

CORPORATE STANDARD

SVEZA DRAWER BIRCH PLYWOOD Technical Specifications

STO 52654419-004-2018

Preface

Development purposes and objectives, as well as the use of corporate standards in the Russian Federation, are stated by Federal Law 184-FZ *On Technical Regulation* of December 27, 2002 and Federal Law of June 29, 2015.

No. 162-FZ On Standardization in the Russian Federation.

Development and execution rules are stated by GOST R 1.0-2012 Standardization in the Russian Federation. General provisions and GOST R 1.4-2004 Standardization in the Russian Federation. Corporate Standards. General Provisions, subject to GOST R 1.5-2012, Standardization In the Russian Federation. National standards. Regulations on arrangement, representation, execution, and designation.

Information on Standard

| 1 DEVELOPED AND INTRODUCED by SVEZA Forest, a limited liability company |
|----------------------------------------------------------------------------------------|
| 2 APPROVED AND ENACTED by order of the General Director of OOO SVEZA Forest dated 20No |
| 3 APPROVED by OOO SVEZA Forest Sales and Marketing Director R.A. Muzyka, 20 |
| 4 FIRST RELEASE |

5. THE EXPERT CONCLUSION, dated 03.05.2018, HAS BEEN RECEIVED from E.Yu. Tretyakova, Expert in the confirmation of the conformity of woodworking industry products, Head of the Fantest NP Certification Body, and member of Technical Committee on Standardization TK 121.

This standard may only be used for work with the written consent of OOO SVEZA Forest.

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CORPORATE STANDARD

SVEZA DRAWER BIRCH PLYWOOD Technical Specifications

BIRCH PLYWOOD SVEZA DRAWER Technical Requirements

| Effective since | | , 20 |
|------------------------|--|------|
| | | |

1 SCOPE

This standard applies to SVEZA DRAWER birch plywood (hereinafter referred as SVEZA DRAWER plywood), used as the main material in manufacture of parts, boxes, furniture components or other independent products in the form of boxes and other products, assuming the cutting of plywood with circular saws and end-mill cutters, as well as machining of sawn faces and edges.

2 REGULATORY REFERENCES

This standard hereby includes regulatory references to the following standards:

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

GOST 427-75 Metal measuring rulers. Technical Specifications

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

GOST 3749-77 90° L-squares. Specifications

GOST 6507-90 Micrometers. Specifications

GOST 7016-2013 Products of wood and wooden materials. Surface roughness parameters

GOST 7502-98 Metal measuring tapes. Specifications

GOST 8925-68 Feeler gauges for machine tool accessories Design

GOST 9620-94 Glued laminated timber. Sampling and general requirements for testing

GOST 9621-72 Glued laminated timber. Methods for determination of physical properties

GOST 9624-2009 Glued laminated timber. Method for determination of shear strength

GOST 9625-2013 Glued laminated timber. Method of determining of static bending strength and modulus of elasticity in static bending

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

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

GOST 18321-73 Statistical quality control. Random sampling methods for custom production

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

GOST 30255-2014 Furniture, timber and polymer materials. Method for determination of formaldehyde and other volatile chemicals in the air of climate chambers

GOST 30427-96 General-purpose plywood. General rules for classification by appearance

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

Note: When using this standard, it is advisable to check the validity of the standards referenced against the National Standards reference index.

3 CLASSIFICATION AND DIMENSIONS

- 3.1 SVEZA DRAWER plywood is classified according to the glue joint water resistance as INT / FK- water- resistant plywood, glued using carbamide-formaldehyde adhesives, for indoor use.
- 3.2 Depending on surface appearance, the SVEZA DRAWER plywood is divided into grades: B, BB, CP, (Latin letters) and I, II, III (Roman numerals).

The grade designator is indicated by both Latin letters and Roman numerals. DR letters are added before the grade designation.

- 3.3 As for surface mechanical processing, SVEZA DRAWER plywood is available sanded on both sides S2S / III2.
 - 3.4 Dimensions
- 3.4.1 Length and width of SVEZA DRAWER sheets should be as shown in Table 1 below.

Table 1

In millimeters

| Length (width) of plywood sheet | Maximum deviation |
|---------------------------------|-------------------|
| 1220; 1250 | ±3.0 |
| 1525 | ±4.0 |
| 2440; 2500 | ±4.0 |
| | |

Notes:

^{1.} SVEZA DRAWER plywood may be produced with other dimensions and maximum deviations by agreement between the manufacturer and the customer

^{2.} The SVEZA DRAWER plywood sheet length is measured along the grain of the face plies.

3.4.2 Thickness and number of plies of SVEZA DRAWER plywood should be as shown in Table 2 below.

Table 2

| Nominal Thickness of plywood (mm) | Minimum thickness (mm) | Maximal thickness (mm) | Maximum deviation (mm) | Thickness variation in one sheet, maximum (mm) | Number of plies, minimum |
|--------------------------------------------|------------------------------|------------------------------|------------------------------|------------------------------------------------|--------------------------|
| 5.0 | 4.7 | 5.3 | | | 4 |
| 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 | 10.2 | 0.2 | 7 |
| 10.0 | 9.7 | 10.3 | ± 0.3 | 0.2 | 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 |

Note - SVEZA DRAWER plywood is permitted to be produced with other thicknesses, number of plies, and maximum deviations by agreement between the manufacturer and the customer

3.4.3 SVEZA DRAWER plywood sheets must be cut at a right angle.

Out-of-squareness must not exceed 2 mm per 1 m of the sheet edge length, when checked as per section 6.4.1.

Difference in the diagonal lengths must not exceed 2 mm per 1 m of the sheet edge length, when checked as per section 6.4.2.

- 3.4.4 Out-of-straightness for the edges must not exceed 2 mm per 1 m of the sheet length.
- 3.5 SVEZA DRAWER plywood marking must include the following information:
 - product designation with wood species specified;
 - grade;
 - combination of face ply grades (using Latin letters and Roman numerals);
 - emission class;
 - surface treatment type;
 - dimensions:
 - this Standard number.

Example of marking for SVEZA DRAWER birch plywood INT / FK with a combination of face ply grades B/BB (I/II), emission class E1, both sides sanded, 1,525 mm length, 1,525 mm width, 10 mm thickness:

Фанера SVEZA DRAWER березовая / Birch Plywood SVEZA DRAWER, INT / FK, DR B/BB (I/II), E1, S2S / III2, 1525 x 1525 x 10 STO 52654419-004-2018

4 TECHNICAL REQUIREMENTS

- 4.1 Characteristics
- 4.1.1 Birch veneer of various thickness is used for core and face plies of SVEZA DRAWER plywood.

Minimum thickness of face plies after sanding should be not less than half the initial thickness of the face ply.

- 4.1.2 In outer veneers of the SVEZA DRAWER plywood, wood flaws and processing defects that exceed the limits specified in Appendix A are not allowed. Terms and definitions of wood flaws and processing defects are as per GOST 30427 and Appendix B.
- 4.1.3 SVEZA DRAWER plywood is available in any combination of the grades mentioned in clause 3.2 herein, depending on the quality of the outer plies.
- 4.2 Formaldehyde content in the plywood and formaldehyde emission from SVEZA DRAWER plywood into the room air must comply with the value specified in Table 3.

Table 3

| Emission | Formaldehyde content | Formaldehyde release | | |
|----------|------------------------|----------------------------|-----------------------------------|--|
| class | per 100 grams of ab- | Chamber | Gas analysis method | |
| | solutely dry weight of | method | $(mg/m^2 \cdot h)$ | |
| | plywood, mg | (mg/m ³ of air) | | |
| | | | Up to 3.5 inclusive, or less than | |
| E1 | Up to 8.0 inclusively | Up to 0.124 | 5.0 during 3 days after manufac- | |
| | | | turing | |

4.3 Physical and mechanical performance of SVEZA DRAWER plywood is specified in Table 4.

Table 4

| Parameter name | Thickness | Physical and mechani- |
|--------------------------------------------------|------------|-----------------------|
| | (mm) | cal |
| | | parameter values |
| 1 Moisture, max (%) | 5.0 - 15.0 | 10 |
| 2 Shear strength for shearing through adhesive | 5.0 - 15.0 | |
| layer (MPa), min | | 1.0 |
| 3 Ultimate static bending strength: | 9.0 - 15.0 | |
| — along the grain of face plies (MPa), min | | |
| — across the grain of face plies (MPa), min | | 45 |
| | | |
| | | 30 |
| 4 Modulus of elasticity in static bending: | 9.0 - 15.0 | |
| — along the grain (MPa), min | | |
| — across the grain (MPa), min | | 5000 |
| | | 3000 |
| 5. Tensile strength perpendicular to the bonding | 5.0 - 15.0 | |
| plane (MPa), at least | | |
| | | 1.2 |

Notes:

- 1. Indicated moisture limits should be adhered when shipping the SVEZA DRAWER plywood from the manufacturer's warehouse
- 2. Tests of INT / FK grade SVEZA DRAWER plywood shall be performed after soaking samples in water at (20 \pm 3) $^{\circ}\text{C}$ for 24 hours.
- 3. Percentage of destruction in wood is determined visually
- 4. Adhesive layer cleaving test has to be performed in various plies of adhesive as per agreement between the manufacturer and customer
- 4.4 SVEZA DRAWER plywood stock is accounted for in cubic meters. One sheet's volume is calculated without regard to rounding. The volume of assembled SVEZA DRAWER plywood stacks and batches is calculated with accuracy of 0.001 m³. The area of a single SVEZA DRAWER plywood sheet is calculated with accuracy of 0.01 m², and the area of the sheets in a batch with accuracy of 0.5 m².
- 4.5 Marking shall be applied using indelible black or green ink on the edge of each SVEZA SVEZA DRAWER plywood sheet as a stamp or text without margins. Marking must include the following information:
 - plywood type,
 - plywood grade,
 - manufacturer (number or name);
 - thickness and/or sorter number.

Flat face should not be stamped.

Edge stamp is placed in the corner of the transverse or longitudinal edge.

For the SVEZA DRAWER plywood with a thickness of 5-9 mm the stamp may be placed once for each (1-3) sheet.

Allowable by agreement between the manufacturer and the customer:

- to not mark SVEZA SVEZA DRAWER plywood sheets;
- to not include additional information in the mandatory marking.
- 4.6 Packing of SVEZA DRAWER plywood

The SVEZA DRAWER plywood must be packed into 400, 600 and 900 mm high stacks according to grade, size, and thickness.

By agreement between the manufacturer and the customer, the SVEZA DRAWER plywood may be packed in stacks of a height other than that specified.

The SVEZA DRAWER plywood in the stack must be placed with the grain running in the same direction.

The SVEZA DRAWER plywood in the stack should be placed so that the higher grade should face the top.

- 4.7 Packing and labeling of ready stacks of SVEZA DRAWERplywood
- 4.7.1 Packing of the SVEZA DRAWER plywood stacks shall ensure their integrity and preserve the stacks during transportation.

Main packing methods and types are regulated by OOO SVEZA Forest. By agreement of manufacturer with the customer, other types and methods of plywood packing may be used.

- 4.7.2 Marking of packed SVEZA DRAWER plywood stacks shall be performed with labels. The label text shall be in Russian and/or English, placed on two parallel or perpendicular side strips. Both labels shall bear the same information:
 - trademark:
- product designation Birch Plywood SVEZA DRAWER / Фанера SVEZA DRAWER березовая;
 - dimensions, plywood thickness and thickness tolerance value (if required);
 - plywood grade in accordance with Appendix C;
 - plywood grade (INT / FK);
 - type of machining used for the plywood face;
 - number of sheets in a stack;
 - working shift;
 - plywood production date;
 - emission class;
- order No. as per Special Terms and Conditions (by agreement with the customer);
 - reference document governing plywood manufacture;
 - manufacturer name and address;
 - certification signs and quality control marks;
 - handling signs: "Keep Dry" and "Use No Hooks";
 - barcode (if a data collection terminal (scanner) is available).

For more streamlined storage operations, additional marking may be applied using labels or stencils.

5 ACCEPTANCE REQUIREMENTS

5.1 SVEZA DRAWER plywood must be accepted in lots.

Lot means a certain number of SVEZA DRAWER plywood sheets of the same grade and size.

For each lot, a single supporting document has to be issued, containing the following information:

- trademark;
- manufacturer name and address;
- plywood mark;
- lot size;
- name of the process standard to which the plywood should comply.
- 5.2 The quality and dimensions of SVEZA SVEZA DRAWER plywood sheets shall be checked by means of selective sampling and testing. In sampling inspection, sheets of SVEZA DRAWER plywood are selected by means of "random" sampling as per GOST 18321 in the quantity stated in Table 5.

Table 5
In sheets

| Lot size | Controlled parameter as per sections herein | | | |
|-------------|---------------------------------------------|---|-------------|------------|
| | 3.4.1; 3.4.2; 3.4.3; 3.4.4 | | 4. | 1.2 |
| | Sample size Acceptance | | Sample size | Acceptance |
| | number | | | number |
| Up to 500 | 8 | 1 | 13 | 1 |
| 501-1200 | 13 | 1 | 20 | 2 |
| 1201-3200 | 13 | 1 | 32 | 3 |
| 3201-10,000 | 20 | 2 | 32 | 3 |

- 5.3 Moisture, shear strength through the adhesive layer, strength in static bending across and along the outer veneers, modulus of elasticity for static bending along and across the grains of the outer plies should be checked for each thickness and number of plies of SVEZA DRAWER plywood at least once per month.
- 5.4 To check the tensile strength perpendicular to the sheet surface, 1 sheet per 1,000 should be sampled, but not less than 1 sheet per order.
- 5.5 For the purpose of formaldehyde content and/or emission testing, one SVEZA DRAWER plywood sheet shall be selected from any sampling volume.

The formaldehyde content reading shall be tested at least once every 15 days.

The formaldehyde emission reading shall be tested at least once every 7 days.

- 5.6 The lot is considered as compliant to the applicable requirements of the standard and are accepted, provided that in the samples:
- the number of SVEZA SVEZA DRAWER plywood sheets not complying with the standard requirements in terms of dimensions, out-of-squareness, out-of-straightness, wood defects, and processing defects, shall be less than or equal to the acceptance number established in Table 5;

- all SVEZA DRAWER plywood sheets are free from blisters, ply splitting, or bark patch;
- physical and mechanical parameters are compliant with the ranges set forth in Table 4;
- the formaldehyde content and/or emission are compliant with limits set forth in Table 3.

6 TEST METHODS

- 6.1 Sampling procedure as per GOST 9620, GOST 27678, GOST 32155, GOST 30255, [1]—[2], [6].
- 6.2 SVEZA SVEZA DRAWER plywood length and width are measured at two points parallel to the edges, at least 100 mm from edges with a metal tape measure according to GOST 7502 with a tolerance of 1 mm. The arithmetic mean value of the two measurements is considered the actual length (width) of the sheet.
- 6.3 SVEZA SVEZA DRAWER plywood thickness is measured at least 25 mm from edges, in the middle of each sheet's face.

The arithmetic mean value of the four measurements is considered the actual thickness of the sheet.

The following devices are used for thickness measurement:

- thickness gauge as per GOST 11358 with the scale division not exceeding 0.1 mm;
- micrometer as per GOST 6507 with the scale division not exceeding 0.1 mm:

Thickness difference in one SVEZA DRAWER plywood sheets defined as the difference between the maximum and the minimum thickness of the four measurements.

- 6.4 Out-of-squareness of a sheet of SVEZA DRAWER plywood
- 6.4.1 Out-of-squareness of SVEZA DRAWER plywood sheet shall be measured as per GOST 30427. The out-of-squareness shall be measured with an L-square as per GOST 3749. Out-of-squareness is defined by measuring the maximum deviation of the sheet edges from the L-square surface using a metal ruler in accordance with GOST 427 with a tolerance of 1 mm.
- 6.4.2 Out-of-squareness may be also determined by the difference of diagonal lines of the sheet measured by metal tape measure as per GOST 7502 with the scale division 1 mm.
- 6.5 Out-of-straightness of a SVEZA DRAWER plywood sheet's edges shall be determined by measuring the maximum gap between the sheet's edge and the edge of the metal ruler using a feeler gauge according to GOST 8925 with an error of 0.2 mm.
- 6.6 Warping shall be checked with a ruler as per GOST 427 placed over the diagonal of the SVEZA DRAWER plywood sheet on a level horizontal surface, and measurement of maximum deflection with a feeler gauge as per GOST 8925 with an error of 1 mm.

- 6.7 Moisture GOST 9621, [3].
- 6.8 Shear strength through adhesive layer as per GOST 9624, [4].
- 6.9 Strength and modulus of elasticity in static bending per GOST 9625, [5].
- 6.10 Formaldehyde content as per GOST 27678; formaldehyde emission into the environment as per GOST 30255, GOST 32155 and [1].
 - 6.11 Tensile strength perpendicular to the panel surface as per [6].
 - 6.12 Surface roughness as per GOST 15612.
- 6.13 Measurement of wood flaws and processing defects as per GOST 30427 and GOST 2140.

7 TRANSPORTATION AND STORAGE

7.1 SVEZA DRAWER plywood should be transported in enclosed vehicles according to the haulage rules applicable to the respective means of transport.

Contact with moisture should be avoided during transportation in order to avoid changes in geometry, physical parameters and quality of the SVEZA DRAWER plywood, and in order to keep the emission class stable.

7.2 Storage of SVEZA DRAWER plywood

The SVEZA DRAWER plywood must be stored indoor in stacks placed horizontally on pallets or on wooden shims, at a temperature between -40 °C and +50 °C and relative humidity up to 80%.

8 MANUFACTURER'S WARRANTY

The manufacturer guarantees conformance of SVEZA DRAWER plywood to the quality requirements hereby if transportation and storage conditions are satisfied.

The INT/ FK grade SVEZA DRAWER plywood guaranteed shelf life is 3 years following the day of receipt by customer.

If the SVEZA DRAWER plywood is to be used for further processing, it is recommended to contact the manufacturer for more details about the properties and specifications of the plywood.

9 SAFETY AND ENVIRONMENTAL REQUIREMENTS

- 9.1 The content of hazardous chemicals emitted into residential or public building air during use of SVEZA DRAWER plywood products must not exceed requirements under items [7], [8].
- 9.2 Requirements [9] for products manufactured using SVEZA Drawer plywood shall be achieved by manufacturing solutions and protective coatings by furniture products manufacturers.

- 9.3 SVEZA DRAWER plywood must be produced using materials and components approved by the national sanitary and epidemiological inspection authorities.
- 9.4 Only persons age 18 and older with a clean bill of health are allowed to work in SVEZA DRAWER plywood production. Medical examinations are conducted according to the applicable instructions from the Ministry of Health of the Russian Federation.
- 9.5 Personnel engaged in SVEZA DRAWER plywood manufacturing must be provided with personal protective equipment according to the applicable regulations under GOST 12.4.011.
- 9.6 Specific activity of Cesium 137 in SVEZA DRAWER plywood must not exceed health standards set forth in [10].
- 9.7 The standard SVEZA DRAWER plywood composition does not include raw materials or components classified as hazardous waste.
- 9.8 SVEZA DRAWER plywood usually has a long service life, and there are a number of ways to recycle it. SVEZA DRAWER plywood must be recycled taking into account the ordinances regarding recycling in the effective laws of various countries.

APPENDIX A (mandatory)

Limit values for wood flaws and processing defects — as per GOST 30427 for outer plies of SVEZA DRAWER plywood

Limit values for wood flaws and processing defects as per GOST 30427 for outer plies of SVEZA DRAWER plywood are presented in Table A.1

Table A.1

| WOOD FLAWS AND | В | BB | СР |
|-----------------------------------|--------------------------------------------|--------------------------------------------|---------------------------------------------|
| PROCESSING DEFECTS | (I) | (II) | (III) |
| 1. Pin knots | | allowable | |
| 2. Sound knots, intergrown, light | allowable up to 15 mm in diameter with | light ones up to 25 mm in di- | allowed with the crack up to |
| and dark | cracks up to 0.5 mm width, no more than | ameter with cracks up to 1 mm | 1 mm width |
| | 5 per m ² | width, 10 m ² maximum — al- | |
| | | lowed | |
| 3. Partially intergrown knots | allowable with dimensions and quantity | intergrown knots up to 15 mm ir | n diameter, 10 m ² maximum — al- |
| | as per Section 4 of this Appendix | wed | |
| 4. Black knots, loose knots, knot | allowed including intergrown knots up to 6 | 6 mm in diameter, 3 m ³ maximum | allowable: any number, with di- |
| holes (no bark inclusions) | | | ameters up to 6 mm |
| 5. Closed cracks | allowable: up to 5 per meter of sheet | allowable: up to 5 per meter of | edge and middle cracks are allow- |
| | width, up to 200 mm long | sheet width, up to 300 mm long | able |
| 6. Open cracks, open joint on | not allowable | allowable: up to 3 per meter of | allowable: up to 600 mm long and |
| spliced veneer | | sheet width, up to 250 mm long | up to 2 mm wide, no more than 2 |
| | | and up to 2 mm wide | per meter of sheet width + allow- |
| | | | able: up to 600 mm long and up to |
| | | | 5 mm wide, provided these are |
| | | | filled up using sealing agents |

Appendix A — continued

| WOOD FLAWS AND | В | BB | CP |
|--------------------------------------|---------------------------------------------------------------------|-------------------------------------|-----------------------------------|
| PROCESSING DEFECTS | (I) | (II) | (III) |
| 7. Timber structure flaws (diago- | | allowable | |
| nal grain, swirly grain, burls, bud | | | |
| traces) | | | |
| 8. Timber structure flaws | only light inbark is allowable; dark in- | light inbark allowable, dark inba | rk allowable within dimensions of |
| (light/dark inner inbark) | bark is allowable in the number and size | jointe | d knots |
| | corresponding to the number of black | | |
| | knots. | | |
| 9. Timber structure flaws (surface | allowable within the | e total number under the black knot | requirements |
| inbark) | | | |
| 10. Sound discoloration (false | not allowable | up to 25 % of surface — allowa- | up to 75 % of surface — allowa- |
| heartwood) | | ble | ble |
| 11. Sound discoloration (stains, | allowable bright, no more than 3 per m ² | allowable: up to 250 mm long | allowable |
| streaks, streak traces) | of sheet, up to 175 mm long and up to 4 | and up to 10 mm wide in total | |
| | mm wide | not more than 10 per m ² | |
| 12. Sound discoloration (grouped | allowable: bright, up to 30x30 mm, not | allowable: up to 60x40 mm, not | allowable |
| streaks) | more than 1 per m ² | more than 1/m ² | |
| 13. Chemical colorations, sap | allowable: up to 30% | allowable: up to 50% | allowable: up to 75% |
| stains (blue and colored sap | of the sheet surface area | of the sheet surface area (false | of the sheet surface area (false |
| stains), discoloration after storage | | heartwood included) | heartwood included) |
| of wood without compromising | | | |
| the wood integrity | | | |
| 14. Biological damage (worm- | allowable within the total number under the black knot requirements | | |
| holes) | | | |

Appendix A — continued

| WOOD FLAWS AND | В | BB | СР | |
|----------------------------------|---------------|---------------------------------------------|---------------------------------|--|
| PROCESSING DEFECTS | (I) | (II) | (III) | |
| 15. Discoloration with partial | | not allowable | | |
| wood integrity damage | | | | |
| 16. Patching of knots and holes | not allowable | allowable only with oval-shaped | allowable only with oval-shaped | |
| with wood inserts before press- | | inserts, not more than 8 inserts | inserts with 1 mm gap from one | |
| ing operation | | per m ² , provided that color of | side or 0.5 mm gap from both | |
| | | timber and direction of grains | sides | |
| | | are similar to those of the outer | | |
| | | ply | | |
| 17. Double insert | not allowable | allowable: not more than 1/m ² | allowable | |
| 18. Patching open cracks with | not allowable | | | |
| veneer patches is | | | | |
| 19. Faceplate bulges (imprinted) | not allowable | allowable: up to 3 mm wide, not | allowable: up to 5 mm wide, not | |
| | | more than 3 per sheet | more than 5 per sheet | |
| 20. Overlaps | not allowable | allowable: up to 1 per meter of | allowable: up to 2 per meter of | |
| | | sheet width, up to 100 mm long | sheet width, up to 300 mm long | |
| | | and up to 2 mm wide | and up to 2 mm wide | |
| 21. Stains from manufacturing | not allowable | up to 10% of surface — allowa- | allowable | |
| (beam traces, strips) | | ble | | |
| | | | | |

Appendix A — continued

| WOOD FLAWS AND | В | BB | СР | | |
|------------------------------------|-----------------------------------------|------------------------------------|------------------------------------|--|--|
| PROCESSING DEFECTS | (I) | (II) | (III) | | |
| 22. Glue penetration | not allowable | up to 2% of surface — allowable | up to 5% of surface — allowable | | |
| 23. Mechanical damage (cuts, | allowable within the | total number under the black knot | requirements | | |
| holes) | | | | | |
| 24. Scratches, ribs, blows, ridges | not allowab | ole | allowable | | |
| | | | up 120 mm long and up to 10 mm | | |
| | | | wide, and 0.5 mm in depth | | |
| 25. Warping | not considered for plywood up to 6.5 mm | thick; not more than 15 mm per 1 r | n of plywood sheet diagonal is al- | | |
| | | for plywood more than 6.5 mm thic | k | | |
| 26. Presence of glue line | not allowab | ole | allowable | | |
| 27. Blister, delamination (also | not allowable | | | | |
| when bended), bark patch | | | | | |
| 28. Unsanded stains (nonuniform | not allowable | | | | |
| sanding) | | | | | |
| 29. Oversanding of surface plies | not allowable | | up to 1% of surface — allowable | | |
| | | | | | |
| 30. Metal inclusions | not allowab | ole | brackets of non-ferrous metals are | | |
| | | | allowable | | |
| 31. Edge defects caused trim- | not allowable | allowable no r | more than 2 mm | | |
| ming, lack of veneer | | | | | |
| 32. Rough peeling | not allowable | up to 5% of surface — allowable | up to 15% of surface — allowable | | |
| | | | | | |
| 33. Waviness (for sanded ply- | not allowable | | allowable | | |
| wood), roughness, ripple | | | | | |
| 34. Surface roughness | roughness paramet | maximum | | | |

Appendix A — end

| WOOD FLAWS AND | В | BB | СР |
|----------------------------------|---------------|-----------------------------|----------------------------------|
| PROCESSING DEFECTS | (I) | (II) | (III) |
| 35. Pockets (no bark inclusions) | not allowable | allowable: in size of group | allowable |
| | | streaks not more than 60x40 | |
| | | mm, not more than 1/m2 | |
| 36. Glued veneer particles | not allowable | | allowable: up to 150 mm long and |
| | | | up to 30 mm wide in total not |
| | | | more than 1 per sheet |

Note: Any defects not specified in Appendix A are not allowed.

APPENDIX B (mandatory)

Terms and definitions of processing defects of the outer plies of SVEZA DRAWER plywood

Terms and definitions of processing defects of external plies of the SVEZA DRAWER plywood are specified in Table B.1

Table B.1

| Name of the processing de- | Description | |
|----------------------------|----------------------------------------------------------|--|
| fect | | |
| Glued veneer particles | Veneer particles glued to or pressed into plywood sur- | |
| | face | |
| Rough peeling | Dense small surface recessions caused by local removal | |
| | of wood during peeling | |
| Pocket | a cavity in the wood or between annual rings filled with | |
| | resin or gum | |

APPENDIX C (mandatory)

Grade designators of SVEZA DRAWER plywood

Grade designation of SVEZA DRAWER plywood is presented in Table C.1

Table C.1

| Latin Letters | Roman Numerals | Text on the label in the |
|---------------|----------------|--------------------------|
| | | "Grade" column |
| B/B | I/I | DR B/B (I/I) |
| B/BB | I/II | DR B/BB (I/II) |
| BB/BB | II/II | DR BB/BB (II/II) |
| B/CP | I/III | DR B/CP (I/III) |
| BB/CP | II/III | DR BB/CP (II/III) |
| CP/CP | III/III | DR CP/CP (III/III) |

References

| [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 quality control. Part 1. Testing sample selection and cutting, expressing test results |
| [3] EN 322:1993 | Wood-based panels. Determination of moisture content |
| [4] EN 314-1:2004 | Plywood. Bond quality. Part 1. Test methods |
| [5] EN 310:1993 | Wood-based panels. Determination of the modulus of elasticity in bending and of bending strength |
| [6] DIN EN 319:1993 | Particleboards and fiberboards. Determination of tensile strength perpendicular to the plane of the board |
| [7] GN 2.1.6.3492-17 | Maximum allowable concentrations (MAC) of pollutants in the atmospheric air of urban and rural settlements |
| [8] GN 2.1.6.2309-07 | Tentative safe exposure levels (TSEL) of pollutants in the atmospheric air of populated places. Health stand- ards |
| [9] TR TS 025/2012 | Customs Union Technical Specification "On Safety of Furniture Products" |
| [10] | Unified sanitary epidemiological and health standards for goods subject to sanitary and epidemiological control approved by the Customs Union Commission decision No. 299 as of May 28, 2010 |

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