

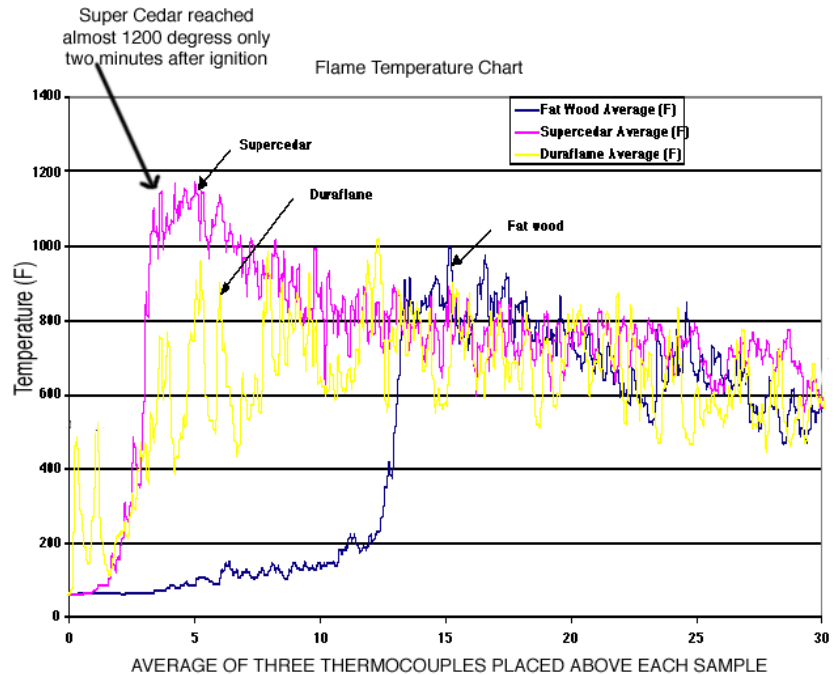


Northwestern Fuels recently used the services of an unbiased 3rd party laboratory to evaluate performance. The evaluation was of Super Cedar Firestarters, Duraflame Firestart, and Fat Wood.

Performance

As you can see by the chart to the right, **Super Cedar Firestarters reached peak temperature much faster** than the two other products. It also **maintained a hotter temperature longer**. Even after 25 minutes, the Super Cedar Firestarters had a temperature of nearly 800 degrees.

The Super Cedar Firestarters reached a higher temperature. Had a higher average temperature throughout the burn and while burning for just as long, if not longer, than the other products.



Observations & Conclusions

IGNITION STUDY

Sample	Description of Ignition
Super Cedar Firestarters	53 minutes then smoldering
Duraflame Firestarter	58 minutes then smoldering
Fat Wood	25 minutes then smoldering

DURATION OF VISIBLE FLAMING

Sample	Description of visible flaming
Super Cedar Firestarters	Ignites with one touch of match
Duraflame Firestarter	Ignites wrapper with one touch of match
Fat Wood	Sustained ignition after 3 applications of a lit match

VISIBLE SMOKE

Sample	Relative Visible Smoke
Super Cedar Firestarters	Least (not apparent)
Duraflame Firestarter	Medium (noticeable)
Fat Wood	Most (significant)



Evaluation Conclusion

Based on the foregoing investigation and analysis, to a reasonable degree of engineering certainty, MDE Engineers concludes the following. The Super Cedar and Duraflame Firestart ignited with one match as opposed to three matches with the Fat Wood. The Super Cedar achieved higher flame temperatures in a faster time period compared to the other products. After 9 minutes the recorded temperatures are comparable between the Super Cedar and the Duraflame Firestart and after 13 minutes the temperatures for all products are comparable until 30 minutes. The duration of the flaming is comparable between the Duraflame Firestart and the Super Cedar, at more than 50 minutes, both being significantly longer in time than the Fat Wood at 25 minutes. The visible smoke emissions of the Super Cedar are less than the Duraflame Firestart and significantly less than the Fat Wood.

Sincerely,

MDE Engineers, Inc.



Noel Putaansuu CFEI

Technical Specialist / Fire Investigator