ABSOLUTE vs. RELATIVE MOISTURE CONTENTS

Absolute moisture contents W_b is defined with the following formula:

$$W_b = \frac{m_w - m_s}{m_s} * 100 \quad [\%]$$

where:

 m_w – weight of a sample before drying m_s – weight of a completely dry sample

Relative moisture contents W_w is defined with the following formula:

$$W_{w} = \frac{m_{w} - m_{s}}{m_{w}} * 100$$
 [%]

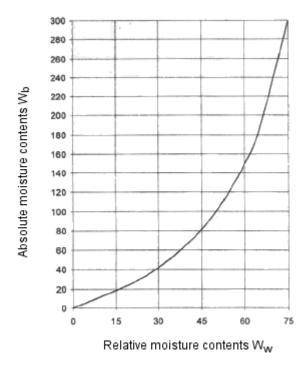
where:

 m_w – weight of a sample before drying m_s – weight of a completely dry sample

Therefore the relationship between absolute and relative moisture contents is:

$$W_{_{b}}=rac{W_{_{w}}}{1-W_{_{w}}}$$
 and $W_{_{w}}=rac{W_{_{b}}}{1+W_{_{b}}}$

This relationship is presented on the figures below:



For practical and historical reasons the moisture contents of wood is always the absolute moisture contents.

