



ARLON

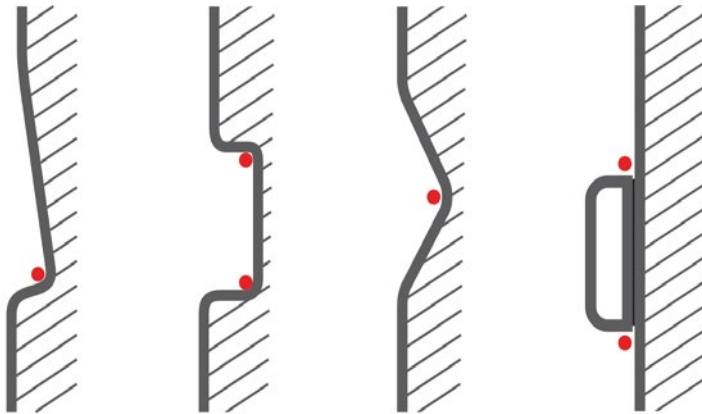
► Installation Technique for Channels

I. Shifting Film Tension and Risk Areas

This technique should be used whenever cast film is stretched, e.g. car wrapping or in signage applications. Not only does this technique prevent the film from lifting or coming off in “risk areas”, it offers other advantages such as better and more consistent appearance, and less risk of vinyl lifting in the high stretched area.

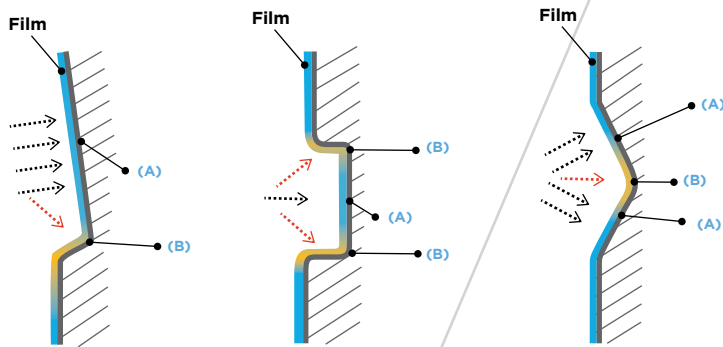
Film Tensions & Risk Areas

RISK AREAS IN DIFFERENT GROOVES



• The red circles represent the groove's most critical risk areas, where the film usually is pushed in. These are pre-eminently the places where the film will lift.

WRONG FILM APPLICATION & FILM STRETCHING



.....> = Is often applied and pushed in first. (A) Here the film will stretch the least.

.....> = After that, using heat, the film is pushed in completely (B)

Yellow = The areas with the most film tension (and film stress) are marked with yellow. Here the film is stretched the most.

Blue = The areas with the least film tension (and film stress) are marked with blue. Here the film is stretched the least.

Grey = Vehicle substrate



When wrapping a car, you will always have to deal with sharp edges and deep grooves where normally the film would thin out and could discolor. This simply can be solved by shifting and spreading the film tension.

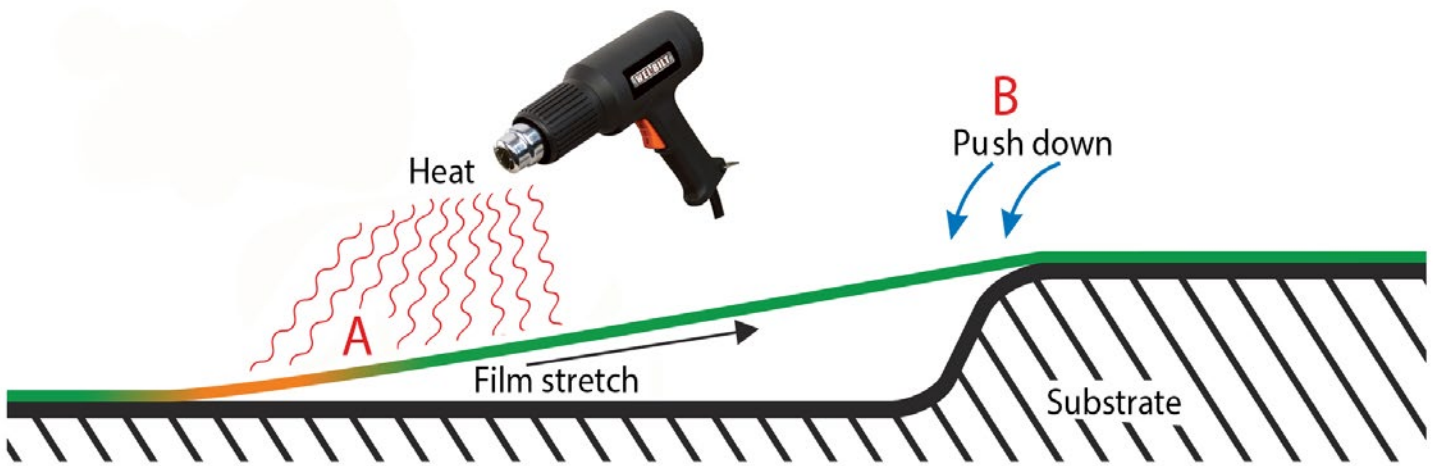


Why Shifting Tension?

There are several reasons; the most important one is the possibility that the film could lift out of a deep groove or channel, where the vinyl has been stretched during application. Moreover, the film could be stretched in such a way that the color or texture in the channels and grooves can visibly change.

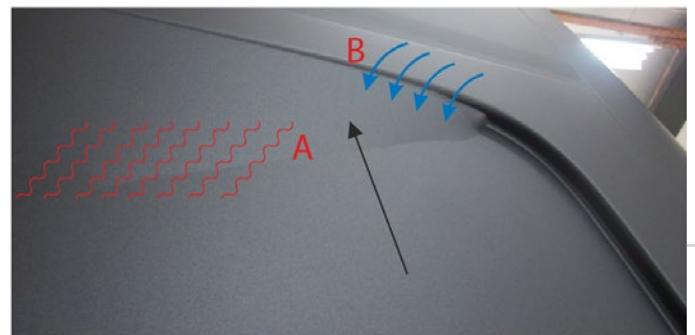
How Does it Work?

Heat the film in a place where it can lay flat and without tension (A). This is where the film can be stretched, whereas film should not be stretched into any groove or channel. Now push the film evenly into the groove (B). When necessary, reheat the film in the area (A) and continue to push the film down into the area (B), until the groove is wrapped. Then, squeegee quickly and firmly to secure the film into the groove, then squeegee quickly and firmly in area (A) to secure the application. Notice that the channel film is completely unstressed and without tension. It will not lift here if applied properly using this technique.



RISK AREAS

Risk areas are those places on a surface that are risky to apply and where film can easily lift or fail. These include channels and grooves. Film can easily come out of these areas over time, and will have the appearance of a bubble.



APPLYING FILM IN DIFFERENT KINDS OF CHANNELS

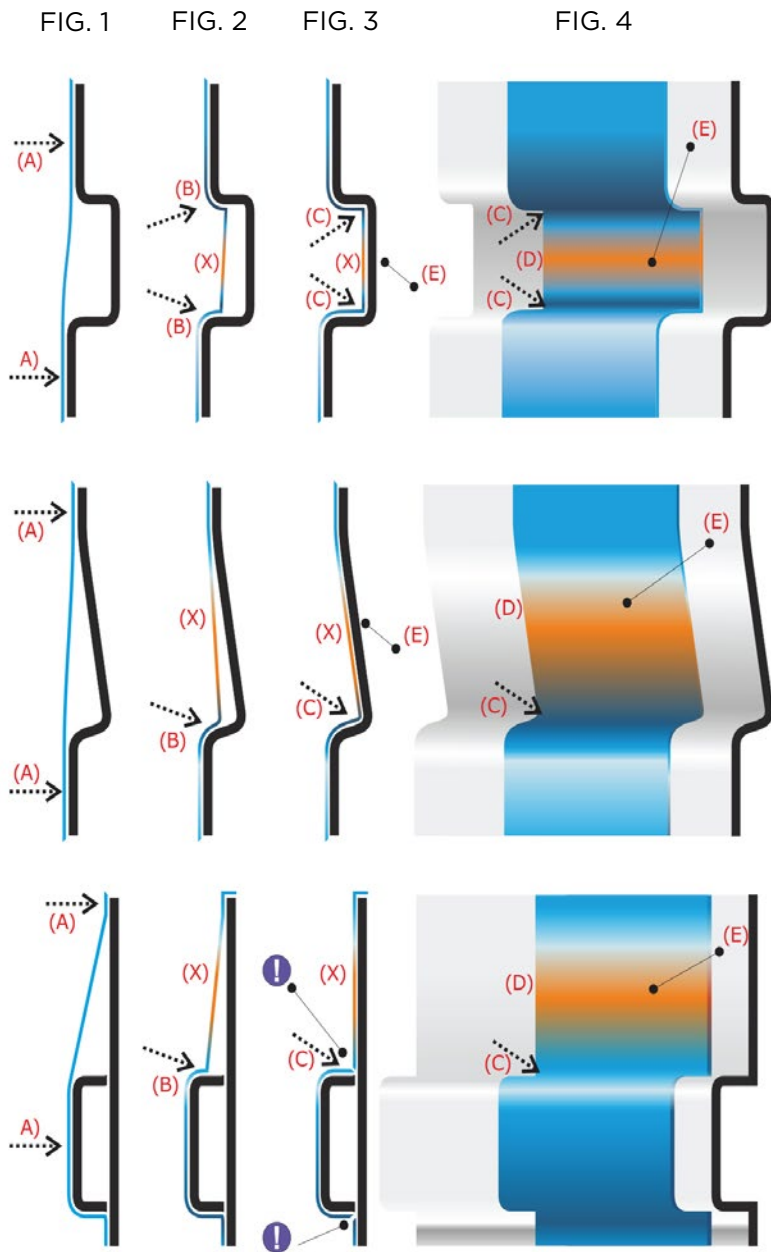


FIG. 1: The film should be applied on the flat surface of the substrate initially (Area A).

FIG. 2: Begin applying the film into the channel area by heating the area labeled (X) and start installation from the edges (B) and moving inwards towards the channel. This will ensure that the film will stretch in a different area (X) and cause less stress on the vinyl.

FIG. 3: Continue applying pressure at the edges (Area C) and working inward until the vinyl makes contact with the flat area of the channel.

FIG. 4: The benefit of installing the vinyl into the channel using the above recommended method is that the stress is minimized in the corners of the channel (Area C) and contained to the flat portion (Area E).

Finishing: To ensure the graphic remains in the channel apply post heat after the installation is complete.

.....➔ Where to apply pressure.

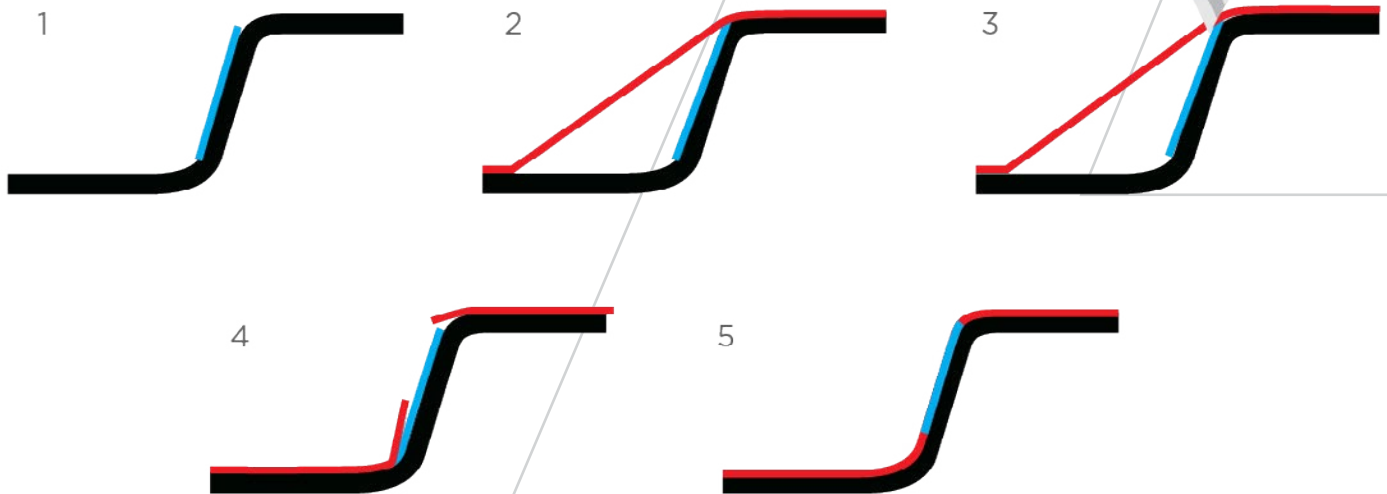
(X) Where to apply heat.

●— Where the stress points will be.

II. How To Install Using Inlay

Applying cast vinyl into channels via the method described below is recommended and covered by the Arlon Fleet Warranty. However, this method requires absolute consistency on the applicator's part, so it is highly recommended that an individual who is not confident using this method should practice and gain consistency prior to doing a real installation. It is normal to have 15% of the channel area to lift during the service life of the product, as specified in the warranty. All channels should be trimmed while bridged and then inlaid for a fully warranted application.

- 1) Inlay a strip of vinyl
- 2) Bridge the channel
- 3) Carefully cut along the edge of the channel
- 4) The inlay covers the area that would show the color of the vehicle
- 5) Complete the application



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