Advice for the use of OneWayPro® microperforated and laminated products

Microperforated is a technical product: it has less contact surface, more edges and is more fragile than solid vinyl. It is important to use it according to the rules listed below.

Storage

Ideally, microperforated films and laminations should be stored in a dry, cool and dark place. Heat and light cause the materials to age more quickly. The solvent in the glue evaporates faster with heat and the PVC becomes more brittle in contact with light.

Avoid placing the roll on a cold floor (vertically or horizontally), the part in contact with the floor will react differently than the rest of the roll and may make waves during printing, lamination and installation.

Printing

Before printing, let the printing material acclimatize for 24 hours at the temperature of the room where it will be printed.

Check the compatibility of our products with your machine. For some machines such as HP Latex 300/500/700/800, the OMAS feed system must be deactivated with OPP/Paper liners because they have a certain transparency that may cause the machine feed to vary.

Never cut a microperforated vinyl to size at the print output, then lay it flat to dry. As the inks dry slowly and first on the surface, the PVC softens and creates tension phenomena and the vinyl may come off the liner.

Wait 24 hours before laminating the printed microperforated liner to allow the solvent in the inks to evaporate. It is best to roll the liner loosely and place the roll vertically on a raised screen, for example, to allow for optimal air circulation.

Always roll your visual media outward.

Lamination

Lamination is highly recommended. It protects the printed material from water, dust and UV rays. It also facilitates the removal of the microperforated after use.

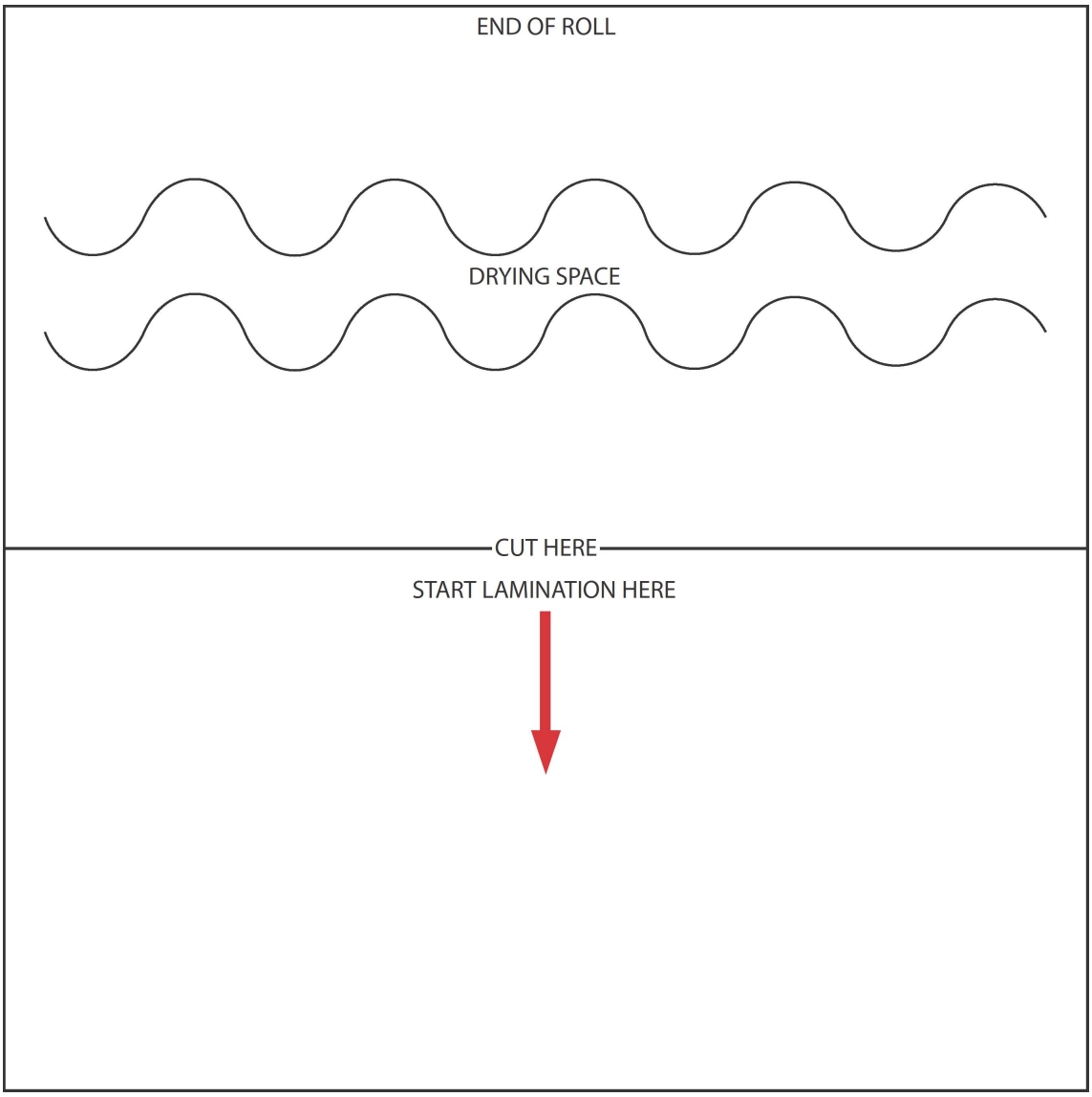
Each lamination has its advantages and disadvantages: PVC films are more flexible than PET films but less transparent. The duration also varies between the different laminations.

Laminating with PVC film (OneWayPro® CAST 050 & OneWayPro® POLY 060 lamination) is easier than laminating with PET film (OneWayPro® PET 036 HT lamination)

All OneWayPro® laminations are cold laminated (application temperature between 10°C and 40°C).

In order to avoid wrinkles during lamination, it is important that the printing rules are respected. It is also important not to leave any downtime between two printing jobs on the same reel, because if the dryer stays in front of the printed microperforated sheet for a longer period of time, the sheet will shrink and form waves that will cause wrinkles when printed or applied.

Immediately after you finish printing your work, print a 100 cm file like this:



Once the file is printed, you cut and remove the last 50 centimeters that will have been left behind the dryer and shrunk. This allows you to start the lamination on a flat surface, to leave 50 cm so that the tension between the microperforated film and the lamination is distributed in order to avoid folds. This is particularly important when using PET 036 HT lamination because PET is a very stable material, it will sooner or later regain its shape and risk to make the microperforated film come off the glass or to be dislodged from the microperforated.

Installation

Microperforated glass is a material where the adhesion force is mechanically reduced. Holes are a source of delamination, especially on the edges, when they are cut. It is imperative that the glass surface be prepared particularly carefully.

Clean and degrease the surface with a highly volatile, non-greasy cleaner. Dry the glass thoroughly, especially around the edges. This is a safety precaution to avoid peeling.
Use a cutter with a new blade. The sharpness of the cut increases the micro-adhesion surface on the edges.
Use a tool that allows for strong, even pressure on the edges to ensure proper adhesion.
Avoid bare-handed grips on the glue side. Grease left by your fingers will reduce the tack/adhesion of the

glue. Use latex gloves. Microperforated is always applied dry, never use water or liquid placement.

The microperforated is designed to be installed on a window. Never place it on the frame. Never place it on a silicone seal. Even a millimeter glued to a silicone seal can cause the material to start peeling off more. Do not overlap between two pieces of microperforated material.

You can use OneWayPro® Sealing Tape to apply to the edges of the microperforated to increase the peel strength.

When placing a microperforated laminate, the pressure in the holes may not be uniform and squeegee marks may appear in relief on the holes. These bumps will disappear after a few days as the air pressure in the holes equalizes.

It is advisable to wait two to five days, depending on the ambient temperature, before using the car wash with the vehicle on which the microperforated is placed, so that the adhesive has time to migrate properly.

You will find a video explaining how to apply the Gold microperforated + Cast lamination on a vehicle window on our website www.onewaypro.eu

The thermal shock

The last point is the most important of all and is the one that generates the most non-conformities in winter period: the thermal shock.

The installation temperature should ideally be between 15°C and 40°C. This applies to the ambient temperature, the temperature of the microperforated material and the temperature of the glass.

It is possible to glue the material at a lower temperature, but this involves risks and the microperforated material should not be subjected to sudden temperature changes (microperforated material placed in the shade and then heated by the sun).

The glue takes longer to migrate and reach 100% of its adhesion when it is cold.

The principle of thermal shock is simple: if temperatures are too low, the glue is harder. The glue acts like a suction cup. If it is cold, the migration of the glue on the glass will take longer. If the microperforated is subjected to too much temperature variation, the PVC will expand while the glue has not yet migrated and the film will peel off and make waves.

This problem most often occurs in late fall to early spring when temperatures are low at night and the days are sunny.