



Product Technical Bulletin

ORACAL® Series 8810 Frosted Glass Release 1, Effective August 2006

Description

ORACAL® Series 8810 Frosted Glass film was specially developed for creating a sparkling glass effect or the impression of etched, cut or sandblasted glass. Long-lasting Series 8810 is available in five shimmering colors – silver grey, gold, mint, light blue and soft pink. This 3-mil cast film features a permanent, solvent-based acrylic adhesive, a clear synthetic (polyester) liner and an outdoor durability rating of 7 years. With a reduced-gloss finish to prevent undesired reflection, Series 8810 is an excellent choice for the decorative design of shop windows, glass doors and glass-like surfaces. This product differs from our existing Series 8510 Etched Glass Film due to its high sparkle effect, cast construction, synthetic liner and multiple color selection.

Product Data

Construction

This information is subject to change. Please ensure you are referencing the most recent Product Bulletin.

- **Face Film** – 3-mil cast PVC film
- **Adhesive** – Solvent polyacrylate, permanent
- **Release Paper/ Liner** – Special 4-mil polyester film

Physical Properties

The information stated below is based on testing results and intended solely as an information source. These values are given without guarantee and no warranty is implied or expressed. ORACAL recommends the purchaser conduct independent tests prior to use in order to determine suitability for the intended application.

Outdoor Durability	7 years
Application Surface Contours	Windows, glass doors and glass-like surfaces
Minimum Surface/Air Application Temperature	46° F
Temperature Resistance	Adhered to glass, -40° F to +194° F no variation

Resistance to Solvents and Chemicals	Adhered to glass, 8 hours in washcalics (0.5% household cleaning agents) in room temperature and in 149° F, no variation
Shelf Life	2 years (68°F/50% relative humidity)
Adhesive Power	(FINAT-TM 1, after 24h average) adhered to glass: 4.1 lb/in ²
Tensile Strength (along)	(DIN EN ISO 527) min.19 MPa
Tensile Strength (across)	(DIN EN ISO 527) min.19 MPa
Elongation at Break (along)	(DIN EN ISO 527) min. 40%
Elongation at Break (across)	(DIN EN ISO 527) min. 40%
Dimensional Stability	(FINAT-TM 14) adhered to glass, no shrinkage in cross direction, in length <.004"

Colors

ORACAL® Series 8810 Frosted Glass film is available in five shimmering colors, silver grey, gold, mint, light blue and soft pink.

Application Methods

Preparing the Surface

When using substrates that tend to outgas, we recommend the following steps:

1. Clean the surface, mount a piece of film to it, and store at 140° F for 24 hours.
2. If bubbles form after 24 hours, outgassing is still occurring. Either treat the plastic with a heat source or store it for an extended period at room temperature conditions in order to cure the substrate prior to application of the vinyl.

The high-quality special adhesives used on ORACAL pressure-sensitive films create an excellent bond with most clean, smooth, weather-resistant surfaces that are free of grease, dust or any contaminants. For a long-lasting bond, the target surfaces must be properly prepared. ***Be sure to check the directions provided by the manufacturer of the substrate you are using to determine the recommended cleaning method for that surface.*** Gas bubbles may form between the film and the surface if any solvent residue remains as a result of improper cleaning or if paint on the surface is too fresh. Freshly lacquered or painted surfaces should be allowed to stand for at least three weeks after complete curing before adhering the film. The end-user should test the compatibility of selected lacquers and paints prior to use.

Application Temperatures

ORACAL films should never be adhered at temperatures below 46° F. Newly fabricated sign faces should remain in the application environment for at least 24 hours to promote uniform adhesion characteristics and allow any residual moisture to evaporate. A significant drop in temperature should be avoided during the first 24 hours after adhesion.

Removing the Synthetic Release Liner

Lay the cut film on a flat surface with the film side down. Pull back only as much release liner as required to mount. Always draw the release liner from the film. Never draw the film from the liner.

Wet Application

Recommended for large applications. Wet adhesion should only be done in ambient temperature environments of at least 70° F.

1. Application Fluid – For ease in application use an application fluid that is designed for use with vinyl sign materials. Please contact product Technical Support for additional information.
2. Clean and Prepare the Substrate – Clean flexible face materials using the prepared application fluid described in Step 1. **Never use alcohol to clean acrylic or polycarbonate.**
3. Film Application for Full-Coverage Sign Faces
 - a. Lay the substrate face up on a clean surface.
 - b. Spray the substrate with prepared application fluid.
 - c. Wipe off the film with a clean, lint-free cloth.
 - d. Lay the film, liner side up, in a dry location near the wetted surface.
 - e. Spray the exposed adhesive side with application fluid and place it on the substrate.
 - f. Position the cut film where you want it. The wet application method allows for more precise positioning of film.
 - g. Squeegee the film to the surface using sweeping, overlapping motions. Be certain that there is no water left between the substrate and adhesive to avoid bubbles and ensure a positive bond.

For wet adhesion, we recommend using a medium-tack application tape. After a short drying period, remove the application tape carefully at a 180° angle.

Application Tips

- Seams can be made using the overlap method. It is recommended that overlaps and seams measure no more than 1/8".
- Puncture air bubbles with an air release tool. Do not use a knife or razor.
- If using application tape, always remove it at a 180° angle and immediately re-squeegee the film.
- Cutbacks should be performed soon after application as adhesion builds with time.

Warranty

ORACAL USA warrants its pressure-sensitive vinyl films to be free of defects in materials and manufacture, and to perform as stated in published product technical information bulletins if properly stored and applied. ORACAL USA will, at its discretion, either replace defective material or refund the purchase price of any ORACAL®, ORAJET®, ORAGUARD®, ORALITE® or ORAMASK® materials that do not meet this warranty within the specified effective performance life. The customer assumes responsibility in determining product suitability for intended use. Oracal USA shall not be liable for any direct, indirect or consequential damages arising from the use or inability to use the product. This warranty is declared in lieu of any other claim, whether expressed or implied, and is not subject to interpretation.

If you are in extreme climate zones Southwestern United States, South America, Latin America or the Caribbean, contact Oracal USA for specific warranty information for your area.

Shipping, Storage, Shelf Life

- Film should be stored in a climate-controlled environment, ideally at 68° F/50% relative humidity.
- For optimal product quality and performance, film must be stored in a dry, clean area, out of direct sunlight.
- Shelf life of ORACAL® Series 8810 must not exceed two years from the date it is received from ORACAL USA

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