



ARLON

## ▶ Vehicle Wrap Tips

These tips are relevant for most cast 'bubble-free' films applied to vehicles, but have a specific focus on Arlon's films designed for vehicle wrap applications. Please follow these tips for assurance that you are successful the first time.

### Clean

Make sure you thoroughly clean all areas; consider a more aggressive cleaner such as the Autoglym range as many new vehicles have a silicone coating. This is particularly important in channels and corrugations or areas where the graphic may be tucked or wrapped. Then finish with IPA (isopropyl alcohol) and make sure the surface is completely dry.

### Pressure

When using bubble-free vinyl, applications require even more squeegee pressure to ensure the adhesive makes a firm bond.

### Heat

Depending on the ambient temperature there may be a need to use a little heat to soften the film when stretching it around complex curves and recesses. This is very critical in colder climates, for example, southern states during winter. In the colder months some heat will need to be applied to the film during the application to make it pliable. Also, the panels of the car will need to be warmed to stop the film from becoming brittle through contact with the vehicle.

### Post Heat (Critical)

Although all printers are equipped with preprint and postprint temperature controls which are meant to enhance ink receptivity, these are effective. It should be remembered that these heat from the back (through the release liner, adhesive and back of the film) and result in raising the film face temperature only a few degrees. The printing areas should be in clean and temperature controlled area and film should be delivered to the printer at comfortable room temperature about 95°C - 120°C or 203°F - 248°F. These steps assure that the heaters can do their job of preheating the vinyl and subsequent drying of the print. At much higher or lower temperatures print defects such as banding and, high dot gain can occur.

### More Pressure

Through the whole process of installation you should always be aware that bubble free film requires more squeegee pressure than non-air egress adhesive films. While cooling after post heating it is absolutely essential to continue application pressure, as it will assist in the adhesive getting a more comprehensive bond to the panel. Squeegee the graphic edges, overlaps and seams using firm pressure.

### Allow to Harden

After application, the adhesive must be allowed to harden before going into service. The absolute minimum time would be 24 hours, but it is recommended for it to be longer and out of the sun, in a temperate environment. If you send out the film before the adhesive has reached a solid bond level, the sun will soften it potentially causing it to lift or shrink.

**TIP:** Once you have post heated the film and left it to harden, DO NOT go back hours later and post heat it again. This will simply break down the adhesive hardness and make it fluid again, while destroying all your hard work!

## Tips on Cutting

If the above instructions are followed you do not need to cut the film, as post heating to above 120°C re-melts the film into its curved shape and reduces internal stress.

Following these key points when using Arlon's vehicle wrap films will assist you in achieving success with vehicle graphics.

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