KITCHEN EXTRACT

# MFU RANGE

**MULTI FILTRATION UNIT** 



# COMMERCIAL KITCHEN FILTRATION EXPERTS

Purified Air Ltd. has been manufacturing and servicing market-leading technology to filter and control oil, grease, smoke and odour from commercial kitchens since 1984.

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#### KITCHEN EXTRACT

# **MFU RANGE**

**MULTI-FILTRATION UNIT** 





Our MFUs are designed explicitly for kitchen extract systems; they collect the oil, grease and smoke particles filtered out of the exhaust through a combination of passive air filters, including panel, bag, HEPA and carbon.

The high-quality unit can house multiple filter combinations and is effortlessly serviced, replaced or even re-configured to provide continually effective and affordable kitchen extract particulate control. Additionally, the units help reduce grease build-up within the ducting and reduce odours.

Its modular design means units can be configured in various ways to handle any required flow rate, providing effective and efficient kitchen extract filtration.

# **KEY FEATURES**

- Built for stock
- Multiple configurations
- Eliminates oil, grease, smoke particles and odours
- Modular in design
- Filters particles down to submicron levels

- Endless combinations of passive filtration
- Specifically designed for commercial kitchen application
- Greatly reduces grease build-up within the duct run

#### **FILTERS REMOVE**









Smoke

Steam

Grease

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# **OUR FILTERS**



#### **PANEL FILTERS**

Our pleated panel filters are constructed using a core of pleated fibrous media designed specifically for use in air filtration. This is then thermally bonded onto a galvvanised steel support mesh for maximum rigidity which is then fully bonded into a moisture resistant rigid white lined card frame. These filters are used as stand-alone pre filters or as a pre filter to bag filters filtering oil and grease particles.



#### **HEPA FILTERS**

To qualify to be called a High-Efficiency Particulate Air or HEPA filter, the filter must be able to remove, from the air that passes through it, 99.97% of particles down to a sub-micron level of 0.3 microns. Our main use of HEPA filtration is the removal of smoke particles. We do supply many different sizes and grades of HEPA filters so please contact us with your requirements.



#### **BAG FILTERS**

Our general purpose bag filters are manufactured using a galvanised steel header to retain the pocket sets.

The pockets are produced from synthetic micro-fibres specifically designed for use in air filtration. They can be applied as a pre filter to carbon cells in malodour extraction, taking out oil and grease particles ahead of the carbon filter stage.



#### **CARBON FILTERS**

Our site safe carbon filters use panels of activated carbon to remove the malodourous gases within the commercial kitchen extract duct through the process of chemical adsorption. By installing adequate pre-filtration before our site safe filters, the carbon life span is greatly increased, allowing it to nullify malodours at optimum efficiency for much longer.

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# **HOW IT WORKS**



Our MFUs fit in line with the kitchen ducting and can be configured modularly to cope with all extract flow rates.

Cooking particulates and odours

02 Canopy Grease Filter

03 MFU Unit

**OUR SERVICES** 



Design Manufacture



# **MODULAR SYSTEM**

Our system allows specifiers and installers to create a wide range of configurations which contain a customisable combination of different air filters. This provides a tailored, cost-effective air filtration solution.

MFU 600

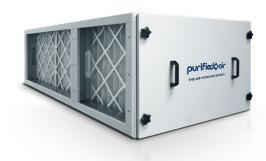
MFU 1200

MFU 1800





2 X MFU 1800



#### **SAMPLE CONFIGURATIONS**

2 X MFU 600



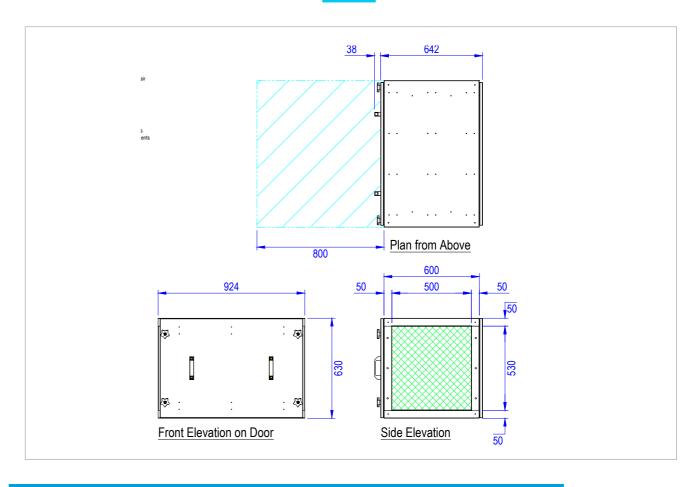


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# **TECHNICAL SPECIFICATIONS**

GLOBAL SPECIFICATIONS						
`FILTERS		Width(mm)	Height	Depth	Weight (kg)	
	45mm	595	595	45	0.5	
Panel	95mm	595	595	95	0.5	
Bag	300mm	592	592	300	1.5	
HEPA	300mm	592	592	300	18	
Carbon	Site Safe	594	597	195	25	
CASINGS ONLY						
MFU 600		600	630	924	55.5	
MFU 1200		1200	630	924	78	
MFU 1800		1800	630	924	133.5	

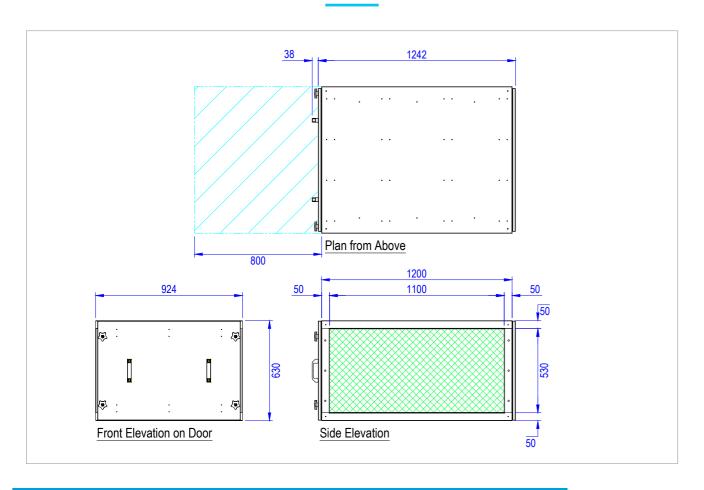
#### MFU 600



MFU 600						
×		Model A1	Model A1 (C)	Model B1	Model E2	Model F2
Panel	45 mm					
	95 mm	1		1	1	1
Bag	300 mm			1		1
HEPA	300 mm			1		1
Carbon	Site Safe (195 mm)	3	3		6	3
Flow Rate*	Maximum (m³/s)	1m³/s	1m <sup>3</sup> /s	1m³/s	1m³/s	1m³/s
Weight (kg)		110	279	76	220	186
No. Units		Single	Single	Single	Double	Double
Pressure Drop	at 0.7 m³/s (Pa)	119	110	197	204	282
Dimensions						
Width (mm)		600	600	600	600	600
Height (mm)		630	630	630	630	630
Depth (mm)	(Direction of airflow)	924	924	924	1848	1848

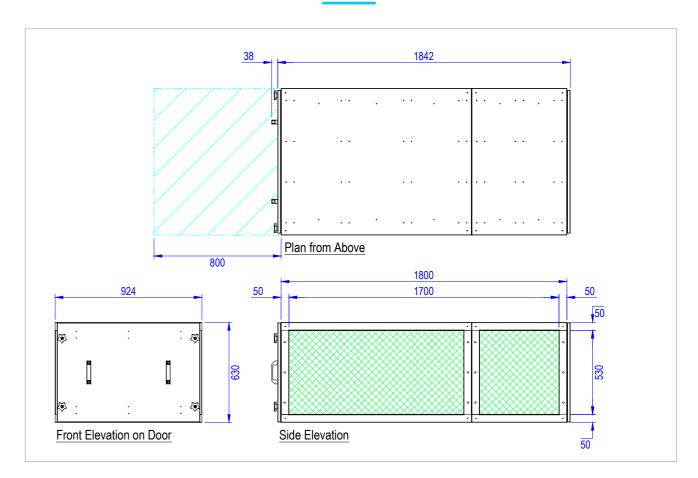
8 TECHNICAL OVERVIEW
TECHNICAL OVERVIEW

 $<sup>^{\</sup>ast}$  Flow Rate – unit selection dependent on air flow rate and cooking style



MFU 1200						
×		Model A1	Model A1 (C)	Model B1	Model E2	Model F2
	45 mm					
Panel	95 mm	2		2	2	2
Bag	300 mm			2		2
HEPA	300 mm			2		2
Carbon	Site Safe (195 mm)	6	6		12	6
Flow Rate*	Maximum (m³/s)	2m³/s	2m³/s	2m <sup>3</sup> /s	2m³/s	2m³/s
Weight (kg)		187	186	118	372	304
No. Units		Single	Single	Single	Double	Double
Pressure Drop	at 1.5 m³/s (Pa)	126	90	211	216	301
Dimensions						
Width (mm)		1200	1200	1200	1200	1200
Height (mm)		630	630	630	630	630
Depth (mm)	(Direction of airflow)	924	924	924	1848	1848

<sup>\*</sup> Flow Rate – unit selection dependent on air flow rate and cooking style



MFU 1800						
×		Model A1	Model A1 (C)	Model B1	Model E2	Model F2
D	45 mm					
Panel	95 mm	3		3	3	3
Bag	300 mm			3		3
HEPA	300 mm			3		3
Carbon	Site Safe (195 mm)	9	9		18	9
Flow Rate*	Maximum (m³/s)	3m³/s	3m³/s	3m³/s	3m³/s	3m³/s
Weight (kg)		280	279	177	560	456
No. Units		Single	Single	Single	Double	Double
Pressure Drop	at 2.5 m³/s (Pa)	150	110	245	220	355
Dimensions						
Width (mm)		1800	1800	1800	1800	1800
Height (mm)		630	630	630	630	630
Depth (mm)	(Direction of airflow)	924	924	924	1848	1848

<sup>\*</sup> Flow Rate – unit selection dependent on air flow rate and cooking style





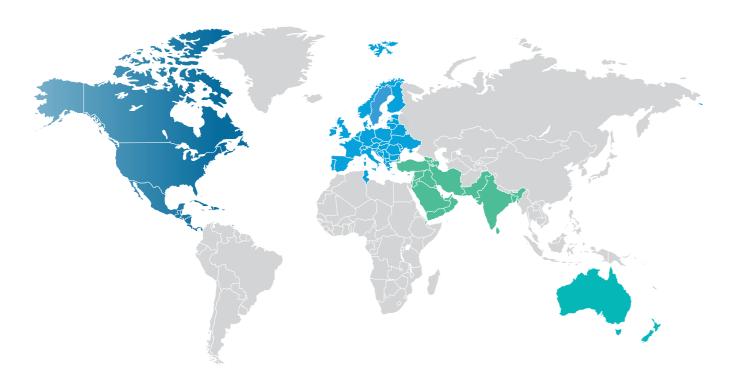
# **ABOUT US**

Purified Air Ltd. has been striving to find the best and most cost-effective way to filter and control oil, smoke, fat and odour produced by commercial kitchens and service since 1984.

Purified Air manufactures filtration and odour control products for stock and bespoke systems, supplying systems to many sectoral brands. The design of each solution is based on the type of food cooked, the cooking process used, and the extracted air volume providing tried and tested purified kitchen exhaust air for Fast Food, Casual Dining and Luxury Concept Restaurant (Fine Dining) markets. By working with these variables, we can design and supply some of the world's best commercial kitchen filtration and odour control systems.

#### **WORLDWIDE COVERAGE**

- United Kingdom
- Middle East
- Europe
- North America
- Asia
- Australasia



# GETIN TOUCH

**\** 01708 755 414

✓ enq@purifiedair.com

Purified Air Limited, Lyon House Lyon Road, Romford, Essex RM1 2BG

purifiedair.com

