



In the Line of **FIRE**

RUSKIN®

Ruskin Puts the Damper on Pressure Drop!

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System designers should specify and use Ruskin combination fire smoke dampers because they are designed to offer less resistance to airflow than any other fire smoke damper in the industry. By offering less resistance to airflow, Ruskin fire smoke dampers can save the building owner money. In fact, Ruskin fire smoke dampers pay for themselves by reducing the overall operating cost of an air system.

How is that possible? It's possible because more system resistance than originally calculated means the fan would have to generate more pressure to deliver the required airflow. In order to generate more pressure the fan speed would have to be increased which would mean an increase in horsepower. Additional horsepower adds operating cost to the owner.

The table below compares the Ruskin FSD60 with similar "air foil" blade combination fire smoke dampers of other manufacturer's (you guess who the G, P, N and AB represent). The criteria for the comparison is:

- Published Certified Data: the comparison is limited to "AMCA Certified" data.
- Size: nearly 70% of all fire smoke dampers sold are 24" x 24" and smaller and almost 90% are 36" x 36" and smaller.
- Velocity: 2000 fpm.

As you can see the Ruskin FSD60 performed better than a similar damper manufactured by "G". The pressure drop across a 12" x 12 FSD60 was 39% better than the "G" damper and 23% better than a similar 24" x 24" damper.

There are no other entries in the table because no other manufacturer published "certified" data. It is only fair to note that "P" published data for a 36" x 36" damper and "N" published data for a 24" x 24" and 36" x 36" damper but none of it was "certified." They both indicated that the pressure drop would be higher on smaller dampers.

The comparison proves that not all fire smoke dampers are created equal. It proves that the Ruskin FSD60 offers less resistance to airflow than other "similar" dampers and it could save the owner money. It also raises some important questions:

- Why don't other manufacturer's publish pressure drop for smaller sizes (what's wrong with their design)?
- Why don't they seek AMCA performance certification?

Since air systems are rarely installed as exactly designed and actual resistance is always more than estimated resistance, take some of the guesswork and uncertainty out of the design process. Specify, with confidence, the best performing fire smoke dampers in the industry!

Manufacturer	Size		
	12" x 12"	24" x 24"	36" x 36"
Ruskin	.36	.13	.11
"G"	.50	.16	?
"P"	?	?	?
"N"	?	?	?
"AB"	?	?	?