

Madico Energy Control Film Installation Instructions

Pressure Sensitive Adhesive System



Equipment:

- Window Solution in spray container, properly mixed (for cleaning and application)
- Squeegee
- Edge Guide Tool
- Trimming Knife
- Pressure Sensitive Tape
- Razor Scraper
- Paper Towel (a lint free towel is best)

1. Completely Clean Window

- Place a drop cloth on floor and/or carpet adjacent to windows on which you're working.
- Wash window with solution and squeegee.
- Wet window with solution and scrape entire surface with razor scraper.
- Wash and Squeegee again.
- Wipe edges carefully with paper towel.
- Make sure that all loose dirt is removed.

CLEANING THE WINDOW COMPLETELY AND THOROUGHLY IS THE SINGLE MOST IMPORTANT STEP.

2. Film Preparation

- Take the film out of the box. Remove end plugs and protective sleeve. Save plastic to protect film when job is completed. Replace end plugs and put film back into box. Set box in front of window so that release liner, which protects the adhesive, (see diagram) faces installer.
- Measure window glass from inside the frame.
- Film width should be pre-cut at least 1/4 inch wider than window.
- Soak window thoroughly with solution.
- Pull enough film from the box to overlap the top and bottom of the window by approximately 1 inch and cut.
- Have assistant hold cut film or place against solution soaked window with release liner facing the installer. Solution on window will hold film in place (with SR film do not use wet window to hold film).

3. Release Liner Removal

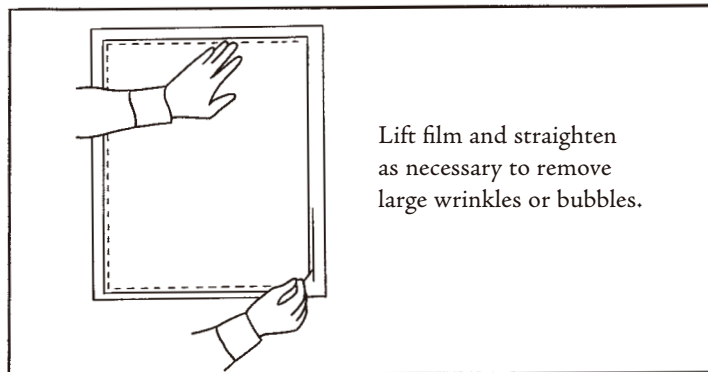
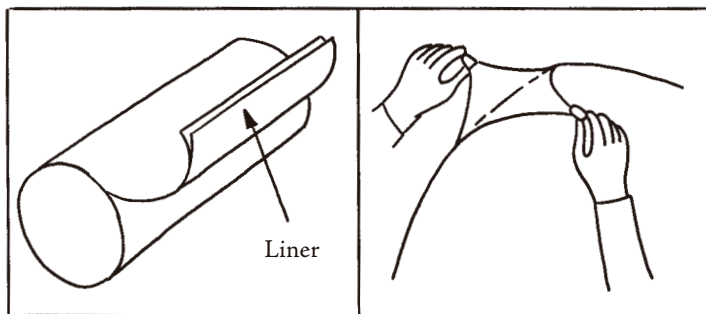
"X" adhesive is pressure sensitive and sticks to anything with which it comes in contact. "C" adhesive must be kept clean. That

is why we protect them with release liners. During application, release liner must be removed. Protect the film and exposed adhesive during the entire installations procedure. Don't let it touch anything but the glass on which it is to be installed.

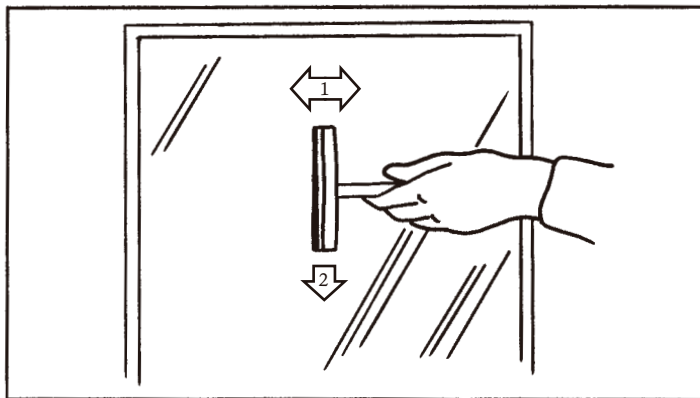
- Apply pressure sensitive tape on one side of an upper corner of the film. Place a second piece of tape on same corner on opposite side of film (see diagram). Be careful not to let exposed tacky surfaces of the tape touch each other.
- Grasping one piece of tape in each hand, pull the piece nearest you towards yourself, separating release liner from film.
- As you pull the liner off the film, begin to spray adhesive surface with Solution, completely soaking exposed adhesive. Continue pulling down on clear release sheet while spraying Solution on adhesive. Solution will neutralize adhesive, preventing it from sticking to anything. Once initial removal of liner begins, try to pull it down evenly across the film. Removal will be easier. Discard release liner.
- With adhesive surface completely exposed, spray one final time with solution to insure that 100 percent of adhesive is wet.

4. Film Application

- Holding the film at uppermost corners, remove film from window. Being careful not to allow film to touch floor or any other surface, place film on window with adhesive side against glass.
- Since applicator solution has made window surface slippery, you can now slide film so that one edge of film is approximately 1/16th of an inch from one side of window. Lift film if necessary to remove large wrinkles or bubbles. (For ease of installation the edge you select should be the one you favor, i.e., right side for right-handed people, left side for left-handed people. If properly done, this edge will not have to be trimmed. Other edges of the film should overlap top, bottom, and opposite edge of window.)
- Soak the side of the film facing you with Solution.
- Beginning at center of window, squeegee once across top to right side of window. Going back to top center, squeegee across to left hand edge of the window, then squeegee each

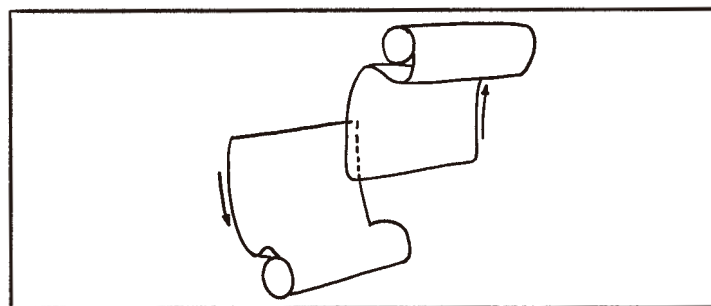


half of the window in straight, smooth, downward strokes working from center out to edge of the window until all excess applicator solution has been squeegeed out from under film and film is lying flat. Do not be afraid to squeegee too hard, it will not damage the film and it is important to remove all of the water and solution from under the film. However, squeegee will not float across a dry surface, so be sure to re-lubricate with applicator solution as needed.



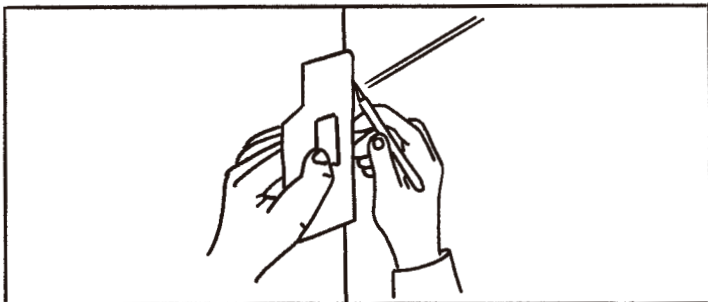
IF SPLICING PROCEDURES ARE NOT PROPERLY FOLLOWED, THE INSTALLATION WILL NOT LOOK PROFESSIONAL AND YOU MAY HAVE A DISSATISFIED CUSTOMER.

- a. Prepare windows as in step #1.
- b. For uniformity of appearance, all splices should be made at center of window. Measure the window from inside frame, and mark center of window on frame with a pencil, both at the top and bottom.
- c. Pre-cut film width so that it will exceed the width of 1/2 the window by approximately 1/2 inch.
- d. Proceed with steps 2d through 2f. When you splice the film, you do only 1/2 the window at a time. Be sure that the film overlaps center marks on frame by at least one-half inch. Proceed with steps 3 through 5.
- e. When placing the second piece on window, **TURN IT UPSIDE DOWN SO THAT EDGE OF EACH PIECE OF FILM THAT IS IN CENTER IS FROM SAME EDGE OF ROLL** (see diagram). Never use two pieces from different rolls in splice.



5. Film Trimming

- a. Butt your edge guide tool against window frame, perpendicular to glass (see diagram).
- b. With Trimming Knife and new sharp blade, trim excess film using edge guide tool to provide a narrow straight line border. Do bottom and side before top, so that trimmed film will not get in your way.



- c. Start trimming operation from corner but do not finish up cutting into corner.
- d. Remove and discard all film scraps.

6. Final Squeegee

- a. Once film is completely trimmed, spray the surface once more with applicator solution. Repeat squeegee operation as described in 4-d.
- b. Finally, using a wad of paper towels, wipe around edges of film to completely remove all excess water.

7. Splicing

Although Madico manufactures film up to 60 inches wide, you will sometimes come across windows that are larger than 60 inches in both directions and can not be covered with one piece of film. Splicing of film will be necessary.

- f. Be sure that this piece also overlaps center by 1/2 inch. Total overlap is about an inch. Proceed with steps 2d through 5 again.
- g. To make sure that the splice on the two pieces of film butt properly against each other, use a metal straight edge as a guide and with a Trimming Knife slice lengthwise through the double thickness of film at center of the splice. Use the pencil marks on the frame as a reference point.
- h. Lift off top cut strip of film at splice and discard. Gently lift a corner of top film and remove the second layer of film. Discard. Spray lightly under the film edge you have lifted with solution during this process.
- i. Proceed to step 6 "Final Squeegee" **BEING CAREFUL NOT TO SQUEEGEE ACROSS SPLICE.**

WARNING:

1. Do not install reflective or tinted film on any of the following surfaces without consulting Madico.
 - Thermo-pane
 - Tinted Glass
 - Textured Glass
2. Do not install any film on plastic glass substitutes without consulting Madico.