



Instructions for Installing Window Film Yourself

Recommended Tools:

- A film aid application concentrate (or no-tears baby shampoo)
- Bottled water (not tap water)
- Spray bottle
- Squeegee
- Break-away utility knife (for cutting film)
- Single-edged razor blade (for cleaning glass)
- Ruler or tape measure
- Soft, lint-free cloth or paper coffee filters (for cleaning the glass and film)

Before You Begin:

Residential window films are applied directly to the inside glass surface you can touch inside your home. If you have a removable storm pane, you may remove it and apply the film to the inside surface of the outermost window, then remount the storm pane.

Applying window film is a simple process, with only a few basic steps. However, patience and preparation are very important. Before beginning this project, please read the instructions completely and carefully, perhaps using a small piece of film to practice the steps before you actually tint a window. Many first-time users feel more confident after tinting a few, small windows. Start with smaller windows before applying film to larger windows, such as patio doors, which may require two people.

Preparation:

a. Fill a pump- or trigger-spray bottle with a soapy water solution: to 1qt. bottled water, add a bottle of a film aid concentrate (or 1/4 tsp of a no-tears baby shampoo without conditioner). Film Aid offers the best drying clarity and pH balance. Do not use hard tap water, which can leave spots under the film. **VERY IMPORTANT:** This soapy water solution (“the Solution”) will serve as a lubricant for the squeegee during glass cleaning, film application, and future cleaning. **CAUTION:** Do not use any household glass cleaner containing ammonia or vinegar to clean the glass or film; such cleaners can dilute or dissolve the film’s adhesive. However, extremely greasy or smoke-covered windows may need to be cleaned first with glass cleaner then rinsed thoroughly with the Solution.

b. Plan to use several single-edge utility razor blades to clean the window. A small utility knife with breakaway blades is the best tool for trimming film. **NOTE:** Film can dull a blade edge quickly; and a dull blade can tear film. Plan to use a new blade after every 10’ of film that you cut.

c. A rubber-blade squeegee is necessary to press the film onto the window without creases and to remove the soapy water from under the film. We recommend a squeegee between 6" to 8" wide, preferably with a flexible blade and solid handle. A quality squeegee is a good investment because you will use it to clean the glass, apply the film, and clean the film in the future.

d. Use lint-free toweling (paper coffee filters work amazingly well!), not paper towels, to clean the windows and absorb squeegeed water.

e. To trim the film (Step 8), use the edge of a ruler or a 50-cent coin or a dedicated wallpaper trimmer.

Special Points to Remember

- Handle the film very carefully. As with aluminum foil, once creased, the film will remain creased.
- Avoid using concentrated or degreasing detergents to make the Solution or the film may dry cloudy or fail to adhere.
- Larger windows (3-4' wide) usually are best filmed by two people working together to remove the liner, install, and trim the film. (See steps 3 and 5)
- Apply film anytime other than in direct sunlight (film may stick too quickly) or freezing weather (film will not stick at all). Best temperature is 45-90 degrees F. Best time is early morning or late evening, when the glass is cooler.
- Work in a dust-free area. Turn off fans. Apply film to windows hung vertically. DO NOT lay windows down to tint them or you will trap air bubbles under the film.
- Film may be removed, but not reused.

Application:

1. Measure the Window

Measure the dimensions of your window carefully before unrolling and cutting the film. Film may be applied from side to side, or top to bottom from the kit roll. Use the measurement that leaves the least waste. You may also choose to pretrim the film to the window dimensions, less 1/16" on all sides (see steps 3 and 8 below).

2. Clean the Window

Generously spray the window with the Solution. (You will use this solution throughout the installation process.) Then use your hand and squeegee to clean the windows thoroughly. Respray the glass, then use a razor blade to remove any caked dirt or paint. Use special care cleaning the corners. Re-wet the window, then squeegee downward. Wipe off accumulated dirt from the window gasket with a soft cloth or paper coffee filters. Repeat process until the glass is clean. If possible, also clean the outside to ensure total clarity. (**NOTE:** Paper coffee filters are lint free and can be used to clean the windows now, and the film later. Remember, the cleaner the glass, the better the final appearance of the applied film.)

3. Cut the Film

Unroll the film on a clean, flat surface near the window. Use a ruler as a guide and cut the film 1” larger than the dimensions of the window to be sure that the film will fit. Of course, you may wish to use the factory edge of the film for one side of the window. Or, if you choose, pretrim the film to the final dimensions of each window (including the 1/16” gap described in step 8). We recommend pretrimming the film to final size for French panes, skylights, and arched windows.

For Windows Larger Than Film Size:

To cover larger windows, you may need to seam the film as you would seam wallpaper. To obtain a perfect butt seam, vertically overlap two sides of the film, then use a ruler as a straight edge to guide your knife as you cut through the center of both layers of film. After cutting the seam line, peel the loose sheet of film from the top, then lift the edge of the film and slide out the other “waste” piece from underneath the film. Rewet the glass, lay down the film, rewet the top of the film, and then squeegee the film from top to bottom in a slow, firm vertical motion. A week after installation, you should waterproof the seam with a coat of clear fingernail polish.

4. Wet the Window Thoroughly

Generously spray the solution, which acts as a lubricant for the film, onto the inside surface of the window until beads of the soapy water run down the glass. If the window becomes dry, rewet it completely before applying film.

5. Remove the Clear Film Backing (“the liner”)

Take your time with this step: be patient and be careful not to crease the film while removing the clear, protective “liner” from the back (adhesive side) of the film. (NOTE: Usually the liner is on the outside surface of the film roll.) Remove the liner by attaching two 3-4” long pieces of transparent tape to the front and back surfaces of a corner of the film so that about 1” of tape is on the film, the rest centered and hanging over the pointed corner of the film. Press the two pieces of tape firmly together, then quickly pull them apart to begin separating the clear liner away from the adhesive side of the film. (NOTE: This process may require a quick, snapping pull, much like pressing together and quickly pulling apart two pieces of velcro.)

As you carefully peel the liner away, generously spray the soapy solution onto the exposed adhesive. This spray helps break any static cling, reduces contamination, and makes the liner separation easier. Wet your hands with the Solution before handling the film to avoid leaving fingerprints on the adhesive. For small windows, remove the liner diagonally, from one corner toward the opposing corner. Try to keep the film from touching itself. Two people should coordinate the liner separation on a large sheet of film.

For Large Windows and Patio Doors

Removing the liner from a large sheet (i.e. patio door size) involves two people. Your helper faces the window and holds the film perpendicular to the floor. You face the liner side of the film, separate

the corner of the liner, slide your finger along the top edge of the film to fully separate the liner, then peel the liner down toward the floor in a smooth, even motion. After removing the liner completely, thoroughly spray the glass then the adhesive side of the film.

6. Place the Film on the Wet Window

Completely remove the clear liner from the back of the film and thoroughly wet the exposed, dry adhesive surface. Be sure the window is dripping wet: too much Solution is better than not enough. Apply the adhesive side of the film to the wet glass. Start at the top of the window, then allow the film to gently lay down onto the glass. Handle the film carefully at the corners to avoid wrinkles or creases, which cannot be removed. Use your hands to smooth the film onto the glass. You can slide the film around and position it correctly so long as the window and film are thoroughly wet.

7. Spray the Outside Surface of the Film and Squeegee the Film Carefully and Firmly

Spray the entire surface of the film facing you with the soapy solution to lubricate its surface. Using a clean rubber squeegee, begin squeegeeing the water and air out from under the film. To do this, start about 2" from the top and side and squeegee from left to right. Second, to set the film on the glass, lightly squeegee the rest of the film downward, but leave the 2" perimeter area unsqueegeed. If you need to remove large air pockets, rewet the top of the film and squeegee again. If the squeegee drags, respray the Solution on the top of the film. (**NOTE:** Always wet film with the solution before squeegeeing. You can remove any large bubbles by pushing them with the squeegee to the nearest film edge. Small bubbles (less than 1/8" in diameter) should disappear in a few days.)

8. Trim Edges of Film and Squeegee Dry

Use a sharp razor blade or utility knife and a 1/16" wide guide to trim the film around the four perimeter edges of the film. This gap is essential for the proper thermal expansion of the glass and allows you to completely squeegee the water and air from under the film. Rewet the entire film surface and squeegee again. Press very firmly to remove all the water so that the adhesive can cure clearly.

This time, imagine an invisible line dividing the window from top to bottom. Starting at the top of the window, squeegee from the center to the left, then from the center to the right. Repeat this process until you reach the bottom of the window. (**NOTE:** If your squeegee has a stiff blade, **PUSH** it toward the sides. If a flexible rubber blade, **PULL** the squeegee.) If "fingers" appear along any edge, wrap your squeegee with a few paper coffee filters (or soft, absorbent cloth) and carefully push the "fingers" toward the edge of the film. Hold in place to absorb any excess water.

The lighter the film, the less your privacy. The shinier the film, the more your daytime privacy. At night, all films will appear more or less reflective inside depending upon the brightness of indoor lighting. For full privacy at night, close your draperies.