ARLON

INSTALLATION GUIDE

Premium Colour Change with FLITE Technology®

Technical Services
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EMEA

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Reading and following this Installation Guide will ensure you as the applicator are equipped with best practices when applying Premium Colour Change.

APPLICATION TOOLS

- Heat Source(s):
  - Heat gun
  - IR heater
  - Propane torch
- Squeegees
- Lint-free application gloves
- BodyGuard Knife
- Knifeless Tape
- 9mm snap-off blades
- IR Thermometer
- Magnets
- Masking Tape

PREPARATION

BEST PRACTICES	BENEFITS
1. ***Vehicle should to be delivered "street clean"*** First, the vehicle needs a basic wash before shop drop-off and then, the shop will clean the vehicle in detail.	A "street clean" vehicle helps maintain a clean zone in the shop and prepares it for a more detailed cleaning prior to wrapping.
2. ***Install in a clean and controlled environment*** Surface temperature: 10°C – 38°C optimum Relative humidity: <85%	Climate control creates optimal conditions for an efficient application. Regulating humidity will prevents moisture build-up on the surface that may hinder adhesion.
3. ***Tape off or remove hardware*** Side mirrors, door handles, auxiliary turn signal lights, third brake lamp, vent trims, badge and emblems, roof molding and railings, antenna, etc.	Removing hardware allows for a thorough cleaning of the edges and gaps. Eliminating or taping off protruding components increases efficiency and minimizes the risk of overstretching.
4. ***Remove Protective Film prior to installing*** Gloss colors come with a clear film layer which needs to be removed on a flat table prior to installation.	The Protective Film is used to protect the film's gloss while the roll is stored horizontally and during shipment. The Protective Film is not flexible, so it must be removed on a flat surface before install. Removing the Protective Film on a vehicle can cause static to build which will attract dust to the surface.

PRECAUTIONS	BENEFITS
Arlon does not warrant applications on aftermarket paint or damaged paint.	Aftermarket or damaged paint will hinder adhesion and may peel off during installation or upon removal.
Avoid wrapping a freshly painted car. Only apply film after paint is fully cure according to the paint manufacturer's specifications.	If the surface is wrapped before the paint fully cures, bubbles will form as the paint outgasses and may also lead to adhesion failure.

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BEST PRACTICES	BENEFITS
1. ***Apply with a buffered squeegee*** Use the unbuffered side to work out sharp wrinkles. Different squeegee shapes and hardness also depends on the installer's preferences.	A buffer prevents squeegee scratches on the film. See *WrapItRight® Video: Basic Squeegee Skills*
2. ***Squeegee with firm pressure and overlap strokes*** Harder squeegees allow for a more direct transfer of force. Overlap strokes by about 50% of the squeegee's width.	Good squeegee technique ensures maximum surface coverage and adhesive contact.
3. ***Place the seams properly with at least 10mm overlap*** • For vertical overlaps, start with the rear panel • For horizontal overlaps, start with the bottom panel	The seam edges will be less likely to fail or get damaged because they will be facing away from the elements.
4. ***Use heat to stretch the film*** Heat Range: 40°C - 50°C.	Heat softens the film and allows it to stretch and conform to curves and channels. The upper temperature limit prevents the film from being too soft which may lead to color shift, and edge curl.
5. ***Distribute the stress on curves and channels*** Heat a larger area and gently stretch in multiple directions.	Spreading the stretch over a larger area lowers the stress on small areas, thus reducing the risk of popping or edge curling. See *TIP 38: Installation Technique for Channels*
6. ***Clean the edges of the applied panel with diluted alcohol*** A 70% dilution of alcohol in water is recommended.	A quick wipe on the edges will remove some skin oils or other contaminants and maximize the adhesion at the overlap.

PRECAUTIONS	BENEFITS
When considering the amount of stretch necessary, avoid installing both concave and convex curve profiles with the same approach.	Convex curves such as bumpers and mirrors will require Pre-stretch and Shrink Method. Concave curves such as channels require shifting tension to the flat areas or use the *Deep Channel Hack*

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FINISHING

BEST PRACTICES	BENEFITS
1. ***Avoid stretching on areas that will be cut*** Edges, wheel wells, seams, overlaps & channels.	Use a technique that will minimize stretching the film where it will be cut to avoid premature failure such as edge curling, lifting, or bottle-capping.
2. ***Post-heat before trimming*** Use temperatures between 95°C and 105°C for edges, seams, and other stretched areas. Post-heating is a time consuming yet vital step of the wrap process. Work in small sections and reapply pressure.	Post-heating softens the adhesive to increase flow; expose trapped air and unapplied areas; anticipate the hottest temperature in can be exposed; and relieve some stresses in the film.
3. ***Wait for 15 minutes before trimming*** Let the film cool and stabilize before trimming and leave 3 mm of overhang to properly tuck the film.	Allowing the film to cool and stabilize before cutting ensures better adhesion on the edges.
4. ***Overnight dwell time*** If possible, let the vehicle dwell overnight in the shop prior to delivery to customer.	Letting the vehicle dwell in the shop allows the adhesive to build before being exposed to the elements. In case of a missed area or edges were improperly installed, it can be easily fixed without being contaminated by outside elements.

PRECAUTIONS	BENEFITS
Avoid trimming while the film is warm.	Warm film is too soft to make a clean cut and yield jagged cuts.
When post heating with high temperatures, do not just heat the film without reapplying pressure.	Reapplying pressure ensures maximum adhesive contact by increasing the adhesive flow and closing air egress channels.
Avoid cutting directly on paint.	Deep cuts on paint are vulnerable to peel off paint when the graphic is removed.
Avoid overstretching on the corners.	Corners converge at a small area and does not have enough adhesive to hold a high stress area in place.

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MAINTENANCE

BEST PRACTICES	BENEFITS
1. ***Regularly wash a wrapped vehicle*** Hand washing is preferred but if using an automated carwash, use the touchless option.	Wash a wrapped vehicle regularly to ensure its longevity. Touchless car wash minimizes the risk of scratches, chips, swirls, and edge lift compared to the brush-type cleaning method.
2. ***Use precautions for power washing*** The nozzle pressure should not exceed 1,300 PSI (90 Bar). Keep the tip at least 1.5 m away from the vehicle and the spray angle of no shallower than 60° from perpendicular.	See *TIP 46: Fleet Graphics Post-Care & Cleaning Instructions*

PRECAUTIONS	BENEFITS
Allow 2-3 weeks to pass from the installation date before washing the vehicle.	Waiting before washing prevent the film from being disturbed as it approaches its maximum adhesion.
Always follow the manufacturer's recommended dilution ratio of detergent and water.	An overly concentrated solution can damage both the adhesive and the vinyl.

REMOVAL

BEST PRACTICES	BENEFITS
1. ***Use heat when removing the wrap*** Heat the film to 30°C - 65°C before peeling it off the vehicle.	Removal becomes easier because heat softens the film to temporarily lowers the adhesive's shear holding force and at the same time, reduce the risk of tearing.
2. ***Peel the film with safety in mind*** Remove the film at a slow and steady pace at an angle no greater than 90°.	There is personal safety risk and potential damage to the vehicle when peeling off a wrap. If the film suddenly tears, the installer can fall off a platform and/or damage the vehicle. A slow and steady pace is required as a sudden change in peeling force may cause layer separation, delamination and/or film tearing. See *TIP 44: Fleet & Vehicle Wrap Removal*