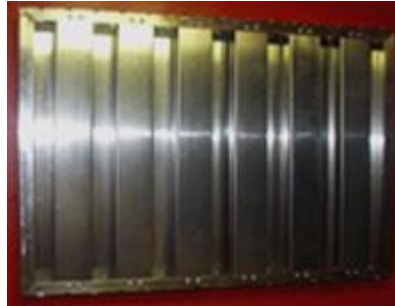


Flame Baffle Filters- Flame Barrier Protection

- ▷ Grease cannot clog or build up
- ▷ Reduces Fire Hazard Accidents
- ▷ Exceeds AS 1668.2 1991
- ▷ Complies with UL 1046-1979



Flame Baffle filters were designed primarily in response to a National Fire Protection Agency report attributing most fires in commercial kitchens being caused by cooking flames that flare up and penetrate mesh filters where grease deposits had accumulated.

The Australian standard AS1668.2 *Mechanical Ventilaion and Air Conditionaing in Buildings* was introduced in 1991 and requires Grease filters to comply with UL1046 - in other words only Flame Baffle type filters are effective in reducing kitchen fire risk.

Multi Action Safety Features

- **Elgee Flame Baffle Filters** provide safe and dependable proven barrier protection.
- **Elgee Flame Baffle Filters** provides efficient and proven grease removal.
- **Elgee Flame Baffle Filters** will not allow grease build up. The high velocity air flow provides a "self-cleaning" action. Special openings allow grease to continually drain and run off from filter.

Improved Air Balance

The filter design provides a self-balancing air flow through each filter allowing filter positioning to provide a good capture velocity where it is required using considerably less volume of exhaust air.

With low pressure drop filters it is necessary to pull more air through the central filters to get good smoke and grease velocity at the ends of the hood.

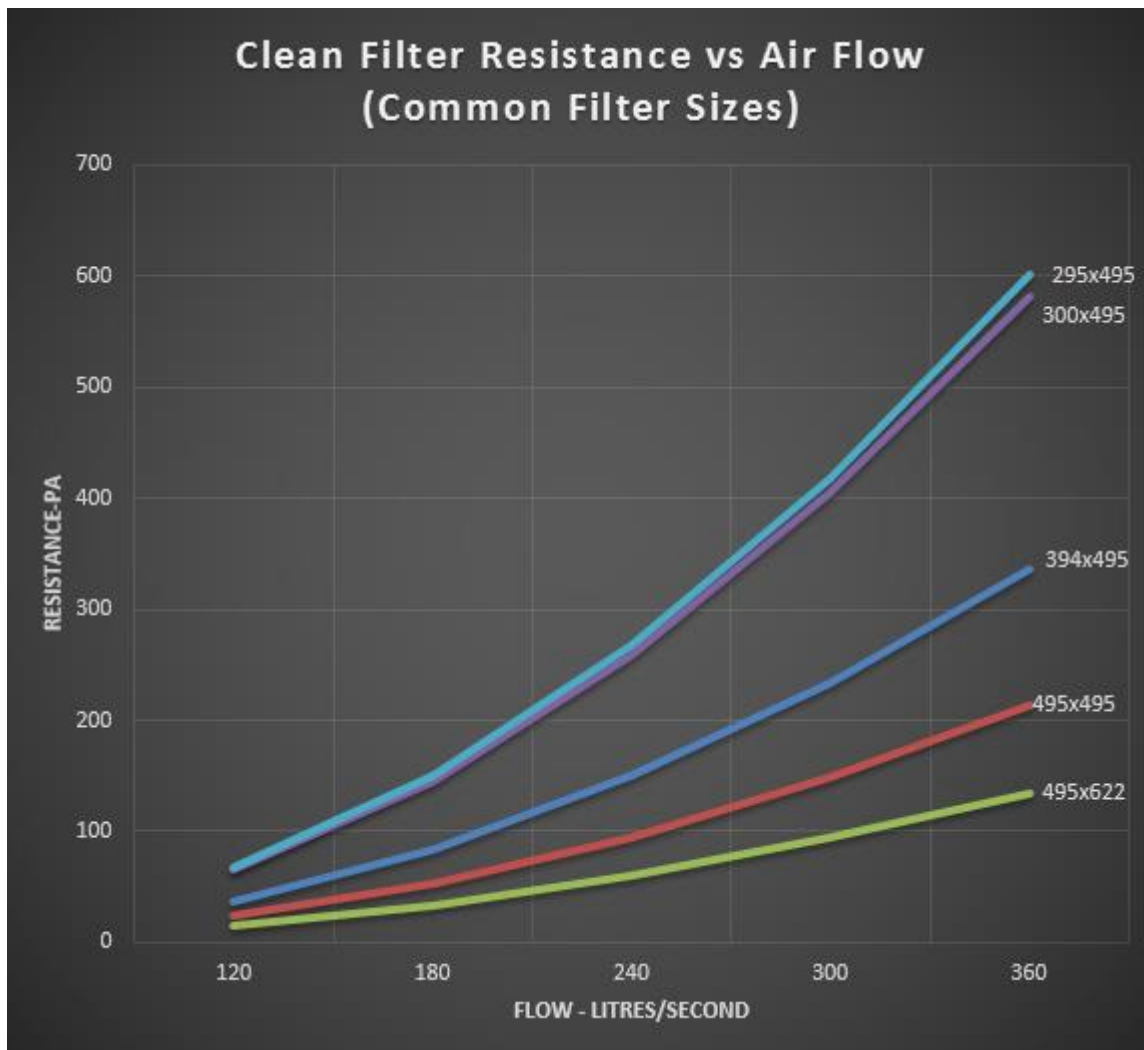
How Elgee Flame Baffle Filters Work



The staggered baffle filter arrangement directs incoming grease laden air through an orifice, firing it at high velocity into an opposing "U" shaped baffle.

The high centrifugal force created both in and out of the orifice forces grease particles to contact and adhere to the baffle.

Clean Filter Resistance vs Air Flow



FLAME BAFFLE FILTER AIR FLOW RESISTANCE

1. 394x495x45mm Filter

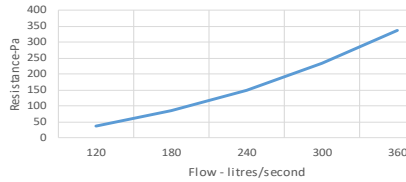
FILTER DIMENSIONS

HEIGHT (mm):	394
WIDTH (mm):	495
DEPTH (mm):	45
AREA (sqm):	0.195

Table 1 - Clean Filter Resistance vs Air Flow (394x495x45mm filter)

Percent of Rated Capacity	Flow (L/s)	Face Velocity	Resistance (Pa)		
			Increasing	Decreasing	Average
40%	120	0.62	37	37	37
60%	180	0.92	84	84	84
80%	240	1.23	150	150	150
100%	300	1.54	234	234	234
120%	360	1.85	337	337	337

Chart 1 - Clean Filter Resistance vs Air Flow (394x495x45mm filter)



2. 495x495x45mm Filter

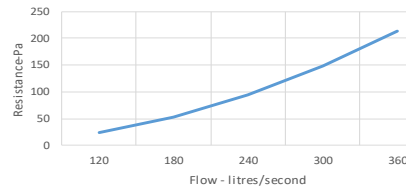
FILTER DIMENSIONS

HEIGHT (mm):	495
WIDTH (mm):	495
DEPTH (mm):	45
AREA (sqm):	0.245

Table 2 - Clean Filter Resistance vs Airflow (495x495x45mm filter)

Percent of Rated Capacity	Flow (L/s)	Face Velocity	Resistance (Pa)		
			Increasing	Decreasing	Average
40%	120	0.49	24	24	24
60%	180	0.73	53	53	53
80%	240	0.98	95	95	95
100%	300	1.22	148	148	148
120%	360	1.47	214	214	214

Chart 2 - Clean Filter Resistance vs Air Flow (495x495x45mm filter)



3. 495x622x45mm Filter

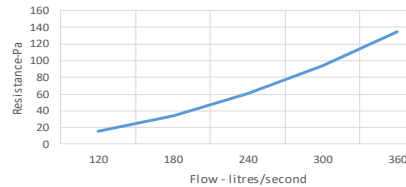
FILTER DIMENSIONS

HEIGHT (mm):	495
WIDTH (mm):	622
DEPTH (mm):	45
AREA (sqm):	0.308

Table 3 - Clean Filter Resistance vs Air Flow (495x622x45mm filter)

Percent of Rated Capacity	Flow (L/s)	Face Velocity	Resistance (Pa)		
			Increasing	Decreasing	Average
40%	120	0.39	15	15	15
60%	180	0.58	34	34	34
80%	240	0.78	60	60	60
100%	300	0.97	94	94	94
120%	360	1.17	135	135	135

Chart 3 - Clean Filter Resistance vs Air Flow (495x622x45mm filter)



4. 300x495x45mm Filter

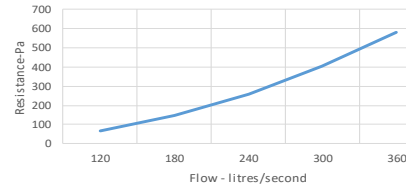
FILTER DIMENSIONS

HEIGHT (mm):	300
WIDTH (mm):	495
DEPTH (mm):	45
AREA (sqm):	0.149

Table 4 - Clean Filter Resistance vs Airflow (300x495x45mm filter)

Percent of Rated Capacity	Flow (L/s)	Face Velocity	Resistance (Pa)		
			Increasing	Decreasing	Average
40%	120	0.81	65	65	65
60%	180	1.21	145	145	145
80%	240	1.62	258	258	258
100%	300	2.02	404	404	404
120%	360	2.42	581	581	581

Chart 4 - Clean Filter Resistance vs Air Flow (300x495x45mm filter)



5. 295x495x45mm Filter

FILTER DIMENSIONS

HEIGHT (mm):	295
WIDTH (mm):	495
DEPTH (mm):	45
AREA (sqm):	0.146

Table 5 - Clean Filter Resistance vs Airflow (295x495x45mm filter)

Percent of Rated Capacity	Flow (L/s)	Face Velocity	Resistance (Pa)		
			Increasing	Decreasing	Average
40%	120	0.82	67	67	67
60%	180	1.23	150	150	150
80%	240	1.64	267	267	267
100%	300	2.05	417	417	417
120%	360	2.47	601	601	601

Chart 5 - Clean Filter Resistance vs Air Flow (295x495x45mm filter)

