

# Edge Finish Guidelines for Customers

**SCRAPING** Scrapers are sharp tool steel devices used to eliminate machining marks and ease sharp edges (See Fig. 10).

**SANDING** All methods of sanding will result in the removal of machining marks, and produce a matte finish. Variety of choices include of hand, palm, random orbit, disc, belt, or drum sanding. Like sanding wood, work from coarse to fine paper. Use light pressure, and keep the part or sander moving to avoid heat buildup (See Fig. 11). After sanding, the edge is ready for buffing or flame polishing.

**FLAME POLISHING** A hydrogen-oxygen torch, with a #4 or #5 tip, gently melts the sanded or machined edges of sheet, providing a smooth glossy look. Low line pressures create a torch flame that is 2-3" long, bluish, nearly invisible, and narrow enough to prevent overshooting onto the face of the acrylic sheet (See Fig. 12).

Remove the masking, and guide the torch along the edge at a rate of approximately 3-4" per second. As with other cutting and machining processes, avoid excessive heat build up. Bubbles, stress, and crazing will occur if the flame is moved too slowly. Do not cement a flame polished edge.

**BUFFING** A well machined edge is required to polish without additional sanding. Preferably, use stationary machines with polishing wheels dedicated to buffing acrylic. Wheels 8-14" diameter, 2-3" wide, of bleached muslin with bias strips, run cooler than ones fully stitched. With light pressure, keep the sheet moving across the wheel to prevent excess heat buildup (See Fig. 13).

Finish quality depends on the polishing compounds used. A medium cutting compound will result in a good finish in one operation. A high luster finish can be achieved by first applying a fast cutting compound, to remove machining and sanding marks, followed by a fine compound on a finishing

