3M™ Wrap Film Series 2080

Product Bulletin 2080 July 2023 (Supersedes September 2020)

Product Description

Product Features

- 3M[™] Wrap Film Series 2080 ("2080") is a multi-layer cast adhesive backed film for full color vehicle wraps, accents, or partial decocration wraps
- 2080 is a more conformable, easier to install film compared to older versions of 3M[™] Wrap Film, requiring less heat during installation
- Bold assortment of nearly 100 colors, patterns, and textures
- 2080 High Glass colors offer a 250% better reflected image quality over a typical premium cast vinyl wrap film, providing a mirror-like apperance
- 3M[™] Controltac[™] and 3M[™] Comply[™] technology
 - Controltac™ minimizes the adhesive's initial contact area for easy sliding, tacking, snap-up, and repositioning
 - Comply™ allows air to exit through air release channels to the edge of the film for fast, easy, bubble-free installations
- Gloss and high gloss color films have a clear protective film layer:
 - Reducing surface impressions and increasing scratch resistance during installation
 - Enabling installers to wrap complex, curved surfaces while leaving the clear protective film layer on
- 2080 has a directional arrow on the liner of each roll to help install the gloss, textured, metallic, pearl, and color flip films (see <u>FAQ 2080</u> Installation)
 - High gloss 2080 colors currently do NOT have directional arrows on the liner. Some high gloss colors do exhibit directionality characteristics, making it important to install high gloss films in a consistent orientation across the entire installation. 3M recommends checking the film's orientation prior to installation to ensure its color and directionality will match across the entire installation.
- Available in 60 in. (1.52 m) rolls to allow for almost any section of the vehicle to be wrapped without seams
- Use the film right out-of-the-box with or without graphic protection (3M™ Wrap Overlaminate Series 8900)
- Removable with heat and/or chemicals from most surfaces within the warranty period
- Comprehensive 3M™ MCS™ Warranty up to eight years of protection on vertical applications* (See Warranty Information.)
- Approved for use with 3M[™] Knifeless[™] Tapes

Additional high gloss color film features include:

- Optimized adhesive for exceptional installation experience, related to reduced initial tack and improved repositionability**
- Smooth high gloss finish after installation

* Warranty varies by zone

** Other 2080 Wrap Film colors will also have this new adhesive based on the manufacturing schedule. Contact 3M Product Support for more details at 1-800-328-3908.

\Lambda warning

A static electricity discharge can occur when removing the liner, creating sparks and igniting flammable vapors. Only use 3M[™] Wrap Film Series 2080 in safe environments.

) IMPORTANT NOTE

These products are intended for resale for professional use only. All installations should be conducted by a professional installer.

IMPORTANT NOTE

The protective film layer on the gloss and high gloss color films can be left on for the entire installation and must be removed before post-heating.



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IMPORTANT NOTE

High gloss color films require additional considerations prior to installation. See FAQ 2080 Installation for more details.

Quick Links 3M Graphics Warranties Technical Information Safety Data Sheets (SDS) FAQ 2080 Installation FAQ 2080 Maintenance Videos

Some of these links lead to web-based resources that are not product-specific.



Recommended Types of Graphics and End Uses

- Standard vehicle graphics, including solid color, detailing, decoration, and multi-layer graphics
- Commercial vehicle and fleet graphics, emblems, or striping
- Watercraft graphics (above the static water line only)

Coverage Options

| Packages | Accents | Partial Coverage | Full Vehicle Coverage |
|--------------------------|---|--|------------------------------------|
| Coverage | Gas cap, rocker panels, racing stripes, chrome delete, etc. | Hood or roof examples | Complete color change |
| Coverage Illustration | | | |
| Film Color Shown | 3M™ Wrap Film Matrix Black | 3M™ Wrap Film High Gloss Hot Rod Red 3M™ Wrap Film High Gloss Black | 3M™ Wrap Film Matte Black Metallic |

Surface Types



Product Line

| Product Name | Description | Features | |
|-----------------------------|--|-------------------------|--|
| 3M™ Wrap Film Series 2080-X | X = Color code, opaque. Various colors and surfaces. | Controltac™ and Comply™ | |

Recommended Compatible Products

Visit <u>3Mgraphics.com/warranties</u> for a complete list of compatible products approved by 3M for use with the base film covered in this bulletin and used for the creation of graphics that may be eligible for the 3M[™] MCS[™] Warranty or 3M Performance Guarantee.

Coatings or other aftermarket additions (such as, but not limited, to ceramic coatings) are excluded from the 3M[™] MCS[™] Warranty and should only be applied and/or used on a user test-and-approve basis. The end user assumes complete responsibility if using a coating or unsubstantiated cleaning product on their 2080 car wrap. 3M does NOT warrant 2080 films with coatings or other aftermarket additions.

Graphic Protection

Printing on 2080 films is to be done strictly on a user test-and-approve basis. Any printed 2080 film must be covered with an overlaminate to preserve the printed areas. Adding an overlaminate will make installation of the 2080 film more difficult. 3M does NOT warranty any printed application for 2080 film.

• <u>3M™ Wrap Overlaminate Series 8900</u>

Other Products

• 3M™ Knifeless™ Tape

Characteristics

These are the typical values for unprocessed product. Processing may change the values.

Physical Characteristics

| Characteristic | Value | | | | |
|--|---|--|--|--|--|
| Material | Cast vinyl | | | | |
| Color | See the <u>3M™ Wrap Film Series 2080 Brochure</u> for a full list of colors. | | | | |
| Thickness | These values apply to 2080-M12. Designs vary slightly in thickness. Without adhesive: 3.5 mil (0.09 mm) With adhesive: 4.5 mil (0.11 mm) | | | | |
| Adhesive | Pressure-activated (slide, tack, snap-up, reposition) with air release channels | | | | |
| Adhesive Color | Gray* or clear, depending on film color | | | | |
| Typical Adhesion 24 Hours After Application | Etched Aluminum: 4.5–6.7 lbs/in. (0.8–1.2 kg/cm) Paint: 2.3–4.5 lbs/in. (0.4–0.8 kg/cm) | | | | |
| Liner | Gloss, Satin, Matte, and Texture color films: Polyethylene-coated paper High Gloss color films: Polyethylene - coated PET | | | | |
| Chemical Resistance | Resists mild alkalis, mild acids, and salt Excellent resistance to water (<i>does not include immersion</i>) Resists occasional fuel spills | | | | |
| Flammability | Click to view the ASTM E84 report for <u>2080</u> , or go to the online product catalog at <u>3Mgraphics.com</u> or call 1-800-328-3908. | | | | |

* NOTE: Gray adhesive color may be darker or lighter depending on the film color.

Application Characteristics

| Characteristic | Value | | | | |
|--------------------------|---|--|--|--|--|
| Substrate Type | Aluminum, chrome, glass*, ABS, paint**, fiberglass with gel coat | | | | |
| Application Temperature | 60°F to 90°F (16°C to 32°C) | | | | |
| In Use Temperature Range | -65°F to 225°F (-54°C to 107°C) (Though not for extended periods of time at the extremes.) | | | | |
| Applied Shrinkage | <15 mil (0.4 mm) | | | | |
| Application Method | Dry only | | | | |

* The application of film onto glass can cause glass breakage via uneven heat absorption from exposure to the sun. 3M is NOT liable for glass breakage. ** Check adhesion to powder-coated or water-based paints.

Product Lifecycle

| 3M™ Wrap Film Series 2080-X | | 1 | 2 | 3 | 4 | 5 | |
|---|-------------------------------|---|---|---|---|---|---------------------------|
| Installation Characteristics | Challenging/High Skill | | | | | | Easy/Low Skill |
| Installation Characteristics (High Gloss Film) | 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 |

Factors Affecting Graphic Performance Life

The actual performance life of a graphic is affected by:

- The combination of graphic materials used
- Selection, condition, and preparation of the substrate
- Surface texture
- Application methods
- Angle and direction of sun exposure
- Environmental conditions
- Cleaning and maintenance methods

Graphics Manufacturing

Layout Considerations for Graphic Panels

Take into account these considerations when planning your graphic layout:

- Textured, metallic, pearl, and color flip films may have a directional characteristic to their appearance. For the best overall appearance, install the film in a consistent orientation through the entire installation. 3M recommends checking the film's orientation and color prior to installation. Do NOT alternate the film's orientation from panel to panel.
- Film colors can vary from lot-to-lot. Use the same lot number of film for an entire vehicle to achieve a consistent appearance.

See FAQ 2080 Installation for more installation details.

3M[™] Primer 94

3M recommends using 3M[™] Primer 94 to maximize a graphic's bond to the substrate in any areas that will be stretched, particularly on the edges of the film.

Consult air quality regulations before using 3M[™] Primer 94.

Cutting

See <u>3M Instruction Bulletin 4.1</u> for Sheeting, Scoring, and Film Cutting details.

(i) IMPORTANT NOTE

The thickness and texture of these films makes them more difficult to cut and weed cleanly. Use clean, sharp, properly aligned blades. The user must assume responsibility for the outcome, so always test and approve before cutting a large job.

Application Tapes

There are two types of application tapes. See <u>3M Instruction Bulletin AT-1</u> to determine what application tape is recommended for your 3M Graphics Products. Finished graphics eligible for any 3M warranty must be constructed using approved 3M Graphics Products. See the <u>3M</u> <u>Graphics Warranty Bulletin</u> for more details.

Premasking Tape

Premasking tape increases stiffness during application while preventing stretching and damage. Use when little or no liner is exposed. See <u>3M Product Bulletin 4.3</u> for complete details.

Prespacing Tape

Prespacing tape holds cut and weeded letters or graphics in place during application and after removal of the film liner, while preventing stretching and damage. Use when large amounts of liner are exposed. See <u>3M Product Bulletin 4.3</u> for complete details.

preventing stretching and damage. Use when large amounts of liner are exposed. See <u>3M Instruction Bulletin 4.3</u> for complete details.

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IMPORTANT NOTE

The texture on certain films in 3M[™] Wrap Film Series 2080 makes it difficult for any application tape to adhere to the film. If used, apply the graphic as soon after cutting and applying an application tape as possible. Alway test and approve before committing to a job. See <u>3M Instruction Bulletin 4.3</u> for complete details.

Application and Installation

(i) IMPORTANT NOTE

Never use a wet application method to apply this film.

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

- <u>3M Product & Instruction Bulletin 4.19</u> Application: 3M™ Knifeless Tape
- <u>3M Instruction Bulletin 5.36</u> Application Techniques for Automobiles, Vans, and Buses
- Complete the 3M Pre-Installation Inspection Record found in 5.36 prior to manufacturing or applying a graphic to an automobile, van, or bus.
- <u>3M Instruction Bulletin 5.4</u> Application: Fleet Trucks
- <u>3M Instruction Bulletin 5.42</u> Application: Special Considerations for Watercraft
- Complete the 3M Pre-Installation Inspection Record found in 5.42 prior to manufacturing or applying a graphic to a watercraft.
- <u>3M Instruction Bulletin 5.45</u> Application and Maintenance of Graphics for Rail Applications
- <u>3M Instruction Bulletin 5.46</u> Application on Substrates with Recesses
- <u>3M Instruction Bulletin 5.5</u> Application: General Procedures for Interior and Exterior Dry Applications.
- <u>3M Wrap Film Product Care Guide</u>

Handling Films

- Use a felt squeegee to install the film to minimize scratching.
- Use a heat gun instead of a torch when heat is needed. A torch may alter the appearance of the finish.

Pressure-activated Adhesive

The pressure activated adhesive on this film offers:

- smooth sliding into position on a substrate;
- fast finger tacking to check positioning; and
- easy snap-up and repositioning when you need it.

The snap-up and reposition feature is lost:

- when firm pressure with a squeegee or other application tool is applied;
- at application temperatures above 100°F (38°C) even if only light finger pressure was used for tacking;
- if any part of the film is removed from the original liner and reapplied to the same or another liner; or
- if solvent from inkjet ink has not completely dried or cured, affecting both slideability and snap-up.

Working with Non-Visible Air Release Channels

Air release channels are a characteristic of films with Comply™ adhesive, allowing trapped air to exit through the edges of the graphic.

- The channels will be damaged if installers remove and attempt to change liners or reapply the same liner.
- For the best results, always work from the center of a graphic out to the edges to allow trapped air to escape. Use an air release tool to help remove any trapped air bubbles. See <u>3M Instruction Bulletin 5.4</u> for details.

Maintenance and Cleaning

Use care to avoid scratching the film. Never scrub the film. Scratching and abrasion marks may be visible and may not be able to be worked out of the film's unique finish. Avoid using harsh chemicals and brushes when cleaning the vehicle, and avoid parking near shrubs, trees, and any other items that could scratch the vehicle. See <u>3M FAQ Vehicle Care</u> for details.

Use a cleaner designed for high-quality painted surfaces. The cleaner must be wet, non-abrasive, without solvents, and have a pH value between 3 and 11 (neither strongly acidic nor strongly alkaline). See <u>3M Instruction Bulletin 6.5</u> for details.

(j) IMPORTANT NOTE

Refer to the FAQ 2080 Maintenance for a list of approved waxes and polishes to use with 2080 films.

Removal

Removal requires heat and/or chemicals. 3M makes no claims as to the speed of removal. This product may not remove similarly to other products in the same category. See <u>3M Instruction Bulletin 6.5</u> for details.

Shelf Life, Storage, and Shipping

Shelf Life

The shelf life is **never more than three years** from the date of manufacture on the original box. Processing the film changes its shelf life to **one year** from the processing date, but no later than three years from the manufacturing date.

Storage Conditions

- 40°F to 100°F (4°C to 38°C)
- Out of sunlight
- Clean, dry area
- Original container
- Bring the film to room temperature before use

Shipping Finished Graphics

Flat, or rolled printed side out on a 6 in. (15 cm) or larger core. This helps prevent the application tape, if used, from popping off.

Health and Safety

When handling any chemical products, read the manufacturers' container labels and the safety data sheets (SDS) for important health, safety, and environmental information. To obtain SDS for 3M products go to <u>3M.com/SDS</u>. To request SDS by mail, or in case of an urgent situation, call 1-800-364-3577 or 1-651-737-6501.

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

Warranty Information

Warranty Coverage Overview

The warranty coverage for eligible graphics is based on the user both reading and following all applicable and current 3M Graphics product and instruction bulletins. The warranty period for eligible graphics is as stated in the 3M Graphics Warranties Matrices at the time that the film was purchased. Information found at <u>3M.com/graphicswarranties</u> includes:

- <u>3M Graphics Warranties Bulletin</u>
 - This bulletin contains information on limitations and exceptions, and warranty period reductions for 3M Graphics Warranties. The warranty period may be reduced and stipulations may apply for certain constructions, applications, and graphic exposures as covered in this Bulletin.
- <u>3M Graphics Warranties Selector</u>
- Use this selector to search for your vertical warranty period by product type, ink type, film name, and/or ink/printer platform.
- <u>3M™ MCS™ Global Geographical Zones Warranty Information</u>
- Use this map to determine which warranty region applies to you.
- U.S. Desert Southwest Region Map
- Use this map of hot, arid desert areas to determine if you are subject to reduced warranted durabilities.
- The following links lead to zone specific information for the 3M™ MCS™ Warranty.
 - <u>Zone 1</u>
 - <u>Zone 2</u>
 - <u>Zone 3</u>
- <u>3M™ Wrap Film Series 2080 Warranty Information</u>
 - This document provides warranty information specific to 3M[™] Wrap Film Series 2080

The warranties set forth in this bulletin are made in lieu of all other express or implied warranties, including any implied warranty of merchantability, fitness for a particular purpose, or arising out of a course of dealing, custom, or usage of trade.

Technical Information

Technical information, guidance, and other statements provided by 3M are based upon records, tests, or experience that 3M believes to be reliable, but the accuracy, completeness, and representative nature of such information is not guaranteed. Such information is intended for people with knowledge and technical skills sufficient to assess and apply their own informed judgment to the information. No license to any intellectual property rights is granted or implied with respect to this technical information.

Product Selection and Use

Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product in a particular application. Customer is solely responsible for evaluating the product and determining whether it is appropriate and suitable for customer's application, including conducting a workplace hazard assessment, reviewing all applicable regulations and standards, and reviewing the product label and use instructions. Failure to properly evaluate, select, and use a 3M product in accordance with instructions or to meet all applicable safety regulations may result in injury, sickness, death, and/or harm to property.

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