

Hygrothermal conditions in the house

Wood must always have a moisture content corresponding to the relative humidity of the environment in which it is used. If this is not the case, the wood will absorb moisture or release it until a moisture content is reached which corresponds to the relative humidity of the environment. This will cause timber movement & deformation. The deformation may cause that some parts come loose causing the stairway construction losing strength and / or unsightly open joints occur.

To avoid problems due to excessive timber movement after the installation, it's best to prevent strong fluctuations of the hygrothermal conditions. At the same time the indoor relative humidity may not be too high or too low. The stage at which the staircase is installed can have a major impact on the final quality of it. For that reason the staircase should be installed, after sufficient drying of the plastering, screed and certainly after the house is wind and water tight. Also the stairs should best not be installed in the immediate vicinity of heating and there may absolutely be no heating elements placed underneath the stairs.





The appropriate hygrothermal conditions in the building and the appropriate moisture content of the wood are essential for the dimensional stability of the parts of the stairway.

Area	Temperature (°C)	Relative Air Humidity (%)	Wood Humidity Level
Not-heated	10-20	45-65	12-14
Heated	20-26	40-50	10-12

All our types of wood are dried to a moisture content of 10% and processed between 10% and 12%. Therefore, the temperature in our workshop is about 15 °C. This is a constant temperature maintained during the weekends and holiday periods to bring the wood to the customer in the best possible conditions.

To make sure that the wood maintains this quality level it would be highly advised to check the humidity level within the house on a regular basis to make sure that it's not too dry/wet. We've included a hygrometer that keeps track of the humidity level within the property, which should sit between 40-60%. This is not only beneficial for the condition of the solid wood, but for us as human beings as well.

