

COMPANY STANDARD**SVEZA PARQUET BIRCH PLYWOOD
Technical Specifications****STO 52654419-002-2024**

Saint Petersburg
2024

* In case of discrepancies, the Russian version of the organization's standard is to be considered as priority. / В случае возникновения разночтений приоритетной является версия стандарта организации на русском языке

Foreword

Development purposes and objectives, as well as the use of standards of organizations in the Russian Federation are established by Federal Law of December 27, 2002 No. 184-FZ «*On Technical Regulation*» and Federal Law of June 29, 2015, No. 162-FZ «*On Standardization in the Russian Federation*».

Development and presentation rules are specified by GOST R 1.0-2012 «*Standardization in the Russian Federation. Basic provisions*» and GOST R 1.4-2004 «*Standardization in the Russian Federation. Standards of organizations. General*», taking into account GOST R 1.5-2012 «*Standardization in Russian Federation. National standards. Rules of structure, drafting, presentation and indication*».

This standard may only be used for work with the written consent of LLC SVEZA-Les.

Table of contents

1 SCOPE OF APPLICATION 1

2 NORMATIVE REFERENCES..... 1

3 CLASSIFICATION AND DIMENSIONS 2

4 TECHNICAL REQUIREMENTS 5

5 ACCEPTANCE RULES 8

6 CONTROL METHODS..... 9

7 TRANSPORTATION AND STORAGE..... 10

8 MANUFACTURER’S WARRANTY 11

9 SAFETY REQUIREMENTS AND ENVIRONMENTAL PROTECTION 11

APPENDIX A 12

APPENDIX B..... 17

APPENDIX C..... 18

APPENDIX D 20

APPENDIX E..... 21

Bibliography 22

COMPANY STANDARD

SVEZA PARQUET BIRCH PLYWOOD
Technical Specifications

RUS: Фанера SVEZA PARQUET березовая
Технические условия

Date of introduction «26» April 2024

1 SCOPE OF APPLICATION

This company standard (hereinafter referred to as the Standard) applies to SVEZA PARQUET birch plywood (hereinafter referred to as SVEZA PARQUET plywood) that is used as a main or auxiliary component by manufacture of parquet or engineered boards used as flooring in residential and public premises.

2 NORMATIVE REFERENCES

This Standard includes normative references to the following standards:

GOST 12.4.011-89 Occupational safety standards system. Means of protection. General requirements and classification

GOST 427-75 Measuring metal rules. Basic parameters and dimensions. Specifications

GOST 2140-81 Visible defects of wood. Classification, terms and definitions, methods of measurement

GOST 3749-77 Checking 90° squares. Specifications

GOST 6507-90 Micrometers. Specifications

GOST 7016-2013 Products of wood and wood materials. Roughness parameters

GOST 7502-98 Measuring metal tapes. Specifications

GOST 8925-68 Flat clearance gauges for machine retaining devices. Design and sizes

GOST 9620-94 Laminated glued wood. Sampling and general requirements in testing

GOST 9621-72 Laminated glued wood. Methods for determination of physical properties

GOST 9624-2009 Laminated glued wood. Method for determination of shear strength

GOST 9625-2013 Laminated glued wood. Method for determination of ultimate strength and modulus of elasticity in static bending

GOST 10636-2018 Wood-shaving and wood-fiber plates. Strength definition method at stretching perpendicularly plate layer

GOST 11358-89 Dial-type thickness gauges and dial-type wall thickness gauges graduated in 0.01 and 0.1 mm. Specifications

GOST 15612-2013 Products from wood and wood materials. Methods for determination of roughness parameters

GOST 27678-2014 Wood-based panels and plywood. Perforator method for determination of formaldehyde content

GOST 30255-2014 Furniture, timber and polymers. The method for determination of formaldehyde and other volatile chemicals in the air of climatic chambers

GOST 30427-96 Plywood for general use. Classification of veneer surfaces by appearance

GOST 32155-2013 Wood-based panels and plywood. Determination of formaldehyde release by the gas analysis method

GOST R 50779.12-2021 Statistical methods. Statistical quality control. Item random sampling methods

Note: While using this standard, it is advisable to check the validity of the standards referenced against the National Standards Reference Index published annually.

3 CLASSIFICATION AND DIMENSIONS

3.1 Depending on the water resistance degree of glue bond, SVEZA PARQUET plywood belongs to the exterior (EXT / ΦCΦ) type plywood characterized by an increased water resistance of the glue bond, manufactured by using phenol-formaldehyde glues and intended for indoor and outdoor use.

Note: SVEZA PARQUET plywood of EXT / ΦCΦ type belongs to EXT formaldehyde emission group.

3.2 Depending on the requirements to the inner plies, two types of SVEZA PARQUET plywood are manufactured: SVEZA PARQUET Standard (PST) and SVEZA PARQUET Premium (PPR).

3.3 Based on appearance, SVEZA PARQUET Standard plywood is divided into grades depending on the combination of its face veneer grades: CP, C (when Latin letters are used) and III, IV (when Roman numerals are used).

Based on appearance, SVEZA PARQUET Premium plywood is divided into grades depending on the combination of its face veneer grades: BB, CP (when Latin letters are used) or II, III (when Roman numerals are used).

The grade is designated both by Latin letters and by Roman numerals. PST / PPR is added before the grade designation.

3.4 In terms of surface treatment, SVEZA PARQUET plywood is manufactured with both sides sanded – S2S.

Note: Sanding belts with a grain size of P80 - P100 microns are used for sanding plywood.

3.5 SVEZA PARQUET Premium plywood lay-up scheme is presented in Appendix E.

3.6 Dimensions

3.6.1 Length and width of SVEZA PARQUET plywood panels must be as shown in Table 1 below.

Table 1

In millimeters

Plywood panel length (width)	Tolerances
1,220; 1,250	± 3.0
1,500; 1,525	± 4.0
2,440; 2,500	± 4.0
3,000; 3,050	± 5.0
Notes: 1. SVEZA PARQUET plywood may be manufactured with other dimensions and tolerances by agreement between the manufacturer and the customer. 2. SVEZA PARQUET plywood panel length is measured along the grain direction of the face veneers	

3.6.2 Thickness and number of plies of SVEZA PARQUET plywood must be as shown in Table 2.

Table 2

Nominal thickness of plywood	Minimum thickness, mm	Maximum thickness, mm	Thickness tolerance, mm	Thickness tolerance within one panel, max mm	Number of plies, min.
5.9	5.6	6.2	± 0.2	0.2	5
6.0	5.7	6.3			5
6.5	6.2	6.8			5
8.0	7.7	8.3			7
9.0	8.7	9.3			7
9.1	8.8	9.4			7
10.0	9.7	10.3			7
12.0	11.7	12.3			9
12.7	12.4	13			9
14.9	14.6	15.2			11
15.0	14.7	15.3			11
18.0	17.7	18.3			13
21.0	20.7	21.3			15
Note: It is allowed to manufacture SVEZA PARQUET plywood of other thicknesses, number of plies, and tolerances by agreement between the manufacturer and the customer.					

3.6.2.1 Thickness and number of plies of SVEZA PARQUET plywood of C/C Grade should correspond to those in Table 2.1.

Table 2.1

Nominal thickness of plywood	Minimum thickness, mm	Maximum thickness, mm	Thickness tolerance, mm	Thickness tolerance within one panel, max mm	Number of plies, min.
5.9	5.6	6.2	±0.3	0.2	5
6.0	5.7	6.3			5
6.5	6.2	6.8			5
8.0	7.7	8.3			7
9.0	8.7	9.3			7
9.1	8.8	9.4			7
10.0	9.7	10.3			7
12.0	11.7	12.3			9
12.7	12.4	13.0			9
14.9	14.6	15.2			11
15.0	14.7	15.3			11
18.0	17.7	18.3			13
21.0	20.7	21.3			15

Note: It is allowed to manufacture SVEZA PARQUET plywood of other thicknesses, number of plies, and tolerances by agreement between the manufacturer and the customer.

3.6.3 SVEZA PARQUET plywood panels should be cut at a right angle.

Tolerance for squareness must not exceed 2 mm per 1 m of the panel edge length when controlled according to 6.4.1.

Difference in the diagonal lengths must not exceed 2 mm per 1 m of the panel edge length when controlled according to 6.4.2

3.6.4 Tolerance for straightness of edges must not exceed 2 mm per 1 m of panel length.

3.7 The reference designation for SVEZA PARQUET plywood should include the following information:

- name of the product with the wood species indication;
- type;
- type and combination of face veneer grades (by Latin letters and Roman numerals);
- emission class;
- surface treatment type;
- dimensions;
- reference to this Standard.

Example of a reference designation for SVEZA PARQUET birch plywood, of EXT/ΦCΦ, Premium type, combination of face veneer grades BB/CP (II/III), E1 emission class, sanded on both sides, 1,525 mm long, 1,525 mm wide and 10 mm thick:

Фанера SVEZA PARQUET березовая / birch plywood SVEZA PARQUET, EXT / ΦCΦ, PPR BB/CP (II/III), E1, S2S / III2, 1525 x 1525 x 10
 STO 52654419-002-2024

4 TECHNICAL REQUIREMENTS

4.1 Characteristics

4.1.1 Outer and inner layers of SVEZA PARQUET plywood are made of birch veneer.

The thickness of the veneer used for outer and inner plies of SVEZA PARQUET plywood should not exceed 2.0 mm.

The minimum thickness of outer plies after sanding should not be less than a half of the initial thickness.

4.1.2 No wood-inherent and manufacturing defects exceeding the limits specified in Appendix A are permitted in outer plies of SVEZA PARQUET plywood. The terms and definitions of wood and manufacturing defects are as specified in GOST 30427 and Appendix B.

4.1.3 No wood and manufacturing defects exceeding the limits specified in Appendix C are permitted in inner plies of SVEZA PARQUET Premium plywood.

4.1.4 Voids on edges of SVEZA PARQUET Premium plywood resulting from the inner plies defects (checks, knots) are permitted within the limits for the defects specified in Appendix C.

Voids on outer edges of SVEZA PARQUET Premium plywood resulting from the defects not specified in Appendix C are permitted if their depth in one ply is not more than 5 mm.

4.1.5 Depending on the quality of the outer layers, SVEZA PARQUET plywood is manufactured with the following grade combinations:

- SVEZA PARQUET Premium - BB/BB, BB/CP, and CP/CP grades;
- SVEZA PARQUET Standard - CP/CP, CP/C, and C/C grades.

4.2 The formaldehyde content and the formaldehyde release from SVEZA PARQUET plywood into the room air should correspond to the values specified in Table 3.

Table 3

Emission class	Formaldehyde content	Formaldehyde release		
		Chamber method, mg/m ³ of air	Chamber method per ASTM D6007, ppm	Gas analysis method, mg/m ² *h
E 0.5	Up to 4.0 inclusive	Up to 0.01 inclusive	Up to 0.04*	Up to 1.3 inclusive
E1	Over 4.0 and up to 8.0 inclusive	Over 0.01 and up to 0.124 inclusive	Up to 0.04*	Over 1.3 and up to 1.5 inclusive or less than 3.5 within 3 days after production
Note:				
* -is confirmed by an Executive order issued by CARB.				

4.3 The physical and mechanical properties of SVEZA PARQUET plywood are given in Table 4.

Table 4

Performance characteristics	Thick- ness, mm	Values
1 Moisture content, %	5.9-21	5-9
2 Moisture for SVEZA PARQUET Standard of C/C grade	5.9-21	5-12
3 Shear strength of the glue line, MPa, min.	5.9-21	1.0
4 Bending strength: - in length direction, MPa, min. - in width direction, MPa, min.	9-21	60 30
5 Modulus of elasticity at bending: - in length direction, MPa, min. - in width direction, MPa, min.	9-21	6000 3000
6 Tensile strength perpendicular to the board plane, MPa, min.: - SVEZA PARQUET Standard plywood - SVEZA PARQUET Premium plywood	5.9-21	not standardized 1.75

Note:

1. The stated normative values of moisture content are to be met when unpacking SVEZA PARQUET plywood at the customer's warehouse, provided the original manufacturer's packaging is intact.
2. The shear tests are carried out for different glue lines by agreement between the manufacturer and the client.
3. Before testing, the test pieces of SVEZA PARQUET samples are pre-treated by one of the following ways:
 - 3.1 Immersion for 1 h in boiling water;
 - 3.2 Immersion for 6 h in boiling water;
 - 3.3 Immersion for 4 h in boiling water, then drying in the ventilated drying oven for 16 h to 20 h at $(60 \pm 3) ^\circ\text{C}$, repeated immersion for 4 h in boiling water, cooling in water at $(20 \pm 3) ^\circ\text{C}$ for 1 hour;
 - 3.4 Immersion for (72 ± 1) h in boiling water followed by cooling in water for 1 h at $(20 \pm 3) ^\circ\text{C}$ – once per quarter;
 - 3.5 Immersion for 24 h in water at $(20 \pm 3) ^\circ\text{C}$ – once per quarter.

Methods 3.3, 3.4, 3.5 are used to prepare SVEZA PARQUET plywood for testing in case of testing new resins.

The pre-treatment of test pieces before testing is agreed upon between the manufacturer and the client.
4. The percentage of wood failure is not determined.

4.4 SVEZA PARQUET plywood volume is accounted for in cubic metres. The volume of one panel is calculated without rounding. The volume of a SVEZA PARQUET plywood pack and batch is calculated to an accuracy of 0.001 m^3 . The area of a SVEZA FANCY plywood panel is calculated to an accuracy of 0.01 m^2 , the area of panels in a batch – to an accuracy of 0.5 m^2 .

4.5 The marking is made using an indelible ink and applied on the edge of each birch plywood panel.

The marking when applied automatically should contain the following information:

- manufacturer (code or name);
- type;
- thickness
- grade;
- shift and/or sorter number;
- date and/or time of manufacture.

The marking when applied manually (stamp) should contain the following information

- manufacturer (code);
- shift.

The manual marking (stamp) is applied in the corner of the long or short edge.

It is allowed to apply one stamp onto 1 to 3 panels of birch plywood with the thickness 5.9 to 9 mm.

The marking should be applied in the following color:

- for birch plywood of EXT / $\Phi C \Phi$ type – in purple or blue.

By agreement between the manufacturer and the customer, it is allowed:

- not to apply any marking onto the birch plywood panels;
- to include additional information into the mandatory marking.

4.6 Stacking of SVEZA PARQUET plywood

SVEZA PARQUET plywood panels should be stacked in packs of 400, 600, 900 and 900 mm high sorted by type, grade, size and thickness.

As agreed upon between the manufacturer and the customer, SVEZA PARQUET plywood panels may be stacked in packs of other heights.

SVEZA PARQUET plywood panels in a pack should be stacked so that their grain directions coincide.

SVEZA PARQUET plywood panels in a pack should be stacked so that the higher grades face upward.

4.7 Packaging and marking of ready for shipment SVEZA PARQUET plywood packs

4.7.1 Packs of SVEZA PARQUET plywood should have proper packaging to ensure its integrity and prevent damage during transportation.

The main methods and types of packaging are regulated by SVEZA-Les LLC. As agreed upon between the manufacturer and the customer, there may be used other methods and types of packaging for SVEZA PARQUET plywood.

4.7.1.1 The packaging of SVEZA PARQUET Standard of C/C grade bundles does not include additional protection by polyethylene film.

4.7.2 The marking to packaged packs of SVEZA PARQUET plywood is applied in the form of labels. The text is written in the Russian and/or English language and the labels are placed parallelly or perpendicularly on two sides of the packaging. The text of both labels contains the same information:

- trademark;
- product name – SVEZA PARQUET birch plywood;
- sizes and thickness of SVEZA PARQUET plywood and thickness tolerances (if required);
- type and grade of SVEZA PARQUET plywood according to Appendix D;
- SVEZA PARQUET plywood category (EXT / ΦCΦ);
- surface machining of SVEZA PARQUET plywood;
- panels per pack;
- shift;
- SVEZA PARQUET plywood production date;
- emission class;
- order No. under Special Terms and Conditions (to be applied as agreed upon between the manufacturer and the customer);
- the regulatory technical document based on which SVEZA PARQUET plywood is produced;
- manufacturer name and address;
- certification markings and standard compliance mark;
- pictorial marking for handling of goods: “Keep dry” and “Use no hooks”;
- barcode if a data collection terminal (scanner) is available.

For convenience in warehouse operations additional marking may be applied in the form of a label or using a stencil.

5 ACCEPTANCE RULES

5.1 SVEZA PARQUET plywood is accepted in batches.

A batch is a certain number of SVEZA PARQUET plywood panels of the same type, grade and size.

One document should be issued for a batch, which contains the following information:

- trademark;
- manufacturer name and address;
- designation of SVEZA PARQUET plywood;
- batch size;
- the regulatory technical document based on which SVEZA PARQUET plywood is produced.

5.2 SVEZA PARQUET plywood panels quality and sizes are checked by selective sampling. The selective check involves random sampling of SVEZA PARQUET plywood panels according to GOST R 50779.12 in amount specified in Table 5.

Table 5

In panels

Batch size	Controlled value under paragraphs			
	3.6.1; 3.6.2; 3.6.3; 3.6.4		4.1.2	
	Sample size	Acceptance number	Sample size	Acceptance number
Up to 500	8	1	13	1
501 to 1,200	13	1	20	2
1,201 to 3,200	13	1	32	3
3,201 to 10,000	20	2	32	3

5.3 Moisture content, ultimate shear strength along bondline, ultimate strength in static bending parallel and perpendicular to grain of outer plies, modulus of elasticity in static bending parallel and perpendicular to grain of outer plies and ultimate tensile strength perpendicular to board plane should be monitored for each thickness and number of plies of SVEZA PARQUET plywood at least once a month.

5.4 The control of the ultimate tensile strength perpendicular to board plane involves selection of 1 panel out of 1000 panels but at least 1 panel from an order.

5.5 The control of the formaldehyde release involves selection of one panel of SVEZA PARQUET plywood from any size sample.

The formaldehyde release is controlled at least once every 7 days as part of the EXT formaldehyde emission group.

5.6 A batch is considered compliant with the requirements of this Standard and is accepted if in the samples:

- the number of SVEZA PARQUET plywood panels non-compliant with the requirements in terms of sizes, out of square length, straightness, wood and manufacturing defects is less than or equal to the acceptance number specified in Table 5;
- no panels of SVEZA PARQUET plywood have any blisters, delamination or bark pockets;
- the values of physical and mechanical properties correspond to the values specified in Table 4;
- the formaldehyde release values correspond to the standard values specified in Table 3.

6 CONTROL METHODS

6.1 Sampling is according to GOST 9620, GOST 27678, GOST 32155, GOST 30255, [1] - [2], [6].

6.2 The SVEZA PARQUET plywood length and width are measured to a tolerance of 1 mm at two points parallel to the edges at least 100 mm from the edges using a metal measuring tape in accordance with GOST 7502. The actual panel length (width) is the arithmetic mean of two measurement results.

6.3 The thickness of SVEZA PARQUET plywood is measured at a distance of at least 25 mm from the edges in the middle of each side of a panel.

The actual panel thickness is the arithmetic mean of four measurement results.

The following instruments are used to measure thickness:

- a thickness gauge according to GOST 11358 graduated not more than in 0.1 mm;

- a micrometer according to GOST 6507 graduated not more than in 0.1 mm.

The thickness variation in one panel of SVEZA PARQUET plywood is defined as difference between the maximum and the minimum thickness values after four measurements.

6.4 Out of square length of SVEZA PARQUET plywood panel

6.4.1 The out-of-straightness of SVEZA PARQUET plywood panel is measured in accordance with GOST 30427. It is measured using a try square in accordance with GOST 3749 and determined by measuring the Tolerances of the panel edges from the try square surface using a metal ruler in accordance with GOST 427 to a tolerance of 1 mm.

6.4.2 It is permitted to determine the out of square length based on the difference of the lengths of the panel diagonals measured using a metal measuring tape graduated in 1 mm in accordance with GOST 7502.

6.5 The deviation from straightness of SVEZA PARQUET plywood panel edges is determined by measuring the maximum gap between the panel edge and the edge of the metal ruler using a gauge in accordance with GOST 8925 to a tolerance of 0.2 mm.

6.6 The warp is according to GOST 30427.

6.7 The moisture content is according to GOST 9621, [3].

6.8 The ultimate shear strength along bondline is according to GOST 9624, [4].

6.9 The ultimate strength and modulus of elasticity in static bending are according to GOST 9625, [5].

6.10 The formaldehyde content is according to GOST 27678 (the said method is used as the reference method), formaldehyde release in the environment is according to GOST 30255, GOST 32155, and [1].

6.11 The ultimate tensile strength perpendicular to board plane is according to GOST 10636 [6].

6.12 The surface roughness is according to GOST 15612.

6.13 The measurement of wood and manufacturing defects is according to GOST 30427 and GOST 2140.

7 TRANSPORTATION AND STORAGE

7.1 SVEZA PARQUET plywood should be transported in fully enclosed vehicles in accordance with the rules for carriage of goods by the respective mode of transport.

The transportation conditions should prevent any increase of the SVEZA PARQUET plywood moisture content that may result in changes of geometric, physical, qualitative characteristics of the plywood and emission class.

7.2 Storage of SVEZA PARQUET plywood

SVEZA PARQUET plywood in an appropriate packaging should be stacked flat on a level surface on pallets or wooden battens indoors at a temperature of minus 40 °C to plus 50 °C and relative humidity of not more than 80%.

8 MANUFACTURER'S WARRANTY

The manufacturer guarantees that SVEZA PARQUET plywood quality complies with requirements of this Standard provided that the transportation and storage conditions are met.

The guaranteed shelf life of SVEZA PARQUET plywood of EXT category is 5 years from the day of receipt by the customer.

When SVEZA PARQUET plywood is intended for further processing or treatment, it is recommended that the manufacturer should be contacted to specify the plywood properties and specifications.

9 SAFETY REQUIREMENTS AND ENVIRONMENTAL PROTECTION

9.1 The content of hazardous chemicals released in the air of residential premises and public buildings when items made of SVEZA PARQUET plywood are used should not exceed the values specified by the requirements of [7], [8], [9].

9.2 SVEZA PARQUET plywood should be produced with the use of the materials and components permitted for use by the national sanitary and epidemiological supervision authorities.

9.3 The personnel engaged in SVEZA PARQUET plywood production should be at least 18 years old and have no medical contraindications. Medical examinations are conducted in accordance with the effective orders of the Ministry of Health of the Russian Federation.

9.4 The personnel engaged in SVEZA PARQUET plywood production should be provided with personal protective equipment according to the applicable regulations in compliance with GOST 12.4.011.

9.5 Specific activity of Cesium 137 in SVEZA OVERLAY plywood should not exceed the hygiene standards specified by the requirements of [10].

9.6 The standard SVEZA PARQUET plywood does not contain any raw materials, materials and components classified as hazardous waste.

9.7 SVEZA PARQUET plywood usually has a long service life and there are several disposal methods used. The disposal method for SVEZA PARQUET plywood should be selected taking into account the disposal requirements established by the legislation of different countries.

APPENDIX A

(mandatory)

Limits for wood and manufacturing defects of outer plies of SVEZA PARQUET plywood

The limits for wood and manufacturing defects of outer plies of SVEZA PARQUET plywood are specified in Table A.1.

Table A.1

WOOD AND MANUFACTURING DEFECTS	BB (II)	CP (III)	C (IV)
1. Pin knots	permitted		
2. Sound intergrown knots, light and dark	permitted up to 25 mm in diameter with a check of up to 1 mm in the maximum number of 10 per m ²	permitted with a check of up to 1.5 mm wide	permitted
3. Partially intergrown knots	permitted within the limits for intergrown knots up to 15 mm in diameter in the maximum number of 10 per m ²		permitted up to 40 mm in diameter without quantity restrictions
4. Non-adhering knots, falling out knots, knot holes (without bark inclusion)	permitted within the limits for intergrown knots up to 6 mm in diameter in the maximum number of 6 per m ²	permitted up to 6 mm in diameter without quantity restrictions	permitted up to 40 mm in diameter without quantity restrictions (permitted bark inclusion at knots up to 5 mm wide)
5. Small checks	permitted up to 300 mm long in the maximum number of 5 per metre of the panel width	permitted at the edges and in the middle	

Appendix A, continued

WOOD AND MANUFACTURING DEFECTS	BB (II)	CP (III)	C (IV)
6. Large checks	permitted of a length of up to 250 mm, width of up to 2 mm in the maximum number of 3 per metre of the panel width provided that they are repaired with a filler	permitted of a length of up to 600 mm, width of up to 2 mm in the maximum number of 2 per metre of the panel width + permitted of a length of up to 600 mm, width of up to 5 mm provided that they are repaired with a filler	permitted of a length of up to 800 mm, width of up to 10 mm, without quantity restrictions
7. Open joint of jointed veneer	no jointed veneer is permitted		
8. Irregularities in wood structure (sloping grain, curly grain, swirl, small knots from dormant buds)	permitted		
9. Defects of wood structure (intergrown inbark, light and dark)	light inbark is permitted, dark inbark is permitted within the size range for intergrown knots		
10. Defects of wood structure (open inbark)	permitted in the total number within the limits for non-adhering knots		
11. Sound discoloration (false heartwood)	permitted up to 25% of the panel surface	permitted	
12. Sound discoloration (spots, streaks, streak marks)	permitted		
13. Sound discoloration (group streaks)	permitted of a size of not more than 60x40 mm in the maximum number of 1 per m ²	permitted	
14. Discoloration due to oxidation; sapwood discoloration caused by wood-staining fungi (blue stain, sapwood color stains), discoloration during storage	permitted		

Appendix A, continued

WOOD AND MANUFACTURING DEFECTS	BB (II)	CP (III)	C (IV)
15. Biological defects (wormhole)	permitted in the total number within the limits for non-adhering knots		
16. Discolouration with partial wood damage	not permitted		
17. Repairing of knots and holes with wood plugs	permitted in the maximum number of 8 per m ² with plugs of different shapes and sizes, the wood colour and grain direction should correspond to the wood colour and grain direction of the outer ply	permitted using plugs of different shapes and sizes with a gap of 1 mm on one side or 0.5 mm on both sides	permitted
18. Double plug	permitted in the maximum number of 1 per m ²	permitted	
19. Repairing of large checks with fillers or veneer plugs	large checks up to 2 mm wide should be repaired with a filler	large checks up to 5 mm wide should be repaired with a filler	permitted
20. Bulges due to overlapping inner plies (marks indicating plies overlap)	permitted of a width of up to 3 mm in the maximum number of 3 per panel	permitted of a width of up to 5 mm in the maximum number of 5 per panel	permitted
21. Overlap	permitted of a length of up to 100 mm, width of up to 2 mm in the maximum number of 1 per metre of the panel width	permitted of a length of up to 300 mm, width of up to 2 mm in the maximum number of 2 per metre of the panel width	permitted
22. Marks left by tools and equipment (marks left by battens, stripes)	permitted up to 10 % of the panel surface	permitted	
23. Glue penetration	permitted up to 2 % of the panel surface	permitted up to 5 % of the panel surface	permitted

Appendix A, end

WOOD AND MANUFACTURING DEFECTS	BB (II)	CP (III)	C (IV)
24. Marks left by tools and equipment, pinholes, kerfs	permitted in the total number within the limits for non-adhering knots		
25. Scratches, ridges, bumps, dents, crests	not permitted	permitted up to 0.5 mm high (deep), up to 120 mm long, up to 10 mm wide	permitted
26. Warp	not considered in plywood under 6.5 mm thick, permitted maximum deflection of 15 mm per 1 m of the length of the diagonal of a plywood panel over 6.5 mm thick		
27. Blisters, delamination (incl. in bending), bark pocket	not permitted		
28. Sander skips (non-uniform sanding)	not permitted		
29. Sanding through	not permitted	permitted up to 1% of the panel surface	permitted
30. Metal inclusions	not permitted	permitted non-ferrous metal staples	
31. Edge defects after trimming, missing veneer	permitted of a width of up to 2 mm		permitted of a width of up to 10 mm
32. Coarse peeling	permitted up to 5 % of the panel surface	permitted up to 15 % of the panel surface	permitted
34. Waviness (for sanded plywood), fuzzy grain, ripple	not permitted	permitted	
33. Surface roughness	roughness R _m is according to GOST 7016, μm, not more than 100		
34. Pocket (without bark inclusion)	permitted in the total number within the limits specified in par. 13 of this Appendix	permitted	
35. Glued in pieces of veneer	not permitted	permitted of a length of up to 150 mm, width of up to 30 mm in the maximum number of 1 per panel	permitted
36. Gradient spots	Not permitted for products with	permitted	

	at least one side of these grades	
37. Weak edge	not permitted for plywood with at least one side of these grades	permitted
38. Burnt edge	not permitted for plywood with at least one side of these grades	permitted
39. Ink traces from panel's marking	not permitted	

Note: No defects not specified in Appendix A are permitted.

APPENDIX B

(mandatory)

Terms and definitions of manufacturing defects of outer plies of SVEZA PARQUET plywood

The terms and definitions of manufacturing defects of outer plies of SVEZA PARQUET plywood are specified in Table B.1.

Table B.1

Wood and manufacturing defects	Definition
Glued in pieces of veneer	Pieces of veneer glued (pressed) in plywood surface
Coarse peeling	Plywood surface has closely located shallow depressions resulting from local wood removal during peeling
Pocket	Cavity inside wood or between growth rings that is filled with gums
Gradient spots (color variations in form of a screen)	Color variations in form of a screen on the plywood surface, either a dark one on a light background or light on a dark background.
Weak edge	A defect in form of an edge area with protruding/torn-out wood fiber bundles characterized by decreased density
Burnt edge	A surface area darkened by partial charring as a reaction to high temperature arising by the increased friction of cutting tools on wood

APPENDIX C

(mandatory)

Limits for wood and manufacturing defects of inner plies of SVEZA PARQUET Premium plywood

The limits for wood and manufacturing defects of inner plies of SVEZA PARQUET Premium plywood are given in Table C.1

Table C.1

WOOD AND MANUFACTURING DEFECTS	1 core (S1)	2 core (S2)
1. Pin knots	permitted	
2. Sound intergrown knots, light and dark	permitted	
3. Partially intergrown knots	permitted of not more than 20 mm in diameter	permitted of not more than 40 mm in diameter
4. Non-adhering knots, falling out knots, knot holes (without bark inclusion), tobacco knots	permitted of not more than 15 mm in diameter	permitted of not more than 40 mm in diameter
5. Small checks	permitted without restrictions	
6. Large checks	permitted of a width of not more than 2 mm	permitted of a width of not more than 5 mm
7. Use of jointed veneer. Gap between adjacent pieces of jointed veneer	no jointed veneer is permitted	
8. Use of spliced veneer	permitted	
9. Bark	not permitted	
10. Discoloration due to oxidation; sapwood discoloration caused by wood-staining fungi (blue stain, sapwood color stains), discoloration during storage without wood damage	permitted	
11. Discolouration with partial wood damage	permitted not more than 5 % of the panel surface	permitted not more than 25 % of the panel surface

Appendix C, end

WOOD AND MANUFACTURING DEFECTS	1 core (S1)	2 core (S2)
12. Biological defects (wormhole), marks left by tools and equipment (including pinholes from pike poles)	permitted of the maximum size of 15 mm	permitted of the maximum size of 40 mm
13. Repair of checks, knot holes	permitted using veneer plugs of any shape and size	
14. Soot, sooty dust, combustion products on veneer surface	not permitted	
15. Sound discoloration (false heartwood, spots, streaks, group streaks)	permitted	
16. Coarse peeling	permitted	
17. Open inbark without bark inclusion	permitted of a width of not more than 2 mm	permitted of a width of not more than 5 mm
18. Other defects	permitted provided that they do not affect the plywood quality and sizes specified in this Standard	

APPENDIX D

(mandatory)

Designation of SVEZA PARQUET plywood types and grades

The designation of SVEZA PARQUET plywood types and grades is given in Table D.1.

Table D.1

Latin letters	Roman numerals	The inscription on the label under "Grade"
SVEZA PARQUET Premium Plywood		
BB/HB	II/II	PPR BB/BB (II/II)
BB/CP	II/III	PPR BB/CP (II/III)
CP/CP	III/III	PPR CP/CP (III/III)
SVEZA PARQUET Standard Plywood		
CP/CP	III/III	PST CP/CP (III/III)
CP/C	III/IV	PST CP/C (III/IV)
C/C	IV/ IV	PST C/C(IV/ IV)

APPENDIX E
(mandatory)

SVEZA PARQUET Premium plywood lay-up diagram

SVEZA PARQUET Premium plywood lay-up diagram is shown in Figure 1.

Outer ply	S1	S2	S2	S2	...	S2	S2	S2	S1	Outer ply
I	-	I	-	I	...	I	-	I	-	I

Figure 1

Bibliography

- | | |
|--|--|
| [1] DIN EN ISO 12460-3 | Wood-based panels – Determination of formaldehyde release – Part 3. Gas analysis method |
| [2] EN 326-1-1994 | Wood-based panels – Sampling, cutting and inspection – Part 1: Sampling and cutting of test pieces and expression of test results |
| [3] EN 322:1993 | Wood-based panels – Determination of moisture content |
| [4] EN 314-1:2004 | Plywood – Bonding quality – Part 1: Test methods |
| [5] EN 310:1993 | Wood-based panels – Determination of modulus of elasticity in bending and of bending strength |
| [6] DIN EN 319:1993 | Particleboards and fibreboards. Determination of tensile strength perpendicular to the plane of the board |
| [7] GN (hygienic standards) 2.1.6.3492-17 | Maximum allowable concentrations (MAC) of pollutants in the atmospheric air of urban and rural settlements |
| [8] GN (hygienic standards) 2.1.6.2309-07 | Safe reference levels of impact (SRLI) of pollutants in the atmospheric air of populated areas. Hygienic standards |
| [9] GN (hygienic standards) 2.1.6.2328-08 | Supplement to GN 2.1.6.2309-07 Safe reference levels of impact (SRLI) of pollutants in the atmospheric air of populated areas. Hygienic standards |
| [10] | Uniform sanitary, epidemiological and hygienic requirements to the goods subject to sanitary and epidemiological supervision (control) approved by Resolution of the Customs Union Commission No. 299 dated May 28, 2010 |
| [11] DIN EN 13986
(German version of EN 13986-2004+A1-2015) | Wood-based panels for use in construction.

Characteristics, evaluation of conformity and marking |

UDC (Universal Decimal Classification) 674-415:006.354 ICS (International Classification for Standards) 79.060.10 OKPD (Russian Classification of Products by Economic Activities) 2 16.21.12.119

Keywords: company standard, SVEZA PARQUET plywood, sizes, technical requirements, packaging, marking, inspection methods, transportation, storage, warranty.

Standard developer company
SVEZA-Les LLC