Product Description

• Multi-layer cast adhesive backed film for solid color vehicle detailing, decoration and full wraps

 This film utilizes 3M[™] Controltac[™] and 3M[™] Comply[™] technology Controltac[™] minimizes the initial contact area of the adhesive for easy sliding, tacking, snap-up and repositioning.
Comply[™] technology allows air to avit through air release abapted to the address

Comply[™] technology allows air to exit through air release channels to the edge of the graphic.

- 60 inch (1.52 m) rolls—allowing almost any section of the vehicle to be wrapped without seams
- Use the film right out-of-the-box with or without graphic protection
- Expected Performance Life (unwarranted period for film with no graphic protection, applied to a flat, vertical, outdoor surface):

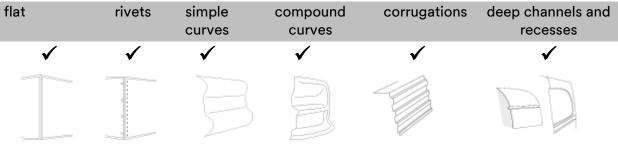
- All colors and textures: 8 years

Important Notice: All 3M[™] Wrap Film Series 2080 gloss films have a clear protective film layer to prevent scratching; this protective film layer can be left on the gloss film surface for the entire installation and must be removed before post-heating. See 3M FAQ 2080 for more details.

Recommended types of graphic and use

- Solid color vehicle detailing
- Standard vehicle graphics, detailing and decoration, multiple layers of graphics
- Commercial vehicle and fleet graphics, emblems or striping
- Watercraft graphics (above the static water line only)

Surface types



Product Line

Product name	Description	Features
3M™ Wrap Film 2080-X	X = color code, opaque. Various colors and surfaces.	Controltac™ and Comply™

Graphic Protection

Use <u>3M[™] Wrap Overlaminate Series 8900</u> to enhance the appearance of 3M[™] Wrap Film Series 2080.



Physical Properties The values displayed are the results of illustrative lab test measures made according to the indicated external norm and shall not be considered as a commitment from 3M

Value	Characteristic				
Material	Cast vinyl				
Color	See colors of <u>3M™ Wrap Film 2080</u> Note: The opacity of these films vary and should be considered when installing.				
Thickness Values apply to 2080-M12; designs vary slightly in thickness	Film without adhesive:	3.5 ± 0.4 mil (0,09 ± 0,01 mm)			
ISO 534	Film with adhesive:	4.5 ± 0.6 mil (0,11 ± 0,015 mm)			
Adhesive	Acrylic, pressure-activated (slideable, repositionable), with air release channels				
Adhesive appearance	Grey or clear, depending on film color Note: Grey adhesive color may be darker or lighter depending on the film color.				
Adhesion	Aluminum etched	5.6 ± 1.1 lbf/in (25 ± 5 N /25 mm)			
Indicative values	Paint	3.4 ± 1.1 lbf/in (15 ± 5 N /25 mm)			
FTM 1, 24 h 23°C/50%RH					
Applied shrinkage FTM 14	< 15 mils (0,4 mm)				
Liner	Polyethylene-coated paper				
Application method	Dry only				
Substrate types	Aluminum, chrome, glass, ABS, paint**, fiberglass with gel coat				
	The application of film onto glass can cause glass break by uneven heat absorption through sun exposure. 3M does not accept liability for glass breakage. ** Check adhesion to powder-coated or water-based paints.				
Application temperature	60 – 90 °F (16 – 32 °C)				
3M recommends application at +	65 °F to 73 °F (+18°C to +23 °C)	for optimum ease of application.			
3M recommends application at + Temperature range after application	65 °F to 73 °F (+18°C to +23 °C) -65 to +225 °F (-53 to +1				
Temperature range after		07 °C)			
Temperature range after	-65 to +225 °F (-53 to + (not for extended periods of tin • Resists mild alkalis, mil	l07 °C) ne at the extremes) d acids, and salt			
Temperature range after application	-65 to +225 °F (-53 to +1 (not for extended periods of tin • Resists mild alkalis, mil • Excellent resistance to	l07 °C) ne at the extremes) d acids, and salt water (does not include immersion)			
Temperature range after application	-65 to +225 °F (-53 to + (not for extended periods of tin • Resists mild alkalis, mil	l07 °C) ne at the extremes) d acids, and salt water (does not include immersion)			



Product Lifecycle

3M™ Wrap Film Series 2080-X		1	2	3	4	5	
Installation Characteristics	Challenging/High Skill						Easy/Low Skill
24-hour adhesion	Low						High
Long term adhesion	Low						High
Removability	Not Designed for Easy Removal						Designed for Easy Removal

Follow the link for complete details about the criteria above and a comparison of all 3M films

Warranty Information

3M Basic Product Warranty

3M Graphics Products are warranted to be free of defects in materials and manufacture at the time of shipment and to meet the specifications stated in its applicable 3M Graphics Product Bulletin and as further set forth in the 3M Graphics Warranties Bulletin.

3M[™] Performance Guarantee and MCS[™] Warranty

3M provides a guarantee/warranty on a finished applied graphic within the framework of 3M™ Performance Guarantee and/or 3M™ MCS™ warranty programs.

Follow the link for a complete list of compatible products that are approved by 3M for use with the base film covered in this Bulletin and used for the creation of a graphic that may be eligible for the 3M[™] MCS[™] Warranty or 3M Performance Guarantee.

Limited Remedy

Unsuitable End Uses

3M recommended product end uses are listed in each 3M graphics product bulletin. End uses not listed in the applicable 3M Graphics Product Bulletins are typically not eligible for 3M Graphics Warranties. For non-recommended and/or non-warranted end uses or applications, users must test and approve the end uses or applications, assume any associated risks, and acknowledge that 3M has no liability for such end uses or applications. Please contact your 3M representative with any questions about graphic applications, end uses, and warranties.

Limitation of liability

Except where prohibited by law, 3M SHALL NOT UNDER ANY CIRCUMSTANCES BE LIABLE TO PURCHASER OR USER FOR ANY DIRECT (EXCEPT FOR THE LIMITED REMEDY PROVIDED IN THE 3M GRAPHICS WARRANTIES BULLETIN), INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, LABOR, NON-3M MATERIAL CHARGES, LOSS OF PROFITS, REVENUE, BUSINESS, OPPORTUNITY, OR GOODWILL) RESULTING FROM OR IN ANY WAY RELATED TO 3M'S GRAPHICS PRODUCTS, SERVICES, or THIS BULLETIN. This limitation of liability applies regardless of the legal or equitable theory under which such losses or damages are sought.

3M Commercial Solutions products are not tested against automotive manufacturer specifications!



Graphic Manufacturing

Vehicle wrapping

Textured, metallic, pearl, and color flip films may have a directional characteristic in their appearance. For the best overall appearance, do not alternate between lengthwise and widthwise graphic panels.

Film colors vary from lot-to-lot. For consistent looking color use the same lot number of film for an entire vehicle.

To maximize a graphic's bond to the substrate 3M recommends to use 3M[™] Tape Primer 94 in areas that will be partly stretched, particularly on the edges of the film. Important Note: Consult air quality regulations before using 3M[™] Tape Primer 94.

Sheeting, Scoring and Film Cutting

<u>See 3M Instruction Bulletin 4.1 for Sheeting, Scoring and Film Cutting details</u> Important Note: The thickness and texture of this film makes it more difficult to cut and weed cleanly. Use clean, sharp, properly aligned blades. The user must assume with responsibility of the outcome, so always test and approve before cutting a large job.

Application Tapes

See instruction bulletin 'AT-1' for information about selection and use of suitable application tapes for this product, please.

Application and Installation

In addition to other 3M Bulletins specified in this document, the following Bulletins and Videos provide details that you may need to successfully apply a graphic.

See 3M Instruction Bulletin 5.36 for application techniques for automobiles, vans and buses.

See 3M Instruction Bulletin 5.4 for application: fleet trucks.

See 3M Instruction Bulletin 5.45 for application techniques for railcars.

See 3M Instruction Bulletin 5.42 for application and special considerations for watercrafts.

See 3M Instruction Bulletin 5.46 for application on substrate with recesses

See 3M Instruction Bulletin 5.5 for general procedures for interior and exterior dry application. 3M FAQ 2080

Maintenance, Cleaning and Removal

Use a cleaner designed for high-quality painted surfaces. The cleaner must be wet, nonabrasive, without solvents, and have a pH value between 3 and 11 (neither strongly acidic nor strongly alkaline).

These films can be removed with the aid of heat.

<u>See 3M Instruction Bulletin 6.5 for information about storage, handling, maintenance and removal of films and sheetings.</u>



Factors that Affect Graphic Performance Life

The actual performance life of a graphic is affected by:

- selection, condition and preparation of the substrate.
- surface texture.
- application methods.
- angle and direction of sun exposure.
- environmental conditions.
- cleaning or maintenance methods.

Shelf Life, Storage and Shipping

The shelf life as defined below remains an indicative and maximum data, subject to many external and non-controllable factors. It may never be interpreted as warranty.

The shelf life is never more than 3 years from the date of manufacture on the original box. If you process the film, the shelf life is changed to 1 year from the processing date, but not later than the 3-year maximum from the manufacturing date.

Storage conditions: +40°F to 100°F (+4°C to +38°C), out of sunlight, original container in clean and dry area.

Bring the film to room temperature before use.

Shipping finished graphics: Flat, or rolled printed side out on 6 inch (15 cm) or larger core.

Health and Safety

When handling any chemical products, read the manufacturer's container labels and the Safety Data Sheets (SDS) for important health, safety and environmental information.

Follow the link to obtain SDS sheets for 3M products on 3M.com/SDS.

IMPORTANT! When using any equipment, always follow the manufacturer's instructions for safe operation.

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