

# Cast Cut Graphics

# **Standard Product Warranty**

- Series 2100 High Performance
- Series 2400 Reflecta-Cal
- Series 2500 Translucent Cast Vinyl
- Series 5500 Diffuser Cast Vinyl
- Series 5570 Blockout Cast Vinyl
- Series 5590 Dual Color Cast Vinyl (Unprinted)

#### I. GENERAL STATEMENT

Arlon warrants Cut Graphic vinyl as follows:

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PRODUCT	DESCRIPTION	WARRANTY
SERIES 2100 / 2200	2-MIL, HIGH PERFORMANCE CAST VINYL	6 - 10 YEARS*
SERIES 2400	REFLECTA-CAL	7 YEARS
SERIES 2500 / 2550	2-MIL, TRANSLUCENT CAST VINYL	7 YEARS
SERIES 5500	DIFFUSER CAST VINYL	7 YEARS *
SERIES 5570	4-MIL, BLOCKOUT CAST VINYL	7 YEARS
SERIES 5590	4-MIL, DUAL COLOR CAST VINYL (UNPRINTED)	7 YEARS

<sup>\*</sup> See PIB for durability rating by color

During the stated warranty period, Arlon Cut Graphic vinyl should reveal no appreciable deterioration such as cracking, blistering, delamination, peeling or excessive color loss when observing the graphic at its intended viewing distance. This warranty is contingent upon a vertically mounted installation and usage of Arlon recommended application procedures, including the conditions listed below. Test results show a significant decrease in durability when films are exposed other than vertically. Additionally, the warranty period is limited to normal environmental conditions not including desert, tropics, and locales of extreme environments and pollutants. Warranty excludes stainless steel and is limited to Series 2100 with standard permanent adhesive for marine applications. Vinyl should not be installed over latex paint.

Slight changes in color, loss of surface gloss, minor chalking, and slight lifting at graphic edges or over non-uniform surfaces are typical effects that occur during normal environmental exposure and would not be cause for claim of failure.

Additionally, this warranty would extend to manufacturing defects, shortages in roll length, shipment of wrong product, and mislabeled material.

Please refer to the appropriate Product Information Bulletin for typical product performance specifications. (Series 2100 colors in the 600 range may not be used for marine applications.)

<sup>❖</sup> Recommended with Arlon Series 2500 Translucent Vinyl

#### A. CONDITIONS AND USAGE FOR FLEET APPLICATIONS

#### (Series 2100 and Series 2400)

- Installation techniques conform to instructions provided in the Arlon Installation Handbook and the Arlon Technical Installation Publications (TIP's). Most particularly, there must be no excessive stretching over non-uniform surfaces and vinyl should be properly heated and pressed into place with a rivet brush when installing on distorted surfaces. It is imperative to make proper surface contact and remove film memory stress.
- Areas of incidental chemical and fuel contact are protected with clear coatings along the top sections of graphics.
- Installation is on new, painted aluminum or fiberglass trailers with all rivets and panel seams degreased, clean and thoroughly dry. All paint or gel coats must be thoroughly cured prior to graphics installation. Arlon does not recommend application over stainless steel.
- If Series 2100 (applies to 6xx color range only) with positionable adhesive is installed on glass surfaces, cleaners that leave residues must not be used.
- Power washing must be done with care. Nozzle pressure should not exceed 1300 PSI and water temperature should be maintained below 140°F (60°C). It is recommended that the angle of spray be no shallower than 60 degrees from perpendicular. Detergents without harsh chemicals should be blended at proper ratios followed by a fresh water rinse to remove all residues.
- The finished graphic may be shipped flat or rolled. In roll form, the finished graphic should face out and should be wrapped around a core of at least five inches (13 cm) in diameter.
- Series 2100 (applies to 6xx color range only) positionable adhesive will remove cleanly from the substrate up to twelve months after application. Removal can be facilitated with the use of a heat gun.

# B. CONDITIONS AND USAGE FOR FLEXIBLE SUBSTRATE APPLICATIONS

#### (Series 2500)

- This warranty pertains to Arlon Cut Graphic vinyl applied to Arlon's Flexface® FX. Other substrates require written approval from Arlon's Technical Service or Marketing Department.
- Prior to installation, all substrates must be cleaned with a cloth saturated with a 1:1 solution of alcohol and water to ensure that dust and other contamination is removed.
- When completed signage is transported or stored, graphics are to be rolled to the outside of the wrap. Should the signage be "two sided", the rougher side of the fabric is to be rolled to the outside of the wrap.

# C. APPLICATION TO ACRYLIC AND POLYCARBONATE SHEETING (FLAT OR FORMED)

#### (Series 2500)

- To avoid outgassing induced defects, such as bubbles in the vinyl, protective masking on acrylic and polycarbonate substrates is to be removed and appropriate ventilation or drying prior to installation provided.
- When overlays are applied, sufficient time or heat is applied to the most underlying film to allow it to completely dry and outgas before the next layer is applied.
- Installation may be on flat sheets prior to forming or on previously formed faces.
- Forming is done only after all installed graphics are completely dry when wet application has been employed.
- Forming temperatures should not exceed 360°F (180°C) or an 8-minute dwell.
- When fabricated as a sign, excessive heat development in the light box is minimized with at least one vented opening at the side or bottom of the box construction.

### D. WET APPLICATION TECHNIQUE FOR FLEXIBLE AND RIGID SIGN FACÉS

#### (Series 2500)

- If using a wet application technique use only commercially available wetting solutions, such as RapidTac or Splash wetting solution. Arlon must approve any other wetting solution.
- If the sign face is polycarbonate, then it must be adequately dried before vinyl installation. Otherwise, bubbles due to outgassing will form between the sign face and vinyl. Drying should be accomplished by exposing sheeting at 150°F (66°C) for 2 hours.
- After installation is initially accomplished, sufficient time for wetting solution drying must pass before application tape is stripped or de-bonding will take place.
- Once application tape has been removed, all vinyl should be checked for good adhesion and if needed, characters should be re-burnished around the edges with a rivet brush to ensure good adhesion contact.

#### E. CONDITIONS AND USAGE FOR SCREEN PRINTING

#### (Series 2100 (applies to 6xx color range only))

• Printing Ink Compatibility and Durability is the responsibility of user. Printing inks recommended by Arlon for use on Arlon Cut Graphic HP are:

NAZDAR: 3500 Series

9700 Series

PP Series Plastics Plus

Sericol Duracal: PY

UV ink with Nazdar 3500 top coat

Coates: FLX Opus

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- As indicated by most ink manufacturers, it is suggested that ink be tested prior to production runs. Printing
  instruction from the respective ink manufacturers should be observed. For extended performance the
  manufacturers' recommended clear coat.
- Vinyl Conditioning: for best lay flat characteristics, allow vinyl to stabilize to shop humidity and temperature prior to printing. In high humidity environments, it is recommended that sheeted product be placed on racking either singling with liner side up or in pairs (face-to-face) and remain in the ambient environment overnight.
- For solvent based inks, jet drying is recommended over rack drying, as extended solvent contact with vinyl film will result in excessive edge shrinkage. It is critical to make sure inks are fully dried prior to subsequent processing.
- Processed film has a shelf life of 1 year with total shelf life of a graphic before and after processing of 2 years. The storage environment must be free from dust, excessive sunlight, heat (50°F to 80°F; 10°C to 27°C) and moisture (30 to 60 RH). When not in use, vinyl should be returned to its original packaging.
- The finished graphic may be shipped flat or rolled. In roll form, the finished graphic should face out and should be wrapped around a core of at least 5 inches (13 cm) in diameter.
- Graphics should not be exposed to gasoline or other solvent vapor spills.

# E. CONDITIONS AND USAGE FOR SCREEN PRINTING (CONTINUED)

• If the stated durability of an approved allied component (ink, toner, overlaminate) differs from that of Arlon material, the finished graphics will be warranted for a period equal to the stated durability of the least durable component.

#### F. CLAIM REMEDY

In the event of a warranted failure, as specified above, Arlon reserves the right of inspection. Arlon will, at our option, replace defective materials or refund purchase price thereof. All documentation and administration will be handled through the formal customer service complaint system at Arlon. Arlon Terms and Conditions apply.

For graphics installed in desert, tropical, intense sun or high environmental pollution regions, durability ratings will be prorated by 60%.

To receive remedy, Arlon or the local distributor must be notified of a claim within 30 days of vinyl failure. Date of installation, material lot number, installation procedures, substrate, and environmental conditions must be supplied with the description of failure.

The customer assumes responsibility in determining the product suitability for his intended end use. Seller's and manufacturer's only obligation shall be to replace such quantity of the film proven to be defective. Neither the seller nor the manufacturer shall be liable for any injury, loss or damage direct or indirect, arising from the use or inability to use these products. See Arlon's Terms and Conditions.

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