Surface preparation will give you the strongest bond.

Depending on the substrate, surface prep may include removal of oils, greases, paints, oxide films, dust, mold release agents, rust inhibitors, or other contaminants. The amount of surface preparation needed will likely depend on the performance you demand from your adhesive and the cost of surface preparation.

There are three primary ways to prepare the surface. They may be used alone or in combination for greater effectiveness.

1) **Degreasing.** Use solvents such as acetone, isopropanol, or proprietary cleaners including hot alkali solutions. Surfaces should be free of rust, paint, mill scale etc. Greases, oils, mold releases etc. can generally be removed with EPA-approved environmentally safe organic solvents or proprietary cleaners.
2) **Chemical cleaning or etching.** Ideal for preparing metals for superior adhesion.
3) **Abrasion.** Helps remove mill scale, oxide films, and some anti-rust treatments. Paints and oxide films can be removed by sanding or sandblasting followed by solvent cleaning.

TRY THIS… A simple test for surface cleanliness is to place a few drops of water on the area to be bonded. If the water spreads in a continuous film, then the surface is sufficiently clean. If the water beads up, surface preparation may be needed to achieve the strongest bond possible.

Time to remove the liner/backing and apply your identification graphic.

Exposing the adhesive to the open air can attract airborne contaminants to the adhesive and may reduce the performance. As a rule, the less chance for contamination, or the less time the adhesive is exposed, the better the bond will be. That's why we recommend that the liner be removed immediately before application.

Why doesn't the adhesive feel sticky?

Some high-performance acrylic adhesives tend to be firm and dry to the touch. They are designed to bond materials other than skin. The natural oils and moisture of skin can vary from person to person and affect the "thumb appeal" or how sticky the adhesive feels to the touch.

Check the temperature before you apply.

Temperatures inside your manufacturing facility, service centre or product warehouse can vary depending on the season, sunlight exposure, and heat generated by equipment. For the best results from your adhesive, it's important to apply your nameplate, label or decal when the ambient (air temperature of the environment) and substrate surface temperatures are between the minimum and maximum application temperature specified for that adhesive.

Allow time for the adhesive to bond.

When you apply your nameplate, label, or decal to the substrate, the time it takes to bond will vary depending on the adhesive. Consider this example of a foam tape adhesive's bond strength:

- 60% bond strength immediately after application.
- 75-80% after 24 hours.
- 95%± bond strength achieved after 72 hours.
- The bond will continue to build over time.

Allow time for the adhesive to cure properly at the recommended temperature before moving the product for shipment or into a warmer or colder storage environment.

Application tips

- Try a test application to perfect your application technique.
- If the surface has been recently prepped or cleaned, be sure it is completely dry.
- Use a squeegee for smooth, even application of large labels or decals.
- A masking tape hinge(s) may be used to hold a large nameplate or decal in the proper position before applying pressure to make it stick.
- Firm, even pressure over the entire graphic is the key to achieving a good bond.
- A rolling action while applying pressure helps avoid air entrapment behind the adhesive.
- A soft cloth or cotton gloves used when applying pressure-sensitive labels will prevent skin oils from smearing the finish of high gloss graphics.
- To prevent edge lifting, smooth from the top down or centre out, giving extra attention and pressure to the edges.
- On uneven surfaces or over rivets, a heat gun or hair dryer can warm the label or decal to help it conform to the surface irregularity.
- Surface contamination is the most common reason for poor adhesion.

Storage, Cleaning & Maintenance

Proper storage and maintenance of your nameplates, labels, or decals before and after application will help ensure they give you the performance you expect.

Store unused identification graphics in a temperature-controlled environment (72°F±5°) that is free from excessive airborne dust and out of direct sunlight. Apply your graphics within the specified shelf-life.

- Rolls of graphics inside a shipping carton should be stored horizontally; rolls, which have been removed from the shipping carton, should be suspended horizontally via a rod or pipe through the roll core.
- Sheets and individual graphics can be stored either flat or stacked.

Use a cleaning solution with a pH range of 3-11 (within mild acid or mild alkaline limits). The solution should be non-abrasive and free of strong solvents. Spray or wipe on solution with a soft brush, rag, or sponge over the entire surface of the film to be cleaned. Rinse with clean water and allow to air dry.

Please note: These recommendations are intended as a source of general information only and are given without a guarantee. You should also independently test cleaning agents and methods, prior to use, to determine their suitability.