



THE WOODTESTER

A SIMPLE TESTER FOR DETECTING MOISTURE IN FIREWOOD



Everyone knows that wet firewood is difficult to light and once alight does not burn cleanly or efficiently. Even wood which appears dry can often still contain large amounts of water.

The WoodTester is a hand-held moisture tester which uses the well-proved measurement of electrical resistance to determine the presence of excessive moisture in firewood.

Measurements are based on the AS/NZS1080 Standard for timber moisture measurement.

HOW DOES IT WORK?

The electrical resistance of wood depends on the amount of moisture present. The WoodTester has two pins which are inserted into the piece of wood. The electrical resistance between these pins forms part of an electric circuit and can be measured. The percentage of moisture in the wood can be interpreted from this resistance reading. The circuit decides whether the resistance is lower than, between or higher than certain values and lights one of three LED lamps.

USING THE WOODTESTER

Gently push the pins into the sample and press the button. One of the LEDs will light up. If the green LED lights then the sample is definitely dry with a moisture content below 20% and can be assumed to burn cleanly and efficiently. If the red LED lights then the sample is above 24% moisture content and will not burn well and give off excessive smoke and soot. If the yellow LED lights then the moisture content of the firewood lies between 20 and 24% and it should be stored until it drops below 20% however it can still be burnt if so required. If no LEDs or more than one LED light up then the battery probably needs replacing. Do this by undoing the two screws on the back of the case, carefully opening the case and replacing the 9V battery.

PRECAUTIONS

Keep the unit clean and dry and protect from physical damage. Do not use excessive force or twisting on the pins. The pins are sharp and will easily enter the end grain of most woods sufficiently far enough to take a reading. They are also sharp enough to enter human skin and implant nasty bacteria picked up from the firewood so take care. The WoodTester is setup for untreated pinewood and may respond slightly differently on other types of wood. In general harder woods such as teatree or dense types of gumtree may appear a few percent wetter than they actually are. It is also set to operate at a nominal temperature of 20 deg C so very cold wood can appear dryer than it actually is. However in general if the green light shows the wood is dry enough to burn.

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