



(844) GO SMOKI (Toll-free in USA)
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SMOKE ZAPPER 200 FILTRATION EFFICIENCY:

Statement of Particulate Emissions Exhaust Field Testing in a Commercial Wood-Fired Pizza Oven

This document describes a particulate matter field test performed on Friday, June 24th, 2016 at Gristmill, a restaurant located at 289 5th Avenue, Brooklyn, New York City.

Under the supervision of the DEP (Department of Environmental Protection) of New York City and Smoki engineer, Tony Chiodi, the particulate matter test was performed during regular operating hours. The cooking equipment used was a commercial RPM 140 Pavesi wood-fired brick oven with an approximately 55" diameter baking floor, fired with natural dried wood logs. The oven was directly connected to a 8" diameter round steel chimney that exhausted to the roof exterior. A Smoke Zapper 200 was installed inline of the steel chimney.

The following test was performed both with the Smoke Zapper 200 in operation and turned off, to measure the reduction in particulate matter provided by the Smoke Zapper 200. The samples were collected and tested using a DataRAM™ pDR-1500 Aerosol Monitor in the field. Samples were first collected with the "relative humidity" correction engaged on the DataRAM™ pDR-1500, and then collected with this option disengaged.

The following are the total averages of the particulate matter weights collected during each testing period, in micro-grams:

	RELATIVE HUMIDITY ENGAGED	RELATIVE HUMIDITY DISENGAGED
Smoke Zapper Engaged	24.07375 µg	102.1106 µg
Smoke Zapper Disengaged	404.34754 µg	1559.93487 µg
Percent Reduction	94.05%	93.45%

This represents an **average particulate matter reduction of 93.75%** in this field test. Per the *NYC Air Pollution Control Code §24-149.5* regarding commercial wood-fired cooking ovens, a 75% reduction in particulate matter is the acceptable limit per the NYC DEP's internal rules.





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COMPARATIVE SMOKE TEST:

Test performed with Smoke Zapper 200 &
Wood-fired Hearth Style Pizza Oven

	SMOKI ON:	SMOKI OFF:
FOR 5 MINUTES		
FOR 20 MINUTES		
FOR 1 HOUR		