

PHYSICAL AND MECHANICAL PARAMETERS

BIRCH PLYWOOD SINERGY LTD.

The actual parameters of the products produced by SINERGY Ltd. are specified on the basis of laboratory test reports. The information is given on the example of FSF 18 mm and FOB 18 mm

Birch plywood 100% (FSF)

N	Parameter name	Requirements of GOST 3916.1-2018	Parameters of the products produced by SINERGY Ltd.	Advantages
1	Moisture, %	5-10	7.7	<p>Can be used for exterior decoration (water resistance and weather resistance above normal).</p> <p>High resistance to temperature fluctuations, chemicals, UV radiation.</p> <p>Excellent bearing strength, can be used at sufficiently high loads: more than 250 kg/m².</p> <p>Form stability (constancy of shape and size).</p> <p>Perfect for making curved elements (flexible, but has resistance to deformation).</p> <p>Safe, eco-friendly, natural, hypoallergenic, can be used for making children's toys and furniture.</p>
2	Ultimate tensile strength when cleaving on the adhesive layer, MPa	≥ 1.0 there is no damage to the wood	2.12 there is no damage to the wood	
3	Elastic modulus when static bending along fibers, MPa, not less	7000	8540	
4	Ultimate tensile strength when static bending along the fibers of the outer layers, MPa, not less	25	72.2	
5	Elastic modulus when static bending across fibers, MPa, not less	-	5607	
6	Emission of formaldehyde, E 0.5 (gas analytical method, mg/m ² *h)	up to and including 1.5	0.12	

Birch laminated plywood 100% (FOB)

N	Parameter name	Requirements of GOST R 53920-2010	Parameters of the products produced by SINERGY Ltd.	Advantages
1	Resistance of coating to 5% solution of sodium hydroxide NaOH	The color of the solution after the test (NaOH) is from light yellow to colorless	Colorless – complete film curing	<p>High resistance to aggressive substances.</p> <p>Resistance to adhesion of concrete mortar.</p> <p>Possible difficulties when stripping structures were prevented.</p> <p>Film prevents the spread of moisture over the surface of the plate and reliably protects against penetration inside.</p> <p>Multiple use up to 60 application cycles.</p>
2	Resistance to cement	There is no staining of cement after contact with plywood	There is no staining	
3	Resistance to steam	There is no swelling. Slight loss of gloss. There is no blister	There is no swelling. Slight loss of gloss. There is no blister	
4	Adhesive strength of facing coating to plywood	Coating should not peel off at the cross point of two incision lines	Complete film curing – film can be removed with wood particles	
5	Resistance of facing coating to abrasion (rpm according Taber test method)	-	350 rpm	

