

Architectural Window Film Fitting Instructions

PLEASE READ THOROUGHLY BEFORE UNPACKING OR HANDLING FILM

Applications are NOT RECOMMENDED in the following situations:

1. (for exterior window film installations) when outside temperatures are below 5° C or will fall below 1° C in the 7-days following installation
2. to rough or cast glass surfaces.
3. to any surface that curves in two directions.

WINDOW FILM is a very thin sheet of material that requires handling with great care. Creases and folding must be avoided and applications need to be carried out in a draught and dust free situation.

PREPARATION AND PRE-CLEANING is vitally important and care must be taken to flush any dirt particles out of the window frame. Some airborne dust may get under the film, but this is difficult to avoid completely and its presence will not affect the performance of the installation.

DURING DRYING OUT some haziness will be evident but this will disappear and dry out over a 2-4 week period (depending on the thickness of the film).

CLEAN as a normal window after 4 weeks but only with a soft leather or cloth and clean water. Never use anything abrasive on the surface of the film.

PATTERNED GLASS in the case of patterned glass, apply the film only to the smooth surface.

INTERNAL GLASS the product can be applied to either side.

WARNING:

Do not install reflective or tinted film on any of the following surfaces without consulting Opalux.

- Low-E Glass
- Self-Cleaning Glass
- Tinted Glass
- Textured Glass
- Laminated Glass

Do not install any film on plastic glass substitutes without consulting Opalux.

Important note to customer:

It is the users' responsibility to ensure the product is suitable for the intended use. The seller shall not be liable for any direct or consequential loss howsoever arising.

Tools for Application

Hard Squeegee, Soft Window Cleaning Squeegee, Edge Card Squeegee, Razor Scraper, Knife, Spray Bottle, Trimming Guide, Tape Measure, Low-lint Cloth, Low-lint Tissue, Dust Sheet, Rubbish Sack.

1. Completely Clean Window

- a. Place a dust sheet on floor and/or carpet adjacent to windows on which you're working.
- b. Wash window with solution and squeegee.
- c. Wet window with solution and scrape entire surface with razor scraper. Maintain an angle less than 45° to the glass while using the razor scraper.
- d. Use a microfiber cloth or low-lint cloth to clean the edges of the glass and frame.
- e. Wash and Squeegee again.
- f. Wipe edges carefully with paper towel.
- g. Make sure that all loose dirt is removed.

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

2. Film Preparation

- a. 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 on a raised flat surface so that release liner, which protects the adhesive, faces installer.
- b. Measure window glass from inside the frame.
- c. Film width should be pre-cut at least 10mm wider than window.
- d. Soak window thoroughly with solution.
- e. Pull enough film from the box to overlap the top and bottom of the window by approximately 25mm and cut.
- f. 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

3. Release Liner Removal

Pressure sensitive adhesive sticks to anything with which it comes in contact. Water activated 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 installation procedure. Don't let it touch anything but the glass on which it is to be installed.

- a. Split the release liner from the film at a corner. If this is proving difficult with your fingers, apply sticky 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. Be careful not to let exposed tacky surfaces of the tape touch each other.
- b. (Skip if not using tape.) Grasping one piece of tape in each hand, pull the piece nearest you towards yourself, separating the release liner from the film.
- c. As you pull the liner off the film, begin to spray adhesive surface with solution, completely soaking exposed adhesive. Continue pulling down on the 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 and removal will be easier.
- d. Discard release liner in a bin before you slip on it.
- e. With adhesive surface completely exposed, spray one final time with solution to insure that 100 percent of adhesive is wet.

4. Film Application

- a. Holding the film at uppermost left hand corner, with your right hand, remove film from the window. Be careful not to allow the film to touch the floor or any other surface, place film on the window with adhesive side against the glass.
- b. Since application solution has made the window surface slippery, you can now slide the film so that the machine edge of film is approximately 1-2mm 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 favour, 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.)
- c. Soak the surface of the film facing you with solution.
- d. Beginning at top centre of window, squeegee once across top to right side of window, going back to top centre, squeegee across top to left hand edge of the window, going back to centre then

bring a single squeegee down about 300mm to create a "T" shape. This should hold the film in place. Starting at the top, work your way from the centre, out sideways to the edge, overlapping the squeegee runs. Work evenly down the window, 2 runs to the left, 2 to the right. Repeat until all excess application 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 application solution as needed.

5. Film Trimming

- a. Butt your edge guide tool against window frame, at right angles to glass.
- 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 application 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. Always work from the centre into the corner. Use the edge card where necessary.

7. Splicing

Although film is manufactured up to 60" (1524mm) wide, you will sometimes come across windows

that are larger than 60" in both directions and can not be covered with one piece of film. Splicing of film will be necessary.

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 centre of window. Measure the window from inside frame, and mark centre of window on frame with a pencil, both at the top and bottom. Splices are less obvious going in the horizontal direction.
- c. Pre-cut film width so that it will exceed the width of $\frac{1}{2}$ the window by approximately 15mm.
- d. Proceed with steps 2d through 2f.

When you splice the film, you do only $\frac{1}{2}$ the window at a time. Be sure that the film overlaps centre marks on frame by at least 15-20mm. 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.** Never use two pieces from different rolls in splice.
- f. Be sure that this piece also overlaps centre by 15mm. Total overlap is about an 25-30mm. Proceed with step 2d through to step 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 the centre 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 application solution during this process.
- i. Proceed to step 6 "Final Squeegee" **BEING CAREFUL NOT TO SQUEEGEE ACROSS SPLICE.**