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 gluing 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: Water resistant paint.

**Thickneses and weight**

<table>
<thead>
<tr>
<th>Nominal thickness (mm)</th>
<th>Min. thickness (mm)</th>
<th>Max. thickness (mm)</th>
<th>Weight kg/m² (MC 10 %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>17.1</td>
<td>18.1</td>
<td>8.3</td>
</tr>
<tr>
<td>21</td>
<td>20.0</td>
<td>20.9</td>
<td>9.7</td>
</tr>
</tbody>
</table>

**Panel size**
2440 x 1220 mm
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 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.
Design Data

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

<table>
<thead>
<tr>
<th>Nominal thickness (mm)</th>
<th>Average thickness</th>
<th>Mean modulus of elasticity bending (N/mm²)</th>
<th>Characteristic strength bending (N/mm²)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>EmI-</td>
<td>fmI-</td>
</tr>
<tr>
<td>18</td>
<td>17.6</td>
<td>8170</td>
<td>20.4</td>
</tr>
<tr>
<td>21</td>
<td>20.6</td>
<td>7547</td>
<td>18.9</td>
</tr>
</tbody>
</table>

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)

Face grain perpendicular to the span (I –)

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 “Guide to Good Site Practice” available from UPM.