

POINTS OF DIFFERENCE

CAN THE OVEN OPERATE ON GAS ONLY & IS THE OVEN CONFIGURABLE WITH AN UNDER FLOOR ASSIST BURNER?

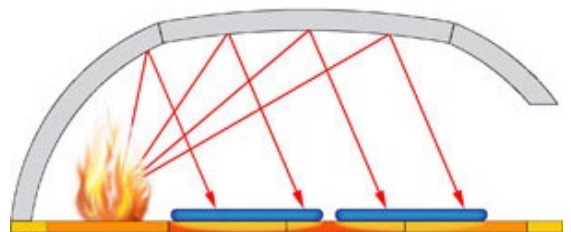
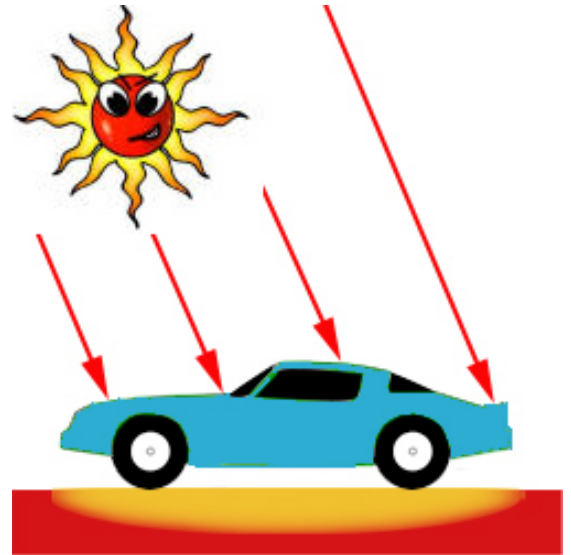
Wood Stone offers ovens in wood, wood-gas combination, and gas only configurations. In addition, most Wood Stone ovens can be equipped with a thermostatically controlled infra-red (under floor) burner option -- Which makes them the highest production ovens available in the world.

Why is having the option for an under floor assist burner important? Cooking in a Stone Hearth oven requires a fine balance of top and bottom heat. With thinner or multi-piece ovens or with gas-fired ovens that have only a radiant dome flame, this balance can be difficult to maintain during heavy production cycles. As pizzas (or other products) are placed on the floor they shadow the cooking surface from the only heat sources in the oven -- The heat coming off of the dome and the radiant flame.

To illustrate this point, let's consider an example we've all experienced: hot pavement on a very sunny day. The radiant flame is like the sun. The heat it puts off is soaked up by the floor, much like pavement heats up from the sunshine.

If something blocks the sun, "shadowing" the pavement, then that shaded pavement is cooler than the exposed surface. In the image to the right you see a parked car blocking the heat as it soaks in to the pavement. The yellow area is cooler than the rest of the pavement.

Pizzas in an oven can block the cooking surface in much the same way. Heat radiates off the open radiant flame and dome and saturates the cooking surface. When you place a pizza on the floor it does two things. First, it takes some heat from the floor (it's relatively much colder than the floor). Second, it blocks the radiant heat from transmitting back into the floor.



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How much this impacts the cooking performance of the oven depends on a few factors. One is obviously how thick the floor is. If no heat is being radiated back into the stone then the thickness (“heat sink”) of the floor becomes critical. The thicker the material in the cooking surface the better. A second point is how much of the floor is being shadowed. If you’re not very busy then much of the floor is exposed and can soak up heat from the flame. Finally, if the floor is a single-piece, you will see much better lateral transmission of heat, meaning those surfaces exposed to radiant flame can soak up the heat and transmit laterally to underneath the pizza shadowing the floor (also see Points of Difference about Oven Floor Thickness).

AN INFRA RED (IR) ASSIST BURNER CAN GUARANTEE FLOOR TEMPERATURE

For chefs with heavy production needs and who require consistent high performance, Wood Stone offers ovens with an Underfloor Infra-Red (IR) Burner.

The IR burner is thermostatically controlled. If you have a temperature range that you want to maintain, say 550-580 degrees Fahrenheit, then you program the set point of the burner at 550 (the bottom of the cooking range).

As long as you are above the set point you will be operating the oven with the radiant flame only. But if you have high production and continually shadow the floor as described above (it is possible even for our ovens to lose some floor temperature over extended periods of time) and the temperature drops below the set point, the IR burner will come on automatically providing heat from below, completely unobstructed by any cooking going on at the surface.

With the optional IR burner in our Wood Stone oven you can keep cooking during your busiest of times without a drop off in oven performance or production.

