

The self-contained **FIRESAFE** kitchen ventilation system



Unlock new locations



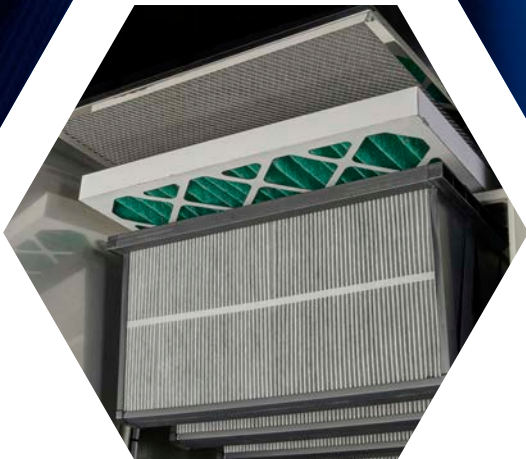
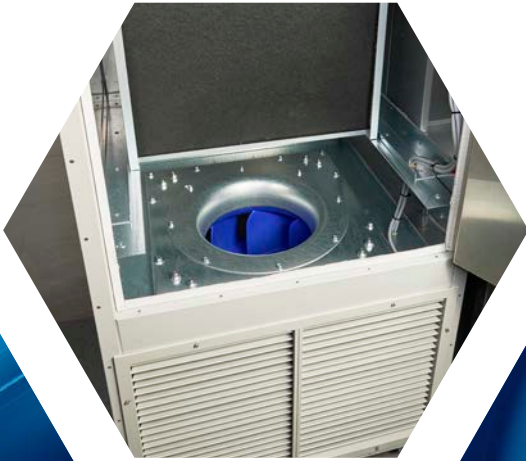
Reduce fire risk



Environmental benefits

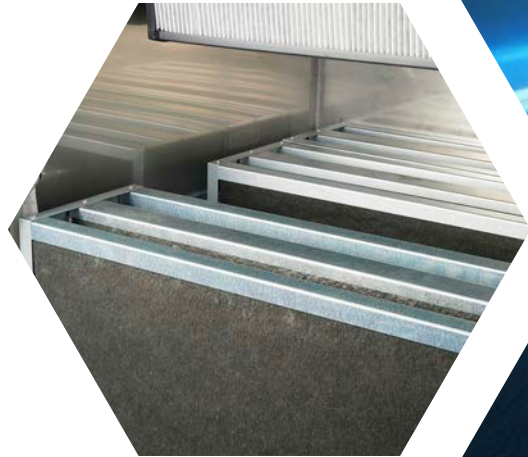


Cost benefits





Building and equipping a professional kitchen can be an expensive exercise when considering location, planning applications, equipment, fire regulations, external ductwork, etc.



**But, what if you could locate a professional kitchen almost anywhere?**

**With the Refresh Firesafe Extraction Solution, you can!!!**

Our compact Refresh Firesafe units incorporate the very latest air extraction systems, with the option of including conditioning, recirculation and fire suppression capabilities together with multistage filtration and biochemical technologies- without the need for permanent exhaust fans and expensive ductwork to atmosphere.

No more worrying about finding the right location, gaining planning permission for external building work and expensive external ductwork.

Just find the right location and start generating business.



No requirement for route to atmosphere.



Unlock new locations



Reduce fire risk



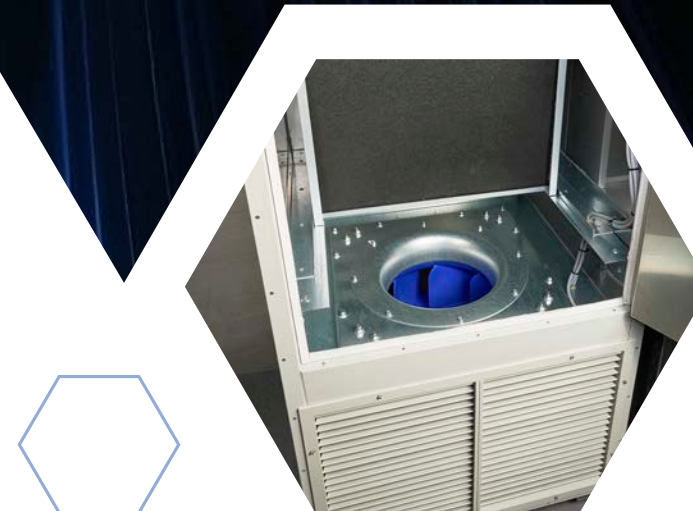
Environmental benefits



Cost benefits

Typical locations where Refresh Firesafe units offer an excellent solution include:-

- Shopping Malls
- Concession areas in transport hubs such as airports, train stations and bus interchanges
- Theatres, Arena's, Concert Halls
- Hotels
- Sports Stadia
- Buildings with listed status
- Universities, Colleges and Schools
- Leisure attractions
- Retail outlets
- High rise buildings
- Basement areas
- Buildings with restricted planning consent







**Refresh**<sup>®</sup>  
FIRESAFE

## Model Number Identification

FKE	005	CB	3	- 02
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Where:

- FKE** - Fire safe Construction - Kitchen Extract
- 005** - Airflow (0.5m<sup>3</sup>/s)
- CB** - Activated carbon filters
- 1 / 3** - 1 Single phase, 3 Three phase
- 02** - 0.2s dwell time (standard for maximum rated airflow)



### What is Dwell time?

Dwell time is the time needed for the air to pass through the filter whilst remaining in contact with the Activated Carbon media.

The longer the passing air remains in contact with the activated carbon media the greater the removal of air borne odours.

Refer to guidelines below for dwell time range that may be considered for various applications.

Nature of cooking	Dwell time
Light catering, kitchens, fish & chips, restaurants, pizza & burgers	0.1s - 0.2s
High concentration of fried foods / burgers	0.2s - 0.3s
Indian, Chinese restaurants / cooking with lots of onion, garlic & spices	0.2s - 0.4s

Higher dwell time can be achieved by reducing the airflow through the units.

For example, FKE-Pro unit with the model number FKE036CB3-02 has a rated airflow of 3.6m<sup>3</sup>/s and a dwell time of 0.2s. Dwell time of this unit can be increased to 0.3s by reducing the airflow to 75% of the rated airflow (i.e 2.7m<sup>3</sup>/s) and the dwell time can be further increased to 0.4s by reducing the airflow to 50% of the rated airflow (i.e 1.8m<sup>3</sup>/s).







The Refresh Firesafe solution has been specifically designed to facilitate cooking extraction- without the need to discharge to outside atmosphere.

## Refresh Firesafe Product Range

The range of Refresh Firesafe units offer a self-contained cooking extraction solution designed to recirculate cleaned air back into the kitchen space- rather than extracting it outside the building. The Refresh Firesafe solution incorporates an impressive range of advanced features whilst also delivering exceptional advantages.

These units are suitable for electrical cookline appliances and are available in three different series, FKE-Standard, FKE-Pro mini and FKE-Pro, covering an airflow range of 0.5m<sup>3</sup>/s to 3.6m<sup>3</sup>/s.

The FKE-Standard series of units incorporates 3-stages of filtration. These units are very compact and light in construction.

The FKE-Pro mini series delivers all the benefits of the FKE-Standard series and in addition, includes a fourth stage of filtration with high-efficiency, advanced activated carbon filtration with a dwell time of 0.1s as standard at maximum rated airflow.

The FKE-Pro series also delivers all the benefits of the FKE-Standard series and in addition, includes a fourth stage of filtration with high-efficiency, advanced activated carbon filtration but with a higher dwell time of 0.2s as standard at maximum rated airflow.

Consideration for any cooling requirements to cater for internal heat loads should be considered at planning stage.

Refresh Firesafe units are provided with a Control Kit having several enhanced features and control options. A Premium Controls option with several sophisticated premium features is available upon request.

The Refresh Firesafe range is manufactured to the highest standards and incorporates the very latest technology- delivering a highly competitive, energy efficient, state-of-the-art recirculation solution.



# Features and advantages of the Refresh Firesafe



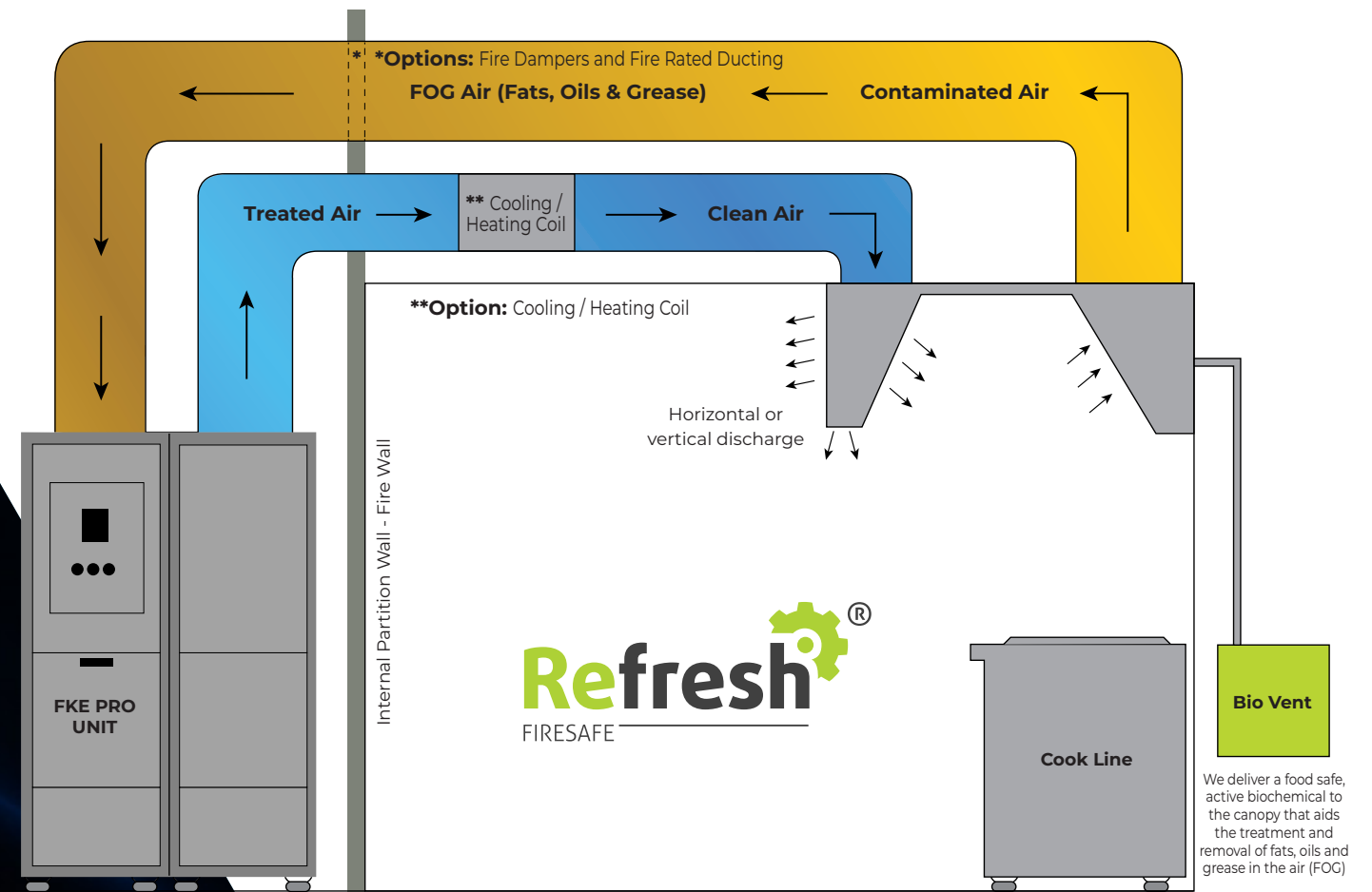
## Features include:-

- Compact unit design-utilising the latest materials and equipment
- Innovative design- recirculating clean air back into the kitchen space
- Extensive range -solving almost any situation
- Multi-stage, high efficiency filtration
- The latest bio-chemical technology- to combat fats and grease build up within the canopy
- No requirement for expensive external ductwork
- Quick and easy installation
- Reduced maintenance costs- compared to other similar solutions
- Latest fan technology - reducing operating costs
- High efficiency filters, whilst removing fats and grease, also help to reduce the risk of bacteria and viruses being recirculated.
- Can also be used as a standalone unit to clean air within a room.
- The unit construction has undergone a 2 hour observation Fire Resistance Test-utilising the general principles of BS476 Part 20:1987 (Warrington Fire Report 429782 Available on request).

## Advantages include:-

- High efficiency extraction, conditioning and recirculation of air-from one, compact designed unit
- Quick and easy to install- saving on materials, time and money
- Substantially reduced operating costs
- Reduced external ductwork cleaning requirements
- No complicated planning applications requiring external ducting
- A very flexible solution- plug and play
- Kitchens can usually be situated in locations which would normally be restricted-due to external ductwork requirements
- Simplified planning applications
- Ideal for both new and retrofit applications
- Highly energy efficient
- Low capital costs when compared to other solutions
- Provides a safer, more comfortable and productive environment
- The option of additional built in fire suppression, cooling and heat reclaim systems
- Designed and manufactured by Weatherite- delivering high efficiency HVAC solutions for over 50 years

# General description and operation






## Compliance

- Fire Officer
- Environmental Health Officer
- Building Control Officer
- Air Quality Consultant
- Acoustic Consultant
- Food Standards Agency

## Standard Filtration

- Stage 1** - Washable stainless steel grease filter
- Stage 2** - Pleated panel filter (ISO coarse 70% / G4)
- Stage 3** - Carbon rigid compact filter (ISO ePM1 60% / F7)
- Stage 4** - Activated carbon filter (FKE Pro Mini & FKE Pro series)

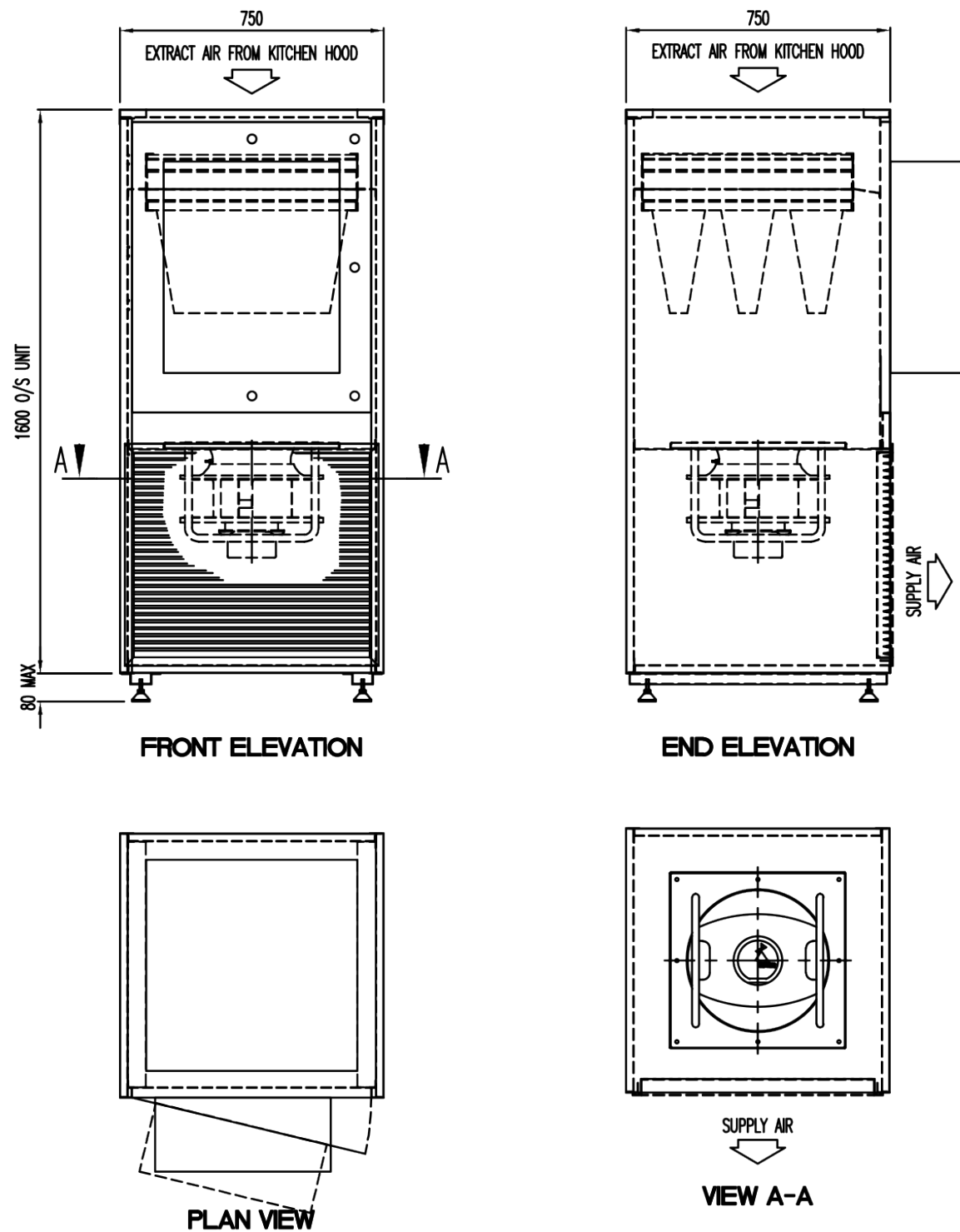
REMOVES →  Grease  Smoke  Odour





# FKE Standard Series

## Unit - Models FKE0051, FKE0053 & FKE0093



# FKE Standard Series

## Specifications - Models FKE0051, FKE0053 & FKE0093

Construction			
Unit Model	Air Flow	Design Air Flow	Filtration
		m <sup>3</sup> /s	
FKE0051		0.5	Stage 1 - Stainless Steel Mesh Pre-Filter Stage 2 - High Capacity Pleated Panel Filter Stage 3 - Carbon Rigid Compact Filter
FKE0053		0.5	
FKE0093		0.9	

The unit construction has undergone a 2 hour observation Fire Resistance Test-utilising the general principles of BS476 Part20:1987 (Warrington Fire Report 429782 available on request)

REMOVES →

Design											
Unit Model	Design Air Flow		External Static Pressure		Fans	Rated Current Amps	Rated Power kW	Maximum Temperature °C	Electrical		Specific Fan Power** kW/m <sup>3</sup> /s
	m <sup>3</sup> /s	m <sup>3</sup> /hr	Design Pa	Available Max ESP* Pa					Frequency Hz	Phase	
FKE0051	0.5	1800	250	625	Ø310	6.6	1.3	45	50 / 60	Single	1.09
FKE0053	0.5	1800	250	1045	Ø355	4	2.5	50	50 / 60	Three	1.08
FKE0093	0.9	3240	250	975	Ø355	4	2.5	50	50 / 60	Three	0.95

\* - Max available ESP given in-case of unusual site requirements only    \*\* - @Mean filter condition and Design External Static Pressure

Dimensional Data				
Unit Model	Dimensions			Estimated Weight** kg
	W (mm)	D (mm) <sup>+</sup>	H (mm)	
FKE0051	750	750	1680	218
FKE0053	750	750	1680	222
FKE0093	750	750	1680	222

<sup>+</sup> - Excluding control panel depth  
<sup>\*\*</sup> - This weight does not include the weight of optional extras

Noise Data***		
Casing Breakout @ 1m free field		
Clean d(B)A	Mean d(B)A	Dirty d(B)A
40	43	46
40	45	49
38	39	42

\*\*\* - Noise data based on Design ESP

Inlet / Outlet Sound Power Level <sup>x</sup>									
Unit Model	Octave bands (Hz)	63	125	250	500	1000	2000	4000	8000
FKE0051	Inlet	72	66	66	63	58	55	47	41
	Outlet	75	74	76	72	73	71	66	62
FKE0053	Inlet	70	70	66	62	55	53	46	39
	Outlet	76	78	75	72	74	69	65	59
FKE0093	Inlet	57	57	65	62	56	55	48	44
	Outlet	65	66	74	72	74	71	67	64

<sup>x</sup> - Sound power levels based on design external static pressure and mean filter condition (Not Weighted)

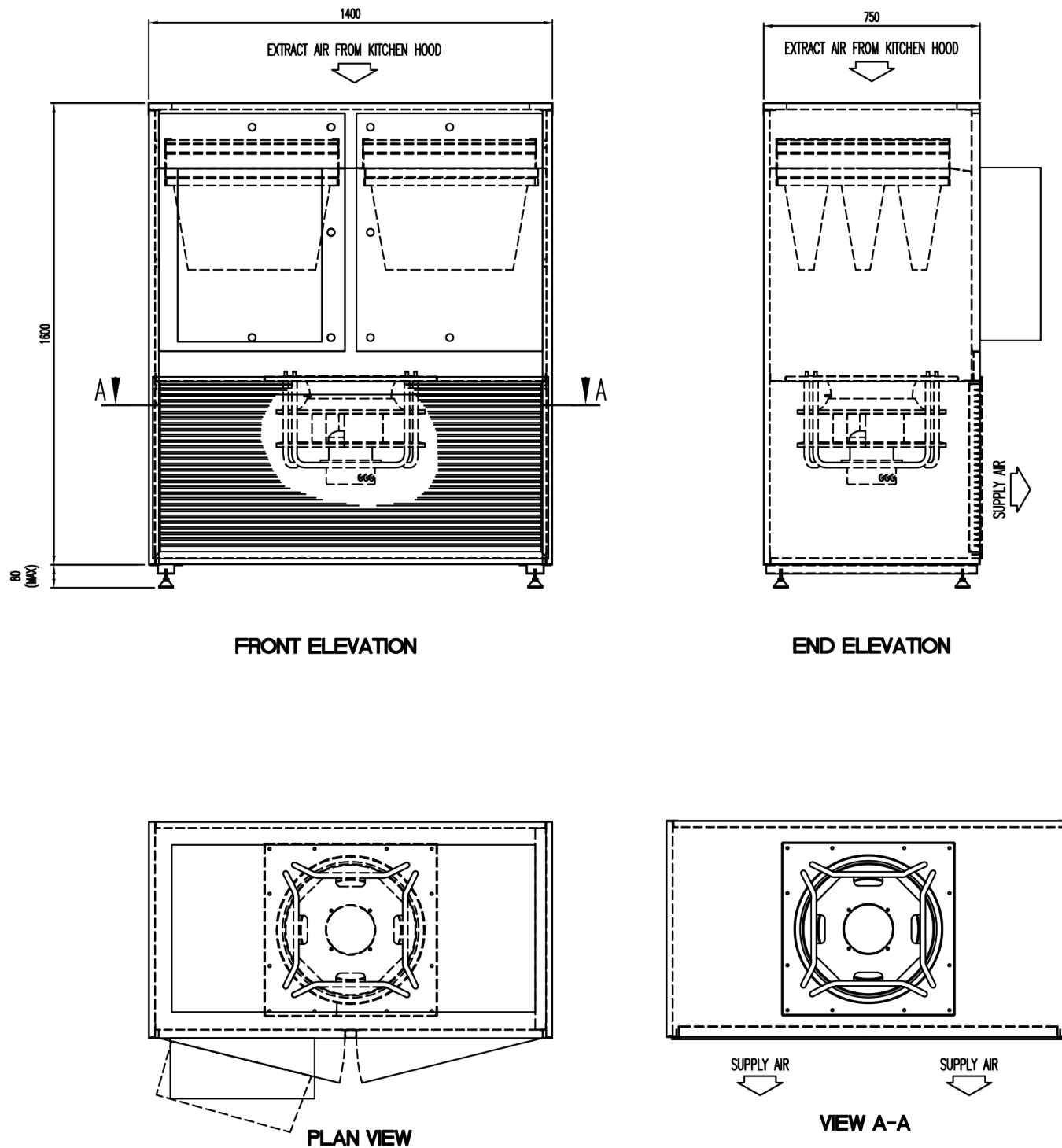
### Notes:

1. Allow 800mm clear service access in front of each door
2. Inlet/Outlet sound power level calculated @ design ESP and mean filter conditions. For clean filters these will reduce slightly
3. Maximum available pressure given in-case of unusual site requirements only
4. The unit construction has undergone a 2 hour observation Fire Resistance Test-utilising the general principles of BS476 Part 20:1987 (Warrington Fire Report 429782 available on request).



# FKE Standard Series

## Unit - Model FKE0183



# FKE Standard Series

## Specifications - Model FKE0183

Construction			
Unit Model	Air Flow	Design Air Flow	Filtration
		m <sup>3</sup> /s	
FKE0183		1.8	Stage 1 - Stainless Steel Mesh Pre-Filter Stage 2 - High Capacity Pleated Panel Filter Stage 3 - Carbon Rigid Compact Filter

The unit construction has undergone a 2 hour observation Fire Resistance Test-utilising the general principles of BS476 Part20:1987 (Warrington Fire Report 429782 available on request)

REMOVES →

Design											
Unit Model	Design Air Flow		External Static Pressure		Fans	Rated Current Amps	Rated Power kW	Maximum Temperature °C	Electrical		Specific Fan Power** kW/m <sup>3</sup> /s
	m <sup>3</sup> /s	m <sup>3</sup> /hr	Design Pa	Available Max ESP* Pa					Frequency Hz	Phase	
FKE018F3	1.8	6480	250	545	Ø450	4.8	2.9	40	50 / 60	Three	0.96

\* - Max available ESP given in-case of unusual site requirements only      \*\* - @Mean filter condition and Design External Static Pressure

Dimensional Data				
Unit Model	Dimensions			Estimated Weight** kg
	W (mm)	D (mm)*	H (mm)	
FKE0183	1400	750	1680	342

\* - Excluding control panel depth  
\*\* - This weight does not include the weight of optional extras

Noise Data***		
Casing Breakout @ 1m free field		
Clean d(B)A	Mean d(B)A	Dirty d(B)A
48	48	49

\*\*\* - Noise data based on Design ESP

Inlet / Outlet Sound Power Level*									
Unit Model	Octave bands (Hz)	63	125	250	500	1000	2000	4000	8000
FKE0183	Inlet	76	71	74	70	62	58	51	50
	Outlet	80	79	82	80	80	74	70	68

\* - Sound power levels based on design external static pressure and mean filter condition (Not Weighted)

### Notes:

1. Allow 800mm clear service access in front of each door
2. Inlet/Outlet sound power level calculated @ design ESP and mean filter conditions. For clean filters these will reduce slightly
3. Maximum available pressure given in-case of unusual site requirements only
4. The unit construction has undergone a 2 hour observation Fire Resistance Test-utilising the general principles of BS476 Part 20:1987 (Warrington Fire Report 429782 available on request).

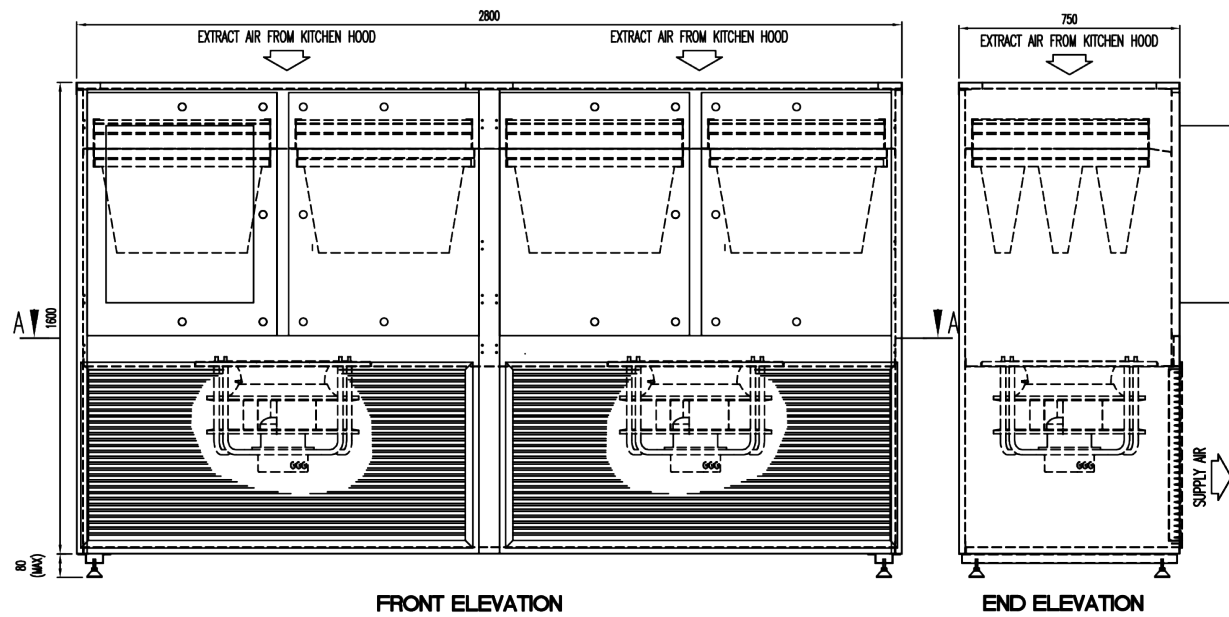


# FKE Standard Series

## Unit - Model FKE0363

# FKE Standard Series

## Specifications - Model FKE0363



### Construction

Unit Model	Air Flow	Design Air Flow		Filtration	The unit construction has undergone a 2 hour observation Fire Resistance Test-utilising the general principles of BS476 Part20:1987 (Warrington Fire Report 429782 available on request)
		m <sup>3</sup> /s			
FKE0363		3.6		<b>Stage 1</b> - Stainless Steel Mesh Pre-Filter <b>Stage 2</b> - High Capacity Pleated Panel Filter <b>Stage 3</b> - Carbon Rigid Compact Filter	<b>REMOVES</b> →

### Design

Unit Model	Design Air Flow		External Static Pressure		Fans	Rated Current	Rated Power	Maximum Temperature	Electrical		Specific Fan Power**
	m <sup>3</sup> /s	m <sup>3</sup> /hr	Design	Available Max ESP*					Frequency	Phase	
FKE0363	3.6	12960	250	545	2 x Ø450	9.6	5.8	40	50 / 60	Three	0.96

\* - Max available ESP given in-case of unusual site requirements only    \*\* - @Mean filter condition and Design External Static Pressure

### Dimensional Data

Unit Model	Dimensions			Estimated Weight**
	W (mm)	D (mm)*	H (mm)	
FKE0363	2800	750	1680	591

\* - Excluding control panel depth  
\*\* - This weight does not include the weight of optional extras

### Noise Data\*\*\*

Casing Breakout @ 1m free field		
Clean	Mean	Dirty
d(B)A	d(B)A	d(B)A
51	51	52

\*\*\* - Noise data based on Design ESP

### Inlet / Outlet Sound Power Level<sup>x</sup>

Unit Model	Octave bands (Hz)	63	125	250	500	1000	2000	4000	8000
FKE0363	Inlet	79	74	77	73	65	61	54	53
	Outlet	83	82	85	83	83	77	73	71

<sup>x</sup> - Sound power levels based on design external static pressure and mean filter condition (Not Weighted)

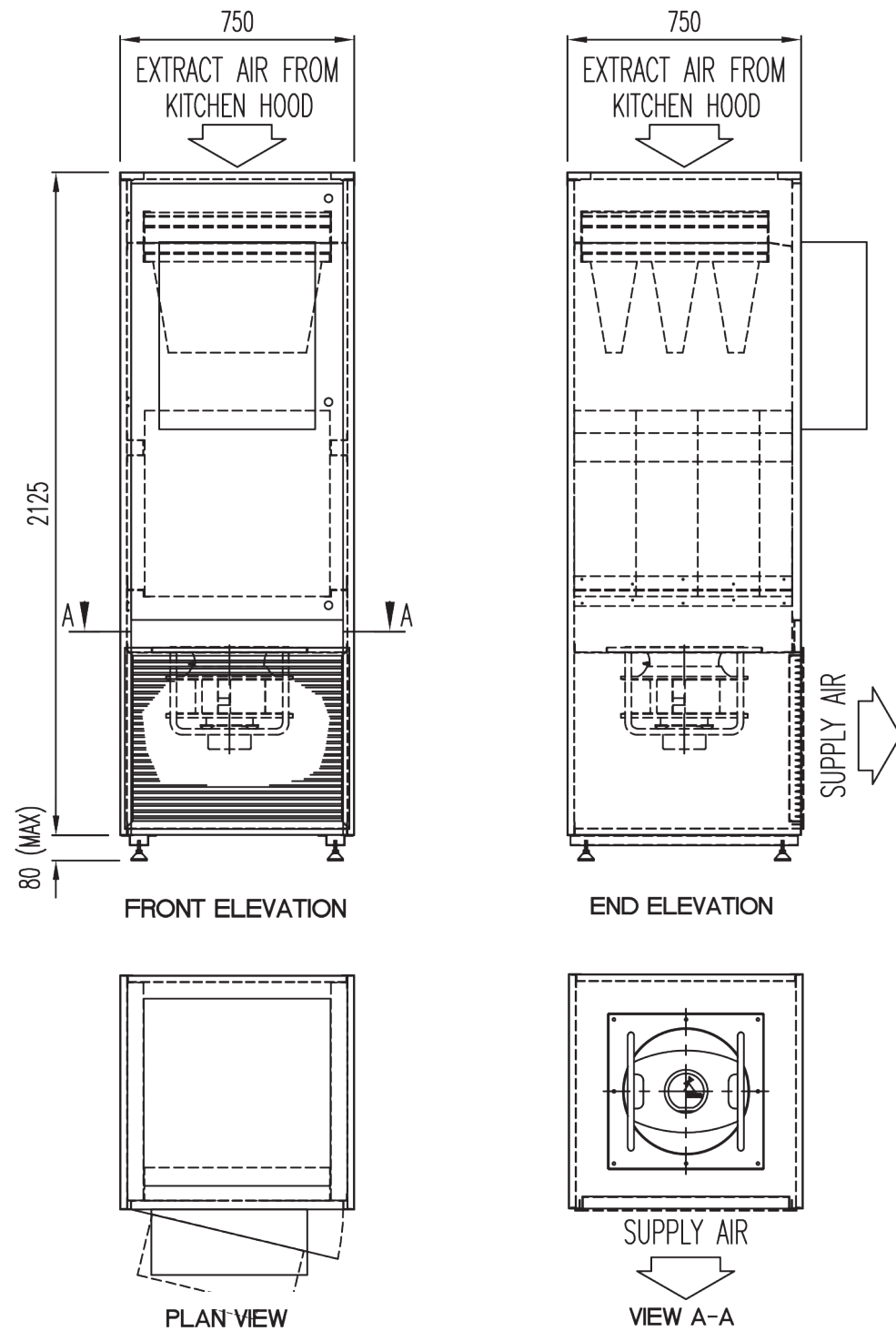
### Notes:

1. Allow 800mm clear service access in front of each door
2. Inlet/Outlet sound power level calculated @ design ESP and mean filter conditions. For clean filters these will reduce slightly
3. Maximum available pressure given in-case of unusual site requirements only
4. The unit construction has undergone a 2 hour observation Fire Resistance Test-utilising the general principles of BS476 Part 20:1987 (Warrington Fire Report 429782 available on request).



# FKE PRO Mini Series

Unit - Model FKE009CB3-01



# FKE PRO Mini Series

Specifications - Model FKE009CB3-01

## Construction

Unit Model	Air Flow	Design Air Flow		Filtration	The unit construction has undergone a 2 hour observation Fire Resistance Test-utilising the general principles of BS476 Part20:1987 (Warrington Fire Report 429782 available on request)
		m <sup>3</sup> /s			
FKE009CB3-01		0.9		<b>Stage 1</b> - Stainless Steel Mesh Pre-Filter <b>Stage 2</b> - High Capacity Pleated Panel Filter <b>Stage 3</b> - Carbon Rigid Compact Filter <b>Stage 4</b> - Activated Carbon Filter	REMOVES →

## Design

Unit Model	Design Air Flow		External Static Pressure		Fans	Rated Current Amps	Rated Power kW	Maximum Temperature °C	Electrical		Specific Fan Power** kW/m <sup>3</sup> /s
	m <sup>3</sup> /s	m <sup>3</sup> /hr	Design Pa	Available Max ESP* Pa					Frequency Hz	Phase	
FKE009CB3-01	0.9	3240	250	790	Ø355	4	2.5	50	50 / 60	Three	1.24

\* - Max available ESP given in-case of unusual site requirements only      \*\* - @Mean filter condition and Design External Static Pressure

## Dimensional Data

Unit Model	Dimensions			Estimated Weight** kg
	W (mm)	D (mm)*	H (mm)	
FKE009CB3-01	750	750	2205	360

\* - Excluding control panel depth  
\*\* - This weight does not include the weight of optional extras

## Noise Data\*\*\*

Unit Model	Casing Breakout @ 1m free field		
	Clean	Mean	Dirty
	d(B)A	d(B)A	d(B)A
FKE009CB3-01	40	44	45

\*\*\* - Noise data based on Design ESP

## Dwell Time

Seconds
0.1

## Inlet / Outlet Sound Power Level\*

Unit Model	Octave bands (Hz)	63	125	250	500	1000	2000	4000	8000
FKE009CB3-01	Inlet	58	56	67	60	53	51	42	36
	Outlet	69	68	79	74	76	74	70	66

\* - Sound power levels based on design external static pressure and mean filter condition (Not Weighted)

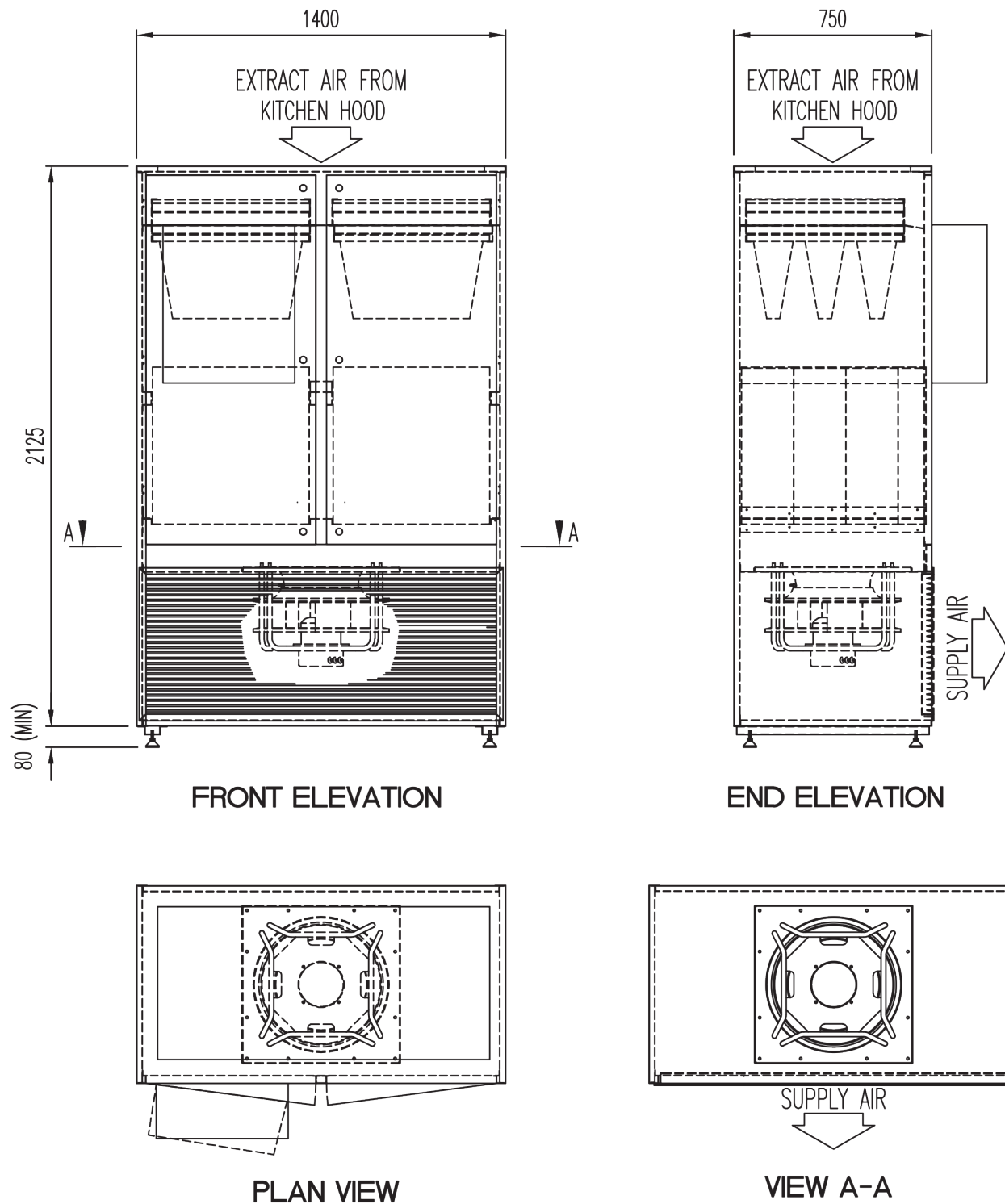
## Notes:

1. Allow 800mm clear service access in front of each door
2. Inlet/Outlet sound power level calculated @ design ESP and mean filter conditions. For clean filters these will reduce slightly
3. Maximum available pressure given in-case of unusual site requirements only
4. The unit construction has undergone a 2 hour observation Fire Resistance Test-utilising the general principles of BS476 Part 20:1987 (Warrington Fire Report 429782 available on request).



# FKE PRO Mini Series

Unit - Model FKE018CB3-01



# FKE PRO Mini Series

Specifications - Model FKE018CB3-01

## Construction

Unit Model	Air Flow	Design Air Flow		Filtration
		m <sup>3</sup> /s		
FKE018CB3-01		1.8		Stage 1 - Stainless Steel Mesh Pre-Filter Stage 2 - High Capacity Pleated Panel Filter Stage 3 - Carbon Rigid Compact Filter Stage 4 - Activated Carbon Filter

The unit construction has undergone a 2 hour observation Fire Resistance Test-utilising the general principles of BS476 Part20:1987 (Warrington Fire Report 429782 available on request)

**REMOVES** →

## Design

Unit Model	Design Air Flow		External Static Pressure		Fans	Rated Current Amps	Rated Power kW	Maximum Temperature °C	Electrical		Specific Fan Power** kW/m <sup>3</sup> /s
	m <sup>3</sup> /s	m <sup>3</sup> /hr	Design Pa	Available Max ESP*					Frequency Hz	Phase	

\* - Max available ESP given in-case of unusual site requirements only    \*\* - @Mean filter condition and Design External Static Pressure

## Dimensional Data

Unit Model	Dimensions			Estimated Weight** kg
	W (mm)	D (mm)*	H (mm)	
FKE018CB3-01	1400	750	2205	594

\* - Excluding control panel depth  
\*\* - This weight does not include the weight of optional extras

## Noise Data\*\*\*

Unit Model	Casing Breakout @ 1m free field		
	Clean	Mean	Dirty
	d(B)A	d(B)A	d(B)A
FKE018CB3-01	49	49	50

\*\*\* - Noise data based on Design ESP

## Dwell Time

Seconds
0.1

## Inlet / Outlet Sound Power Level\*

Unit Model	Octave bands (Hz)	63	125	250	500	1000	2000	4000	8000
		FKE018CB3-01	<b>Inlet</b>	74	67	73	67	59	53
	<b>Outlet</b>	81	78	84	81	81	76	71	68

\* - Sound power levels based on design external static pressure and mean filter condition (Not Weighted)

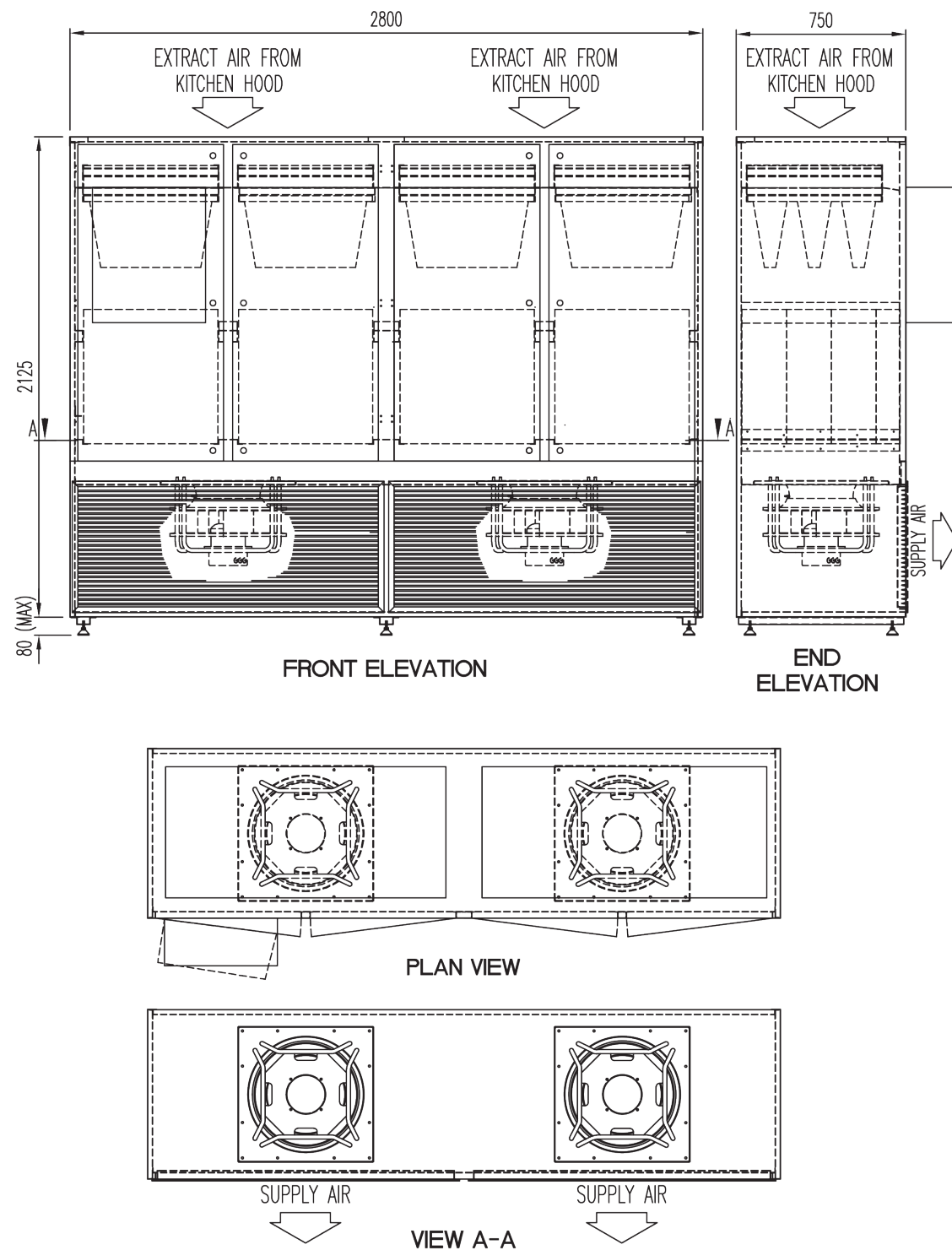
## Notes:

1. Allow 800mm clear service access in front of each door
2. Inlet/Outlet sound power level calculated @ design ESP and mean filter conditions. For clean filters these will reduce slightly
3. Maximum available pressure given in-case of unusual site requirements only
4. The unit construction has undergone a 2 hour observation Fire Resistance Test-utilising the general principles of BS476 Part 20:1987 (Warrington Fire Report 429782 available on request).



# FKE PRO Mini Series

Unit - Model FKE036CB3-01



# FKE PRO Mini Series

Specifications - Model FKE036CB3-01

## Construction

Unit Model	Air Flow	Design Air Flow		Filtration	The unit construction has undergone a 2 hour observation Fire Resistance Test-utilising the general principles of BS476 Part20:1987 (Warrington Fire Report 429782 available on request)
		m <sup>3</sup> /s			
FKE036CB3-01		3.6		<b>Stage 1</b> - Stainless Steel Mesh Pre-Filter <b>Stage 2</b> - High Capacity Pleated Panel Filter <b>Stage 3</b> - Carbon Rigid Compact Filter <b>Stage 4</b> - Activated Carbon Filter	<b>REMOVES</b> → Grease Smoke Odour

## Design

Unit Model	Design Air Flow		External Static Pressure		Fans	Rated Current Amps	Rated Power kW	Maximum Temperature °C	Electrical		Specific Fan Power** kW/m <sup>3</sup> /s
	m <sup>3</sup> /s	m <sup>3</sup> /hr	Design	Available Max ESP*					Frequency Hz	Phase	
			Pa	Pa							
FKE036CB3-01	3.6	12960	250	360	2 x Ø450	9.6	5.8	40	50 / 60	Three	1.23

\* - Max available ESP given in-case of unusual site requirements only    \*\* - @Mean filter condition and Design External Static Pressure

## Dimensional Data

Unit Model	Dimensions			Estimated Weight** kg
	W (mm)	D (mm)*	H (mm)	
	FKE036CB3-01	2800	750	2205

\* - Excluding control panel depth  
\*\* - This weight does not include the weight of optional extras

## Noise Data\*\*\*

Unit Model	Casing Breakout @ 1m free field		
	Clean	Mean	Dirty
	d(B)A	d(B)A	d(B)A
FKE036CB3-01	52	52	53

\*\*\* - Noise data based on Design ESP

## Dwell Time

Seconds
0.1

## Inlet / Outlet Sound Power Level\*

Unit Model	Octave bands (Hz)	63	125	250	500	1000	2000	4000	8000
FKE036CB3-01	Inlet	77	70	76	70	62	56	46	43
	Outlet	84	81	87	84	84	79	74	71

\* - Sound power levels based on design external static pressure and mean filter condition (Not Weighted)

### Notes:

1. Allow 800mm clear service access in front of each door
2. Inlet/Outlet sound power level calculated @ design ESP and mean filter conditions. For clean filters these will reduce slightly
3. Maximum available pressure given in-case of unusual site requirements only
4. The unit construction has undergone a 2 hour observation Fire Resistance Test-utilising the general principles of BS476 Part 20:1987 (Warrington Fire Report 429782 available on request).

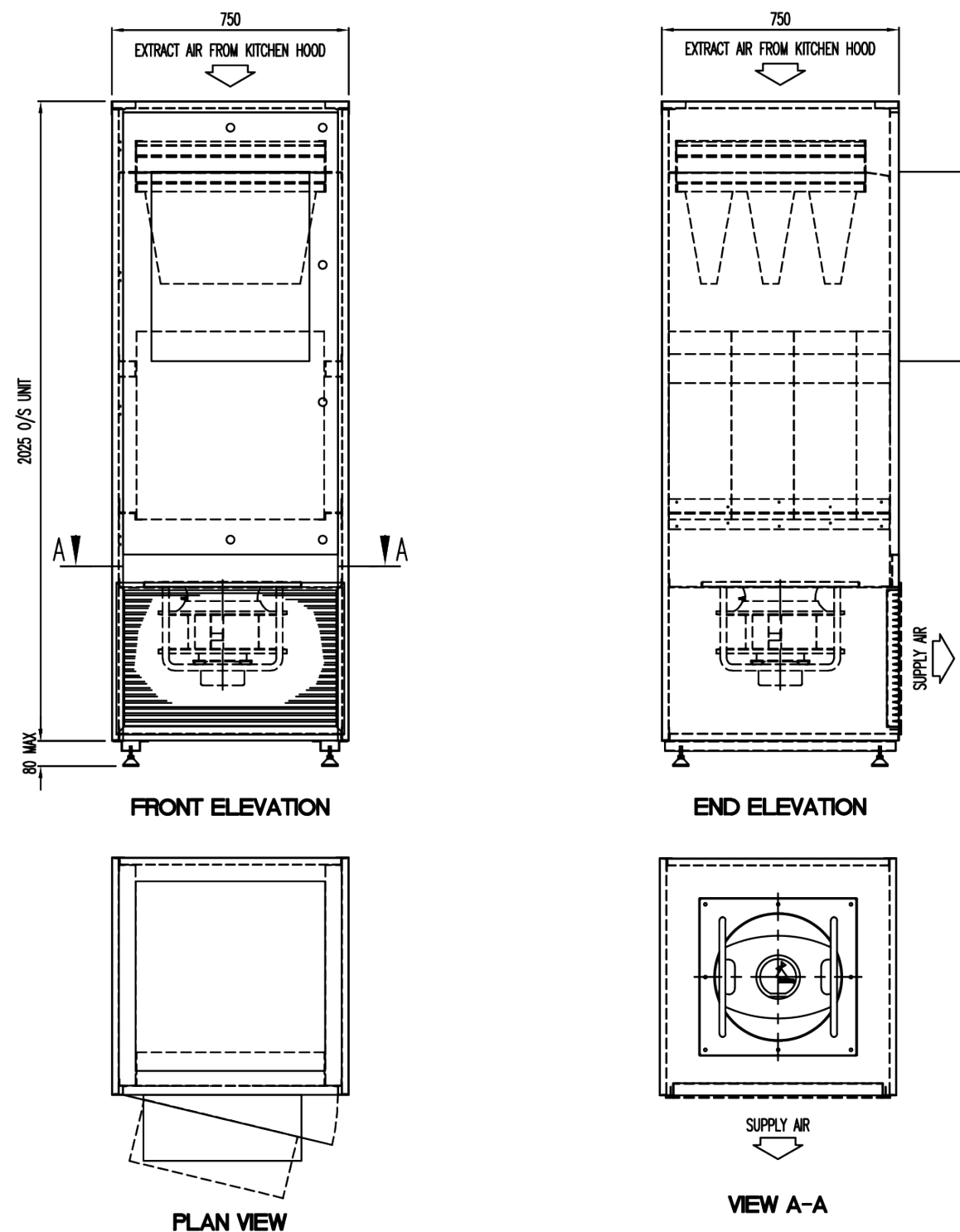


# FKE PRO Series

## Unit - Models FKE005CB1-02 & FKE005CB3-02

# FKE PRO Series

## Specifications - Models FKE005CB1-02 & FKE005CB3-02



### Construction

Unit Model	Air Flow	Design Air Flow		Filtration
		m <sup>3</sup> /s		
FKE005CB1-02		0.5		Stage 1 - Stainless Steel Mesh Pre-Filter Stage 2 - High Capacity Pleated Panel Filter Stage 3 - Carbon Rigid Compact Filter Stage 4 - Activated Carbon Filter
FKE005CB3-02		0.5		

The unit construction has undergone a 2 hour observation Fire Resistance Test-utilising the general principles of BS476 Part20:1987 (Warrington Fire Report 429782 available on request)

REMOVES →

### Design

Unit Model	Design Air Flow		External Static Pressure		Fans	Rated Current Amps	Rated Power kW	Maximum Temperature °C	Electrical		Specific Fan Power** kW/m <sup>3</sup> /s
	m <sup>3</sup> /s	m <sup>3</sup> /hr	Design Pa	Available Max ESP* Pa					Frequency Hz	Phase	
FKE005CB1-02	0.5	1800	250	525	Ø310	6.6	1.3	45	50 / 60	Single	1.30
FKE005CB3-02	0.5	1800	250	945	Ø355	4	2.5	50	50 / 60	Three	1.31

\* - Max available ESP given in-case of unusual site requirements only

\*\* - @Mean filter condition and Design External Static Pressure

### Dimensional Data

Unit Model	Dimensions			Estimated Weight** kg
	W (mm)	D (mm) <sup>+</sup>	H (mm)	
FKE005CB1-02	750	750	2105	350
FKE005CB3-02	750	750	2105	354

<sup>+</sup> - Excluding control panel depth

<sup>\*\*</sup> - This weight does not include the weight of optional extras

### Noise Data\*\*\*

Unit Model	Casing Breakout @ 1m free field		
	Clean	Mean	Dirty
	d(B)A	d(B)A	d(B)A
FKE005CB1-02	42	45	48
FKE005CB3-02	43	47	51

\*\*\* - Noise data based on Design ESP

### Dwell Time

Seconds	Dwell Time	
	0.3s Dwell Time	0.4s Dwell Time
0.2	Reduce the airflow to 75% of the design airflow	Reduce the airflow to 50% of the design airflow
0.2	Reduce the airflow to 75% of the design airflow	Reduce the airflow to 50% of the design airflow

### Inlet / Outlet Sound Power Level<sup>x</sup>

Unit Model	Octave bands (Hz)	63	125	250	500	1000	2000	4000	8000
		Inlet	Outlet	Inlet	Outlet	Inlet	Outlet	Inlet	Outlet
FKE005CB1-02	Inlet	71	64	65	61	54	50	40	33
	Outlet	77	76	78	74	74	73	68	64
FKE005CB3-02	Inlet	71	69	66	61	53	48	39	32
	Outlet	80	80	79	75	76	72	67	62

<sup>x</sup> - Sound power levels based on design external static pressure and mean filter condition (Not Weighted)

### Notes:

1. Allow 800mm clear service access in front of each door
2. Inlet/Outlet sound power level calculated @ design ESP and mean filter conditions. For clean filters these will reduce slightly
3. Maximum available pressure given in-case of unusual site requirements only
4. The unit construction has undergone a 2 hour observation Fire Resistance Test-utilising the general principles of BS476 Part 20:1987 (Warrington Fire Report 429782 available on request).

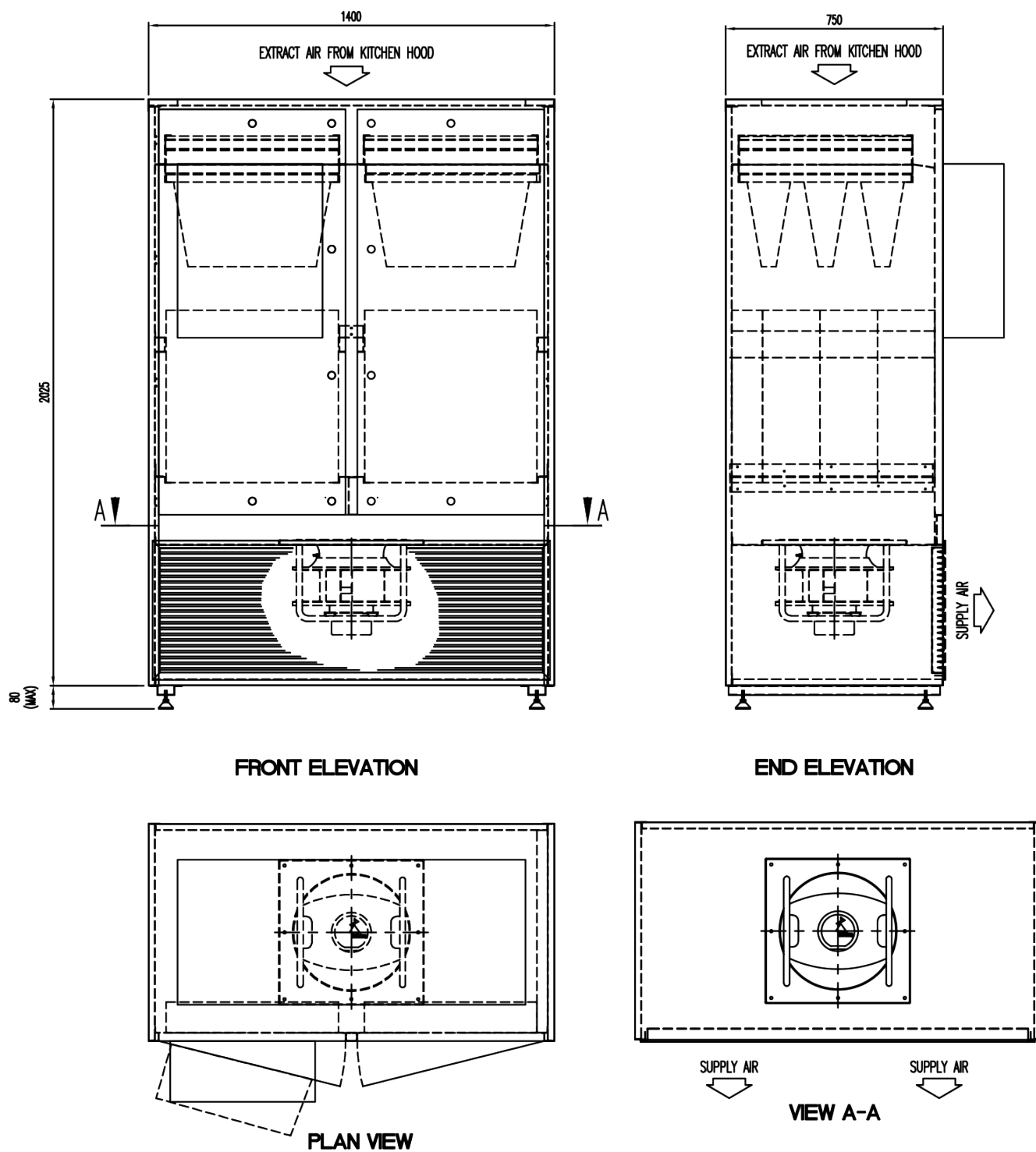


# FKE PRO Series

Unit - Model FKE009CB3-02

# FKE PRO Series

Specifications - Model FKE009CB3-02



### Construction

Unit Model	Air Flow	Design Air Flow		Filtration	The unit construction has undergone a 2 hour observation Fire Resistance Test-utilising the general principles of BS476 Part20:1987 (Warrington Fire Report 429782 available on request)
		m³/s			
FKE009CB3-02		0.9		<b>Stage 1</b> - Stainless Steel Mesh Pre-Filter <b>Stage 2</b> - High Capacity Pleated Panel Filter <b>Stage 3</b> - Carbon Rigid Compact Filter <b>Stage 4</b> - Activated Carbon Filter	<b>REMOVES</b> →

### Design

Unit Model	Design Air Flow		External Static Pressure		Fans	Rated Current	Rated Power	Maximum Temperature	Electrical		Specific Fan Power**
	m³/s	m³/hr	Design	Available Max ESP*					Frequency	Phase	
			Pa	Pa	Amps	kW	°C	Hz		kW/m³/s	
FKE009CB3-02	0.9	3240	250	875	Ø355	4	2.5	50	50 / 60	Three	1.11

\* - Max available ESP given in-case of unusual site requirements only      \*\* - @Mean filter condition and Design External Static Pressure

### Dimensional Data

Unit Model	Dimensions			Estimated Weight**
	W (mm)	D (mm)*	H (mm)	
FKE009CB3-02	1400	750	2105	565

\* - Excluding control panel depth  
\*\* - This weight does not include the weight of optional extras

### Noise Data\*\*\*

Unit Model	Casing Breakout @ 1m free field		
	Clean	Mean	Dirty
	d(B)A	d(B)A	d(B)A
FKE009CB3-02	39	41	44

\*\*\* - Noise data based on Design ESP

### Dwell Time

Seconds	0.3s Dwell Time	0.4s Dwell Time
0.2	Reduce the airflow to 75% of the design airflow	Reduce the airflow to 50% of the design airflow

### Inlet / Outlet Sound Power Level\*

Unit Model	Octave bands (Hz)	63	125	250	500	1000	2000	4000	8000
FKE009CB3-02	Inlet	57	55	65	59	52	49	40	36
	Outlet	67	67	76	73	75	73	69	65

\* - Sound power levels based on design external static pressure and mean filter condition (Not Weighted)

### Notes:

1. Allow 800mm clear service access in front of each door
2. Inlet/Outlet sound power level calculated @ design ESP and mean filter conditions. For clean filters these will reduce slightly
3. Maximum available pressure given in-case of unusual site requirements only
4. The unit construction has undergone a 2 hour observation Fire Resistance Test-utilising the general principles of BS476 Part 20:1987 (Warrington Fire Report 429782 available on request).

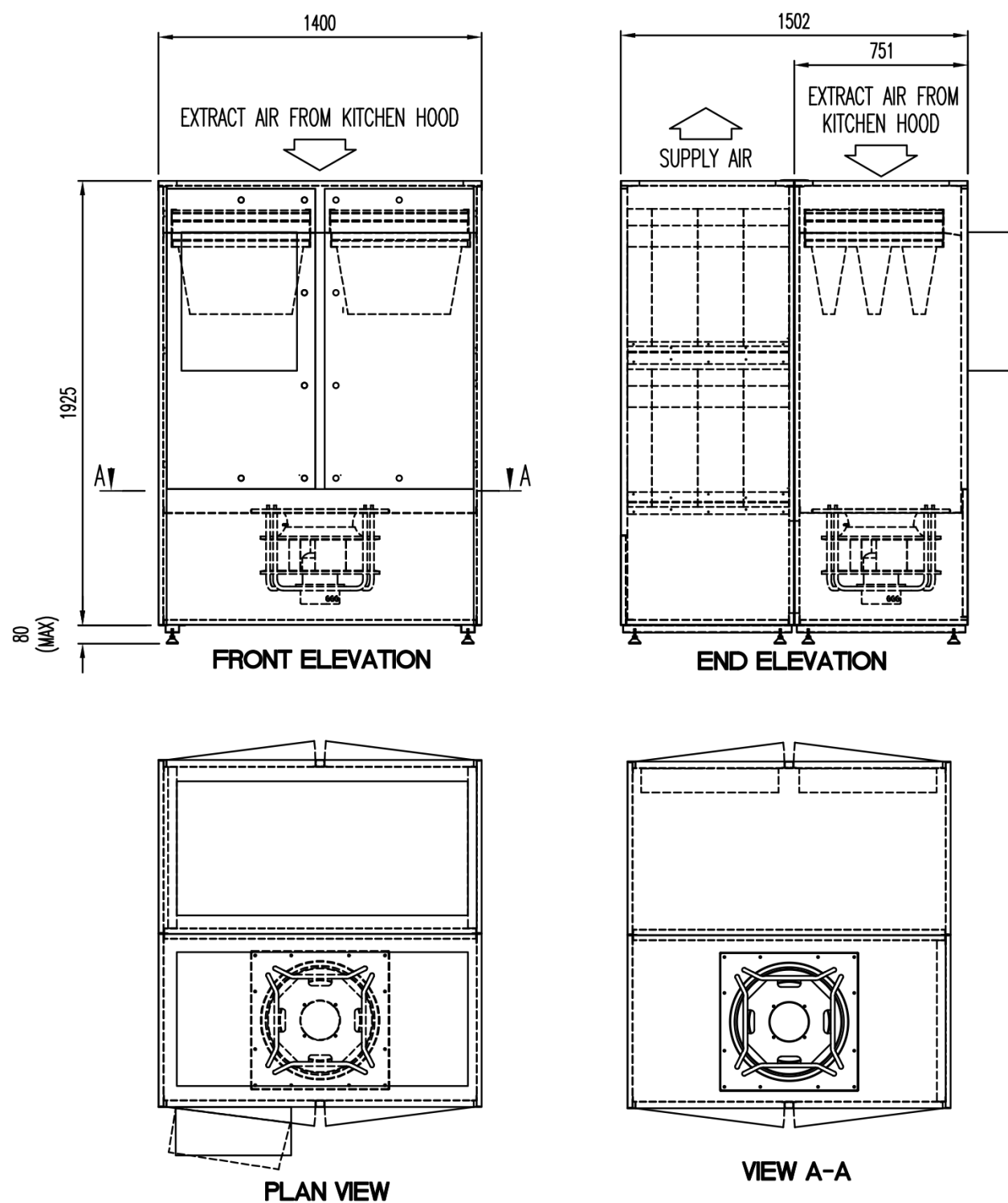


# FKE PRO Series

Unit - Model FKE018CB3-02

# FKE PRO Series

Specifications - Model FKE018CB3-02



## Construction

Unit Model	Air Flow	Design Air Flow		Filtration	The unit construction has undergone a 2 hour observation Fire Resistance Test-utilising the general principles of BS476 Part20:1987 (Warrington Fire Report 429782 available on request)
		m³/s			
FKE018CB3-02		1.8		<b>Stage 1</b> - Stainless Steel Mesh Pre-Filter <b>Stage 2</b> - High Capacity Pleated Panel Filter <b>Stage 3</b> - Carbon Rigid Compact Filter <b>Stage 4</b> - Activated Carbon Filter	<b>REMOVES</b> →

## Design

Unit Model	Design Air Flow		External Static Pressure		Fans	Rated Current	Rated Power	Maximum Temperature	Electrical		Specific Fan Power**
	m³/s	m³/hr	Design	Available Max ESP*					Frequency	Phase	
FKE018CB3-02	1.8	6480	250	790	Ø450	8.4	5.2	40	50 / 60	Three	1.56

\* - Max available ESP given in-case of unusual site requirements only

\*\* - @Mean filter condition and Design External Static Pressure

## Dimensional Data

Unit Model	Dimensions			Estimated Weight**
	W (mm)	D (mm)*	H (mm)	
	kg			
FKE018CB3-02	1400	1502	2005	1014

\* - Excluding control panel depth  
 \*\* - This weight does not include the weight of optional extras

## Noise Data\*\*\*

Casing Breakout @ 1m free field		
Clean	Mean	Dirty
d(B)A	d(B)A	d(B)A
49	51	52

\*\*\* - Noise data based on Design ESP

## Dwell Time

Seconds	0.3s Dwell Time	0.4s Dwell Time
0.2	Reduce the airflow to 75% of the design airflow	Reduce the airflow to 50% of the design airflow

## Inlet / Outlet Sound Power Level\*

Unit Model	Octave bands (Hz)	63	125	250	500	1000	2000	4000	8000
FKE018CB3-02	Inlet	67	67	76	71	66	61	53	51
	Outlet	71	71	80	74	74	69	60	53

\* - Sound power levels based on design external static pressure and mean filter condition (Not Weighted)

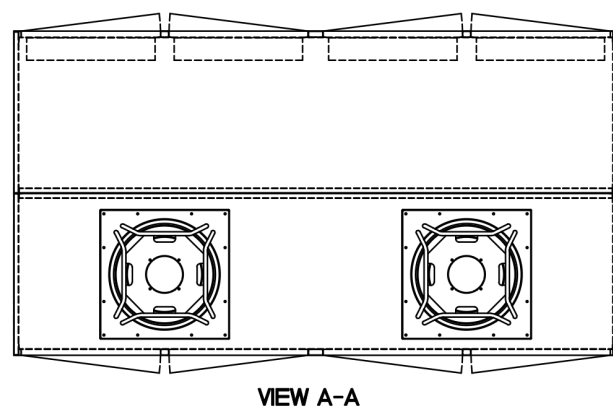
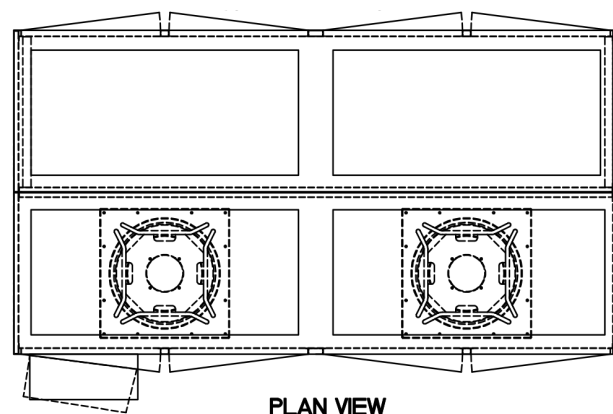
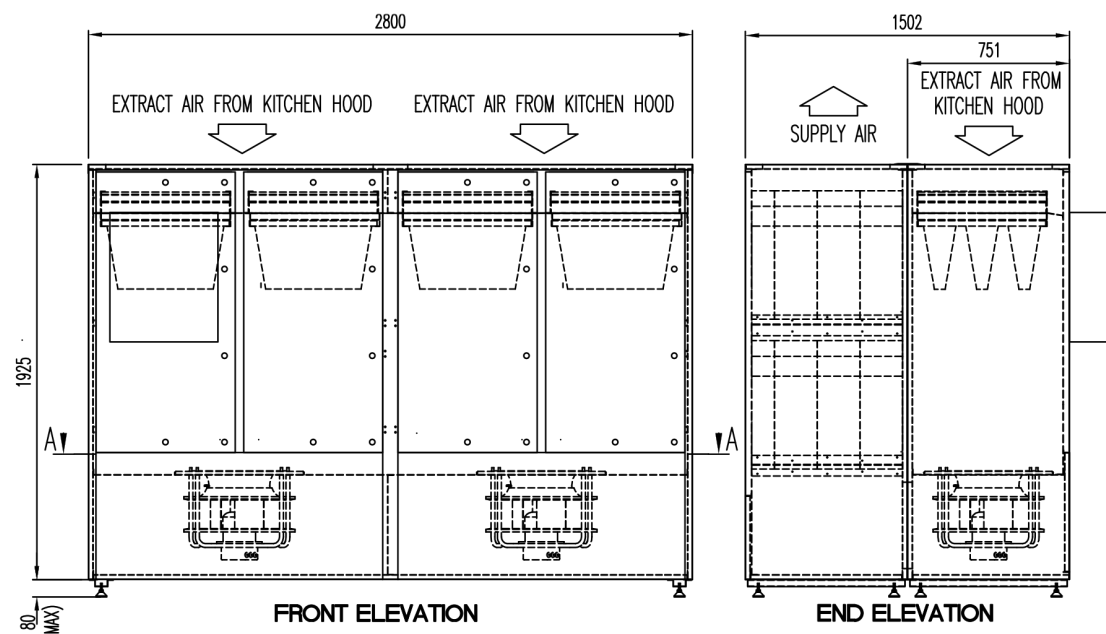
## Notes:

1. Allow 800mm clear service access in front of each door
2. Inlet/Outlet sound power level calculated @ design ESP and mean filter conditions. For clean filters these will reduce slightly
3. Maximum available pressure given in-case of unusual site requirements only
4. The unit construction has undergone a 2 hour observation Fire Resistance Test-utilising the general principles of BS476 Part 20:1987 (Warrington Fire Report 429782 available on request).



# FKE PRO Series

## Unit - Model FKE036CB3-02



# FKE PRO Series

## Specifications - Model FKE036CB3-02

### Construction

Unit Model	Air Flow	Design Air Flow	Filtration	The unit construction has undergone a 2 hour observation Fire Resistance Test-utilising the general principles of BS476 Part20:1987 (Warrington Fire Report 429782 available on request)
		m <sup>3</sup> /s		
FKE036CB3-02		3.6	<b>Stage 1</b> - Stainless Steel Mesh Pre-Filter <b>Stage 2</b> - High Capacity Pleated Panel Filter <b>Stage 3</b> - Carbon Rigid Compact Filter <b>Stage 4</b> - Activated Carbon Filter	REMOVES →

### Design

Unit Model	Design Air Flow		External Static Pressure		Fans	Rated Current Amps	Rated Power kW	Maximum Temperature °C	Electrical		Specific Fan Power** kW/m <sup>3</sup> /s
	m <sup>3</sup> /s	m <sup>3</sup> /hr	Design	Available Max ESP*					Frequency Hz	Phase	
			Pa	Pa							
FKE036CB3-02	3.6	12960	250	790	2 x Ø450	16.8	10.4	40	50 / 60	Three	1.56

\* - Max available ESP given in-case of unusual site requirements only      \*\* - @Mean filter condition and Design External Static Pressure

### Dimensional Data

Unit Model	Dimensions			Estimated Weight** kg
	W (mm)	D (mm)*	H (mm)	
FKE036CB3-02	2800	1502	2005	1831

\* - Excluding control panel depth  
\*\* - This weight does not include the weight of optional extras

### Noise Data\*\*\*

Unit Model	Casing Breakout @ 1m free field		
	Clean	Mean	Dirty
	d(B)A	d(B)A	d(B)A
FKE036CB3-02	52	54	55

\*\*\* - Noise data based on Design ESP

### Dwell Time

Seconds	0.3s Dwell Time	0.4s Dwell Time
0.2	Reduce the airflow to 75% of the design airflow	Reduce the airflow to 50% of the design airflow

### Inlet / Outlet Sound Power Level<sup>x</sup>

Unit Model	Octave bands (Hz)	63	125	250	500	1000	2000	4000	8000
FKE036CB3-02	Inlet	70	70	79	74	69	64	56	54
	Outlet	74	74	83	77	77	72	63	56

<sup>x</sup> - Sound power levels based on design external static pressure and mean filter condition (Not Weighted)

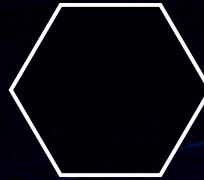
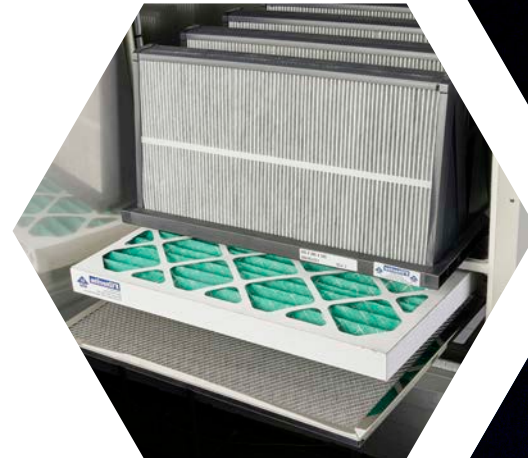
### Notes:

1. Allow 800mm clear service access in front of each door
2. Inlet/Outlet sound power level calculated @ design ESP and mean filter conditions. For clean filters these will reduce slightly
3. Maximum available pressure given in-case of unusual site requirements only
4. The unit construction has undergone a 2 hour observation Fire Resistance Test-utilising the general principles of BS476 Part 20:1987 (Warrington Fire Report 429782 available on request).



## The Complete Solution

Weatherite Air Conditioning provide the complete service- from initial discussions with the client through to survey, design, manufacture, installation and commissioning. And, to ensure the client is fully supported we provide full 24-hour support services.



Whether your requirement is for a brand new kitchen or part of a refurbishment project, we will ensure we deliver a service that is second to none.

With over 50 years' experience and expertise to match, Weatherite Air Conditioning has been designing and manufacturing a comprehensive range of air distribution products and is the UK's leading independent HVAC equipment manufacturer. Utilising the very latest production techniques and innovative technologies, Weatherite has delivered heating, ventilation and air conditioning solutions to many blue-chip, UK organisations.

We are experts in creating and delivering clean air environmental solutions and have years of first-hand experience and knowledge. Ensuring we deliver exactly the right solution, first time, is our number one priority and we value honesty, integrity, reliability and consistency in every action we take and every solution we deliver.

Being aware that a kitchen, with poor ventilation can become uncomfortable for those working in the vicinity, as well as a possible health and safety hazard drives our philosophy of delivering consistent, reliable, high quality, integrated solutions.





# A complete self-contained kitchen ventilation system with a difference

Weatherite Air Conditioning will deliver the very best solution on time, within budget and incorporating the very latest extract technologies - and we will be there to support our solution 24/7/365.



## Contact Details:

For further information please contact the sales team on: **+44 (0)121 665 2266**  
or email: **sales@weatheritegroup.com**  
or visit the website: **www.weatheriteac.com**



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