

Sampling Firewood from a stock pile or store

This method is based on the sampling standard **BS EN 14778:2011**

The equipment needed to sample Firewood

- Heavy duty plastic bag or water tight container to put the sample
- Pin meter

Precautions

Consider health and safety – use Personal Protective Equipment, observe manual handling procedures, and assess the site for hazards from machinery, dangerous or loose stock piles etc.

Taking a representative sample

To make sure the sample is representative, random samples should be taken from around the pile/lorry/bag/sack. Where a sample is being taken following a dispute, please ensure all parties witness the sample collection.

- From a stock pile of firewood, randomly select a minimum of 8 samples from different areas of the stock, ideally taking samples from different drying batches and cross species
- Split the samples into two batches. One to be submitted to Woodsure Test Centre and the other to be retained by the client
- If taking directly from a kiln, ensure the product has cooled before bagging
- If gathering samples from different drying methods ie. seasoned and Kiln Dried then two sets of samples will need collecting and bagging separately.
- Note the weather conditions.

Note: submitted samples can be cross referenced to pin meter testing when the readings are written on the wood samples

- Place samples inside two water tight containers or two rubble sacks, sealed with gaffer tape. Label as per below. Leave one sample with the client for their reference and forward the second to the test laboratory. Samples should be stored in dry conditions out of direct sunlight.
- Label the bags / containers with:
 - Date
 - Company or depot that produced the fuel
 - Woodfuel size and moisture specification (for example 22cm 20% moisture)
 - Sample reference
 - Name of sampler
 - Weather conditions
 - In the case of POS collections, supporting photos.

Labelling is very important as these samples may be sent by carrier to Woodsure for Quality Assurance testing.

Place the bag for any samples going to Woodsure into a cardboard box and address to: Woodsure Testing Centre, Severn House, Unit 5, Newtown Trading Estate, Green Lane, Tewkesbury, GL20 8HD.

- Inform Woodsure by email (admin@woodsurre.co.uk) or phone (01684 278188) that you have sent the sample for testing.
- Once tested the results will be forwarded to the supplier. Where the results are positive, the sample(s) may be disposed of immediately. Samples that fail may be kept temporarily whilst results or corrective actions are considered with the supplier. The clients retained sample, or a separate sample may be requested for further testing.

Sampling Firewood from a Point of Sale

The equipment needed to sample Firewood

- Pin meter

Precautions

Consider health and safety – use Personal Protective Equipment, observe manual handling procedures, and assess the site for hazards from machinery, dangerous or loose stock piles etc.

Taking a representative sample

To make sure the sample is representative, random samples should be taken from around the pile/lorry/bag/sack. Where a sample is being taken following a dispute, please ensure all parties witness the sample collection.

- From a stock pile of firewood, randomly select a minimum of 8 samples from different areas of the stock, ideally taking samples from different drying batches and cross species
- When collecting a prepacked sample (grab bag) collection of any compromised product along with supporting evidence where possible ie. Photos etc.
- Samples should be tested using the pin meter method, were the pin meter readings average over 18% then these should be forwarded to the lab for further analysis. Pin meter readings should be undertaken with the following method: -

1. From the selection of samples, a minimum of 3 random logs should be further selected.
2. Take the samples and split the log down the centre with an axe
3. Measure the moisture by pressing the meters pins into the centre of the log, across the grain.

Record the number of measurements of each split log. Measure for at least 6 readings from the sample then calculate the average.

$$\text{AVERAGE} = \frac{\text{SUM OF ALL READING}}{\text{NUMBER OF READINGS TAKEN}}$$

Record this as the timber's average moisture content.

Those samples to be sent to the lab for testing should be processed by:-

- Place samples inside two water tight containers or two rubble sacks, sealed with gaffer tape. Label as per below.

- Label the bags / containers with:
 - Date
 - Company or depot that produced the fuel
 - Woodfuel size and moisture specification (for example 22cm 20% moisture)
 - Sample reference
 - Name of sampler
 - Weather conditions
 - In the case of POS collections, supporting photos.

Labelling is very important as these samples may be sent by carrier to Woodsure for Quality Assurance testing.

Place the bag for any samples going to Woodsure into a cardboard box and address to:
Woodsure Testing Centre, Severn House, Unit 5, Newtown Trading Estate, Green Lane,
Tewkesbury, GL20 8HD.

Firewood longer than 50cm.

Taking a representative sample

Selection of representative, random samples should follow the same process above. Practicalities for despatching such long samples for testing should be considered. We will accept a declared measurement of length offered by the supplier. The consequence of offering oversize logs to your end customer is obvious and shouldn't need our validation unless specifically requested. Our testing focuses on fuel moisture rather than physical characteristics of size and dimensions. When sending samples for testing please reduce the sample length to an appropriate length that can be easily handed by a courier or through the post. For example, reduce the selected logs to 30cm lengths, and then take a sub selection as a representative sample.