

# Storing, Printing, Drying and Transporting One Way Vision

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Perforated vinyls do not by default behave the same as solid digital vinyls. Therefore, it is important to appreciate that to achieve positive and reliable results, there are unique and specific steps to follow.

## Storage Instructions

1. Store Clear Focus One Way Vision (CFOWV) media in the same room as the printer machine. It is important the media is at the same temperature and humidity level as the printer.
2. For more than half a roll, store the media upright on an end, on its end cap. Do not lean. Keep in box and plastic wrapping. The goal is to keep the media free of contaminants, such as dust, solvents and moisture.
3. For less than half a roll, may opt to store on a spindle horizontally.
4. Use cotton gloves when handling the media, such as when mounting or dismounting the media.
5. Ensure the humidity is not too dry nor too moist. Refer to data sheet for recommended temperature and humidity levels.
6. Remember the media has a shelf life, which is listed in its data sheet. Do not use the media after it is has expired.

## Printing Instructions

1. **Tension** – There must be tension across the film so that it will not lift while printing. Therefore, we recommend that the film is printed roll to roll, that is, use a take up roller. Ensure the take up has the printed film facing outwards. To minimise waste for the lead in, attach a piece of self-adhesive vinyl (SAV) to the leading edge of the CFOWV film.
2. **Alignment** – Ensure the media is aligned perfectly straight in all axes.
3. **Profile including Speed and Temperature** – Take the time to configure a profile to suit your printer and environment. Do not assume the default settings supplied by the RIP is satisfactory. We do not supply printer profiles. When creating a profile for CFOWV perforated vinyl on your printer, we suggest the following:
  - a. Test with a generic SAV profile for polymeric SAV.
  - b. Experiment with printing standard CMYK spectrum for hue accuracy, but also print deep dark colours and light neutral colours in order to determine the speed/temperature balance.
  - c. Too fast or insufficient heat will result in blotchy or a wet appearance in dark colours.
  - d. Too slow or too much heat will result in waves of discolouration on light and neutral colours.
4. **Ink Type** – If printing with UV-Cure ink, allow printed film to fully cure before overprinting, such as white or black. Otherwise film will be saturated with ink causing potential adhesion issues.
5. **Ink load** – Total ink load across CMYK must not exceed 270%. It is suggested to use spot colours in the artwork then in the RIP, specify the spot to CMYK conversion and manually adjust to ensure total CMYK is less than 270%. When printing, if the “walls” of the perforation edges are not white, then ink load is too high. There is a limit to how much ink the liner can absorb. It is not advisable for the ink to migrate into the adhesive or the plasticisers via the perforations. Ink load is at correct value when the ink is coalescing in the centre of the perforations, and away from the perforation edges.
6. **Resolution** – Print at low resolution, no more than 100dpi. Anything high will not be visibly different. It will keep the RIP files smaller. We recommend 600x600.
7. **Print Heads** – Ensure the film is clean and free of raised contaminants. Wipe the film down to remove dust, finger prints or small bits of packaging before printing. Do not use low head height setting. Instead, use high head setting. Monitor the film progressing through the printer, as the film is perforated and can lift off the liner while printing. It is highly susceptible to heat, which can cause the film to lift and/or the edges to curl. Keep an eye out for glue, vinyl, cardboard or other contaminants in the holes. If they are raised, pause printing, clean the affected area and resume printing. Keep print heads clean and well maintained at all times, otherwise lines may appear running down the roll and/or discolouration.

### Drying (De-gas / Out-gas) Instructions

If printed using solvent (including eco or mild) ink, follow these out gassing instructions:

1. **Suspension** – Ensure the CFOWV film is unrolled and suspended vertically above the ground by at least 50cm.
2. **Ventilation** – Ensure the media is well ventilated, even as far as directing the air flow from a fan onto the print. Depending on ink type, ink coverage, ink load, degree of ventilation and other environmental factors, it may take 1 to 5 days to properly outgas.

### Transportation Instructions

1. Transport printed Clear Focus One Way Vision film (OWV) either in flat and stacked sheet form or rolled form. Do not transport until print is completely dry and gassed out.
2. If sheet form, then ensure the liner is underneath and the printed side is up. Lay flat. Place the first sheet on a rigid substrate such as a pallet with a layer of thick cardboard or fluted plastic sheet. Stack each sheet on top aligning edges. When finished stacking, place another piece of cardboard or flue board on top. Do not strap, instead shrink wrap the entire pallet around the edges and over the top.
3. If rolled form, then ensure the image is on the outside edge of the roll, do not roll the printed side inwards. Minimum diameter of roll is 15cm. This will help prevent stretching. Preferably roll the OWV film onto a 6 inch core tube. However if laminated, lay the film flat and wait 24 hours after lamination before rolling. Use low tack masking tape around the entire diameter of the roll.
4. If rolled, place the roll inside a clean plastic protective bag, add end caps at both ends then place into a strong cardboard box.
5. During storage and transport, avoid exposing the OWV film to prolonged durations of very low or high temperatures or humidity. Never store or transport in direct sun light. Do not expose to water.