Every project you use a rotary cutter on, you’ll also need a cutting mat. Mats protect the work surface (tabletop, etc.) from damage, and prevent the blade from dulling quickly.

Cutting mats are described as either hard-surface or self-healing (soft surface). Hard-surface mats are more rigid and more rugged, since the blade skims over the mat surface without cutting into it. Self-healing mats are thin and flexible. Cutting blades create tiny scratches in the mat surface that reclose afterward; thus the description “self-healing.” Both types are appropriate for home sewing and quilting use.

Choosing a Cutting Mat

Standard cutting mats range from 12”x18” to 24”x36”. Mats 40”x72” and larger are available to cover the entire surface of a cutting table, in one piece or as sections that connect like puzzle pieces. Some large cutting mats fold for easier storage. Mats are also available in small sizes (5”x5”, etc.) for small projects or for transporting to classes.

In general, choose the largest mat that fits the work and storage areas available. If you’ll be using a rotary cutter to cut pattern pieces, a full-size cutting-table mat is ideal. For quilting, a mat 24” or larger permits cutting strips across the fabric width with only a single fold; this gives you greater accuracy.

For frequent travel to classes, a 12”x18” cutting mat is large enough for most uses, but small enough to transport easily. Larger mats require more space than most classrooms provide. The smallest mats fit beside the sewing machine for quick, easy cuts such as trimming seams while paper piecing or stitching miniature projects. Another advantage to smaller mats is that they can be rotated and moved easily for cutting in different directions without disturbing the fabric being cut.

Also convenient for classroom use are products that combine a rotary cutting mat on one side with a pressing surface on the back. Some products open book fashion with the cutting and pressing surfaces side by side. Again, consider the space you have available when deciding which is right for you.

Another factor to consider when choosing a mat is the markings on the mat surface and whether you’ll use them as you work. Most mats are printed with a 1” grid that can be used for some measuring tasks. In addition, mats may have rulers marked in 1/8” increments along their edges, with angled or circular guidelines superimposed on the grid.

**Tip:** For the most accurate measurements, use a ruler as your guide. The lines on a cutting mat are generally thick, which reduces accuracy, and they’re also subject to wear and distortion over time.

Some cutting mats have two useable surfaces. Although the back side is usually not marked with gridlines, it may have the same finish as the marked side. This effectively doubles the life of the mat by providing an alternate cutting surface.

Storage

Rotary cutting mats are made from plastic materials that are heat sensitive. Improperly stored mats will warp and are impossible to repair. If exposed to extreme cold, cutting mats may get brittle and break.

For best results, store cutting mats flat. Avoid exposure to heat and sunlight. Don’t store mats by leaning them against a wall or cabinet, and don’t roll mats for storage unless the manufacturer’s instructions suggest it. Leaving a cutting mat in a hot automobile can irreparably damage the mat; when transporting a mat to class, lay it flat in the trunk or other area protected from sunlight, and minimize the time the
mat is in the hot car.

Some cutting mats can be stored vertically by hanging. Hard-surface mats may incorporate a handle for carrying and storage; hang them from a door hook or on the wall. Mats combined with a rigid pressing surface can be stored flat or vertically. Store flexible mats flat, or hang them with specially designed accessories that support the mat’s entire length to prevent curling.

**Care**

Rotary cutting mats can be cleaned with a soft cloth and mild detergent. Avoid abrasive cleansers and solvents that can damage the mat or remove the printed markings. Use a lint roller or a napped lint brush to remove surface lint and fabric crumbs.

Self-healing mats trap bits of lint in the rotary blade cuts. This is especially apparent when working with fuzzy fabrics such as fleece or quilt batting. A special tool called a mat smoother (1) is available to pull the lint out of the mat’s cuts. Over time, the mat smoother may also rub away the printed markings, but it’s effective for keeping the mat surface clean and smooth.

To prolong the mat’s life, use it only with rotary cutting tools. Fixed knives and other cutting tools, such as eyelet punches and buttonhole cutters, gouge the surface, leaving permanent holes that interfere with cutting and accuracy (2).

**Using a Rotary Mat**

Always place the mat on a hard, flat surface, at least as large as the mat. The entire mat must lie flat on the work surface.

To rotary cut using pattern pieces, lay the fabric on a large rotary mat. Pin the pattern pieces in place or secure them with pattern weights. Select a small-diameter rotary blade, for maneuverability around curves, and cut along the edges of each pattern piece. Reposition the fabric as necessary to cut other pieces.

To cut strips and patches for quilting, you’ll need a rigid acrylic ruler. Fold the fabric as needed to fit the mat size. Keep the grainlines straight and square. Position the fabric fold along one of the mat guidelines. Lay the ruler across the fabric along a perpendicular (at a right angle) guideline, or use lines on the ruler to be sure the cut will be perpendicular to the fold. Cut along the ruler to straighten the fabric edge, and then use the cut edge as a guide for cutting strips and patches (3).