

Focus on Timber Worksheet 5: Moisture in Wood

Moisture Content (MC)

When a tree is first cut down, up to _____ of the timber's weight is _____. When the timber is _____ (a process of drying timber), the water _____ usually drops to about 15% of the timber's weight, depending on the local _____ of the area in which the timber is being dried. The aim of seasoning timber is to remove the water content at a _____ rate. Drying it out too _____ can damage the cell _____ of the timber or causes the timber to shrink in unpredictable ways. Drying too _____ leaves the timber _____ to rot and fungal attack. Modern timber seasoning methods often _____ traditional air drying as well as more modern _____ such as kiln or microwave driers and even _____ treatments.

However, pieces of timber hundreds of years old will _____ to react to the _____ of the air around them unless it is completely _____ with some type of _____ coating such as paint or lacquer. This process is called *Equilibrium Moisture Content* (_____). As the surrounding air dries out a piece of timber, it will give up some of the _____ held _____ the timber's cell walls, and start to _____. Similarly as the humidity increases, this same piece of timber will absorb water back into its cell walls and _____. Old furniture is often _____ because it was not sealed _____ and hundreds of years of _____ and _____ cause joints to _____ and boards to _____.

Fill in the spaces with the correct missing words:

shrink, within, contracting, properly, crack, chemical, *EMC*, slowly, moisture, continue, expand, combine, uniform, vulnerable, seasoned, content, structure, loosen, expanding, techniques, humidity, 90%, damaged, water, fast, climate, sealed, protective