

## Birch plywood quality grades

CHARACTERISTICS	I	II	III	IV	C
	B	S	BB	CP	
Pin knots (sound intergrown knots of no more 3 mm diameter)	Permitted	Permitted	Permitted	Permitted	Permitted
Sound intergrown knots	Diameter up to 6 mm, cumulative diameter does not exceed 12 mm/m <sup>2</sup>	Diameter up to 20 mm, cumulative diameter does not exceed 50 mm/m <sup>2</sup>  Knots may have slight splits up to 0.5 mm	Diameter up to 25 mm, cumulative diameter does not exceed 60 mm/m <sup>2</sup>  Knots may have slight splits up to 0.5 mm	Diameter up to 40 mm, cumulative diameter does not exceed 400 mm/m <sup>2</sup>  Knots may have splits up to 1 mm	Permitted
Unsound adhering knots	Not permitted	Not permitted	Not permitted	Diameter up to 5 mm up to 3 per m <sup>2</sup>	Permitted
Other knots and holes	Not permitted	Not permitted	Diameter up to 6 mm, cumulative diameter does not exceed 25 mm/m <sup>2</sup> , repaired	Diameter up to 15 mm, cumulative diameter does not exceed 100 mm/m <sup>2</sup> , repaired	Diameter up to 40 mm up to 10 per m <sup>2</sup>
Abnormalities due to insects	Not permitted	Not permitted	Diameter of 3 mm vertically to the plane of panel, up to 10 per m <sup>2</sup> , repaired	Width 15 mm and length 60 mm, up to 3 per m <sup>2</sup>	Permitted
Open splits and checks	Not permitted	Up to an individual width up to 2 mm and of an individual length 200 mm, up to 1 per meter of panel width, repaired	Up to an individual width up to 2 mm and of an individual length 200 mm, up to 1 per meter of panel width, repaired	Up to an individual width up to 2 mm and of an individual length 600 mm, up to 2 per meter of panel width, repaired	Up to an individual width up to 10 mm and of an individual length 400 mm, up to 5 per meter of panel width
Closed splits and checks	Not permitted	Up to an individual length 200 mm, up to 2 per meter of panel width, repaired	Up to an individual length 200 mm, up to 2 per meter of panel width, repaired	Permitted	Permitted
Irregularities in the structure of the wood	Permitted, but slightly	Permitted	Permitted	Permitted	Permitted

Stains from manufacturing (beam traces, strips)	Not permitted	Not permitted	Permitted up to 10% of the sheet surface are	Permitted	Permitted
Curly grain	Not permitted	Not permitted	Permitted	Permitted	Permitted
Discoloration and colored streaks	Up to 15% of the panel surface without colored streaks	Up to 15% of the panel surface, few streaks of color and minerals	Up to 15% of the panel surface	Permitted	Permitted
Brown, but not rot	Not permitted	Not permitted	Up to 30% of the panel surface	Permitted	Permitted
Brown, hard rot at the initial phase	Not permitted	Not permitted	Not permitted	Not permitted	Permitted
Inserts	Allowed if properly matched color tones and not more than 1 / m <sup>2</sup>	Up to 1 per m <sup>2</sup>	Up to 30% of the panel surface	Permitted	Permitted
Open joints	Not permitted	Not permitted	Up to an individual width up to 2 mm and of an individual length 200 mm, up to 1 per meter of panel width, repaired	Up to an individual width up to 2 mm and of an individual length 600 mm, up to 2 per meter of panel width, repaired	Up to an individual width up to 7 mm
Dents and bumps	Not permitted	Not permitted	Very slight in height or depth up to 2 cm <sup>2</sup> , up to 3 defects per panel	Up to 0.5 mm in height or depth, up to 120 mm in width	Permitted
Roughness	Not permitted	Not permitted	Slight up to 10 cm <sup>2</sup> /m <sup>2</sup> , up to 3 defects per panel	Permitted	Permitted
Sanding through	Not permitted	Not permitted	Up to 10 cm <sup>2</sup> per m <sup>2</sup>	Up to 10 cm <sup>2</sup> per m <sup>2</sup>	Permitted
Glue penetration	Not permitted	Occasionally	Up to 5% of the panel surface	Up to 10% of the panel surface	Permitted
Unsanded areas (for sanded plywood)	Not permitted	Up to 5 mm from the edge	Up to 5 mm from the edge	Up to 5% of the panel surface	Up to 50% of the panel surface
Defects at the edges (sanding, trimming)	Up to 5 mm from the edge, if the glue is not visible	Up to 5 mm from the edge, not in all length, repaired	Up to 5 mm from the edge, not in all length, repaired	Up to 5 mm from the edge	Up to 10 mm from the edge
Delamination	Not permitted	Not permitted	Not permitted	Not permitted	Not permitted
A part of bark or bast remaining on face veneer area	Not permitted	Not permitted	Not permitted	Not permitted	Not permitted