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UPM

WISA®-FORM MDO

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

Base board
Plywood made solely from spruce (softwood) 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: MDO coating, for matt concrete finish.
Reverse: Dark brown phenolic film with imprinted text "WISA-Form MDO" as moisture barrier.
Edge sealing: Two coats of water resistant paint.

Thicknesses and weight

Nominal thickness (mm)	Number of plies	Min. thickness (mm)	Max. thickness (mm)	Weight kg/m² (MC 10 %)
18	7	17.5	18.5	9.0
21	7	20.5	21.5	10.0

Panel size
2440 x 1220 mm
Size tolerance (length/width) ±1mm per metre
Squareness tolerance ±1mm per metre length of diagonal

Reuses
Typical number of reuses is likely to be in the range of 10 - 15 times. However, the number of reuses will depend on a wide range of factors including good site practice, the required concrete finish, careful handling & storage of forms and the type and quality of release agent.

Form release agents
The selection of the most suitable release agent will ensure cleaner striking of the forms and thus more reuses, as well as better quality concrete finishes. The chemically active release agents are considered to be the most suitable for MDO coating.

Important note: MDO coating is not pre-oiled and must be oiled twice before first use, and thereafter once before each subsequent reuse of the form.

ISO 9001
ISO 14001
DNV
CERTIFIED ORGANISATION

PEFC
PEFC/02-31-112

CE

Design Data

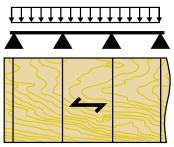
Mechanical properties of WISA-Form MDO, in standard thicknesses, moisture content 10 ±2 %.

Nominal thickness (mm)	Mean modulus of elasticity bending (N/mm²)		Characteristic strength bending (N/mm²)	
	EmII	EmI-	fmII	fmI-
18	8170	3830	20.4	13.0
21	7547	4453	18.9	14.3

WISA-Form MDO is constructed with the grain direction of the outermost (face) veneers running parallel to the long edges of the panel. Therefore boards should always be used with the long edges parallel to the span direction to minimise deflection of the shutter.

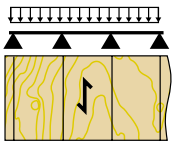
Face grain parallel to the span (I I)

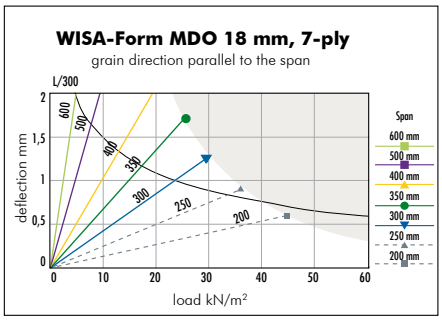
grain direction of surface veneers

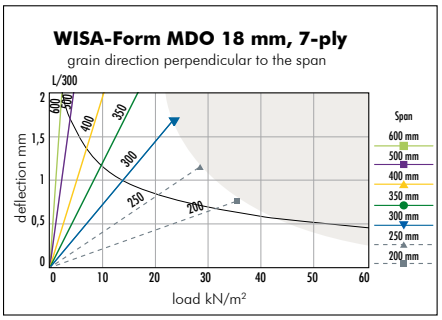


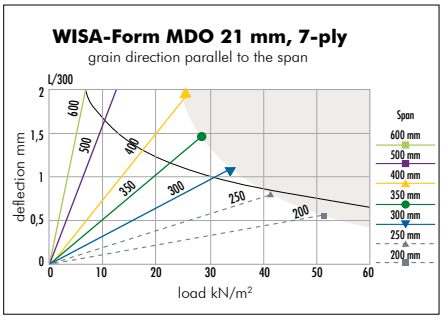
Face grain perpendicular to the span (I –)

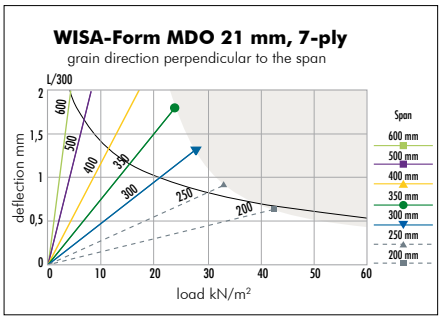
grain direction of surface veneers











Moisture content 27 %, short term 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.

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