

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.

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

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 from outside the field of vision 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. Consideration needs to be made when using Contra Vision® BACKLITE™ graphics that any point sources of light in the observer's eye-line will still burn through the graphics, although overall you will always see more of the graphics than with white on black material.



Contra Vision® BACKLITE™ daytime view



Contra Vision® BACKLITE™ night-time view

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 180 micron 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 grey liner colour 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 favourably 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 5°C (40°F).



Liner

Contra Vision® Performance™ perforated vinyls featuring Replacement Liner technology have better layflat properties because a Replacement Liner avoids the typical 800 linear metres per square metre 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.

Overlaminates

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.



Licensed Products

Contra Vision Ltd owns patents and secret know-how protecting Contra Vision® products and their methods of manufacture. See <http://www.contravision.com/about-the-international-group/patents-trade-marks/>
All Contra Vision® perforated window films are appropriately licensed and are easily identified by their unique features and liner branding.

This document is intended as a source of information, is given without guarantee, and does not constitute a warranty. Purchasers should independently determine, prior to use, the suitability of the product for their specific intended purpose.

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