



Presentation Brochure

SVEZA BIRCH PLYWOOD Products and Applications

www.sveza.com

SVEZA IS THE WORLD LEADER IN BIRCH PLYWOOD PRODUCTION

SVEZA group is a Russian company, the world leader in the birch plywood market. SVEZA products have earned customer loyalty in 70 countries across the world. They are used in high-rise building and Olympic venue construction, long-haul trailer and high-speed train production, and eco-friendly furniture and trendy interior design.

The company is on the Russian market since 1998. Along the way, SVEZA has upgraded its production with the cutting edge technology and equipment. SVEZA Group's annual production is 102 million m² (1.3 million m³).

SVEZA is committed to responsible use of forest resources, which is confirmed by international FSC^{TM} certificates.

*FSC (Forest Stewardship Council®) is an independent, non-governmental, not-for-profit organization established to promote the responsible management of the world's forests.





1 260 000 m ³	of wood boards annually
200+	sizes and thicknesses
100%	birch veneer
70	purchasing countries
6	mills

SVEZA - 100% BIRCH PLYWOOD



Exceptional durability



Hard surface



Unique load capacity



Keeps its properties through a temperature range of -40°C to +50°C (-40°F to +122°F)



Attractive wood texture



Easy handling



SVEZA INTERIOR BIRCH PLYWOOD

SVEZA INTERIOR BIRCH PLYWOOD

SVEZA Interior Birch Plywood is easy to process and goes well together with finish materials. This type of plywood is ideal for indoor use.

Key benefits

- Durable and wear resistant
- Hard surface
- Higher water-resistance
- Comes in a variety of thicknesses and sizes

Technical specifications

Standard sizes, length x width, mm (ft)	1525x1525 (5x5) 2440/2500x1500/1525 (8x5)	
Thickness, mm	3-25	
Plywood grade	I (B, S), II (BB), III (CP), IV (C)	
Surface type	Outer layers sanded (S2S), one side sanded (S1S), unsanded (NS)	
Formaldehyde emission class	E1	
Waterproofness	Normal	
Density, kg/m³	640-700	
Moisture content, %	5-14	
Edge sealing		
Plywood is produced under STO 00255177-001-2013 "General purpose plywood with birch face veneers."*		

Strength specifications

Subject		Thickness, mm	Index
Static bending strength, N/mm², not less	along the outer layer grain	9-40	45
	across the outer layer grain		30
Strength in tension along the grain, N/mm², not less		3-8	30
Modulus of elasticity in static bending,	along the grain	9-40	5000
N/mm², not less	across the grain		3000

* For STO 00255177-001-2013, visit "Certificates" section of <u>www.sveza.com</u> website.

SVEZA EXTERIOR BIRCH PLYWOOD

SVEZA EXTERIOR BIRCH PLYWOOD

SVEZA Exterior Birch Plywood maintains its performance characteristics under conditions of high humidity and does not deform or soak. It can be used in both interior and exterior finish.

Key benefits

- Higher water resistance
- Durable and wear resistant
- Hard surface
 - Resistance to temperature variation: through a range of -40°C to +50°C (-40°F to +122°F)
 - Comes in a variety of thicknesses and sizes

Technical specifications

Standard sizes, length x width, mm (ft)	1525x1525 (5x5) 1220x2440x1220 (4x8x4) 1250x2500x1250 (4x8x4) 1500/1525x2440/2500 (5x8) 2440/2500x1500/1525 (8x5) 1500/1525x3000/3050 (5x10)
Thickness, mm	4-40
Plywood grade	I (B, S), II (BB), III (CP), IV (C)
Surface type	Outer layers sanded (S2S), one side sanded (S1S), unsanded (NS)
Formaldehyde emission class	E1
Waterproofness	Higher
Density, kg/m³	640-700
Moisture content, %	5-14
Edge sealing	_
Plywood is produced under STO 00255	177-001-2013 "General purpose plywood with birch face veneers."*

Strength specifications

Subject		Thickness, mm	Index
Static bending strength, N/mm², not less	along the outer layer grain	9-40	60
	across the outer layer grain		30
Strength in tension along the grain, N/mm², not less		4-8	30
Modulus of elasticity in static bending,	along the grain	9-40	6000
N/mm², not less	across the grain	9-40	3000

* For STO 00255177-001-2013, visit "Certificates" section of <u>www.sveza.com</u> website.



SVEZA FILM FACED BIRCH PLYWOOD



SVEZA FILM FACED BIRCH PLYWOOD

SVEZA Film Faced Birch Plywood is a high-quality exterior birch plywood with special coating of resin-treated paper that turns into protective film during production. Comes with smooth or mesh surface. Edges are sealed with water-dispersible acrylic paint. This type of plywood is widely used in the construction industry and vehicle production. It is easy to mount and work with.

Key benefits

- Highly wear resistant
- Resistant to most aggressive environments, including chemicals
- Higher water resistance
- Slip resistant (meshy surface)
- Durable
- Hard surface
 - Resistance to temperature variation: through a range of -40°C to +50°C (-40°F to +122°F)
 - Comes in a variety of thicknesses and sizes

Technical specifications

Standard 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 type	Smooth/smooth (F/F), smooth/wire mesh (F/W)	
Formaldehyde emission class	E1	
Waterproofness	Higher	
Density, kg/m ³	640-700	
Moisture content, %	5-14	
Edge sealing	Emulsion acrylic paint	
Produced under STO 00255177-002-2014 "Film-faced birch plywood."*		

Strength specifications

Subject		Thickness, mm	Index
Static bending strength,	along the outer layer grain	9-40	60
N/mm², not less	across the outer layer grain		30
Strength in tension along the grain, N/mm ² , not less		6-8	30
Modulus of elasticity in static bending,	along the grain	9-40	6000
N/mm², not less	across the grain	9-40	3000

* For STO 00255177-002-2014, visit "Certificates" section of <u>www.sveza.com</u> website.

SVEZA DECK 350

Specially for slab formwork





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SVEZA DECK 350 Special purpose plywood for slab formwork with layout grid

PATENTED TECHNOLOGY!*

SVEZA Deck 350 is a special film faced plywood with a grid pattern intended for slab formwork. It comes with 25, 50, and 100 mm grid patterns. This simplifies plywood laying-out and cutting, and reduces labor costs at the construction site. The pattern also can be used as the template for rebar placement.

SVEZA Deck 350 edges are coated with special acrylate-based waterborne Finnish-made paint with low water permeability. SVEZA Deck 350 surface is smooth, and coated with German-made wear resistant material (wearing capacity is 350 Taber test rotations).

Key benefits

Grid Pattern: easy to cut plywood and place reinforcement

Edges: increased moisture protection**

Technical specifications

Standard sizes, length x width, mm (ft)	1220x2440x1220 (4x8x4) 1250x2500x1250 (4x8x4)
Thickness, mm	18, 21
Surface type	Smooth/smooth (F/F)
Wear resistance	350 Taber test rotations
Formaldehyde emission class	E1
Waterproofness	Higher
Density, kg/m³	640-700
Moisture content, %	5-14
Edge sealing	Special acrylate-based waterborne paint
Produced under STO 00255177-002-20)14 "Film-faced birch plywood."***

Strength specifications

Static bending strength, N/mm ² , not less	along the outer layer grain	60
	across the outer layer grain	30
Modulus of elasticity in static bending,	along the grain	6000
N/mm ² , not less	across the grain	3000

*Production process of plywood with layout mesh is patented (registered in the National Register of Utility Models of the Russian Federatioin as of 20.01.15, RF Patent number 150519).

**Compared to the Russian-made water emulsion acrylic paint (Lakokraska Testing Center lab test protocol, 2011).

***For STO 00255177-002-2014, visit "Certificates" section of <u>www.sveza.com</u> website.



SVEZA TITAN

Increased wear resistance

Up to 10 times higher than the regular surface

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SVEZA TITAN

SVEZA Titan is a special film faced plywood coated with German-made wear resistant material (wearing capacity at least 4000 Taber test rotations). SVEZA Titan's has up to 10 times higher wear resistance than plywood with regular surface.* This plywood has a mesh working surface. Its edges are protected with water-dispersible acrylic paint.

SVEZA Titan plywood is specially designed for applications where high wear resistance and anti-slip properties are required: vehicle floors, industrial flooring, load bearing platforms, storage racks.

Key benefits

Increased wear resistance

Maximum anti-slip protection

Technical specifications

Standard sizes, length x width, mm (ft)	1220/1250x2440/2500 (4x8) 1500/1525x2440/2500 (5x8) 1500/1525x3000/3050 (5x10)	
Thickness, mm	6-40	
Surface type	Smooth/wire mesh (F/W)	
Wear resistance	At least 4000 Taber test rotations	
Formaldehyde emission class	E1	
Waterproofness	Higher	
Density, kg/m ³	640-700	
Moisture content, %	5-14	
Edge sealing	Emulsion acrylic paint	
Produced under STO 00255177-002-2014 "Film-faced birch plywood."**		

Strength specifications

Subject		Thickness, mm	Index
Static bending strength, N/mm², not less	along the outer layer grain	9-40	60
	across the outer layer grain		30
Strength in tension along the grain, N/mm², not less		6-8	30
Modulus of elasticity in static bending,	along the grain	9-40	6000
N/mm², not less	across the grain	9-40	3000

*Standard surface of film-coated plywood

with density of 120 g/m² (according to laboratory tests).

**For STO 00255177-002-2014, visit "Certificates" section of <u>www.sveza.com</u> website.

SVEZA COLOR GREY

SVEZA COLOR GREY

SVEZA Color Grey is a film faced plywood coated with a grey color wear-resistant material. Comes with smooth or mesh surface. Edges are sealed with water-dispersible acrylic paint.

SVEZA Color Grey plywood is designed for applications where grey colored surface is required: production of boats, commercial vehicle bodies and flooring, stages and racks, as well as playgrounds and sports grounds.

Technical specifications

Standard sizes, length x width, mm (ft)	1200/1220/1250x2400/2440/2500 (4x8) 1500/1525x3000/3050 (5x10)	
Thickness, mm	6-21	
Surface type	Smooth/smooth (F/F), smooth/wire mesh (F/W)	
Surface color	Grey	
Formaldehyde emission class	E1	
Waterproofness	Higher	
Density, kg/m³	640-700	
Moisture content, %	5-14	
Edge sealing	Grey pained/no painting	
Produced under STO 00255177-002-2014 "Film-faced birch plywood."*		

Strength specifications

Subject		Thickness, mm	Index	
Static bending strength,	along the outer layer grain	9-21	60	
N/mm ² , not less	across the outer layer grain	5-21	30	
Strength in tension along the grain, N/mm², not less		6-8	30	
Modulus of elasticity in static bending,	along the grain	9-21	6000	
N/mm ² , not less	across the grain	J-Z I	3000	

* For STO 00255177-002-2014, visit "Certificates" section of <u>www.sveza.com</u> website.



SVEZA COLOR YELLOW

SVEZA COLOR YELLOW

SVEZA Color Yellow is a film faced plywood coated with a yellow color wear-resistant material. Comes with smooth or mesh surface. Edges are sealed with water-dispersible acrylic paint.

SVEZA Color Yellow plywood is designed for interior finishing of farm structures, as well as for applications where a light colored surface is required.

Technical specifications

Standard sizes, length x width, mm (ft)	1200/1220/1250x2400/2440/2500 (4x8) 1500/1525x3000/3050 (5x10)
Thickness, mm	6-21
Surface type	Smooth/smooth (F/F), smooth/wire mesh (F/W)
Surface color	Yellow
Formaldehyde emission class	E1
Waterproofness	Higher
Density, kg/m³	640-700
Moisture content, %	5-14
Edge sealing	Yellow pained/no painting
Produced under STO 00255177-002-20	D14 "Film-faced birch plywood."*

Strength specifications

Subject		Thickness, mm	Index	
Static bending strength,	along the outer layer grain	9-21	60	
N/mm ² , not less	across the outer layer grain	5-21	30	
Strength in tension along the grain, N/mm², not less		6-8	30	
Modulus of elasticity in static bending,	along the grain	9-21	6000	
N/mm ² , not less	across the grain	J-Z I	3000	

* For STO 00255177-002-2014, visit "Certificates" section of <u>www.sveza.com</u> website.



Construction

Slab Formwork

Plywood: SVEZA Deck 350 Size: 4x8 Thickness: 18, 21 Surface: F/F

Vertical Formwork

Plywood: Film Faced Size: 5x10 Thickness: 18, 21, 24 Surface: F/F

Concrete Slab Production

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Plywood: Film Faced Size: 4x8, 5x10 Thickness: 12,18, 24 Surface: F/F

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Scaffolding

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Plywood: Exterior, Film Faced Size: 4x8, 5x10 Thickness: 12, 15, 18 Grade: CP/C Surface: F/W

Industrial Flooring (stairs, tribunes, bridges)

Plywood: SVEZA Titan Size: 4x8, 5x8, 5x10 Thickness: 6-40 Surface: F/W

Farms and Farm Structures

Plywood: SVEZA Color Yellow Size: 5x10 Thickness: 6-21 Surface: F/F (walls)



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Transport

Trailer&Semi-trailer

Plywood: Film Faced, SVEZA Titan Size: 4x8, 5x10, 5x8 Thickness: 24, 27, 30, 35 Surface: F/W (flooring)

Goods Vans

Plywood: Exterior, Film Faced, SVEZA Titan Size: 4x8, 5x10, 5x8 Thickness: 9, 12, 15, 18, 21, 24, 27 Grade: BB/BB, BB/CP, CP/CP (walls, doors) Surface: F/W (flooring), F/F (walls, doors)

Light Commercial Vehicles

Plywood: Exterior, Film Faced, SVEZA Color Grey Size: 4x8, 5x10, 5x8 Thickness: 4, 5, 6, 9, 12, 15, 18 Grade: BB/BB, BB/CP, CP/CP (walls, doors) Surface: F/W (flooring), F/F (walls)

Buses

Plywood: Exterior, Film Faced Size: 5x10, 4x8 Thickness: 9, 12, 15, 18 Grade: CP/C (flooring) Surface: F/F (walls), F/W (flooring)



Packaging

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Plywood: Exterior Size: 5x5, 4x8, 5x10 Thickness: Thickness: 6-21 Grade: CP/C, C/C



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Furniture, Interior

Plywood: Interior, Exterior Size: 5x5, 4x8x4, 5x10 Thickness: 3, 6, 9, 12, 15, 18, 21, 24 Grade: B/BB, S/BB, BB/BB, BB/CP, CP/C, C/C



Flooring

Plywood: Exterior Size: 4x8, 5x8 Thickness: 6, 9, 12 Grade: BB/CP, BB/C, CP/CP, CP/C



Children's Toys and Outdoor Playsets

Plywood: Interior, Exterior, Film Faced, SVEZA Color Grey Size: 5x5, 4x8 Thickness: 3, 4, 6, 9, 12, 15, 18 Grade: B/BB, BB/BB, BB/CP Surface: F/F, F/W 1



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TECHNICAL INFO

Number of sheets and crate volume

	Crate height, mm			
Nominal thickness of plywood, 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		

Tolerances

TUCIAIL						
		Sanded plywood		wood Unsanded plywoo		
Nominal thickness, mm	Number of plies	Tolerance, mm	Max difference in measurements, mm	Tolerance, mm	Max difference in measurements, 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	1,0	
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; - 0,6		
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		
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	1,0	+ 1,6; - 2,0	2,0	
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		

Plywood with other thicknesses, sizes, number of plies

and tolerances are available by special order.

Size tolerances

Length or width of plywood sheets, mm	Tolerance, mm
1220, 1250	±3,0
1500, 1525	±4,0
2440, 2500	±4,0
3000, 3050	±5,0

Other sizes are available by special order. Length of plywood panels is defined along the grain of outer layers.

Distance from the SVEZA mills to Moscow

Distance, km
685
412
1024
1411
671
2000

Transport loading capacity

		Container		Truck		Railcar (138 m ³)	
Size, ft	Crate height, mm	Quantity of crates	Volume, m ³	Quantity of crates	Volume, m ³	Quantity of crates	Volume, m ³
5x5	400	40	36-37	32	30	62-82	58-75
4x8x4 (1250x2500x1250mm) Exterior Plywood	400	29-30	36-37	24	30	60-74	75-92
	600	-	_	16	30	45	84
4x8x4 (1220x2440x1220 mm) Exterior Plywood	400	30-31	36-37	25	30	60-74	71-88
	600	-	_	16	30	45	80
4x8x4	400	28-29	35-36,5	23-24	29-30	60-74	75-92
(1250x2500x1250 mm) Film Faced Plywood	600			16	30	45	84
4x8x4 (1220x2440x1220 mm) Film Faced Plywood	400	29-30	35-36	24	29	60-74	71-88
	600	-	_	16	29	45	80
5x8x5	400	25	38	20	30	48	70
	600	-	_	13	30		
5x10	400	19	35	16	30	34	60
5×10	600			11	30		

The actual loading capacity standards can differ from the basic standards, depending on the terms agreed upon with the client.

Certificates



















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