

INSTALL GUIDELINES for VEHICLES

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These are the recommended steps for installing automotive grade Clear Focus One Way Vision (OWV) film onto a vehicle rear windscreen window. Automotive grade films include AutoVue and SuperVue. For vans and utes, ClassicVue or PromoVue may also be used on the rear windscreen.

Location: Applicable to all geographical areas in Australia and New Zealand.

Temperature/Humidity: For minimum and maximum application temperatures and humidity levels, please refer to the relevant specification data sheet for the OWV film being installed. Generally, the range will be approximately 15°C to 25°C.

Surfaces: Any external glass / acrylic vertical or near vertical surface of vehicles. We do not recommend application to acute angled rear windscreens or to the side windows.

OWV Films: Applicable to all exterior mount adhesive Clear Focus One Way Vision films recommended for vehicles, such as AutoVue and SuperVue.

Laminate: It is **strongly recommended** that the One Way Vision on cars be laminated with CurvaLam. Otherwise when it rains, the water stays in the holes, making it virtually impossible for the driver to see through the rear windscreen. Ensure the One Way Vision is laminated with CurvaLam prior to installation onto car.

Please note, for buses, we recommend not to laminate.

Check List:

- Two clean lint free cloths
- Cotton gloves
- Sharp utility knife (e.g. Box cutting knife)
- Plastic squeegee applicator (rounded corners, felt overlay on one edge)
- Measuring tape
- Low tack application tape
- Scissors (optional)
- Felt block applicator (optional)

Pre-Install Notes:

1. Follow the steps outlined in the SURFACE PREPARATION fact sheet.

2. If solvent ink printed, it is recommended that the OWV film is out-gassed for a **minimum of 3 days** prior to trimming and installation onto a vehicle. If the OWV film is to be overlaminated, then **minimum of 5 days** gassing out is recommended if printed with full/hard solvent inks.
3. It is **strongly advised** that OWV film applied to the glass surfaces of cars be overlaminated with the optically clear laminate CurvaLam.
4. It is recommended to overlamine OWV film in the workshop using a manual or electric roll fed cold press laminating machine. Wait 24 hours after laminating before applying to a window.
5. It is recommended **not** to apply to vehicles with an acute angle windscreen, as the one way vision effect diminishes the further the windscreen angle is off the vertical.
6. It is recommended **not** to apply to side windows on vehicles, as it is difficult for the driver to see through due to the acute angle of perception.
7. It is recommended to apply in a sheltered area, where there is no breeze or direct sunlight. If the windscreen has been in direct sunlight, drive the vehicle into a shaded area and wait until the windscreen has cooled down. If the vehicle has been outside in cold weather, drive the vehicle inside to a workshop area and warm up the windscreen.
8. It is recommended a minimum of two (2) people work together to apply the OWV film.
9. Do not apply when it is raining or snowing. Dry application method is recommended.
10. Do not apply over cracks, stone chips, scratches or any other type of damaged surface.
11. Do not apply over rubber, silicone, vinyl, canvas or plastic surfaces, such as seals and protruding mounts.
12. Do not leave the uninstalled OWV film in the sun prior or on the ground to installation.

Install Steps:

Cleaning and Preparation



1. Ensure the surface area has been properly cleaned, following the instructions as per the Surface Preparation Fact Sheet.
2. Depending on the vehicle, rear windscreen wiper may be removed from the car before installation. After installation, the wiper is remounted. The benefit of this is that it significantly reduces the risk of the OWV curling, as the film is applied under the wiper mount thereby leaving no edges exposed. Car washes as used by some petrol stations can cause the

edges to fray or curl. Likewise, with spoilers, it is recommended to temporarily remove these for installation of OWV film then re-attach spoiler afterwards.

3. Using cotton gloves or a clean lint free cloth, wipe down the printed side of the OWV film, ensuring all finger prints, flecks, dust and any other material are removed.

Position and Measure



4. OWV film is applied to the exterior side of the windscreen. For rear windscreens, applying over the entire windscreen including mounted brake lights is allowed. Locate the horizontal and vertical centres of the trim area on the OWV film, and on the vehicle windscreen. Mark these centre points with application tape, both on the OWV film and on the vehicle.
5. Place the OWV film onto the rear windscreen and position into desired location. Align the centre marks on the OWV film with the centre marks on the vehicle. Secure the OWV film onto the vehicle with application tape.

Apply



6. Peel one half of the backing release liner from the OWV film. One person will need to hold the OWV face stock up and off the release liner, while the other person cuts the release liner up to the half way (centre) point. Using a cotton glove, wipe away any flecks off the windscreen left after cutting the release liner.
7. Please note that rubber and silicone will chemically react with the adhesive on OWV films. For many newer vehicles, the rubber seals are now under the glass, therefore applying the OWV film up to the edge should not be an issue. Irrespectively, for all installations, we recommended to seal the edges. Please follow the manufacturer's instructions of the edge sealing product. If using a spray adhesive, then spray around the window edge and you have 15 minutes to install the OWV over the spray adhesive. We recommend spray around 20mm width around all four edges.
8. **DRY METHOD:** With one person holding the OWV face stock loosely (so as to minimise the tension) at a low angle off the windscreen, the other person lightly squeegees the film down onto the windscreen, using a felt block, starting from the centre, working towards the edges, in small curved firm slow strokes, ensuring air bubbles do not form. If an air bubble or crease does appear, stop, and peel back the film a little until the air bubble/crease is exposed, then re-apply the film using the squeegee, ensuring the air bubble/crease is pressed out toward the edge.
9. Repeat step 7 until half the OWV film has been applied.
10. Now peel off the remaining backing sheet, wipe off any flecks off the windscreen. Repeat step 7 above.
11. A heat gun is not recommended, as this will permanently damage the OWV film. However, if the windscreen is curved and the OWV film in the corners of the windscreen is not adhering to the surface, a short soft low heat burst of the heat gun, no closer than 30cm, may be enough for the film to mould to the shape of the windscreen.

Trim



12. Remove all application tape used during the installation steps above.
13. Using a sharp blade, carefully cut the OWV film around the edge of the windscreen, and if necessary, protruding objects such as hinges, water nozzles, wiper mounts etc. The squeegee can be used as a straight edge in conjunction with the knife, to assist with keeping the cut aligned to the shape of the windscreen. It is recommended for the OWV film to be trimmed so that no part of it touches the rubber seal.

However, if using an edge sealing tape, first trim the one way vision film 5mm away from the window edges, then apply the edge seal tape, bridging the one way vision film and the glass surface.

14. If installing onto a window that can be wound, then ensure the film is trimmed 5mm away from all edges or seals (top, bottom and left/right sides). We recommend that the bottom edge of the film is sealed with an edge sealing tape. Ensure the tape bridges the film and the window. In some cars, please note that winding the window up or down may damage or mark the OWV film.
15. Check for bubbles. Prick a small hole on the edge of the bubble and squeegee the air out through the pin hole. Repeat this step until all bubbles are gone.



Post-Install Notes:

1. Do not use the wiper for at least 72 hours after installation.
2. Do not use the demister for at least 24 hours after installation.
3. Do not wash or clean the installed OWV film for at least one (1) week after installation.
4. Be aware that in temperatures outside the minimum and maximum application range, it may take longer for the adhesion to build strength.
5. Check the installation for lifting or bubbling within 2 to 3 hours, and firmly squeegee down the film. If left unattended, the adhesive can dry out, which means that it is unlikely that the film will be able to adhere in this area.
6. Check again in 24 hours.
7. 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.
8. Never use high pressure cleaning devices to clean the one way vision film. Tepid wax free mild detergent sponged over the film then gently rinsed off. Please refer to the Care and Removal Fact Sheet for further information.