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# **ELGEE HONEYCOMB GREASE FILTERS**

## **Advantages of using Honeycomb Filters over Mesh Grease Filters**

- Lower Running Cost
- b Lower Pressure Loss
- Duct Cleaning
- b Lower Noise Level
- Description 

  Lower Total Installed Cost 

  Lower Total Instal



The **honeycomb** grease filter has become the preferred Australian Standard Grease Filter displacing mesh filters in most parts of Australia.

Mesh grease filters trap and accumulate solids and other combustible materials within the filter which are difficult to remove. Although mesh filters may appear to be clean on the outside they really can be harbouring a dangerous amount of combustible material on the inside.

In contrast to the mesh grease filter, the honeycomb grease filter has large smooth walled passages which can easily be cleaned using a water jet.

## **How Honeycomb Grease Filters Work**



The Elgee Honeycomb filter media splits the incoming grease laden air into over 34,000 air streams per square metre of filter surface. Each air stream then criss-crosses similar air streams at 7 different points, creating turbulence which when combined with the 3 point turn (enforced by the flying "V" shaped core), forces grease particles to contact and adhere to the aluminium or stainless surface. This prevent grease from entering the exhaust system.

This unique Elgee design combines the highest collection efficiency with negligible pressure loss.



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# HONEYCOMB GREASE FILTER AIR FLOW RESISTANCE

#### L. 495x495x50mm Filter

FILTER DIMI	ENSIONS	Т
HEIGHT:	495 mm	
WIDTH:	495 mm	
DEPTH:	50 mm	Т
AREA:	0.245 sqm	

Flow

(litres/second)

100

200

300

400

500

600

Tabe 1 - Air Flow Resistance (495x495x50mm filter)

metres/second

0.4

0.8

1.2

1.6

2.4

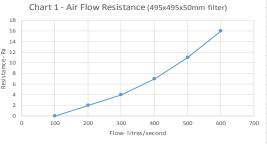
Face Velocity Resistance

(Pa)

11

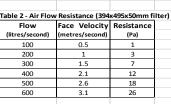
16

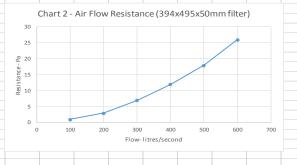




#### 2. 394x495x50mm Filter

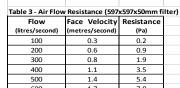
FILTER DIME	ILTER DIMENSIONS		
HEIGHT:	394mm		
WIDTH:	495mm		
DEPTH:	50 mm		
AREA:	0.195 sqm		

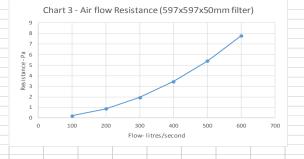




## 3. 597x597x50mm Filter

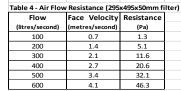
FILTER DIMEN	ER DIMENSIONS	
HEIGHT:	597 mm	
WIDTH:	597 mm	
DEPTH:	50 mm	
AREA:	0.356 sam	

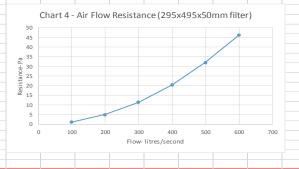




#### 4. 295x495x50mm Filter

FILTER DIMENS	SIONS
HEIGHT:	295 mm
WIDTH:	495 mm
DEPTH:	50 mm
AREA:	0.146 sqm





#### 5. 495x622x50mm Filter

FILTER DIMENSIONS		
HEIGHT:	495 mm	
WIDTH:	622mm	
DEPTH:	50 mm	
AREA:	0.308 sqm	

|--|

Flow (litres/second)         Face Velocity (metres/second)         Resistance (Pa)           100         0.3         0.3           200         0.6         1.2           300         1.0         2.6			
100 0.3 0.3 200 0.6 1.2	Flow	Face Velocity	Resistance
200 0.6 1.2	(litres/second)	(metres/second)	(Pa)
	100	0.3	0.3
300 1.0 2.6	200	0.6	1.2
	300	1.0	2.6
400 1.3 4.6	400	1.3	4.6
500 1.6 7.2	500	1.6	7.2
600 1.9 10.4	600	1.9	10.4

