



Norbert Senf &lt;norbert.senf@gmail.com&gt;

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**update and corrections: Re: most significant wood stove innovators?**

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Thu, Aug 3, 2017 at 11:48 AM

To: John Ackerly &lt;jackerly@forgreenheat.org&gt;

Cc: "mhatech@yahoogroups.com" &lt;mhatech@yahoogroups.com&gt;

On Thu, Aug 3, 2017 at 9:50 AM, John Ackerly &lt;jackerly@forgreenheat.org&gt; wrote:

Thanks for all these ideas. Can you give a bit more detail on the Frisch fresh air system? What is it and why is it really innovative.

(snip)

john

Ha, ha, funny story:

Jerry's shop north of Seattle, where we set up the lab in 1993, had a 40' insulated chimney stack. We would run four 2 hr tests per day for about 2 weeks each spring.

Each test was on a separate appliance, so we would run one test per day per appliance.

One of them was Jerry's Firecrest precast fireplace firebox, which he had licensed. It makes a great retrofit into an existing fireplace, and Sleepy Hollow over on Long Island sells an identical system today called Bellfires, which originated in Holland. It is based on the aerodynamic research of Professor P.O. Rosin for the British Coal Board, prior to WW2. I found Rosin's original research report in Ottawa at the National Research Council, in the Division of Building Research library:

[heatkit.com/docs/rosin.PDF](http://heatkit.com/docs/rosin.PDF)

Anyway, there was a zero clearance version of this fireplace, and Jerry had outfitted it with an airtight door, something unknown at the time on a fireplace. The door was custom made by Wilkening Fireplace in Minnesota. Because we were limited to 2 hours on all the tests, we would scoop out any remaining coals at the end of each test and put them into a metal bucket. In order to calibrate our test equipment and get some baseline numbers, we would run the same test on the Frisch Rosin fireplace at the end of the each day. We would thrown in all the coals from the day, add wood, and let it rip.

Lopez Labs Archive



*Jerry Frisch with his clean burning Frisch Rosin masonry fireplace system (Norbert Senf on the left, holding "2 min." sign) (1994)*

One day Jerry got the idea to try using a 1" air tube in the firebox on each sidewall, at the floor near the front, aimed at the fire. Anyway, it burned like a rocket with a big jetting action from the air tube. This was because we had a 40' stack plus 750F stack temperatures. In other words, huge draft - enough to power the air through the 1" tubes and provide a lot of turbulence. Paul Tieg's came by one day. We lit the fire, and went outside to look, and there was zero smoke, even from the start. Paul couldn't believe it.

I don't know the evolution towards the Frisch Rosin "Wolfshead" pieces that are now use, except that Jim Buckley, the Rumford fireplace guy, was no doubt involved in getting a certified Rumford accepted in Washington.



Googling this image just now, I see that they are certified in California, as well.....N

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