

RELIEF OR BEVEL CUTTING

Relief or bevel cutting can add a natural *carved* appearance to any scrolled piece. Portions of any design can be raised or recessed with angled cuts. Most scroll saws on the market have the ability to *tilt* their table to allow for angle cutting. One saw, the Excalibur EX-21 tilts the head rather than the table. The degree of a table's angle, combined with the direction of the cut, give the relief effect.

Good Book: *Scroll Saw Relief* by Marilyn Carmin, c1999 by Fox Chapel Publishing. Lists for \$14.95

Key Points:

- ✂ A saw with tilt both ways allows for more flexibility
- ✂ Using non-pinned blades allows for the use of patterns with inside cuts
- ✂ Angles used are small – from two (2) to four (4) degrees
- ✂ The extent of degree determines the depth of relief – the lower the degree, the more the relief
- ✂ Width of wood will also affect the degree of relief
- ✂ The width of the blade will also change the equation
- ✂ ALWAYS make a template using the same blade and width wood to determine the best degree setting for your wood
- ✂ Mark your templates accurately
- ✂ Direction of cutting determines whether the piece is raised or recessed

Table Angle	Raised Effect	Recessed Effect
Right	Cut Clockwise	Cut Counter-Clockwise
Left	Cut Counter-Clockwise	Cut Clockwise

- ✂ Take your time to think about the effect your desire and mark your pattern before cutting
- ✂ Put small X's to mark pilot hole locations and an arrow to show cutting direction
- ✂ Drill pilot holes on an angle whenever possible
 - Set the saw table at the cutting angle – place the wood on the table – drill the hole with your drill parallel to the saw blade (don't drill into your table!)
- ✂ Use the smallest drill bit possible and hide it in the natural design of the cut to insure that your pilot hole is inconspicuous
- ✂ Cut with the smallest piece first, working to the larger
- ✂ Cut any pieces within pieces first
- ✂ To project cut pieces, put masking tape across it to hold in place while further cutting is done
- ✂ Finish sand the face & back being careful not to sand the relief cut edges as this will affect their fit
- ✂ Glue carefully, putting a thin layer of wood glue on the cut edges where the edges will touch

Hints for Adjusting Patterns for Relief Cutting:

- ✂ Close lines, long & extended cuts
- ✂ Alter or eliminate small cutouts to avoid breakage
- ✂ Separate close lines to add strength & define
- ✂ Widen or shorten long & extended areas of the design
- ✂ Connect several cuts to make one large cut
- ✂ Eliminate areas of the pattern as needed
- ✂ Veining can be used to define areas closed together