



# CLEAR FOCUS Imaging, Inc.

**CREATING A NEW WORLD  
OF ADVERTISING SPACE!**



## **ONE WAY VISION™ FILM FOR WINDOW GRAPHICS**

### **PRODUCT INFORMATION GUIDE**



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## **Benefits of CLEAR FOCUS One Way Vision™ Films**

- Allows you to diversify your printing capabilities and expand your customer base for greater profitability.
- Offers cutting-edge window graphics technology that gives your customers a competitive edge.
- Creates new, innovative media space without obstructing the view.
- Allows premium ad placement: can be placed on glass doors at eye level; on buses to create “moving billboards”; or on high-rise building windows for high-impact advertising.

## **Common Features of CLEAR FOCUS One Way Vision Films**

- 6-mil interior-mount & 8-mil exterior-mount polyvinyl chloride (PVC) — among the thickest window graphics films in the industry.
- Up to 50% of the film is perforated to achieve the desired image resolution and one-way visibility.
- Pressure-sensitive adhesive with solid release liner.
- Reduces heat and glare from the sun.
- Enhances privacy and security.
- Easy to print and install.

Where:

Exterior-mount window graphics for buses and other vehicles, POP, retail and commercial signage, corporate identity and a wide variety of other applications.

How:

Designed specifically for use with the solvent-based Océ Arizona 180 printer.

## **ImageVue™ Exterior-mount Film**

What:

8-mil black/white composite PVC with 1.5-mm perforations and a solid release liner.

Perforation pattern: 35% perforated, 65% retained.

Standard rolls: 54" x 100' [137 cm x 30.48 m]

Master rolls: 54" x 1000' [137 cm x 304.8 m]

Custom sizes available by special order.

Where:

Exterior-mount window graphics for decals, POP, retail and commercial signage, corporate identity and a wide variety of other applications. Not usable for vehicle window graphics because of reduced visibility.

*ImageVue's 65/35 perforation pattern provides more print surface area, making it ideal for small-format window graphics and other graphics requiring small detail and text, and finer image resolution.*

How:

Screen printing, wide-format digital imaging (e.g., solvent inkjet printing), electrostatic transfer, thermal transfer and airbrush.

## **ImageJetVue™ Exterior-mount Film**

What:

8-mil black/white composite PVC with 1.5-mm perforations and a solid release liner.

Coated with a micro-thin inkjet-receptive layer.

Perforation pattern: 35% perforated, 65% retained.

Standard rolls: 54" x 50' [137 cm x 15.24 m]

Custom sizes available by special order.

Where:

Exterior-mount window graphics for decals, POP, retail and commercial signage and a wide variety of other applications. Not usable for vehicle window graphics because of reduced visibility.

*ImageJetVue's 65/35 perforation pattern provides more print surface area, making it ideal for small-format window graphics and graphics requiring small detail and text, and finer image resolution. It is ideal for short production runs, including one-offs, for short-term applications when used outdoors. ImageJetVue capitalizes on the cost-effectiveness, quick turnaround and mass customization possible with inkjet printing.*

How:

Wide-format inkjet printing with aqueous pigmented and dye-based inks.

*Laminating (using an overlamine or a liquid laminate) is recommended with ImageJetVue, especially for outdoor graphics printed with dye-based inks, to increase the life of the image. For graphics to be mounted on curved windows, a liquid laminate or an overlamine that conforms well to curved surfaces is recommended.*

## **JetVue™ Exterior-mount Film**

What:

8-mil black/white composite PVC with 2-mm perforations and a solid release liner.  
Coated with a micro-thin inkjet-receptive layer.

Perforation pattern: approx. 50% perforated, 50% retained.

Standard rolls: 36", 50" & 54" x 50' [91.44 cm , 127 cm & 137 cm x 15.24 m]

Custom sizes available by special order.

*Also available with an unperforated solid paper liner for printers that incorporate a sensor to detect media (e.g., HP5000).*

Where:

Exterior-mount window graphics for POP, retail and commercial signage and a wide variety of other applications.

*JetVue is ideal for short production runs, including one-offs, for short-term applications when used outdoors. It capitalizes on the cost-effectiveness, quick turnaround and mass customization possible with inkjet printing.*

How:

Mid- and wide-format inkjet printing with aqueous pigmented and dye-based inks.

*Laminating (using an overlamine or a liquid laminate) is recommended with JetVue, especially for outdoor graphics printed with dye-based inks, to increase the life of the image. For graphics to be mounted on curved windows, a liquid laminate or an overlamine that conforms well to curved surfaces is recommended.*

## **SuperVue™ Exterior-mount Film**

What:

8-mil black/white composite PVC with 2-mm perforations and a solid release liner.

Perforation pattern: approx. 50% perforated, 50% retained.

Standard rolls: 27" & 54" x 100' [68.5 cm & 137 cm x 30.48 m]

Master rolls: 27" & 54" x 1000' [68.5 cm & 137 cm x 304.8 m]

Custom sizes available by special order.

Where:

Exterior-mount window graphics for building wraps, bus shelters, POP, retail and commercial signage, convention centers, corporate identity and a wide variety of other applications.

*SuperVue's larger hole size makes it ideal for large-scale outdoor advertising, such as building wraps.*

How:

Screen printing, wide-format digital imaging (e.g., solvent inkjet printing), electrostatic transfer, thermal transfer and airbrush.

*Also available with an unperforated solid paper liner for other applications, such as wet transfer.*

## **SuperVue Interior-mount Film**

What:

6-mil clear PVC with 2-mm perforations and a solid release liner.

Perforation pattern: approx. 50% perforated, 50% retained.

Standard rolls: 27" & 54" x 100' [68.5 cm & 137 cm x 30.48 m]

Master rolls: 27" & 54" x 1000' [68.5 cm & 137 cm x 304.8 m]

Custom sizes available by special order.

*Also available with an unperforated solid paper liner.*

Where:

Designed to mount to the interior surface of windows. Applications include POP, retail and commercial signage and a wide variety of other applications. Not recommended for use on dark or tinted windows because of color distortion and undesirable reflections that may occur since product is mounted on the inside surface of the window.

*SuperVue Interior-mount Film is ideal for window signage that requires protection from weathering, abrasion and vandalism.*

How:

The most common method is to screen print in 3 steps:

- 1) Print mirror image with color sequence printed in reverse.
- 2) Print an opaque white coat over entire film.
- 3) Print an opaque black coat over entire film.

The image can also be printed by electrostatic transfer, thermal transfer or other methods that allow reverse printing. The white and black coats are applied subsequently by screen printing or other suitable method. (See Printing Tips on page 12.)

## **ClearLam™ Pressure-sensitive Over-laminate**

What:

1.5-mil clear polyester, pressure-sensitive overlaminate with clear release liner.

Standard rolls: 36" & 54" x 100'  
[91.44 cm & 137 cm x 30.48 m]

Where:

For use on CLEAR FOCUS One Way Vision exterior-mount window graphics and other graphics. Designed for flat applications; not suitable for contoured surfaces.

### How:

Using roll-fed cold laminators; can also be applied manually to small imaged surfaces.

### Benefits:

- Optical clarity, UV protection, water resistance, increased image life & attractive finish.
- Rigid enough to span perforations.
- Can be cleaned with non-abrasive detergents without becoming cloudy.

### Application Tips:

- Make sure inks are completely dry before applying ClearLam.
- Solvent and oil-based inks, in particular, must be completely dry and must “air out” for at least 24 hours before applying ClearLam; otherwise, outgassing may occur, which can result in bubbles and adversely affect the adhesive properties of ClearLam.
- The printed substrate must be cool — less than 90° F. **Never** apply ClearLam with heat!
- Proper tension control is important to prevent wrinkles and tunneling from occurring. Do not stretch either the vinyl film or ClearLam during the lamination process as this can result in tunneling and/or wrinkles.
- ClearLam is **not** recommended for use on graphics that will be mounted on curved surfaces. For graphics to be installed on a curved surface, we recommend applying a liquid laminate or an overlaminate that conforms well to curved surfaces prior to installation of the graphics.

- If, after lamination, it is necessary to roll the graphics, be sure to roll them loosely with the printed/laminated side out. When shipping graphics, lay them flat between layers of cardboard or other protective material, or roll the graphics with the printed/laminated side out onto a core that is large enough in diameter to prevent the liner and overlaminates from wrinkling or tunneling. Use a shipping tube whose diameter is large enough to easily accommodate the loosely rolled graphics.
- To clean after laminating, spray cleanser on cloth, then wipe surface. Solvents should not come into contact with vinyl, as they can adversely affect adhesion.

## **CurvaLam™ Conformable Cold Overlaminates**

### What:

1.65-mil clear cast PVC, highly conformable, pressure-sensitive overlaminates with clear release liner.

Standard rolls: 36" & 54" x 100'  
[91.44 cm & 137 cm x 30.48 m]

### Where:

For use on CLEAR FOCUS One Way Vision exterior-mount window graphics and other graphics. Designed for vehicle graphics and other outdoor applications on flat, curved or riveted surfaces.

### How:

Using roll-fed cold laminators; can also be applied manually to small imaged surfaces.

## Benefits:

Superior clarity

UV protection

Excellent dimensional stability

Very good outdoor durability

Good resistance to salt water, cleaning solution, etc.

## Application Tips:

Make sure inks are completely dry before applying CurvaLam.

Solvent and oil-based inks, in particular, must be completely dry and must “air out” for at least 24 hours before applying CurvaLam; otherwise, outgassing may occur, which can result in bubbles and adversely affect the adhesive properties of CurvaLam.

The printed substrate must be cool-less than 90° F. Never apply CurvaLam with heat!

Proper tension control is important to prevent wrinkles and tunneling from occurring. Do not stretch either the vinyl film or CurvaLam during the lamination process as this can result in tunneling and/or wrinkles.

If, after lamination, it is necessary to roll the graphics, be sure to roll them loosely with the printed/laminated side out. When shipping graphics, lay them flat between layers of cardboard or other protective material, or roll the graphics with the printed/laminated side out onto a core that is large enough in diameter to

## Basic Design & Printing Considerations

- Small detail and type are not suitable for films with a 50/50 perforation pattern because 50% of the film is missing due to the perforation process. With their 65/35 perforation pattern and 1.5-mm holes, ImageVue and ImageJetVue are recommended for small-format window graphics with detailed images that will be viewed from a close distance.
- When including text in the design, use a font size of 30 point or larger for ImageVue and ImageJetVue, and a font size of 50 point or larger for ClassicVue, SuperVue and JetVue.
- Brightly colored inks (e.g., reds, yellows, oranges, and bright greens and blues) provide the best results. Avoid using dark colors (dark purple, navy, brown, black) for background colors. This is because with bright colors the eye tends to focus *on* the graphics, whereas dark colors allow the eye to see *through* the graphics.
- Be sure to print on the *vinyl* side of the film. Do NOT print on the film's liner (the liner side is glossier than the print side).
- For optimum one-way visibility, lighting should be brighter on the graphics side than on the non-imaged (black) side. When used indoors, supplemental flood lighting may be needed to illuminate the graphics side.

## Printing Tips

*We strongly recommend performing a test prior to actual printing. This applies to both printing graphics on Clear Focus One Way Vision films and applying an overlamine to the printed graphic.*

### Screen printing

- Use a more viscous ink and apply less ink than normal.
- Use a higher resolution screen (65-line is acceptable, 85-line is optimal).
- Use lighter squeegee pressure than normal to prevent flooding of the holes with ink.

*For details on screen printing SuperVue Interior-mount Film, see pp. 8-9.*

### Inkjet printing on JetVue or ImageJetVue Exterior-mount Film

When using dye-based inks, in particular, an overlamine or liquid clear coat is recommended. Outdoor graphics printed with aqueous pigmented inks may also require an overlamine or clear coat depending on the conditions under which the graphics are displayed.

When using oil-based inks: 1) The standard (perforated) liner is recommended. Oil-based inks do not dry adequately on the unperforated (solid) paper liner. 2) Allow the inks to dry thoroughly on the film and the liner before handling the graphics or applying a clear coat or overlamine.

### Electrostatic transfer, thermal transfer, wide-format digital imaging

Due to the wide variety of transfer papers, toners, inks and other variables used with these printing methods, we recommend performing a test prior to actual printing. **In most cases using the same settings as those used for printing solid vinyl should yield satisfactory results.**

### Airbrushing

Spray at a 90-degree angle to avoid coating the interior side walls of the holes.

*A list of printers compatible with CLEAR FOCUS films can be found at [www.clearfocus.com/compatibility.html](http://www.clearfocus.com/compatibility.html). If you have questions or need technical assistance, please call your distributor or call CLEAR FOCUS Imaging at 1-800-307-7990 in the U.S. or 707-544-7990.*

## **Ensuring the Integrity of the Finished Product**

- The quality and type of inks used will determine the quality and durability of the printed image. Therefore, be sure to choose the proper inks, toners, transfer papers, rigid overlaminates, liquid laminates or other materials needed to obtain the desired results.
- To prevent smudging, make sure that both the graphics as well as any ink on the liner are completely dry before handling or laminating.
- If an overlaminate is required for added protection, ClearLam has been developed to work effectively with JetVue, ImageJetVue and other CLEAR FOCUS window graphics films for flat applications.

- Some liquid laminates and PVC overlaminates are also effective in protecting graphics and are better suited for graphics that will be mounted on a curved surface. As always, we recommend performing a test prior to actual application.

## Pre-installation Guidelines

*Prior to installation of printed graphics, we recommend attaching a small piece of CLEAR FOCUS film to glass as a test to help you become accustomed to the film's characteristics, including adhesion strength.*

- Glass surface must be clean. Use mild soap and water to clean the glass. Do not use glass cleaners with solvents (e.g., Windex®).
- Surface must be completely dry. Use lint-free cloth or industrial paper towels to dry glass.
- Temperature of glass must be moderate – **between approx. 40° F (5° C) and 90° F (32° C).**
  - In cold weather, apply film in late afternoon, after windows have warmed up, or, in the case of a vehicle, in a garage or other enclosed area (with the vehicle engine turned off). Applying film to glass that is too cold may adversely affect adhesion of film.
  - In hot weather, apply film in the early morning, while glass is still cool. Applying film to glass that is too hot can cause the film to stretch during installation.

## Basic Installation Instructions

1. Lift the upper edge of the liner away from the vinyl and fold back approximately 3-6 inches (depending on the size of the graphic).
2. Carefully position the film so that it is properly aligned on all sides, then press the upper corners in place using light pressure.
3. Using your hand or a soft plastic squeegee, lightly press the film in place. Working from the top of the graphic to the bottom, continue by peeling away more of the liner and applying light pressure to the film.
4. Continue in this manner until the liner is completely removed and the window graphic is in place. Finally, squeegee film from the center and work outward in all directions.

**Important notice to bus-graphics installers:** A data sheet called “Safety Guidelines for Installing Window Graphics on Buses and Other Vehicles with Emergency Exit Windows” is available on request or can be accessed online at [www.clearfocus.com/NHTSA\\_safety-data.pdf](http://www.clearfocus.com/NHTSA_safety-data.pdf).

For detailed installation instructions with photos, visit [www.clearfocus.com/install.html](http://www.clearfocus.com/install.html).

## Cleaning One Way Vision Window Graphics

*The durability of the graphics depends primarily on the types of inks used to print them, as well as whether an optically clear liquid laminate or a rigid overlaminate has been applied to the graphics. We strongly recommend conducting a test prior to cleaning.*

**For laminated or non-laminated graphics printed on ClassicVue, ImageVue or SuperVue films with solvent-inkjet inks, screen printing inks, airbrush paints and other durable outdoor inks, as well as by thermal transfer:**

1. Apply a solution of mild soap and water to a lint-free cloth; wring out any excess water. The cloth should be moist but not saturated.
2. Conduct a test by gently wiping a small area of the graphics (such as a corner or other inconspicuous area) with the wet cloth to remove dirt, smudges, fingerprints and other residue. If the inks do not run or come off onto the cloth, gently wipe the rest of the graphics clean.
3. If necessary, dry the graphics with a soft, dry, lint-free cloth.

Note: If the graphics have not been laminated and the inks come off on the wet cloth, this means the inks are not water-resistant. In this case, use a soft, dry, lint-free cloth to gently wipe the graphics clean. Another alternative is to use compressed air to blow away dust and dirt.

**For laminated graphics printed on JetVue or ImageJetVue film with aqueous pigmented or dye-based inks, or on ClassicVue, ImageVue or SuperVue film printed by electrostatic transfer:**

Graphics printed by non-solvent inkjet or electrostatic transfer must have either a liquid laminate or an overlamine applied to them prior to cleaning with water. Follow the steps above, being sure to conduct a test prior to cleaning.

For longer-lasting graphics and to protect against UV and moisture, the use of an optically clear liquid laminate or an overlamine, such as ClearLam, is recommended for flat surfaces.

**Vehicle window graphics:**

Durable outdoor inks are recommended for printing vehicle window graphics because the graphics are subjected to rain, dirt and other residue, and must therefore be cleaned regularly. Buses sometimes undergo a daily washing; as a result the inks used must be especially durable. As always, a test is highly recommended prior to cleaning.

**The following are NOT recommended:**

- Using a solvent-based window cleaner (e.g., Windex®) – the solvents in the cleaner may weaken the film’s adhesive properties. For this reason solvent-based cleaners should not be used to clean the glass prior to graphic installation or after the graphics have been installed.
- Completely saturating the graphics with water, as this will fill the holes with water and reduce visibility.
- Using a squeegee to remove excess water – a rubber squeegee may leave marks on the graphics.
- Using the wiper blade on the rear window of a vehicle to remove water from rain that collects in the holes or after a car wash. Such water buildup can be prevented by using an

overlamine on the graphics prior to installation so that the rain runs off the graphics. If the vehicle windows are curved, be sure to use a conformable overlamine. If the graphics have not been laminated, dry them using a soft, dry, lint-free cloth.

## **Removing One Way Vision Window Graphics**

CLEAR FOCUS window graphics should remove cleanly up to about six months after installation. Certain conditions, such as extreme heat and prolonged installation, will increase the film's adhesion to the glass.

To remove, peel up one corner or edge of the film and pull the film away from the window. The film should peel off easily in strips or sections. In areas where the film does not remove cleanly, spray the area liberally with a solvent-based glass cleaner (e.g., Windex®). Let sit for a minute or two, then remove the film. If necessary, use a single-edged industrial razor blade to scrape off any residue.

For stubborn graphics, an adhesive remover called Rapid Remover™, produced by Rapid-Tac Inc. of Merlin, Oregon, has been recommended by professional installers. Rapid Remover is a non-toxic, water-soluble solution that breaks down and removes adhesives. For more information, contact RapidTac at 1-800-350-7751 or 541-474-1113. Website: [www.rapidtac.com](http://www.rapidtac.com).

Some installers use a heat source, such as a hair dryer, sun lamp, heat lamp or heat gun, to

soften and remove particularly stubborn vinyl graphics. In such cases, extreme care must be taken so as not to overheat the glass on which the graphics are installed. Use this method only if you are an experienced installer, and carefully follow the instructions of the heating-device manufacturer. Do not use a heat source if the glass has any cracks or other defects. Also, do not use a heat source on windows that are cold (under about 60° F/15.5° C); the abrupt change in temperature from cold to hot might damage the glass.

After all the film has been removed, you may wish to have the windows washed.

## **Diverse Applications**

CLEAR FOCUS film clearly communicates your message. This premium medium has an unlimited array of applications. For photos and details of actual applications, please visit [www.clearfocus.com/gallery.html](http://www.clearfocus.com/gallery.html).

### Transit Advertising

- Buses
- Delivery & service vehicles
- Hotel & airport shuttles
- Taxis
- Limousines
- Monorail & light rail systems
- Urban train systems

### Outdoor Advertising

- Convention centers
- Bus shelters
- Phone booths
- Kiosks
- Malls, shopping centers
- Airports
- Skywalks

### Entertainment Venues

- Theaters
- Video stores
- Concert halls
- Theme parks
- Stadiums
- Aquariums
- Zoos

### Retail & Commercial Applications

- Fast-food restaurants
- Chain restaurants
- Auto dealerships
- Service stations
- Department stores
- Supermarkets
- Real-estate signage
- Banks, savings & loans
- Car rental agencies
- Lounges
- Hotels, motels
- Glass-walled elevators
- Retail businesses
- Hospitality suites
- Fitness centers
- Golf carts
- Daycare centers
- Museums & art galleries

### Interior/Indoor Applications

- Malls, shopping centers
- Sports arenas
- Airports
- Trade show displays
- Movie & theater backdrops
- Murals
- Supermarket refrigerated-case & freezer doors
- Interior environments for retail stores, restaurants, public buildings, offices

### Corporate Identity

- Lobby displays
- Meeting rooms
- Company vehicle identification
- Company logos
- Auto dealership & fleet vehicles
- TV & radio station vehicles
- Mobile health-care units

### Special Promotions

- POP displays
- Movie launches
- Product launches
- Seasonal & holiday displays
- Pace car graphics
- Political decals, posters

### Security, Surveillance & Privacy

- Delivery, utility & service vehicles
- Surveillance vehicles
- Security windows in banks, casinos & airports
- Schools
- Hospitals, managed-care facilities
- Emergency vehicles
- Synagogues & other religious facilities

### Heat & Light Control

- Residential & commercial window coverings
- Service, delivery & utility vans

### Consumer Applications

- Auto rear-window banners
- RVs
- Sports teams
- Colleges
- Licensed characters
- Standardized signs
- See-through safety strips for sliding glass doors

# **CLEAR FOCUS Imaging, Inc.**

**60 Maxwell Court, Santa Rosa, CA 95401**

**1-800-307-7990**

**Phone (707) 544-7990**

**Fax (707) 544-1886**

**www.clearfocus.com**

**E-mail: headoffice@clearfocus.com**

**CLEAR FOCUS products are manufactured under one or more of the following patents in North America: US No. 4,883,556, US No. 4,940,622, US No. 5,525,177, US No. 5,609,938, US No. 5,773,110, & US No. 6,258,429. Other US and foreign patents pending.**

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**Your local distributor:**

## **Graphics credits**

### Front cover

Togo's by Albert Basse Associates

E. T. by Adera Corporation

Star Trek Las Vegas monorail by Final Film

### Back cover

AT&T by SuperGraphics

Major League Baseball All-Star Game by Holzhauer Sign

Diet Pepsi by SignMasters/TransitArt

