# **DS1000 Crystal Clear**Pressure sensitive adhesive system

### Before you start

The printed media should be presented to you with the ink facing on the outside of the roll, loosely wound and poly bagged.

The media supplied should be printed in accordance to the print guide supplied.

The printed media should be post cured by the printer for at least 48 hours before installation. This is to allow the inks to fully cure / harden.

### 1. Application solution

LINTEC EUROPE recommend the use of Johnsons baby shampoo and water. A few drops of soap per litre of water is normally sufficient but it is very dependent upon application temperatures, graphic size, experience of application personnel (time taken to apply) etc. For more working time increase the volume of the soap. In cold weather the soap should be reduced or replaced with an alcohol based solution to accelerate the drying process.

### 2. Completely clean window

- a. Place absorbent cloth on floor under the windows to collect excessive window solution.
- b. Wash window with solution and squeegee.
- Wet window with solution and scrape entire surface with razor scraper to remove any dirt particles.
- d. Wash and squeegee again.
- e. Wipe edges carefully with paper towel.
- f. Make sure that all loose dirt is removed.

Cleaning the window completely and thoroughly is the single most important step.

### 3. Film preparation

- a. Take the film out of the box. Remove end plugs and protective plastic sleeve. Save packaging to protect balance of film when job is completed. Replace end plates and place the roll back in the box. Set the box in front of window so that release liner which protects the adhesive faces installer. The film can then be unrolled directly from the box.
- 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 film against solution soaked window with release liner facing the installer. The solution on a window will hold film in place (with scratch resistant coated polyester film do not use wet window to hold film).

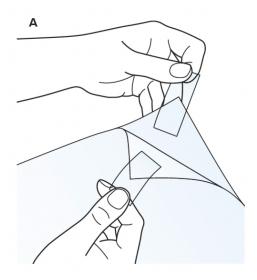
#### 4. Release liner removal

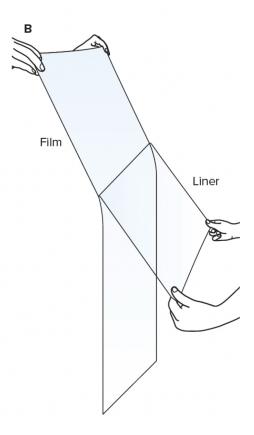
The films are coated with pressure sensitive adhesive which must be kept clean. The adhesive is protected with a release liner and during application the release liner must be removed. Protect the film and exposed adhesive during the entire installation procedure. Do not let it touch anything but the glass on which it is to be installed.

- a. Apply pressure sensitive tape on one side of an upper corner of the film. Place a second piece of tape on same corner on the reverse side of film (see diagram A). Be careful not to let exposed tacky surfaces of the tape touch each other.
- Holding one piece of tape in each hand, pull the pieces of tape apart to separate the release liner from film.

### **Equipment**

- Application solution for cleaning and application (in spray container, properly mixed)
  - · Soft squeegee
  - · Edge guide tool
  - · Trimming knife
  - Pressure sensitive tape
    - · Razor scraper
  - Paper towel (a lint free towel is best)





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- c. As you pull the liner off the film, begin to spray the adhesive surface with solution, completely soaking exposed adhesive. Continue pulling down on clear release sheet while spraying solution on adhesive. Solution will neutralise adhesive, preventing it from sticking to anything. Once initial removal of liner begins, try to pull it down evenly across the film (see diagram B). Discard release liner safely.
- d. With adhesive surface completely exposed, spray one final time with solution to insure that 100 percent of adhesive is wet.

### 5. Film application

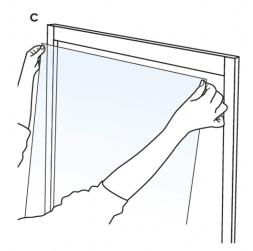
- a. Hold film at uppermost corners being careful not to allow film to touch floor or any other surface, place film on window with adhesive side against glass (see diagram C).
- b. The application solution acts as a lubricant making the window surface slippery. You can now slide the film so that one edge of film is 1-2mm from one side of window (see diagram D). 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 fitted correctly 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 side of the film facing you with solution. This acts as a lubricant for the squeegee.
- d. Beginning at the centre of window, squeegee once to right side of window (see diagram E). Going back to the centre, squeegee across to left hand edge of the window, then squeegee the window in straight, smooth strokes working from centre out to the edges of the window until all excess application solution has been squeegeed out from under the film and film is lying flat. Do not be afraid to squeegee too hard, it will not damage film and it is important to remove as much water and solution from under the film. Note: the squeegee will not float across a dry surface, so re-lubricate with application solution as needed.

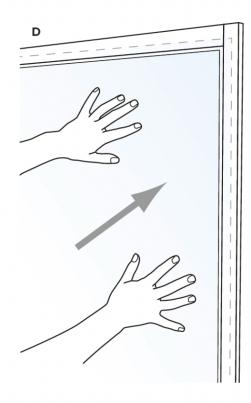
#### 6. Film trimming

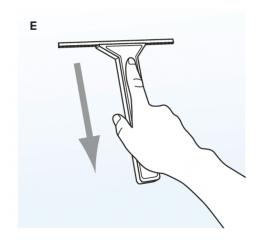
- a. Butt the edge guide tool against window frame, perpendicular to glass (see diagram F).
- b. With trimming knife and new sharp blade, trim excess film using edge guide tool to provide a narrow straight line border. Trim the bottom and side before top, so that trimmed film will not get in your way.
- c. Start trimming operation from corner but do not finish cutting into corner.
- Remove and discard all film scraps.

### 7. Final squeegee

- a. Once film is completely trimmed, spray the surface once more with application solution. Repeat squeegee operation as described in Step 4-d (see diagram G).
- b. Finally, using a wad of paper towels, gently wipe around edges of film to completely remove all excess water. This prevents the application solution re-entering between the glass and film.







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### 8. Splicing

You will sometimes come across windows that are larger in both directions and cannot be covered with one piece of film. Splicing of film will be neessary.

If splicing procedures are not properly followed, the installation will not look professional and you may end up with an unhappy customer.

- a. Prepare windows as in step #2.
- 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 top and bottom.
- Pre-cut film width so that it will exceed the width of 1/2 the window by approximately 15mm.
- d. Proceed with steps 3d through 3f. When you splice film you do only 1/2 the window at a time. Be sure that film overlaps centre marks on frame by at least 15mm. Proceed with steps 4 through 6.
- e. Depending upon the film type, when placing the second piece on window, consider turning it upside down so that the edge of each piece of film that is now in the centre is from the same edge of the roll please consult LINTEC EUROPE if splicing is required. Never use two pieces from different rolls in splice.
- f. Be sure that this piece also overlaps centre by 15mm. Total overlap is approximately 30mm. Proceed with steps 3d through 6 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 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 solution during this process.
- Proceed with step 7 "Final Squeegee". Be careful not to squeegee across a splice.

### Warning:

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

Thermo-pane

**Tinted Glass** 

Textured Glass

- Do not install any film on plastic glass substitutes without consulting LINTEC EUROPE.
- Consult LINTEC EUROPE before installing Lumisty\* film. A different application solution should be considered due to the aggressive nature of the adhesive.

Please note: For UV digital printed graphics there can be a slight softening of the ink when wet. Extra care should be taken squeegeeing over the printed areas of the film to avoid damage to the ink at this stage. In particular, do not use hard squeegees or scrape across the film with hard objects. (Once dried, the ink will quickly regain full hardness).

Tip: It is possible to lay the previously removed release liner over the face of the printed film to protect the surface from scratching when squeegeeing.

