# **Product Description**

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

 This film utilizes 3M<sup>™</sup> Controltac<sup>™</sup> and 3M<sup>™</sup> Comply<sup>™</sup> technology Controltac<sup>™</sup> minimizes the initial contact area of the adhesive for easy sliding, tacking, snap-up and repositioning.
Comply<sup>™</sup> technology allows air to exit through air release channels to the edge

Comply<sup>™</sup> 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 2080 gloss films have a clear protective film layer to prevent scratching; this protective film layer must be removed after installation.

# 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

flat	rivets	simple curves	compound curves	corrugations	deep channels and recesses
$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
		B	B		BD

## **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<sup>™</sup> Wrap Overlaminate Series 8900</u> to enhance the appearance of 3M<sup>™</sup> Wrap Film 2080 Series.



**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		ee colors of <u>3M™ Wrap Film 2080</u> lote: The opacity of these films vary and should be considered when nstalling.					
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.							
Temperature range after application	-65 to +225 °F (-53 to +107 °C)						
	(not for extended periods of time at the extremes)						
Chemical Resistance	Resists mild alkalis, mild acids, and salt						
	• Excellent resistance to water (does not include immersion)						
	Resists occasional fuel	spills					
Flammability	ASTM E84 test report: click here or go to the On-line Catalog at 3Mgraphics.com Flammability standards are different from country to country. Ask your local 3M contact for details, please.						



# 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

# 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<sup>™</sup> Performance Guarantee and MCS<sup>™</sup> 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<sup>™</sup> MCS<sup>™</sup> Warranty or 3M Performance Guarantee.

# **Limited Remedy**

This bulletin provides technical information only.

#### **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 all product end uses (recommended or not recommended), user remains solely responsible for evaluating, testing and approving this 3M product and determining whether it is appropriate and suitable for customer's application.
- For non-recommended and/or non-warranted end uses or applications, users must assume any associated risks, and acknowledge that 3M has no liability for such end uses or applications.

As outdoor graphics age, natural weathering occurs causing a gradual reduction in gloss, slight color changes, some lifting of the graphic at the edges or around rivets, and ultimately a minor amount of cracking. These changes are not evidence of product failure and are not covered by a 3M warranty.

Please contact your 3M representative with any questions about graphic applications, end uses, and warranties.

#### Limitation of liability

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.

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<sup>™</sup> 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<sup>™</sup> 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 product bulletin 'ATR' 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.

<u>See 3M Instruction Bulletin 5.5 for general procedures for interior and exterior dry application.</u>

# 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.

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



## 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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