



Polishing Rowmark's Acrylic Products

When creating a sign or project out of Rowmark material, you want to provide your customer with the nicest looking finished product possible. A clean, smooth edge is a finishing touch that your customers will appreciate.

Most engraving sheet with a thickness less than .060" (1/16") can easily be cut to size using a standard hand or foot shear. Heavier gauge products often require saw cutting to size. In many instances, a commercial "table" or "band saw" is used, although they are the least desirable. Rowmark recommends a "safety" saw with a fine tooth blade for best results. When cutting to size with a saw, undesirable teeth marks (chatter) remain on the edge of the material. Cutting the material face-down will help to minimize chatter, but will not eliminate it. *The chatter may be removed with several methods if the user desires a glossy, smooth edge on a finished acrylic-based product.*

There are essentially two common ways to polish the edge of plastic sheet material: **flame polishing**, and **mechanical buffing**. Each process has its pros and cons, and it may take a bit of trial and error to determine which process is right for you.

Flame polishing often provides the best finish and is best for removing chatter and frosted edges found on saw cut sheets. Flame polishing is accomplished by using a hot flame that turns the plastic to a liquid and allows it to "flow" (a propane torch found in most hardware stores for fitting copper pipes is ideal as in fig.1). When done quickly and correctly, the flow will cool and give your project a smooth, clear edge. This process works particularly well with clear acrylic products such as *Rowmark's ColorCast Acrylics*. It will give you an edge with outstanding optical clarity.



Fig. 1 – Flame polishing

However, if you heat the material for too long, you do run the risk of burning the substrate. *This method does not work for ABS-based or polyethylene materials*, as those products have very low melting points. If you are not sure if your Rowmark material is acrylic, ABS or polyethylene, view the product specifications in Rowmark's Color Chart or on www.rowmark.com.

Mechanical polishing (buffing) is the most common and easiest method for polishing the edge of any plastic. While this method will give you visually pleasing edge for most materials, it will leave fine scratches on the surface that will be noticeable on clear acrylic materials such as ColorCast Acrylics. Mechanical polishing is best accomplished by using a buffing wheel mounted on

a small grinder. Rowmark uses a compound called Novus® Plastic Polish that can help expedite the process and leave a smoother edge on the finished piece. Be forewarned: buffing will ruin any flame polishing already done to a piece. It *will not* improve on the quality of the flame polishing process.

Regardless of which method you use, please be sure to use the appropriate safety precautions (heat-resistant gloves, safety goggles, breathing masks, etc.) before beginning a polishing project, and work in a well-ventilated area.

While polishing the edge of a material will give you a great, finished look, it won't be able to fix engraving errors in the sheet. Make sure you begin working with a cleanly cut edge to begin with, and the polishing will add the finishing touch.

Should you need additional information on plastic polishing, please contact our Technical Support department at inquiries@rowmark.com or 1-877-ROWMARK.

Rowmark acrylic-based products:

ADA Alternative

ColorCast Acrylics

Earthtones

FlexiBrass® & FlexiColor®

Granites Deluxe™

Lacquers

LaserMark®

LaserMax®

Multigraph

Outdoor Weatherable Metals

Reverse LaserMark®

Slickers

Textures

Ultra-Mattes Front-Engravable

Ultra-Mattes Reverse-Engravable

*Note – Rowmark is not affiliated with and does not receive any compensation from Novus® Plastic Polish and provides this recommendation only as a courtesy to our customers.