# Using 3M<sup>™</sup> Wrap Film Series 1080 & 2080

# About the Films

# What's new?

- 3M<sup>™</sup> Wrap Film Series 2080 ("2080") is more conformable than 3M<sup>™</sup> Wrap Film Series 1080 ("1080"), enabling easier installation with less heat.
- All 2080 gloss films have a conformable protective film layer on their surface.
  - The protective film layer reduces surface impressions in a finished goods roll. It can be easily and cleanly removed after installation. Scratches on the protective film layer will not transfer to the film itself.
  - Leave the protective film layer on for the entire installation, but remove it before postheating.
  - If hazing occurs, a heat gun can be used to restore the film's original gloss level.
- 2080 offers an improved warranty versus 1080, with up to eight years on vertical applications and up to three years on horizontal applications.

## Can I use an overlaminate?

Applying 3M<sup>™</sup> Wrap Overlaminate Series 8900 can alter the films inherent texture. If graphic protection other than 3M<sup>™</sup> Wrap Overlaminate Series 8900 is used, then the wrap shop assumes all risk for testing, approving, suitability, and warranty.

#### (i) **IMPORTANT NOTE**

All 2080 gloss films have a protective film layer on the surface. This protective film layer **must** be removed before applying an overlaminate.

## Can I print on 3M<sup>™</sup> Wrap Film Series 1080 or 2080?

These films are available in many colors, textures, and finishes, and is intended to be used without further processing. If the film is printed, with or without graphic protection, the wrap shop assumes all risk for testing, approving, suitability, and warranty.

#### (i) IMPORTANT NOTE

All 2080 gloss films have a protective film layer on the surface. This protective film layer **must** to be removed before printing.

## Is the "striped" appearance on carbon fiber films normal?

Yes. All 1080 and 2080 films have some texture integral to creating their unique looks. The carbon fiber films have the most texture, which appears to have more depth in certain lighting conditions, giving a somewhat striped look.

## Do certain colors, such as Satin Pearl White, appear to change color if applied in different directions?

Yes. Certain film colors, such as Satin Pearl White and the Brushed Metal colors, have a directional characteristic to their appearance. Film colors can also vary slightly from lot-to-lot. For the most consistent color, use the same film lot number for an entire vehicle. 3M now offers Color Flip options that change color when viewed from different angles. See <u>3M.com/2080</u> and <u>3M Product Bulletin 2080</u> for details.

## **IMPORTANT NOTE**

(i)

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. Follow the directional arrows when installing to achieve consistency and help prevent color shifts from panel to panel.

#### **3M Graphics Warranties Technical Information Selector** Safety Data Sheets (SDS) Flammability (ASTM E84 Reports) Videos

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



# Questions and Answers for Wrap Shops

# **Ouick Links**

FAQs 1080/2080 **Revision E, January 2022** 

#### How can I ship and store 2080 gloss films?

All 2080 gloss films have a protective film layer on the surface. Do not use masking tape on the protective film layer. Please wrap the outer layer of 2080 gloss film with paper and fix the paper with tape to prevent the tape from damaging the film layer. Clips can also be used to store 2080 gloss films. See <u>3M Product Bulletin 2080</u> for further information.



Figure 1. Film Storage Options

# Installation Tips

#### Clean the Vehicle Properly Before Applying Film

Cleaning the application surface properly is one of the most important steps to a good application. Wash and dry the vehicle thoroughly. Wipe the application area and a large area around it with a solvent-based cleaner, wiping dry as you work. Wipe again with a mixture of 70% isopropyl alcohol (IPA) and 30% water, wiping dry as you work. Read <u>3M Instruction Bulletin 5.36 for complete details</u>. Alternatively, use the  $3M^{TM}$  Surface Preparation System and lint-free paper towels to clean the application surface. After cleaning ensure the application surface is completely dry.

#### Use Masking Tape for Alignment

Always use masking tape to mark alignment. Do not use a grease pencil. Its waxy core can embed in the film's texture, and attempting to remove it may damage the texture.

#### Cover the Edge of the Squeegee to Reduce Scratches

The unique finishes on 2080 films are sensitive to installation scratches and require careful handling during installation. 3M recommends using a high-density felt squeegee, or covering the edge of a 3M<sup>™</sup> Hand Applicator PA1-G (gold) with the "loop" side of 3M<sup>™</sup> Scotchmate<sup>™</sup> Reclosable Hook and Loop Fastener - Loop portion SJ-35231, or PTFE tape. Another option is to use a squeegee with a suede or nylon wrapped edge. Alternatively, use 3M<sup>™</sup> Hand Applicator PA1-G (gold) squeegee with thin, soft microfiber sleeves.

#### Use a Heat Gun, Not a Torch, to Heat the Film

Only heat the film with a heat gun - never a torch. A torch is likely to permanently alter the appearance of the finish.

#### Using 3M Roller Tools

3M offers several roller based tools to help get the job done. 3M<sup>™</sup> Rapid Roller Applicator CPA-2 is for flat areas, such as the hood or roof. 3M<sup>™</sup> Roller L, 3M<sup>™</sup> Roller S, and 3M<sup>™</sup> Vehicle Channel Applicator Tool VCAT-2 have specially shaped rollers designed to help conform heated film into channels and recesses. Read more about these tools in <u>3M Instruction Bulletin 5.36</u>.

#### Using Application Tape

Film Series 2080 features a dual cast construction that is approximately 3.5 mil thick. It has just enough rigidity to allow easy installation without an overlaminate or application tape. Due to the film's texture, application tape may not work well with cut and prespaced graphics. Wrap shops may choose to test and approve an application tape, such as  $3M^{M}$  Prespacing Tape SCPS-55.

# (i) IMPORTANT NOTE

All 2080 gloss films have a protective film layer on the surface. This protective film layer must be removed before applying application tape.

# Installation Overview

#### Where can I get complete installation details?

<u>3M Instruction Bulletin 5.36</u> provides specific instructions for installing vehicle wraps. 3M also offers world-class training for professional growth, as well as opportunities to earn an installer endorsement from 3M and be listed on the 3M website.

#### Do Film Series 1080 and 2080 install the same way as Print Wrap Film IJ180mC?

Installation is very similar to 3M<sup>™</sup> Print Wrap Film IJ180mC ("IJ180mC"). Film Series 1080 and 2080 have the same features as IJ180mC, that is, slidable and repositionable adhesive with virtually invisible air release channels. But be aware of these important installation practices:

- Align the graphic using masking tape.
- Apply edge protection to the squeegee, such as PTFE tape or loop tape.
- Use a heat gun, never a torch.

#### Is film primer required on complex curves?

3M<sup>™</sup> Primer 94 can help any film adhere to deep channels and complex contours. Please refer to <u>3M Instruction Bulletin 5.36</u> and <u>3M</u>. <u>Instruction Bulletin 5.46</u> for recommendations.

#### Can I wet-apply Film Series 1080 or 2080?

No. 3M does not recommend or warrant using a wetting solution on the vehicle surface when applying any film with air release channels. However, the installer may use a wetting solution on *top* of the film layer to provide some slip resistance for the squeegee.

#### Can I apply Film Series 1080 or 2080 to an older, rusted, or repaired vehicle?

All wrap films, including Film Series 1080 and 2080, should be applied to a "like new" vehicle finish for the best results. 3M's warranty only applies to vehicles that have an excellent bond of the paint and its finish to the vehicle substrate. Any rust, bubbling, scratches, dents, or other damage will be visible through the film, and such imperfections may damage the film or cause the film to fail prematurely. Areas repaired with body filler must be sanded, epoxy primed, and, for best results, finished with an OEM (Original Equipment Manufacturer) paint or clear coat. Any recently applied finish must be fully cured according to the paint manufacturer's directions before film is applied.

#### Are there any special application considerations?

Yes, particularly for the Carbon Fiber and Metal finishes and 3M<sup>™</sup> Wrap Overlaminate Series 8900. Because of the unique patterns designed into these films for their realistic looking finish, improper application techniques show more readily on these finishes. Proper stretching and heating of the film is essential to avoid creating visual imperfections, which can appear as dents, bends, stretch marks, or kinks in the finish. See Figure 2.

To ensure a successful application:

- If stretching is required, stretch large sections of the film. Stretching the film in smaller sections may cause a series of stretch marks at every location where stretching occurred.
- Always use even tension when stretching the film. Avoid applying too much force in one particular area, as this may distort the film's finish.
- Apply as little heat—using only a heat gun—as possible to stretch the film. The temperature at the surface of the film should not exceed 150°F (65°C).
- Avoid applying heat directly to where the film attaches to the substrate.





Figure 2. Proper techniques ensure a professional looking wrap.

# Wrapped Vehicle Maintenance

#### **Removing Fingerprints**

The matte finish films may show fingerprints, but these can be cleaned off after the installation is complete by wiping the film surface with a clean lint-free towel saturated with a mixture of 70% IPA and 30% water. Wipe the film surface dry afterwards.

#### **Removing Stains**

Try a mild household cleaner, such as SimpleGreen®, and a lint-free cloth, followed by the technique used for "Removing Fingerprints." Alternatively, for matte, satin, and textured films, try 3M<sup>™</sup> Cleaner for Matte Wrap Films (available in Europe, the Middle East, and Africa only), and for glossy films, try 3M<sup>™</sup> Finesse-it<sup>™</sup>.

### (j) IMPORTANT NOTE

Users should test their cleaner of choice in a small inconspicuous area prior to applying to the full film installation. The use of any specific cleaner is strictly on a user test-and-approve basis.

#### **Removing Scratches**

Many surface scratches will disappear when exposed to sunlight on warm days. Otherwise, surface scratches may be removed by heating the film surface with a heat gun. See Figure 3. Do not allow the surface temperature of the film to exceed 225°F (107°C). Deeper scratches in the film surface will not come out. Always use care to avoid scratches during installation, maintenance, use, and storage of the wrapped vehicle.



Figure 3. The circled area shows surfaces scratches removed with a heat gun.

#### Cleaning a Wrap

Review the Caring for Your Vehicle Graphics FAQ Vehicle Care.

Film or Finish Type	Product or Solution
Smooth or Gloss Texture	<ul> <li>3M<sup>™</sup> Perfect-It<sup>™</sup> Show Car Paste Wax 39526</li> <li>Meguiar's® Gold Class<sup>™</sup> Carnuaba Plus Premium Liquid Wax</li> <li>3M<sup>™</sup> Polish Rosa 80345</li> <li>3M<sup>™</sup> Synthetic Wax Protectant</li> <li>A mixture of 70% IPA and 30% water</li> <li>3M<sup>™</sup> Cleaner for Matte Wrap Films</li> </ul>
Matte White (2080-M10) Carbon Fiber White (2080-CF100, 8900-BR100)	<ul> <li>Based on the type and degree of contamination, use one or more of these solutions, in the order shown, to remove any build-up.</li> <li>Hot, soapy water solution</li> <li>70% IPA and 30% water</li> <li>Simple Green® All-Purpose Cleaner</li> <li>Ready-made household chlorine bleach spray cleaner followed by the 70% IPA and 30% water</li> <li>Mineral spirits followed by the 70% IPA and 30% water</li> <li>Alternatively, use 3M<sup>™</sup> Cleaner for Matte Wrap Films.</li> </ul>
Carbon Fiber Black (2080-CF12, 8900-CF100, 8900-BR100)	<ul> <li>Meguiar's Ultimate Black Plastic Restorer</li> <li>3M<sup>™</sup> Cleaner for Matte Wrap Films</li> </ul>

#### Refreshing the Appearance of a Vehicle Wrap

Before using any of these procedures, test and approve them in an inconspicuous area before using them on the entire wrap.



Figure 4. Recommended Meguiar's Finishing Products

#### **Replacing Damaged Wraps**

If your customer requests replacing only the damaged part of a wrap, you may want to recommend replacing the entire graphic. Many factors will contribute to the replaced section appearing different from the rest of the wrap, which may not be satisfactory for the customer. These factors include color shifts due to using film from a different printing lot, and the slight fading or change in gloss that may have occurred on the previously installed film.

# **Ceramic Coatings**

For information about  $3M^{\text{TM}}$  Ceramic Coatings, visit the <u>3M website</u>, read the <u>3M^{\text{TM}} Ceramic Coating Instruction Bulletin</u>, or see <u>3M's</u> instructional video.



Figure 5. 3M<sup>™</sup> Ceramic Coatings

#### IMPORTANT NOTE

The 3M<sup>™</sup> Ceramic Coating (see Figure 5 above) is the only coating recommended for use with Film Series 2080. Other ceramic or 9H coatings are not recommend, and they may discolor, damage, or otherwise shorten the life of the film. The use of any non-3M coatings applied to the film are solely the responsibility of the user.

# Removing a Wrap

### Removing Film Series 1080 and 2080

3M recommends having a wrap professional remove film. Film Series 1080 and 2080 are removable throughout the time period covered under warranty, provided the film has not been printed and no overlaminate has been applied. Heat and/or chemicals may be required. Some adhesive residue may be left on the vehicle, which can be easily removed with a product such as the 3M<sup>™</sup> Citrus Base Cleaner. Refer to 3M Product Bulletin 2080 and 3M Instruction Bulletin 6.5 for more details.

#### Removal Causing Damage

When used, applied, maintained, and removed according to 3M's instructions and within the product's 3M warranty period, Film Series 1080 and 2080 should not damage an OEM paint finish upon removal.

# Other Resources & Information

#### Information Available at 3M.com/Graphics

Additional information is available online. To see the newest additions to this product offering and to learn more go to: <u>3M.com/Graphics</u>

#### Protective Film Layer on All 2080 Gloss Films

The Film Series 2080 protective film layer is classified as recyclable plastic Number 4. Recycling programs vary from country to country. Ask your local solid waste authority about their plastic Number 4 recycling program.

# Warranty Information

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

## **Technical Information**

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