UPM**BIOFORE**
BEYOND FOSSILS

WISA®-Form Spruce

WISA-Form Spruce is a coated special plywood for use in loose panel concrete formwork.

Base board
Spruce plywood made solely from spruce (softwood) veneers bonded together in a cross banded construction.

Bonding
Weather resistant glueing according to EN 314-2/class 3 Exterior.

Surface and edges
Face and reverse: Dark or light brown phenolic film 120 g/m².
Edge sealing: Water resistant paint.

Constructions and thicknesses

Nominal thickness (mm)	Min. thickness (mm)	Max. thickness (mm)	Weight kg/m² (MC 10 %)
12	11.5	12.5	6.3
15	14.3	15.3	7.1
18	17.1	18.1	8.7
21	20.0	20.9	10.1

Panel size
Standard panel sizes:
1200/1220/1250 x 2400/2440/2500/3000 mm
1500/1525 x 2400/2440/2500/3000/3050 mm
2400/2440/2500 x 1200/1220/1250 mm

Size tolerance (length/width) ±1mm per metre
Squareness tolerance ±1mm per metre length of diagonal
Cut to sizes at customer's request.

Reuses
Typical number of reuses is likely to be in the range of 10–15 times. However, this will vary according to many different factors including good site practice, the required concrete finish, the amount of care taken when compacting the concrete, handling and storage of the forms, type and quality of release agent.

UK CA
1245

PEFC
PEFC/02-31-112
Promoting Sustainable
Forest Management
www.pefc.org
For PEFC™ products, visit www.pefc.org

FSC
www.fsc.org
FSC® C009856
The mark of responsible forestry
For FSC® products, visit www.fsc.org

CE

RTS - 3rd PARTY VERIFIED
epd
THE BUILDING INFORMATION FOUNDATION
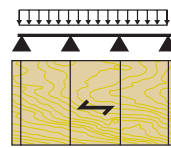
Design Data

Mechanical properties of WISA-Form Spruce, in standard thicknesses, moisture content 10±2%.

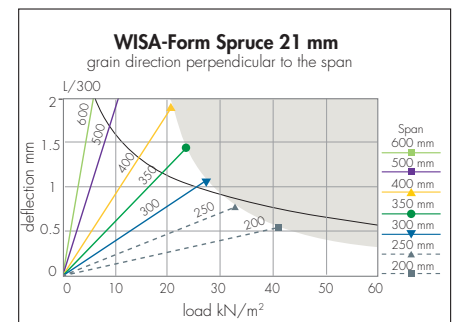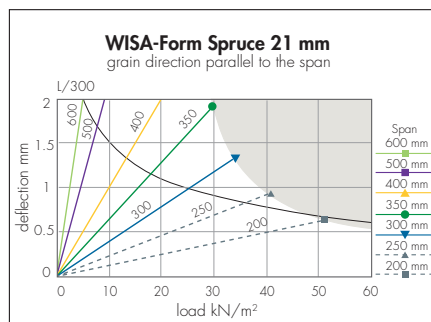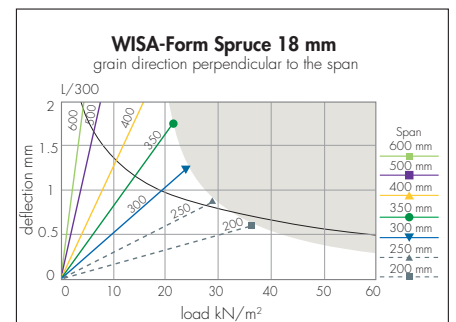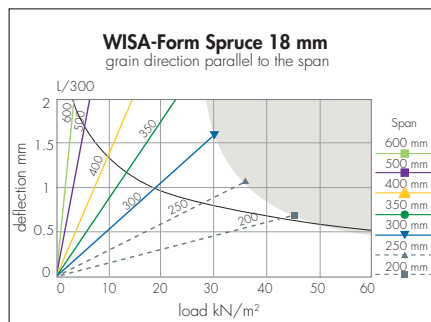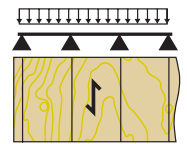| Nominal thickness (mm)	Mean modulus of elasticity bending (N/mm²)		Characteristic strength bending (N/mm²)	
	Emll	Eml-	fmll	fml-
18	5395	6605	13.5	18.8
21	5226	6774	13.1	18.9

Face grain parallel to the span (l l)

→ grain direction of surface veneers

Face grain perpendicular to the span (l –)

→ grain direction of surface veneers

WISA-Form Spruce 18 mm
grain direction parallel to the span

WISA-Form Spruce 18 mm
grain direction perpendicular to the span

WISA-Form Spruce 21 mm
grain direction parallel to the span

WISA-Form Spruce 21 mm
grain direction perpendicular to the span

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

For all detailed technical values, please see DoP (Declaration of Performance) UPM002CPR on www.wisaplywood.com/dop.

Instructions for use

See "Guide to Good Site Practice" available from UPM.