

3M™ Fasara™ Glass and Plastic Finishes

3M™ Fasara™ / 3M™ Fasara™ Custom

Installation Guide

Revision C, February 2014
Replaces Release B, August 2013

Product Description

3M™ Fasara™ and 3M™ Fasara™ Custom Finishes (the “Products”) are decorative glass and window films with a wide variety of available designs. Over 50 standard designs are available for Fasara Glass and Plastic Finishes, while Fasara™ Custom Finishes have a wide variety of available UV-cured inkjet-printed designs and colors.

3M™ Fasara™ Finishes are intended for both new and refurbished interior décor and boast a Class A fire rating. These decorative Products can be used in vertical applications in commercial buildings to control both light and privacy through a building’s interior glass and interior plastic (acrylic and polycarbonate) surfaces. Many Fasara and Fasara Custom Finishes also can be used in interior perimeter glass applications. Two of the Product designs can be used in exterior glass applications.

See the current 3M™ Fasara™ Glass Finishes Product Catalog (the “Catalog”) for available designs.

Safety



CAUTION: Risk of Glass Breakage Due to Thermal Expansion

Glass surfaces exposed to sunlight will absorb heat. A glass surface covered by a film with high opacity or dark-colored ink, including films with small areas of high opacity or dark-colored ink, will absorb more heat. Heat absorption can create thermal stress that results in glass breakage, or thermal cracking. This can cause personal injury and property damage. 3M specifically does not recommend using a film with high opacity or dark-colored ink on glass surfaces with significant exposure to sunlight.

Precautions

Plastic Substrates

Generally, applying a Fasara Glass Finish to plastic substrates, such as acrylic and polycarbonate, is not recommended. Plastic materials may outgas, causing the finish to bubble or peel.

For plastic substrates, please apply Illumina-P (SH2FGIM-P), Oslo-P (SH2EMOS-P), or Fasara Custom Plastic Finishes only. Please see the applicable technical data sheets for details of these finishes and their proper handling.

High Humidity Conditions

Do not install Fasara Glass Finishes in locations in which the film may frequently come into contact with water or where condensation often occurs. Product and Application Characteristics.

Installation Tools and Supplies



Figure 1. Felt-wrapped and nylon squeegees for Fasara installation

- Mild, non-lotion containing liquid detergent
- Water
- Spray bottle (a garden style, 1 or 2 gallon, low pressure sprayer works well)
- Clean, lint-free towels
- A ruler with nick-free edges
- Plastic trim guide
- Olfa knife with replacement break-away blades
- 4" Window scraper with replacement blades
- 8" Window cleaning squeegee with replacement rubbers
- Application squeegee for Fasara: 4 in. or 6 in., rubber hardness 80, 6mm or greater thickness, nick free
- Application squeegee for Custom Fasara: 4 in. or 6 in., felt-wrapped plastic, 6mm or greater thickness, nick free
- Drop cloths (absorbent) or plastic sheeting
- Scotch™ Masking Tape

About Measuring, Cutting and Finishing Panels

Any nicks or burrs on the edge of the ruler used to mark and cut the finish could scratch it. Apply masking tape to the side of the ruler that contacts the finish to help prevent damage. Use a very sharp cutting blade to ensure clean, smooth edges.

Prepare the Application Solution

Prepare a water and liquid detergent solution to use for applying the finish. It should have a concentration of approximately 0.1% to 0.2% detergent. A solution of about 1 teaspoon of mild detergent to 1 gallon of water is sufficient for about 36 square yards of application surface. Pour this solution into your sprayer.

- High detergent concentration causes the squeegee and finish to slip, resulting in insufficient application pressure.
- Low detergent concentration causes the finish to stick or prevents the squeegee from traveling smoothly across the finish, which results in an inconsistent application and leaves excess water behind.

Application Surface Preparation

Use the following steps to prepare the application surface for film application. An experienced Product applicator's techniques may vary.

Note: Apply Fasara™ Glass Finishes to glass only. To enhance the application and appearance, clean and dry the glass thoroughly.

For plastic substrates, please apply Illumina-P (SH2FGIM-P), Oslo-P (SH2EMOS-P), or Fasara™ Custom Plastic Finishes only.

1. Place drop cloths and/or plastic sheeting to protect the application area below the application surface.
2. Spray the application solution on the application surface.
3. Scrape glass to remove dirt and other contaminants on the surface of the glass.

Note: Do not scrape plastic surfaces as this will cause scratches that may show through the film.

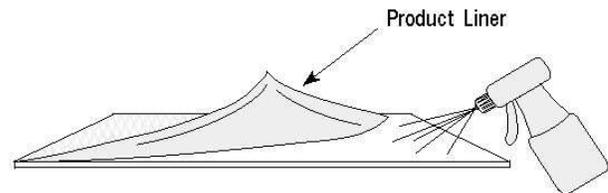
4. Thoroughly rinse the application surface using the sprayer, then squeegee the entire application surface, wiping the squeegee after each stroke.
5. Dry the application surface edge and frame thoroughly.
6. Apply the finish immediately after cleaning the application surface. Any dirt or contaminants which settle on the application surface after cleaning will inhibit adhesion and may be visible after application.

Application Procedure

Recommended application temperature: 53°F - 100°F (12°C - 38°C)

These are the general Product application steps. An experienced Product applicator's techniques may vary.

Note: Always handle the finish with care. It is relatively thin and can fold upon itself more easily than other interior decorating finishes with which you may be familiar.



1. Spray both the adhesive side of the finish while removing the liner and the application surface generously with the application solution.
2. Position the finish on the application surface.
3. Starting at the top of the finish, use firm and consistent pressure, making overlapping strokes with the squeegee. The goal is to push the water out to the edges so the adhesive makes good contact with the application surface.
4. When applying multiple panels, butt the seams together, factory edge to factory edge. An overlap joint is not recommended, as this technique may cause adhesion problems or a discolored appearance.

Note: When butting panels together, ensure that the panels are from the same lot. Different lots of the same material can have slight color variations that will be noticeable at seams.

Note: The surface of Fasara glass finishes is not smooth. A small amount of application solution remains on the surface of the finish after squeegeeing, potentially causing an uneven visual appearance until it dries.

Using Finishes from Different Product Categories

If combining finishes, for example to compliment a gradation pattern using a different finish of the same color, check the color between the panels before installation. Although different Product categories may have the same color, the differences in the product construction and lot may be apparent when used side by side.

Product Maintenance

Residual Water Phenomenon

Even when installed properly, some application solution may remain between the glass and the finish. This causes small water bubbles or clouding that disappears as the water evaporates. This can take up to several days, depending on environmental conditions.

- Do NOT touch the finish during this time.
- Protect the finish from abuse.
- Hitting the applied finish with a hard or sharp object could scratch, mar or damage it.
- Do not apply any adhesive-backed product, such as seals or stickers, and do not write on the finish with markers or pens.

Cleaning

Regular maintenance will help keep your glass finish looking good for a longer time. Care must be taken not to scratch the film. Do not use bristle brushes or abrasive cleaning materials.

Note: Never use alcohol, or other organic solvents when cleaning Fasara™ Custom Finishes. This can easily damage custom finishes.

1. Dust and grit: wipe it off with a soft damp cloth.
2. Soiled, but not gritty: use water and a clean, nick free window squeegee, making sure you do not scratch the finish with any metal parts of the tool.
3. Heavier soil: use a mild liquid detergent and water, followed by a clear water and clean cloth wipe.
4. Mat Crystal 2 or Milky Crystal finishes installed outdoors: rinse with clear water or a clean cloth that is sufficiently wet to wash away any gritty dirt, then clean as above.
5. Wipe in one direction only, not back and forth. Avoid rubbing vigorously, which could mar the surface of the finish.
6. To remove coating and caulking material, use toluene or alcohol. Use a small amount and apply ONLY where necessary. Do not allow the solvent to contact the edge of the finish. Wipe off immediately with a water dampened, clean, soft cloth.
7. Do not use:
 - Ammonia-containing cleaning products
 - Chlorine or bleach-containing cleaning products
 - Organic-based cleaning products (i.e. Alcohol, Toluene, etc.)
 - Polishing compound
 - Cleaning compound
 - Sponges
 - Brushes or electric polishing equipment
 - Dirty cleaning tools

Note: Additional caution is recommended when cleaning spliced areas. Always clean in the direction of the splice.

Removal

Use the following steps to remove previously installed Fasara finishes from glass or plastic application surfaces.

Note: Films can become brittle in cold weather, causing it to break into small pieces during removal. For best results, remove film when the temperature is above 40°F (10°C).

1. Lift the edge of the film from the application surface, then pull the film from the surface.
2. If the film is wider than 1 - 2 ft. (30mm - 60mm), or is not peeling off easily, **carefully** cut strips in the film using the recommended utility knife to ease the removal process.

Note: When cutting the film, be very careful not to damage the substrate. Glass and plastic substrates can be scratched easily.

3. If the film is still not peeling off easily, try the following steps:
 - a. Spray a solution of ammonia and water onto the film.
 - b. Apply a plastic film or newspaper onto film.
 - c. Wait one to two hours, then lift the edge of the film and pull it off in sheets.
4. When the film has been removed, clean the adhesive residue from the application surface with a scraper using a solution of ammonia and water.

For more information, contact Technical Service at 1-888-650-3497.

Storing Fasara Finishes

Tightly roll unapplied finish on the original tube and tape the edge to hold it in place. Apply both end caps and put the finish in its shipping box. Storing the finish too loosely rolled allows air to get between the finish and liner, which may cause appearance problems.

Storage Conditions

- 40° to 90°F (4° to 32°C)
- Out of sunlight
- Clean dry area
- Original container
- Bring the film to room temperature before using

Disclaimer of Warranty

The information contained and techniques described herein are believed to be reliable, but 3M makes no warranties, express or implied, including but not limited to any implied warranty of merchantability or fitness for a particular purpose.

Limitation of Liability

Except where prohibited by law, 3M SHALL NOT UNDER ANY CIRCUMSTANCES BE LIABLE TO PURCHASER OR USER FOR ANY DIRECT, 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 SELLER'S PRODUCT, SERVICES OR THIS BULLETIN. This limitation of liability applies regardless of the legal or equitable theory under which such losses or damages are sought, including breach of contract, breach of warranty, negligence, strict liability, or any other legal or equitable theory.

Warranty

Please refer to the 3M™ Fasara™ Glass Finishes warranty document.



3M Architectural Markets 3M U.S.

3M Center
Building 220-7W-07
St. Paul, MN 55144-1000
1-888-650-3497
3MArchitecturalMarkets.com

3M Canada

1840 Oxford St E
London, ON N5V 3R6
1-800-265-1840

3M Architectural Markets 3M Europe

Hermeslaan 7
1831 Diegem
Belgium
www.3M.eu/ArchitecturalMarkets

3M Architectural Markets 3M Italia, S.p.A.

Via Nortberto Bobbio, 21
20096 Pioltello MI
Tel. 02.7035.2517
www.dubic.it

3M India Limited Architectural Markets Department

Concorde Blook, UB City
24 Vittal Mallya Road, Bangalore 560 001
Tel: 080 2223 1414 Fax: 080 2223 1450
3minteriors.in@mmm.com
www.3M.com/in/interiors
www.spacesunleased.com

3M Architectural Markets 3M Gulf

PO Box 20191, Dubai Internet City
Building @ 11
Dubai, United Arab Emirates
Tel. 971 4 3670 777
Fax 971 4 3670 998

3M and Fasara are trademarks
of 3M Company. © 3M 2013.
All rights reserved. Please recycle.