

3M™ Wrap Film Series 1080

Preparation of Substrates, Application, Maintenance and Removal

Instruction Bulletin

Recommended Types of Graphics and End Uses

3M™ Wrap Film 1080 is a long-term, dual cast film designed for solid color vehicle detailing, decoration and full wraps without the need of additional graphic protection.

3M™ Wrap Film 1080 uses Controltac™ and Comply™ technology. Controltac™ minimizes the initial contact area of the adhesive and allows the applicator to reposition the graphic during application. This allows easier installation of large formats in a wide temperature range. Comply™ are air release channels allowing fast and easy, bubble free installation of graphics.

General Information

Refer also to the Product Bulletin of this Wrap Film Series for more specific details.

Important Notice

3M™ Wrap Film is not intended for wet applications. Residual water reduces adhesion and can cause lifting after application.

Application of Metallic Films

On adjacent car parts application of metallic wrap films should be done in the same pattern direction of the roll in order to maintain the same appearance.

Light Colors

Prestretching (e.g. for side mirror application) of light colored films might lead to slight color change.

Cleaning

Cleaning the application surface properly is an important step for a good application result. First step is a car wash (without hot wax) and thorough drying of the vehicle. Then clean the surface thoroughly with 3M™ Surface Preparation System as grease and oil prevent the film from adhering properly. Use lint-free paper towels. Remaining car wax and polish must be completely removed. Edges and recesses must be properly cleaned. After cleaning make sure that the substrate, edges and seams are completely dry. Film adheres poorly even to a properly cleaned substrate if there is any remaining liquid on the substrate, edges or seams.

Note: Do not use isopropyl alcohol as this can affect the adhesion of the film. Other solvents than 3M™ Surface Preparation System may affect the adhering properties of the film, too.



Application Tools

Notice: Use thin, soft sleeves when applying Wrap Film 1080-G.

- 3M™ Squeegee PA-1 Gold
- Cutter
- Magnets
- Industrial heat gun
- Infrared pyrometer
- Gloves
- 3M™ MaskingTape
- Knifeless™ Tape
- Ruler



Application Temperature

Minimum application temperature: +16°C (surface temperature)
Optimum application temperature: +18°C to +23°C

Application

General Procedure Remove the liner carefully from the film.

Application on Flat Surface Position the film onto the substrate:



Span the film wrinkle-free with moderate tension on the substrate. Easy sliding and repositioning of the film is given by Controltac™. Squeegee lengthwise from the center outwards with overlapping strokes.

Gloss and satin films need higher squeegee pressure to avoid air entrapment between film and substrate.



It is very important NOT to squeegee the film directly after heating. Let the film cool down for a few seconds after heating, then firmly squeegee without stretching the film. Stretching at the edges might cause shrinkage of the film and color fading.

Squeegee Pressure

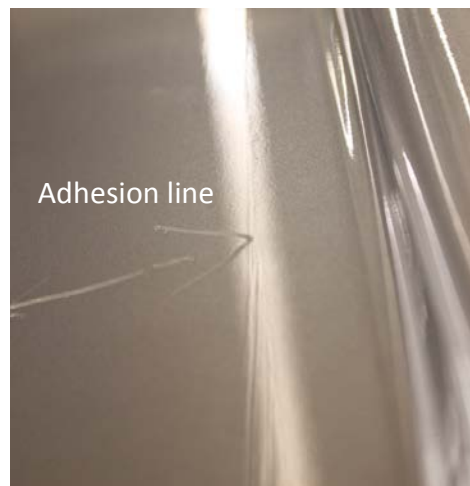
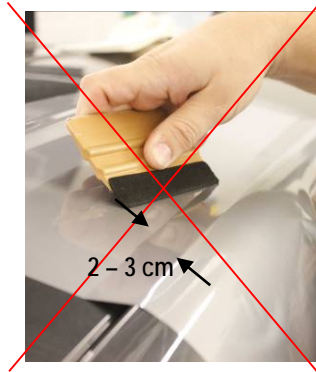
3M™ Wrap Film 1080 uses Controltac™ technology which minimizes the initial contact area of the adhesive and allows the applicator to reposition the graphic during application. This allows easier installation of large formats in a wide temperature range.

Gloss and satin films have fine, non-visible air release channels (Comply™ technology) and require therefore higher squeegee pressure to remove the air through the air release channels.

Application on Recesses with Inlays

The film is designed for application on flat and simply curved surfaces. On recesses and deep channels it is recommended to apply the film with inlays. Please refer to the [Instruction Bulletin Inlay Method](#) for details.

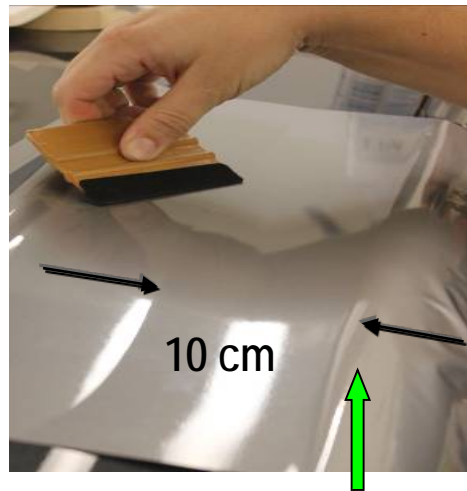
Adhesion Lines In certain situations, e.g. bridging of the film under tension, undesired effects as adhesion lines can occur. If the film is squeegeed under tension too close to the edge (up to 2 – 3 cm), snapped and re-squeegeed as shown in the pictures below, adhesion lines may become visible which cannot be removed.



Application Recommendation

In bridging situations, stop applying the film at least 10 cm before the edge in order to reduce tension of the film. Then lift the film slightly and continue tension-free squeegeeing to the edge.

It is recommended to finish the application in one step without interruption.



Finishing of Edges

It is recommended to heat and re-squeegee the edges of the film in order to assure a good adherence.



1080 Carbon Fiber and Brushed may tear at higher temperatures if being slightly stretched. Therefore, heating temperatures for these films should not be higher than +40°C to +50°C.

Application at Window Trim Gaskets



Cut the film at an overlap of approx. 2 mm on the gasket and apply the film with the squeegee underneath the gasket. For cutting the use of Knifeless Tape is recommended.



Important Notice

Partial wrinkling of the film may occur at window trim gaskets because of possible mechanical movements of the gasket resulting in stress on the film.



Important Notice

The wrapped vehicle should remain in the shop floor for at least 24 hours to allow the adhesive to build up adhesion on the car paint. Car wash should not be done before 7 days after wrapping.

Automated Car Washing and Pressure Washing

Automated car washing may be used. Be aware that brush-type car washes may influence the visual appearance of the film. The use of hot wax is not recommended.

Pressure washing may be used under these conditions:

- Ensure water pressure is kept below 80 bar.
- Keep water temperature below 60 °C.
- Keep the spray nozzle at least 30 cm away and perpendicular (at 90° +/- 30°) to the graphic.

Difficult Contaminants

Difficult contaminations by bird droppings or tree sap should be removed immediately from the film surface with warm soapy water.

Removal

Applied graphics can be removed with heat or chemicals.

Remarks

This bulletin provides technical information only.

Important Notice

All questions of warranty and liability relating to this product are governed by the terms and conditions of the sale, subject, where applicable, to the prevailing law.

Before using, the user must determine the suitability of the product for its required or intended use, and the user assumes all risk and liability whatsoever in connection therewith.

Additional Information

Visit the web site <http://www.3Mgraphics.com> for getting:

- more details about 3M™ MCS™ Warranty and 3M™ Performance Guarantee
- additional instruction bulletins
- a complete product overview about materials 3M is offering.



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