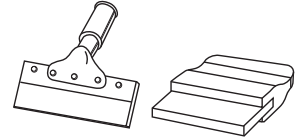


Installing Fasara™ Glass Finishes

1. Installation

A. Installation Tools

- Scotch™ Masking Tape
- 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
- 5" Application squeegee: rubber hardness 80, 6mm or greater thickness, nick free
- Drop cloths (absorbent) or plastic sheeting



B. Surface Preparation

1. Apply Fasara Glass Finishes to glass only. To enhance the application and appearance, clean and dry the glass thoroughly.
2. Place drop cloths and/or plastic sheeting to protect the application area below the glass.
3. Apply application solution to glass using pressure sprayer tank.
4. Scrape glass to remove dirt and other contaminants on the surface of the glass.
5. Thoroughly rinse the glass using the pressure sprayer tank and squeegee the entire glass surface, wiping the window squeegee after each stroke.
6. Dry the glass edge and window frame thoroughly.
7. Apply the glass finish immediately after cleaning. Any dirt or contaminants which settle on the glass after cleaning will inhibit adhesion and may be visible after application.

C. 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 (SH@EMOS-P) or Transparent (SH2CL-P) only. Please see separate materials 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.

Risk of Glass Breakage Due to Thermal Expansion

Perimeter glass and/or interior glass exposed to direct sunlight will absorb heat. If covered by an opaque film, glass will absorb more heat. Heat absorption can create thermal stress, resulting in glass breakage (also called thermal cracking), which can cause personal injury and property damage. 3M specifically does not recommend using any of the following Products on glass exposed to direct sunlight.

- Black (Nokto, Radius, Prism Noir, Shutie Black and Arpa Black)
- Silver (Prism Silver and Astral Silver)

1. Installation (cont.)

D. About Measuring, Cutting and Finish 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. When applying multiple panels of finish side by side, be sure they are from the same lot to reduce the chance of a visual difference.

E. 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.

- Too high a concentration allows the squeegee and finish to slip, resulting in insufficient application pressure
- Too low a concentration allows 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

2. Installation Procedure

Recommended Application Temperature: 53–100°F (12–38°C)

1. 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.
2. Spray both the adhesive side of the finish and the glass surface generously with the application solution.
3. Position the finish on the glass.
4. 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 glass.

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.

5. 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.

A. Visual Variations

Using Finishes from Different Product Categories

Although finishes from these product categories may have the same color, the differences in the product construction and lot may be apparent when used side by side.

Pattern Repeats

Some finish patterns have repeats that vary in height so they may not align perfectly when multiple panels are used side by side.

3. Product Maintenance

A. 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.

3. Product Maintenance (cont.)

B. 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.

C. 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.

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:
 - Any ammonia, chlorine or organic based cleaning products
 - Polishing compound
 - Sponges
 - Brushes or electric polishing equipment
 - Dirty cleaning tools
 - Cleaning compound
8. Additional caution is recommended when cleaning spliced areas. Clean in the direction of the splice.

4. Removal

Fasara Glass Finishes can be removed with low heat or the use of solvents. For more information, contact Technical Service at 1-888-650-3497.

5. 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.

A. Storage Conditions

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

6. 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.

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8. Warranty

Please refer to 3M Fasara Glass Finishes warranty document.



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