

2018/19
SAMPLE BOOK
DECORATIVE FILM



PAPERLAWN

Technical Details

TECHNICAL DATA

PAPERLAM is a decorative film with adhesive that is applicable on site as well as factory. Recreate your world with PAPERLAM. It is an ideal way to finish many environments on site with little or no down time. PAPERLAM is used extensively for interior applications such as hotels, corporate lobbies, corporate and elevators. With its light weight and minimal thickness, PAPERLAM is a popular choice for interiors. PAPERLAM offers plenty of patterns including solid color, abstract drawings and natural material replications such as wood and stone. PAPERLAM's pressure sensitive adhesive ensures clean, fast installation on a variety of substrates. With its superior flexibility, PAPERLAM can be installed on highly detailed and 3D surfaces.

PAPERLAM Composition & Benefits

PAPERLAM is best characterized as an architectural design film, and is made primarily from PVC (Polyvinyl Chloride). It is sometimes referred to as a cladding or a vinyl laminate. Following are some of the many benefits that make PAPERLAM the perfect solution to many decorative problems.

Pattern Selection

Plenty of patterns are available within the PAPERLAM series.

Weight

PAPERLAM is lighter than most decorative products available in the market today weighting less than 370 grams per linear meter (11.7 ounces per linear yard). This is critical for projects where weight is major factor such as elevators, movable partitions, office dividers, etc.

Thickness

Each of the PAPERLAM series is only about 0.2mm (0.008") thick excluding the release paper. Because the thickness of PAPERLAM is comparable to a good coat of paint, PAPERLAM can be used for such renovations as store fixtures, doors and frames, cabinets, elevator doors, etc.

Width and Length

PAPERLAM is packaged in rolls, 1.22 meters wide and 50 meters long. This enables PAPERLAM to be applied to most doors and partitions without creating seams.

Flexibility and Conformability

PAPERLAM can be applied to many two-dimensional decorative surfaces and tailored to a 90 to 180 degrees angle for such uses as doorframes, moldings, handrails, cabinet doors, store fixtures and panel projects. Many of the PAPERLAM patterns can also be stretched to conform to three-dimensional surfaces by Certified Installers. This allows PAPERLAM to be applied to many decorative surfaces with bull-nose edges as well as concave and convex surfaces.

Pressure Sensitive Adhesive System

PAPERLAM's adhesive system is one of the most remarkable features of the project. It will cure to its optimum bonding strength in just 8-12 hours following the application at 23°C (72°F). This strong adhesive system also allows PAPERLAM to be installed in high-risk areas such as subways, shopping malls, bathroom partitions, etc.

Fire and Smoke Ratings

PAPERLAM meets very high standards and carries Class A (Class 1) fire and smoke ratings. As such, PAPERLAM can be installed in high-risk areas such as elevators, public transportation, health care facilities, airports, restaurants, office complexes, cruise and marine, etc.

Stain Resistance

PAPERLAM offers excellent stain resistance to many substances. In most cases, stains can be easily removed using a soft cloth and household cleaner such as dishwashing liquid. In other cases, a solution of denatured alcohol will generally remove the stain.

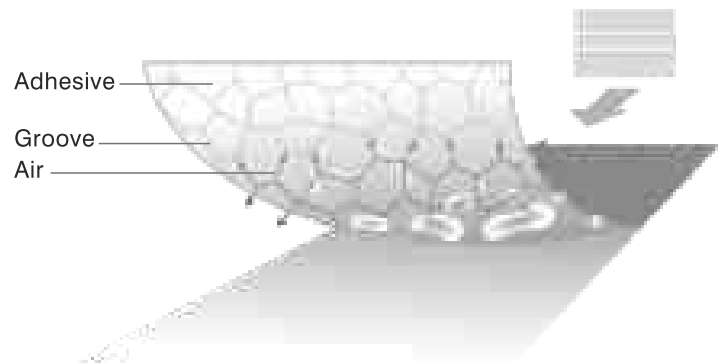
Reparability

One of the greatest advantages of PAPERLAM is that damages can be easily repaired. Further, a minimal down-time is required for renovation projects such as elevators, shopping malls, airports, etc. Often, this is the greatest benefit of all as the cost of down-time can be a large part of any renovation.

Hybrid Type Adhesive

Most of the PAPERLAM patterns are using the hybrid type adhesive. This adhesive system simplifies the removal of air during the application as compared to the flat type adhesive. Although ordinary pressure must still be applied to the hybrid type adhesive, the air left between PAPERLAM and the substrate is less appreciable than in the case of the flat type adhesive.

How the Hybrid Type Adhesive Works



Air trapped between the PAPERLAM and the substrate exits through designed narrow grooves as pressure is applied with the squeegee.

The measure for VOC reduction

Formaldehyde and chlorpyrifos are not used. Toluene, xylene, ethyl benzene, and styrene are not used as raw material.

PAPERLAM Series Selection

Carefully choose the right series of PAPERLAM for your application. Depending on the application and substrate, the finished appearance may be affected. Specify your choice of colours and patterns after reviewing the characteristics.

PAPERLAM is basically designed and manufactured for interior use.

Heat and Sunlight

Because PAPERLAM is made of plastics, do not install places where the temperature exceeds 50°C (110°F) or falls below -10°C (14°F) continuously. Even when it is for interior installation, cautions against sunlight must be used for such opening areas as windows.

Water and Moisture

Although PAPERLAM provides sufficient durability against water, substrates affected by deterioration such as rust may cause delimitation of PAPERLAM or other problems. Adequate water proofing primers should be used on the substrate as well as the overlap bonding technique for seaming.

PAPERLAM

Durability

PAPERLAM's durability is unmatched by many other decorative products; however, PAPERLAM should not be used in areas of abuse by sharp objects such as keys, knives, belt buckles etc. PAPERLAM can be scratched or scored just as most other decorative materials including marble, stone, stainless steel, high pressure laminates and glass.

Substrate Color and texture

Because some PAPERLAM shades have low opacity; confirm that the colour of the substrate will not alter the appearance of the finished project. Uneven or textured substrates also may affect the finish of glossy or smooth finish patterns. A trial installation should be performed to confirm the result.

Maintenance

Use a soft cloth with a light neutral detergent such as dishwashing detergent to clean the surface of PAPERLAM. Rinse the detergent from the surface using clean water. Do NOT use any detergent with abrasives. Also, avoid using solvents such as thinner or toluene. When stains are difficult to remove, wipe using a soft cloth with petroleum benzene or denatured alcohol.

IMPORTANT: It is always recommended that a test area be cleaned first when using any strong solvent to make sure that there is no adverse reaction.

Products Warranty

PAPERLAM ("PRODUCT") will be manufactured free from defects and will remain free from defects for a period of 6 years from the date of receipt of PRODUCT, unless exposed to excessive abuse, or abnormal conditions such as floods, fire, or other acts of God. Such warranted defects include: reduced gloss, developed texture, decomposition, swelling, clouding, and tackiness, crazing, and cracking of PRODUCT.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED, OR IMPLIED, WRITTEN OR ORAL, AND SHALL CONSTITUTE THE SOLE AND EXCLUSIVE REMEDY OF PURCHASER AND LIMIT OF MANUFACTURER'S LIABILITY FOR ANY AND ALL CLAIMS, LOSSES, DAMAGES, OR EXPENSES OF PURCHASERS. BECAUSE OF THE STRONG ADHESIVES REQUIRED TO INSTALL PRODUCT, REMOVAL OF PRODUCT MAY CAUSE DAMAGE TO THE ORIGINAL SUBSTRATE.

Product Size

| | | |
|-----------|------------|----------------|
| Width | : 1220mm | 48inches |
| Length | : 50m/roll | 54yards/roll |
| Thickness | : ca.0.2mm | ca.0.008inches |

Dimensional Stability

The cut width expansion is within 0.3mm (0.012") size of 200mm×200mm(7.874"×7.874"). The plate is put in an oven for 2 hrs. at 100°C(212° F). (ISO 11501)

Adhesion Durability After Heating

No adhesion degradation after being left in an atmosphere at 70°C (158° F) for 1 month.

Adhesion Stability Under Moisture

No adhesion degradation after being left in an atmosphere at 45°C (113° F) and RH at 95% for 1 month.

Abrasion Resistance

Abrasion ends at 7000 cycles
Taber Abrasion Test
CS-17 wheel loaded with 1kg (2.2 pounds) weights

Stain Resistance

Stain can be removed with neutral detergent or ethyl alcohol after direct contact with the following substances for 24 hrs.

| | |
|-------------------------|-------------------------------|
| Coca-Cola | Facial Soap Diluted Water(1%) |
| Wine | Body Soap Diluted Water(1%) |
| Ketchup | House-Use Ammonia |
| Vinegar | 10% HCL |
| Soy Sauce | Formalin |
| Water-Ink Marker(Black) | Oxygenated Water |

Heat Cycle Durability

Neither delamination nor colour change is observed.

Install PAPERLAM in the size of 120mm×120mm (4.724"×4.724") on an aluminum plate.

Left them for 2 hrs. at -20°C (-4° F) and 70°C (158° F) ten times. Then check the adhesion and color change.

Anti-crack Under Low Temperature

No crack observed after being left in an atmosphere at 0° C(32° F) for 24 hrs.

Anti-mold properties

Anti-mold properties testing (by JIS Z 2911 : 2010)
No growth of molds is observed visibly and under microscope.

Bonding Strength

| | With Primer | No |
|------------------------|-------------|-------|
| Primer | | |
| Plywood(Lauan) | 40.18 | - |
| Plywood(Basswood) | 45.25 | - |
| Plaster Board | 5.33 *1 | - |
| Silicate Calcium Board | 46.08 | - |
| Galvanized Steel | 47.04 | 38.22 |
| Aluminium Plate | - | 29.40 |
| Stainless Steel | - | 31.36 |
| Acrylic Board | - | 32.34 |

After 24 hrs. of adhesion onto each of the above-mentioned substrate, peel PAPERLAM off the substrate at 180° angle (N/25mm wide). *2

*1 Destroy the substrate

*2 Those value is of PAPERLAM. Each value slightly differs according to the type of PAPERLAM

PAPERLAM is produced under very strict quality control, however colour and gloss-ness may vary slightly on each product lot. Above data are based on measured values and not guaranteed values.



PAPER **LAM**

www.paperlam.in