

Preliminary remarks

The following general tips are given for application of ORACAL Special Window Films. It is highly recommended to get professional help from a local window film application center to get window films applied on vehicles.

Storage

ORACAL Special Window Films should be stored in a cool dry place protected from sunlight at all times. Material delivered in rolls must be either suspended or stand on-end on the roll blocks provided. For processing window films, relative humidity of between 40% and 50% and temperatures in the range of +18°C to +22°C are considered ideal.

Preparation

When applying the ORACAL Special Window Films, it is vitally important to prepare the windows properly. The most effective way to clean the windows is by **using a window cleaning solution (water and soap etc.)** and a rubber squeegee to make sure you get all the dirt and residues off. Please clean the windows at least twice in a dust free area and **DO NOT** use acid-based chemical solutions to prevent any damage to the film. Remember to clean the window rubbers as well to prevent the transfer of dirt, dust and any other residues. Even the tiniest residue on windows will prevent full bonding with the glass, ending up permanent bubbles in the film after application.

Cutting

If you are not highly experienced, it would be our recommendation that you use a piece of cardboard to cut a template for each window. This way, you can **get the right shape** without wasting any film. When making the template, add about 3-5 cm below the rubber seal and about 3-5 cm to the sides and top to give coverage below and under the seals. When you have a template, lay it and the film on a flat surface and use a sharp utility knife to cut along the edges so that the cut film exactly matches the shape of the template. Double check the film size by placing it over inside of the window. Have an assistant to hold the film in place, trim the film if needed to **make sure it fits properly**, remember to cut right into the corners to avoid ending up with gaps between the rubber seals and the film. Keeping in mind that the tint film goes on the inside of the window, check that the film fits properly, since the outside and inside window seals may be in different sizes.

Application

Start with applying a generous amount of application solution on the film and on the window. Peel the protective paper off the window film and spray some on the adhesive side as well.

- With the help of an assistant, carefully place the adhesive side of the film over the window, starting at the bottom edge. While working upwards avoid crinkles and bubbles as much as you can and you should apply not too much but adequate pressure on the film since the adhesive is pressure-activated.
- When the film is correctly in place, use a rubber squeegee to apply the film firmly onto the glass by using even strokes, starting from the middle and working outwards. At this point it is important to apply some more application solution to the outside surface of the film to provide lubrication for the squeegee.
- Continue pushing the air bubbles and application solution out from underneath the film, but avoid pressing too hard. Use more application solution on the outside surface of the film when needed. Remember that the film has not yet fully bonded with the glass, but it will bond progressively more as the solution is removed. Make sure you are able to access the corners and edges of the window.
- Working on the upper part of the window, leave the extra 3-5 cm film hanging out and dry it completely with the hot air gun. The dried part now can be filed off the window in order to get seamless edges.
- By the time all the application solution and bubbles are removed, the film should be firmly bonded to the glass, with no wrinkles, no trapped air bubbles and no gaps around the edges.
- Repeat the process for the other windows and allow at least 48 hours for the adhesive to cure before you either wash or roll your windows up or down.

Important Note

The information on this document is based on our current knowledge and experience. We have not explained all considering aspects of application. Specialized or occupational knowledge and competence of a professional application window film expert are presupposed. The trained experts are responsible for the quality of application. Due to the diversity of potential influencing factors during application and use, we recommend to make own tests of our products by customers who wish to use the films. No legally binding warranty of certain qualities can be derived from our information. This document constitutes neither a warranty of certain properties nor a quality or durability guarantee with regard to our ORACAL® window films. We are not responsible for costs incurred for the removal of our films.