

March 29th, 2019

Dear Steffan and Mike,

Thank you for the back and forth conversation we had over the phone yesterday. As a follow up to it, it's our understanding that the Alternative Test Method that is granted to any forced air type furnace must show at least 2 burn attempts (by the testing lab Intertek) to achieve Category I using, if needed, the least amount of combustion air available to a potential user. This would be the pilot air located right on the induced draft combustion air fan itself and/or another location on a furnace using a remote thermostat to control combustion air.

With Intertek targeting the Category I percentage of maximum burn Direct Heat Output by thermostatically turning the primary combustion air fan, or any other type of automatic combustion air draft on when it falls below the target Category I percentage and off when it gets above the target Category I percentage, unfortunately, this doesn't reveal the emissions using the least amount of primary air still available to the user. The least amount of primary air then would be its' pilot air on full idle if the thermostat is continually satisfied.

In the real world, when the room thermostat is satisfied and the automatic draft is turned off (full Idle) - what are the emissions for the furnace as it maintains combustion using the pilot air that is available to the user?

In all types of weather, especially on warmer days, the automatic draft may be turned off for long stretches of time. If the fire dies out and/or smolders (causing excessive smoke and pollution) it's a poor design and detrimental to the environment. Not something the EPA should condone or certify, but definitely check.

It is our belief that the Fire Chief SF1000E has not been tested in the full idle position to give the EPA an accurate emission result after it failed to meet Category I & II. This result is a needed measurement to ensure clean, non-polluting air for our precious environment.

Thanks,

Daryl Lamppa