



# — DECORATIVE LAMINATES

PROCESS & PROTECTIVE FILMS,  
MACHINES & LAMINATORS, TECHNICAL TAPES



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## ABOUT NOVACEL

As a 40-year-old worldwide leader in surface solutions, Novacel proposes a full offer to its customers, ranging from industrial processing films, to technical tapes, paper products, machines and associated services.

Novacel continuously focuses on expertise and innovation to provide its customers and partners with the most appropriate recommendations to value their materials and to contribute to their industrial efficiency.

Novacel is present in **90 countries** with more than **750 employees** and several production sites worldwide. With its ethos 'Beyond the Surface', Novacel is deeply committed to sustainability and innovation, for People and the Planet. Novacel is part of Chargeurs Group.

# NOVACEL, AN EXPERT FOR YOUR DECORATIVE LAMINATES

With the trend towards matt and structured finish combined with natural design, decorative laminates are upgrading to high value materials. Surface protection is now a vital component in this trend to luxury status.

Whatever the type of decorative laminate and its associated surface finish, Novacel has created **global solutions** to meet customers' expectations with innovative and perfectly adapted products.

Decorative laminates are extending their field with improved features :

- > **Increasing use** in new spaces and environments, requiring a significant upscaling
- > **Substituting** other materials with the same appearance and feel, like wood, stones or metals.
- > **Offering new functionalities** like anti-fingerprint, higher scratch, heat or chemical resistance.

These trends have increased the complexity and value of the surfaces, meaning new challenges for high performance solutions. More than ever, it is essential to use the right film, on the right surface for the right application.

By working in **cooperation with partners and experts**, Novacel anticipates market trends & changes and develops today, the solutions for tomorrow. This synergy results in **technical answers for new coatings like anti-fingerprint or new of eco-responsible solutions** to reduce carbon footprint and develop new and environmentally friendly products.



## WHY USE NOVACEL SOLUTIONS?

### > A Global Solution Provider

Novacel offers complete solutions with industrial processing films, technical tapes, paper products, machines and associated services.

### > Unique features for your specific needs

We create innovative solutions to improve your industrial efficiency and to take care of people; i.e. films dedicated to new surfaces or processes, low noise, easy peel or easy to unwind.

### > Expertise & Technical support

Our teams are dedicated to provide you the best experience and to assist you from the initial search for the right solution right up to its final implementation.

### > A Strong CSR Commitment

Novacel keeps working on its carbon footprint by improving its production, creating eco-responsible solutions and placing human well-being at the heart of its strategy.



# NOVACEL COMMITMENT TO PEOPLE AND THE PLANET

Novacel CSR Strategy is organized around 3 pillars:

- Creating a responsible industrial community
- Minimizing our environmental impact
- Eco-designing our products

## Eco-designing our products

Reducing the environmental impact of our products by innovating all along their conception until their end of life and taking care of teams' and customers' health is at the heart of Novacel CSR Strategy.

Tackling the ecological impact of our products on the planet is a daily challenge. **Oxygen**, Novacel unique range of responsible products promises to:

- Reduce fossil raw materials use to save non-renewable resources
- Use as many recycled resources as possible to limit the production of new fossil based films
- Minimize CO<sub>2</sub> emissions
- Be 100% recyclable



— FOSSIL  
RESSOURCES



— CO<sub>2</sub> EMISSION



+ RECYCLING

Increasing the human wellbeing at work is a daily preoccupation at Novacel; internally and externally. Novacel keeps developing technologies in this direction to decrease repetitive strain injury (RSI) or increase the quality of work environment:



EASY PEEL



EASY UNWINDING



LOW NOISE

**Ask now for a free sample roll for formal approval on your fabrication line!**



# — OXYGEN, NOVACEL ECO-RESPONSIBLE RANGE

The decorative laminates are more than ever inspired by nature and beauty.

Laminates manufacturers are also more driven by sustainability and involved in preserving the environment. They are committed to reduce their carbon footprint by increasing significantly the overall post-consumer recycled content in HPL.

In this context, on top of its commitment towards responsibility, **Novacel has designed the first eco-responsible range of process and protective films**, adapted from its successful and well-established products engineered for the decorative laminates market.

## Novacel OXYGEN, 3 technologies:



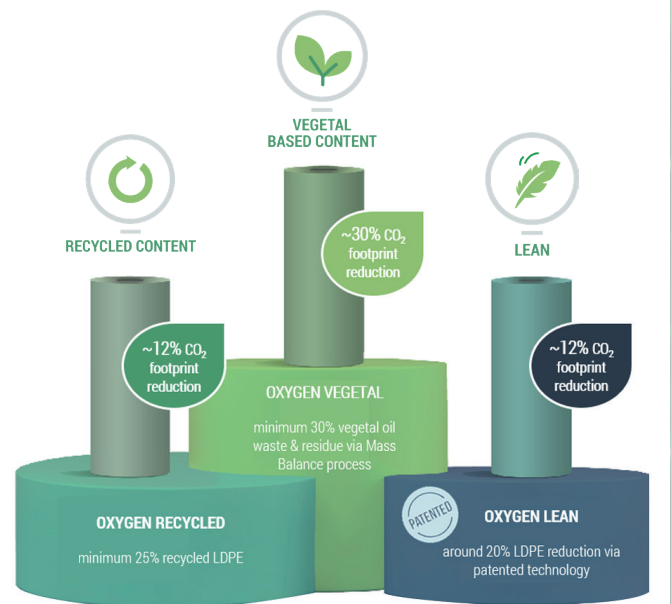
**VEGETAL** is the most versatile technology



**LEAN** is available for thick films



**RECYCLED** allows to re-use fossil resources



**RECYCLED CONTENT**

## 3130: Oxygen Recycled for HPL:

25% recycled polyethylene content

11% CO<sub>2</sub> emission reduction, with 0,106 kg CO<sub>2</sub>/m<sup>2</sup>

100% recyclable

Compatible with VX2 laminator





# HIGH PRESSURE LAMINATES (HPL) & MELAMINE FACED CHIPBOARD (MFC/ TFL)

Stylish, versatile and durable, decorative laminates are among the most creative materials in interior design. Whether for natural surfaces like woodgrain, stone, marble or for industrial metal look, the trends mix matt and textured surfaces to get the look and feel effect.

Novacel has designed a broad range of films dedicated to the new finishes in HPL or MFC materials, which keep them perfect throughout their fabrication processes.



## NOVACEL ASSETS

- > A Large range of films to be used like second-skin for the laminates during their fabrication processes
- > The right adhesion to fit the material whatever its finish.
- > Our Dedicated eco-responsible **OXYGEN** for HPL: **3130**
  - 25% recycled polyethylene content
  - 11% CO<sub>2</sub> emission reduction, with 0,106 kg CO<sub>2</sub>/m<sup>2</sup>
  - 100% recyclable
  - Compatible with VX2 laminator

4381 Carbon Footprint : 0,118 kg Co<sub>2</sub>/m<sup>2</sup>



## LACQUERED COATED PANELS

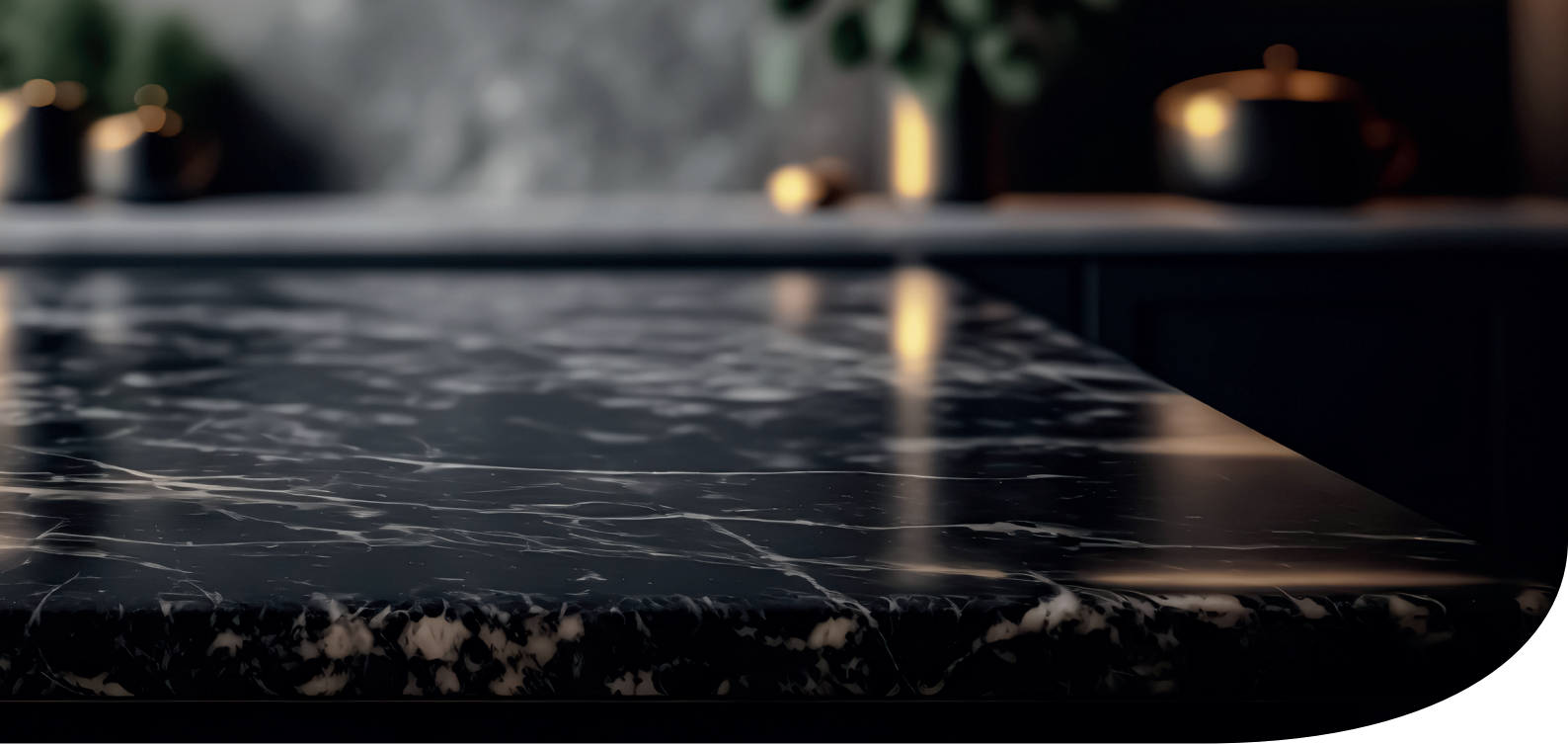
Processing films are needed all along the manufacturing process when producing the trendy and valuable matt finishes with Anti FingerPrint (AFP) coatings.

Novacel has designed new solutions in cooperation with its customers such as the premium solution **4143**, for the new textured finishes.



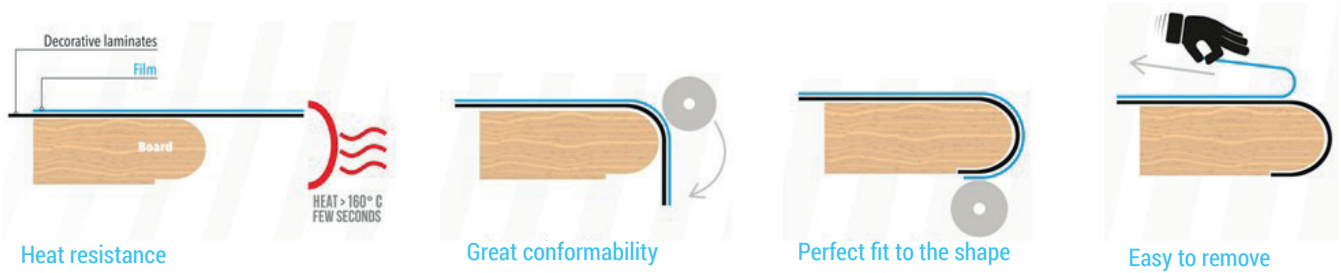
Grade	Decorative Laminate finish	Film Thickness	Adhesion level	Features
4768	High Gloss, marble	30 µm / 1.2 mil	Low	Reduced carbon footprint
4368	Glossy, fine textured, soft velvet, waxed grain, metal	35 µm / 1.4mil	Low - Medium	Reduced carbon footprint
4501	Woodgrain, concrete look, soft grain, matt, velvet touch, aged-stone, antique metal	50 µm/ 2 mil	Medium	Adapted to automatic lines
4381		35 µm / 1.4 mil	Medium - High	Reduced carbon footprint
4510	Linear woodgrain effect, textured finish, smooth super matt	50 µm / 2 mil	Medium -High	Peace of mind solutions, suitable for a wide diversity of finishes with different glues
4116		50 µm / 2 mil	High	
4374	Rough woodgrain, textured finish, super matt	40 µm / 1.6 mil	High	Reduced carbon footprint
4143	Natural Pattern wood, slate, Ridgewood, high texture, ultra matt	58 µm / 2.3 mil	Very High	Premium Solution for critical finishes, low noise at unwinding and easy to apply
4160		60 µm/ 2.4 mil	Very High	Dedicated to "difficult to protect" textured finishes
<b>3130</b>	Woodgrain, concrete look, soft grain, matt, velvet touch, aged-stone, antique metal	35 µm /1.4 mil	Medium - High	Eco-responsible recycled solution





# — POSTFORMING PROCESS

Some laminates are made with a special quality: thinner and more flexible, they can undergo “postforming” operations, i.e. edges bending and shaping. Novacel Heat-resistant High quality films are designed to withstand the Postforming operations for the edge shaping of laminates while avoiding the risk of damage.



## NOVACEL ASSETS

- > **Heating resistant** PET backing to withstand the laminates postforming process
- > Comprehensive range of postformable films to get the **ideal adhesion** to the material whatever the finish, with safe-formulated and stable adhesive throughout its time on the surface.
- > Expertise to combine Novacel solution machine with the best selected film to end up to perfect lamination.



Grade	Decorative Laminate finish	Film Thickness	Adhesion level	Features
9230	High gloss	25µm / 1 mil	Low	Easy-peel solution
4491	Glossy, fine textured, soft velvet or matt, waxed grain, metal, Woodgrain, concrete look,	25 µm / 1mil	Medium	Suitable for most finishes and stable adhesion
4496	Super matt, textured finish, rough Woodgrain, aged-stone, Slate	33 µm/ 1.3 mil	High	The most versatile solution until critical textures, stable adhesion
4315	Linear woodgrain effect, very textured finish, rough and ultra matt	30 µm / 1.2 mil	Very High	Very strong adhesion only for the most critical finishes.





# COMPACT LAMINATES & PANELS

Resistant and long-lasting, the high pressure structural laminates are also called compact or solid panels.

They are used for interior applications which require a high impact resistance such as interior wall panelling, scientific surfaces, cabinets & lockers. They can also be found in architectural applications such as outdoor furniture elements or exterior cladding panels.

Novacel has designed a full range of process and protective films for **indoor and outdoor use**, adapted to the diverse range of finishes these high value surfaces exhibit.

## NOVACEL ASSETS

- > Get the **right adhesion level** to the material whatever the finish.
- > Promote your brand image with the possibility to print, including arrows to advise panels mounting direction for facades.
- > For external architectural compact laminate panels with a stylish matt, stone pattern or raw wood finish, **Novacel 4127** is the perfect choice: A combination of a unique transparent film with three months outdoor warranty.



Grade	Decorative compact Laminate finish	Film Thickness	Adhesion level	Features
4501	Glossy, satin, fine textured, soft velvet, waxed grain, metal	50 µm / 2 mil	Medium	Indoor use
4510		50 µm / 2mil	Medium-High	Indoor use
4365	Woodgrain, concrete look, soft grain, matt, velvet touch, stone rock, metallic	50 µm/ 2 mil	High	Outdoor use Advanced solutions, suitable for a wide diversity of finishes
4234		70 µm/ 2.8 mil		
4127	Raw wood effect, textured finish, smooth super matt	53 µm / 2.1 mil	Medium -High	Outdoor use For highly textured finishes







## — 2D & 3D FILMS

2D and 3D foils are thermoplastic laminates applied as decorative surfacing for raw Medium Density Fiberboard (MDF) using a thermoforming process for the fabrication of furniture elements in 2 or 3 dimension shape.

Novacel has designed a full range of of “second skin” process films for these valuable surface finishes during the thermoforming operation.



### NOVACEL ASSETS

- > Keep the laminate's perfect aesthetics from damage during the thermoforming process and the cutting around panels.
- > Get the **right adhesion level** to the decorative thermo-foil in everything from High gloss or ultra matt finish.

### LACQUERED COATED PANELS

Processing films are needed all along the manufacturing process when producing the trendy and valuable matt finishes with Anti FingerPrint (AFP) coatings.

Novacel has developed new products adapted to membrane forming press for new coated materials such as the **4118** or the **9120** in cooperation with its customers.



Grade	Decorative furniture film finish	Film Thickness	Adhesion level	Features
4346	High gloss finish	40 µm / 1.6 mil	Low	Premium solution with high quality clear backing for sensitive glossy surfaces
4609	Glossy, soft woodgrain, velvet finish	50 µm / 2mil	Medium	Blue film to avoid being left on furniture
4540	Glossy, soft, velvet finish	50 µm / 2mil	Medium-High	Versatile solution suitable to cover a wide diversity of finishes included scratch resistant coated furniture surfaces
4334	Matt and super matt surfaces	50 µm / 2mil	High	Clear film
9120	Matt and extra matt and coated decorative foils (anti scratch, anti finger print).	60µm / 2.4 mil	Very High	Blue film Designed for AFP coated matt furniture surfaces
4118		50 µm/ 2 mil	Very High	Blue film compatible with most AFP coating chemistry



# EDGEBANDS

Edgebands are thin strips of material used to cover the raw edges of wood panels. They contribute to extend the furniture durability by protecting it from moisture and scratches and by giving a nice solid piece appearance to the element.

Novacel proposes a large offer of process and protective films withstand the bonding operations, whatever the technology used: from hot melt glue, to hot air or LASER.

## NOVACEL ASSETS

- > Perfect edgebands from the bonding process until the final installation.
- > Right adhesion to the decorative thermo-foil for high gloss, satin, wood or ultra mat finish.



## PRINTING SOLUTION

Films solutions are printable.  
Novacel has designed an exclusive 100% scratch and solvent resistant "trap printing" technology, available with clear transparent backings, preventing the risk of ink transfer during fabrication.

Grade	Edgeband surface finish	Film Thickness	Adhesion level	Features
4241	Glossy, soft matt, woodgrain, velvet finish	60 µm / 2.4 mil	Medium	Blue film, suitable for smooth finishes
9373		50 µm / 2 mil	Medium	Black and white opaque film
4333		50 µm / 2 mil	Medium	Clear film, can be trap-printed
4324	Matt and super matt finish, rough woodgrain effect, textured finish	80 µm / 3.2 mil	Very high	Black and white opaque film suitable for severe finishes
4160		60 µm / 2.4 mil	Very high	Clear film, suitable for severe finishes, can be trap-printed



# — TECHNICAL TAPES

Decorative laminates are made up of layers of paper that are impregnated with melamine resins. While being processed through the impregnation line, decorative paper rolls require splices in multiple places including tabbing to start and finish rolls as well as to connect rolls together.

**Novacel has designed a complete splicing tapes range** that is adapted to different paper qualities, can undergo high speed process and offers a good resistance to high temperatures without slowing your production speed.

## NOVACEL ASSETS

- > Get the **right splice to fit** the need: single or double coated splicing side.
- > Ensure splices optimum efficiency with backings and adhesives engineered to resist hot and humid environments.
- > Get expert service advise when selecting and testing the best option.



Grade	Application	Type	Colour	Carrier	Adhesive	Total Thickness
BN 72000	High speed splices	Double-sided tape	Green	Cellulose Non woven	Repulpable acrylic	100 µm



# COATING MACHINES & LAMINATORS

With Omma and Walco brands, **Novacel Special Machines (NSM)** proposes the **ultimate coating and lamination technology** dedicated to the decorative laminates and wood industry. Based on a long experience and know-how with innovative, often exclusive and always reliable solutions:

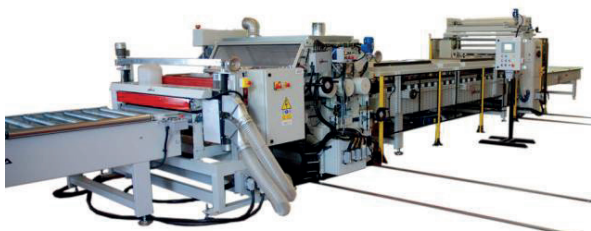
- **Glue spreaders** allow the glue to be spread quickly and uniformly on various materials: laminates, wood panels and any flat surface
- **Laminators** allow easy and fast lamination, wrinkle and bubble-free film on any size and any flat surface. They can be used both in a production line or as a stand alone unit and can be equipped with either manual or automatic cutting technology.
- **Pressing units, glue feeding devices, panel cleaning systems and slitting machines.**
- **Complete gluing and laminating lines**, from loading to unloading.



**TX precision:** Horizontal Laminator

## NOVACEL ASSETS

- > **Glue spreaders**, standard or customized machines for adhesive application (Water Based, PU, Hot Melt)
- > **TX Precision**, for film application on decorative laminates and wood panels
- > **Complete gluing and laminating lines**
- > **Services:** Installation and startup, maintenance, troubleshooting and software updates



**Complete gluing and laminating line**



**HGS:** Hot Melt Application

Type of glue	Machine	Standard dimension	Thickness	Glue application	Application Characteristics	Specificities
Hot Melt	HGS	Widths : 1,400mm (55") 3,100mm (122")	Up to 80 mm (3.1")	Single or Double-sides	High precision application	<ul style="list-style-type: none"> <li>- Glue sealing plates easy extraction &amp; cleaning</li> <li>- Wide customization possible</li> </ul>
Water Based	OPEN	Widths : 800mm (31.4") 3,600mm (142")	Up to 80 mm (3.1")	Single or Double-sides	High precision application	<ul style="list-style-type: none"> <li>- Easy use and maintenance</li> <li>- Efficient cleaning system</li> </ul>

Lamination	Machine	Standard dimension	Thickness	Film application	Lamination Characteristics	Specificities
Horizontal	TX precision	Widths : 1,400mm (55") 1,700mm (67")	4 mm (0.16") up to 80 mm (3.1")	Single or Double-sides	Precise film application	<ul style="list-style-type: none"> <li>- Automatic length detection</li> <li>- Automatic cut</li> </ul>
Horizontal	PRO-JET	Widths : 1,400mm (55") up to 3,300mm (132")	5 mm (0.2") up to 80 mm (3.1")	Single or Double-sides		<ul style="list-style-type: none"> <li>- Entry-level applicator</li> <li>- Manual cut</li> </ul>







# FIND YOUR MATCH

Decorative Laminate type	Material surface finish	Grade	Thickness (µm/mils)	Adhesion level	Features
HPL	High gloss	4768	30 / 1.2	Low	Reduced carbon footprint
HPL	High gloss	9230	25 / 1	Low	For HPL Postforming
HPL	Glossy, smooth	4368	35 / 1.4	Low-Medium	Reduced carbon footprint
HPL	Soft woodgrain, velvet, matt	4381/ 3130	35 / 1.4	Medium-High	Reduced carbon footprint Recycled version available
HPL	Soft Woodgrain, fine texture	4501	50 / 2	Medium	
HPL	Textured	4374	40 / 1.6	High	Reduced carbon footprint
HPL	Matt, textured	4496	25 / 1	High	For HPL Postforming
HPL	Matt, super matt, textured, wood	4116	50 / 2	Medium-High	
HPL	Textured, rough woodgrain	4143	58 / 2.3	Very High	Low noise, Easy to apply
HPL & Compact	Woodgrain, fine textured, velvet, matt	4510	50 / 2	Medium-High	Versatile suitability
Compact	Smooth, textured, woodgrain	4365	50 / 2	High	Suitable for outdoor
Compact & Edgeband	Smooth, textured, woodgrain	4234	70 / 2.8	High	Suitable for outdoor, black & white solution
Compact & Edgeband	Textured and rough finishes	4324	80 / 3.2	High	The strong black & white solution
2D/3D Films	High gloss	4346	40 / 1.6	Low	Premium quality for 2D/3D forming
2D/3D Films	Glossy, smooth	4609	50 / 2	Medium	
2D/3D Films	Glossy, smooth, semi matt	4540	50 / 2	Medium High	Premium quality for 2D/3D forming
2D/3D Films	Matt, super Matt, textured	4334	50 / 2	High	
2D/3D Films	Matt, ultra matt AFP	9120	60 / 2.4	Very High	Premium for severe finish AFP
Edgeband	Glossy, satin, smooth	4241	60 / 2.4	Medium	
HPL, 2D/3D Films, edgeband	Matt, ultra matt AFP, textured, rough woodgrain	4160	60 / 2.4	Very High	Suitable for most severe finishes
Decorative papers	NA	BN 72000	100 / 4		Double-sided tape

\*NA : Not Applicable

For more grades or information, please refer to your sales representative.





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