



and the Bringer of L

er. Jah

41

# A WORLD OF PLYWOOD

1th Surger and a line to

charles ( 4



# A WORLD OF PLYWOOD

# **Table of contents**

ABOUT OUR COMPANY 4 GENERAL OVERVIEW 6 PLYWOOD HOMOLOGATIONS – RELEVANT FACTS 8 PLYWOOD PRODUCTION PROCESS 9

NATURAL PLYWOOD 11

PAGED BIRCHPLY 12 PAGED BEECHPLY 13 PAGED SOFTWOOD THINPLY 14 PAGED SOFTWOOD THICKPLY 15 PAGED TWINPLY 16 PAGED LIGHTPLY 17 PAGED BLOCKBOARD 18 PAGED NATURE 19 PAGED PARQUETPLY 20

### COATED AND FILM-FACED PLYWOOD 21

PAGED PAINT 22 PAGED DURABLE 23 PAGED COLOUR 24 PAGED FORM 25 PAGED TWIN FORM 26 PAGED MASTER FORM 27 PAGED ULTRA FORM 28 PAGED MESH 29 PAGED HEXA 30 PAGED TRANS 31

### SPECIALTY PLYWOOD 32

PAGED PHON 33 PAGED DOOR 34 PAGED COMPREG 35 PAGED ELKON 36 PAGED LASER 37 PAGED FRAME 38

### FIRE-RETARDANT PLYWOOD 39

PAGED SOFTWOOD THINPLY FR 41-42 PAGED THICKPLY FR 43 PAGED BIRCHPLY FR 44-45 PAGED BEECHPLY FR 46 PAGED BEECHPLY PHON FR 47 PAGED TWIN FORM FR 48

CNC MACHINING AND PROCESSING SERVICES 49 PACKING, TRANSPORTATION AND STORAGE INSTRUCTIONS 50 USEFUL INFORMATION 51

# About our company

### Paged - a globally renown plywood manufacturer

For over eighty years, Paged has been offering a wide range of products and services to its customers in Europe. Our product portfolio includes natural hardwood and conifer plywood, coated and film-faced plywood, fire-retardant plywood as well as specialty plywood composites such as ELKON® or COMPREG.

As a business we strive to deliver the industry's best solutions and products to our partners. As a result, our products create value in a range of applications, from construction sites to heavy duty road transportation, specialty packaging and furniture industries as well as shipbuilding and interior design.



We source pine, birch, alder, aspen and beech wood from sustainably managed forests, under FSC® or PEFC<sup>™</sup> systems at both our plywood mills in north-eastern Poland. Our production facilities operate in line with PN-EN ISO 9001:2015 Quality Management system, the PN-EN ISO 14001:2015 environmental management system and the occupational safety and hygiene management system PN-ISO 45001:2018.

We create value for our customers through responsible sourcing and smart investment in innovative products and services. We value the development of our employees, the continued improvement of our processes and product innovation to deliver more sustainable solutions to our clients.



Feel free to contact us with your inquiry and thank you for your business.



# We believe in partnership

Our mission is to deliver on our quality promise for all plywood, composite boards and innovative, tailor-made solutions developed by our technology and R&D teams. We take pride in the eighty years of our history and make sure that we continue to invest in our employees and production processes in order to remain the most advanced plywood manufacturer in Poland.

Our products help our Customers gain business efficiencies or to create more value for the end users. We stand behind the quality of our products and progress continuously in our efforts to limit our environmental footprint for the benefit of today's and future generations.

# General overview

We manufacture all our plywood at two of our sites, one in Morąg and one in Pisz.

We source pine, birch, alder, aspen and beech wood from sustainably managed forests, under FSC® or PEFC<sup>™</sup> systems at both our plywood mills in north-eastern Poland.

Our production facilities operate in line with PN-EN ISO 9001:2015 Quality Management system, the PN-EN ISO 14001:2015 environmental management system and the occupational safety and hygiene management system PN-ISO 45001:2018.

Plywood is a natural and sustainable material. With the increasing use of modern technology we continue to improve the environmental performance of our products. All of them adhere to the new, lower formaldehyde emission norms as confirmed by ZE05 certificate and E01 as confirmed by Hygienic Certificate according to CARB and TSCA IV regulations. Our products also conform with low VOC emission norms, details of which can be found in relevant technical documentation.



### Our history



As a recognized supplier to our partners in Poland and abroad we service various market segments and develop products to specification and customer requirements. As part of this process, our products undergo rigorous testing, accreditation and approval processes around the world. All of such documents, tests and reports can be obtained from our website or from one of our sales representatives.

We continue to add new products and features to our existing products. As we want to propel our innovation efforts we established a new R&D department in 2019 – a daughter company under the name of Paged LabTech.

All of our plywood adhere to the new, lower formaldehyde emission norms as confirmed by ZE05 certificate and E01 as confirmed by Hygienic Certificate according to CARB 2 and TSCA VI regulations. Our products also conform with low VOC emission norms, details of which can be found in relevant technical documentation available upon request.

Bonding type	PN-EN 636	DIN 68705	BS 1203
INTERIOR GLUE UF TYPE	636-1: Dry environment	IF 20 BFU 20	INT MR
WEATHER RESISTANT GLUE* MUF OR PF TYPE	636-2: Humid environment 636-3: Exterior environment	AW 100 BFU 100	WBP

\*Weather resistant plywood is also referred to as WBP (weather and boil-proof) which means that the glue line will not break down when subjected to adverse weather conditions, and can also withstand immersion in boiling water. All of the above ratings apply to the adhesive resin that is used to hold the veneer layers of wood together in the manufacturing process of plywood. Wood veneers are not water resistant same as wood that they're made from. Weather resistant plywood is an exterior grade so long as its edges and surfaces are treated with a preservative. It is advised not to keep plywood in direct contact with wet substrates, such as soil or water.

### Certificates of compliance, laboratory test results and homologations

### FACTORY PRODUCTION CONTROL CERTIFICATION SYSTEM

Our products undergo regular tests, both in external certifying and testing bodies as well as at our in-house laboratory. We issue Declaration of Performance for all our products for both structural and non-structural applications in construction.

All our products are CE marked thanks to factory production control certificates under the Regulation (EU) No 305/2011 of the European Parliament and of the Council of 9 March 2011. All plywood marked with CE can be used as structural elements in construction and housing in both external and internal applications. We mark plywood from 9 to 50mm in thickness with CE mark.

### INTEGRATED MANAGEMENT SYSTEM

We carry the integrated management system practices throughout all aspects of our business. We have completed its implementation at our facility in Pisz and we have scheduled its implementation at our facility in Morag.

### **FSC® AND PEFC® CERTIFICATION**

We source wood from responsibly managed forests under FSC® and/or PEFC® standards. Our products are either FSC® or PEFC marked, depending on our customers' requirements.

### **DIBt Approvals and EU Regulations**

Both our production facilities supply plywood approved by DIBt office for use in construction applications. We test and qualify our products at MPA Eberswalde GmbH - Materialprüfanstalt Brandenburg.

# Plywood homologations

Paged manufactures plywood compliant with ECE Regulation No. 118.

Fire safety is by far one of the most important technical requirements for materials used within a vehicle. To ensure materials can provide a safe environment, the European directive 'ECE Regulation No. 118' is used to govern the fire safety of materials in coaches and intercity all-seater buses.



Compliance E20 R11811 – 02 4000

Numerical values after the letter E denote the country where compliance tests took place.

ECE Regulation 118 covers how materials burn (their burning rate and melting behaviour) and their ability to prevent the absorption of fuel and lubricants. It is relevant to materials located in the occupant compartments and heated compartments (such as engine bays) of commercial vehicles, including buses and coaches.

Acoustic and sound-proofing materials are also subject to Reg. 118 because of their location within passenger cabins and engine bays.



# E20 R118II - 02 4000

All Paged products marked with E20 R188II are ECE Regulation No. 118 compliant.

Our products were tested in three areas of compliance under ECE Regulation No. 118:

- Annex 6 Test to determine the horizontal burning rate of materials
- Annex 7 Test to determine the melting behaviour of materials
- Annex 8 Test to determine the vertical burning rate of materials

# Plywood manufacturing proces

### 1. Hydrothermal wood logs processing

Wood logs which are the raw material for plywood manufacturing undergo hydrothermal processing. The hydrothermal processing is carried out in soaking pools filled with water at a temperature of 40–60°C depending on the wood species. Next, through mechanical debarking, the logs are cleared of bark and mineral residues accumulated in the bark during the process of logging and transport.





### 2. Peeling

A cut to size wood log is delivered to a rotary peeling machine. Once fitted at a right angle against a rotary lathe, a log is being rotated against the blade. The peeling blade cuts a layer of veneer in the form of a veneer band.

### **3.** Drying and surface repairing of veneers

At this stage veneers have a moisture content of 30–120%. In order to reduce the moisture to the required level, veneers are dried in a continuous process in a band drying facility or as sheets in roller drying facilities, at a temperature of 160–180°C, to reach the desired moisture content of about 8 - 12%. Any veneer defects caused by the wood anatomy (e.g. knots, close shakes, bud traces, etc. ) are identified by using specialist scanning systems. Such surface defects are repaired with veneer inserts or chocks that match in colour and woodgrain pattern.





**4.** Adhesive application and plywood sets assembly

The sets of face and core veneers are assembled by selecting and arranging veneer sheets in a proper way. Depending on the intended use of the final product and a customer's requirements, the sheets are laid cross-grained in a classic way, cross- and parallel-grained or parallel-grained in relation to each other. The adhesive is applied on both sides onto every second sheet of veneer. The type of the adhesive compound determines the type of bonding used for the specific plywood.

### 5. Hot pressing

The sets of veneers are hot-pressed under pressure in hydraulic multi-platen presses. The veneers are pressed together and from now are permanently bonded.



### 6. Final processing and sanding

Following the seasoning of plywood, the plywood sheets are finally processed and cut to target size with the excess material cut off on a profiling machine. Next the surfaces of face veneers are calibrated and sanded in a precise sanding machine.

### 7. Overlaying, filming, surface treatment

If required by the end application of plywood panel, at this stage in the process a special paper impregnated with resin (also referred to as film) is applied onto the surface of plywood board. This process is carried out in high pressure and high temperature environment, causing the resin to pass to the core veneers and, as a result, to produce a surface with new performance properties.





### 8. Quality inspection and grade sorting

Sorting of plywood is based on quality inspection and classification of plywood face veneers in line with quality systems' requirements, technical standards and specifications.

# Natural plywood range

We offer natural plywood manufactured from birch, aspen, alder, beech and pine. Plywood is made up of thin multiple cross-banded veneers. In addition to standard cross-banded construction a range of orientated special constructions, aimed at specific end uses are available. Construction of plywood can be homogenous with all veneers throughout the construction of the same wood species or combi with same species veneers on each face and alternate inner veneers of softwood and hardwood species.

Natural plywood is used widely in construction (e.g. wall, floor and roof panelling), interior design and fit-out (e.g. decorative panels), furniture manufacturing, window and door manufacturing and in the production of engineered wooden flooring and stairs.

### Main application areas for natural plywood:



### Construction

(sub-floors, sub-walls, wall panelling, roof sheeting)



### Interior fit-out

(wall panels and decorative panels, recreational vehicle fit-out, boat and yacht fit-out)



### Furniture

(framing, cabinets, structural elements, sofas, beds, armchairs)



### Doors and windows

Packaging, palletization and die-cutting for packaging material



Engineered flooring and wooden stairs



## We distinguish four grades of natural plywood appearance

All our plywood is graded as one of the four appearance classes: I, II, III and IV.

Each class is determined by the quality and defects of surface veneers.

We classify our hardwood plywood according to PN-EN 635-2 and our softwood plywood according to PN-EN 635-3. The full body of classification is available from our website www.sklejkapaged.pl.

# Paged BirchPly





### **SPECIFICATIONS**

High quality hardwood plywood made of sustainably sourced Baltic birch and available in a wide range of thicknesses and formats. Paged BirchPly is noted for its strength, durability, rigidity, and resistance to splitting and warping. It can be used where special strength and high quality is required, especially for construction, joinery and transport industries.

STANDARD SIZES	1250×2500/3000mm 1500×2500/3000/3300mm 1530×2230mm 2500×1250/1500mm
NOMINAL THICKNESS	4-45 mm*
DENSITY	640-760 kg/m <sup>3**</sup>
RELEASE OF FORMALDEHYDE (EN 717	<b>7-1)</b> ½ E1
BONDING QUALITY (EN 314-2)	Class 1 Class 2 Class 3

\*other thicknesses available upon request \*\*as measured at 8-12% moisture content

### ADVANTAGES

natural finish and uniform wood structure

high durability

increased moisture resistance

high resistance and durability

low swelling

easy to coat, varnish and paint



Sustainable manufacturing process





Vapour permeability



o ne E2



Dimensional

stability



# Paged **BeechPly**



### **SPECIFICATIONS**

A unique face quality plywood panel, made of locally sourced beech offers its users superb rigidity, durability and the highest face sheet quality possible. It is highly recognized by furniture makers and designers around the world.

STANDARD SIZES	1250/1500×2500 mm 1250×1950/2200 mm 2500×1250/1500 mm
NOMINAL THICKNESS	4-30 mm*
DENSITY	720-880 kg/m <sup>3**</sup>
RELEASE OF FORMALDEHYDE (EN 717-1)	½ E1
BONDING QUALITY (EN 314-2)	Class 1 Class 2 Class 3

\*other thicknesses available upon request \*\*as measured at 8-12% moisture content

### **ADVANTAGES**

- high quality face veneers
- natural finish and uniform wood structure
- increased moisture resistance

durability and strength

easy to coat, varnish and paint

impact resistant



product



manufacturing

process



Dimensional stability



E20 R118II - 02 4000

# Paged Softwood ThinPly





**SPECIFICATIONS** 

Paged Softwood ThinPly is made of standard thickness locally sourced Baltic Pine and offers its users high durability and resistance to mould and UV lightening. Thanks to its high load-bearing capacity, smooth and uniform surface Paged Softwood ThinPly is widely used in construction, furniture and packaging industries.

STANDARD SIZES	2500×1250/1500 mm 1500×3000 mm
NOMINAL THICKNESS	4-45 mm*
DENSITY	550-650 kg/m <sup>3**</sup>
RELEASE OF FORMALDEHYDE (EN 717-1)	½ E1
BONDING QUALITY (EN 314-2)	Class 1 Class 2 Class 3

\*other thicknesses available upon request \*\*as measured at 8-12% moisture content

### **ADVANTAGES**

made from highly regarded Baltic Pine wood good protection against fungi and moisture light and easy to machine good insulating properties low swelling easy to coat, varnish and paint low weight Natural Sustainable Dimensional product manufacturing process stability Easy to machine Vapour Compliance E20 R11811 - 02 4000 permeability

# Paged Softwood ThickPly





**SPECIFICATIONS** 

Paged Softwood ThickPly is made of selected specific thickness Baltic Pine and offers its users high durability and resistance to mould and UV lightening at a reduced total weight of the panel. Thanks to its high load-bearing capacity, smooth and uniform surface Paged Softwood ThickPly is widely used in construction and packaging industries.

STANDARD SIZES	2500×1250 mm 2440×1220 mm
NOMINAL THICKNESS	6-40 mm*
DENSITY	585 kg/m <sup>3**</sup>
RELEASE OF FORMALDEHYDE (EN 717-1)	½ E1
BONDING QUALITY (EN 314-2)	Class 3



\*other thicknesses available upon request \*\*as measured at 8-12% moisture content

### **ADVANTAGES**

made from highly regarded Baltic Pine wood good protection against fungi and moisture light and easy to machine good insulating properties low swelling easy to coat, varnish and paint low weight Natural Sustainable product Sustainable Dimensional stability



Easy to machine



Compliance E20 R118II – 02 4000

# Paged TwinPly

CE



### SPECIFICATIONS

Paged TwinPly offers a perfect balance between the high quality surface of face birch veneers and the lightness and natural moisture resistance that softwood brings to its core. The natural wood surface is an elegant interior material. It works in both modern housing, construction and shopfitting as well as traditional interior design. Paged TwinPly brings natural atmosphere to the room. It is easy to handle and can be machined with common hand tools.

STANDARD SIZES	1250×2500 mm 1220×2440 mm
NOMINAL THICKNESS	9-40 mm*
DENSITY	605 kg/m³**
RELEASE OF FORMALDEHYDE (EN 717-1)	½ E1
BONDING OUALITY (EN 314-2)	Class 3

\*other thicknesses available upon request \*\*as measured at 8-12% moisture content

### ADVANTAGES

natural finish and uniform wood structure

high value of modulus of elasticity and bending resistance

easy to machine

increased moisture resistance

easy to coat, varnish and paint

universal in application

low swelling

lightweight



# Paged LightPly

### **SPECIFICATIONS**

Paged LightPly is an ultralight, high quality decorative plywood panel with elegant Baltic birch face veneer and Nordic aspen core made in the EU from sustainable Estonian forests. It is characterised by a plethora of applications thanks to its lightness, surface quality and excellent mechanical properties. Paged LightPly has been specifically designed to bring natural design, panel lightness and ease of machining to the interior design and furniture customers.

STANDARD SIZES	2440×1220 mm 2500×1250 mm
NOMINAL THICKNESS	7-27 mm*
DENSITY	520-590 kg/m <sup>3**</sup>
RELEASE OF FORMALDEHYDE (EN 717-1)	½ E1
BONDING QUALITY (EN 314-2)	Class 2 Class 3

\*other thicknesses available upon request \*\*as measured at 8-12% moisture content

### ADVANTAGES

### dimensional stability

high durability

low weight

easy to machine

high quality face veneers

easy to coat, varnish and paint

high value of face screw holding







Natural product Sustainable Dimensional manufacturing process stability



Easy to machine

# Paged Blockboard



and have present the second of the



### **SPECIFICATIONS**

Paged Blockboard is build of a 5-layer solid softwood core. As a standard its outer layers are made of hardwood (birch, alder) or softwood (pine) veneers 1,5mm thick. We also offer many exotic and local wood species as the outer veneers, depending on the final application.

STANDARD SIZES	1250×2500 mm 2500×1250 mm
NOMINAL THICKNESS	13-45 mm*
DENSITY	550-650 kg/m <sup>3**</sup>
RELEASE OF FORMALDEHYDE (EN 717-1)	½ E1
BONDING QUALITY (EN 314-2)	Class 1 Class 2

\*other thicknesses available upon request \*\*as measured at 8-12% moisture content

### **ADVANTAGES**

light, stu	rdy and durable					
bonding	type: water and boil-p	roof or interior				
good ins	ulating properties					
easy to c	oat, varnish and paint					
high valu	ie of face screw holdin	g				
low weig	ht					1
solid woo	od core					10 B. (88)
high qua	lity finish				and the second second	
	•		-101	Nº.		
Natural product	Sustainable manufacturing process	Dimensional stability	Easy to machine			

# Paged Nature





### **SPECIFICATIONS**

Paged Nature was designed specifically for the needs of modern interior designers and furniture makers. It is built of furniture-grade birch veneers covered in natural wood veneers, depending on the customer's choice. It is a long-lasting and durable material that is easy to machine into different dimensions and shapes using any type of joinery machinery.

STANDARD SIZES	2500×1250 mm
NOMINAL THICKNESS	4-40 mm*
DENSITY	640-760 kg/m³**
RELEASE OF FORMALDEHYDE (EN 717-1)	1⁄2 E1
BONDING QUALITY (EN 314-2)	Class 2

\*other thicknesses available upon request \*\*as measured at 8-12% moisture content

### **ADVANTAGES**

natural and homogenous appearance increased moisture resistance low swelling easy to coat, varnish and pain low weight strong and dimensionally stable



Natural product





Dimensional stability



machine

# Paged **ParquetPly**







Improved quality hardwood or softwood plywood for engineered flooring producers. Manufactured by Paged to strict thickness tolerance under controlled production regime that guarantees stable moisture and dimensional stability. Easy to machine and overlay with natural veneers.

STANDARD	HARDWOOD	SOFTWOOD
SIZES	1220×2440 mm	2440×1220 mm
	1250×2500 mm	2500×1250 mm
	2500×1250 mm	
NOMINAL THICKNESS	6,5 / 9 / 12	2/15 mm*
DENSITY	640-760 kg/m <sup>3**</sup>	585 kg/m <sup>3**</sup>
RELEASE OF FORMALDEH	/DE (EN 717-1) <sup>1</sup> / <sub>2</sub>	El
BONDING QUALITY (EN 314	- <b>2)</b> Cla	ss 3

\*other thicknesses available upon request \*\*as measured at 5-9% moisture content

### **ADVANTAGES**

tight thickness tolerance +-0,2 mm

optimal moisture level of 5-9%

high durability

dimensional stability







Natural product





Easy to machine





Dimensional stability



# Coated and film-faced plywood

Our coated and film-faced plywood products offer better moisture protection and higher wear&tear resistance.

The final application varies and depends on the type of overlay or film used. Coated and film-faced plywood are used in the production of shuttering systems, as base plates for manufacturing of concrete blocks.

Estimated number of uses\*:



\*The estimated number of uses is presented for guidance only. The actual number of uses will depend on the actual use, handling and machining of plywood sheets.

### Plywood for transportation and exhibition & events industries

With its high strength to weight ratio as well as high anti-slip index, plywood with structural film finish increases load safety during transport. The surface of the anti-slip plywood is hard and resistant to abrasion and rolling wear. Filmed plywood is also used in construction, industry flooring, working platforms, scaffolding, stages, warehouse and factory hall floors.

# <complex-block>

### Key facts and data

Product	Mesh			Hexa		Trans	
Thickness [g/m²]	145	167	220	167	220	4	60
Taber test as per PN-EN 438-2	400	480	600	520	600	5 000	10 000
Rolling test as per SS 923508 [no. of cycles]	1800 +- 35%		2000	+- 35%	10000	+- 35%	
Anti-slip class as per DIN 51130	RIO		RIO		RII	/R13	

Our products are characterized by high strength-to-weight ratio and are easy to machine. Depending on their final use we manufacture film-faced and overlaid plywood from specific wood species in order to improve their performance.

# Paged Paint





### **SPECIFICATIONS**

Birch hardwood plywood of special construction with face veneers selected specifically as underpaint surface. Paged Paint is designed to be used both in interior and exterior applications. It comes with a grey or white finish to allow for a reduced use of paint and to achieve high opacity and high smoothness with minimum cover layers.

STANDARD SIZES	1250×2500/3000 mm 1500×2500/3000 mm
NOMINAL THICKNESS	9-45 mm*
DENSITY	640-760 kg/m³**
RELEASE OF FORMALDEHYDE (EN 717-	<b>1)</b> <sup>1</sup> / <sub>2</sub> E1
BONDING QUALITY (EN 314-2)	Class 3

\*other thicknesses available upon request \*\*as measured at 8-12% moisture content

### **ADVANTAGES**

easy to machine and fasten increased moisture resistance rigid and dimensionally stable easy to paint



Natural product





Easy to machine



# Paged Durable





### **SPECIFICATIONS**

Paged Durable is produced from high quality birch plywood coated with a polypropylene film. The final panel offers extra protection against moisture and UV radiation, simultaneously ensuring colour fastness. Available with a smooth or orange peel finish to match your desired application.

STANDARD SIZES	1250×2500 mm 1500×2500/3000 mm 1525×3050 mm
NOMINAL THICKNESS	6,5-30 mm*
DENSITY	640-760 kg/m <sup>3**</sup>
RELEASE OF FORMALDEHYDE (EN 71	<b>7-1)</b> <sup>1</sup> ⁄ <sub>2</sub> El
BONDING QUALITY (EN 314-2)	Klasa 3

\*other thicknesses available upon request \*\*as measured at 8-12% moisture content

### **ADVANTAGES**

- colour fastness ≥ 6 (EN ISO 105-B02)
- resistance to cracking
- impact resistant
- UV resistant
- easy to clean
- long life-span





•

Natural product

Sustainable manufacturing process



Dimensional ss stability



Easy to machine



High UV resistance

# Paged Colour



CE



Paged Colour is a high quality finish birch plywood made with waterproof resin and designed for both structural and non-structural applications. It is characterised by high durability and strength, while its surface provide a decorative and easy to preserve surface.

STANDARD SIZES	1250×2500 mm 1500×2500/3000 mm*	
NOMINAL THICKNESS	9-30 mm*'	
DENSITY	640-760 kg/m³***	
RELEASE OF FORMALDEHYDE (EN 717-1)	½ E1	
BONDING QUALITY (EN 314-2)	Class 3	

\*applicable to white colour only \*\*other thicknesses available upon request \*\*\*as measured at 8-12% moisture content

### **ADVANTAGES**

high durability and strength

hygienic and easy to maintain

high UV resistance



product

Natural







Dimensional stability



resistance



# Paged Form







### **SPECIFICATIONS**

Paged Form is made of thick veneer softwood panel covered on both sides with special craft-based paper impregnated with resins. The specific construction of the panel reinforces its durability and resistance, while the surface and strength of the overlay allows its user to achieve a spotless surface press.

STANDARD SIZES	2500×1250 mm 2440×1220 mm
NOMINAL THICKNESS	15-21 mm*
DENSITY	585 kg/m <sup>3**</sup>
RELEASE OF FORMALDEHYDE (EN 717-1)	½ E1
BONDING QUALITY (EN 314-2)	Class 3

\*other thicknesses available upon request \*\*as measured at 8-12% moisture content

### **ADVANTAGES**

additional surface protection in concrete block production

easy to handle

increased moisture resistance

impact resistant





Natural product





Easy to machine





# Paged Twin Form





Paged Twin Form is a high quality birch-pine plywood overlaid with purpose designed phenolic films. It offers an upgrade in terms of resistance to water and durability when compared to imported softwood panels and allows its users to maximize the life of the product.

STANDARD SIZES	1250×2500 mm 1220×2440 mm
NOMINAL THICKNESS	9-40 mm*
DENSITY	605 kg/m <sup>3**</sup>
RELEASE OF FORMALDEHYDE (EN 717-1)	
BONDING QUALITY (EN 314-2)	½ E1
*other thicknesses available upon request	Class 3

\*other thicknesses available upon request \*\*as measured at 8-12% moisture content

### ADVANTAGES



# Paged Master Form







Our flagship, waterproof bond, birch hardwood plywood overlaid with purpose-designed phenolic film. Paged Master Form was designed to perform at its best in the challenging industries of formwork and heavy-duty flooring applications.

STANDARD SIZES	1250×2500/3000 mm 1500×2500/3000/3300 mm
NOMINAL THICKNESS	6,5-45 mm*
DENSITY	640-760 kg/m³**
RELEASE OF FORMALDEHYDE (EN 717	' <b>-1)</b> ½ E1
BONDING QUALITY (EN 314-2)	Klasa 3

\*other thicknesses available upon request \*\*as measured at 8-12% moisture content

# <text>

# Paged Ultra Form





### **SPECIFICATIONS**

Specialty formwork plywood panel designed to last longer and serve multiple uses thus saving its users time and money. Its superb mechanical properties combined with hard-wear coating provides for an ideal formwork solution. Paged Ultra Form is resistant to UV lightening and chemical agents. It is perfect for vertical, special and frame formwork systems.

STANDARD SIZES	1250×2500 mm 500×2500/3000/3300 mm
NOMINAL THICKNESS	9-30 mm*
DENSITY	700 - 850 kg/m <sup>3**</sup>
RELEASE OF FORMALDEHYDE (EN 717-1)	∮⁄₂ E1
BONDING QUALITY (EN 314-2)	Class 3

\*other thicknesses available upon request \*\*as measured at 8-12% moisture content

### **ADVANTAGES**

lower cost of ownership

UV resistant

scratch resistant

impact resistant

resistant to light chemical treatment





Natural product





Easy to machine





# Paged Mesh







### SPECIFICATIONS

Paged Mesh is a birch hardwood plywood panel overlaid with durable phenolic film. It is an ideal panel for applications that require high wear resistance. The anti-slip finish is ideal for demanding applications in the transport, construction and events industries. The hard wearing coating also protects the plywood against moisture penetration. Paged Mesh, in addition to its great mechanical properties is also easy to clean and resistant to most commonly used chemicals.

<b>STANDARD SIZES</b> 1250×2500/3000 1500×2500/3000/3300	
NOMINAL THICKNESS	6,5-40 mm*
DENSITY	640-760 kg/m <sup>3**</sup>
RELEASE OF FORMALDEHYDE (EN 717	<b>7-1)</b> <sup>1</sup> / <sub>2</sub> E1
BONDING QUALITY (EN 314-2)	Class 3

\*other thicknesses available upon request \*\*as measured at 8-12% moisture content

### **ADVANTAGES**

high anti-slip index

high durability and crack resistance

increased moisture resistance

resistant to light chemical treatment







Natural product





Easy to machine

Dimensional stability



Compliance E20 R11811 – 02 4000

# Paged Hexa







### **SPECIFICATIONS**

A durable, anti-slip birch hardwood plywood designed to sustain heavy duty usage resulting in low wear and tear over its course of life. Through specialty manufacturing process the high quality plywood board is coated with a hard wearing film overlay hot pressed into a hexagonal shape to boost its anti-slip properties. Paged Hexa is also available as fire-retardant composite board for specialty applications.

STANDARD SIZES	1250×2500/3000 mm 1500×2500/3000 mm
NOMINAL THICKNESS	6,5-40 mm*
DENSITY	640-760 kg/m <sup>3**</sup>
RELEASE OF FORMALDEHYDE (EN 717-1)	1⁄2 E1
BONDING OUALITY (EN 314-2)	Class 3

\*other thicknesses available upon request \*\*as measured at 8-12% moisture content

### **ADVANTAGES**

- anti-slip surface
- wear and tear resistance
- high load bearing capacity
- easy to clean
- resistant to light chemical treatment







Sustainable manufacturing process



product



Dimensional Cor stability E20 R11

Compliance E20 R118II – 02 4000

# Paged Trans





CE

### SPECIFICATIONS

The most durable, wear and tear resistant anti-slip plywood made with waterproof bonding resin. Paged Trans is overlaid with specialty phenolic film to assure the highest possible wear and abrasion resistance. Thanks to its construction as well as the coating this product boasts the highest anti-slip index of R11 or R13, depending on the final choice of surface coating.

STANDARD SIZES	1250×2500/3000 mm 1500×2500/3000 mm
NOMINAL THICKNESS	12-40 mm*
DENSITY	640-760 kg/m³**
RELEASE OF FORMALDEHYDE (EN 717-1)	½ E1
BONDING QUALITY (EN 314-2)	Class 3

\*other thicknesses available upon request \*\*as measured at 8-12% moisture content

### **ADVANTAGES**

lasting effect

highest anti-slip index R11 or R13

impact resistant

resistant to light chemical treatment

scratch resistant







Natural product Sustainable manufacturing process

Dimensional

stability



Easy to machine



# Specialty plywood

We offer a selection of specialty plywood products for various applications and end-uses. Our technology and R&D continue to develop new products and bring innovative solutions to our customers.

## Each product has been developed specifically to meet the needs of a given application.

We manufacture plywood and composite boards with rubber, metal, composites and polymers. We have a long-standing tradition in the manufacturing of laminated densified wood products. These products have an array of specialty applications in electromechanical, mechanical and cryogenic industries.

### Key application areas include:

- distribution and power oil-immersed transformers (blocks, pressure rings, potential rings, shield rings, pressure beams, block supports, coil supports, step blocks),
- floor and wall sheeting of rolling stock and public transport vehicles (buses, coaches, rolling stock, ships),
- boat building,



- door and window manufacturing,
- cutting dies,
- sliding parts and guides for traditional machines, spiked lattices, carding willows and openers, gears for finishing machines, slat conveyors, shuttles, ledges for healds,
- thermoforming of carbon fiber and polycarbonate, cold bending of sheets and lamination.



# Paged Phon



### **SPECIFICATIONS**

Paged Phon composite board is made of hardwood plywood and special-purpose rubber to increase a vehicle's insulation from noise and vibration. It was designed specifically to increase the level of satisfaction of public transport users. Paged Phon can be used in flooring, wall sheeting as well as luggage compartment areas.

STANDARD SIZES	1200×2400 mm 1250/1500×2500 mm
NOMINAL THICKNESS	11-19 mm*
DENSITY	950-1050 kg/m <sup>3**</sup>
RELEASE OF FORMALDEHYDE (EN 717-1)	½ E1
BONDING QUALITY (EN 314-2)	Class 2 Class 3

\*other thicknesses available upon request \*\*as measured at 8-12% moisture content

### **ADVANTAGES**

uniform and homogenous surface

high durability and resistance to friction

good acoustic insulation

easy to machine



Ø



Sustainable manufacturing process







Easy to machine

Dimensional stability

Compliance E20 R118II – 02 4000

# Paged Door



### SPECIFICATIONS

Hardwood or softwood plywood with aluminium core acting as a fire barrier, designed for door manufacturers to help them adhere to the highest fire standards. The special construction of the panel minimizes deviation from squareness. A high quality finish or specialty finish available upon request.

STANDARD SIZES	1250×2500 mm 2500×1250 mm
NOMINAL THICKNESS	4-40 mm*
DENSITY	640-760 kg/m³**
RELEASE OF FORMALDEHYDE (EN 717-1)	½ E1
BONDING QUALITY (EN 314-2)	Class 2

\*other thicknesses available upon request \*\*as measured at 8-12% moisture content

### **ADVANTAGES**

natural, wooden finish high durability and dimensional stability

easy to machine and finish

wide range of panel thicknesses







Natural product

Sustainable manufacturing process



Easy to machine

Dimensional stability



# Paged Compreg

# ESC\* C01028 The mark of esponsible forest

### **SPECIFICATIONS**

Layered wood material, hot-pressed under high pressure, made of beech or birch veneers coated with special phenolic resins. It is a specially engineered, extremely hard and durable wood composite with highly unique mechanical and performance properties. The exceptional structure of the compreg also provides protection from radiation which is used for medical and military purposes. However, compreg is not only suitable for industrial purposes. Despite its hardness, it is relatively easy to machine and therefore it is used for the production of various wooden consumer goods.

STANDARD SI	ZES	1000×1500 mm
NOMINAL THI	CKNESS	5-100 mm*
DENSITY		1200 kg/m <sup>3**</sup>
ТҮРЕ	Sheeted Co Self-lubricating Co	ompreg – 0,8 mm beech veneer ompreg – 0,6 mm beech veneer

### **BONDING QUALITY (EN 314-2)**

Class 3

\*other thicknesses and special construction available on request \*\*as measured at 8-12% moisture content

### **ADVANTAGES**

superb wear and tear resistance resistance to shear and bend strength high vibration resistance thermal resistance -200/+100°C





Natural product





Easy to machine





# Paged Elkon®



### SPECIFICATIONS

Paged Elkon is often referred to as the "transformer plywood" since it is widely used for the production of power and distribution transformers thanks to its unique insulating and durability properties. Paged Elkon is a high density wooden laminate which depending on the arrangement of fibres in adjacent veneer plies is distinguished between the cross-grained in which adjacent plies are laid at right angles to each other and the parallel-grained (for process-related reasons, up to 15% of veneers can be arranged transversely). Paged Elkon is manufactured according to standard no. 140/08.

STANDARD SIZES	1500×1000 mm, 1500×1500 mm, 2000×1000 mm, 2000×1500 mm, 2200×1200mm						
	Pl	P2	СІ	C2	C3	C4	CPC5
THICKNESS* [MM]	15-120		5-120		5-80		35-120
DENSITY [G/CM <sup>3</sup> ]	>0,70 ≤0,90	>0,90 ≤1,10	>0,70 ≤0,90	>0,90 ≤1,10	>1,10 ≤1,20	>1,20 ≤1,30	>1,00 ≤1,20
PRODUCT TYPE IN REFERENCE TO EN 61061-1	DUCT TYPE EFERENCE PIR P2R 9 EN 61061-1	CIR	C2R	C3R	C4R	-	
PRODUCT TYPE IN REFERENCE TO DIN 7707	KP 2	0212	KP 20222		-	KP 20224	-

### ADVANTAGES

superb electrical insulation high durability and mechanical performance high oil absorption ease of machining low heat transfer coefficient



product



Sustainable manufacturing process



Easy to machine



Dimensional stability

# Paged Laser





### **SPECIFICATIONS**

Paged Laser is a specially designed and processed panel for die-cutting applications. Carefully selected, sustainably sourced birch veneers allow for low dusting burn while machining and for a high precision of cut. Durable and homogenous birch veneers provide for a rigid environment to keep the die cut blades firmly in place. Melamine film coating is another option if you are looking for an extra protection against dust and moisture.

STANDARD SIZES	1220×1900/2440mm 1250×2500mm 1500×2500/3000mm 1530×2230mm
NOMINAL THICKNESS	9-18 mm*
DENSITY	700-800 kg/m <sup>3**</sup>
RELEASE OF FORMALDEHYDE (EN 717-1)	½ E1
BONDING QUALITY (EN 314-2)	Class 1

\*other thicknesses available upon request \*\*as measured at 8-12% moisture content

### **ADVANTAGES**

ease of machining low warping ratio; dimensional stability special construction







Dimensional tability

# Paged Frame



### SPECIFICATIONS

High quality and durability hardwood, softwood or beech plywood of special, parallel grained construction. Hardwood construction reinforced with two layers of perpendicular veneers in centre. Softwood construction in parallel throughout its profile. Thanks to their special design all Paged Frame product versions provide for a higher mechanical and flexural strength when benchmarked against standard plywood construction. Paged Frame laid across a bed frame prevents the mattress from sagging or shifting. Paged Frame also helps with weight distribution throughout the mattress and keeps the sleeper laying on top of a firmer mattress instead of sinking or sagging into a mattress.

STANDARD SIZES	2500/2200/2000×80-40 mm 1100/700×80-40 mm
NOMINAL THICKNESS (HARDWOO	<b>D)</b> 18-30 mm*
NOMINAL THICKNESS (SOFTWOOD	<b>)</b> 18-40 mm*
RELEASE OF FORMALDEHYDE (EN	<b>717-1)</b> ½ ET
BONDING QUALITY (EN 314-2)	Class 3 Class 3

\*other thicknesses available upon request \*\*as measured at 8-12% moisture content

### **ADVANTAGES**

uniform structure and face veneer quality high flexural strength wide availability of formats and widths reinforced construction





Natural product





Easy to machine



Dimensional stability

# Fire retardant plywood

As a leader in plywood innovation we have developed a family of fire retardant plywood products specific to the needs of construction and transportation sectors – Paged FR.

### Main application include:

- construction industry,
- transport industry (buses, coaches, recreational vehicles),
- rolling stock manufacturing.

Our Paged FR line of plywood limit the spread of flames, heat, smoke release and burning droplets. For a fire to start, it needs three simple things: oxygen, heat and fuel. These three things are often known as the fire triangle. The technology used in Paged's plywood manufacturing process is designed to reduce the spread of flames across the surface and to reduce the rate of heat release.

### Certification

Our products are certified externally and internally under the relevant certification schemes for applications in construction, transportation and rolling stock.

### Paged FR Plywood in construction – Reaction to fire classification



B-s1, d0 (walls and ceilings), Bfl-s1 (floors) in accordance with CE1 and CE2+ systems to be used as structural elements in construction applications.



The letter "s" in reaction to fire classification indicates smoke production. From highest classification s1 via s2 to s3 being the lowest level of performance.

The letter "d" in reaction to fire classification indicates burning droplet forming. From highest classification d0 via d1 to d2 being the lowest level of performance. Burning droplets can cause fire to spread onto other surfaces and elements.



### PN-EN 13501-1+A1 Norm

The European classification standard EN 13501-1 ranks construction materials in 7 classes with regard to their reaction-to-fire fire behavior: A1, A2, B, C, D, E and F. Besides this reaction-to-fire classification, the Euroclass classification system will rate also smoke (class s1 to s3) and dripping (class d0 to d2).

Al and A2 classes cover products that do not contribute to the development of a fire. Class B covers products that have a very little contribution to fire. Classes C through F cover products that have a limited contribution to fire (C), that have a contribution to fire (D), that have a contribution to fire and are only able to resist ignition by a small flame for a short period (E), that have shown no performance criteria (F).

\*Teresa Grabowska, Joanna Nowicka, Stanisława Kabiesz-Neniczka Opinionating on the cause of poisoning and death in fire victims.

# Fire retardant plywood

# Paged FR plywood in rolling stock manufacturing

Our plywood is widely used in rolling stock manufacturing as an element of floors and flooring systems, wall and ceiling lining as well as for furniture and fit-out. Today, all materials used in rail vehicles must follow the EN 45545-2 standard in order to achieve the highest level of safety possible in the event of a fire. The standard affects manufacturers of rail vehicles including high speed trains, regional trains and trains in industrial transportation.

PN-EN 45545-2+AI:2015 standard defines requirements for the fire behaviour of materials and components including flooring, seats and cables on railway vehicles. Part 2 of the standard specifies the test methods, test condition and reaction to fire performance requirements.

Products are classified according to 26 requirement sets (R1-R26) depending on where the materials are used. Each requirement has a corresponding series of test performance criteria. As an example R1 requirement applies to horizontal / vertical interior surfaces, e.g. ceiling and walls, window frames or display screens.

### Selected sets determined by the area of application

Fire rating in rail vehicles



Horizontal / vertical interior surfaces, e.g. ceiling and walls, window frames or display screens



Interior surfaces of gangways-Type B, air ducts on locomotives, etc.



Interior horizontal upwards facing surfaces floor composites



# HL3

Operation category: tunnels and/or elevated structures, without side evacuation available

# We manufacture to highest standards

Vehicles are classified as: HL1, HL2 or HL3, depending on their time in tunnels and whether they contain sleeper cars. The HL1 classification represents the lowest Hazard Level and HL3 represents the highest.

Paged FR plywood is classified as HL3 and can be used in all sections of a rail vehicle where HL3 class is required, e.g. sleeping carts.

# Paged Softwood ThinPly FR





### **SPECIFICATIONS**

Fire retardant softwood plywood with pine outer veneers and mixed, hardwood-softwood core, with enhanced fire protection which allowed it to reach the highest fire classification rating for wood based panels in construction applications. Paged softwood ThinPly FR is used a construction panel in accordance with CEI system (floors).

STANDARD SIZES	2500×1250/1500 mm 1500×3000 mm	
NOMINAL THICKNESS	9-45 mm*	
DENSITY	550-650 kg/m <sup>3**</sup>	
RELEASE OF FORMALDEHYDE (EN 717-1)	1⁄2 El	
BONDING QUALITY (EN 314-2)	Class 3	
FIRE CLASSIFICATION (EN 13501-1)	B <sub>f</sub> -sl	

\*other thicknesses available upon request \*\*as measured at 8-12% moisture content

### **ADVANTAGES**

made from high quality Baltic Pine pine veneers

strong and lightweight

ease to machine and fasten

highest fire classification for wood products





Natural product





Dimensional stability



machine

# Paged Softwood ThinPly FR





### **SPECIFICATIONS**

Fire retardant softwood plywood with pine outer veneers and mixed, hardwood-softwood core, treated against fire through an innovative treatment which allowed to reach the highest fire classification rating for wood based panels in construction applications. Paged softwood ThinPly FR is used as a construction panel in accordance with CE1 system (for walls and ceilings).



STANDARD SIZES	2500×1250/1500 mm
NOMINAL THICKNESS	12-30 mm*
DENSITY	570-720 kg/m <sup>3**</sup>
RELEASE OF FORMALDEHYDE (EN 717-1)	½ El
BONDING QUALITY (EN 314-2)	Class 3
FIRE CLASSIFICATION (EN 13501-1)	B-s1, d0

\*other thicknesses available upon request \*\*as measured at 8-12% moisture content

### **ADVANTAGES**

made from high quality Baltic Pine pine veneers durable and lightweight ease to machine and fasten highest fire classification for wood products





Dimensional stability



Easv to machine



# Paged Softwood ThickPly FR



### **SPECIFICATIONS**

Fire retardant thickply softwood plywood with enhanced fire performance and high mechanical and physical properties of the panel. Safe and approved chemical composition of the fire retardant additives. Paged Softwood ThickPly is used as a construction panel in accordance with CE1 (walls, ceilings and floors).

STANDARD SIZES	2500×1250 mm 2440×1220 mm
NOMINAL THICKNESS	9-40 mm*
DENSITY	550-700 kg/m <sup>3**</sup>
RELEASE OF FORMALDEHYDE (EN 717-1)	½ E1
BONDING QUALITY (EN 314-2)	Class 3
FIRE CLASSIFICATION (EN 13501-1)	B-s1, d0 B <sub>f</sub> -s1



\*\*other thicknesses available upon request; applicable to B<sub>a</sub>-s1

\*\*as measured at 8-12% moisture content

### **ADVANTAGES**

high quality bonding

impact resistant

easy to machine and fasten

highest fire classification for wood products





Natural product





Easy to machine



stability

# Paged BirchPly FR



### SPECIFICATIONS

Fire retardant hardwood plywood available raw, in natural finish or filmed with high density phenolic film. It is characterized by high mechanical resistance and load strength and boasts highest fire classification for wood and wood-based panels used in construction, joinery, shopfitting and rail industries. Paged BirchPly FR plywood is manufactured to highest standards in order to suit its use as a structural component according to CE1 and CE2+ systems (floors) and it meets the highest level of fire classification, i.e. HL3 in R10 class.

STANDARD SIZES	1250/1500×2500 mm 1500×3000 mm
NOMINAL THICKNESS	9-45 mm*
DENSITY	640-760 kg/m <sup>3**</sup>
RELEASE OF FORMALDEHYDE (EN 717-1)	½ E1
FIRE CLASSIFICATION (EN 13501-1)	B <sub>fl</sub> -s1
BONDING QUALITY (EN 314-2)	Class 3
FIRE CLASSIFICATION (EN-45545-2)	HI 3 (B10)

\*other thicknesses available upon request; 9mm thickness for R10 only, 35-45mm thicknesses for B<sub>ff</sub>-s1 only \*\*as measured at 8-12% moisture content

### **ADVANTAGES**

CE certified

wide range of thicknesses

highest fire classification for wood products



Natural

product



Sustainable manufacturing process

Dimensional stability





Easy to machine

Vapour permeability



# Paged BirchPly FR



CE



### **SPECIFICATIONS**

Fire retardant hardwood plywood with special veneer construction, fire proofed with an innovative immersion method which provides for the highest fire rating ofwood based panels in construction and rail industries. BirchPly FR is used as a construction element in accordance with CE1 (walls and ceilings) as well as HL3 in R1 class for rolling stock manufacturing.

	The mark of responsible fores
and the second	
the state of the state	
	100mm

STANDARD SIZES	1250/1500×2500 mm 1500×3000 mm
NOMINAL THICKNESS	12-30 mm*
DENSITY	720-880 kg/m <sup>3**</sup>
RELEASE OF FORMALDEHYDE (EN 717-1)	½ E1
FIRE CLASSIFICATION (EN 13501-1)	B-s1, d0
BONDING QUALITY (EN 314-2)	Class 3
FIRE CLASSIFICATION (EN-45545-2)	HL3(R1)

\*other thicknesses available upon request \*\*as measured at 8-12% moisture content

### ADVANTAGES

high strength/weight ratio

improved fire protection

highest fire classicisation for wood products





Natural product





Easy to machine

Dimensional stability

# Paged BeechPly FR





### **SPECIFICATIONS**

Beech plywood panel of highest rigidity, uniform face veneer structure, surface protected with high class fire retardant. Paged BeechPly FR is widely used in transportation and construction industries as it is recognized for it durability and sheer strength when used as a flooring panel. This product is manufactured as a bearing construction element in line with CE1 requirements (flooring applications).



\*other thicknesses available upon request \*\*as measured at 8-12% moisture content

### **ADVANTAGES**

strong and rigid imrpoved fire protection easy to machine and fasten HL3 fire classification





Natural product





Easy to machine



Dimensior stability



# Paged BeechPly Phon FR



### **SPECIFICATIONS**

Soundproof composite board made of beech plywood and a special 3mm-thick rubber insulating layer. This layer located symmetrically in the center of the board is made of special rubber, which suppresses vibrations and reduces the sound intensity level caused by thermal expansion of metals or rolling friction. Wherever proper sound insulation is needed when it comes to various construction uses in buses and trains, Paged BeechPly Phon FR comes in hand. This product is available in one side film-faced version. It meets the highest level of fire classification - HL3 in class R10.

STANDARD SIZES	1250/1500×2500 mm 1500×3000 mm	
NOMINAL THICKNESS	15-30 mm*	
<b>DENSITY</b> 920-1050 k		
RELEASE OF FORMALDEHYDE (EN 717-1)	½ E1	
BONDING QUALITY (EN 314-2)	Class 2	
FIRE CLASSIFICATION (EN-45545-2)	HL3(R10)	

\*other thicknesses available upon request \*\*as measured at 8-12% moisture content

### **ADVANTAGES**

strong and rigid sound and vibration absorbing properties improved fire protection HL3 fire classification







Natural product

Sustainable manufacturing process





		responsible forestr
	HE TO SERVICE SERVICES	
	and the second second	
	and the second	
	and the second s	
	the second s	
Э		
4		
4		Property lies
		and the second
r	and the second sec	Contraction of the
1	an arrest in many of	TTHE LOPEST



Product	Sound Reduction Index		
Paged Phon 11mm	32 dB		
Paged BirchPly 15mm	27 dB		
Paged BeechPly Phon 19mm	33 dB		
When you and real writes in the R and real to the Real Statute and and	2.004		



# Paged Twin Form FR





SPECIFICATIONS

High quality, birch-pine plywood made with thick ply pine veneers, overlaid with purpose-designed thick phenolic films. With its lower weight, high mechanical resistance and highest fire classification rating for wood based panels it can be mounted with joists directly on Euroclass A1 and A2 material. Paged Twin Form FR is used as a construction panel in accordance with CE2+ system (floors). It is available with phenolic film overlay with smooth or structured (mesh) finish.



STANDARD SIZES	1250×2500 mm 1220×2440 mm
NOMINAL THICKNESS	9-40 mm*
DENSITY	605 kg/m³**
RELEASE OF FORMALDEHYDE (EN 717-1)	½ E1
BONDING QUALITY (EN 314-2)	Class 3
FIRE CLASSIFICATION (EN 13501-1)	B <sub>a</sub> -s1

\*other thicknesses available upon request \*\*as measured at 8-12% moisture content

### **ADVANTAGES**

high quality bonding

low weight and high durability

easy to machine and fasten

highest fire classification for wood products



Sustainable manufacturing process





Dimensional stability Easy to machine



# Machining, CNC, drilling and other services

We focus on precision and quality. With a wide offer of machining services Paged is a one stop shop for products made to measure and tailored to our customers' needs.

- cut to size services on multi-blade panel saws,
- CNC milling, routing and drilling, etc.,
- custom edge milling.

We offer tongue & groove as well as scarf joints to our customers. Both joint types allow our customers to build smooth, level surfaces in flooring, roofing and panelling.

Both our natural as well as filmed plywood can be tongue & groove or scarf jointed.



Example 1: Scarf-joint



Example 2: Tongue and groove



# Packing, transportation and handling of plywood

### Packing

Sheets of plywood are piled up on single-decked pallets specifically built to a given panel size. Depending on our customer's requirements and means of transport pallet packs are secured with plastic, cardboard, hardboard, bands and edge protectors.

Our standard pallet height is 0,12 m. We offer two standard pack heights, either 0,6 m or 0,4 m (without pallet). The average weight of a full pack of plywood is 26-30kg for 4x8 format (5x10 format the average is 46kg).

We use forklift trucks for loading pallets onto trailers or into containers. Vehicles that unload plywood at our customers' premises have to allow side unloading – min. loading width - 2,5 m.

Panel thickness [mm]	Number of panels in a pack		
4	100		
6,5	90		
9	65		
12	50		
15	40		
18	35		
21	30		
24	25		
27	22		
30	20		
35	18		
40	15		

Recyclable materials used in plywood packing:

- in-house built plywood pallet
  cardboard overlay and/or side protection
- veneer overlay and/or side protection
- stretch wrap (PP)
- PET/PP bands
- hardboard



our standard pack height does not exceed 0,7 m

Plywood	Density	Maximum loading capacity			
type	[kg/m³]	24mt Trailer	Container 20'	Container 40'	
Birch	640-760	33 m³			
Pine/Blockboard	550-650	34-36 m <sup>3</sup>	16-17 m <sup>3</sup>	30 m³	
Beech	720-880	30 m³			
Aspen	520-590	42 m <sup>3</sup>	22 m <sup>3</sup>	42 m <sup>3</sup>	

### Transport

Plywood must be securely fastened while in transport. Both loading and unloading shall be carried out in such a way as to not damage the individual plywood sheets.

Any vehicle used for transport of plywood must provide protection against water, humidity and adverse weather conditions. All packs must be loaded horizontally on rigid pallets. It is allowed to stack packs of plywood on top of each other while in transit. All packs must be strapped when in transit to prevent any movement of the load.

With the exception of intermodal and container transport, all packs are transported by road trailers with curtain sides. The maximum load per trailer is 24 t unless otherwise allowed by the local road regulations.

### **Storing and handling**

Plywood panels shall be stored horizontally. They should not be placed directly on the ground to avoid direct contact with water and/or soil. One should avoid storing of panels of different sizes, different wood types, and different glue bond on the same pile.

### **Storing and handling**

The warehousing premises for plywood should provide protection against direct exposure to water, excessive humidity and high temperature fluctuations.

Plywood is stored in rooms with controlled humidity. It is advisable to limit the impact of the contraction stress of plywood through control of air temperature and relative humidity.





# Useful plywood calculations

Standard sizes* [mm]	1220x1950	1220x 2440	1250x2500	1250x3000	1500x2500	1500x3000	1500x3300	1530x2230
l sheet [m²]	2,38	2,98	3,13	3,75	3,75	4,50	4,95	3,41
Nominal Thickness* [mm]	Number of plies [m³]							
4	105,1	84,0	80,0	66,7	66,7	55,6	50,5	73,4
6,5	64,7	51,7	49,2	41,0	41,0	34,2	31,1	45,1
9	46.7	37,3	35,6	29,6	29,6	24,7	22,4	32,6
12	35,0	28,0	26,7	22,2	22,2	18,5	16,8	24,4
15	28,0	22,4	21,3	17,8	17,8	14,8	13,5	19,5
18	23,4	18,7	17,8	14,8	14,8	12,3	11,2	16,3
21	20,0	16,0	15,2	12,7	12,7	10,6	9,6	14,0
24	17,5	14,0	13,3	11,1	11,1	9,3	8,4	12,2
27	15,6	12,4	11,9	9,9	9,9	8,2	7,5	10,9
30	14,0	11,2	10,7	8,9	8,9	7,4	6,7	9,8
35	12,0	9,6	9,1	7,6	7,6	6,3	5,8	8,4

\* other thicknesses available upon request

# Notes


# Paged

**PAGED PISZ SP. Z O.O.** ul. Kwiatowa 1, 12-200 Pisz tel: +48 87 425 48 00 fax: +48 87 425 49 40

KRS 0000749961 | NIP 8490000016 | REGON 000123004

### **PAGED MORĄG S.A.** ul. Mazurska 1, 14-300 Morąg tel:+48 89 757 95 01 fax: +48 89 757 95 99

KRS 0000010478 | NIP 7411378488 | REGON 510445569

© 2020 Paged Pisz sp. z o.o. © 2020 Paged Morąg S.A. All rights reserved.

www.sklejkapaged.pl