

# **SPECIFICATIONS FOR ALUMINUM SIGN BLANKS**

The following specification shall apply to aluminum blanks incorporated as an integral portion of each finished sign, or intended for incorporation into finished sign by city personnel.

All cutting, punching of holes, leveling, and straightening of the blanks shall be performed prior to degreasing and etching operations.

Sheet aluminum shall be a minimum .080 (.203 cm) thickness, with measurement uniform throughout the blank.

Aluminum shall conform to ASTM designation B209, of either 5052-H38, or 6061-T6 alloy.

Aluminum shall be free of corrosion, white rust, and dirt, and shall be degreased by either of the following methods:

Vapor degreasing. Blank shall be completely immersed in a saturated vapor of trichlorethylene or perchlorethylene. All trademark printing shall be removed using either lacquer thinner or controlled alkaline cleaner, then entire blank rinsed thoroughly with running water, or Alkaline degreasing. Blank shall be immersed completely in a tank containing alkaline solution controlled and titrated to the specification of the solution manufacturer. Immersion time shall depend of the amount of dirt for removal. After immersion, the blanks shall be thoroughly rinsed with running water. Blanks shall require etching by either: Acid etch, using a six percent to eight percent (6% to 8%) phosphoric acid solution @ 100 degrees F (38C). After blank is well etched it shall be thoroughly rinsed with running water, then rinsed additionally through a hot water tank or Alkaline etched. Process shall well etch pre-cleaned blanks in an alkaline solution controlled by titration.

Regardless of the methods employed for degreasing and etching, the blanks shall be dried with forced air-dryer.

Fabrication to a finished sign blank , including a hole pattern, shall be done in such manner as to assure that finished blanks shall be free of buckle, crevice, warp, dent, cockles, burrs, and/or other irregularities.

Finished blanks shall have an allowable variation from the plane of no more than .04" (.016cm) per lineal foot of blank surface.

All sign blank corners shall be radiused.