

contrAvision® Perforated Window Films



Contra Vision® Performance™ Replacement Liner
Contra Vision® Performance™ Additional Liner
Contra Vision® Open™
Contra Vision® Sprint™

Contra Vision

Contra Vision has a unique understanding of see-through graphics, having started the industry in 1985. Contra Vision has 27 inventions patented or patent-pending in the field of see-through graphics.

Percentage transparency

The transparency of see-through graphics is determined by the diameter and spacing of the holes in the vinyl.

Graphics have greater impact with lower transparency material. See-through characteristics are better with higher transparency material. There is no right and wrong choice. 40% transparency material is typically the first choice for the side windows of vehicles and office windows. 30% transparency material suits retail windows and the back windows of vehicles.

Backlit see-through graphics

During the hours of darkness, white on black see-through graphics suffer from ‘burn-through’ where the lights inside a building or vehicle sometimes reduce and may eliminate the impact of the graphics, if there is no or inadequate external illumination.

Contra Vision® BACKLITE™ graphics also allow daylight in and a view out, with the perforated translucent white film using existing in-store lighting to ‘back-light’ the graphics during the hours of darkness. This increases the advertising impact during the hours of darkness without increasing the energy consumption of the store. Spot or flood lights directed at the graphics effectively transform them into an illuminated sign.

A ghost reverse image of the print can be seen from the inside, although the mind will concentrate on the outside view and not the ghost image.

Contra Vision® BACKLITE™ graphics are ideal for use on the windows of convenience stores and other retail outlets which operate during the hours of darkness.

More than one way

The Contra Vision® Perforated Window Films range is comprehensive and by far the largest on the market, enabling the production of see-through graphics with different levels of transparency, for application on the inside or outside of a window, with or without a ‘back-light’ effect at night. It is printable by digital inkjet, solvent, UV-cure and latex, and screen printing equipment.



Outside or Inside



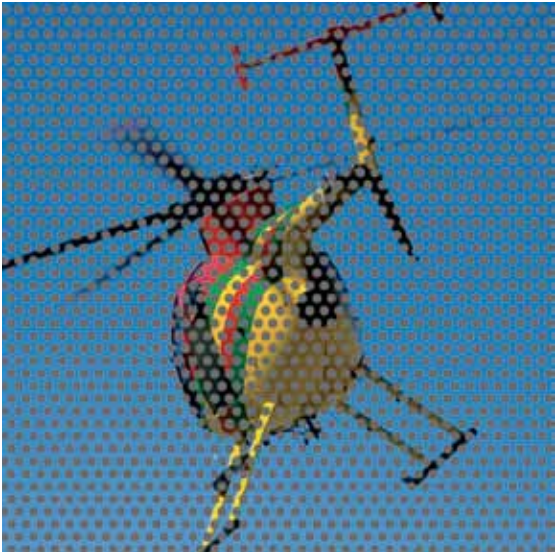
Contra Vision® BACKLITE™ daytime view



Contra Vision® BACKLITE™ night-time

Perforated Window Films

Contra Vision® *Performance™* products are manufactured to our exacting specifications with innovative and high-value product features to provide additional benefits to printers and end users alike. Contra Vision® *Performance™* perforated window films feature 7 mil thick polymeric calendered, laminated face films for better printing, minimal shrinkage and to aid application and clean removal. The clear, solvent acrylic adhesive used on Contra Vision® *Performance™* perforated window films gives easy, low temperature application, reliable adhesion and quick and clean removability when required. Please refer to the relevant technical data sheets for more information.



Unique *Grayliner™* technology

Grayliner™ technology is a major, patent-pending improvement to perforated materials, unique to Contra Vision. The gray liner color visible through the perforation holes simulates the inside of a building or vehicle so that, before application, printers and end users see a close approximation to the appearance of the applied graphics. This deters printers from compensating for the washed-out appearance of prints on a white liner by using excessive amounts of ink. It also manages end user expectations, avoiding projects being rejected because the client thinks that the whitened, pale appearance resulting from the use of a conventional white liner is how the prints will appear when applied to a window.

Face-film

Contra Vision[®] *Performance*[™] perforated window films are manufactured using European-engineered polymeric vinyl. The polymeric formulation minimizes shrinkage, avoiding the exposed, dirt-attracting adhesive associated with the shrinkage of cheaper monomeric formulations. The vinyl is in compliance with European REACH requirements on the current candidate SVHC (Substances of Very High Concern). This compares favorably with some other vinyls used in the production of perforated vinyl.

Contra Vision[®] *Performance*[™] White on Black products are manufactured using White on Black vinyl layers laminated together, which gives a superior, more consistent product than any alternative black coating or black adhesive method.

Contra Vision[®] *Performance*[™] perforated window films feature a thick vinyl face-film, which is stronger than thinner constructions and is less likely to break up during removal, so speeding up the clean removal of the graphics.

Adhesive

A White on Black laminate enables clear adhesive to be used; the alternative construction of thinner white face-film and black adhesive can be difficult or impossible to remove in one piece and may leave a residue of unsightly black adhesive after removal.

Contra Vision[®] *Performance*[™] perforated vinyls feature a proven, clear solvent-based acrylic adhesive to give reliable adhesion with clean removability for a minimum of 6 months after application and a low minimum application temperature of 40°F (5°C)



Liner

Contra Vision[®] *Performance*[™] perforated vinyls featuring Replacement Liner technology have better layflat properties because a Replacement Liner avoids the typical 250 linear feet per square foot of moisture-absorbing perforated paper edges of Additional Liner construction. Replacement Liner allows the adhesive to ‘wet out’ onto a flat Replacement Liner after the perforation process and so adheres better to the glass. However, Replacement Liner construction is not recommended for use with UV curing inkjet printers. Depending on the brand of ink and density of the print, “bridging” can occur over the perforated holes after removal of the Replacement Liner, in relatively dark areas of a design. This is eliminated with Additional Liner. We therefore generally recommend *Grayliner*[™] Additional Liner for UV inkjet printing only.

Overlamine

Perforated window film cannot be seen through if exposed to rain or other water because the water acts like a tiny lens in each hole. Contra Vision[®] laminating film features a transparent face-film which is designed to bridge over the perforated holes, providing protection from abrasion and washing chemicals and preventing dirt and water from entering the perforated holes.

Standards & Quality

Please note that some countries have laws or regulations requiring minimum light transmission that may limit or preclude the use of see-through graphics on vehicle windows.

Self-adhesive products are not recommended for use on glass with coatings such as anti-reflective, self-cleaning and scratch-resistant, which may be damaged during film removal.

Each batch of material is examined to ensure that it complies with the agreed standards.

Contra Vision[®] *Performance*[™] products are also available in non-standard formats – roll widths, roll lengths, core sizes and hole patterns, subject to manufacturing and shipping lead times.

Open Hole Perforated Window Films

Contra Vision[®] *Open*[™] products feature the same high specification face films and adhesive as Contra Vision[®] *Performance*[™] Replacement Liner and Additional Liner products and offer some unique, additional benefits.

Contra Vision[®] *Open*[™] eliminates the possibility of UV inkjet ink bridging holes. Print Contra Vision[®] *Open*[™] using any UV, solvent or latex inkjet printer that features an open gutter, ink-collector or mesh kit. Ink that passes through the open perforations is collected for safe disposal. You don’t end up shipping ink that’s not needed, drying ink that’s not needed, or checking that unwanted ink is bridging holes. Output is guaranteed “Fit to Ship[™]”.

Unique *Blackliner*[™] provides WYSIWYG (What You See Is What You Get when applied to a window), of value to printing companies, customers and retailers alike. Contra Vision[®] *Open*[™] is suitable for outside application (with liner removed) or inside application (with liner intact), providing greater acceptability and use in multiple location campaigns.

Contra Vision[®] *Open*[™] uses fewer manufacturing resources and so costs less to buy.

Print-on Foam Adhesive Perforated Window Films

Contra Vision[®] *Sprint*[™] features a remarkable, print-receptive adhesive. Print onto the product’s white adhesive face and, surprisingly, it retains adhesive properties. Apply the material inside with the printed adhesive face visible through the window so it’s viewed from the outside. Contra Vision[®] *Sprint*[™] is printed using low-solvent printers and is dried conventionally. Contra Vision[®] *Sprint*[™] is easy to apply, relocatable, and requires no laminating or other post-print processes.

See-through graphics applied to the inside of a window are protected from vandalism, rain water and street dirt. Access to the inside of glazing is often easier than to the outside. Contra Vision[®] *Sprint*[™] does not need white ink, necessary to produce inside application see-through graphics with Contra Vision[®] *Performance*[™] or Contra Vision[®] *Open*[™] Clear perforated window films.

Contra Vision[®] *Sprint*[™] is very easy to apply. The adhesive tolerates repositioning and performs well in inexperienced hands which makes it ideal for end-user application. Carefully stored, Contra Vision[®] *Sprint*[™] graphics can be re-used and so are ideal for repeating campaigns and for temporary signs that are used occasionally.

Contra Vision[®] *Sprint*[™] features *Grayliner*[™] technology, to give a realistic impression of how the graphics will appear applied to the window.

Contra Vision[®] *Sprint*[™] is available with a White on Black face-film for the production of one-way vision see-through graphics, and with a Translucent White face-film for the production of backlit see-through graphics for 24-hour visibility.

Selection Guide

Type	Application Outside or Inside	Transparency	Printing Technology	Contra Vision Product	Features & Comments
Contra Vision® one-way graphics	Outside Application	50% Transparency	• Full or low solvent or latex Inkjet • Solvent or UV Screenprint	WBPRG50 Contra Vision® <i>Performance™</i> • White on Black vinyl • Replacement Liner	Polymeric face-film for minimal shrinkage Laminated face-film for consistent printing <i>Grayliner™</i> for improved visual perception Replacement Liner for better adhesion and lay flat Clear solvent adhesive for reliable adhesion 7.2 mil construction to help one-piece removal Not for UV curing inkjet printers
			UV curing Inkjet	WBPA650 Contra Vision® <i>Performance™</i> • White on Black vinyl • Additional Liner	
		40% Transparency	UV curing Inkjet	WBPA640 Contra Vision® <i>Performance™</i> • White on Black vinyl • Additional Liner	Polymeric face-film for minimal shrinkage Laminated face-film for consistent printing <i>Grayliner™</i> for improved visual perception Clear solvent adhesive for reliable adhesion 7.2 mil construction to help one-piece removal
			• Full or low solvent or latex Inkjet • Solvent or UV Screenprint	WBPRG40 Contra Vision® <i>Performance™</i> • White on Black vinyl • Replacement Liner	Polymeric face-film for minimal shrinkage Laminated face-film for consistent printing <i>Grayliner™</i> for improved visual perception Replacement Liner for better adhesion and lay flat Clear solvent adhesive for reliable adhesion 7.2 mil construction to help one-piece removal Not for UV curing inkjet printers
			Inkjet with mesh kit	WBPOB40 Contra Vision® <i>Open™</i> • White on Black vinyl • Open Liner	Polymeric face-film for minimal shrinkage Laminated face-film for consistent printing <i>Blackliner™</i> for WYSIWYG and inside display option Clear solvent adhesive for reliable adhesion 7.2 mil construction to help one-piece removal
			Inkjet with mesh kit	WBPOB30 Contra Vision® <i>Open™</i> • White on Black vinyl • Open Liner	
		30% Transparency	UV curing Inkjet	WBPA630 Contra Vision® <i>Performance™</i> • White on Black vinyl • Additional Liner	Polymeric face-film for minimal shrinkage Laminated face-film for consistent printing <i>Grayliner™</i> for improved visual perception Clear solvent adhesive for reliable adhesion 7.2 mil construction to help one-piece removal
			• Full or low solvent or latex Inkjet • Solvent or UV Screenprint	WBPRG30 Contra Vision® <i>Performance™</i> • White on Black vinyl • Replacement Liner	Polymeric face-film for minimal shrinkage Laminated face-film for consistent printing <i>Grayliner™</i> for improved visual perception Replacement Liner for better adhesion and lay flat Clear solvent adhesive for reliable adhesion 7.2 mil construction to help one-piece removal Not for UV curing inkjet printers
		20% Transparency	• Full or low solvent or latex Inkjet • Solvent or UV Screenprint	WBPRG20 Contra Vision® <i>Performance™</i> • White on Black vinyl • Replacement Liner	Polymeric face-film for minimal shrinkage Laminated face-film for consistent printing <i>Grayliner™</i> for improved visual perception Clear solvent adhesive for reliable adhesion 7.2 mil construction to help one-piece removal
			UV curing Inkjet	WBPA620 Contra Vision® <i>Performance™</i> • White on Black vinyl • Additional Liner	
	Inside Application	30% Transparency	• Full or low solvent or latex Inkjet • Solvent or UV Screenprint	CLPRW30 Contra Vision® <i>Performance™</i> • Clear vinyl • Replacement Liner	Polymeric face-film for minimal shrinkage Replacement Liner for better adhesion and lay flat Clear solvent adhesive for reliable adhesion 7.2 mil construction to help one-piece removal Not for UV curing inkjet printers Print design reverse-read followed by white and black layers
			UV curing Inkjet with white ink	CLPAC30 Contra Vision® <i>Performance™</i> • Clear vinyl • Additional Liner	Polymeric face-film for minimal shrinkage Clear solvent adhesive for reliable adhesion 7.2 mil construction to help one-piece removal Print design reverse-read followed by white and black layers Part-clear liner so design can be seen from back
			Inkjet with mesh kit and white ink	CLPOW30 Contra Vision® <i>Open™</i> • Clear vinyl • Open Liner	Inkjet with white ink (for white and black layers) Polymeric face-film for minimal shrinkage Clear solvent adhesive for reliable adhesion 7.2 mil construction to help one-piece removal Print design reverse-read followed by white and black layers
			Low solvent Inkjet without white ink	WBMSG30 Contra Vision® <i>Sprint™</i> • White on Black vinyl	<i>Grayliner™</i> for improved visual perception Liner backcoated to protect adhesive Printable foam adhesive
		20% Transparency	Low solvent Inkjet without white ink	WBMSG20 Contra Vision® <i>Sprint™</i> • White on Black vinyl	
			UV curing Inkjet with white ink	CLPAC20 Contra Vision® <i>Performance™</i> • Clear vinyl • Additional Liner	Polymeric face-film for minimal shrinkage Clear solvent adhesive for reliable adhesion 7.2 mil construction to help one-piece removal Print design reverse-read followed by white and black layers Part-clear liner so design can be seen from back
			• Full or low solvent or latex Inkjet • Solvent or UV Screenprint	CLPRW20 Contra Vision® <i>Performance™</i> • Clear vinyl • Replacement Liner	Polymeric face-film for minimal shrinkage Replacement Liner for better adhesion and lay flat Clear solvent adhesive for reliable adhesion 7.2 mil construction to help one-piece removal Not for UV curing inkjet printers Print design reverse-read followed by white and black layers

Type	Application Outside or Inside	Transparency	Printing Technology	Contra Vision Product	Features & Comments
Contra Vision® BACKLITE™ backlit see-through graphics	Outside Application	30% Transparency	• Full or low solvent or latex Inkjet • Solvent or UV Screenprint	TWPRG30 Contra Vision® <i>Performance</i> ™ • Translucent White vinyl • Replacement Liner	Polymeric face-film for minimal shrinkage <i>Grayliner</i> ™ for improved visual perception Replacement Liner for better adhesion and lay flat Clear solvent adhesive for reliable adhesion 7.2 mil construction to help one-piece removal Not for UV curing inkjet printers
			UV curing Inkjet	TWPAG30 Contra Vision® <i>Performance</i> ™ • Translucent White vinyl • Additional Liner	Polymeric face-film for minimal shrinkage <i>Grayliner</i> ™ for improved visual perception Clear solvent adhesive for reliable adhesion 7.2 mil construction to help one-piece removal
			Inkjet with mesh kit	TWPOB30 Contra Vision® <i>Open</i> ™ • Translucent White vinyl • Open Liner	Polymeric face-film for minimal shrinkage <i>Blackliner</i> ™ for inside display option Clear solvent adhesive for reliable adhesion 7.2 mil construction to help one-piece removal
		20% Transparency	• Full or low solvent or latex Inkjet • Solvent or UV Screenprint	TWPRG20 Contra Vision® <i>Performance</i> ™ • Translucent White vinyl • Replacement Liner	Polymeric face-film for minimal shrinkage <i>Grayliner</i> ™ for improved visual perception Replacement Liner for better adhesion and lay flat Clear solvent adhesive for reliable adhesion 7.2 mil construction to help one-piece removal Not for UV curing inkjet printers
			UV curing Inkjet	TWPAG20 Contra Vision® <i>Performance</i> ™ • Translucent White vinyl • Additional Liner	Polymeric face-film for minimal shrinkage <i>Grayliner</i> ™ for improved visual perception Clear solvent adhesive for reliable adhesion 7.2 mil construction to help one-piece removal
			Inside Application	30% Transparency	• Full or low solvent or latex Inkjet • Solvent or UV Screenprint
	UV curing Inkjet with white ink	CLPAC30 Contra Vision® <i>Performance</i> ™ • Clear vinyl • Additional Liner			Polymeric face-film for minimal shrinkage Clear solvent adhesive for reliable adhesion 7.2 mil construction to help one-piece removal Print design reverse-read followed by white layer Part clear liner so design can be seen from back
	Inkjet with mesh kit and white ink	CLPOW30 Contra Vision® <i>Open</i> ™ • Clear vinyl • Open Liner			Polymeric face-film for minimal shrinkage Clear solvent adhesive for reliable adhesion 7.2 mil construction to help one-piece removal Print design reverse-read followed by white layer
	20% Transparency	• Full or low solvent or latex Inkjet • Solvent or UV Screenprint		TWMSG30 Contra Vision® <i>Sprint</i> ™	<i>Grayliner</i> ™ for improved visual perception Liner backcoated to protect adhesive Printable foam adhesive
		• Full or low solvent or latex Inkjet • Solvent or UV Screenprint		CLPRW20 Contra Vision® <i>Performance</i> ™ • Clear vinyl • Replacement Liner	Polymeric face-film for minimal shrinkage Replacement Liner for better adhesion and lay flat Clear solvent adhesive for reliable adhesion 7.2 mil construction to help one-piece removal Not for UV curing inkjet printers Print design reverse-read followed by white layer
		UV curing Inkjet with white ink		CLPAC20 Contra Vision® <i>Performance</i> ™ • Clear vinyl • Additional Liner	Polymeric face-film for minimal shrinkage Clear solvent adhesive for reliable adhesion 7.2 mil construction to help one-piece removal Print design reverse-read followed by white layer Part clear liner so design can be seen from back
	Laminating film (optional for one-way or backlit)	Protecting Outside Application from rain and dirt			CL25YY
				CL75PY	Polymeric calendered face-film for optical clarity Polyester liner for optical clarity Clear solvent adhesive for optical clarity
				CL50CY	Cast vinyl face-film for optical clarity Cast vinyl face-film for compound curvature surfaces Polyester liner for optical clarity Clear solvent adhesive for optical clarity



The Contra Vision® range of perforated window films is available from:

Licensed Products

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