Mcr Smart Groups Ltd

Specialist in: Stainless Steel Fabrication, Commercial Kitchen Design and Installation,
Full Extraction System, Canopies & Cladding, etc
Lind Street, Holt Town. Manchester, M40 7ES. [redacted]

Mohamed Amer
17, Lansdowne Road.
Manchester. M8 5SF

Our Ref No: MSR/511/25
Date: 21-04-2026

Subject: Installation of Fume Extraction System, Shop No: 27, Lansdowne Road. Manchester. M8 5SF

Further to our visit to your premises at **27, Lansdowne Road. Manchester. M8 5SF,** regarding the installation of a fume extraction system, we will be installing a system designed to achieve the desired performance while ensuring compliance with local council regulations. The system will effectively minimise excessive noise, reduce gaseous odours, and capture small grease or food particles.

An extraction system has therefore been designed to eliminate the levels of odours generated during cooking operations. The internal aspect of the extraction system has been designed to be compact and easily accessible, with low acoustic and visual impact.

Our proposed design includes a canopy measuring approximately 7.9m x 1.5m, with a face velocity of 0.5 m/s. The extraction hood in the kitchen will incorporate stainless steel baffle filters as the first stage of filtration. The extracted air will then pass through secondary filtration, including carbon and pre-filters, before being directed to the fan and attenuator, which will help eliminate any remaining odours from the airflow.

The ducting will contain an attenuator installed in line with the fan to minimise operational noise. A contra-rotating case axial FANS TCBBx2 / TCBTx2 Series model CBTx2/4-500 fan will be fitted to provide the required performance, with a high-velocity cowl discharging the extracted air vertically.

The external ducting will exit through the original extraction opening. To maintain the visual integrity of the building, the external ductwork will be painted RAL red to match the existing brickwork, ensuring a minimal visual impact from the side of the premises.
We have also supplied a maintenance report for your system.

Please do not hesitate to contact me should you require any further information.
Thanking You

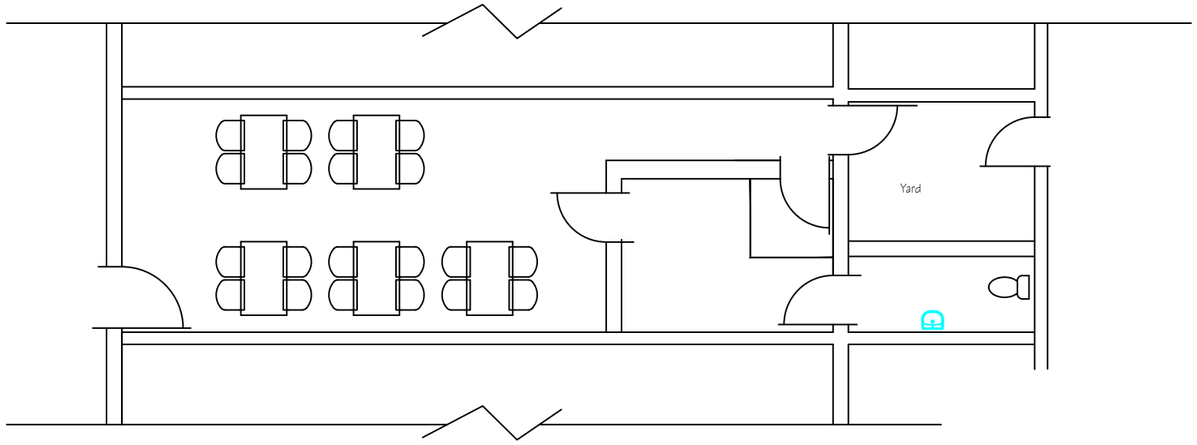
Sincerely Yours

[redacted]

Hassan Ali
Manager

All materials and equipment supplied by Mcr Smart Groups Ltd shall remain the property of Mcr Smart Groups Ltd until full payment.

The builder must check the site and the approved drawings before commencing the works and must take any working measurements as necessary.Any discrepancy in the drawing must be reported to the client .



Ground Floor Plan

SCALE BAR 1:100



H S H
Engineering Design Services Ltd
428 Cheetham Hill Road Cheetham Manchester
M8 9LE. UK 01617956385,07940197 333

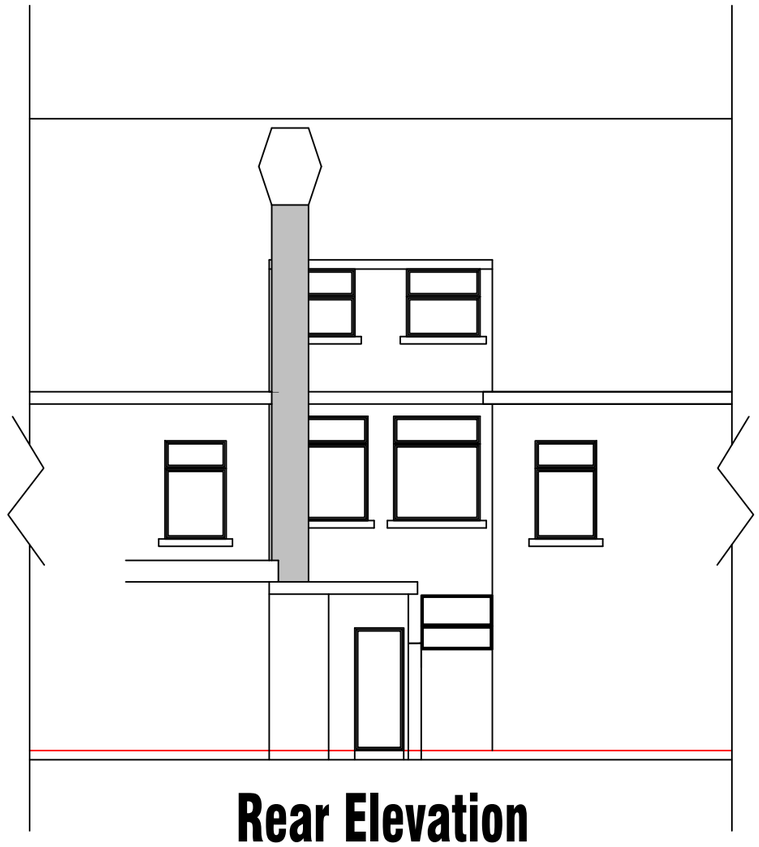
project title	Proposed change of use from a retail outlet to a Restaurant and installation of external flue pipe.
client	Mr Mohammed Amir
dwg. title	Proposdd Ground Floor Plan

dwg.no.	sheet no.	scale.	job no.
05		1:100 ● A3	

27 Landsdowne Road M/c M8 5SF

drawn by.	checked by.	approved by.	date
TZ		-	May 2026

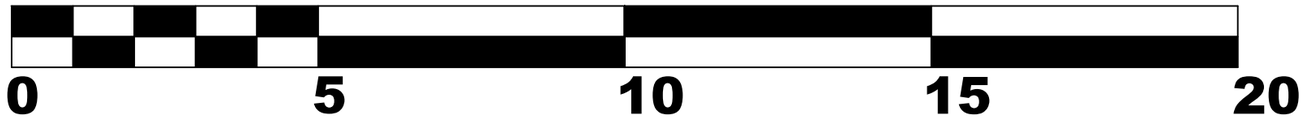
The builder must check the site and the approved drawings before commencing the works and must take any working measurements as necessary.Any discrepancy in the drawing must be reported to the client .



Rear Elevation

Site Layout Plan

SCALE BAR 1:100



H S H
Engineering Design Services Ltd
428 Cheetham Hill Road Cheetham Manchester
M8 9LE. UK 01617956385,07940197 333

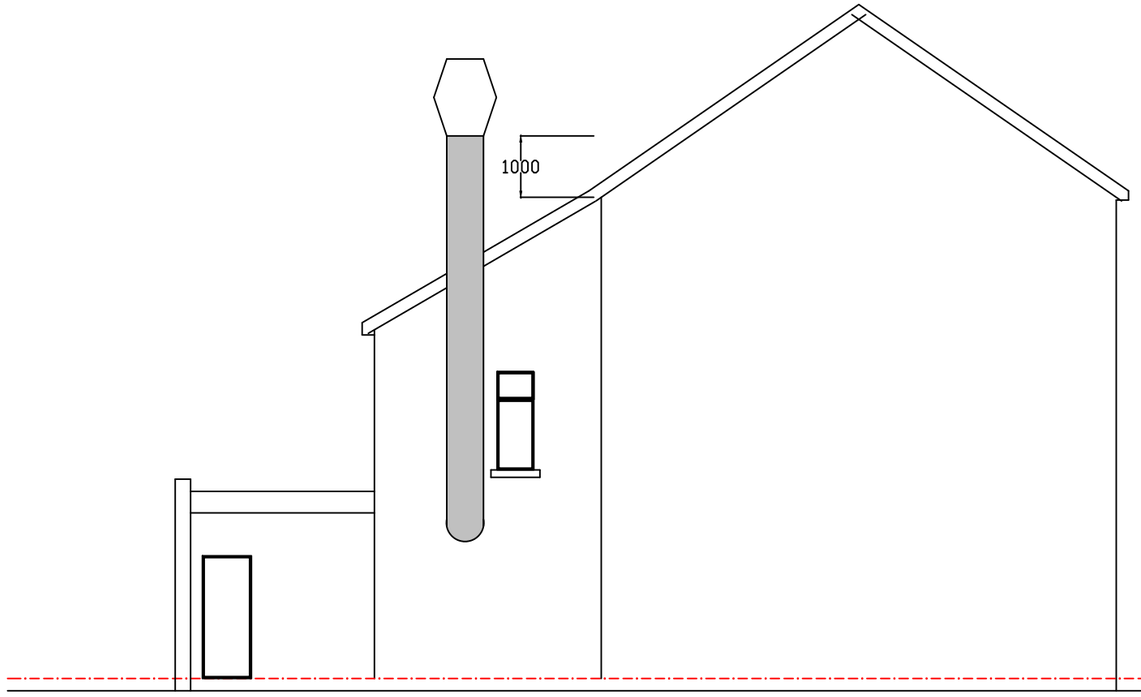
project title	Proposed change of use from a retail outlet to a Restaurant and installation of external flue pipe.
client	Mr Mohammed Amir
dwg. title	Rear Elevation

dwg.no.	sheet no.	scale.	job no.
06		1:100 @ A3	

27 Landsdowne Road M/c M8 5SF

drawn by.	checked by.	approved by.	date
TZ		-	May 2026

The builder must check the site and the approved drawings before commencing the works and must take any working measurements as necessary.Any discrepancy in the drawing must be reported to the client .



Elevation From No 25

0 5 10 15 20

H S H
Engineering Design Services Ltd
428 Cheetham Hill Road Cheetham Manchester
M8 9LE. UK 01617956385,07940197 333

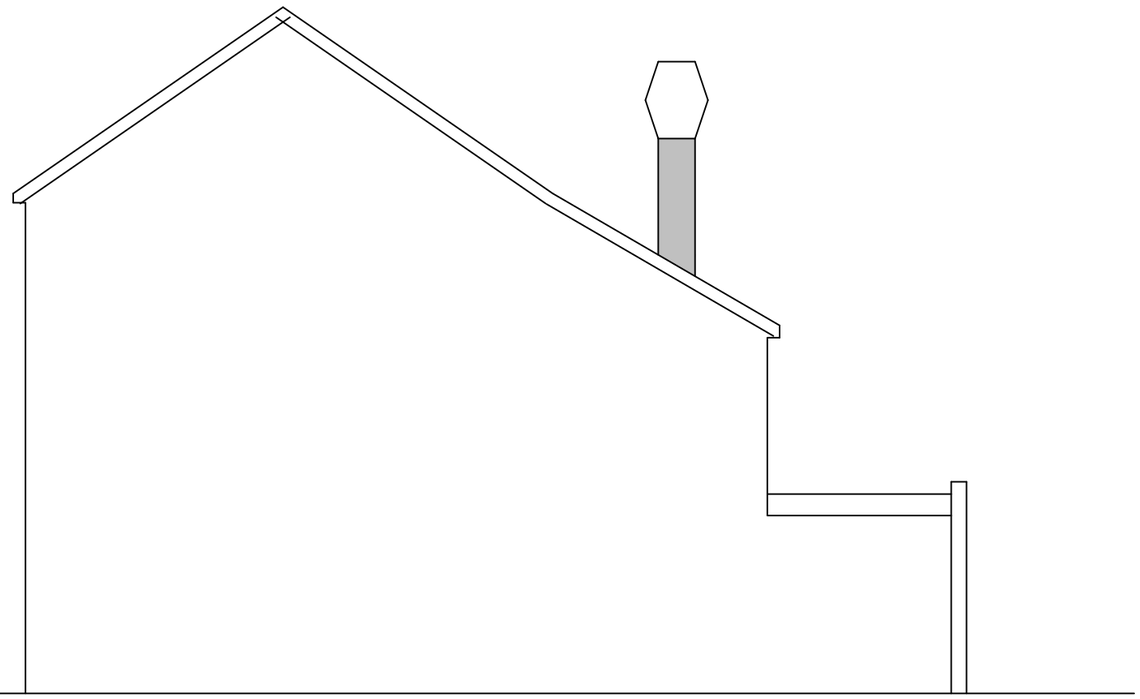
project title	Proposed change of use from a retail outlet to a Restaurant and installation of external flue pipe.
client	Mr Mohammed Amir
dwg. title	Side Elevations

dwg.no.	sheet no.	scale.	job no.
07		1:100 @ A3	

27 Landsdowne Road M/c M8 5SF

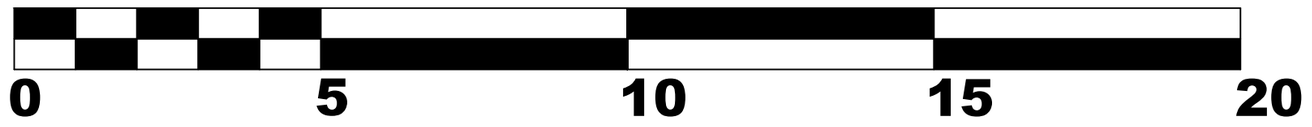
drawn by.	checked by.	approved by.	date
TZ		.	May 2026

The builder must check the site and the approved drawings before commencing the works and must take any working measurements as necessary.Any discrepancy in the drawing must be reported to the client .



Elevation From No 29

SCALE BAR 1:100



H S H
Engineering Design Services Ltd
428 Cheetham Hill Road Cheetham Manchester
M8 9LE. UK 01617956385,07940197 333

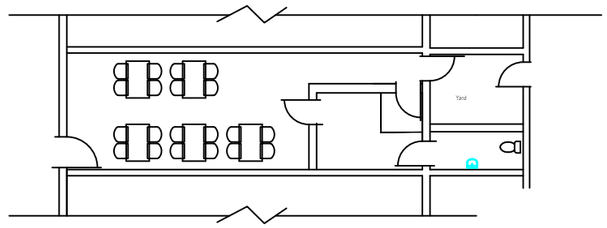
project title	Proposed change of use from a retail outlet to a Restaurant and installation of external flue pipe.
client	Mr Mohammed Amir
dwg. title	Site Elavation

dwg.no.	sheet no.	scale.	job no.
08		1:100 @ A3	

27 Landsdowne Road M/c M8 5SF

drawn by.	checked by.	approved by.	date
TZ		-	May 2026

The builder must check the site and the approved drawings before commencing the works and must take any working measurements as necessary.Any discrepancy in the drawing must be reported to the client .



H S H
Engineering Design Services Ltd
428 Cheetham Hill Road Cheetham Manchester
M8 9LE. UK 01617956385,07940197 333

project title	Proposed change of use from a retail outlet to a Restaurant and installation of external flue pipe.
client	**Mr Mohammed Amir**
dwg. title	Proposed Site Layout Plan

dwg.no.	sheet no.	scale.	job no.
10		1:200 ● A3	

27 Landsdowne Road M/c M8 5SF

drawn by.	checked by.	approved by.	date
TZ		-	May 2026



Range of cylindrical cased axial fans fitted with aluminium impellers and manufactured from high grade rolled galvanised steel and protected against corrosion by cataforesis primer and black polyester paint finish.
Fited with 2 contra rotating complementary impellers manufactured from die-cast aluminium.
All models are supplied with pre-wired wiring junction box located on the outside of the fan casing for easy wiring access.
Available with single or three phase 4 poles motors.

Motors
All the motors are IP65, Class F insulation (1), equipped with thermal protection.
Single phase motors are variable voltage (Excepted TCBBX2/4-630).
Three phase motors suitable for inverter control.
Electrical supplies:
- Single phase 230V-50Hz (Capacitor located inside the wiring terminal box)
- Three phase 230/400V-50Hz.

(1) Working temperatures from -40ºC up to 70ºC.



Contra rotating: High pressure
Contra rotating system with two complementary impellers allowing the duplication of the pressure with the same air volume.



Corrosion resistance
Rolled steel casings and motor support protected by cataforesis primer and black polyester paint finish. Stainless steel screws.



Terminal box
Wiring terminal box with cable gland PG-11.



Impeller dynamically balanced
Impellers are dynamically balanced, according to ISO 1940 standard, giving vibration free operation.

TECHNICAL CHARACTERISTICS

Before installation check that the product electrical characteristics listed on the data plate label (voltage, power, frequency, etc.) match those of the intended electrical supply.

Model	Speed (rpm)	Diameter (mm)	Maximum absorbed power (W)	Maximum absorbed current (A)		Sound pressure level* (dB(A))	Maximum air volume (m^3/h)	Weight (kg)	Speed controller RMB/T	Variable frequency inverter			
										VFTM		VFKB	
				to 230 V	to 400 V					1/230V**	3/400V	1/230V**	3/400V
SINGLE PHASE													
TCBBx2/4-450	1420	450	1316	5,7	–	74	7.430	42	RMB-8	–	–	–	–
TCBBx2/4-500	1370	500	1957	9,0	–	76	9.950	50	RMB-10	–	–	–	–
TCBBx2/4-560	1370	560	2972	13,6	–	78	13.930	66	–	–	–	–	–
TCBBx2/4-630	1400	630	3671	16,3	–	79	16.560	80	–	–	–	–	–
THREE PHASE													
TCBTx2/4-450	1430	450	1309	5,2	3	74	7.250	42	RMT-5	VFTM MONO 1,1	VFTM TRI 1,1	VFKB 27	VFKB 45
TCBTx2/4-500	1390	500	1700	5,8	3,4	76	9.800	50	RMT-5	VFTM MONO 1,1	VFTM TRI 1,5	VFKB 27	VFKB 45
TCBTx2/4-560	1390	560	3173	10,0	5,8	78	15.170	66	–	VFTM MONO 2,2	VFTM TRI 3	–	VFKB 48
TCBTx2/4-630	1445	630	4014	-	7,4	79	17.810	80	–	–	VFTM TRI 4	–	VFKB 48

* Sound pressure level, measured in free field condition at a distance equivalent of three times the diameter of the impeller or a minimum of 1.5 meters wichever is the greater.
** Only for fans fitted with three phase motors 230/400V.

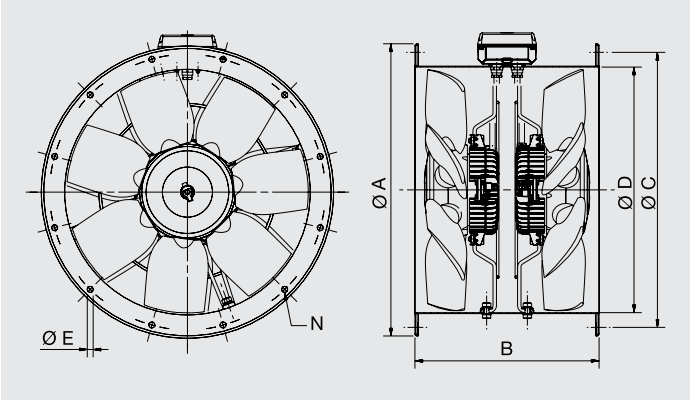
ACOUSTIC CHARACTERISTICS

The sound levels –NPS- shown in the technical characteristic chart, correspond to the value of sound pressure dB(A), measured in free field conditions at a distance equivalent to three times the diameter of the impeller with a minimum of 1.5 meters.
The following table shows the sound power level spectrums in dB(A) measured with the fan ducted, at both inlet and discharge sides.

Model	Air volume m^3/h	63	125	250	500	1000	2000	4000	8000	Global
450 Inlet	6.600	46	73	85	82	85	79	72	64	90
	5.850	46	73	84	81	83	79	71	64	88
	4.300	58	70	80	80	83	79	71	64	87
450 Outlet	6.600	63	75	86	85	87	82	74	67	92
	5.850	53	73	85	84	87	81	74	67	91
	4.300	58	70	82	83	86	82	74	67	90
500 Inlet	9.000	48	78	87	85	87	81	74	67	92
	7.500	52	76	85	85	85	80	73	65	90
	6.000	60	73	83	82	85	80	73	66	89
500 Outlet	9.000	65	76	87	88	90	84	77	70	94
	7.500	62	75	86	87	88	83	76	69	92
	6.000	59	72	86	85	88	83	76	69	92

Model	Air volume m^3/h	63	125	250	500	1000	2000	4000	8000	Global
560 Inlet	13.720	50	85	87	88	91	85	78	73	95
	10.800	57	79	83	86	89	84	78	72	93
	9.000	63	79	81	86	89	84	78	72	92
560 Outlet	13.720	74	86	85	91	94	88	81	75	97
	10.800	70	82	84	88	92	87	81	74	95
	9.000	74	81	85	89	92	87	81	74	95
630 Inlet	17.500	51	85	91	89	93	87	80	74	97
	15.600	55	85	85	88	91	86	80	73	95
	12.000	64	80	84	88	90	86	80	73	94
630 Outlet	17.500	73	87	88	93	95	89	83	77	99
	15.600	71	87	86	91	94	89	83	76	98
	12.000	67	84	86	90	94	89	84	76	97

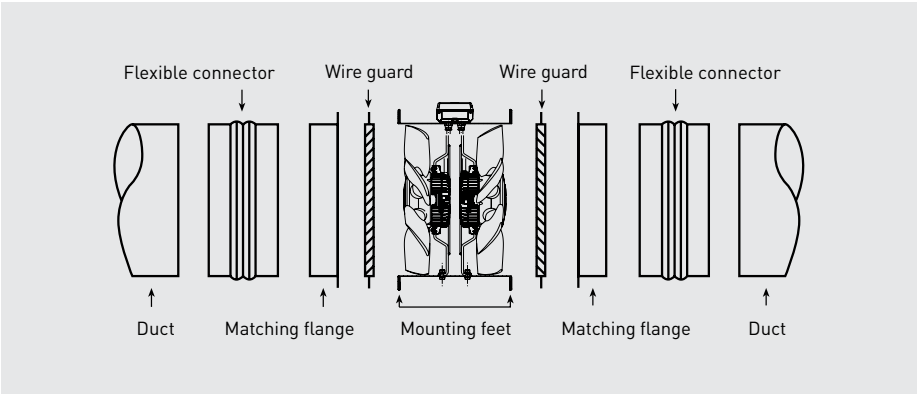
DIMENSIONS (mm)



Model	Ø A	B	Ø C	Ø D	Ø E	Number of holes N
450	537	375	500	450	12	8
TCBBx2/4-500	595	520	560	500	12	12
TCBTx2/4-500	595	375	560	500	12	12
560	655	520	620	560	12	12
630	725	520	690	630	12	12

MOUNTING ACCESSORIES



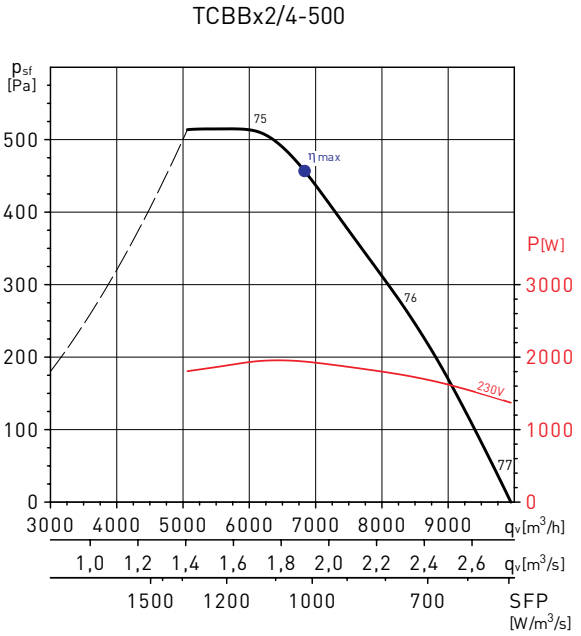


PERFORMANCE CURVES TCBBx2 / TCBTx2

- q_v: Air volume in m^3/h and m^3/s.
- p_{sf}: Static pressure in Pa.
- SFP: Specific fan power in $W/m^3/s$.
- P: Input power in W.
- Measurement category: C or D depending on the models.
- Efficiency category: Static or Total depending on the models.
- Fan tested with inlet bellmouth.
- Fan efficiency without VSD.
- Air flow data in accordance with ISO 5801.
- Sound pressure level dB(A), measured in a free field distance equal to 3 times the diameter, with a minimum of 1,5 m.

MC	Measurement category
EC	Efficiency category
VSD	Speed control: supplied with the fan
SR	Specific ratio
η[%]	Efficiency
N	Efficiency grade
[kW]	Absorbed power
[m³/h]	Air volume
[Pa]	Static pressure
[RPM]	Speed

EXAMPLE CURVE

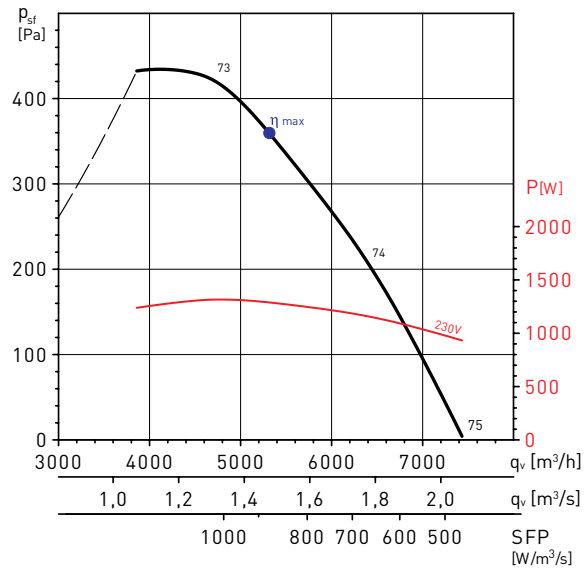


MC*	EC*	VSD*	SR*	η[%]*	N*	[kW]	[m³/h]	[Pa]	[RPM]
C	Static	No	1	45,1	49,6	1,957	6383	498	1394

* See example curve.

PERFORMANCE CURVES – 4 POLE MOTOR

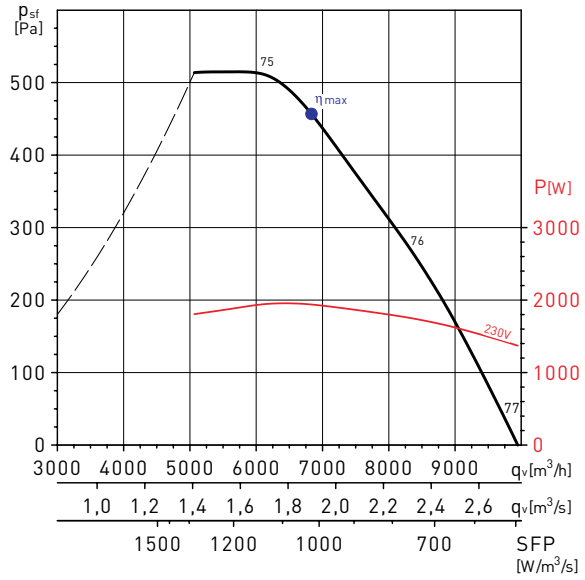
TCBBx2/4-450



MC*	EC*	VSD*	SR*	η[%]*	N*	[kW]	[m³/h]	[Pa]	[RPM]
C	Static	No	1	41,9	47,5	1,316	4842	411	1349

* See example curve.

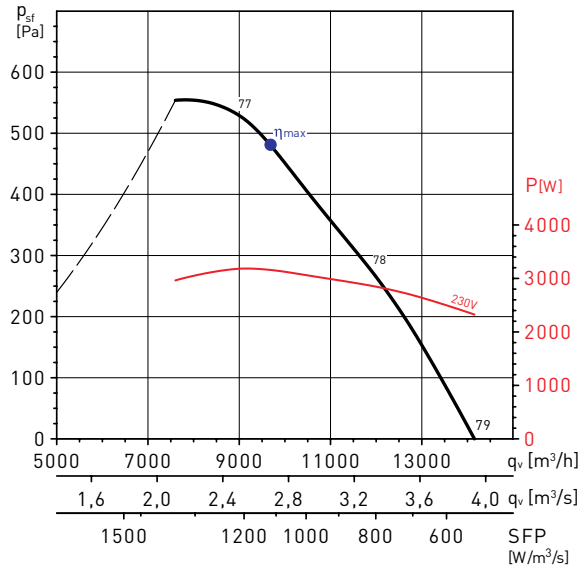
TCBBx2/4-500



MC*	EC*	VSD*	SR*	η[%]*	N*	[kW]	[m³/h]	[Pa]	[RPM]
C	Static	No	1	45,1	49,6	1,957	6383	498	1394

* See example curve.

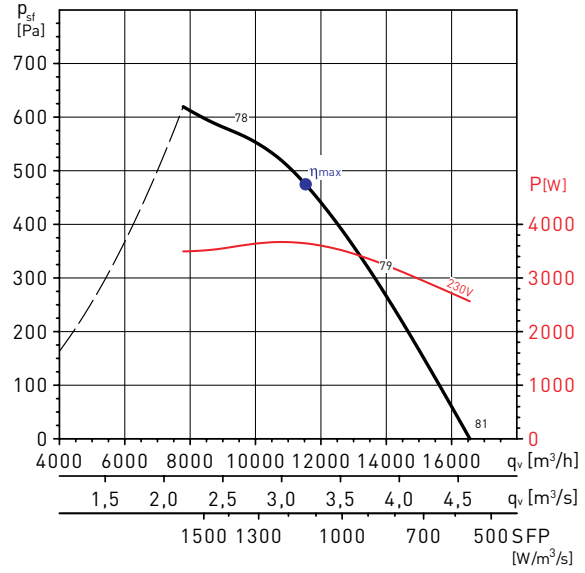
TCBBx2/4-560



MC*	EC*	VSD*	SR*	η[%]*	N*	[kW]	[m³/h]	[Pa]	[RPM]
C	Static	No	1	41,9	45,2	2,970	8741	513	1311

* See example curve.

TCBBx2/4-630

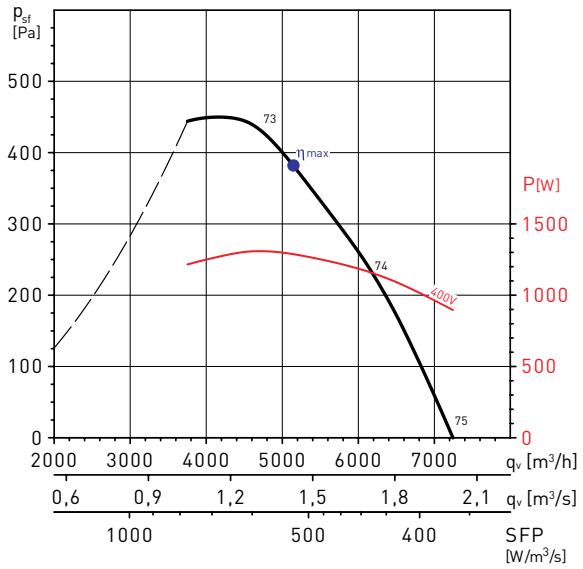


MC*	EC*	VSD*	SR*	η[%]*	N*	[kW]	[m³/h]	[Pa]	[RPM]
C	Static	No	1	42,4	45,2	3,665	10542	536	1285

* See example curve.

PERFORMANCE CURVES – 4 POLE MOTOR

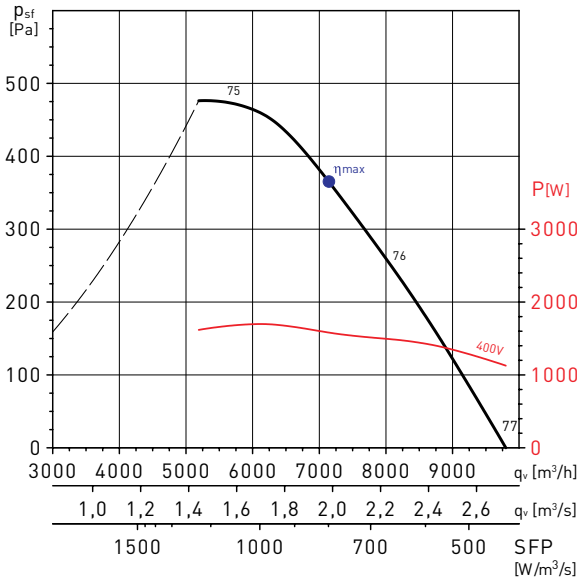
TCBTx2/4-450



MC*	EC*	VSD*	SR*	η[%]*	N*	[kW]	[m³/h]	[Pa]	[RPM]
C	Static	No	1	43,0	48,6	1,309	4705	432	1375

* See example curve.

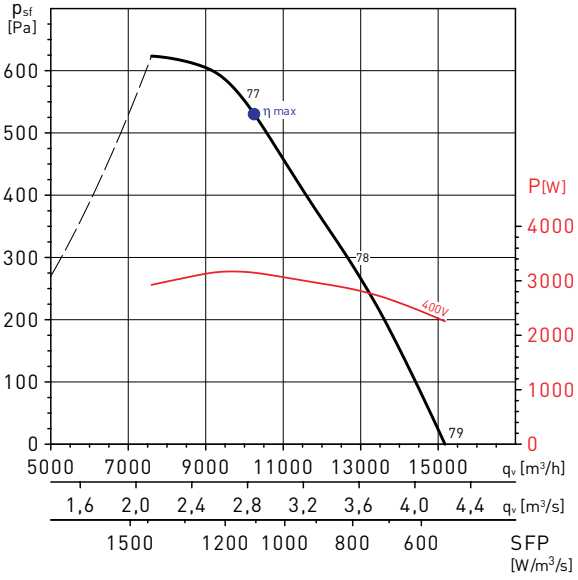
TCBTx2/4-500



MC*	EC*	VSD*	SR*	η[%]*	N*	[kW]	[m³/h]	[Pa]	[RPM]
D	Total	No	1	53,5	58,6	1,581	7145	427	1348

* See example curve.

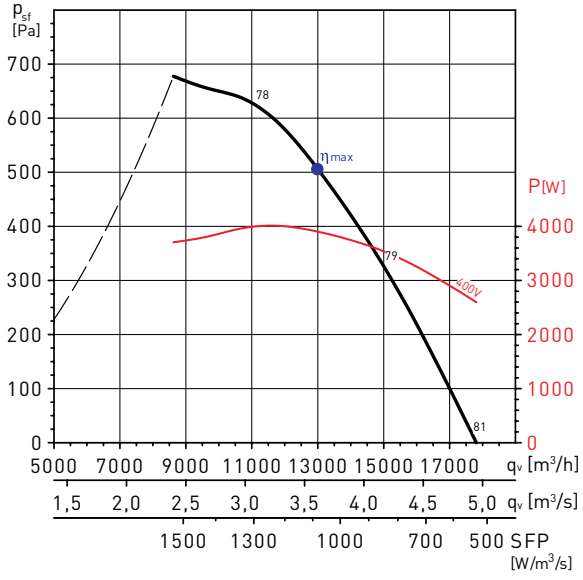
TCBTx2/4-560



MC*	EC*	VSD*	SR*	η[%]*	N*	[kW]	[m³/h]	[Pa]	[RPM]
D	Total	No	1	55,0	58,2	3,148	10254	611	1365

* See example curve.

TCBTx2/4-630



MC*	EC*	VSD*	SR*	η[%]*	N*	[kW]	[m³/h]	[Pa]	[RPM]
D	Total	No	1	54,2	56,8	3,903	12997	587	1387

* See example curve.

PLATE MOUNTED AXIAL FLOW FANS
COMPACT HCBB / HCBT series

Range of low profile plate mounted axial fans fitted with aluminium impellers and single phase motor (HCBB) or three phase motor (HCBT) IP65 (1) Class F insulation (2), equipped with thermal protection (3).
(1) Models 800, 900 and 1000 are IP55.
(2) Working temperatures from -40ºC up to +70ºC.
Except models Ø 800, 900 and 1000 suitable for usage in environments from -20ºC to +40ºC.
(3) Except models Ø 800 to 1000.



ErP OK

IP65 (1)
PROTECTION

NEXT DAY delivery*

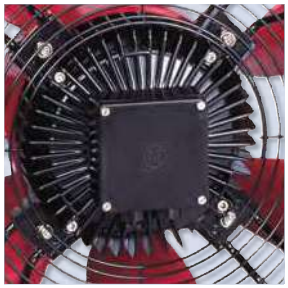
Motors
Available, depending upon the model, with single or three phase motors in 4 poles.
All motors are speed controllable by auto-transformer except models /4-630, B/710, T/4-710, T/800, T/900 and T/1000.
Three phase models are speed controllable by inverter.
Electrical supplies:
Single phase 230V~50Hz.(except HCBB/4-250H 230~50/60Hz.
(Capacitor located inside the wiring terminal box).
Three phase 230/400V-50Hz or 400V-50Hz.
Standard air direction: form (A) configuration. (Motor over Impeller).



Configuration for models Ø 800 to 1000
Special design of motor over impeller, which provides compactness and tightness IP55.

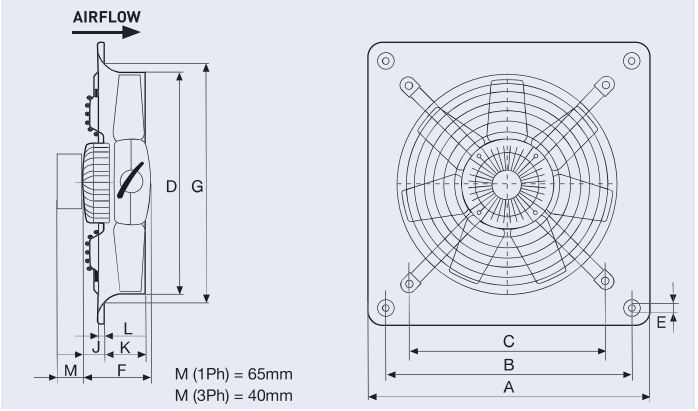


Corrosion resistance
Mounting plate, motor support and finger proof guard protected by cataforesis primer and black polyester paint finish. Stainless steel screws.

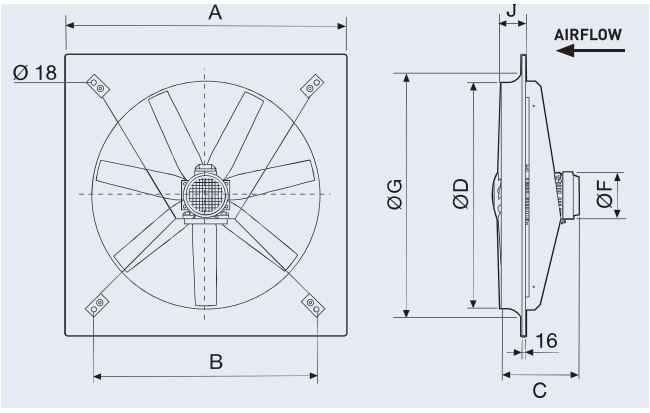


Terminal box
Wiring terminal box with cable gland PG-11.

DIMENSIONS (mm)



Model	□A	□B	C	ØD	ØE	F	Ø G	J	K	L
250	315	260	220	254	10	122	294	59	53	12
315	400	330	280	315	10	122	329	32	68	12
355	450	380	315	355	10	129	371	45	75	12
400	500	420	355	400	10	129	422	40.5	78	12
450	560	480	400	450	10	150	476	48	91	12
500	630	560	450	500	10	150	536	44.5	97	12
560	710	630	510	560	10	218.5	596	110.5	98.5	12
630	800	710	580	630	12	218.5	674	110.5	103	12
710	900	800	636	710	12	218.5	733	134	91.5	16.5



Model	□A	□B	Ø D	J	Ø G	C		Ø F	
						L	H	L	H
800	1000	800	800	92	926	345	380	181	203
900	1120	900	900	120	1060	392	439	203	280
1000	1250	1000	1000	110	1154	380	485	203	280

TECHNICAL DATA

Model	Speed (r.p.m.)	Maximum absorbed power (W)	Maximum current (A)		Sound pressure level @3m (dB(A))	Maximum air volume (m³/h)	Weight (Kg)	Speed controller		Inverter Control	
			230 V	400 V				ELECTRONIC	AUTO-TRANSFORMER	S&P VFD*	
SINGLE PHASE 4 POLE											
HCBB/4-250/H	1325	84	0,4		49	1.130	5	REB-1	REV-3N		
HCBB/4-315/H	1295	140	0,7		55	2.310	7	REB-1	REV-3N		
HCBB/4-355/H	1385	193	0,9		59	3.560	8	REB-3	REV-3N		
HCBB/4-400/H	1360	315	1,5		62	4.830	9	REB-3	REV-5N		
HCBB/4-450/H	1410	626	2,8		65	7.180	13	REB-3	REV-5N		
HCBB/4-500/H	1365	787	3,4		68	8.810	16	REB-5	REV-5N		
HCBB/4-560/H	1370	1266	5,7		70	12.580	22	REB-8	REV-7N		
HCBB/4-630/H	1360	1879	8,3		71	16.550	25	–	–		
THREE PHASE 4 POLE											
HCBT/4-250/H	1330	81	0,3	0,2	49	1.120	5		–	-M 10A	-T 5A
HCBT/4-315/H	1320	162	0,7	0,4	55	2.370	7		–	-M 10A	-T 5A
HCBT/4-355/H	1370	182	0,8	0,5	59	3.480	8		–	-M 10A	-T 5A
HCBT/4-400/H	1320	288	1,1	0,6	62	4.880	9		–	-M 10A	-T 5A
HCBT/4-450/H	1350	511	1,6	0,9	65	6.310	13		–	-M 10A	-T 5A
HCBT/4-500/H	1390	809	2,7	1,6	68	9.030	16		–	-M 10A	-T 5A
HCBT/4-560/H	1390	1287	4,0	2,3	70	12.760	22		–	-M 10A	-T 5A
HCBT/4-630/H	1385	1736	5,4	3,1	73	16.840	25		–	-M 10A	-T 5A
HCBT/4-710/H	1350	2554	7,6	4,4	74	22.330	27		–	-M 10A	-T 6.8A
HCBT/4-800/L-X (1,5 kW)	1410	2632	7,3	4,2	78	23.290	37		–	-M 10A	-T 5A
HCBT/4-800/H-X (3 kW)	1440	4595	12,8	7,4	84	33.100	52		–	-M 16A	-T 9A
HCBT/4-900/L-X (3 kW)	1450	3909	12,0	6,9	82	34.270	96		–	-M 16A	-T 9A
HCBT/4-900/H-X (5,5 kW)	1455	7893		13,4	87	46.270	112		–		-T 17A
HCBT/4-1000/L-X (3 kW)	1415	5048	14,2	8,2	86	39.910	67		–	-M 16A	-T 9A
HCBT/4-1000/H-X (7 ,5 kW)	1470	8675		14,6	93	53.700	101		–		-T 17A

* Inverter control: VFD-M - 1-Phase 230V Input, 3-Phase 400V Output.
VFD-T - 3-Phase 400V Input, 3-Phase 400V Output.

PERFORMANCE DATA

Airflow m³/s @ Static Pressure Pa

Model	0	25	50	75	100	125	150	175	200	250	300	350	400
SINGLE PHASE 4 POLE													
HCBB/4-250/H	0.314	0.268											
HCBB/4-315/H	0.633	0.567	0.439										
HCBB/4-355/H	0.996	0.921	0.836	0.718									
HCBB/4-400/H	1.394	1.299	1.191	1.045	0.839								
HCBB/4-450/H	1.889	1.807	1.720	1.613	1.470	1.326	1.194						
HCBB/4-500/H	2.458	2.369	2.271	2.150	1.993	1.824	1.651	1.463					
HCBB/4-560/H	3.721	3.620	3.512	3.390	3.245	3.074	2.886	2.685	2.482	2.283			
HCBB/4-630/H	4.604	4.495	4.346	4.194	4.039	3.879	3.707	3.514	3.278	2.969			
THREE PHASE 4 POLE													
HCBT/4-250/H	0.311	0.263											
HCBT/4-315/H	0.661	0.593	0.481										
HCBT/4-355/H	0.979	0.896	0.812	0.673									
HCBT/4-400/H	1.394	1.299	1.191	1.045	0.839								
HCBT/4-450/H	1.889	1.807	1.720	1.613	1.470	1.326	1.194						
HCBT/4-500/H	2.539	2.450	2.356	2.247	2.097	1.909	1.744						
HCBT/4-560/H	3.598	3.485	3.368	3.242	3.096	2.916	2.705	2.483	2.202				
HCBT/4-630/H	4.677	4.543	4.405	4.258	4.093	3.906	3.694	3.462	3.224				
HCBT/4-710/H	6.203	6.024	5.842	5.653	5.452	5.235	4.992	4.714	4.379	3.488			
HCBT/4-800/L-X (1,5kW)	6.468	6.314	6.156	5.993	5.817	5.624	5.408	5.159	4.882	4.315	3.525	2.862	2.395
HCBT/4-800/H-X (3kW)	9.193	9.029	8.862	8.690	8.511	8.319	8.107	7.871	7.601	6.925	6.117	5.268	4.475
HCBT/4-900/L-X (3kW)	9.519	9.312	9.103	8.890	8.668	8.435	8.188	7.922	7.635	6.982	6.227	5.395	4.386
HCBT/4-900/H-X (5,5kW)	13.819	13.566	13.314	13.061	12.809	12.555	12.298	12.033	11.757	11.137	10.401	9.545	8.591
HCBT/4-1000/L-X (3kW)	11.193	10.924	10.655	10.384	10.110	9.831	9.546	9.249	8.936	8.226	7.408	6.561	5.760
HCBT/4-1000/H-X (7,5kW)	14.855	14.551	14.287	13.661	13.970	13.388	13.099	12.756	12.406	11.688	11.004	10.166	9.246

Mcr Smart Groups Ltd

Specialist in: Stainless Steel Fabrication, Commercial Kitchen Design and Installation,
Full Extraction System, Canopies & Cladding, etc
Lind Street, Holt Town. Manchester, M40 7ES. Tele: +44-7353830773



The Camfil GlidePack MultiTrack 13 is a multi-stage air filter housing with adaptable tracks to apply a variety of prefiltration and final filtration products. The Multitrack 13 provides superior indoor air quality for virtually any application. The housing may also be reconfigured in the field for air filtration upgrades or to adapt to the latest air filtration technology.

The aluminium filter mounting track includes ribbed surfaces to ensure that filters slide easily across the tracks in housing configurations from four high to six filters wide. The tracks include slide modifiers that may be moved or removed to change filter configurations to accommodate three 2” filters, or one 2” filter and one 4” filter.

All materials and equipment supplied by Mcr Smart Groups Ltd shall remain the property of Mcr Smart Groups Ltd until full payment.

LONGAR® Type 3
Low Pressure Baffle Filter



*Stainless steel 240 grit finish - standard handles



*Stainless steel bright annealed finish - optional fixed high temp handles

LONGAR® TYPE 3 FEATURES:
- Low pressure loss
- Polished finish or 240 grit dull grain finish
- Fully welded construction – all stainless steel construction
- Robust construction, our strongest filter yet
- Folding handles and drain holes standard (optional rigid handle available)
- Meets HVCA DW172 requirements
- Stock Sizes 2-3 days delivery, custom sizes available
- Cutsafe safety edges

APPLICATIONS
- Commercial kitchens
- Water mist separation
- Spark arrestors
- Sand filtration

LONGAR® TYPE 3 BAFFLE FILTER
For use in commercial kitchens and ventilation to extract grease laden air and offer a barrier to flame. The Type 3 has been developed for customers that require a lower pressure baffle filter, it still holds many of the features of the premium Type 2 yet offer a lower resistance to air. The Type 3 is available in standard depths of 20mm and 45mm. Custom sizes available on request. Meets DW172 and ISO9001.

CONSTRUCTION / MATERIAL SPECIFICATION
As standard all baffles are manufactured with Stainless Steel 430 polished finish and 240 Grit Dull Grain Finish. Maximum Operating temperature 400C or 750F.

FITTING INSTRUCTIONS
- Fit products, handles in direction of air in.
- Product vertical in air stream.

HANDLING
- Handle with care when unpacking.
- Store in dry and frost protected place.

MAINTENANCE
- All maintenance should be carried out in accordance with the planned maintenance set by installation contractor.
- When handling any components suitable PPE should be used - gloves & eye protection and access equipment.
- Filters should be cleaned by a trained operative either daily for heavy use or weekly for light use.
- For more exact guide to cleaning you should contact a cleaning specialist.

PACKAGING
All units are packaged in double wall boxes with separators for standard sizes, glued closed for protection whilst in transit against contamination.

FILTER CLASSIFICATION:
- Filter Class G2.
- UL Class 2.

MANUFACTURED TO:
- DW172.
- ISO9001.

For technical specifications, part numbers and ordering information, please see overleaf.

Longar Industries Limited, Unit 25, Glenmore Business Park, Colebrook Way Weyhill Road, Andover, Hampshire SP10 3GZ United Kingdom
T +44 (0)1264 332 993 F +44 (0)1264 332 994 E info@longarind.com W www.longarind.com

Mcr Smart Groups Ltd

Specialist in: Stainless Steel Fabrication, Commercial Kitchen Design and Installation,
Full Extraction System, Canopies & Cladding, etc
Lind Street, Holt Town. Manchester, M40 7ES. [redacted]



Camfil Farr 30/30® Pleated Panel Filter

1. Product Description

The Camfil Farr 30/30® pleated panel filter has long been the standard for G4 panel filters. Its unique combination of media composition, beverage board construction, and pleating technology ensures high performance, durability, and low energy consumption under all HVAC conditions. The 30/30® filter is designed for superior dust-holding capacity and extended life. Its frame is made of high wet-strength beverage board, capable of withstanding humidity and airflow variations without distortion or blowouts. The filter media is a blend of cotton and polyester, reinforced with a corrosion-resistant wire backing that maintains pleat stability even under high air velocity conditions.

2. Technical Specifications

Property	Specification
Filter Classification	G4 (EN 779:2002) / MERV 8 / ISO ePM10 50%
Media Composition	Cotton & synthetic fiber blend, pleated design
Frame Material	Water-resistant beverage board (not recycled cardboard)
Support Grid	Corrosion-resistant wire backing
Recommended Final Pressure Drop	250 Pa
Temperature Range	Up to 70 °C
Relative Humidity (Max)	70%
Standard Sizes	305×305×50 mm, 610×610×50 mm, 305×610×50 mm, etc.

3. Application and Use:

Suitable for use as a prefilter or medium-efficiency final filter in HVAC systems for commercial, institutional, and public sector buildings. Typical applications include:

a) Air Handling Units (AHUs)
b) Fan Coil Units (FCUs)
c) Ventilation systems within council-managed facilities, schools, offices, and public service environments.

All materials and equipment supplied by Mcr Smart Groups Ltd shall remain the property of Mcr Smart Groups Ltd until full payment.

Mcr Smart Groups Ltd

Specialist in: Stainless Steel Fabrication, Commercial Kitchen Design and Installation,
Full Extraction System, Canopies & Cladding, etc
Lind Street, Holt Town. Manchester, M40 7ES. [redacted]

4. Compliance with Manchester City Council Standards:

Filters shall comply with the Manchester City Council Building Services Specification for air handling and ventilation systems.,

Each filter shall provide energy-efficient air filtration with a low pressure drop and long service life. The filter shall maintain integrity in humid environments and achieve an ISO ePM10 50% classification minimum.

5. Installation and Maintenance

a) Filters should be installed in compatible **front or side-access housings** to ensure full sealing and avoid air bypass.
b) Change-out should occur when the **pressure drop reaches 250 Pa**, or in accordance with the maintenance schedule.
c) Used filters must be disposed of safely and replaced with identical specifications.
d) All installation work shall comply with **CIBSE Guide B2** and **BS EN 15780** for air-handling cleanliness.

6. City Pleat (Activated Carbon Panel Filter)

The City Pleat filter is designed for combined particulate and molecular filtration. It uses synthetic fiber media impregnated with activated carbon to control low-level gaseous pollutants while maintaining G4 efficiency.

Property	Specification
Filter Type	Pleated Panel (Activated Carbon)
Frame	Water-resistant cardboard
Media	Synthetic / Activated Carbon blend
Maximum Temperature	40 °C
Maximum Relative Humidity	70%
Applications	Indoor Air Quality (IAQ) improvement-city centers, shopping malls, offices, and public buildings

7. Manufacturer and Reference Links

Camfil – 30/30 Brochure (Official PDF)
RS Components – Technical Sheet

All materials and equipment supplied by Mcr Smart Groups Ltd shall remain the property of Mcr Smart Groups Ltd until full payment.

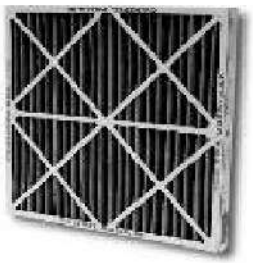
Mcr Smart Groups Ltd

Specialist in: Stainless Steel Fabrication, Commercial Kitchen Design and Installation,
Full Extraction System, Canopies & Cladding, etc
Lind Street, Holt Town. Manchester, M40 7ES. Tele: +44 7535830773

Pre-Filtration, Class G3 to F5

Pleated Filters

30/30





ENERGY & AIR QUALITY RATING

Advantages

- **High mechanical strength**
- **Fully supported media bonded onto a wire support grid**
- **Rigid, water resistant cardboard frame**
- **Large media surface**
- **Unique radial pleat design**
- **Bonded into case to eliminate air bypass**

Application: Primary filter for air conditioning systems.
Type: High performance disposable pleated panel filter.
Case: Rigid water resistant cardboard.
Media: Mixture of cotton and synthetic fibre.
EN 779:2002 efficiency: G4.
Gravimetric efficiency: 92%.
Eurovent 4/5 efficiency: EU4.
Recommended final pressure drop: 250 Pa.
Temperature: 70°C maximum in continuous service.
Holding frames: Front and side access housings and frames are available, Type S, Type L, and FC Housings.

Reference	Type	Model	Dimensions (WxHxD) mm	Filter classification EN 779:2002	Air flow/ pressure drop $m^3/hr/Pa$	Media area m^2	Unit weight kg	Unit volume m^3	Energy Rating
049880-927	30/30 Panel	30/30-12122NOM	305x305x50	G4	864/70	0,39	0,24	0,01	F
049880-006	30/30 Panel	30/30-12242NOM	305x610x50	G4	1710/70	0,79	0,40	0,01	F
049880-001	30/30 Panel	30/30-16202NOM	406x508x50	G4	1890/70	0,94	0,44	0,01	F
049880-004	30/30 Panel	30/30-16252NOM	406x635x50	G4	2340/70	1,18	0,55	0,02	F
049880-002	30/30 Panel	30/30-20202NOM	508x508x50	G4	2340/70	1,12	0,55	0,02	F
049880-012	30/30 Panel	30/30-20242NOM	508x610x50	G4	2880/70	1,36	0,66	0,02	F
049880-003	30/30 Panel	30/30-20252NOM	508x635x50	G4	2970/70	1,42	0,70	0,02	F
049880-005	30/30 Panel	30/30-24242NOM	610x610x50	G4	3420/70	1,64	0,78	0,02	F
059413-002	30/30 Panel	30/30-12244NOM	305x610x100	G4	2070/90	1,28	0,75	0,02	E
059413-004	30/30 Panel	30/30-16204NOM	406x508x100	G4	2250/90	1,45	0,85	0,02	E
059413-005	30/30 Panel	30/30-16254NOM	406x635x100	G4	2880/90	1,82	1,05	0,04	E
059413-003	30/30 Panel	30/30-20204NOM	508x508x100	G4	2880/90	1,73	1,05	0,04	E
059413-008	30/30 Panel	30/30-20244NOM	508x610x100	G4	3420/90	2,09	1,25	0,04	E
059413-006	30/30 Panel	30/30-20254NOM	508x635x100	G4	3600/90	2,18	1,30	0,04	E
059413-001	30/30 Panel	30/30-24244NOM	610x610x100	G4	4140/90	2,56	1,45	0,04	E
054862-010	30/30 Panel	30/30-12241NOM	305x610x25	G4	1310/65	0,42	0,25	0,01	G
054862-001	30/30 Panel	30/30-16201NOM	406x508x25	G4	1460/65	0,45	0,30	0,01	G
054862-004	30/30 Panel	30/30-16251NOM	406x635x25	G4	1840/65	0,57	0,35	0,01	G
054862-002	30/30 Panel	30/30-20201NOM	508x508x25	G4	1800/65	0,56	0,35	0,01	G
054862-933	30/30 Panel	30/30-20241NOM	508x610x25	G4	2200/65	0,68	0,40	0,01	G
054862-003	30/30 Panel	30/30-20251NOM	508x635x25	G4	2300/65	0,71	0,45	0,01	G
054862-005	30/30 Panel	30/30-24241NOM	610x610x25	G4	2600/65	0,83	0,50	0,01	G

Other dimensions are available on request - All dimensions are nominal.

As part of our continuous improvement, Camfil Farr reserve the right to change specifications without notice.

camfil FARR
Knowsley Road, Haslingden, Lancashire, BB4 4EG
Tel: +44 (0) 1706 238000, Fax: +44 (0) 1706 226736
www.camfilfarr.co.uk

All materials and equipment supplied by Mcr Smart Groups Ltd shall remain the property of Mcr Smart Groups Ltd until full payment.

Mcr Smart Groups Ltd

Specialist in: Stainless Steel Fabrication, Commercial Kitchen Design and Installation,
Full Extraction System, Canopies & Cladding, etc
Lind Street, Holt Town. Manchester, M40 7ES. Tele: +44 7553830773



800mm Long Straight-Through Silencer

An 800mm long straight-through silencer typically reduces fan noise levels by approximately 10-13 dB(A).* It can be supplied either to bolt directly onto any manufacturer's cased axial fan or with spigots for inline installation within ductwork.

The addition of this silencer to a system function similarly to a car exhaust silencer. If you have ever heard a car operating without one, you will appreciate the significant difference a silencer can make in reducing overall noise levels.

1. **Product:** 800mm Long Straight-Through Silencer
2. **Manufacturer:** Fläkt Woods
3. **Supplier:** NFAN Ltd (Manchester, UK)
4. **Specification:**
    a) Diameter: 800 mm
    b) Length: 800 mm (1D type)
    c) Type: Straight-through circular silencer for ventilation duct systems
    d) Material: Galvanised steel with acoustic lining
    e) Function: Reduces air handling noise while maintaining airflow efficiency

This product is compliant with standard HVAC acoustic performance and is available for next-day delivery from the UK supplier.

Please note:
For a straight-through silencer to achieve maximum effectiveness, it is recommended that a silencer is installed on both the inlet and outlet sides of the fan. This configuration provides three key benefits to the overall noise performance of the system:

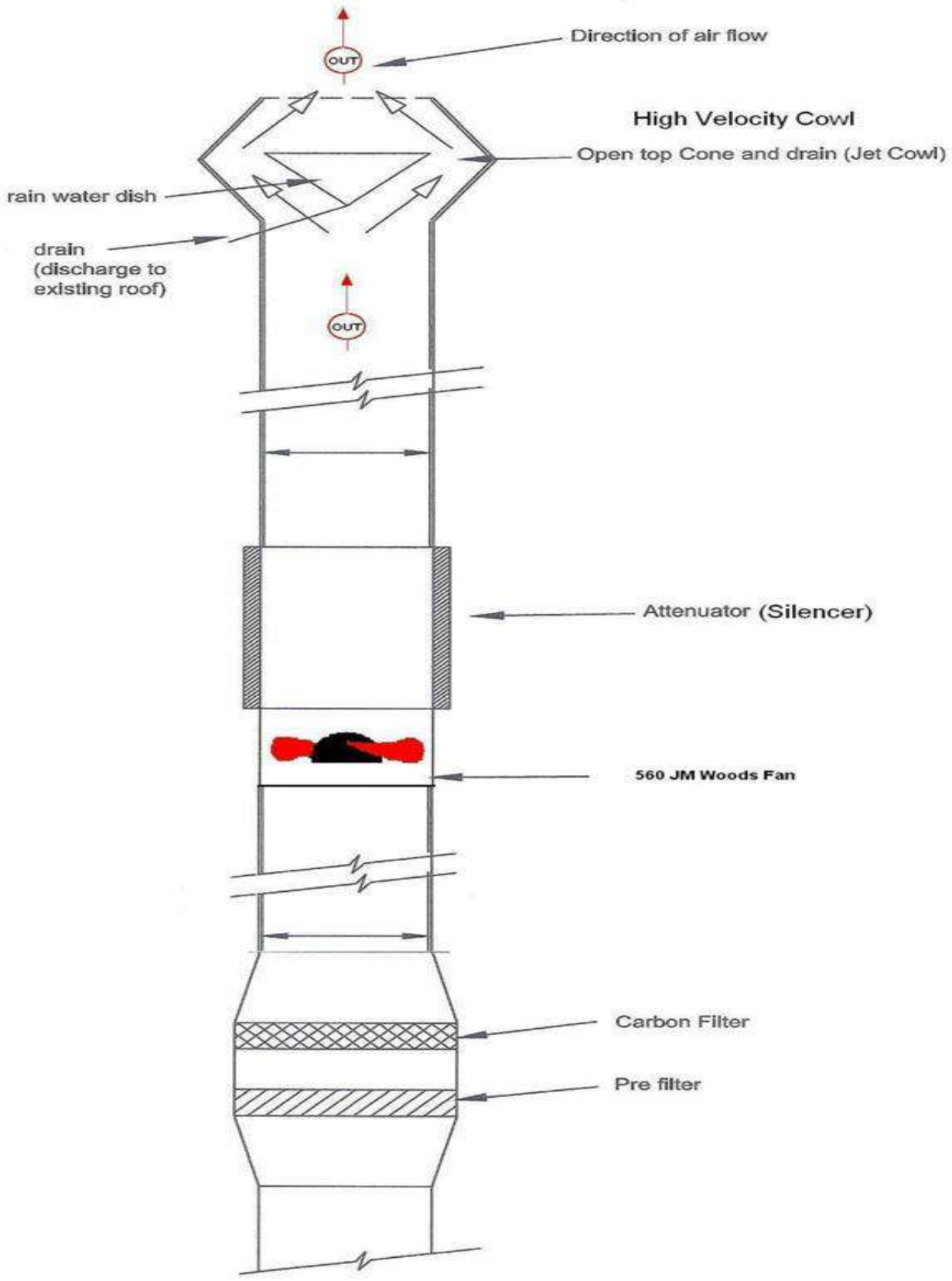
1. System side (internal noise): Reduces noise levels within the building.
2. Atmospheric side (external noise): Reduces noise levels outside the building.
3. Fan breakout noise: Minimises noise emitted directly from the fan housing, which is particularly beneficial where the fan is located in sensitive areas such as false ceilings, classrooms, or office spaces.

**Noise control is a complex subject. If you are uncertain about specific performance requirements or need to achieve defined target noise levels, please do not hesitate to contact us. Our team will be pleased to assist you in finding the most suitable solution for your application. **

All materials and equipment supplied by Mcr Smart Groups Ltd shall remain the property of Mcr Smart Groups Ltd until full payment.

Mcr Smart Groups Ltd

Specialist in: Stainless Steel Fabrication, Commercial Kitchen Design and Installation,
Full Extraction System, Canopies & Cladding, etc
Lind Street, Holt Town. Manchester, M40 7ES. Tele: +44-7353830773



All materials and equipment supplied by Mcr Smart Groups Ltd shall remain the property of Mcr Smart Groups Ltd until full payment.

Mcr Smart Groups Ltd

Specialist in: Stainless Steel Fabrication, Commercial Kitchen Design and Installation,
Full Extraction System, Canopies & Cladding, etc
Lind Street, Holt Town. Manchester, M40 7ES. [redacted]



Jet Cowl
• Prevents rain from entering ductwork
• Inner funnel piece allows rain to drain out of ductwork even when the system is not running
• Has three angle brackets for guide wire attachment
• Installs In Seconds with Standard QF Clip.
SKU: 23000-XXX Categories: QF Duct, QF Misc, QF Stack heads

All materials and equipment supplied by Mcr Smart Groups Ltd shall remain the property of Mcr Smart Groups Ltd until full payment.

Mcr Smart Groups Ltd

Specialist in: Stainless Steel Fabrication, Commercial Kitchen Design and Installation,
Full Extraction System, Canopies & Cladding, etc
Lind Street, Holt Town. Manchester, M40 7ES. Tele: [redacted]

Extraction System Maintenance Schedule.

The maintenance of the canopy and extraction unit must be carried out regularly to ensure the efficient and reliable operation of the system. Throughout the life of the canopy, the grease filters will require routine cleaning by the user. However, the ducting filters must be replaced periodically to comply with local council regulations.

We are able to replace the carbon filters, pre-filters, and grease filters on a regular basis to ensure your kitchen continues to meet the required standards. Please use this document as a guide to your recommended maintenance schedule, as advised by the manufacturer.

Canopy Care:

The stainless-steel canopy should be cleaned weekly using non-corrosive detergents. In addition, the canopy must be inspected twice a year to ensure trouble-free operation. All grease drain points should be checked every six months for blockages and cleaned as required. Grease collection trays must be emptied as necessary.

Caution: All stainless-steel surfaces should only be cleaned with recommended solvents or cleaning agents. Caustic or abrasive materials must be avoided, as they can scratch the surface, leading to bacterial growth and deterioration of the finish.

Grease Filters:

Replacement grease filters are supplied as needed and are designed to fit the filter banks of your canopy. Each filter includes two handling grips for safe removal. We recommend that filters and collection drawers be cleaned weekly to prevent the build-up of dirt and grease. Both mesh and baffle-type filters can be cleaned using any commercial dishwasher or by soaking in a warm degreasing solution for 15 minutes. This ensures unrestricted airflow for the extraction of gaseous fumes.

Caution: Always switch off the extraction system before cleaning to prevent unfiltered air from entering the system. The build-up of grease inside the ducting can pose a fire hazard.

Pre-Filters:

Replacement pre-filters are supplied to fit your ducting system and must be changed at the intervals recommended in the appendix. These filters cannot be cleaned and must be replaced when saturated. Failure to do so will reduce their efficiency and cause grease to contaminate the carbon filters.

Carbon Filters:

Replacement carbon filters are supplied and must be changed in accordance with the maintenance schedule. As with pre-filters, these units cannot be cleaned. If grease contamination occurs, the activated carbon will become ineffective, preventing the system from adequately removing gaseous odours.

All materials and equipment supplied by Mcr Smart Groups Ltd shall remain the property of Mcr Smart Groups Ltd until full payment.

Mcr Smart Groups Ltd

Specialist in: Stainless Steel Fabrication, Commercial Kitchen Design and Installation,
Full Extraction System, Canopies & Cladding, etc
Lind Street, Holt Town. Manchester, M40 7ES. Tele: [redacted]

Fan:
If unusual noise or vibration occurs, cleaning the fan impeller often resolves the issue. If the problem persists after cleaning, contact the flue supplier or the fan manufacturer. Always isolate the electrical supply before working on the fan. Check that flexible couplings (if fitted) are secure and undamaged. Fan motors with grease fittings should be lubricated using a low-pressure grease gun with Shell Alvania No. 3 grease.

Ducting:
An annual inspection of the ducting system must be carried out by the user. When necessary, a qualified TR19 specialist cleaner should be contracted to remove accumulated grease. It is essential to maintain a clear, unrestricted airflow through the ducting to ensure the fan's efficiency and performance. Grease build-up presents significant health and safety risks, including fire hazards, unpleasant odours, noise issues, and non-compliance with insurance and regulatory standards. Cleaning frequency should follow the TR19 and TR/17 Guidelines for good practice.

Speed Controller Operation:
The correct setting of the speed controller is crucial for the safe and efficient operation of the fan. The controller should be properly adjusted and clearly marked according to the manufacturer's recommendations.
Caution: When temporarily increasing the fan speed to remove excessive smoke, always return the controller to its original setting afterward to prevent unnecessary wear and tear.

Handling Components:
When handling canopy components, operators must wear cut-resistant, non-slip gloves to protect against sharp edges and cleaning agents. Even well-finished filter panels can cause injury, particularly when wet or greasy. Grease filters are naturally slippery, so extra care should be taken during removal and cleaning. If filters are located above head height, appropriate access equipment and safe working procedures should be used.

Maintenance Summary:
The frequency and intensity of cleaning depend on the level of use and the environment. Ultimately, the facility manager is responsible for ensuring proper maintenance. As a general rule, if a surface looks dirty, it needs cleaning. Regular inspections should include all visible and concealed surfaces, as 'what is out of sight is often out of mind.' Such inspections must form part of every kitchen and extraction system maintenance plan.

Care and Maintenance of Stainless Steel:
All grades of stainless steel can discolour or stain due to surface deposits and should not be considered maintenance-free. To achieve maximum corrosion resistance, surfaces must be kept clean. Provided that the correct grade and finish are used and regular cleaning is maintained, the system will provide long service life and high performance

All materials and equipment supplied by Mcr Smart Groups Ltd shall remain the property of Mcr Smart Groups Ltd until full payment.

Mcr Smart Groups Ltd

Specialist in: Stainless Steel Fabrication, Commercial Kitchen Design and Installation,
Full Extraction System, Canopies & Cladding, etc
Lind Street, Holt Town. Manchester, M40 7ES. Tele: [redacted]

Factors Affecting Maintenance: Surface contamination and deposits should be prevented. These may include iron particles or rust left over from construction activities. Environmental conditions such as marine air, salt deposits, humidity, or heat can accelerate corrosion and require more frequent cleaning. Chemical cleaners and disinfectants should only be used according to the manufacturer's instructions. Strong acids must never come into contact with stainless steel, and if this occurs, the surface must be immediately washed with plenty of clean water.

Maintenance Program:
With proper care during installation, cleaning prior to handover should not present difficulties. However, if the installation period has been prolonged, additional attention may be necessary. Where contamination is suspected, immediate cleaning following installation will ensure reliable, long-term performance.

Precautions:
Acids should only be used for on-site cleaning when all other methods have failed. Protective gloves must be worn, and special care taken when using oxalic acid. Solvents should not be used in enclosed areas, and smoking is strictly prohibited when working with solvents. Always follow the manufacturer's safety guidelines.

In general, cleaning should restore the original surface finish, prevent corrosion, and maintain hygienic conditions. Stainless steel is easy to clean: washing with mild detergent and warm water, followed by rinsing and drying with a soft cloth, is usually sufficient. In hard water areas, drying prevents water spotting.

Hygiene:
Thorough cleaning is essential in catering and medical environments, not only for appearance but also for hygiene. Stainless steel's smooth, non-porous surface does not harbour bacteria and can be cleaned effectively using vigorous cleaning techniques when necessary.

All materials and equipment supplied by Mcr Smart Groups Ltd shall remain the property of Mcr Smart Groups Ltd until full payment.