



Consumers' Choice

Residential and Commercial Installation Instructions

RECOMMENDED TOOLS:

- Mounting solution
- Bottled water (not tap water)
- Spray bottle
- Squeegee or squeegee card
- Break-away utility knife (for cutting film)
- Single-edged razor blade (for cleaning glass)
- Ruler or tape measure
- Soft, lint-free cloth

BEFORE YOU BEGIN:

Applying window film is a simple process, with only a few basic steps. Before beginning this project, please read the instructions completely and carefully.

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

REMINDER: Most residential films are compatible with standard 1/8" clear residential windows. However, the professional insulating films are specifically engineered to be the most compatible with dual-pane (thermo pane) and Low-E windows, whether 1/8" or 1/4" glass.

CAUTION: Do not apply residential films to plastic or Plexiglas surfaces or to motor vehicle windows. Do not apply any film to frosted, etched, leaded, cracked, holed, or deeply scratched glass.

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°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 film them or you will trap air bubbles under the film.

APPLICATION:

1. MEASURE THE WINDOW

Measure the dimensions (Figure 1) of your window carefully before unrolling and cutting the film. Film may be applied from side to side, or top to bottom from the roll.

Figure 1



2. CLEAN THE WINDOW

Generously spray the window with the Solution. (Figure 2) Then use your hand and squeegee to clean the windows thoroughly. (Figure 3)



Figure 2



Figure 3

Re-spray the glass, and then use a razor blade to remove any caked dirt or paint. (Figure 4) 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. (Figure 5)



Figure 4



Figure 5

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. Or, if you choose, pre-trim the film to the final dimensions of each window (including the 1/16" gap described in step 8).

Helpful Hint: We recommend pre-trimming 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, and 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 onto the inside surface of the window until beads of the soapy water run down the glass. (Figure 2) If the window becomes dry, rewet it completely before applying film.

5. REMOVE THE CLEAR FILM BACKING ("the liner")

NOTE: (Usually the liner is on the outside surface of the film roll). Remove the liner by attaching two 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, and then quickly pull them apart to begin separating the clear liner away from the adhesive side of the film. (Figure 6)



Figure 6

Helpful Hint - 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.

Helpful Hint - Wet window film and place on window adhesive side out. This will hold the film while you remove the liner. Wet your hands with the Solution before handling the film to avoid leaving fingerprints on the adhesive.

Small Windows

Remove the liner diagonally, from one corner toward the opposing corner. Try to keep the film from touching itself.

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, and 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, and 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. (Figure 7) You can slide the film around and position it correctly while the window and film are thoroughly wet.



Figure 7

7. SPRAY THE OUTSIDE SURFACE OF THE FILM AND SQUEEGEE FILM CAREFULLY AND FIRMLY

Spray the entire surface of the film facing you with the soapy Solution to lubricate its surface. (Figure 8) 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. (Figure 9) Second, to set the film on the glass, lightly squeegee the rest of the film downward, but leave the 2" perimeter area unsqueegeed. (Figure 10) If you need to remove large air pockets, rewet the top of the film and squeegee again. If the squeegee drags, re-spray the Solution on the top of the film.



Figure 8



Figure 9



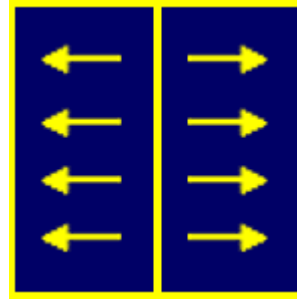
Figure 10

Helpful Hint - 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.



Helpful Hint - 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 soft, absorbant cloth and carefully push the "fingers" toward the edge of the film. Hold in place to absorb any excess water.

CURING TIME:

The film begins to adhere in thirty minutes and fully "cures" over thirty days. Dry, sunny weather speeds curing; wet, cold weather prolongs it. During curing, the film may initially look hazy or cloudy; this effect will disappear with time and/or exposure to heat (i.e. the sun or a hair dryer).

FILM CLEANING TIPS: Always clean film with the same soapy Solution and a clean, pliable squeegee. **DO NOT USE** ammonia, vinegar, household glass cleaners, paper towels, or brushes.