

The purpose of this document is to provide general instructions for Clear Focus One Way Vision films, to help sign makers to achieve consistently successful results on One Way Vision jobs.

Please note that this document is a summary of our instructions. Each section has additional one or more documents containing further specific instructions and details that can be provided upon request.

## General Recommendations

- For passenger vehicles (with 9 seats or less), we recommend AutoVue + CurvaLam be applied only to the rear windscreen that has an angle of more than 55 degrees and is not window tinted.

## Selecting the appropriate Film for the Job

- For passenger vehicles, use AutoVue and CurvaLam. For goods varying vehicles, use PromoVue.
- For non-APNO buses including coaches and mini buses, use ExitVue. For trains, use PromoVue.
- For ground floor building windows, use PromoVue. For building wraps use AutoVue.
- For UV-cure ink printers, select the Universal Liner version of the film.
- For latex ink printers, select the SL (solvent/latex) or Universal Liner version of the film.

## Artwork

- **Avoid dark colours** covering large areas such as backgrounds. Use CMYK spot colours for dark colours in the background, do not exceed 100% for black, 200% for other dark colours and 270% for all other colours.
- Recommended minimum font size is 50 point. Use 100dpi or less for raster graphics resolution.

## Storage and Handling

- Store the One Way Vision media at 24 degrees and 50% relative humidity in a clean room away from direct sun light. Store in its box. Use cotton gloves when handling the media.
- Discard expired stock. One Way Vision has a limited shelf life.

## Profiling

- Visit <http://www.clearfocus.com/support/printer-profiles/> in the first instance. Try using a profile that closely meets your printer model. We have recommended RIP settings in a separate document.
- Visit your printer, ink and RIP manufacturer's web sites and search for profiles for perforated vinyls.

## Printing

- Print immediately, do not delay in printing. Use a take-up roll. Ensure the printed side is facing outwards on the take up roll.
- **Reduce the ink load**. Recommended maximum across total CMYK is 270%.
- Print at low resolution, no more than 100dpi. Reduce print speed.
- Reduce heat. For non-latex ink machines recommend 35-40°C degrees and post heat is recommended 45°C. For latex ink machines recommend 90-100°C degrees and post heat is recommended 45°C.
- Print too fast or insufficient heat will result in blotchy or a wet appearance in dark colours. Print too slow or too much heat will result in waves of discolouration on light and neutral colours. Test to find the right balance.
- Always keep print heads clean and well maintained. Ensure all nozzles are firing and correctly aligned, otherwise lines or discolouration may appear running down or across the media.
- Do not leave media in printer after printing. Remove the unprinted portion and place inside a clear plastic cover and store in its box. Do not leave media on take-up roll after printing.

## Outgassing

- If solvent printed, remove take-up roll immediately after printing and unwind completely.  
**Suspension** – Suspend vertically above the ground by at least 50cm.

**Ventilation** – Ensure the media is ventilated, air flow from a fan directed onto the print maybe required.

- Outgas for 3 days for graphics that won't be laminated. 5 days to outgas if print has dark colours or laminating.

## Laminating

- **Use only the laminate we specify**, otherwise the warranty is voided. EconoLam for EconoVue, CurvaLam to our polymeric perforated films.
- Do not laminate by hand, always use a cold press laminator, **preferably a flat-bed laminator**.
- **Cold press only**. Do not use heat.
- Ensure the compression rollers have enough gap to allow the One Way Vision and overlamine films to pass through without overt compression but not too much gap, otherwise the laminate will not bond to the perforated vinyl.
- Laminate slowly. Stretching the laminate film or substrate film will most likely result in failure.
- After applying an overlamine, let the graphics sit for at least 24 hours before application.

## Transporting

- **Ensure the image is facing outwards**. Minimum diameter of roll is 15cm.
- During transport, avoid exposing the OWV film to prolonged durations of very low or high temperatures or humidity. Never transport in direct sun light. Do not expose to water.

## Cleaning

- Window surface must be cleaned thoroughly prior to installation of perforated vinyl.
- **Do not use Windex, ammonia, citrus cleaners, methylated spirits, vinegar, prep-sol, prep-lube, prep-wash, paint strippers, surface cleaner or any other chemical**.
- **Use a generic brand kitchen sink dishwashing liquid detergent**, to wash the window down. Ensure it is free of additives such as fragrances, anti-bacterial, softeners for sensitive skin, waxes etc. Recommended solution is 5 drops in a 500ml bottle of warm clean water. Using a clean lint free cloth, thoroughly wash the entire surface, from edge to edge. Use pressure. **In corners, do not use circular hand motions rather go up/down and right/left**.
- Dry the surface and remove soap residue by using 100% IPA onto another clean lint free cloth and rubbing the entire surface dry.

## Installing – for adhesive backed One Way Vision films

- For non-adhesive perforated vinyls, follow the instructions in its data sheet.
- When installing onto glass, the glass temperature needs to be within the range 15°C to 25°C.
- **Dry apply**, do not wet apply, even if it is laminated and to be applied onto a curved windscreen.
- Do not use heat. Use a felt block or felt edge squeegee.
- Slowly remove the liner 30cm at a time and gently squeegee from the middle to edge. Do not put tension on the film when holding it out from the glass. Let the film drape onto the glass as you squeegee. Squeegee slowly and lightly so as not to rip, tear or stretch the film. Do not reposition film after application.
- When removing the Universal Liner, ensure you start in the corner and place your fingernail between the adhesive layer and the perforated liner layer, then peel the liner slowly. Have the film flat, not curled, when removing the liner. Remove the liner slowly. **We recommend to edge seal for dark or single coloured backgrounds**.
- When trimming, cut to edge of window and make sure no film touches the rubber seals.
- After initial application to glass and after edges have been trimmed, re-squeegee the entire surface firmly to activate the pressure sensitive adhesive, so that it will cure and bond to the glass in time.
- Depending on the climate and how much direct sunlight the applied OWV film receives, it may take 2 to 4 weeks for squeegee marks to disappear, if laminated.

## Care

- Takes up to a week for the adhesive bond to cure. Adhesion strength increases up to 6 months.
- Do not use Windex, ammonia, citrus cleaners, methylated spirits, vinegar, prep-sol, prep-lube, prep-wash, paint strippers, isopropyl alcohol (IPA) or any other chemical.
- **Do not use high pressure water cleaning**.
- Use a generic brand kitchen sink dishwashing liquid, free of additives. With cold mild soapy clean water, use a clean lint free cloth or sponge, lightly wash the graphic. Do not scrub. Then use clean water only (no soap), either sponge down or lightly hose off the soap residue. Do not clean more than once per week.