The many problems and lies pertaining to catalytic stoves and inserts

Most folks assume catalytic stoves are high tech. That's not so. Catalytic equipped units have long been obsolete. It's 80's technology, but few still exist, as a cheap way of making its brochure more appealing.

Catalytic's should be avoided for numerous reasons.

Today's best stoves, oddly labeled 'non-catalytic', imply they are 'non-high tech', when instead they are far superior. This far superior, 'non-catalytic' technology involves firebox flash combustion.

Here are the facts.
Catalytic and non-cat stoves are 'tested' as having similar high efficiencies, due to the combustion of smoke fuel before it exits the stove. With new technology non-cat stoves, smoke burning (secondary combustion), produce view-able flames seen via 'stay clean' glass. These added flames account for the near doubling of efficiency.

With catalytic stoves, the smoke burning is not seen. Worse than that, the catalytic, and resulting smoke ignition flames, originate near the exit of the stove, heating the stove collar area, not the firebox, resulting in 30% of exit the 80% efficiency, lost up the chimney!
EPA brochure efficiencies include heat from flames lost. Heat lost up the chimney, and thus not transferred to the living space. Brochures only state combustion efficiency, not home heat transfer efficiency. This is the fault of the EPA testing agency. In conclusion, not only do non-cat stoves net higher efficiencies, non-cat stoves don't have to follow a tedious list of catalytic do's and don'ts.

Catalytics are fragile, and expensive to periodically service and replace ($400 to $550), with a long list of do's and don'ts in starting, loading and operation. Also, forget about burning a nearly free fuel, scrap wood and pine, such as many enjoy, issue free, in clean burning non-cat stoves. These 'free' fuels will quickly plug up and damage a catalyst, and catalyst & chimney cleaning procedures are a chore. Even colored newspaper ink can damage a $500 catalytic.