

Architectural Fusions Care & Maintenance

Includes Belbien, Reatec and LG Benif Interior Films

In most all cases, the stains can be easily cleaned off by using a household cleaner such as dishwashing liquid. In other cases, a solution of denatured alcohol will generally remove the stain. For severe stains, it is possible to use lacquer thinner or acetone in some instances.

Note: It is highly advisable to test any strong solvent's compatibility with the fusion in an inconspicuous area prior to applying the solvent to a visible area. Read the following topics for solvent resistance. **It is important to refrain from using abrasive cleaners on any vinyl fusion because it could damage the surface.**

Custom Printed Graphic Architectural Fusions

It is recommended to clean printed films with a damp rag using water. If a cleaning solution is needed, a non-abrasive cleaner such as Windex should be used. **Use of harsh or abrasive chemicals such as denatured alcohol may damage the printed image.**

Solvent Resistance

The exterior series is more resistant to strong solvents than the Interior series. This is because of an anti-corrosive film layer that is incorporated with the exterior series.

The anti-corrosive film layer is comparable in nature to the makeup of fluoride or Teflon. However, it is important to refrain from making a "direct comparison" because they are somewhat different.

The following solvents were exposed to the exterior series and appreciable change was observed.

- Toluene
- MEK (Methyl Ethyl Ketone)
- Acetone

*If you have any questions regarding care or maintenance of the Fusions product,
please contact Surfacequest Solutions at 952-835-2880*

Technical Data Sheet



LG Hausys self-adhesive interior film, produced by LG Hausys Ltd, a leading surface materials manufacturer in Korea, provides total solution to the commercial and shop fitting sectors without the disruption of replacing existing fixtures and fittings.

Featured Benefits



Economical

Simple and easy installation compared to the traditional finishing materials. LG Hausys Interior Film can be easily repaired or removed, partially or as a whole piece.

Convenient

LG Hausys Interior Film has excellent flexibility and adhesion, which allows perfect finish to curved areas and complex shapes.

Durable

Highly resistant to impact, abrasion and scratching. LG Hausys Interior Film is also very stable even when exposed to heat, humidity or low temperatures.

Creative

Create your own space with the various patterns and colours of LG Hausys Interior Film, such as wood grain, metallic and leather.

Easy application

By resolving inconvenience due to air-bubbles during installation, it shortens installation time and prevents bumpiness of the product, by minute air-bubbles, and enhances its quality.

Specifications

The values in these tables are typical, and are based on test data deemed reliable but are not warranted.

Material	Vinyl (most finishes)
Form - Standard	48 in. X 164 ft (1,220 mm x 50 m) roll length options based on availability
Thickness	10mils (0.25mm) nominal (release paper liner excluded). Some designs vary slightly in thickness due to embossing
Weight	Approximately 66 lbs(27kg) for a 50m roll

General Characteristics and Data

Property	Test Results	Test Method																				
Dimensional Stability	Within 1.2mm (Length / Width)	Measuring a 100×100mm piece of film on a 150×150mm aluminium plate after 2hours at 100°C																				
Temperature for adhesion	10°C ~ 30°C	Measuring ideal temperature range for best adhesion																				
Weather ability	No effect	Measuring colour change and fading after 150 hours on weather-O-meter with XENON ARC lamp																				
Heat resistance	No Delamination or visible change	Measuring film adhesion to aluminium plate after 30days at 60°C																				
Moisture resistance	No Delamination or visible change	Testing film adhesion to aluminium plate after 30days at 40°C and 90% relative humidity.																				
Low temperature resistance	No Delamination or visible change	Testing film adhesion to aluminium plate after 15days at -20°C																				
Resistance to stains	No Delamination or visible change	Measuring stains caused by the following liquid solutions 24 hours later, after wiping out with wet cloth : salt solution (1%), ethanol (50%) olefin oil, orange juice, caustic soda (10%), soap solution, coffee, coke, milk, vinegar. ※ Real test by customers required																				
Resistance to chemical	<table border="1"> <thead> <tr> <th>Solution</th> <th>Result</th> </tr> </thead> <tbody> <tr> <td>Heptane</td> <td>No change</td> </tr> <tr> <td>Ethyl Alcohol</td> <td>No change</td> </tr> <tr> <td>Water</td> <td>No change</td> </tr> <tr> <td>Salt solution(5%)</td> <td>No change</td> </tr> <tr> <td>MEK</td> <td>Damaged</td> </tr> <tr> <td>Xylene</td> <td>Damaged</td> </tr> </tbody> </table>	Solution	Result	Heptane	No change	Ethyl Alcohol	No change	Water	No change	Salt solution(5%)	No change	MEK	Damaged	Xylene	Damaged	Measuring the level of damage after soaking film (on aluminium plate) in different chemical solutions for 48hours ※ Real test by customers required						
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Ethyl Alcohol	No change																					
Water	No change																					
Salt solution(5%)	No change																					
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Flammability	Self extinguished	Measuring the flammability of film (on aluminium plate) All LG Hausys interior films have the function of fire retardant																				
Adhesion strength	<table border="1"> <thead> <tr> <th>Substrate</th> <th>After primer coating(kg/in)</th> </tr> </thead> <tbody> <tr> <td>Lauan veneer</td> <td>2.5 ↑</td> </tr> <tr> <td>Timber veneer</td> <td>3.0 ↑</td> </tr> <tr> <td>Gypsum board</td> <td>0.5 ↑</td> </tr> <tr> <td>Asbestos slate board</td> <td>2.0 ↑</td> </tr> <tr> <td>Melamine-baked steel sheet</td> <td>3.0 ↑</td> </tr> <tr> <td>Aluminium sheet</td> <td>2.5 ↑</td> </tr> <tr> <td>Stainless steel sheet</td> <td>2.5 ↑</td> </tr> <tr> <td>Acrylic board</td> <td>2.5 ↑</td> </tr> <tr> <td>MDF</td> <td>2.0 ↑</td> </tr> </tbody> </table>	Substrate	After primer coating(kg/in)	Lauan veneer	2.5 ↑	Timber veneer	3.0 ↑	Gypsum board	0.5 ↑	Asbestos slate board	2.0 ↑	Melamine-baked steel sheet	3.0 ↑	Aluminium sheet	2.5 ↑	Stainless steel sheet	2.5 ↑	Acrylic board	2.5 ↑	MDF	2.0 ↑	Measuring the adhesion strength of 25mm wide film applied on each substrate after 1days under ambient temperature (tensile speed : 300mm/min, 180° peel) ※ Real test by customers required
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Storage Condition

- Store in a clean, dry area at an ambient temperature 20°C or less
- Protect from excessive moisture
- Protect from direct sunlight

Things to be aware of during Interior Film installation

1. Before applying

Do not forget to check out the type and condition of material (MDF, etc.) to attach films so as to identify any parts that might cause a problem.

- In the case of MDF, a different density might cause incoherent adhesive strength and printing resistance performance. It is necessary to use MDFs with consistent density.
- It is necessary to use alcohol to remove pollutants from the surface to be sprayed, and check if there is any damage to the sprayed face due to solvents. If it has an uneven surface, you can apply putty then finish with sandpaper. Use a dust brush to remove foreign substances.
- In case of steel plates, remove any surface pollutants first with alcohol, lacquer or thinners. For an uneven surface, apply putty, then finish with sandpaper. Use a dust brush to remove foreign substances.

Do not forget to carry out a prior inspection for any problems (pattern name, appearance, etc.) for products selected by customers. Film application should be done after woodwork and before painting or hanging the wallpaper.

2. Prior task for Surface

It is necessary to finish thoroughly with sandpaper for cross section parts which are to have film applied (MDF etc.).

- In particular, if the material is wood (MDF, PB, etc.), the smoothness of an edge or crevice is very important. Therefore you should finish the part with sandpaper or with pate treatment before proceeding any further.

3. Primer Treatment

During primer treatment, a cross section of wood (MDF, PB, etc.) tends to absorb more primer than other parts. Thus, spray at least 2 or 3 coats of primer. Once primer is applied, the next treatment should start when the previous primer has completely dried.

4. How to apply

Make sure to hide the cross section of the cut-out film as much as possible.

Try not to show the substrate to be applied with film.

It is possible there may be some colour difference between product lots, so it is necessary to classify lots.

When surface treated product is overlapped with another product, you should spray undiluted PM04 solution, an exclusive water-type primer for LG Hausys Interior Film then proceed after it has dried completely.

- In particular, be careful with El REINA (EL,EV), WOOD (NL,NW), SOLID (RB, RS) patterns.

5. Others to note

If you intend to apply film to a substrate not covered in the specifications regarding application methods and materials (MDF, etc.), please contact the LG HAUSYS or the dealer to check application possibility.

You should follow the guidelines on the specifications to apply films.

When film is applied, it is necessary to use the exclusive primer for LG Hausys Interior Film.

- PM02 (Solvent primer), PM04 (Water primer)

Considerations for Product Series

Product Series	Code	Notes
Wood	CW	Use caution during cold weather application; cold stretching may rip film.
Neo geo	NL	Surface of film may be damaged when exposed to friction, or dented when subjected to weighted objects.
Abstract	ML, RM	Remove stains immediately. Stains in embossed grooves may be difficult to remove.
Solid	RS, RB, RE	Do not use : outside; in high temperature; in high humidity; on stretchable substrate;
Metal	MS, ME	Excessive stretching during application may cause an uneven colour pattern.
Premium Wood	NW	
Neo geo	NL	Wrap squeegee in a soft cloth to prevent damage to the film surface. Replace cloth when it becomes worn or stained.
Eleina	EL, EV	
Nature Craft	NC	<p>Requires Butt Joint-style application. Butt overlap application may exfoliate on the overlapping part due to embossing or surface treatment layer.</p> <p>It is not available for curved area application as its special multi-layer structure could make exfoliation or surface crease with application of heat on the surface.</p> <p>When cutting and applying the product, it is necessary to consider how to connect patterns. If you cut the film by the printed markings on the release paper, it is impossible to match the patterns on different films.</p>
High Gloss	GM, GS	<p>To fully achieve gloss effect of the film surface, you should work in a clean environment.</p> <p>- If there are some foreign substances such as dust and dirt on the substrate to apply film(MDF, etc) and the film's adhesive side during application, the film surface could be marred or damaged.</p> <p>As the product is hard, it is necessary to pay more attention to finishing to ensure no loose edges by applying more strength to obtain visually pleasing finish.</p>