Using Milestone Decals on FUSED GLASS - GLASSWARE

Milestone decals are printed on paper that is coated with a water-release adhesive made of dextrin. A layer of wax paper protects the decal. Store decals in a cool, dry place when not in use. Milestone decals can be used on a wide range of glass types from hot glass fusing to low temp drinkware and borosilicate.

Applying

1. **Prepare the Decals**
   Remove the wax paper layer and carefully cut out the decal. Place any unused decals aside to keep them dry.
2. **Clean the Surface**
   Thoroughly clean the glass with warm water. Avoid drying with towels or paper, as these can leave lint on the surface.
3. **Soak the Decal**
   Submerge the decal in a bowl of lukewarm water until it begins to uncurl (approximately 30 seconds). Larger decaks will require longer soak time.
   TIP: Remove the decal from the water before it floats off the backing paper. If it does, you might accidentally apply it upside down, which will prevent proper adhesion. Use the decal image on our website to verify the correct orientation if necessary.
4. **Position the Decal on the Surface**
   Place the decal (still attached to its backing paper) onto the clean glass. Allow it to sit for 1–2 minutes to soften the glue underneath. The decal should release easily from the backing paper.
   If the decal doesn't release, re-wet it briefly and let it rest for a bit longer to allow the glue to soften. Larger decals may require more time.
   TIP: Blank areas of the decal sheet can be soaked and used to supplement the glue for better adhesion.
5. **Apply the Decal**
   Gently slide the decal from the backing paper onto the desired position on the glass, ensuring the glue side faces down (similar to a sticker, not a temporary tattoo).
   Using a small squeegee (or a rubber/silicone spatula), press and push out water from the center of the decal to the edges in a clockwise motion. Follow this by repeating the process with increased pressure, using a lint-free cloth to remove all water and air bubbles from beneath the decal.
6. **Secure the Decal**
   Once applied, the decal should not move. Clean any watermarks from the surface with a damp, lint-free cloth. Allow the decorated item to rest and dry completely before firing.

Safety

The decals should be fired in a well-ventilated room, preferably one that ventilates to the outside.

Firing

General considerations:

- Make sure the kiln is well-ventilated up to 1000°F(535°C)
- Decals should be fired very slowly below 500°F (260°C)
- The non metallic decals are somewhat translucent. To help keep their density, it is best to use them on white or light glass.
- For capping fused pieces with clear glass, pre-fire the to the bottom glass to 1240-1300°F (670-700°C) the re-fire a second time with the clear cap to 1370-1470°F (740-800°C).

Uncapped Fused Decal Firing (decal not covered with glass):

Rate	Temperature	Hold
80°F (30°C)/hr	250°F (120°C)	:20 min.
250°F (120°C)/hr	700°F (370°C)	:15 min.
1000°F (540°C)/hr	**1240°F (670°C) to 1300°F (700°C)**	:10 min.

Anneal according to the needs of the piece.

Capped Fused Decal Firing (decals sandwiched in glass):

Rate	Temperature	Hold
80°F (30°C)/hr	250°F (120°C)	:20 min.
250°F (120°C)/hr	700°F (370°C)	:15 min.
1000°F (540°C)/hr	**1370°F (740°C) to 1470°F (800°C)**	:30 min.- 3 hr.

Anneal according to the needs of the piece.

Drinkware Decal (Low Temperature)

Rate	Temperature	Hold
80°F (30°C)/hr	250°F (120°C)	:20 min.
250°F (120°C)/hr	700°F (370°C)	:15 min.
1000°F (540°C)/hr	**1150°F (620°C) to 1200°F (650°C)**	:10 min.

Glow Decal /Borosilicate Firing (Leaded)

Rate	Temperature	Hold
80°F (30°C)/hr	250°F (120°C)	:20 min.
250°F (120°C)/hr	700°F (370°C)	:15 min.
600°F (315°C)/hr	**1080°F (580°C)**	:15 min.