} \\ \begin{tabular}{ll} \bf 7 & \textbf{Joint the border strips.} \\ \begin{tabular}{ll} \bf 1 & \textbf{Joint the border strips.} \\ \begin{tabular}{ll} \bf 1 & \textbf{Join$

4 Place the quilt right side up on a flat surface and fold under the ends of each strip at a 45-degree angle. Pin the folds in place from the right side, ensuring that the angle is correct. Press the folds and remove the pins.



5 Working from the wrong side, re-pin the mitre along the pressed fold. Tack in place if desired. Hand stitch the fold together from the quilt edge to the outside corner. Trim the seam allowance and press it open. Repeat to mitre all corners.

Multiple mitred borders



If you are using multiple borders, join them together in straight rows and attach them to the quilt top in one go. Mitre the corners as in Steps 4 and 5, making sure you match the borders through the mitre.



Simple sashings cushion

A simple block pattern framed by sashing can be a nice addition to any chair in the room. If using fabrics with a directional pattern, be sure to cut and sew them so that they're the correct way up on the cushion front.

Essential Information

DIFFICULTY Easy

SIZE 40 x 40cm (16 x 16in)

TOOLS AND MATERIALS

Rotary cutter

Cutting mat

Quilter's ruler

Pins

Thread to match your fabrics

Sewing machine

Scissors

40cm (16in) square cushion pad

FABRICS

A: $28 \times 28 \text{cm}$ (11 × 11in) patterned flower fabric **B:** $28 \times 28 \text{cm}$ (11 × 11in) patterned dotty fabric **C:** $6.5 \times 6.5 \text{cm}$ ($2^{1}/_{2} \times 2^{1}/_{2} \text{in}$) patterned bird fabric **D:** $13 \times 13 \text{cm}$ ($5 \times 5 \text{in}$) patterned triangle fabric **E:** $60 \times 70 \text{cm}$ ($23^{1}/_{2} \times 27^{1}/_{2} \text{in}$) solid grey fabric

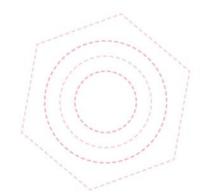
F: 10 x 26cm (4 x 10in) patterned fabric, for the back inset detail

SKILLS

Sashing and borders (see pp.104-109)

SEAM ALLOWANCES

6mm (1/4in) throughout, unless otherwise stated

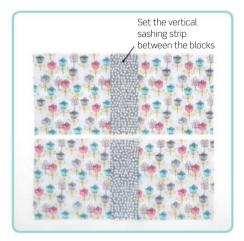




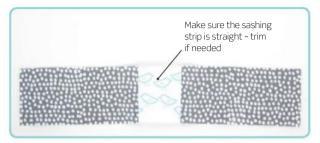
Cut four 14cm (51/2in) squares from strips from fabric B (if you are using a directional pattern for the sashing you will need to cut two strips with the pattern across the width of the strip and two strips with the pattern across the height of the strip); four 6.5cm (21/2in) squares from fabric D; four 6.5 x 32cm ($2^{1/2}$ x 121/2in) strips (cutting two strips with the pattern across the width of the strip and two strips with the pattern across the height of the strip), one 42 x 26cm $(16^{1}/_{2} \times 10in)$ rectangle, one 12 x 26cm $(4^{1}/_{2}$ x 10in) rectangle, and one 22 x 26cm (81/2 x 10in) rectangle from fabric E.



2 Lay out all your pieces for the cushion front on a flat surface. With right sides together, pin and sew the first fabric B strip (with the pattern running height-wise to the first fabric A square). Open up the seam and sew the second fabric A square to the opposite side of the strip.



Repeat using the second height-wise fabric B strip and the remaining two fabric A squares to create the two front strips. Ensure that all of the patterns on the fabrics are running the same way in this case that all the flowers are upright. Open up and press the seams towards the darker fabric.



Take the two remaining fabric B strips and the fabric C square and sew them together with the square in the centre to create the central sashing. Press the seams open.



5 Pin and sew the central sashing to the bottom edge of the top front strip, being sure to match the seams on all the pieces (see p.72). Make sure that when the strip is sewn and opened up that the pattern is the same way up on all the pieces.



6 Pin and sew the bottom front strip to the bottom edge of the central sashing, matching the seams as you pin. Ensure all of the patterns are the right way up. Press open the seams to create the main cushion front.



7 Pin and sew one of the fabric E strips with the pattern running height-wise to the right edge of the main cushion front, right sides together.



Pin and sew the second height-wise fabric E strip to the left edge of the main cushion front. Open out and press the seams just sewn towards the darker fabrics.

Sew two fabric D squares to either end of one of the remaining fabric E strips, as shown, to create the first border. Repeat using the remaining two fabric D squares and final fabric E strip to create the second border. Press the seams towards the darker fabric.





 10° Pin and sew the two borders to the top and bottom of the main cushion front, matching the seams and ensuring all of the patterns are the right way up. Press the seams open.



 $\label{eq:local_problem} \begin{tabular}{ll} 1 & 1 & 1 & 2 & cm (4 x 10in) fabric $$F$ rectangle right sides together with the $$12 x 26cm$ (4\frac{1}{2}x 10in) fabric E rectangle. Pin and sew the $$22 x 26cm$ (8\frac{1}{2}x 10in) fabric E rectangle to the opposite side of the fabric F rectangle to create a $$42 x 26cm$ (16\frac{1}{2}x 10in)$ strip. }$



12 You now have two 42 x 26cm (16½ x 10in) strips – one plain and one with a strip of fabric F running through it – these are the back flaps. Turn over one of the long raw edges of one flap by 1cm (¾in) to the wrong side using a seam guide if needed, then the same again to create a hem. Pin in place. Repeat on the second flap.



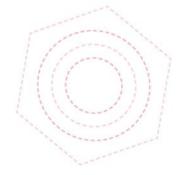
 $13 \\ \text{Using a matching thread, topstitch along} \\ \text{the inner fold to secure the hem. Repeat} \\ \text{on the second flap.}$



14 Lay the cushion front out, right side up. Then lay the plain back flap on top, right side down, with the raw edges aligning with the top of the cushion front. Lay the second flap on top of this, right side down, with the raw edges aligning with the raw edges of the bottom of the cushion front. Pin all around.



15 Stitch around the entire perimeter of the cushion. Forward and reverse stitch over the area where the flaps overlap to reinforce the seam. Carefully snip off all four corners being sure not to cut through any of the stitches. Turn the cushion cover right side out, carefully pushing out the corners and insert the cushion pad.



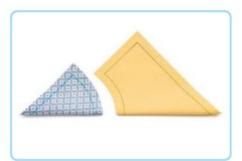


Curves

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 fiddly, 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.

Sewing curved seams by hand



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



Place the smaller convex piece right sides together on the concave one, aligning the centre points. Pin the centre point through both pieces. Pin the end points of the marked seamline. Then pin along the seamline every 1cm (3/sin) or so, manipulating the fabric to eliminate creases.



Take out the pin at one end and take the needle through the matching points. You may use a double back-stitched loop (see p.40) in the seamline to secure the thread. Do not sew into the seam allowance. 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. Secure the seam further by making a small back stitch each time you bring the needle through.



A 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 back-stitched loop to secure the thread. Do not clip the seam allowance. Press the seam towards the convex piece. If your stitching is accurate, the piece will lie flat.

Sewing curved seams by machine



Make templates and mark the centre of the curve on each one. Cut out the fabric pieces, adding a 6mm (½/4in) seam allowance. Centre the templates on the wrong side of your fabric pieces, draw around them to mark the seam allowances, then mark the centre point of the curve on the fabric pieces.



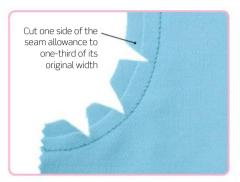
2 Pin the two fabric pieces together at the centre point on the seam allowance, then pin at each end. Pin along the edge to stabilize the curve.



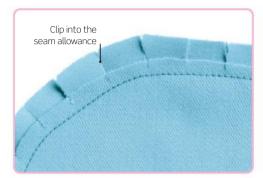
3 Stitch along the marked curve without stretching or pulling. Remove the pins as you sew. Press the seam towards the convex piece. It should lie flat without being clipped.

Reducing seam bulk

Sometimes you may need to reduce the bulk in curved seams to help your patchwork lie flat. This is usually used on 3-dimensional objects.



Reducing bulk on an inner curve Layer the seam by cutting along one side of the seam allowance to reduce it to one-third of its original width. Then cut out V notches to reduce the bulk. Do not cut through the stitching.

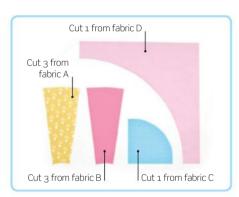


Reducing bulk on an outer curve Layer the seam and clip through the seam allowances to reduce bulk.

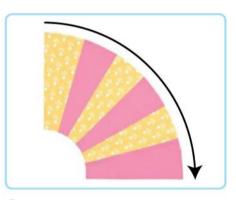
Fans



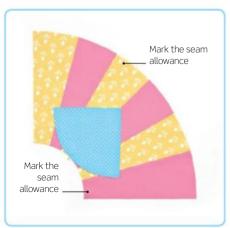
Transfer the outlines to card or template plastic and cut out the shapes. Make two sets of templates – set 1 for the cutting lines, and set 2 with the seam allowances trimmed off the curved edges for the stitching line.



2 For a six-blade fan, cut three blades each from fabrics A and B. Cut a small corner piece from fabric C and a background from fabric D.



3 Join the fan blade pieces, alternating the colours and taking a 6mm (½4in) seam allowance. Press the blades in the same direction.



4 Mark the seam allowances on the top and bottom edges of the fan unit.

Mark the seam allowance on the small corner piece and pin it to the lower edge of the fan unit. Join them as in Steps 5 and 6 of Drunkard's path (see pp.116-117). Press towards the fan.

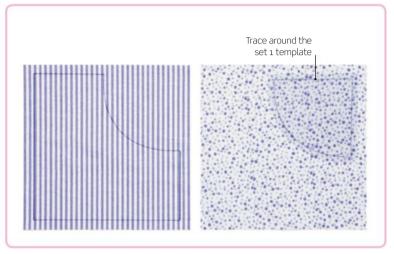


6 Mark the seam allowance on the background piece and pin the background piece to the upper edge of the fan unit. Join them as before. Press towards the background.

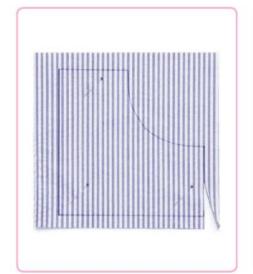
Drunkard's path



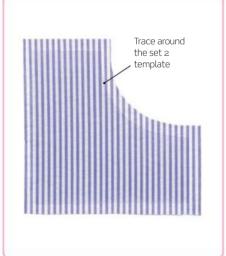
1 Make two sets of templates from card or plastic – set 1 for the cutting lines, and set 2 with the seam allowances trimmed off the curved edges for the stitching line. Place the registration marks precisely on both sets.



2 Trace the larger outlines onto the wrong side of the chosen fabrics. Make sure the registration marks are transferred accurately.



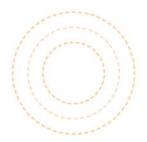
3 Cut out the shapes. If you are using scissors, cut around the curve, not into it. If you prefer to cut with rotary equipment, use the smallest size blade (25mm/1in) and a perfectly smooth cutting mat for best results.



A Separate the cut-out shapes and, using the set 2 templates, trace the seamlines and registration marks onto the wrong side of each fabric piece.



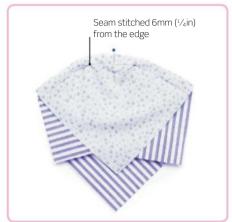
 $5\,$ Pin one of each shape and fabric right sides together, with the convex piece on top of the concave one. Match and pin the centre marks first, then pin the corners.



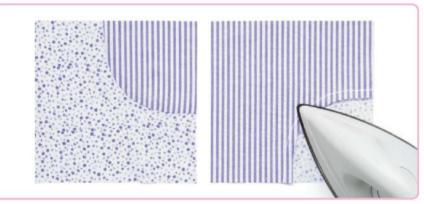




Place pins in between, every 1cm (3/sin) or so, matching the seamlines on both pieces as necessary and using your fingers and thumbs to manipulate and ease the fabric to eliminate uneven distribution.



Slowly stitch along the seamlines marked on the curved seam of each piece, removing pins as you sew. If you pin in advance, you can chain piece these units.



Press the seams. There should be no need to clip the curves.





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



 $10^{\rm Join \, the \, rows, \, matching \, the \, seams}$ carefully. Press.



Dresden plate cushion

This round cushion features a traditional Dresden plate patchwork block. Many variations of the Dresden plate block exist, but this one is a multi-petalled flower. Once the "plate" is complete, it is hand-sewn to the front of the cushion.

Essential Information

DIFFICULTY Medium

SIZE 38cm (15in) in diameter x 10cm (4in) deep

TOOLS AND MATERIALS

Tracing paper

Measuring tape

Pencil

Pins

Threads to match your fabrics

Sewing machine

Scissors

Iron and ironing board

Sewing needle

FABRICS

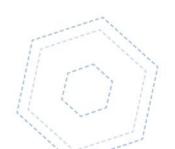
50 x 85cm (193/4 x 331/2 in) plain white fabric for the circle for the cushion front and for the two semicircles for the cushion back
A selection of seven patterned blue fabrics for the petals and the flower centre
24 x 62cm (91/2 x 241/2 in) blue fabric, cut into two rectangles, each 12 x 62cm
(43/4 x 241/2 in) for the cushion sides
Toy filling, wadding, or a 38cm (15in) diameter x 10cm (4in) deep round cushion pad

SKILLS

Chain piecing (see p.63)
Curves and fans (see pp.114-117)

SEAM ALLOWANCE

6mm (1/4in) throughout, unless otherwise stated

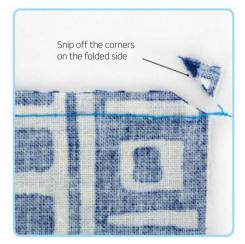




Using the template on page 175, cut two petals from each of six differently patterned blue fabrics, giving a total of 12 petals. Arrange the petals in a circle, with matching petals directly opposite each other, as shown. Cut the remaining pieces for the cushion using the templates and instructions on page 175.



2 Fold the wider end of each petal in half, right side to right side, and pin. Chain piece all the petals together (see p.63).



3 Cut the petals apart and snip off the inside, folded corner of each petal.



Press the seams open using an iron or finger press.



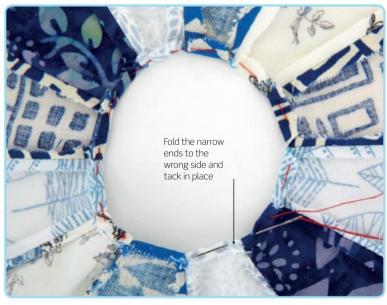
5 Turn each petal to the right side and gently push the corner out. Fold the wider end of the petal to the wrong side to form a symmetrical triangle. Press in place. Lay the petals out in the correct order again.



 $6\,\mathrm{Pin}$ two adjacent petals together, right sides together, along the long edge. Starting at the triangular end, stitch along the edge. Stop stitching 6mm (1/4in) from the narrow end of the petals. Press the seam open.

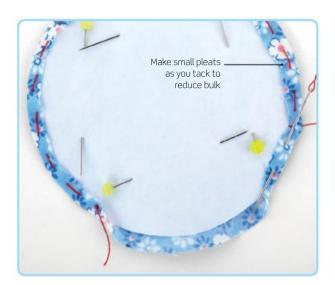


Continue adding the remaining petals in the same way, pressing the seams open as you go, until you have a full circle or "plate" of joined petals.



 $\label{eq:foldover} 8 \text{ Fold over 6mm (1/4in) of the narrow ends of the petals to the wrong side of the fabric, then press and tack.}$





To make the flower centre, pin the flower centre pattern piece to the wrong side of the flower centre fabric. Fold the seam allowance over the pattern piece and tack together, making small pleats in the fabric to reduce the bulk. Press to set the pleats.



 10^{10} Lay the white circle of fabric for the front, right side up. Measure and mark the centre, then place the completed "plate" of petals on top, right side up and centred. Measure from the edge of the circle to the tip of each petal to ensure the petals are centred.



 $1\,1\,$ Pin the plate in place along its inside and outside edges. As you pin, make sure that the mark in the centre of the white circle remains in the centre of the plate and that the tips of the petals remain equidistant from the edge of the white circle.



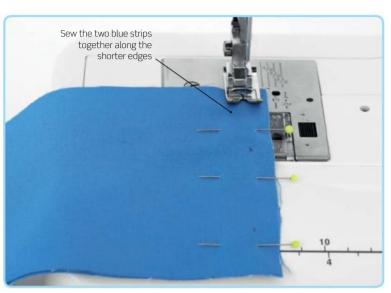
12 Using small slip stitches and matching thread (see p.43), and working from the wrong side, sew the outside and inside edges of the plate to the white circle, making the stitches as invisible as possible.







 13° To complete the cushion front, unpick the tacking stitches from the flower centre and gently remove the paper pattern piece. Pin the wrong side of the flower centre to the centre of the plate. Slip stitch in place.



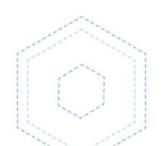
14 To make the sides of the cushion, place the two blue strips right sides together. Pin their shorter edges together at both ends, then sew them together, leaving a 1cm (3/8 in) seam allowance. Press the seams open. You will now have a loop of fabric.



 $15^{\rm With}$ right sides together, pin one long edge of the blue loop all around the edge of the cushion front.



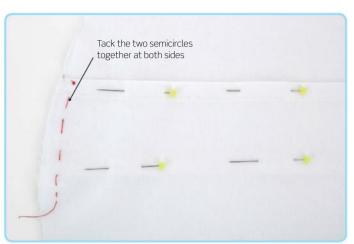
 $16 \\ \text{Sew all around the pinned edge,} \\ \text{leaving a 1cm (3/8 in) seam allowance.}$







17 To make the back of the cushion, lay out the bigger white semicircle wrong side up. Fold the straight edge over by 1cm (3/8 in) and press, then fold it over again to create a neat hem and to enclose the raw edge. Press again, then topstitch together. Repeat on the straight edge of the smaller semicircle.



 $18\,$ With right sides face up and with the larger semicircle on top, lay the two semicircles together to form a full circle. Overlap the hemmed edges by about 4.5cm (15/8 in). Pin along both sides of the overlap, then tack the two overlapped semicircles together at both sides, inside the 1cm (3/8 in) seam allowance. Remove the pins along the overlapped edges.



 $19^{\rm With}$ right sides together, pin the back of the cushion to the remaining long edge of the blue loop. Remove the tacking stitches from the back of the cushion, then sew all around the pinned edge, leaving a 1cm (3/8 in) seam allowance.



 20° Turn the cushion to the right side through the opening in the back and press the seams that join the sides of the cushion to the front and back. Stuff the cushion with toy filling, wadding, or a cushion pad.



Essential Information

DIFFICULTY Medium

SIZE $14 \times 14 \times 10$ cm $(5^{1/2} \times 5^{1/2} \times 4$ in)

TOOLS AND MATERIALS

Pencil

Tracing paper

Scissors

Rotary cutter

Cutting mat

Quilter's ruler

Thread to match the fabrics

Long, thin, blunt object, such as a

chopstick, for turning through

Embroidery needle

Dark embroidery thread

One 1.2cm (1/2in) button, for the nose

Dried beans or lentils, for weight

Toy filling

FABRICS

A: 20.5 x 20.5cm (8 x 8in) light-coloured tummy and inner ear fabric

B: 20.3 x 58.5cm (8 x 23in) body fabric

C: 9 x 15cm (3¹/₂ x 6in) outer ear fabric

D: 2.5 x 14cm (1 x 5¹/₂in) tail fabric

E: 16.5cm (6¹/₂in) square bottom fabric

SKILLS

Curves (see pp.118-119) Set-in seams (see pp.100-101)

SEAM ALLOWANCE

6mm (1/4in) throughout



Embroider a face on your mouse and give it whiskers using the same thread. You should stitch down the nose and add the button first.



Door mouse

This little mouse will keep your door from blowing shut and because it's soft, there's no need to worry about stubbed toes. If you use younger-style fabrics, it's just perfect for a nursery. Be sure to keep the button nose away from babies though.

Cut the pieces

Trace and cut out the templates from pp.172-175. Using the templates, cut one tummy piece and two ear pieces from fabric A, three body 1 pieces and three body 2 pieces from fabric B, and two ear pieces from fabric C. The body 1 and body 2 pieces are the same, just use the template in reverse.

Make the mouse

Make the ears

Place one inner ear right sides together with one outer ear. Following the stitching guidelines marked on the template, stitch around the ears, leaving the bottom edge unsewn. Trim the seam allowance to 3mm (½in), snip into the curves, turn the ear right side out, and press. Repeat to form the second ear.

Lay the ears face up on a flat surface, inner fabric face up, and turn them so they are mirror images of one another, as they will appear on the mouse's head. Fold down the top edge of each ear by approximately 6mm (¼in) to create the folded top to the ear. Pin the fold and press.

Make the tail

Take the long strip of tail fabric and fold it in half lengthwise, right sides together. Sew along one short end and along the long raw edges, leaving the second short end unsewn. Trim the seam allowance to 3mm (%in). Snip the corners off the sewn, short end, being careful not to cut through the stitches, to reduce the bulk. Use a long, thin object to carefully turn the tail right side out.

Make the body

Take one body 1 piece and one body 2 piece and lay them right sides together. Insert one ear between the two pieces, where it is marked on the template, with the unsewn edge sticking out by 3mm (½in) and the folded edge towards the top of the head. Pin along that edge, then sew. Forward and reverse stitch over the ends of the ear to secure it. Remove the pins, open the pieces flat, and press the seam allowance open.

Repeat for the second ear, but this time placing the ear the other way down, to create the opposite side of the body. Repeat the process with the last two body pieces, this time sandwiching the tail where indicated on the template.

Take the tummy piece and place it right sides together with one of the body pieces with an ear sewn in the seam. Pin along the long edge so that when the two pieces are opened up, the inner part of the ear will face forward, towards the tummy. Stitch along the edge stopping 6mm (¼in) from the bottom edge. Take the second body piece with an ear and pin it to the opposite side of the tummy piece. Sew along the edge, stopping 6mm

(¼in) from the bottom edge. Take the body piece with the tail and pin it right sides together with one of the body ear pieces and stitch along the edge stopping 6mm (¼in) from the bottom edge. Take the two remaining free edges and stitch them right sides together in the same way. This creates a pyramid shape. Trim the seams along the point of the pyramid to 3mm (½in) to reduce the bulk.

Mark dots set in 6mm (¼in) from each corner on the wrong side of the bottom piece of fabric, fabric E (see p.94). Pin the bottom square into the bottom of the pyramid, right sides together. Sew around all four edges, leaving a gap of approximately 5cm (2in) in the back, under the tail. Turn the sewn mouse right side out through the gap.

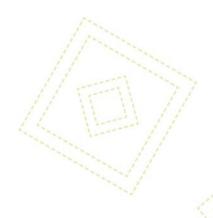
Sew the face

Turn the tip of the pyramid down towards the tummy approximately 2.5cm (1in) so that the top of the fold aligns with the top of the ears. Stitch the point to the tummy. Place the button on top of the point and stitch it in place.

Using embroidery thread and a needle sew two eyes onto the face, using the detail photo, upper left, as your guide. Cut three 10cm (4in) pieces of embroidery thread and thread them through the nose to create whiskers. Tie a knot in each end of the thread to keep them from being pulled out.

Stuff the mouse and finish

Lightly stuff the top of the mouse with toy filling, then fill the bottom with dried beans or lentils to give it weight. Slip stitch the opening closed (see p.41).



English paper piecing

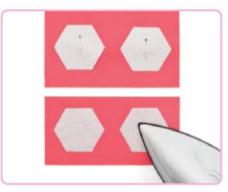
This is a traditional method for making a quilt of mosaic shapes. The fabric pieces – hexagons, honeycombs, diamonds, and triangles, all of which have at least two bias edges – are tacked to pre-cut paper templates the size of

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.

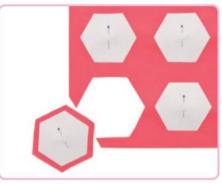
Basic paper-piecing technique



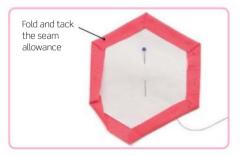
1 Unless you are using pre-cut paper shapes, make a template. Draw around it to make the necessary number of shapes. Using paper scissors, carefully cut out the backing papers.



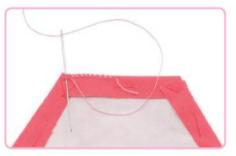
2 Pin a plain-paper shape or iron a freezer-paper shape (paper side up) to the wrong side of the fabric. Leave enough space for seam allowances.



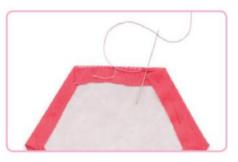
3 Cut out each shape from fabric, leaving a 6mm (1/4in) seam allowance all around. You can use scissors or a rotary cutter, but take care to keep at least one side of the shape along the straight grain of the fabric.



4 Turn the seam allowance to the wrong side over the edge of the paper shape. Fold the seam allowance in each corner neatly and place a few tacking stitches through the wax paper and fabric, holding it securely in place.

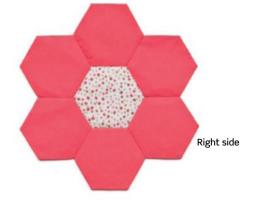


5 To join patches into units, place two shapes right sides together. Make a back-stitched loop (see p.40), and oversew to the corner as close to the fold as possible. Do not sew through the backing papers.





Continue adding shapes until complete. If you wish to re-use papers, you can remove them once all the shapes adjoining a particular piece have been added by clipping the tacking stitches and carefully pulling the paper out.





Setting in hexagons

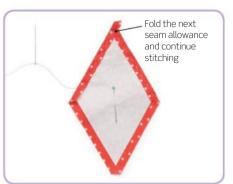


To set in a third Hexagon, and starting at the centre point. To set in a third hexagon, oversew one side of the seam,

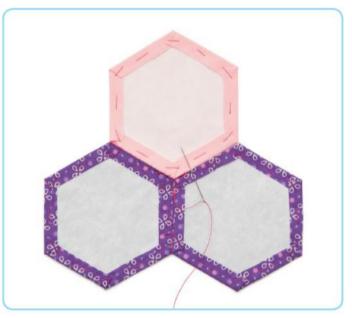
Neat folds



To make a neat fold 1 To make a near of at the sharp points when tacking diamonds and triangles, start sewing in the middle of one side. When you reach the point, fingerpress the extended seam allowance.

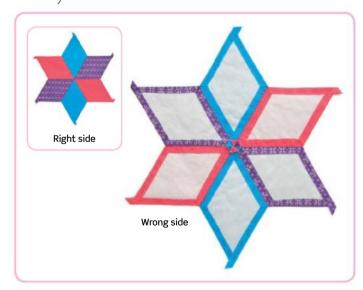


→ Fold over the **Z** allowance from the next side neatly. Take a stitch through the fold and continue. Do not trim off the fabric extensions.



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

Neat joins



To make a neat join when you sew pieces together, fold the extension to the side so that you don't stitch through it. Where several come together, the unstitched extensions will form a spiral around their meeting point and lie flat.





Pentagon ball

Baby will just love this soft ball plaything. It is easily made using a pentagon-shaped template, adjusted to suit the size you want the ball to be. Made from scraps of fabric in coordinating patterns, it will withstand hours of play.

Essential Information

DIFFICULTY Easy

SIZE Approximately 13cm (5in) in diameter

TOOLS AND MATERIALS

Tracing paper

Pencil or marker pen

Scissors

Stiff card, paper, or freezer paper

Pins or paper clips

Sewing needle

Threads to match your fabrics

Toy filling

Child-safe toy bell or rattle (optional)

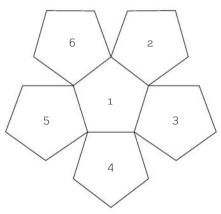
FABRICS

12 scraps of coordinating fabric, each a minimum of 10 x 10cm (4 x 4in)

SKILLS

English paper piecing (see pp.124-125) Fussy cutting (optional, see p.38)

Pentagon ball layout



Cut the template

Using a pencil or marker pen, trace the pentagon template (see pp.172-175) onto tracing paper and cut it out. You can make the template larger or smaller if you'd like to alter the size of the ball. Copy the template onto card, paper, or freezer paper to make a total of 12 pentagon pattern pieces, all the same size. Carefully cut out each pattern piece.

Make the patches

Pin each pattern piece to the wrong side of a fabric scrap (see p.126) or use a paper clip to hold them together. To centre a specific design detail from the fabric on the finished pentagon, make sure you attach the pattern piece so it is centred over the detail (see p.38).

Cut out the fabric around each pattern piece, leaving approximately a 1cm (%in) seam allowance. Folding the seam allowance over the edge of the pattern piece to the wrong side, tack along the edges of the fabric, taking care not to sew through the pattern piece. Fold each corner of the fabric neatly and stitch through the fold to hold it securely. Repeat for all the pentagons, then remove the pins or paper clips.

Join the patches

Lay out six of the pentagon patches in the shape of a flower, with one pentagon in the middle surrounded by five more pentagons (see diagram, left). With right sides together, oversew (see p.43) the patches together. The stitched patches will take on the shape of a bowl. Repeat to make another bowl using the

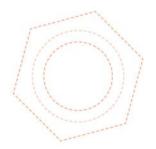


For added interest, try centring a few of the pentagon pattern pieces over some of the design details in the fabric. This playful image of bunnies now takes centre stage.

remaining six patches. With the wrong sides face out, invert one bowl and place it over the other, matching the alternating edges. Oversew the matched edges together, leaving one pair unstitched for turning through. Remove the pattern pieces.

Stuff the ball

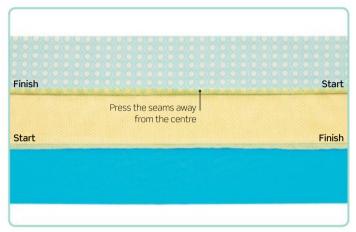
Turn the ball to the right side through the unstitched edge. Stuff the ball firmly with toy filling. If you wish, insert a child-safe rattle or bell into the centre of the filling. Slip stitch (see p.41) the opening closed.



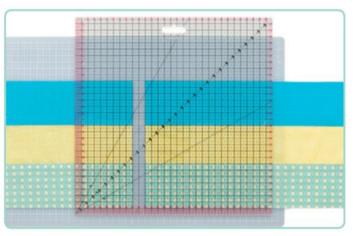
Strip piecing

Strip piecing is a good way to build blocks quickly. In principle, several long strips are joined – or pieced – and then cut apart before being stitched together again in a different sequence. It is the method by which many blocks can be made, including log cabin (see pp.132-133) and Seminole patchwork (see pp.144-147).

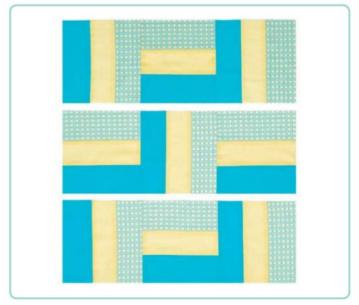
Strip-pieced blocks: Rail fence

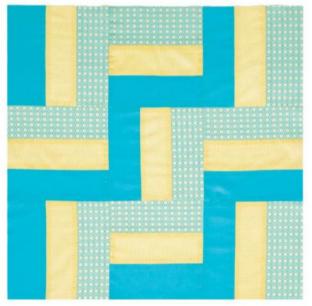


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2 Using a rotary cutter and quilter's ruler, measure the width of the pieced strip and cut across it to make squares the same size on each side as this measurement.





4 With right sides together, join the rows, matching the seams and leaving a 6mm (1/4in) seam allowance.

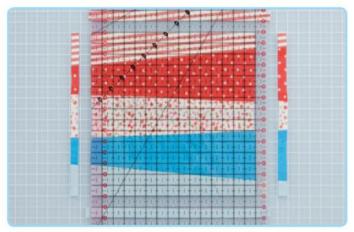
String piecing

String piecing is similar to strip piecing, but the lengths of fabric are not necessarily straight strips and are referred to as "strings". The string-pieced blocks can be combined to make larger units. If using a paper foundation block for Method 2, use a stitch length of around 1.5 to perforate the paper making it easier to remove.

Method 1

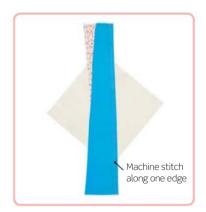


 $\label{eq:local_select} \textbf{1} \ \ \text{Select "strings" of fabric with plenty of colour and pattern contrast. With right sides together, stitch them together lengthways, leaving a 6mm ($^{1}/_{4}$ in) seam allowance. Alternate the angle as you add each piece and alternate the direction of stitching each time to prevent bowing.$

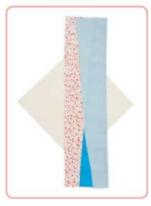


Press the seams to one side. Using a rotary cutter and quilter's ruler, trim the piece to the desired size and shape.

Method 2



Lot a muslin or paper foundation block, plus seam allowances. Place the first string right side up in the centre of the block and lay the second string right side down on top. Make sure both strings are longer than the block at its widest point. Machine stitch along one edge of the strips through all layers. Flip the joined pieces open and press.



2 Turn the foundation block, then add a new string, right side down, to the free edge of the first string. Flip the joined pieces open and press.



 $\label{eq:continue} 3 \text{ Continue to add strings, flip, press, and stitch, until the foundation block is covered. Trim the edges level with the foundation. If you have used a paper foundation, leave a 6mm (<math>\frac{1}{4}$ in) allowance when you trim.



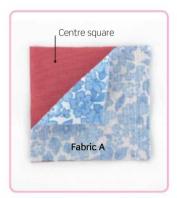
4 Carefully tear away the paper foundation, if used. A muslin foundation will remain in place. Press.

Log cabin

Log cabin is a very versatile block design, usually featuring fabric strips surrounding a small central square, as shown here, though some log cabin blocks have other shapes in the centre. Blocks can be made individually or chain pieced.

Always leave a 6mm (½in) seam allowance unless otherwise stated. Log cabin is stunning in simple two-colour versions and the blocks can be set in many ways to create secondary patterns (see p.103).

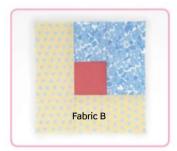
Method 1: Individual blocks



1 Cut a centre square of the desired size, plus seam allowances. Cut a second square the same size from fabric A and, with right sides together, stitch them together along one edge to make a pieced unit. Press open.



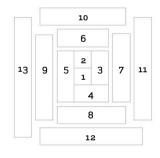
2 Cut a strip from fabric A the width of the centre square and the same length as the pressed pieced unit. With right sides together, stitch this strip to the long side of the unit.



3 Add two strips from fabric B in the same way, working in a clockwise direction to ensure that the centre square remains in the middle.



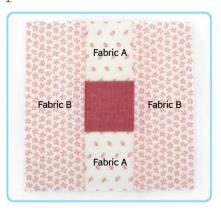
Continue adding strips, two from fabric A and two from fabric B, or two each from different fabrics. Always work in a clockwise direction until the block reaches the desired size.



Method 2: Courthouse steps variation



1 Cut a centre square. From fabric A, cut two squares the same size as the centre and with right sides together, join them to opposite sides of the centre square to make a pieced unit. Press the seams away from the centre.

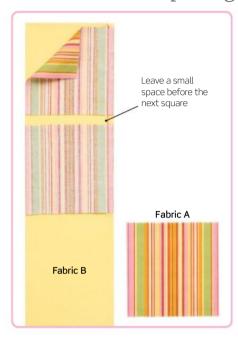


2 Cut strips the same width as the centre square from fabric B, and add one strip to each long side of the pieced unit. Trim to the same length as the pieced unit. Press away from the centre.



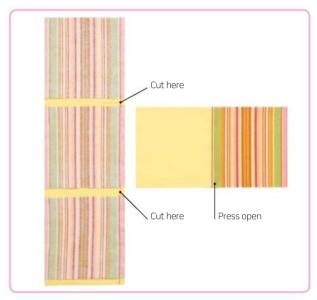
 $\label{eq:continue} 3 \text{ Continue adding strips - first two strips of fabric B} \\ \text{A to the top and bottom, then two of fabric B} \\ \text{to the sides, or two each from different fabrics -} \\ \text{until the block reaches the desired size. Press each} \\ \text{strip away from the centre.}$

Method 3: Chain piecing

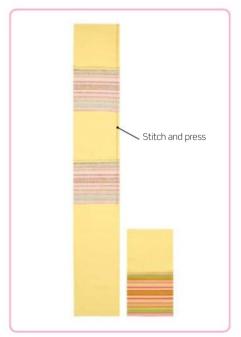


1 Cut the required number of identical centre squares from fabric A. Cut strips from fabric B the same width as the fabric A squares. Place one centre square at one end of a strip with right sides together. Stitch, leaving a 6mm (1/4 in) seam allowance.

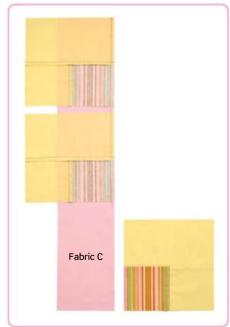
Without raising the machine needle or breaking the thread, leave a small gap and add a second fabric A square in the same way. Continue adding squares until you reach the end of the strip and have a chain of units.



 $3 \\ \text{Snip the units apart and, if necessary, trim the squares} \\ \text{so they are the same size. Flip them open and press.} \\$



4 Place the pieced units on a second fabric B strip, with right sides together and with the fabric A squares below the fabric B squares. Stitch and press, then cut across the strip below each fabric A square to make a number of three-part units.



 $5\,$ Place the three-part units on a fabric C strip with right sides together, again with the fabric A squares at the bottom. Stitch, press, and trim, as before.



Repeat to add the fourth strip (fabric C) along the unstitched edge of the fabric A square, always working clockwise. Continue adding strips – two B, and then two C, or two each from different fabrics – until the blocks are the desired size.



Pear quilt

This eye-catching double-bed size quilt is based on a simple log cabin block using five different fabrics. Here, a pretty multi-coloured pear-printed cotton is the dominant fabric and the other fabrics have been chosen to complement it.

Essential Information

DIFFICULTY Easy

SIZE 216 x 216cm (85 x 85in)

TOOLS AND MATERIALS

Measuring tape

Quilter's ruler

Rotary cutter

Cutting mat

Scissors

Sewing machine

Threads to match your fabrics

Iron and ironing board

Curved safety pins

FABRICS

A: $1 \times 1m$ (39 × 39in) cotton fabric B: $1 \times 1m$ (39 × 39in) cotton fabric

C: 2 x 2m (79 x 79in) cotton fabric

D: 2 x 2m (79 x 79in) cotton fabric

E: 2.5 x 2.5m (98 x 98in) cotton fabric

4.5 x 4.5m (177 x 177in) backing fabric

80cm (32in) of fabric of 112cm (44in) width

for binding

2.25 x 2.25m (88 x 88in) wadding

SKILLS

Log cabin (see pp.140-141)

SEAM ALLOWANCE

1.2cm (1/2 in) throughout

Guide to cutting fabric pieces

Fabrics	Cut size	Finished size
А	11 x 11cm (41/2 x 41/2in)	g x gcm (31/2 x 31/2 in)
В	11 X 11cm (41/2 X 41/2 in)	g x gcm (31/2 x 31/2 in)
С	20 X 11cm (8 X 41/2 in)	18 x gcm (7 x 31/2in)
D	20 X 11cm (8 X 41/2 in)	18 x 9cm (7 x 31/2in)
E	29 x 11cm (111/2 x 41/2 in)	27 x gcm (101/2 x 31/2 in)



Cut the fabrics

The size of the quilt depends on the size of the block; however, this log cabin design (see pp.140-141) works best with an even number of blocks, such as six, eight, or 10. This double-bed-sized quilt requires eight rows of eight blocks, so cut 64 pieces from each of fabrics A, B, C, D, and E, following the measurements given in the table above. Before cutting all the fabrics, check that the colour and print combination looks good. For example, fabric E is used for the biggest pieces, so this will be the dominant fabric in your quilt.

Piece the blocks

With right sides together and leaving a 1.2cm (½in) seam allowance, stitch A and B together along one side to form a rectangle. Using chart A on page 136 as a guide, stitch C to the bottom of this rectangle. A, B, and C together will now form a square. Attach D to the left of this square and E along the top. After each step, press the seam allowance to one side. Make the remaining 63 blocks in the same way. Ensure each completed block measures $27 \times 27 \text{cm} (10\frac{1}{2} \times 10\frac{1}{2} \text{in})$ and is a combination of five different fabrics.

Chart A

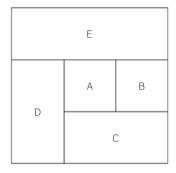
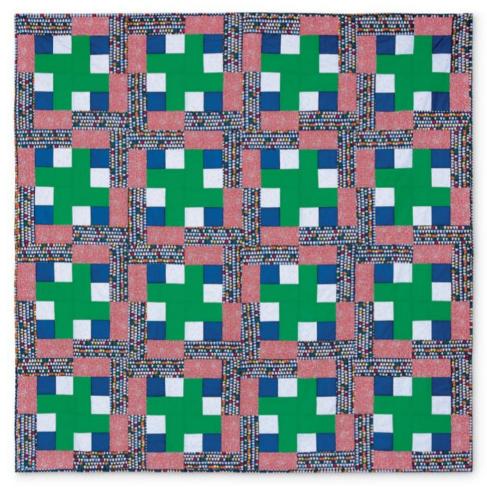


Chart B

	E		[)			Е		[)			Е			D			Е		[
D	А	В		А	E	D	А	В		А	E	D	А	В	С	А	Е	D	А	В		А	Е
				В						В				2		В			(2		В	
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Ch				C A	D	E	В	С	В	C A	D	E			В	C A	D	E	В	С	В	C A	D



Join the rows

To make a row of blocks, with right sides together, sew eight blocks together, as shown in chart B above. Note that the pattern of the quilt is created by rotating each pair of adjacent blocks through 90 degrees. Follow chart C to sew together the next row. Continue in this way, alternating between chart B and chart C until you have eight separate rows, each made up of eight blocks.

Press the seams in the first row in one direction and the seams in the second row in the opposite direction. Repeat for the rest of the rows so that the seams in each alternate row face in the same direction. If you have a very light fabric joined to a dark fabric, press the seam towards the darker fabric. With right sides together, join the B and C rows, alternating between them and pinning through the seams wherever necessary to ensure that all the seams line up. You have now completed the quilt top.

Assemble the layers

Lay the backing fabric on a flat surface, right side down. Lay the wadding on top and carefully smooth out the wadding and backing fabric (see p.46). Lay the quilt top right side

Bold blocks This quilt is in a traditional, simplified log cabin design. Choosing bright, modern, graphic fabrics will make the quilt look very eye-catching, while fabrics with less contrast will create a gentler effect.

up on the wadding. Both the wadding and the backing fabric will overhang the quilt top by several centimetres (inches). Starting from the centre and working outwards, pin the layers together (see p.46) with curved safety pins at intervals of 15cm (6in) or so, or tack the layers together. Try not to lift the quilt top too much as you pin and regularly check that all the layers sit flat and are even with one another.

Quilt the layers

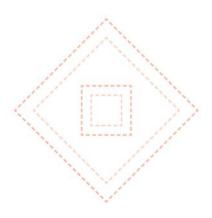
For this design, we quilted through the layers by stitching in the ditch around each complete block, and then around the centre square (square A) of each block. When quilting, it is important to consider what the stitching will look like on the back of the quilt, so use threads that will complement the fabric. We used a green top thread and white thread in the bobbin to give a subtle effect on the back of the quilt, which, in this case, is the lightly patterned white fabric that was also used on the top.

Attach the binding

Once the quilting is complete, cut away the excess backing fabric and wadding, so that all three layers of the quilt line up with each other along the sides. To finish the quilt with binding, make a long, continuous piece of binding to go around all four sides. The binding can be made either from one fabric or by joining together several pieces of fabric of varying lengths. If doing this, lay the fabric strips around the edge of the quilt before sewing, to gauge the finished effect. Attach the binding to the edges of the quilt following the instructions for Double-fold binding (see p.53).



Subtle binding Here one of the fabrics from the quilt top has been used to bind the edges, giving a subtly understated effect. If you prefer to make more of a statement, you could choose a complementary fabric that will stand out more.





Working on a foundation

Several patchwork techniques are worked on a foundation, also known as stitchand-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 calico. Reverse-pieced foundation piecing 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



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

2 Gather a selection of straight-sided pieces of various shapes and colours. Starting in the centre, place two pieces right sides together, on top of the foundation, and sew along one side through all three layers. Take a 6mm (½/4in) seam allowance, whether you are working by hand or machine.



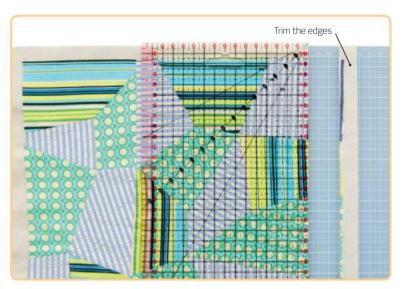
3 Press or fingerpress the pieces open.



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

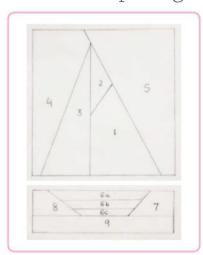


5 Continue clockwise around the centre piece until the foundation is completely filled. Keep the arrangement random and avoid parallel lines. Run the seams in different directions and vary the angles. Press each piece open as you work.



 $\,\,$ Trim the edges level with the edges of the foundation fabric. Embellish the finished piece if you wish.

Foundation piecing: Reverse pieced



1 Cut the chosen foundation (use paper, calico, wadding, or non-woven 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.



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.



5 Turn the foundation right side up and re-pin carefully to avoid catching any pins in the feed dogs of your sewing machine.

Stitch the seam, joining pieces 1 and 2. If your foundation is made of paper, use a short 1.5 stitch length to make it easier to remove. If necessary, trim the seam allowance to 6mm (½/4in).



7 Turn the foundation fabric right side up, remove the pins, open the pieces, and press.



Cut piece 3 and align it next to piece 2. Pin it on top, then turn over and stitch as in Steps 3-7 until the top is complete. Make the bottom section in the same way.



Join the sections.
Then trim the
foundation level with the
edges of the patchwork
design. If the foundation
is removable, carefully
tear it away.



Folded patchwork

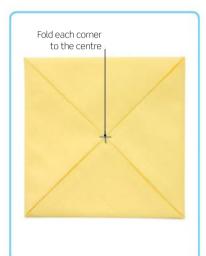
There are a number of specialized patchwork techniques that involve manipulating fabric by folding it in specific ways before joining pieces together. They can all be used to make quilts, but because they are, by definition, made from more than one layer, they are also good for making household items,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

Cathedral window



Decide the size of the finished square (10cm/4in) and multiply the measurement by 2 (20cm/8in). Add 1.2cm (½in) seam allowance and cut four squares this size from the background, fabric A.

Pold the seam allowance down and press each side of the square flat. Diagonally fold one way and press, then fold along the other diagonal and press firmly to mark the exact centre. Open out.



3 Fold each corner of each square to the centre and press the folds firmly. Make sure that the new corners are sharply defined.

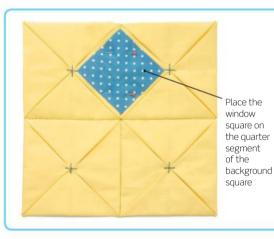
Take a small cross stitch across the centre into each point, through all the layers to hold the points in place.



5 Fold each corner to the centre 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, oversewing 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.

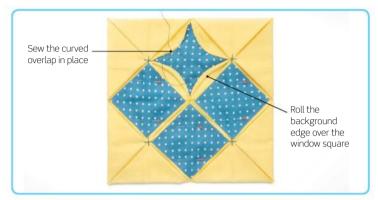


Cut four contrasting window squares from fabric B. Each window square should just fit inside a quarter segment of the background square; to work out the size, measure the distance from the centre of one folded square to the outside corner.

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







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 to 9 to fill the other spaces in the square. If you work in rows, add windows after you join rows together.

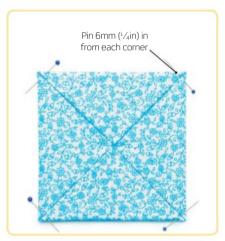


Secret garden



Make a folded square as for Steps 1 to 3 of Cathedral window (see opposite). 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.

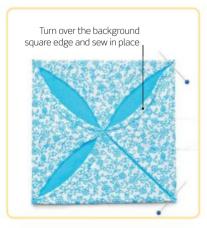
2 Open the pressed corners and place the window square on point within the lines. If necessary, trim the raw edges to fit and anchor with small tacking stitches.



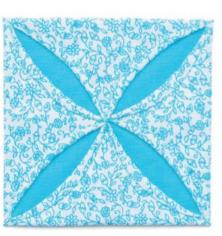
3 Fold the four corners of the background square into the centre. Press.

Anchor each corner in the centre with a small cross, stitching through all layers.

 $\frac{1}{4} \text{ Pin 6mm ($^1/_4$in) in from each corner through all layers to stabilize the square.}$



5 Turn over one edge of the background square to form a curving "petal" shape. Sew in place, working outwards from the centre and using thread to match the background fabric.



6 Repeat on all eight folded edges of the background square, removing the pins and securing each corner with a double tacking stitch.





Secret garden pin cushion

This little pin cushion is made by creating a Secret garden patch (see p.143) and turning it into a small cushion by adding a back and stuffing it firmly. A covered button adds the finishing touch and, with the back button, joins front to back.

Essential Information

DIFFICULTY Easy

SIZE 10cm (4in) square

TOOLS AND MATERIALS

One 22 \times 22cm (g \times gin) thin card template Iron and ironing board Threads to match your fabrics Sewing needle

Pins

Sewing machine

One 2.5cm (1in) button with shank, covered in fabric C

One 1.5cm (5/sin) plain flat button for the back, used as a washer

FABRICS

- **A:** One 26.5 x 26.5cm (10½ x 10½in) square of plain teal-coloured fabric
- **B:** One 11 x 11cm (4¹/₂ x 4¹/₂in) square of red fabric
- **C:** One 10 x 20cm (4 x 8in) piece of patterned teal-coloured fabric, cut and made into four half-square triangles (see p.82)
- **D:** Two 7.5 x 15cm (3 x 6in) rectangles of the same patterned teal-coloured fabric, for the back

Toy filling or wadding

SKILLS

Secret garden (see p.141)

SEAM ALLOWANCE

6mm (1/4in) throughout, unless otherwise stated

Make the front

With fabric A right side down, centre the card template on top of the fabric. Either finger press or use an iron to press the sides of the fabric over the template, starting by folding over the corners. Continue folding over and pressing the fabric over the card. Remove the card and press again. Find the centre of the fabric by folding the square in half and pressing the fold. Repeat again in the opposite direction and press lightly. With the fabric still right side down, fold up and press each corner of the square to the centre mark on the fabric. Press all sides. Catch stitch the four corner points in place. Repeat the folding process again on the four sides, pressing the creases but not stitching them in place.

Open up the four triangular flaps and place fabric B, right side up, on the plain fabric, using the creases as a guide. Fold the triangular flaps in so the points meet in the centre. Pin all four outside corners and pin the four points in the centre, then anchor the points in the centre through all the layers with a few cross stitches.

Pin the four half-square fabric C triangles right side up to each of the triangular flaps, 3mm (%in) inside the edge of fabric A. Roll the edge of fabric A over fabric C, curving fabric A so the rolled edge is wider in the middle and narrower at each end, forming a "petal" shape (see p.141). Pin as required. Repeat on the remaining seven edges. Increase the stitch size on your machine slightly, then top stitch along the rolled edge, beginning in the centre. Repeat for the seven remaining curves.

Make the back

On the reverse of one fabric D rectangle, measure 4cm (1% in) down along one long edge. Rotate the rectangle 180 degrees and repeat on the other side. Place the second rectangle under the first, right sides together and, leaving a 6mm (% in) seam allowance, stitch to the mark, backstitching to finish. Rotate and stitch to the mark again, leaving a gap of approximately 4cm (1% in). Finger press the seam open.

Place the front and back of the cushion right sides together. Align and pin the edges in place. Stitch around the four sides, then trim off the excess fabric so the raw edges are neat. Gently turn the cushion through the opening in the back seam, pushing out the corners.

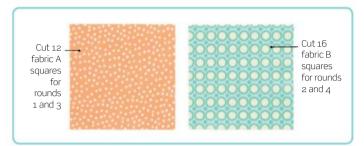
Stuff and button the cushion

Stuff the cushion and oversew the gap in the back by hand (see p.41). Stitch the shanked button to the front of the cushion with double thread, passing the needle through to the back and through the washer button. Pull the thread to compress the pin cushion and tie the thread off securely.

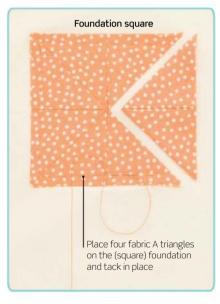




Folded star



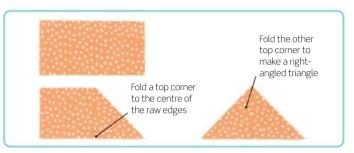
 $\mathbf{1}$ The star consists of a calico foundation square with four rounds, or layers, of triangles on top. Cut the calico to the finished size plus 5cm (2in) on all sides. For rounds 1 and 3, cut twelve 1ocm (4in) squares from fabric A. For rounds 2 and 4, cut sixteen 1ocm (4in) squares from fabric B.



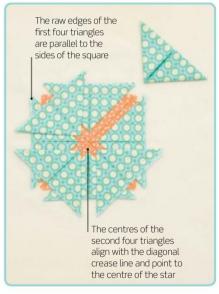
To make guidelines, fold the foundation square in half horizontally and vertically and press. Fold in half again along the diagonals and press again. Open the square out.

4 For round 1, place the four fabric A right-angled triangles along the pressed guidelines, so their points meet in the centre and the folded edges are on top. Pin or tack in place along the raw edges.

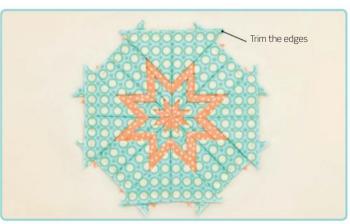
Secure each point with a small hidden stitch.



2 For the triangles, with wrong sides together, press each square in half. Fold one top corner of the resulting rectangle to the centre of the raw edges and press. Repeat, folding the other top corner to the raw edges to make a right-angled triangle with raw edges along its long side.



For round 2, place four fabric B right-angled triangles with their points 1cm (3/8in) from the centre, and with their raw edges parallel with the sides of the foundation square. Secure as in Step 4, then add four more fabric B triangles in the gaps, aligning their raw edges with the diagonal guidelines on the foundation square. Secure as before. Measure 1cm (3/8in) from the points and mark.



Add eight fabric A triangles for round 3 in the same way as the eight were added for round 2, followed by eight fabric B triangles for round 4. Remove the tacking and trim and finish all the edges as desired.





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 re-joining them.

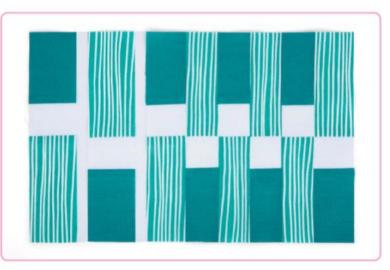
Method 1: Straight band



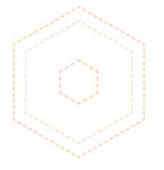
Lut strips from three contrasting fabrics. Here the width of the strips from top to bottom of the picture is in the ratio of 2:1:3, plus seam allowances, which ensures that the white will be evenly offset either side of the centre line of the finished patchwork. With the narrowest strip in the centre and with right sides together, join the three strips, leaving a 6mm (½in) seam allowance. Press the seams towards the darker colour.



2 Using a rotary cutter and quilter's ruler, cut across the joined strips to make pieced strips of the desired width.



3 Alternating the top and bottom of each adjacent strip and with right sides together, sew the strips together again, leaving a 6mm ($\frac{1}{4}$ in) seam allowance. Press all the seams in the same direction.

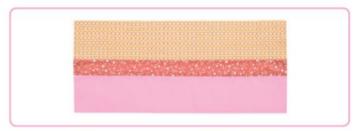




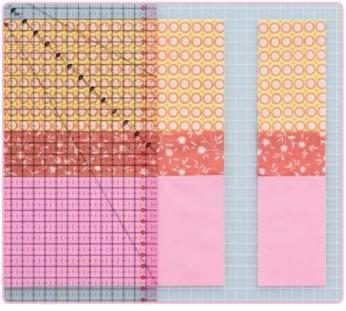
Method 2: Angled band



1 Cut strips from three contrasting fabrics; the widths can vary.



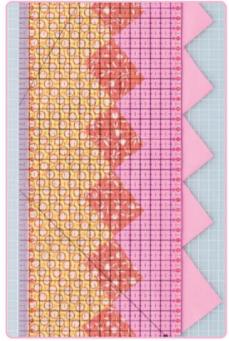
2 With right sides together and the wider strips on the outside, sew the strips together. Press the seams in the same direction.



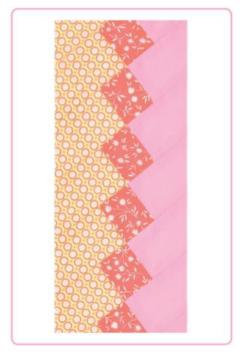
 $3 \ \, \text{Using a rotary cutter and quilter's ruler, cut across the joined strips to make pieced strips of the desired width.}$



4 Sew the strips back together, leaving a 6mm (½/4in) seam allowance and offsetting the centre squares each time you join one strip to the next. Press the seams in the same direction.



5 Using a rotary cutter and quilter's ruler, trim off the points at either edge of the pieced strip.

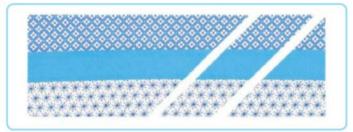


6 Square up both ends to make a neat pieced strip.

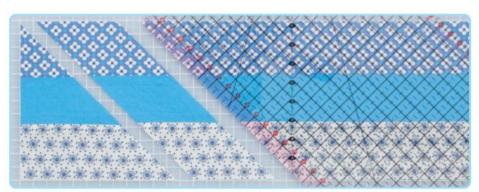
Method 3: Chevron band



 $\begin{tabular}{ll} L cut strips the same width from three contrasting fabrics. With right sides together, sew the strips together and press the seams in the same direction. Make a second identical pieced strip. \\ \end{tabular}$



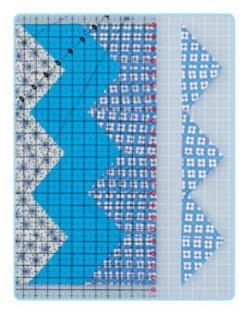
2 Using a rotary cutter and quilter's ruler, cut one of the pieced strips several times at a 45-degree angle in one direction (see p.38) to make angled strips.



Repeat on the second pieced strip, using the same angle but reversing the direction of the cut.

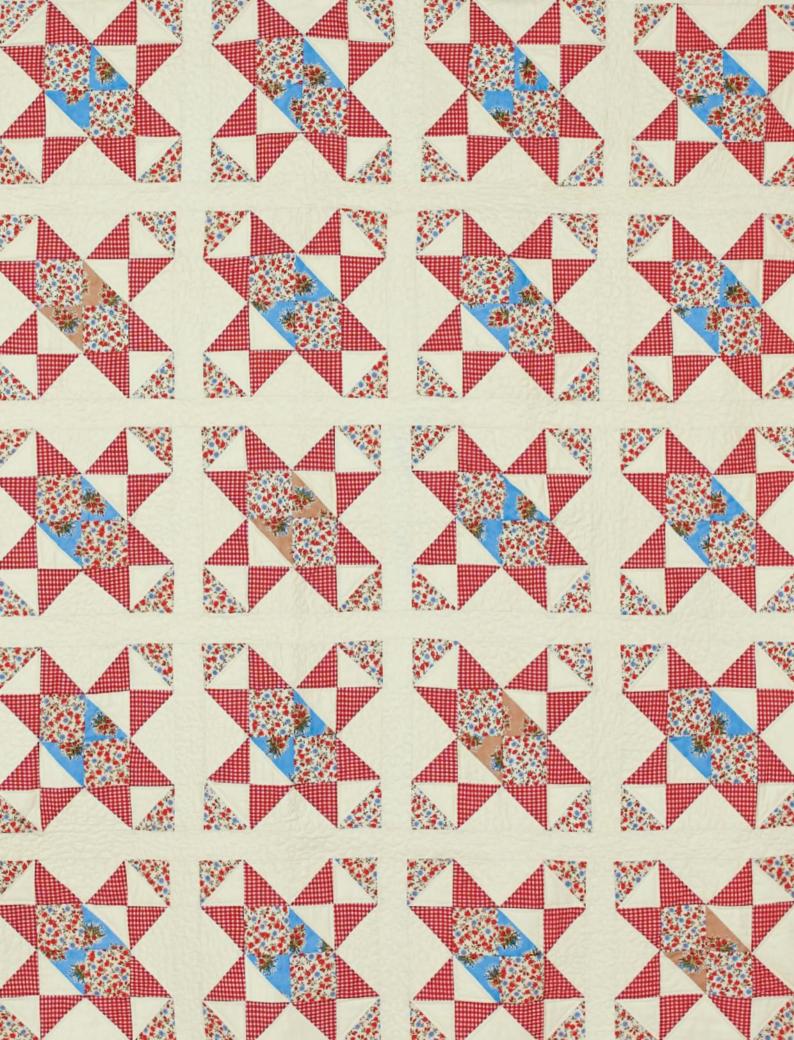


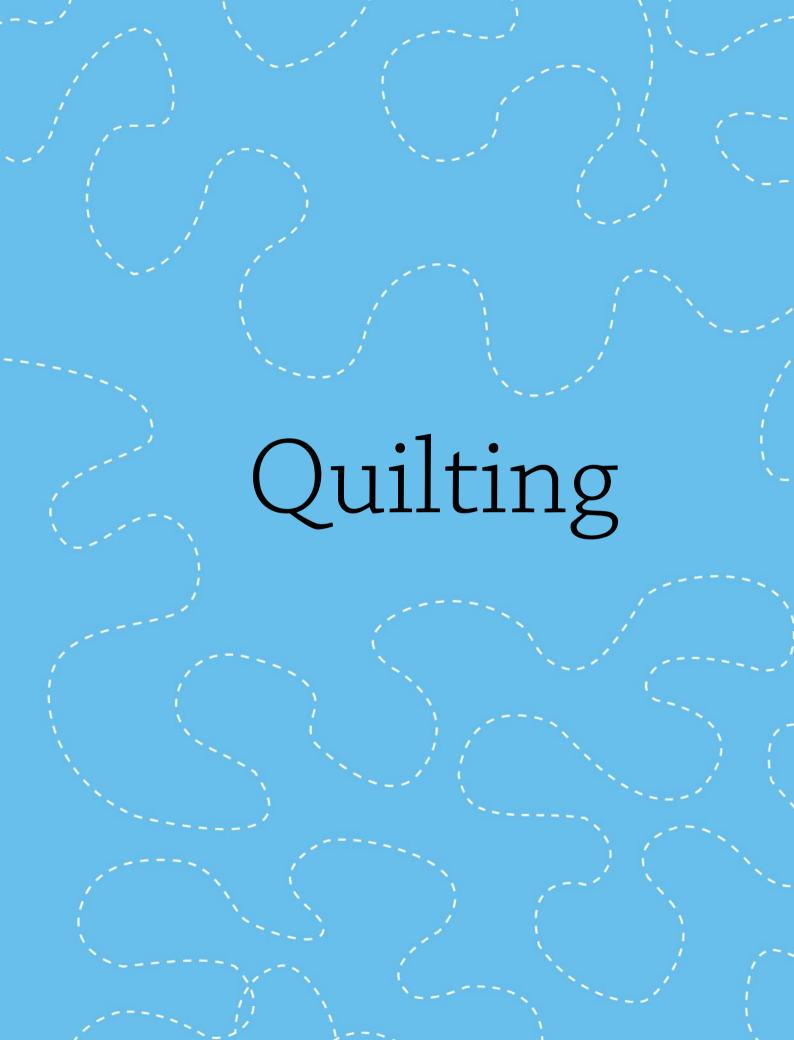
4 Match the seams of an angled strip from the first pieced strip to the seams of an angled strip from the second pieced strip. Sew together, leaving a 6mm ($^{1}/_{4}$ in) seam allowance. Repeat to join in pairs.





 $6 \\ \text{The result is a chevron} \\ \text{pattern running through} \\ \text{the whole of the pieced strip.}$





Quilting

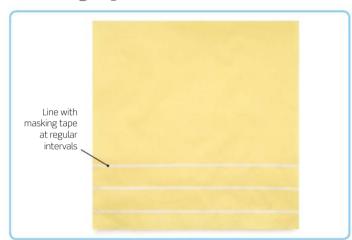
Quilting holds the layers of a quilt together, gives a quilt its texture, and should add to the overall beauty of the piece. Quilting motifs range from geometric grids and simple heart shapes to elaborate scrolls. Some appliqué motifs look best if they are outlined or echoed by quilting.

Transferring designs

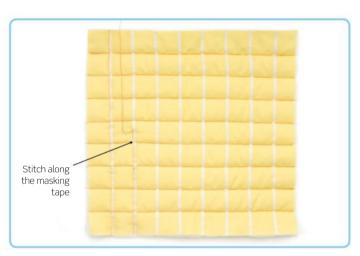
Once the quilt top is finished, you need to transfer the quilting pattern onto it. Use equipment that can be easily removed, such as water- or air-soluble pens or light pencil marks, to mark the pattern. Tailor's chalk applied lightly can usually

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

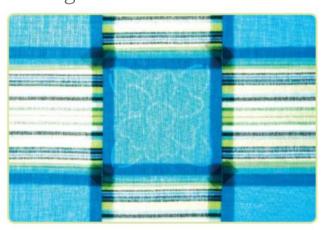


 $\label{eq:lambda} 1 \text{ This method only works for quilting designs in straight lines.}$ After the quilt has been layered with wadding and backing, apply 6mm (1/4in) masking tape in lines as a guide.



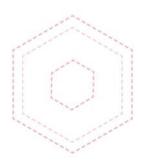
2 Stitch along the edge of the tape by hand or machine, then remove the tape as soon as possible. When the rows are complete, repeat in the other direction.

Tracing



If your project is small and light in colour, 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.

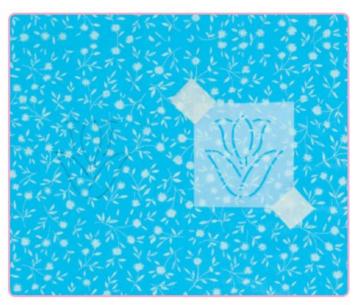




Templates or stencils



1 Mark the design on the finished quilt top before making the quilt sandwich. 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.



 $\label{eq:move-the-pattern} 2 \text{ Move the pattern as necessary and repeat until } \\ \text{the entire top has been marked.}$

Trace and tack



1 Use on fabrics that are hard to mark. Transfer the pattern to the quilt top before making the quilt sandwich. 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.



 $2\,$ Pull the paper away gently without disturbing the tacking. If necessary, score the marked lines with a pin to break the paper.

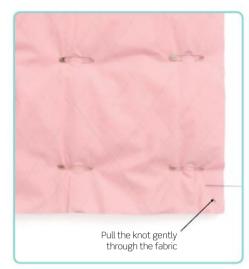
Hand quilting basics

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



1 Knot a 50cm (20in) length of quilting thread. Take the needle down through the top layer of fabric, about 2.5cm (1in) away from where you wish to start stitching. Bring it out where you wish to begin.

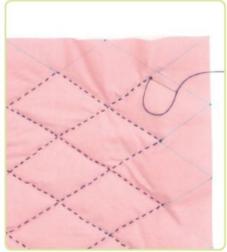


Pull the thread gently until the knot pops through the top layer of fabric but not hard enough to bring it out again. The knot will bury itself in the wadding and be virtually undetectable.

Finishing off



To secure the thread at the end, take a small back stitch through the top layer and pull the thread through to the top. Make a French knot close to the end of the stitching. Secure the wraps with your finger and pull the knot tight.

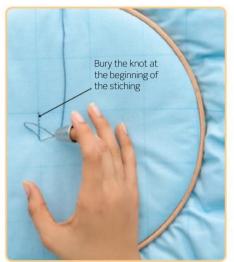


2 Insert the needle point into the top layer only, next to where the thread emerges and in the opposite direction to the stitching. Slide the needle within the wadding and bring it out about 2cm (¾in) from the end of the stitching. Gently pull the French knot through into the wadding.



 $3 \ \, \text{Carefully cut the thread close to} \\ \text{the surface and let the tail sink} \\ \text{into the wadding.}$

Quilting or rocking stitch



Place the area to be worked inside a large embroidery hoop. Bury the knot as in Knotting to begin (see opposite). Place one hand under the quilt where the needle should emerge.

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

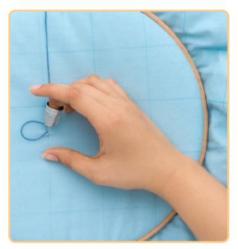


With your underneath finger, push up gently against the side of the needle and the quilt.

At the same time, push down with your top thumb and make a bump in the layers while you push the needle sideways back through to the top. Stop pushing when the length of the needle protruding on the top is the same length as the next stitch.



4 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.



5 Continue this motion until the needle has as many stitches as it will hold. Pull the needle and thread through. Repeat.

Stab stitch



Place the area to be worked inside a large embroidery hoop. 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 opposite). Push the upright needle straight down through all layers. Pull the needle and thread through to the back.



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.



Hand-quilted cushion

Hand quilting uses running stitch to hold the layers of the piece together. This lovely cushion cover with a slit opening at the back gives you a chance to try out this simple technique. The finished cover has authentic handmade charm.

Essential Information

DIFFICULTY Easy

SIZE 40 x 40cm (16 x 16in)

TOOLS AND MATERIALS

Rotary cutter

Scissors

Cutting mat

Quilter's ruler

Pins

Safety pins

Large-eyed needle

Threads to match your fabrics

Contrasting embroidery thread

Sewing machine

Iron and ironing board

40cm (16in) square cushion pad

FABRICS

 43×43 cm (17 × 17in) patterned front fabric 88×52 cm (35 × $20^{1}/2$ in) backing fabric 45×45 cm (17 $^{3}/_{4} \times 17^{3}/_{4}$ in) wadding

SKILLS

Hand quilting (see pp.152-153)

SEAM ALLOWANCE

1cm (3/sin) seam allowance throughout, unless otherwise stated



1 For the cushion front, lay a 46 x 46cm (18 x 18in) square of backing fabric on a flat surface. Centre the wadding on top of the backing fabric, then centre the patterned front fabric on top of that.



2 Starting from the centre and working outwards, pin the backing, wadding, and front fabric together using safety pins. Make sure that all the layers lie flat and check that the underside of the backing fabric also lies flat (see p.44).

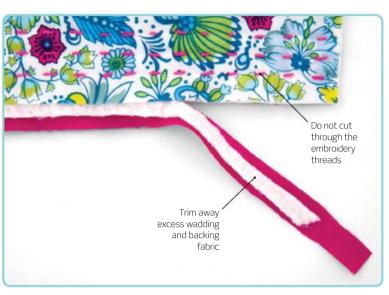


Starting at one corner and using a large-eyed needle and a length of embroidery thread, use stab stitch (see p.153) to sew a line through all three layers of fabric. Make the stitches and the gap between them about 6mm (1/4 in) long. At the opposite edge, tie the thread off at the back.

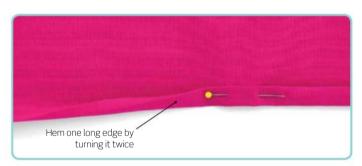




4 Continue sewing rows of running stitch, spacing the rows approximately 1cm (3/sin) apart. Try to keep the stitches and the gaps in line from row to row, as above. Continue until you have stitched the entire top. Remove the safety pins as you work.



5 Use your quilter's ruler and rotary cutter to cut around all four edges to remove the excess wadding and backing fabric, trimming the cushion front to a 42cm (16½in) square.



 6^{To} make the cushion back, cut two pieces of backing fabric, each $_{4^2}$ x 26cm (16½ x 10in). Fold one of the long edges of one piece to the wrong side of the fabric by 1cm (3½in). Fold it again by the same amount to create a neat hem and to enclose the raw edge. Pin the hem in place, check that it is straight, then sew along the edge of the second fold to secure the hem. Repeat on the other piece of fabric.



Z Lay the quilted cushion front right side up. Place one of the back pieces on top, right side down, aligning its long, unhemmed edge with the top raw edge of the cushion front. Place the second back piece right side down on top of the first, aligning its long, unhemmed edge with the bottom raw edge of the cushion front. The two back pieces should overlap. Pin along all four edges.

If you find it easier, use tailor's chalk and a ruler to draw stitching



 $\label{eq:loss_equation} 8 \text{ Leaving a 1cm (3/sin) seam allowance, sew around all four edges of the cushion cover to secure the back pieces to the cushion front. Forward and reverse stitch over the overlapped edges. Remove the pins as you work.}$

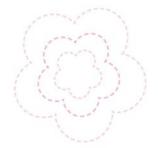


 $9\,{\rm Snip}$ off all four corners, taking care not to cut through the stitches. Turn the cushion cover to the right side through the opening in the back. Iron, then insert the cushion pad.



Loose, casual running stitches give this cushion its handmade charm. To add even more colour and to give the cushion a very personalized touch, try using more than one colour of embroidery thread, changing colour after every few rows.





uidelines, or use masking tape to mark straight lines.



Kantha stitch throw

Made from snuggly flannel, this throw is perfect for chilly evenings. You can design and stitch any pattern you wish. Here we've quilted a geometric pattern with borders around it. Be sure to mark the whole design before you begin sewing.

Essential Information

DIFFICULTY Easy

SIZE 118 x 163cm (461/2 x 64in)

TOOLS AND MATERIALS

Scissors

Curved safety pins

Card

Pencil

Spray bottle or sponge

Rotary cutter

Cutting mat

Quilter's ruler

Water-soluble pen

Roll of 2.5cm (1in) masking tape

Large-eyed needle

Five different-coloured embroidery,

or quilting, threads

Sewing machine (optional)

Thread to match the main fabric

Sewing needle

FABRIC

200 x 275cm (78 x 108in) of flannel for the main fabric front, back, and binding 123 x 165cm (48 x 65in) wadding

SKILLS

Hand quilting (see pp.152-153)

SEAM ALLOWANCE

Hand quilt following the pattern

Make the quilt sandwich

Cut two pieces of main fabric both 120 x 165 cm (47 x 65 in). Lay one piece right side down, then lay the wadding to fit on top of it. Lay the other main fabric piece right side up on top so all the edges are even. Smooth all the layers from the centre outwards and once smooth, use curved safety pins to pin the layers together (see p.44).

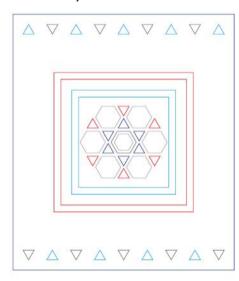
Mark the design

Measure and mark the centre of the quilt sandwich. Using the templates on page 173 and a water-soluble pen, mark the pattern on the front of the quilt sandwich. Use the masking tape to mark the borders and your quilter's ruler to make sure everything is sitting even and square with one another. If you are unhappy with the design at any point, use water to remove the pen and begin again.

Quilt the pattern

Working from the centre outwards and readjusting the safety pins as needed, begin to quilt the pattern using stab stitch (see p.43) and the colours indicated on the diagram. Bury the knots in the fabric at the back to hide them (see p.152). Cut a piece of embroidery thread long enough to sew each

Pattern layout

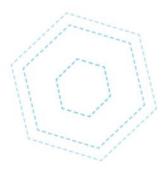


shape. Remove any safety pins that fall within the quilted sections as you work, but leave the pins around the edges. Remove the masking tape when you are done.

Attach the binding

Trim the edges of the quilt square with each other and the stitching. Cut and piece together a binding strip 6.5×585 cm ($2\% \times 230$ in), (see pp.46–47). Attach the strip using the Double-fold binding method (see p.51).

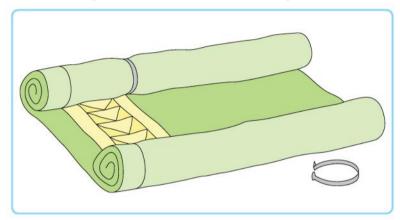




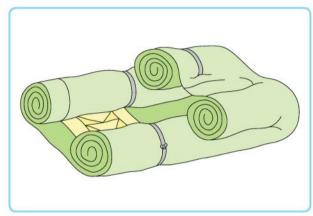
Machine quilting basics

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 re-setting, or leave a tail of thread to tie off.

Preparing a quilt for machining



 $\label{eq:towards} 1 \text{ To work on a small area at a time, roll up both sides of the quilt towards the centre, leaving 30cm (12in) open in between.}$ Hold the edges with clips.



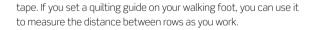
 $2^{\rm Fold}$ or roll up the other ends of the piece and secure them using clips, leaving space to work on. Repeat the rolling and/or folding process as you work your way around the piece.

Grid patterns

Traditional gridded quilting patterns can be square or diamond shaped. Mark the grid by drawing the centre line in each direction, or use 6mm (½/in) masking



Take a few short stitches. Set the quilting guide to the correct distance on one side and stitch the first marked row from edge to edge. Turn the work and use the quilting guide to measure each vertical row in turn.





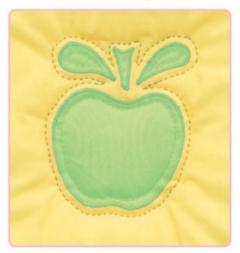
Repeat to work the horizontal rows.



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 6mm (½in) masking tape; curves can be drawn lightly. Echo quilting is similar, but consists of a series of evenly spaced concentric quilted lines.

Outline quilting



Following the seamlines or outlines of the motif, work your quilting stitches 6mm (½in) inside or outside, or on both sides, of the motif's edges.

Echo quilting



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



Seeding

This hand-quilting method uses small, straight stitches to fill the background. The back of the piece will have longer, stranded stitches, so this is best used on pieces where the back will not show, such as wall hangings or items with linings.

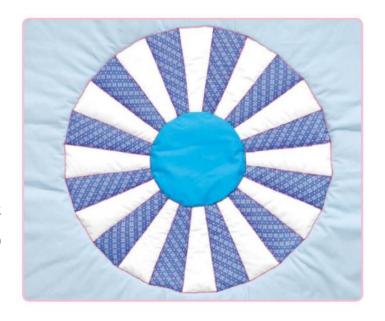


Bury the knot (see p.152). Bring the needle and thread out near the motif. Take to the back and come up a short distance away from the first stitch.

Take another stitch straight down and pull the thread through and come up a short distance away. Work outwards from the motif. Keep the stitches small on the front and position them randomly so that they look like scattered seeds.

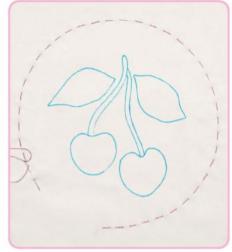
Quilting in the ditch

Here, the stitching follows the piecing lines on the quilt top and is hidden in the seams. It is best to use a walking foot on your machine when quilting in the ditch. Stitch along each row of piecing in turn, working from the centre outwards. Stop and start as little as possible.

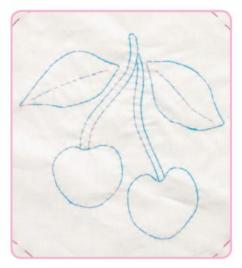


Corded quilting and trapunto

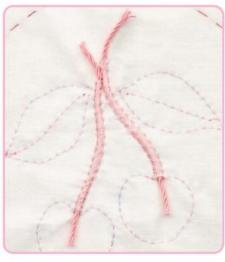
Corded quilting, or Italian quilting, and trapunto, or stuffed quilting, are techniques that can be used separately, but they work well together. Both involve stitching a design through a top and a thin backing layer, usually of butter muslin. The motif is then filled from the back with lengths of quilting,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



1 Cut a background fabric and transfer the design to the right side, using a water-soluble pen. Cut a piece of butter muslin or similar fabric the same size. Tack them together around the edges.



2 Outline the motif(s) with a small running stitch. Here we have used a contrasting colour thread for clarity. Where lines meet, keep stitches separate so they don't cross over. When stitching is complete, remove the marking.



 $3^{\ }\ {\rm Thread\ a\ tapestry\ needle\ with\ quilting\ or}$ knitting wool or soft cord. From the back, slip the needle through the first channel, leaving a short tail at each end.



4 Make small slits in the centre of each element through the backing layer only and stuff small pieces of wadding between the top and the muslin.



5 Close each slit in the backing with a crossed stitch, such as herringbone. Remove the tacking stitches once the design is complete.



 $\label{eq:theorem} 6 \text{ The cording and trapunto gives the finished } \\ \text{motif a three-dimensional quality on the } \\ \text{right side.}$

Tying

This involves tying lengths of cotton thread, lightweight wool, or ribbon through the layers of a quilt to hold them together. Use a sharp-pointed needle with an eye that is large enough to hold the thread but small enough to avoid making holes in the quilt. Space the ties according to the type of wadding, the block pattern, and the size of the quilt. Cotton and wool wadding shift easily and should be tied more closely than polyester. A general guide is 10-15cm (4-6in) apart.





2 Take a second stitch in the same way in the same place.



3 Tie the ends of thread in a reef knot. Cut the thread from the reel and trim the ends to the same length. Repeat, double-stitching and knotting over the entire quilt.

Freestyle or free-motion quilting

Freestyle, or free-motion, quilting gives machine quilters freedom to create their own designs. Mastering the technique requires patience and practice, but the effort can be very rewarding. 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.

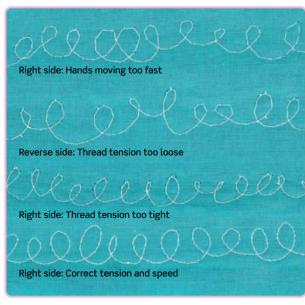


1 With the presser foot down where you will start, take one stitch. Hold the top thread and use it to gently pull the bobbin thread to the top. Secure with a few very short stitches. Start slowly and take a few more short stitches. Cut away the thread tails.



Quide 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.

Troubleshooting





Quilted pot holders

These pot holders are quick to whip up in any size. Each pot holder is like a miniquilt with a backing, wadding, and front all quilted together and bound. They're the perfect project for trying out your quilting skills, or using up scraps of fabric.

Essential Information

DIFFICULTY Easy

SIZE 19cm (71/2in) square

TOOLS AND MATERIALS

Ouilter's ruler

Cutting mat

Rotary cutter

Sewing machine

Pins

Threads to match the fabrics and binding tapes

FABRICS

21.5 x 43cm (8½ x 17in) main, patterned cotton fabric

21.5 x 43cm ($8^{1/2}$ x 17in) insulated wadding 21.5 x 43cm ($8^{1/2}$ x 17in) cotton towelling fabric 100cm (40in) bias binding tape

SKILLS

Machine quilting (see pp.160-163)
Binding with pre-made bias binding (see pp.48-49)

SEAM ALLOWANCE

6mm ($^{1}/_{4}$ in) throughout, unless otherwise stated



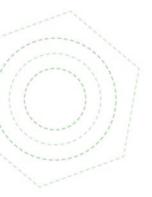
1 Cut one piece of main fabric, one piece of insulated wadding, and once piece of towelling fabric all 21.5cm ($8^{1}/_{2}$ in) square. Then, cut one piece of main fabric, one piece of towelling fabric, and one piece of insulated wadding all 16.5 x 21.5cm ($6^{1}/_{2}$ x $8^{1}/_{2}$ in).



Pin each piece of main fabric wrong sides together with its corresponding piece of towelling, placing the insulated wadding in the middle. Place the pins inside the motif to be quilted so that they will not be in the way of your stitching lines.



3 Using a matching or complementary thread in the top of your machine and a thread to match your towelling in your bobbin, stitch around each shape on both pinned units. Alternatively, you can quilt the units using the pattern of your choice.

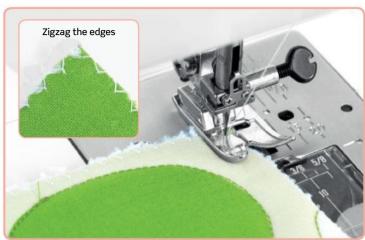








4 Once you are done quilting both pieces, trim the larger unit an equal amount on all four sides so that it is $19 \times 14 \times 10^{1/2}$ in) square. Trim the smaller unit so that it is $19 \times 14 \times 10^{1/2} \times 5^{1/2}$ in).



 $5 \ {\hbox{\rm Zigzag stitch around all four raw edges of both units to keep}} \\ {\hbox{\rm the edges neat and tidy.}}$





Z Lay the large unit towelling side up, then lay the smaller unit on top of it, towelling side down. Align the bottom and side edges, pinning in place. Stitch the two units together, around the three unfinished edges of the small unit, leaving a 6mm (1 / $_4$ in) seam allowance to create the pot holder.



Attach a piece of bias binding to fit all the way around the pot holder, mitring the corners and finishing by hand or machine (see pp.48–49).

Pot holder variation

You can easily make variations on the pocket-style pot holder just shown. If you'd like to make one without a pocket and with fabric on both sides, cut two squares of main fabric and one square of insulated wadding of the same size. Sandwich the wadding between the two layers of fabric, pin, and quilt as you desire. Bind all four edges.



You can attach a handy loop to your pot holders if you'd like to be able to hang them. Fold a piece of binding tape approximately 15.5cm (6in) in half, along the length, wrong sides together. Fold in the two raw ends so that they will not be visible. Stitch along the edges to create a long thin strip. Create a loop out of the strip, as shown right, and pin it to the corner of the potholder. Stitch it securely in place.



Embellishing quilts

From surface embroidery and beading to adding buttons, bows, and found objects, the ways to embellish a quilt are endless. You can use sequins, charms, or shisha mirrors, or add machine embroidery.

Buttons



Novelty buttons make charming embellishments on theme quilts or folk-art versions. Buttons can also become "flowers" at the end of stems in a basket or accents in any number of places. Stitch buttons to the quilt top and knot them if you don't want to stitch through the backing. Otherwise, tie a knot at the back. They are best reserved for decorative pieces such as wall hangings and should not be used on quilts for children and babies, since they can become detached.

Charms



Simply tie charms in position on the quilt top, depending on the type and size. Charms are usually used to add a personal touch to a quilt – wedding motifs for a bride's quilt, for example. They are best reserved for decorative pieces such as wall hangings and should not be used on quilts for children and babies, since they can become detached.

Bows

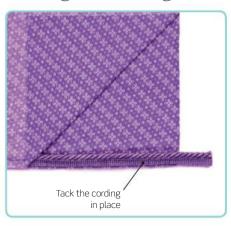


Tie ribbon bows to the desired size and stitch them in place on the quilt top. They can be single or double bows. Make sure the knot is secure before stitching. If adding bows to a baby quilt be sure the tail ends are not long enough to present a hazard. You can stitch a few small stitches through the central knot in the bow to help prevent it from unknotting.

Cording and piping

Quilted cushion covers, home accessories, or bags often require a contrasting decorative edging of cording or piping. Cording is the easiest to apply; however, with piping your choice of colour is unlimited.

Sewing on cording



Sew cording in between two layers of fabric, for example, along the seamline of a cushion cover. Align the fabric edge of the cording with the raw edge of the right side of the front piece. Tack in place along the edges.

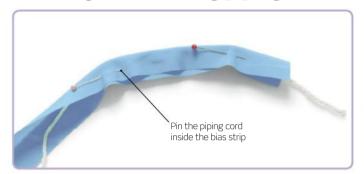
2 Lay the back piece over the cording, with the right sides of the fabric pieces together, and machine stitch along the outer edge of the cording using a zip foot.



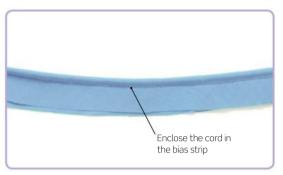
Remove the tacking and turn the fabric pieces right-side out.

Press the fabric away from the cord so that the cord sits neatly along the seamline.

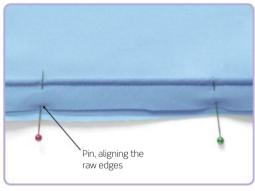
Covering and inserting piping cord



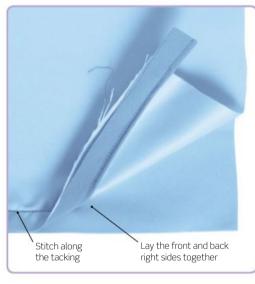
 $\label{eq:prepare bias strips approximately 4cm (1½in) wide (see pp.48-49).}$ Fold the bias cut fabric strip in half, wrong side to wrong side, over the piping cord. Pin or tack in place.



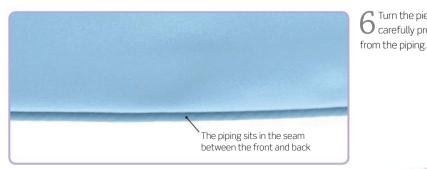
2 Machine stitch in place close to the cord using a zip foot or special piping foot. If the zip foot doesn't run smoothly against the covered cord, tack the fabric in place before machine stitching.

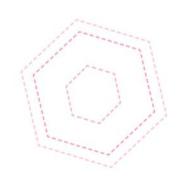


3 Trim the seam allowance on the piping cover so that it is the desired seam allowance width – it can be less than this width, but not more. Align the seam on the piping cover with the intended seamline on the right side of the front of the fabric and pin. Tack in place with the piping facing inwards.



6 Turn the piece right-side out and carefully press the fabric away





4 If you are sewing the piping around a corner, bend it carefully to form a go-degree angle and continue tacking.

5 Place the back fabric piece over the front piece with the right sides together and pin. Using a zip foot, machine stitch the layers together, stitching on top of the

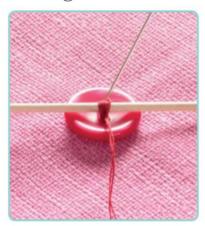
piping cord seam.



Fastenings

Although fastenings have a practical use – securing closings on cushion covers, bags, garments, and home accessories – many of them also serve as decorative finishing details. Techniques for adding very simple fastenings are provided here, including hand-stitched buttonholes, press studs, and zips.

Sewing on buttons

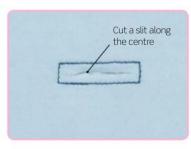


Thread your needle with a double strand of thread. Secure the thread to the fabric where the button is to be positioned. Pass the needle up through one hole of the button, down through the other hole to the back. Do not pull the thread taut yet – first insert a cocktail stick (or match stick) under the stitch. Then pull the thread taut. Continue working back and forth through the holes of the button and the fabric, until at least five stitches have been worked.



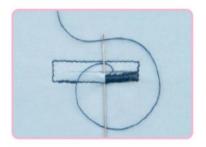
 $\label{eq:linear_problem} 2^{\text{Remove the cocktail stick.}} \text{ Wrap the working thread several times around the thread under the button to form a shank.} \\ \text{Secure the thread end with three small stitches at the back.}$

Hand-stitched buttonholes



 $\label{eq:local_local_local_local_local} \begin{tabular}{ll} Mark the desired finished length of the buttonhole on the right side of the piece, then machine stitch a rectangle 6mm ($^1/_4$in) wide and as long as the required finished buttonhole length. Carefully cut a slit along the exact centre of this rectangle. \\ \end{tabular}$





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 3mm (½in) long.

Finish each end of the buttonhole with three or four stitches that are the same width as the total width of the buttonhole. Always work buttonholes through two layers of fabric that have an interfacing in between them.

Sewing on press studs



Although press studs, or poppers, 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 press stud pieces.

Sewing on a zip



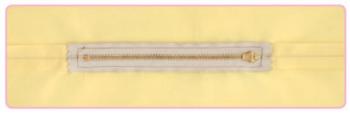
The easiest method for sewing on a zip is centring it on an opening in a seamline. To begin, machine stitch the seamline, leaving a gap in the stitches that is the length of the zip.



2 Tack the opening closed, working the tacking stitches along the seamline.



3 Open out the seam and press the seam allowance open on the wrong side. Open the zip and place it face down on top of the wrong side of the seam. Centring the zip teeth carefully on top of the seam, tack one side of the zip tape in place 3mm (½in) from the teeth.



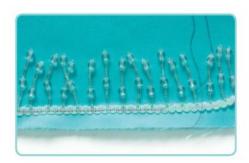
4 Close the zip and tack the other side of the zip tape in place. Using a matching thread, machine stitch the zip in place, stitching on the right side of the fabric and forming a rectangle around the zip just outside the tacking stitches.



5 Remove the tacking around the zip tape and along the opening. Press.

Inserting trim in a seam

If a piece is backed, trims, in addition to piping (see p.168-169), can be inserted between the top and the other layer, such as in the seam joining the front and back of a cushion or place mat.



1 Measure the edge to be trimmed and add an extra 10-15cm (4-6in) to the trimming. Starting in the centre of the bottom edge on the right side of the top, align the top edge of the trim on the seamline with the decorative edge pointing away from the raw edge. Pin and tack, then machine stitch in place.



2 With the trim inside and pointing inwards, position the back and top right sides facing. Machine stitch along the same seamline that was made in Step 1.



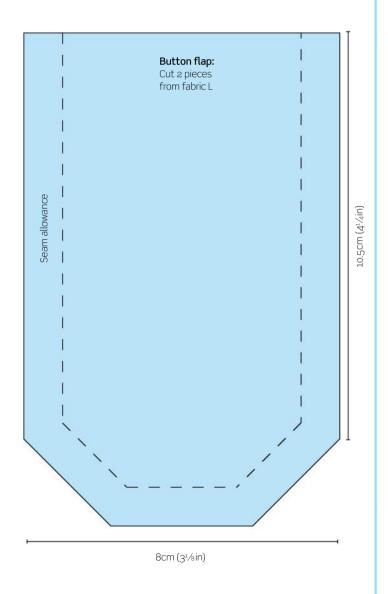
3 Turn through to the right side and press on both sides. Top stitch along the edge if desired.



Templates

Simple squares tote (pp.74–79)

Actual size



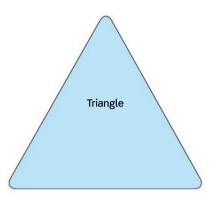
Pentagon ball (pp.128–129)
Actual size

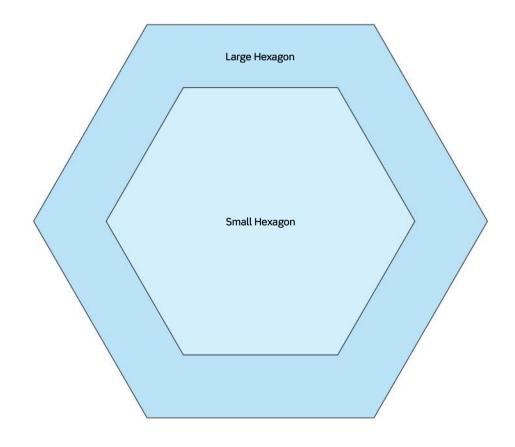
--- Stitching line

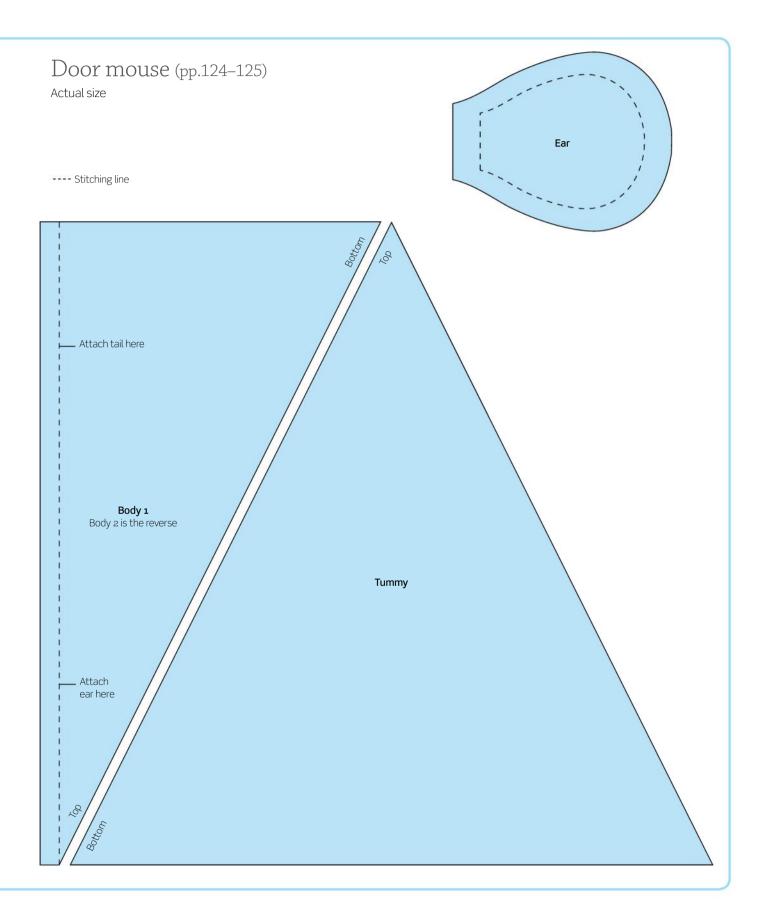
Kantha stitch throw

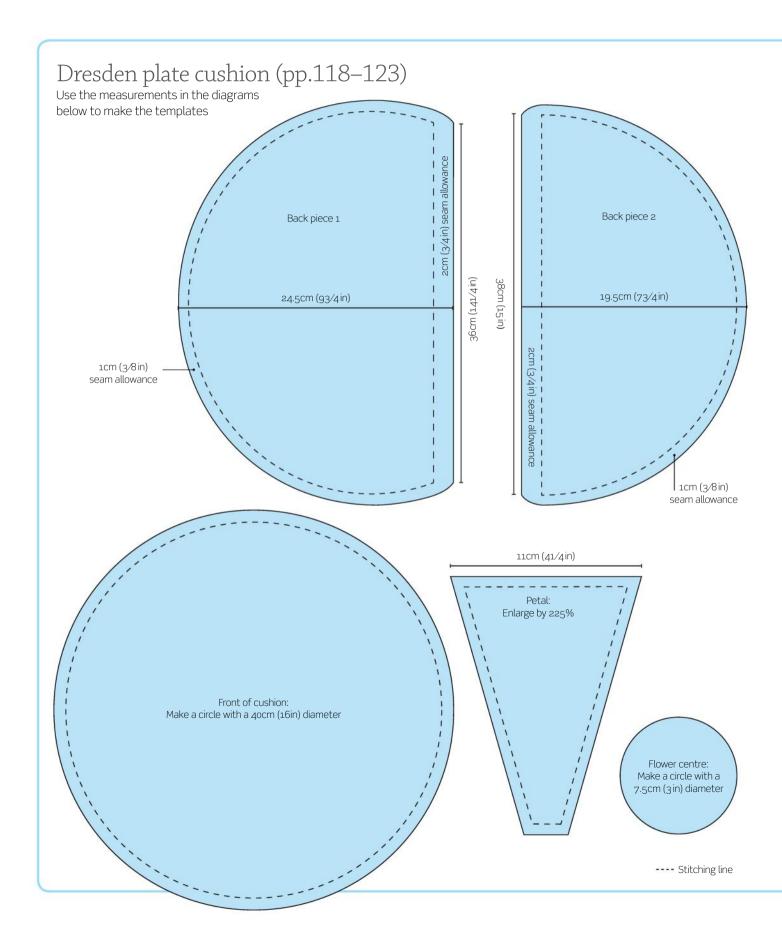
(pp.158-159)

Actual size









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