## SVEZA

PRODUCTS AND APPLICATIONS







# SVEZA is a world leader in birch plywood production

Sveza is a Russian company, a world's leading producer of birch plywood with customers in more than 90 countries. Sveza's plywood is used for the construction of towers and skyscrapers, Olympic facilities and line-haul trailers, high-speed trains and LNG carriers, as well as in eco-friendly furniture and contemporary interiors.

Sveza has been present on the Russian market since 1997 and has continuously modernized its production facilities implementing new equipment and technologies. Sveza manufactures 1.4 million cubic meters of wood products annually.

### SVEZA plywood is made of 100% birch wood

- OI Exceptional durability and strength
- 02 Excellent surface hardness
- 03 High load-bearing capacity
- Withstands temperatures from -40 °C to +50 °C (-40 °F to +122 °F)
- 05 Natural wood grain
- 06 Easy cutting, milling and machining



**7** plywood mills



**5,000**+ employees



16%
of the global production
of birch plywood



18,000 tons of dry fuel briquettes annually



**1,400,000** m<sup>3</sup> of wood panels annually



4 continents



200+ sizes and thicknesses



1,400,000 m<sup>3</sup>

### SVEZA INTERIOR

High-quality plywood with excellent durability and strength properties as well as attractive surface appearance. Easy to cut and treat, SVEZA Interior makes a perfect material for interior decor. Although suitable for damp conditions, we do not recommend using SVEZA Interior outdoors. It performs best in indoor applications such as furniture or toys.



### Key features

- Of Excellent surface hardness
- 02 Attractive appearance
- 03 Strong and durable
- O4 Available in a variety of sizes and thicknesses

Technical details	1525x1525 (5x5)
	1220x2440x1220 (4x8x4)
Panel sizes, length x width, mm (ft)	1250x2500x1250 (4x8x4)
, , , ,	1500/1525x2440/2500 (5x8)
	2440/2500x1500/1525 (8x5)
Thickness, mm	2.7-25
Grade	(B, S),    (BB),     (CP),  ∨ (C)
Surface	Sanded both sides (S2S), sanded one side (S1S), unsanded (NS)
Formaldehyde emission	E0.5, E0.05 ppm, CARB ULEF
Moisture resistance	Normal
Density, kg/m³	640-700
Moisture, %	5-12
Edge treatment	-
Manufactured to company standard*	

PARAMETER		THICKNESS, MM	VALUE
Static bending strength, min MPa	along the grain of the face veneers	9-25	45
Static behaling strength, min MPa	across the grain of the face veneers		30
Tensile strength along the grain, min MPa		2.7-8	30
Modulus of elasticity in static bending, min MPa	along the grain	9-25	7,000
- Todalids of clasticity in static bending, milit in a	across the grain	7-20	3,000

### SVEZA EXTERIOR

High-quality plywood made of 100% birch wood: strong, durable, and highly resistant to moisture. Designed to withstand elevated levels of humidity, SVEZA Exterior will not deform or swell when wet, making it an excellent material for a wide range of interior and exterior applications.



### Key features

- Of High moisture resistance
- 02 Strong and durable
- 03 Excellent surface hardness
- 04 Withstands temperatures from -40 °C to +50 °C (-40 °F to +122 °F)
- O5 Available in a variety of sizes and thicknesses

Technical details	1525x1525 (5x5) 1220x2440x1220 (4x8x4)
Panel sizes, length x width, mm (ft)	1250x2500x1250 (4x8x4) 1500/1525x2440/2500 (5x8) 2440/2500x1500/1525 (8x5) 1500/1525x3000/3050 (5x10)
Thickness, mm	2.7-40
Grade	I (B, S), II (BB), III (CP), IV (C)
Surface	Sanded both sides (S2S), sanded one side (S1S), unsanded (NS)
Formaldehyde emission	E0.5, E0.05 ppm, CARB ULEF
Moisture resistance	High
Density, kg/m³	640-700
Moisture, %	5-12
Edge treatment	-
Manufactured to company standard*	

PARAMETER		THICKNESS, MM	VALUE
Static bending strength, min MPa	along the grain of the face veneers	9-40	60
Static bending strength, mintripa	across the grain of the face veneers		30
Tensile strength along the grain, min MPa		2.7-8	30
Modulus of elasticity in static bending, min MPa	along the grain	9-40	7,000
i localido di diabilotty in ocacio bolituli g, mili i i i i i	across the grain	7-40	3,000

### SVEZA FILM-FACED

SVEZA Film-faced is high-quality exterior birch plywood overlaid with resin-saturated paper. During the production process, the paper turns into protective film coating, creating a wood panel suitable for demanding applications such as concrete forming. Two types of surface are available: smooth and mesh. All edges are sealed with acrylic paint. SVEZA Film-faced plywood offers easy installation and machining.



### Key features

- o High wear resistance
- 02 Resistance to aggressive impacts, including chemicals
- O3 Anti-slip (surface with a mesh pattern)
- 04 High moisture resistance
- 05 Withstands temperatures from -40 °C to +50 °C (-40 °F to +122 °F)
- O6 Available in a variety of sizes and thicknesses

#### **Technical details**

Panel sizes, length x width, mm (ft)	1220x2440x1220 (4x8x4) 1250x2500x1250 (4x8x4) 1500/1525x2440/2500 (5x8) 2440/2500x1500/1525 (8x5) 1500/1525x3000/3050 (5x10)
Thickness, mm	6-40
Surface	Smooth/smooth (F/F), smooth/mesh (F/W)
Facing film density, g/m²	120, 220
Formaldehyde emission	E0.5
Moisture resistance	High
Density, kg/m³	640-700
Moisture, %	5-12
Edge treatment	Water-resistant acrylic paint
Manufactured to company standard*	

PARAMETER		THICKNESS, MM	VALUE
Static bending strength, min MPa	along the grain of the face veneers	9-40	60
Static bending strength, min MPa	across the grain of the face veneers		30
Tensile strength along the grain, min MPa		6-8	30
Modulus of elasticity in static bending, min MPa	along the grain	9-40	7,000
	across the grain	7-40	3,000

### SVEZA DECK 350

Designed for slab formwork applications, SVEZA Deck 350\* has 25, 50, and 100 mm grid ruling on the surface for easy marking, cutting and laying rebar, thus reducing labor at the construction site. The edges of SVEZA Deck 350 are sealed with water-resistant acrylic paint.



### Key features

- 100% birch wood
- 02 Easy to mark and cut
- 03 Easy to lay rebar
- 04 Reduces time and labor
- 05 Wear-resistant surface
- 06 Edges sealed against moisture
- Packed in stacks on wooden beams

#### **Technical details**

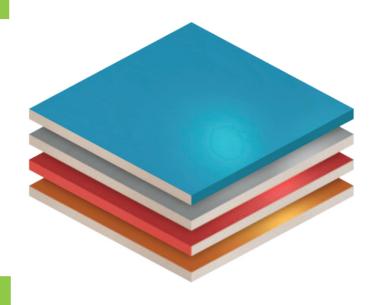
Panel sizes, length x width, mm (ft)	1220x2440x1220 [4x8x4]				
	1250x2500x1250 (4x8x4)				
Thickness, mm	18, 21				
Surface	Smooth/smooth (F/F)				
Coating film density, g/m²	120				
Wear rating (Taber value)	350				
Formaldehyde emission	E0.5				
Density, kg/m <sup>3</sup>	640-700				
Moisture, %	5-12				
Edge treatment	Water-resistant acrylic paint				
Manufactured to company standard**					

PARAMETER		VALUE
Static handing atwansth min MDs	along the grain of the face veneers	60
Static bending strength, min MPa	across the grain of the face veneers	30
Modulus of elasticity in static bending, min MPa	along the grain	7,000
rioddias of clasticity in static schaing, min i rea	across the grain	3,000

<sup>\*</sup>The grid ruled plywood production technology is patented (Russian Federation Patent No. 150519, registered with the Russian State Utility Models Register on January 20, 2015).

### SVEZA MONOLITH

Innovative plywood solution for cast-in-place construction applications. SVEZA Monolith is 100% birch plywood coated with several layers of special UV-cured material.



### Key features

- Of Full compliance with the Russian GOST standard
- 02 Multilayer UV-coating with a choice of colors
- 03 Excellent durability
- O4 Protection from moisture and heavy rippling
- 05 Resistance to aggressive impacts

#### **Technical details**

	1220x2440x1220 (4x8x4)				
Panel sizes, length x width, mm (ft)	1250x2500x1250 (4x8x4)				
	11500/1525x3000/3050 (5x10)				
Thickness, mm	9-24				
Surface	Smooth/smooth (F/F)				
Formaldehyde emission	E0.5				
Moisture resistance	High				
Density, kg/m³	640-700				
Moisture, %	5-12				
Edge treatment	Sealer				
Manufactured to company standard*					

PARAMETER		VALUE
Chabia la qualina abusantha main MDa	along the grain of the face veneers	60
Static bending strength, min MPa	across the grain of the face veneers	30
Modulus of elasticity in static bending, min MPa	along the grain	7,000
riodulus of elasticity in static behalfly, militimpa	across the grain	3,000

### SVEZA FLEX

SVEZA Flex Uncoated is flexible plywood with a wide adjustment range, from R=0.55 m (depending on the thickness), for use in the construction and lining of complex structures. SVEZA Flex Coated is flexible film-faced plywood with a wide adjustment range, from R=1.45 m (depending on the thickness), for use in the construction of bent and curved concrete shapes with special surface requirements.



### Key features

- of Flexible panel
- 02 Very little preparation at the construction site
- 03 Edges sealed against moisture
- 04 Moisture-resistant coating
- 05 Smooth off-form concrete finish
- 06 Improved concrete adhesion
- 07 Multiple reuses
- 08 Wear-resistant surface

Technical details	SVEZA FLEX COATED	SVEZA FLEX UNCOATED
Panel sizes, length x width, mm (ft)	1220x2440x1220 (4x8x4) 1250x2500x1250 (4x8x4)	1220x2440x1220 (4x8x4) 1250x2500x1250 (4x8x4)
Thickness, mm	9, 12, 15	6, 9, 12, 15
Surface	Smooth Kraft / smooth Kraft (F/F)	S2S/NS2NS
Grade	-	BB/BB, CP/CP, CP/C
Glue	WBP (Exterior)	WBP (Exterior)
Formaldehyde emission	E0.5	E0.5
Density, kg/m <sup>3</sup>	640-700	640-700
Moisture, %	5-12	5-12
Edge treatment	Waterborne acrylic paint	-
Manufactured to company standard*		

Bend radius		SVEZA FLEX COATED			;	SVEZA FLEX UNCOATED			
	Thickness, mm	9	12	15		6	9	12	15
Maximum	Inner radius, mm	1,700	1,700	2,500	-	700	550	1,700	2,500
bend radius	Outer radius, mm	1,450	1,450	2,200	Į	550	550	1,450	2,500

### **SVEZAOIL**

Manufactured with the Oil Recycling technology,\* SVEZA Oil is general-purpose birch plywood for concrete work projects that do not require many reuses (2-5 cycles\*\*). SVEZA Oil has the surface impregnated with oil and the edges sealed against moisture with acrylic paint. Oiling in the shop ensures uniform impregnation of the surface. SVEZA Oil is a perfect choice for low-rise construction projects.



### Key features

- OI Uniformly impregnated surface
- 02 **2-5 reuses**
- O3 Simple solution for concrete projects
- 04 Edges sealed against moisture with acrylic paint
- 05 Oil Recycling technology
- 06 Excellent strength

#### **Technical details**

Panel sizes, length x width, mm	2500x1250x2500 2440x1220x2440
Thickness, mm	15, 18, 21
Grade	CP/CP
Surface	Unsanded
Oil	Distillate oil
Glue	WBP (Exterior)
Formaldehyde emission	E0.5
Density, kg/m³	640-700
Moisture, %	5-12
Edge treatment	Acrylic paint. It is highly recommended to fully seal with acrylic paint any newly exposed edges from cutting and hole-drilling.
Manufactured to company standard***	

#### Strength values

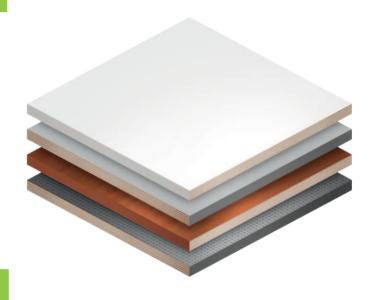
PARAMETER		VALUE
Static bending strength, min MPa	along the grain of the face veneers	60
	across the grain of the face veneers	30
Modulus of elasticity in static bending, min MPa	along the grain	7,000
	across the grain	3,000

\*Reprocessed oil may be used.

<sup>\*\*</sup>The number of reuses depends on how the plywood is used, cleaned and stored.
\*\*\*For the relevant company standard, please refer to the "Library" section on Sveza's website www.sveza.com.

### SVEZA COLOR

SVEZA Color is made of 100% birch wood and coated with colored wear-resistant materials. Featuring high UV stability, waterproof glue and high-quality film coating, SVEZA Color is a perfect solution for both interior and exterior projects that require colored surfaces.



### Key features

- of 100% birch wood
- 02 High UV stability
- 03 Highly durable
- 04 Waterproof glue
- 05 Slip resistant

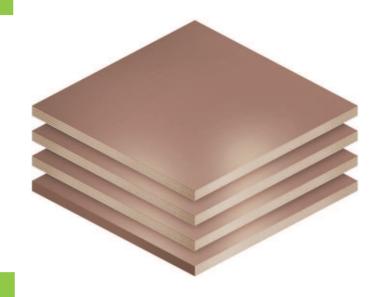
#### **Technical details**

Panel sizes, length x width, mm (ft)	1220x2440/1250x2500 (4x8) 1500x3000/1525x3050 (5x10)
Thickness, mm	6-21 (thicknesses up to 40 mm on request)
Surface	Smooth/smooth (F/F), smooth/mesh (F/W)
Facing film color (density)	White (205 g/m²) Light Grey (220 g/m²) Stone Grey (174 g/m²) Light Brown (117 g/m²)
Formaldehyde emission	E0.5
Glue	WBP (Exterior)
Density, kg/m <sup>3</sup>	640-700
Moisture, %	5-12
Edge treatment	Sealing of the edges on request
Manufactured to company standard*	

PARAMETER		THICKNESS, MM	VALUE
Static bending strength, min MPa	along the grain of the face veneers		60
	across the grain of the face veneers		30
Modulus of elasticity in static bending, min MPa	along the grain	9-21	7,000
	across the grain		3.000

### SVEZA PAINT

SVEZA Paint is 100% birch plywood specially treated for painting. An ideal solution for interior and exterior projects, including walls, facades, doors, furniture, vehicle internal body work, and sports equipment. SVEZA Paint Kraft features a very smooth and hard-wearing surface ready for painting any color.



### Key features

- of 100% birch wood
- 02 Time saving up to 70%\*
- 03 Saves priming materials
- 04 Perfectly smooth paint finish
- 05 Durable result without cracking
- 06 Weather-resistant\*\*

#### **Technical details**

Panel sizes, length x width, mm (ft)	1220x2440/1250x2500 (4x8)	
	1500x3000/1525x3050 (5x10)	
Thickness, mm	6-21 (thicknesses up to 40 mm on request)	
Surface	Smooth/smooth (F/F)	
Facing film color (density)	Kraft (214 g/m²)	
Formaldehyde emission	E0.5	
Glue	WBP (Exterior)	
Density, kg/m³	640-700	
Moisture, %	5-12	
Edge treatment	Sealing of the edges on request	
Manufactured to company standard***		

PARAMETER		THICKNESS, MM	VALUE
Static bending strength, min MPa	along the grain of the face veneers	9-21	60
	across the grain of the face veneers		30
Tensile strength along the grain, min MPa		6-8	30
Modulus of elasticity in static bending, min MPa	along the grain	9-21	7,000
	across the grain	7-21	3,000

<sup>\*</sup>Time is saved through elimination of preparation work that normally takes up to 70% of the painting job, as confirmed in an experiment at a children's playground manufacturer's shop (Moscow, 2017).

\*\*UV-resistant.

<sup>\*\*\*</sup>For the relevant company standard, please refer to the "Library" section on Sveza's website www.sveza.com.

### SVEZA OVERLAY

SVEZA Overlay Standard meets main requirements of HPL panel manufacturers. Smooth surface (sanding at 60+ and 80 grit) and consistently flat panels with little to no thickness variation in one panel. SVEZA Overlay Premium features superior surface smoothness (sanding at 120 grit) and little to no defects in inner plies, in addition to industry standards. SVEZA Overlay Premium is the best material for producing a high-quality HPL panel.



### Key features

- of 100% birch plywood
- 02 High moisture resistance
- 03 Consistently flat panel
- 04 Very tight thickness tolerances
- 05 Hand-selected core veneers (SVEZA Overlay Premium)
- 06 Superior smoothness (SVEZA Overlay Premium)
- 07 Excellent surface quality (SVEZA Overlay Premium)

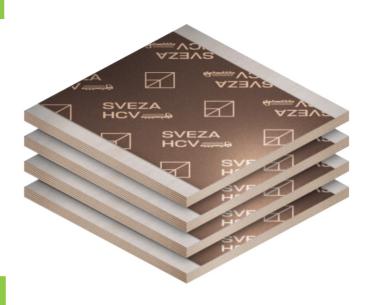
#### **Technical details**

Panel sizes, length x width, mm (ft)	2440x1220/2500x1250 (8x4) 1220x2440/1250x2500 (4x8) 1500x3000/1525x3050 (5x10) (other sizes on request)
Thickness, mm	6-30 (other thicknesses on request)
Surface	OVST (60+, 80), OVPR (60+, 80, 120)
Grade	<b>OVST</b> B/BB, S/BB, BB/BB, BB/CP, CP/CP, CP/C; <b>OVPR</b> B/BB, S/BB, BB/BB, BB/CP, CP/CP
Formaldehyde emission	E0.5, E0.05 ppm, CARB ULEF
Glue	WBP (Exterior), improved water resistance
Density, kg/m³	640-700
Moisture, %	OVST ≤12, OVPR ≤10
Manufactured to company standard*	

PARAMETER		THICKNESS, MM	VALUE
Chatia havaling atvacable min MDs	along the grain of the face veneers	9-30	60
Static bending strength, min MPa	across the grain of the face veneers		30
Tensile strength along the grain, min MPa		6-8	30
Modulus of elasticity in static bending, min MPa	along the grain	9-30	6,000
- Todalas of Glasticity in Static Benaing, min Tie	across the grain	7-30	3,000

### SVEZA HCV

Designed and manufactured to meet the customer's specific needs, SVEZA HCV plywood flooring is ready for installation and guarantees safe and reliable performance for at least 2 years.



### Key features

- High load-carrying capacity
- 02 High rolling load capacity (SFS 3939)
- os High wear rating (EN 438-2:2016)
- 04 Slip-resistant (DIN 51130 and EN 12195)

#### **Technical details**

2440x1220x2440/2500x12		
	1500x2500 (5x8)	
Panel sizes, length x width, mm (ft)	1500x3000/1525x3050 (5x10)	
Thickness, mm	21-32	
Surface	Mesh/smooth (W/F)	
Wear rating (Taber value, EN 438-2:2016)	350R - 2,600R	
Wheel test value	10,000 movements	
Slip resistance (ramp test)	RI3	
Slip resistance (CoF)	Up to 0.55 (for wooden pallets)	
Coating color	Black, Dark Brown	
Coating density	120-220 g/m²	
Formaldehyde emission	Ef	
Moisture resistance	High	
Density, kg/m³	640-700	
Moisture, %	<14	
Manufactured to company standard*		

PARAMETER		THICKNESS, MM	VALUE
Static bending strength, min MPa	along the grain of the face veneers		60
	across the grain of the face veneers		30
Modulus of elasticity in static bending, min MPa	along the grain	21-32	6,000
	across the grain		3.000

### SVEZA PUZZLE

100% birch plywood for gift and craft projects. Perfect material for complicated laser cutting projects.



### Key features

- of 100% birch veneers
- 02 Laser compatible
- 03 Consistently flat sheet
- 04 Hand-selected premium quality core veneers
- 05 Very tight thickness tolerances

#### **Technical details**

Panel sizes, length x width, mm (ft)	1525x1525 (5x5)
Thickness, mm	3-6.5
Grade	B/BB, B/BB
Formaldehyde emission	E0.5, E1, E0.05 ppm, CARB & EPA (on request)
Glue	MR (Interior)
Moisture, %	≤10
Manufactured to company standard*	

PARAMETER		THICKNESS, MM	VALUE
Chatia la valina atua aste main MDa	along the grain of the face veneers	9-25	45
Static bending strength, min MPa	across the grain of the face veneers		30
Tensile strength along the grain, min MPa		3-6.5	30
Modulus of elasticity in static bending, min MPa	along the grain	9-25	5,000
riodalas of elasticity in static bending, min in-a	across the grain	, 20	3,000

### SVEZA PARQUET

SVEZA Parquet is 100% birch plywood core specially designed to satisfy the needs of engineered wood flooring manufacturers. SVEZA Parquet Standard reduces manufacturing costs while ensuring stability of engineered wood flooring boards. SVEZA Parquet Premium features hand-selected solid veneers in the face and core plies and superior bonding strength (>1.75 MPa).



### Key features

- of 100% birch wood
- 02 Thickness tolerance ±0.2 mm
- 03 Moisture content 5-9%
- 04 Plastic film packaging
- 05 Waterproof glue
- of Extra strong (SVEZA Parquet Premium)
- op Solid veneers for face and core (SVEZA Parquet Premium)

Technical details	1220x2440/1250x2500 (4x8)
Panel sizes, length x width, mm (ft)	2440x1220/2500x1250 (8x4)
	1525x1525 (5x5)
Thickness, mm	6-15
Grade	PST CP/CP, PST CP/C; PPR BB/CP, PPR CP/CP; PST C/C
Surface	Sanded both sides (S2S)
Formaldehyde emission	E0.5, E1, E0.05 ppm, CARB ULEF
Glue	WBP (Exterior)
Density, kg/m³	640-700
Moisture. %	5-9 (5-12 for PST C/C grade)

PARAMETER		THICKNESS, MM	VALUE
SVEZA Parquet Premium Out-of-plane tensile strength, min MPa			1.75
SVEZA Parquet Standard Out-of-plane tensile strength, min MPa		6-15	_
Shear strength, min MPa			1
Obatic less stress and series MD	along the grain of the face veneers	9-15	60
Static bending strength, min MPa	across the grain of the face veneers		30
Modulus of elasticity in static bending, min MPa	along the grain	7-10	6,000
	across the grain		3,000

### **SVEZAUV**

SVEZA UV is coated with UV-cured varnish in many layers. The UV coating protects the plywood panel from damage while ensuring beautiful appearance and bringing out the natural grain beauty of birch wood. Custom tints can be achieved to match a desired finish color or gloss.



### Key features

- Of Reduces finishing time and cost
- 02 Available in sizes 5x5, 5x10, 8x4x8
- 03 Ready for use
- 04 Natural wood grain

#### **Technical details**

	1525x1525 (5x5), 2440x1220x2440 (8x4x8)
Panel sizes, length x width, mm (ft)	2500x1250x2500 (8x4x8), 1500/1525x3000/3050 (5x10)
Surface	100% birch plywood with uniform UV-cured finish
Glue	MR (Interior), WBP (Exterior)
Thickness, mm	6, 6.5, 8, 9, 10, 12, 15, 18, 19
Grade	B/B, B/BB, BB/BB (UV coating both sides); B/CP, BB/CP (UV coating one side)
Patching	Oval, butterfly
Coating	UV-curable clear varnish on one or two sides
Varnish	Transparent (no color) or tinted, according to customer's specifications
Chandand much	Sanded at 400 grit, with UV Medium finish
Standard product	(gloss 35% ±5%)
	UV High - 80% ±5%
01(	UV Medium - 35% ±5%
Gloss (as per customer's specifications)	UV Low - 20% ±5%
	UV Special - gloss according to customer's specifications ±5%

PARAMETER	THI	CKNESS, 1	MM VALUE
Static bending strength, min MPa	along the grain of the face veneers	9-19	45
	across the grain of the face veneers	7-17	30
Tensile strength along the grain, min MPa		6-8	30
Modulus of elasticity in static bending, min MPa	along the grain	9-19	5,000 (INT), 6,000 (EXT)
	across the grain	7-17	3,000

### SVEZA LASER

Developed specially for cutting die makers, this flat die board made of 100% birch wood fully meets the requirements of the industry. SVEZA Laser Standard features a consistently flat panel and laser-compatible glue. SVEZA Laser Premium offers uniform color of the face and minimum defects in the core veneers for the die makers with the strictest manufacturing quality standards.



### Key features

- of 100% birch wood
- 02 Consistently flat panel
- 03 Laser-compatible
- 04 Choice of coating options and sizes
- 05 Little to no defects in core veneers (SVEZA Laser Premium)

Technical details	1525x1525 (5x5) 1220x1525 (4x5)/1250x1525 (4x5)
Panel sizes, length x width, mm (ft)	1525x1250 (5x4)/1525x1250 (5x4)/1500x1200 (5x4)/1500x1120 (5x4) 2500x1250 (8x4)/2440x1220 (8x4)/2130x1220 (7x4)/1830/1220 (6x4) 1525x3050 (5x10)/1525x2500 (5x8)
Thickness, mm	8-30 (other thicknesses on request)
Surface	S2S - sanded both sides UV/UV - UV coating both sides F/F - melamine film facing both sides
Grade	<b>LST</b> B/B, <b>LST</b> B/BB, <b>LST</b> BB/BB, <b>LPR</b> B/BB, <b>LPR</b> BB/BB
Formaldehyde emission	E0.5, E1, E0.05 ppm, CARB ULEF
Glue	MR (Interior)
Density, kg/m <sup>3</sup>	640-700
Moisture, %	<io< th=""></io<>
Manufactured to company standard*	

PARAMETER		THICKNESS, MM	VALUE
Static bending strength, min MPa	along the grain of the face veneers	9-30	45
Static bending strength, min MPa	across the grain of the face veneers		30
Tensile strength along the grain, min MPa		8	30
Modulus of elasticity in static bending, min MPa	along the grain	9-30	5,000
riodalus or elasticity irretatio bending, mini riea	across the grain	7-30	3,000

### SVEZATOY

Developed with safety in mind and made of 100% birch wood, SVEZA Toy is a perfectly safe plywood material for the production of toys and children's furniture.

One of the few CARB approved ULEF manufacturers of plywood, Sveza guarantees that SVEZA Toy complies with the world's highest safety standards.



### Key features

- of 100% birch veneers
- 02 Natural wood grain
- 03 Very tight thickness tolerances
- 04 Certified as CARB ULEF\*
- 05 ≥0.7 mm thick face veneer for extra sanding and painting

#### **Technical details**

Panel sizes, length x width, mm (ft)	1525x1525 (5x5) 1220x1525 (4x5)/1250x1525 (4x5) 1525x1250 (5x4)/1525x1250 (5x4)
Thickness, mm	3-30 (other thicknesses on request)
Grade	B/B, B/BB, BB/BB, B/CP, BB/CP, CP/CP
Formaldehyde emission	E0.5, E1, E0.05 ppm, CARB ULEF
Glue	MR (Interior)
Density, kg/m³	640-700
Moisture, %	<b>≤10</b>
Manufactured to company standard**	

PARAMETER		THICKNESS, MM	VALUE
Static bending strength, min MPa	along the grain of the face veneers	9-30	45
Static bending strength, minner	across the grain of the face veneers		30
Tensile strength along the grain, min MPa		3-8	30
Modulus of elasticity in static bending, min MPa	along the grain	9-30	5,000
- Induduo of oldoctory infocusio scriding, mint in a	across the grain	7-00	3,000

<sup>\*</sup>Pursuant to CARB ATCM, Section 93120.3(d).

<sup>\*\*</sup>For the relevant company standard, please refer to the "Library" section on Sveza's website www.sveza.com.

### SVEZA DRAWER

SVEZA Drawer is 100% birch plywood specially designed for making drawer sides and furniture components where the production process involves cutting, milling, and machining of planes and edges. SVEZA Drawer features extra control of bonding strength for an ideal dovetail joint, thicker face veneers for extra sanding and painting, and beautiful appearance of natural wood.



### Key features

- of 100% birch veneers
- 02 Oval patching
- 03 Exceptional bonding strength
- 04 Face veneer thickness ≥0.7 mm
- 05 Thickness tolerance ±0.3 mm
- 06 All sheets in the stack are one-direction, best side up

#### **Technical details**

Panel sizes, length x width, mm (ft)	1525x1525 (5x5) 1220x1525 (4x5)/1250x1525 (4x5) 1525x1250 (5x4)/1525x1250 (5x4)	
Thickness, mm	3-25	
Grade	B/B, B/BB, BB/BB, B/CP, BB/CP, CP/CP	
Formaldehyde emission	E0.5, E1, E0.05 ppm, CARB ULEF	
Glue	MR (Interior)	
Density, kg/m³	640-700	
Moisture, %	≤10	
Manufactured to company standard*		

PARAMETER		THICKNESS, MM	VALUE
Static bending strength, min MPa	along the grain of the face veneers	9-15	45
Static bending strength, minimpa	across the grain of the face veneers	7-10	30
Tensile strength along the grain, min MPa		5-8	30
Modulus of elasticity in static bending, min MPa	along the grain	9-15	5,000
- Todalas of Glasticity Installe Schaling, milit in a	across the grain	7-10	3,000

### SVEZA LVL

100% birch unidirectional plywood for furniture components.



### Key features

- of 100% birch veneers
- 02 Waterproof glue
- 03 High benging strength
- 04 Reduces production waste
- 05 Consistent quality from end to end
- 06 For extra strong structures

#### **Technical details**

Panel sizes, length x width, mm (ft)	2440x1220/2500x1250 (8x4)	
Thickness, mm	15, 18, 21, 24, 25, 27, 30, 38, 40	
Grade	C/C (other grades on request)	
Formaldehyde emission	E0.5, E1, E0.05 ppm, CARB & EPA (on request)	
Glue	Extra waterproof WBP (Exterior)	
Moisture, %	5-12	
Composition	Unidirectional plywood throughout	
Manufactured to company standard*		

PARAMETER		THICKNESS, MM	VALUE
Chatia la cualina atuananta main MDa	along the grain of the face veneers		60
Static bending strength, min MPa	across the grain of the face veneers		30
Modulus of elasticity in static bending, min MPa	along the grain	15-40	10,800
	across the grain		_

### SVEZA UNIPLYWOOD

100% birch unidirectional plywood for door frames and furniture.



### Key features

- of 100% birch veneers
- 02 Waterproof glue
- 03 High bending strength
- 04 Reduces production cost
- 05 Very tight thickness tolerances
- 06 Exceptional bonding strength

#### **Technical details**

Panel sizes, length x width, mm (ft)	2440x1220/2500x1250 (8x4)
Thickness, mm	15, 18, 21, 24, 25, 27, 30, 38, 40
Grade	BB/CP
Formaldehyde emission	E0.5, E1, E0.05 ppm, CARB (on request)
Glue	WBP (Exterior)
Moisture, %	5-12
Composition	Two cross plies. Inner plies arranged in accordance with the customer's specifications.
Surface preparation	The surface is prepared for finishing with wood veneers, laminates, or plastic film. All visible defects on the BB face are filled before sanding. Excess filler on the surface after sanding is not allowed.

PARAMETER		THICKNESS, MM	VALUE
Chatia lagradina atuawath win MDa	along the grain of the face veneers		60
Static bending strength, min MPa	across the grain of the face veneers		30
Modulus of elasticity in static bending, min MPa	along the grain	15-40	10,800
Modulus of elasticity in static bending, minimpa	across the grain		_

### SVEZA GAS

SVEZA Gas are high-quality 100% birch plywood insulation panels for LNG cargo containment systems, designed under GTT's NO96, Mark III or GST system requirements for the transport and storage of liquefied natural gas.



### Key features

- OI Full compliance with GTT's standards
- 02 ABS, BV, CCS, DNV GL, KR, LR and RS certifications
- 03 Tight quality control at each manufacturing stage
- 04 Excellent strength
- 05 Any size
- 06 On-time delivery

#### **Technical details**

Panel sizes, length x width, mm	Any size from A4 to 1525 mm x 3050 mm		
Thickness	Any thickness starting from 4 mm		
Grade	BB/BB, BB/WG, and WG/WG		

#### Thickness tolerances

#### SVEZA Gas Mark III and GST

Certified to M3010 (Mark III system), and M4010 (GST system) standards.

and M4010 (GST syst		THICKNESS, MM	VALUE
Shear strength in the original state at three thermal shocks		6.5, 9, 12, 15, 21, 30	<b>≥</b> 3.5
average, MPa		24,35,92	≽2.5
Shear strength after boiling, average, MPa		6.5, 9, 12, 15, 21, 30, 24, 35, 92	≽1.4
	along and across the grain	12,18	>30
Static bending strength, MPa	along the grain	30	58
	across the grain	30	50
	along and across the grain	6.5	40
Tensile strength, average, MPa	along the grain	9, 12, 15	60
	across the grain	9, 12, 15	40

#### SVEZA Gas NO96, NO96 L03&L03+, NO96 Super+

Certified to M3502 (N096), M3513 (N096 L03&L03-and M3526-38 (Super+ system) standards.

and 113526-50 (Super+ system) standards.			THICKNESS,		
PARAMETER	SYSTEM		MM	VALUE	
	N096		6.5-35		
Shear strength, MPa	NO96L03&L03	3+	35-42	≥1	
	NO96 Super+		37		
		across the grain	6.5-35	≥50	
			6.5-9	>80	
			12	≽75	
	N096		15	≽70	
Statia handing atrangth	11070	along the grain	21	>65	
Static bending strength, average, MPa		the grain	24	≥61	
			30	>58	
			35	>56	
		across the grain	9-12	>50	
	NO96 Super+	along	9	>80	
		the grain	12	≽75	
Out-of-plane compressive strength, MPa	NO96 Super+		9-37	≽4.5	
In-plane compressive	NO96 L03&L03+		35-42	≥28	
strength, MPa	NO96 Super+		21	≥25	
				27	









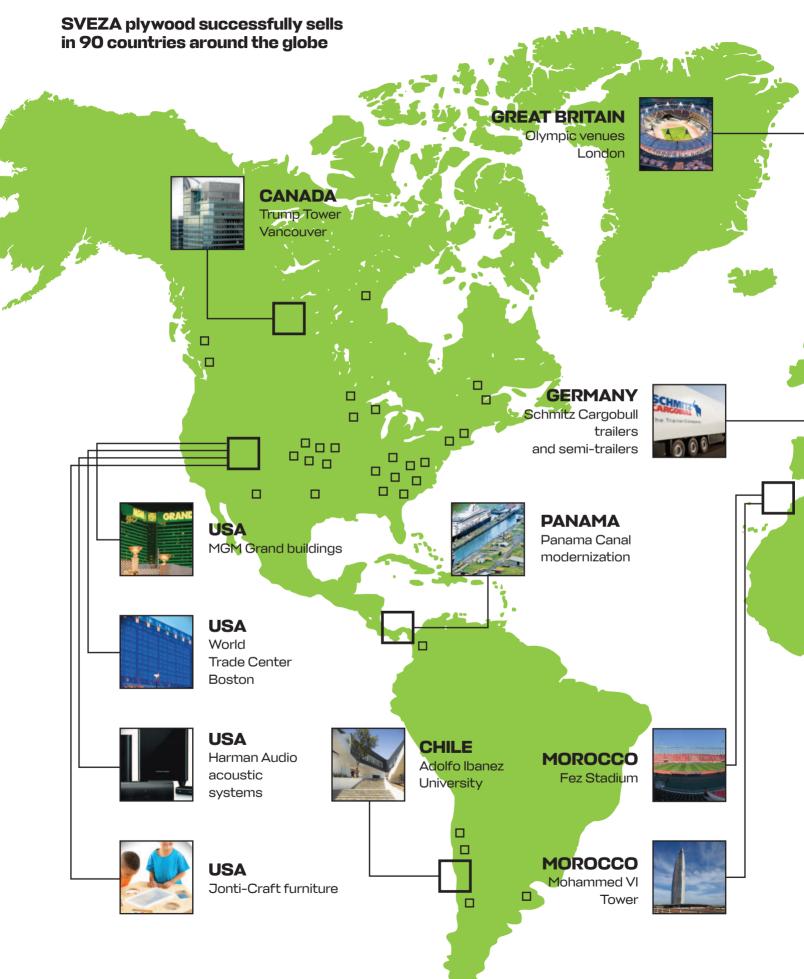


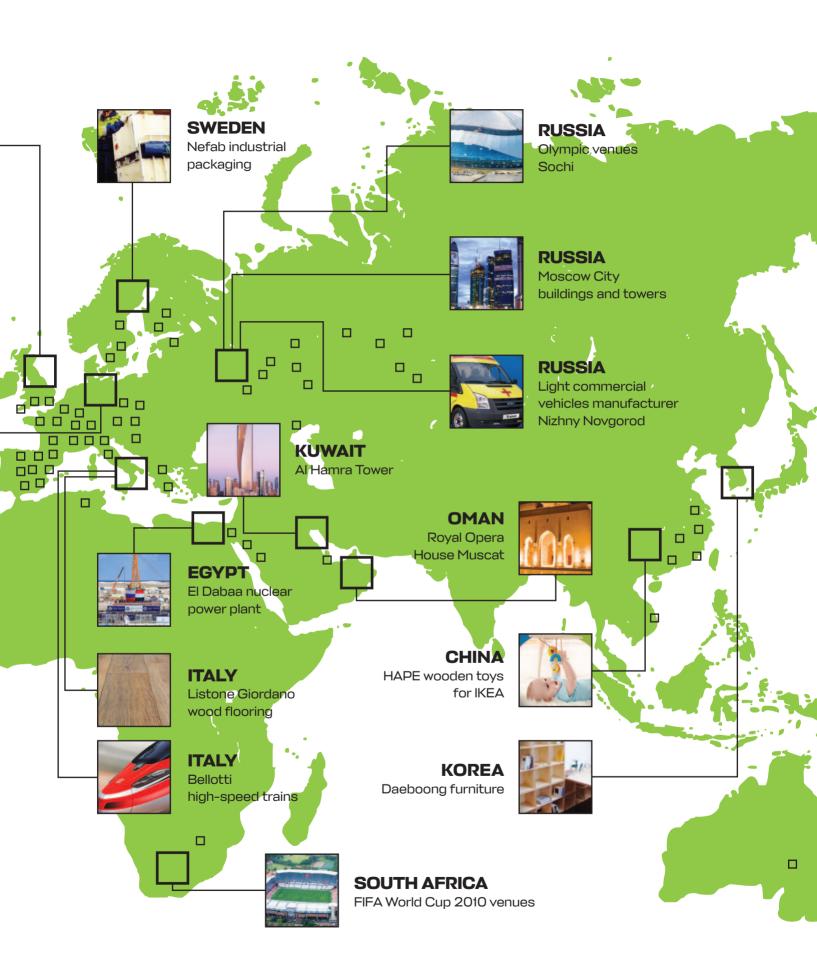






### **SVEZA** around the world





### **Service solutions**

We offer a full scope of services for our customers, from pre-order advice to product modifications, to after-sales support.
All our products are tailored to the specific needs of the market.

We anticipate our customers' needs by developing solutions for a wide range of projects and uses, and we are happy to help you find solutions for your most challenging tasks.

We work for your success!



#### Cutting to size of plywood and particleboard

Plywood: straight cutting of plywood as per the customer's specifications. Minimum cutting size is 25 mm, maximum cutting size is 3,300 mm.

Particleboard: cutting of particleboard into finished pieces from  $400\,\mathrm{mm}$  to  $3,\!500\,\mathrm{mm}$  wide and from  $800\,\mathrm{mm}$  to  $1,\!750\,\mathrm{mm}$  long.

Your order manager will specify the details of your order with you.

#### References

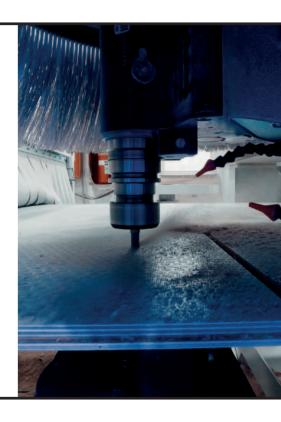
- Of Production of end pieces for engineered wood flooring boards
- O2 Production of two-ply flooring board parts as per the customer's specifications

#### **CNC** precision cutting of plywood

Precision curved-line cutting and milling of parts as per the customer's drawings. Our CNC machines process plywood sizes up to 4,000 mm x 1,900 mm, thicknesses up to 100 mm, and weights up to 200 kg. We offer a full scope of CNC routing operations on full-size raw and film-faced plywood, including trimming, cutting-to-size, drilling, chamfering, profiling and many more. Our CNC machines can be set up to perform some of the operations simultaneously, reducing the time required to complete a project.

#### References

- O1 Commercial vehicles: HCV plywood flooring kits
- 02 Packaging: flanges for cable reels





#### Customized arrangement of veneer plies

Adding strength along the sides of material by creating a special arrangement of veneer sheets in the core for extra bending strength along or across the grain.

Creating a custom core: using premium quality veneers for applications with exposed plywood core.

#### References

- Of Commercial vehicles: HCV plywood flooring kits
- 02 Furniture: SVEZA LVL for sofa frames as a stronger alternative to softwood LVL
- O3 Doors: SVEZA Uniplywood for door frames as a stronger alternative to softwood LVL

#### **Edge finishing**

We offer a wide range of joints from click joints to chamfering, to grooves for drawer bottoms.

#### References

- 01 Construction: decking panels
- 02 Commercial vehicles: HCV plywood flooring kits
- 03 Interior design: wall panels
- 04 Furniture: drawer box parts





#### **Branded film coating**

We'll print your logo on any SVEZA product.

#### References

- 01 PERI formwork
- 02 Absolut Building
- 03 PSK Delta formwork

#### Extra edge protection

Edge sealing with waterproof acrylic sealer.

#### References

O1 Film-faced formwork plywood





#### Full-scope technical product support

At Sveza, we assist our customers in all stages from placing the order through to after-sales support. We provide advice, documentation, product samples, lab test reports, and deliver product training.

Our customer service is there for you, anytime.



#### UV coating for decorative and protective applications

SVEZA plywood with UV-cured coating is a turnkey solution as it is ready for cutting into finished furniture parts or interior design elements. Our UV-curing equipment can process plywood sheets up to 1,525 mm wide.

The UV varnish brings out the natural grain beauty of birch wood. Custom tints can be achieved to match a desired finish color and opacity.

Our customers benefit from a safe and durable surface at an attractive price compared to the cost of coating plywood with UV-cured material at the customer's facility.

#### References

- 01 SVEZAUV
- 02 SVEZA Monolith
- 03 SVEZA Laser UV

#### Choice of UV coating colors from the RAL palette

Paint your plywood in any color from the RAL palette to match your company's brand colors or customize it for a specific application. We'll make your product stand out in the market!

#### References

- 01 SVEZA Monolith
- 02 SVEZA Laser UV
- 03 SVEZA UV for the company Focus Desk





#### **Product training**

We pride ourselves in helping our customers get the most out of SVEZA plywood. Our experts deliver product training in various formats for our customers and distributors: online training sessions or customer facility/store visits.

We strive to maximize our product support experience for our customers and partners for the best results at the user's end.



#### Shipment services: truck, rail, sea, air

We choose the best shipping method for every order, from the standpoint of safety, cost, and convenience. All delivery modes are available: truck, rail, sea, and air, including multimodal transport (rail+bulker).

We have established logistics routes across the globe to ensure seamless delivery. Our logistics supervisors oversee every shipment and will implement alternative delivery modes and routes in case of disruptions.

#### Packaging to meet your requirements

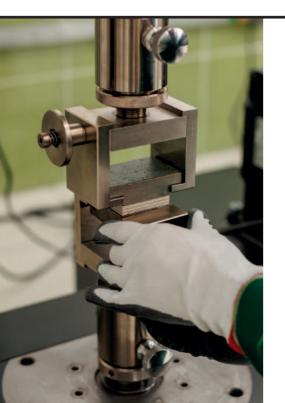
Plywood: we offer shipping packaging to suit different types of transport, from the common options to custom solutions (such as a request from a customer to minimize packaging for an oversize order in order to minimize the amount of waste). Our transport packaging optimizes space and reduces costs associated with handling and storage.

Particleboard: PET film packaging.

#### References

- O1 Packaging for cable reel flanges: we provided round pallets for space optimization
- 02 End pieces





#### R&D: development of new products

We work with our customers to create custom solutions, and analyze market trends to develop new products and stay ahead of the competition. Based at a plywood mill, our R&D department creates new technologies and products to substitute imported technologies.

#### References

01 SVEZA Dielectric

### **Technical data**

#### Number of sheets in a bundle

	BUNDLE HEIGHT, MM			
Sheet thickness, mm	400	600		
3	130	200		
4	100	150		
5	80	120		
6	65	100		
6.5	62	92		
8	50	75		
9	44	67		
10	40	60		
12	33	50		
15	26	40		
18	22	33		
21	19	29		
24	16	25		
27	14	22		
30	12	20		
35	11	17		
40	10	15		

#### Size tolerances

Sheet length/width, mm	Tolerance, mm
1,220/1,250	±3.0
1,500/1,525	±4.0
2,440/2,500	±4.0
3,000/3,050	±5.0

Other sizes are available to order.
The length of a plywood sheet is measured along the grain of the face and back veneers.

### Distance from Moscow to Sveza plywood mills

Mill	Distance, km
SVEZA Ust-Izhora, St. Petersburg	685
SVEZA Kostroma, Kostroma	412
SVEZA Novator, Vologda Region	1,024
SVEZA Uralsky, Perm Region	1,411
SVEZA Manturovo, Kostroma Region	671
SVEZA Verkhnyaya Sinyachikha, Ekaterinburg Region	1,474
SVEZA Tyumen, Tyumen	1,710



#### **Thickness tolerances**

			SANDED PLYWOOD		DED DOD
Sheet thickness, mm	Plies	Tolerance, mm	Thickness variation, mm	Tolerance, mm	Thickness variation, mm
3	3	+ 0.3; - 0.4	_	+ 0.4; - 0.3	0.6
4	3	+ 0.3; - 0.5		+ 0.8; - 0.4	
5	4/5	+ 0.4; - 0.5	_	+ 0.8; - 0.4	
6	5	+ 0.4; - 0.5		+ 0.9; - 0.4	1.0
6.5	5	+ 0.4; - 0.5		+ 0.9; - 0.4	
8	6/7	+ 0.4; - 0.5		+ 1.0; - 0.5	
9	7	+ 0.4; - 0.6	0.6	+ 1.0; - 0.5	
10	7/8	+ 0.5; - 0.6		+ 1.0; - 0.5	
12	9	+ 0.5; - 0.7	+ 1.1; -		
15	11	+ 0.6; - 0.8		+ 1.2; - 0.7	
18	13	+ 0.7; - 0.9		+ 1.3; - 0.8	1.5
21	15	0.0; -1.1		+ 1.0; - 1.1	1.0
24	17	0.0; -1.5		+ 1.0; - 1.5	
27	19	0.0; -1.8		+ 1.5; - 1.8	
30	21	0.0; - 2.0	- 10	+ 1.6; - 2.0	20
35	25	0.0; - 2.0	- 1.0 -	+ 1.6; - 2.0	2.0
40	28/29	+ 1.2; - 1.2		+ 1.6; - 2.0	

SVEZA plywood can be made to the customer's specifications for thickness, number of plies, and tolerances.

#### **Transport loading rates**

	CONTAINER		TRUCK		RAIL CAR (138 M³)		
Size, ft	Bundle height, mm	Number of bundles	Volume, m³	Number of bundles	Volume, m <sup>3</sup>	Number of bundles	Volume, m <sup>3</sup>
5x5	400	40	36-37	32	30	62-82	58-75
4x8x4 (1250x2500x1250 mm)	400	29-30	36-37	24	30	60-74	75-92
SVEZA Exterior	600	-	-	16	30	45	84
4x8x4 (1220x2440x1220 mm)	400	30-31	36-37	25	30	60-74	71-88
SVEZA Exterior	600	-	-	16	30	45	80
4x8x4 (1250x2500x1250 mm)	400	28-29	35-36.5	23-24	29-30	60-74	75-92
SVEZA Film-faced	600	-	-	16	30	45	84
4x8x4 (1220x2440x1220 mm)	400	29-30	35-36	24	29	60-74	71-88
SVEZA Film-faced	600	-	-	16	29	45	80
5x8x5 -	400	25	38	20	30	48	70
JXOXJ	600	-	-	13	30		-
F 10	400	19	35	16	30	34	60
5x10 =	600	-	-	11	30		

Actual loading rates may be different, depending on the terms agreed with the customer.















