

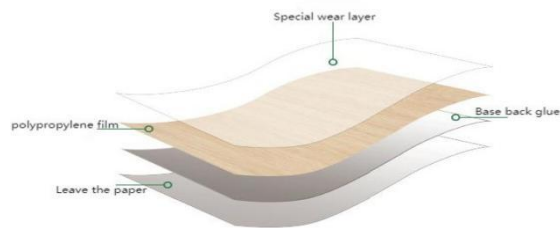
Self-adhesive PP

Product Basic Information

1, Product specifications

Width : 1220mm, Thickness :0.15 mm~0.25 mm(Thickness will be a little different by different pattern/color.)

2, Product structure



- *Special wear-resistant layer; enhance surface hardness, improve surface wear-resistant anti-fouling performance.
- *Printing layer give the surface rich color natural lifelike.
- *Polypropylene film, the main material of the product.
- *Base back glue, can be bonded with various materials.
- *Leave the paper tear off the construction can be pasted.

3.Product parameters

Technical indicators		Technical requirements		Impact		
Appearance dimensions	Appearance requirements	The texture is clean, the color is uniform; no obvious cold scar, bubble, spray frost and other defects; there should be no perforation, permanent fold and other serious defects: do not allow to attach more than 0.6 mm black spots, impurities; color difference between batches $\Delta E \leq 1$; winding flat		Visual effects		
	Dimensions requirements	Thickness allowance: ± 8 ; width allowance : $+10$ mm		Difficulty of subsequent processing		
Physicochemical properties	Tensile strength	Vertical ≥ 25.0 MPa, transverse ≥ 20.0 MPa				
	Right angle tear strength	Two-way $\geq$ KN/m 100				
	Dimensional change rate	Vertical ≤ 1 per cent, horizontal ≤ 0.5 per cent				
	Surface abrasion resistance	mg/100r ≤ 80		Resistance to external forces	Service life	
	Initial viscosity (DT20min Peel)	≥ 2200 g/25mm		Bond to substrate		
	Adhesion (DT24hrs Peel)	≥ 2600 g/25mm				
	180° Stripping force	N/inch ≥ 20				
	moisture-proof	The surface of the specimen is not expanded and not stratified		Against the outside world Temperature and humidity		
	Surface resistance to dry heat	Not less than 2				
	Surface moisture resistance	Not less than 2				
	Surface cooling cycle	No cracks, bubbling, discoloration, wrinkling, etc on the specimen surface				
	Colour fastness to light	Blue wool cloth level 6, up to gray card level 4		Against the outside light		
	Surface Pollution Corrosion	Level 5		Resistance to foreign chemicals		
antibacterial Properties (optional)	Antibacterial performance	Class 1:99 per $\geq$		Resistance to microorganisms		
	Anti-fungal properties	Not less than Level 1				
Flame retardant Properties (optional)	Polypropylene decorative film	Grade B1 (refractory material)				
	Polypropylene decorative film facing sheet	A (A2) (Non-combustible materials)				
Environmental Performance	Smell	Level 1(no odor)		Safe and environmentally friendly, friendly to people and environment, do not release harmful substances when used.		
	Formaldehyde emission	No aldehydes				
	Volatile organic compounds release	Meeting Green Product Requirements				
	Soluble heavy metals	Not included				
	Degradable	Release only carbon dioxide and water when fully burned				

4.Product design and function selection

Colour									Function	
Solid Color Series	Wood grain series	Stone grain series	Dermatoglyph series	Cloth pattern series	Metal Series	Art Series	Skin Sense Series	Highlights Series	Flame retardant	Antibacterial
√	√	√	√	√	√	√	√	√	√	√

5.Product characteristics

Eco-environmental protection:

No unpleasant or irritating odor Formaldehyde emission: GB18580-2017,1m according to standard³ Climate box method, formaldehyde emission is not detected, that is, no formaldehyde Soluble heavy metals: according to the latest EU standards EN 71-3, the detection of soluble heavy metals increased from 8 to 19 items, all of which were not detected

Adhesion properties:

GB/T17657-2013 based on criteria Bonding on each substrate, after 24 hours of placement, tensile stripping in 180° direction (N):

Painting wall	26.81	Wood board	31.94
Plywood	32.33	Aluminium and plastic board	35.26
Fibreboard	34.22	Stainless steel plate	39.37
Plaster	24.25	Aluminum sheet	29.26
Calcium silicate plate	27.07	Acrylic panels	35.02
		Glass	39.11

Dimensional stability:

GB/T 12027-2004 based on criteria PP decorative film specimens, placed in a temperature 100°C drying box, size change rate: longitudinal 0.3%, transverse 0.5%

Pollution resistance:

Use clean water, alcohol or neutral detergent to remove the following substances after 24 hours of contact

*coffee *ketchup *soap water *soy sauce *vinegar *cola

After 16 hours of exposure, remove the following substances with water, alcohol or neutral detergent

*footwear *red ink

Solvent resistance:

Drop the solvent below the sample surface and rinse with water after 8 hours. Observe the surface condition: no change

*acetone *alcohol *hydrochloric acid (10%) *caustic soda (10%) *Aviation gasoline

Surface scratch resistance:

GB/T 17657-2013,GB/T 6739-2006 based on criteria; Wear value 6 mg, no exposed bottom after 100 rpm; pencil hardness: H B

Adhesion to substrate:

GB/T 4852-2002,GB/T 4851-2014,GB/T 2792-2014 based on criteria Primary viscosity 20# ball adhesion >72 h,180° stripping force 27 N

Moisture-proof:

After placing at temperature 45°C and humidity 95% for 30 days, there was no obvious change in bond strength

Colour fastness to light:

GB/T 17657-2013 based on criteria Blue wool cloth level 6, up to gray card level 4

Moisture and Heat Resistance:

GB/T 17657-2013 based on criteria 2 cm spray³ The distilled water polyamide fiber cloth was placed on the surface of the PP decorative film specimen, and the heat source heated to 100°C was placed on the surface of the polyamide fiber cloth for 20 minutes to observe the surface condition of the specimen: Level 1 surface no visible change (no damage)

Heat resistance:

GB/T 17657-2013 based on criteria The heat source was heated to 100°C and placed on the surface of the PP decorative film specimen for 20 minutes to observe the surface condition of the specimen: Level 1 surface no visible change (no damage)

Cold and heat resistance cycle:

GB/T 17657-2013 based on criteria PP decorative film samples were placed in a drying oven, placed at 80°C for 2 hours, and refrigerated at -20 °C for 2 hours as a cycle, with 4 cycles There is no crack, blister, discoloration and wrinkle on the surface of the sample

Antibacterial Performance (Optional Function)

ISO 22196-2011,ASTM G 21-2015 based on criteria Antibacterial properties: antibacterial rate >99.9%(Staphylococcus aureus, Escherichia coli, Klebsiella pneumoniae)Antibacterial properties: grade I(Aspergillus Brazil Penicillium cordate, Spherical shell, Trichoderma green, Sprouting Terrier)

Flame retardancy (optional function)
GB 8624-2012 based on criteria Combustion performance grade B1 (refractory material)

6.Packaging, Transportation and Storage of Products

6.1 Packing

Self-adhesive PP with hard plastic tube or paper tube to do the roll core, outside (including end face) application film, kraft paper or other materials packaging, in the outer packaging should indicate the number of meters, generally 30-100 meters per roll.

6.2 Transport

Transport should be protected against mechanical collision, rain, sun and contamination.

6.3 Storage

Be neatly placed in a clean, cool, dry warehouse, keep the package intact, should not be stacked too high, generally not more than 2 layers, not less than 1 m. from the heat source. The storage period should not exceed one year from the date of production.

Selection guide

1.Considerations

- 1.1 The color of the base, different base color (especially dark base) may affect the color and effect of the surface after the paste of the large positive PP since the mucous membrane, please use the method of trial paste before construction to confirm the veneer effect. In the case of dark substrates with very high surface color and effect requirements, be sure to communicate fully with technicians before placing an order
- 1.2 Base flatness requirements, the base flatness will affect the film veneer effect, especially the smooth surface, high gloss series products, the base flatness requirements are higher; so in the selection of the base if the base can not achieve a higher flatness, try to choose the surface effect concave convex texture deeper color series.
- 1.2 Use temperature to avoid prolonged use in a low temperature environment of -10°C and higher than 50°C, which can accelerate product aging over a long period of time.
- 1.3 Illumination environment, the current self adhesive PP are used for interior decoration, if there is outdoor use needs, please contact technical support staff.

2.Color and Function Selection

Please refer to the above item of 4 product color and function selection list for selection. At present, our products have nine color series, there are two functions to choose from, to meet the needs of various application scenarios.

3.Application scenarios
wall, partition, etc.

Construction guidelines

1.Preparation before construction

1.1 To ensure that the base meets the construction requirements, please refer to the following table to check the base surface of the PP film to be pasted:

Basal species		Basal requirements	Processing methods
Wood	Plywood Medium density plate particle board	Moisture contents≤10%, flatness ≤2 mm, no burr; no exposed nail head	Seam, concave with putty leveling, can do appropriate sanding treatment
Inorganic	Plaster Calcium silicate plate Glass Magnesium Plate	Water content ≤10%, flatness ≤2 mm, no loose, peeling, powder drop phenomenon	The joint is treated with seam putty and glued with seam tape, surface scraping putty
	Cement mortar Plaster	Smooth and dry surface≤2 mm, no loose, peeling, powder drop phenomenon	Crack, concave with putty leveling, then full scraping putty grinding flat, according to the need to determine the number of scraping putty
Metal and stone wood plastic sheets	Aluminum Alloy Stainless steel plate Lacquer steel Wood panels Stone plastic board	Smooth and dry surface, no stains, flatness ≤2 mm.	Rust removal, oil removal, decontamination treatment, cleaning with alcohol, volatile solvents or neutral detergent.

1.2 Construction environment confirmation: it is recommended that the construction:

temperature range is 10°C~35°C, and when the ambient temperature of the construction site is lower than 10°C, the construction environment temperature and the base temperature can be increased by heating device. Avoid the back glue adhesion force drop due to too low temperature, can not be tightly bonded with the substrate, resulting in foaming, shelling and other risks. Clean the surrounding environment in advance to prevent dust and garbage from causing poor veneer.

1.3 Construction tools:

Tools category	Tool Name	Purpose
Essential tools	Scraper	Film application
	Steel tape	Measuring dimensions
	American knife	Cutting
	Sandpaper	Local sanding
	Beauty paper	Positioning
	Hair dryer	Used for bending or three-dimensional surfaces
	Table	Cutting platform
Auxiliary tools	Putty	Basal treatment
	Closed primer	Base material backing if necessary
	Heating equipment	Use at low site temperature
	Escalator	Use in climbing operations
Cleaning materials	Neutral detergent	
	Alcohol	
	Clean soft cloth	

2. On construction

- Note: to avoid different batches of the same color products of continuous close paste, different batches of design continuous bond, should take off the seam bond, off the seam treatment can be selected according to the overall aesthetic design needs. Our PP has strict process control during self-adhesive production to ensure the lowest degree of color difference rate.
- 2.1 The paper on the back of the film in the vertical and horizontal direction according to 50 mm marked square line, easy to cut as a reference, improve efficiency; convenient construction. When it is necessary to the pattern, pay attention to the pattern direction and the mechanism pattern direction, adopt the way of overlapping, and then cut off the excess part, so that the pattern texture to smooth.
- 2.2 Groove design (optional) to facilitate the construction of the exhaust treatment, if bubbles, plastic scrapers (to prevent the film surface from being squeezed to break the ring, or with the help of soft cloth over the top of the scraper) along the direction of the bubble will be driven out, small bubbles can be a sharp knife point piercing the bubble, and then slowly smooth.
- 2.3 After the completion of the construction, it is necessary to check whether there are fine bubbles, which can cause bubble bulging under the physical action of thermal expansion and contraction.
- 2.4 The adhesive strength is more and more stable over time. If there is a bond error in the construction, it can be torn up and re-bonded in time, but pay attention to the strength of the substrate, some of the poor strength of the substrate, when re-tear will destroy the substrate, in this case, avoid repeated tear bond.
- 2.5 When the construction encountered bending, can be combined with hair dryer heating construction, can make the bending more compliant.

3.Maintenance after construction

- 3.1 Cleaning: Self-adhesive PP has excellent surface physical and chemical properties, can withstand 140°C below the high temperature cleaning, can use most cleaning agents, including 95% alcohol solution and neutral detergent, clean with clean water to remove the residual cleaning agent, specific tolerance solvent and anti-fouling properties please refer to the product physical and chemical properties parameter table and product characteristics description.
- 3.2 Avoid mechanical scratches caused by sharp objects and avoid contact of cigarette butts with scalded discoloration.
- 3.3 When the surface of the film is damaged, minor bumps can be repaired by paint toning, a large area is broken ring, it is recommended to replace, the surface of the film after the passage of time, there will be a slight color difference, the replacement of the continuous front waff is recommended to replace the whole, to avoid the generation of new and old color difference.