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## WISA®-FORM BIRCH

**WISA-Form Birch is a coated special plywood for use in concrete formwork where high requirements are set on the concrete surface and the number of reuses.**

### Base board

Birch plywood made solely from birch (hardwood) veneers bonded together in a cross banded construction.

### Bonding

Phenolic resin cross-bonded weather resistant glueing according to EN 314-2/ class 3.

### Surface and edges

Face and reverse: Dark brown phenolic film 120 g/m<sup>2</sup> or 220 g/m<sup>2</sup> moisture barrier.  
Edge sealing: water resistant paint.

### Constructions and thicknesses

Nominal thickness (mm)	Number of plies	WISA-Form standard sizes	
		min. (mm)	max. (mm)
6,5	5	6.1	6.9
9	7	8.8	9.5
12	9	11.5	12.5
15	11	14.3	15.3
18	13	17.1	18.1
21	15	20.0	20.9
24	17	22.9	23.7
27	19	25.2	26.8
30	21	28.1	29.9
> 30		± 3%	± 3%

### Panel size

Standard panel sizes:

1200/1220/1250/1500/1525 x 2400/2440/2500/2700/3000/3050/3600/3660mm

Cut sizes at customer's request

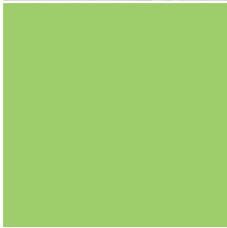
Size tolerance (length/width) ± 1 mm per metre

Squareness tolerance ± 1 mm per metre length of diagonal

### Reuses

Typical number of reuses is likely to be in the range of 20 - 80 times. However, this will vary according to many different factors including good site practice, required concrete finish, amount of care taken when compacting the concrete, handling and storage of the forms, type and quality of release agent.





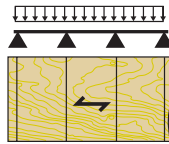
# Design Data

Mechanical properties of WISA-Form Birch, in standard thicknesses, moisture content  $10 \pm 2\%$

Nominal thickness (mm)	Mean modulus of elasticity bending (N/mm <sup>2</sup> )		Characteristic strength bending (N/mm <sup>2</sup> )	
	Emll	Eml-	fml	fml-
18	10048	7452	40.2	34.1
21	9858	7642	39.4	34.3

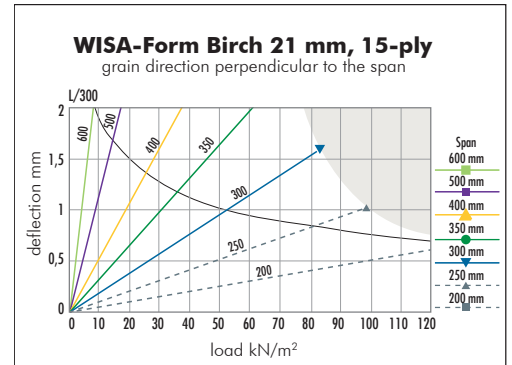
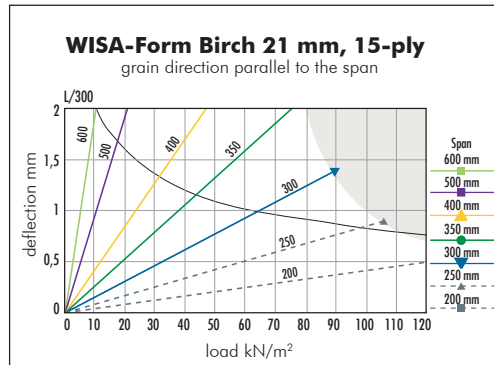
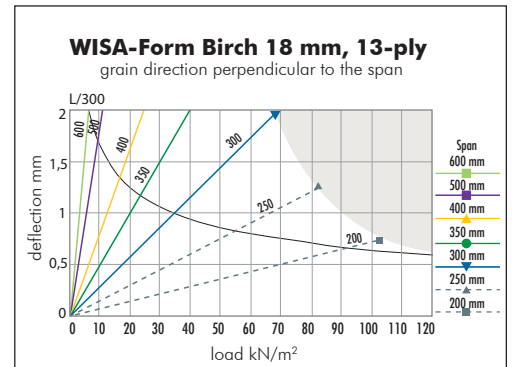
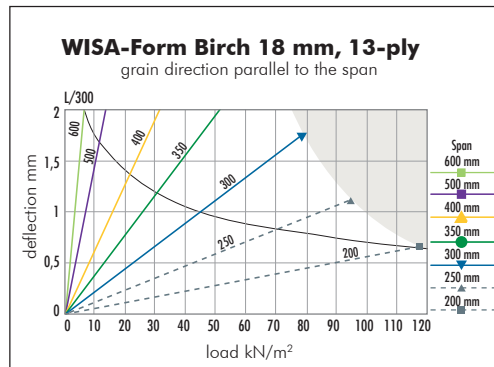
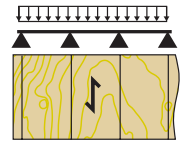
**Face grain parallel to the span ( | | )**

← grain direction of surface veneers



**Face grain perpendicular to the span ( | - )**

← grain direction of surface veneers



Moisture content 27 %, short time loading  
 Partial safety factor for the material is 1.3. Partial safety factor for the loads is 1.2.  
 Deflection limit L/300 of the span  
 Support width is not taken into account in calculations

## Instructions for use

See "Site guidance note for WISA-Form plywood" available from UPM.

UPM policy is one of continuous development. We reserve the right to amend specifications without notice or obligation.



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