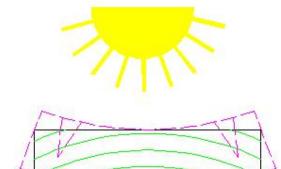




## **Physical Effects Upon Heating of Werzalit Table Tops**

• Effect on natural materials, such as natural wood



Equilibrium moisture content approx. 12% Dried to approx. 6-8%

The wood dries further on exposure to sunlight, to a moisture content of approx. 6-8%. The moisture evaporates. This results in shape changes and crack formation.

Effect of heating on Werzalit Table Top



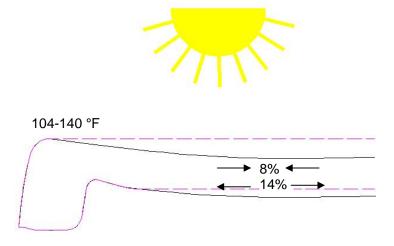


Initially, heating

of one side of the table top surface; later, the entire table becomes hot.

The moisture seal over the entire surface prevents moisture from escaping! As a result, the moisture moves within the table cross section in the direction of the bottom of the table.

This makes the top of the table drier, for example 8%, and the bottom more moist, for example 14%.



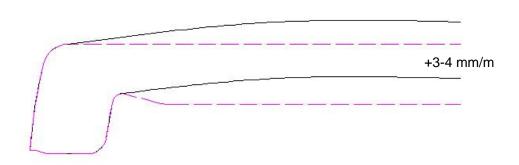
This moisture migration causes the top part of the table to shrink slightly and the bottom part of the table to swell slightly, enlarging it. This physical change causes the panel to bend in a concave manner.

Light décor tables bend by approx. 5-6 mm/m of panel length, dark décor tables by approx. 9-12 mm/m of table length.

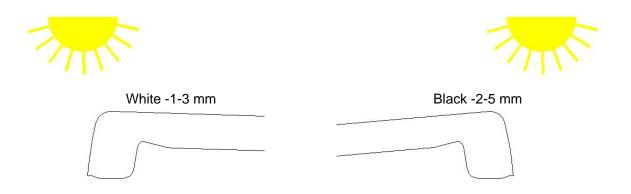
If the table cools down again during the night or a period of less sunny days, the moisture distributes itself evenly again and the table becomes flatter again. It does not return entirely to the original condition. The curvature of the table only recovers by about 2-3 mm. This recovery takes place slowly over the course of several days.

## Measures

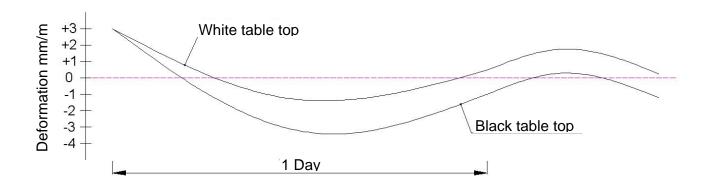
To counteract these physical effects somewhat, Werzalit table tops are given a convex shape during manufacturing and are delivered in this condition.



Upon heating of the table, the deflection changes, with the lightness of the décor determining the severity of the change.



 The deflection over time of black and white table tops over multiple days of strong sunshine



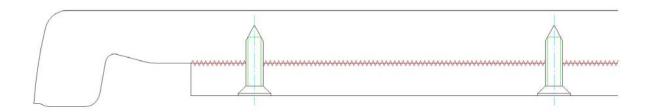
## Consequences

Due to the physical effect described above, Werzalit recommends using somewhat lighter table tops in areas exposed to strong sunlight. Nevertheless, a deflection of the table by up to 4 mm in the concave range must be accepted, depending on the décor. Werzalit table tops will therefore never be completely level.

The material properties cause the table to always be somewhat in motion.

The panels are produced at the factory such that the initial convexity is more pronounced in the middle of the panel than at the edge. As a result, this convexity is not too noticeable when the panel is used indoors.

If, for design reasons, dark tables must be exposed to strong sunlight, the deflection effect can be reduced somewhat by gluing and screwing onto the bottom side an approx. 5/8 inch thick moisture-proof laminated particle board panel.



Metal braces on the table underside will also reduce the effect of the concave deformation to a certain extent.

However, these measures cannot completely prevent the effect.

Please also consult our technical data and processing instructions.

## Solutions For Reinforcing Table Tops

