LYNNEL's On-site film is a permanent adhesive film product with long-term indoor durability. This timeframe and warranty are only valid with proper installation, use, and care and maintenance of the product.

TECHNICAL DATA

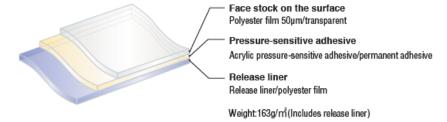
FEATURES

- Printing materials for UV curable inkjet printers
- Transparent polyester film
- It is suitable for window display applications
- It is high in transparency, and demonstrates excellent design
- Provides scratch-resistant treatment on the surface
- Indoor application only

APPLICATIONS

For indoor applications

PRODUCT CONFIGURATION



PROPERTIES

Adhesion

Test Items	Unit	Properties	Test Panel	Test Method
Adhesive strength 30 minutes after adhering	N/25mm	7.9	Stainless	LINTEC method
Adhesive strength 24 hours after adhering	N/25mm	9.0	Stainless	LINTEC method
Adhesive strength 30 minutes after adhering	N/25mm	10.2	Glass	LINTEC method
Adhesive strength 24 hours after adhering	N/25mm	11.4	Glass	LINTEC method
Ball tack	No.	8	-	J.Dow method
Holding strength	Second	NC 30000	Stainless	LINTEC method



Film properties (value)

Ite	em	Unit	Properties
Total Strength	MD	N/25mm	96.3
	CD	N/25mm	165.1
Tensile expansion	MD	%	98.4
rate	CD	%	96.3

Optical properties

Item	Unit	Properties
Ultraviolet ray transmission	%	5.8
Visible light transmission	%	92.3

PRECAUTIONS

- Numerical values in this data sheet are based on the results of manufacturer tests, and are not guaranteed. Please verify performance in advance according to your application.
- Use this product within one year of purchase.
- It does not provide removable performance as it is a permanent adhesive.
- To sue for joints and the same surface, use the same lot.
- . This film is for indoor use only.
- Please consult with manufacturer if you wish to use the product for special applications.

Storage methods

- Avoid high temperature, low temperature and humidity for storage. Be sure to put this product in a bag, and hang it in the air. Make sure that it is not exposed to direct sunlight.
- Prevent it from being exposed to fluorescent light at a close range.
- Recommended ambient temperature: 10°C-30°C, humidity: 70%RH or less. The adhesive strength and holding strength become lower at low temperature or high temperature and it is detached easily.
- Avoid contact with water, chemicals, and shock.

Precautions for output and Processing

- Do not touch the output surface of media directly with your hand. Soil, oil, dirt and scratches may lower print quality.
- Use the product as early as possible after opening.
- Output quality may differ depending on the type of printers to be used and print conditions. We recommend testing it be checked in advance.

Precautions for install

- Install ambient temperature: 10°C-40°C. install at high temperature may raise the initial adhesive and soften products.
- Operating temperature: -30°C-80°C.
- Please be fully aware of an install with soapy water. You may have difficulties in removing remaining water from the substrate and
 pressure-sensitive surface depending on the temperature and humidity conditions, and be unable to achieve sufficient adhesive strength.
 This may cause raising and detaching.
- Adhesive strength may not be achieved sufficiently depending on the properties of test panels, and raising and detaching may occur.
 Please check in advance.
- · Adhesive strength may not be fully achieved immediately after adhering.
- The adhesive strength may not be achieved fully for install on a substrate where condensation tends to form.



Test panel		Install
	PP/PE/Fluorine	*1
	ABS	0
	PET	0
Plastic	FRP	0
	Acrylic resin	*2
	Polycarbonate	*2
	PVC	*3
	Tent Materials	*3
Glass	General	*4
	Mesh included	*4
	Galvanized steel	0
	Bonderized metal	0
Metal	Melamine coated panel	0
	Aluminum	0
	Stainless Steel	*5
	Concrete	*6
Others	Mortar	*6
	Slate	*6
	Plywood	*6

- The adhesive strength may not be fully achieved.
- A bulge may occur because outgas is generated. Please consult with manufacturer in advance. *2 *3 *4 *5
- As a plasticizer and suspended particles are included, raising and detaching may occur.
- Heat cracks may occur.
- In case of adhering outdoors, this product may be deteriorated, depending on conditions. Please consult with manufacturer in advance.
- *6 Basically prior processes and primer coating are needed. Otherwise raising and detaching may occur due to the water oozing and adhesive failure caused by the rough surface.
- The above 1 to 6 may differ depending on conditions. Please contact manufacturer for details.
- If you have questions about the products, please contact the manufacturer.
- This sheet provides product information and information about the environment and safety, and does not guarantee performance or quality.
- Product specifications and appearance are subject to change without notice for the purpose of improvement.

MANUFACTURER'S SPECIFICATIONS & WARRANTY LIMITATIONS

WARRANTY LIMITATIONS

Fit for Use Limitation: Manufacturer does not warranty the film for any particular use. Since only the user is aware of the specific conditions in which the product will be used, it is the user's responsibility to determine whether the product is suitable for that intended application. LYNNEL Art to Form markets the product for intended use on glass and acrylic surfaces.

Printing Limitation: Manufacturer does not warranty the film for satisfactory printing. Manufacturer will not warranty against ink performance failures such as ink fading, cracking, peeling, scratching, or any other ink related issues. LYNNEL On-site film should be tested and approved with the printer and ink combination prior to application. LYNNEL Art to Form has conducted numerous tests and completed a wide range of projects with successful use and application of LYNNEL On-site film.

Installation Limitation: Manufacturer does not warranty film installation performed by third-party installers. Responsibility for defects or failures resulting from improper installation is transferred to the third-party installers.

Product Misuse Limitation: This warranty does not cover LYNNEL On-site film that has been damaged through improper storage, misuse, vandalism, abuse, neglect, or mishandling of finished or unfinished products by any person.

Glass/Acrylic Breakage Limitation: This warranty does not cover any type of glass or acrylic breakage. This warranty is only valid towards the LYNNEL On-site film product.

FILM DRY OUT TIME

The mounting solution used during the installation of your LYNNEL On-site film may require a period of time to dry out. Cold and/or cloudy weather conditions can lengthen the dry out time of a LYNNEL On-site film. Warm weather and direct sunlight exposure will shorten the dry out time. Small water beads and a slightly cloudy look are common and may appear during the dry out period. If slow drying occurs, do not be alarmed since it is part of the natural curing process. Do not install LYNNEL On-site film on the interior of a single pane of glass if the temperature is below 32 degrees



FILM CARE & MAINTENANCE

Do not clean the film for 30 days after installation to allow proper curing of the adhesive system to the glass. Do not use bristle brushes, abrasive scrubbing sponges, or any other abrasive cleaning materials that could scratch the film. Always use soft clean materials to wash and dry the film surface. NEVER USE HARSH CHEMICALS OR CLEANING AGENTS SUCH AS WINDEX TO CLEAN THE FILM SURFACE. The chemicals used in many harsh cleaning agents can attach the adhesive at the film edge causing delamination from the glass. Use a soapy water solution such as dishwashing fluid and water to clean the film surface. Do not spray this soapy water solution directly onto the film since prolonged exposure to moisture can reduce the scratch resistance of many UV curable inks. Spray the soapy water directly onto a soft clean cloth and proceed to wipe down the film surface. Improper care and maintenance will void the warranty

INSTALLATION INSTRUCTIONS

EQUIPMENT

- Application solution (in spray container, properly mixed)
 - A standard 32 oz spray bottle full of warm distilled water mixed with 3 drops of dishwashing fluid can be used as application fluid
 in a pinch
- Squeegee
- Edge guide tool
- Trimming knife
- Pressure sensitive tape
- Razor scraper
- Paper towel (a lint free towel is best)

STEPS

Clean Window

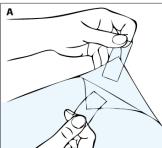
- a. Place absorbent cloth on floor under the windows to collect excessive window solution
- b. Wash window with solution and squeegee
- c. Wet window with solution and scrape entire surface with razor scraper to remove any dirt particles
- d. Wash and squeegee again
- e. Wipe edges carefully with paper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

2. Film Preparation

- a. Measure glass/acrylic from inside the frame
- o. Soak glass/acrylic thoroughly with solution
- c. Pull enough film from the box to overlap the top and bottom of the glass/acrylic (standard image bleed should be 0.25" on each side unless otherwise stated)
- d. Have assistant hold film, or place film against solution-soaked glass/acrylic with release liner facing the installer

3. Release Liner Removal

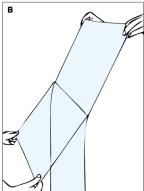
a. Apply pressure sensitive tape on one side of an upper corner of film. Place a second piece of tape on same corner on the reverse side of film.



Be careful not to let exposed tacky surfaces of the tape touch each other.

- b. Holding one piece of tape in each hand, pull the pieces of tape apart to separate the release liner from the film
- c. As you pull the liner off the film, begin to spray the adhesive surface with solution, completely soaking 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.



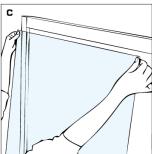


Discard release liner safely for scratch resistant film.

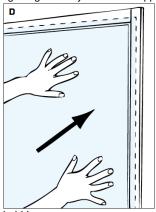
d. With adhesive surface completely exposed, spray one final time with solution to ensure that 100 percent of adhesive is we

4. 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/acrylic



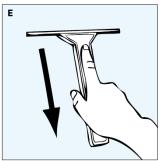
b. The application solution acts as a lubricant making the glass/acrylic surface slippery. You can now slide the film.



Lift film if necessary to remove large wrinkles or bubbles.

- c. Spray the surface side of the film facing you with solution. This acts as a lubricant for the squeegee.
- d. Beginning at the center of the glass/acrylic, squeegee once to right side of glass/acrylic.

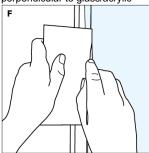




Going back to the center, squeegee across to left hand edge of the glass/acrylic, then squeegee the glass/acrylic in straight, smooth strokes working from center out to the edges of the glass/acrylic until all excess application solution has been squeegeed out from under the film and film is lying flat. Note: the squeegee will not float across a dry surface, so re-lubricate with application fluid as needed. Please be aware that film can be scratched if a hard squeegee is used. LYNNEL On-site film is scratch resistant and highly recommended to prevent scratches in clear non image areas. For extra security, you may use the release liner as a mask during the squeegee process.

5. Film Trimming

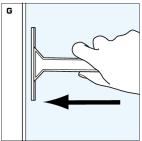
a. Butt the edge guide tool against window frame, perpendicular to glass/acrylic



- b. With trimming knife and new sharp blade, trim excess film using edge guide tool to provide 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
- d. Remove and discard all film scraps

6. Final Squeegee

 Once film is completely trimmed, spray the surface once more with application solution. Repeat squeegee operation as described in STEP 4-d.



Finally, using paper towels, gently wipe around edges of film to completely remove all excess water. This prevents the application solution from re-entering between glass and film. Note on LYNNEL On-site printed films, many UV curable inks are not entirely water-resistant, though all that were tested by LYNNEL Art to Form can be applied via a wet solution, however, some added care is necessary. When applying the solution on the film's printed surface, squeegee within 2 minutes. A soft squeegee is necessary to prevent smudging of ink and scratching of film.

7. Cleaning & Maintenance

a. The film can be cleaned periodically using soap and water solution. We recommend wetting a soft cloth with solution and then cleaning the window where film is applied. Please see SPECIFICATIONS & WARRANTY: FILM CARE & MAINTENANCE for specific cleaning instructions.

